Airport Commission

Wednesday, April 1, 2026, 4:00 PM, Zoom/New Administrative Offices in Project NexT

PLEASE NOTE:
This meeting will be held on zoom and in-person in a NEW LOCATION. See details below

You can join us in-person at the Airport's new administration office in the large conference room. This new location is on the north side of the Airport; as you enter the Airport on the first floor at Gate 4 next to the car rental counters, go up the stairs or elevator to the second floor. Head north to the stairs and elevator located at the end of the hallway. Go up the stairs or the elevator to the third floor. You will come to an open space looking out at the airfield through the glass. To the right of this glass, there is a conference room where the Commission meeting will be held. Please email jsprague@btv.aero with any questions locating this new space.

Zoom Info:
Join from a PC, Mac, iPad, iPhone or Android device:
Please click this URL to join. https://zoom.us/j/95941583622?pwd=jspMUXkiTTeF3LGU9JkR8vhdYXocQq.1

1. Call to Order

Subject	**1.1. Call to Order**
Meeting	April 1, 2026 - Airport Commission - Wednesday, April 1, 2026, 4:00 PM, Zoom/New Administrative Offices in Project NexT
Category	1. Call to Order
Department	
Type	

Subject	**1.2. Acknowledgement of Remote Commissioners**
Meeting	April 1, 2026 - Airport Commission - Wednesday, April 1, 2026, 4:00 PM, Zoom/New Administrative Offices in Project NexT
Category	1. Call to Order
Department	
Type	

2. Agenda

2.1. Motion to amend/adopt agenda

3. Public Forum

Subject	**3.1. PUBLIC FORUM - Verbal Comments**
Meeting	April 1, 2026 - Airport Commission - Wednesday, April 1, 2026, 4:00 PM, Zoom/New Administrative Offices in Project NexT
Category	3. Public Forum
Department	
Type	

4. Consent Agenda

Subject	**4.1. Approval of Minutes**
Meeting	April 1, 2026 - Airport Commission - Wednesday, April 1, 2026, 4:00 PM, Zoom/New Administrative Offices in Project NexT
Category	4. Consent Agenda
Department	
Type	
Recommended Action	

5. Action Items

Subject	**5.1. Requests to Amend Project NexT Contracts, Amend Budget, and to Execute and Accept Grant Application**
Meeting	April 1, 2026 - Airport Commission - Wednesday, April 1, 2026, 4:00 PM, Zoom/New Administrative Offices in Project NexT
Category	5. Action Items
Department	Burlington International Airport
Type	
Recommended Action	

6. Financial Update

Subject	**6.1. Financial Update, N. Longo**
Meeting	April 1, 2026 - Airport Commission - Wednesday, April 1, 2026, 4:00 PM, Zoom/New Administrative Offices in Project NexT
Category	6. Financial Update
Department	Burlington International Airport
Type	

7. Construction Update

Subject	**7.1. Construction Update, L. Lackey**
Meeting	April 1, 2026 - Airport Commission - Wednesday, April 1, 2026, 4:00 PM, Zoom/New Administrative Offices in Project NexT
Category	7. Construction Update

Department Burlington International Airport

Type

8. Residential Sound Insulation Program Updates

Subject **8.1. Residential Sound Insulation Program Updates, L. Lackey**

Meeting April 1, 2026 - Airport Commission - Wednesday, April 1, 2026, 4:00 PM, Zoom/New Administrative Offices in Project NexT

Category 8. Residential Sound Insulation Program Updates

Department Burlington International Airport

Type

9. Director's Report

Subject **9.1. Director's Report, N. Longo**

Meeting April 1, 2026 - Airport Commission - Wednesday, April 1, 2026, 4:00 PM, Zoom/New Administrative Offices in Project NexT

Category 9. Director's Report

Department

Type

10. Commissioner Items

Subject **10.1. Commissioner Items**

Meeting April 1, 2026 - Airport Commission - Wednesday, April 1, 2026, 4:00 PM, Zoom/New Administrative Offices in Project NexT

Category 10. Commissioner Items

Department

Type

11. Follow-up Items

12. Adjournment

Subject **12.1. Motion to adjourn**

Meeting April 1, 2026 - Airport Commission - Wednesday, April 1, 2026, 4:00 PM, Zoom/New Administrative Offices in Project NexT

Category 12. Adjournment

Department Council and Board

Type

Recommended Action

13. Informational and Non-Discrimination Statements

This meeting will air on Town Meeting TV's Burlington Meetings channel (Burlington Telecom channel 317) at a later date. For program airtimes, please visit cctv.org, or contact Town Meeting TV at 802-862-3966 or airtimes@cctv.org

The City of Burlington will not tolerate unlawful harassment or discrimination on the basis of political or religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status, crime victim status or genetic information. The City is also committed to providing proper access to services, facilities and employment opportunities. The programs and services of the City of Burlington are accessible to people with disabilities. Individuals who require special arrangements, auxiliary aid, service for effective communication, or a modification of policies or procedures to participate in a program, service, or activity of the City of Burlington, should contact the office of the Title II Burlington ADA Coordinator at 802-865-7000 as soon as possible but no later than 48 hours before the scheduled event.

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT

BOARD OF AIRPORT COMMISSIONERS

MINUTES OF MEETING

March 4, 2026

Location: The Wright Room

1200 Airport Drive,

South Burlington, VT 05403

[Hybrid meeting]

MEMBERS PRESENT:	Tim George, Chair
	Jeff Schulman, Vice Chair
	Robin Guillian
	Helen Riehle
	Chip Mason
	Al Turkos
MEMBERS ABSENT:	Andrew Savage
BTV STAFF PRESENT:	Nicolas Longo, Director of Aviation
	Larry Lackey, Director of Engineering & Environmental Compliance
	Jeff Bartley, Director of Innovation & Marketing
	Jesse Sprague, Executive Assistant
	Madison Reagan, Environmental Compliance and Project Manager
	Alexandra Cohen, Marketing Assistant
	Jillian Waite, Office Assistant
	Romeo von Hermann, Customer Experience Manager
	Dave Carman, Deputy Director – Airport Operations
	Marie Friedman, Director of Finance
OTHERS PRESENT:	CCTV
	Michael Sanchez (Heritage Aviation)

1.0 Call to Order

1.1 Call to Order

Airport Commission Chair, Tim George, called the meeting to order at 4:04 p.m.

1.2 Acknowledgement of Remote Commissioners

DRAFT

Individuals attending the meeting remotely identified themselves (Helen Riehle, Chip Mason; Jeff Schulman joined online later in the meeting)

2.0 Agenda

2.1 **Approve/Adopt Agenda**

MOTION by Chip Mason, SECOND by Helen Riehle, to approve the agenda as presented.
VOTING: unanimous (5-0); motion carried.

3.0 Public Forum

3.1 **Public Forum**

3.1.1 No members of the public volunteered to speak at public forum.

4.0 Consent agenda:

4.1 **Approval of the minutes**

MOTION by Al Turkos**,** SECOND by Robin Guillian, to approve the minutes as presented in the agenda packet, including Minutes from the February 4, 2026 meeting.
VOTING: unanimous (5-0); motion carried.

5.0 Action Items

5.1 **Airport Ambassador Reclassification**

MOTION by Al Turkos, SECOND by Chip Mason, to recommend the memo to Board of Finance and City as presented; the subject of the memo is to recommend and approve the reclassification of the Airport Ambassador job description and grading, as outlined in the agenda packet
DISCUSSION included:

- The reclassification will move the Airport Ambassador position to a grade 11 from a grade 9; the grades are a pay range, as detailed in the memo.
- Staff has worked with Human Resources at the City to reclassify this position and add responsibilities that trigger a reclassification.
- Jeff Schulman joined at 4:07pm
- This request will go to on Board of Finance on March 9 and City Council on March 23

VOTING: unanimous (6-0); motion carried.

6.0 Innovation and Marketing Quarterly Update

6.1 **Innovation and Marketing Quarterly Update, J. Bartley**

In addition to the presentation and written reports in the agenda, Director Bartley reported updates from the Innovation and Marketing Department and also reported on the new Economic Impact Assessment. Highlights included:

- The Innovation and Marketing team includes: Jeff Bartley, Alex Cohen, Jillian Waite, Romeo von Hermann, and the ambassador team.
- The Airport will host a second 5K Race in the fall.
- Better Box, a healthier vending machine option, will be coming to the Airport
- Airline agreement negotiations currently ongoing
- Marketing department is working on a streamlined process for a therapy dog program at the Airport

DRAFT

- The Airport will host a farmer's market on Fridays this summer on the recreation path that opened in November 2025
- Hagan Associates is the Airport's marketing and consulting firm. Hagan informs the Airport on marketing efforts and manages the data the Airport uses to inform marketing.
- Website 'views' are defined as how many times someone was on each page of the Airport's website. Website 'sessions' are defined as the period in time a person spends on the website in one sitting.
- The Airport is leveraging data to make a case to airlines for expanding service to various destinations, including Denver.
- Leahy BTV will be involved in Aviation Day in Montpelier at the State House on April 30.
- Since 2018, the Airport regional value has grown in the following areas: jobs (+14.4%), total payroll (+90%), total economic output (+122.2%), total state and local taxes (81%) and existing/replacement value (+44%)
- The combined Airport regional value has grown 90% since 2018, from $1.043 billion to $1.88 billion in 2025.
- Staff and commissioners discussed the methodology behind how employers and groups at the Airport were grouped in the Economic Impact Study

7.0 Construction Update

7.1 **Construction Update, L. Lackey**

7.1.1 In addition to the written construction update provided to the Airport Commission, Larry Lackey highlighted the following updates:

- Leahy BTV requested funding from the FAA for the south terminal replacement project this project, and the FAA has said airports will be notified this month regarding award recipient status.
- A pre bid meeting was held today for the cargo apron. This will help expand the cargo apron in the future. The Airport is still waiting on the FAA funding information for this project.
- The bid for the Snow Removal Equipment building is awarded to Engelberth construction. Engelberth was the lowest of the three bidders for the project.
- Capital Improvement Plan (CIP) update: after the cargo project, the airport will pause receiving FAA grant entitlement funds so that in the future, the airport can use more of them.
- Taxiway C-G project be under construction
- The building at 1223 Airport Drive will start demolition this month.
- Beta Technologies went before the Development Review Board (DRB) for their B Build building and childcare center. Working on permitting and excavation for their B Build. These projects had been approved in a prior permitting process; due to the spaces being over 5% greater than originally expected, Beta needs to go through the approval process again at the DRB for these changes. Beta is currently building the Alia Hangar in the space identified as Area 5 on the airfield.

8.0 Residential Sound Insulation Program Updates

8.1 **Residential Sound Insulation Updates, L. Lackey**

DRAFT

In addition to the written update provided to the Airport Commission, Larry Lackey highlighted the following:

8.1.1 The first phase of the Office of Local Defense Community Cooperation (OLDCC) project is under design for the first phase of 70 homes to prepare for construction bids; construction will start by July 2026. This summer there will be a second round of homes to use up the rest of the funding. The Airport will work to have a second package of homes submitted to the FAA for sound insulation in FY27.

8.1.2 Director Lackey reviewed updates provided in the written report

8.1.3 Chip Mason left at 4:59p.m.

9.0 Financial Update

9.1 Financial Update, M. Friedman

In addition to the written financial update provided to the Airport Commission, Director Longo highlighted the following:

9.1.1 The Airport has not borrowed any additional money under the Grant Anticipation Note (GAN) since the start of the year. Director Friedman expects utilizing other grants as the GAN reaches the limit of the Airport's grant expenditures.

9.1.2 The Airport is working on the Passenger Facility Charge (PFC) Application. The PFC is the fee paid to the Airport for every airline ticket sold that departs from BTV. These funds have designated uses

9.1.3 New airlines have access to an incentive program that waives landing fees for the first two years of operation at Leahy BTV. Breeze has been here for two years, so landing fees will now start. Breeze is becoming a signatory on the Airline Agreement, solidifying its presence at Leahy BTV, and bringing more revenue to the Airport.

9.1.4 Expenses through January were 2.5% higher over the prior year. Much of this growth is from increasing salaries and benefits

9.1.5 The Airport does not owe the City any money

9.1.6 CBIZ completed the audit report for Leahy BTV. The PFC application requires an audit to review how the Airport spends.

9.1.7 Operating revenues increase 3.5% or $840,000 from last year

9.1.8 Operating expenses include grants (including sound insulation grants). This may add confusion to how operating expenses appear in this report.

9.1.9 This report covers July 1, 2024 to June 30, 2025. Landing revenues increased in 2025; this year, the landing fees are not doing as well as the year before. Several factors add to the variation in these revenues including: plane size and schedule changes.

9.1.10 Debt coverage score ratio. Our score must be over 1.25; this number reflects revenues are at least 1.25% higher than our expenditures. Our score is 1.95%

9.1.11 On June 30, 2025, the Airport had just under $20M in revenue bonds. These will be paid off on July 1, 2030.

9.1.12 As the expansion projects continue, demolished parts of the airport will come off the value of the Airport's asset value.

10.0 Director's Update

10.1 Director's Update

In addition to the written presentation, Director Longo reported:

DRAFT

10.1.1 The new terminal will be open by the end of the month. The current location of gates 3-6 will be demolished after the opening of the new terminal. The project to follow will be the south terminal expansion.
10.1.2 The 2026 staff appreciation lunch was Olympics themed, and the Mayor of the City of Burlington was in attendance.
10.1.3 The Snow Operations team at Leahy BTV has done a fantastic job this winter with regard to clearing snow on the runway
10.1.4 The Airport will go to City Council this month to get approval for new rates with Transportation Network Companies (TNCs). Previously, the Airport was focused on the City of Burlington TNC rate updates; now the Airport is seeking to raise the total that ride-share companies (TNCs) pay per ride. Taxis are not subject to these same fees but do pay separate taxi fees. Director Longo discussed different forms of taxi fee structures.
10.1.5 The Snow Removal Equipment (SRE) updates: The contract with Engelberth will be coming to Airport Commission in the near future for the build of this building. The existing SRE building is older and does not fit all airport equipment. This building will be on the northwest side of the building. After feedback from the community, this building is now planned to be as far north as possible. The Airport is currently seeking lease financing for this building.
10.1.6 Vacation travel for the school break recently rose the quantity of vehicles in the garage, and the ambassador team did a great job monitoring the garage during this time.
10.1.7 Dave Carman, Stacy Leveille, and Andrew Geppner are currently at the Northeast Chapter (NEC) of the American Association of Airport Executives in Hershey, Pennsylvania. A few members of the snow operations team will travel to Buffalo in April for the Snow Symposium conference as well.
10.1.8 The 2026 projected number of passengers is over 920,000 outbound passengers
10.1.9 The projected numbers are projected to be higher than last year. The report of passenger statistics is an 80% projection of the reported scheduled seats in the previous slide.

11.0 Commissioner Items

11.1 Commissioner Items:

11.1.1 No Commissioner items.

12.0 Follow Up Items

12.1 Follow Up Items

12.1.1 No follow up items.

13.0 Adjournment

MOTION by Al Turkos, SECOND by Robin Guillian, to adjourn the meeting.

VOTING: unanimous (5-0); motion carried.

Meeting Adjourned at 6:02 p.m.

DRAFT

TO: Airport Commission

FROM: Patrick Leahy Burlington International Airport
Nic Longo, Director of Aviation
Larry Lackey, Director of Planning, Engineering, and Sustainability

DATE: April 1, 2026

SUBJECT: Request to Accept and Execute a Federal Aviation Administration (FAA) Grant 4, minor amendments to previously approved Agreement Amounts with Jacobs Engineering Group and Engelberth Construction, Inc. for the completion of construction of the North Concourse Replacement Project "Project NEXT" and request authorization of a budget neutral amendment for this new grant.

REQUEST

The Patrick Leahy Burlington International Airport (Airport or BTV) seeks to:

1. Execute an amendment to the previously approved Engelberth Construction, Inc (ECI) agreement amount, for the completion of Project NexT the North Concourse Replacement Project.

2. Execute a minor amendment to the previously approved Jacobs Engineering Group, Inc (JPG) agreement amount for the completion Project NeXT the North Concourse Replacement Project.

3. Execute an additional Federal Aviation Administration ("FAA") grant application 4 for the completion of the North Concourse Replacement Project "Project NEXT".

4. Create budget neutral amendment to the Fiscal Year 2026 BTV Airport Improvement Project Fund related to this grant to increase revenues and capital expenditures by $4,480,140.

Background Information

1. Project Summary

Project NexT - North Concourse Replacement Project includes new concourse replacement (approximately 25,000 SF of new gross floor area on the second level, with the first level available for storage); removal of the existing dated concourse; four (4) new aircraft gate replacements; four (4) new passenger boarding bridge replacements, new passenger circulation and hold room space.

Furthermore, integral to this project is the addition of a third floor dedicated to office space, catering to airport administration needs, alongside a versatile public event and observation area. This space will boast both indoor event facilities and outdoor patio areas, offering a dynamic experience for visitors, guests, and events.

This ambitious project is not just about accommodating larger aircraft and boosting passenger capacity; it's about ushering our terminal into the future with modern amenities tailored to meet the demands of the next generation of travelers.

The urgency and significance of replacing this terminal cannot be overstated. As the beating heart of our busiest terminal area, its seamless operation is fundamental to the overall success and efficiency of our airport. By prioritizing this vital upgrade, we are not only ensuring smoother, safer operations but also enhancing the overall experience for travelers passing through our gates.

As we embark on this transformative journey, we remain steadfast in our commitment to delivering a world-class terminal that not only meets but exceeds the expectations of our passengers and stakeholders. With each milestone achieved, we move one step closer to realizing our collective vision of a modern, efficient, and passenger-centric airport experience.

In line with our forward-thinking vision and mission at Leahy BTV, sustainability lies at the core of this new development. The design incorporates a myriad of elements aimed at minimizing environmental impact.

The project consists of the construction and demolition and removal of the existing outdated north concourse and the construction of the new north terminal concourse, Project NexT. The outdated area would then be used for airport apron, allowing additional space between the terminal building and Taxiway Alpha. Currently the dimensions of this apron between building and active taxiways is far too small to allow the appropriate sized aircraft to park, resulting in unusable gate/apron space for the majority of the commercial aircraft utilized by our partner airlines requiring access.

Benefits:

This upgrade provides the much needed shift to the new north concourse. This provides a significant level of comfort and safety where passengers have adequate room to wait for their flight. The interior of the new building is designed according to FAA standards and provide the space needed for passenger quantities and future forecast, which currently does not exist, for all of the aircraft sizes that use Leahy BTV.

This project as mentioned above includes the demolition of the existing North Concourse, which causes encroachment on the Taxiway Alpha safety areas when aircraft are maneuvering into and out of their gate positions. The Terminal expansion is located 150'+ farther from Taxiway Alpha, thus improving airfield safety.

Selection Process

Jacobs Engineering Group (JEG) was selected to provide the design and construction inspection services through the Airport's selection process by meeting standards by the FAA for this project. This price was determined through an extensive pricing process established by the FAA for all airport improvement projects (AIP) grant funded projects. For FAA AIP projects a qualification based process with an independent fee estimate (IFE) is completed for projects. Anything over $100,000.00 requires it to be reviewed by an independent engineer/reviewer of scope and fee. Once this is completed a record of negotiations (RON) is completed if needed, dependent in the results IFE.

After a diligent qualifications review process with 5 proposers, Engelberth Construction was selected as the Construction Manager at Risk (CMAR). A maximum guaranteed construction price will be agreed to.

Funding:

The funding is from the FAA through the typical Airport Improvement Program (AIP) process, with the funds coming from a Federal Fiscal Year 2023 Congressional Directed Spending Bill (CDS) appropriation which provides 90% funding once the project is bid and grant offer received. The remaining 10% is the local share which will supplemented with Passenger Facility Charges (PFC). The CDS appropriation has covered a large portion of the existing terminal removal and new terminal construction. The additional funds needed came from our portion of the Bipartisan Infrastructure Legislation (BIL) appropriation, Airport Infrastructure Grant (AIG). It should also be noted that we received a grant from the Northern Boarders Regional Commission (NBRC) for utilization of domestic construction materials. We also received a grant from the Vermont Agency of Natural for storm water improvements that were part of this project.

The project progression has been:

1. Existing Terminal Removal and New Terminal Construction
2. New Passenger Boarding Bridges (PBB)

3. Apron Improvements for new PBB aircraft location – Gate 1
4. Existing Terminal Second Floor Renovation

The adjustments outlined in this memo are attributable to the final improvements to the existing second floor renovations, additional apron panels needed at the new gate one to allow for 3 aircraft parking positions, challenges related to the construction of the geothermal system and some change order items not included in the initial building documents.

The previously approved amount by City Council with Engelberth Construction, Inc. was a total of $61,537,265.80 in June of 2024 and May of 2025. The previously approved amount by City Council with Jacobs Engineering Group Inc. was a total of $5,204,081.20 in October of 2023.

Budget Amendment:

The FY 2026 budget needs to be amended to reflect this grant revenue and related expenditures.

Org Set	GL Account	Account Name	Increase
Expense			
421-35-700-938	9500_110	Capital Expenditures	$ 4,480,140
		Total Expense	**$ 4,480,140**
Revenues			
421-35-700-938	4875_125	Federal Grant Revenue	$ 4,032,126
421-35-700-938	4990_400	Interfund Transfer Proceeds (local share)	$ 448,014
		Total Revenues	**$ 4,480,140**

PROPOSED MOTIONS:

Airport Commission

1. To Approve the Memo as Presented

Board of Finance:

1. "To approve and recommend the City Council to authorize the Director of Aviation execute a minor contract amendment with Engelberth Construction Inc., to increase the project cost from $61,537,265.80 up to $64,000,000.00 for the construction of Project NeXT – North Concourse Replacement Project, subject to review and approval of the City Attorney's Office."

2. "To approve and recommend the City Council to authorize the Director of Aviation to

execute a minor contract amendment with Jacobs Engineering Group, Inc. to increase the project cost from $5,204,081.20 to $5,454,914 for engineering services of Project NeXT – North Concourse Replacement Project, subject to review and approval of the City Attorney's Office."

3. "To approve and recommend the City Council to authorize the Director of Aviation to execute an additional grant from the Federal Aviation Administration to accept an amount up to $4,032,126.00 for the completion of the North Concourse Replacement Project "Project NEXT" Grant Application 4, subject to review by the City Attorney's Office."

4. "To approve and recommend the City Council to authorize a budget neutral amendment to the Fiscal Year 2026 BTV Airport Improvement Project Fund related to this grant to increase revenues and capital expenditures by $4,480,140.

City Council

1. "To authorize the Director of Aviation execute a minor contract amendment with Engelberth Construction Inc., to increase the project cost from $61,537,265.80 up to $64,000,000.00 for the construction of Project NeXT – North Concourse Replacement Project, subject to review and approval of the City Attorney's Office."

2. "To authorize the Director of Aviation to execute a minor contract amendment with Jacobs Engineering Group, Inc. to increase the project cost from $5,204,081.20 to $5,454,914 for engineering services of Project NeXT – North Concourse Replacement Project, subject to review and approval of the City Attorney's Office."

3. "To authorize the Director of Aviation to execute an additional grant from the Federal Aviation Administration to accept an amount up to $4,032,126.00 for the completion of the North Concourse Replacement Project "Project NEXT" Grant Application 4, subject to review by the City Attorney's Office."

4. "To authorize a budget neutral amendment to the Fiscal Year 2026 BTV Airport Improvement Project Fund related to this grant to increase revenues and capital expenditures by $4,480,140."

CONSULTANT AGREEMENT

for

DATA COLLECTION, PRELIMINARY DESIGN, PERMITTING, AND PROJECT ADMINISTRATION SERVICES

NORTH TERMINAL IMPROVEMENTS

AIP No. TBD

at

Burlington International Airport

City of Burlington, Vermont

with

JACOBS ENGINEERING GROUP INC.

September 21, 2022

CITY OF BURLINGTON
CONSULTANT CONTRACT

This Consultant Contract ("Contract") is entered into by and between the City of Burlington, Vermont ("the City"), and Jacobs Engineering Group Inc. ("Consultant"), a corporation registered with the Secretary of State to do business in Vermont, with a principal place of business at 2 Executive Park Drive, Suite 205, Bedford, NH 03110.

Consultant and the City agree to the terms and conditions of this Contract.

1. DEFINITIONS

The following terms shall be construed and interpreted as follows:

A. "Contract Documents" means all the documents identified in Section 4 (Scope of Work) of this Contract.

B. "Effective Date" means the date on which this Contract is approved and signed by the City, as shown on the signature page.

C. "Party" means the City or Consultant, and "Parties" means the City and Consultant.

D. "Project" means the ***Data Collection, Preliminary Design, Permitting, and Project Administration Services for the North Terminal Improvements Project.***

E. "Work" means the services described in Section 5 (Payment for Services) of this Contract, along with the specifications contained in the Contract Documents as defined in Section 4 (Scope of Work) below.

2. RECITALS

A. Authority. Each Party represents and warrants to the other that the execution and delivery of this Contract and the performance of such Party's obligations have been duly authorized.

B. Consideration. The Parties acknowledge that the mutual promises and covenants contained herein and other good and valuable consideration are sufficient and adequate to support this Contract.

C. Purpose. The City seeks to employ the Consultant to provide data collection, preliminary design (to include programming, 30% design plans, and a basis of design report), permitting, and project administrative services for improvements to the North Terminal concourse at Burlington International Airport. The project is expected to include the demolition of the existing North Terminal concourse, replacement of the concrete aircraft parking apron, and the design of a new North Terminal concourse to be located immediately east of the existing terminal access driveway. The consultant will prepare

30%-level design plans and a Basis of Design report, which will be used to evaluate to continued design path for the project and various procurement options. Data collection to be used for the preliminary design includes field survey and geotechnical exploration. Final design, bidding, and construction phase services are not included in this agreement. A detailed scope of services to be provided by the Consultant is included in Attachment A.

3. EFFECTIVE DATE & TERM

A. Effective Date. This Contract shall not be valid or enforceable until the Effective Date. The City shall not be bound by any provision of this Contract before the Effective Date and shall have no obligation to pay Consultant for any performance or expense incurred before the Effective Date or after the expiration or termination of this Contract.

B. Term. This Contract and the Parties' respective performance shall commence on the Effective Date and expire on December 31, 2024 or upon the satisfaction of the City, unless sooner terminated as provided herein.

4. SCOPE OF WORK

The Consultant shall perform the services listed in Attachment A (Consultant's Proposal).

5. PAYMENT FOR SERVICES

A. Amount. The City shall pay the Consultant for completion of the Work in accordance with Exhibit A – Scope of Work, which is contained within Attachment A, in the amount of Nine Hundred Eight Thousand Two Hundred dollars and No cents ($908,200.00).

Consultant agrees to accept this payment as full compensation for performance of all services and expenses incurred under this Agreement.

B. Payment Schedule. The City shall pay the Consultant in the manner and at such times as follows: payments shall be one hundred percent (100%) of the amount expended during the invoice period. The City seeks to make payment within thirty days of receipt of an invoice and any backup documentation requested under subsection D (Invoice) below.

C. Maximum Limiting Amount. The total amount that may be paid to the Consultant for all services and expenses under this Contract shall not exceed the maximum limiting amount of $908,200.00. The City shall not be liable to Consultant for any amount exceeding the maximum limiting amount without duly authorized written approval.

D. Invoice. Consultant shall submit one copy of each invoice, including rates and a detailed breakdown by task for each individual providing services, and backup documentation for any equipment or other expenses to the following:

Burlington International Airport
Attn: Mr. Larry Lackey
1200 Airport Drive, #1
South Burlington, VT 05403
P: 802-863-2874 ext. 204
llackey@btv.aero

The City reserves the right to request supplemental information prior to payment. Consultant shall not be entitled to payment under this Contract without providing sufficient backup documentation satisfactory to the City.

6. SECTION & ATTACHMENT HEADINGS

The article and attachment headings throughout this Contract are for the convenience of City and Consultant and are not intended nor shall they be used to construe the intent of this Contract or any part hereof, or to modify, amplify, or aid in the interpretation or construction of any of the provisions hereof.

7. CONTRACT DOCUMENTS & ORDER OF PRECEDENT

A. Contract Documents. The Contract Documents are hereby adopted, incorporated by reference, and made part of this Contract. The intention of the Contract Documents is to establish the necessary terms, conditions, labor, materials, equipment, and other items necessary for the proper execution and completion of the Work to ensure the intended results.

The following documents constitute the Contract Documents:

Attachment A: Consultant's Proposal dated September 9, 2022
Attachment B: Burlington Standard Contract Conditions for Consultants
Attachment C: Burlington Livable Wage Ordinance Certification
Attachment D: Burlington Outsourcing Ordinance Certification
Attachment E: Burlington Union Deterrence Ordinance Certification
Attachment F: Consultant's Certificate of Insurance
Attachment G: Federal Contract Provisions

B. Order of Precedent. To the extent a conflict or inconsistency exists between the Contract Documents, or provisions therein, then the Contract takes precedent. Any Invitation for Bids, Additional Contract Provisions, and the City Ordinance Certifications shall prevail over any inconsistency with the Contractor's Scope of Work and Cost Proposal.

8. [Reserved]

— Signatures follow on the next page —

SIGNATURE

Persons signing for the Parties hereby swear and affirm that they are authorized to act on behalf of their respective Party and acknowledge that the other Party is relying on their representations to that effect.

Consultant
Jacobs Engineering Group Inc.

By: _____
David M. Chamberlain
Vice President

Date: 21 September, 2022

City of Burlington
Burlington International Airport

By: _____
Nic Longo
Director of Aviation

Date: 11/3/2022

Attachment A:
Consultant's Proposal dated September 9, 2022

Jacobs

Challenging today.
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September 9, 2022

Mr. Larry Lackey
Director of Engineering and Environmental Compliance
Burlington International Airport
1200 Airport Drive, #1
South Burlington, VT 05403

RE: Fee Proposal - North Terminal Improvements

Dear Larry:

Thank you for partnering with Jacobs once again to assist with the ongoing Terminal improvement projects at Burlington International Airport. Our architectural staff in Boston and Denver are thrilled to be part of this exciting time at BTV, and we are ready to continue the momentum from the Terminal Integration Project into the next phase of Terminal improvements.

Per your request, and in accordance with the scope of work discussed with FAA staff on August 3, 2022, Jacobs has prepared the enclosed fee proposal for Data Collection, Preliminary Design [Programming, 30% Design, and Basis of Design Report], Permitting, and Project Administration services for the upcoming North Terminal improvements. Please note that the enclosed scope and fee for the North Terminal improvements is identical to that of the South Terminal, *with the following exceptions*:

- Article B.I, Task 15(iv.): This Task was added to include preliminary CSPP drawings, as discussed at the 8/3/2022 scoping meeting.
- Article B.I, Task 22: Hours for landside Civil design reduced, and shifted to lower-cost staff. This is due to the smaller available space for landside improvements at the North Terminal.
- Article B.I, Task 24: This Task was added to an evaluation of building eligibility under AIP and PFC funding requirements, as discussed at the 8/3/2022 scoping meeting. An evaluation of existing AIP/PFC funded improvements that have not yet reached their full life cycle will also be included.
- Article B.I, Task 25: This Task was added to include an Engineer's Design Report per the AIP handbook, as discussed at the 8/3/2022 scoping meeting.
- Subconsultant costs for Field Survey and Airfield Civil design have been reduced slightly due to the smaller area of apron replacement associated with the project.

We look forward to assisting BTV with this project and are ready to begin work immediately. Please reach out to me at the phone number or email below if you would like to discuss.

Yours sincerely,



Stu Moncrieff, P.E.
Project Manager

(603) 496-9267
stu.moncrieff@jacobs.com

Enclosure (Fee Proposal)

BURLINGTON INTERNATIONAL AIRPORT (KBTV)
1200 Airport Drive, #1
South Burlington, VT 05403

Project:

DATA COLLECTION, PRELIMINARY DESIGN, PERMITTING,
AND PROJECT ADMINISTRATION SERVICES FOR TERMINAL IMPROVEMENT
PHASE III (NORTH END)

AIP No. TBD

FEE SUMMARY

Lump Sum Articles	Hours*	Fee
Article A: Data Collection	112	$58,800
Article B: Preliminary Design and Permitting		
Article B.I: Programming, Basis of Design (BoD), and 30% Design	3,843	$750,400
Article B.II: Permitting	125	$41,600
Article C: Bidding and Arrangements for Construction - ***Not Used***		
Article D: Project Management and Administration	346	$57,400
Total Lump Sum Fee	**4,426**	**$908,200**

Cost Plus Articles	Hours*	Fee
Article E: Construction Administration - ***Not Used***		
Article F: Resident Engineering (Part-Time) - ***Not Used***		
Article G: Environmental Monitoring Services - ***Not Used***		
Total Cost Plus Fee	**0**	**$0**

TOTAL PROJECT FEE	**$908,200**

Fee Breakdown by Entity	Fee
Jacobs Engineering Group Inc.	$721,519
Vermont Survey & Engineering - Field Survey	$19,440
John Turner Consulting - Soil Exploration	$22,500
Hoyle, Tanner & Associates	$64,268
City Point Partners, LLC	$17,973
Wagner Hodgson	$40,000
EIV Technical Services	$22,500

*** Hours are for Jacobs only, and do not include Subconsultant efforts**

Notes	
Jacobs Overhead Rate (2022 Rate - Applies to entire project duration)	102.74%
Jacobs Profit (Labor)	10.00%
Jacobs Profit (Subconsultants)	0.00%
Mileage Rate ($/mi.)	$0.585
Round Trip Mileage from Jacobs Office (Bedford, NH) to BTV	330

Exclusions
Preparation of bidding/RFP documents
Preparation of technical specifications
Design services beyond those specifically described herein
Additional exclusions as noted throughout Article B.I

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Article A: Data Collection

Task ID	WORK ITEM	Principal in Charge	Project Manager	Project Engineer	Engineer	Structural Engineer	MEP Engineer	Utility Engineer	Environ. Scientist	CADD	Admin Assistant	TOTAL
1	**ESTABLISH SCOPE OF DATA COLLECTION.** Jacobs will establish a preliminary limit of work for the field survey, and determine an appropriate number of soil borings required for the building substructure. A plan will be prepared to graphically illustrate the nature and location of work required. These graphics will be used as part of the Request for Proposals under Task 2.			2	2	2						6
2	**SOLICIT PROPOSALS.** Jacobs will prepare two (2) separate Requests for Proposal (RFPs) for field survey and soil exploration. The field survey RFP will detail the expected scope of field work, and the format for CAD deliverables. The soil boring RFP will describe the scope of field exploration, laboratory analysis, design recommendation(s), and summary report. Both RFPs will summarize the safety, badging, and escorting protocols in place at BTV, and will require compliance with all safety and security measures in place at the Airport. This Task includes QA/QC of RFP documents distributed to potential subconsultants.		2	2	4	2						10
3	**REVIEW PROPOSALS.** Jacobs will evaluate all proposals received in response to the RFPs issued under Task 2. A selection will be made using a "best value" approach that factors in the qualifications, experience, availability, and cost of each firm. Jacobs will review the results with the Airport prior to awarding the work to any subconsultant.		2	2								4
4	**AWARD OF WORK.** Jacobs will notify the winning proposers of their selection to participate in this project, and advise them of next steps. Jacobs will also notify all firms not selected for the project.		2	2								4
5	**EXECUTE SUBCONSULTANT AGREEMENTS.** *[This work is included as part of Article D - Project Management and Administration]*	*Refer to Article D - Project Management and Administration*										0
6	**SCHEDULE AND OBSERVE FIELD WORK.** Jacobs will schedule all on-Airport data collection with BTV staff. Jacobs will schedule the work to accommodate other active construction projects on the airfield. For this Task, the Airport shall be responsible to provide an escort, if necessary. Jacobs will be on-site for one (1) day of soil exploration work.		2	20								22
7	**EVALUATE UTILITY CAPACITY.** Jacobs will coordinate with local utility companies to advise them of the project scope, and determine available capacity within their existing infrastructure. It is anticipated that this coordination will be required for four (4) utilities: water, sewer, natural gas, and electric services. This Task includes one (1) site visit with two (2) senior technical staff.		12				20	20				52
8	**REVIEW DELIVERABLES.** Jacobs will review all deliverables provided by the subconsultants for compliance with the accepted proposals. Any deficiencies will be clearly identified, and the subconsultant will be notified for corrective action. Follow-up deliverables will be re-checked for compliance.			4	4	2				4		14
	TOTAL HOURS	0	20	32	10	6	20	20	0	4	0	**112**
	2022 HOURS	0	20	32	10	6	20	20	0	4	0	**112**
	2022 RATE	$140	$72	$58	$45	$65	$80	$70	$60	$43	$28	
	2023 HOURS	0	0	0	0	0	0	0	0	0	0	**0**
	2023 RATE	$140	$76	$61	$48	$68	$84	$74	$63	$45	$30	
	PAYROLL ESTIMATE	$0	$1,440	$1,856	$450	$390	$1,600	$1,400	$0	$172	$0	**$7,308**

Subconsultant Summary:

Subconsultant and Scope of Work	Fee
[Vermont Survey & Engineeringt] - Detail survey within area of new terminal footprint and South Concourse apron restoration. The approximate survey area is 6.33 acres.	$19,440
[John Turner Consulting] - Thirty (30) soil borings (depths of up to 40' BGS), laboratory analysis, and design recommendations for pavement design and building substructure.	$22,500
Total Subconsultants:	**$41,940**

TOTAL PAYROLL		**$7,308**
Overhead	102.74%	$7,508
Subtotal		$14,816
Profit	10%	$1,482
Payroll Fee		$16,298
Subconsultants		$41,940
Expenses		$562
Lump Sum Fee Total		**$58,800**

Expense Summary by Task ID:

Task ID	Expense Item	Amount
6	Travel - Geotechnical Engineer (330 Miles Round-Trip @ $0.585)	$193
7	Travel - MEP Engineer and Utility Engineer (330 Miles Round-Trip @ $0.585)	$193
1-8	Misc. (Internal prints, Postage, Etc.)	$176
	Total Expenses:	**$562**

NOTE: All submissions are assumed to be electronic, in PDF format. No plan/specifications reprographics costs are included in this Agreement.

Article A: Data Collection - Total Fee = $58,800

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DATA COLLECTION, PRELIMINARY DESIGN, PERMITTING,
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PHASE III (NORTH END)
AIP No. TBD

Article B.I: Programming, Basis of Design (BoD), and 30% Design

Task ID	WORK ITEM	Principal in Charge	Design Team Manager	Project Engineer	Architect	Structural Engineer	MEP Engineer	Comm. Engineer	Environ. Scientist	CADD	Admin Assistant	TOTAL
1	**DESIGN COORDINATION WITH OWNER.** This includes soliciting input on preferences for holdroom locations, concessions, aircraft fleet mix, aircraft parking positions, and other factors that will affect the programming, Basis of Design, and 30% Design Drawings. This task assumes an initial coordination meeting with the Owner via teleconference, and ongoing coordination with the Owner throughout the design development phase.	30	24		60	40						154
2	**ARCHITECTURAL SITE VISIT.** Jacobs will conduct a thorough site investigation prior to the initiation of the project's programming phase. This will include an inspection of existing Terminal facilities, and meetings with staff to gain perspective on project goals, concerns, and preferences. This visit will include two (2) architectural staff from Jacobs' Denver, Colorado office, and a Project Manager from the Bedford, New Hampshire office. This Task includes time required for travel. There will be a total of three site visits for two (2) architectural		8		120							128
3	**PROGRAM DEVELOPMENT.** Jacobs will work closely with the Owner to identify the primary goals and objectives of the project, and develop an understanding of building design, circulation, holdroom layout, and other preferences. This background information will be used to develop initial programming drawings, which will evolve based upon Owner input throughout the process. This will include input and recommendations from the Airfield Civil Subconsultant, with regard to Gate and passenger boarding bridge locations.		20		170							190
4	**DESIGN REVIEW MEETINGS.** Jacobs will schedule, prepare for, and manage up to three (3) Design Review Meetings with Airport staff, Jacobs team members, and subconsultants, as necessary, to review and discuss conceptual designs and evaluate alternatives. Owner preferences or requests for alterations will be incorporated prior to finalization of the preferred concept.		12		30	24						66
5	**CODE COMPLIANCE/LIFE SAFETY COORDINATION.** During the Programming phase, Jacobs will evaluate each alternative for conformance with applicable building codes and life safety standards. Complete Code Review/Life Safety plan will be completed for preferred concept.		8		180	8						196
6	**FINALIZE PREFERRED CONCEPT.** Jacobs will review and discuss all conceptual drawings with the Owner, and assist with identifying the preferred concept. The preferred concept will then be used to develop all discipline drawings for the 30% Design Drawings set.		12		160					36		208
7	**PREPARE BASIS OF DESIGN (BoD) NARRATIVE.** Jacobs will utilize the Basis of Design (BoD) narrative issued as part of the Terminal Integration Project, and update accordingly to meet the design intent of this project. Updates will incorporate preferences of the Owner, and will address the need for additional holdroom space, passenger circulation, and the ability to accommodate larger aircraft.		24		120							144
8	**ARCHITECTURAL DESIGN.** Using the preferred concept developed as part of the Programming phase, Jacobs will advance the Architectural design to a 30% level for inclusion in the overall 30% Design Drawings. It is assumed that the overall architectural theme will be consistent with the original Terminal design, and the Terminal Integration Project (TIP).											
	i. Review of Terminal Integration Project (TIP) Architectural drawings to develop general understanding of building construction and preferred connection strategy.		16		40							56
	ii. Develop and refine architectural theme of Terminal improvement. This will include basic exterior renderings for up to three (3) architectural options.		8		120							128
	iii. Architectural Design and development of 30% Design Drawings. Jacobs will utilize the preferred concept to prepare 30% architectural drawings, which will include the following: - Floor Plans - Roof Plan - Reflected Ceiling Plans - Exterior Elevations - Interior Elevations - Building Sections		8		360					56		424
	Architectural Design Assumptions: 1. Local coordination/approval of architectural concepts (e.g., Mayor's Office, City Council, Planning Department, etc.) will be conducted by the Owner 2. Architectural themes are assumed to be consistent with the existing Terminal and the ongoing Terminal Integration Project (TIP)											

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Task ID		WORK ITEM	Principal in Charge	Design Team Manager	Project Engineer	Architect	Structural Engineer	MEP Engineer	Comm. Engineer	Environ. Scientist	CADD	Admin Assistant	TOTAL
9		**STRUCTURAL DESIGN.** Jacobs will review available soil information, investigate the applicable design requirements and codes, and prepare preliminary 30% Basis of Design (BoD) Structural Drawings for the building foundation and super structure.											
	i.	Review soil characteristics and design load recommendations provided by the Geotechnical Engineer.					8						8
	ii.	Prepare Structural narrative for the Basis of Design (BoD). This will provide a general description of the proposed foundation systems, structural framing, and lateral load resisting systems. The BoD narrative will also provide information on the applicable Design Code, Standards and Guidelines, Design Loads, and other parameters.					40						40
	iii.	Develop preliminary footing and foundation design. It is assumed that a spread footing design will be incorporated, along with a frost wall perimeter.					32						32
	iv.	Develop preliminary structural analysis model and design calculations. This will allow for preliminary sizing of major structural components.					96						96
	v.	Prepare 30% BoD Structural Drawings. These plans may include, but not be limited to: foundation, footings, slab, framing, bracing, decking, and design details.					160						160
		Structural Design Assumptions: 1. Soil information and design recommendations to be provided as part of Article A (Data Collection) 2. Standard building codes, loading, and seismic design factors to be incorporated											
10		**MECHANICAL DESIGN.** The HVAC system will include new air handling units to serve Level 1 and Level 2. The heating system either an expansion of the existing boiler system or utilizing electric heat (depending on the capacity of the existing boiler plant). Ductwork distribution system will be provided. Building management system will control and monitor the systems.											
	i.	Site Visit to evaluate and understand the existing systems and identify expansion limitations. This includes two site visits for one engineer.						40					40
	ii.	Virtual Meeting with current Facility team to discuss and coordinate systems expansion.						8					8
	iii.	Evaluate the existing boiler system for an expansion to cover the new added spaces.						20					20
	iv.	Prepare Basis of Design narrative for the HVAC systems, including the new DX Cooling, gas-fire heating rooftop units, air distribution, heating system as well as the controls addressing compliance with applicable systems, design requirements, and parameters.						40					40
	v.	Coordinate 30% HVACdesign with Facilities team and other design disciplines for new and existing systems and utilities.						32					32
	vi.	Develop 30% Design Package: 30% drawings, BOD report, outline spec. Preliminary locations and sizing of major equipment such as rooftop units.						160					160
		Mechanical Assumptions: 1. 30% Mechanical drawings includes RTU locations, main duct runs (single line), control concepts, preliminary equipment schedules.											
11		**ELECTRICAL DESIGN.** Jacobs will present a program of requirements and preliminary design to key stakeholders and provide guidelines for the future design firm to proceed to detailed design. The scope will consist of coordinating the new addition with existing utilities and existing lighting within the proposed Terminal improvement.											
	i.	Site Visit to evaluate the existing platforms and identify location(s) for utility transformer. This includes two site visits for one engineer.						40					40
	ii.	Virtual Meeting with current facility team to discuss and identify existing lighting (interior and exterior) and coordinate systems expansion.						8					8
	iii.	Prepare Basis of Design narrative for electrical systems, including incoming utility service, normal & emergency power, lighting, fire alarm, & lightning protection addressing compliance with applicable systems, codes, design requirements, and parameters.						24					24
	iv.	Coordinate with utility engineer to bring new service to the Terminal improvement.						30					30
	v.	Coordinate high-level electrical design with other design disciplines and other stakeholders to locate the electrical switchboards, electrical rooms/closets and emergency electrical room/closet.						20					20

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Task ID		WORK ITEM	Principal in Charge	Design Team Manager	Project Engineer	Architect	Structural Engineer	MEP Engineer	Comm. Engineer	Environ. Scientist	CADD	Admin Assistant	TOTAL
	vi.	Electrical system design and development of 30% Design Drawings. Jacobs will utilize the preferred alternative to prepare the following drawings: - Electrical Legend - Lighting Plans (interior only) - Power Plans - Lightning Protection Plan - Enlarged Electrical Plan(s) - Electrical Section plan Sheet (if needed) - Electrical One-Line Diagrams - Electrical Detail Sheets - Panel Schedules - Equipment Schedules						120			40		160
	Electrical Assumptions: 1. 30% Electrical Design includes BOD narrative, 30% Design Drawings, service load calculation, and emergency/standby generator sizing 2. Interior lighting assumed to be substantially similar to the Terminal Integration Project (TIP) **Electrical Exclusion**: 1. Exterior/site lighting not included 2. Interior photometric plan not included												
12	**PLUMBING.** Provide engineering design for the plumbing systems which includes domestic cold water, hot water, sanitary waste and vents, internal storm drainage, natural gas.												
	i.	Site Visit to evaluate and understand the existing platforms and identify expansion limitations.	*[To be combined with Mechanical site visit - Task 10(i)]*										0
	ii.	Virtual Meeting with facilities group to discuss and coordinate systems expansion.						10					10
	iii.	Coordinate water, sanitary and gas (and other site utilities) for new building.						20					20
	iv.	Prepare Basis of Design narrative for plumbing systems, addressing compliance with applicable systems, design requirements, and parameters.						24					24
	v.	Coordinate 30% design with facilities group and other design disciplines in the placement of equipment and plumbing fixtures within the Terminal.						20					20
	vi.	Develop 30% Design Package: 30% drawings, BOD report, outline spec. Preliminary locations and sizing of plumbing systems.						40			40		80
	Plumbing Assumptions: 1. 30% plumbing drawings includes prelimary plumbing plans and riser diagrams.												
13	**FIRE PROTECTION.** Provide sprinkler system in the new addition. Connections to be made to the existing fire protection loop.												
	i.	Site Visit to evaluate and understand the existing fire protection system and identify expansion limitations.	*[To be combined with Mechanical site visit - Task 10(i)]*										0
	ii.	Virtual Meeting with facilities group to discuss and coordinate systems expansion.						8					8
	iii.	Prepare Basis of Design narrative for fire protection systems, addressing compliance with applicable systems, design requirements, and parameters.						16					16
	iv.	Coordinate 30% design concept with the Architectural team.						30					30
	v.	Develop 30% Design Package: BOD report for fire protection narrative/ concept, outline spec.						40			20		60
	Fire Protection Assumptions: 1. Connect the existing system for extension to the new terminal spaces. Assume flowrate is adequate and will confirm available pressure and flow for furher design in the next phase.												
14	**COMMUNICATIONS.** The Terminal improvement will require the following low voltage systems to be incorporated into the new space: Flight Information Display (FIDS), Public Address (PA), Electronic Access Control (SIDA), Video Surveillance Systems (CCTV) and Wireless Access Points (Wi-Fi). The following Tasks are included as part of the SOW:												
	i.	Site Visit to evaluate and understand the existing platforms and identify expansion limitations. This includes two site visits for one engineer.							40				40
	ii.	Virtual Meeting with current IT/Systems group to discuss and coordinate systems expansion.							24				24
	iii.	Determine what (if any) system expansion modules and/or additional storage requirements may be required to support the expansion of these systems.							16				16
	iv.	Prepare Basis of Design narrative for communications systems, addressing compliance with applicable systems, design requirements, and parameters.							32				32
	v.	Coordinate 30% communications design with internal stakeholders and other design disciplines in the placement of devices within the Terminal.							32				32
	vi.	Attend internal and external team coordination meetings to review designs and adjust as needed per architectural or other discipline changes.							32				32

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Task ID		WORK ITEM	Principal in Charge	Design Team Manager	Project Engineer	Architect	Structural Engineer	MEP Engineer	Comm. Engineer	Environ. Scientist	CADD	Admin Assistant	TOTAL
	vii.	System Design and Development of 30% Design Drawings. Jacobs will utilize the preferred alternative to prepare system design, plan view, and one-line drawings for each of the following communication systems: - FIDS - PA - SIDA - CCTV - Wi-Fi							40				40
	Communications Assumptions: 1. Existing systems are capable to support the Terminal improvement 2. BTV to provide Jacobs with existing system vendor information 3. Existing communication interface plans (comm closets/rooms) shall be provided												
15	**AIRFIELD CIVIL DESIGN.** Jacobs and our airfield Subconsultant will prepare site demolition plans for the removal of the South Concourse, and design a new concrete ramp and aircraft parking to service the east side of the TIP and the Terminal improvement. The Civil Subconsultant will also be involved with early Terminal programming efforts, to assist with developing optimum holdroom and gate layouts for the Airport's long-term benefit. Note:												
	i.	Assist with Terminal improvement programming efforts, including holdroom/gate locations, aircraft parking position options, fleet mix evaluation. It is assumed that this task will include a maximum of three (3) conceptual gate/parking layouts.	*[By Hoyle, Tanner & Associates - See Below]*										0
	ii.	Determine limits of demolition for the existing South Concourse, and identify the extent of required ramp reconstruction. Impacts to existing airfield electrical, drainage, and other subsurface infrastructure will also be investigated.	*[By Hoyle, Tanner & Associates - See Below]*										0
	iii.	Perform airfield civil design and prepare 30% apron reconstruction plans for inclusion in the overall 30% Design Drawings set. This will include, but not be limited to, the following: - Site Demolition Plans - Interim Drainage & Electrical Plans - Geometry Plans - Grading and Drainage Plans - Marking Plans - Marking Details - Electrical Plans (if necessary) - Electrical Details (if necessary)	*[By Hoyle, Tanner & Associates - See Below]*										0
	iv.	Design construction phasing and prepare 30% CSPP drawings. An overall plan and detail for each phase will be provided. This will include a summary of work areas, safety equipment to be installed, impacts to NAVAIDs and/or AOAs, access route(s), and staging/stockpile areas. This effort excludes the written narrative portion of the CSPP.		4	12						24		40
	Airfield Civil Assumptions: 1. Desired aircraft fleet mix for each new Gate to be provided by the Owner 2. Existing Terminal chiller unit is assumed to remain (not included in building demolition) 3. Detailed site survey to be provided as part of Article A (Data Collection)												
16	**INTERDISCIPLINARY DESIGN COORDINATION.** Jacobs' major design disciplines and our Subconsultant(s) will coordinate design elements on an ongoing basis. Additionally, up to four (4) discipline review meetings will be held to review design status and discuss areas of conflict and/or the need for re-design of specific elements.			24		24	16	24	24				112
17	**PREPARE 30% DESIGN DRAWINGS.** Jacobs will aggregate 30% Design Drawings prepared by each discipline and our Subconsultants, develop numbering convention, and format for consistency throughout the plan set. A cover sheet and general project notes will also be developed as part of this Task.			20		50		24	32		70		196

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Task ID	WORK ITEM	Principal in Charge	Design Team Manager	Project Engineer	Architect	Structural Engineer	MEP Engineer	Comm. Engineer	Environ. Scientist	CADD	Admin Assistant	TOTAL
18	**30% COST ESTIMATE.** Jacobs will subcontract with a trusted partner firm to prepare a detailed 30%-level quantity take-off and Cost Estimate for the Basis of Design (BoD) Narrative and accompanying Design Drawings. It is anticipated that the Cost Estimate will include, but not be limited to, the following major components: - Building Demolition - Site Demolition - Civil Site Preparation - Structure Foundation - Building Super Structure - Building Enclosure - Building Finishes - Building Openings - Building Specialties - Building Fire Suppression - Building Plumbing - Building HVAC - Building Electrical - Building Communications - Building Electronic Safety/Security - Building Commissioning - Mobilization, Survey, Safety Compliance, QC	*[By City Point Partners, LLC - See Below]*										0
19	**FAA COORDINATION.** The Engineer will coordinate with the FAA Airports Division as needed throughout the 30% design phase to ensure all AIP requirements are being followed and that the project remains fully eligible for reimbursement.		24									24
20	**AIRSPACE EVALUATION.** The Engineer will gather and input building information (lat/long, height) based on the 30% design, and upload to the FAA's OEAAA website for an airspace review. Up to eight (8) building points will be submitted. The FAA will typically review the submitted data and issue a determination within 45 days.		12		8							20
21	**QUALITY CONTROL REVIEW OF PROJECT DELIVERABLES**. The Engineer will conduct an internal QA/QC review of all project deliverables. The QA/QC shall be a comprehensive check of all associated documents to be presented to the client, issued for bid, or distributed for review.		16	80	16	8	16	16				152
22	**CONCEPTUAL CIVIL DESIGN (LANDSIDE)**. The Engineer shall prepare three (3) concept drawings for the landside area adjacent to the Terminal improvement. The intent of this effort is to improve the flow of delivery and waste removal vehicles. Concepts will be limited to the development of roadway, sidewalk, loading, and landscaping areas.		4	24						32		60
23	**LANDSCAPE DESIGN.** The Engineer will subcontract landscape design services, for the purpose of compliance with the City of South Burlington landscape mitigation requirements. It is assumed that some or all of these improvements will be located off-site in locations identified in the Airport's approved Landscape Master Plan.	*[By Wagner Hodgson - See Below]*										0
24	**ELIGIBILITY EVALUATION.** This Task will be to conduct preliminary eligibility calculations for the Terminal improvements based upon floor area and use. Additionally, the Engineer will coordinate with FAA and the Owner to discuss financial impacts for the demolition of existing concrete apron and Terminal space. A financial summary will be provided in the Basis of Design report.	2	20	20						20		62
25	**FAA ENGINEER'S DESIGN REPORT.** Following the preparation of the 30% Design Drawings and the Basis of Design Report, the Engineer will prepare a summary Design Report as required by Section 3-28 of FAA Order 5100.38D, Change 1. All required content as described in Table 3-20 will be included. This report may be included as an Appendix to the Basis of Design report.	1	8	24	8	8	8	8		12	4	81
	TOTAL HOURS	33	272	160	1466	440	822	296	0	350	4	**3843**
	2022 HOURS	13	108	100	595	153	404	154	0	120	2	
	2022 RATE	$140	$72	$58	$72	$65	$80	$70	$60	$43	$28	
	2023 HOURS	20	164	60	871	287	418	142	0	230	2	
	2023 RATE	$140	$76	$61	$76	$68	$84	$74	$63	$45	$30	
	PAYROLL ESTIMATE	$4,620	$20,240	$9,460	$109,036	$29,461	$67,432	$21,288	$0	$15,510	$116	**$277,163**

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DATA COLLECTION, PRELIMINARY DESIGN, PERMITTING,
AND PROJECT ADMINISTRATION SERVICES FOR TERMINAL IMPROVEMENT
PHASE III (NORTH END)

AIP No. TBD

Article B.I: Programming, Basis of Design (BoD), and 30% Design

Task ID	WORK ITEM	Principal in Charge	Design Team Manager	Project Engineer	Architect	Structural Engineer	MEP Engineer	Comm. Engineer	Environ. Scientist	CADD	Admin Assistant	TOTAL
											TOTAL PAYROLL	**$277,163**
											Overhead 102.74%	$284,757
											Subtotal	$561,920
											Profit 10%	$56,192
											Payroll Fee	$618,112
											Subconsultants	$122,241
											Expenses	$10,047
											Lump Sum Fee Total	**$750,400**

Subconsultant Summary:

Subconsultant and Scope of Work	Fee
Hoyle, Tanner & Associates - Airfield Civil Design, as described in Task 15(i) through 15(iii) above.	$64,268
City Point Partners - Quantity Takeoff and Cost Estimating, as described in Task 18 above.	$17,973
Wagner Hodgson - Landscape Design, as described in Task 23 above.	$40,000
Total Subconsultants:	**$122,241**

Expense Summary by Task ID:

Task ID	Expense Item	Amount
2	Travel (Airfare) - 2 Arch, Comm, Elect, Mech (DEN to BTV, 5 Staff)	$6,000
2	Travel (Lodging) - 2 Arch, Comm, Elect, Mech (5 Staff, 2 Nights)	$2,000
2	Travel (Meals & Incidentals) - 2 Arch, Comm, Elect, Mech (5 Staff, 2 Nights)	$800
2	Travel - Project Manager (330 Miles Round-Trip @ $0.585)	$193
4	Travel - Project Manager (330 Miles Round-Trip @ $0.585, 3 Trips)	$579
1-21	Misc. (Internal prints, Postage, Etc.)	$475
	Total Expenses:	**$10,047**

NOTE: All submissions are assumed to be electronic, in PDF format. No plan/specifications reprographics costs are included in this Agreement.

Article B: Preliminary Design and Permitting - Total Fee = $750,400

BURLINGTON INTERNATIONAL AIRPORT (KBTV)
1200 Airport Drive, #1
South Burlington, VT 05403
DATA COLLECTION, PRELIMINARY DESIGN, PERMITTING,
AND PROJECT ADMINISTRATION SERVICES FOR TERMINAL IMPROVEMENT
PHASE III (NORTH END)
AIP No. TBD

Article B.II: Permitting

Task ID	WORK ITEM	Principal in Charge	Project Manager	Project Engineer	Engineer	Structural Engineer	MEP Engineer	Utility Engineer	Environ. Scientist	CADD	Admin Assistant	TOTAL
1	**COORDINATION WITH OWNER AND PERMITTING TEAM.** This includes periodic meetings to discuss and strategize the permitting process, and to review the ongoing status of permit submissions.	1	4									5
2	**CITY OF SOUTH BURLINGTON PERMITTING.** This project will require three (3) local approvals: Sketch Plan Review, Site Plan Review, and Zoning Permit. Jacobs and our permitting Subconsultant will assist the Owner with the preparation of application materials, coordination of fees, attendance at public hearings (up to 3 meetings are anticipated), and follow-up on requests by City staff or the review Boards.		24	12	8							44
3	**VERMONT NATURAL RESOURCES BOARD PERMITTING.** This project requires a "Minor Amendment" to the existing Act 250 Land Use Permit currently in place at the Airport. Jacobs and our permitting Subconsultant will assist the Owner with the preparation of application materials, coordination of fees, and follow-up with Board staff as needed to obtain project approval. Since this project is not increasing impervious area or generating a significant increase in air traffic, this task assumes the Act 250 amendment will be procedural. No Public Hearings are expected or included in this agreement.		4	16								20
4	**VERMONT AGENCY OF NATURAL RESOURCES (ANR) OPERATIONAL STORMWATER PERMITTING.** This project requires an amendment to the existing Operational Stormwater Permit (3-9050) in place at the Airport. Jacobs and our permitting Subconsultant will assist the Owner with the preparation of application materials, coordination of fees, and one (1) meeting with ANR staff to review drainage alterations proposed as part of the project. Any follow-up requests for permit approval will also be addressed.		4	16								20
5	**VERMONT AGENCY OF NATURAL RESOURCES (ANR) INDIVIDUAL CONSTRUCTION STORMWATER PERMITTING.** This project requires and Individual Construction Stormwater Permit (3-9020) prior to construction. Jacobs and our permitting Subconsultant will assist the Owner with the preparation of application materials, coordination of fees, and one (1) meeting with ANR staff to review erosion control measures and inspection schedules proposed as part of the project. Any follow-up requests for permit approval will also be addressed.		4	16								20
6	**FEDERAL PERMITTING COORDINATION.** As a Federally-funded project, coordination and review with the US Fish & Wildlife Service, Army Corps of Engineers, and the State Historic Preservation Officer are required. Jacobs and our permitting Subconsultant will provide the required application, notification, and/or and documentation for review, as specified by each Federal entity. This Task assumes all coordination will be by phone or US mail; no meetings are anticipated or included.		2	6								8
7	**QUALITY CONTROL REVIEW OF PROJECT DELIVERABLES.** The Engineer will conduct an internal QA/QC review of all project deliverables. The QA/QC shall be a comprehensive check of all associated documents to be presented to the client, issued for permitting, or distributed for review.		8									8
	TOTAL HOURS	1	50	66	8	0	0	0	0	0	0	**125**
	2022 HOURS	1	16	20	4	0	0	0	0	0	0	41
	2022 RATE	$140	$72	$58	$45	$65	$80	$70	$60	$43	$28	
	2023 HOURS	0	34	46	4	0	0	0	0	0	0	84
	2023 RATE	$140	$76	$61	$48	$68	$84	$74	$63	$45	$30	
	PAYROLL ESTIMATE	$140	$3,736	$3,966	$372	$0	$0	$0	$0	$0	$0	**$8,214**

Subconsultant Summary:

Subconsultant and Scope of Work	Fee
Elv Technical Services - Permitting coordination and assistance with the following permits: City of South Burlington (Sketch Plan Review, Site Plan Review, Zoning Permit); Vermont NRB Act 250 Permit (Minor Amendment); Vermont ANR (Operational 3-9050 and Individual 3-9020) Stormwater Permits; and Federal permits/notifications (USF&W, ACOE, SHPO)	$22,500
Total Subconsultants:	**$22,500**

TOTAL PAYROLL		**$8,214**
Overhead	102.74%	$8,439
Subtotal		$16,653
Profit	10%	$1,665
Payroll Fee		$18,318
Subconsultants		$22,500
Expenses		$782
Lump Sum Fee Total		**$41,600**

Expense Summary by Task ID:

Task ID	Expense Item	Amount
2	Travel - Project Manager (330 Miles Round-Trip @ $0.585 x 3 Trips)	$579
1-7	Misc. (Internal prints, Postage, Etc.)	$203
	Total Expenses:	**$782**

NOTE: All submissions are assumed to be electronic, in PDF format. No plan/specifications reprographics costs are included in this Agreement.

Article B.II: Permitting - Total Fee = $41,600

BURLINGTON INTERNATIONAL AIRPORT (KBTV)
1200 Airport Drive, #1
South Burlington, VT 05403

DATA COLLECTION, PRELIMINARY DESIGN, PERMITTING,
AND PROJECT ADMINISTRATION SERVICES FOR TERMINAL IMPROVEMENT
PHASE III (NORTH END)

AIP No. TBD

Article D: Project Management and Administration

Task ID	WORK ITEM	Principal in Charge	Project Manager	Project Engineer	Engineer	Structural Engineer	MEP Engineer	Utility Engineer	Environ. Scientist	CADD	Admin Assistant	TOTAL
1	**DEVELOP SCOPE OF WORK.** The Engineer will prepare a scope of work for required design services, and for relevant subconsultant services. The Engineer will also solicit proposals from firms that are best suited to participate in the project. A draft scope of work will be submitted to the Owner for review and approval prior to the Owner's obtaining an Independent Fee Estimate.	2	20									22
2	**IFE ASSISTANCE.** The Engineer shall assist the Owner in preparing the necessary documents so that they can obtain an Independent Fee Estimate (IFE). The Engineer will develop a "zeroed-out" fee spreadsheet. The "zeroed-out" fee spreadsheet and the finalized scope of work shall be electronically transmitted to the Owner. The Owner shall be responsible for soliciting, coordinating, and obtaining the IFE.		2									2
3	**ENGINEERING CONTRACTS.** Once the IFE has been completed, the Owner and the Engineer shall negotiate the final scope of work and Engineering Fee. The Engineer will prepare the final Contracts in compliance with City of Burlington requirements, and transmit electronic copies to the Owner for signature. The Owner shall be responsible for preparing and submitting a record of negotiations letter to the FAA.	2	8									10
4	**SUBCONSULTANT AGREEMENTS.** Following receipt of signed Contracts, the Engineer will prepare and circulate subconsultant agreements for the firms selected to participate in the project. It is assumed that five (5) subconsultant agreements will be required (Field Survey, Soil Investigation, Airfield Civil, Cost Estimating, and Permitting).		24									24
5	**PROJECT MANAGEMENT AND COORDINATION.** This task includes Owner coordination, project team coordination, internal staff coordination, and project-specific administrative efforts such as invoicing and monthly project controls updates. It is anticipated that this project will have a duration of 6 months once work begins.	8	240	20	20							288
	TOTAL HOURS	12	294	20	20	0	0	0	0	0	0	**346**
	2022 HOURS	8	120	10	10	0	0	0	0	0	0	148
	2022 RATE	$140	$72	$58	$45	$65	$80	$70	$60	$43	$28	
	2023 HOURS	4	174	10	10	0	0	0	0	0	0	198
	2023 RATE	$140	$76	$61	$48	$68	$84	$74	$63	$45	$30	
	PAYROLL ESTIMATE	$1,680	$21,864	$1,190	$930	$0	$0	$0	$0	$0	$0	**$25,664**

Subconsultant Summary:

Subconsultant and Scope of Work	Fee
[None]	---
Total Subconsultants:	**$0**

TOTAL PAYROLL		**$25,664**
Overhead	102.74%	$26,367
Subtotal		$52,031
Profit	10%	$5,203
Payroll Fee		$57,234
Subconsultants		$0
Expenses		$166
Lump Sum Fee Total		**$57,400**

Expense Summary by Task ID:

Task ID	Expense Item	Amount
1-5	Misc. (Internal prints, Postage, Etc.)	$166
Total Expenses:		**$166**

Article D: Project Management and Administration - Total Fee = $57,400

Attachment A, Appendix A:

Subconsultant Proposal
Vermont Survey & Engineering
Field Survey
[Article A – Data Collection]

Vermont Survey and Engineering, Inc.

Surveyors and Civil Engineers

79 River Street, Suite 201, Montpelier, Vermont 05602
(802) 229-9138, info@vermontsurvey.com

August 18, 2022

Burlington International Airport
Phase III – North Terminal Improvements

Topographic Survey & Base Mapping

Topographic survey of the project area as depicted on the included sketch. The detail shown to the east of the project area was mapped by VSE in December 2021 and does not require additional survey.

Survey work shall be tied to the Vermont State Plane Coordinate System (SPCS) based on the North American Datum (NAD) of 1983 and NAVD 1988 with the standard units for this work being the US survey foot.

Establish temporary control points (iron pins and PK nails) outside of, but adjacent to the work area indicated on the sketch to assist with construction layout. (Minimum of 4 per area)

Level of detail of surveyed information shall include:

- All edges of pavement
- Catch basins/drainage manholes, including pipe size, direction, and inverts
- Electrical manholes/handholes
- Area lighting
- Underdrain clean-out covers
- Airfield lighting and/or markers
- All building corners, doorways, and first floor elevations at all doorways
- All fence lines and gate locations
- All visible utilities (gas, electric, water, sewer)
- All grade breaks/swale lines

Survey information shall be provided in an AutoCAD drawing format via electronic transfer. This information shall include all pertinent surface files and a drawing file (fully contoured) containing all of the survey data, including the surveyed point information.

Survey elevation data shall be to the nearest 0.01 ft. for all points on the paved surfaces and to the nearest 0.1 ft. for all points in turf.

Data shall include surveyed points taken on a 25’x25’ grid, parallel and perpendicular to the concrete ramp sections, and any other interval required to show the required level of detail outlined above.

List of definitions for all point descriptions and a copy of the survey field notes to be provided as part of the final deliverables.

Cost Estimate – Topographic Survey and Base Mapping

Labor				
Classification	**Hours**	**Rate**	**Total**	
Survey Party Chief	70	$92.00	$6,440.00	
Instrument Operator	70	$80.00	$5,600.00	
CAD Operator	20	$102.00	$2,040.00	
			Total Labor	$14,080.00
Expenses				
Expense	**Amount**	**Rate**	**Total**	
Mileage	1,120 mi.	$0.625	$700.00	
			Total Expenses	$700.00
			Total Estimate	**$14,780.00**

Cost Estimate – Pavement Markings Survey and Mapping

Labor				
Classification	**Hours**	**Rate**	**Total**	
Survey Party Chief	20	$92.00	$1,840.00	
Instrument Operator	20	$80.00	$1,600.00	
CAD Operator	10	$102.00	$1,020.00	
			Total Labor	$4,460.00
Expenses				
Expense	**Amount**	**Rate**	**Total**	
Mileage	320 mi.	$0.625	$200.00	
			Total Expenses	$200.00
			Total Estimate	**$4,660.00**



Attachment A, Appendix B:

Subconsultant Proposal
John Turner Consulting
Geotechnical Exploration
[Article A – Data Collection]

JOHN TURNER
CONSULTING

July 7, 2022

Mr. Stu Moncrieff – P.E.
Jacobs
Two Executive Park Drive, Suite 205
Bedford, NH 03110
P: 603-496-9267
E: Stu.Moncrieff@jacobs.com

Proposal for Geotechnical Engineering Services
BTV Terminal Renovation Project
South Burlington, Vermont
JTC Proposal #22-0687

Dear Mr. Moncrieff,

John Turner Consulting, Inc. (JTC) is pleased to submit this proposal to perform a Geotechnical Investigation for the above-referenced project. The purpose of the geotechnical investigation is to obtain information on the subsurface conditions at the site and to provide geotechnical engineering recommendations to support the design and construction of the proposed project. JTC has prepared this proposal based on review of the project rendering and information you provided by email in June 15, 2022.

Based on our review of the RFP documents, the project generally consists of continuing the southern expansion of the terminal. The proposed building is expected to be two-stories, with an estimated footprint of approximately 25,000 square feet (100 x 250 ft). We understand the project does not include a below-grade basement. For purposes of this proposal, we have assumed that we can access the work area without going through the secure areas of the airport. Therefore, security clearance, badging, escorting, and similar will not be required.

Based on our experience in the area, including work on the adjacent south terminal addition that is currently under construction and the northern proposed parking garage, we expect subsurface conditions to consist of a thin layer of granular fill associated wit construction of the airport, over loose to medium dense native sands, over stiff clay, which is in turn underlain by glacial till.

PROPOSED SCOPE OF WORK

JTC has prepared the following scope of work for the geotechnical investigation:

- JTC will locate the proposed boring locations in the field and will notify Digsafe, the Burlington International Airport, and the City of South Burlington to request utility markout.
- Due to the likely presence of underground utilities, JTC has included the fee for a private utility

locating service to clear the boring locations.

- Prior to advancing the borings, we will arrange for the existing concrete pavement to be sawcut and removed at the planned boring locations. The sawcuts will be approximately 12 x 12 inches square to allow for advancing soil boring augers and passage of drill spoils. Our budget assumes the concrete is not thicker than 6 inches. Additional fees may apply if the concrete is thicker. Concrete would be cut in advance of mobilizing the soil boring driller. The concrete "plugs" will be left in place after cutting.
- JTC will perform up to ten (10) test borings within the footprint of the proposed building expansion. One boring will be advanced to a maximum depth of 100 feet, a minimum of 10 feet into dense soils, such as dense glacial till, or to refusal on bedrock, as required to evaluate Site Class. These conditions are estimated to be encountered at a depth of about 50 to 75 feet. The remaining borings will be advanced to depths of about 10 to 30 feet. Three (3) days of drilling is included.
- JTC will subcontract a drilling company to complete the test borings. The concrete plugs will be removed from the pavement and disposed of off site by the drillers. As the borings are advanced, standard penetration tests (SPTs) will be conducted where four (4) sample will be retrieved within the upper 10 feet and at 5-foot intervals thereafter. Soil samples will be obtained via 2-inch split-spoon samplers. SPTs will be conducted in general accordance with ASTM D 1586.
- JTC will directly oversee the geotechnical drilling, testing, and sampling so that the need for adjustments can be assessed at the time of drilling. If additional drilling and/or sampling is warranted based on site conditions, you will be notified to discuss any additional recommended work prior to proceeding. At a minimum, JTC will notify you immediately if any of the following subsurface conditions are identified:
  - Soft, very loose, or otherwise unsuitable, compressible, or problematic soils.
  - Buried organics, trash, debris, or subsurface structures.
  - Shallow bedrock.
- Upon completion of each exploration, the boreholes will be backfilled with soil cuttings. The upper 2 feet of the borehole, plus the thickness of the pavement, will be filled with quick-curing, high early-strength sack concrete mix to meet the surface of the existing pavement. Any leftover soil cuttings and drilling fluids will be placed in drums and removed from the site. The surface will be swept, a soiled surface is expected to remain. The area should be cleaned with a street sweeper after the explorations. We have assumed that the airport would be able to perform this service.
- JTC will perform geotechnical laboratory testing of selected soil samples, consisting of the following:
  - Three washed sieve analyses and moisture content determinations
- Following the completion of the exploration and laboratory testing program, JTC will provide a Geotechnical Investigation Report stamped by a Professional Engineer registered in the State of Vermont, which will include:
  - A general description of the site and the proposed development;
  - A brief summary of the geotechnical exploration and laboratory testing programs;
  - A description of the subsurface conditions encountered, including:
    - Primary soil strata.
    - Existing pavement thicknesses.
    - Groundwater levels observed at the time of the investigation.
    - Presence/absence of bedrock and/or boulders.

- Recommended design parameters and construction considerations for shallow or deep foundations, as appropriate;
- Recommendations for site preparation and earthwork construction procedures, including excavation, fill/backfill, and compaction requirements;
- Recommendations for removal and/or reconditioning of unsuitable soils, if encountered;
- An assessment of frost susceptibility of existing subgrade soils, and the suitability of existing subgrade materials for reuse;
- Exploration Location Plan(s), Test Boring Logs, and Geotechnical Laboratory Testing Reports.

PROPOSED SCHEDULE

JTC utilizes several preferred drilling contractors. JTC will contact our preferred drilling contractors upon authorization to proceed and will reserve the earliest available dates to perform the work described herein. Currently, drilling contractors are scheduling work about 4 to 6 weeks in advance. JTC will prepare and submit a Geotechnical Investigation Report within fifteen (15) business days following the completion of the geotechnical exploration program.

PROPOSED FEE

JTC's fee for performing the geotechnical engineering services as described herein will be performed on unit price basis as explained at the end of this proposal. No additional services beyond the above-mentioned scope of services will be provided without your prior knowledge. If site conditions or the client's needs mandate a change in the scope of work, JTC will prepare a work authorization request for the client's approval that summarizes the changes to the project scope of work, schedule, and/or fee.

JTC's proposed fee is based on the following conditions and/or assumptions:

- Any necessary drilling/excavation permits, if required, will be provided by others. Alternatively, JTC will procure the permits on a time and materials basis. We do not anticipate a need for a drilling permit at this location.
- JTC and its subcontractors will be provided unimpeded and uninterrupted access to the boring locations.
- JTC has budgeted for a private utility locating service in our base price. Drilling on private property proximate to existing developments typically warrants a private utility locating service to clear each boring location of potential subsurface utility conflicts.
- The exploration locations can be reasonably accessed via a truck-mounted drill rig.
- Short-term (i.e., during drilling, upon completion of drilling, and/or a few hours after drilling) water levels should be considered approximate. For accurate groundwater level measurements, piezometers are suggested. Piezometers can typically be added to the program, prior to drilling, for a fee of $40 per linear foot.
- Costs for rock coring, if necessary, is not included in this proposal. JTC will contact you if shallow refusal is encountered during drilling. If necessary, rock coring can typically be added to the program for a fee of $55 per linear foot.
-

REMARKS

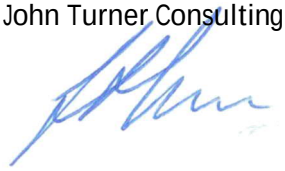
It is understood that others will furnish the information on the underground features, in addition to those marked by DigSafe in the area of work. JTC cannot assume responsibility for damage to underground features not indicated in advance.

AUTHORIZATION

To approve this proposal, please sign and return the Client Acceptance and Terms and Conditions. We will proceed with the work upon receipt of proposal authorization. We will proceed with the work upon receipt of proposal authorization. JTC will perform the work in accordance with the attached General Conditions, which are incorporated into and made a part of this proposal. JTC trusts that the above proposal will be sufficient to meet your needs.

If you have any questions regarding this proposal, please call or e-mail me.

Respectfully,
John Turner Consulting, Inc.



Stephen C. Lanne, P.E.
Vice President of Engineering
slanne@consultjtc.com
(413) 222-1675

FEE PROPOSAL

For the scope of service outlines above, JTC proposes the following fee.

Geotechnical Investigation	$22,500 Lump Sum

Invoices for the work will be prepared monthly and all charges shall be due and payable within 30 days of invoice. Interest and fees will be charged for payments beyond the due date. Final payment shall be due and payable upon delivery of the geotechnical report. Should additional work or other out of scope services be required, charges will be invoiced at the applicable personnel rates, in accordance with the table and notes below.

PERSONNEL	HOURLY RATE
Principal Engineer, PE	$ 205.00
Senior Engineer, PE or Project Manager	$ 160.00
Senior Staff Engineer	$ 135.00
Staff Engineer	$ 115.00
Field Inspector	$ 105.00

Notes:

1. Field Personnel charges are based on a four-hour minimum.
2. Rates apply to travel time. Mileage for travel is invoiced paid at 65¢ per mile.
3. Expenses are invoiced at direct cost plus 15% administrative overhead.

CLIENT ACCEPTANCE

Agreed to this _____ day of _____, 2022

By: _____

Title: _____

Firm: _____

John Turner Consulting, Inc.
Terms and Conditions

John Turner Consulting, Inc. (JTC) shall perform the services outlined in this agreement (attached) for the stated fee arrangement (attached).

Access to Site
Unless otherwise stated, JTC will have access to the site for activities necessary for the performance of the services. JTC will take reasonable precautions to minimize any damage due to these activities, but has not included in the fee the cost of restoration of any resulting damage.

Fees
See attached fee schedule. Total fees for a project are based upon schedules and work flow. If applicable, any total fee indicated, except stated lump sum, shall be understood to be an estimate, based upon rates listed, and shall not be exceeded by more than ten percent, without written approval of CLIENT.

Billings/Payments
Invoices shall be due in full in 30 days. A finance charge of 1.5% per month (18% per year) will be assessed for each month payment is outstanding. After 90 days, CLIENT agrees to pay all costs of collection, including reasonable attorneys' fees.

Hidden Conditions and Hazardous Materials
A condition is hidden if concealed by existing finishes or is not capable of investigation by reasonable visual observation. If JTC has reason to believe that such a condition may exist, CLIENT shall authorize and pay for all costs associated with the investigation of such a condition. If (1) CLIENT fails to authorize such investigation after due notification, or (2) JTC has no reason to believe that such a condition exists, JTC shall not be responsible for the existing condition or any resulting damages to persons or property. JTC shall have no responsibility for the discovery, presence, handling, removal, disposal or exposure of persons to hazardous materials of any form that are not related to the service provided.

Indemnification
JTC and CLIENT mutually agree, to the fullest extent permitted by law, to indemnify and hold each other harmless from any and all damage, liability or cost (including reasonable attorneys' fees and defense costs) to the extent caused by their own negligent acts, errors or omissions and those of anyone for whom they are legally liable, and arising from the project that is the subject of this agreement. Neither party is obligated to indemnify the other in any manner whatsoever for the other's own negligence.

Risk Allocation
In recognition of the relative risks and benefits of the project to both CLIENT and to JTC, CLIENT agrees, to the fullest extent permitted by law, to limit JTC's total liability to CLIENT, for any and all damages or claim expenses (including attorneys' fees) arising out of this agreement, from any and all causes, to the total amount of $50,000, the amount of JTC's fee (whichever is greater) or other amount agreed upon when added under Special Conditions.

Termination of Services
This agreement may be terminated upon 5 days written notice by either party should the other fail to perform his obligations hereunder. In the event of termination, CLIENT shall pay John Turner Consulting, Inc. for all services, rendered to the date of termination, all reimbursable expenses, and reasonable termination expenses.

Witness Fees
JTC's employees shall not be retained as expert witnesses except by separate, written agreement. CLIENT agrees to pay JTC's legal expenses, administrative costs and fees pursuant to JTC's then current fee schedule for JTC to respond to any subpoena.

Ownership of Documents
All documents produced by John Turner Consulting, Inc., under this agreement shall remain the property of John Turner Consulting, Inc. and may not be used by CLIENT for any other purpose without the written consent of JTC.

Employees
Client agrees that it will not, during the term of this agreement, or within one year afterward, hire any person who has been an employee of John Turner Consulting, Inc. If client violates its obligations under this section, it will be liable to John Turner Consulting, Inc. for liquidated damages in an amount equal to one year's gross wages of the employee, at the rate last paid to that employee by John Turner Consulting, Inc. The provision of this section shall survive any termination of this Agreement. The provisions of this section shall also be adhered to by the client's client and/or owner of said project.

Jobsite Safety
In performing construction observation visits to the jobsite, JTC shall have no control over or responsibility for the Contractor's means, methods, sequence, techniques or procedures in performing the Work. These are solely the responsibilities of the Contractor, who is also responsible for complying with all health and safety precautions as required by any regulatory agencies. Jobsite safety is the responsibility of the general contractor, who has control over the construction employees and the jobsite.

Dispute Resolution
As a prerequisite to filing a negligence suit, CLIENT agrees to obtain a Certificate of Merit. Any claim or dispute between CLIENT and John Turner Consulting, Inc. shall be submitted to non-binding mediation, subject to the parties agreeing to a mediator(s). Unless otherwise specified, this agreement shall be governed by the laws of the state of New Hampshire no matter where the project is located.

Initials: _____ (CLIENT) Initials: SCL (JTC)

Date: _____ Date: 7-7-22

Attachment A, Appendix C:

Subconsultant Proposal
Hoyle, Tanner & Associates
Airfield Civil Design
[Article B.I – Programming, Basis of Design (BoD, and 30% Design]

ATTACHMENT A

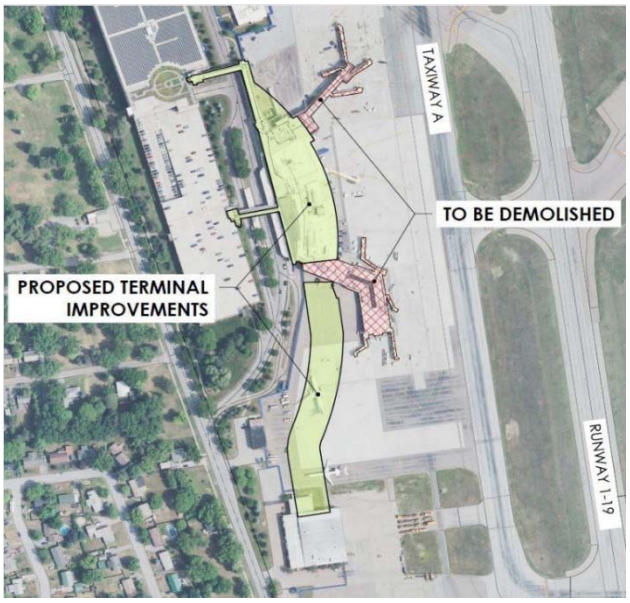
SCOPE OF WORK
for
PROFESSIONAL ENGINEERING SERVICES

NORTH TERMINAL UPGRADES – SITE CIVIL SUPPORT WORK – 30% DESIGN
at
BURLINGTON INTERNATIONAL AIRPORT

This subcontract will cover the following services:

1) Conceptual airport gate planning
2) Predesign concept validation for site civil
3) Schematic design for site civil
4) Preliminary design for site civil
5) Design development for site civil
   final design for terminal improvements
6) Bidding

The project includes planning, design and bidding assistance. Hoyle, Tanner & Associates will provide services for the Project as a Subconsultant to Jacobs Engineering Group Inc (Jacobs).



It is assumed that the initial concept for purposes of scoping resembles this graphic, taken from the current Airport Master Plan

ARTICLE I - PROJECT ADMINISTRATION

The Sub Consultant shall provide project administration services as required and as requested by Jacobs during the design and construction periods. The services under this paragraph shall include:

1. Preparation of Subconsultant documents and supporting back-up documentation required in connection with the Project. Effort to include preparation of scope and fee, and review and execution of Subconsultant documents.
2. Monthly invoicing, budget review, schedule review
3. As reasonably requested, provide assistance with any other administrative-type work required by the Sponsor and/or Jacobs in connection with the Project.

ARTICLE II – CONCEPTUAL AIRPORT GATE PLANNING

1. Assist Jacobs with gate planning, to include initial analysis of existing gate layout and aircraft parking capacity and proposed gate layout and aircraft parking capacity for up to three alternatives. Analysis to include provide planning level input on the key factors such as cost, 2-D utility connection feasibility, and aircraft maneuver layouts.
2. Conduct an in-house QA/QC prior to submission.

ARTICLE III. SITE CIVIL DESIGN

A. PRE-DESIGN CONCEPT VALIDATION FOR SITE CIVIL

1. Continue the analysis of site civil utilities to include modeling in 3-D with basic dimensions such as length and inverts described.
2. Provide basic terminal apron layout criteria to determine if initial layout concepts will meet current taxiway, taxilane, and vehicle service road separation standards.
3. Prepare for and attend design review meeting at the Airport and design coordination meetings with Jacobs and the Sponsor to coordinate the project.
4. Conduct an in-house QA/QC prior to submission.

B. SCHEMATIC DESIGN FOR SITE CIVIL

5. Determine the most feasible finished floor elevation for each layout concept based on planning level aircraft apron grading, and surrounding grades where proposed terminal abuts roadway/sidewalk and joins existing terminal.
6. Provide initial analysis of site pre and post drainage calculations to determine initial siting of stormwater treatment system.
7. Progress terminal passenger boarding gate maneuver analysis to provide Jacobs with design checks for space analysis and airline ingress and egress requirements.
8. Provide initial input on anticipated construction phasing challenges.
9. Prepare for and attend design review meeting at the Airport and design coordination meetings with Jacobs and the Sponsor to coordinate the project. Conduct an in-house QA/QC prior to submission.

C. PRELIMINARY DESIGN FOR SITE CIVIL

10. Preliminary Apron grading and surrounding site grade grading
11. Preliminary utility design for stormwater system, wastewater distribution, and water distribution.
12. Coordinate with other design disciplines to deconflict possible utility crossings such as power, gas, and communications.
13. Preliminary apron marking
14. Preliminary input on portions of the CSPP pertaining to site civil and passenger boarding bridge layout phasing
15. Prepare for and attend design review meeting at the Airport and design coordination meetings with Jacobs and the Sponsor to coordinate the project.
16. Conduct an in-house QA/QC prior to submission.

DESIGN ASSUMPTIONS

1. It is assumed that geotechnical data to determine bearing capacity for design of the PBB pedestal and apron pavement design will be provided by Jacobs.
2. It is assumed that existing survey information will be provided by Jacobs.
3. No environmental permitting services are required of Hoyle Tanner.
4. All CAD will be done in ACAD Civil 3D

ATTACHMENT B PROJECT FEE ESTIMATE

ESTIMATE OF PLANNING/DESIGN/BIDDING COST
for
NORTH TERMINAL UPGRADES

at
BURLINGTON INTERNATIONAL AIRPORT
for
BURLINGTON INTERNATIONAL AIRPORT
South Burlington, Vermont
August 29, 2022

HOYLE, TANNER PROJECT NO. 39150X.XX

Article I - Project Administration		**$6,200**	**LUMP SUM**
	Hoyle Tanner Phase 01		
Article II – Planning		**$7,100**	**LUMP SUM**
	Hoyle Tanner Phase 20		
Article III – Design		**$49,800**	**LUMP SUM**
	Hoyle Tanner Phase 40		
Expenses		**$1,168**	**ACTUAL COST**
	Hoyle Tanner Phase 99		
TOTAL ESTIMATED PROJECT COST:		**$ 64,268**	

BURLINGTON INTERNATIONAL AIRPORT

TERMINAL IMPROVEMENTS

Article I - Project Administration
Hoyle Tanner Phase 01

HOYLE, TANNER PROJECT NO. 39150X.XX

		ESTIMATED HOURS BY LABOR CLASSIFICATION								
Task	**Description**	**Principal Engineer $75.00** /HR	**Project Manager $70.00** /HR	**Senior Engineer $48.00** /HR	**Env'l Coordinator $55.00** /HR	**Staff Engineer $40.00** /HR	**Sr CADD Tech $47.00** /HR	**Admin Support $35.00** /HR	**Total Hours**	**Total Labor Cost**
1	Preparation of Subconsultant documents and supporting back-up documentation required in connection with the Project. Effort to include preparation of scope and fee, and review and execution of Subconsultant documents.	2	5					4	11	$640.00
2	Monthly invoicing, budget review, schedule review	1	6					4	11	$635.00
3	As reasonably requested, provide assistance with any other administrative-type work required by the Sponsor and/or Jacobs in connection with the Project.	1	6					8	15	$775.00
									0	$0.00
	TOTAL HOURS	**4**	**17**	**0**	**0**	**0**	**0**	**16**	**37**	
	TOTAL DIRECT LABOR	**$300.00**	**$1,190.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$560.00**		**$2,050.00**

DIRECT LABOR		$2,050.00
OVERHEAD	161.30%	$3,306.65
		$5,356.65
REIMBURSABLE EXPENSES		$0.00
SUBCONSULTANTS		$0.00
		$0.00
FIXED FEE	15%	**$800**
ESTIMATED TOTAL COST		$6,160.15
ACTUAL COST PLUS FIXED FEE		**$6,200**

Hoyle, Tanner & Associates, Inc. **150 Dow Street, Manchester, NH 03101**

BURLINGTON INTERNATIONAL AIRPORT

TERMINAL IMPROVEMENTS

Article II – Planning
Hoyle Tanner Phase 20

HOYLE, TANNER PROJECT NO. 39150X.XX

		ESTIMATED HOURS BY LABOR CLASSIFICATION								
Task	**Description**	**Principal Engineer $75.00** /HR	**Project Manager $70.00** /HR	**Senior Engineer $48.00** /HR	**Env'l Coordinator $55.00** /HR	**Staff Engineer $40.00** /HR	**Sr CADD Tech $47.00** /HR	**Admin Support $35.00** /HR	**Total Hours**	**Total Labor Cost**
1	Assist Jacobs with gate planning, to include initial analysis of existing gate layout and aircraft parking capacity and proposed gate layout and aircraft parking capacity for up to three alternatives. Analysis to include provide planning level input on the key factors such as cost, 2-D utility connection feasibility, and aircraft maneuver layouts.	1	8	2	0	18	8		37	$1,827.00
2	Conduct an in-house QA/QC prior to submission.	2	2	4	1				9	$537.00
	TOTAL HOURS	**3**	**10**	**6**	**1**	**18**	**8**	**0**	**46**	
	TOTAL DIRECT LABOR	**$225.00**	**$700.00**	**$288.00**	**$55.00**	**$720.00**	**$376.00**	**$0.00**		**$2,364.00**

DIRECT LABOR		$2,364.00
OVERHEAD	161.30%	$3,813.13
		$6,177.13
REIMBURSABLE EXPENSES		$0.00
SUBCONSULTANTS		$0.00
		$0.00
FIXED FEE	15%	**$900**
ESTIMATED TOTAL COST		$7,103.70
ACTUAL COST PLUS FIXED FEE		**$7,100**

Hoyle, Tanner & Associates, Inc. **150 Dow Street, Manchester, NH 03101**

TERNATIONAL AIRPORT

TERMINAL IMPROVEMENTS

Article III – Design
Hoyle Tanner Phase 40

HOYLE, TANNER PROJECT NO. 39150X.XX

		ESTIMATED HOURS BY LABOR CLASSIFICATION								
Task	Description	Principal Engineer $75.00 /HR	Project Manager $70.00 /HR	Senior Engineer $48.00 /HR	Env'l Coordinator $55.00 /HR	Staff Engineer $40.00 /HR	Sr CADD Tech $47.00 /HR	Admin Support $35.00 /HR	Total Hours	Total Labor Cost
	PRE-DESIGN CONCEPT VALIDATION FOR SITE CIVIL									
1	Continue the analysis of site civil utilities to include modeling in 3-D with basic dimensions such as length and inverts described.		4	4		24			32	$1,432.00
2	Provide basic terminal apron layout criteria to determine if initial layout concepts will meet current taxiway, taxilane, and vehicle service road separation standards.		4	4		8	16		32	$1,544.00
3	Preare for and attend design review meeting at the Airport and design coordination meetings with Jacobs and the Sponsor to coordinate the project.		10			8			18	$1,020.00
4	Conduct an in-house QA/QC prior to submission.	2		2				1	5	$281.00
	SCHEMATIC DESIGN FOR SITE CIVIL									
5	Determine the most feasible finished floor elevation for each layout concept based on planning level aircraft apron grading, and surrounding grades where proposed terminal abuts roadway/sidewalk and joins existing terminal.	1	6	6		16			29	$1,423.00
6	Provide initial analysis of site pre and post drainage calculations to determine initial siting of stormwater treatment system.		2	4		16			22	$972.00
7	Progress terminal passenger boarding gate maneuver analysis to provide Jacobs with design checks for space analysis and airline ingress and egress requirements.		4			4	16		24	$1,192.00
8	Provide initial input on anticipated construction phasing challenges.	1	4	2		8			15	$771.00
9	Prepare for and attend design review meeting at the Airport and design coordination meetings with Jacobs and the Sponsor to coordinate the project. Conduct an in-house QA/QC prior to submission.		10						10	$700.00
	PRELIMINARY DESIGN FOR SITE CIVIL									
10	Preliminary Apron grading and surrounding site grade grading	1	12	4		32			49	$2,387.00
11	Preliminary utility design for stormwater system, wastewater distribution, and water distribution.		4			32			36	$1,560.00
12	Coordinate with other design disciplines to deconflict possible utility crossings such as power, gas, and communications.		2	4		8			14	$652.00
13	Preliminary apron marking		2			12			14	$620.00
14	Preliminary input on portions of the CSPP pertaining to site civil and passenger boarding bridge layout phasing		6						6	$420.00
15	Prepare for and attend design review meeting at the Airport and design coordination meetings with Jacobs and the Sponsor to coordinate the project.		10			10			20	$1,100.00
16	Conduct an in-house QA/QC prior to submission.	4		4					8	$492.00
										$0.00
										$0.00
	TOTAL HOURS	**9**	**80**	**34**	**0**	**178**	**32**	**1**	**334**	
	TOTAL DIRECT LABOR	**$675.00**	**$5,600.00**	**$1,632.00**	**$0.00**	**$7,120.00**	**$1,504.00**	**$35.00**		**$16,566.00**

DIRECT LABOR		$16,566.00
OVERHEAD	161.30%	$26,720.96
		$43,286.96
REIMBURSABLE EXPENSES		$0.00
SUBCONSULTANTS		$0.00
		$0.00
FIXED FEE	15%	**$6,500**
ESTIMATED TOTAL COST		$49,780.00
ACTUAL COST PLUS FIXED FEE		**$49,800**

Hoyle, Tanner & Associates, Inc. **150 Dow Street, Manchester, NH 03101**

BURLINGTON INTERNATIONAL AIRPORT
TERMINAL IMPROVEMENTS

Expenses
Hoyle Tanner Phase 99

HOYLE, TANNER PROJECT NO. 39150X.XX

Reimbursable Expenses	Resident Mileage & Tolls $0.00 /trip	Mileage & Tolls $206.25 /trip	Postage & Communications	Printing	Lodging $146.00 /night	Per Diem $69.00 /full day	Per Diem $51.75 /travel day	GPS Unit $150.00 /day	Construction Supplies	Expenses Total	Subconsultant	Subconsultant Fees
Article I - Project Administration		$0.00	$17.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$17.00		
Article II – Planning		$206.25	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$206.25	Sub 1	
Article III – Design		$618.75	$20.00	$100.00	$0.00	$0.00	$0.00	$0.00	$0.00	$738.75	Sub 2	
#REF!		$206.25	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$206.25		
Total:	**$0.00**	**$1,031.25**	**$37.00**	**$100.00**	**$0.00**	**$0.00**		**$0.00**	**$0.00**	**$1,168.25**		

Reimbursables Expenses: **$1,168.25** **Subconsultants:** **$0.00**

Total Expenses: **$1,168.25**

Attachment A, Appendix D:

Subconsultant Proposal
City Point Partners
Cost Estimating
[Article B.I – Programming, Basis of Design (BoD, and 30% Design]

March 7, 2022

Mr. Stu Moncrieff, P.E.
Two Executive Park Drive
Suite 205
Bedford, NH 03110

RE: BURLINGTON VERMONT INTERNATIONAL AIRPORT EXPANSION PROJECT 30% DESIGN ESTIMATE DEVELOPMENT PROPOSAL

Mr. Moncrieff,

City Point Partners, LLC is pleased to present this proposal for cost estimating services for the Burlington Vermont International Airport Expansion Project. The Airport is proposing to demolish and rebuild the terminal on the south side of the existing airport. Project work will include:

- Civil site preparation
- New foundation
- New structure and finishes
- New plumbing, electrical and HVAC
- Building communications
- Building electronic safety/security

CITY POINT PARTNERS SCOPE OF WORK

Cost Estimates:

("The client") shall supply all necessary information to City Point Partners in order to develop the estimates during design including the 30% level stage of development. The client shall supply plan sets, specification requirements, any required Project Utility Coordination, anticipated start date and construction expectations. Complete information is required at the start of each estimate development in order to streamline the efforts and to effectively create and deliver the estimates in a timely manner. Incomplete information may lead to out of scope or schedule issues.

Our scope includes the development of one estimate at each stage of design, with time following to address comments/revisions. If the comments/revisions are extensive due to scope change or client/owner changes, a request for additional time will be made in order to incorporate this new information. Comments or revisions from the client and/or Prime Client after the initial submittal of the estimates from City Point needs to be coordinated between the client and the owner into one set prior to sending to City Point Partners for changes.

The development of the cost estimates for the project includes costs and markups for the anticipated construction costs and the general contractors scope and fee requirements,

CITY POINT PARTNERS LLC
11 Elkins Street, Suite 470
Boston, MA 02127

617 315 7832 office

www.citypointpartners.com

including anticipated costs for all subcontracted work under the contract requirements. The total cost shall include the costs from NTP through to final completion, including procurement and closeout activities.

- City Point Partners shall prepare a 30% level cost estimate in accordance with the Prime Client's Project Controls Policy Manual.
- City Point Partners will perform quantity takeoffs.

Software used for development of estimate deliverables: Sage Estimator, OnScreen Takeoff, MCACES MII and Excel will be used as a platform for cost estimating development. The cost estimate shall be based on supplied quantities by the responsible engineers for each item number and applying the standard markups to the estimate per the client's guidelines and templates.

The cost shall be a fully detailed analysis including expected cost loaded crews and equipment as well as material costs. Davis Bacon rates, local union trades, current regional equipment pricing shall be validated and detailed. Logistics of accessible laydown areas, anticipated mobilization and demobilization of specialty cranes and other heavy equipment needs shall be validated and identified in the estimates. Deliverables will include an executive summary, estimating report(s), and electronic media for review.

CONTRACT ADMINISTRATION

- CPP shall not begin work or perform its services without an agreement signed by both parties.
- In the performance of it services, CPP shall exercise the same degree of care and skill ordinarily exercised by reasonable professionals undertaking similar work under similar circumstances at the same locality. To no extent are CCP's services expressly or impliedly guaranteed or warranteed.
- CPP's fee structure is effective through 2022. If the project goes beyond 2022, billing rates will be escalated.
- This proposal is effective for six months from the date of this proposal. If work has not started in that timeframe, CPP may re-quote the work.
- All comments or revisions from Client and Owner after the initial submittal of the estimate from CPP will need to be coordinated into one set prior to sending to CPP for review and changes.
- After the initial review, If the comments/revisions are extensive due to scope change or client/owner changes, a request for additional level of effort and/or time will be made to incorporate this new information and CPP's fee and schedule will be amended to reflect this additional work.
- Hourly billing rates will apply for work beyond the specified scope established in this proposal. All work scope is expected to be performed and completed within nine months from the date of this proposal.
- CPP will use its best judgment developing and preparing all cost estimates and cost evaluations; however, Client recognizes that CPP does not have control over labor and material or equipment costs, marketplace fluctuations or over the contractor's method of determining prices and bidding strategy and that such estimates may vary from constructions costs and Client's budget for the project.

- CPP shall invoice monthly on a time and expense basis.
- CPP's cost estimates and evaluations and any other documents produced by it during the performance of its services are its instruments of service and are CPP's property.
- Upon payment for it services, CPP will grant Client a license to use its instruments of service for the project and Client shall be able to retain reproducible copies of such instruments of service for its reference. Any reuse or adaptation of CPP's instruments of service by the Client without notice and written consent by CPP shall be at Client's sole risk.
- This proposal is conditional upon mutually agreed upon terms and conditions.

Please see the below breakdown of fee, rates and hours broken out by each element. Thank you for this opportunity. If you need any additional information, please contact me at amotti@citypointpartners.com or 413-404-8188.

	Burlington International Airport Terminal Expansion Project 30% Desing Estimate	Total Hours	Labor	Total by Task
1	**30% Estimate Development**			
	TASK - 30% Estimate Development	76	$11,858.00	$11,858.00
	TASK - 30% Review Conference(s)	12	$2,063.00	$2,063.00
	TASK - 30% Estimate Backcheck	26	$4,052.00	$4,052.00
	TASK TOTALS:	**114**	**$17,973.00**	**$17,973.00**

Respectfully Submitted,

City Point Partners LLC

Annalisa Motti, CCT
Proposal/Contract Manager

Attachment A, Appendix E:

Subconsultant Proposal
Wagner Hodgson Landscape Architecture
Landscape Design
[Article B.I – Programming, Basis of Design (BoD, and 30% Design]

WAGNERHODGSON
LANDSCAPE ARCHITECTURE

July 29, 2022

Mr. Stu Moncrieff, P.E.
Project Manager
Jacobs Engineering Group, Inc.
via email

Re: Proposal for Professional Landscape Architecture Services: BTV Terminal Imporvement Phase III, (North)

DearStu,

As requested, WagnerHodgson is pleased to submit the following proposal for the Terminal Integration Project Phase II for the Burlington International Airport.

1. PERMITTING & 30% Design- BTV TERMINAL IMPROVEMENT PHASE III (NORTH)
   A. Gather base information from Consulting Team Members for Cad base and to understand the overall basis for design.
   B. Site Visit: If necessary, site walk and photographs, document existing conditions in the area immediately surrounding the project as well as within its boundaries. This will be supplemented with the data supplied by the architect , surveyor, civil engineer and from digital images (Google Earth).
   C. Initial Team Meetings to review scope of the project and design intent.
   C. Develop schematic ideas and concepts through Sketch Plans to present to the client and the City of South Burlington.
   D. Develop 1"=20' scale landscape plans for all areas of the site showing site materials, furnishings, lighting and planting. Coordination and exchange of Cad files with architects and engineers as plans become further developed. Locate alternative sites within the Master Plan for landscaping and site amenities if the specific site cannot accommodate the full budgeted landscape components required by the City of South Burlington. This would involve designing and developing areas called out in the BTV Master Plan and directed by the City as to what they want to see implemented next.
   E. Planting Plan and Plant Schedule: Plans indicating the general location of proposed plant materials and existing plant materials to remain. A plant schedule shall be provided indicating a selection of plant material including quantity, Botanical name, Common name, size, spacing and special requirements of each type of plant for the Project.
   F. Develop planting and hardscape breakdowns in Excel spreadsheet by plant type and material with projected costs to show compliance with South Burlington Landscaping Value Requirements.
   G. Create Color Renderings for Presentation to the City.
   H. Attend required permitting meetings / hearings and team meetings.

Following your approval, WagnerHodgson would be pleased to provide the following services per your discretion as an additional service on an hourly basis per the fee schedule outlined below:

1. CONSTRUCTION BID DOCUMENTS
   Building off of Permitting Plans - Preparation of detailed construction drawings and specifications required for proper site/landscape detailing and bidding.

   A. Final Planting Plan and Plant Schedule: Plan indicating the final location of proposed plant materials, including their names, sizes, and any other characteristics required for plant specimens.
   B. Planting Details and Specifications: Preparation of the landscape planting details and specifications to convey specific planting methods for installation during construction to the selected Contractor.
   C. Layout & Materials Plan: Plan indicating the location of site design elements such as fence, paving, lighting,

VT 802. 864. 0010 NY 518. 567. 1791
www.wagnerhodgson.com

D. Final Site Construction Details and Specifications: Site Construction Details and written performance Specifications for site features including fence, paving, lighting, furnisings, and other site amenities. Detailed written performance standards on the materials required, the fabrication procedures, and the application of site/landscape products and materials required to construct the designas indicated on the Drawings.
D. Design Review and Coordination of the Final Grading Plan: Review of the design aspects of the Site Grading Plan as prepared by Civil Engineer, if applicable.
E. Attend team meetings as necessary.

2. IRRIGATION DESIGN:
Preparation and coordination of irrigation design, drawings, and specifications for a fully automated watering system to support the proposed planting plan.

3. GREEN ROOF / ON-STRUCTURE LANDSCAPE:
Preparation of plans and details for intensive or extensive green roof or roof terrace if requested.

Statements for additional services calculated on an hourly basis shall be in accordance with the current schedule of rates as follows:

Principal	$175.00
Partner	$150.00
Associate:	$130.00
Landscape Architect	$95.00
Landscape Designer	$85.00
Support Staff	$55.00

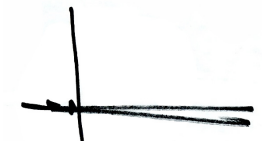
COMPENSATION

Compensation for the BTV TERMINAL IMPROVEMENT PHASE III, (NORTH) will be billed on an hourly basis with a fee not to exceed Forty thousand dollars ($40,000.00). In the event that these efforts become more extensive or involved than anticipated, we will request a fee review; however, the total fee for services will not exceed the estimated total without your prior review and approval.

TERMS

Fees do not include incidental direct expenditures made in the interest of the project such as reproduction, photographic services, postage and transportation expenses that will be invoiced for reimbursement at cost plus 10 percent. Statements for services rendered are submitted on the 1st of each month, and an interest rate of 1.5% per month will be charged on amounts 30 days in arrears. If you are in agreement with this proposal, please sign and return one of the enclosed proposals to our office at your earliest convenience. We look forward to working together with you and the rest of the design team on solutions that creatively solve the site and landscape programmatic needs. If you should have any further questions or comments, please do not hesitate to contact us.

Sincerely,



H. Keith Wagner, FASLA
Partner

Accepted By: _____ Date: _____

Attachment A, Appendix F:

Subconsultant Proposal
EIV Technical Services
Permitting
[Article B.II – Permitting]

The City Lights Building
106 East Allen Street, Unit 506
Winooski, VT 05404
Tel: 802-497-3653

August 18, 2022

Stu Moncrieff
Project Manager
JACOBS
Two Executive Park Drive, Suite 205
Bedford, NH 03110

Re: Burlington International Airport
North Concourse Replacement
Environmental Consulting Services

Dear Mr. Moncrieff:

We appreciate your consideration of EIV as your team's environmental permitting specialist for the above referenced project. We understand that the project is for the removal and replacement of the Terminal's North Concourse.

The replacement concourse is estimated to have a footprint of approximately 25,000 square-feet, and will include 2 levels. The project will also include the demolition of the existing North Concourse, along with the repair/replacement of apron space between the Terminal and Taxiway 'A'.

The project will trigger the following local and State permit authorizations:

- Vermont Natural Resources Board, Act 250 Land Use Minor Amendment
- Operational Stormwater Permit 3-9050
- Individual Construction Stormwater Permit 3-9020
- Local sketch plan, site plan and zoning approvals
- We will coordinate with federal regulators to confirm that USFW, ACOE and SHPO have reviewed the project.

We can provide these environmental consulting services for a lump sum of $22,500. If you have any questions or require additional information, please do not hesitate to contact me directly at 802-324-5522.

Sincerely,
EIV Technical Services

Jacqueline Dagesse, MBA, CPESC, PMP
President / Environmental Engineer

EIV Technical Services

The City Lights Building
106 E. Allen Street, #506
Winooski, VT 05404

PROPOSAL

Environmental Permit Consulting Services

Burlington International Airport - North Concourse Replacement

Article B.II - Permitting Services (Lump Sum)

No.	Description	Manager IV	Environmental Specialist Supervisor	Environmental Biologist	Environmental Specialist III	Admin.	Total Hours
B.II.1	Permitting Coordination with BTV, Jacobs, and the various agencies.	32	8				40
B.II.2	City of South Burlington permitting assistance (Sketch Plan, Site Plan, and Zoning).	24	24				48
B.II.3	Vermont NRB Act 250 Permit - assume "Minor Amendment".	20	16				36
B.II.4	Vermont ANR Operational Stormwater Permit 3-9050	20	12				32
B.II.5	Vermont ANR Individual Stormwater Permit 3-9020	24	16				40
B.II.6	Federal permitting assistance (US Fish & Wildlife, Army Corps of Engineers, SHPO).	8	8				16
	Hours	**128**	**84**	**0**	**0**	**0**	**212**
	Direct Rate	$45.00	$45.00	$40.00	$30.00	$28.00	
	Payroll Expense	**$5,760.00**	**$3,780.00**	**$0.00**	**$0.00**	**$0.00**	**$9,540.00**

Expense Detail:

Mileage:	400 mi @ $0.585	$	234.00
Prints:	[None]	$	-
Postage:	20 @ $0.55	$	11.00
Misc.:	Incidentals	$	79.81
		$	**324.81**

Payroll Expense	$	9,540.00
OH @ 111.313%	$	10,619.26
Subtotal	$	20,159.26
Fixed Fee @10%	$	2,015.93
Labor Total	$	22,175.19
Direct Expenses	$	324.81
TOTAL - Article B.II	**$**	**22,500.00**

Expense Exclusions:

Permit Fees, Filing Fees, Etc.
Certified Mailings (Abutter Notifications)

Summary of Fees:

Article B.II:	**$**	**22,500.00**
-	**$**	**-**
TOTAL:	**$**	**22,500.00**

Jacqueline Dagesse, MBA, CPESC
President / Environmental Engineer
(802) 497-3653
jdagesse@eivtech.com

Proposal Accepted By:

Signature: _____

Printed Name: _____

Title/Company: _____

Date: _____

Attachment B:
Burlington Standard Contract Conditions For Consultants

ATTACHMENT B:
BURLINGTON STANDARD CONTRACT CONDITIONS
FOR CONSULTANTS

1. **DEFINITIONS:**
   - **A.** The "Contract" shall mean the Contract between Consultant and the City to which these conditions apply and includes this Attachment B.
   - **B.** The "Consultant" shall mean **Jacobs Engineering Group Inc.**
   - **C.** The "City" shall mean the City of Burlington, Vermont or any of its departments.
   - **D.** The "Effective Date" shall mean the date on which the Contract becomes effective according to its terms, or if no effective date is stated, the date that all parties to it have signed.
   - **E.** The "Parties" shall mean the parties to this Contract.
   - **F.** The "Work" shall mean the services being provided by the Consultant, as provided in the Contract.

2. **REGISTRATION:** The Consultant agrees to be registered with the Vermont Secretary of State's office as a business entity doing business in the State of Vermont at all times this Contract is effective. This registration must be complete prior to Contract execution.

3. **INSURANCE:** Prior to beginning any work, the Consultant shall obtain the following insurance coverage from an insurance company registered and licensed to do business in the State of Vermont and having an A.M. Best insurance rating of at least A-, financial size category VII or greater (www.ambest.com). The certificate of insurance coverage shall be documented on forms acceptable to the City. Compliance with minimum limits and coverage, evidenced by a certificate of insurance showing policies and carriers that are acceptable to the City, must be received prior to the Effective Date of the Contract. The insurance policies shall provide that insurance coverage cannot be canceled or revised without thirty (30) days prior notice to the City. If this Contract extends to more than one year, evidence of continuing coverage must be submitted to the City on an annual basis. Copies of any insurance policies may be required. Each policy (with the exception of professional liability and worker's compensation) shall name the City as an additional insured for the possible liabilities resulting from the Consultant's actions or omissions. The liability insurance furnished by the Consultant is primary and non-contributory for all the additional insured.

   The Consultant is responsible to verify and confirm in writing to the City that: (i) all sub-consultants must comply with the same insurance requirements as the Consultant; (ii) all coverage shall include adequate protection for activities involving hazardous materials; and (iii) all work activities related to the Contract shall meet minimum coverage and limits.

   No warranty is made that the coverage and limits listed herein are adequate to cover and protect the interests of the Consultant for the Consultant's operations. These are solely minimums that have been developed and must be met to protect the interests of the City.

   A. <u>General Liability And Property Damage</u>: With respect to all operations performed by the Consultant, sub-consultants, agents or workers, it is the Consultant's responsibility to

ensure that general liability insurance coverage, on an occurrence form, provides all major divisions of coverage including, but not limited to:

1. Premises Operations
2. Independent Contractors'/Consultants' Protective
3. Products and Completed Operations
4. Personal Injury Liability
5. Medical Expenses

Coverage limits shall not be less than:

1.	General Aggregate	$2,000,000
2.	Products-Completed/Operations	$2,000,000
3.	Personal & Advertising Injury	$1,000,000
4.	Each Occurrence	$1,000,000
5.	Damage to Rented Premises	$ 250,000
6.	Med. Expense (Any one person)	$ 5,000

B. Workers' Compensation: With respect to all operations performed, the Consultant shall carry workers' compensation insurance in accordance with the laws of the State of Vermont and ensure that all sub-consultants carry the same workers' compensation insurance for all work performed by them under this Contract. Minimum limits for Employer's Liability:

1.	Bodily Injury by Accident:	$500,000 each accident
2.	Bodily Injury by Disease:	$500,000 policy limit, $500,000 each employee

C. Professional Liability Insurance:

1. General: The Consultant shall carry appropriate engineers professional liability insurance covering errors and omissions made during their performance of contractual duties with the following minimum limits:

   (a) $3,000,000 - Annual Aggregate

   (b) $2,000,000 - Per Occurrence

2. Deductibles: The Consultant is responsible for any and all deductibles.

3. Coverage: Prior to performing any work, the Consultant shall provide evidence of professional liability insurance coverage defined under this section. In addition, the Consultant shall maintain continuous professional liability coverage for the period of the Contract and for a period of five years following substantial completion of construction.

D. Automobile Liability: The Consultant shall carry commercial automobile liability insurance covering all motor vehicles, including owned, non-owned and hired, used in connection with the Contract. Each policy shall provide coverage with a limit not less than: $1,000,000 Combined Single Limit for each occurrence.

E. Valuable Papers And Records Insurance: The Consultant shall carry valuable papers insurance in a form and amount sufficient to ensure the restoration or replacement of any plans, drawings, field notes, or other information or data relating to the work, whether supplied by the City or developed by the Consultant, sub-consultant, worker, or agent, in the event of loss, impairment, or destruction. Such coverage shall remain in force until the final plans as well as all related materials have been delivered by the consultant to, and accepted by, the City. Unless otherwise provided, Valuable Papers and Records Insurance shall provide coverage on an "individual occurrence" basis with limits in the amount of one hundred and fifty thousand dollars ($150,000) when the insured items are in the Consultant's possession, and in the amount of forty thousand dollars ($40,000) regardless of the physical location of the insured items.

F. Umbrella Liability:

1. $1,000,000 Each Event Limit

2. $1,000,000 General Aggregate Limit

4. **CONFLICT OF INTEREST:** The Consultant shall disclose in writing to the City any actual or potential conflicts of interest or any appearance of a conflict of interest by the Consultant, its employees or agents, or its subconsultants, if any.

5. **PLANS, RECORDS, AND AVAILABLE DATA:** The City agrees to make available, at no charge, for the Consultant's use all available data related to the Contract including any preliminary plans, maps, drawings, photographs, reports, traffic data, calculations, EDM, valuable papers, topographic survey, utility location plats, or any other pertinent public records.

6. **PERSONNEL REQUIREMENTS AND CONDITIONS:** The Consultant shall employ only qualified personnel with appropriate and valid licensure, to the extent a license is required for the work performed. The City shall have the right to approve or disapprove key personnel assigned to administer activities related to the Contract.

   Except with the approval of the City, during the life of the Contract, the Consultant shall not employ:

   1. Any City employees who are directly involved with the awarding, administration, monitoring, or performance of the Contract or any project(s) that are the subjects of the Contract.

   2. Any person so involved within one (1) year of termination of employment with the

City.

The Consultant warrants that no company or person has been employed or retained, other than a bona fide employee working solely for the Consultant, to solicit or secure this Contract, and that no company or person has been paid or has a contract with the Consultant to be paid, other than a bona fide employee working solely for the Consultant, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of the Contract. For breach or violation of this warranty, the City shall have the right to annul the Contract, without liability to the City, and to regain all costs incurred by the City in the performance of the Contract.

The City reserves the right to require removal of any person employed by a Consultant, from work related to the Contract, for misconduct, incompetence, or negligence as determined by the City, in the due and proper performance of Consultant's duties, or for neglecting or refusing to comply with the requirements of the Contract.

7. **PERFORMANCE:** Consultant warrants that performance of Work will conform to the requirements of this Contract. Consultant shall use that degree of ordinary care and reasonable diligence that an experienced and qualified provider of similar services would use acting in like circumstances and experience in such matters and in accordance with the standards, practices and procedures established by Consultant for its own business.

8. **DESIGN STANDARDS:** Unless otherwise specifically provided for in the Contract, or directed in writing, Consultant services, studies or designs, that include or make reference to plans, specifications, special provisions, computations, estimates, or other data shall be in conformance with applicable City, state, and federal specifications, manuals, codes or regulations, including supplements to or revisions thereof, adopted prior to or during the duration of this Contract. In case of any conflict with the guidelines referenced, the Consultant is responsible to identify and follow any course of direction provided by the City.

9. **RESPONSIBILITY FOR SUPERVISION:** The Consultant shall assume primary responsibility for general supervision of Consultant employees and their sub-consultants for all work performed under the Contract and shall be solely responsible for all procedures, methods of analysis, interpretation, conclusions and contents of work performed under the Contract. The Consultant shall be responsible to the City for all acts or omissions of its subconsultants and any other person performing work under this Contract.

10. **UTILITIES:** Whenever a facility or component of a private, public, or cooperatively-owned utility will be affected by any proposed construction, the Consultant will counsel with the City, plus achieve any necessary contacts and discussions with the affected owners, regarding any requirement necessary for revisions of facilities or existing installations, both above and below ground. Any such installations must be completely and accurately exhibited on any detail sheets or plans. The Consultant shall inform the City, in writing, of any such contacts and the results thereof.

11. **INSPECTION OF WORK:** The City shall, at all times, have access to the Consultant's work

for the purposes of inspection, accounting, and auditing, and the Consultant shall provide whatever access is considered necessary to accomplish such inspections. At any time, the Consultant shall permit the City or representative for the City the opportunity to inspect any plans, drawings, estimates, specifications, or other materials prepared or undertaken by the Consultant pursuant to the Contract, as well as any preparatory work, work-in-progress, or completed work at a field site, where applicable.

Conferences, visits to a site, or an inspection of the work, may be held at the request of any involved party or by representatives of the City.

12. **REVIEWS AND ACCEPTANCES:** All preliminary and detailed designs, plans, specifications, estimates or other documents prepared by the Consultant, shall be subject to review and endorsement by the City.

    Approval for any inspections or sequences of progress of work shall be documented by letters, memoranda or other appropriate written means.

    A frequency for formal reviews shall be set forth in the Contract. Informal reviews, conducted by the City will be performed as deemed necessary. The Consultant shall respond to all official comments regardless of their source. The Consultant shall supply the City with written copies of all correspondence relating to formal and informal reviews.

    No acceptance shall relieve a Consultant of their professional obligation to correct any defects or errors in their work at their own expense.

13. **PUBLIC RELATIONS:** Whenever it is necessary to perform work in the field, particularly with respect to reconnaissance, the Consultant will endeavor to maintain good relations with the public and any affected property owners. Personnel employed by or representing the Consultant shall conduct themselves with propriety. The Consultant agrees to inform property owners and/or tenants, in a timely manner, if there is need for entering upon private property as an agent of the City, in accordance with 19 V.S.A. § 35 and §.503, to accomplish the work under the Contract. The Consultant agrees that any work will be done with minimum damage to the land and disturbance to the owner. Upon request of the Consultant, the City shall furnish a letter of introduction to property owners soliciting their cooperation and explaining that the Consultant is acting as an agent of the City.

14. **ACKNOWLEDGEMENTS:** Acknowledgment of the City's support must be included in any and all publications, renderings and project publicity, including audio/visual materials developed under this Contract.

15. **APPEARANCES:**

    A. Hearings and Conferences: The Consultant shall provide services required by the City and necessary for furtherance of any work covered under the Contract. These services shall include appropriate representation at design conferences, public gatherings and hearings, and appearances before any legislative body, commission, board, or court, to justify,

explain and defend its contractual services covered under the Contract.

The Consultant shall perform any liaison that the City deems necessary for the furtherance of the work and participate in conferences with the City, at any reasonable time, concerning interpretation and evaluation of all aspects covered under the Contract.

The Consultant further agrees to participate in meetings with the City and any other interested or affected participant, for the purpose of review or resolution of any conflicts pertaining to the Contract.

The Consultant shall be equitably paid for such services and for any reasonable expenses incurred in relation thereto in accordance with the Contract.

B. Appearance as Witness: If and when required by the City, the Consultant, or an appropriate representative, shall prepare and appear for any litigation concerning any relevant project or related contract, on behalf of the City. The Consultant shall be equitably paid, to the extent permitted by law, for such services and for any reasonable expenses incurred in relation thereto, in accordance with the Contract.

16. PAYMENT PROCEDURES: The City shall pay, or cause to be paid, to the Consultant or the Consultant's legal representative payments in accordance with the Contract. All payments will be made in reliance upon the accuracy of all representations made by the Consultant, whether in invoices, progress reports, emails, or other proof of work. When applicable, for the type of payment specified in the Contract, the progress report shall summarize actual costs and any earned portion of fixed fee.

All invoices and correspondence shall indicate the applicable project name, project number and the Contract number. When relevant, the invoice shall further be broken down in detail between projects.

When applicable, for the type of payment specified in the Contract, expenses for meals and travel shall be limited to the current approved in-state rates, as determined by the State of Vermont's labor contract, and need not be receipted. All other expenses are subject to approval by the City and must be accompanied with documentation to substantiate their charges.

No approval given or payment made under the Contract, shall be conclusive evidence of the performance of the Contract, either wholly or in part thereof, and no payment shall be construed to be acceptance of defective work or improper materials.

The City agrees to pay the Consultant and the Consultant agrees to accept, as full compensation, for performance of all services rendered and expenses incurred, the fee specified in the Contract.

Upon completion of all services covered under the Contract and payment of the agreed upon fee, the Contract with its mutual obligations shall end.

17. **DUTY TO INFORM CITY OF CONTRACT DOCUMENT ERRORS:** If Consultant knows, or has reasonable cause to believe, that a clearly identifiable error or omission exists in the Contract Documents, including but not limited to unit prices and rate calculations, Consultant shall immediately give the City written notice thereof. Consultant shall not cause or permit any Work to be conducted which may relate to the error or omission without first receiving written notice by the City that City representatives understand the possible error or omission and have approved of modifications to the Contract Documents or that Consultant may proceed without any modification being made to Contract Documents.

18. **NON-APPROPRIATION:** The obligations of the City under this Contract are subject to annual appropriation by the Burlington City Council. If no funds or insufficient funds are appropriated or budgeted to support continuation of payments due under this Contract, the Contract shall terminate automatically on the first day of the fiscal year for which funds have not been appropriated. The Parties understand and agree that the obligations of the City to make payments under this Contract shall constitute a current expense of the City and shall not be construed to be a debt or a pledge of the credit of the City. The decision whether or not to budget and appropriate funds during each fiscal year of the City is within the discretion of the Mayor and City Council of the City. The City shall deliver written notice to Consultant as soon as practicable of any non-appropriation, and Contract Consultant shall not be entitled to any payment or compensation of any kind for work performed after the City has delivered written notice of non-appropriation.

19. **CHANGES AND AMENDMENTS:** No changes or amendments to the Work of the Contract shall be effective unless documented in writing and signed by authorized representatives of the City and the Consultant.

20. **EXTENSION OF TIME:** The Consultant agrees to prosecute the work continuously and diligently and no charges or claims for damages shall be made by the Consultant for delays or hindrances, from any cause whatsoever, during the progress of any portion of services specified in the Contract. Such delays or hindrances, if any, may be compensated for by an extension of time for such reasonable period as the City may decide. Time extensions shall be granted by amendment, only for excusable delays, such as delays beyond the control of the Consultant and without the fault or negligence of the Consultant.

21. **PUBLIC HEALTH EMERGENCY:**

    A. Compliance with Mandates and Guidance: The Consultant is advised that public health emergencies—meaning public health emergencies, as declared by the City, the State of Vermont, or the Federal Government—may introduce significant uncertainty into the project. The Consultant must comply with all local, state, federal orders, directives, regulations, guidance, advisories during a public health emergency. Consultant shall adhere to the below provisions and consider public health emergencies as it develops project schedules and advances the Work.

    B. Creation of Public Health Emergency Plan: For any work performed on-site at a City location, the Consultant shall create a public health emergency plan acceptable to the City.

The Consultant shall be responsible for following this plan and ensuring that the project or site is stable and in a safe and maintainable condition.

a. Public Health Emergency Plan: The Public Health Emergency Plan will contain:
    i. Measures to manage risk and mitigate potential impacts to the health and safety of the public, the City and Consultant's workers;
    ii. Explicit reference to any health and safety performance standards and mandates provided by the City, the State of Vermont, the Federal government, or other relevant governmental entities;
    iii. A schedule for possible updates to the plan as standards and mandates change; and
    iv. Means to adjust the schedule and sequence of work should the emergency change in nature or duration.
b. Review and Acceptance of Plan:
    i. Consultant must provide the plan to the City by the Effective Date of this Contract or by one (1) week prior to the commencement of on-site activities, whichever is later.
    ii. The City shall have sole discretion to require changes to the plan.
    iii. The City may revisit the plan at any time to verify compliance with obligations that arise under a state of emergency.

C. Enforcement & Stoppage of Work: Consultant fails to comply with either 1) the approved public health emergency plan, or 2) any local, state, federal orders, directives, regulations, guidance, or advisories during a public health emergency, the City may stop Work under the Contract until such failure is corrected. Such failure to comply shall constitute a breach of the Contract.

Upon stoppage of work, the City may allow Work to resume, at a time determined by the City, under this Contract if such failure to comply is adequately corrected. The City shall have sole discretion in determining if Consultant has adequately corrected its failure to comply with the above.

If Consultant's breach of Contract has not been cured within seven (7) days after notice to stop Work from the City, then City may terminate this Contract, at its discretion.

D. City Liability Relating to Potential Delays: If a public health emergency is declared, the City will not be responsible for any delays related to the sequence of operations or any expenses or losses incurred as a result of any delays. Any delays related to a public health emergency will be excusable, but will not be compensable.

22. FORCE MAJEURE: Neither Party to this Contract shall be liable to the other for any failure or delay of performance of any obligation under this Contract to the extent the failure or delay is caused by acts of God, public health emergencies, epidemics, acts of the public enemy, acts of superior governmental authority, weather conditions, riots, rebellion, sabotage, or any other circumstances for which it is not responsible or which is not under its control ("Force Majeure"). To assert Force Majeure, the nonperforming party must prove that a) it made all reasonable efforts to remove, eliminate, or minimize the cause of delay or damage, b) diligently

pursued performance of its obligations, c) substantially fulfilled all obligations that could be fulfilled, and d) timely notified the other part of the likelihood or actual occurrence of a Force Majeure event. If any such causes for delay are of such magnitude as to prevent the complete performance of the Contract within two (2) years of the originally scheduled completion date, either Party may by written notice request to amend or terminate the Contract. The suspension of any obligations under this section shall not cause the term of this Contract to be extended and shall not affect any rights accrued under this Contract prior to the occurrence of the Force Majeure. The Party giving notice of the Force Majeure shall also give notice of its cessation.

23. PAYMENT FOR EXTRA WORK, ADDITIONAL SERVICES OR CHANGES: The City may, in writing, and without invalidating the Contract, require changes resulting from revision or abandonment of work already performed by the Consultant or changes in the scope of work.

The value of such changes, to the extent not reflected in other payments to the Consultant, shall be incorporated in an amendment and be determined by mutual agreement. Any adjustments of this nature shall be executed under the appropriate fee established in the Contract, based on the adjusted quantity of work.

No changes for which additional fee payment is claimed shall be made unless pursuant to a written order from the City, and no claim for payment shall be valid unless so ordered.

The Consultant agrees to maintain complete and accurate records, in a form satisfactory to the City for all time devoted directly to same by Consultant employees. The City reserves the right to audit the records of the Consultant related to any extra work or additional services. Any such services rendered shall be subject, in all other respects, to the terms of the Contract. When changes are so ordered, no additional work shall be performed by the Consultant until a Contract amendment has been fully executed, unless written notice to proceed is issued by the City. Any claim for extension of time that may be necessitated as a result of extra work or additional services and changes shall be given consideration and evaluated insofar as it directly relates to the change.

24. FAILURE TO COMPLY WITH TIME SCHEDULE: If the City is dissatisfied because of slow progress or incompetence in the performance of the Work in accordance with the schedule for completion of the various aspects of construction, the City shall give the Consultant written notice in which the City shall specify in detail the cause of dissatisfaction. Should the Consultant fail or refuse to remedy the matters complained of within five days after the written notice is received by the Consultant, the City shall have the right to take control of the Work and either make good the deficiencies of the Consultant itself or direct the activities of the Consultant in doing so, employing such additional help as the City deems advisable. In such events, the City shall be entitled to collect from the Consultant any expenses in completing the Work. In addition, the City may withhold from the amount payable to the Consultant an amount approximately equal to any interest lost or charges incurred by the City for each calendar day that the Consultant is in default after the time of completion stipulated in the Contract Documents.

25. RETURN OF MATERIALS: Consultant agrees that at the expiration or termination of this Contract, it shall return to City all materials provided to it during its engagement on behalf of

City.

26. **ACCEPTANCE OF FINAL PAYMENT; RELEASE:** Consultant's acceptance of the final payment shall be a release in full of all claims against the City or its agents arising out of or by reason of the Work. Any payment, however, final or otherwise, shall not release the Consultant or their sureties from any obligations under the Contract Documents or any performance or payment bond.

27. **OWNERSHIP OF THE WORK:** The Consultant agrees that the ownership of all studies, data sheets, survey notes, subsoil information, drawings, tracings, estimates, specifications, proposals, diagrams, calculations, EDM and other material prepared or collected by the Consultant, hereafter referred to as "instruments of professional service", shall become the property of the City as they are prepared and/or developed during execution of the Contract. The Consultant agrees to allow the City access to all "instruments of professional service" at any time. The Consultant shall not copyright any material originating under the Contract without prior written approval of the City. No publications or publicity of the work, in part or in total, shall be made without the express written agreement of the City, except that Consultant may in general terms use previously developed instruments of professional service to describe its abilities for a project in promotional materials.

28. **PROPRIETARY RIGHTS:** The Parties under the Contract hereby mutually agree that, if patentable discoveries or inventions should result from work performed by the Consultants under the Contract, all rights accruing from such discoveries or inventions shall be the sole property of the Consultant. The Consultant, however, agrees to and does hereby grant to the City an irrevocable, nonexclusive, non-transferable, and royalty-free license to the manufacture, use, and disposition of any discovery or invention that may be developed as a part of the Work under the Contract.

29. **PUBLIC RECORDS:** The Consultant understands that any and all records related to and acquired by the City, whether electronic, paper, or otherwise recorded, are subject to the Vermont Public Records Act and that the determination of how those records must be handled is solely within the purview of City. The Consultant shall identify all records that it considers to be trade secrets as that term is defined by subsection 317(c)(9) of the Vermont Public Records Act and shall also identify all other records it considers to be exempt under the Act. It is not sufficient to merely state generally that the record is proprietary or a trade secret or is otherwise exempt. Particular records, pages or section which are believed to be exempt must be specifically identified as such and must be separated from other records with a convincing explanation and rationale sufficient to justify each exemption from release consistent with Section 317 of Title 1 of the Vermont Statutes Annotated.

30. **RECORDS RETENTION AND ACCESS:** The Consultant agrees to retain, in its files, and to produce to the City—within the time periods requested—all books, documents, Electronic Data Media (EDM), accounting records, and other records produced or acquired by the Consultant in the performance of this Contract which are related to the City, at any time during this Contract and for a period of at least three (3) years after its completion or termination. In addition, if any audit, claim, or litigation is commenced before the expiration of that three (3)

year period, the records shall be retained until all related audits, claims, or litigation are resolved. The Consultant further agrees that the City shall have access to all the above information for the purpose of review and audit during the Contract period and anytime within the aforementioned retention period. Copies of all of the above referenced information shall be provided to the City, if requested, in the format in which the records were obtained, created, or maintained, such that their original use and purpose can be achieved. Consultant, sub-consultants, or their representatives performing work related to the Contract, are responsible to ensure that all data and information created or stored on EDM is secure and can be duplicated and used if the EDM mechanism is subjected to power outage, obsolescence, or damage.

31. **CONTRACT DISPUTES:** In the event of a dispute between the parties to this Contract each party will continue to perform its obligations unless the Contract is terminated in accordance with these terms.

32. **SETTLEMENTS OF MISUNDERSTANDINGS:** To avoid misunderstandings and litigation, it is mutually agreed by all Parties that the City Engineer shall act as referee on all questions arising under the terms of the Contract and that the decision of the City Engineer in such cases shall be binding upon both Parties.

33. **CITY'S OPTION TO TERMINATE:** The Contract may be terminated in accordance with the following provisions, which are not exclusive:

A. Termination for Convenience: At any time prior to completion of services specified under the Contract, the City may terminate the Contract for any reason by submitting written notice via certified or registered mail to the Consultant, not less than fifteen (15) days prior to the termination date, of its intention to do so. If the termination is for the City's convenience, payment to the Consultant will be made promptly for the amount of any fees earned to the date of the notice of termination and costs of materials obtained in preparation for Work but not yet installed or delivered, less any payments previously made. However, if a notice of termination is given to a Consultant prior to completion of twenty (20) percent of the estimated services, as set forth in the approved Work Schedule and Progress Report, the Consultant will be reimbursed for that portion of any reasonable and necessary expenses incurred to date of the notice of termination that are in excess of the amount earned under its approved fee to the date of said termination. Such requests for reimbursement shall be supported with factual data and shall be subject to the City's approval. The Consultant shall make no claim for additional compensation against the City by reason of such termination.

B. Termination for Cause:

i. Breach: Consultant shall be in default if Consultant fails in any manner to fully perform and carry out each and all conditions of this Contract, including, but not limited to, Consultant's failure to begin or to prosecute the Work in a timely manner or to make progress as to endanger performance of this Contract; failure to supply a sufficient number of properly skilled employees or a sufficient quantity of materials of proper quality; failure to perform the Work unsatisfactorily as determined by the

City; failure to neglect or refuse to remove materials; or in the event of a breach of warranty with respect to any materials, workmanship, or performance guaranty. Consultant will not be in default for any excusable delays as provided in Sections 19-21.

The City may give Consultant written notice of such default. If Consultant does not cure such default or provide a plan to cure such default which is acceptable to the City within the time permitted by the City, then the City may terminate this contract for cause.

ii. Proceedings for Relief of Debtors: If a federal or state proceeding for relief of debtors is undertaken by or against Consultant, or if Consultant makes an assignment for the benefit of creditors, then the City may immediately terminate this contract.

iii. Dishonest Conduct: If Consultant engages in any dishonest conduct related to the performance or administration of this Contract then the City may immediately terminate this contract.

iv. Cover: In the event the City terminates this contract as provided in this section, the City may procure, upon such terms and in such manner as the City may deem appropriate, services similar in scope and level of effort to those so terminated, and Consultant shall be liable to the City for all of its costs and damages, including, but not limited to, any excess costs for such services, interest, or other charges the City incurs to cover.

v. Rights and Remedies Not Exclusive: The rights and remedies of the City provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

34. GENERAL COMPLIANCE WITH LAWS: The Consultant and any subconsultant approved under this Contract shall comply with all applicable Federal, State and local laws, including but not limited to the Burlington Livable Wage Ordinance, the Non-Outsourcing Ordinance, and the Union-Deterrence Ordinance and shall provide the required certifications attesting to compliance with these ordinances (see attached ordinances and certifications).

Provisions of the Contract shall be interpreted and implemented in a manner consistent with each other and using procedures that will achieve the intent of both Parties. If, for any reason, a provision in the Contract is unenforceable or invalid, that provision shall be deemed severed from the Contract, and the remaining provisions shall be carried out with the same force and effect as if the severed provisions had never been a part of the Contract.

35. CIVIL RIGHTS AND EQUAL EMPLOYMENT OPPORTUNITY: During performance of the Contract, the Consultant will not discriminate against any employee or applicant for employment because of religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability,

HIV positive status, crime victim status, or genetic information. Consultant, and any subconsultants, shall comply with any Federal, State, or local law, statute, regulation, Executive Order, or rule that applies to it or the services to be provided under this contract concerning equal employment, fair employment practices, affirmative action, or prohibitions on discrimination or harassment in employment.

36. CHILD SUPPORT PAYMENTS: By signing the Contract, the Consultant certifies, as of the date of signing the Contract, that the Consultant (a) is not under an obligation to pay child support; or (b) is under such an obligation and is in good standing with respect to that obligation; or (c) has agreed to a payment plan with the Vermont Office of Child Support Services and is in full compliance with that plan. If the Consultant is a sole proprietorship, the Consultant's statement applies only to the proprietor. If the Consultant is a partnership, the Consultant's statement applies to all general partners with a permanent residence in Vermont. If the Consultant is a corporation, this provision does not apply.

37. TAX REQUIREMENTS: By signing the Contract, the Consultant certifies, as required by law under 32 VSA, Section 3113, that under the pains and penalties of perjury, that the Consultant is in good standing with respect to payment, or in full compliance with a plan to pay, any and all taxes due the State of Vermont as of the date of signature on the Contract.

38. INDEMNIFICATION:

A. Indemnification by Consultant: Except for the active negligence or willful misconduct of the City, or any of its boards, officers, agents, employees, assigns and successors in interest, consultant undertakes and agrees to defend, indemnify and hold harmless the City and any of its boards, officers, agents, employees, assigns, and successors in interest from and against all suits and causes of action, claims, losses, demands and expenses, including, but not limited to, attorney's fees (both in house and outside counsel) and cost of litigation (including all actual litigation costs incurred by the City, including but not limited to, costs of experts and consultants), damages or liability of any nature whatsoever, for death or injury to any person, including Consultant's employees and agents, or damage or destruction of any property of either party hereto or of third parties, arising in any manner by reason of the negligent acts, errors, omissions or willful misconduct incident to the performance of this Contract by Consultant or its subconsultants of any tier.

B. Notice of Claims & City's Right to Participate: If the City, its officers, agents, or employees are notified of any claims asserted against it to which this indemnification provision may apply, the City shall immediately thereafter notify the Consultant in writing that a claim to which the indemnification provision may apply has been filed. Consultant shall immediately retain counsel and otherwise provide a complete defense against the entire claim or suit. The City retains the right to participate, at its own expense, in the defense of any claim, and to approve all proposed settlements of clams to which this provision applies.

C. City's Rights and Remedies: Rights and remedies available to the City under this provision are cumulative of those provided for elsewhere in this Contract and those allowed under the laws of the United States and the State of Vermont.

D. No Indemnification by City: Under no conditions shall the City be obligated to indemnify the Consultant or any third party, nor shall the City be otherwise liable for expenses or reimbursement including attorney's fees, collection costs, or other costs of the Consultant or any third party.

39. NO GIFTS OR GRATUITIES: The Consultant shall not make any payment or gift or donation of substantial value to any elected official, officer, employee, or agent of the City during the term of this Contract.

40. ASSIGNMENT: Consultant shall not sublet or assign this Work, or any part of it, without the written consent of the City. If any subconsultant is approved, Consultant shall be responsible and liable for all acts or omissions of that subconsultant for any Work performed. If any subconsultant is approved, Consultant shall be responsible to ensure that the subconsultant is paid as agreed and that no lien is placed on any City property.

41. TRANSFERS, SUBLETTING, ETC: The Consultant shall not assign, sublet, or transfer any interest in the work, covered by this Contract, without prior written consent of the City, and further, if any sub-consultant participates in any work involving additional services, the estimated extent and cost of the contemplated work must receive prior written consent of the City. The approval or consent to assign or sublet any portion of the work, shall in no way relieve the Consultant of responsibility for the performance of that portion of the work so transferred. The form of the sub-consultant's contract shall be as developed by the Consultant and approved by the City. The Consultant shall ensure that insurance coverage exists for any operations to be performed by any sub-consultant as specified in the insurance requirements section of this Contract.

The services of the Consultant, to be performed under the Contract, shall not be transferred without written authorization of the City. Any authorized sub-contracts shall contain all of the same provisions contained in and attached to the original Contract with the City.

42. CONTINUING OBLIGATIONS: The Consultant agrees that if because of death, disability, or other occurrences, it becomes impossible to effectively perform its services in compliance with the Contract, neither the Consultant nor its surviving members shall be relieved of their obligations to complete the Contract unless the City agrees to terminate the Contract because it determines that the Consultant is unable to satisfactorily execute the Contract.

43. INTERPRETATION & IMPLEMENTATION: Provisions of the Contract shall be interpreted and implemented in a manner consistent with each other and using procedures that will achieve the intent of both Parties.

44. **ARM'S LENGTH:** This Contract has been negotiated at arm's length, and any ambiguity in any of its terms or provisions shall be interpreted in accordance with the intent of the Parties and not against or in favor of either the City or Consultant.

45. **RELATIONSHIP:** The Consultant is an independent consultant and shall act in an independent capacity and not as officers or employees of the City. To that end, the Consultant shall determine the method, details, and means of performing the work, but will comply with all legal requirements in doing so. The Consultant shall provide its own tools, materials, or equipment. The Parties agree that neither the Consultant nor its principal(s) or employees are entitled to any employee benefits from the City. Consultant understands and agrees that it and its principal(s) or employees have no right to claim any benefits under the Burlington Employee Retirement System, the City's worker's compensation benefits, health insurance, dental insurance, life insurance, or any other employee benefit plan offered by the City. The Consultant agrees to execute any certifications or other documents and provide any certificates of insurance required by the City and understands that this Contract is conditioned on its doing so, if requested.

    The Consultant understands and agrees that it is responsible for the payment of all taxes on the above sums and that the City will not withhold or pay for Social Security, Medicare, or other taxes or benefits or be responsible for any unemployment benefits.

46. **CHOICE OF LAW:** Vermont law, and rules and regulations issued pursuant thereto, shall be applied in the interpretation, execution, and enforcement of this Contract. Any provision included or incorporated herein by reference which conflicts with said laws, rules, and regulations shall be null and void. Any provision rendered null and void by operation of this provision shall not invalidate the remainder of this Contract to the extent capable of execution.

47. **JURISDICTION:** All suits or actions related to this Contract shall be filed and proceedings held in the State of Vermont.

48. **BINDING EFFECT AND CONTINUITY:** This Contract shall be binding upon and shall inure to the benefit of the Parties, their' respective heirs, successors, representatives, and assigns. If a dispute arises between the Parties, each Party will continue to perform its obligations under this Contract during the resolution of the dispute, until the Contract is terminated in accordance with its terms.

49. **SEVERABILITY:** The invalidity or unenforceability of any provision of this Contract, shall not affect the validity or enforceability of any other provision, which shall remain in full force and effect, provided that the Parties can continue to perform their obligations under this Contract in accordance with the intent of this Contract.

50. **ENTIRE CONTRACT & AGREEMENT:** This Contract constitutes the entire Contract, agreement, and understanding of the Parties with respect to the subject matter of this Contract. Prior or contemporaneous additions, deletions, or other changes to this Contract shall not have any force or effect whatsoever, unless embodied herein.

51. **APPENDICES:** The City may attach to these conditions appendices containing various forms

and typical sample sheets for guidance and assistance to the Consultant in the performance of the work. It is understood, however, that such forms and samples may be modified, altered, and augmented from time to time by the City as occasions may require. It is the responsibility of the Consultant to ensure that they have the latest versions applicable to the Contract.

52. **NO THIRD PARTY BENEFICIARIES:** This Contract does not and is not intended to confer any rights or remedies upon any person or entity other than the Parties. Enforcement of this Contract and all rights and obligations hereunder are reserved solely to the Parties. Any services or benefits which third parties receive as a result of this Contract are incidental to this Contract, and do not create any rights for such third parties.

53. **WAIVER:** A Party's failure or delay in exercising any right, power, or privilege under this Contract, whether explicit or by lack of enforcement, shall not operate as a waiver, nor shall any single or partial exercise of any right, power, or privilege preclude any other or further exercise of such right, power, or privilege.

Attachment C:
Burlington Livable Wage Ordinance Certification

Certification of Compliance with the City of Burlington's Livable Wage Ordinance

I, **David M. Chamberlain**, on behalf of **Jacobs Engineering Group Inc.** ("the Contractor") in connection with a contract for **Data Collection, Preliminary Design, Permitting, and Project Administration Services for the North Terminal Improvements Project** services that we provide to the City, hereby certify under oath that the Contractor (and any subcontractors under this contract) is and will remain in compliance with the City of Burlington's Livable Wage Ordinance, B.C.O. 21-80 et seq., and that:

(1) as a condition of entering into this contract or grant, we confirm that all covered employees as defined by Burlington's Livable Wage Ordinance (including the covered employees of subcontractors) shall be paid a livable wage (as determined, or adjusted, annually by the City of Burlington's chief administrative officer) and provided appropriate time off for the term of the contract;

(2) a notice regarding the applicability of the Livable Wage Ordinance shall be posted in the workplace(s) or other location(s) where covered employees work;

(3) we will provide verification of an employee's compensation, produce payroll or health insurance enrollment records or provide other relevant documentation (including that of any subcontractor), as deemed necessary by the chief administrative officer, within ten (10) business days from receipt of a request by the City;

(4) we will cooperate in any investigation conducted by the City of Burlington's City Attorney's office pursuant to this ordinance; and

(5) we will not retaliate (nor allow any subcontractor to retaliate) against an employee or other person because an employee has exercised rights or the person has cooperated in an investigation conducted pursuant to this ordinance.

Date: 9/24/2022 By: DM Chamberlain

David M. Chamberlain
Vice President
Jacobs Engineering Group Inc.

Subscribed and sworn to before me:

Date: 9/21/2022 Notary: Jessica L Simeone

JESSICA L. SIMEONE
NOTARY PUBLIC
STATE OF NEW HAMPSHIRE
- MY COMMISSION EXPIRES OCTOBER 3, 2023 -

Attachment D:
Burlington Outsourcing Ordinance Certification

Certification of Compliance with the City of Burlington's Outsourcing Ordinance

I, **David M. Chamberlain**, on behalf of **Jacobs Engineering Group Inc.** (Contractor) and in connection with the **Data Collection, Preliminary Design, Permitting, and Project Administration Services for the North Terminal Improvements Project**, hereby certify under oath that (1) Contractor shall comply with the City of Burlington's Outsourcing Ordinance (Ordinance §§ 21-90 – 21-93); (2) as a condition of entering into this contract or grant, Contractor confirms that the services provided under the above-referenced contract will be performed in the United States or Canada.

Dated at Bedford, New Hampshire this 21st day of September, 2022

By: _____
David M. Chamberlain
Vice President
Jacobs Engineering Group Inc.

Subscribed and sworn to before me:

Date: 9/21/2022 Notary: _____

JESSICA L. SIMEONE
NOTARY PUBLIC
STATE OF NEW HAMPSHIRE
- MY COMMISSION EXPIRES OCTOBER 3, 2023 -

Attachment E:
Burlington Union Deterrence Ordinance Certification

Certification of Compliance with the City of Burlington's Union Deterrence Ordinance

I, **David M. Chamberlain**, on behalf of **Jacobs Engineering Group Inc.** and in connection with the **Data Collection, Preliminary Design, Permitting, and Project Administration Services for the North Terminal Improvements Project**, hereby certify under oath that **Jacobs Engineering Group Inc.** has not advised the conduct of any illegal activity, and it does not currently, nor will it over the life of the contract advertise or provide union deterrence services in violation of the City's union deterrence ordinance.

Dated at Bedford, New Hampshire this 21st day of September, 2022

By: _____

David M. Chamberlain
Vice President
Jacobs Engineering Group Inc.

Subscribed and sworn to before me:

Date: 9/21/2022 Notary: Jessica L Simeone

JESSICA L. SIMEONE NOTARY PUBLIC STATE OF NEW HAMPSHIRE - MY COMMISSION EXPIRES OCTOBER 3, 2023

Attachment F:
Consultant's Certificate of Insurance

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 09/21/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER LIC #0437153 1-212-948-1306 Marsh Risk & Insurance Services CIRTS_Support@jacobs.com 633 W. Fifth Street Los Angeles, CA 90071	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): 1-212-948-1306 E-MAIL ADDRESS:
INSURED Jacobs Engineering Group Inc. C/O Global Risk Management 1000 Wilshire Blvd., Suite 1140 Los Angeles, CA 90017	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : ACE AMER INS CO — 22667 INSURER B : INSURER C : INSURER D : INSURER E : INSURER F :

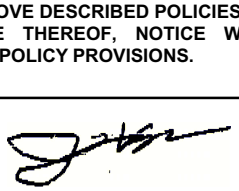
COVERAGES **CERTIFICATE NUMBER:** 66650748 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			HDO G72496176	07/01/22	07/01/23	EACH OCCURRENCE	$ 2,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 250,000
	X CONTRACTUAL LIABILITY						MED EXP (Any one person)	$ 5,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						PERSONAL & ADV INJURY	$ 2,000,000
	X POLICY PRO-JECT LOC						GENERAL AGGREGATE	$ 3,000,000
	OTHER:						PRODUCTS - COMP/OP AGG	$ 3,000,000
								$
A	AUTOMOBILE LIABILITY			ISA H25568230	07/01/22	07/01/23	COMBINED SINGLE LIMIT (Ea accident)	$ 2,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$
	DED RETENTION $							$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			SCF C68914619 (WI)	07/01/22	07/01/23	X PER STATUTE OTH-ER	
A	ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N: N	N / A		WLR C6891453A (AOS)	07/01/22	07/01/23	E.L. EACH ACCIDENT	$ 1,500,000
A	(Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below			WCU C68914577 (OH)*	07/01/22	07/01/23	E.L. DISEASE - EA EMPLOYEE	$ 1,500,000
							E.L. DISEASE - POLICY LIMIT	$ 1,500,000
A	PROFESSIONAL LIABILITY			EON G21655065 013	07/01/22	07/01/23	PER CLAIM/PER AGG	3,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

PROJECT MGR: Stuart Moncrieff. CONTRACT MGR: Stuart Moncrieff. RE: Data Collection, Preliminary Design, Permitting, and Project Administration for North Terminal Improvements. CONTRACT END DATE: 2024-12-31. PROJECT NUMBER: E2X81910. SECTOR: Public. City of Burlington - Burlington International Airport is added as an additional insured for general liability & auto liability as respects the negligence of the insured in the performance of insured's services to cert holder under contract for captioned work. Coverage is primary and certificate holder's insurance is excess and non-contributory. *THE TERMS, CONDITIONS, AND LIMITS PROVIDED UNDER THIS CERTIFICATE OF INSURANCE WILL NOT EXCEED OR BROADEN IN ANY WAY THE TERMS, CONDITIONS, AND LIMITS AGREED TO UNDER THE APPLICABLE CONTRACT.*

CERTIFICATE HOLDER	CANCELLATION
City of Burlington - Burlington International Airport 1200 Airport Drive, #1 South Burlington, VT 05403 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 

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SUPPLEMENT TO CERTIFICATE OF INSURANCE

DATE
09/21/2022

NAME OF INSURED: **Jacobs Engineering Group Inc.**

Additional Description of Operations/Remarks from Page 1:

Additional Information:

***$2,000,000 SIR FOR STATE OF: OHIO**

SUPP (05/04)

EVIDENCE OF PROPERTY INSURANCE

DATE (MM/DD/YYYY): 09/21/2022

THIS EVIDENCE OF PROPERTY INSURANCE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE ADDITIONAL INTEREST NAMED BELOW. THIS EVIDENCE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS EVIDENCE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE ADDITIONAL INTEREST.

AGENCY	PHONE (A/C, No, Ext): 1-415-486-7000	COMPANY
Aon Risk Insurance Services West, Inc. CIRTS_Support@jacobs.com 425 Market Street, 28th Floor San Francisco, CA 94105	FAX (A/C, No):	E-MAIL ADDRESS:	WESTPORT INS CORP
CODE: Property All Risk	SUB CODE:	
AGENCY CUSTOMER ID #:		

INSURED	LOAN NUMBER	POLICY NUMBER
Jacobs Engineering Group Inc. C/O Global Risk Management 1000 Wilshire Blvd., Suite 1140 Los Angeles, CA 90017		NAP 2004255 01
	EFFECTIVE DATE: 04/01/22	EXPIRATION DATE: 04/01/23	☐ CONTINUED UNTIL TERMINATED IF CHECKED
	THIS REPLACES PRIOR EVIDENCE DATED:	

PROPERTY INFORMATION

LOCATION/DESCRIPTION
SEE REMARKS BELOW FOR ALL LOCATION DETAILS.
Limit: $150,000.00

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS EVIDENCE OF PROPERTY INSURANCE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

COVERAGE INFORMATION

COVERAGE / PERILS / FORMS	AMOUNT OF INSURANCE	DEDUCTIBLE
"All Risks" of Direct Physical Loss or Damage including Earthquake, Flood and Boiler & Machinery subject to normal policy exclusions and sublimits. Covering: Valuable Papers Valuation: Replacement Cost on Property Damage.	As_stated_above	

REMARKS (Including Special Conditions)

PROJECT MGR: Stuart Moncrieff. CONTRACT MGR: Stuart Moncrieff. RE: Data Collection, Preliminary Design, Permitting, and Project Administration for North Terminal Improvements. CONTRACT END DATE: 2024-12-31. PROJECT NUMBER: E2X81910. SECTOR: Public. *THE TERMS, CONDITIONS, AND LIMITS PROVIDED UNDER THIS CERTIFICATE OF INSURANCE WILL NOT EXCEED OR BROADEN IN ANY WAY THE TERMS, CONDITIONS, AND LIMITS AGREED TO UNDER THE APPLICABLE CONTRACT.*

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

ADDITIONAL INTEREST

NAME AND ADDRESS		
City of Burlington - Burlington International Airport 1200 Airport Drive, #1 South Burlington, VT 05403 USA	☐ MORTGAGEE ☐ LOSS PAYEE ☐ ADDITIONAL INSURED LOAN #	
	AUTHORIZED REPRESENTATIVE Aon Risk Insurance Services West, Inc.	

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SUPPLEMENT TO CERTIFICATE OF INSURANCE

DATE
09/21/2022

NAME OF INSURED: Jacobs Engineering Group Inc.

SUPP (10/00)

Attachment G:
Federal Contract Provisions

FAA
Airports

Contract Provision Guidelines for Obligated Sponsors and Airport Improvement Program Projects

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Record of Changes

No.	Date	Item	Change
1	1/29/2016	Entire Document	Re-structured document to enhance user understanding of use and applicability; added suggested provisions for "Termination for Cause", "Recovered Materials", "Seismic Safety".
2	6/10/2016	Table 1	Distracted Driving: Updated "Dollar Threshold" to $3,500 to reflect current micro-purchase threshold.
3	6/10/2016	A2, Affirmative Action	Update the reference to the Department of Labor online document to be "Participation Goals for Minority and Females"
4	6/10/2016	A12, Disadvantaged Business Enterprise	A12.3: Changed Title to "Required Provisions" A12.3.1: Corrected starting timeframe for submitting written confirmation from "Owner Notice of Award" to "bid opening" A12.3.1: Provided two sets of last paragraphs to reflect change (7 days to 5 days) that occurs on December 31, 2016. A12.3.2: Moved Race/Gender Neutral language up and renamed heading to reflect text is solicitation language. A12.3.3: Moved and renamed contract clause information and clarified it is for prime contract covered by a DBE program.
5	12/12/2017	Cover	Change title of document for clarity
6	12/12/2017	1. Purpose of this Document	Added clarifying text addressing purpose and limitations of this guidance. 1.7-1.9: Added definitions of contract, applicant, bid

No.	Date	Item	Change
7	12/12/2017	2. Sponsor requirements	Added clarifying text addressing sponsor responsibilities.
8	12/12/2017	3. Typical Procurement Steps	Added clarifying text for typical procurement process steps.
9	12/12/2017	Table 1 – Applicability Matrix	Re-arranged table in alphabetic order. Added "Solicitation" column to address solicitation provisions Item l, Seismic Safety: Added Limited Application Added note on Airport Concessions Disadvantaged Business Enterprises
10	12/12/2017	All Clauses	Clarifying revisions made to applicability section.
11	12/12/2017	A5, Civil Rights - General	Rephrased General Civil Rights Provision to simplify language and to clarify duration of obligation for tenant/concessionaire/lessee
12	12/12/2017	A6.3.1 Civil Rights – Solicitations	Added sponsor must select either DBE or ACDBE
12	12/12/2017	A12, Disadvantaged Business Enterprise	The deadline to submit DBE confirmation of participation is now 5 days after bid opening or as a matter of bid responsiveness. Updated DBE contract assurance (12.3.3) to match language of 49 CFR § 26.13
13	12/12/2017	A24, Tax Delinquency and Felony Conviction	New certification addressing contractor tax delinquency and felony conviction.
14	6/19/2018	6.2.1, Applicability of Title VI Solicitation Notice	For Title VI Clauses for Compliance with Nondiscrimination Requirements, change second sentence in second column to changed "are already subject to nondiscrimination requirements" to "are **not** already subject to nondiscrimination requirements".
15	6/19/2018	A6.4.1, Title VI Clauses for Compliance with Nondiscrimination Requirements	In second item, changed "are already subject to nondiscrimination requirements" to "are **not** already subject to nondiscrimination requirements".

CONTRACT GUIDANCE

1. Purpose of this Document

1) The purpose of this document is to establish a convenient resource for Sponsors that consolidates all possible provisions and clauses into one document that includes an applicability matrix. This document itself does not create, revise or delete requirements for participation in the Airport Improvement Program. The source of requirements addressed within this document are identified within the section for each individual clause.

2) Federal laws and regulations require that an sponsor (a recipient of federal assistance) include specific clauses in certain contracts, solicitations, or specifications regardless of whether or not the project is federally funded.

3) The term **sponsor** is used in this document to mean either an obligated sponsor on a project that is not federally funded, or a sponsor on an AIP funded project.

4) The term ***Owner*** is generally used in the solicitation or contract clauses because of its common use in public contracts.

5) An Owner becomes an obligated sponsor upon acceptance of the Airport Improvement Program (AIP) grant assurances associated with current or prior AIP grant funded projects.

6) For purposes of determining requirements for contract provisions, the term ***contract*** includes subcontracts and supplier contracts such as purchase orders.

7) For purpose of remaining compliant with its obligations, a sponsor must incorporate applicable contract provisions in all its procurements and contract documents. Unless otherwise stated, these provisions flow down to subcontracts and sub-tier agreements.

8) The term **contractor** is understood to mean a contractor, subcontractor, or consultant; and means one who participates, through a contract or subcontract (at any tier).

9) The term **bid** is understood to mean a bid, an offer, or a proposal.

10) **Applicant:**

    a. For the Equal Employment Opportunity (EEO) clause, the term **applicant** means an applicant for employment (whether or not the phrase, *for employment*, follows the word applicant or applicants).

    b. For all other clauses, the term **applicant** means a bidder, offeror, or proposer for a contract.

2. Sponsor Requirements

In general, the sponsor must take the following actions in order to remain consistent with its obligations:

1) Include in its procurements the provisions that are applicable to its project.

2) Not incorporate the entire contract provisions guidelines in its solicitation or contract documents, whether by reference or by inclusion in whole. Incorporation of this entire guidance document creates potential for ambiguous interpretation and may lead to improper application that unnecessarily increases price. A sponsor that fails to properly incorporate applicable contract clauses may place themselves at risk for audit findings or denial of Federal funding.

3) Incorporate applicable contract provisions using mandatory language as required. The subheading entitled *Applicability* advises whether a particular clause or provision has mandatory language that a sponsor must use.

   (a) Mandatory Language - Whenever a clause or provision has mandatory text, the sponsor must incorporate the text of the provision **without change**, except where specific adaptive input is necessary (e.g. such as the sponsor's name).

   (b) No Mandatory Language Provided - For provisions without mandatory language, this guidance provides model language acceptable to the FAA. Some sponsors may already have standard procurement language that is equivalent to those federal provisions. In these cases, sponsors may use their existing standard procurement provision language provided the text meets the intent and purpose of the Federal law or regulation.

4) Require the contractor (including all subcontractors) to insert these contract provisions in each lower tier contract (e.g. subcontract or sub-agreement).

5) Require the contractor (including all subcontractors) to incorporate the applicable requirements of these contract provisions by reference for work done under any purchase orders, rental agreements and other agreements for supplies or services.

6) Require that the prime contractor be responsible for compliance with these contract provisions by any subcontractor, lower-tier subcontractor or service provider.

7) Verify that any required local or State provision does not conflict with or alter a Federal law or regulation.

3. Typical Procurement Steps

The usual procurement steps in a project are:

1) Solicitation, Request for Bids or Request for Proposals – This is also called the Advertisement or Notice to Bidders.

2) Bidding or Accepting Proposals – In this stage, the bidders receive a complete set of the procurement documents, also known as the project manual. The project manual will typically include a copy of the solicitation, instructions-to-bidders, bid forms, certifications and representations, general provisions, contract conditions, copy of contract, project drawings, technical specifications and related project documents.

3) Bid/Proposal Evaluation – Period when Sponsor tabulates and reviews all proposals for bid responsiveness and bidder responsibility.

4) Award – Point when the Sponsor formally awards the contract to the successful bidder.

5) Execution of Contract – Point at which the Sponsor formally enters into a legally binding agreement to perform services or provide goods.

4. Applicability Matrix for Contract Provisions

Table 1 summarizes the applicability of contract provisions based upon the type of contract or agreement. The dollar threshold represents the value at which, when equal to or exceeded, the sponsor must incorporate the provision in the contract or agreement.

Supplemental information addressing applicability and use for each provision is located in Appendix A. Appendix A and the Matrix include notes indicating when the sponsor may incorporate references in the **solicitation** in lieu of including the entire text.

Meaning of cell values

- Info –Sponsor has discretion on whether to include clause in its contracts.
- Limited – Provision with limited applicability depending on circumstances of the procurement.
- n/a – Provision that is not applicable for that procurement type.
- NIS – Provision that does not need to be included or referenced in the solicitation document
- REF – Provision to be incorporated into the solicitation by reference.
- REQD - Provision the sponsor must incorporate into procurement documents.

Table 1 – Applicability of Provisions

Provisions/Clauses	Dollar Threshold	Solicitation	Professional Services	Construction	Equipment	Property (Land)	Non-AIP Contracts
Access to Records and Reports	$ 0	NIS	**REQD**	**REQD**	**REQD**	**REQD**	n/a
Affirmative Action Requirement	$10,000	**REQD**	Limited	**REQD**	Limited	Limited	n/a
Breach of Contract	$150,000	NIS	**REQD**	**REQD**	**REQD**	**REQD**	n/a
Buy American Preferences	$ 0	**REF**	Limited	**REQD**	**REQD**	Limited	n/a
(1) Buy American Statement	$ 0	NIS	Limited	**REQD**	**REQD**	Limited	n/a
(2) BA – Total Facility	$ 0	NIS	Limited	**REQD**	**REQD**	Limited	n/a
(3) B.A. – Manufactured Product	$ 0	NIS	Limited	**REQD**	**REQD**	Limited	n/a
Civil Rights – General	$ 0	NIS	**REQD**	**REQD**	**REQD**	**REQD**	**REQD**
Civil Rights - Title VI Assurances	$ 0	**REF**	**REQD**	**REQD**	**REQD**	**REQD**	**REQD**
(1) Notice - Solicitation	$ 0	**REQD**	**REQD**	**REQD**	**REQD**	**REQD**	**REQD**
(2) Clause - Contracts	$ 0	NIS	**REQD**	**REQD**	**REQD**	**REQD**	**REQD**
(3) Clause – Transfer of U.S. Property	$ 0	NIS	n/a	n/a	n/a	Limited	**REQD**
(4) Clause – Transfer of Real Property	$ 0	NIS	n/a	n/a	n/a	**REQD**	**REQD**
(5) Clause - Construct/Use/Access to Real Property	$ 0	NIS	n/a	n/a	n/a	**REQD**	**REQD**
(6) List – Pertinent Authorities	$0	NIS	**REQD**	**REQD**	**REQD**	**REQD**	**REQD**
Clean Air/Water Pollution Control	$150,000	NIS	**REQD**	**REQD**	**REQD**	**REQD**	n/a
Contract Work Hours and Safety Standards	$100,000	NIS	Limited	**REQD**	Limited	Limited	n/a
Copeland Anti-Kickback	$ 2,000	NIS	Limited	**REQD**	Limited	Limited	n/a
Davis Bacon Requirements	$ 2,000	**REF**	Limited	**REQD**	Limited	Limited	n/a
Debarment and Suspension	$25,000	**REF**	**REQD**	**REQD**	**REQD**	Limited	n/a
Disadvantaged Business Enterprise	$ 0	**REF**	**REQD**	**REQD**	**REQD**	**REQD**	n/a
Distracted Driving	$3,500	NIS	**REQD**	**REQD**	**REQD**	**REQD**	n/a
Energy Conservation Requirements	$ 0	NIS	**REQD**	**REQD**	**REQD**	**REQD**	n/a
Equal Employment Opportunity	$10,000	NIS	Limited	**REQD**	Limited	Limited	n/a
(1) EEO Contract Clause	$10,000	NIS	Limited	**REQD**	Limited	Limited	n/a
(2) EEO Specification	$10,000	NIS	Limited	**REQD**	Limited	Limited	n/a
Federal Fair Labor Standards Act	$ 0	NIS	**REQD**	**REQD**	**REQD**	**REQD**	Info
Foreign Trade Restriction	$ 0	**REF**	**REQD**	**REQD**	**REQD**	**REQD**	n/a
Lobbying Federal Employees	$ 100,000	**REF**	**REQD**	**REQD**	**REQD**	**REQD**	n/a
Occupational Safety and Health Act	$ 0	NIS	**REQD**	**REQD**	**REQD**	**REQD**	Info
Prohibition of Segregated Facilities	$10,000	NIS	Limited	**REQD**	Limited	Limited	n/a
Recovered Materials	$10,000	**REF**	Limited	**REQD**	**REQD**	Limited	n/a
Rights to Inventions	$ 0	NIS	Limited	Limited	Limited	n/a	n/a
Seismic Safety	$ 0	NIS	Limited	Limited	Limited	n/a	n/a
Tax Delinquency and Felony Conviction	$ 0	NIS	**REQD**	**REQD**	**REQD**	**REQD**	n/a
Termination of Contract	$10,000	NIS	**REQD**	**REQD**	**REQD**	**REQD**	n/a
Veteran's Preference	$ 0	NIS	**REQD**	**REQD**	**REQD**	**REQD**	n/a

Airport Concessions Disadvantage Business Enterprise (ACDBE) Notes:

1. Language relative to solicitation for ACDBEs does not need to be included in AIP funded solicitations, since in no case are concessions activities funded with federal funds.

2. Airport sponsors must include the appropriate Title VI language in their solicitation notices when they seek proposals for concessions.

APPENDIX A – CONTRACT PROVISIONS

A1 ACCESS TO RECORDS AND REPORTS

A1.1 SOURCE

2 CFR § 200.333

2 CFR § 200.336

FAA Order 5100.38

A1.2 APPLICABILITY

2 CFR § 200.333 requires a sponsor to retain records pertinent to a Federal award for a period of three years from submission of final closure documents. 2 CFR § 200.336 establishes that sponsors must provide Federal entities the right to access records pertinent to the Federal award. FAA policy extends these requirements to the sponsor's contracts and subcontracts of AIP funded projects.

Contract Types – The sponsor must include this provision in all contracts and subcontracts of AIP funded projects.

Use of Provision – No mandatory language provided. The following language is acceptable to the FAA with meeting the intent of this requirement. If the sponsor prefers to use different language, the sponsor's language must fully satisfy the requirements of §§ 200.333 and 200.336.

A1.3 CONTRACT CLAUSE

ACCESS TO RECORDS AND REPORTS

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the Owner, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

A2 AFFIRMATIVE ACTION REQUIREMENT

A2.1 SOURCE

41 CFR part 60-4

Executive Order 11246

A2.2 APPLICABILITY

Minority Participation. Sponsors are required to set goals for minority participation in AIP funded projects exceeding $10,000. The goals for minority participation derive from Economic Area (EA) and Standard Metropolitan Statistical Area (SMSA) as established in Volume 45 of the Federal Register dated 10/3/80. Page 65984 contains a table of all EAs and SMSAs and the associated minority participation goals.

To find the goals for minority participation, a sponsor must either refer to the Federal Register Notice or to the Department of Labor online document, "Participation Goals for Minorities and Females". EAs and SMSAs span state boundaries. A sponsor may have to refer to entries for adjacent states in order to locate the goal for the project location.

Female Participation. Executive Order 11246 has set a goal of 6.9% nationally for female participation for all construction projects. This value remains constant for all counties and states.

Contract Types –

Construction – The sponsor must incorporate this notice in all solicitations for bids or requests for proposals for AIP funded construction work contracts and subcontracts that exceed $10,000. Construction work means construction, rehabilitation, alteration, conversion, extension, demolition or repair of buildings, highways or other changes or improvements to real property, including facilities providing utility services. The term also includes the supervision, inspection and other onsite functions incidental to the actual construction.

Equipment – The sponsor must incorporate this notice in any equipment project exceeding $10,000 that involves installation of equipment onsite (e.g. electrical vault equipment). This provision does not apply to equipment acquisition projects where the manufacture of the equipment takes place offsite at a manufacturer's plant (e.g. firefighting and snow removal vehicles).

Professional Services – The sponsor must incorporate this notice in any professional service agreement if the professional services agreement includes tasks that meet the definition of construction work [as defined by the U.S. Department of Labor (DOL)] and exceeds $10,000. Examples include installation of monitoring systems (e.g. noise, environmental, etc.).

Property/Land – The sponsor must incorporate this notice in any agreement associated with land acquisition if the agreement includes construction work (defined above) that exceeds $10,000. Examples include demolition of structures or installation of boundary fencing.

Use of Provision – MANDATORY TEXT. The sponsor must:

(a) Incorporate the text of this provision in its solicitations without modification.
(b) Incorporate the applicable minority participation goal and the covered area by geographic name.
(c) Not simply insert a reference to the 1980 Federal Register Notice.

A2.3 SOLICITATION CLAUSE

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION to ENSURE EQUAL EMPLOYMENT OPPORTUNITY

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for minority participation for each trade:	**[*sponsor must insert established goal*]**
Goals for female participation in each trade:	6.9%

These goals are applicable to all of the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a) and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is **[*sponsor must insert* *state, county, and city*]**.

A3 BREACH OF CONTRACT TERMS

A3.1 SOURCE

2 CFR § 200 Appendix II(A)

A3.2 APPLICABILITY

This provision requires sponsors to incorporate administrative, contractual or legal remedies if contractor violate or breach contract terms. The sponsor must also include appropriate sanctions and penalties.

Contract Types – This provision is required for all contracts that exceed the simplified acquisition threshold as stated in 2 CFR Part 200, Appendix II (A). This threshold is occasionally adjusted for inflation and is now equal to $150,000.

Use of Provision – No mandatory language provided. The following language is acceptable to the FAA as meeting the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of part 200. Select either "contractor" or "consultant" as applicable.

A3.3 CONTRACT CLAUSE

BREACH OF CONTRACT TERMS

Any violation or breach of terms of this contract on the part of the [*Contractor | Consultant*] or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

Owner will provide [*Contractor | Consultant*] written notice that describes the nature of the breach and corrective actions the [*Contractor | Consultant*] must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the [*Contractor | Consultant*] must correct the breach. Owner may proceed with termination of the contract if the [*Contractor | Consultant*] fails to correct the breach by the deadline indicated in the Owner's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

A4 BUY AMERICAN PREFERENCE

A4.1 SOURCE

Title 49 USC § 50101

A4.2 APPLICABILITY

The Buy American Preference requirement in 49 USC § 50101 requires that all steel and manufactured goods used on AIP projects be produced in the United States. The statute gives the FAA the ability to issue a waiver to a sponsor to use non-domestic material on an AIP funded project subject to meeting certain conditions. A sponsor may request that the FAA issue a waiver from the Buy American Preference requirements if the FAA finds that:

1) Applying the provision is not in the public interest;
2) The steel or manufactured goods are not available in sufficient quantity or quality in the United States;
3) The cost of components and subcomponents produced in the United States is more than 60 percent of the total components of a facility or equipment, and final assembly has taken place in the United States. Items that have an FAA standard specification item number (such as specific airport lighting equipment) are considered the equipment.
4) Applying this provision would increase the cost of the overall project by more than 25 percent.

Timing of Waiver Requests. Sponsors desiring a Type 1 or Type 2 waiver must submit their waiver requests *before* issuing a solicitation for bids or a request for proposal for a project.

The sponsor must submit Type 3 or Type 4 waiver requests *prior* to executing the contract. The FAA will generally not consider waiver requests after execution of the contract except where extraordinary and extenuating circumstances exist. The FAA cannot review waiver requests with incomplete information. Sponsors must assess the adequacy of the waiver request and associated information prior to forwarding a waiver request to the FAA for action.

Buy American Conformance List. The FAA Office of Airports maintains a listing of equipment that has received a nationwide waiver from the Buy American Preference requirements or that fully meet the Buy American requirements. The Nationwide Buy American Waiver List is available online at www.faa.gov/airports/aip/buy_american/. Products listed on the Buy American Conformance list do not require additional submittal of domestic content information under a project specific Buy American Preference waiver.

Facility Waiver Requests. For construction of a facility, the sponsor may submit the waiver request after bid opening, but prior to contract execution. Examples of facility construction include terminal buildings, terminal renovation, and snow removal equipment buildings.

Contract Types –

Construction and Equipment – The sponsor must meet the Buy American Preference requirements of 49 USC § 50101 for all AIP funded projects that require steel or manufactured

goods. The Buy America requirements flow down from the sponsor to first tier contractors, who are responsible for ensuring that lower tier contractors and subcontractors are also in compliance.

Note: The Buy American Preference does not apply to equipment a contractor uses as a tool of its trade and which does not remain as part of the project.

Professional Services – Professional service agreements (PSAs) do not normally result in a deliverable that meets the definition of a manufactured product. However, the emergence of various project delivery methods has created situations where task deliverables under a PSA may include a manufactured product. If a PSA includes providing a manufactured good as a deliverable under the contract, the sponsor must include the Buy American Preference provision in the agreement.

Property – Most land transactions do not involve acquiring a manufactured product. However, under certain circumstances, a property acquisition project could result in the installation of a manufactured product. For example, the installation of property fencing, gates, doors and locks, etc. represent manufactured products acquired under an AIP funded land project that must comply with Buy American Preferences.

Use of Provision – No mandatory language provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully comply with 49 USC § 50101.

There are two types of Buy American certifications. The sponsor must incorporate the appropriate "Certificate of Buy America Compliance" in the solicitation:

- Projects for a facility (buildings such as terminals, snow removal equipment (SRE) buildings, aircraft rescue and firefighting (ARFF) buildings, etc.) – Insert the Certificate of Compliance Based on Total Facility.
- Projects for non-facility development (non-building construction projects such as runway or roadway construction or equipment acquisition projects) – Insert the Certificate of Compliance Based on Equipment and Materials Used on the Project.

A4.3 SOLICITATION CLAUSE

A4.3.1 Buy American Preference Statement

BUY AMERICAN PREFERENCE

The Contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

A4.3.2 Certificate of Buy American Compliance – Total Facility

CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR TOTAL FACILITY

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101 by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e. not both) by inserting a checkmark (✓) or the letter "X".

☐ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

a) Only installing steel and manufactured products produced in the United States; or
b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- To faithfully comply with providing U.S. domestic products.
- To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

☐ The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

a) To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
d) To furnish U.S. domestic product for any waiver request that the FAA rejects.
e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver – The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the "facility". The required documentation for a Type 3 waiver is:

a) Listing of all manufactured products that are not comprised of 100 percent U.S. domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
c) Percentage of non-domestic component and subcomponent cost as compared to total "facility" component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

Type 4 Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

a) Detailed cost information for total project using U.S. domestic product
b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date	Signature
Company Name	Title

A4.3.3 Certificate of Buy American Compliance – Manufactured Product

Certificate of Buy American Compliance for Manufactured Products

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (✓) or the letter "X".

☐ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

a) Only installing steel and manufactured products produced in the United States;
b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
2. To faithfully comply with providing U.S. domestic product.
3. To furnish U.S. domestic product for any waiver request that the FAA rejects
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

☐ The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

1. To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
3. To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver – The cost of the item components and subcomponents produced in the United States is more that 60 percent of the cost of all components and subcomponents of the "item". The required documentation for a Type 3 waiver is:

a) Listing of all product components and subcomponents that are not comprised of 100 percent U.S. domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
c) Percentage of non-domestic component and subcomponent cost as compared to total "item" component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

Type 4 Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

a) Detailed cost information for total project using U.S. domestic product
b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date	Signature
Company Name	Title

A5 CIVIL RIGHTS - GENERAL

A5.1 SOURCE

49 USC § 47123

A5.2 APPLICABILITY

There are two separate civil rights provisions that apply to projects:

1. FAA General Civil Rights Provision and,
2. Title VI provisions, which are addressed in Appendix A6.

Contract Types – The General Civil Rights Provisions found in 49 USC § 47123, derived from the Airport and Airway Improvement Act of 1982, Section 520, apply to all sponsor contracts *regardless* of funding source.

Use of Provision – **MANDATORY TEXT**. There are two separate general civil rights provisions —one that is used for contracts, and one that is used for lease agreements or transfer agreements. The sponsor must incorporate the text of the appropriate provision without modification into the contract, or the lease or transfer agreement.

A5.3 CONTRACT CLAUSE (Use the Correct Clause for the Situation)

A5.3.1 Clause that is used for Contracts

GENERAL CIVIL RIGHTS PROVISIONS

The Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

A5.3.2 Clause that is used for Lease Agreements or Transfer Agreements

GENERAL CIVIL RIGHTS PROVISIONS

The (tenant/concessionaire/lessee) agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance. If the (tenant/concessionaire/lessee) transfers its obligation to another, the transferee is obligated in the same manner as the (tenant/concessionaire/lessor).

This provision obligates the (tenant/concessionaire/lessee) for the period during which the property is owned, used or possessed by the (tenant/concessionaire/lessee) and the airport remains obligated to the

Federal Aviation Administration. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

A6 CIVIL RIGHTS – TITLE VI ASSURANCE

A6.1 SOURCE

49 USC § 47123

FAA Order 1400.11

A6.2 APPLICABILITY

Title VI of the Civil Rights Act of 1964, as amended, (Title VI) prohibits discrimination on the grounds of race, color, or national origin under any program or activity receiving Federal financial assistance. Sponsors must include appropriate clauses from the Standard DOT Title VI Assurances in all contracts and solicitations.

The text of each individual clause comes from the U.S. Department of Transportation Order DOT 1050.2, Standard Title VI Assurances and Nondiscrimination Provisions, effective April 24, 2013. These assurances require that the Recipient (the sponsor) insert the appropriate clauses in the form provided by the DOT. Where the clause refers to the applicable activity, project, or program, it means the AIP project.

The clauses are as follows:

A6.2.1 Applicability of Title VI Solicitation Notice

Contract Clause	The Sponsor must include the contract clause in:	Clause Text is Included in Paragraph
Title VI Solicitation Notice – • Assurance 2 of the DOT Standard Title VI Assurances and Nondiscrimination Clauses • Assurance 30d of the Airport Sponsor Assurances	1) All AIP funded solicitations for bids, requests for proposals, or any work subject to Title VI regulations; and 2) All sponsor proposals for negotiated agreements **regardless of funding source.**	A6.3.1
Title VI Clauses for Compliance with Nondiscrimination Requirements • Assurance 3 of the DOT Standard Title VI Assurances and Nondiscrimination Clauses • Assurance 30e.1 of the Airport Sponsor Assurances	Every contract or agreement (unless the sponsor has determined, and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities) It has been determined that service contracts with utility companies that are not already subject to nondiscrimination requirements must include this clause.	A6.4.1

Contract Clause	The Sponsor must include the contract clause in:	Clause Text is Included in Paragraph
Title VI Required Clause for Property Interests Transferred from the United States • Assurance 4 of the DOT Standard Title VI Assurances and Nondiscrimination Clauses • Assurance 30e.3 of the Airport Sponsor Assurances	As a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor. This is a rare occurrence and it will be the responsibility of the United States government to include the clause in the contract.	A6.4.2
Title VI Required Clause for Transfer of Real Property Acquired or Improved Under the Activity, Facility or Program – • Assurance 5 of the DOT Standard Title VI Assurances and Nondiscrimination Clauses • Assurance 30e.4a of the Airport Sponsor Assurances	As a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the sponsor with other parties for all transfers of real property acquired or improved under Airport Improvement Program This applies to agreements such as leases where a physical portion of the airport is transferred for use, for example a fuel farm, apron space, or a parking facility.	A6.4.3
Clause for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program • Assurance 6 of the DOT Standard Title VI Assurances and Nondiscrimination Clauses • Assurance 30e.4b of the Airport Sponsor Assurances	In any future (deeds, leases, licenses, permits, or similar instruments) entered into by the sponsor with other parties for the construction or use of, or access to, space on, over, or under real property acquired or improved under Airport Improvement Program This applies to agreements such as leases of concession space in a terminal.	A6.4.4
Title VI List of Pertinent Nondiscrimination Acts and Authorities • Assurance 3 of the DOT Standard Title VI Assurances and Nondiscrimination Clauses • Assurance 30e.2 of the Airport Sponsor Assurances	Insert this list in every contract or agreement, unless the sponsor has determined, and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities. **This list can be omitted if the FAA has determined that the contractor or company is already subject to nondiscrimination requirements.**	A6.4.5

A6.3 SOLICITATION CLAUSE

The sponsor must include this clause in:

1) All AIP funded solicitations for bids, requests for proposals, or any work subject to Title VI regulations; and
2) All sponsor proposals for negotiated agreements **regardless of funding source.**

A6.3.1 Title VI Solicitation Notice

Title VI Solicitation Notice:

The **(Name of Sponsor)**, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement, [select disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

A6.4 CONTRACT CLAUSES

A6.4.1 Title VI Clauses for Compliance with Nondiscrimination Requirements

The sponsor must include this contract clause in:

1) Every contract or agreement (unless the sponsor has determined, and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities); and

2) Service contracts with utility companies that are not already subject to nondiscrimination requirements.

Compliance with Nondiscrimination Requirements:

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor"), agrees as follows:

1. **Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
3. **Solicitations for Subcontracts, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the contractor's obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a Contractor's noncompliance with the non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:

a. Withholding payments to the Contractor under the contract until the Contractor complies; and/or

b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

A6.4.2 Title VI Clauses for Deeds Transferring United States Property

This is a rare occurrence, and it will be the responsibility of the United States government to include the clause in the contract. It will be included as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor.

CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of the Airport Improvement Program grant assurances.

NOW, THEREFORE, the Federal Aviation Administration as authorized by law and upon the condition that the (***Title of Sponsor***) will accept title to the lands and maintain the project constructed thereon in accordance with (***Name of Appropriate Legislative Authority***), for the **(Airport Improvement Program or other program for which land is transferred),** and the policies and procedures prescribed by the Federal Aviation Administration of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 USC § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the (***Title of Sponsor***) all the right, title and interest of the U.S. Department of Transportation/Federal Aviation Administration in and to said lands described in (***Exhibit A attached hereto or other exhibit describing the transferred property)*** and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto (***Title of Sponsor***) and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the (***Title of Sponsor***), its successors and assigns.

The (***Title of Sponsor***), in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the (***Title of Sponsor***) will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended[, and (3) that in the event of breach of any of the above-mentioned nondiscrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the Federal Aviation Administration and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

A6.4.3 Title VI Clauses for Transfer of Real Property Acquired or Improved Under the Activity, Facility, or Program

This applies to agreements such as leases where a physical portion of the airport is transferred for use—for example a fuel farm, apron space, or a parking facility—and will be included as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the sponsor with other parties for all transfers of real property acquired or improved under the Airport Improvement Program.

CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE AIRPORT IMPROVEMENT PROGRAM

The following clauses will be included in (deeds, licenses, leases, permits, or similar instruments) entered into by the (***Title of Sponsor***) pursuant to the provisions of the Airport Improvement Program grant assurances.

A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:
    1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a Federal Aviation Administration activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Nondiscrimination Acts and Regulations listed in the Pertinent List of Nondiscrimination Authorities (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, (***Title of Sponsor***) will have the right to terminate the (lease,

license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.*

C. With respect to a deed, in the event of breach of any of the above Nondiscrimination covenants, the (***Title of Sponsor***) will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the (***Title of Sponsor***) and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

A6.4.4 Title VI Clauses for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program

This applies to agreements such as leases of concession space in a terminal and any future deeds, leases, licenses, permits, or similar instruments entered into by the sponsor with other parties for the construction or use of, or access to, space on, over, or under real property acquired or improved under the Airport Improvement Program.

CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by (***Title of Sponsor***) pursuant to the provisions of the Airport Improvement Program grant assurances.

A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the List of discrimination Acts And Authorities.

B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above nondiscrimination covenants, (***Title of Sponsor***) will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.*

C. With respect to deeds, in the event of breach of any of the above nondiscrimination covenants, (***Title of Sponsor***) will there upon revert to and vest in and become the absolute property of (***Title of Sponsor***) and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

A6.4.5 Title VI List of Pertinent Nondiscrimination Acts and Authorities

Insert this list in every contract or agreement, unless the sponsor has determined and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities. This list can be omitted if the FAA has determined that the contractor or company is already subject to nondiscrimination requirements.

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq*., 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq*.), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq*.) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 USC §§ 12131 – 12189) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC 1681 et seq).

A7 CLEAN AIR AND WATER POLLUTION CONTROL

A7.1 SOURCE

2 CFR § 200, Appendix II(G)

A7.2 APPLICABILITY

Contract Types – This provision is required for all contracts and lower tier contracts that exceed $150,000.

Use of Provision – No mandatory language provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of Appendix II to 2 CFR §200.

A7.3 CONTRACT CLAUSE

CLEAN AIR AND WATER POLLUTION CONTROL

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC § 740-7671q) and the Federal Water Pollution Control Act as amended (33 USC § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Contractor must include this requirement in all subcontracts that exceeds $150,000.

A8 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

A8.1 SOURCE

2 CFR § 200, Appendix II(E)

A8.2 APPLICABILITY

Contract Workhours and Safety Standards Act Requirements (CWHSSA) requires contractors and subcontractors on covered contracts to pay laborers and mechanics employed in the performance of the contracts one and one-half times their basic rate of pay for all hours worked over 40 in a workweek. CWHSSA prohibits unsanitary, hazardous, or dangerous working conditions on federally assisted projects. The Wage and Hour Division (WHD) within the U.S. Department of Labor (DOL) enforces the compensation requirements of this Act, while DOL's Occupational Safety and Health Administration (OSHA) enforces the safety and health requirements

Contract Types –

Construction – This provision applies to all contracts and lower tier contracts that exceed $100,000, and employ laborers, mechanics, watchmen, and guards.

Equipment – This provision applies to any equipment project exceeding $100,000 that involves installation of equipment onsite (e.g. electrical vault equipment). This provision does not apply to equipment acquisition projects where the manufacture of the equipment takes place offsite at the vendor plant (e.g. ARFF and SRE vehicles).

Professional Services – This provision applies to professional service agreements that exceed $100,000 and employs laborers, mechanics, watchmen, and guards. This includes members of survey crews and exploratory drilling operations.

Property – While most land transactions do not involve employment of laborers, mechanics, watchmen, and guards, under certain circumstances, a property acquisition project could require such employment. Examples include the installation of property fencing or testing for environmental contamination

Use of Provision – **MANDATORY TEXT.** Sponsors must incorporate this text without modification.

A8.3 CONTRACT CLAUSE

CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

1. Overtime Requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a

rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; Liability for Unpaid Wages; Liquidated Damages.

In the event of any violation of the clause set forth in paragraph (1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this clause, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

3. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration (FAA) or the Owner shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this clause.

4. Subcontractors.

The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this clause.

A9 COPELAND "ANTI-KICKBACK" ACT

A9.1 SOURCE

2 CFR § 200, Appendix II(D)

29 CFR Parts 3 and 5

A9.2 APPLICABILITY and PURPOSE

The Copeland (Anti-Kickback) Act (18 USC 874 and 40 USC 3145) makes it unlawful to induce by force, intimidation, threat of dismissal from employment, or by any other manner, any person employed in the construction or repair of public buildings or public works, financed in whole or in part by the United States, to give up any part of the compensation to which that person is entitled under a contract of employment. The Copeland Act also requires each contractor and subcontractor to furnish weekly a statement of compliance with respect to the wages paid each employee during the preceding week.

Contract Types –

Construction – This provision applies to all construction contracts and subcontracts financed under the AIP that exceed $2,000.

Equipment – This provision applies to all equipment installation projects (e.g. electrical vault improvements) financed under the AIP that exceed $2,000. This provision does not apply to equipment acquisitions where the equipment is manufactured at the vendor's plant (e.g. SRE and ARFF vehicles).

Professional Services –The emergence of different project delivery methods has created situations where Professional Service Agreements (PSAs) include tasks that meet the definition of construction, alteration, or repair as defined in 29 CFR Part 5. If such tasks result in work that qualifies as construction, alteration, or repair and it exceeds $2,000, the PSA must incorporate the Copeland Anti-kickback provision.

Property –Ordinarily, land acquisition projects would not involve employment of laborers or mechanics and thus the Copeland Anti-Kickback provision would not apply. However, land projects that involve installation of boundary fencing and demolition of structures would involve laborers and mechanics. The sponsor must include this provision if the land acquisition project involves employment of laborers or mechanics for a contract exceeding $2,000.

Use of Provision – **MANDATORY TEXT.** 29 CFR Part 5 establishes specific language a sponsor must use in construction contracts. The sponsor may not make any modification to the standard language. Architectural/Engineering (A/E) firms that employ laborers and mechanics on a task that meets the definition of construction, alteration, or repair are acting as a contractor. The sponsor may not substitute the term "contractor" for "consultant" in such instances.

A9.3 CONTRACT CLAUSE

COPELAND "ANTI-KICKBACK" ACT

Contractor must comply with the requirements of the Copeland "Anti-Kickback" Act (18 USC 874 and 40 USC 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.

A10 DAVIS-BACON REQUIREMENTS

A10.1 SOURCE

2 CFR § 200, Appendix II(D)

29 CFR Part 5

A10.2 APPLICABILITY

The Davis-Bacon Act ensures that laborers and mechanics employed under the contract receive pay no less than the locally prevailing wages and fringe benefits as determined by the Department of Labor.

Contract Types –

Construction – Incorporate into all construction contracts and subcontracts that exceed $2,000 and include funding from the AIP.

Equipment – This provision applies to all equipment installation projects (e.g. electrical vault improvements) financed under the AIP that exceed $ 2, 000. This provision does not apply to equipment acquisitions where the equipment is manufactured at the vendor's plant (e.g. SRE and ARFF vehicles)

Professional Services – The emergence of different project delivery methods has created situations where Professional Service Agreements (PSAs) includes tasks that meet the definition of construction, alteration, or repair as defined in 29 CFR Part 5. If such tasks result in work that qualifies as construction, alteration, or repair and it exceeds $2,000, the PSA must incorporate this clause.

Property – Ordinarily, land acquisition projects would not involve employment of laborers or mechanics and thus the provision would not apply. However, land projects that involve installation of boundary fencing and demolition of structures would involve laborers and mechanics. The sponsor must include this provision if the land acquisition project involves employment of laborers or mechanics for a contract exceeding $2,000.

Fencing Projects – Fencing projects that exceed $2,000 must include this provision.

Use of Provision – **MANDATORY TEXT.** 29 CFR part 5 establishes specific language a sponsor must use. The sponsor may not make any modification to the standard language. A/E firms that employ laborers and mechanics on a task that meets the definition of construction, alteration, or repair are acting as a contractor. The sponsor may not substitute the term "Contractor" for "Consultant" in such instances.

A10.3 CONTRACT CLAUSE

DAVIS-BACON REQUIREMENTS

1. Minimum Wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any

account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided* that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination;

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers, or mechanics to be employed in the classification, or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall

refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program: *Provided* that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding.

The Federal Aviation Administration or the sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the Contractor, Sponsor, Applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and Basic Records.

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records that show that the commitment to provide such benefits is

enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and that show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (*e.g.* the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at *www.dol.gov/whd/forms/wh347instr.htm* or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit them to the applicant, sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, Sponsor, or Owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) The payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5 (a)(3)(i), and that such information is correct and complete;

(2) Each laborer and mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;

(3) Each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The Contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the sponsor, the Federal Aviation Administration, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, Sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau,

withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination that provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal Employment Opportunity. The utilization of apprentices, trainees, and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act Requirements.

The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

(i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 USC 1001.

A11 DEBARMENT AND SUSPENSION

A11.1 SOURCE

2 CFR part 180 (Subpart C)

2 CFR part 1200

DOT Order 4200.5

A11.2 APPLICABILITY

The sponsor must verify that the firm or individual that it is entering into a contract with is not presently suspended, excluded, or debarred by any Federal department or agency from participating in federally assisted projects. The sponsor accomplishes this by:

1) Checking the System for Award Management (SAM.gov) to verify that the firm or individual is not listed in SAM.gov as being suspended, debarred, or excluded;
2) Collecting a certification from the firm or individual that it is not suspended, debarred, or excluded; and
3) Incorporating a clause in the contract that requires lower tier contracts to verify that no suspended, debarred, or excluded firm or individual is included in the project.

Contract Types – This requirement applies to *covered transactions*, which are defined in 2 CFR part 180. AIP funded contracts are non-procurement transactions, as defined by §180.970. Covered transactions include any AIP-funded contract, regardless of tier, that is awarded by a contractor, subcontractor, supplier, consultant, or its agent or representative in any transaction, if the amount of the contract is expected to equal or exceed $25,000. This includes contracts associated with land acquisition projects.

Use of Provision – No mandatory language provided. The following language is acceptable to the FAA in meeting the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 2 CFR part 180. For professional service agreements, sponsor may substitute bidder/offeror with consultant.

A11.3 SOLICITATION CLAUSE

A11.3.1 Bidder or Offeror Certification

CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

A11.3.2 Lower Tier Contract Certification

CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

The successful bidder, by administering each lower tier subcontract that exceeds $25,000 as a "covered transaction", must verify each lower tier participant of a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder will accomplish this by:

1. Checking the System for Award Management at website: http://www.sam.gov.
2. Collecting a certification statement similar to the Certification of Offerer /Bidder Regarding Debarment, above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract.

If the Federal Aviation Administration later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

A12 DISADVANTAGED BUSINESS ENTERPRISE

A12.1 SOURCE

49 CFR part 26

A12.2 APPLICABILITY

A sponsor that anticipates awarding $250,000 or more in AIP funded prime contracts in a federal fiscal year must have an approved Disadvantaged Business Enterprise (DBE) program on file with the FAA Office of Civil Rights (§ 26.21). The approved DBE program will identify a 3-year overall program goal that the sponsor bases on the availability of ready, willing, and able DBEs relative to all businesses ready, willing, and able to participate on the project (§ 26.45).

Contract Types – Sponsors with a DBE program on file with the FAA must include the three following provisions, if applicable:

1) Clause in all solicitations for proposals for which a contract goal has been established,
2) Clause in each prime contract, and
3) Clause in solicitations that are obtaining DBE participation through race/gender neutral means.

Use of Provision –

1. *Solicitations with a DBE Project Goal* – No mandatory language provided. 49 CFR §26.53 requires a sponsor's solicitation to address what a contractor must submit on proposed DBE participation. The language of A12.3.1 is acceptable to the FAA in meeting the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully satisfy these requirements. The sponsor may require the contractor's submittal on proposed DBE participation either at bid opening as a matter of responsiveness or within five days of bid opening as a matter of responsibility.

2. *Solicitations Relying on Race-gender Neutral Means* – No mandatory language provided. The language of A12.3.2 is acceptable to the FAA in meeting the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully satisfy requirements for a sponsor that is not applying a project specific contract goal but is covered by a DBE program on file with the FAA.

3. *Contracts Covered by DBE Program* – **MANDATORY TEXT PROVIDED**. Sponsors must incorporate this language if they have a DBE program on file with the FAA. This includes projects where DBE participation is obtained through race-gender neutral means (i.e. no project goal). Sections §26.13 and §26.29 establish mandatory language for contractor assurance and prompt payment. The sponsor must not modify the language.

4. Sponsors that are not required to have a DBE program on file with the FAA are not required to include DBE provisions and clauses.

A12.3 REQUIRED PROVISIONS

A12.3.1 Solicitation Language (Solicitations that include a Project Goal)

Information Submitted as a matter of bidder responsiveness:

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

As a condition of bid responsiveness, the Bidder or Offeror must submit the following information with its proposal on the forms provided herein:

1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
2) A description of the work that each DBE firm will perform;
3) The dollar amount of the participation of each DBE firm listed under (1)
4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal; and
5) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26.

Information submitted as a matter of bidder responsibility:

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

The successful Bidder or Offeror must provide written confirmation of participation from each of the DBE firms the Bidder or Offeror lists in its commitment within five days after bid opening.

1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
2) A description of the work that each DBE firm will perform;
3) The dollar amount of the participation of each DBE firm listed under (1)
4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal; and
5) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26.

A12.3.2 Solicitation Language (Race/Gender Neutral Means)

The requirements of 49 CFR part 26 apply to this contract. It is the policy of the [Insert Name of Owner] to practice nondiscrimination based on race, color, sex, or national origin in the award or performance of this contract. The Owner encourages participation by all firms qualifying under this solicitation regardless of business size or ownership.

A12.3.3 Prime Contracts (Projects Covered by a DBE Program)

DISADVANTAGED BUSINESS ENTERPRISES

Contract Assurance (§ 26.13) –

The Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of Department of Transportation-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Owner deems appropriate, which may include, but is not limited to:

1) Withholding monthly progress payments;
2) Assessing sanctions;
3) Liquidated damages; and/or
4) Disqualifying the Contractor from future bidding as non-responsible.

Prompt Payment (§26.29) – The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than [specify number] days from the receipt of each payment the prime contractor receives from [Name of recipient]. The prime contractor agrees further to return retainage payments to each subcontractor within [specify the same number as above] days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the [Name of Recipient]. This clause applies to both DBE and non-DBE subcontractors.

A13 DISTRACTED DRIVING

A13.1 SOURCE

Executive Order 13513

DOT Order 3902.10

A13.2 APPLICABILITY

The FAA encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant.

Contract Types – Sponsors must insert this provision in all AIP funded contracts that exceed the micro-purchase threshold of 2 CFR §200.67 (currently set at $3,500).

Use of Provision – No mandatory text provided. The following language is acceptable to the FAA in meeting the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully satisfy these requirements.

A13.3 CONTRACT CLAUSE

TEXTING WHEN DRIVING

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving", (10/1/2009) and DOT Order 3902.10, "Text Messaging While Driving", (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant.

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding $3,500 that involve driving a motor vehicle in performance of work activities associated with the project.

A14 ENERGY CONSERVATION REQUIREMENTS

A14.1 SOURCE

2 CFR § 200, Appendix II(H)

A14.2 APPLICABILITY

The Energy Conservation Requirements of 2 CFR § 200 Appendix II(H) requires this provision on energy efficiency.

Contract Types – The sponsor must include this provision in all AIP funded contracts and lower-tier contracts.

Use of Provision – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's revised language must fully satisfy these requirements. Sponsor may substitute "Contractor and subcontractor" with "Consultant and sub-consultant" for professional service agreements.

A14.3 CONTRACT CLAUSE

ENERGY CONSERVATION REQUIREMENTS

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 USC 6201*et seq*).

A15 DRUG FREE WORKPLACE REQUIREMENTS

A15.1 SOURCE

49 CFR part 32

Drug-Free Workplace Act of 1988 (41 U.S.C. 701 *et seq.,* as amended)

A15.2 APPLICABILITY

The Drug-Free Workplace Act of 1988 requires some Federal contractors and *all* Federal grantees to agree that they will provide drug-free workplaces as a condition of receiving a contract or grant from a Federal agency. The Act does ***not*** apply to contractors, subcontractors, or subgrantees, although the Federal grantees workplace may be where the contractors, subcontractors, or subgrantees are working.

Contract Types – This provision applies to all AIP funded projects, but not to the contracts between the grantee (the sponsor) and a contractor, subcontractors, suppliers, or subgrantees.

Use of Provision – No mandatory or recommended text provided because the requirements do not extend beyond the sponsor level.

A15.3 CONTRACT CLAUSE

None.

A16 EQUAL EMPLOYEMENT OPPORTUNITY (EEO)

A16.1 SOURCE

2 CFR 200, Appendix II(C)

41 CFR § 60-1.4

41 CFR § 60-4.3

Executive Order 11246

A16.2 APPLICABILITY

The purpose of this provision is to provide equal opportunity for all persons, without regard to race, color, religion, sex, or national origin who are employed or seeking employment with contractors performing under a federally assisted construction contract. There are two provisions — a construction clause and a specification clause.

The equal opportunity contract clause must be included in any contract or subcontract when the amount exceeds $10,000. Once the equal opportunity clause is determined to be applicable, the contract or subcontract must include the clause for the remainder of the year, regardless of the amount or the contract.

Contract Types –

Construction – The sponsor must incorporate contract and specification language in all construction contracts and subcontracts as required above.

Equipment – The sponsor must incorporate contract and specification language into all equipment contracts as required above that involves installation of equipment onsite (e.g. electrical vault equipment). This provision does not apply to equipment acquisition projects where the manufacture of the equipment takes place offsite at the vendor plant (e.g. ARFF and SRE vehicles).

Professional Services – The sponsor must include contract and specification language into all professional service agreements as required above.

Property – The sponsor must include contract and specification language into all land acquisition projects that include work that qualifies as construction work as defined by 41 CFR part 60 as required above. An example is installation of boundary fencing.

Use of Provision – **MANDATORY TEXT.** 41 CFR § 60-1.4 provides the mandatory ***contract*** language. 41 CFR § 60-4.3 provides the mandatory ***specification*** language. The sponsor must incorporate these clauses without modification.

A16.3 MANDATORY CONTRACT CLAUSE

A16.3.1 EEO Contract Clause

EQUAL OPPORTUNITY CLAUSE

During the performance of this contract, the Contractor agrees as follows:

(1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identify, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

(3) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the

administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance*: Provided, however*, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

A16.3.2 EEO Specification

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS

1. As used in these specifications:

   a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

   b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;

   c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;

   d. "Minority" includes:

      (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

      (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);

      (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

      (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR part 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other

contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period and the Contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor

by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or female sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions, including specific review of these items, with onsite supervisory personnel such superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the Contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally), the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing

subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR part 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

A17 FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

A17.1 SOURCE

29 USC § 201, et seq

A17.2 APPLICABILITY

The U.S. Department of Labor (DOL) Wage and Hour Division administers the Fair Labor Standards Act (FLSA). This act prescribes federal standards for basic minimum wage, overtime pay, record keeping, and child labor standards.

Contract Types – Per the Department of Labor, all employees of certain enterprises having workers engaged in interstate commerce; producing goods for interstate commerce; or handling, selling, or otherwise working on goods or materials that have been moved in or produced for such commerce by any person are covered by the FLSA.

All consultants, sub-consultants, contractors, and subcontractors employed under this federally assisted project must comply with the FLSA.

> *Professional Services* – 29 CFR § 213 exempts employees in a bona fide executive, administrative or professional capacity. Because professional firms employ individuals that are not covered by this exemption, the sponsor's agreement with a professional services firm must include the FLSA provision.

Use of Provision – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 29 USC § 201.The sponsor must select *contractor* or *consultant*, as appropriate for the contract.

A17.3 SOLICITATION CLAUSE

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers.

The [*Contractor* | *Consultant*] has full responsibility to monitor compliance to the referenced statute or regulation. The [*Contractor* | *Consultant*] must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

A18 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

A18.1 SOURCE

31 USC § 1352 – Byrd Anti-Lobbying Amendment

2 CFR part 200, Appendix II(J)

49 CFR part 20, Appendix A

A18.2 APPLICABILITY

Consultants and contractors that apply or bid for an award of $100,000 or more must certify that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or another award covered by 31 USC 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award.

Contract Types – The sponsor must incorporate this provision into all contracts exceeding $100,000.

Use of Provision – **MANDATORY TEXT.** Appendix A to 49 CFR Part 20 prescribes language the sponsor must use. The sponsor must incorporate this provision without modification.

A18.3 CONTRACT CLAUSE

CERTIFICATION REGARDING LOBBYING

The Bidder or Offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under

grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

A19 PROHIBITION of SEGREGATED FACILITIES

A19.1 SOURCE

41 CFR § 60

A19.2 APPLICABILITY

The contractor must comply with the requirements of the EEO clause by ensuring that facilities they provide for employees are free of segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin. This clause must be included in all contracts that include the equal opportunity clause, regardless of the amount of the contract.

Contract Types – AIP sponsors must incorporate the Prohibition of Segregated Facilities clause in any contract containing the Equal Employment Opportunity clause of 41 CFR §60.1. This obligation flows down to subcontract and sub-tier purchase orders containing the Equal Employment Opportunity clause.

Construction – Construction work means construction, rehabilitation, alteration, conversion, extension, demolition or repair of buildings, highways, or other changes or improvements to real property, including facilities providing utility services. The term also includes the supervision, inspection, and other onsite functions incidental to the actual construction.

Equipment – On site installation of equipment such as airfield lighting control equipment meets the definition of construction and thus this provision would apply. This provision does not apply to equipment projects involving manufacture of the item at a vendor's manufacturing plant. An example would be the manufacture of a SRE or ARFF vehicle.

Professional Services – Professional services that include tasks that qualify as construction work as defined by 41 CFR part 60. Examples include the installation of noise monitoring equipment.

Property/Land – Land acquisition contracts that include tasks that qualify as construction work as defined by 41 CFR part 60. Examples include demolition of structures or installation of boundary fencing.

Use of Provision – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 41 CFR § 60.

A19.3 CONTRACT CLAUSE

PROHIBITION OF SEGREGATED FACILITIES

(a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Employment Opportunity clause in this contract.

(b) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Employment Opportunity clause of this contract.

A20 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

A20.1 SOURCE

29 CFR part 1910

A20.2 APPLICABILITY

Contract Types – All contracts and subcontracts must comply with the Occupational Safety and Health Act of 1970 (OSH). The U.S. Department of Labor Occupational Safety and Health Administration (OSHA) oversees the workplace health and safety standards wage provisions from OSH.

Use of Provision – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 20 CFR part 1910.

A20.3 CONTRACT CLAUSE

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

A21 PROCUREMENT OF RECOVERED MATERIALS

A21.1 SOURCE

2 CFR § 200.322

40 CFR part 247

Solid Waste Disposal Act

A21.2 APPLICABILITY

Sponsors of AIP funded development and equipment projects must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. Section 6002 emphasizes maximizing energy and resource recovery through use of affirmative procurement actions for recovered materials identified in the Environmental Protection Agency (EPA) guidelines codified at 40 CFR part 247. When acquiring items designated in the guidelines, the sponsor must procure items that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition.

Contract Types – This provision applies to any contracts that include procurement of products designated in subpart B of 40 CFR part 247 where the purchase price of the item exceeds $10,000 or the value of the quantity acquired by the preceding fiscal year exceeded $10,000.

Construction and Equipment – Include this provision in all construction and equipment projects.

Professional Services and Property – Include this provision if the agreement includes procurement of a product that exceeds $10,000.

Use of Provision – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 2 CFR § 200.

A21.3 CONTRACT CLAUSE

PROCUREMENT OF RECOVERED MATERIALS

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

1) The contract requires procurement of $10,000 or more of a designated item during the fiscal year; or
2) The contractor has procured $10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products.

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
b) Fails to meet reasonable contract performance requirements; or
c) Is only available at an unreasonable price.

A22 RIGHT TO INVENTIONS

A22.1 SOURCE

2 CFR § 200, Appendix II(F)

37 CFR §401

A22.2 APPLICABILITY

Contract Types – This provision applies to all contracts and subcontracts with small business firms or nonprofit organizations that include performance of *experimental, developmental, or research work*. This clause is not applicable to construction, equipment, or professional service contracts unless the contract includes *experimental, developmental, or research work*.

Use of Provision – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of Appendix II to 2 CFR part 200.

A22.3 CONTRACT CLAUSE

RIGHTS TO INVENTIONS

Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Owner in any resulting invention as established by 37 CFR part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This contract incorporates by reference the patent and inventions rights as specified within 37 CFR §401.14. Contractor must include this requirement in all sub-tier contracts involving experimental, developmental, or research work.

A23 SEISMIC SAFETY

A23.1 SOURCE

49 CFR part 41

A23.2 APPLICABILITY

Contract Types – This provision applies to construction of new buildings and additions to existing buildings financed in whole or in part through the Airport Improvement Program.

Professional Services– Sponsor must incorporate this clause in any contract involved in the construction of new buildings or structural addition to existing buildings.

Construction – Sponsor must incorporate this clause in any contract involved in the construction of new buildings or structural addition to existing buildings.

Equipment – Sponsor must include the construction provision if the project involves construction or structural addition to a building such as an electrical vault project to accommodate or install equipment.

Land – This provision will not typically apply to a property/land project.

Use of Provision – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 49 CFR part 41.

A23.3 CONTRACT CLAUSE

A23.3.1 Professional Service Agreements for Design

SEISMIC SAFETY

In the performance of design services, the Consultant agrees to furnish a building design and associated construction specification that conform to a building code standard that provides a level of seismic safety substantially equivalent to standards as established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their building code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety. At the conclusion of the design services, the Consultant agrees to furnish the Owner a "certification of compliance" that attests conformance of the building design and the construction specifications with the seismic standards of NEHRP or an equivalent building code.

A23.3.2 Construction Contracts

SEISMIC SAFETY

The Contractor agrees to ensure that all work performed under this contract, including work performed by subcontractors, conforms to a building code standard that provides a level of seismic safety substantially equivalent to standards established by the National Earthquake Hazards Reduction

Program (NEHRP). Local building codes that model their code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety.

A24 TAX DELINQUENCY AND FELONY CONVICTIONS

A24.1 SOURCE

Sections 415 and 416 of Title IV, Division L of the Consolidated Appropriations Act, 2014 (Pub. L. 113-76), and similar provisions in subsequent appropriations acts.

DOT Order 4200.6 - Requirements for Procurement and Non-Procurement Regarding Tax Delinquency and Felony Convictions

A24.2 APPLICABILITY

The sponsor must ensure that no funding goes to any contractor who:

- Has been convicted of a Federal felony within the last 24 months; or
- Has any outstanding tax liability for which all judicial and administrative remedies have lapsed or been exhausted.

Contract Types – This provision applies to all contracts funded in whole or part with AIP.

Use of Provision – The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of DOT Order 4200.6.

A24.3 CONTRACT CLAUSE

CERTIFICATION OF OFFERER/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark (✓) in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

Certifications

1) The applicant represents that it is ( ) is not ( ) a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

2) The applicant represents that it is ( ) is not ( ) is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

Note

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify

the FAA Airports District Office, which will then notify the agency's SDO to facilitate completion of the required considerations before award decisions are made.

Term Definitions

Felony conviction: Felony conviction means a conviction within the preceding twentyfour (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

Tax Delinquency: A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

A25 TERMINATION OF CONTRACT

A25.1 SOURCE

2 CFR § 200 Appendix II(B)

FAA Advisory Circular 150/5370-10, Section 80-09

A25.2 APPLICABILITY

Contract Types – All contracts and subcontracts in excess of $10,000 must address *termination for cause* and *termination for convenience* by the sponsor. The provision must address the manner (i.e. notice, opportunity to cure, and effective date) by which the sponsor's contract will be affected and the basis for settlement (i.e. incurred expenses, completed work, profit, etc.).

Use of Provision –

Termination for Default – **MANDATORY TEXT.** Section 80-09 of FAA Advisory Circular 150/5370-10 establishes standard language for Termination for Default under a construction contract. The sponsor must not make any changes to this standard language.

Termination for Convenience – No mandatory text provided. The sponsor must include a clause for termination for convenience. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of Appendix II to 2 CFR part 200.

Equipment, Professional Services, and Property – No mandatory text provided. The sponsor may use their established clause language provided that it adequately addresses the intent of Appendix II(B) to Part 200, which addresses termination for fault and for convenience.

A25.3 CONTRACT CLAUSE

A25.3.1 Termination for Convenience

TERMINATION FOR CONVENIENCE (CONSTRUCTION & EQUIPMENT CONTRACTS)

The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:

1. Contractor must immediately discontinue work as specified in the written notice.
2. Terminate all subcontracts to the extent they relate to the work terminated under the notice.
3. Discontinue orders for materials and services except as directed by the written notice.
4. Deliver to the Owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work, and as directed in the written notice.

5. Complete performance of the work not terminated by the notice.
6. Take action as directed by the Owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

1) completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;

2) documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;

3) reasonable and substantiated claims, costs, and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers; and

4) reasonable and substantiated expenses to the Contractor directly attributable to Owner's termination action.

Owner will not pay Contractor for loss of anticipated profits or revenue or other economic loss arising out of or resulting from the Owner's termination action.

The rights and remedies this clause provides are in addition to any other rights and remedies provided by law or under this contract.

TERMINATION FOR CONVENIENCE (PROFESSIONAL SERVICES)

The Owner may, by written notice to the Consultant, terminate this Agreement for its convenience and without cause or default on the part of Consultant. Upon receipt of the notice of termination, except as explicitly directed by the Owner, the Contractor must immediately discontinue all services affected.

Upon termination of the Agreement, the Consultant must deliver to the Owner all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Engineer under this contract, whether complete or partially complete.

Owner agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

Owner further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

A25.3.2 Termination for Default

TERMINATION FOR DEFAULT (CONSTRUCTION)

Section 80-09 of FAA Advisory Circular 150/5370-10 establishes conditions, rights, and remedies associated with Owner termination of this contract due to default of the Contractor.

TERMINATION FOR DEFAULT (EQUIPMENT)

The Owner may, by written notice of default to the Contractor, terminate all or part of this Contract if the Contractor:

1. Fails to commence the Work under the Contract within the time specified in the Notice- to-Proceed;
2. Fails to make adequate progress as to endanger performance of this Contract in accordance with its terms;
3. Fails to make delivery of the equipment within the time specified in the Contract, including any Owner approved extensions;
4. Fails to comply with material provisions of the Contract;
5. Submits certifications made under the Contract and as part of their proposal that include false or fraudulent statements; or
6. Becomes insolvent or declares bankruptcy.

If one or more of the stated events occur, the Owner will give notice in writing to the Contractor and Surety of its intent to terminate the contract for cause. At the Owner's discretion, the notice may allow the Contractor and Surety an opportunity to cure the breach or default.

If within [10] days of the receipt of notice, the Contractor or Surety fails to remedy the breach or default to the satisfaction of the Owner, the Owner has authority to acquire equipment by other procurement action. The Contractor will be liable to the Owner for any excess costs the Owner incurs for acquiring such similar equipment.

Payment for completed equipment delivered to and accepted by the Owner shall be at the Contract price. The Owner may withhold from amounts otherwise due the Contractor for such completed equipment, such sum as the Owner determines to be necessary to protect the Owner against loss because of Contractor default.

Owner will not terminate the Contractor's right to proceed with the Work under this clause if the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such acceptable causes include: acts of God, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, and severe weather events that substantially exceed normal conditions for the location.

If, after termination of the Contractor's right to proceed, the Owner determines that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the Owner issued the termination for the convenience the Owner.

The rights and remedies of the Owner in this clause are in addition to any other rights and remedies provided by law or under this contract.

TERMINATION FOR DEFAULT (PROFESSIONAL SERVICES)

Either party may terminate this Agreement for cause if the other party fails to fulfill its obligations that are essential to the completion of the work per the terms and conditions of the Agreement. The party initiating the termination action must allow the breaching party an opportunity to dispute or cure the breach.

The terminating party must provide the breaching party [7] days advance written notice of its intent to terminate the Agreement. The notice must specify the nature and extent of the breach, the conditions

necessary to cure the breach, and the effective date of the termination action. The rights and remedies in this clause are in addition to any other rights and remedies provided by law or under this agreement.

a) **Termination by Owner**: The Owner may terminate this Agreement in whole or in part, for the failure of the Consultant to:
   1. Perform the services within the time specified in this contract or by Owner approved extension;
   2. Make adequate progress so as to endanger satisfactory performance of the Project; or
   3. Fulfill the obligations of the Agreement that are essential to the completion of the Project.

   Upon receipt of the notice of termination, the Consultant must immediately discontinue all services affected unless the notice directs otherwise. Upon termination of the Agreement, the Consultant must deliver to the Owner all data, surveys, models, drawings, specifications, reports, maps, photographs, estimates, summaries, and other documents and materials prepared by the Engineer under this contract, whether complete or partially complete.

   Owner agrees to make just and equitable compensation to the Consultant for satisfactory work completed up through the date the Consultant receives the termination notice. Compensation will not include anticipated profit on non-performed services.

   Owner further agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

   If, after finalization of the termination action, the Owner determines the Consultant was not in default of the Agreement, the rights and obligations of the parties shall be the same as if the Owner issued the termination for the convenience of the Owner.

b) **Termination by Consultant**: The Consultant may terminate this Agreement in whole or in part, if the Owner:
   1. Defaults on its obligations under this Agreement;
   2. Fails to make payment to the Consultant in accordance with the terms of this Agreement;
   3. Suspends the Project for more than [180] days due to reasons beyond the control of the Consultant.

   Upon receipt of a notice of termination from the Consultant, Owner agrees to cooperate with Consultant for the purpose of terminating the agreement or portion thereof, by mutual consent. If Owner and Consultant cannot reach mutual agreement on the termination settlement, the Consultant may, without prejudice to any rights and remedies it may have, proceed with terminating all or parts of this Agreement based upon the Owner's breach of the contract.

   In the event of termination due to Owner breach, the Engineer is entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement and all justified reimbursable expenses incurred by the Consultant through the effective date of termination action. Owner agrees to hold Consultant harmless for errors or omissions in documents that are incomplete as a result of the termination action under this clause.

A26 TRADE RESTRICTION CERTIFICATION

A26.1 SOURCE

49 USC § 50104

49 CFR part 30

A26.2 APPLICABILITY

Unless waived by the Secretary of Transportation, sponsors may not use AIP funds on a product or service from a foreign country included in the current list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR).

Contract Types – The trade restriction certification and clause applies to all AIP funded projects.

Use of Provision – MANDATORY TEXT. 49 CFR part 30 prescribes the language for this model clause. The sponsor must include this certification language in all contracts and subcontracts without modification.

A26.3 SOLICITATION CLAUSE

TRADE RESTRICTION CERTIFICATION

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror –

1) is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);
2) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and
3) has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 USC Section 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR or
2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list or
3) who incorporates in the public works project any product of a foreign country on such USTR list.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The Contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration (FAA) may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

A27 VETERAN'S PREFERENCE

A27.1 SOURCE

49 USC § 47112(c)

A27.2 APPLICABILITY

Contract Types – This provision applies to all AIP funded projects that involve labor to carry out the project. This preference, which excludes executive, administrative, and supervisory positions, applies to covered veterans (as defined under § 47112(c)) only when they are readily available and qualified to accomplish the work required by the project.

Use of Provision – No mandatory text provided. The following language is acceptable to the FAA and meets the intent of this requirement. If the sponsor uses different language, the sponsor's language must fully satisfy the requirements of 49 USC § 47112.

A27.3 CONTRACT CLAUSE

VETERAN'S PREFERENCE

In the employment of labor (excluding executive, administrative, and supervisory positions), the Contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 USC 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

CITY OF BURLINGTON
CONSTRUCTION CONTRACT

This Construction Contract ("Contract") is entered into by and between the City of Burlington, Vermont ("the City"), and Engelberth Construction, Inc. ("Construction Manager"), a Vermont corporation located at 150 Water Tower Circle, Suite 101, Colchester, VT.

Construction Manager and the City agree to the terms and conditions of this Contract.

1. DEFINITIONS

The following terms shall be construed and interpreted as follows:

A. "Contract Documents" means all the documents identified in Section 4 (Scope of Work) of this Contract.

B. "Effective Date" means the date on which this Contract is approved and signed by the City, as shown on the signature page.

C. "Party" means the City or Construction Manager and "Parties" means the City and Construction Manager.

D. "Project" means the **Patrick Leahy Burlington International Airport Project NexT.**

E. "Work" means the services described in Section 5 (Payment for Services) of this Contract, along with the specifications contained in the Contract Documents as defined in Section 4 (Scope of Work) below.

F. "City" The City is the Project Owner and is an entity identified and identified as such throughout the Contract Documents. The City shall designate in writing a representative who shall have express authority to bind the City with respect to all matters requiring the City's approval or authorization. The City's Designated Representative is a person empowered and duly authorized to make decisions on behalf of the City concerning estimates and schedules, construction budgets and Changes in the Work. The Construction Manager may rely on any order, consent, or approval given to the Construction Manager by such person.

City's Designated Representative
Larry Lackey, Director of Engineering
Patrick Leahy Burlington International Airport
1200 Airport Drive, #1
South Burlington, VT 05403

G. "Construction Manager" The Construction Manager is an entity identified as such throughout the Contract Documents. The Construction Manager's Designated Representative is a person empowered and duly authorized to make decisions on behalf of the Construction Manager. The Construction Manager's shall designate in writing a representative who shall have express authority to bind the Construction Manager with respect to all matters under this Contract.

Construction Manager's Designated Representative
Brendan Jones, Project Manager
150 Water Tower Circle, Suite 101

Colchester, VT 05446

2. RECITALS

A. Authority. Each Party represents and warrants to the other that the execution and delivery of this Contract and the performance of such Party's obligations have been duly authorized.

B. Consideration. The Parties acknowledge that the mutual promises and covenants contained herein and other good and valuable consideration are sufficient and adequate to support this Contract.

C. Purpose. The City seeks to employ the Construction Manager to construct a new three-level, 64,000 sf addition; four new passenger boarding bridges; 50 new geothermal wells; 20,000 sf of renovations to the existing North Terminal; and associated sitework.

3. EFFECTIVE DATE & TERM

A. Effective Date. This Contract shall not be valid or enforceable until the Effective Date of September 15, 2023. The City shall not be bound by any provision of this Contract before the Effective Date and shall have no obligation to pay Construction Manager for any performance or expense incurred before the Effective Date or after the expiration or termination of this Contract.

B. Term. This Contract and the Parties' respective performance shall commence on the Effective Date of September 15, 2023, and expire on April 23, 2026, or upon the satisfaction of the City, unless sooner terminated as provided herein.

4. SCOPE OF WORK

The Construction Manager shall perform the services listed in Attachments A (Request for Proposals) and B (Construction Manager's Response to Request for Proposals).

5. PAYMENT FOR SERVICES

A. Amount. The City shall pay the Construction Manager for completion of the Work in accordance with **Attachment B** (Construction Manager's Response to Request for Proposals).

Construction Manager agrees to accept this payment as full compensation for performance of all services and expenses incurred under this Contract.

B. Payment Schedule. The City shall pay the Construction Manager in the manner and at such times as set forth in the Contract Documents. The City seeks to make payment within thirty (30) thirty days of receipt of an invoice and any backup documentation requested under subsection E (Invoice) below.

C. Contract Sum. In consideration of the labor, materials, equipment, and services to be provided by the Construction Manager under and in accordance with the terms of this Contract, Construction Manager shall be paid the Contract Sum. The Contract Sum shall be **Forty-Seven Million Nine Hundred Thirty-One Thousand Five Hundred Twenty-Five ($47,931,525.00) Dollars**, subject to the issuance of 100% Construction Drawing Documents, under which the final Contract Sum, as authorized by Owner in Owner's sole discretion, shall be amended by Change Order. See Construction Manager's Estimate Update dated May 22, 2024 as Attachment H. The City shall not

be liable to Construction Manager for any amount exceeding the Contract Sum without duly authorized written approval.

D. **Changes in the Work:** The City may, without invalidating the Contract, order Changes in the Work within the general scope of the Contract consisting of additions and deletions or other revisions. The City shall issue such changes in writing. Change Orders that reflect an increase in the Contract Sum will be equal to the Construction Manager's net cost of the increased Scope of Work, plus ten (10%) percent for overhead and profit. Deductive Change Orders shall be based on the decreased Cost of the Work only.

E. **Applications for Payment.** Construction Manager shall submit a detailed Schedule of Values with each Application for Payment. Applications for Payment shall be based on the most recent schedule of values submitted by the Construction Manager in accordance with the Contract Documents. The Schedule of Values shall allocate the entire Contract Sum among the various portions of the Work. The Schedule of Values shall be prepared in such form, and supported by such data to substantiate its accuracy, as the Owner may require. This schedule of values shall be used as a basis for reviewing the Construction Manager's Applications for Payment. Construction Manager shall submit one copy of each invoice, including rates and a detailed breakdown by task for each individual providing services, and backup documentation for any equipment or other expenses to the following:

Larry Lackey, Director of Engineering
Burlington International Airport
1200 Airport Drive
South Burlington, VT 05403
llackey@btv.aero

The City reserves the right to request supplemental information prior to payment. Construction Manager shall not be entitled to payment under this Contract without providing sufficient backup documentation satisfactory to the City.

F. **Retainage.** Ten percent (10%) retainage shall be withheld on the Construction Manager's Applications for Payment until final completion and acceptance of the Project, and completion of all Punchlist Items. The City's Designated Representative and the Construction Manager shall agree upon a mutually acceptable procedure for reduction of retention for subcontractors. Early reduction of retainage for select subcontractors shall be based upon completion dates and performance and shall be solely at the discretion and approval of the City

6. SECTION & ATTACHMENT HEADINGS

The article and attachment headings and throughout this Contract are for the convenience of City and Construction Manager and are not intended nor shall they be used to construe the intent of this Contract or any part hereof, or to modify, amplify, or aid in the interpretation or construction of any of the provisions hereof.

7. CONTRACT DOCUMENTS & ORDER OF PRECEDENCE

A. **Contract Documents.** The Contract Documents are hereby adopted, incorporated by reference, and made part of this Contract. The intention of the Contract Documents is to establish the necessary terms, conditions, labor, materials, equipment, and other items necessary for the proper execution and completion of the Work to ensure the intended results.

The following documents constitute the Contract Documents:

Attachment A: Request for Proposals dated July 2023
Attachment B: Construction Manager's Proposal dated August 11, 2023
Attachment C: Burlington Standard Contract Conditions for Construction Contractors
Attachment C-1: Insurance, Bonds & Indemnification
Attachment C-2: Federal Aid Contract Requirements and Byrd Anti-Lobbying Certification
Attachment D: Burlington Livable Wage Ordinance Certification
Attachment E: Burlington Outsourcing Ordinance Certification
Attachment F: Burlington Union Deterrence Ordinance Certification
Attachment G: Contractor's Certificate of Insurance
Attachment H: Updated Executive Estimate Package dated May 22, 2024

B. Order of Precedence. To the extent a conflict or inconsistency exists between the Contract Documents, or provisions therein, then the Contract takes precedent. Any Invitation for Bids, Additional Contract Provisions, and the City Ordinance Certifications shall prevail over any inconsistency with the Construction Manager's Scope of Work and Cost Proposal.

8. Permits: The Contractor acknowledges and agrees that compliance with properly issued permits is a condition for commencing with any portion of the Work. The Contractor shall only proceed with Work for which the appropriated permit has been issued in accordance with the applicable regulations and as required by law.

— Signatures follow on the next page —

SIGNATURE

Persons signing for the Parties hereby swear and affirm that they are authorized to act on behalf of their respective Party and acknowledge that the other Party is relying on their representations to that effect. This Contract may be executed in counterparts, each of which shall be deemed an original, and it may be executed electronically, and an electronic copy or other facsimile shall be treated as an original.

Engelberth Construction, Inc.

By: _____
Pierre G. LeBlanc, President

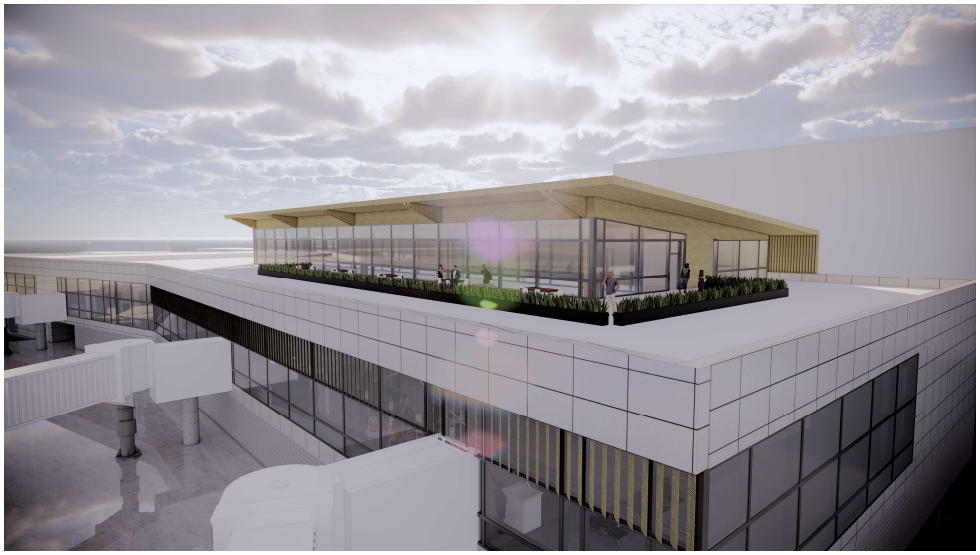
Date: October 4, 2024

City of Burlington

By: _____
Nicolas Longo, Director of Aviation

Date: October 4, 2024

Attachment A:
Request for Proposals



REQUEST FOR PROPOSAL

CONSTRUCTION MANAGER AT RISK (CMAR) SERVICES

for the

NORTH TERMINAL IMPROVEMENTS PROJECT

at the

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT

JULY 2023

Patrick Leahy Burlington International Airport
1200 Airport Drive, #1
South Burlington, VT 05403

Jacobs Engineering Group Inc.
Two Executive Park Drive
Bedford, New Hampshire 03110

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ADVERTISEMENT FOR BIDS

ADVERTISEMENT FOR BIDS

NORTH TERMINAL IMPROVEMENT PROJECT

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT (BTV)
BURLINGTON, VERMONT

Sealed Bids (for the purpose of this notice, the term "bid" can be taken to mean the Construction Manager's qualifications and price proposal) for the **North Terminal Improvement Project** will be received at the Office of the Director of Aviation, Patrick Leahy Burlington International Airport, 1200 Airport Drive, #1, South Burlington, VT 05403 until **2:00 PM**, local time, **Friday, August 11, 2023** and there, at said office, at said time, be confirmed and acknowledge, via teleconference, that all requirements have been met and the Construction Manager's bid will advance to the evaluation stage.

Bids shall be submitted in a sealed envelope, clearly labelled with the bidder's name and address, and the project title.

The project is being bid as a Construction Manager at Risk (CMAR) contract. The project consists of an expansion of the existing North terminal at Patrick Leahy Burlington International Airport, demolition of a portion of the existing terminal, utility construction, utility and generator relocation, new aircraft apron construction, new passenger boarding bridges, and interior renovation of a portion of existing 2nd floor concourse level. The total estimated finished floor area of the expansion is 36,000 square feet. An unfinished lower level of approximately 28,500 square feet is also part of the building. A preliminary design has been completed and is presented in the Bid Documents.

The project also includes the construction of approximately 4,400 linear feet of recreational path, landscaping, and hardscape features on Airport-owned property in the adjacent Chamberlain neighborhood.

The project includes a Base Bid only. Prevailing wage rates apply, including compliance with Federal and State minimum wage rates and the current City of Burlington Livable Wage Ordinance. Bidders must be bonded and insured to the level indicated in the Contract Documents. A Federal DBE participation goal is included in the Contract. The project is sales tax exempt.

Bid Documents, including but not limited to: Bid Forms, draft Contract Documents, Federal and City Contract Provisions, Plans, and Appendices, will be available online only, beginning on **Tuesday, July 18, 2023**, at www.Projectdog.com. Enter the Project Code **856949** in the project locator box and select "Acquire Documents" to download documents. Bidders must have an active online account on www.Projectdog.com to acquire documents and to receive project notifications (Addenda). Projectdog accounts are available to all, free of charge.

A pre-bid conference will be held virtually at **11:00 A.M.** local time on **Wednesday, July 26, 2023**. Contact Stu Moncrieff (Phone: 603-496-9267, e-mail: stu.moncrieff@jacobs.com) to obtain a link to the virtual meeting.

An optional pre-bid site tour of the work area will be held at **11:00 A.M**. on **Friday, July 28, 2023**. Please RSVP for this visit to Stu Moncrieff (Phone: 603-496-9267, e-mail: stu.moncrieff@jacobs.com). Please arrive at the 2nd floor badging office by 10:30 A.M. to obtain a visitor's badge. All bidders will be escorted to the project site as a single group. Persons with disabilities who require assistance or special arrangements to participate in the pre-bid site tour are encouraged to contact the Airport at (802)

863-2874 at least 72 hours in advance so that proper arrangements can be made.

Technical questions during the bid period shall be directed to Stu Moncrieff at Jacobs (Phone: 603-496-9267, e-mail: stu.moncrieff@jacobs.com).

Each bid must be accompanied by a certified check or bid bond, in the amount of five percent (5%) of the total maximum bid price for the contract in the form and subject to the conditions provided in the Bid Documents.

Selection for this project will be based upon both qualifications and price. Responses are limited to a maximum of forty (40) pages single-sided, twenty (20) pages double sided, or a combination thereof. Cover page(s), cover letter, dividers, table of contents, and any required bid forms are excluded from the page count.

It is the intention of the Owner to issue a notice-to-proceed for pre-construction services upon execution of the CMAR contract, and to have construction begin on or about April 15, 2024.

Bidders are to ensure they have fulfilled the **annual requirement** of pre-qualification with the City of Burlington by submitting the City of Burlington's ***Pre-Qualification of Construction Contractors Application*** form (see Bid Documents) to Larry Lackey, Director of Planning, Engineering, and Sustainability, Patrick Leahy Burlington International Airport, 1200 Airport Drive, #1, South Burlington, VT 05403, or LLackey@btv.aero. This form must be submitted five (5) days before this bid is due (unless the bidder has already fulfilled this annual requirement). In addition to City of Burlington Prequalification, each bidder shall furnish the completed **Statement of Bidder's Qualifications** form (see Bid Documents) at the time of bid opening.

Attention of bidders is also called to the conditions of employment to be observed and minimum wage rates to be paid under the Contract. The Construction Manager (CM) for this project will be required to comply with the Disadvantaged Business Enterprises (DBE) and Equal Employment Opportunity requirements of the Federal Aviation Administration and the City of Burlington, and the City of Burlington's Women and Construction Trades Ordinance.

The CM must comply with the Federal Disadvantaged Business Enterprise (DBE) requirements contained within the Bid Documents and in any resulting Contract. This project utilizes race-conscious DBE procedures. **The Airport's DBE project goal for FY 2023 is 3.76%; the FY 2024 through 2026 goal is pending approval by FAA but is not expected to exceed the FY 2023 goal.** Bidders must comply with the requirements of 49 CFR Part 26, including Appendix A, which discusses making good-faith efforts, to ensure that all DBE's and Small Businesses are afforded the maximum opportunity to work with them on federally funded projects.

The Bidder/Offeror will be required to submit the following information: (1) the names and addresses of DBE firms that will participate in the contract; (2) a description of the work that each DBE firm will perform; (3) the dollar amount of the participation of each DBE firm listed under item (l); (4) written documentation of the Bidder or Offeror that attests their commitment to use a DBE firms listed in item (1) to meet the Owner's Project goal; (5) written confirmation from the DBE that it is participating in the contract as provided in the commitment made under item (4); (6) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26; and (7) a list or DBE's and non-DBE's contacted, or who provided quotes as potential Subcontractors under this bid.

The CM shall comply with 49 USC§ 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

The CM shall comply with Title VI of the Civil Rights Act of 1964, as amended, (Title VI) which prohibits discrimination on the grounds of race, color, or national origin under any program or activity receiving Federal financial assistance.

The CM shall comply with the Davis-Bacon Act, ensuring that workers employed under this contract receive pay no less than the locally prevailing wages and fringe benefits as determined by the Department of Labor.

The CM shall not be presently suspended, excluded, or debarred by any Federal department or agency from participating in federally assisted projects.

The CM shall certify that they will not and have not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or another award covered by 31 USC 1352.

The CM shall to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247.

The CM shall not use products or services from a foreign country included in the current list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR).

Bidders shall also be fully aware of the following Federal Requirements contained within the bid documents:

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION to ENSURE EQUAL EMPLOYMENT OPPORTUNITY

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for minority participation for each trade: 0.8%
Goals for female participation in each trade: 6.9%

These goals are applicable to all of the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.J(a) and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is the State of Vermont, County of Chittenden, City of South Burlington.

TITLE VI SOLICITATION NOTICE

The **City of Burlington, VT,** in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC§§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The City of Burlington and the Burlington Airport Commission reserves the right to reject any and all bids, to waive any technical or legal deficiencies and to accept any bid that it may deem to be in the best interest of the Airport. No bidder may withdraw their bid for a period of 180 days following the bid opening.

TIM GEORGE

CHAIR, BURLINGTON AIRPORT COMMISSION

INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

1. RECEIPT, PREPARATION AND OPENING OF BIDS

Sealed Bids (for the purpose of this notice, the term "bid" can be taken to mean the Construction Manager's qualifications and price proposal) for the **North Terminal Improvement Project** will be received at the Office of the Director of Aviation, Patrick Leahy Burlington International Airport, 1200 Airport Drive, #1, South Burlington, VT 05403 until **2:00 PM**, local time, **Friday, August 11, 2023** and there, at said office, at said time, be confirmed and acknowledge, via teleconference, that all requirements have been met and the Construction Manager's bid will advance to the evaluation stage.

Bids shall be submitted in a sealed envelope, clearly labelled with the bidder's name and address, and the project title.

The project is being bid as a Construction Manager at Risk (CMAR) contract. The project consists of an expansion of the existing North terminal at Patrick Leahy Burlington International Airport, demolition of a portion of the existing terminal, utility construction, utility and generator relocation, new aircraft apron construction, new passenger boarding bridges, and interior renovation of a portion of existing 2nd floor concourse level. The total estimated finished floor area of the expansion is 36,000 square feet. An unfinished lower level of approximately 28,500 square feet is also part of the building. A preliminary design has been completed and is presented in the Bid Documents.

The project also includes the construction of approximately 4,400 linear feet of recreational path, landscaping, and hardscape features on Airport-owned property in the adjacent Chamberlain neighborhood.

The project includes a Base Bid only. Prevailing wage rates apply, including compliance with Federal and State minimum wage rates and the current City of Burlington Livable Wage Ordinance. Bidders must be bonded and insured to the level indicated in the Contract Documents. A Federal DBE participation goal is included in the Contract. The project is sales tax exempt.

Bid Documents, including but not limited to: Bid Forms, draft Contract Documents, Federal and City Contract Provisions, Plans, and Appendices, will be available online only, beginning on **Tuesday, July 18, 2023**, at www.Projectdog.com. Enter the Project Code **856949** in the project locator box and select "Acquire Documents" to download documents. Bidders must have an active online account on www.Projectdog.com to acquire documents and to receive project notifications (Addenda). Projectdog accounts are available to all, free of charge.

A pre-bid conference will be held virtually at **11:00 A.M.** local time on **Wednesday, July 26, 2023**. Contact Stu Moncrieff (Phone: 603-496-9267, e-mail: stu.moncrieff@jacobs.com) to obtain a link to the virtual meeting.

An optional pre-bid site tour of the work area will be held at **11:00 A.M**. on **Friday, July 28, 2023**. Please RSVP for this visit to Stu Moncrieff (Phone: 603-496-9267, e-mail: stu.moncrieff@jacobs.com). Please arrive at the 2nd floor badging office by 10:30 A.M. to obtain a visitor's badge. All bidders will be escorted to the project site as a single group. Persons with disabilities who require assistance or special arrangements to participate in the pre-bid site

tour are encouraged to contact the Airport at (802) 863-2874 at least 72 hours in advance so that proper arrangements can be made.

Technical questions during the bid period shall be directed to Stu Moncrieff at Jacobs (Phone: 603-496-9267, e-mail: stu.moncrieff@jacobs.com).

Each bid must be accompanied by a certified check or bid bond, in the amount of five percent (5%) of the total maximum bid price for the contract in the form and subject to the conditions provided in the Bid Documents.

Selection for this project will be based upon both qualifications and price. Responses are limited to a maximum of forty (40) pages single-sided, twenty (20) pages double sided, or a combination thereof. Cover page(s), cover letter, dividers, table of contents, and any required bid forms are excluded from the page count.

Only proposals from firms that are pre-qualified for this project by the City of Burlington will be accepted. Refer to Section 26 on Page IB-9 for additional information on pre-qualification.

A bid bond or cashiers check made payable to The City of Burlington, Vermont, in any amount not less than 5 percent of the total bid, inclusive of alternate work items, must accompany the sealed bid (see Bid Security, page BP-2).

Insert Unit Price bid in words and figures in the blank spaces provided for in the Schedule of Prices in the BID PROPOSAL.

Submit all Bid Proposals, Contract Documents and Specifications intact without changing any of the text and all entries should be made with an indelible pen or pencil.

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids.

Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered.

It is the intention of the Owner to issue a notice-to-proceed for pre-construction services upon execution of the CMAR contract, and to have construction begin on or about April 15, 2024.

2. TELEGRAPHIC MODIFICATION

Any bidder may modify his bid by telegraphic communication at any time prior to the scheduled closing time for receipt of bids, provided such telegraphic communication is received by the Owner prior to the closing time, and, provided further, the Owner is satisfied that a written confirmation of the telegraphic modification over the signature of the bidder was mailed prior to the closing time. The telegraphic communication should not reveal the bid price but should provide the addition or subtraction or other modification so that the final prices or terms will not be known by the owner until the sealed bid is opened. If written confirmation is not received within two days from the closing time, no consideration will be given to the telegraphic modification.

3. BID SECURITY

Each bid proposal must be accompanied by a certified check of the bidder, treasurer's or cashier's check make payable to the Owner, or a bid bond, duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner, in the amount of 5% of the total bid price, inclusive of the base bid and all alternate work items. Such cash, check or bid bonds will be returned to all except the three lowest bidders within five (5) days after the opening of bids, and the remaining cash, checks, or bid bonds will be returned promptly after the Owner and the accepted bidder have executed the contract, or if no award has been made within ninety (90) calendar days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he has not been notified of the acceptance of his bid.

4. ADDENDA AND INTERPRETATION

Any request from a prospective bidder for the interpretation of the meaning of the Bid Documents should be in writing addressed to the office of the Engineer, Jacobs Engineering Group, Inc., Two Executive Park Drive, Bedford, NH 03110 or by email to stu.moncrieff@jacobs.com and to be given consideration must be received at least five working days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be uploaded to the www.projectdog.com website. An electronic notification will then be sent to all registered plan holders, who may then download the addendum from that website. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents. Bidders must acknowledge receipt of all issued addenda on the Bid proposal forms.

The Engineer may choose to issue addenda not less than 24 hours prior to the time at which bids are due.

5. BONDS

A Performance and a Payment Bond by a company satisfactory to the Owner, in an amount of not less than 100 percent of the contract Price recorded in the Proposal section of the contract as executed, will be required from the successful bidder for the faithful performance of the contract. The Performance and the Payment Bond shall be in accordance with the form attached to the Contract Documents.

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

6. SUBCONTRACTORS

The submission of the name of a subcontractor in the Proposal shall be deemed to constitute an acceptance by the Contractor, if awarded the contract, of the bid of such subcontractor. Any alteration therein, after the award of the contract, shall be subject to the approval of the Owner.

7. OBLIGATIONS OF THE BIDDER

At the time of the opening of bids, each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect to his bid.

All bidders are encouraged to attend the pre-bid conference and the pre-bid site tour to ascertain, personally, the extent and character of the work to be performed. Details on the dates and scheduling requirements for these events are included in the Advertisement for Bids. Persons with disabilities who require assistance or special arrangements to participate in any pre-bid site visits are encouraged to contact the Airport at (802) 863-2874 at least 72 hours in advance so that proper arrangements can be made.

Each bidder must inform himself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his obligation to furnish all material and labor necessary to carry out the provisions of his contract. Insofar as is possible, the Contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor.

The bidder's attention is directed to the fact that all applicable federal and state laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract thoroughly and they will be deemed to be included in the contract the same as though herein written out in full. Particular reference is made to the Federal Wage Rates and the City of Burlington Livable Wage Ordinance requirements.

In the case of each proposal, the Owner reserves the right to satisfy itself as to the complete responsibility of the bidder, toward which object every bidder is required to furnish all information requested in the Proposal.

The failure or omission of any bidder to receive or examine and become familiar with any form, instrument, or document shall in no way relieve the bidder of any obligation in respect to his proposal.

8. INSURANCE

The successful bidder shall be prepared to furnish certificates of workmen's compensation and statutory Public Liability Insurance in the sum of not less than that indicated in the (General) Specifications. The bidder's insurance company must have, or its agent have, an address in the State of Vermont.

9. METHOD OF AWARD

The Owner reserves the right to reject any or all proposals for any reason the Owner deems advisable. Award of contract will be made by the City upon the recommendation of the Qualification Review Committee. Evaluation criteria to determine the highest ranked Construction Manager (CM) shall be made in accordance with Section 1, Article 4 of these Specifications. Recommendation for Contract award will be made for the bidder with highest ranked score. Should bids exceed the available funding, the Owner may reject all bids, adjust the scope of the project, or make adjustments to the bid, in any form, that is mutually acceptable to the owner and highest ranked bidder, as necessary to bring the Contract value within

available funding limits in order to finance the project. Such reduction, deletion or modifications of work and bids shall not constitute a basis for withdrawal of the proposal or for adjustment of the unit or lump sum prices bid.

Notice of the acceptance of this proposal will be given to the successful bidder by the Owner posting a registered letter to the bidder's address stated in said proposal. If within 15 calendar days after this day when such notice was given, the successful bidder shall fail to deliver his bonds properly executed and his contract duly signed, in consideration of such failure, this proposal and acceptance, at the option of the Owner, may become null and void, and the bid guaranty accompanying his proposal shall become the property of the Owner which may proceed to accept another of the proposals.

10. DISQUALIFICATION OF BIDDERS

A bidder shall be considered disqualified for any of the following:

a. Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.

b. Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the Owner until such participating bidder has been reinstated by the Owner as a qualified bidder.

c. Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.

d. Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force (with the Owner) at the time the Owner issues the proposal to a prospective bidder.

e. Contractor default under previous contracts with the Owner.

f. Unsatisfactory work on previous contracts with the Owner.

g. Unbalanced proposals in which the prices for some items are out of proportion to the prices for other items.

h. Failure to submit a unit price for each item of work for which a bid price is required by the proposal.

i. Lack of competency as revealed by the financial statement, experience, or plant and equipment statements submitted.

j. Lack of responsibility as shown by past work judged from the standpoint of workmanship and progress.

k. Uncompleted work which, in judgement of the Owner, might hinder or prevent the prompt completion of additional work if awarded.

l. The city of Burlington Pre-Qualification of Construction Contractor requirements.

11. PUBLIC AGENCY APPROVALS

The work to be performed under this contract is subject to approval by the Federal Aviation Administration, the State of Vermont Agency of Transportation, and the City of Burlington, Vermont. All drawings, specifications, and contracts therefore shall be approved by those agencies.

12. WITHDRAWAL OR REVISION OF PROPOSALS

A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the owner in writing or by telegram before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.

13. TIME OF COMPLETION AND LIQUIDATED DAMAGES

The bidder must agree to commence work on or before a date to be specified in the written Notice-to-Proceed of the Owner and to complete all work within **the schedule provided in the General Provisions, Section 80-08.** The Bidder must also agree to pay to the Owner liquidated damages as stipulated in the General Specifications for each and every calendar day that the work remains incomplete beyond the above the specified times provided in the Contract Articles.

14. POWER OF ATTORNEY

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

15. LAWS AND REGULATIONS

The bidder’s attention is directed to the fact that all applicable Federal and State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full.

16. EXECUTION OF CONTRACT

The individual, firm, partnership, or corporation to whom or to which the Contract has been awarded shall sign the necessary agreements entering into a Contract with the Owner and return them to the Office of the Owner (with the required contract bonds and insurance certificates) within 10 calendar days after the Contract is mailed.

17. APPROVAL OF CONTRACT

The successful Bidder shall return the executed agreements and the appropriate Contract Bonds and Insurance Certificates to the Owner within fifteen (15) calendar days of mailing, as specified above. The Owner shall then execute the agreements within fifteen (15) calendar days of the receipt of the Bidder’s executed copy of the Contract.

The Contract does not become binding until both the successful Bidder and the Owner have signed it.

18. FAILURE TO EXECUTE CONTRACT

Failure of a bidder to comply with any of the requirements of the proposal, failure to execute the Contract within 15 days after mailing, as specified, or failure to furnish contract bonds as required shall be just cause for the annulment of the award. In the event of such annulment of the award, the amount of bid security shall become the property of the Owner, not as a penalty but as fixed and agreed liquidated damages. Award may then be made to the next best qualified bidder, or the work re-advertised, or otherwise handled as the Owner may elect.

19. NOTICE OF SPECIAL CONDITIONS

Attention is particularly called to those parts of the Bid Documents which address the following:

a. Wage Rates (Davis-Bacon, and City of Burlington Livable Wage Ordinance).
b. Compliance with the FAA Buy American requirements.
c. Insurance and bonding requirements.
d. Allowable Contract time for Construction.
e. Liquidated damages for failure to complete the various portions of the work within the specified times.

20. EQUAL EMPLOYMENT OPPORTUNITY

a. Each bidder will be required to comply with the affirmative action plan for equal employment opportunity prescribed by the OFCC, United States Department of Labor, Regulations of the Secretary of Labor (41 CFR 60), or by other designated trades used in the performance of the contract and other non-federally involved contracts in the area geographically defined in the plan.

b. The proposed contract is under and subject to Executive Order 12246 of September 26, 1995, as amended, and to the equal opportunity clause; and

c. The successful bidder will be required to submit a Certification of Nonsegregated Facilities prior to award of the contract, and to notify prospective subcontractors of the requirement for such a certification where the subcontract exceeds $10,000. Samples of the certification and the notice to subcontractors appear in the specifications.

d. When a determination has been made to award a contract or subcontract to a specific contractor, such contractor is required, prior to the award or after the award, or both, to furnish such other information as the FAA, the sponsor, or the Director of OFCC requests.

e. A bidder must indicate whether he has previously had a contract subject to the equal opportunity clause, whether he has filed all report forms required in such contract, and if not, compliance report (Standard Form (SF) 100) must be submitted with his bid.

f. Equal Employment Opportunity (EEO) and labor provisions, when applicable, are included in the bidding documents of specifications and are available for inspection at the Office of the Director of Aviation, Burlington International Airport.

g. Contractors and subcontractors may satisfy EEO requirements of paragraph 2 of the EEO contract clause by stating in all solicitations or advertisements for employees that:

"All qualified applicants will receive consideration for employment without regard to race, color, sex, or national origin."

h. A contractor having 50 or more employees and his subcontractors having 50 or more employees and who may be awarded a subcontract of $50,000 or more will, within 120 days from contract commencement, be required to develop a written affirmative action compliance program for each of its establishments (state and local governments are exempt).

21. DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

The Contractor must comply with the Federal Disadvantaged Business Enterprise (DBE) requirements contained within the Bid Documents and in any resulting Contract. This project utilizes race-conscious DBE procedures. **The Airport's DBE project goal for FY 2023 is 3.76%; the FY 2024 through 2026 goal is pending approval by FAA but is not expected to exceed the FY 2023 goal.** Bidders must comply with the requirements of 49 CFR Part 26, including Appendix A, which discusses making good-faith efforts, to ensure that all DBE's and Small Businesses are afforded the maximum opportunity to work with them on federally funded projects.

The Bidder/Offeror will be required to submit the following information: (1) the names and addresses of DBE firms that will participate in the contract; (2) a description of the work that each DBE firm will perform; (3) the dollar amount of the participation of each DBE firm listed under item (l); (4) written documentation of the Bidder or Offeror that attests their commitment to use a DBE firms listed in item (1) to meet the Owner's Project goal; (5) written confirmation from the DBE that it is participating in the contract as provided in the commitment made under item (4); (6) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26; and (7) a list or DBE's and non-DBE's contacted, or who provided quotes as potential Subcontractors under this bid.

The Contractor shall comply with 49 USC§ 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

The Contractor shall comply with Title VI of the Civil Rights Act of 1964, as amended, (Title VI) which prohibits discrimination on the grounds of race, color, or national origin under any program or activity receiving Federal financial assistance.

22. DAVIS-BACON WAGE REQUIREMENTS

This project is Federally funded and is therefore subject to minimum wage rates as required by the Davis-Bacon Act, as amended. The Contractor, and all subcontractors, must pay their laborers and mechanics employed under the resulting contract no less than the rates specified in the current wage determination for work in Chittenden County, Vermont. The current wage determination shall be conspicuously displayed at the job site throughout the duration of construction.

The current Federal wage determinations applicable to the project can be found at the end of the Instructions to Bidders section. The Contractor shall be responsible to periodically adjust the rates during the project as may be required.

23. SALES TAX EXEMPTION

The City of Burlington is exempt from the State of Vermont sales tax. Also, sales made to contractors, subcontractors or repairmen of materials, supplies or services which are to be incorporated into the completed work as part of this project are exempt from the sales tax. It shall be the contractor's responsibility to comply with all State regulations regarding this exemption.

24. WOMEN IN CONSTRUCTION

Refer to the attached City of Burlington Women and Construction Trade Ordinance (WACTO). A copy of this ordinance can be found at the end of the Instructions to Bidders section.

25. CITY OF BURLINGTON LIVABLE WAGE RATES

The wage rate determination for this contract shall be as defined by the City of Burlington's Livable Wage Ordinance. A copy of this determination and the most recent published wage rates can be found at the end of the Instructions to Bidders section.

26. BIDDER'S QUALIFICATIONS

Bidders are to ensure they have fulfilled the **annual requirement** of pre-qualification with the City of Burlington by submitting the City of Burlington's ***Pre-Qualification of Construction Contractors Application*** form (see Bid Documents) to the Larry Lackey, Director of Planning, Engineering, and Sustainability, Patrick Leahy Burlington International Airport, 1200 Airport Drive, #1, South Burlington, VT 05403, or LLackey@btv.aero. This form must be submitted five (5) days before this bid is due (unless the bidder has already fulfilled this annual requirement). In addition to City of Burlington Prequalification, each bidder shall furnish the completed **Statement of Bidder's Qualifications** form (see Bid Documents) at the time of bid opening.

Any individual, partnership, or corporation which has been disqualified by the State of Vermont from acting as prime contractor or subcontractor on State projects shall be disqualified from acting as the prime Contractor or Subcontractor on this Project.

Said firms may act as material suppliers in accordance with the decisions of the State of Vermont.

ATTACHMENT 1

Current Federal Wage Determinations for Chittenden County, Vermont

"General Decision Number: VT20230025 05/26/2023

Superseded General Decision Number: VT20220025

State: Vermont

Construction Type: Building

County: Chittenden County in Vermont.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least $16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2023
1	02/24/2023

2 04/07/2023
3 05/26/2023

ELEC0300-001 07/04/2021

	Rates	Fringes
ELECTRICIAN	$ 26.10	9.25%+7.70

ELEC0300-002 07/04/2021

	Rates	Fringes
ELECTRICIAN (Low Voltage Wiring)	$ 26.10	9.25%+7.70

IRON0007-024 03/16/2023

	Rates	Fringes
IRONWORKER, STRUCTURAL	$ 30.08	24.72

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* PLUM0693-003 05/01/2023

	Rates	Fringes
PLUMBER	$ 32.50	18.11

SHEE0063-005 07/01/2022

	Rates	Fringes
SHEET METAL WORKER (HVAC Duct Installation Only)	$ 39.02	32.30

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* SUVT2011-010 02/10/2011

	Rates	Fringes
BRICKLAYER	$ 25.89	0.78
CARPENTER (Drywall Hanging Only)	$ 17.15	1.63
CARPENTER, Excludes Drywall Hanging	$ 20.28	10.49
LABORER: Common or General	$ 13.11 **	3.52
LABORER: Mason Tender - Brick	$ 15.78 **	0.48
LABORER: Mason Tender - Cement/Concrete	$ 16.50	0.00
OPERATOR: Bulldozer	$ 19.00	0.00
OPERATOR: Excavator	$ 17.00	0.95
PAINTER: Brush Only	$ 16.82	0.00
PAINTER: Roller	$ 16.82	0.00
ROOFER	$ 18.98	4.40

SPRINKLER FITTER (Fire Sprinklers).....$ 19.43 2.30

TRUCK DRIVER: Dump Truck.....$ 14.00 ** 0.81

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 ($16.20) or 13658 ($12.15). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number,

005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for

the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"

"General Decision Number: VT20230067 04/07/2023

Superseded General Decision Number: VT20220067

State: Vermont

Construction Type: Heavy

County: Chittenden County in Vermont.

HEAVY CONSTRUCTION PROJECTS (including sewer/water construction).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least $16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2023
1	04/07/2023

* LABO0668-002 12/01/2022

	Rates	Fringes
LABORER (COMMON OR GENERAL)	$ 24.51	20.57

* LABO0668-003 12/01/2022

	Rates	Fringes
LABORER (PIPELAYER)	$ 24.51	20.57

* SUVT2017-006 08/06/2019

	Rates	Fringes
ELECTRICIAN, Includes Low Voltage Wiring	$ 28.82	2.85
OPERATOR: Backhoe/Excavator/Trackhoe	$ 28.11	19.52
OPERATOR: Loader	$ 27.60	19.52
TRAFFIC CONTROL: Flagger	$ 12.63 **	0.14
TRUCK DRIVER: Dump Truck	$ 17.64	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 ($16.20) or 13658 ($12.15). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

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U.S. Department of Labor
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Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"

"General Decision Number: VT20230059 01/06/2023

Superseded General Decision Number: VT20220059

State: Vermont

Construction Type: Highway

County: Chittenden County in Vermont.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least $16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number | Publication Date
0 | 01/06/2023

SUVT2017-020 08/06/2019

	Rates	Fringes
CARPENTER, Includes Form Work	$ 21.66	3.58
LABORER: Common or General, Includes Asphalt Raker, Shoveler, Spreader and Distributor	$ 17.57	2.04
OPERATOR: Backhoe/Excavator/Trackhoe	$ 20.76	1.96
OPERATOR: Bobcat/Skid Steer/Skid Loader	$ 20.96	5.99
OPERATOR: Broom/Sweeper	$ 18.57	2.47
OPERATOR: Loader	$ 21.50	2.41
OPERATOR: Milling Machine	$ 28.48	13.11
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)	$ 21.41	3.55
OPERATOR: Pounder	$ 22.30	5.04
TRAFFIC CONTROL: Flagger	$ 12.66 **	0.00
TRUCK DRIVER, Includes all axles including Dump Trucks	$ 18.88	2.33

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 ($16.20) or 13658 ($12.15). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

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Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

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classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

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U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

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Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

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4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"

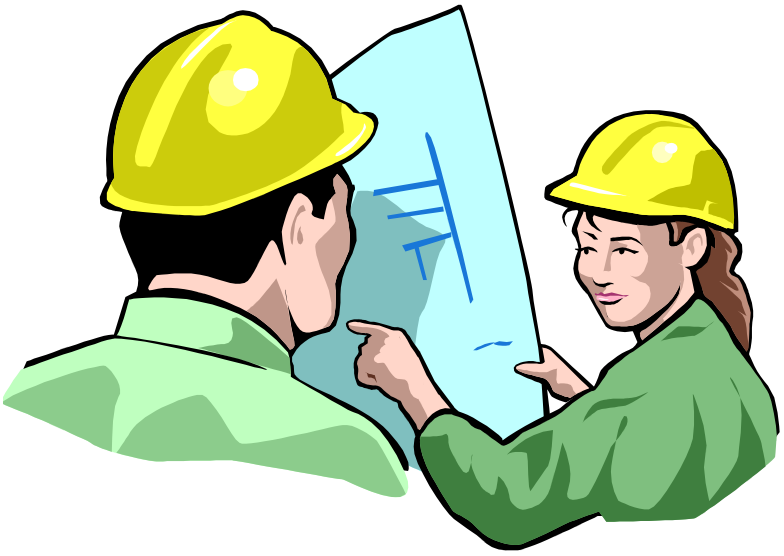
ATTACHMENT 2

City of Burlington Women in Construction Trades Ordinance (WATCO)

CITY OF BURLINGTON

WOMEN AND CONSTRUCTION TRADES ORDINANCE (WACTO)

INFORMATION & REPORTING PACKET



For further information and answers to questions regarding WATCO, please call the Community and Economic Development Office at: 802/865-7144



April 10, 1986
Revised July 27, 2000

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A. Employment Plan
B. Technical Assistance Sheet
C. Sample Monthly Compliance Report

(Copied from Burlington City Charter Supp. No. 41)

ARTICLE II. WOMEN IN CONSTRUCTION TRADES[1]

Sec 21-50. Statement of purpose.

Whereas, women in Burlington, as elsewhere, need improved job opportunities and increased income to support themselves and their families; and

Whereas, the current development situation in Burlington is resulting in the expenditure of millions of dollars by both the private and public sectors for construction projects; and

Whereas, jobs in the construction trades; including entry level position, are among the better paid jobs in the Burlington area; and

Whereas, the differential in the Burlington area between number of female employees and number of males employees is largest in the field of construction trades; and

Whereas, job training for construction trades primarily on-site and involves paid positions; and

Whereas, women in construction trades offer highly visible role models of employment of women in nontraditional fields; and

Whereas, for all of the above reasons, it is the intention of the city council in passing this article to improve job opportunities for women in the construction trades. (Ord. of 3-10-86, § 21-40) 21-40)

Sec. 21-51. Definitions.

As used in this article, the following terms shall be defined as follows:

(1) *Construction contract.* An agreement to provide labor and related materials, supplies or services for any construction within the city which involves any city funds, other governmental funds funneled through the city, private funds funneled through the city, or other publicly supported projects including those financed by tax-exempt industrial revenue bonds.

(2) *Construction contractor.* Any person or persons, firm, partnership, corporation or combination thereof who submits a bid and/or enters into construction contracts let or awarded in the city which involve any amount of public financing, including financing by tax-exempt industrial revenue bonds.

(3) *Subcontractor.* Any person or persons, firm, partnership, corporation or any combination thereof, who enters into a contract or agreement with the construction contractor to perform a substantial specified portion of the contract let or awarded in the city which involves any amount of public financing, including financing by tax-exempt industrial

[1] Editor's note—An ordinance of March 10, 1986, amended Ch.21 by adding new provisions designated §§21-40—21-46. In order to provide better classification and to facilitate the indexing, reference and use of these new provisions, the editor, at his discretion, has redesignated them as a new Art. II, §§ 21-50—21-54. The provisions of said ordinance set out as §§ 21-45 and 21-46, providing a repealer and severability clause, have not been included herein by the editor. Supp. No. 41

revenue bonds.

(4) *Construction trades workers.* Workers performing job categories including, but not limited to:

Brickmasons, stonemasons, tile setters;
Carpenters;
Electricians and power transmission installers;
Painters, paperhangers, plasterers;
Plumbers, pipefitters, and steamfitters;
Carpet installers;
Drywall installers and drywall finishers;
Concrete and terrazzo finishers;
Glaziers;
Insulation workers;
Paving, surfacing and tamping equipment operators;
Roofers;
Sheet-metal duct installers;
Structural metal workers.

(Ord. of 3-10-86. § 21-41)

Sec. 21-52. Establishment of workforce participation rates for women.

(a) The following work force participation rates shall apply to each category of construction trades workers and each construction contract entered into in which the total project cost is fifty thousand dollars ($50,000.00) or more:

(1) Contractors and subcontractors whose total number of employees is one to five (-5) shall be exempt from any specific requirement under this article.

(2) Contractors and subcontractors whose total number of employees is six to fifteen (6-15) shall be required to employ and maintain the employment of at least one woman as a condition of any construction contract which they enter into within the city.

(3) Contractors and subcontractors whose total number of employees is sixteen (16) or more shall be required to employ and maintain the employment of women in at least ten (10) per cent of the positions in each of the construction trades performed by that contractor or subcontractor.

(b) It is the purpose of this article to require work force participation rates for women in the amount of ten (10) per cent of the construction trades workers in each category of construction trade and in all applicable construction contracts within the city. Compliance with this article specifically includes the submission of a plan for compliance by the contractor or subcontractor as part of any bid or contract proposal; compliance with this article at the beginning of the contract; and continued compliance during the term of the contract, including any extensions of the term which may be agreed to by the parties to the contract. (Ord. of 3-10-86, § 21-42)

Sec. 21-53. Enforcement.

(a) Each contractor and subcontractor who submits a bid and/or enters into construction contracts let or awarded for publicly financed projects within the city shall submit as part of the bid or contract proposal a specific plan detailing how the contractor or subcontractor intends to comply with the work force participation rates for women.

(b) The plan submitted shall include a list of specific jobs in the construction trades which will be required for the contract; a list of current employees of the contractor or subcontractor by name, trade and sex; sample advertisements which will be used to recruit construction trades workers for the contract; a list of all places that recruitment will be done including the names of publications where advertisements will be placed; a description of any apprenticeship/training programs provided by the contractor or subcontractor; any available evidence of the contractor's or subcontractor's previous record of hiring women in the construction trades; and the name of the person or persons who will be responsible for the contractor's or subcontractor's compliance with this article.

(c) Compliance with work force participation rates for women shall be a condition precedent of any construction contract awarded within the city for a project that is partially or totally financed with public funds, including tax-exempt industrial revenue bonds.

(d) In order to assure continued compliance with this article during the duration of the contract, all contractors and subcontractors affected by this article shall submit monthly work force charts listing construction trades workers by name, trade, hours worked, hourly rate of pay and sex.

(e) In order to have consistency in enforcement of this article, negotiations for implementation of the work force participation rates for women in applicable contracts and the monitoring of the contracts awarded for applicable projects shall be conducted by the Community and Economic Development Office. Other city departments who award construction contracts shall cooperate with the community and economic development office and the office of the city attorney in the enforcement of this article. (Ord. of 3-10-86, § 21-43)

Sec. 21-54. Penalty.

In addition to the fact that construction contracts shall not be awarded to contractors or subcontractors who do not present a specific plan for compliance with the requirements of this article, penalties for noncompliance after contracts are awarded shall be a fine of fifty dollars ($50.00) for each day of the violation and for each position under the contract which the contractor or subcontractor was to have filled with a female employee and failed to comply. (Ord. of 3-10-86, § 21-44)

FACT SHEET

Background of Ordinance

This ordinance originated in the Economic Justice Committee of the Burlington Women's Coalition after research, done by the Council, and the Community and Economic Development Office (CEDO) showed that a significant percentage of the families living in poverty in Burlington were headed by single parents – mostly women – and that existing job opportunities for women were not providing jobs which would enable these women to avoid the welfare system and support their families. The research also showed that women were seriously underrepresented in jobs in the construction trades and that these jobs offer salary scales which would enable people to support families without governmental assistance. It was also demonstrated that job training in the construction trades is usually on-site and paid positions.

Support for the Ordinance

The ordinance was passed by the City Council on March 10, 1986, and became effective on April 10, 1986. It has been strongly supported by the Burlington's Women's Coalition (formerly Women's Council), the Women's Economic Opportunity Project, the CEDO Office, and other City officials. Public input was strong with support led by women who have experience working in the trades. The only opposition came from a few contractors, and it is fair to say that they weren't opposed to the idea, but were concerned about the availability of women to fill the necessary construction trade jobs.

Who is Affected

All construction contracts in the City involving any public funds that are for projects over $50,000.

Goals of the Ordinance

The overall purpose of the ordinance is to improve job opportunities for women in the construction trades. In addition to an exemption for contractors who have 1 to 5 employees, the 10% goal can be met by contractors with 6 to 15 employees by having one women employed in the trades(s). For contractors who have 16 employees, or more, 10% of their employees in the construction trades must be women. The ultimate goal of the ordinance is to have 10% women employed in each construction trade category.

Special Requirements

Before any bid can be accepted for an applicable project, the contractor shall submit a signed statement of intent to comply and to have his or her subcontractors comply with the provisions of the ordinance. The statement of intent shall be included in all bid packets provided to contractors interested in bidding on a project. The signed statement must be submitted with the bid.

After a contractor is selected for a project, the contractor and any known subcontractors for the project must submit an Employment Plan specifying their compliance or non-compliance with the ordinance. In cases of non-compliance, recruitment efforts, etc. to be made must be specified. The Employment Plan(s) must be submitted to the CEDO Office in a timely manner for approval, and the Employment Plan(s) must be approved before the contract for the project is signed. Continued compliance with the ordinance during the duration of the contract is required, and the CEDO Office will

monitor compliance with the approved Employment Plan.

Technical Assistance

Technical assistance to City departments and contractors will be provided by the CEDO office, the Women's Economic Opportunity Project, and the Burlington Women's Coalition. Model Employment Plans, monitoring forms, etc., will be provided. A Job Bank of qualified tradeswomen will be available to assist contractors in complying with the law.

Who will Enforce

The primary responsibility for monitoring and enforcing compliance with the ordinance is in the CEDO Office. A staff person in that office has been designated the Compliance Officer for this law. Ultimately, prosecutions for violations of the ordinance will be done by the City Attorney's Office.

Penalties for Non-compliance

The ordinance provides for daily fines for non-compliance. These fines are in addition to the fact that the contract for the project cannot be signed until the contractor and subcontractors known at the time of the signing of the contract have submitted Employment Plans specifying how they will comply with the ordinance and these Employment Plans have been approved by the CEDO Office.

ADMINSTRATIVE POLICY

Introduction

This ordinance originated in the Economic Justice Committee of the Burlington Women's Coalition after research, done by the Council, and the CEDO office showed that a significant percentage of the families living in poverty in Burlington were headed by single parents – mostly women – and that existing job opportunities for women were not providing jobs which would enable these women to avoid the welfare system and support their families. The research also showed that women were seriously underrepresented in jobs in the construction trades and that these jobs offer salary scales which would enable people to support families without governmental assistance. It was also demonstrated that job training in the construction trades is usually on-site and paid positions.

Article I – Definitions: For the purposes of this administrative policy, the following terms shall be defined as follows:

A. Awarding Authority

The department of the City of Burlington or other entity awarding the construction contract.

B. Enforcement Office

The CEDO Office shall be responsible for ensuring compliance with the Women in Construction Trades Ordinance. Other City departments who award construction contracts shall cooperate with the CEDO Office and the Office of the City Attorney in the enforcement of the Ordinance.

C. Contract Price

The proposed base contract price submitted by a general contractor at the time stated for the opening of bids.

D. Employment Plan

The plan that describes the contractor's current work force, the level of present compliance or non-compliance with the Ordinance, recruitment plans to bring the contractor into compliance or arrangements for continual compliance during the contract. (See attached format for plan.)

E. The Ordinance

The Women in Construction Trades Ordinance passed by the City Council of Burlington on March 10, 1986 and effective on April 10, 1986.

Article II – Workforce Participation Rates for Women in Construction Trades.

A. Goals of the Ordinance

The overall purpose of the Ordinance is to improve job opportunities for women in the

construction trades. The goal is to have 10% of the people employed in each construction trades category be women. Section 21-52 of the Ordinance specifically requires the following Work Force Participation Rates for Women:

"(1) The following work force participation rates shall apply to each category of construction trades workers and each construction contract entered into in which the total project cost is fifty thousand dollars ($50,000) or more:

(a) Contractors and subcontractors whose total number of employees is one to five (1-5) shall be exempt from any specific requirement under this ordinance.

(b) Contractors and subcontractors whose total number of employees is six to fifteen (6-15) shall be required to employ and maintain the employment of at least one (1) woman as a condition of any construction contract which they enter into within the City.

(c) Contractors and subcontractors whose total number of employees is sixteen (16) or more shall be required to employ and maintain the employment of women in at least ten (10%) percent of the position in each of the construction trades performed by that contractor or subcontractor."

The numbers in the section of the Ordinance on Work Force Participation Rates apply to the number of employees to be used on the applicable project.

B. Applicable Construction Trades:

The Work Force Participation Rates shall apply to construction workers in job categories including, but not limited to:

Brick masons, stone masons, tile setters, Carpenters, electricians & power transmission installers, painters, paper hangers, plasterers, plumbers, pipe fitters & steamfitters, carpet installers, drywall installers and drywall finishers, concrete & terrazzo finishers, glaziers, insulation workers, paving, surfacing & tamping equipment operations, roofers, sheet metal duct installers, structural metal workers.

Other construction trades jobs covered by the Ordinance include:

Power equipment operators
- truck drivers
- back hoe
- bulldozer
- crane
- loader
- grader

Sprinkler installers
Elevator installers
Laborers

Landscape

Compliance with the 10% figure shall be enforced by comparing the number of female construction trades workers with the total number of construction trades workers on the project and by comparing the number of female work hours in the construction trades on the project with the total number of construction trades work hours. The 10% requirement may be met with females in training positions in the construction trades.

Article III: Contractors' Compliance Responsibilities.

A. Subcontractors

The general contractor shall be held responsible for the project's overall compliance and shall ensure that any subcontracts entered into for construction under the prime contract conform to the requirements of the Ordinance.

B. Pre-bid Requirements

All general contractors must submit with their bids to the Awarding Authority a statement specifying their intent and the intent of their subcontractors to comply with the requirements of the Ordinance. The form of the statement of intent shall be as follows:

> The contractor and subcontractors on this project have read and understand the provisions of the City of Burlington's Women in Construction Trades Ordinance as described in the Ordinance and the Administrative Policy statement.
>
> The contractor shall submit prior to the signing of the contract a completed Employment Plan. This Employment Plan shall be approved by the CEDO Office before the signing of the contract.
>
> The contractor and all subcontractors shall prepare and submit Monthly Compliance Reports no later than the first Thursday of each month following the month work is performed. The CEDO Office shall be notified of any work suspension, the day work was suspended, and the day the work commencement is anticipated. This Monthly Compliance Report shall document the name, address, social security number and sex of each worker, job classification, total hours worked each day on the project, total hours worked during this time period, rate of pay and gross earnings.
>
> The contractor and subcontractors shall comply with the Women and Construction Trades Ordinance throughout the contract period.

_____
(Signature of Authorized Official)

_____
(Date)

All general contractors shall receive a copy of the statement of intent to comply with the Ordinance in their bid packet. A contractor's bid on a project shall not be considered for the project unless his or her bid includes the signed statement of intent to comply with the Ordinance.

C. Pre-contract Signing Requirements

The general contractor who is awarded the contract shall, prior to the contract signing with the Awarding Authority, submit a completed Employment Plan for approval by the Enforcement Office. The Employment Plan includes a description of the general contractor's and known subcontractors' current workforce and the workforce for the project. If the current workforce for the project meets the 10% requirement of the Ordinance at the time the contract is signed, then the Employment Plan shall document current compliance and efforts the contractor will make to ensure continuous compliance with the Ordinance during the entire term of the contract. If the contractor's and known subcontractors' workforce does not meet the 10% requirement of the Ordinance at the time the contract is signed, then the Employment Plan shall specifically describe efforts the contractor shall make to comply with the 10% requirement of the Ordinance. The Enforcement Office shall provide technical assistance to contractors to help with completion of the Employment Plan.

D. Designation of Responsibility

The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company is complying with Ordinance requirements and to submit reports as required to the Enforcement Office, and to keep records. This official shall be designated in the Employment Plan.

Article IV: Compliance During Construction Phase

A. Pre-construction Conference

Prior to the commencement of work for the contract, the Awarding Authority in conjunction with the Enforcement Office, shall conduct at least one pre-construction conference to explain the workforce requirements. The general contractor shall ensure that all subcontractors to be used on the project also attend the pre-construction conference.

In the event that subcontractors are not yet identified at the time of the pre-construction conference, the general contractor shall be responsible for providing written notification to the Enforcement Office within 10 working days of award of any subcontract for construction work under the prime contract. The notification shall list the project name, the name, address and telephone number of the subcontractor, and estimated starting and completion dates of the labor to be supplied under the subcontract. The general contractor shall, upon entering into an agreement with the subcontractor, submit a subcontractor Employment Plan to the Enforcement Office prior to the start of work under the subcontract.

B. Recruitment and Documenting Compliance

In the hiring of women, the contractor and its subcontractors may rely on traditional referral methods utilized by the construction industry and shall also take specific affirmative action to ensure compliance with the 10% female workforce participation rates. Contractors will be in compliance only if they and their subcontractors have a minimum of 10% women on the workforce for the project or if they can clearly demonstrate that they have followed all the recruitment procedures to employ women as outlined in their Employment Plans and the Employment Plans of their subcontractors. The contractor shall document these efforts fully and shall take affirmative action steps at least as extensive as the following:

1. Establish and maintain a current list of female recruitment sources and community organizations, including, but not limited to, the Burlington Women's Coalition's Women in Skilled Trades Job Bank. When the Contractor has employment opportunities available, a record of the requests made to these sources and organizations for female applicants shall be maintained and record of responses to the request for referrals shall also be maintained. The Enforcement Office will provide technical assistance to contractors to help develop and update this list of recruitment sources.

2. Maintain a file of relevant documents related to recruitment including, but not limited to: copies of all advertisements for job openings related to the project, including placement of such advertising and dates thereof; copies and/or notations of all referrals requested and all referrals received for employment on the project, including names, addresses and phone numbers of all female applicants; records of all individual applications made for employment on the project and the results of these individual applications; and a record of all persons hired to work on the project together with their starting dates.

3. Establish and maintain a printed list of the skill requirements for each construction trade category they employ. This list should cover specific skills used on the job, experience with specialized tools and any other standards the contractor maintains for performance in the job category.

4. Establish and maintain descriptions of any training or apprenticeship programs offered to employees.

5. Disseminate the contractor's policy on ensuring 10% female work force participation rates by posting it on bulletin boards accessible to all employees at each workplace location related to the project.

6. Ensure and maintain a working environment free of harassment, intimidation and coercion at all sites and in all facilities at which contractor's employees are assigned to work, with specific attention to female employees working at such sites. Ensure that all forepersons, superintendents, and other on-site supervisory personnel are aware of and carry out the contractor's obligation to maintain such

a working environment.

C. Access to Records

The contractor and its subcontractors shall submit the required Employment Plans and Monthly Compliance Reports to the Enforcement Office in a timely manner. In addition, all records of recruitment efforts made by the contractor and subcontractors shall be maintained, including, but not limited to, copies of all advertisements for job openings related to the project, including placement of such advertising and dates thereof, copies and/or notations of all referrals requested and all referrals received, records of all individual applications made for employment and the results of those individual applications. Specific information related to attempts to recruit female employees shall be included in these records. The contractor and subcontractor shall make available all or any portion of these records to the Enforcement Office within seven (7) days of a request for such information by that office. The contractor and subcontractors also shall permit access to their facilities and any books, records, accounts and other sources of information that the Enforcement Office, the Awarding Authority or the City of Burlington determines relates to the employment of personnel. Where information is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so demonstrate to the Enforcement Office and shall say what efforts he or she has made to obtain this information. These requirements for access to records apply only to information pertinent to compliance with this Ordinance.

Article V: Enforcement.

A. Start of Construction.

The construction start date shall be established at the pre-construction conference. In the event that a firm date cannot be established at the conference, both the Awarding Authority and the general contractor shall notify the Enforcement Office, in advance, of the date that work is to start on a project. Further, the general contractor shall advise the Enforcement Office of dates that individual subcontractors are starting work on the project.

B. Monthly Compliance Reports

The contractor and all subcontractors shall prepare and submit to the Enforcement Office Monthly Compliance Reports no later than the first Thursday of each month following the month work is performed. The Enforcement Office shall be notified of any work suspension, the date work was suspended and the date the work commencement is anticipated.

The reports shall document the name and address of each worker, the sex, work classification, hours worked on project and rate of pay. The reports shall also designate which workers are newly hired.

C. On-site Inspections

The Enforcement Office shall have the right of access to the construction site during

work hours in order that on-site inspections may be conducted.

D. Documented Compliance Efforts

The contractor and its subcontractors shall be deemed to be in compliance with the Ordinance only if they have demonstrated to the Enforcement Office that they have a minimum of 10% women on their workforce or if that requirement has not been met, that they have followed all of the recruitment procedures outlined in their Employment Plan(s). Compliance requires maintenance of specific documentation of all outreach and recruitment efforts as well as records of all applications for employment and the results of those applications.

The Enforcement Office and the Office of the City Attorney shall have the responsibility and authority to determine whether a contractor has met its obligations to comply with all the terms of the Ordinance.

E. Penalties

In the event that a contractor refuses or fails to comply with the requirements of this Ordinance, penalties for noncompliance after contracts are awarded shall be a fine of fifty ($50.00) dollars for each day of the violation and for each position under the contract which the contractor or subcontractor was to have filled with a female employee and failed to comply.

ATTACHMENT 3

City of Burlington Livable Wage Ordinance and Rates

Rights & Responsibilities

Under Burlington's Livable Wage Ordinance

$17.44/hr

WHEN
employer ***provides*** employer assisted health insurance

$18.59/hr

WHEN
employer ***does not provide*** employer assisted health insurance

and 12 days of paid time off per year*

*prorated for part-time employees

The law requires employers to display this poster where employees can readily see it.

COVERAGE

Any employer who receives City contracts or grants totaling in excess of $15,000 for any 12-month period is covered. Covered employees are entitled to livable wages, 12 days paid time off per year* for vacation, sick leave, or personal leave, and all rights under the Fair Labor Standards Act (FLSA), as well as other applicable state and federal laws.

Covered contractors are required to include in all subcontracts notice of the Livable Wage Ordinance (LWO), and are liable for LWO violations committed by their covered subcontractors.

ENFORCEMENT

The City is responsible for the administration of the LWO, and has the authority to recover back wages in instances of violations. Employers found in violation of the LWO may be assessed monetary penalties and be barred from future City contracts and grants. The law prohibits retaliation against workers who file a complaint or participate in any proceeding under the LWO.

ADDITIONAL INFORMATION

To obtain additional information about your rights and responsibilities under the LWO, visit the **LWO Webpage (https://www.burlingtonvt.gov/CT/Livable-Wage-Ordinance)** or call **802-865-7000, option 1 (Office of the Clerk/Treasurer)**.

Livable Wage July 1, 2023 - June 30, 2024

Effective July 1, 2023

ATTACHMENT 4

Pre-Qualification of Construction Contractors Application

City of Burlington

Pre-Qualification of Construction Contractors Application

Date Received: _____

Date Checked: _____

Available for Electronic Mailing

Pre-Qualification of Construction Contractors Application

This is an application for pre-qualification of construction contractors for the City of Burlington under Chapter 21 of the Code of Ordinances. The purpose of the application is to solicit information necessary to determine whether a contractor applying for work on a government-funded project is a responsible contractor.

1. Policy

It is the policy of the City of Burlington to let contracts for city construction projects only to contractors and subcontractors that demonstrate that they are responsible contractors.

2. Responsible Contractor

Responsible contractors are those contractors and subcontractors who have demonstrated to the City that they are financially responsible, have experience suggesting that they have the ability to perform government projects responsibly, have demonstrated that they are responsible employers, and have demonstrated that they have fair subcontractor relations, or that they perform all work with their own forces.

3. Minimum Contract Amount

This pre-qualification requirement applies to any construction contract by a department, board or council of the City, or those construction projects financed by tax exempt bonds issued by the Burlington Community Development Corporation, in which the total project cost is $100,000 or more.

4. Contracting Authority

This application is to be delivered to the contracting authority under the schedule determined by that authority as part of the bidding process. The contracting authority is the department, board or council, agency, or entity that is sponsoring the contract on behalf of a government funded project.

5. Proprietary Information

All information submitted by contractors and subcontractors in connection with a pre-qualification application shall be considered proprietary information. The City shall not release the information except as may be required by the Access to Public Records Law, or by court order.

6. Subcontract Work

The pre-qualification requirement does not apply to subcontractors where the total value of the work to be performed is less than $7,500.

Instructions for Filing the Questionnaire, Financial Statement and Other General Information For Contractors

1. Preparation of Statement:

One copy of the questionnaire is required by the City. It must be completely executed and properly sworn to before a Notary Public. Financial Statements which are compiled, reviewed, or fully-audited must be prepared and certified by an Independent Certified Public Accountant (CPA). A Certified Public Accountant is considered on who, in Vermont, is registered by the State of Vermont Board of Public Accountancy as a CPA. For other states, the City will consider a CPA whose registration qualifications in their state equal those established in Vermont. If the Contractor has not been approved to be prequalified as of the date of the bid opening, this questionnaire must be submitted before the date of opening bids, or with the Contractor's Bid, in order to ensure consideration for pre-qualification for a particular bid opening.

2. Notification of Action Taken:

The City will send in writing to the applicant a notification of its decision. Questionnaires will be considered in the order received and acted upon at all times as promptly as circumstances permit. Contractors duly pre-qualified will be appraised in writing of both the amount and type of work on which they will be eligible to bid.

3. Duration of Pre-Qualification:

The duration of any pre-qualification will not exceed one (1) year and will expire annually three (3) months subsequent to the closing date of the contractors fiscal year, as evidenced in their financial statement.

4. Revision of Pre-Qualification Rating:

Requests for revision of pre-qualification rating will be considered at any time provided credentials showing increased assets, equipment or ability to perform work are submitted. These must be submitted prior to a bid opening to receive consideration for that bid opening. Contractors shall also report any substantial increase in liabilities that occurs during the pre-qualification period.

5. Request for Plans, Specifications and Proposal Form:

Contractors having been duly pre-qualified will receive notices from time to time inviting submission of proposals for the contracts to be let on specified dates. A Contractor desiring to receive plans, proposal and specifications for any contract may obtain them upon written request only, utilizing the special form entitled A Standard Form B Request for Proposal and/or Plans. This form is furnished to all pre-qualified contractors by the City and this form must show the status of all work under contract or otherwise executed by the Contractor, both inside and outside the State of Vermont, as of the date of request.

PRE-QUALIFICATION OF
CONSTRUCTION CONTRACTORS
APPLICATION

Submitted by_____

Corporation ☐ Partnership ☐ Individual ☐ Other ☐

Mailing Address _____

_____

Location Address_____

Telephone Number _____ Federal ID Number_____

The signatory of this questionnaire guarantees the truth and accuracy of all statements and of all answers to interrogatories hereinafter made.

Notary:

_____
Authorized Signature

_____
Name and Title of Authorized Agent

_____
Date

Experience Questionnaire

How many years has your organization been in business as a general contractor under your resent business name? _____ Under other names? (List)

_____

_____

How many years experience in construction work has your organization had, (a) As a general Contractor, (b) As a Sub-Contractor: _____

_____

_____

_____

_____

Has your organization, or any officer, partner, director or principal individual thereof ever admitted to or been convicted of any criminal violation, including but not limited to discrimination, anti-trust or labor violations, other than traffic offences; or been convicted of or is currently being sued for any civil antitrust violation or other civil suit involving fraud; or been debarred from performing work on any contract?

If so, give full details, including the name of any individual involved and the court and docket number of any civil or criminal actions:

_____

_____

_____

Date of reinstatement_____

2. Is your organization currently debarred from performing work on any contract? YES / NO

   If yes, by whom? _____

   Date of reinstatement: _____

3. Has your organization ever been denied pre-qualification by the City of Burlington?

   If so, by whom and for what reason? _____

   _____

   _____

4. Have you ever failed to complete any work awarded to you? YES / NO

   If so, where and why? _____

   _____

   _____

5. Has any officer, director or partner of your organization ever been an officer or partner of some other organization that failed to complete a construction contract? YES / NO

   If so, state the name of individual, other organization and reason therefore:

   _____

   _____

   _____

6. Has any officer, director or partner of your organization ever failed to complete a construction contract handled in his own name? YES / NO

_____

_____

If so, state name of individual, name of owner and reason therefore: YES / NO

_____

_____

7. Has the organization been cited in the past three (3) years for violations of OSHA?

If so, please explain: YES / NO

_____

_____

8. Has the organization currently any outstanding legal action against it by a subcontractor on a current or former job? YES / NO

If so, please explain:

_____

_____

9. List all parents, subsidiaries, affiliates or divisions of your firm, and any related parties included in disclosures in your most recent financial statements or the notes thereto:

_____

_____

10. List any of your officers, shareholders or directors that are affiliated with any other contractor and/or supplier:

_____

_____

11. Identify all persons having final bidding authority and/or the Chief Estimator:

_____

_____

12. Give names and complete addresses of three (3) major material suppliers and/or subcontractors with whom your firm has done business in the past 3 years:

_____

_____

_____

13. List the names and addresses of the following:

Bank:

_____

_____

Amount of Letter of Credit:

_____

_____

Bonding Co. and limit (Please specify per project and aggregate limits):

_____

_____

Bonding Agent:

_____

_____

Liability Insurance:

Name of Carrier:

_____

_____

Limits of Liability:

_____

_____

Worker's Compensation:

Name of Carrier:

_____

_____

14. Does the organization have a company safety program, such as, a currently approved VOSHA plan in place? YES / NO

If so, briefly describe:

_____

_____

15. List the average wages and benefits paid by the organization over the past year for the skills, trades and job classifications intended to be employed for the contract (s) under consideration in this pre-qualification:

Job Title	Hourly wages	Health Insurance
CARPENTER		
ELECTRICIAN		
PAINTERS		
PIPEFITTERS		
PLUMBERS		
ROOFERS		
POWER EQUIPMENT OPERATORS		
TRUCK DRIVERS		
LABORERS		
OTHERS		

16. List specific projects which your organization has completed in the last five years (Attach additional sheet if required):

Contract Amount	Type of Work	% of Subcontract	When Completed	Location	Name, Address and Telephone of Owner

17. List all field supervisory personnel and indicate their construction experience:

Name	Present Position or Office	No. of Years With this Firm	Construction Experience	Magnitude and Type of Work	In what Capacity

18. Is your firm pre-qualified by the State of Vermont? YES / NO

If so, please state rating and type of work qualified to perform:

RATING TYPE OF WORK

_____

_____

_____

_____

_____

_____

_____

Experience and Work Preference

In the following tabulation indicate the various types of work in which you are experienced and for which you desire to be qualified:

Bridge Construction	_____	Bridge Rehabilitation	_____
Railroad Signals	_____	Roads Culverts	_____
Building Construction	_____	Building Demolition	_____
Surface Rehabilitation	_____	Maintenance	_____
Tank Removal/Replacement	_____	Foundation	_____
Guard Rail, Fencing & Signs	_____	Hazardous Material Removal	_____
Construction &	_____	Landscaping	_____
Rehabilitation	_____	Pavement Markings	
Traffic Signals & Lighting	_____	Water & Sewer	_____
Road Construction	_____	Other (as specified)	_____

19. Financial Capability.

The City reserves the right to request additional information if necessary to establish financial capability.

SECTION 1

SUBMISSION REQUIREMENTS AND EVALUATION CRITERIA

ARTICLE 1 INTRODUCTION

1.1 OVERVIEW AND PURPOSE:

The City of Burlington, VT, acting through the Patrick Leahy Burlington International Airport (Owner) seeks to retain the services of a qualified Construction Manager (CM) firm (the Proposer, or Bidder) to provide pre-construction services during the final design process for the North Terminal Improvements Project. The project consists of an expansion of the existing North terminal at the Airport, demolition of a portion of the existing terminal, utility construction, utility and generator relocation, new aircraft apron construction, new passenger boarding bridges, and interior renovation of a portion of existing 2nd floor concourse level. The total estimated finished floor area of the expansion is 36,000 square feet. An unfinished lower level of approximately 28,500 square feet is also part of the building. A preliminary design has been completed and is presented in the Bid Documents. Once constructed, the facility will provide a significantly enhanced customer experience with additional holdroom and circulation space, enhanced concession and convenience features, larger restrooms, and improved circulation between the North and South concourses.

The project also includes the construction of approximately 4,400 linear feet of recreational path, landscaping, and hardscape features on Airport-owned property in the adjacent Chamberlain neighborhood. This path is intended to satisfy the landscaping mitigation requirements for the development of the new Terminal.

It is the intent of the Owner to negotiate a Guaranteed Maximum Price (GMP) and construction Terms and Conditions with the selected CM once the design progresses to an 80% design level. Should a GMP not be successfully negotiated, the Owner retains the right to complete the design and advertise the project for a low-bid award.

1.2 REQUEST FOR QUALIFICATIONS:

This procurement action seeks to identify and engage a qualified Construction Manager (CM) to assist the Owner and the Owner's Representative with pre-construction services for the project. As such, only Proposers with requisite CM experience of at least **ten years (10)** on similar projects and demonstrated financial wherewithal will be considered in the review process. The Owner's Qualification Review Committee will review the proposals in accordance with the conditions as set forth in Article 4 – Selection Process and Evaluation Criteria.

This procurement packet includes the instructions, requirements, qualifications, specifications, attachments, and appendices as enumerated in the Table of Contents.

1.3 EVALUATION CRITERIA:

The Owner intends to select a Construction Manager (CM) that offers a Proposal that is in the best interest of the Owner as determined by the Qualification Review Committee. Evaluation criteria is detailed in Article 4 of this section.

ARTICLE 2 PROJECT SCOPE

2.1 DESIGN DOCUMENTS:

The Owner has engaged Jacobs Engineering Group (Jacobs) to prepare a preliminary (30%) design to illustrate the overall intent of the North Terminal Improvements Project. This design was completed in May 2023, and design is currently advancing. A copy of the 30% design

plans is included as an Appendix to this procurement packet.
Jacobs has been retained to continue with design activities through the Issued for Construction (IFC) documents and will assist with the preparation of construction documents and throughout the construction period.

2.2 SCOPE OF SERVICES FOR THE OWNER'S REPRESENTATIVE:

The Patrick Leahy Burlington International Airport (Owner) has engaged the services of Jacobs Engineering Group Inc. (Jacobs) to act as the Owner's Representative during the CM procurement and through the pre-construction services. The Owner's Representative will be responsible for oversight of the CM throughout the pre-construction process while IFC documents are being prepared. The Owner's Representative will also manage the design team and coordinate cost estimating reviews with the CM. Appropriate adjustments to the design will be made to align the project cost with the available funding.

The selected CM will be expected to work collaboratively with the Owners' Representative to efficiently complete the work under this Project.

2.3 SCOPE OF SERVICES FOR THE CONSTRUCTION MANAGER (CM):

This project has been pre-approved by the Federal Aviation Administration (FAA) to utilize the Construction Manager at Risk (CMAR) procurement method. CMAR will allow the selected CM to be involved with cost estimating, design review, constructability review, and scheduling at an earlier stage than traditional project delivery. This will allow for the project to maximize the available funding and deliver a high-quality facility to serve the public for decades to come.

The scope of service to be provided by the CM is described in the following sections:

2.3.1 Pre-Construction Services:

The CM will perform a number of review, advisory, and administrative tasks during the preparation of IFC documents. Based on the Owner's desire to begin site preparation activities in early 2024, it is expected that these services will be required for a duration of 33 weeks. The pre-construction services of the CM shall include at a minimum:

- Cost Estimating:
    - Prepare preliminary cost estimate of completed 30% design documents.
    - Prepare updated cost estimate at 60% design level.
    - Maintain real-time estimate documents as design progresses toward 80% level.
    - Share subcontractor pricing information with Owner's Representative throughout pre-construction phase.
- Value Engineering:
    - Ongoing input will be required to ensure the project can be delivered within the budget established by the Owner.
- Constructability Review:
    - Identify specific challenges associated with current design elements.
    - Provide alternate option(s) to streamline construction activities.

- Assist with identifying opportunities for early release packages to expedite construction activities.

- Construction Phasing Review:

  - Review and provide comments on the Draft construction phasing plans prepared for CM procurement package.
  - Provide recommendations to expedite construction, reduce work area size, and/or minimize impact to Airport operations.
  - Identify work areas that may effectively be completed concurrently with others.
  - Provide input on preferred haul routes, laydown areas, and other elements which may efficiently advance the project, while minimizing disruption to the travelling public and Airport Operations.

- Scheduling:

  - Provide initial opinion of construction duration based on 30% design plans.
    - Identify long lead time items and recommend alternates that may expedite delivery.

- Management/Administrative:

  - Participate in weekly meetings with the Owner's Representative and design team.
  - Participate in weekly meetings with the Owner and Owner's Representative.
  - Coordinate as needed with the Owner's Representative. This may include telephone, email, or in-person communications. Due to the expected duration of pre-construction services, it is expected that daily communications will be required.

2.3.2 Construction Services:

Negotiations for a Guaranteed Maximum Price will also include the negotiation of General Conditions, contingency, and Contractor markup. Therefore, the scope of specific construction services to be provided cannot be defined at this time.

2.4 DBE/MBE/WATCO GOALS AND REQUIRMENTS:

The project shall be subject to a Disadvantage Business Enterprise (DBE), Minority Business Enterprise and Women in Construction Trades Ordinance (WATCO) participation goal as established by the Owner and as noted in the Instructions to Bidders section of this procurement packet.

2.5 ESTIMATED DESIGN AND CONSTRUCTION COSTS:

The cost of pre-construction services and the resulting construction is estimated at approximately forty-five million dollars ($45,000,000.00).

2.6 SCHEDULE OF EVENTS

The following is a general timeline for the procurement period:

Procurement Packet Available	July 18, 2023
Pre-bid Conference	July 26, 2023
Pre-bid Site Tour	July 28, 2023

Addendum(s) issued	As Required
Deadline for Questions	August 4, 2023
Proposals Due	August 11, 2023
Price Proposal Opening Date	August 18, 2023
CM Interviews	August 25, 2023
Selection Committee Recommendation to Commission	August 31, 2023

All dates above are subject to adjustment by Addendum or at the Owner's discretion following receipt of proposals.

All submittals, deliverables, and work products resulting from the development and submission of the bid, and any resulting contract, will become the property of the Patrick Leahy Burlington International Airport.

ARTICLE 3 SUBMISSION REQUIREMENTS

3.1 SUBMISSION DEADLINE:

Proposals must be received at the above address no later than **2:00 P.M. on Friday, August 11, 2023**, local time. Any proposal received after that time shall not be considered.

3.2 DELIVERY OF PROPOSAL:

Five (5) hard copies and one (1) PDF copy of the Proposer's Qualifications Package shall be submitted. A separate sealed envelope shall contain one (1) hard copy of the Price Proposal forms. The complete submittal package shall be submitted in a single, sealed envelope, clearly labelled with the Proposer's name and address, and the project title. Delivery shall be made to:

Mr. Larry Lackey
Director of Planning, Engineering & Sustainability
Patrick Leahy Burlington International Airport
1200 Airport Drive, #1
South Burlington, VT 05403

The PDF copy of the Qualifications Package shall be submitted on a non-returnable flash drive. No pricing information shall be included electronically on the flash drive.

3.3 FORMAT OF QUALIFICATIONS PACKAGE:

3.3.1 Page Limit:

The Qualifications Package is limited to a maximum of forty (40) pages single-sided, twenty (20) pages double sided, or a combination thereof. Cover page(s), cover letter, dividers, table of contents, and any required bid forms are excluded from the page count.

3.3.2 Required Sections:

To facilitate a fair comparison between the Qualifications Packages received, the following sections are required and shall be presented in order:

- **Cover Letter.** Briefly introduce your firm and explain your interest in the North Terminal Improvements Project.

Note: The Cover Letter will not be scored and does not count toward the Page Limit.

- **Pre-Construction Services.** Discuss the scope of pre-construction services presented in Section 2.3.1, above, and how your firm intends to best deliver those services. Additionally, describe your firm's approach to the following elements:

    - Engaging in a collaborative project environment and working with the Owner's Representative and project design team.
    - Process for conducting design and constructability reviews.
    - Identifying current market conditions and material availability challenges.
    - Assessment of local market conditions.

    Note: The pre-construction services outlined in Section 2.3.1 and detailed by the bidder in this section of the qualifications package shall constitute the scope of work to be priced as Item No. 1 on the project bid forms.

- **Relevant Project Experience.** Identify a minimum of three (3) previous projects (within the past 10 years) similar in nature to the North Terminal Improvements Project and discuss the similarities that are relevant to this project. Describe work of similar construction type and lessons learned that may benefit the success of this project. Discuss previous experience in working on projects within occupied buildings, where customer or employee movements must be coordinated or contained. Provide any additional information that may demonstrate your firm's experience with similar elements of this project. Project Sheets may be included in this section.

- **Construction Management Team.** Provide a project organizational chart which demonstrates the relationships within your firm and how they may interact with the Owner and Owner's Representative. Provide resumes for key individuals and indicate how their experience may align with the Relevant Project Experience provided. Discuss the current and upcoming workload of key individuals, and their availability to engage consistently on this project.

- **Pre-Construction Management Strategy.** Briefly discuss your firm's approach to pre-construction services and how they may contribute to the overall success of the project. Identify any unique experience that may be brought forth early in the project, to best position the project for success during construction.

- **Past or Ongoing Litigation.** Provide a complete list of all litigation, arbitration, or mediation your firm has been involved in within the past five (5) years. A narrative may be provided for some or all cases, as appropriate.

- **Additional Qualifications.** Provide the following documentation, if available:

    - Description of your firm, its legal and ownership structure, and the names and titles of senior management individuals.
    - Evidence of Corporate registration within the State of Vermont.
    - Evidence of Liability Insurance.
    - Evidence of suitable Bonding capacity.
    - The bidder may use this section to provide additional information not requested in other sections.

There is no page limit for each individual section required above. The overall page limit specified in Section 3.3.1 is the only page limit applied to the Qualifications Package.

3.3.3 Signature Page:

The Bidder is required to sign the Qualifications Package. A signature on the Cover Letter shall satisfy this requirement.

3.4 FORMAT OF THE PRICE PROPOSAL:

The Price Proposal shall be prepared to provide a price for the pre-construction services as outlined in Section 2.3.1 above, and shall include the scope of work for additional detail as may be provided in the Pre-Construction Services section of the Qualifications Package. The price includes a Base Bid only.

The CM's Price Proposal shall include the following:

- Completed Price Proposal Forms as contained within Section 2 of this procurement packet.
- All forms must be signed and/or notarized where indicated.
- Additional sheets may be amended to the Forms as needed, if additional space is needed to provide the requested information.

Note: The Price Proposal Forms shall be submitted in a separate sealed envelope, as described in Section 3.2 above.

ARTICLE 4 SELECTION PROCESS AND EVALUATION CRITERIA

4.1 EVALUATION OVERVIEW:

The Owner's Qualification Review Committee, will follow the followings steps in selecting a CM for the project:

- The Qualifications Package will be reviewed initially by the Owner's Qualification Review Committee to determine responsiveness to the requirements procurement packet.

- Each Qualifications Package will be reviewed and scored by the Owner's Qualification Review Committee, scored on the criteria included in Section 4.5 (Max 50 pts)

- Each Price Proposal will be publicly opened and receive a Price Proposal score based on the criteria included in Section 4.5 (Max 30 pts)

- Combined scores will be determined for each responsive proposal by adding the Qualifications Package score and Price Proposal score. At this time, the Owner has the right to award the Contract to highest score or move to a fortifying presentation.

- If the Owner requires a fortifying presentation the two (2) Proposers with the highest combined scores will be asked to make a fortifying presentation.

- Fortifying Presentations will be scored by the Owner's Qualification Review Committee. (Max 20 pts)

- Final scores for the finalist will be calculated by adding the scores for the Qualifications Package, Price Proposal and Fortifying Presentation (if conducted).

- The Authority's Qualification Review Committee will recommend approving and entering into final contract negotiations with the Proposer with the highest overall score.

4.2 INITIAL EVALUATION:

The Owner's Qualification Review Committee shall first determine whether the Proposals are responsive to the requirements of the RFP. The Chairman to the Owner's Qualification Review Committee shall evaluate the appropriate components of the Proposals against the criteria contained in the RFP and submit the findings to the full Owner's Qualification Review Committee. Committee members will not evaluate the Qualifications Package or Price Proposal components of any Proposals that are deemed non-responsive.

Non-responsive Proposals will be returned to the Proposer along with their unopened Price Proposal.

4.3 PROPOSAL CLARIFICATIONS:

The Owner's Qualification Review Committee shall determine if clarification shall be required. The Owner's Qualification Review Committee shall notify in writing each Proposer for which clarification of their Proposal are required. Committee members may request each Proposer to address any and all incomplete issues and/or information and may request the submission of additional information for the purpose of clarifying and improving the Committee's understanding of the Proposal.

4.4 QUALITATIVE RATINGS:

Each major category and subcategory may be qualitatively evaluated by each reviewer and assigned a rating as follows:

- **EXCEPTIONAL (90-100):** The Proposer has demonstrated an approach that is considered to significantly exceed stated requirements/objectives and provides as consistently out standing level of quality. There is very little or no risk that this Proposer would fail to meet the requirements of the aspect of the work. There is essentially no weakness in this item of the Proposal.

- **GOOD (80-89):** The Proposer has demonstrated an approach which is considered to exceed stated requirements/objectives and offers a generally better than acceptable quality. There is risk that this Proposer would fail to meet the requirements of this aspect of the work. Weaknesses, if any, are minor in nature.

- **ACCEPTABLE (70-79):** The Proposer has demonstrated an approach that is considered to meet the stated requirements/objectives and has acceptable level of quality. The Proposal, for the aspect of the work, demonstrates a reasonable probability of success. Weaknesses are minor and can be readily mitigated.

- **POOR (60-69):** The Proposer has demonstrated an approach that fails to meet stated requirements/objectives as there are weaknesses and/or deficiencies, but they are susceptible to correction through oral presentations. The response is considered marginal in terms of the basic content and/or the amount of information provided for evaluation, and the Proposer should be capable of providing an acceptable or better

Proposal for this item.

- **UNACCEPTABLE (0-59):** The proposer has demonstrated an approach that contains significant weaknesses/deficiencies and /or unacceptable quality. The Proposal fails to meet the stated requirements/objectives and /or lacks essential information and is conflicting and/or unproductive. There is no reasonable likelihood of success; weaknesses/deficiencies as so major and/or extensive that major revision would be necessary.

The Committee will use the guide as a means of converting the applicable weighting factors to the qualitative ratings established in the review of the Proposals. The guide will enable the Committee to apply the appropriate weight to each selection factor as set forth in the project specific Proposal evaluation process.

4.5 SELECTION CRITERIA:

The Owner's Qualification Review Committee will evaluate each Proposers Qualifications Package. The Committee will use the following procedures for evaluation.

Every Qualification Review Committee member is responsible for reviewing each Qualifications Package in all areas. The Owner's Qualification Review Committee will decide as a group if additional resources as needed to assist them in those areas where the Committee does not possess an appropriate level of expertise. Committee members may consult with each other on specific areas of the Proposals.

The Committee members will then meet to establish a final Qualifications Package score for each Proposal. This is intended to be a structured meeting to discuss concerns and to determine how well each proposal met the criteria. The purpose of this meeting is to give each reviewer a better understanding of the technical merits of each Proposal prior to establishing each score.

Selection Criteria shall be scored as shown in Table 1:

Table 1 – Evaluation Criteria and Point Assignments

Qualifications (Maximum 50 points). Assigned as follows:	
Pre-Construction Services	15 (Max.)
Relevant Project Experience	10 (Max.)
Construction Management Team	10 (Max.)
Construction Management Strategy	5 (Max.)
Past and Ongoing Litigation	5 (Max.)
Additional Qualifications	5 (Max.)
Qualifications Maximum: 50 Points	
Price (Maximum 30 points):	
Lowest Responsible Bidder	30
Second Lowest Responsible Bidder	24
Third Lowest Responsible Bidder	18
Fourth Lowest Responsible Bidder	12
All Others	6
Price Maximum: 30 Points	
Fortifying Presentation (Maximum 20 points):	
Scoring awarded based on the Qualitative Rankings described in Article 4, Section 4.4.	
Presentation Maximum: 20 Points	

Maximum Possible Points: 100 Points

Qualifications Package Evaluation Criteria: (Maximum 50 pts)

Qualifications Packages shall be reviewed in accordance with the submittal requirements as listed within Section 3.3.2. Points or partial points shall be awarded in accordance with Table 1, above.

Each Qualification Review Committee shall read each proposal prior to assigning any scores. Scores will then be assigned for each required section, using the qualitative ratings in Section 4.4 as a guide. Each Committee member will judge the Proposer's responses individually, without any outside influence of coercion.

After all Committee members have completed their scoring, the full Qualification Review Committee shall meet to aggregate the scores and establish the final Qualifications Package score for each Proposer.

Price Proposal Evaluation Criteria: (Maximum 30 pts)

After the Qualifications Package scores have been tabulated, the Owner's Qualification Review Committee shall notify all the Proposers of the time and place for opening of the sealed Price Proposals, see Section 2.6, Schedule of Events, for the Price Proposal Opening Date. The Owner's Qualification Review Committee shall review the individual Price Proposal for errors and omissions. The Committee and technical advisors will review all qualified Price Proposals and will use the following criteria for establishing a Price Proposal Score:

- Lowest Responsive Price will receive the maximum points: **30 points**
- All Price Proposals above the Lowest Responsive Bidder will receive incrementally reduced points with the second lowest receiving **24 Points**, the third lowest receiving **18 Points**, the fourth lowest receiving **12** Points, and all others receiving **6 Points**.

4.6 CM INTERIM RANKING:

Once the Price Proposal Score has been established for each proposer, the Authority's Qualification Review Committee shall add each Qualifications Package score (maximum 50 pts) to the Price Proposal score (maximum 30 pts) for a combined interim score.

If the Owner is satisfied in the final score at this point the Authority reserves the right to award the project based solely on the combination of Qualifications and Price scores. However, if the Owner's Qualification Review Committee decides that fortifying presentation are required, the top two (2) highest ranking firms will be notified.

The Authority reserves the right to ask additional Proposers for fortifying presentation at its sole discretion.

4.7 FORTIFIYING PRESENTATIONS: (Maximum 20 PTS)

The Owner's Qualification Review Committee may request the Proposer to present fortifying presentation of their Proposals. The presentation shall afford the Proposers the opportunity to highlight the significant aspects for their Qualifications Package and Price Proposals, their understanding of the Project, and offer a chance for the Committee

member to ask clarifying questions. The Owner's Qualification Review Committee shall decide in advance as to what Proposal information may require clarification and which of the Proposer's key personnel that should be attendance for the presentation. The oral presentation shall not be used to fill in missing or incomplete information that was required in the written Qualifications Package.

Following the fortifying presentations, the Authority's Qualification Review Committee shall rank each of the fortifying presentations using the qualitive rankings as shown in Section 4.4 with an overall maximum score of 20 pts. The Fortifying Presentation scores will be added to the Qualifications Package score and Price Proposal score to provide an overall score.

4.8 CONTRACT AWARD:

Unless all Proposals are rejected, the Authority's Qualification Review Committee shall recommend approving and entering into final contract negotiations with the Proposer with the highest overall score, subject to approval by the Owner and the City of Burlington.

4.9 RIGHTS OF THE PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT:

The Patrick Leahy Burlington International Airport reserves the right to:

- Consider any source of information in evaluating Proposals.
- Omit any planned evaluation step if, in the Authority's view, the step is not needed.
- At its sole discretion, reject any and all Proposals at any time.
- At its sole discretion, award the Proposal at any time after the Qualifications Package and Price Proposal review stage.
- Waive minor Proposal irregularities.

ARTICLE 5 COMMUNICATION GUIDELINES DURING THE RFP PROCESS

5.1 PRE-SUBMITTAL CONFERENCE:

The Patrick Leahy Burlington International Airport will hold a Pre-Bid Conference Call on **July 26, 2023**. Refer to the Advertisement for Bids for additional information.

5.2 QUESTIONS:

The Proposer have an opportunity to submit in written questions to the Owner via email until **NOON on August 4, 2023.** All questions should be submitted to *Stu Moncrieff, Project Manager, at stu.moncrieff@jacobs.com*. The Owner will acknowledge all questions and make every effort to answer each question. The Proposer that has submitted a question should contact *Stu Moncrieff at (603) 496-9267* if an email confirmation has not been received with 24 hours of submitting the question. All questions and answers will be shared with all the Proposers via Addendum.

END OF SUBMISSION REQUIREMENTS AND EVALUATION CRITERIA

SECTION 2

PRICE PROPOSAL FORMS

PROPOSAL FORM FOR GENERAL BID

To the Patrick Leahy Burlington International Airport:

The undersigned hereby declares to have carefully examined the Bid Documents therein referred to and also the site upon which the projected work is to be performed.

A. The undersigned proposes to furnish Construction Manager (CM) services for the pre-construction phase of the **NORTH TERMINAL IMPROVEMENT PROJECT** at the Patrick Leahy Burlington International Airport for the Owner in accordance with the provisions of the **Bid Documents** prepared by **JACOBS, 2 Executive Park Drive, Bedford, NH** and the **Qualifications Package** submitted by the undersigned and annexed hereto by reference.

The undersigned also agrees to negotiate in good faith to establish a Guaranteed Maximum Price and agreeable terms and conditions for the construction phase of the project.

The undersigned also hereby declares to be the only person interested in this Price Proposal; that it is made without any connection with any other person making any bid for the same work; that no person acting for, or employed by the City of Burlington or the Patrick Leahy Burlington International Airport is directly or indirectly interested in this Price Proposal, or in any Contract which may be made under it, or in expected profits to arise therefrom; and it is made without directly or indirectly influencing or attempting to influence any other person or corporation to bid or to refrain from bidding or to influence the amount of the bid of any other person or corporation; and that this Price Proposal is made in good faith, without collusion or connection with any other person bidding for the same work; and that this Price Proposal is made with distinct reference and relation to the Bid Documents prepared for this case, and herein mentioned. The undersigned declares that in regard to the conditions affecting the work to be done and the labor and materials needed, this Price Proposal is based solely on their own investigation and research and not in reliance upon any drawings, surveys, measurements, dimensions, calculations, estimates, borings, or representations of any employee, officer, or agent of the Owner.

B. This bid acknowledges receipt of Addenda numbered and dated as follows:

No. _____ Date: _____

No. _____ Date: _____

No. _____ Date: _____

No. _____ Date: _____

No. _____ Date: _____

No. _____ Date: _____

C. The proposed Contract Price is:

TOTAL PROPOSED CONTRACT BASE BID PRICE:

_____Dollars
(amount in words)

($).____
(amount in figures)

D. The proposed Contract Price is further subdivided as follows:

UNIT PRICE BID FORM

BASE BID						
Item No.	**QTY/Unit**	**Item of Work With Unit Prices Written in Words**	**Figures**			
			Unit Price		**Amount**	
			Dollars	**Cents**	**Dollars**	**Cents**
1	33 Weeks	Pre-Construction Services at_____ Dollars and Cents/per Week				

TOTAL PROPOSED CONTRACT BASE BID PRICE:

($).____
(To be entered in Paragraph C)

E. The undersigned agrees that, if he/she is selected as Contractor, he/she will within 5 days, Saturdays, Sundays, and legal holidays excluded, after presentation thereof by the Owner, execute the Contract in accordance with the terms of this bid and furnish a performance bond and also a labor and materials or payment bond, each for the full amount of the Contract Price, with a Surety company qualified to do business under the laws of the State of Vermont and satisfactory to the Owner, the premiums for which are to be paid by the Contractor Entity and are included in the Contract Price.

F. The Bidder hereby certifies that in the event he/she is awarded the Contract he/she shall comply with the minority manpower ratio and all specific action steps contained in the Patrick Leahy Burlington International Airport Equal Employment Opportunity Anti-Discrimination and Affirmative Action Programs as required by the Specifications, including compliance with the minority contractor provisions specified therein. The Bidder Entity receiving the award of the Contract shall be required to obtain from each of the subcontractors, and submit same to the Owner prior to the performance of any work under said Contract, a certificate by said subcontractor, regardless of tier, that it will comply with the minority manpower ratio and specific affirmative action steps contained in said programs.

G. The Bidder hereby certifies that he/she is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work; that all employees to be employed at the

worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least ten (10) hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; that he/she will comply with Federal Department of Homeland Security Requirements in hiring any and all employees to be employed on the work who are required to be listed in the certified payroll reports required to be submitted under the Contract, which compliance shall include, but not be limited to, the faithful completion of the Federal Department of Homeland Security Form I-9 process by the undersigned for each of its employees.

H. The undersigned further certifies under penalties of perjury that this bid is in all respects bona fide, fair, and made without collusion or fraud with any other person. As used in this subsection, the word "person" shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity.

I. The undersigned further certifies under penalties of perjury that the said undersigned is not presently debarred from doing public construction work in the State of Vermont under the provisions of the General laws or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

STATEMENT OF BIDDER'S QUALIFICATIONS

The undersigned submits answers to the following questions to enable the Owner to judge the bidder's experience, ability and facilities for completing the proposed work:

1. The work, if awarded to you, will have the resident personal supervision of whom? State his or their special qualifications.

_____

_____

_____

_____

2. Describe equipment you propose to use. State whether you own or rent it.

_____

_____

_____

_____

_____

_____

_____

_____

3. How many years has your organization been in business as a general contractor under the name in which you propose to execute this contract?

_____

_____

_____

4. What projects has your present organization completed of character similar to that proposed on this project? Give the information indicated by the following tabulation:

Name and Address of Owner for Whom Work Was Done	Work Done as Contractor or Subcontractor	Description of Work	Approx. Amount of Contract	Approx. Date Work Was Done

5. Has your present organization ever been involved in litigation on any work awarded to it? If so, state when, where and why.

_____

_____

_____

_____

_____

6. Give below the name of one or more banks which have information that would enable them to advise regarding the financial ability of your company.

Name of Bank	Address

7. The name and residences of all persons and parties interested in this proposal as principals are as follows:

NOTE: In case of a corporation, give names of officers and directors;
In case of partnership, give names of all partners.

_____

_____

_____

_____

_____

8. The undersigned also agrees that all work to be performed by the subcontractors and the sums to be paid the subcontractors for the same, by the Contractor, are as follows (attach additional sheets if necessary):

Description of Subcontract Work	Name and Address of Subcontractor	Unit Prices	Amounts

_____

_____

_____

_____

_____

_____

_____

_____

9. Have you on any of your projects failed to complete the work within the original contract completion time (during the past five-year period)? If so, indicate why for each project. The Owner's engineer reserves the right to recommend the disqualification of the bidder based upon the investigation of the information furnished.

Description of Contract Work	Name and Address of Sponsor	Extra Time Used to Complete Contract and Reasons for Same

Date: _____

_____
(Name of Bidder)

By: _____

_____
(Printed Name as Signed Above)

_____
(Title)

_____
(Business Address)

_____
City and State)

_____
(Telephone Number)

_____
(Fax Number)

_____
(E-mail Address)

Note: If the Bidder is a corporation, indicate state of incorporation; if a partnership, give full names and addresses of all partners; and if an individual, give residential address if different from business address. Use the following spaces:

If a Corporation:

Incorporated in what state: _____

President: _____

Treasurer: _____

Secretary: _____

If a Partnership: (Name ALL Partners)

Name of Partner: _____

Residence: _____

Name of Partner: _____

Residence:: _____

If an Individual:

Name: _____

Residence: _____

If an Individual doing business under a firm name:

Name of Firm: _____

Name of Individual: _____

Business Address: _____

Residence: _____

The bidder will give below the name and address of the Surety Company who will sign the bonds.

_____

_____

CONTRACT

CITY OF BURLINGTON
DRAFT CONSULTANT CONTRACT

This Consultant Contract ("Contract") is entered into by and between the City of Burlington, Vermont ("the City"), and [_____] ("Consultant"), a Vermont corporation located at [_____].

Consultant and the City agree to the terms and conditions of this Contract.

1. DEFINITIONS

The following terms shall be construed and interpreted as follows:

A. "Contract Documents" means all the documents identified in Section 4 (Scope of Work) of this Contract.

B. "Effective Date" means the date on which this Contract is approved and signed by the City, as shown on the signature page.

C. "Party" means the City or Consultant, and "Parties" means the City and Consultant.

D. "Project" means the [_____].

E. "Work" means the services described in Section 5 (Payment for Services) of this Contract, along with the specifications contained in the Contract Documents as defined in Section 4 (Scope of Work) below.

2. RECITALS

A. Authority. Each Party represents and warrants to the other that the execution and delivery of this Contract and the performance of such Party's obligations have been duly authorized.

B. Consideration. The Parties acknowledge that the mutual promises and covenants contained herein and other good and valuable consideration are sufficient and adequate to support this Contract.

C. Purpose. The City seeks to employ the Consultant to [_____].

3. EFFECTIVE DATE & TERM

A. Effective Date. This Contract shall not be valid or enforceable until the Effective Date. The City shall not be bound by any provision of this Contract before the Effective Date and shall have no obligation to pay Consultant for any performance or expense incurred before the Effective Date or after the expiration or termination of this Contract.

B. Term. This Contract and the Parties' respective performance shall commence on the Effective Date and expire on [_____] or upon the satisfaction of the City, unless sooner terminated as provided herein.

4. SCOPE OF WORK

The Consultant shall perform the services listed in Attachments A (Request for Proposals) and B (Consultant's Response to Request for Proposals).

5. PAYMENT FOR SERVICES

A. Amount. The City shall pay the Consultant for completion of the Work in accordance with Attachment B (Consultant's Response to Request for Proposals) [or as follows: _____].

Consultant agrees to accept this payment as full compensation for performance of all services and expenses incurred under this Agreement.

B. Payment Schedule. The City shall pay the Consultant in the manner and at such times as set forth in the Contract Documents [or as follows: _____]. The City seeks to make payment within thirty days of receipt of an invoice and any backup documentation requested under subsection D (Invoice) below.

C. Maximum Limiting Amount. The total amount that may be paid to the Consultant for all services and expenses under this Contract shall not exceed the maximum limiting amount of $[_____]. The City shall not be liable to Consultant for any amount exceeding the maximum limiting amount without duly authorized written approval.

D. Invoice. Consultant shall submit one copy of each invoice, including rates and a detailed breakdown by task for each individual providing services, and backup documentation for any equipment or other expenses to the following:

[Name, address, phone, email]

The City reserves the right to request supplemental information prior to payment. Consultant shall not be entitled to payment under this Contract without providing sufficient backup documentation satisfactory to the City.

6. SECTION & ATTACHMENT HEADINGS

The article and attachment headings throughout this Contract are for the convenience of City and Consultant and are not intended nor shall they be used to construe the intent of this Contract or any part hereof, or to modify, amplify, or aid in the interpretation or construction of any of the provisions hereof.

7. CONTRACT DOCUMENTS & ORDER OF PRECEDENT

A. Contract Documents. The Contract Documents are hereby adopted, incorporated by reference, and made part of this Contract. The intention of the Contract Documents is to establish the necessary terms, conditions, labor, materials, equipment, and other items necessary for the proper execution and completion of the Work to ensure the intended results.

The following documents constitute the Contract Documents:

Attachment A: Request for Proposals dated [_____]
Attachment B: Consultant's Response to Request for Proposals dated [_____]
Attachment C: Burlington Standard Contract Conditions for Consultants

Attachment D: Burlington Livable Wage Ordinance Certification
Attachment E: Burlington Outsourcing Ordinance Certification
Attachment F: Burlington Union Deterrence Ordinance Certification
Attachment G: Consultant's Certificate of Insurance

B. Order of Precedent. To the extent a conflict or inconsistency exists between the Contract Documents, or provisions therein, then the Contract takes precedent. Any Invitation for Bids, Additional Contract Provisions, and the City Ordinance Certifications shall prevail over any inconsistency with the Contractor's Scope of Work and Cost Proposal.

8. [Reserved]

— Signatures follow on the next page —

SIGNATURE

Persons signing for the Parties hereby swear and affirm that they are authorized to act on behalf of their respective Party and acknowledge that the other Party is relying on their representations to that effect.

Consultant
(Name of Consultant)

By: _____

Date: _____

City of Burlington
(Department)

By: _____
Name
Title

Date: _____

BURLINGTON'S OUTSOURCING ORDINANCE

21-90 Policy.

It is the policy of the City of Burlington to let service contracts to contractors, subcontractors and vendors
who perform work in the United States.

(Ord. of 11-21-05/12-21-05)

21-91 Definitions.

(a) *Contractor* or *vendor.* A person or entity that has a contract with the City of Burlington primarily for the furnishing of services (as opposed to the purchasing of goods), including any subcontractors of such contractor or vendor.

(b) *Government funded project.* Any contract for services which involves any city funds and the total amount of the contract is fifty thousand dollars ($50,000.00) or more. Burlington School Department contracts shall not be considered government funded projects under this article.

(c) *Outsourcing.* The assigning or reassigning, directly, or indirectly through subcontracting, of services under a government funded project to workers performing the work outside of the United States.

(Ord. of 11-21-05/12-21-05)

21-92 Implementation.

(a) No contract for a government funded project shall be let to any contractor, subcontractor, or vendor who is outsourcing, or causing the work to be performed outside of the United States or Canada.

(b) Prior to the commencement of work on a government funded project a contractor, subcontractor or vendor shall provide written certification that the services provided under the contract will be performed in the United States or Canada.

(Ord. of 11-21-05/12-21-05)

21-93 Exemption.

An exemption from requirements of this article may be authorized by the chief administrative officer based upon a determination that the services to be performed for the government funded project are not available in the United States or Canada at a reasonable cost. Any such exemption decision by the chief administrative officer shall be reported to the board of finance in writing within five (5) days. The board of finance may, if it should vote to do so, override the exemption decision if such vote occurs within fourteen (14) days of the date of the chief administrative officer's communication to such board.

(Ord. of 11-21-05/12-21-05)

21-94 Enforcement.

(a) Any contractor, subcontractor or vendor who files false or materially misleading information in
connection with an application, certification or request for information pursuant to the provisions of this article or outsources work on a government funded project shall be deemed to be in violation of this article.

(b) A violation of this article shall be a civil offense subject to a civil penalty of from one hundred dollars ($100.00) to five hundred ($500.00). All law enforcement officers and any other duly authorized municipal officials are authorized to issue a municipal complaint for a violation of this article. Each day any violation of any provision of this article shall continue shall constitute a separate violation.

(c) The City of Burlington shall have the right to modify, terminate and or seek specific performance of any contract for a government funded project if the contractor, subcontractor or vendor has not complied with this article.

(Ord. of 11-21-05/12-21-05)

21-95—21-99 Reserved.

Certification of Compliance with the City of Burlington's Outsourcing Ordinance

I, _____, on behalf of _____ (Contractor) and in connection with the _____[project], hereby certify under oath that (1) Contractor shall comply with the City of Burlington's Outsourcing Ordinance (Ordinance §§ 21-90 – 21-93); (2) as a condition of entering into this contract or grant, Contractor confirms that the services provided under the above-referenced contract will be performed in the United States or Canada.

Dated at _____, Vermont this ____ day of _____, 2023.

By: _____
Duly Authorized Agent

Subscribed and sworn to before me: _____
Notary

BURLINGTON'S UNION DETERRENCE ORDINANCE

21-100 Policy.

It is the policy of the City of Burlington to limit letting contracts to organizations that provide union deterrence services to other companies.
(Ord. of 3-27-06/4-26-06)

21-101 Definitions.

(a *Contractor or vendor.* A person or entity that has a contract with the City of Burlington primarily for the furnishing of services (as opposed to the purchasing of goods), including any subcontractors of such contractor or vendor.

(b) *Government funded project.* Any contract for services which involves any City funds and the total amount of the contract is fifteen thousand dollars ($15,000.00) or more. Burlington School Department contracts shall not be considered government funded projects under this article.

(c) *Union deterrence services.* Services provided by a contractor, subcontractor or vendor that are not restricted to advice concerning what activities by an employer are prohibited and permitted by applicable laws and regulations, but extend beyond such legal advice to encouraging an employer to do any of the following:

1) Hold captive audience, (i.e., mandatory) meetings with employees encouraging employees to vote against the union;

2) Have supervisors force workers to meet individually with them to discuss the union;

3) Imply to employees, whether through written or oral communication, that their employer may have to shut down or lay people off if the union wins the election;

4) Discipline or fire workers for union activity;

5) Train managers on how to dissuade employees from supporting the union.

(d) *Substantial portion of income.* For the purposes of this article, substantial portion of income shall
mean greater than ten (10) percent of annual gross revenues or one hundred thousand dollars ($100,000.00), whichever is less.

(Ord. of 3-27-06/4-26-06)

21-102 Implementation.

(a) No contract for a government funded project shall be let to any contractor, subcontractor, or vendor who

1) Advises or has advised an employer to conduct any illegal activity in its dealings with a union.

2) Advertises union deterrence services as specialty services;

3) Earns a substantial portion of its income by providing union deterrence services to other companies in order to defeat union organizing efforts.

(b) Prior to the commencement of work on a government funded project a contractor, subcontractor or vendor shall provide written certification that it has not advised the conduct of any illegal activity, it does not currently, nor will it over the life of the contract provide union deterrence services in violation of this article.

(Ord. of 3-27-06/4-26-06)

21-103 Enforcement.

(a) Any contractor, subcontractor or vendor who files false or materially misleading information in connection with an application, certification or request for information pursuant to the provisions of this article or provided union deterrence services during the life of a contract for a government funded project shall be deemed to be in violation of this article.

(b) The City of Burlington shall have the right to modify, terminate and or seek specific performance of any contract for a government funded project if the contractor, subcontractor or vendor has not complied with this article.

(Ord. of 3-27-06/4-26-06)

21-104—21-110 Reserved.

Certification of Compliance with the City of Burlington's Union Deterrence Ordinance

I _____, on behalf of _____ (Contractor) and in connection with _____ (City contract/project/grant), hereby certify under oath that _____ (Contractor) has not advised the conduct of any illegal activity, and it does not currently, nor will it over the life of the contract advertise or provide union deterrence services in violation of the City's union deterrence ordinance.

Dated at _____ Vermont this ____ day of _____ 20__.

By: _____
Duly Authorized Agent

Certification of Compliance with the City of Burlington's Livable Wage Ordinance

I, _____ , on behalf of _____("the Contractor") in connection with a contract for _____ services that we provide to the City, hereby certify under oath that the Contractor (and any subcontractors under this contract) is and will remain in compliance with the City of Burlington's Livable Wage Ordinance, B.C.O. 21-80 et seq., and that

(1) as a condition of entering into this contract or grant, we confirm that all covered employees as defined by Burlington's Livable Wage Ordinance (including the covered employees of subcontractors) shall be paid a livable wage (as determined, or adjusted, annually by the City of Burlington's chief administrative officer) and provided appropriate time off for the term of the contract;

(2) a notice regarding the applicability of the Livable Wage Ordinance shall be posted in the workplace(s) or other location(s) where covered employees work;

(3) we will provide verification of an employee's compensation, produce payroll or health insurance enrollment records or provide other relevant documentation (including that of any subcontractor), as deemed necessary by the chief administrative officer, within ten (10) business days from receipt of a request by the City;

(4) we will cooperate in any investigation conducted by the City of Burlington's City Attorney's office pursuant to this ordinance; and

(5) we will not retaliate (nor allow any subcontractor to retaliate) against an employee or other person because an employee has exercised rights or the person has cooperated in an investigation conducted pursuant to this ordinance.

Date_____

By:_____

Contractor

Subscribed and sworn to before me:

Date _____

_____

Notary

ATTACHMENT C:
BURLINGTON STANDARD CONTRACT CONDITIONS
FOR CONSULTANTS

1. **DEFINITIONS:**
   - **A.** The "Contract" shall mean the Contract between Consultant and the City to which these conditions apply and includes this Attachment C.
   - **B.** The "Consultant" shall mean _____.
   - **C.** The "City" shall mean the City of Burlington, Vermont or any of its departments.
   - **D.** The "Effective Date" shall mean the date on which the Contract becomes effective according to its terms, or if no effective date is stated, the date that all parties to it have signed.
   - **E.** The "Parties" shall mean the parties to this Contract.
   - **F.** The "Work" shall mean the services being provided by the Consultant, as provided in the Contract.

2. **REGISTRATION:** The Consultant agrees to be registered with the Vermont Secretary of State's office as a business entity doing business in the State of Vermont at all times this Contract is effective. This registration must be complete prior to Contract execution.

3. **INSURANCE:** Prior to beginning any work, the Consultant shall obtain the following insurance coverage from an insurance company registered and licensed to do business in the State of Vermont and having an A.M. Best insurance rating of at least A-, financial size category VII or greater (www.ambest.com). The certificate of insurance coverage shall be documented on forms acceptable to the City. Compliance with minimum limits and coverage, evidenced by a certificate of insurance showing policies and carriers that are acceptable to the City, must be received prior to the Effective Date of the Contract. The insurance policies shall provide that insurance coverage cannot be canceled or revised without thirty (30) days prior notice to the City. If this Contract extends to more than one year, evidence of continuing coverage must be submitted to the City on an annual basis. Copies of any insurance policies may be required. Each policy (with the exception of professional liability and worker's compensation) shall name the City as an additional insured for the possible liabilities resulting from the Consultant's actions or omissions. The liability insurance furnished by the Consultant is primary and non-contributory for all the additional insured.

   The Consultant is responsible to verify and confirm in writing to the City that: (i) all sub-consultants must comply with the same insurance requirements as the Consultant; (ii) all coverage shall include adequate protection for activities involving hazardous materials; and (iii) all work activities related to the Contract shall meet minimum coverage and limits.

   No warranty is made that the coverage and limits listed herein are adequate to cover and protect the interests of the Consultant for the Consultant's operations. These are solely minimums that have been developed and must be met to protect the interests of the City.

   A. <u>General Liability And Property Damage</u>: With respect to all operations performed by the Consultant, sub-consultants, agents or workers, it is the Consultant's responsibility to

ensure that general liability insurance coverage, on an occurrence form, provides all major divisions of coverage including, but not limited to:

1. Premises Operations
2. Independent Contractors'/Consultants' Protective
3. Products and Completed Operations
4. Personal Injury Liability
5. Medical Expenses

Coverage limits shall not be less than:

1.	General Aggregate	$2,000,000
2.	Products-Completed/Operations	$2,000,000
3.	Personal & Advertising Injury	$1,000,000
4.	Each Occurrence	$1,000,000
5.	Damage to Rented Premises	$ 250,000
6.	Med. Expense (Any one person)	$ 5,000

B. Workers' Compensation: With respect to all operations performed, the Consultant shall carry workers' compensation insurance in accordance with the laws of the State of Vermont and ensure that all sub-consultants carry the same workers' compensation insurance for all work performed by them under this Contract. Minimum limits for Employer's Liability:

1.	Bodily Injury by Accident:	$500,000 each accident
2.	Bodily Injury by Disease:	$500,000 policy limit, $500,000 each employee

C. Professional Liability Insurance:

1. General: The Consultant shall carry appropriate professional liability insurance covering errors and omissions made during their performance of contractual duties with the following minimum limits:

   (a) $3,000,000 - Annual Aggregate

   (b) $2,000,000 - Per Occurrence

2. Deductibles: The Consultant is responsible for any and all deductibles.

3. Coverage: Prior to performing any work, the Consultant shall provide evidence of professional liability insurance coverage defined under this section. In addition, the Consultant shall maintain continuous professional liability coverage for the period of the Contract and for a period of five years following substantial completion of construction.

D. Automobile Liability: The Consultant shall carry commercial automobile liability insurance covering all motor vehicles, including owned, non-owned and hired, used in connection with the Contract. Each policy shall provide coverage with a limit not less than: $1,000,000 Combined Single Limit for each occurrence.

E. Valuable Papers And Records Insurance: The Consultant shall carry valuable papers insurance in a form and amount sufficient to ensure the restoration or replacement of any plans, drawings, field notes, or other information or data relating to the work, whether supplied by the City or developed by the Consultant, sub-consultant, worker, or agent, in the event of loss, impairment, or destruction. Such coverage shall remain in force until the final plans as well as all related materials have been delivered by the consultant to, and accepted by, the City. Unless otherwise provided, Valuable Papers and Records Insurance shall provide coverage on an "individual occurrence" basis with limits in the amount of one hundred and fifty thousand dollars ($150,000) when the insured items are in the Consultant's possession, and in the amount of forty thousand dollars ($40,000) regardless of the physical location of the insured items.

F. Umbrella Liability:

1. $1,000,000 Each Event Limit

2. $1,000,000 General Aggregate Limit

4. **CONFLICT OF INTEREST:** The Consultant shall disclose in writing to the City any actual or potential conflicts of interest or any appearance of a conflict of interest by the Consultant, its employees or agents, or its subconsultants, if any.

5. **PLANS, RECORDS, AND AVAILABLE DATA:** The City agrees to make available, at no charge, for the Consultant's use all available data related to the Contract including any preliminary plans, maps, drawings, photographs, reports, traffic data, calculations, EDM, valuable papers, topographic survey, utility location plats, or any other pertinent public records.

6. **PERSONNEL REQUIREMENTS AND CONDITIONS:** The Consultant shall employ only qualified personnel with appropriate and valid licensure, to the extent a license is required for the work performed. The City shall have the right to approve or disapprove key personnel assigned to administer activities related to the Contract.

   Except with the approval of the City, during the life of the Contract, the Consultant shall not employ:

   1. Any City employees who are directly involved with the awarding, administration, monitoring, or performance of the Contract or any project(s) that are the subjects of the Contract.

   2. Any person so involved within one (1) year of termination of employment with the

City.

The Consultant warrants that no company or person has been employed or retained, other than a bona fide employee working solely for the Consultant, to solicit or secure this Contract, and that no company or person has been paid or has a contract with the Consultant to be paid, other than a bona fide employee working solely for the Consultant, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of the Contract. For breach or violation of this warranty, the City shall have the right to annul the Contract, without liability to the City, and to regain all costs incurred by the City in the performance of the Contract.

The City reserves the right to require removal of any person employed by a Consultant, from work related to the Contract, for misconduct, incompetence, or negligence as determined by the City, in the due and proper performance of Consultant's duties, or for neglecting or refusing to comply with the requirements of the Contract.

7. **PERFORMANCE:** Consultant warrants that performance of Work will conform to the requirements of this Contract. Consultant shall use that degree of ordinary care and reasonable diligence that an experienced and qualified provider of similar services would use acting in like circumstances and experience in such matters and in accordance with the standards, practices and procedures established by Consultant for its own business.

8. **DESIGN STANDARDS:** Unless otherwise specifically provided for in the Contract, or directed in writing, Consultant services, studies or designs, that include or make reference to plans, specifications, special provisions, computations, estimates, or other data shall be in conformance with applicable City, state, and federal specifications, manuals, codes or regulations, including supplements to or revisions thereof, adopted prior to or during the duration of this Contract. In case of any conflict with the guidelines referenced, the Consultant is responsible to identify and follow any course of direction provided by the City.

9. **RESPONSIBILITY FOR SUPERVISION:** The Consultant shall assume primary responsibility for general supervision of Consultant employees and their sub-consultants for all work performed under the Contract and shall be solely responsible for all procedures, methods of analysis, interpretation, conclusions and contents of work performed under the Contract. The Consultant shall be responsible to the City for all acts or omissions of its subconsultants and any other person performing work under this Contract.

10. **UTILITIES:** Whenever a facility or component of a private, public, or cooperatively-owned utility will be affected by any proposed construction, the Consultant will counsel with the City, plus achieve any necessary contacts and discussions with the affected owners, regarding any requirement necessary for revisions of facilities or existing installations, both above and below ground. Any such installations must be completely and accurately exhibited on any detail sheets or plans. The Consultant shall inform the City, in writing, of any such contacts and the results thereof.

11. **INSPECTION OF WORK:** The City shall, at all times, have access to the Consultant's work

for the purposes of inspection, accounting, and auditing, and the Consultant shall provide whatever access is considered necessary to accomplish such inspections. At any time, the Consultant shall permit the City or representative for the City the opportunity to inspect any plans, drawings, estimates, specifications, or other materials prepared or undertaken by the Consultant pursuant to the Contract, as well as any preparatory work, work-in-progress, or completed work at a field site, where applicable.

Conferences, visits to a site, or an inspection of the work, may be held at the request of any involved party or by representatives of the City.

12. **REVIEWS AND ACCEPTANCES:** All preliminary and detailed designs, plans, specifications, estimates or other documents prepared by the Consultant, shall be subject to review and endorsement by the City.

    Approval for any inspections or sequences of progress of work shall be documented by letters, memoranda or other appropriate written means.

    A frequency for formal reviews shall be set forth in the Contract. Informal reviews, conducted by the City will be performed as deemed necessary. The Consultant shall respond to all official comments regardless of their source. The Consultant shall supply the City with written copies of all correspondence relating to formal and informal reviews.

    No acceptance shall relieve a Consultant of their professional obligation to correct any defects or errors in their work at their own expense.

13. **PUBLIC RELATIONS:** Whenever it is necessary to perform work in the field, particularly with respect to reconnaissance, the Consultant will endeavor to maintain good relations with the public and any affected property owners. Personnel employed by or representing the Consultant shall conduct themselves with propriety. The Consultant agrees to inform property owners and/or tenants, in a timely manner, if there is need for entering upon private property as an agent of the City, in accordance with 19 V.S.A. § 35 and §.503, to accomplish the work under the Contract. The Consultant agrees that any work will be done with minimum damage to the land and disturbance to the owner. Upon request of the Consultant, the City shall furnish a letter of introduction to property owners soliciting their cooperation and explaining that the Consultant is acting as an agent of the City.

14. **ACKNOWLEDGEMENTS:** Acknowledgment of the City's support must be included in any and all publications, renderings and project publicity, including audio/visual materials developed under this Contract.

15. **APPEARANCES:**

    A. Hearings and Conferences: The Consultant shall provide services required by the City and necessary for furtherance of any work covered under the Contract. These services shall include appropriate representation at design conferences, public gatherings and hearings, and appearances before any legislative body, commission, board, or court, to justify,

explain and defend its contractual services covered under the Contract.

The Consultant shall perform any liaison that the City deems necessary for the furtherance of the work and participate in conferences with the City, at any reasonable time, concerning interpretation and evaluation of all aspects covered under the Contract.

The Consultant further agrees to participate in meetings with the City and any other interested or affected participant, for the purpose of review or resolution of any conflicts pertaining to the Contract.

The Consultant shall be equitably paid for such services and for any reasonable expenses incurred in relation thereto in accordance with the Contract.

B. Appearance as Witness: If and when required by the City, the Consultant, or an appropriate representative, shall prepare and appear for any litigation concerning any relevant project or related contract, on behalf of the City. The Consultant shall be equitably paid, to the extent permitted by law, for such services and for any reasonable expenses incurred in relation thereto, in accordance with the Contract.

16. PAYMENT PROCEDURES: The City shall pay, or cause to be paid, to the Consultant or the Consultant's legal representative payments in accordance with the Contract. All payments will be made in reliance upon the accuracy of all representations made by the Consultant, whether in invoices, progress reports, emails, or other proof of work. When applicable, for the type of payment specified in the Contract, the progress report shall summarize actual costs and any earned portion of fixed fee.

All invoices and correspondence shall indicate the applicable project name, project number and the Contract number. When relevant, the invoice shall further be broken down in detail between projects.

When applicable, for the type of payment specified in the Contract, expenses for meals and travel shall be limited to the current approved in-state rates, as determined by the State of Vermont's labor contract, and need not be receipted. All other expenses are subject to approval by the City and must be accompanied with documentation to substantiate their charges.

No approval given or payment made under the Contract, shall be conclusive evidence of the performance of the Contract, either wholly or in part thereof, and no payment shall be construed to be acceptance of defective work or improper materials.

The City agrees to pay the Consultant and the Consultant agrees to accept, as full compensation, for performance of all services rendered and expenses incurred, the fee specified in the Contract.

Upon completion of all services covered under the Contract and payment of the agreed upon fee, the Contract with its mutual obligations shall end.

17. **DUTY TO INFORM CITY OF CONTRACT DOCUMENT ERRORS:** If Consultant knows, or has reasonable cause to believe, that a clearly identifiable error or omission exists in the Contract Documents, including but not limited to unit prices and rate calculations, Consultant shall immediately give the City written notice thereof. Consultant shall not cause or permit any Work to be conducted which may relate to the error or omission without first receiving written notice by the City that City representatives understand the possible error or omission and have approved of modifications to the Contract Documents or that Consultant may proceed without any modification being made to Contract Documents.

18. **NON-APPROPRIATION:** The obligations of the City under this Contract are subject to annual appropriation by the Burlington City Council. If no funds or insufficient funds are appropriated or budgeted to support continuation of payments due under this Contract, the Contract shall terminate automatically on the first day of the fiscal year for which funds have not been appropriated. The Parties understand and agree that the obligations of the City to make payments under this Contract shall constitute a current expense of the City and shall not be construed to be a debt or a pledge of the credit of the City. The decision whether or not to budget and appropriate funds during each fiscal year of the City is within the discretion of the Mayor and City Council of the City. The City shall deliver written notice to Consultant as soon as practicable of any non-appropriation, and Contract Consultant shall not be entitled to any payment or compensation of any kind for work performed after the City has delivered written notice of non-appropriation.

19. **CHANGES AND AMENDMENTS:** No changes or amendments to the Work of the Contract shall be effective unless documented in writing and signed by authorized representatives of the City and the Consultant.

20. **EXTENSION OF TIME:** The Consultant agrees to prosecute the work continuously and diligently and no charges or claims for damages shall be made by the Consultant for delays or hindrances, from any cause whatsoever, during the progress of any portion of services specified in the Contract. Such delays or hindrances, if any, may be compensated for by an extension of time for such reasonable period as the City may decide. Time extensions shall be granted by amendment, only for excusable delays, such as delays beyond the control of the Consultant and without the fault or negligence of the Consultant.

21. **PUBLIC HEALTH EMERGENCY:**

    A. Compliance with Mandates and Guidance: The Consultant is advised that public health emergencies—meaning public health emergencies, as declared by the City, the State of Vermont, or the Federal Government—may introduce significant uncertainty into the project. The Consultant must comply with all local, state, federal orders, directives, regulations, guidance, advisories during a public health emergency. Consultant shall adhere to the below provisions and consider public health emergencies as it develops project schedules and advances the Work.

    B. Creation of Public Health Emergency Plan: For any work performed on-site at a City location, the Consultant shall create a public health emergency plan acceptable to the City.

The Consultant shall be responsible for following this plan and ensuring that the project or site is stable and in a safe and maintainable condition.

a. Public Health Emergency Plan: The Public Health Emergency Plan will contain:
    i. Measures to manage risk and mitigate potential impacts to the health and safety of the public, the City and Consultant's workers;
    ii. Explicit reference to any health and safety performance standards and mandates provided by the City, the State of Vermont, the Federal government, or other relevant governmental entities;
    iii. A schedule for possible updates to the plan as standards and mandates change; and
    iv. Means to adjust the schedule and sequence of work should the emergency change in nature or duration.
b. Review and Acceptance of Plan:
    i. Consultant must provide the plan to the City by the Effective Date of this Contract or by one (1) week prior to the commencement of on-site activities, whichever is later.
    ii. The City shall have sole discretion to require changes to the plan.
    iii. The City may revisit the plan at any time to verify compliance with obligations that arise under a state of emergency.

C. Enforcement & Stoppage of Work: Consultant fails to comply with either 1) the approved public health emergency plan, or 2) any local, state, federal orders, directives, regulations, guidance, or advisories during a public health emergency, the City may stop Work under the Contract until such failure is corrected. Such failure to comply shall constitute a breach of the Contract.

Upon stoppage of work, the City may allow Work to resume, at a time determined by the City, under this Contract if such failure to comply is adequately corrected. The City shall have sole discretion in determining if Consultant has adequately corrected its failure to comply with the above.

If Consultant's breach of Contract has not been cured within seven (7) days after notice to stop Work from the City, then City may terminate this Contract, at its discretion.

D. City Liability Relating to Potential Delays: If a public health emergency is declared, the City will not be responsible for any delays related to the sequence of operations or any expenses or losses incurred as a result of any delays. Any delays related to a public health emergency will be excusable, but will not be compensable.

22. FORCE MAJEURE: Neither Party to this Contract shall be liable to the other for any failure or delay of performance of any obligation under this Contract to the extent the failure or delay is caused by acts of God, public health emergencies, epidemics, acts of the public enemy, acts of superior governmental authority, weather conditions, riots, rebellion, sabotage, or any other

circumstances for which it is not responsible or which is not under its control ("Force Majeure"). To assert Force Majeure, the nonperforming party must prove that a) it made all reasonable efforts to remove, eliminate, or minimize the cause of delay or damage, b) diligently pursued performance of its obligations, c) substantially fulfilled all obligations that could be fulfilled, and d) timely notified the other part of the likelihood or actual occurrence of a Force Majeure event. If any such causes for delay are of such magnitude as to prevent the complete performance of the Contract within two (2) years of the originally scheduled completion date, either Party may by written notice request to amend or terminate the Contract. The suspension of any obligations under this section shall not cause the term of this Contract to be extended and shall not affect any rights accrued under this Contract prior to the occurrence of the Force Majeure. The Party giving notice of the Force Majeure shall also give notice of its cessation.

23. PAYMENT FOR EXTRA WORK, ADDITIONAL SERVICES OR CHANGES: The City may, in writing, and without invalidating the Contract, require changes resulting from revision or abandonment of work already performed by the Consultant or changes in the scope of work.

The value of such changes, to the extent not reflected in other payments to the Consultant, shall be incorporated in an amendment and be determined by mutual agreement. Any adjustments of this nature shall be executed under the appropriate fee established in the Contract, based on the adjusted quantity of work.

No changes for which additional fee payment is claimed shall be made unless pursuant to a written order from the City, and no claim for payment shall be valid unless so ordered.

The Consultant agrees to maintain complete and accurate records, in a form satisfactory to the City for all time devoted directly to same by Consultant employees. The City reserves the right to audit the records of the Consultant related to any extra work or additional services. Any such services rendered shall be subject, in all other respects, to the terms of the Contract. When changes are so ordered, no additional work shall be performed by the Consultant until a Contract amendment has been fully executed, unless written notice to proceed is issued by the City. Any claim for extension of time that may be necessitated as a result of extra work or additional services and changes shall be given consideration and evaluated insofar as it directly relates to the change.

24. FAILURE TO COMPLY WITH TIME SCHEDULE: If the City is dissatisfied because of slow progress or incompetence in the performance of the Work in accordance with the schedule for completion of the various aspects of construction, the City shall give the Consultant written notice in which the City shall specify in detail the cause of dissatisfaction. Should the Consultant fail or refuse to remedy the matters complained of within five days after the written notice is received by the Consultant, the City shall have the right to take control of the Work and either make good the deficiencies of the Consultant itself or direct the activities of the Consultant in doing so, employing such additional help as the City deems advisable. In such events, the City shall be entitled to collect from the Consultant any expenses in completing the Work. In addition, the City may withhold from the amount payable to the Consultant an amount approximately equal to any interest lost or charges incurred by the City for each calendar day that the Consultant is in default after the time of completion stipulated in the Contract Documents.

25. **RETURN OF MATERIALS:** Consultant agrees that at the expiration or termination of this Contract, it shall return to City all materials provided to it during its engagement on behalf of City.

26. **ACCEPTANCE OF FINAL PAYMENT; RELEASE:** Consultant's acceptance of the final payment shall be a release in full of all claims against the City or its agents arising out of or by reason of the Work. Any payment, however, final or otherwise, shall not release the Consultant or their sureties from any obligations under the Contract Documents or any performance or payment bond.

27. **OWNERSHIP OF THE WORK:** The Consultant agrees that the ownership of all studies, data sheets, survey notes, subsoil information, drawings, tracings, estimates, specifications, proposals, diagrams, calculations, EDM and other material prepared or collected by the Consultant, hereafter referred to as "instruments of professional service", shall become the property of the City as they are prepared and/or developed during execution of the Contract. The Consultant agrees to allow the City access to all "instruments of professional service" at any time. The Consultant shall not copyright any material originating under the Contract without prior written approval of the City. No publications or publicity of the work, in part or in total, shall be made without the express written agreement of the City, except that Consultant may in general terms use previously developed instruments of professional service to describe its abilities for a project in promotional materials.

28. **PROPRIETARY RIGHTS:** The Parties under the Contract hereby mutually agree that, if patentable discoveries or inventions should result from work performed by the Consultants under the Contract, all rights accruing from such discoveries or inventions shall be the sole property of the Consultant. The Consultant, however, agrees to and does hereby grant to the City an irrevocable, nonexclusive, non-transferable, and royalty-free license to the manufacture, use, and disposition of any discovery or invention that may be developed as a part of the Work under the Contract.

29. **PUBLIC RECORDS:** The Consultant understands that any and all records related to and acquired by the City, whether electronic, paper, or otherwise recorded, are subject to the Vermont Public Records Act and that the determination of how those records must be handled is solely within the purview of City. The Consultant shall identify all records that it considers to be trade secrets as that term is defined by subsection 317(c)(9) of the Vermont Public Records Act and shall also identify all other records it considers to be exempt under the Act. It is not sufficient to merely state generally that the record is proprietary or a trade secret or is otherwise exempt. Particular records, pages or section which are believed to be exempt must be specifically identified as such and must be separated from other records with a convincing explanation and rationale sufficient to justify each exemption from release consistent with Section 317 of Title 1 of the Vermont Statutes Annotated.

30. **RECORDS RETENTION AND ACCESS:** The Consultant agrees to retain, in its files, and to produce to the City—within the time periods requested—all books, documents, Electronic Data Media (EDM), accounting records, and other records produced or acquired by the

Consultant in the performance of this Contract which are related to the City, at any time during this Contract and for a period of at least three (3) years after its completion or termination. In addition, if any audit, claim, or litigation is commenced before the expiration of that three (3) year period, the records shall be retained until all related audits, claims, or litigation are resolved. The Consultant further agrees that the City shall have access to all the above information for the purpose of review and audit during the Contract period and anytime within the aforementioned retention period. Copies of all of the above referenced information shall be provided to the City, if requested, in the format in which the records were obtained, created, or maintained, such that their original use and purpose can be achieved. Consultant, sub-consultants, or their representatives performing work related to the Contract, are responsible to ensure that all data and information created or stored on EDM is secure and can be duplicated and used if the EDM mechanism is subjected to power outage, obsolescence, or damage.

31. **CONTRACT DISPUTES:** In the event of a dispute between the parties to this Contract each party will continue to perform its obligations unless the Contract is terminated in accordance with these terms.

32. **SETTLEMENTS OF MISUNDERSTANDINGS:** To avoid misunderstandings and litigation, it is mutually agreed by all Parties that the [Head of Department] shall act as referee on all questions arising under the terms of the Contract and that the decision of the [Head of Department] in such cases shall be binding upon both Parties.

33. **CITY'S OPTION TO TERMINATE:** The Contract may be terminated in accordance with the following provisions, which are not exclusive:

A. Termination for Convenience: At any time prior to completion of services specified under the Contract, the City may terminate the Contract for any reason by submitting written notice via certified or registered mail to the Consultant, not less than fifteen (15) days prior to the termination date, of its intention to do so. If the termination is for the City's convenience, payment to the Consultant will be made promptly for the amount of any fees earned to the date of the notice of termination and costs of materials obtained in preparation for Work but not yet installed or delivered, less any payments previously made. However, if a notice of termination is given to a Consultant prior to completion of twenty (20) percent of the estimated services, as set forth in the approved Work Schedule and Progress Report, the Consultant will be reimbursed for that portion of any reasonable and necessary expenses incurred to date of the notice of termination that are in excess of the amount earned under its approved fee to the date of said termination. Such requests for reimbursement shall be supported with factual data and shall be subject to the City's approval. The Consultant shall make no claim for additional compensation against the City by reason of such termination.

B. Termination for Cause:

i. Breach: Consultant shall be in default if Consultant fails in any manner to fully perform and carry out each and all conditions of this Contract, including, but not limited to, Consultant's failure to begin or to prosecute the Work in a timely manner

or to make progress as to endanger performance of this Contract; failure to supply a sufficient number of properly skilled employees or a sufficient quantity of materials of proper quality; failure to perform the Work unsatisfactorily as determined by the City; failure to neglect or refuse to remove materials; or in the event of a breach of warranty with respect to any materials, workmanship, or performance guaranty. Consultant will not be in default for any excusable delays as provided in Sections 19-21.

The City may give Consultant written notice of such default. If Consultant does not cure such default or provide a plan to cure such default which is acceptable to the City within the time permitted by the City, then the City may terminate this contract for cause.

ii. Proceedings for Relief of Debtors: If a federal or state proceeding for relief of debtors is undertaken by or against Consultant, or if Consultant makes an assignment for the benefit of creditors, then the City may immediately terminate this contract.

iii. Dishonest Conduct: If Consultant engages in any dishonest conduct related to the performance or administration of this Contract then the City may immediately terminate this contract.

iv. Cover: In the event the City terminates this contract as provided in this section, the City may procure, upon such terms and in such manner as the City may deem appropriate, services similar in scope and level of effort to those so terminated, and Consultant shall be liable to the City for all of its costs and damages, including, but not limited to, any excess costs for such services, interest, or other charges the City incurs to cover.

v. Rights and Remedies Not Exclusive: The rights and remedies of the City provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

34. GENERAL COMPLIANCE WITH LAWS: The Consultant and any subconsultant approved under this Contract shall comply with all applicable Federal, State and local laws, including but not limited to the Burlington Livable Wage Ordinance, the Non-Outsourcing Ordinance, and the Union-Deterrence Ordinance and shall provide the required certifications attesting to compliance with these ordinances (see attached ordinances and certifications).

Provisions of the Contract shall be interpreted and implemented in a manner consistent with each other and using procedures that will achieve the intent of both Parties. If, for any reason, a provision in the Contract is unenforceable or invalid, that provision shall be deemed severed from the Contract, and the remaining provisions shall be carried out with the same force and effect as if the severed provisions had never been a part of the Contract.

35. CIVIL RIGHTS AND EQUAL EMPLOYMENT OPPORTUNITY: During performance

of the Contract, the Consultant will not discriminate against any employee or applicant for employment because of religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status, crime victim status, or genetic information. Consultant, and any subconsultants, shall comply with any Federal, State, or local law, statute, regulation, Executive Order, or rule that applies to it or the services to be provided under this contract concerning equal employment, fair employment practices, affirmative action, or prohibitions on discrimination or harassment in employment.

36. CHILD SUPPORT PAYMENTS: By signing the Contract, the Consultant certifies, as of the date of signing the Contract, that the Consultant (a) is not under an obligation to pay child support; or (b) is under such an obligation and is in good standing with respect to that obligation; or (c) has agreed to a payment plan with the Vermont Office of Child Support Services and is in full compliance with that plan. If the Consultant is a sole proprietorship, the Consultant's statement applies only to the proprietor. If the Consultant is a partnership, the Consultant's statement applies to all general partners with a permanent residence in Vermont. If the Consultant is a corporation, this provision does not apply.

37. TAX REQUIREMENTS: By signing the Contract, the Consultant certifies, as required by law under 32 VSA, Section 3113, that under the pains and penalties of perjury, that the Consultant is in good standing with respect to payment, or in full compliance with a plan to pay, any and all taxes due the State of Vermont as of the date of signature on the Contract.

38. INDEMNIFICATION:

A. Indemnification by Consultant: Except for the active negligence or willful misconduct of the City, or any of its boards, officers, agents, employees, assigns and successors in interest, consultant undertakes and agrees to defend, indemnify and hold harmless the City and any of its boards, officers, agents, employees, assigns, and successors in interest from and against all suits and causes of action, claims, losses, demands and expenses, including, but not limited to, attorney's fees (both in house and outside counsel) and cost of litigation (including all actual litigation costs incurred by the City, including but not limited to, costs of experts and consultants), damages or liability of any nature whatsoever, for death or injury to any person, including Consultant's employees and agents, or damage or destruction of any property of either party hereto or of third parties, arising in any manner by reason of the negligent acts, errors, omissions or willful misconduct incident to the performance of this Contract by Consultant or its subconsultants of any tier.

B. Notice of Claims & City's Right to Participate: If the City, its officers, agents, or employees are notified of any claims asserted against it to which this indemnification provision may apply, the City shall immediately thereafter notify the Consultant in writing that a claim to which the indemnification provision may apply has been filed. Consultant shall immediately retain counsel and otherwise provide a complete defense against the entire claim or suit. The City retains the right to participate, at its own expense, in the defense of any claim, and to approve all proposed settlements of clams to which this provision applies.

C. City's Rights and Remedies: Rights and remedies available to the City under this provision are cumulative of those provided for elsewhere in this Contract and those allowed under the laws of the United States and the State of Vermont.

D. No Indemnification by City: Under no conditions shall the City be obligated to indemnify the Consultant or any third party, nor shall the City be otherwise liable for expenses or reimbursement including attorney's fees, collection costs, or other costs of the Consultant or any third party.

39. NO GIFTS OR GRATUITIES: The Consultant shall not make any payment or gift or donation of substantial value to any elected official, officer, employee, or agent of the City during the term of this Contract.

40. ASSIGNMENT: Consultant shall not sublet or assign this Work, or any part of it, without the written consent of the City. If any subconsultant is approved, Consultant shall be responsible and liable for all acts or omissions of that subconsultant for any Work performed. If any subconsultant is approved, Consultant shall be responsible to ensure that the subconsultant is paid as agreed and that no lien is placed on any City property.

41. TRANSFERS, SUBLETTING, ETC: The Consultant shall not assign, sublet, or transfer any interest in the work, covered by this Contract, without prior written consent of the City, and further, if any sub-consultant participates in any work involving additional services, the estimated extent and cost of the contemplated work must receive prior written consent of the City. The approval or consent to assign or sublet any portion of the work, shall in no way relieve the Consultant of responsibility for the performance of that portion of the work so transferred. The form of the sub-consultant's contract shall be as developed by the Consultant and approved by the City. The Consultant shall ensure that insurance coverage exists for any operations to be performed by any sub-consultant as specified in the insurance requirements section of this Contract.

The services of the Consultant, to be performed under the Contract, shall not be transferred without written authorization of the City. Any authorized sub-contracts shall contain all of the same provisions contained in and attached to the original Contract with the City.

42. CONTINUING OBLIGATIONS: The Consultant agrees that if because of death, disability, or other occurrences, it becomes impossible to effectively perform its services in compliance with the Contract, neither the Consultant nor its surviving members shall be relieved of their obligations to complete the Contract unless the City agrees to terminate the Contract because it determines that the Consultant is unable to satisfactorily execute the Contract.

43. INTERPRETATION & IMPLEMENTATION: Provisions of the Contract shall be interpreted and implemented in a manner consistent with each other and using procedures that will achieve the intent of both Parties.

44. **ARM'S LENGTH:** This Contract has been negotiated at arm's length, and any ambiguity in any of its terms or provisions shall be interpreted in accordance with the intent of the Parties and not against or in favor of either the City or Consultant.

45. **RELATIONSHIP:** The Consultant is an independent consultant and shall act in an independent capacity and not as officers or employees of the City. To that end, the Consultant shall determine the method, details, and means of performing the work, but will comply with all legal requirements in doing so. The Consultant shall provide its own tools, materials, or equipment. The Parties agree that neither the Consultant nor its principal(s) or employees are entitled to any employee benefits from the City. Consultant understands and agrees that it and its principal(s) or employees have no right to claim any benefits under the Burlington Employee Retirement System, the City's worker's compensation benefits, health insurance, dental insurance, life insurance, or any other employee benefit plan offered by the City. The Consultant agrees to execute any certifications or other documents and provide any certificates of insurance required by the City and understands that this Contract is conditioned on its doing so, if requested.

    The Consultant understands and agrees that it is responsible for the payment of all taxes on the above sums and that the City will not withhold or pay for Social Security, Medicare, or other taxes or benefits or be responsible for any unemployment benefits.

46. **CHOICE OF LAW:** Vermont law, and rules and regulations issued pursuant thereto, shall be applied in the interpretation, execution, and enforcement of this Contract. Any provision included or incorporated herein by reference which conflicts with said laws, rules, and regulations shall be null and void. Any provision rendered null and void by operation of this provision shall not invalidate the remainder of this Contract to the extent capable of execution.

47. **JURISDICTION:** All suits or actions related to this Contract shall be filed and proceedings held in the State of Vermont.

48. **BINDING EFFECT AND CONTINUITY:** This Contract shall be binding upon and shall inure to the benefit of the Parties, their' respective heirs, successors, representatives, and assigns. If a dispute arises between the Parties, each Party will continue to perform its obligations under this Contract during the resolution of the dispute, until the Contract is terminated in accordance with its terms.

49. **SEVERABILITY:** The invalidity or unenforceability of any provision of this Contract, shall not affect the validity or enforceability of any other provision, which shall remain in full force and effect, provided that the Parties can continue to perform their obligations under this Contract in accordance with the intent of this Contract.

50. **ENTIRE CONTRACT & AGREEMENT:** This Contract constitutes the entire Contract, agreement, and understanding of the Parties with respect to the subject matter of this Contract. Prior or contemporaneous additions, deletions, or other changes to this Contract shall not have any force or effect whatsoever, unless embodied herein.

51. **APPENDICES:** The City may attach to these conditions appendices containing various forms

and typical sample sheets for guidance and assistance to the Consultant in the performance of the work. It is understood, however, that such forms and samples may be modified, altered, and augmented from time to time by the City as occasions may require. It is the responsibility of the Consultant to ensure that they have the latest versions applicable to the Contract.

52. **NO THIRD PARTY BENEFICIARIES:** This Contract does not and is not intended to confer any rights or remedies upon any person or entity other than the Parties. Enforcement of this Contract and all rights and obligations hereunder are reserved solely to the Parties. Any services or benefits which third parties receive as a result of this Contract are incidental to this Contract, and do not create any rights for such third parties.

53. **WAIVER:** A Party's failure or delay in exercising any right, power, or privilege under this Contract, whether explicit or by lack of enforcement, shall not operate as a waiver, nor shall any single or partial exercise of any right, power, or privilege preclude any other or further exercise of such right, power, or privilege.

GENERAL PROVISIONS

Section 10 Definition of Terms

When the following terms are used in these specifications, in the contract, or in any documents or other instruments pertaining to construction where these specifications govern, the intent and meaning shall be defined as follows:

Paragraph Number	Term	Definition
10-01	**AASHTO**	The American Association of State Highway and Transportation Officials.
10-02	**Access Road**	The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public roadway.
10-03	**Advertisement**	A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.
10-04	**Airport**	Airport means an area of land or water which is used or intended to be used for the landing and takeoff of aircraft; an appurtenant area used or intended to be used for airport buildings or other airport facilities or rights of way; airport buildings and facilities located in any of these areas, and a heliport.
10-05	**Airport Improvement Program (AIP)**	A grant-in-aid program, administered by the Federal Aviation Administration (FAA).
10-06	**Air Operations Area (AOA)**	The term air operations area (AOA) shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operation area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.
10-07	**Apron**	Area where aircraft are parked, unloaded or loaded, fueled and/or serviced.
10-08	**ASTM International (ASTM)**	Formerly known as the American Society for Testing and Materials (ASTM).
10-09	**Award**	The Owner's notice to the successful bidder of the acceptance of the submitted bid.

Paragraph Number	Term	Definition
10-10	**Bidder**	Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.
10-11	**Building Area**	An area on the airport to be used, considered, or intended to be used for airport buildings or other airport facilities or rights-of-way together with all airport buildings and facilities located thereon.
10-12	**Calendar Day**	Every day shown on the calendar.
10-13	**Certificate of Analysis (COA)**	The COA is the manufacturer's Certificate of Compliance (COC) including all applicable test results required by the specifications.
10-14	**Certificate of Compliance (COC)**	The manufacturer's certification stating that materials or assemblies furnished fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer's authorized representative.
10-15	**Change Order**	A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for work within the scope of the contract and necessary to complete the project.
10-16	**Contract**	A written agreement between the Owner and the Contractor that establishes the obligations of the parties including but not limited to performance of work, furnishing of labor, equipment and materials and the basis of payment. The awarded contract includes but may not be limited to: Advertisement, Contract form, Proposal, Performance bond, payment bond, General provisions, certifications and representations, Technical Specifications, Plans, Supplemental Provisions, standards incorporated by reference and issued addenda.
10-17	**Contract Item (Pay Item)**	A specific unit of work for which a price is provided in the contract.
10-18	**Contract Time**	The number of calendar days or working days, stated in the proposal, allowed for completion of the contract, including authorized time extensions. If a calendar date of completion is stated in the proposal, in lieu of a number of calendar or working days, the contract shall be completed by that date.

Paragraph Number	Term	Definition
10-19	**Contractor**	The individual, partnership, firm, or corporation primarily liable for the acceptable performance of the work contracted and for the payment of all legal debts pertaining to the work who acts directly or through lawful agents or employees to complete the contract work.
10-20	**Contractors Quality Control (QC) Facilities**	The Contractor's QC facilities in accordance with the Contractor Quality Control Program (CQCP).
10-21	**Contractor Quality Control Program (CQCP)**	Details the methods and procedures that will be taken to assure that all materials and completed construction required by the contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors.
10-22	**Control Strip**	A demonstration by the Contractor that the materials, equipment, and construction processes results in a product meeting the requirements of the specification.
10-23	**Construction Safety and Phasing Plan (CSPP)**	The overall plan for safety and phasing of a construction project developed by the airport operator, or developed by the airport operator's consultant and approved by the airport operator. It is included in the invitation for bids and becomes part of the project specifications.
10-24	**Drainage System**	The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.
10-25	**Engineer**	The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for engineering, inspection, and/or observation of the contract work and acting directly or through an authorized representative.
10-26	**Equipment**	All machinery, together with the necessary supplies for upkeep and maintenance; and all tools and apparatus necessary for the proper construction and acceptable completion of the work.
10-27	**Extra Work**	An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Owner's Engineer or Resident Project Representative (RPR) to be necessary to complete the work within the intended scope of the contract as previously modified.

Paragraph Number	Term	Definition
10-28	**FAA**	The Federal Aviation Administration. When used to designate a person, FAA shall mean the Administrator or their duly authorized representative.
10-29	**Federal Specifications**	The federal specifications and standards, commercial item descriptions, and supplements, amendments, and indices prepared and issued by the General Services Administration.
10-30	**Force Account**	**a.** Contract Force Account - A method of payment that addresses extra work performed by the Contractor on a time and material basis. **b.** Owner Force Account - Work performed for the project by the Owner's employees.
10-31	**Intention of Terms**	Whenever, in these specifications or on the plans, the words “directed,” “required,” “permitted,” “ordered,” “designated,” “prescribed,” or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Engineer and/or Resident Project Representative (RPR) is intended; and similarly, the words “approved,” “acceptable,” “satisfactory,” or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Engineer and/or RPR, subject in each case to the final determination of the Owner. Any reference to a specific requirement of a numbered paragraph of the contract specifications or a cited standard shall be interpreted to include all general requirements of the entire section, specification item, or cited standard that may be pertinent to such specific reference.
10-32	**Lighting**	A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.
10-33	**Major and Minor Contract Items**	A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20% of the total amount of the award contract. All other items shall be considered minor contract items.

Paragraph Number	Term	Definition
10-34	**Materials**	Any substance specified for use in the construction of the contract work.
10-35	**Modification of Standards (MOS)**	Any deviation from standard specifications applicable to material and construction methods in accordance with FAA Order 5300.1.
10-36	**Notice to Proceed (NTP)**	A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.
10-37	**Owner**	**The term "Owner" shall mean the party of the first part or the contracting agency signatory to the contract. Where the term "Owner" is capitalized in this document, it shall mean airport Sponsor only. The Owner for this project is:** **Patrick Leahy Burlington International Airport.**
10-38	Passenger Facility Charge (PFC)	Per 14 Code of Federal Regulations (CFR) Part 158 and 49 United States Code (USC) § 40117, a PFC is a charge imposed by a public agency on passengers enplaned at a commercial service airport it controls.
10-39	**Pavement Structure**	The combined surface course, base course(s), and subbase course(s), if any, considered as a single unit.
10-40	**Payment bond**	The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will pay in full all bills and accounts for materials and labor used in the construction of the work.
10-41	**Performance bond**	The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.
10-42	**Plans**	The official drawings or exact reproductions which show the location, character, dimensions and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications. Plans may also be referred to as 'contract drawings.'

Paragraph Number	Term	Definition
10-43	**Project**	The agreed scope of work for accomplishing specific airport development with respect to a particular airport.
10-44	**Proposal**	The written offer of the bidder (when submitted on the approved proposal form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the plans and specifications.
10-45	**Proposal guaranty**	The security furnished with a proposal to guarantee that the bidder will enter into a contract if their own proposal is accepted by the Owner.
10-46	**Quality Assurance (QA)**	Owner's responsibility to assure that construction work completed complies with specifications for payment.
10-47	**Quality Control (QC)**	Contractor's responsibility to control material(s) and construction processes to complete construction in accordance with project specifications.
10-48	**Quality Assurance (QA) Inspector**	An authorized representative of the Engineer and/or Resident Project Representative (RPR) assigned to make all necessary inspections, observations, tests, and/or observation of tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.
10-49	**Quality Assurance (QA) Laboratory**	The official quality assurance testing laboratories of the Owner or such other laboratories as may be designated by the Engineer or RPR. May also be referred to as Engineer's, Owner's, or QA Laboratory.
10-50	**Resident Project Representative (RPR)**	The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for all necessary inspections, observations, tests, and/or observations of tests of the contract work performed or being performed, or of the materials furnished or being furnished by the Contractor, and acting directly or through an authorized representative.
10-51	**Runway**	The area on the airport prepared for the landing and takeoff of aircraft.
10-52	**Runway Safety Area (RSA)**	A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft. See the construction safety and phasing plan (CSPP) for limits of the RSA.

Paragraph Number	Term	Definition
10-53	**Safety Plan Compliance Document (SPCD)**	Details how the Contractor will comply with the CSPP.
10-54	**Specifications**	A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if included in the contract physically.
10-55	**Sponsor**	A Sponsor is defined in 49 USC § 47102(24) as a public agency that submits to the FAA for an AIP grant; or a private Owner of a public-use airport that submits to the FAA an application for an AIP grant for the airport.
10-56	**Structures**	Airport facilities such as bridges; culverts; catch basins, inlets, retaining walls, cribbing; storm and sanitary sewer lines; water lines; underdrains; electrical ducts, manholes, handholes, lighting fixtures and bases; transformers; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.
10-57	**Subgrade**	The soil that forms the pavement foundation.
10-58	**Superintendent**	The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the RPR, and who shall supervise and direct the construction.
10-59	**Supplemental Agreement**	A written agreement between the Contractor and the Owner that establishes the basis of payment and contract time adjustment, if any, for the work affected by the supplemental agreement. A supplemental agreement is required if: (1) in scope work would increase or decrease the total amount of the awarded contract by more than 25%: (2) in scope work would increase or decrease the total of any major contract item by more than 25%; (3) work that is not within the scope of the originally awarded contract; or (4) adding or deleting of a major contract item.
10-60	**Surety**	The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds that are furnished to the Owner by the Contractor.
10-61	**Taxilane**	A taxiway designed for low speed movement of aircraft between aircraft parking areas and terminal areas.

Paragraph Number	Term	Definition
10-62	**Taxiway**	The portion of the air operations area of an airport that has been designated by competent airport authority for movement of aircraft to and from the airport's runways, aircraft parking areas, and terminal areas.
10-63	**Taxiway/Taxilane Safety Area (TSA)**	A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an aircraft. See the construction safety and phasing plan (CSPP) for limits of the TSA.
10-64	**Work**	The furnishing of all labor, materials, tools, equipment, and incidentals necessary or convenient to the Contractor's performance of all duties and obligations imposed by the contract, plans, and specifications.
10-65	**Working day**	A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least six (6) hours toward completion of the contract. When work is suspended for causes beyond the Contractor's control, it will not be counted as a working day. Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work will be considered as working days.
10-66	**Owner Defined terms**	None

END OF SECTION 10

Section 20 Proposal Requirements and Conditions

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The information provided in this section is often duplicated within the Instruction-to-bidders and Invitation-for-Bidders. For the purpose of limiting redundant requirements and potential discrepancies, modifications may be made to this section to include a reference that these requirements may be found in the procurement section of the project bid documents. The language provided in this section represents model language acceptable to the FAA. The Owner may make edits to the model language that reflect established written local and state procurement versions provided such requirements do not materially alter the intent and purpose of the FAA's model language; and such alterations do not conflict with the requirements of 2 CFR part 200 or 49 USC chapter 471.

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20-01 Advertisement (Notice to Bidders). Refer to Invitation for Bids.

20-02 Qualification of bidders. Each bidder shall submit evidence of competency and evidence of financial responsibility to perform the work to the Owner at the time of bid opening.

Evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, and a list of equipment and a list of key personnel that would be available for the work.

Each bidder shall furnish the Owner satisfactory evidence of their financial responsibility. Evidence of financial responsibility, unless otherwise specified, shall consist of a confidential statement or report of the bidder's financial resources and liabilities as of the last calendar year or the bidder's last fiscal year. Such statements or reports shall be certified by a public accountant. At the time of submitting such financial statements or reports, the bidder shall further certify whether their financial responsibility is approximately the same as stated or reported by the public accountant. If the bidder's financial responsibility has changed, the bidder shall qualify the public accountant's statement or report to reflect the bidder's true financial condition at the time such qualified statement or report is submitted to the Owner.

Unless otherwise specified, a bidder may submit evidence that they are prequalified with the State Highway Division and are on the current "bidder's list" of the state in which the proposed work is located. Evidence of State Highway Division prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports specified above.

Bidders must be pre-qualified for this project in accordance with the City of Burlington Procurement requirements.

Each bidder shall submit "evidence of competency" and "evidence of financial responsibility" to the Owner at the time of bidding. Refer to the Bid Proposal.

20-03 Contents of proposal forms. The Owner's proposal forms state the location and description of the proposed construction; the place, date, and time of opening of the proposals; and the estimated quantities of the various items of work to be performed and materials to be furnished for which unit bid prices are asked. The proposal form states the time in which the work must be completed, and the amount of the

proposal guaranty that must accompany the proposal. The Owner will accept only those Proposals properly executed on physical forms or electronic forms provided by the Owner. Bidder actions that may cause the Owner to deem a proposal irregular are given in paragraph 20-09 *Irregular proposals*.

A pre-bid conference is required on this project to discuss as a minimum, the following items: material requirements; submittals; Quality Control/Quality Assurance requirements; the construction safety and phasing plan including airport access and staging areas; and unique airfield paving construction requirements. Refer to the Invitation for Bids for the time, date, and additional information.

20-04 Issuance of proposal forms. The Owner reserves the right to refuse to issue a proposal form to a prospective bidder if the bidder is in default for any of the following reasons:

a. Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.

b. Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force with the Owner at the time the Owner issues the proposal to a prospective bidder.

c. Documented record of Contractor default under previous contracts with the Owner.

d. Documented record of unsatisfactory work on previous contracts with the Owner.

20-05 Interpretation of estimated proposal quantities. An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the proposal. It is the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly, or by implication, agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the quantities may be increased or decreased as provided in the Section 40, paragraph 40-02, Alteration of Work and Quantities, without in any way invalidating the unit bid prices.

20-06 Examination of plans, specifications, and site. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. Bidders shall satisfy themselves to the character, quality, and quantities of work to be performed, materials to be furnished, and to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied to the conditions to be encountered in performing the work and the requirements of the proposed contract, plans, and specifications.

Boring logs and other records of subsurface investigations and tests are available for inspection of bidders. It is understood and agreed that such subsurface information, whether included in the plans, specifications, or otherwise made available to the bidder, was obtained and is intended for the Owner's design and estimating purposes only. Such information has been made available for the convenience of all bidders. It is further understood and agreed that each bidder is solely responsible for all assumptions, deductions, or conclusions which the bidder may make or obtain from their own examination of the boring logs and other records of subsurface investigations and tests that are furnished by the Owner.

20-07 Preparation of proposal. The bidder shall submit their proposal on the forms furnished by the Owner. All blank spaces in the proposal forms, unless explicitly stated otherwise, must be correctly filled in where indicated for each and every item for which a quantity is given. The bidder shall state the price (written in ink or typed) both in words and numerals which they propose for each pay item furnished in the proposal. In case of conflict between words and numerals, the words, unless obviously incorrect, shall govern.

The bidder shall correctly sign the proposal in ink. If the proposal is made by an individual, their name and post office address must be shown. If made by a partnership, the name and post office address of each member of the partnership must be shown. If made by a corporation, the person signing the proposal shall give the name of the state where the corporation was chartered and the name, titles, and business address of the president, secretary, and the treasurer. Anyone signing a proposal as an agent shall file evidence of their authority to do so and that the signature is binding upon the firm or corporation.

20-08 Responsive and responsible bidder. A responsive bid conforms to all significant terms and conditions contained in the Owner's invitation for bid. It is the Owner's responsibility to decide if the exceptions taken by a bidder to the solicitation are material or not and the extent of deviation it is willing to accept.

A responsible bidder has the ability to perform successfully under the terms and conditions of a proposed procurement, as defined in 2 CFR § 200.318(h). This includes such matters as Contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

20-09 Irregular proposals. Proposals shall be considered irregular for the following reasons:

a. If the proposal is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the proposal form is detached.

b. If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind that make the proposal incomplete, indefinite, or otherwise ambiguous.

c. If the proposal does not contain a unit price for each pay item listed in the proposal, except in the case of authorized alternate pay items, for which the bidder is not required to furnish a unit price.

d. If the proposal contains unit prices that are obviously unbalanced.

e. If the proposal is not accompanied by the proposal guaranty specified by the Owner.

f. If the applicable Disadvantaged Business Enterprise information is incomplete.

The Owner reserves the right to reject any irregular proposal and the right to waive technicalities if such waiver is in the best interest of the Owner and conforms to local laws and ordinances pertaining to the letting of construction contracts.

20-10 Bid guarantee. Each separate proposal shall be accompanied by a bid bond, certified check, or other specified acceptable collateral, in the amount specified in the proposal form. Such bond, check, or collateral, shall be made payable to the Owner.

20-11 Delivery of proposal. Each proposal submitted shall be placed in a sealed envelope plainly marked with the project title, location of airport, and name and business address of the bidder on the outside. When sent by mail, preferably registered, the sealed proposal, marked as indicated above, should be enclosed in an additional envelope. No proposal will be considered unless received at the place specified in the advertisement or as modified by Addendum before the time specified for opening all bids. Proposals received after the bid opening time shall be returned to the bidder unopened.

20-12 Withdrawal or revision of proposals. A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the Owner in writing or by email before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.

20-13 Public opening of proposals. Proposals shall be opened, and read, publicly at the time and place specified in the advertisement. Bidders, their authorized agents, and other interested persons are invited to attend. Proposals that have been withdrawn (by written or telegraphic request) or received after the time specified for opening bids shall be returned to the bidder unopened.

20-14 Disqualification of bidders. A bidder shall be considered disqualified for any of the following reasons:

a. Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.

b. Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the Owner until any such participating bidder has been reinstated by the Owner as a qualified bidder.

c. If the bidder is considered to be in "default" for any reason specified in paragraph 20-04, *Issuance of Proposal Forms,* of this section.

20-15 Discrepancies and Omissions. A Bidder who discovers discrepancies or omissions with the project bid documents shall immediately notify the Owner's Engineer of the matter. A bidder that has doubt as to the true meaning of a project requirement may submit to the Owner's Engineer a written request for interpretation no later than five (5) business days prior to bid opening.

Any interpretation of the project bid documents by the Owner's Engineer will be by written addendum issued by the Owner. The Owner will not consider any instructions, clarifications or interpretations of the bidding documents in any manner other than written addendum.

END OF SECTION 20

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Section 30 Award and Execution of Contract**30-01 Consideration of proposals**. After the proposals are publicly opened and read, they will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the proposal by the unit bid prices. If a bidder's proposal contains a discrepancy between unit bid prices written in words and unit bid prices written in numbers, the unit bid price written in words shall govern.

Until the award of a contract is made, the Owner reserves the right to reject a bidder's proposal for any of the following reasons:

a. If the proposal is irregular as specified in Section 20, paragraph 20-09, *Irregular Proposals*.

b. If the bidder is disqualified for any of the reasons specified Section 20, paragraph 20-14, *Disqualification of Bidders*.

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all proposals, waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable state and local laws or regulations pertaining to the letting of construction contracts; advertise for new proposals; or proceed with the work otherwise. All such actions shall promote the Owner's best interests.

30-02 Award of contract. The award of a contract, if it is to be awarded, shall be made within **90**calendar days of the date specified for publicly opening proposals, unless otherwise specified herein. If the Owner elects to proceed with an award of contract, the Owner will make award to the responsible bidder whose bid, conforming with all the material terms and conditions of the bid documents, is the lowest in price.

30-03 Cancellation of award. The Owner reserves the right to cancel the award without liability to the bidder, except return of proposal guaranty, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with paragraph 30-07 *Approval of Contract*.

30-04 Return of proposal guaranty. All proposal guaranties, except those of the two lowest bidders, will be returned immediately after the Owner has made a comparison of bids as specified in the paragraph 30-01, *Consideration of Proposals.* Proposal guaranties of the two lowest bidders will be retained by the Owner until such time as an award is made, at which time, the unsuccessful bidder's proposal guaranty will be returned. The successful bidder's proposal guaranty will be returned as soon as the Owner receives the contract bonds as specified in paragraph 30-05, *Requirements of Contract Bonds.*

30-05 Requirements of contract bonds. At the time of the execution of the contract, the successful bidder shall furnish the Owner a surety bond or bonds that have been fully executed by the bidder and the surety guaranteeing the performance of the work and the payment of all legal debts that may be incurred by reason of the Contractor's performance of the work. The surety and the form of the bond or bonds shall be acceptable to the Owner. Unless otherwise specified in this subsection, the surety bond or bonds shall be in a sum equal to the full amount of the contract.**30-06 Execution of contract**. The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return the signed contract to the Owner, along with the fully executed surety bond or bonds specified in paragraph 30-05, *Requirements of Contract Bonds,* of this section, within 15 calendar days from the date mailed or otherwise delivered to the successful bidder.

30-07 Approval of contract. Upon receipt of the contract and contract bond or bonds that have been executed by the successful bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances, and return the fully executed contract to the Contractor. Delivery of the fully executed contract to the Contractor shall constitute the Owner's approval to be bound by the successful bidder's proposal and the terms of the contract.

30-08 Failure to execute contract. Failure of the successful bidder to execute the contract and furnish an acceptable surety bond or bonds within the period specified in paragraph 30-06, *Execution of Contract,* of

this section shall be just cause for cancellation of the award and forfeiture of the proposal guaranty, not as a penalty, but as liquidated damages to the Owner.

END OF SECTION 30

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Section 40 Scope of Work

40-01 Intent of contract. The intent of the contract is to provide for construction and completion, in every detail, of the work described. It is further intended that the Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, specifications, and terms of the contract.

40-02 Alteration of work and quantities. The Owner reserves the right to make such changes in quantities and work as may be necessary or desirable to complete, in a satisfactory manner, the original intended work. Unless otherwise specified in the Contract, the Owner's Engineer or RPR shall be and is hereby authorized to make, in writing, such in-scope alterations in the work and variation of quantities as may be necessary to complete the work, provided such action does not represent a significant change in the character of the work.

For purpose of this section, a significant change in character of work means: any change that is outside the current contract scope of work; any change (increase or decrease) in the total contract cost by more than 25%; or any change in the total cost of a major contract item by more than 25%.

Work alterations and quantity variances that do not meet the definition of significant change in character of work shall not invalidate the contract nor release the surety. Contractor agrees to accept payment for such work alterations and quantity variances in accordance with Section 90, paragraph 90-03, *Compensation for Altered Quantities*.

Should the value of altered work or quantity variance meet the criteria for significant change in character of work, such altered work and quantity variance shall be covered by a supplemental agreement. Supplemental agreements shall also require consent of the Contractor's surety and separate performance and payment bonds. If the Owner and the Contractor are unable to agree on a unit adjustment for any contract item that requires a supplemental agreement, the Owner reserves the right to terminate the contract with respect to the item and make other arrangements for its completion.

40-03 Omitted items. The Owner, the Owner's Engineer or the RPR may provide written notice to the Contractor to omit from the work any contract item that does not meet the definition of major contract item. Major contract items may be omitted by a supplemental agreement. Such omission of contract items shall not invalidate any other contract provision or requirement.

Should a contract item be omitted or otherwise ordered to be non-performed, the Contractor shall be paid for all work performed toward completion of such item prior to the date of the order to omit such item. Payment for work performed shall be in accordance with Section 90, paragraph 90-04, *Payment for Omitted Items*.

40-04 Extra work. Should acceptable completion of the contract require the Contractor to perform an item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, Owner may issue a Change Order to cover the necessary extra work. Change orders for extra work shall contain agreed unit prices for performing the change order work in accordance with the requirements specified in the order, and shall contain any adjustment to the contract time that, in the RPR's opinion, is necessary for completion of the extra work.

When determined by the RPR to be in the Owner's best interest, the RPR may order the Contractor to proceed with extra work as provided in Section 90, paragraph 90-05, *Payment for Extra Work*. Extra work that is necessary for acceptable completion of the project, but is not within the general scope of the work

covered by the original contract shall be covered by a supplemental agreement as defined in Section 10, paragraph 10-59, *Supplemental Agreement*.

If extra work is essential to maintaining the project critical path, RPR may order the Contractor to commence the extra work under a Time and Material contract method. Once sufficient detail is available to establish the level of effort necessary for the extra work, the Owner shall initiate a change order or supplemental agreement to cover the extra work.

Any claim for payment of extra work that is not covered by written agreement (change order or supplemental agreement) shall be rejected by the Owner.

40-05 Maintenance of traffic. It is the explicit intention of the contract that the safety of aircraft, as well as the Contractor's equipment and personnel, is the most important consideration. The Contractor shall maintain traffic in the manner detailed in the Construction Safety and Phasing Plan (CSPP).

a. It is understood and agreed that the Contractor shall provide for the free and unobstructed movement of aircraft in the air operations areas (AOAs) of the airport with respect to their own operations and the operations of all subcontractors as specified in Section 80, paragraph 80-04, *Limitation of Operations*. It is further understood and agreed that the Contractor shall provide for the uninterrupted operation of visual and electronic signals (including power supplies thereto) used in the guidance of aircraft while operating to, from, and upon the airport as specified in Section 70, paragraph 70-15, *Contractor's Responsibility for Utility Service and Facilities of Others*.

b. With respect to their own operations and the operations of all subcontractors, the Contractor shall provide marking, lighting, and other acceptable means of identifying personnel, equipment, vehicles, storage areas, and any work area or condition that may be hazardous to the operation of aircraft, fire-rescue equipment, or maintenance vehicles at the airport in accordance with the construction safety and phasing plan (CSPP) and the safety plan compliance document (SPCD).

c. When the contract requires the maintenance of an existing road, street, or highway during the Contractor's performance of work that is otherwise provided for in the contract, plans, and specifications, the Contractor shall keep the road, street, or highway open to all traffic and shall provide maintenance as may be required to accommodate traffic. The Contractor, at their expense, shall be responsible for the repair to equal or better than preconstruction conditions of any damage caused by the Contractor's equipment and personnel. The Contractor shall furnish, erect, and maintain barricades, warning signs, flag person, and other traffic control devices in reasonable conformity with the Manual on Uniform Traffic Control Devices (MUTCD) (http://mutcd.fhwa.dot.gov/), unless otherwise specified. The Contractor shall also construct and maintain in a safe condition any temporary connections necessary for ingress to and egress from abutting property or intersecting roads, streets or highways. Unless otherwise specified herein, the Contractor will not be required to furnish snow removal for such existing road, street, or highway.

40-06 Removal of existing structures. All existing structures encountered within the established lines, grades, or grading sections shall be removed by the Contractor, unless such existing structures are otherwise specified to be relocated, adjusted up or down, salvaged, abandoned in place, reused in the work or to remain in place. The cost of removing such existing structures shall not be measured or paid for directly, but shall be included in the various contract items.

Should the Contractor encounter an existing structure (above or below ground) in the work for which the disposition is not indicated on the plans, the Resident Project Representative (RPR) shall be notified prior to disturbing such structure. The disposition of existing structures so encountered shall be immediately determined by the RPR in accordance with the provisions of the contract.

Except as provided in Section 40, paragraph 40-07, *Rights in and Use of Materials Found in the Work*, it is intended that all existing materials or structures that may be encountered (within the lines, grades, or

grading sections established for completion of the work) shall be used in the work as otherwise provided for in the contract and shall remain the property of the Owner when so used in the work.

40-07 Rights in and use of materials found in the work. Should the Contractor encounter any material such as (but not restricted to) sand, stone, gravel, slag, or concrete slabs within the established lines, grades, or grading sections, the use of which is intended by the terms of the contract to be embankment, the Contractor may at their own option either:

a. Use such material in another contract item, providing such use is approved by the RPR and is in conformance with the contract specifications applicable to such use; or,

b. Remove such material from the site, upon written approval of the RPR; or

c. Use such material for the Contractor's own temporary construction on site; or,

d. Use such material as intended by the terms of the contract.

Should the Contractor wish to exercise option a., b., or c., the Contractor shall request the RPR's approval in advance of such use.

Should the RPR approve the Contractor's request to exercise option a., b., or c., the Contractor shall be paid for the excavation or removal of such material at the applicable contract price. The Contractor shall replace, at their expense, such removed or excavated material with an agreed equal volume of material that is acceptable for use in constructing embankment, backfills, or otherwise to the extent that such replacement material is needed to complete the contract work. The Contractor shall not be charged for use of such material used in the work or removed from the site.

Should the RPR approve the Contractor's exercise of option a., the Contractor shall be paid, at the applicable contract price, for furnishing and installing such material in accordance with requirements of the contract item in which the material is used.

It is understood and agreed that the Contractor shall make no claim for delays by reason of their own exercise of option a., b., or c.

The Contractor shall not excavate, remove, or otherwise disturb any material, structure, or part of a structure which is located outside the lines, grades, or grading sections established for the work, except where such excavation or removal is provided for in the contract, plans, or specifications.

40-08 Final cleanup. Upon completion of the work and before acceptance and final payment will be made, the Contractor shall remove from the site all machinery, equipment, surplus and discarded materials, rubbish, temporary structures, and stumps or portions of trees. The Contractor shall cut all brush and woods within the limits indicated and shall leave the site in a neat and presentable condition. Material cleared from the site and deposited on adjacent property will not be considered as having been disposed of satisfactorily, unless the Contractor has obtained the written permission of the property Owner.

END OF SECTION 40

Section 50 Control of Work

50-01 Authority of the Resident Project Representative (RPR). The RPR has final authority regarding the interpretation of project specification requirements. The RPR shall determine acceptability of the quality of materials furnished, method of performance of work performed, and the manner and rate of performance of the work. The RPR does not have the authority to accept work that does not conform to specification requirements.

50-02 Conformity with plans and specifications. All work and all materials furnished shall be in reasonably close conformity with the lines, grades, grading sections, cross-sections, dimensions, material requirements, and testing requirements that are specified (including specified tolerances) in the contract, plans, or specifications.

If the RPR finds the materials furnished, work performed, or the finished product not within reasonably close conformity with the plans and specifications, but that the portion of the work affected will, in their opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, the RPR will advise the Owner of their determination that the affected work be accepted and remain in place. The RPR will document the determination and recommend to the Owner a basis of acceptance that will provide for an adjustment in the contract price for the affected portion of the work. Changes in the contract price must be covered by contract change order or supplemental agreement as applicable.

If the RPR finds the materials furnished, work performed, or the finished product are not in reasonably close conformity with the plans and specifications and have resulted in an unacceptable finished product, the affected work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor in accordance with the RPR's written orders.

The term "reasonably close conformity" shall not be construed as waiving the Contractor's responsibility to complete the work in accordance with the contract, plans, and specifications. The term shall not be construed as waiving the RPR's responsibility to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's execution of the work, when, in the RPR's opinion, such compliance is essential to provide an acceptable finished portion of the work.

The term "reasonably close conformity" is also intended to provide the RPR with the authority, after consultation with the Sponsor and FAA, to use sound engineering judgment in their determinations to accept work that is not in strict conformity, but will provide a finished product equal to or better than that required by the requirements of the contract, plans and specifications.

The RPR will not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction or the safety precautions incident thereto.

50-03 Coordination of contract, plans, and specifications. The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. If electronic files are provided and used on the project and there is a conflict between the electronic files and hard copy plans, the hard copy plans shall govern. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions will govern over scaled dimensions; contract technical specifications shall govern over contract general provisions, plans, cited standards for materials or testing, and cited advisory circulars (ACs); contract general provisions shall govern over plans, cited standards for materials or testing, and cited ACs; plans shall govern over cited standards for materials or testing and cited ACs. If

any paragraphs contained in the Special Provisions conflict with General Provisions or Technical Specifications, the Special Provisions shall govern.

From time to time, discrepancies within cited testing standards occur due to the timing of the change, edits, and/or replacement of the standards. If the Contractor discovers any apparent discrepancy within standard test methods, the Contractor shall immediately ask the RPR for an interpretation and decision, and such decision shall be final.

The Contractor shall not take advantage of any apparent error or omission on the plans or specifications. In the event the Contractor discovers any apparent error or discrepancy, Contractor shall immediately notify the Owner or the designated representative in writing requesting their written interpretation and decision.

50-04 List of Special Provisions. Refer to Division 01 Specifications.

50-05 Cooperation of Contractor. The Contractor shall be supplied with an electronic PDF of the plans and specifications. The Contractor shall have available on the construction site at all times one hardcopy each of the plans and specifications. Additional hard copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.

The Contractor shall give constant attention to the work to facilitate the progress thereof, and shall cooperate with the RPR and their inspectors and with other Contractors in every way possible. The Contractor shall have a competent superintendent on the work at all times who is fully authorized as their agent on the work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the RPR or their authorized representative.

50-06 Cooperation between Contractors. The Owner reserves the right to contract for and perform other or additional work on or near the work covered by this contract.

When separate contracts are let within the limits of any one project, each Contractor shall conduct the work not to interfere with or hinder the progress of completion of the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other as directed.

Each Contractor involved shall assume all liability, financial or otherwise, in connection with their own contract and shall protect and hold harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced because of the presence and operations of other Contractors working within the limits of the same project.

The Contractor shall arrange their work and shall place and dispose of the materials being used to not interfere with the operations of the other Contractors within the limits of the same project. The Contractor shall join their work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

50-07 Construction layout and stakes. The Engineer/RPR shall establish necessary horizontal and vertical control. The establishment of Survey Control and/or reestablishment of survey control shall be by a State Licensed Land Surveyor. Contractor is responsible for preserving integrity of horizontal and vertical controls established by Engineer/RPR. In case of negligence on the part of the Contractor or their employees, resulting in the destruction of any horizontal and vertical control, the resulting costs will be deducted as a liquidated damage against the Contractor.

Prior to the start of construction, the Contractor will check all control points for horizontal and vertical accuracy and certify in writing to the RPR that the Contractor concurs with survey control established for the project. All lines, grades and measurements from control points necessary for the proper execution and control of the work on this project will be provided to the RPR. The Contractor is responsible to establish all layout required for the construction of the project.

Copies of survey notes will be provided to the RPR for each area of construction and for each placement of material as specified to allow the RPR to make periodic checks for conformance with plan grades, alignments and grade tolerances required by the applicable material specifications. Surveys will be provided to the RPR prior to commencing work items that cover or disturb the survey staking. Survey(s) and notes shall be provided in the following format(s): Revit (RVT format), AutoCAD (DWG format) and/or Microsoft Word (DOC format).

Laser, GPS, String line, or other automatic control shall be checked with temporary control as necessary. In the case of error, on the part of the Contractor, their surveyor, employees or subcontractors, resulting in established grades, alignment or grade tolerances that do not concur with those specified or shown on the plans, the Contractor is solely responsible for correction, removal, replacement and all associated costs at no additional cost to the Owner. No direct payment will be made, unless otherwise specified in contract documents, for this labor, materials, or other expenses. The cost shall be included in the price of the bid for the various items of the Contract.

50-08 Authority and duties of Quality Assurance (QA) inspectors. QA inspectors shall be authorized to inspect all work done and all material furnished. Such QA inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. QA inspectors are not authorized to revoke, alter, or waive any provision of the contract. QA inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

QA Inspectors are authorized to notify the Contractor or their representatives of any failure of the work or materials to conform to the requirements of the contract, plans, or specifications and to reject such nonconforming materials in question until such issues can be referred to the RPR for a decision.

50-09 Inspection of the work. All materials and each part or detail of the work shall be subject to inspection. The RPR shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

If the RPR requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be at the Contractor's expense.

Provide advance written notice to the RPR of work the Contractor plans to perform each week and each day. Any work done or materials used without written notice and allowing opportunity for inspection by the RPR may be ordered removed and replaced at the Contractor's expense.

Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the (contract) Owner, authorized representatives of the Owners of such facilities shall have the right to inspect such work. Such inspection shall in no sense make any facility owner a party to the contract, and shall in no way interfere with the rights of the parties to this contract.

50-10 Removal of unacceptable and unauthorized work. All work that does not conform to the requirements of the contract, plans, and specifications will be considered unacceptable, unless otherwise determined acceptable by the RPR as provided in paragraph 50-02, *Conformity with Plans and Specifications*.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner in accordance with the provisions of Section 70, paragraph 70-14, *Contractor's Responsibility for Work*.

No removal work made under provision of this paragraph shall be done without lines and grades having been established by the RPR. Work done contrary to the instructions of the RPR, work done beyond the lines shown on the plans or as established by the RPR, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply with any order of the RPR made under the provisions of this subsection, the RPR will have authority to cause unacceptable work to be remedied or removed and replaced; and unauthorized work to be removed and recover the resulting costs as a liquidated damage against the Contractor.

50-11 Load restrictions. The Contractor shall comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the work. A special permit will not relieve the Contractor of liability for damage that may result from the moving of material or equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures or to any other type of construction will not be permitted. Hauling of materials over the base course or surface course under construction shall be limited as directed. No loads will be permitted on a concrete pavement, base, or structure before the expiration of the curing period. The Contractor, at their own expense, shall be responsible for the repair to equal or better than preconstruction conditions of any damage caused by the Contractor's equipment and personnel. **50-12 Maintenance during construction**. The Contractor shall maintain the work during construction and until the work is accepted. Maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces so that the work is maintained in satisfactory condition at all times.

In the case of a contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

All costs of maintenance work during construction and before the project is accepted shall be included in the unit prices bid on the various contract items, and the Contractor will not be paid an additional amount for such work.

50-13 Failure to maintain the work. Should the Contractor at any time fail to maintain the work as provided in paragraph 50-12, *Maintenance during Construction*, the RPR shall immediately notify the Contractor of such noncompliance. Such notification shall specify a reasonable time within which the Contractor shall be required to remedy such unsatisfactory maintenance condition. The time specified will give due consideration to the exigency that exists.

Should the Contractor fail to respond to the RPR's notification, the Owner may suspend any work necessary for the Owner to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the Owner, shall be recovered as a liquidated damage against the Contractor.

50-14 Partial acceptance. If at any time during the execution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, the Contractor may request the RPR to make final inspection of that unit. If the RPR finds upon inspection that the unit has been satisfactorily completed in compliance with the contract, the RPR may accept it as being complete, and the Contractor may be relieved of further responsibility for that unit. Such partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the contract.

50-15 Final acceptance. Upon due notice from the Contractor of presumptive completion of the entire project, the RPR and Owner will make an inspection. If all construction provided for and contemplated by the contract is found to be complete in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The RPR shall notify the Contractor in writing of final acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the RPR will notify the Contractor and the Contractor shall correct the unsatisfactory work. Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the RPR will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

50-16 Claims for adjustment and disputes. If for any reason the Contractor deems that additional compensation is due for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, the Contractor shall notify the RPR in writing of their intention to claim such additional compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given or the RPR is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the RPR has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 10 calendar days, submit a written claim to the RPR who will present it to the Owner for consideration in accordance with local laws or ordinances.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

50-17 Value Engineering Cost Proposal. This section not applicable to this project.

END OF SECTION 50

Section 60 Control of Materials

60-01 Source of supply and quality requirements. The materials used in the work shall conform to the requirements of the contract, plans, and specifications. Unless otherwise specified, such materials that are manufactured or processed shall be new (as compared to used or reprocessed).

In order to expedite the inspection and testing of materials, the Contractor shall furnish documentation to the RPR as to the origin, composition, and manufacture of all materials to be used in the work. Documentation shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.

At the RPR's option, materials may be approved at the source of supply before delivery. If it is found after trial that sources of supply for previously approved materials do not produce specified products, the Contractor shall furnish materials from other sources.

The Contractor shall furnish airport lighting equipment that meets the requirements of the specifications; and is listed in AC 150/5345-53, *Airport Lighting Equipment Certification Program* and *Addendum*, that is in effect on the date of advertisement.

60-02 Samples, tests, and cited specifications. All materials used in the work shall be inspected, tested, and approved by the RPR before incorporation in the work unless otherwise designated. Any work in which untested materials are used without approval or written permission of the RPR shall be performed at the Contractor's risk. Materials found to be unacceptable and unauthorized will not be paid for and, if directed by the RPR, shall be removed at the Contractor's expense.

Unless otherwise designated, quality assurance tests will be made by and at the expense of the Owner in accordance with the cited standard methods of ASTM, American Association of State Highway and Transportation Officials (AASHTO), federal specifications, Commercial Item Descriptions, and all other cited methods, which are current on the date of advertisement for bids.

The testing organizations performing on-site quality assurance field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel. Unless otherwise designated, samples for quality assurance will be taken by a qualified representative of the RPR. All materials being used are subject to inspection, test, or rejection at any time prior to or during incorporation into the work. Copies of all tests will be furnished to the Contractor's representative at their request after review and approval of the RPR.

A copy of all Contractor QC test data shall be provided to the RPR daily, along with printed reports, in an approved format, on a weekly basis. After completion of the project, and prior to final payment, the Contractor shall submit a final report to the RPR showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests. The Contractor may submit reports electronically in PDF format in lieu of hard copies.

60-03 Certification of compliance/analysis (COC/COA). The RPR may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's COC stating that such materials or assemblies fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the work must be accompanied by a certificate of compliance in which the lot is clearly identified. The COA is the manufacturer's COC and includes all applicable test results.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not.

The form and distribution of certificates of compliance shall be as approved by the RPR.

When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "or equal," the Contractor shall be required to furnish the manufacturer's certificate of compliance for each lot of such material or assembly delivered to the work. Such certificate of compliance shall clearly identify each lot delivered and shall certify as to:

a. Conformance to the specified performance, testing, quality or dimensional requirements; and,

b. Suitability of the material or assembly for the use intended in the contract work.

The RPR shall be the sole judge as to whether the proposed "or equal" is suitable for use in the work.

The RPR reserves the right to refuse permission for use of materials or assemblies on the basis of certificates of compliance.

60-04 Plant inspection. The RPR or their authorized representative may inspect, at its source, any specified material or assembly to be used in the work. Manufacturing plants may be inspected from time to time for the purpose of determining compliance with specified manufacturing methods or materials to be used in the work and to obtain samples required for acceptance of the material or assembly.

Should the RPR conduct plant inspections, the following conditions shall exist:

a. The RPR shall have the cooperation and assistance of the Contractor and the producer with whom the Contractor has contracted for materials.

b. The RPR shall have full entry at all reasonable times to such parts of the plant that concern the manufacture or production of the materials being furnished.

c. If required by the RPR, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Place office or working space in a convenient location with respect to the plant.

It is understood and agreed that the Owner shall have the right to retest any material that has been tested and approved at the source of supply after it has been delivered to the site. The RPR shall have the right to reject only material which, when retested, does not meet the requirements of the contract, plans, or specifications.

60-05 Engineer/ Resident Project Representative (RPR) field office. The Contractor shall provide dedicated space for the use of the engineer, RPR, and inspectors, as a field office for the duration of the project. This space shall be located conveniently near the construction and shall be separate from any space used by the Contractor. The field office shall measure a minimum of 150 SF, the Contractor shall provide a chair, a file cabinet, and a desk. The contractor shall also furnish water, sanitary facilities, heat, air conditioning, and electricity.

60-06 Storage of materials. Materials shall be stored to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the RPR. Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free and unobstructed movement of aircraft. Unless otherwise shown on the plans and/or CSPP, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the RPR. Private property shall not be used for storage purposes without written permission of the Owner or lessee of such property. The Contractor shall make all arrangements and bear all expenses for

the storage of materials on private property. Upon request, the Contractor shall furnish the RPR a copy of the property Owner's permission.

All storage sites on private or airport property shall be restored to their original condition by the Contractor at their expense, except as otherwise agreed to (in writing) by the Owner or lessee of the property.

60-07 Unacceptable materials. Any material or assembly that does not conform to the requirements of the contract, plans, or specifications shall be considered unacceptable and shall be rejected. The Contractor shall remove any rejected material or assembly from the site of the work, unless otherwise instructed by the RPR.

Rejected material or assembly, the defects of which have been corrected by the Contractor, shall not be returned to the site of the work until such time as the RPR has approved its use in the work.

60-08 Owner furnished materials. The Contractor shall furnish all materials required to complete the work, except those specified, if any, to be furnished by the Owner. Owner-furnished materials shall be made available to the Contractor at the location specified.

All costs of handling, transportation from the specified location to the site of work, storage, and installing Owner-furnished materials shall be included in the unit price bid for the contract item in which such Owner-furnished material is used.

After any Owner-furnished material has been delivered to the location specified, the Contractor shall be responsible for any demurrage, damage, loss, or other deficiencies that may occur during the Contractor's handling, storage, or use of such Owner-furnished material. The Owner will deduct from any monies due or to become due the Contractor any cost incurred by the Owner in making good such loss due to the Contractor's handling, storage, or use of Owner-furnished materials.

END OF SECTION 60

Section 70 Legal Regulations and Responsibility to Public

70-01 Laws to be observed. The Contractor shall keep fully informed of all federal and state laws, all local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and all their officers, agents, or servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor's employees.

70-02 Permits, licenses, and taxes. The Contractor shall procure all permits and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful execution of the work.

70-03 Patented devices, materials, and processes. If the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the Contractor shall provide for such use by suitable legal agreement with the Patentee or Owner. The Contractor and the surety shall indemnify and hold harmless the Owner, any third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the execution or after the completion of the work.

70-04 Restoration of surfaces disturbed by others. The Owner reserves the right to authorize the construction, reconstruction, or maintenance of any public or private utility service, FAA or National Oceanic and Atmospheric Administration (NOAA) facility, or a utility service of another government agency at any time during the progress of the work. To the extent that such construction, reconstruction, or maintenance has been coordinated with the Owner, such authorized work (by others) must be shown on the plans and is indicated as follows:

- Relocation of NOAA Emergency Back Up Generator:
  - Owner: NOAAA
  - Location: See plan Sheet No.
  - Contact:

Except as listed above, the Contractor shall not permit any individual, firm, or corporation to excavate or otherwise disturb such utility services or facilities located within the limits of the work without the written permission of the RPR.

Should the Owner of public or private utility service, FAA, or NOAA facility, or a utility service of another government agency be authorized to construct, reconstruct, or maintain such utility service or facility during the progress of the work, the Contractor shall cooperate with such Owners by arranging and performing the work in this contract to facilitate such construction, reconstruction or maintenance by others whether or not such work by others is listed above. When ordered as extra work by the RPR, the Contractor shall make all necessary repairs to the work which are due to such authorized work by others, unless otherwise provided for in the contract, plans, or specifications. It is understood and agreed that the

Contractor shall not be entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.

70-05 Federal Participation. The United States Government has agreed to reimburse the Owner for some portion of the contract costs. The contract work is subject to the inspection and approval of duly authorized representatives of the FAA Administrator. No requirement of this contract shall be construed as making the United States a party to the contract nor will any such requirement interfere, in any way, with the rights of either party to the contract.

70-06 Sanitary, health, and safety provisions. The Contractor's worksite and facilities shall comply with applicable federal, state, and local requirements for health, safety and sanitary provisions.

70-07 Public convenience and safety. The Contractor shall control their operations and those of their subcontractors and all suppliers, to assure the least inconvenience to the traveling public. Under all circumstances, safety shall be the most important consideration.

The Contractor shall maintain the free and unobstructed movement of aircraft and vehicular traffic with respect to their own operations and those of their own subcontractors and all suppliers in accordance with Section 40, paragraph 40-05, *Maintenance of Traffic*, and shall limit such operations for the convenience and safety of the traveling public as specified in Section 80, paragraph 80-04, *Limitation of Operations*.

The Contractor shall remove or control debris and rubbish resulting from its work operations at frequent intervals, and upon the order of the RPR. If the RPR determines the existence of Contractor debris in the work site represents a hazard to airport operations and the Contractor is unable to respond in a prompt and reasonable manner, the RPR reserves the right to assign the task of debris removal to a third party and recover the resulting costs as a liquidated damage against the Contractor.

70-08 Construction Safety and Phasing Plan (CSPP). The Contractor shall complete the work in accordance with the approved Construction Safety and Phasing Plan (CSPP) developed in accordance with AC 150/5370-2, Operational Safety on Airports During Construction. The CSPP is will be prepared following award of Contract.

70-09 Use of explosives. The use of explosives is not permitted on this project.

70-10 Protection and restoration of property and landscape. The Contractor shall be responsible for the preservation of all public and private property, and shall protect carefully from disturbance or damage all land monuments and property markers until the Engineer/RPR has witnessed or otherwise referenced their location and shall not move them until directed.

The Contractor shall be responsible for all damage or injury to property of any character, during the execution of the work, resulting from any act, omission, neglect, or misconduct in manner or method of executing the work, or at any time due to defective work or materials, and said responsibility shall not be released until the project has been completed and accepted.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the non-execution thereof by the Contractor, the Contractor shall restore, at their expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.

70-11 Responsibility for damage claims. The Contractor shall indemnify and hold harmless the Engineer/RPR and the Owner and their officers, agents, and employees from all suits, actions, or claims, of any character, brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or

because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act," or any other law, ordinance, order, or decree. Money due the Contractor under and by virtue of their own contract considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, their own surety may be held until such suits, actions, or claims for injuries or damages shall have been settled and suitable evidence to that effect furnished to the Owner, except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he or she is adequately protected by public liability and property damage insurance.

70-12 Third party beneficiary clause. It is specifically agreed between the parties executing the contract that it is not intended by any of the provisions of any part of the contract to create for the public or any member thereof, a third-party beneficiary or to authorize anyone not a party to the contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the contract.

70-13 Opening sections of the work to traffic. If it is necessary for the Contractor to complete portions of the contract work for the beneficial occupancy of the Owner prior to completion of the entire contract, such "phasing" of the work must be specified below and indicated on the approved Construction Safety and Phasing Plan (CSPP) and the project plans. When so specified, the Contractor shall complete such portions of the work on or before the date specified or as otherwise specified.

Upon completion of any portion of work listed above, such portion shall be accepted by the Owner in accordance with Section 50, paragraph 50-14, *Partial Acceptance*.

No portion of the work may be opened by the Contractor until directed by the Owner in writing. Should it become necessary to open a portion of the work to traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the RPR, such portion of the work is in an acceptable condition to support the intended traffic. Temporary or intermittent openings are considered to be inherent in the work and shall not constitute either acceptance of the portion of the work so opened or a waiver of any provision of the contract. Any damage to the portion of the work so opened that is not attributable to traffic which is permitted by the Owner shall be repaired by the Contractor at their expense.

The Contractor shall make their own estimate of the inherent difficulties involved in completing the work under the conditions herein described and shall not claim any added compensation by reason of delay or increased cost due to opening a portion of the contract work.

The Contractor must conform to safety standards contained AC 150/5370-2 and the approved CSPP.

Contractor shall refer to the plans, specifications, and the approved CSPP to identify barricade requirements, temporary and/or permanent markings, airfield lighting, guidance signs and other safety requirements prior to opening up sections of work to traffic.

70-14 Contractor's responsibility for work. Until the RPR's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with Section 50, paragraph 50-14, *Partial Acceptance*, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part due to the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God such as earthquake, tidal wave, tornado, hurricane or other cataclysmic phenomenon of nature, or acts of the public enemy or of government authorities.

If the work is suspended for any cause whatever, the Contractor shall be responsible for the work and shall take such precautions necessary to prevent damage to the work. The Contractor shall provide for

normal drainage and shall erect necessary temporary structures, signs, or other facilities at their own expense. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established planting, seeding, and sodding furnished under the contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

70-15 Contractor's responsibility for utility service and facilities of others. As provided in paragraph 70-04, *Restoration of Surfaces Disturbed by Others*, the Contractor shall cooperate with the owner of any public or private utility service, FAA or NOAA, or a utility service of another government agency that may be authorized by the Owner to construct, reconstruct or maintain such utility services or facilities during the progress of the work. In addition, the Contractor shall control their operations to prevent the unscheduled interruption of such utility services and facilities.

To the extent that such public or private utility services, FAA, or NOAA facilities, or utility services of another governmental agency are known to exist within the limits of the contract work, the approximate locations have been indicated on the plans and/or in the contract documents.

Refer to Division 01 of the Specifications for a list of known contact information for utilities within or adjacent to the work area(s).

It is understood and agreed that the Owner does not guarantee the accuracy or the completeness of the location information relating to existing utility services, facilities, or structures that may be shown on the plans or encountered in the work. Any inaccuracy or omission in such information shall not relieve the Contractor of the responsibility to protect such existing features from damage or unscheduled interruption of service.

It is further understood and agreed that the Contractor shall, upon execution of the contract, notify the Owners of all utility services or other facilities of their plan of operations. Such notification shall be in writing addressed to "The Person to Contact" as provided in this paragraph and paragraph 70-04, *Restoration of Surfaces Disturbed By Others*. A copy of each notification shall be given to the RPR.

In addition to the general written notification provided, it shall be the responsibility of the Contractor to keep such individual Owners advised of changes in their plan of operations that would affect such Owners.

Prior to beginning the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such Owner of their plan of operation. If, in the Contractor's opinion, the Owner's assistance is needed to locate the utility service or facility or the presence of a representative of the Owner is desirable to observe the work, such advice should be included in the notification. Such notification shall be given by the most expeditious means to reach the utility owner's "Person to Contact" no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the RPR.

The Contractor's failure to give the two days' notice shall be cause for the Owner to suspend the Contractor's operations in the general vicinity of a utility service or facility.

Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use hand excavation methods within 3 feet (1 m) of such outside limits at such points as may be required to ensure protection from damage due to the Contractor's operations.

Should the Contractor damage or interrupt the operation of a utility service or facility by accident or otherwise, the Contractor shall immediately notify the proper authority and the RPR and shall take all reasonable measures to prevent further damage or interruption of service. The Contractor, in such events, shall cooperate with the utility service or facility owner and the RPR continuously until such damage has been repaired and service restored to the satisfaction of the utility or facility owner.

The Contractor shall bear all costs of damage and restoration of service to any utility service or facility due to their operations whether due to negligence or accident. The Owner reserves the right to deduct such costs from any monies due or which may become due the Contractor, or their own surety.**70-15.1 FAA facilities and cable runs**. The Contractor is hereby advised that the construction limits of the project include existing facilities and buried cable runs that are owned, operated and maintained by the FAA. The Contractor, during the execution of the project work, shall comply with the following:

a. The Contractor shall permit FAA maintenance personnel the right of access to the project work site for purposes of inspecting and maintaining all existing FAA owned facilities.

b. The Contractor shall provide notice to the FAA Air Traffic Organization (ATO)/Technical Operations/System Support Center (SSC) Point-of-Contact through the airport Owner a minimum of seven (7) calendar days prior to commencement of construction activities in order to permit sufficient time to locate and mark existing buried cables and to schedule any required facility outages.

c. If execution of the project work requires a facility outage, the Contractor shall contact the FAA Point-of-Contact a minimum of 72 hours prior to the time of the required outage.

d. Any damage to FAA cables, access roads, or FAA facilities during construction caused by the Contractor's equipment or personnel whether by negligence or accident will require the Contractor to repair or replace the damaged cables, access road, or FAA facilities to FAA requirements. The Contractor shall not bear the cost to repair damage to underground facilities or utilities improperly located by the FAA.

e. If the project work requires the cutting or splicing of FAA owned cables, the FAA Point-of-Contact shall be contacted a minimum of 72 hours prior to the time the cable work commences. The FAA reserves the right to have a FAA representative on site to observe the splicing of the cables as a condition of acceptance. All cable splices are to be accomplished in accordance with FAA specifications and require approval by the FAA Point-of-Contact as a condition of acceptance by the Owner. The Contractor is hereby advised that FAA restricts the location of where splices may be installed. If a cable splice is required in a location that is not permitted by FAA, the Contractor shall furnish and install a sufficient length of new cable that eliminates the need for any splice.

70-16 Furnishing rights-of-way. The Owner will be responsible for furnishing all rights-of-way upon which the work is to be constructed in advance of the Contractor's operations.

70-17 Personal liability of public officials. In carrying out any of the contract provisions or in exercising any power or authority granted by this contract, there shall be no liability upon the Engineer, RPR, their authorized representatives, or any officials of the Owner either personally or as an official of the Owner. It is understood that in such matters they act solely as agents and representatives of the Owner.

70-18 No waiver of legal rights. Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of final acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or stopped from recovering from the Contractor or their surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill their obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty.

70-19 Environmental protection. The Contractor shall comply with all federal, state, and local laws and regulations controlling pollution of the environment. The Contractor shall take necessary precautions to

prevent pollution of streams, lakes, ponds, and reservoirs with fuels, oils, asphalts, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

Refer to Division 01 of the Specifications.

70-20 Archaeological and historical findings. Unless otherwise specified in this subsection, the Contractor is advised that the site of the work is not within any property, district, or site, and does not contain any building, structure, or object listed in the current National Register of Historic Places published by the United States Department of Interior.

Should the Contractor encounter, during their operations, any building, part of a building, structure, or object that is incongruous with its surroundings, the Contractor shall immediately cease operations in that location and notify the RPR. The RPR will immediately investigate the Contractor's finding and the Owner will direct the Contractor to either resume operations or to suspend operations as directed.

Should the Owner order suspension of the Contractor's operations in order to protect an archaeological or historical finding, or order the Contractor to perform extra work, such shall be covered by an appropriate contract change order or supplemental agreement as provided in Section 40, paragraph 40-04, *Extra Work,* and Section 90, paragraph 90-05, *Payment for Extra Work*. If appropriate, the contract change order or supplemental agreement shall include an extension of contract time in accordance with Section 80, paragraph 80-07, *Determination and Extension of Contract Time*.

70-21 Insurance Requirements. Refer to Division 01 of the Specifications.

END OF SECTION 70

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Section 80 Execution and Progress

80-01 Subletting of contract. The Owner will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented either in person, by a qualified superintendent, or by other designated, qualified representative who is duly authorized to receive and execute orders of the Resident Project Representative (RPR).

The Contractor shall perform, with his organization, an amount of work equal to at least **5** percent of the total contract cost.

Should the Contractor elect to assign their contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner.

The Contractor shall provide copies of all subcontracts to the RPR 14 days prior to being utilized on the project. As a minimum, the information shall include the following:

- Subcontractor's legal company name.
- Subcontractor's legal company address, including County name.
- Principal contact person's name, telephone and fax number.
- Complete narrative description, and dollar value of the work to be performed by the subcontractor.
- Copies of required insurance certificates in accordance with the specifications.
- Minority/ non-minority status.

80-02 Notice to proceed (NTP). The Owners notice to proceed will state the date on which contract time commences. The Contractor is expected to commence project operations within 10 days of the NTP date. The Contractor shall notify the RPR at least 1 week in advance of the time contract operations begins. The Contractor shall not commence any actual operations prior to the date on which the notice to proceed is issued by the Owner.

80-03 Execution and progress. Unless otherwise specified, the Contractor shall submit their coordinated construction schedule showing all work activities for the RPR's review and acceptance at least 10 days prior to the start of work. The Contractor's progress schedule, once accepted by the RPR, will represent the Contractor's baseline plan to accomplish the project in accordance with the terms and conditions of the Contract. The RPR will compare actual Contractor progress against the baseline schedule to determine that status of the Contractor's performance. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the RPR's request, submit a revised schedule for completion of the work within the contract time and modify their operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the execution of the work be discontinued for any reason, the Contractor shall notify the RPR at least 24 hours in advance of resuming operations.

The Contractor shall not commence any actual construction prior to the date on which the NTP is issued by the Owner.

Refer to Division 01 of the Specifications for scheduling requirements. The Contractor shall maintain the work schedule and provide an update and analysis of the progress schedule on a twice monthly basis, or as otherwise specified in the contract. Submission of the work schedule shall not relieve the Contractor of overall responsibility for scheduling, sequencing, and coordinating all work to comply with the requirements of the contract.

80-04 Limitation of operations. The Contractor shall control their operations and the operations of their subcontractors and all suppliers to provide for the free and unobstructed movement of aircraft in the air operations areas (AOA) of the airport.

When the work requires the Contractor to conduct their operations within an AOA of the airport, the work shall be coordinated with airport operations (through the RPR) at least **1 week** prior to commencement of such work, unless more time is specified in the safety and phasing plans/CSPP. The Contractor shall not close an AOA until so authorized by the RPR and until the necessary temporary marking, signage and associated lighting is in place as provided in Section 70, paragraph 70-08, *Construction Safety and Phasing Plan (CSPP).*

When the contract work requires the Contractor to work within an AOA of the airport on an intermittent basis (intermittent opening and closing of the AOA), the Contractor shall maintain constant communications as specified; immediately obey all instructions to vacate the AOA; and immediately obey all instructions to resume work in such AOA. Failure to maintain the specified communications or to obey instructions shall be cause for suspension of the Contractor's operations in the AOA until satisfactory conditions are provided. The areas of the AOA identified in the Construction Safety Phasing Plan (CSPP) and as listed below, cannot be closed to operating aircraft to permit the Contractor's operations on a continuous basis and will therefore be closed to aircraft operations intermittently as follows:Refer to Draft CSPP drawings for areas of AOA to be closed.

The Contractor shall be required to conform to safety standards contained in AC 150/5370-2, Operational Safety on Airports During Construction and the approved CSPP.

80-04.1 Operational safety on airport during construction. All Contractors' operations shall be conducted in accordance with the approved project Construction Safety and Phasing Plan (CSPP) and the Safety Plan Compliance Document (SPCD) and the provisions set forth within the current version of AC 150/5370-2, Operational Safety on Airports During Construction. The CSPP included within the contract documents conveys minimum requirements for operational safety on the airport during construction activities. The Contractor shall prepare and submit a SPCD that details how it proposes to comply with the requirements presented within the CSPP.

The Contractor shall implement all necessary safety plan measures prior to commencement of any work activity. The Contractor shall conduct routine checks to assure compliance with the safety plan measures.

The Contractor is responsible to the Owner for the conduct of all subcontractors it employs on the project. The Contractor shall assure that all subcontractors are made aware of the requirements of the CSPP and SPCD and that they implement and maintain all necessary measures.

No deviation or modifications may be made to the approved CSPP and SPCD unless approved in writing by the Owner. The necessary coordination actions to review Contractor proposed modifications to an approved CSPP or approved SPCD can require a significant amount of time. **80-05 Character of workers, methods, and equipment**. The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, and specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.

Any person employed by the Contractor or by any subcontractor who violates any operational regulations or operational safety requirements and, in the opinion of the RPR, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the RPR, be removed immediately by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the RPR.

Should the Contractor fail to remove such person or persons, or fail to furnish suitable and sufficient personnel for the proper execution of the work, the RPR may suspend the work by written notice until compliance with such orders.

All equipment that is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the work shall not cause injury to previously completed work, adjacent property, or existing airport facilities due to its use.

When the methods and equipment to be used by the Contractor in accomplishing the work are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the work in conformity with the requirements of the contract, plans, and specifications.

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless otherwise authorized by the RPR. If the Contractor desires to use a method or type of equipment other than specified in the contract, the Contractor may request authority from the RPR to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the RPR determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of specified quality, or take such other corrective action as the RPR may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this paragraph.

80-06 Temporary suspension of the work. The Owner shall have the authority to suspend the work wholly, or in part, for such period or periods the Owner may deem necessary, due to unsuitable weather, or other conditions considered unfavorable for the execution of the work, or for such time necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Owner, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the written order to suspend work to the effective date of the written order to resume the work. Claims for such compensation shall be filed with the RPR within the time period stated in the RPR's order to resume work. The Contractor shall submit with their own claim information substantiating the amount shown on the claim. The RPR will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather or for any other delay provided for in the contract, plans, or specifications.

If it becomes necessary to suspend work for an indefinite period, the Contractor shall store all materials in such manner that they will not become an obstruction nor become damaged in any way. The Contractor shall take every precaution to prevent damage or deterioration of the work performed and provide for normal drainage of the work. The Contractor shall erect temporary structures where necessary to provide for traffic on, to, or from the airport.

80-07 Determination and extension of contract time. The number of calendar days shall be stated in the proposal and contract and shall be known as the Contract Time.

If the contract time requires extension for reasons beyond the Contractor's control, it shall be adjusted as follows:

80-07.1 Contract time based on calendar days. Contract Time based on calendar days shall consist of the number of calendar days stated in the contract counting from the effective date of the Notice to Proceed and including all Saturdays, Sundays, holidays, and non-work days. All calendar days elapsing between the effective dates of the Owner's orders to suspend and resume all work, due to causes not the fault of the Contractor, shall be excluded.

At the time of final payment, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in the contract time shall not consider either cost of work or the extension of contract time that has been covered by a change order or supplemental agreement. Charges against the contract time will cease as of the date of final acceptance.

80-08 Failure to complete on time. For each calendar day or working day, as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in paragraph 80-07, *Determination and Extension of Contract Time*) the sum specified in the contract and proposal as liquidated damages (LD) will be deducted from any money due or to become due the Contractor or their own surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in their contract.

Schedule	Liquidated Damages Cost	Allowed Construction Time
Pre-Construction Services	$0/day	231 Days
Building, Site and Utility, Construction	$2,500.00/day	570 Days

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The Engineer should list the liquidated damages cost and allowed construction time in the proposal form or other appropriate contract document to clarify when more than one schedule of work is bid, or in the event all schedules bid cannot be awarded. If LD's are listed elsewhere in the contract, provide the cross-reference link.

The amount of the liquidated damages should not be unreasonable, excessive, or punitive. Liquidated damages must reflect a reasonable estimate of the actual costs

which will be incurred by the Owner and users of the airport and must not be punitive. An excessive value for liquidated damages may not be enforceable.

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The maximum construction time allowed for all Schedules will be the sum of the time allowed for individual schedules but not more than 570 days. Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a wavier on the part of the Owner of any of its rights under the contract.

80-09 Default and termination of contract. The Contractor shall be considered in default of their contract and such default will be considered as cause for the Owner to terminate the contract for any of the following reasons, if the Contractor:

a. Fails to begin the work under the contract within the time specified in the Notice to Proceed, or

b. Fails to perform the work or fails to provide sufficient workers, equipment and/or materials to assure completion of work in accordance with the terms of the contract, or

c. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or

d. Discontinues the execution of the work, or

e. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or

f. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or

g. Allows any final judgment to stand against the Contractor unsatisfied for a period of 10 days, or

h. Makes an assignment for the benefit of creditors, or

i. For any other cause whatsoever, fails to carry on the work in an acceptable manner.

Should the Owner consider the Contractor in default of the contract for any reason above, the Owner shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or surety, within a period of 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the RPR of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the execution of the work out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as in the opinion of the RPR will be required for the completion of said contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

80-10 Termination for national emergencies. The Owner shall terminate the contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction contract as a direct result of an Executive Order of the President with respect to the execution of war or in the interest of national defense.

When the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits shall be considered.

Reimbursement for organization of the work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained or ordered by the Contractor for the work and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records at such points of delivery as may be designated by the RPR.

Termination of the contract or a portion thereof shall neither relieve the Contractor of their responsibilities for the completed work nor shall it relieve their surety of its obligation for and concerning any just claim arising out of the work performed.

80-11 Work area, storage area and sequence of operations. The Contractor shall obtain approval from the RPR prior to beginning any work in all areas of the airport. No operating runway, taxiway, or air operations area (AOA) shall be crossed, entered, or obstructed while it is operational. The Contractor shall plan and coordinate work in accordance with the approved CSPP and SPCD.

END OF SECTION 80

Section 90 Measurement and Payment

90-01 Measurement of quantities. All work completed under the contract will be measured by the RPR, or their authorized representatives, using United States Customary Units of Measurement.

The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave-outs) having an area of 9 square feet (0.8 square meters) or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the RPR.

Unless otherwise specified, all contract items which are measured by the linear foot such as electrical ducts, conduits, pipe culverts, underdrains, and similar items shall be measured parallel to the base or foundation upon which such items are placed.

The term "lump sum" when used as an item of payment will mean complete payment for the work described in the contract. When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

When requested by the Contractor and approved by the RPR in writing, material specified to be measured by the cubic yard (cubic meter) may be weighed, and such weights will be converted to cubic yards (cubic meters) for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the RPR and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

Measurement and Payment Terms

Term	Description
Excavation and Embankment Volume	In computing volumes of excavation, the average end area method will be used unless otherwise specified.
Measurement and Proportion by Weight	The term "ton" will mean the short ton consisting of 2,000 pounds (907 km) avoirdupois. All materials that are measured or proportioned by weights shall be weighed on accurate, independently certified scales by competent, qualified personnel at locations designated by the RPR. If material is shipped by rail, the car weight may be accepted provided that only the actual weight of material is paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the RPR directs, and each truck shall bear a plainly legible identification mark.

Term	Description
Measurement by Volume	Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable for the materials hauled, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.
Asphalt Material	Asphalt materials will be measured by the gallon (liter) or ton (kg). When measured by volume, such volumes will be measured at 60°F (16°C) or will be corrected to the volume at 60°F (16°C) using ASTM D1250 for asphalts. Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when asphalt material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work. When asphalt materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, will be used for computing quantities.
Cement	Cement will be measured by the ton (kg) or hundredweight (km).
Structure	Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.
Timber	Timber will be measured by the thousand feet board measure (MFBM) actually incorporated in the structure. Measurement will be based on nominal widths and thicknesses and the extreme length of each piece.
Plates and Sheets	The thickness of plates and galvanized sheet used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing will be specified and measured in decimal fraction of inch.
Miscellaneous Items	When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gauge, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.
Scales	Scales must be tested for accuracy and serviced before use. Scales for weighing materials which are required to be proportioned or measured and paid for by weight shall be furnished, erected, and maintained by the Contractor, or be certified permanently installed commercial scales. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end. Scales shall be accurate within 0.5% of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the RPR before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed 0.1% of the nominal rated capacity of the

Term	Description
	scale, but not less than one pound (454 grams). The use of spring balances will not be permitted. In the event inspection reveals the scales have been "overweighing" (indicating more than correct weight) they will be immediately adjusted. All materials received subsequent to the last previous correct weighting-accuracy test will be reduced by the percentage of error in excess of 0.5%. In the event inspection reveals the scales have been under-weighing (indicating less than correct weight), they shall be immediately adjusted. No additional payment to the Contractor will be allowed for materials previously weighed and recorded. Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the RPR can safely and conveniently view them. Scale installations shall have available ten standard 50-pound (2.3 km) weights for testing the weighing equipment or suitable weights and devices for other approved equipment. All costs in connection with furnishing, installing, certifying, testing, and maintaining scales; for furnishing check weights and scale house; and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit contract prices for the various items of the project.
Rental Equipment	Rental of equipment will be measured by time in hours of actual working time and necessary traveling time of the equipment within the limits of the work. Special equipment ordered in connection with extra work will be measured as agreed in the change order or supplemental agreement authorizing such work as provided in paragraph 90-05 *Payment for Extra Work*.
Pay Quantities	When the estimated quantities for a specific portion of the work are designated as the pay quantities in the contract, they shall be the final quantities for which payment for such specific portion of the work will be made, unless the dimensions of said portions of the work shown on the plans are revised by the RPR. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the authorized changes in the dimensions.

90-02 Scope of payment. The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials, for performing all work under the contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the execution thereof, subject to the provisions of Section 70, paragraph 70-18, *No Waiver of Legal Rights*.

When the "basis of payment" subsection of a technical specification requires that the contract price (price bid) include compensation for certain work or material essential to the item, this same work or material will not also be measured for payment under any other contract item which may appear elsewhere in the contract, plans, or specifications.

90-03 Compensation for altered quantities. When the accepted quantities of work vary from the quantities in the proposal, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in Section 40, paragraph 40-02, *Alteration of Work and Quantities,* will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly from such alterations or indirectly from their own unbalanced allocation of overhead and profit among the contract items, or from any other cause.

90-04 Payment for omitted items. As specified in Section 40, paragraph 40-03, *Omitted Items,* the RPR shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the RPR omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the RPR's order to omit or non-perform such contract item.

Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the RPR's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner.

In addition to the reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs incurred for the purpose of performing the omitted contract item prior to the date of the RPR's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature the amount of such costs.

90-05 Payment for extra work. Extra work, performed in accordance with Section 40, paragraph 40-04, *Extra Work,* will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work.

90-06 Partial payments. Partial payments will be made to the Contractor at least once each month as the work progresses. Said payments will be based upon estimates, prepared by the RPR, of the value of the work performed and materials complete and in place, in accordance with the contract, plans, and specifications. Such partial payments may also include the delivered actual cost of those materials stockpiled and stored in accordance with paragraph 90-07, *Payment for Materials on Hand*. No partial payment will be made when the amount due to the Contractor since the last estimate amounts to less than five hundred dollars.

a. From the total of the amount determined to be payable on a partial payment, 10 percent of such total amount will be deducted and retained by the Owner for protection of the Owner's interests. Unless otherwise instructed by the Owner, the amount retained by the Owner will be in effect until the final payment is made except as follows:

(1) Contractor may request release of retainage on work that has been partially accepted by the Owner in accordance with Section 50-14. Contractor must provide a certified invoice to the RPR that supports the value of retainage held by the Owner for partially accepted work.

(2) In lieu of retainage, the Contractor may exercise at its option the establishment of an escrow account per paragraph 90-08.

b. The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. Contractor must provide the Owner evidence of prompt and full payment

of retainage held by the prime Contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Owner. When the Owner has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.

c. When at least 95% of the work has been completed to the satisfaction of the RPR, the RPR shall, at the Owner's discretion and with the consent of the surety, prepare estimates of both the contract value and the cost of the remaining work to be done. The Owner may retain an amount not less than twice the contract value or estimated cost, whichever is greater, of the work remaining to be done. The remainder, less all previous payments and deductions, will then be certified for payment to the Contractor.

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the RPR to be a part of the final quantity for the item of work in question.

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in paragraph 90-09, *Acceptance and Final Payment*.

The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim.

90-07 Payment for materials on hand. Partial payments may be made to the extent of the delivered cost of materials to be incorporated in the work, provided that such materials meet the requirements of the contract, plans, and specifications and are delivered to acceptable sites on the airport property or at other sites in the vicinity that are acceptable to the Owner. Such delivered costs of stored or stockpiled materials may be included in the next partial payment after the following conditions are met:

a. The material has been stored or stockpiled in a manner acceptable to the RPR at or on an approved site.

b. The Contractor has furnished the RPR with acceptable evidence of the quantity and quality of such stored or stockpiled materials.

c. The Contractor has furnished the RPR with satisfactory evidence that the material and transportation costs have been paid.

d. The Contractor has furnished the Owner legal title (free of liens or encumbrances of any kind) to the material stored or stockpiled.

e. The Contractor has furnished the Owner evidence that the material stored or stockpiled is insured against loss by damage to or disappearance of such materials at any time prior to use in the work.

It is understood and agreed that the transfer of title and the Owner's payment for such stored or stockpiled materials shall in no way relieve the Contractor of their responsibility for furnishing and placing such materials in accordance with the requirements of the contract, plans, and specifications.

In no case will the amount of partial payments for materials on hand exceed the contract price for such materials or the contract price for the contract item in which the material is intended to be used.

No partial payment will be made for stored or stockpiled living or perishable plant materials.

The Contractor shall bear all costs associated with the partial payment of stored or stockpiled materials in accordance with the provisions of this paragraph.

90-08 Payment of withheld funds. At the Contractor's option, if an Owner withholds retainage in accordance with the methods described in paragraph 90-06 *Partial Payments*, the Contractor may request that the Owner deposit the retainage into an escrow account. The Owner's deposit of retainage into an escrow account is subject to the following conditions:

a. The Contractor shall bear all expenses of establishing and maintaining an escrow account and escrow agreement acceptable to the Owner.

b. The Contractor shall deposit to and maintain in such escrow only those securities or bank certificates of deposit as are acceptable to the Owner and having a value not less than the retainage that would otherwise be withheld from partial payment.

c. The Contractor shall enter into an escrow agreement satisfactory to the Owner.

d. The Contractor shall obtain the written consent of the surety to such agreement.

90-09 Acceptance and final payment. When the contract work has been accepted in accordance with the requirements of Section 50, paragraph 50-15, *Final Acceptance*, the RPR will prepare the final estimate of the items of work actually performed. The Contractor shall approve the RPR's final estimate or advise the RPR of the Contractor's objections to the final estimate which are based on disputes in measurements or computations of the final quantities to be paid under the contract as amended by change order or supplemental agreement. The Contractor and the RPR shall resolve all disputes (if any) in the measurement and computation of final quantities to be paid within 30 calendar days of the Contractor's receipt of the RPR's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the RPR's estimate under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with Section 50, paragraph 50-16, *Claims for Adjustment and Disputes*.

After the Contractor has approved, or approved under protest, the RPR's final estimate, and after the RPR's receipt of the project closeout documentation required in paragraph 90-11, *Contractor Final Project Documentation*, final payment will be processed based on the entire sum, or the undisputed sum in case of approval under protest, determined to be due the Contractor less all previous payments and all amounts to be deducted under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

If the Contractor has filed a claim for additional compensation under the provisions of Section 50, paragraph 50-16, *Claims for Adjustments and Disputes*, or under the provisions of this paragraph, such claims will be considered by the Owner in accordance with local laws or ordinances. Upon final adjudication of such claims, any additional payment determined to be due the Contractor will be paid pursuant to a supplemental final estimate.

90-10 Construction warranty.

a. In addition to any other warranties in this contract, the Contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, workmanship, or design furnished, or performed by the Contractor or any subcontractor or supplier at any tier.

b. This warranty shall continue for a period of one year from the date of final acceptance of the work, except as noted. If the Owner takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one year from the date the Owner takes possession. However, this will not relieve the Contractor from corrective items required by the final acceptance of the project work. Light Emitting Diode emitting diode (LED) light fixtures with the exception of obstruction lighting, must be warranted by the manufacturer for a minimum of four (4) years after date of installation inclusive of all electronics.

c. The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Owner real or personal property, when that damage is the result of the Contractor's failure to conform to contract requirements; or any defect of equipment, material, workmanship, or design furnished by the Contractor.

d. The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for one year from the date of repair or replacement.

e. The Owner will notify the Contractor, in writing, within 7 days after the discovery of any failure, defect, or damage.

f. If the Contractor fails to remedy any failure, defect, or damage within 14 days after receipt of notice, the Owner shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

g. With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall: (1) Obtain all warranties that would be given in normal commercial practice; (2) Require all warranties to be executed, in writing, for the benefit of the Owner, as directed by the Owner, and (3) Enforce all warranties for the benefit of the Owner.

h. This warranty shall not limit the Owner's rights with respect to latent defects, gross mistakes, or fraud.

90-11 Contractor Final Project Documentation. Approval of final payment to the Contractor is contingent upon completion and submittal of the items listed below. The final payment will not be approved until the RPR approves the Contractor's final submittal. The Contractor shall:

a. Provide two (2) copies of all manufacturers warranties specified for materials, equipment, and installations.

b. Provide weekly payroll records (not previously received) from the general Contractor and all subcontractors.

c. Complete final cleanup in accordance with Section 40, paragraph 40-08, *Final Cleanup*.

d. Complete all punch list items identified during the Final Inspection.

e. Provide complete release of all claims for labor and material arising out of the Contract.

f. Provide a certified statement signed by the subcontractors, indicating actual amounts paid to the Disadvantaged Business Enterprise (DBE) subcontractors and/or suppliers associated with the project.

g. When applicable per state requirements, return copies of sales tax completion forms.

h. Manufacturer's certifications for all items incorporated in the work.

i. All required record drawings, as-built drawings or as-constructed drawings.

j. Project Operation and Maintenance (O&M) Manual(s).

k. Security for Construction Warranty.

l. Equipment commissioning documentation submitted, if required.

m. Return or mail all SIDA badges to Airport Security

n. Provide project photographs in accordance with Division 01 Specifications.

END OF SECTION 90

DIVISION 01 SPECIFICATIONS

SECTION 011100 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY AND DESCRIPTION

A. The Work specified in this contract consists of furnishing all management, supervision, labor, materials, tools, equipment, services, testing and incidentals for the construction of the Work indicated in the contract documents including lump sum items and unit price items.

B. The Work in this Contract may affect operations at BTV. The Contractor shall bid, plan and execute the Work to minimize disruption of operations and inconvenience to the public.

C. Change Notice:

1. Refer to BTV General Contact Conditions

D. Change Directives:

1. Refer to BTV General Contact Conditions

E. Guaranteed Maximum Price (GMP): For Contracts assigned as GMP the Contractor shall follow the Special Conditions issued for the Contract.

F. Inspection Requirements:

1. Special Inspection and Testing required by the building official or the Engineer of Record in the Contract Documents or in the Statement of Special Inspections will be performed by BTV contracted Agencies.
2. Contractor shall subcontract Qualified Material Testing Agency(s) to perform all necessary Quality Control, processing control and any additional Testing required by the Contract Documents.
3. Jacobs Quality Assurance Manager may audit all material tests performed by the Contractor Quality Control at any time. Testing and Inspections for structural elements **reinforced concrete, steel, masonry caissons, fire protection,** or **precast and post tension concrete** not identified as special inspection will be performed by the Contractor Quality Control Program and Contractor Material Testing Agency and audited and confirmed by Owner or designated representative Quality Assurance Manager. BTV will perform 100% visual inspection on all weldments. BTV will perform Quality Assurance testing at a

frequency of approximately 10% of the Quality Control test and inspection frequencies. The testing frequencies by BTV may escalate to higher percentages and the Contractor will be responsible for all costs associated with failing tests of the same pay item elements. The Contractor may not hire the BTV contracted or testing agency in any capacity on this Project.

G. Owner or designated representative Quality Assurance will perform all quality assurance pull and adhesion tests on all airfield joint sealants. Contractor shall perform all quality control tests for the same items.

H. Owner or designated representative Quality Assurance is required to submit a letter indicating that all Work performed on the project complies with all applicable codes. The Contractor shall make sure that all required test frequencies and all deficiencies has been corrected to comply with all applicable codes standards and the requirements of the Contract Documents.

1.3 WORK BY OTHERS AND FUTURE WORK

A. Refer to Title 7 – Cooperation, Coordination and Rate of Progress of the General Contract Conditions

1.4 SITE CONDITIONS

A. Refer to Title 14 – Site Conditions of the General Contract Conditions

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 CONTRACTOR'S DUTIES

A. Refer to Title 3 – Contractor Performance and Services of the General Contract Conditions

B. Execute the Work as specified and in a timely manner. Section 013210, Schedules has specific information related to project scheduling and execution. Submit a workplan and schedule of Work that will be performed at times other than during the eight-hour working day of Monday through Friday, daylight hours. Submit the initial workplan and schedule within 30 days after Notice to Proceed. Submit any updates to this workplan and schedule five (5) working days prior to the beginning of Work at non-normal hours to the Owner’s Representative Project Manager for review and acceptance. Approval to work at night may be obtained after Contractor presents a written program outlining special precautions to be taken to control the extraordinary hazards presented by night work. That program shall include, but not limited to, supplementary lighting of work areas, availability of medical facilities, security precautions, and noise limitations.

3.2 COORDINATION

A. Coordinate execution of the Work with those public utilities, governmental bodies, private utilities and other contractors performing work on and adjacent to the worksites. Eliminate or minimize delays in the Work and conflicts with those utilities, bodies, and contractors. Schedule governmental, private utility and public utility work that relies upon survey points, lines and grades established by the Contractor to occur immediately after those points, lines and grades have been established. Confirm coordination measures for each individual case with the BTV Project Manager in writing.

B. In the coordination effort of work by others, the Contractor shall obtain and refer to equipment locations and other layouts, as available, to avoid interface problems.

C. The Owner reserves the right to permit access to the site of the Work for the performance of work by other contractors and persons at such times that the Owner deems proper. The exercise of such reserved right shall in no way or to any extent relieve the Contractor from liability for loss and damage to the Work due to or resulting from its operations or from responsibility for complete execution of the Contract. The Contractor shall coordinate, and cooperate with other contractors and persons in all matters requiring common effort.

3.3 CONTRACTOR USE OF WORK SITE

A. Confine work site operations to areas permitted by law, ordinances, permits, and the Contract.

B. Consider the safety of the Work and that of the people and property on and adjacent to the work site when determining amount, location, movement, and use of materials and equipment on work site.

C. Do not load work site with equipment and products that would interfere with the Work. Only equipment, tools, or materials required for this Work may be stored at the work site.

D. Protect products, equipment, and materials stored on work site.

E. Relocate stored products, equipment, and materials that interfere with operations of the Owner, government bodies, public, and private utilities, and other contractors.

END OF SECTION 01110

SECTION 011400 - WORK SEQUENCE AND CONSTRAINTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 OTHER WORK

A. Other concurrent construction contracts with which the Contractor must interface are described elsewhere in the Contract Documents. Refer to Section 013210 "Schedule" and the Special Conditions for specific work constraints and milestones.

1.3 WORK SEQUENCE

A. The work sequence shall comply with Phasing, Sequencing, and Milestones as indicated in the Contract Documents and in accordance with the approved Construction Schedule developed by the Contractor. The schedule shall comply with requirements indicated in the Special Conditions and Section 011400 "Work Sequence and Constraints". The Construction Schedule is described in Section 013210 "Schedule".

1.4 WORK CONSTRAINTS

A. Site Constraints:

1. Access to the Project shall be generally as indicated in the Contract Documents. Access shall be organized and planned by the Contractor to ensure no disruption of airline or BTV operations.
2. Access to work sites will be strictly monitored and must comply with BTV Airport Operations and FAA Regulations. The Contractor shall provide monitoring and escorts as required by BTV Operations in the area of the Work.
3. The Contractor shall submit for review and approval the construction area layouts.
4. Contractor employee parking will not be allowed within the existing revenue control system. Parking facilities will be as indicated in the Construction Documents.
5. Employee and material access to the Concourses will be via designated and approved haul routes and access points in the construction barricades at concourse construction sites via designated construction gate.
6. The Contractor shall use the haul routes coordinated and accepted by BTV airport Operations.
7. Contractor staging, parking, and offices shall be located at the designated area

provided by BTV. the Contractor shall provide an adequate transportation for the Contractor's employees, design staff and BTV staff between the designated contractor yard and the work sites. The transportation services shall be provided at all times when Contractor employees are working on the Project.

B. System Interruptions:

1. BTV is a 24/7/365 facility. Construction activity that requires any system shutdown must be coordinated with the project manager and BTV AIM MCC.
2. The Shutdown cannot proceed unless all approver groups have approved the request. If any of the groups rejects the request, you may not proceed with the Shutdown. If a Shutdown is determined to be an emergency due to pending health issues or the risk of additional damage, this process may be bypassed. If the Shutdown is an emergency, proceed with the shutdown without the approvals. Approvals must be obtained as follows

    a. Airfield Shutdowns must be submitted at least 72 hours prior to the shutdown start date.
    b. All other Shutdowns must be submitted at least five (5) business days prior to the shutdown start date.
    c. All Shutdown Requests must be submitted using the Shutdown Request form, in coordination with system providers, BTV Operations, and BTV PMT.

C. Airfield Operations at Burlington International Airport:

1. Full airport and aircraft operations are underway adjacent to this Project. Contractors are required to obtain a Contractor Participant Manual from the Security Manager and must follow the guidelines in the manual. Copies of the Contractor section of the manual are available for review at the Burlington International Airport Access Services, Airport Security Office.

    a. If any Work contains requirements for Work activities or access through or in the restricted Secured, Sterile, and/or Controlled area, reference Section 011420 "Security Requirements & Sensitive Security Information (SSI)" for requirements.
    b. If not in a Secured, Sterile, and/or Controlled restricted area, the Contractor personnel still must be badged; reference Section 011420 "Security Requirements & Sensitive Security Information (SSI).

D. Operational safety on airports during construction:

1. All Work shall be accomplished in accordance with FAA Advisory Circular AC150/5370-2G, "Operational Safety on Airports during Construction", FAR Part 139 and FAR Part 107 except as herein modified.

E. Welding Equipment, Procedures and Constraints:

1. Natural gas-powered portable welders or inverter single- and three-phase electric portable welders are the only acceptable welding equipment to be used inside the building basement or tunnel areas. Acceptability of equipment other than the

equipment noted above shall be at the sole discretion of the BTV Project Manager.

2. Welding activities inside buildings require submittal of a System Interruption Request (See paragraph “System Interruptions” above). Prior to welding in any area, the Contractor shall locate smoke detectors and shall request interruption of the fire alarm system. Subsequent to the interruption of the fire alarm system and prior to welding activities, the Contractor shall cover and protect smoke detectors until work is complete. Prior to expiration of each interruption of the system, the Contractor shall uncover the smoke detectors.
3. Electrical Service: The Contractor shall be responsible for verifying with the Owner’s Representative or representatives locations acceptable for accessing electrical power for welders and other electrical equipment feeders. The Contractor shall be responsible for all work and equipment required to install temporary or permanent electrical modifications for construction power and lighting.

    a. Temporary Hook-up: In addition to the requirements of paragraph “Temporary Power and Lighting for Construction” below, comply with the following:

        1) Provide wiring sized to accommodate full load of welding equipment, accounting for voltage drop.
        2) Provide appropriate NEMA twist-lock or ANSI receptacle for welder hook-up.
        3) 480V, 3 phase, 3 pole, 4-wire twist lock ground line.
        4) NEMA L16-20 or ANSI C73.87.

    b. Where connected to any BTV power supply, The Contractor may not begin operation of the equipment prior to request for inspection by BTV representatives and acceptance of the installation.
    c. Permanent installation of electrical branch circuiting for welding equipment shall be made in accordance with all Division 26 Specification Sections.

4. Welding Practices: All standard safe welding practices must be followed, including but not limited to the following:

    a. Flash protection for surrounding areas.
    b. Contractor fire extinguisher in area.
    c. One person in each welding area solely designated as fire watch for each welder.
    d. Protect all equipment, cable trays and contents, etc., in area.
    e. Use fire blankets and other appropriate materials to confine sparks and molten metal from the welding, cutting, and/or grinding activities.
    f. All welders shall have been qualified through welding tests in accordance with applicable welding code, such as but not limited to AWS, ASME, API, within one year prior to welding taking place. Evidence of qualification shall be through Welding Performance Qualification Records (WPQR).
    g. All welder qualifications test shall be or shall have been administered and witnessed by an Independent Testing Agency (ITA), AWS Certified Welding Inspector (CWI).
    h. If recertification of welders is required, delay costs and retesting costs shall

be borne by the Contractor.

5. Grounding: Review with BTV representative's area of work prior to beginning work to ensure ground procedures do not induce undesirable charges in steel building system or other systems. This review should take place subsequent to the pre-work meeting. Do not ground to adjacent building systems, baggage system, hangers, or devices that support mechanical or electrical equipment.

F. Temporary Power and Lighting for Construction:

1. The Contractor shall be responsible for all work and equipment required to install temporary or permanent electrical modifications for construction power and lighting.
2. The Contractor shall be responsible for all work and equipment required to install temporary or permanent electrical modifications for construction power and lighting.

   a. Comply with all requirements of NEC Article 590.
   b. Flexible cords used for temporary power shall be listed in accordance with NEC Article 400, and rated for 'extra-hard' usage.
   c. Provide an equipment grounding conductor with all temporary power circuits.
   d. All temporary power distribution devices and equipment shall be listed and rated for the application.
   e. Provide ground fault protection for personnel.
   f. Temporary lighting fixtures shall be protected from physical damage.

G. Cleaning Equipment and Spoils:

1. Discharge of water, liquids, or chemicals into a building sanitary sewer system or storm drainage systems is prohibited. The Contractor shall comply with all Federal, State, and Local requirements for disposal of chemicals and equipment wash water. The Contractor shall maintain and service all equipment in work areas and collect all wash water, spoils and water from excavations in containers for discharge or removal off site.

H. Vehicle Permitting for Tunnel and Indoor Use:

1. Electric carts do not require permitting. The Contractor shall provide at least one (1) electric cart for Contractor use during the work in the tunnel and basements of the buildings. Only electric or CNG powered trucks are allowed in the tunnel and basements of the buildings. Only electric or CNG trucks may be used and shall not be parked overnight or for long terms within the tunnel or basements. All vehicles require permitting. Permits may be acquired at the BTV Airport Security Office.

I. Radio and Cell Phone Use:

1. The Contractor shall have wireless communications in place prior to initiation of work in the tunnel or basements by use of cell phone and/or radio. Radio and cell phone coverage in the tunnels and basements varies in signal strength

throughout the campus. An RF Application must be submitted for the Radio equipment intended for use at least 14 days prior to intended use. Include the following radio information:

a. Make
b. Model
c. Frequency
d. Effective Radiated Power (ERP)

2. Contractors must receive an approval letter from the RF Systems Manager prior to use of the radio equipment on the BTV campus.

J. Keys:

1. The Contractor shall be required to contact BTV Maintenance to procure keys for access to all rooms having locks in order to gain access. Keys may be checked out at the beginning of each work shift by the Contractor and shall be returned to BTV Maintenance at the end of each work shift.

a. Failure to return keys may result in suspension and/or revocation of Airport ID badge.
b. Duplication of keys is strictly forbidden.

1.5 COORDINATION

A. The Contractor will designate a contact person(s) for coordination with the Owner's Representative and airline tenants. The contact person shall have the authority to make binding decisions for the Contractor firm for changes in work. The contact person shall be on site at all times during work activity.

B. No additional costs shall be considered for coordination activities throughout this project. The Contractor shall include in the Contractor's bid costs for coordination of all activities.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 DUST/PROTECTION BARRIERS

A. HVAC system containment: The Contractor shall submit to BTV Maintenance HVAC and Fire Alarm shutdown requests prior to modifications to the area of work for dust containment. The HVAC system shall be interrupted, re-routed, or blocked off to prevent dust from entering return or supply ducts.

B. Debris and Protection Barriers: The Contractor shall construct code-approved and BTV -approved dust and debris barriers on both sides of walls and doors that are to be

modified. Barriers shall be constructed to allow emergency ingress and egress to and from equipment and spaces. Barriers shall be constructed to allow continual uninterrupted function of building equipment and spaces.

1. Return all removed door hardware to BTV. Label each hardware set correlating the door number of the original hardware set. Coordinate with the Owner's Representative for storage and return of hardware.

3.2 EQUIPMENT

A. Equipment: CNG-powered equipment is allowed within the buildings. No other fossil fuel equipment may be used within the buildings unless the equipment is directly vented to the building exterior.

B. Electric: Electric powered equipment is acceptable in the Work area.

END OF SECTION 011400

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SECTION 011420 - SECURITY REQUIREMENTS & SENSITIVE SECURITY INFORMATION (SSI)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 DESCRIPTION

A. Each Contractor is required to become a “Participant” in the BTV Airport Security Program (ASP) and must remain in good standing in order to retain Airport Security privileges.

B. All Contractor employees and all vehicles requiring access to the Secured Area, Sterile Area, and/or any other Controlled Areas shall be required to obtain the proper access authorizations for Airport ID badges and vehicle permits.

1.3 PARTICIPANT OF AIRPORT SECURITY PROGRAM

A. Contractors are required to become a “Participant" of the ASP. In order to become a “Participant”, your company must attend a Participant meeting within the Airport Security Office.

B. The Contractor shall comply with all Burlington Municipal Airport System Rules and Regulations and all Transportation Security Administration (TSA) regulations. Special emphasis should be paid to Burlington Municipal Airport System Rules and Regulations Part 20 – Airport Security Rules and Regulations and Part 130 – Operating Vehicles In The Secured Area" and Part 35 – Operations Infraction Accountability Program". The Burlington International Airport Rules and Regulations can be found on the www.btv.aero website.

C. The TSA has the authority to issue civil penalties for failure to adhere to their regulations.

D. It is the responsibility of the Airport Security Office to ensure all fences and gates are secure. If a Contractor's operations necessitate the frequent (Defined by BTV Security) use of a particular gate, the Contractor shall place, at the Contractor’s expense, two (2) contract security guards at the gate that shall have been trained and certified by the Airport Operations Division to facilitate access to its Work. The Contractor assumes full responsibility for maintaining security once this is done. If the perimeter gate will be used as a haul route, the contractor must also place, at the Contractor’s expense, Haul Route Monitors as dictated by the TSA approved Temporary Amendment. Any fines levied against the Airport as a result of the failure by the Contractor to provide

adequate security shall be passed on to the Contractor.

1. If the Contractor provides guards or monitors, the Contractor must also supply a shelter for the guards/monitors. The shelter must meet the following requirements:

    a. One 10 x 12 Tuff Shed or similar type structure with a window, 24-inch convex mirror mounted outside for vehicle inspection, sufficient HVAC capability, generator, light plant, and sanitary services, which are maintained by the Contractor.

E. Contractors will be required at all times to have a supervisor or foreman at each work location in Secured, Sterile, and Controlled Areas.

F. All Work shall be accomplished in accordance with the most current FAA Advisory Circular (AC) 150/5370-2, "Operational Safety on Airports during Construction", 49 Code of Federal Regulations (CFR) Part 1542 and 14 CFR Part 139 except as modified herein.

G. All Work shall be accomplished in accordance with the most current TSA Security Directives applicable to BTV, except as modified herein.

H. This Section intends to supplement, modify, change, delete from, or add to the most current FAA AC150/5370-2. Where any paragraph, subparagraph, or clause of the AC is modified or deleted by these supplements, the unaltered provisions of that paragraph, subparagraph, or clause shall remain in effect.

1.4 SENSITIVE SECURITY INFORMATION (SSI)

A. If the Contract involves SSI information or procedures, the Contractor must contact the Assistant Director of Airport Security or designee, for disclosure information, as well as protocols that must be followed with SSI distribution.

B. This Section governs the maintenance, safeguarding, and disclosure of records and information that the TSA has determined to be SSI as defined by 49 CFR Part 1520, "Protection of Sensitive Security Information". SSI is information that the TSA has determined to be detrimental to the security of Burlington International Airport if disclosed to unauthorized persons. This is a process for the documentation, use, and recovery of SSI of a specific origin.

C. Applicability:

1. For all management staff, all authorized departments, all contractors, and subcontractors handling documents or materials containing SSI information.
2. Each person employed by, contracted to, or acting on behalf of the Department of Aviation at Burlington International Airport is subject to the requirements of this Section.
3. SSI disclosure is limited to persons or entities under criteria identified in federal regulations, subject to strict “need-to-know” standard, and as otherwise determined by TSA or the Department of Homeland Security (DHS).

D. Except as otherwise provided in this Section, records containing SSI are not available for public inspection or copying. Burlington International Airport will not release such records to persons without a need to know. Prime contractors will not release SSI records to any subcontractor without a need to know. An employee or contractor has a "need to know" SSI if access to the information is necessary for performance of his or her official duties.

E. Unauthorized disclosure of SSI is a Federal violation of 49 CFR Part 1520 and violation is grounds for a civil penalty and other enforcement action by DHS Security. In addition to the civil penalties, corrective action may include issuance of an order requiring retrieval of SSI to remedy unauthorized disclosure, an order to cease future unauthorized disclosure, and dismissal from the work site.

F. Except as otherwise provided in writing by the TSA in the interest of public safety or airport security, the following information and records containing such information constitute SSI:

1. Information that would be detrimental to the security of Burlington International Airport and aviation transportation.
2. Any performance specification, including a description of devices and procedures used by Burlington International Airport, for the detection of any weapon, explosive, incendiary, or destructive substance.
3. Any performance specification, including a description of devices and procedures, for any communications equipment used by Burlington International Airport in carrying out any aviation transportation security requirements.
4. Details of any security inspection or investigation of an alleged violation of aviation transportation security requirements of Federal law that could reveal security vulnerability.
5. Specific details of aviation transportation security measures including those recommended by the Federal government.
6. The following information regarding security screening under aviation transportation security requirements of Federal law:

    a. Procedures for screening of persons, property, checked baggage, U.S. mail, and cargo.
    b. Information used by a passenger or property-screening program or system, including an automated screening system.
    c. Detailed information, if determined by the TSA to be SSI, about the locations at which particular screening methods or equipment are used.
    d. Performance or test data from security equipment or screening systems.

7. Identifying information of certain aviation transportation security personnel including lists of the names or other identifying information that identify persons as having unescorted access to a secure area of the airport.
8. Critical aviation asset information identifying systems so vital to the airport that the incapacity or destruction of such assets would have a debilitating impact on aviation security.
9. Any information involving the security of operational or administrative data systems identified by the Department of Transportation or DHS as critical to the safety or security of Burlington International Airport.

10. Solicited or unsolicited proposals, pursuant to a grant or contract, to perform work that relates to security measures.

G. Restrictions on the Disclosure of SSI:

1. Employees and contractors working onsite have a duty to protect sensitive security information and must take reasonable steps to safeguard SSI in that person's possession from unauthorized disclosure. When a person is not in physical possession of SSI, the person must store it in a secure container such as a locked desk, a locked file cabinet, or in a locked room. SSI is to be disclosed only to persons having a need to know as stated in CFR 1520. Requests for SSI are to be referred to City Project Manager.
2. Prior to receiving SSI records, contractors must sign the "Confidentiality and Non-Disclosure Agreement", Form PS-17, stating that SSI will be guarded from unauthorized persons, that records will be controlled while in use and secured when not in use, and that all SSI plans and records will be returned to the airport or destroyed following the completion of the Project.
3. Return or destruction of SSI documents must be done in a timely manner and documented on the SSI Return or Destruction Compliance Form, Form PS-20. Companies under contract to the City must return or destroy all SSI material following the completion of the Work. Companies not selected during the bidding process must return or destroy all SSI material immediately following the announcement of bid results.

H. If a record containing SSI is received that is not marked as specified in this Section below, the following steps must be taken:

1. Mark the record as specified in paragraph Part 1 of this Section.
2. Inform the sender of the record that the record must be marked as specified in Part 1 of this Section.

I. If a person becomes aware that SSI has been released to unauthorized persons, promptly inform the Communication Center Supervisor at 303-342-4020 and request to speak to the on-call Airport Security Coordinator.

J. Marking SSI:

1. In the case of paper records containing SSI, a covered person must mark the record by placing the PROTECTIVE MARKING conspicuously on the top, and the DISTRIBUTION LIMITATION STATEMENT on the bottom, of following parts of the document:

   a. The outside of any front and back cover, including a binder cover or folder, if the document has a front and back cover.
   b. Any title page.
   c. Each page of the document.

2. Protective Marking

   a. SENSITIVE SECURITY INFORMATION
   b. Distribution Limitation Statement:

c. WARNING: This record contains Sensitive Security Information that is controlled under 49 CFR parts 15 and 1520. No part of this record may be disclosed to persons without a “need to know”, as defined in 49 CFR parts 15 and 1520, except with the written permission of the Administrator of the Transportation Security Administration or the Secretary of Transportation. Unauthorized release may result in civil penalty or other action. For U.S. government agencies, public disclosure is governed by 5 U.S.C. 552 and 49 CFR parts 15 and 1520.

3. In the case of non-paper records that contain SSI, including motion picture films, videotape recordings, audio recording, and electronic and magnetic records, a covered person must clearly and conspicuously mark the records with the protective marking and the distribution limitation statement such that the viewer or listener is reasonably likely to see or hear them when obtaining access to the contents of the record.

K. Destruction of SSI

1. When the employee or contractor no longer needs the SSI to carry out their work requirements, the SSI must be returned to the issuing entity or completely destroyed by burning or cross-shredding to preclude recognition or reconstruction of the information.
2. The Contractor shall comply with all the requirements of the Department of Aviation Standards and Procedures, Protection of Sensitive Security Information (SSI) No. 10003 Revised 08/01/15 regarding Contractor Protection of Sensitive Security Information (SSI).

1.5 MISCELLANEOUS

A. Dumpster Security Requirements

1. The following procedures must be followed to provide maximum security with all construction projects in public areas unless an exception has been made by the Airport Security Coordinator (ASC) or designee:

a. Roll-off dumpsters must have the ability to be covered (hard side) and locked when not in use.
b. When unlocked and in use, and located outside the limits of the construction site, the Contractor shall provide an employee, or a subcontractor’s employee, to stand by the dumpster to prevent unauthorized placement of prohibited items

2. If the Contractor is not able to have a roll-off dumpster with the ability to be locked, the dumpster shall be removed from the public area when the construction site is inactive.

B. Contractor Fences (Not Perimeter Fence)

1. If required, the Contractor shall establish and maintain a secure (fenced) perimeter at its primary operations area to include its field offices, staging and

storage areas, and maintenance facilities. The responsibility for security within its operations area shall rest solely with the Contractor. Entrance gates to operations areas shall be equipped with a combination of locks to include a lock provided by the City for its use in accessing emergency equipment, should that need arise. The location, size and other physical characteristics of the Contractor's operations area must be approved by the Owner's Representative prior to its installation.

2. Unless specifically required by the Contract Documents and with the exception of the fenced operations area described above, the Contractor shall install no fences or other physical obstructions on or around the Project work area without the written approval of the Owner's Representative.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SUBMITTAL FOR AIRPORT ID BADGES

A. By submitting information for the individual requesting or requiring an Airport ID badge that would permit unescorted access to the Sterile and/or Secured Areas must be fingerprinted and pass a Criminal History Records Check (CHRC) and Security Threat Assessment (STA). Passing a CHRC means the employee shall not have been convicted, given a deferred sentence, found not guilty by reason of insanity or have been arrested and are awaiting judicial proceedings of any felony charge during the ten (10) years before the date of the individual's application for unescorted access authority. For an individual to obtain driver authorization to drive within the Secured Area, the individual must have a valid driver license that allows them to drive their contractor vehicle.

B. An employee requesting an Airport ID badge must resolve all pending or valid violations before being allowed to proceed in the airport ID badging process. If the employee no longer works for the company and is attempting to be employed by a different company, a management representative from the "new" company must attend the Violation Notice Hearing along with the employee.

C. Airport ID Badges are obtained as follows:

1. The Contractor shall meet with the City Project Manager to review the procedures and required access points at BTV. The Contractor and the Owner's Representative shall visit the site to verify the access points. Access points shall be listed and submitted by the Contractor to the Owner's Representative for review and comment prior to Contractor's application for badging.
2. The Contractor shall designate an Authorized Signatory who must attend an annual class with Airport Security. The Authorized Signatory must be an employee of the Contractor, have a valid Burlington International Airport ID badge. The Authorized Signatory will be authorized to sign for the Contractor on the Fingerprinting and Badge Application Form and will be the primary designation contact for Airport Security related business.

3. The Contractor's Authorized Signatory shall schedule a Participant Meeting with the BTV Airport Security Office to review BTV security procedures and receive training on how to ensure that all Participants remain in compliance with Part 20 of the Burlington Municipal Airport System Rules and Regulations. A second meeting will be scheduled for the Authorized Signatory to learn how to successfully complete the required forms for Airport ID badges and vehicle permits.
4. A CHRC and STA are required for each employee requesting unescorted access to the Secure and/or Sterile Area. The employee will complete the Fingerprinting and Badge Application (two-sided form) and schedule an appointment with the Airport Security Office to have the form reviewed and to be fingerprinted. The Federal Bureau of Investigation will conduct the CHRC and will return the results to the Airport Security Office. For the fee for the Fingerprinting, please see the www.btv.aero website. The Transportation Security Administration will process the STA and will return the results to the Airport Security Office.
5. When the Authorized Signatory is notified by Airport Security that the CHRC and STA have cleared, the applicants must come to the Airport Security Office to receive regulated security and driver training. The training will take approximately one (1) hour for security training and approximately two (2) hours for security and driver training.
6. All applicants must watch and pass all concepts of a computer based security training module for a Security Identification Display Area (SIDA) Airport ID badge. All individuals requesting driver authorization in the non-movement area must also view an interactive computer based driver training module and complete a test by passing all concepts. In addition, the individual must receive non-movement driver orientation training by the Contractor’s driver representative before being allowed to drive on the airfield. Non- Movement Orientation training should be conducted annually.
7. All Airport ID badges must be immediately terminated upon employee separation from the Contractor or when a need for BTV access no longer exists.
8. The Airport ID badges must be returned to the Airport Security Office prior to final payment. All Airport ID badges are issued with an annual expiration date. The expiration date is determined by the birthday of the Airport ID badge holder. Contractors shall notify the Owner’s Representative as soon as possible but in no case less than four (4) weeks in advance of any requirement to extend the Sponsorship status.

END OF SECTION 011420

SECTION 011430 - VEHICLE AND EQUIPMENT PERMITTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The Contractor shall comply with the Airport Security Program. Vehicle permits are required for all vehicles operating in the Secured Area. The BTV vehicle permit is required for vehicles operating in the Secured Area but limited to above grade, outdoor activity. Vehicles or machinery operating within buildings shall be required to acquire a BTV emissions permit as well as a BTV vehicle permit.

B. Special emphasis should be paid to Burlington Municipal Airport System Rules and Regulations Part 20 – Airport Security Rules and Regulations and Part 130 – Operating Vehicles In The Secured Area" and Part 35 – Operations Infraction Accountability Program". The Burlington Airport Rules and Regulations can be found on the www.btv.aero website.

1. All Work shall be accomplished in accordance with the most current FAA Advisory Circular (AC) 150/5370-2, "Operational Safety on Airports during Construction", 49 Code of Federal Regulations (CFR) Part 1542 and 14 CFR Part 139 except as modified herein.
2. All Work shall be accomplished in accordance with the most current TSA Security Directives applicable to BTV, except as modified herein.
3. Access to the runways, taxiways, and aprons shall be gained by the Contractor after establishing radio communications with Airport Operations through the BTV Inspector. No personnel or equipment will be allowed on the runways until radio contact has been made with Airport Operations and permission given.
4. Access to the Movement Area will be limited in order to allow the maximum efficient movement of aircraft. As part of this limitation, the Contractor may be required to only use these areas late at night when there is less aircraft traffic
5. Once admitted into the Secured Area, the Contractor shall proceed directly to the work location by way of a route assigned by Airport Security. At no time shall a Contractor or any of its personnel enter onto a taxiway, runway, or ramp without proper clearance from the Airport Operations Manager or Assistant Airport Operations Manager. Contractors or individuals violating these requirements for driving in the Secured Area may be subject to fines, suspension, or permanent revocation of their driver authorization and/or Airport ID badge privileges.
6. The Transportation Security Administration (TSA) requires that all operating airports be secured from the general public and has the authority to issue

citations for violations of these requirements. It is the responsibility of the Airport to ensure all fences and gates are secure. If a Contractor's operations necessitate the frequent use of a particular gate, the Contractor shall place guards at the gate. Refer to 011420 – Security Requirements and SSI for details regarding the placement of guards.

C. General Safety Regulations When in Aircraft Operations Areas May Include the Following:

1. At all times, the Contractor shall coordinate its Work with the requirements of the Airport site and operations. All Work, movement of personnel, materials, supplies and equipment in areas used by aircraft shall be subject to regulations and restrictions established by the Owner. The Contractor shall take special precautions and be fully responsible for the prevention of damage to materials and equipment in the areas affected by the jet blast of taxiing aircraft. No work shall proceed until necessary protective devices are placed as required to protect the public, airport operations, property, and personnel from the hazards of the Work. The Contractor shall proceed with the Contractor's Work, including temporary work and storage of tools, machinery, and materials, to cause no interference with or hazards to the operation of the Airport.
2. Landings, takeoffs, and taxiing shall take precedence over all Contractors' operations. In the event that the Contractor is notified that an emergency landing or a takeoff is imminent, the Contractor shall stop all operations immediately, regardless of the sequence of events in progress and shall immediately evacuate the Contractor's personnel and equipment from the runway and taxiway areas as directed.
3. The Contractor shall remove its personnel and equipment to the distance specified below for the prevailing conditions:

    a. For emergencies, the Contractor shall move all personnel and equipment as directed by Airport Operations or the Owner's Representative.
    b. At the end of a work day in areas where aircraft are operating, all equipment shall be moved to a location that is not less than 750 lineal feet measured from the near edge of the runway, taxiway or ramp area or to the location designated by the Owner.

4. If the Contractor is asked to leave part of its work site to allow aircraft operation, the Contractor shall clean the area to allow safe aircraft movement. Cleaning may include sweeping the area to prevent damage to aircraft.

D. Vehicle Permitting:

1. Refer to the Burlington Municipal Airport System Rules and Regulations Part 20 – Airport Security Rules and Regulations and Part 130 – Operating Vehicles In The Secured Area" and Part 35 – Operations Infraction Accountability Program" for information regarding vehicle permitting. The Burlington Airport Rules and Regulations can be found on the www.btv.aero website.
2. For additional information regarding permitting, the Contractor must contact BTV Security.

E. Equipment Permitting

1. Fossil fuel powered equipment to be used in the interior of buildings and/or in basement/tunnel areas shall require inspection by BTV Maintenance and the Burlington Fire Department.

a. Only CNG fossil fuel powered equipment may be used; gasoline powered, propane powered, or diesel-powered equipment will not be acceptable unless identified and operated per Section 011400 "Work Sequence and Constraints".

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PERMITS

A. Vehicle permits shall not be issued prior to Notice to Proceed. The Contractor may, at the Contractor's own risk, submit required information prior to Notice to Proceed to the following:

1. Vehicle permit: BTV Engineering Group or BTV Airport Security.
2. Equipment and vehicle emissions permit. BTV Engineering or BTV Maintenance Group.

3.2 SCHEDULE

A. The Contractor shall allow in the Contractor's schedule five (5) days for BTV review of submittals for permits. Testing of equipment and review by the Burlington Fire Department shall be scheduled by the Contractor. By submitting information for permits, the Contractor certifies that equipment and vehicles comply with Contract documents and with all City, state and federal regulations including but not limited to emissions, licensing and safety requirements.

END OF SECTION 011430

SECTION 011810 - UTILITIES INTERFACE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Various utilities are located within the limits of work in the Project area. The owners of these utilities hereinafter noted may require that the Contractor is to work around their existing facilities until such alterations, relocation, or abandonment have been completed. All known existing utilities are shown; however, the Contractor shall verify and satisfy himself that there are no other existing utilities that may not be shown.

B. The owners of known utilities within the project area and corresponding representatives include, but are not limited to:

1. Burlington Telephone
2. Vermont Gas System Inc. (VGS)
3. Patterson Fuels
4. Trono Fuels
5. Green Mountain Power
6. BTV Storm Water
7. BTV Sanitary Sewer
8. South Burlington Water Department
9. Premise Wiring System- BTV IT Section
10. FAA Duct Bank
11. BTV Electrical Department
12. Fire Alarm System
13. Paging System

C. The location and establishment of each construction vehicle crossing shall be at sites mutually agreed upon in writing by the Contractor and the owner of the utility.

D. At the locations where the Contractor needs to establish a construction vehicle crossing over any of the operating pipelines, the furnishing and placing of a crossing shall be by the Contractor. The crossing shall allow the normal operation of the pipeline at all times. Each crossing shall be adequately marked and signed for safe passage of vehicles over the crossing. Construction vehicles shall not be allowed to cross over operating pipelines at any place other than an established crossing.

E. These utility locations are based upon information provided by the utility companies or previous construction contractors that were the basis for determining utility

coordinates. The Contractor is responsible for confirming the accuracy of the provided coordinates.

F. The Contractor shall control the Contractor's operations in order to avoid creating any obstacles for the utility owner’s access for maintaining or operating their equipment.

1.3 REFERENCE DOCUMENTS

A. Section 312323.33 "Flowable Backfill (Controlled Low-Strength Material)"

1.4 REGULATORY REQUIREMENTS

A. The Contractor shall obtain and pay for all utility company permits, fees, and licenses necessary for the execution of this work. The Contractor shall give all notices and shall comply with all laws, ordinances, rules, and regulations of all authorities having jurisdiction.

1.5 QUALITY CONTROL

A. When the Contractor performs any operations that will affect a utility owner, the Contractor shall give timely notice to the utility owner and the Owner’s Representative so that the Contractor's operations may be observed by the utility owner or their representative.

1.6 WORK INCLUDED

A. The Work of this Section includes furnishing all materials, equipment, and labor necessary to provide utility crossings as required and as specified herein and subject to approval by the associated utility owner.

B. North American Resources has a line passing through airport property. The Contractor shall contact the utility prior to beginning earthwork operations to ascertain any special requirements or conditions required to maintain and protect this service during construction activities.

C. FAA Underground Duct lines: The FAA has duct lines passing under the site. The Contractor shall contact the FAA prior to beginning earthwork operations to ascertain any special requirements or conditions required to maintain this service during construction activities.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Suitable cover material shall be in accordance with Vermont Department of

Transportation Standard Specifications. Wet, soft, or frozen material, asphalt chunks, or other deleterious substances shall not be used for cover.

B. Aggregate for road base material shall consist of clean, sound and durable particles of crushed stone, crushed gravel or crushed slag, shall be free from coatings of clay, silt and organic matter, and shall contain no clay balls. Material shall conform to the State of Vermont Standard Specifications for Road and Bridge Construction Class 6 aggregate base unless otherwise specified.

C. The materials for the load distribution system on top of the cover shall conform to the specification of the American Institute of Steel Construction, the American Institute of Timber Construction, or the American Concrete Institute, as applicable, depending upon the system agreed upon between the Contractor and utility owner.

D. Materials for the sleeving of the pipelines shall be purchased by the utility owner at the Contractor's expense.

E. Comply with utility backfill requirements for the use of flowable backfill required by the utilities specified above.

PART 3 - EXECUTION

3.1 NOTIFICATION OF UTILITIES FOR LOCATING AND POTHOLING

A. The Contractor shall verify the location of all utilities prior to any operations including physically uncovering the utility to verify location as required by the utility owner.

B. The Contractor shall notify the Utility Notification Center of Vermont at 811, as a minimum for location of utilities. 72 hours advance notice is required.

END OF SECTION 011810

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SECTION 012510 - SUBSTITUTIONS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. All material and equipment substitutions must comply with Title 4, Article 406: Substitution of Materials and Equipment in the General Contract Conditions, 2011 Edition.

B. The Work specified in this Section consists of submitting form CM-09, Request for Substitution for the approval of a different material, equipment, or process than is described in the Contract Documents.

C. If the substitution changes the Scope of Work, Contract cost, or Contract time, a Change Order is required.

D. As-built drawings and specifications must include all substitutions even if a Change Order is not issued.

1.3 REFERENCE DOCUMENTS

A. Form CM-09, Request for Substitution.

B. Section 013300 "Submittal Procedures".

1.4 QUALITY CONTROL

1. The substitution shall provide as a minimum, the same performance as specified.

1.5 SUBMITTALS

A. Refer to Section 013300 "Submittal Procedures" "Shop and Working Drawings, Product Data and Samples" for submittal procedures.

B. A completed Form CM-09 shall be submitted at least 60 days prior to when an order needs to be placed or a method needs to be changed.

C. The submittal shall contain all the data required to be submitted for acceptance of the

originally specified item or process, including, as appropriate:

1. Detailed product data sheets for the specified items and the substitution.
2. Samples and shop drawings of the substitution.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SUBSTITUTION PROCESS

A. Provide the information as required on Form CM-09.

3.2 SUBSTITUTION REQUEST

A. The formal Request for Substitution will be evaluated by the Owner's Representative and the Designer of Record based on the following criteria:

1. Compatibility with the rest of the project.
2. Reliability, ease of use and maintenance.
3. Both initial and long term cost.
4. Schedule impact.
5. The willingness of the Contractor to share equally in any cost savings.
6. The ability of the item or process to meet all applicable governing regulations, rules, and laws along with funding agency requirements.
7. The cost of evaluating the substitution.

B. Based upon the above evaluation, the Sr. Director of AIM Development will make a final determination of what is in the best interest of the Airport and either approve, disapprove or approve as noted the requested substitution.

3.3 CONDITIONS

A. As a condition for submitting a Request for Substitution the Contractor waives all rights to claim for extra cost or change in Contract time other than those outlined in the request and approved by the Deputy Manager of Aviation. The Contractor, by submitting a Request for Substitution, also accepts all liability for cost and scheduling impact on other contractors or the Owner due to the substitution.

B. Included with the Request for Substitution shall be the following statement:

1. "The substitution being submitted is equal to or superior in all respects to the Contract-required item or process. All differences between the substitution and the Contract-required item or process are described in this request along with all required information, cost, and scheduling data."

C. The statement shall be signed and dated by the Contractor's Superintendent.

D. Replacement of Substitution Found to be Not Equal: The Contractor shall be responsible for all aspects and conditions of the substitution that are not clearly identified in the substitution submittal, and shall be liable for the appearance, function, performance or other aspects of the substitution that are found not to be equal to the originally specified item.

1. The Contractor shall incur all labor and costs associated with replacement of any substitution that is found to be not equal to the originally specified item or process and rejected by the Owner’s Representative.
2. The replacement of any rejected substitution shall either be with the originally specified item or process, or a substitution approved by the Owner’s Representative.

END OF SECTION 012510

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SECTION 012910 - SCHEDULE OF VALUES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions other Division 01 Specification Sections, and Related Requirements apply to this Section.

1.2 RELATED REQUIREMENTS

A. The Work specified in this Section consists of preparing and submitting the Schedule of Values (“Schedule”) as referenced in the General Conditions and Supplemental Conditions. Use the Project Specifications Table of Contents or Bid Tabs, if applicable, as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section, as approved by the Owner’s Representative. The Work also includes the preparing and submitting of updated copies of the Schedule if the Schedule is affected by change orders.

B. A Schedule of Stored Material is a detailed cost breakdown for permanent materials that will be temporarily stored prior to their being installed and for which the Contractor seeks partial payments. The Schedule of Stored Material will be incorporated as a part of the Schedule of Values.

C. Within 14 calendar days of issuance of the Notice to Proceed (NTP), the Contractor shall submit the Schedule of Values including the Schedule of Stored Material if applicable. The Schedule of Values and Schedule of Stored Material used to prepare the work/cost breakdown for the Schedule will be used for the Contractor's billings.

D. Any Contract allowances shall be included in the Schedule. Expenditure of allowances shall be done using the Allowance Authorization form. Use of this form does not increase or decrease the Contract value.

1.3 RELATED DOCUMENTS

A. Title 9 – Compensation of the General Contract Conditions, 2011 Edition.

B. Section 013300 "Submittal Procedures".

C. Schedule of Values.

D. Schedule of Values for Unit Price Contracts.

1.4 SUBMITTALS

A. The Schedule of Values shall be formally approved by the Owner's Representative. Any revisions or updates to the Schedule of Values shall also be approved by Owner's Representative.

B. The Schedule shall identify each item of work. Work items in the Schedule shall represent all Work and shall be referenced with the Technical Specifications section numbers, specification subparagraph, specification section title and the bid item number used for the Schedule of Prices and Quantities when applicable.

C. Upon request by the Owner, the Contractor shall support values given with the data that will substantiate the correctness of the values.

D. The Schedule will be utilized only as a basis for review of the Contractor's application for progress payment.

1.5 REVIEW AND RESUBMITTAL

A. If review by the Owner's Representative indicates that changes to the Schedule are required, the Contractor shall revise and resubmit the Schedule.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PREPARING SCHEDULE OF VALUES

A. Provide a breakdown of the Contract Price in enough detail to facilitate continued evaluation of Applications for Payment and progress reports.

B. Breakdown of the items used in the Schedule shall include the following item costs. Ensure each item is complete:

1. Delivered cost of product with applicable taxes paid.
2. Total installation cost with overhead and profit.
3. Breakdown costs of each lump sum item with a list of products and major operations for which the Contractor seeks to receive progress payments to recover the Contractor's costs for that bid Item.
4. Each unit price item as listed in the bid Schedule of Prices and Quantities shall list products and major operations for which the Contractor seeks to receive progress payments for that bid item.

3.2 PREPARING SCHEDULE OF STORED MATERIAL

A. The Contractor shall submit with the Schedule an indication of whether products will be

stored on or off the work site. The Schedule of Stored Material shall show all quantities and types of products that will be stored.

B. Material allowances consist of only the net cost of the product, the cost of delivery and unloading at the storage site, the cost of applicable sales taxes, and all discounts.

C. In no case will the cost paid for a permanent material be greater than 90 percent of the Contract price for the Work in which they are included.

3.3 PAYMENT FOR STORED MATERIALS

A. Only materials that are described in the specifications and on the drawings will be considered permanent materials. Permanent materials are materials that will be left in the Work after the Contract is completed.

B. Nothing in these specifications shall be interpreted as requiring the Owner to pay for stored materials. The Owner’s Representative shall decide on a case-by-case basis whether stored materials shall be paid for. No payment will be made for stored materials that have not been submitted and accepted.

C. The Contractor must, at all times, store permanent materials in accordance with manufacturer's recommendations. Any material not properly stored will not be paid for. Amounts will be deducted from payments for any stored permanent material previously paid for and subsequently found to be improperly stored or not present, based upon a physical inventory of stored permanent material.

D. Only the neat line quantity of material needed for the finished product may be paid for.

E. All requests for stored permanent material payment must be accompanied by paid invoices clearly showing the quantity of permanent material, the type of permanent material and discounts or rebates and the net amount paid to the supplier along with a certificate stating that the permanent material is free of any liens or judgments preventing its use by the Owner.

F. If the permanent material is stored outside the Burlington area the Contractor must pay for the Owner’s representative's transportation and lodging to see the stored material as needed. Acceptable lodgings must, as a minimum, have a Mobil Travel Guide Rating Criteria® rating of Two-Star or the American Automobile Association Lodging Listing Requirements & Diamond Rating Guidelines® rating of Two Diamonds. The minimum transportation shall be by regularly scheduled commercial air carrier at coach rates. The Owner’s Representative will determine if an overnight stay is required.

G. All permanent material stored off site, for which payment is being requested, must be insured and stored in bonded, insured warehouses. The Contractor shall provide proof of insurance for all material stored off site, and specific address and storage conditions of storage location.

H. Any permanent material on which payment is requested must be in such a form that it cannot be used on work other than this Contract or stored in a manner acceptable to

the Owner's Representative to ensure that the permanent material cannot be used on work other than this Contract.

3.4 ALLOWANCE AUTHORIZATION AND PAYMENT

A. Contractor shall request written approval for expenditure of any Contract allowances PRIOR TO performing the Work involved. List work to be performed and estimated cost in the requesting correspondence.

B. Original copies of all invoices and receipts must be submitted with the Allowance Authorization as part of the request for payment.

C. Using the format provided by the Owner, the Contractor's request for payment of all Contract allowances shall be included in the Schedule of Values.

END OF SECTION 012910

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SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative provisions for coordinating construction operations and coordination with other stakeholders and adjacent Contractors on the Project including,

1. Subcontractor’s Acceptance Certification and Subcontractors List.
2. General Coordination Procedures.
3. Contract Administration Procedures.
4. Current Project Management Information Systems (PMIS).
5. Coordination drawings.
6. Requests for Information (RFIs).

B. Related Requirements:

1. Section 011100, " Summary of Work" for a description of the division of work among separate contracts and responsibility for coordination activities not in this Section.
2. Section 011400 “Work Sequence and Constraints” for shutdown requests and coordinating with airport operational activities.
3. Section 011420 "Security Requirements and Sensitive Security Information (SSI)".
4. Section 013210 "Schedule” for preparing and submitting Contractor's Construction Schedule.
5. Section 013223 "Construction Layout, As-built and Quantity Surveys” for coordinating, survey activities and survey related record documents.
6. Section 013300 “Submittal Procedures”.
7. Section 017720 "Contract Closeout" for coordinating closeout of the Contract.
8. Section 017419 "Construction Waste Management and Recycling".
9. BTV Building Information Modeling (BIM) Design Standards Manual (DSM).

1.3 DEFINITIONS

A. RFI: Request from the BTV Contractor to the Owner’s Representative seeking information required by, or clarifications of the Contract Documents.

1.4 SUBMITTALS - SUBCONTRACTORS ACCEPTANCE CERTIFICATION AND

SUBCONTRACTORS LIST

A. Subcontractors working on the project shall have their scope of work approved by the Owner's Representative prior to working on the project. Additionally, the Contractor must prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design.

B. Provide emergency contacts list to the Owner's Representative prior to any site activities. List must contain project name, number, location, company name and address, name and title of emergency contacts in order and time and assigned responsibilities. Keep list current and accurate at all times. Include any specific security arrangements or special projects requirements.

C. Within two (2) days of Notice to Proceed, the Contractor shall submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identifying individuals and their duties and responsibilities listing addresses and telephone numbers, including home, office, and cellular telephone numbers and e-mail addresses. Providing names, addresses, and telephone numbers of individuals assigned as alternates in the absence of individuals assigned to Project.

1. Post copies of the accepted list in project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

1.5 GENERAL COORDINATION PROCEDURES

A. Coordination with other Contractors:

1. For details on coordinating with other Contractors, refer to Articles 701 Cooperation with Other Work Forces, Article 702 Coordination of the Work, and Article 703 Coordination of Public Contact in the General Contract Conditions, 2011 Edition.

B. Minimum cooperation requirements with other contractors include the following, unless directed by the Owner's Representative in writing:

1. Regular meetings, minimum weekly.
2. Construction schedule coordination.
3. Staging area and access planning (to include employee shuttle routes).
4. Deliveries.
5. Traffic control.
6. When and where required or specified, the Contractor shall develop appropriate coordination drawings for use by interfacing adjacent parties using the Burlington International Airport site.

C. The following is a list that includes, but is not limited to, all of the contractors that may be working in the area of the project limits:

a) Tenant finish contractors for Airlines, concessions, and others.
b) BTV IT system contractors.

c) Local and Regional Utility Contractors.
d) Airport Third Party contractors for Jet Fuel distribution and other airside systems.
e) Third Party Contractors for installation of Owner Provided Owner installed Items that may include PBB and ground service equipment, holdroom seating, other FF&E items, etc.)
f) Third party Busing Companies for transportation of contractor employees.

D. Coordination with BTV entities shall include but is not limited to the following:

1. Coordinate with Owner Contracted Communication Contractor.
2. Coordinate with Utility Companies for utilities that are single sole source.
3. Coordinate with Airport Security and BTV Maintenance for all security related services.
4. Coordinate with BTV Life Safety Team for all issues related to fire alarm, fire protection systems in addition to compliance with all regulatory agencies.
5. Coordinate all shutdowns and system interruptions in accordance with section 011400 "Work Sequence and Constraints”.

1.6 Contract Administration Procedures:

A. This Project will be administered in part using the current Project Management Information System (PMIS). Any processes necessary to properly administer the Contract and not included in the list below shall be addressed as acceptable to the Owner’s Representative. Owner’s Representative may modify the list below in serialized correspondence without constituting a change to the Contract. Administrative tools and processes shall not in any form waive any contractual or legal requirements of the law or the Contract. The Contractor shall attend all coordination meetings with the Owner’s Representative and the DE+6N Project Control Administrators to arrange for staff training, and technical support to facilitate the execution of electronic data management and control.

B. Project Management Information Systems (PMIS): Oracle Unifier Enterprise Project Portfolio Manager (EPPM), or the Oracle Primavera P6, or Procore or similar.

C. All submittals, RFIs, Pay Applications, Correspondence, change requests, and pricing proposals and settlement agreements shall be recorded and submitted using the current PMIS:

1. The Contractor shall follow the specified PMIS Access Request Procedure and adhere to all user license conditions.
2. The Contractor shall sign the Information Technology Agreement (ITA) to comply with the BTV computer system security requirements and any contractual obligation to the software and service providers for the current PMIS software.
3. BTV will train the Contractor’s staff on the use of the PMIS.
4. At a minimum, the Contractor shall provide computer hardware and software to meet the following requirements and to run the following programs, as required for the project:

a. Internet connectivity that provides the necessary high-speed connection to

perform all activities indicated in this Contract.

b. Internet Explorer version 8 or higher.
c. Based on the project, a specific Java JRE application may be required, which can be downloaded from the Internet. If needed, the revision and update number will be provided at NTP.
d. Other files capability pre-approved by the Owner's Representative or as required by the BTV BIM Execution Plan.
e. Most current version of Revit, as per BTV requirements.

1.7 COORDINATION DRAWINGS

A. Coordination Drawings, General: Prepare coordination drawings according to requirements in individual Sections, BIM Design Standards Manual and BIM Project Execution Plan (BPXP), and additionally where installation is not completely shown on Shop Drawings, where limited space availability necessitates coordination, or if coordination is required to facilitate integration of products and materials fabricated or installed by more than one entity. Coordination drawings will be the result of a Contractor driven Spatial Coordination effort as spelled out in the BPXP.

1. Field verify all existing dimensions and any as-built dimensions, whether built by the Contractor or others, necessary to produce accurate coordination and working drawings.
2. Content: Project-specific information, drawn accurately to a scale large enough to indicate and resolve conflicts. Do not base coordination drawings on standard printed data. Include the following information, as applicable:

    a. Use applicable Models/Drawings as a basis for preparation of coordination drawings. Prepare sections, elevations, and details as needed to describe relationship of various systems and components.
    b. Coordinate the addition of trade-specific information to the coordination drawings by multiple contractors in a sequence that best provides for coordination of the information and resolution of conflicts between installed components before submitting for review.
    c. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
    d. Indicate space requirements for routine maintenance and for anticipated replacement of components during the life of the installation.
    e. Show location and size of access doors required for access to concealed dampers, valves, and other controls.
    f. Indicate required installation sequences.
    g. Indicate dimensions shown on the Models/Drawings. Specifically note dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Owner's Representative
    h. indicating proposed resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

B. Coordination Drawing Organization: Using software as in the BPXP, the Contractor shall coordinate these systems per floor or zone per BPXP, and as follows:

1. Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire-protection, fire alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work.
2. Plenum Space: Indicate subframing for support of ceiling and wall systems, mechanical and electrical equipment, and related Work. Locate components within ceiling plenum to accommodate layout of light fixtures indicated on Drawings. Indicate areas of conflict between light fixtures and other components.
3. Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire-protection, fire alarm, and electrical equipment.
4. Structural Penetrations: Indicate penetrations and openings required for all disciplines.
5. Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
6. Mechanical and Plumbing Work: Show the following:

    a. Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.
    b. Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts and electrical distribution equipment.
    c. Fire-rated enclosures around ductwork.

7. Electrical Work: Show the following:

    a. Runs of vertical and horizontal conduit.
    b. Light fixture, exit light, emergency battery pack, smoke detector, and other fire-alarm locations.
    c. Panel board, switchboard, switchgear, transformer, busway, generator, and motor control center locations.
    d. Location of pull boxes and junction boxes dimensioned from column centerlines.

8. Fire-Protection System: Show the following:

    a. Locations of standpipes, mains piping, branch lines, pipe drops, and sprinkler heads.

9. Review: Owner’s Representative will review coordination drawings to confirm that the Work is being coordinated, but not for the details of the coordination, which are Contractor's responsibility. If Owner’s Representative determines that coordination drawings are not being prepared in sufficient scope or detail, or are otherwise deficient, Owner’s Representative will so inform Contractor, who shall make changes as directed and resubmit.

C. Coordination Digital Data Files: Prepare coordination digital data files according to the following requirements:

1. File Preparation Format: Same digital data software program, version, and operating system as original Drawings, unless approved otherwise by Owner's Representative.
2. File Preparation Format: Provided in the Project BIM Execution Plan operating in Microsoft Windows operating system.
3. File Submittal Format: Submit or post coordination drawing files as required in the Project BIM Execution Plan.
4. The submittal must be logged in accordance with the submittal procedure
5. For Fire Protection system; provide shop drawing and design calculations as approved by the building department. Submit as-built drawings in format as outline in BPXP.
6. For all projects, receiving official variance from the BIM requirements not utilizing BIM, coordination drawings must be submitted in acceptable digital format shall be in an industry recognized 3D AutoCAD model.

7. Owner's Representative will furnish Contractor one (1) set of digital data files of Models and/or Drawings for use in preparing coordination digital data files.

    a. The Design consultants and Contractors and Sub Contractors acknowledge and represent the following Right Of Reliance regarding Electronic Models and/or Drawing deliverables:

        1) Models may be transferred for allowing the recipients to develop derivative models to develop the means and methods by which to construct the project.
        2) It must be clear that each party be able to rely on the fact that the model furnished by others "match the 2D Contract Documents or shop drawings in their equivalent state of development".

1.8 REQUESTS FOR INFORMATION (RFIs)

A. General: Immediately on discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit an RFI through the PMIS.

1. Owner's Representative will distribute the RFIs to the proper entities.
2. Owner's Representative will coordinate and submit RFIs in a prompt manner to avoid delays in Contractor's Work or work of subcontractors.

B. Owner's Representative has the right to reject RFIs or those that do not contain proper information and required data to properly evaluate the request and respond in a timely manner.

C. RFIs: Use PMIS to generate RFIs.

1. Attachments shall be electronic files in Adobe Acrobat PDF format.
2. Attachments include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.

a. Include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments on attached sketches.

D. For projects not using Unifier to create the RFI, the RFI must include a detailed, legible description of item needing information or interpretation and the following:

1. Project name.
2. Project number.
3. Date.
4. Name of Contractor.
5. Name of DOR **and Owner's Representative**.
6. RFI number, numbered sequentially.
7. RFI subject.
8. Specification Section number and title and related paragraphs, as appropriate.
9. Drawing number and detail references, as appropriate.
10. Field dimensions and conditions, as appropriate.
11. Contractor's suggested resolution. If Contractor's suggested resolution impacts the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
12. Contractor's signature.
13. Attachments: Include sketches, descriptions, measurements, photos, Product Data, Shop Drawings, coordination drawings, and other information necessary to fully describe items needing interpretation.

E. Owner's Representative will review each RFI, determine action required, and respond. RFIs received by Owner's Representative after 1:00 p.m. will be considered as received the following working day. Direct responses by any entity other than Owner's Representative shall not be binding to the Owner. E-mails, and verbal conversations must be followed by an official RFI or proper contractual vehicle before it is considered for any additional compensation or time impact to the project terms and conditions.

1. The following Contractor-generated RFIs will be returned without action:

a. Requests for approval of submittals.
b. Requests for approval of substitutions.
c. Requests for approval of Contractor's means and methods.
d. Requests for coordination information already indicated in the Contract Documents.
e. Requests for adjustments in the Contract Time or the Contract Sum.
f. Requests for interpretation of Owner's Representative's actions on submittals.
g. Incomplete RFIs or inaccurately prepared RFIs.

2. Owner's Representative's action may include a request for additional information, in which case Owner's Representative's time for response will date from time of receipt of additional information.
3. Owner's Representative's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Title 11 - Changes In the Work, Contract Price, or Contract Time in the General Contract Conditions, 2011 Edition as amended by Special Conditions.

a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Owner's Representative in writing within five (5) days of receipt of the RFI response or the time required by Title 11 - Changes In the Work, Contract Price, or Contract Time in the General Contract Conditions, 2011 Edition.

F. RFI Log: For projects not utilizing the PMIS application, prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. The log shall include but not limited to the following data:

1. Project name.
2. Name and address of Contractor.
3. Name and address of Owner's Representative.
4. RFI number including RFIs that were returned without action or withdrawn.
5. RFI description.
6. Date the RFI was submitted.
7. Date Owner's Representative's response was received.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

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SECTION 013119 - PROJECT MEETINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The Work specified in this Section requires the Contractor's Project Manager, Superintendent, and Quality Control representative to attend meetings scheduled by the Owner’s Representative for the collection and dissemination of information related to the subject Contract.

B. The Owner’s Representative will prepare the minutes of each meeting and distribute them to each of the participants.

1.3 REFERENCE DOCUMENTS

A. Preconstruction Meeting Agenda

B. Construction Meeting Agenda/Minutes

1.4 OTHER MEETINGS

A. The Contractor shall attend all other project related meetings as directed by the Owner’s Representative.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PRECONSTRUCTION MEETING

A. A Preconstruction Meeting will be scheduled by the Owner’s Representative after the Contract has been signed by all parties. The purpose of this meeting is to introduce the City's Representatives to their counterparts in the Contractor's organization and to establish lines of communication between these representatives and outline some Contract requirements. The Contractor's key personnel shall attend this meeting.

B. The Owner’s Representative will distribute a notice of this meeting, along with an agenda of the subjects to be addressed. Refer to Preconstruction Meeting Agenda.

C. The Owner’s Representative will explain and discuss the responsibilities and authorities of the Owner, the Designer of Record, and the Owner’s Representative's organization.

D. The Contractor shall introduce the Contractor's key personnel, subcontractors, and representatives and briefly describe each person's responsibilities.

E. Explanations provided by the Owner’s Representative will not amend, supersede, or alter the terms or meaning of any Contract document, and the Contractor shall not claim reliance on such explanations as a defense to any breach or failure by the Contractor to perform as specified in the Contract.

3.2 CONSTRUCTION PROGRESS MEETINGS

A. Progress meetings will be scheduled weekly and more often as necessary by the Owner’s Representative to promote the competent and timely execution of the Contract.

B. The meetings will be held at the work site or at a location selected by the Owner’s Representative. Meetings will be chaired by the Owner’s Representative.

C. The Contractor's key personnel shall attend unless otherwise agreed by the Owner’s Representative.

D. At a minimum, and as directed by the Owner’s Representative, the items detailed in the Construction Meeting Agenda/Minutes shall be addressed at each meeting. The items addressed in the meeting do not waive notification or submittal requirements as required elsewhere in the Contract.

E. The Contractor will be responsible for publishing minutes of the meetings. Refer to the Construction Agenda/Meeting Minutes.

END OF SECTION 013119

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SECTION 013210 - SCHEDULE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The Work specified in this Section describes the procedures and requirements for scheduling and documenting the progress of the project.

1. Preliminary Construction Schedule.
2. Contractor's Construction Schedule.
3. Contractor's Monthly Construction Schedule update.
4. As-built Schedule.
5. Three-Week Look-Ahead Schedule.
6. Daily Construction Reports.
7. Submittal Schedule.
8. Fabrication Schedule.
9. Material Delivery Schedules, cranes, special equipment and staging status.
10. Special reports:

    a. Weather impacts and mitigations.
    b. Recovery Schedule and alternatives.

B. Reference Documents

1. Article 1105 – Time Extensions in the General Contract Conditions, 2011 Edition.
2. Section 011100 "Summary of Work".
3. Section 011420 "Work Sequence and Constraints".
4. Section 012910 "Schedule of Values".
5. Section 013119 “Project Meetings”.
6. Section 013300 "Submittal Procedures".

1.3 DEFINITIONS

A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a Construction Schedule consume time and resources:

1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.

Predecessor Activity: An activity that precedes another activity in the network.
Successor Activity: An activity that follows another activity in the network.

B. Cost Loading: The allocation given in the Schedule of Values for the completion of an activity as scheduled. The sum of costs loaded for all scheduled activities must equal the total Contract Value unless otherwise approved by Owner' Representative. All project costs, including those for stored materials and allowances, shall be loaded into the schedule and shall be balanced to where no activity is unfunded.

C. Critical Path Method (CPM): A method of planning and scheduling a construction project where activities are arranged based upon defined relationships. Defined relationships determine when activities can be performed and the critical path for completing the Work.

D. Critical Path: The longest chain of interdependent activities through the network sequence that establishes the shortest duration for completing the work and contains no float. The critical path shall be calculated as total float equal to but not less than zero days.

E. Float: The amount of time that an activity in a network sequence can be delayed without causing a delay to subsequent activities and/or the completion date of the Work:

1. Float is not for the exclusive use or benefit of either the Owner or the Contractor but is jointly owned. Liability for delay to the Substantial Completion of the Work rests with the party whose actions, last in time, actually cause a delay to the Substantial Completion date.
2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of its successor activity.
3. Total float is the amount of time that an activity may be delayed from early start without adversely affecting the Substantial Completion date.

F. Resource Loading: The allocation of direct man-hours by trade, material, equipment, subcontractors, and all other resources required to complete each activity. The contractor shall account for the indirect man-hours in the cost. The indirect labor hours could be tracked and reported separately, if agreed upon between the Contractor and the Owner' Representative prior to the start of the Work.

G. Direct Man-hours: Man-hours related only to the physical construction of the Work, i.e., masonry, mechanical, electrical, drywall, carpeting, etc.

H. Indirect Man-hours: Man-hours related to support of the physical construction of the Work, i.e., cleanup, mobilization, traffic control, temporary activities, badging, supervision and overhead, etc.

I. Work Breakdown Structure (WBS): A hierarchical arrangement of the activities that allows for the roll-up and summarization to a predetermined level. The level of breakdown shall be agreed upon by the Contractor and the Owner' Representative prior to the start of Work.

1.4 SUBMITTALS

A. Scheduler Qualifications

1. Scheduling Consultant Qualifications: A professional specialist, experienced in CPM scheduling and reporting with capability of producing CPM reports and diagrams who can quickly produce these reports/diagrams within 24 hours of the Owner' Representative's request. Review methods and procedures related to the set-up in the PMIS of Preliminary Construction Schedule and Contractor's Construction Schedule, including, but not limited to, the following:

    a. Review content and format for reports.
    b. Verify availability of qualified personnel needed to develop and update schedule.
    c. Discuss constraints, including phasing, area separations, interim milestones, and partial Owner occupancy.
    d. Review delivery dates for Owner-furnished products.
    e. Review submittal requirements and procedures.
    f. Review time required for review of submittals and resubmittals.
    g. Review requirements for tests and inspections by independent testing and inspecting agencies.
    h. Review time required for Project closeout and Owner start-up procedures, including commissioning activities.
    i. Review procedures for updating schedule.
    j. Review requirements for content and input of direct man-hour resources in activities.
    k. Review requirements for cost loading of activities.

B. Format for Submittals: All schedules shall be submitted in the following format:

1. The Contractor shall develop Critical Path Method (CPM) Schedule utilizing the applicable PMIS. The schedule shall utilize the Precedence Diagram Method (PDM) and be depicted in Gantt Chart view.
2. All schedules shall be submitted to the Owner' Representative electronically in PDF format and in a dynamic format that will allow import/export, manipulation, and generation of report(s) to evaluate and review any part of the schedule.
3. Export file shall use the following naming convention. For example, 161510 BL – Parking Structure MOD4E Baseline.

    a. Project ID: To be assigned at Schedule Conference Meeting, i.e., 161510
    b. Project Name: Reference Project Manual for Project Name, i.e., Parking Structure MOD 4E.
    c. Identify schedule type: Baseline, Update or Revision, i.e., BL, U, and R.

4. All schedules shall contain a title block showing:

    a. Project name.
    b. Contractor number.
    c. Contractor's name.
    d. Data date.

e. Symbol legend.

5. All schedules shall contain a time-scale at the top showing month and weeks.
6. The activity table layout shall include, but not limited to, the following columns:

a. Activity ID.
b. Activity name.
c. Original duration.
d. Schedule percent complete.
e. Start date.
f. Finish date.
g. Total Float.

7. A narrative report shall accompany all schedules.
8. A mitigation report shall be required when at the discretion of either party it becomes apparent that the project is not progressing on time regardless of the cause of delays and impacts, or issued construction changes have negative impact and require a mitigation effort through several viable alternatives. The mitigation report shall detail the measures proposed by the Contractor to mitigate the impacts of the delay in order to meet the planned project completion date.

1.5 PRELIMINARY CONSTRUCTION SCHEDULE

A. Gantt Chart Schedule

1. Submit Gantt chart-type CPM Construction Schedule at the pre-construction meeting.

B. Preparation

1. Indicate each significant construction activity separately.
2. Identify first workday of each week with a continuous vertical line.
3. Outline significant construction activities for first sixty (60) days of construction.
4. Include skeleton diagram for the remainder of the Work.
5. The Preliminary Schedule shall show all significant work tasks that occur in the first sixty (60) days, including planning, mobilization, shop drawings and technical submittals and approval time, procurement, fabrication and construction.
6. It shall identify work items or milestones that affect or are affected by City, other Contractor's work, utilities, and other third parties and it shall list major submittals required by the Contract.

C. Narrative

1. The Preliminary Schedule shall be accompanied by a narrative describing the Contractor's approach to mobilization, procurement, and construction during the first sixty (60) days.
2. The narrative shall elaborate based on durations, production rates, major equipment to be used, and shall identify all major assumptions used to develop the schedule.

D. Approval of Preliminary Construction Schedule will not constitute approval of Schedule of Values.

E. The Owner' Representative will respond within 14 days to the Preliminary Schedule submittal with either acceptance or direction to revise and resubmit.

F. In lieu of the Preliminary Schedule, the Contractor may, at the Contractor's own discretion, submit the Construction Schedule at the Preconstruction Meeting. If the Construction Schedule is submitted in lieu of the Preliminary Schedule, the Owner' Representative will respond within thirty (30) days with acceptance or direction to revise and resubmit within ten (10) days.

1.6 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. The Contractor shall submit the Initial Construction Schedule thirty (30) days after the Notice to Proceed (NTP). Upon acceptance from the Owner' Representative and the BTV Scheduler, the Initial Construction Schedule shall become the Baseline Schedule for the duration of the project.

B. The Owner's Representative will respond within 14 days with acceptance or direction to revise and resubmit.

C. Failure of the contractor to have a Construction Schedule accepted by Owner's Representative will be considered cause for withholding progress payment.

D. The acceptance of the schedule is for general conformity to the Contract requirements and shall not constitute any relief of any Contract requirements.

E. Failure to include any work item required for performance of this Contract shall not excuse the Contractor from completing all Work within applicable completion dates, regardless of the Owner's acceptance of the schedule.

F. Preparation

1. Project Duration

    a. Extend schedule from date of established for the NTP to date of Substantial Completion and Final Completion.
    b. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically amended by Change Order.

2. Activities

    a. Treat each building floor or separate area as a separate numbered activity for each main element of the Work. Prepare a list of all activities required to complete the Work and indicate the estimated time duration, sequence requirements, and relationships of each activity in relation to the other activities.

3. Activity Duration

    a. Define activities so no construction activity is longer than twenty (20) days, unless specifically allowed by Owner' Representative. Include estimated time frames for the following activities:

        1) Preparation and processing of submittals.
        2) Mobilization and demobilization.
        3) Purchase of materials.
        4) Delivery of materials.
        5) Fabrication of materials.
        6) System shutdown request and approval.
        7) Utility/system interruptions.
        8) Installation.
        9) Work by City, other contractors, utilities and other third parties that may affect or be affected by Contractor's activities.
        10) Startup, Testing and Commissioning.
        11) Punch list and Final Completion.

4. Critical Path Activities

    a. No more than twenty-five (25) percent of the activities may be on the critical path, unless approved IN WRITING by Owner' Representative.
    b. Identify critical path activities, including those for interim completion dates.
    c. Scheduled start and completion dates shall be consistent with Contract milestone dates.

5. Procurement Activities

    a. Include procurement activities for long lead items and major items as separate activities in schedule.
    b. Procurement cycle activities including, but are not limited to, submittals, approvals, purchasing, fabrication and delivery.

6. Submittal Review Time

    a. Include review and re-submittal times indicated in Technical Specification 013300 "Submittal Procedures" in schedule unless time frame is reduced by approval of the Owner' Representative.
    b. Coordinate submittal review times in Contractor's Construction Schedule with submittal schedule.

7. Substantial Completion

    a. Indicate date established for Substantial Completion.

8. Constraints

    a. Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the

Work is affected.

1) Phasing:
Arrange list of activities in schedule by phase or Work Breakdown Structure (WBS).

a) Coordinate phasing and constraint with those established in Technical Specification Section 011400 “Work Sequence and Constraints”.

2) Products Ordered in Advance:
Include separate activity for each product.

a) Include delivery date indicated in Technical Specification Section 011100 “Summary of Work”.
b) Delivery dates indicated stipulate the earliest possible delivery data.

3) Owner-furnished Products:
Include separate activity for each product.

a) Include delivery date indicated in Technical Specification Section 011100 “Summary of Work”.
b) Delivery dates indicated stipulate the earliest possible delivery date.

9. Milestones

a. Include milestone indicated in the Contract Documents in schedule, including, but not limited to, the NTP, phasing requirements, Substantial Completion and Final Completion.

1) Resource Loading of Construction Schedule:

a) Coordinate with BTV Project Control Staff and Owner’ Representative for the requirements below.
b) Activities shall be resource loaded with direct man-hours required to perform the physical construction of the project. Indirect man-hours shall not be included as resources to activities.

2) Contract Modifications:

a) For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis to demonstrate the effect of the proposed change to the overall project schedule.

1.7 CONSTRUCTION SCHEDULE MONTHLY UPDATES

A. The Contractor shall submit a monthly progress schedule at the end of each month following the NTP. At the end of each month, the Contractor and Owner' Representative shall agree on the progress of the work and the Contractor shall update the Construction Schedule accordingly. This review does not constitute an acceptance of the Construction Schedule and shall not be used for the purpose of modifying the initially accepted Construction Schedule.

B. Failure of the Contractor to have a Construction Schedule accepted by the Owner' Representative will be considered cause for withholding progress payment per Article 306 - Working Hours and Schedules and Article 909 - Additional Withholding of Progress Payments of the General Contract Conditions.

C. The Contractor's monthly progress schedule shall include a written narrative describing the overall progress of the Work, provide a critical path analysis, discuss significant problems with proposed corrective action, and how the status of major changes and any other changes are affecting the project schedule.

D. Concurrent with making revision to the schedule, prepare a tabulated report showing the following and include in the narrative report:

1. Identification of activities that have changed.
2. Changes in early and late start dates.
3. Changes in early and late finish dates.
4. Changes in activity durations for remaining work activities only.
5. Changes in critical path.
6. Change in total float.
7. Changes in contract duration.

E. Changes to the Schedule

1. The Construction Schedule may be changed when one or more of the following events occur:

   a. When a Change Order significantly affects the contract completion date or sequence of work.
   b. When the Contractor elects to change the sequence or duration of work items affecting the critical path.
   c. When the City directs a change that affects a milestone dates specified in the Special Conditions or alters the length of a critical path.

2. Minor revisions submitted at monthly progress review meeting are not considered as changes in this context.

F. If, after submitting a request for change to the Construction Schedule, the Owner' Representative does not agree with the request, the Owner' Representative will schedule a meeting with the Contractor to discuss the differences. If a settlement cannot be reached on the change in the Construction Schedule, or if the Contractor has failed to submit revisions to the network, the Owner' Representative has the option of providing suggested logic or duration changes in all subsequent update schedules. The suggested logic and/or duration times will remain in effect until the change in the

Construction Schedule is settled or until the logic and duration are superseded.

1.8 AS-BUILT CONSTRUCTION SCHEDULE

A. After all Contract Work items are complete, the contractor shall submit an as-built Construction Schedule showing actual start and finish dates for all work items and milestones.

1.9 SCHEDULE NARRATIVES

A. In addition to the schedule, the Contractor shall submit a narrative that explains the basis for the Contractor's determination of construction logic.

B. It shall include estimated quantities and production rates, hours per shift, workdays per week, and types, number and capacities of major construction equipment to be used and whether the Contractor plans to work weekends.

1.10 SUBCONTRACTOR COORDINATION

A. The Contractor shall schedule and coordinate the work of all of its subcontractors and suppliers including their use of the worksite.

B. The contractor shall keep the subcontractors and suppliers informed of the project Construction Schedule to enable the subcontractors to plan and perform their work properly.

1.11 THREE WEEK LOOK-AHEAD SCHEDULE

A. The Contractor shall provide the Owner' Representative an electronic copy prior to and a minimum of four (4) hard copies of the Contractor's Three (3) Week Look-Ahead Schedule for review at the Owner' Representative's weekly progress meeting.

B. The schedule shall be in bar chart format based on the approved accepted CPM Baseline Schedule and shall include dates of testing activities, anticipated dates of inspection by BTV and other agencies, activities in progress, percentage of completion of activities, and responsible subcontractor for the activities.

1.12 RECOVERY SCHEDULE

A. If the latest completion time date for any work item does not fall within the time allowed by the Construction Schedule, the sequence of work or duration shall be revised by the Contractor through concurrent operations, additional manpower, additional shifts or overtime, additional equipment, or alternative construction methods until the schedule produced indicates that all significant contract completion dates, occupancy dates and milestones will be met.

B. No additional costs will be allowed if such expediting measures are necessary to meet the agreed completion date or dates except as provided elsewhere in the Contract Documents.

C. When periodic update indicates the Work is behind the current approved schedule, submit a separate Recovery Schedule indicating means by which Contractor intends to regain compliance with the schedule.

D. Provide a narrative indicating changes to working hours, working days, crew sizes, and equipment required to achieve compliance, and date by which recovery will be accomplished.

1.13 CONTRACT EXTENSIONS

A. If the Contractor is granted an extension of time for completion of any milestone or contract completion date under the provisions of the Contract, the determination of the total number of extended days will be based upon the current analysis of the schedule and upon all data relevant to the extension. Such data shall be incorporated into the next monthly update of the schedule.

B. The Contractor acknowledges and agrees that delays in work items that, according to schedule analysis, do not affect any milestone dates or the Contract completion date shown on the CPM Network Schedule at the time of the delay will not be the basis for a Contract extension.

1.14 COORDINATION

A. Pre-scheduling Conference: Schedule conference at Pre-Construction meeting to comply with requirements in Section 013100 "Project Management and Coordination." Review methods and procedures related to setting up the Preliminary Construction Schedule and Contractor's Construction Schedule, including, but not limited to, the following:

1. Review content and format for reports.
2. Verify availability of qualified personnel needed to develop and update schedule.
3. Discuss constraints, including phasing, area separations, interim milestones, and partial Owner occupancy.
4. Review delivery dates for Owner-furnished products.
5. Review submittal requirements and procedures.
6. Review time required for review of submittals and resubmittals.
7. Review time required for Shutdown request and approval.
8. Review requirements for tests and inspections by independent testing and inspecting agencies.
9. Review time required for Project closeout and Owner startup procedures, including commissioning activities.
10. Review procedures for updating schedule.
11. Review requirements for content and input of direct man-hour resources in activities.

12. Review requirements for cost loading of activities.

B. Coordinate Contractor's Construction Schedule with the Schedule of Values.

C. Work items in the Construction Schedule shall be identified in a Work Breakdown Structure (WBS) format that corresponds with the technical specifications.

D. At a minimum WBS shall correspond to the first tier level of the Master Format.

E. Secure time commitments for performing critical elements of the Work from entities involved.

F. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013210

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SECTION 013223 - CONSTRUCTION LAYOUT, AS-BUILT AND QUANTITY SURVEYS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section covers Burlington International Airport (BTV) procedures and accuracy requirements for survey services for construction layout, as-built, and quantity surveys.

B. Before commencing any field surveys on BTV property, the Contractor shall coordinate a pre-survey preparation activities meeting. This meeting is to be arranged through the Burlington International Airport Owner's Representative's Office with the attendance of the Contractor, the Contractor's surveyor and the BTV Survey Section. The Contractor is responsible for obtaining BTV related survey guidance, National Geodetic Survey (NGS) control stations, projection parameters, and training materials from the BTV Survey Section prior to beginning any survey work.

C. Reference Contract General Conditions.

D. Survey Project Checklist, provided after the end of this Section, will be reviewed at the pre-survey preparation activities meeting.

1.3 REFERENCE DOCUMENTS:

A. Section 013300 "Submittal Procedures".

B. Federal Aviation Administration Advisory Circular 150/5300-16A - "General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey".

C. Federal Aviation Administration Advisory Circular 150/5300-17C - "Standards for Using Remote Sensing Technologies in Airport Surveys".

D. Federal Aviation Administration Advisory Circular 150/5300-18B - "General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and Geographic Information System (GIS) Standards".

E. BTV Building Information Modeling (BIM) Design Standards Manual (DSM) and Construction Plan Manual, Technical Specifications Division 1.

F. Vermont Department of Transportation (VDOT) Survey Manual.

1.4 SUBMITTALS

A. Refer to Section 013300 "Submittal Procedures" for the submittal process.

B. Survey Statement of Work (SSOW):

1. The Contractor must develop a complete SSOW and submit it to the Owner's Representative. The SSOW is the Contractor's written description of the Contractor's methodology for surveying services that will be provided as part of the Project, including specific features that will be surveyed, action items, timelines necessary airport resources and general information.
2. SSOW must be submitted within ten (10) working days of the Notice to Proceed (NTP) and prior to commencement of any survey or layout work on the site.
3. The SSOW will be reviewed and approved by the BTV Survey Section. Under no circumstances will work begin until the SSOW has been accepted. Review comments and/or approval will be sent to the Owner's Representative within three (3) working days of the delivery of such document to the BTV Survey Section.

C. Survey and layout data must be submitted in the format indicated below. The data must be submitted immediately after completion.

1. Verify that formats noted below are currently used or approved by BTV.
2. All Raw Data files, either GPS, digital levels or conventional total station must use a Trimble format.
3. All copies of original pages of field notes or electronic field notes must be in Adobe Portable Document Format (PDF).
4. All original field notebooks used for this Project must be submitted at the end of Contract.
5. All points files must be in either CSV or TXT format.
6. All CAD drawings must be in Autodesk Civil 3D format.
7.

D. Weekly Project Status Report:

1. Submit a project status report via email Owner's Representative every Monday by 2:00 P.M. Eastern Time, from the date of the task order until the date of Substantial Completion. Provide the status of ongoing work, with expected completion dates, and any unusual circumstances and/or deviations from the contract documents. Status reports should be brief and contain the current information in the text of the email. See the example of a Project Status Report as provided after the end of this Section.

1.5 EQUIPMENT

A. Equipment Calibration:

1. Equipment must be regularly checked, and calibrated for accuracy at the beginning of any survey project to ensure that the equipment is operating

appropriately. Errors due to poorly maintained or malfunctioning equipment will not be accepted. If any equipment errors are found to exist, they must be reported to the BTV Survey Section prior to the start of any surveying. These errors will need to be verified and eliminated prior to performing any survey work. For projects lasting longer than six (6) months, the checking, and calibration of equipment shall be repeated. Furthermore, documentation must verify such equipment has met acceptable tolerances.

2. The Contractor MUST submit to the Owner's Representative written proof that survey equipment, as listed in the SQCP plan has been checked and calibrated before commencing any survey work. This could be in the form of field notes. If repairs are made, documentation of such repairs from an authorized equipment vendor is required.
3.

1.6 SURVEY CONTROL

A. All airport construction project surveys MUST USE the most current coordinate system. No prior coordinate systems are supported. Surveys MUST utilize the most current coordinate system for collecting construction as-built information.

B. Since the BTV LDP utilized the NAD83 (2007) data, all NGS horizontal points MUST use the NAD83 (2007) data. The BTV Survey Section will provide this data during the mandatory pre-survey preparation activities meeting. The BTV Survey Section will also provide coordinates for all NGS Control Points in BTV LDP based upon the location of the Project.

C. Since BTV has established NGS horizontal control points, the Contractor MUST use the published latitudes, longitudes, and heights with the projection parameters for these control points that are received and NOT the BTV LDP rectangular coordinates for base station setups for the Geodetic Verification Survey. The Contractor must verify each NGS Horizontal and Vertical primary control point stations by:

1. Physically visiting each control station to determine its usability and checking its identity.
2. Ascertaining its unmoved position.
3. Determining its condition, stability, visibility.
4. The submission of a recovery report to NGS if one has not been recently recorded.

D. Geodetic Verification Survey Instructions and Procedures:

1. The geodetic verification survey is created to ensure the stable position of the BTV control points that are used to reference the temporary design/construction control points to the National Spatial Reference System (NSRS). Acceptable monuments will be identified by the BTV Survey Section and will be limited to monuments of the NSRS with permanent identifiers (PIDS) and published positions and elevations. Temporary design/construction control points established for such project will be referenced by direct measurement to at least two (2) separate NGS control stations.

a. The Contractor will attempt to recover each identified monument and determine its condition, stability, and suitability for the intended use. A location sketch and visibility diagram will be prepared for each station. A minimum of three (3) digital photographs, one of each type described in AC 150/5300-18B, Section 1.5.2.1, will be captured, captioned, and properly named. A recovery note will be filed with NGS if no current recovery is shown in the NSRS database.

b. After recovering the identified NSRS NGS control stations that are located on BTV property, the procedure to verify the control points are as follows:

1) When using a remote GPS base station on the airfield, the Contractor must occupy the Primary Airport Control Station (PACS) and observe the Secondary Airport Control Station (SACS) for a duration of at least ten (10) minutes (600 epochs), along with a five (5) second collection interval. Then reverse the setup, occupy the SACS and observe the PACS for a duration of at least ten (10) minutes (600 epochs), along with a five (5)-second collection interval. The end results are two (2) independent GPS observations. Compare the newly measured distances or inverse distances (from new observations) against the distances determined from the published positions. Submit results to the BTV Survey Manager and BTV Survey Section in Microsoft Excel format.
2) When using a Virtual Reference Station (VRS) on the airfield, the Contractor must observe the PACS and the SACS for a duration of at least ten (10) minutes (600 epochs), along with a five (5)-second collection interval. Then reverse the setup, occupy the SACS and observe the PACS for a duration of at least ten (10) minutes (600 epochs), along with a five (5)-second collection interval. The end results are two (2) independent GPS observations. Compare the newly measured distances or inverse distances (from new observations) against the distances determined from the published positions. Submit results to the BTV Survey Manager and BTV Survey Section in Microsoft Excel format.
3) When using conventional methods on the airfield, measure the distance between the PACS and SACS using a calibrated electronic distance meter instrument (EDMI). Compute either the inverse using the NGS program INVERS3D (available on the NGS website at http://www.ngs.noaa.gov/TOOLS/) or a comparable commercial product. Compare the newly measured distances or inverse distances, from new observations, against the distances determined from the published positions. Submit results to the BTV Survey Manager and BTV Survey Section in Microsoft Excel format.
4) Obtain elevation checks either from GPS observations or from digital levels. The distances must agree within, plus or minus, three (±3) cm; the difference in ellipsoidal height must agree within, plus or minus, four (±4) cm, and the difference in orthometric height must agree within, plus or minus, five (±5) cm. If the tolerances are not met, the data must be recollected.
5) Provide the results or the comparisons as part of the observational data in a report to the Owner’s Representative to be reviewed and

approved by the BTV Survey Section prior to the start of construction and include this approved report in the final report.

6) Submit a recovery report for the NGS horizontal control stations to the NGS.

E. The Following are Limitations and Additional Information on NGS Control Stations and NGS Benchmarks (Refer to the NGS website.):

1. The use of control monuments and projection parameters for construction layout other than those shown on the Contract Drawings or furnished by or approved by the BTV Survey Section is STRICTLY PROHIBITED. Use of other monuments is solely at the risk of the Contractor.
2. The BTV Survey Section will provide the contractor with the projection parameters and any assistance in implementing the current coordinate system. It is up to the Contractor to use the correct methodology in performing any survey task that shall be submitted to the Owner's Representative and reviewed during the pre-survey preparation activities meeting.
3. The BTV Survey Section will need all pertinent data from the contractor to check and verify that the Contractor implemented the current coordinate system correctly.

F. Modifications to AC 150/5300-18B, Section 2.6.10.1.1, Verification of Survey Marks:

1. BTV is modifying the requirement for verification of PACS and SACS and is replacing it with a requirement to verify the unmoved position and elevation of both the PACS and SACS for any airside projects and any two (2) BTV approved NGS horizontal control stations for any landside project.
2. The surveyor must follow the same verification procedure as stated in paragraph 1.6.C of this Section.

G. Reporting Damage or Errors of NGS Control Stations:

1. Report damaged or destroyed airport control points, benchmarks, and section corner monuments promptly to the Owner's Representative.

   a. If section corner monuments are damaged or destroyed during construction activities, such points shall be re-established pursuant to Laws of the State of Colorado Regulating the Practice of Land Surveying by a Registered Professional Land Surveyor in the State of Colorado.
   b. If NGS control stations or NGS benchmarks are damaged, moved, altered, or destroyed by the Contractor, the City's cost of reestablishing such points shall be borne by the Contractor.
   c. The City will not be responsible for any increased costs or delays to the Contractor relating to reference points, airport control points, or benchmarks that are damaged, moved, altered, or destroyed by the Contractor or its subcontractors, suppliers, agents or employees or other Contractors working on the site.

2. Report alleged errors in NGS control stations or NGS benchmarks promptly to the Owner's Representative.

a. Discontinue use of NGS control stations or NGS benchmarks alleged to be in error until the accuracy of points can be verified or as directed.
b. Claims for extra compensation for alteration or reconstruction allegedly due to errors in NGS control stations or NGS benchmarks will not be allowed unless original NGS control stations and NGS benchmarks still exist or substantiating evidence proving error is furnished by the Contractor, and unless the Contractor has reported such errors to the Owner's Representative as specified herein.

1.7 TEMPORARY SURVEY CONTROL

A. The Contractor MUST set a minimum of 1" copper plug; a PK (surveying) nail in asphalt or a 5/8" rebar with cap stamped "Control Point" and the Surveyor's Professional Land Surveyors' number, in natural ground. Any other type of material used for control points MUST be approved first.

B. When a contractor establishes temporary control points for BTV survey work the Contractor MUST follow FAA guidelines. All temporary control points must be referenced to the NSRS using the NGS control stations provided by the BTV Survey Section. Temporary control may be necessary based on project site location. Below are the acceptable means to establish temporary geodetic control for BTV design or construction projects:

1. Temporary control must be established under close cooperation with the BTV Survey Section following the procedures outlined in AC150/5300-16 "General Guidance and Specifications for Aeronautical Surveys.
2. Establishment of Geodetic Control and Submission to National Geodetic Survey" shall be required only in the following cases:

   a. Large airport airfield construction project that significantly changes the airport geometry and would trigger the need to acquire new Digital Stereo Imagery following AC 150/5300-17 "General Guidance and Specification for Aeronautical Survey Airport Imagery Acquisition and Submission to the National Geodetic Survey". Examples include a new runway and taxiway complex, significant modification of existing runway or taxiway system, development of new outboard deice pad complex or establishment of new mid airfield concourse and terminal complex. The size and complexity of the Project will dictate the need to acquire new digital stereo imagery for significant construction.
   b. Construction that establishes a new ILS CAT II/III Operations.
   c. New Instrument Development Procedure.
   d. New Airport Layout Plan Survey Update.
   e. New Airport Obstruction Chart Update.
   f. New Airport Mapping Database.

3. On BTV construction projects, the Contractor, excluding large airport airfield construction projects, may use temporary control points on their project site. These temporary control points must be referenced to the nearest BTV primary control points and MUST BE referenced vertically to two (2) different

benchmarks. Also, all surveyors MUST obtain permission to establish temporary control points on BTV property by means of communicating with the BTV Survey Section.

4. In addition, all vertical control MUST BE established only using a digital level and collected using the digital software to reduce transposition errors unless otherwise authorized by the BTV Survey Section.
5. Minimum Construction Horizontal and Vertical Accuracy Tolerance:

    a. Adjustments:

        1) No Horizontal adjustment of the survey field data will be permitted without the written consent of the Owner's Representative and the BTV Survey Section. If it is determined that an adjustment is necessary, a weighted least squares adjustment method is recommended.

    b. Primary Control Benchmark Minimum Vertical Accuracy Tolerance:

        1) Setting of primary control benchmarks shall meet the Minimum Vertical Accuracy Tolerance of a NGS Second Order Class II as the square root of the total horizontal distance of the level loop in miles multiplied by 0.035 feet.
        2) The Primary Control Benchmarks must be NGS Published Vertical Points.

    c. Secondary Control Benchmark Minimum Vertical Accuracy Tolerance:

        1) Setting of secondary control benchmarks for construction shall meet the Minimum Construction Vertical Accuracy Tolerance of the square root of the total horizontal distance of the level loop in miles multiplied by 0.035 feet.

6. Whether establishing temporary control points or not, the Contractor must set up a pre-survey preparation activities meeting with the Owner's Representative and BTV Survey Section to discuss Geodetic Control Verification, obtain pertinent survey data, and projection parameters before the commencement of any survey work.
7. If temporary control points are needed, the Contractor can set and collect temporary control while performing as outlined in Part 1 of this Section. This procedure requires a ten (10) minute (600 epochs) for each temporary control point set. Once the data is collected the Contractor is required to submit to the Owner's Representative all GPS raw data in a Trimble format with a spreadsheet that displays the comparison from each observation of the NGS control stations and the Contractor's temporary control points. Only the redundant values of the temporary control points should be averaged. The results must be reviewed and approved by the BTV Survey Section, allowing at least seventy-two (72) hours to review and either approve or reject the temporary control. All temporary control points MUST BE accepted before any survey construction work can commence.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 CONSTRUCTION LINES AND GRADES

A. The Contractor's surveyor shall make surveys and layouts as necessary to delineate the Work. As a part of such surveys, the Contractors Surveyor shall furnish, establish, and maintain in good order, survey control points that may be required for the completion of the Work.

B. The Owner's Representative shall have the right to check surveys and layouts made by the Contractor prior to approving any of the Work. The Contractor shall give advance notice of not less than forty-eight (48) hours to the Owner's Representative to enable such checking prior to placing any work. The Contractor shall furnish assistance as may be required for checking purposes when so requested by the Owner's Representative.

C. The Contractor shall furnish skilled labor, instrument platforms, ladders, and such other temporary structures as may be necessary for making and maintaining points and lines in connection with the surveys required.

D. BTV may draw the Contractor's attention to errors or omissions in lines or grades, but the failure to point out such errors or omissions shall not give the Contractor any right or claim nor shall in any way relieve the Contractor of obligations according to the terms of this Contract.

1. The Contractor's Surveyors instruments and other survey equipment shall be accurate, suitable for the surveys required in accordance with recognized professional standards and in proper operating condition and adjustment at all times. Surveys shall be performed under the direct supervision of a current Colorado Registered Licensed Surveyor.

E. Field Notes:

1. The Contractor shall record surveys in field notebooks or as electronic field notes, whichever is more appropriate to the type of survey work. Copies of the original pages of field notebooks shall be furnished to the Owner's Representative and the BTV Survey Section at intervals required by the Owner's Representative. Each field notebook shall be furnished to the Owner's Representative when filled or at completion of project. No erasures are allowed on the data entered in the field book. Cross out errors, and write correct entries above. The person that makes correction in the field book should initial above corrections made. An explanatory note shall be made for all corrections to original figures. All editing of computer records shall be done on a copy of the original with all changes initialed. Electronic data from data collectors shall be provided in formats in accordance with BTV Design Standards Manual Volume 12 and Construction Plan Manual Technical Specifications Division 1. These will

be used to supplement field books and shall be supplied to the Owner's Representative and BTV Survey Section on Compact Disk (CD).

2. If the Owner's Representative or BTV Survey Section finds errors in the field notes BTV will have the Contractor correct and resubmit the notes. This review does not relieve the Contractor from the responsibility of maintaining accurate survey data. Whichever method of note taking the Contractor starts with, the Contractor must use the same method throughout the Contract duration.

3.2 SUBSURFACE UTILITIES ENGINEERING (SUE)

A. Refer to Section 011810 "Utilities Interface" for information related to underground utilities.

3.3 QUANTITY SURVEYS FOR PAYMENT

A. When the specifications or the Owner's Representative requires items in the Schedule of Prices and Quantities to be measured by surveying methods, the Contractor shall perform the surveys. All such surveys, including Horizontal and Vertical control surveys run for establishing the measurement values shall be performed in the presence of the Owner's Representative and the BTV Surveyor may witness the surveying operation. The Contractor will reduce the field notes and calculate final quantities for payment purposes. The note reductions and calculations shall be submitted to the Owner's Representative.

3.4 SURVEYING ACCURACIES AND TOLERANCES IN CONTROL SURVEYS, CONSTRUCTION LAYOUTS AND QUANTITY CALCULATIONS

A. See CDOT Survey Manual or FAA Specifications for acceptable tolerances.

3.5 CAD DRAWINGS PER BTV GIS LAYER STANDARDS

A. Where CAD drawings are required, follow BTV BIM DSM.

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PART 4 - SURVEY CHECKLIST

Step	Yes	No	N/A	Project Kickoff Phase
1	☒	☐	☐	Did Consultant/Contractor meet with Owner's Representative obtain the data standards and general requirements for data gathering?
2	☒	☐	☐	Did Consultant/Contractor meet with Airport Survey Office to obtain airport survey control points, projection parameters, and airport survey training materials?
3	☒	☐	☐	Did Consultant/Contractor provide Survey Statement of Work to Owner's Representative?
4	☒	☐	☐	Did Consultant/Contractor provide Geodetic Verification Survey to Owner's Representative?
5	☒	☐	☐	Did Consultant/Contractor provide Survey Control Plan to Owner's Representative?
6	☐	☐	☒	Did Consultant/Contractor provide Imagery Plan to Owner's Representative? (Only required if collecting aerial imagery)?
7	☐	☐	☒	Did the FAA accept survey plans?
Step	Yes	No	N/A	Construction Phase (As-Builts)
8	☐	☐	☒	Did Consultant/Contractor perform field survey of project site to collect accurate as-built data?
9	☐	☐	☒	Did the Consultant/Contractor provide Owner's Representative with subsurface utility data?
10	☐	☐	☒	Each week, did the Consultant/Contractor provide Owner's Representative with Project Status Reports?
11	☐	☐	☒	Did the Consultant/Contractor provide Owner's Representative with 30% as-built data in both CADD and GIS formats including all attribute information and metadata?
12a	☐	☐	☒	Did Owner's Representative report 30% QA findings via email to Consultant/Contractor?
12b	☐	☐	☒	If required, did the Consultant/Contractor provide Owner's Representative with 60% as-built data in both CADD and GIS formats including all attribute information and metadata?
12c	☐	☐	☒	If applicable, did Owner's Representative report 60% QA findings via email to Consultant/Contractor?
12d	☐	☐	☒	If required, did the Consultant/Contractor provide the Owner's Representative with 90% as-built data in both CADD and GIS formats including all attribute information and metadata?
12e	☐	☐	☒	If applicable, did Owner's Representative report 90% QA findings via email to Consultant/Contractor?
13	☐	☐	☒	Did the Consultant/Contractor provide Owner's Representative with 100% as-built data in both CADD and GIS formats including all attribute information and metadata?
14	☐	☐	☒	Did Consultant/Contractor provide Owner's Representative with a completed

				Final Survey Report?
15	☐	☐	☒	Did Owner's Representative report QA findings via email to Consultant/Contractor?

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PART 5 - SAMPLE OF A WEEKLY PROJECT STATUS REPORT

Anywhere Field/Anywhere International Airport

AIP X-XX-XXXX-XXX-20XX

Survey progress update #1

July XX to July XX

Eagle Eye Surveying completed a second week of ground surveying. The first week verified PACS and SACS control, collected runway centerline, and primary surface topographic information.

To date we have surveyed for Runway 12-30:
Airport Control (PACS, SACS, ANY B540) 100%
Runway and Stop way Ends 100%
NAVAIDS (VOR, NDB, Airport Beacon, VASI, PAPI, and REILs) 100%
Runway and Stop way Obstructions (Primary surface, approaches, transitional surfaces) 100%
Aircraft Movement and apron areas 75%
Prominent airport buildings / potential close-in obstructions 42%

This week we will be analyzing the collected obstruction survey data relative to the object identification surfaces. We will check both the required points for each obstruction zone and the navigational aids, and generate the appropriate field documentation. We completed subcontract negotiations with aerial photography sub consultant SkyCamera, Inc. and are submitting the proposed flight map with ground reference points for review and approval before completing our final week of field surveying. This week we will be setting aerial targets and surveying in the targets and Photo ID points, and collecting final outlying obstruction data. Aerial photography is promised to us 2 to 4 days after our targets are in place.

Sincerely,

Any Surveyor, P.S.
Eagle Eye Surveying

END OF SECTION 013223

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SECTION 013233 - PHOTOGRAPHIC DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for the following:

1. Preconstruction photographs.
2. Periodic construction photographs.
3. Final Completion construction photographs.
4. Preconstruction video recordings.
5. Periodic construction video recordings.
6. Web-based construction photographic documentation.

1.3 REFERENCE DOCUMENTS:

A. Section 013300 "Submittal Procedures"

B. Section 017720 "Contract Closeout"

C. Section 017900 "Demonstration and Training"

D. Section 024119 "Selective Demolition"

E. Section 018113 “Sustainable Design Requirements”

1.4 ALTERNATES

A. Refer to Section 012300 "Alternates"

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For photographer. Individual or company with demonstrable previous experience with photographic documentation of large construction projects. Entity may be required to provide examples and documentation of at least two projects of similar size and complexity and five separate construction projects overall. Entity must be capable of meeting the security requirements of the Airport for access to the site.

B. Key Plan: Submit key plan of Project site and building with notation of vantage points marked for location and direction of each photograph and/or video recording. Indicate elevation or story of construction. Include same information as corresponding photographic documentation.

C. Digital Photographs: Submit image files within seven (7) days of taking photographs.

1. Digital Camera: Minimum sensor resolution of 10 megapixels.
2. File Format: Minimum 300 dpi150, in unaltered RAW original files, with same aspect ratio as the sensor, uncropped, date and time stamped, in folder named by date of photograph, accompanied by key plan file.
3. Identification: Provide the following information with each image description in file metadata tag:

    a. Project title and Project number.
    b. Name and contact information for photographer.
    c. Name of Owner's Representative.
    d. Name of Contractor.
    e. Date photograph was taken.
    f. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.

        1) Include work order number or change order number if applicable.

    g. Unique sequential identifier keyed to accompanying key plan.
    h. Photograph number.

D. Construction Photographs: Submit one (1) print of each photographic view and one electronic file via Unifier of all photo print files within seven (7) days of taking photographs.

1. Format: 8-by-10-inch. smooth-surface matte prints on single-weight, commercial-grade photographic paper; punched for standard three-ring binder.
2. Identification: On back of each print, provide an applied label or rubber-stamped impression with the following information:

    a. Name of Project.
    b. Name and contact information for photographer.
    c. Name of Owner's Representative.
    d. Name of Contractor.
    e. Date photograph was taken if not date stamped by camera.
    f. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
    g. Unique sequential identifier keyed to accompanying key plan.
3. Digital file names must match the sequential identifier of the printed images.

E. Video Recordings: Submit video recordings within ten (10) days of recording.

1. Submit video recordings in an electronic format acceptable to Owner's Representative. Recordings shall be high-resolution 4k with a minimum framerate of 60Hz

2. Identification: With each submittal, provide the following information:

    a. Name of Project.
    b. Name and address of photographer.
    c. Name of Owner's Representative.
    d. Name of Contractor.
    e. Date video recording was recorded.
    f. Description and key plan of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
    g. Weather conditions at time of recording.

F. Web-Based Photographic Documentation: Submit time-lapse sequence video recordings.

1. Submit time-lapse sequence video recordings by posting as directed Owner's Representative.
2. Identification: For each recording, provide the following information:

    a. Name of Project.
    b. Name and contact information for photographer.
    c. Name of Owner's Representative.
    d. Name of Contractor.
    e. Date(s) and time(s) video recording was recorded.
    f. Description of vantage point, indicating location, direction (by compass point), and elevation or story of construction.
    g. Weather conditions at time of recording.

1.6 QUALITY ASSURANCE

A. Photographer Qualifications: An individual who has been regularly engaged as a professional photographer of construction projects for not less than three years.

B. Web-Based Photographic Documentation Service Provider: A firm specializing in providing photographic equipment, Web-based software, and related services for construction projects, with record of providing satisfactory services similar to those required for Project for not less than three years.

1.7 USAGE RIGHTS

A. Obtain and transfer copyright usage rights from photographer to City and County of Denver for unlimited reproduction of photographic documentation.

PART 2 - PRODUCTS

2.1 PHOTOGRAPHIC MEDIA

A. Digital Images: Provide images in JPG format, produced by a digital camera with

minimum sensor size of 10 megapixels, and at an image resolution of not less than 3200 by 2400 pixels.

B. Digital Video Recordings: Provide high-resolution4k with a minimum framerate of 60Hz in electronic format acceptable to Owner's Representative.

2.2 WEB-BASED PHOTOGRAPHIC DOCUMENTATION

A. Project Camera: Provide fixed exterior camera installation, mounted to provide unobstructed view of construction site from location approved by Owner's Representative.

1. Provide one fixed-location camera per project site location, with the following characteristics:

a. Static view and optical zoom of 500 percent minimum.
b. Provide power supply, active high-speed data connection to service provider's network, and static public IP address for each camera.

B. Provide camera system capable of producing images complying with requirements in this Section, with wireless transmission to service provider's network enabling a live image stream viewable by multiple parties.

1. Provide equipment and components including base station hub and base station connection to enable wireless camera operation. Contractor responsible for ensuring camera stays in operation.
2. Provide power supply, active high-speed data connection to service provider's network, and static public IP address at base station hub. Provide power supply, conduit, and data wiring between base station hub and base station connection.

C. Web-Based Image Access: Password-protected access for Project team administered by Contractor, providing current image access and archival image access by date and time, with images downloadable to viewer's device.

1. Provide public viewer open access to most recent project camera image as directed by Owner's Representative.

PART 3 - EXECUTION

3.1 CONSTRUCTION PHOTOGRAPHS

A. Photographer: Engage a qualified photographer to take construction photographs.

B. General: Take photographs using the maximum range of depth of field, and that are in focus, to show clearly the Work. Photographs with blurry or out-of-focus areas will not be accepted.

1. Maintain key plan with each set of construction photographs that identifies each

photographic location.

C. Digital Images: Submit digital images exactly as originally recorded in the digital camera, without alteration, manipulation, editing, or modifications using image-editing software. Provide commercial quality, digital color photographs in PDF format. PDF file shall be security-free, bookmarked by date with all photos rotated to the correct orientation. Identify the following information on each photograph on the lower right corner.

1. Subject description (include work order number or change order number if applicable).
2. Station point of camera and direction of view. Include letter size diagram of project indicating Station point.
3. Date and time each photo was taken.
4. Name of Contractor.
5. Photograph number.
6. Field Office Images: Maintain one set of images accessible in the field office at Project site, available at all times for reference. Identify images in the same manner as those submitted to Owner's Representative.

D. Preconstruction Photographs: Before commencement of excavation, demolition, or starting construction, take photographs of Project site and surrounding properties, including existing items to remain during construction, from different vantage points, as directed by Owner's Representative.

1. Flag excavation areas before taking construction photographs.
2. Take 20 photographs to show existing conditions adjacent to property before starting the Work.
3. Take 20 photographs of existing buildings either on or adjoining property to accurately record physical conditions at start of construction.
4. Take additional photographs as required to record settlement or cracking of adjacent structures, pavements, and improvements.
5. Haul route, laydown yard, and other locations as directed by Owner's Representative.

E. Periodic Construction Photographs: Take 20 photographs monthly, with timing each month adjusted to coincide with the cutoff date associated with each Application for Payment. Select vantage points to show status of construction and progress since last photographs were taken.

F. Owner's Representative-Directed Construction Photographs: From time to time, Owner's Representative will instruct photographer about number and frequency of photographs and general directions on vantage points. Select actual vantage points and take photographs to show the status of construction and progress since last photographs were taken.

G. Time-Lapse Sequence Construction Photographs: Take 10 photographs per project site as indicated, to show status of construction and progress since last photographs were taken.

1. Frequency: Take photographs weekly, with timing each month adjusted to

coincide with the cutoff date associated with each Application for Payment.

2. Vantage Points: Following suggestions by Owner's Representative and Contractor, photographer to select vantage points. During each of the following construction phases, take not less than two of the required shots from same vantage point each time to create a time-lapse sequence as follows:

    a. Commencement of the Work, through completion of subgrade construction.
    b. Above-grade structural framing.
    c. Exterior building enclosure.
    d. Interior Work, through date of Substantial Completion.

H. Final Completion Construction Photographs: Take 20 color photographs after date of Substantial Completion for submission as project record documents. Owner's Representative will inform photographer of desired vantage points.

1. Do not include date stamp.

I. Additional Photographs: Owner's Representative may request photographs in addition to periodic photographs specified. Additional photographs shall be paid for by Change Order and are not included in the Contract Sum.

1. Three days' notice shall be given, where feasible.
2. In emergency situations, take additional photographs within 24 hours of request.
3. Circumstances that could require additional photographs include, but are not limited to, the following:

    a. Special events planned at Project site.
    b. Immediate follow-up when on-site events result in construction damage or losses.
    c. Photographs to be taken at fabrication locations away from Project site. These photographs are not subject to unit prices or unit-cost allowances.
    d. Substantial Completion of a major phase or component of the Work.
    e. Extra record photographs at time of final acceptance.
    f. BTV's request for special publicity photographs.

J. Indoor Air Quality Control Documentation: Take a minimum of 6 photographs at three different occasions (minimum 18 total) during construction of the different SMACNA requirements and provide a brief description of the SMACNA approach employed, documenting implementation of the IAQ management measures, such as protection of ducts, cleaning of air handling units, installation of filters, and on-site stored or installed absorptive materials.

1. Digital Photographs: 24 bit color, minimum resolution of 1024 by 768, in JPG format; provide files unaltered by photo editing software.

    a. Delivery Medium: Via email.
    b. File Naming: Include project identification, date and time of view, and view identification.
    c. PDF File: Assemble all photos into printable pages in PDF format, with 2 to 3 photos per page, each photo labeled with file name; one PDF file per submittal.

3.2 CONSTRUCTION VIDEO RECORDINGS

A. Video Recording Photographer: Engage a qualified videographer to record construction video recordings.

B. Recording: Mount camera on tripod before starting recording unless otherwise necessary to show area of construction. Display continuous running time and date. At start of each video recording, record weather conditions from local newspaper or television and the actual temperature reading at Project site.

C. Narration: Describe scenes on video recording by dubbing audio narration off-site after video recording is recorded. Include description of items being viewed, recent events, and planned activities. At each change in location, describe vantage point, location, direction (by compass point), and elevation or story of construction.

1. Confirm date and time at beginning and end of recording.
2. Begin each video recording with name of Project, Contractor's name, videographer's name, and Project location.

D. Preconstruction Video Recording: Before starting excavation, demolition, or construction, record video recording of Project site and surrounding properties from different vantage points, as directed by Owner’s Representative.

1. Flag excavation areas before recording construction video recordings.
2. Show existing conditions adjacent to Project site before starting the Work.
3. Show existing buildings either on or adjoining Project site to accurately record physical conditions at the start of excavation, demolition, or construction.
4. Show protection efforts by Contractor.

E. Periodic Construction Video Recordings: Record video recording as requested by Owner’s Representative but not more than monthly. Select vantage points to show status of construction and progress since last video recordings were recorded. Minimum recording time shall be 10 minutes(s).

F. Time-Lapse Sequence Construction Video Recordings: Record video recording to show status of construction and progress.

1. Frequency: During each of the following construction phases, set up video recorder to automatically record one frame of video recording every five (5) minutes, from same vantage point each time, to create a time-lapse sequence of the construction work.

    a. Commencement of the Work, through completion of subgrade construction.
    b. Above-grade structural framing.
    c. Exterior building enclosure.
    d. Exterior utilities and paving.
    e. Placement of Gate equipment including passenger boarding bridges and related gate equipment.

2. Timer: Provide timer to automatically start and stop video recorder so recording occurs only during daylight construction work hours.
3. Vantage Points: Following suggestions by Owner's Representative and photographer to select vantage points.

3.3 WEB-BASED CONSTRUCTION PHOTOGRAPHIC DOCUMENTATION

A. Time-Lapse Sequence Construction Site Recordings: Provide video recording from a fixed-location camera to show status of construction and progress.

1. Frequency: Record one frame of video recording every 5 minutes, from same vantage point each time, to create a time-lapse sequence of construction activities.
2. Timer: Provide timer to automatically start and stop video recorder so recording occurs only during daylight construction work hours.

B. Maintain cameras and Web-based access in good working order according to Web-based construction photographic documentation service provider's written instructions until Final Completion. Provide for service of cameras and related networking devices and software.

END OF SECTION 013233

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SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The Work specified in this Section summarizes the requirements for the submittal of documents to the Owner's Representative that are defined in these Specifications. It also describes the procedures for "supplemental" submittals.

B. The Contractor must follow all the requirements of the procedures and the product details and keep all the submittals current and approved prior to any placement of work.

1.3 SUBMITTAL SCHEDULE

A. The Contractor shall provide a submittal schedule within 14 days after Notice to Proceed. The Submittal Schedule shall be directly related to the CPM schedule, shall identify all the submittals, and shall include the following information for each submittal item.

1. Specification section, Contract article, or special condition.
2. Specification Subparagraph.
3. Item description.
4. Date the submittal shall be submitted.
5. Name of subcontractor or supplier.

B. The submittal schedule shall be kept current by the Contractor and submitted with the progress payment requests.

C. For large files that cannot be loaded or e-mailed through the electronic Project Manager application (Unifier), submit the files on a CD, DVD, or USB flash drive media.

1.4 ELECTRONIC SUBMITTALS

A. Submit request for progress payment applications utilizing TEXTURA software as instructed by Owner's Representative.

B. Submit original electronic copies of all City of South Burlington's Building Inspection

Department Approved drawings including all approvals of Deferred Submittals; including but not limited to shoring plans, Fire Protection distribution plans, and structural shop drawings to Owner's Representative as Informational Submittals. The lack of approval of South Burlington on any document shall be basis for rejection of Work and non-compliance.

1. NOTE: Only original copies shall be accepted. Scans will not be accepted.

C. Submit electronically scanned copies of all documents required by Chapter 17 "Special Inspection and Testing" of the International Building Code 2021. Keep scale and clarify dimension where electronic copies are not as originally scaled and dimensioned.

D. All submittals shall be delivered to the Owner's Representative utilizing the Primavera Construction Manager program (PCM) as attachments and as separate file when files are too large to attach or of an electronic media that is not supported by PCM or Utilizing the EPPM Unifier software uploaded to the share drive Unifier's project site when directed by Owner's Representative.

1. Acceptable electronic formats.

   a. Print document format (pdf) shall have no security and bookmark every applicable submittal. All pages shall be completely legible and oriented to correct reading view.

2. Formats are acceptable only with written permission of the Owner's Representative or required by the BIM PXP. For files in any of the following formats, the corresponding stringency will apply.

3. Verify that all software programs in paragraphs below are most currently used by BTV.

   a. Microsoft Office 2007 or newer. All files shall be fully compatible with Microsoft Office 2007.

      1) AutoCAD files shall be self-contained with no external x-references.

   b. BIM files shall conform to the standards and formats outlined in the BIM PXP and BTV BIM DSM.
   c. Other files pre-approved by the Owner's Representative.

1.5 INITIAL SUBMITTAL

A. Each submittal document shall include a title block showing the following information:

1. Date of submittal and revision dates.
2. Contract title and number.
3. The names of Contractor, subcontractor, supplier, manufacturer and when applicable, the seal and signature of an Engineer registered in the State of Vermont, for the involved discipline.

4. Identification of product by either description, model number, style number or lot number.
5. Subject identification by Contract Drawing or specification reference.

B. On each submitted drawing, include a blank space on each sheet, three inches by four inches, in the lower right corner, just above the title block, in which the Owner's Representative or the Designer of Record may indicate the action taken.

C. Review timeframes shall be consistent with the agreed upon or contract design schedule. If no timeframes for review are stated, the consultant shall allow a minimum cycle of 30 calendar days for review of each submittal by the Owner's Representative.

D. Accompany submittal documents with BTV transmittal form CM-30, Submittal, which shall contain the following information:

1. Contractor's name, address and telephone number.
2. Submittal number and date.
3. Contract title and number.
4. Supplier's, manufacturer's, or subcontractor's name, address and telephone number.
5. Identification of variations from Contract Documents.
6. Contractor's stamp and signature certifying the Contractor's review.
7. Identification of submittal:

    a. If the submittal is being made on a General Condition or Special Condition, reference the General or Special Condition number the first two digits of the specification section shall be 00XXXX.
    b. If the submittal is being made under a specification section, reference the specification number, paragraph number, and subparagraph number.
    c. If the submittal is being made under a drawing, reference the drawing(s) number and sub-number.

E. The Contractor shall describe, at the time of submission, variations from the Contract documents in writing, separate from the submittal document. If the Owner's Representative approves any such variations, an appropriate Contract change order shall be issued, except that if the variation is minor and does not involve a change in price or in time of performance, a modification need not be issued. If a submission contains variations and the variation column is not marked on the transmittal form, it will not be considered for review and acceptance. Along with marking the transmittal as a variation, a description must be included which outlines all the differences including maintenance and utility services along with any cost savings from an item not containing the variation.

F. Changes in accepted submittal documents will not be permitted unless those changes have been accepted, in writing, by the Owner's Representative.

1.6 SUPPLEMENTAL SUBMITTALS

A. Supplemental submittal documents initiated by the Contractor for consideration of

corrective procedures shall contain sufficient data for review. Make supplemental submittals in the same manner as initial submittals with the appropriate primary transmittal referenced.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

A. The Contractor shall review all submittal documents, stamp, and sign as reviewed and approved as complying with Contract Documents prior to submission to the Owner's Representative. Submittal documents that are submitted to the Owner's Representative THAT HAVE NOT BEEN REVIEWED BY THE CONTRACTOR will not be reviewed and will be returned to the Contractor. Contractor is responsible for any delays in the Project due to improperly reviewed, stamped, and signed submittals.

B. The Owner review period will be limited to ten (10) business days from the time complete submittal documents have been submitted.

C. The Contractor is responsible to obtain all approvals for all deferred submittals, shop drawings, and significant changes from the Owner's Representative.

D. All submittals must delineate any deviation from the intended design and must submit request for substitution to address any significant variation.

3.2 REVIEW BY OWNER'S REPRESENTATIVE

A. Submittal documents will be reviewed by the Owner's Representative, the Owner's Representative Team, and/or the DOR for conformance to requirements of the Contract Documents. Review of a separate item will not constitute review of an assembly in which the item functions. The Owner's Representative will withhold approval of submittals that depend on other submittals not yet submitted. Review and acceptance will not relieve the Contractor from the Contractor's responsibility for accuracy of submittals, for conformity of submittal document to requirements of Contract Drawings and specifications, for compatibility of described product with contiguous products and the rest of the system, or for protection and completion of the Contract in accordance with the Contract Drawings and specifications.

B. The Owner, the DOR, and/or the Owner's Representative will review the submittal documents for general conformance with the Contract Documents and mark the Action Code, sign, and date the transmittal.

C. The Action Codes have the following meanings:

1. No Exceptions Taken

a. The submittal conforms to the respective requirements of the contract documents.

2. Make Corrections Noted

a. The submittal conforms to the respective requirements of the Contract Documents after changes are made in accordance with reviewer's comments. AAN submittals do not need to be resubmitted.

3. Revise and Resubmit (R&R)

a. The submittal is unacceptable and must be revised and resubmitted.

4. Rejected (REJ)

a. The submittal is not approved and a new submittal in accordance with the Contract Documents must be prepared and submitted.

5. Reviewed Only

a. An item is received by the Owner’s Representative but is not reviewed.

6. Submit Specified Item

3.3 CONTRACTOR'S RESPONSIBILITIES

A. Coordinate each submittal document with the requirements of the Work. Place particular emphasis upon ensuring that each submittal of one trade is compatible with other submittals of that trade and submittals of other trades including producing as needed drawings showing the relationship of the Work of different trades.

B. Contractor's responsibility for errors and omissions in submittal documents and associated calculations is not relieved by the Owner’s Representative’s review, correction, and acceptance of submittals.

C. Contractor's liability to the Owner, in case of variations in the submittal document from the requirements of the Contract Documents, is not relieved by the Owner’s Representative’s review and acceptance of submittals containing variations unless the Owner’s Representative expressly approves the deviation in writing, in which the Owner’s Representative describes the variation.

D. The Contractor shall maintain a file of all approved submittal documents at the work site. The complete file of approved submittal documents shall be turned over to the Owner’s Representative with the as-built documents at the end of the job.

E. Schedule impact due to resubmittal requirements is the responsibility of the Contractor.

END OF SECTION 013300

DRAFT

SECTION 013325 - SHOP AND WORKING DRAWINGS, PRODUCT DATA, AND SAMPLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The Work specified in this Section consists of preparing and submitting shop and working drawings, product data, samples, and record documents required by other specifications Sections.

1. The Contractor shall submit all shop drawings, working drawings, product data, and samples, as defined in the General Conditions, to the Owner's Representative in accordance with the requirements in the technical specifications. The Owner's Representative will return one (1) copy of the shop drawings, working drawings and product data to the Contractor with a written transmittal.

B. The Contractor shall not submit as shop drawings, copies or reproductions of drawings issued to the Contractor by BTV.

C. Related Requirements

1. Section 013300 "Submittal Procedures
2. Section 012510 "Substitutions"
3. Section 017720 "Contract Closeout"

1.3 SUBMITTALS

A. All submittals shall be delivered to the Owner's Representative in electronic format. All submittals must be of a consistent format (all PDF). No combination of electronic file types will be allowed unless required by a specific specification section.

1. Acceptable electronic formats:

a. Adobe Acrobat 8.0 or newer. All files shall be fully compatible with Adobe Acrobat 8.0.
b. Microsoft Office 2007 or newer. All files shall be fully compatible with Microsoft Office 2007.
c. AutoDesk AutoCAD 2007 or newer. All files shall be fully compatible with AutoDesk AutoCAD 2007.

d. AutoCAD files shall be self-contained with no external x-references.
e. BIM format outlined in the BIM Project Execution Plan (PXP)
f. Other files pre-approved by the Owner's Representative.

2. Adobe Acrobat Requirements:

a. Drawings shall have security set to "No Security." Commenting, printing, adding photos, form fields and document signing must be allowed.
b. PDF submittals shall be one continuous file or Portfolio. No external links are allowed.
c. All individual components of submittals shall be bookmarked inside the PDF file.
d. All original documents shall be directly converted from the original electronic format to PDF. Scanning of files shall only be allowed by the Owner's Representative when the original electronic information is not obtainable.
e. Failure to comply with these requirements will result in a return of file to the Contractor for immediate revision.

3. Electronic files submitted shall correspond with BTV File Control Numbering System available from the Owner's Representative.

B. Quantities

1. One (1) electronic submittal in Unifier containing electronic files of each shop or working drawing.
2. One (1) electronic submittal in Unifier containing electronic files of manufacturer's standard schematic drawings.
3. One (1) electronic submittal in Unifier containing electronic files of manufacturer's calculations and manufacturer's standard data.
4. One (1) electronic submittal in Unifier containing electronic files of manufacturer's printed installation, erection, application, and placing instructions.
5. Nine (9) samples of each item specified in the various specification sections, unless otherwise specified.
6. One electronic submittal in Unifier containing electronic files of inspection, test reports, and certificates of compliance.
7. Note: If manufacturer's printed information is in color, all copies of submittals must be in color.

C. Review:

1. Submittal review comments by the Owner's Representative will be in electronic form and incorporated into the electronic submittal file.
2. Resubmittals of electronic documents shall modify the original electronic file with new information and include the Owner's Representative's comments with appropriate responses and additional information.

1.4 CHANGES

A. Changes in products for which shop or working drawings, product data or samples have been submitted will not be permitted unless those changes have been accepted and approved in writing by the Owner's Representative as provided in Section 012510 "Substitutions."

1.5 QUALITY CONTROL

A. Shop drawings and record documents shall be prepared to the standards of quality outlined in the specificationsand BIM PXP, prepared and printed from Revit and checked in the spatial coordination format specified in the BIM PXP.

B. Refer to BTV BIM DSM for other requirements that may be applicable to this Article.

PART 2 - PRODUCTS.

2.1 SHOP AND WORKING DRAWINGS

A. Prepare shop and working drawings in an electronic format that is current and approved by BTV to a scale large enough to easily depict and annotate each of the various items.

B. Include the following as they apply to the subject:

1. Contract title, work order, and number.
2. Respective Contract drawing numbers.
3. Applicable specification section numbers.
4. Relation to adjacent structure or materials.
5. Field dimensions clearly identified as such.
6. Applicable standards such as ASTM or Federal Specification number, FAA, AASHTO, and pertinent authority specifications or standards.
7. Identification of deviations from the Contract Drawings and specifications.
8. Drawing name, number, and revision.
9. Contractor's stamp, initialed or signed, certifying:
    a. Verification of field measurements.
    b. Review of submittals for compliance with Contract requirements.
    c. Compatibility of the Work shown thereon with that of affected trades.
10. Blank space on each sheet per Technical Specifications Section 013300 "Submittal Procedures."

C. Drawings of equipment and other items that contain multiple parts shall include exploded views showing the relationship of parts and the description of the parts into the smallest units that may be purchased or serviced.

D. Comply with all submittal requirements of Section 013300 "Submittal Procedures."

2.2 PRODUCT DATA

A. Modify manufacturer's standard and/or schematic drawings to delete information that is not applicable to the Contract. Supplement standard information with additional information applicable to this Contract.

B. Modify manufacturer's standard(s), diagrams, schedules, performance charts, illustrations, calculations, and other descriptive data to delete information that is not applicable to the Contract. Indicate dimensions, clearances, performance characteristics, and capacities. Include with the submittal electrical, plumbing, HVAC, and any other diagrams, as applicable.

C. Modify erection, application, and placing instructions to delete information that is not applicable to the Contract or work order.

D. Include the following:

1. Contract title, work order, and number.
2. Respective Contract drawing numbers.
3. Applicable Contract technical specification section numbers.
4. Applicable standards such as ASTM or Federal Specification number, FAA, AASHTO and pertinent authority specifications or standards.
5. Identification of deviations from the Contract Drawings and specifications.
6. Contractor's stamp, initialed or signed, certifying:

    a. Dimensional compatibility of the product with the space in which it is intended to be used.
    b. Review of submittals for compliance with Contract requirements.
    c. Compatibility of the product with other products with which it is to perform or which will be next to it.
    d. The products electrical, plumbing, control and HVAC requirements conform to Contract Documents and the necessary utilities are provided for in the Contract Documents.

E. Comply with all submittal requirements of Section 013300 "Submittal Procedures."

2.3 SAMPLES

A. Submit samples of sizes and quantities to clearly illustrate full color range and functional characteristics of products and materials including attachment devices.

B. Erect field samples and mockups at the work site as specified in specification Sections and at locations acceptable to the Owner’s Representative. All field samples shall be erected in a location that will be readily visible throughout the life of the Contract to allow comparison of the Work as it progresses to the field sample. Field samples and mockups may be incorporated into the Work at Contractor's risk if approved by

Owner's Representative.

C. The Contractor shall verify, through appropriate inspections and tests, that the samples submitted meet the specifications and shall provide inspection and test data with the samples. The review and comments on the sample shall not relieve the Contractor of the Contractor's responsibility for completion of the Contract.

D. Show the following information:

1. Contract title and number.
2. Respective Contract drawing numbers.
3. Applicable technical specification section numbers.
4. Applicable standards such as ASTM or Federal Specification number.
5. Identification of deviations from the Contract Drawings and specifications
6. Contractor's stamp, initialed or signed, certifying:

    a. Dimensional compatibility of the product with the space in which it is intended to be used
    b. Review of submittals for compliance with Contract requirements
    c. Compatibility of the product with other products with which it is to perform or which will be next to it

7. If multiple samples are submitted and the Owner's Representative is requested to make a choice, each sample shall have a unique identification number attached to it so the returned transmittal can state the identification number of the accepted sample and the Contractor will know which one it is.

E. Comply with all submittal requirements of Section 013300 "Submittal Procedures."

PART 3 - EXECUTION

3.1 CONTRACTOR RESPONSIBILITIES

A. Verify field measurements, catalog numbers, and similar data.

B. The Contractor shall not start work for which submittals are required until a transmittal has been received by the Contractor marked with the Action Code NO EXCEPTIONS TAKEN or MAKE CORRECTIONS NOTED by the Owner's Representative.

C. Before making submittals, ensure that the products will be available in the quantities and at the times required by the Contract.

D. Submit final, corrected, electronic copies of Contract and shop and working drawings showing the Work as actually installed, placed, erected, and applied. Refer to Section 017720 "Contract Closeout."

3.2 REVIEW BY THE OWNER'S REPRESENTATIVE

A. One (1) electronic copy of the marked-up shop and working drawing and one (1) electronic copy of the product data will be returned to the Contractor by the Owner's Representative. Only the transmittal form appropriately marked with the Action Code and comments, if any, will be returned on sample submittals.

B. Contractor's responsibility for errors and omissions in submittals for compatibility will not be reduced, waived or otherwise limited by the review and acceptance of submittals by the Owner's Representative.

END OF SECTION 013325

DRAFT

SECTION 013510 - CONSTRUCTION SAFETY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Work specified in this Section includes construction safety precautions and programs by the Contractor and the basis for reviews by the Owner's Representative.

B. For projects enrolled under BTV Rolling Owner Controlled Insurance Program (ROCIP) reference the Contract Special Conditions for all safety requirements.

1.3 RESPONSIBILITY

A. The Contractor is responsible for the health and safety of the Contractor's personnel, agents, subcontractors and their personnel, and other persons on the worksite, for the protection and preservation of the Work and all materials and equipment to be incorporated therein, and for the worksite and the area surrounding the worksite. The Contractor shall take all necessary and reasonable precautions and actions to protect all such persons and property.

B. This Section shall be interpreted in its broadest sense for the protection of persons and property by the Contractor and no action or omission by the Owner's Representative or the Owner's Representative's authorized representatives shall relieve the Contractor of any of its obligations and duties hereunder.

1.4 SUBMITTALS

A. Refer to Section 013300 "Submittal Procedures" for the submittal process. The Contractor's Site Specific Safety Plan shall be submitted and approved under the general Contract prior to commencing any Work. If a Task Order or Change Order is issued where the Work is not covered by the approved Contractor's Site Specific Safety Plan, then a revision to the Safety Plan specific for the Work in the Task Order shall be resubmitted for approval.

1. No progress payment shall be approved until the Contractor's Site Specific Safety Plan has been accepted by the Owner's Representative.

B. The Contractor shall provide six (6) copies of the Contractor's Site Specific Safety Plan to the Owner's Representative for review at least ten (10) calendar days before on-site

construction begins. The Contractor's program must meet, as a minimum, all applicable federal, state and local government requirements, and the following:

1. The Contractor shall provide the following information for acceptance by the Owner's Representative prior to the commencement of construction activities. The Site Specific Safety Plan must address all aspects listed below. If an item is not applicable, then this must be noted in the plan.

    a. Name of the Contractor's safety representative.
    b. If the Contractor is running multiple shifts or working more than (40) hours per week, the name of an assistant safety representative who can act in the absence of the site safety representative.
    c. Twenty-four (24) hours per day emergency phone numbers of Contractor site management to be used in case of injury or accident. Provide at least four contacts.
    d. Means of protecting employees working in trenches and excavations, including sloping and shielding.

        1) Soil type classification will be considered as Type C indicated in geotechnical report when designing protective systems, unless the Contractor can prove to the satisfaction of BTV that the soil classification is otherwise. Soil classification change request shall be provided to the Owner's Representative in writing. The decision of the Owner's Representative will be provided to the Contractor in writing.

    e. The Contractor shall show how material shall be stored beside the excavation. Stored material shall include the excavated and backfilled material

        1) Injury and accident handling, including samples of the reporting form.
        2) How personnel will be handled who are unable to safely perform their duties, including how the Contractor will determine whether personnel are unable to safely perform duties. This may include the Contractor's disciplinary process and employee's physical capabilities to perform the work safely.
        3) How and when equipment will be checked to see that it is safe, that all safety guards are in place, and that the equipment is being used for its designed purpose and within its rated capacity.
        4) How and when all electric devices will be checked for proper grounding and insulation. Describe the methods that will be used to lock out electric systems that should not be energized.
        5) How trash and human organic waste will be disposed of.
        6) How snow and ice will be removed by the Contractor in the project area.
        7) How concrete forms will be anchored to ensure their stability, including calculations showing that the forms will safely hold the maximum construction loads.
        8) How flammable materials will be stored and handled, and how any spills will be cleaned up and removed for disposal.
        9) What system will be used to prevent fires and, if fires do occur, who

will be trained to fight them. In addition, what firefighting equipment will the Contractor have available and how will this equipment's condition be monitored.

10) How materials will be received, unloaded, stored, moved, and disposed of.
11) How personnel working above ground level will be protected from falling.
12) How people working beneath the construction work will be protected.
13) What will be done to protect personnel in case of severe weather.
14) How adequate lighting will be provided and monitored.
15) How air quality will be monitored to ensure that chemical exposures are below current, established OSHA Permissible Exposure Limits. How personnel will be protected if these limits are exceeded.
16) How the safety of work platforms, man lifts, material lifts, ladders, shoring, scaffolding, etc., will be ensured relating to load capacity and the protection of personnel using or working around them.
17) The type of personal protective equipment that will be used to protect personnel from hazards.
18) The type of safety training that will be provided to personnel to inform them of safe work procedures.
19) How daily audits and inspections will be performed to ensure compliance with the Contractor's Site Specific Safety Plan and current, applicable OSHA regulations.

f. Procedures to ensure that welding and other hot work is performed safely.

1) A hot work permit from the South Burlington Fire Department will be required for all welding, soldering, cutting, and brazing and or other processes required by South Burlington Fire Department on the project. Contractor will comply with all of the provisions in the permit.

g. How compressed gases will be safely stored, handled, and used.
h. Methods to ensure that personnel safely enter, work in, and exit confined spaces.

1) All confined spaces on BTV property are considered permit required. A permit must be obtained from the Burlington Fire Department before Contractor personnel may enter a confined space. Contractors will comply with all provisions and requirements of this permit.

i. How the hazards of chemicals will be communicated to personnel, including the use of material safety data sheets and chemical labels.
j. Methods to ensure that forklifts and other powered industrial trucks are operated in a safe manner.
k. How an effective hearing conservation program will be used to protect personnel from high noise levels and prevent hearing loss.
l. How personnel will be protected from the effects of jet blast.
m. How hazards will be identified and corrected when reported.

1.5 OWNER'S REPRESENTATIVE REVIEW

A. Prior to the start of any work by contractor or subcontractor personnel, the Contractor shall provide the Owner's Representative with a list of its personnel, subcontractor's personnel and other personnel the Contractor has requested to work at Burlington International Airport, who have signified in writing that they have been briefed on, or have read and understand, the Contractor's Site Specific Safety Plan.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 IMPLEMENT CONTRACTOR'S OPERATIONAL SAFETY PLAN

A. Implement the approved Contractor's Operational Safety Plan as described in Article 1 of this Section and in Section 011100 "Summary of Work."

B. If the Contractor experiences lost time or an injury rate greater than 75 percent of the national average for all construction, the Contractor shall notify the Owner's Representative and audit its safety procedures and submit a plan to reduce its rates.

C. If at any time the lost time or injury rates experienced by the Contractor are 150 percent or more of the national average for construction, the Contractor shall notify the Owner's Representative and immediately hire an independent safety professional who shall audit the Contractor's procedures and operations and make a report of changes that the Contractor should implement to reduce the rate including changing personnel.

1. The report shall be submitted to the Owner's Representative.
2. The Contractor shall immediately begin implementing the recommendations of the independent safety professional.
3. A weekly report shall be submitted by the Contractor to the Owner's Representative on the status of the implementation of the recommendations.
4. Failure to comply with these requirements is a basis to withhold a portion of progress payments.

3.2 ROLLING OWNER CONTROLLED INSURANCE PROGRAM (ROCIP)

A. Implement Rolling Owner Controlled Insurance Program (ROCIP) as provided in the Project Manual issued for bid or proposal

END OF SECTION 013510

SECTION 013516 - ALTERATION PROJECT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes special procedures for alteration work.

1.3 DEFINITIONS

A. Alteration Work: This term includes remodeling, renovation, repair, and maintenance work performed within existing spaces or on existing surfaces as part of the Project.

B. Consolidate: To strengthen loose or deteriorated materials in place.

C. Design Reference Sample: A sample that represents the DOR's prebid selection of work to be matched; it may be existing work or work specially produced for the Project.

D. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.

E. Match: To blend with adjacent construction and manifest no apparent difference in material type, species, cut, form, detail, color, grain, texture, or finish; as approved by DOR.

F. Refinish: To remove existing finishes to base material and apply new finish to match original or as otherwise indicated.

G. Repair: To correct damage and defects, retaining existing materials, features, and finishes. This includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials.

H. Replace: To remove, duplicate, and reinstall entire item with new material. The original item is the pattern for creating duplicates unless otherwise indicated.

I. Replicate: To reproduce in exact detail, materials, and finish unless otherwise indicated.

J. Reproduce: To fabricate a new item, accurate in detail to the original, and from either the same or a similar material as the original, unless otherwise indicated.

K. Retain: To keep existing items that are not to be removed or dismantled.

L. Strip: To remove existing finish down to base material unless otherwise indicated.

1.4 COORDINATION

A. Alteration Work Subschedule: A construction schedule coordinating the sequencing and scheduling of alteration work for entire Project, including each activity to be performed, and based on Contractor's Construction Schedule. Secure time commitments for performing critical construction activities from separate entities responsible for alteration work.

1. Schedule construction operations in sequence required to obtain best Work results.
2. Coordinate sequence of alteration work activities to accommodate the following:

    a. Owner's continuing occupancy of portions of existing building.
    b. Owner's partial occupancy of completed Work.
    c. Other known work in progress.
    d. Tests and inspections.

3. Detail sequence of alteration work, with start and end dates.
4. Utility Services: Indicate how long utility services will be interrupted. Coordinate shutoff, capping, and continuation of utility services.
5. Use of elevator and stairs.
6. Equipment Data: List gross loaded weight, axle-load distribution, and wheelbase dimension data for mobile and heavy equipment proposed for use in existing structure. Do not use such equipment without certification from Contractor's professional engineer that the structure can support the imposed loadings without damage.

B. Pedestrian and Vehicular Circulation: Coordinate alteration work with circulation patterns within Project buildings and site. Some work is near circulation patterns and/or adjacent to restricted areas. Circulation patterns cannot be closed off entirely and in places can be only temporarily redirected around small areas of work. Access to restricted areas may not be obstructed. Plan and execute the Work accordingly.

1.5 PROJECT MEETINGS FOR ALTERATION WORK

A. Preliminary Meeting for Alteration Work: Before starting alteration work, Advise Owner’s Representative of the readiness for the meeting and what entities such as passengers, tenants, or BTV Stakeholders will be impacted by the alteration. The Owner’s Representative will schedule the date and time for the preliminary meeting at the appropriate location.

1. Attendees: In addition to representatives of Owner’s Representative, DOR, and Contractor, testing service representative, and specialists shall be represented at the meeting.

2. Agenda: Discuss items of significance that could affect progress of alteration work, including review of the following:

    a. Alteration Work Subschedule: Discuss and finalize; verify availability of materials, specialists' personnel, equipment, and facilities needed to make progress and avoid delays.
    b. Fire-prevention plan.
    c. Governing regulations.
    d. Areas where existing construction is to remain and the required protection.
    e. Hauling routes.
    f. Sequence of alteration work operations.
    g. Storage, protection, and accounting for salvaged and specially fabricated items.
    h. Existing conditions, staging, and structural loading limitations of areas where materials are stored.
    i. Qualifications of personnel assigned to alteration work and assigned duties.
    j. Requirements for extent and quality of work, tolerances, and required clearances.
    k. Embedded work such as flashings and lintels, special details, collection of waste, protection of occupants and the public, and condition of other construction that affects the Work or will affect the work.

3. Reporting: Owner’s Representative will record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from meeting.

B. Coordination Meetings: If the Owner’s Representative determines that separate coordination meetings are required, Conduct coordination meetings specifically for alteration work at weekly intervals. Coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and preinstallation meeting.

1. Attendees: In addition to representatives of the City, Owner’s Representative, DOR, and Contractor, each specialist, supplier, installer, and other entity concerned with progress or involved in planning, coordination, or performance of alteration work activities shall be represented at these meetings. All participants at meeting shall be familiar with Project and authorized to conclude matters relating to alteration work.
2. Agenda: Review and correct or approve minutes of previous coordination meeting. Review other items of significance that could affect progress of alteration work. Include topics for discussion as appropriate to status of Project.

    a. Alteration Work Subschedule: Review progress since last coordination meeting. Determine whether each schedule item is on time, ahead of schedule, or behind schedule. Determine how construction behind schedule will be expedited with retention of quality; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities are completed within the Contract Time.
    b. Schedule Updating: Revise Contractor's Alteration Work Subschedule after

each coordination meeting where revisions to schedule have been made or recognized. Issue revised schedule concurrently with report of each meeting.

c. Review present and future needs of each entity present, including review items listed in the "Preliminary Meeting for Alteration Work" Paragraph in this article and the following:

1) Interface requirements of alteration work with other Project Work.
2) Status of submittals for alteration work.
3) Access to alteration work locations.
4) Effectiveness of fire-prevention plan.
5) Quality and work standards of alteration work.
6) Change Orders for alteration work.

3. Reporting: Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

1.6 MATERIALS OWNERSHIP

A. Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to City that may be encountered or uncovered during the Work, regardless of whether they were previously documented, remain the City’s property.

1. Carefully dismantle and salvage each item or object in a manner to prevent damage and protect it from damage, then promptly deliver it to where directed on Airport property.

1.7 INFORMATIONAL SUBMITTALS

A. Alteration Work Subschedule

1. Submit alteration work subschedule within 15 days of date established for commencement of alteration work.

B. Preconstruction Documentation: Show preexisting conditions of adjoining construction and site improvements that are to remain, including finish surfaces, that might be misconstrued as damage caused by Contractor's alteration work operations.

C. Alteration Work Program: Submit 30 days before work begins.

D. Fire-Prevention Plan: Submit 30 days before work begins.

1.8 QUALITY ASSURANCE

A. Specialist Qualifications: An experienced firm regularly engaged in specialty work similar in nature, materials, design, and extent to alteration work as specified in each

Section and that has completed a minimum of five recent projects with a record of successful in-service performance that demonstrates the firm's qualifications to perform this work.

1. Field Supervisor Qualifications: Full-time supervisors experienced in specialty work similar in nature, material, design, and extent to that indicated for this Project. Supervisors shall be on-site when specialty work begins and during its progress. Supervisors shall not be changed during Project except for causes beyond the control of the specialist firm.

    a. Construct new mockups of required work whenever a supervisor is replaced.

B. Title X Requirement: Each firm conducting activities that disturb painted surfaces shall be a "Lead-Safe Certified Firm" according to 40 CFR 745, Subpart E, and use only workers that are trained in lead-safe work practices.

C. Alteration Work Program: Prepare a written plan for alteration work for whole Project, including each phase or process and protection of surrounding materials during operations. Show compliance with indicated methods and procedures specified in this and other Sections. Coordinate this whole-Project alteration work program with specific requirements of programs required in other alteration work Sections.

1. Dust and Noise Control: Include locations of proposed temporary dust- and noise-control partitions and means of egress from occupied areas coordinated with continuing on-site operations and other known work in progress.
2. Debris Hauling: Include plans clearly marked to show debris hauling routes, turning radii, and locations and details of temporary protective barriers.

D. Fire-Prevention Plan: Prepare a written plan for preventing fires during the Work, including placement of fire extinguishers, fire blankets, rag buckets, and other fire-control devices during each phase or process. Coordinate plan with City's fire-protection equipment and requirements. Include fire-watch personnel's training, duties, and authority to enforce fire safety.

E. Safety and Health Standard: Comply with the current version of the ANSI/ASSE Safety and Health Program Requirements for Demolition Operations

1.9 STORAGE AND HANDLING OF SALVAGED MATERIALS

A. Salvaged Materials:

1. Clean loose dirt and debris from salvaged items unless more extensive cleaning is indicated.
2. Pack or crate items after cleaning; cushion against damage during handling. Label contents of containers.
3. Store items in a secure area until delivery to specified location.
4. Transport items to the designated storage area on airport property or as indicated on Drawings.

5. Protect items from damage during transport and storage.

B. Salvaged Materials for Reinstallation:

1. Repair and clean items for reuse as indicated.
2. Pack or crate items after cleaning and repairing; cushion against damage during handling. Label contents of containers.
3. Protect items from damage during transport and storage.
4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment unless otherwise indicated. Provide connections, supports, and miscellaneous materials to make items functional for use indicated.

C. Existing Materials to Remain: Protect construction indicated to remain against damage and soiling from construction work. Where permitted by DOR, items may be dismantled and taken to an approved, suitable, protected storage location during construction work and reinstalled in their original locations after alteration and other construction work in the vicinity is complete.

D. Storage: Catalog and store items within a weathertight enclosure where they are protected from moisture, weather, condensation, and freezing temperatures.

1. Identify each item for reinstallation with a nonpermanent mark to document its original location. Indicate original locations on plans, elevations, sections, or photographs by annotating the identifying marks.
2. Secure stored materials to protect from theft.
3. Control humidity so that it does not exceed 85 percent. Maintain temperatures 5°F or more above the dew point.

E. Storage Space:

1. Owner’s Representative will arrange for limited on-site locations for free storage of salvaged material. This storage space may not include security and/or climate control for stored material.
2. Arrange for off-site locations for storage and protection of salvaged material that cannot be stored and protected on-site.

1.10 FIELD CONDITIONS

A. Survey of Existing Conditions: Record existing conditions that affect the Work by use of measured drawings, electronic scanning, or other means sufficient to accurately determine required dimensions and existing construction conditions**.**

1. Comply with requirements specified in Section 013233 "Photographic Documentation."

B. Discrepancies: Notify Owner’s Representative of discrepancies between existing conditions and Drawings before proceeding with removal and dismantling work.

C. BTV’s Removals: Before beginning alteration work, verify in correspondence with Owner’s Representative that any items anticipated to be removed by BTV have been

completely removed:

D. Size Limitations in Existing Spaces: Materials, products, and equipment used for performing the Work and for transporting debris, materials, and products shall be of sizes that clear surfaces within existing spaces, areas, rooms, and openings, including temporary protection.

PART 2 - PRODUCTS - (Not Used)

PART 3 - EXECUTION

3.1 PROTECTION

A. Protect persons, motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm resulting from alteration work.

1. Use only proven protection methods, appropriate to each area and surface being protected.
2. Provide temporary barricades, barriers, and directional signage to exclude the public from areas where alteration work is being performed.
3. Erect temporary barriers to form and maintain fire-egress routes.
4. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during alteration work.
5. Contain dust and debris generated by alteration work, and prevent it from reaching the public or adjacent surfaces.
6. Provide shoring, bracing, and supports as necessary. Do not overload structural elements.
7. Protect floors and other surfaces along hauling routes from damage, wear, and staining.
8. Provide supplemental sound-control treatment to isolate demolition work from other areas of the building.

B. Temporary Protection of Materials to Remain:

1. Protect existing materials with temporary protections and construction. Do not remove existing materials unless otherwise indicated.
2. Do not attach temporary protection to existing surfaces except as indicated as part of the alteration work program.

C. Comply with each product manufacturer's written instructions for protections and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.

D. Utility and Communications Services:

1. Notify Owner’s Representative, authorities having jurisdiction, and entities owning or controlling wires, conduits, pipes, and other services affected by alteration work before commencing operations.

2. Disconnect and cap pipes and services as required by authorities having jurisdiction, as required for alteration work.
3. Maintain existing services unless otherwise indicated; keep in service, and protect against damage during operations. Provide temporary services during interruptions to existing utilities.

E. Existing Drains: Prior to the start of work in an area, test drainage system to ensure that it is functioning properly. Notify Owner's Representative immediately of inadequate drainage or blockage. Do not begin work in an area until the drainage system is functioning properly.

1. Prevent solids such as adhesive or mortar residue or other debris from entering the drainage system. Clean out drains and drain lines that become sluggish or blocked by sand or other materials resulting from alteration work.
2. Protect drains from pollutants. Block drains or filter out sediments, allowing only clean water to pass.

F. Existing Roofing: Prior to the start of work in an area, install roofing protection as indicated on Drawings.

3.2 PROTECTION FROM FIRE

A. General: Follow fire-prevention plan and the following:

1. Comply with NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations requirements unless otherwise indicated.
2. Remove and keep area free of combustibles, including rubbish, paper, waste, and chemicals, unless necessary for the immediate work.

    a. If combustible material cannot be removed, provide fire blankets to cover such materials.

B. Heat-Generating Equipment and Combustible Materials: Comply with the following procedures while performing work with heat-generating equipment or combustible materials, including welding, torch-cutting, soldering, brazing, removing paint with heat, or other operations where open flames or implements using high heat or combustible solvents and chemicals are anticipated:

1. Obtain Owner's approval for operations involving use of welding or other high-heat equipment. Notify Owner's Representative at least 72 hours before each occurrence, indicating location of such work.
2. As far as practicable, restrict heat-generating equipment to shop areas or outside the building.
3. Do not perform work with heat-generating equipment in or near rooms or in areas where flammable liquids or explosive vapors are present or thought to be present. Use a combustible gas indicator test to ensure that the area is safe.
4. Use fireproof baffles to prevent flames, sparks, hot gases, or other high-temperature material from reaching surrounding combustible material.
5. Prevent the spread of sparks and particles of hot metal through open windows,

doors, holes, and cracks in floors, walls, ceilings, roofs, and other openings.

6. Fire Watch: Before working with heat-generating equipment or combustible materials, station personnel to serve as a fire watch at each location where such work is performed. Fire-watch personnel shall have the authority to enforce fire safety. Station fire watch according to NFPA 51B, NFPA 241, and as follows:

    a. Train each fire watch in the proper operation of fire-control equipment and alarms.
    b. Prohibit fire-watch personnel from other work that would be a distraction from fire-watch duties.
    c. Cease work with heat-generating equipment whenever fire-watch personnel are not present.
    d. Have fire-watch personnel perform final fire-safety inspection each day beginning no sooner than 30 minutes after conclusion of work to detect hidden or smoldering fires and to ensure that proper fire prevention is maintained.
    e. Maintain fire-watch personnel at each area of Project site until 60 minutes after conclusion of daily work.

C. Fire-Control Devices: Provide and maintain fire extinguishers, fire blankets, and rag buckets for disposal of rags with combustible liquids. Maintain each as suitable for the type of fire risk in each work area. Ensure that nearby personnel and the fire-watch personnel are trained in fire extinguisher and blanket use.

D. Sprinklers: Where sprinkler protection exists and is functional, maintain it without interruption while operations are being performed. If operations are performed close to sprinklers, shield them temporarily with guards.

1. Remove temporary guards at the end of work shifts, whenever operations are paused, and when nearby work is complete.

3.3 PROTECTION DURING APPLICATION OF CHEMICALS

A. Protect motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm or spillage resulting from applications of chemicals and adhesives.

B. Cover adjacent surfaces with protective materials that are proven to resist chemicals selected for Project unless chemicals being used will not damage adjacent surfaces as indicated in alteration work program. Use covering materials and masking agents that are waterproof and UV resistant and that will not stain or leave residue on surfaces to which they are applied. Apply protective materials according to manufacturer's written instructions. Do not apply liquid masking agents or adhesives to painted or porous surfaces. When no longer needed, promptly remove protective materials.

C. Do not apply chemicals during winds of sufficient force to spread them to unprotected surfaces.

D. Neutralize alkaline and acid wastes and legally dispose of off Owner's property.

E. Collect and dispose of runoff from chemical operations by legal means and in a manner that prevents soil contamination, soil erosion, undermining of paving and foundations, damage to landscaping, or water penetration into building interior.

3.4 GENERAL ALTERATION WORK

A. Have specialty work performed only by qualified specialists.

B. Ensure that supervisory personnel are present when work begins and during its progress.

C. Record existing work before each procedure (preconstruction), and record progress during the work. Use digital preconstruction documentation. Comply with requirements in Section 013233 "Photographic Documentation."

D. Perform surveys of Project site as the Work progresses to detect hazards resulting from alterations.

E. Notify of visible changes in the integrity of material or components whether from environmental causes including biological attack, UV degradation, freezing, or thawing or from structural defects including cracks, movement, or distortion.

1. Do not proceed with the work in question until directed by.

END OF SECTION 013516

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SECTION 013520 - CONSTRUCTION SAFETY - AIRSIDE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Work specified in this Section includes construction safety precautions and programs by the Contractor for airside, and the basis for reviews by the Owner's Representative.

B. Related Specification Sections:

1. Section 011420 "Security Requirements and Sensitive Security Information".
2. Section 011430 "Vehicle and Equipment Permitting".
3. Section 011810 "Utilities Interface".
4. Section 013510 "Construction Safety".

C. For projects enrolled under BTV Rolling Owner Controlled Insurance Program (ROCIP) reference the Contract Special Conditions for all safety requirements.

1.3 RESPONSIBILITY

A. The Contractor is responsible for the health and safety of the Contractor's personnel, agents, subcontractors and their personnel, and other persons on the worksite, for the protection and preservation of the Work and all materials and equipment to be incorporated therein, and for the worksite and the area surrounding the worksite. The Contractor shall take all necessary and reasonable precautions and actions to protect all such persons and property.

B. This Section shall be interpreted in its broadest sense for the protection of persons and property by the Contractor and no action or omission by the Owner's Representative or the Owner's Representative's authorized representatives shall relieve the Contractor of any of its obligations and duties hereunder.

1.4 SUBMITTALS

A. Refer to Section 013300 "Submittal Procedures" for the submittal process. The Contractor's Operational Safety Plan shall be submitted and approved under the general Contract prior to commencing any Work. If a Task Order or Change Order is issued where the Work is not covered by the approved Contractor's Operational Safety Plan, then a revision to the Safety Plan specific for the Work in the Task Order shall be

resubmitted for approval.

1. No progress payment shall be approved until the Contractor's Operational Safety Plan has been accepted by the Owner's Representative.

B. Scope: The Contractor's Operational Safety Plan shall be developed and submitted by the contractor for the Owner's Representative's review and approval. The Operational Safety Plan shall be developed according to the guidelines and requirements provided in FAA AC No. 150/5370-2F "Operational Safety on Airports During Construction" and will describe how the Contractor will comply with the requirements of the Construction Safety and Phasing Plan (CSPP). The Operational Safety Plan shall cover the actions of not only the construction personnel and equipment, but the actions of inspection personnel and airport staff for the duration of construction activities.

C. Definitions

1. Approach Surface: A surface longitudinally centered on the extended runway centerline and extending outward and upward from either a runway threshold or 200 feet behind a threshold. This surface is needed to define where unobstructed airspace above the runway begins.
2. Notice To Airmen (NOTAM): A notice to the flying public (airmen) through FAA's NOTAM system. Normally initiated by message to the nearest FAA Flight Service Station. Issuance of the NOTAM will be coordinated through the Owner's Representative and BTV Operations.
3. Object Free Area: A two-dimensional ground area surrounding runways, taxiways, and taxi lanes that is clear of objects, except for objects whose location is fixed by function.
4. Safety Area (see AC 150/5300-13A): A defined surface adjacent to runways, taxiways and taxi lanes prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot or excursion from the paved surface. Each safety area must be cleared and graded and have no potentially hazardous ruts, humps, depressions or other surface variations. Each safety area must be drained by grading or storm sewers to prevent water accumulation. East safety area must be capable under dry conditions of supporting snow removal and aircraft rescue and firefighting equipment and or supporting the occasional passage of aircraft without causing any damage to the aircraft. No objects may be located in any safety area, except for objects that need to be located in a safety area because of their function. These objects must be constructed, to the extent practical, on frangibly mounted structures of the lowest practical height, with the frangible point no higher than three (3) inches above grade.

D. Policy: Aviation safety is a primary consideration during airport construction. These activities shall be planned and scheduled to minimize disruption of normal aircraft activities. If the clearances and restrictions described in this plan cannot be maintained while construction is underway, action will be taken by the Contractor to perform Work at night or during periods of minimal aircraft activity.

E. Safety Impacts: The Contractor shall take all necessary steps and precautions to mitigate the impact of hazardous conditions as they may relate to the Work. Potentially hazardous conditions which may occur during airport construction include, but are not

limited to, the following:

1. Trenches, holes, or excavations on or adjacent to any active runway, taxiway, taxi lane, apron, or related safety areas.
2. Unmarked/unlighted holes or excavations on or adjacent to any active runway, taxiway, taxi lane, apron, or related safety areas.
3. Mounds or piles of earth, construction material, temporary structures, or other objects on or in the vicinity of any active runway, taxiway, taxi lane, apron or related safety, approach, or departure areas.
4. Pavement drop-offs that would cause, if crossed at normal operating speeds, damage to aircraft that normally use the airport. The maximum drop-off is 3 inches per FAA AC 150/5300-13A.
5. Vehicles or equipment (whether operating or idle) on any active runway, taxiway, taxi lane, apron or related safety, approach, or departure areas.
6. Vehicles, equipment, excavations, stockpiles, or other materials that could impinge upon NAVAID-critical areas and degrade or otherwise interfere with electronic NAVAIDS or interfere with visual NAVAIDS facilities.
7. Unmarked utility, NAVAIDS, weather service, runway lighting, underground power, or signal cables that could be damaged during construction.
8. Objects or activities anywhere on or in the vicinity of an airport which would be distracting, confusing, or alarming to pilots during aircraft operations.
9. Unflagged/unlighted low visibility items such as tall cranes, backhoes, scrapers, dump trucks, rollers, compactors, dozers and the ilk, in the vicinity of an active runway, taxiway, taxi lane, apron or related safety, approach, or departure areas.
10. Dirt, debris, or other transient accumulations that temporarily obscure pavement markings or pavement edges, or derogate the visibility of runway or taxiway markings or lighting or of construction and maintenance areas.
11. Trash or other materials with foreign object damage (FOD) potential, whether on runways, taxiways, taxi lanes, aprons or in related safety areas.
12. Failure to control vehicle, human and large animal access to, and nonessential nonaeronautical activities on, open aircraft movement areas.
13. Failure to maintain radio communication between construction vehicles and air traffic control or other on-field communications facilities.
14. Construction activities or material which could hamper Aircraft Rescue and Fire Fighting (ARFF) vehicle access from ARFF stations to all parts of the runway/taxiway system, runway approach and departure areas, or aircraft parking locations.
15. Inadequate fencing or other marking to separate construction areas from open aircraft operating areas.
16. Bird attractions such as edibles (food scraps, etc.), trees, brush, other trash, grass/crop seeding, or ponded water on or near the airport.

F. Safety Requirements

1. General

a. During performance of this Contract, the airport runways, taxiways, taxi lanes, and aircraft parking aprons shall remain in use by aircraft to the maximum extent possible, consistent with continual safety. Aircraft use of areas near the Contractor's Work will be controlled to minimize disturbance to the Contractor's operation. However, AIRCRAFT HAVE THE RIGHT OF

WAY AT ALL TIMES. The Contractor shall not allow employees, subcontractors, suppliers, or any unauthorized persons to enter or remain in any airport area that would be hazardous to persons or to aircraft operations.

b. Contractor personnel, airport staff and field inspectors directly involved in on-airport construction shall:

1) Be aware of the types of conditions, safety problems, and/or hazards identified each day at the airport. To insure that all personnel are aware, daily meetings between management and supervisory personnel and their employees shall be scheduled prior to any work commencing on the shift.
2) Inspect daily all work and/or storage areas for which the Contractor is responsible to be aware of current conditions.
3) Promptly take all steps needed to remedy any unsafe or potentially unsafe condition. Coordinate with the Owner's Representative to insure immediate corrective action is undertaken

c. Before commencement of construction activity the Contractor, through coordination with the Owner's Representative and BTV Operations, shall give notice using the NOTAM system of construction on the airfield. In addition, a NOTAM shall be issued for the completion of construction on the airfield.

2. Construction Area Marking: Temporary lighting, barricades, flagging, and flashers are required as shown on the plans and per FAA AC 150/5370-2F Chapter 2 Section 220.b.(1)(2) Flag lines, traffic cones, flashers, edge lights, and/or signs shall be used as necessary:

a. To clearly separate all construction from other parts of an air operations area
b. To identify isolated hazards, such as open manholes, excavations, areas under repair, stockpiled material, waste areas, etc.
c. Vehicle and pedestrian access routes used for airport construction shall be controlled to prevent any unauthorized entry of persons, vehicles, or animals.
d. Vehicle parking areas for Contractor employees shall be designated in advance to minimize traffic in open/active aircraft movement areas.

3. Cables and Utilities

a. Special attention shall be given to preventing unscheduled interruption of utility services and facilities. The location of all cables and utilities shall be identified prior to construction activities.
b. There shall be coordination among the Contractor, the Owner's Representative, BTV Operations, the FAA, the National Weather Service, utility companies, and any other appropriate entity or organization. NAVAIDS, weather service facilities, electric cables, and other utilities must be fully protected during the entire construction time.
c. Power, communication, and control cables leading to and from any FAA NAVAIDS, weather service, and other facilities will be marked in the field by

the appropriate individuals as identified in Section 011810 "Utilities Interface" for the information of the Contractor before any work in their general vicinity is started. Thereafter, through the entire duration of construction, utilities shall be protected from any possible damage.

d. At the intersection of expansion joints and centerline lighting circuits on taxiways and runways, the electrical conduit may be within the 21” portion of the Portland cement concrete pavement. Coordination with the Owner’s Representative’ s representative and the BTV Electrical Department is of utmost importance for both the scheduling of an outage and the removal of conductors while cutting the joint.

4. Vehicle and Employee Identification

a. Contractor vehicles and equipment shall be flagged for high daytime visibility and if appropriate, lighted for nighttime operations. Vehicles that are not marked and lighted shall be escorted by a vehicle that is equipped with appropriate marking and lighting devices. Marking and lighting shall be in conformance with FAA AC 150/5210-5D, current edition, or as outlined in Section 011430 "Vehicle and Equipment Permitting" of the Contract Documents.

b. The Contractor will be required to conform to the specific requirements as outlined in Section 011420 "Security Requirements and Sensitive Security Information (SSI)" of the Contract documents.

5. Radio Communications

a. The Contractor’s construction superintendent and flag personnel shall be required to coordinate directly with the Owner’s Representative or designated Representative. Only the Owner’s Representative or designated Representative shall monitor transceiver radios tuned to the frequency for communications with BTV Operations and B Tower Control. Radios shall be used to obtain the proper clearance concerning the movement of equipment, trucks, etc., on the airfield. Further, any unusual occurrences in the flight pattern of approaching or departing aircraft shall be acknowledged by all concerned so that operation of the airport and the construction work can be safely carried on at all times.

6. Haul Routes Crossing Active Aircraft Operation Areas

a. The Contractor shall provide a minimum of one (1) broom truck to continuously clean the surface of the active taxiway, taxi lane or apron of any foreign object damage (FOD) or other objectionable debris that may result from hauling activities. Additional broom trucks may be required to expedite the cleanup process. Opening the taxiway, taxi lane, or apron to aircraft operations shall only be approved after a visual inspection of the pavement surface by the BTV Airfield Operations Manager.

b. The Contractor shall not work within the minimum of the following: 160 ft. of the centerline of an active taxiway, 310 ft. of the centerline of an active runway, or the minimum requirements of the FOD or Safety Zone unless otherwise noted in the Contract Documents and as approved in writing by the Owner’s Representative.

c. All construction equipment and vehicles shall be flagged for high daytime visibility and if appropriate, lighted for nighttime operations. Vehicles that are not marked and lighted shall be escorted by a vehicle that is equipped with appropriate marking and lighting devices. Marking and lighting shall be in conformance with FAA AC 150/5210-5D, current edition.
d. All Contractor and Subcontractor employees must be aware of the types of safety problems and hazards associated with aircraft operations and construction activities.

PART 2 - PRODUCTS

2.1 Contractor's Operational Safety Plan

A. The Contractor shall provide six (6) copies of the Contractor's Operational Safety Plan to the Owner's Representative for review at least ten (10) calendar days before on-site construction begins. The Contractor's program must meet, as a minimum, all applicable federal, state and local government requirements, and the following:

1. The Contractor shall provide the following information for acceptance by the Owner's Representative prior to the commencement of construction activities. The Operational Safety Plan must address all aspects listed below. If an item is not applicable, then this must be noted in the plan.

a. Name of the Contractor's safety representative.
b. If the Contractor is running multiple shifts or working more than (40) hours per week, the name of an assistant safety representative who can act in the absence of the site safety representative.
c. Twenty-four (24) hours per day emergency phone numbers of Contractor site management to be used in case of injury or accident. Provide at least four contacts.
d. Means of protecting employees working in trenches and excavations, including sloping and shielding.

1) Soil classification will be considered as Type C when designing protective systems, unless the Contractor can prove to the satisfaction of BTV that the soil classification is otherwise. Soil classification change request shall be provided to the Owner's Representative in writing. The decision of the Owner's Representative will be provided to the Contractor in writing.

e. The Contractor shall show how material shall be stored beside the excavation. Stored material shall include the excavated and backfilled material
f. Injury and accident handling, including samples of the reporting form.
g. How personnel will be handled who are unable to safely perform their duties, including how the Contractor will determine whether personnel are unable to safely perform duties. This may include the Contractor's disciplinary process and employee's physical capabilities to perform the work safely.

h. How and when equipment will be checked to see that it is safe, that all safety guards are in place, and that the equipment is being used for its designed purpose and within its rated capacity.
i. How and when all electric devices will be checked for proper grounding and insulation. Describe the methods that will be used to lock out electric systems that should not be energized.
j. How trash and human organic waste will be disposed of.
k. How snow and ice will be removed by the Contractor in the project area.
l. How concrete forms will be anchored to ensure their stability, including calculations showing that the forms will safely hold the maximum construction loads.
m. How flammable materials will be stored and handled, and how any spills will be cleaned up and removed for disposal.
n. What system will be used to prevent fires and, if fires do occur, who will be trained to fight them. In addition, what firefighting equipment will the Contractor have available and how will this equipment's condition be monitored.
o. How materials will be received, unloaded, stored, moved, and disposed of.
p. How personnel working above ground level will be protected from falling.
q. How people working beneath the construction work will be protected.
r. What will be done to protect personnel in case of severe weather.
s. How adequate lighting will be provided and monitored.
t. How air quality will be monitored to ensure that chemical exposures are below current, established OSHA Permissible Exposure Limits. How personnel will be protected if these limits are exceeded.
u. How the safety of work platforms, man lifts, material lifts, ladders, shoring, scaffolding, etc., will be ensured relating to load capacity and the protection of personnel using or working around them.
v. The type of personal protective equipment that will be used to protect personnel from hazards.
w. The type of safety training that will be provided to personnel to inform them of safe work procedures.
x. How daily audits and inspections will be performed to ensure compliance with the Contractor's Operational Safety Plan and current, applicable OSHA regulations.
y. Procedures to ensure that welding and other hot work is performed safely.

    1) A hot work permit from the Burlington Fire Department will be required for all welding, soldering, cutting, and brazing and or other processes required by Burlington Fire Department on the project. Contractor will comply with all of the provisions in the permit.

z. How compressed gases will be safely stored, handled, and used.
aa. Methods to ensure that personnel safely enter, work in, and exit confined spaces.

    1) All confined spaces on BTV property are considered permit required. A permit must be obtained from the Burlington Fire Department before Contractor personnel may enter a confined space. Contractors will comply with all provisions and requirements of this permit.

bb. How the hazards of chemicals will be communicated to personnel, including the use of material safety data sheets and chemical labels.
cc. Methods to ensure that forklifts and other powered industrial trucks are operated in a safe manner.
dd. How an effective hearing conservation program will be used to protect personnel from high noise levels and prevent hearing loss.
ee. How personnel will be protected from the effects of jet blast.
ff. How hazards will be identified and corrected when reported.

2.2 OWNER'S REPRESENTATIVE REVIEW

A. Prior to the start of any work by contractor or subcontractor personnel, the Contractor shall provide the Owner's Representative with a list of its personnel, subcontractor's personnel and other personnel the Contractor has requested to work at Burlington International Airport, who have signified in writing that they have been briefed on, or have read and understand, the Contractor's Operational Safety Plan.

PART 3 - EXECUTION

3.1 IMPLEMENT CONTRACTOR'S OPERATIONAL SAFETY PLAN

A. Implement the approved Contractor's Operational Safety Plan as described in Part 1 and Part 2 of this Section and in Section 011100 "Summary of Work."

B. If the Contractor experiences lost time or an injury rate greater than 75 percent of the national average for all construction, the Contractor shall notify the Owner's Representative, audit its safety procedures, and submit a plan to reduce its rates.

C. If at any time the lost time or injury rates experienced by the Contractor are 150 percent or more of the national average for construction, the Contractor shall notify the Owner's Representative and immediately hire an independent safety professional who shall audit the Contractor's procedures and operations and make a report of changes that the Contractor should implement to reduce the rate including changing personnel.

1. The report shall be submitted to the Owner's Representative.
2. The Contractor shall immediately begin implementing the recommendations of the independent safety professional.
3. A weekly report shall be submitted by the Contractor to the Owner's Representative on the status of the implementation of the recommendations.
4. Failure to comply with these requirements is a basis to withhold a portion of progress payments.

3.2 ROLLING OWNER CONTROLLED INSURANCE PROGRAM (ROCIP)

A. Implement Rolling Owner Controlled Insurance Program (ROCIP) as provided in the Project Manual issued for bid or proposal

END OF SECTION 013520

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SECTION 014100 - REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section identifies primary compliance with the State, City of Burlington's regulatory requirements including:

B. Construction shall be based on the latest edition of the referenced codes including additions and revisions thereto that are in effect at the time of Project bidding or Task Order pricing or GMP established whichever is latest, and as specifically related.

1.3 RELATED SECTIONS

A. Section 015719 "Temporary Environmental Controls" for environmental and related permitting requirements.

1.4 BUILDING CODE

A. All design and construction work shall be governed by the Building IBC 2021, latest edition. This is based upon the International Building Code of the International Code Council with South Burlington Amendments to this code.

1.5 SOUTH BURLINGTON FIRE DEPARTMENT

A. For review and approval of all construction documents for compliance to the South Burlington building code:

1. SOUTH BURLINGTON FIRE DEPARTMENT

A. For review and approval of plans for compliance with the South Burlington Fire Department's requirements as they apply to the Burlington International Airport:
South Burlington Fire Department
575 Dorset Street
South Burlington, VT 05403

B. The Contractor is advised that the South Burlington Fire Department – Fire Prevention Bureau requires permitting for the following activities as they apply to the scope of

work. The Contractor is responsible for obtaining the appropriate permits necessary to complete the work. All costs associated with this permitting and policy compliance shall be the responsibility of the Contractor. The policies all reference the International Fire Code (IFC).

1. “““?Hot work”, which is defined as the operation of any equipment or tool that creates sparks, hot slag, or radiant or convective heat as a result of the work. This includes, but is not limited to, welding, cutting, brazing, or soldering.
2. Use and storage of compressed gas for both temporary storage and permanent facility installation. This includes, but is not limited to, flammable gas (excluding propane-LPG), oxidizer (including oxygen), and inert and/or simple asphyxiates.
3. Tank installation, which includes aboveground storage tanks (AST) and underground storage tanks (UST) for both temporary tanks and permanent facility installations.

C. In addition to the above permits, the South Burlington Fire Department may require other permits that are associated with the specific work in the Contract Documents. Policies provided by the South Burlington Fire Department are meant to provide basic information for the most common conditions and situations. In any given occupancy, many other Uniform Fire Code requirements may be enforced. These should be addressed with the South Burlington Fire Department before construction begins and during construction with premise inspection(s).

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PERMITS AND CERTIFICATIONS

A. The Contractor shall maintain records on site of all permits acquired by federal, state, and local agencies. Posting of permits shall conform to requirements of the respective agencies.

B. At the completion of any inspection by other agencies, the Contractor shall forward copies of the status of the inspection and copies of any approved or "signed-off" inspections by the respective agencies to the Owner’s Representative.

C. At the time of request for Substantial Completion, the Contractor shall forward to the Owner’s Representative all permits approved by the respective agencies.

END OF SECTION 014100

SECTION 014510 - CONTRACTOR QUALITY CONTROL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section identifies the Quality Control activities to be performed during all phases of the Contract by the Contractor.

B. The Contractor shall have in place a Quality Control Program as necessary to ensure that all materials and work are completed in compliance with Contract Documents. The Contractor is solely responsible for Quality Control and shall provide the necessary quality control personnel to assure that all materials, workmanship, and tests are in conformance with the Project documents with the exception of those tests and/or audits that may be conducted by the Owner as defined in the contract documents.

C. Test schedules and/or testing requirements for materials used on this project are included in the technical specifications. Laboratory and field-testing identified in the specifications shall be conducted by a Testing Agency retained by the Owner's Representative; hereafter is referred to as the Owner's Testing Agency (OTA).

D. The Owner or its consultant working as the Owner's Representative will perform or arrange for third party Quality Assurance and Special Inspection Testing of material and Inspection of workmanship required by the Contract Documents and the Building Official to fulfill the code and the regulatory authority's requirements. The Contractor must schedule these tests and provide access to the Owner's Representative inspectors and testers to perform these tests and inspections. The performance of the tests by the Owner's Representative does not relieve the Contractor of the responsibility to deliver a fully functional building meeting all the requirements of the Contract Documents and their intent. The Contractor must develop its own testing program for processing, acceptance from the subcontractor or suppliers at a frequency defined by the contractor for its own process control and to assure delivery of the intended acceptable workmanship. All time impacts of testing and retesting shall be accounted for in the updated schedule and any mitigation of time impacts shall be the responsibility of the Contractor.

1.3 SUBMITTALS

A. Refer to Section 013300 "Submittal Procedures" for submittal requirements.

B. Quality Control Plan: Within ten (10) days after Notice to Proceed, the Contractor shall

submit a Quality Control Plan for review and acceptance. The Quality Control Plan shall be accepted by the Owner's Representative prior to any Work or materials being incorporated into the Project. Acceptance by the Owner's Representative does not relieve the Contractor of its responsibility to comply with the Contract Requirements. The Contractor Quality Control Plan shall address the following as a minimum:

1. A general description of Quality Control monitoring to be performed until final acceptance by BTV. Include monitoring activities of Work and the work site during times that no construction activity is scheduled to take place.

    a. No work requiring QC inspection and testing shall take place without QC inspection and testing staff on site.

2. An individual designated by the Contractor and approved in writing by the Owner's Representative whose [sole] responsibility is Quality Control Management. This individual shall be highly qualified in all phases of construction as it relates to this Project and shall have the authority to direct work changes required to bring the Work into conformance with Contract requirements, including stopping non-conforming work in progress. A detailed resume of the proposed Quality Control Manager including applicable education, experience, and certifications shall be included in the Quality Control Plan.

    a. At the discretion of the Owner's Representative, for Small Projects, Early Work Packages and Task Orders all of value less than $1,000,000 or a duration which is less than three (3) months, the Contractor may assign one of the Contractor's staff, i.e. Contractor's Superintendent, Office Engineer, Field Engineer, or Contractor's Project Manager as Quality Control Manager. The assigned person must be on site while work requiring QC inspection and testing is being completed and available to discuss quality issues, manage all aspects of the Project Quality Control Plan, coordinate all required Special Inspection and Quality Assurance testing, and provide proposed solutions on all quality issues at any time as to not cause any delay to the project. Any delays caused in part or in all due to defective or no conforming work shall be borne by the Contractor.

3. Quality Control inspection staff as needed to assist the Quality Control Manager with implementation of the Quality Control Program. Duties of the Quality Control Inspectors shall be limited strictly to inspection of the ongoing work. Sampling and testing of materials shall be performed by Quality Control personnel other than Quality Control Inspectors. Quality Control Inspectors shall inspect only those work elements for which they are qualified. Resumes of the proposed Quality Control Inspectors including applicable education, experience and certifications shall be included in the Quality Control Plan.
4. An Organization Chart identifying all Quality Control staff by name and function. The chart shall indicate the total staff required to implement all elements of the Quality Control Program, including inspection and testing for each item of work including tests performed by the OTA. If necessary, different Quality Control staff can be utilized for specific inspection and testing functions for different items of work. The chart shall show that the Quality Control Manager, Quality Control Inspectors, and Quality Control testing personnel are outside of the production

staff with clear lines of authority for Quality Control.

5. Any test performed by any agency on the Project shall be recorded and show a passing re-test of all failing tests.

    a. All test results shall be made available for inspection by the Owner's Representative. This includes tests that are above the QC testing frequency required.

6. Any tests submitted by the Contractor for basis of acceptance, or payment reduction when performed by the Contractor's agency, must meet all standards and must be certified to have followed approved procedure, processed in a certified lab by properly certified or licensed personnel by properly certified testers and on calibrated and certified equipment. Authentications of tests must be preapproved and cannot be selectively submitted. All tests shall be recorded in the field witnessed by BTV inspector to be accepted as a record test of the material in question. Any failing tests could be the sole basis for rejecting the material.
7. Each technical specification division's requirements for quality control identifying each item requiring submittal and approval/acceptance prior to installation of work, all inspections to be performed during work and prior to acceptance of work, each item of work requiring testing by the independent testing agency or the City provided testing agency, and the testing frequency.
8. The plan shall address all elements of special inspection required by the statement of special inspection as approved by the Building Official. All special inspections and tests will be performed by agencies employed by the Owner's Representative.
9. The Contractor is responsible for the complete record of inspection file including but not limited to all manufacturer certificates, certificates of material compliance, Certificates of Material Testing Record, successful re-inspection of all deficiency items, proper deposition of design related Non-Conformance reports (NCR), Structural Engineers' observation reports, Building Inspectors' records of approvals, permit cards, fire suppression and fire- alarm tests records as witnessed by the authorities of jurisdiction and any record necessary to achieve a certificate of occupancy.
10. The Contractor must keep track of all logs of discrepancies and submit periodic updates, as required by the Owner's Representative, of all open issues and track the closure of open items in a timely manner.
11. Establish controls and documentation format to ensure that items or materials that have been accepted through receiving inspection are used or installed. Identification and traceability shall be provided throughout all inspections, test activities, and records. For stored items, provisions shall be made for the control of item/material identification, consistent with the expected duration and type of storage.
12. A methodology of monitoring, testing, and exercising of all equipment, valves, and/or assemblies to ensure the Work installed is in proper working order.
13. A list of suppliers and subcontractors. This list shall include items to be supplied by each supplier and/or subcontractor and shall identify work to be performed by each subcontractor. The list shall be updated and resubmitted as required.
14. All approvals related to Special Inspection are subject to the acceptance or approval of the Building Official.

15. Emergency contact information including name, company, title, work phone number, home phone number, and other means of contact. The Emergency Contact list shall include at least four individuals. The Emergency Contact list shall be maintained on a daily basis. In the event there is any change in any of the information, the Contractor shall forward the updated list to the Owner's Representative and to BTV Maintenance. The Emergency Contact list shall include the project number, project title, and date of issue.

C. The Contractor shall transmit the following daily reports to the Owner's Representative electronically PRIOR TO THE CLOSE OF BUSINESS ON the following work day:

1. Contractors Daily Construction Report. The Foreman may add sheets of information to this form as needed.
2. Daily Quality Control Inspection Report

D. Deficiency List: The OTA shall establish a deficiency list including the minimum information for each deficiency item; description, date, location, drawings reference, detail reference, specification reference, and superseding document NCR, date of expected solution date repaired date inspected by Owner's Representative and accepted.

1.4 DOCUMENTATION

A. The Contractor shall not change or alter approved submittals, procedures, specifications, drawings/MODELS, or other pertinent documentation without the Owner's Representative's written authorization.

B. All records and documents that are quality related shall be prepared, identified and maintained by the Contractor and shall be made available to BTV upon request. Records shall be protected from damage, deterioration, or loss. A copy of the records and documents shall be maintained at the Work site at all times unless the Owner's Representative has approved other locations in writing. Retention time for all quality records shall be not less than three (3) years from date of Final Acceptance of the Contract.

C. The Contractor is responsible for the complete record of inspection file including but not limited to all manufacturer certificates, certificates of material compliance, Certificates of Material Testing Record, successful re-inspection of all deficiency items, proper deposition of design related NCRs, Structural Engineers' observation reports, Building Inspectors' records of approvals, permit cards, fire suppression and fire-alarm tests records as witnessed by the authorities of jurisdiction and any record necessary to achieve a Certificate of Occupancy.

D. The Contractor shall maintain records at the actual worksite and at Contractor's office to show the inspection status of materials and items installed in order to ensure that the required inspections and tests have been performed in a timely and correct manner.

E. The Contractor must keep a record of all deficiency issues and show positive evidence

of closure (passing re-inspection or re-test) to every issue.

1.5 INSPECTIONS AND TESTS

A. Inspections, tests and system shut down requests, conducted by persons or agencies other than the Contractor, shall not in any way relieve the Contractor of the responsibility and obligation to meet all specifications and the referenced standards. The Contractor's designated Quality Control Representative shall inspect the work and shall ensure the Work complies with the Contract requirements prior to any requests for inspection or testing.

B. When the specifications, laws, ordinances, rules, regulations or orders of any public agency having jurisdiction require the Owner's Representative's surveillance of inspections or tests, the Contractor shall notify the Owner's Representative, in writing, of the place, date and time 48 hours prior to the inspection and/or test. The Contractor shall be responsible for notifying and requesting inspection by other agencies including but not limited to the South Burlington Building Inspection Division, Burlington Fire Department, and Champlain Water District. Prior to request for other agency inspections, the Contractor shall meet and plan inspection times with the Owner's Representative.

C. Special inspections or tests may be required by the technical specifications, City, State and/or Federal Agencies in addition to those tests already performed. The Contractor shall notify the Owner's Representative, in writing, at least 48 hours in advance of the additional inspections or tests.

D. Quantities will be verified as defined in the Pre-Work Meetings.

1.6 INSPECTION PLAN

A. The Contractor shall utilize the following six-point inspection plan to ensure the conformance of the Work performed by the Contractor meets the requirements of the Contract Drawings and specifications, the referenced codes and standards and the approved submittals:

1. Prework Coordination: Prior to the start of construction work on the Contract and prior to the start of Work under each separate specification section and prior to the start of Work where a change in a construction operation is contemplated by the Contractor, and prior to a new subcontractor starting work, a coordination meeting to ensure that the Contractor's personnel have no misunderstandings regarding their safety and quality procedures as well as the technical requirements of the Contract will be held with the Contractor's superintendent, Quality Control and Safety representatives, and Owner's Representative. Supervisory, Safety and Quality Control, representatives of all applicable subcontractors will also attend. Prior to the meeting, the Contractor's Quality Control Representative shall provide the Owner's Representative with a meeting agenda for review. The Contractor's Quality Control Representative shall conduct the meeting and distribute the approved agenda. The Quality Control Manager

shall develop and electronically distribute finalized meeting minutes within one business day upon completion of the meeting. The following items shall be presented and reviewed by the Contractor:

a. Contract requirements and specifications.
b. Shop drawings, certifications, submittals, models, and as-built drawings.
c. Testing and inspection program and procedures.
d. Contractor's Quality Control program.
e. Familiarity and proficiency of the Contractor's and subcontractor's workforce to perform the operation to required workmanship standards including certifications of installers.
f. Safety, security, and environmental precautions to be observed.
g. Any other preparatory steps dependent upon the particular operation.
h. The Contractor's means and methods for performing the Work.

2. Initial Inspection: Upon completion of a representative sample of a given feature of the Work and no later than two weeks after the start of a new or changed operation, the Owner’s Representative will meet with the Contractor's Quality Control representative and applicable subcontractor's supervisor and their Quality Control representatives to check the following items, as a minimum:

a. Workmanship to established quality standards.
b. Conformance to Contract Drawings, specifications and the accepted shop drawings.
c. Adequacy of materials and articles utilized.
d. Results of inspection and testing methods.
e. Adequacy of as-built drawings/MODELS maintained daily.
f. Once accepted, the representative sample will become the physical baseline by which ongoing work is compared for quality and acceptability. To the maximum practical extent, approved representative samples of work elements shall remain visible until all work in the appropriate category is complete. Acceptance of a sample does not waive or alter any Contract requirements or show acceptance of any deviation from the Contract not approved in writing by the Owner’s Representative.

3. Follow-up Inspection: The Contractor's Quality Control representative will monitor the Work to review the continuing conformance of the Work to the workmanship standards established during the preparatory and initial inspections.
4. Completion Inspection: Forty-eight (48) hours prior to the completion of an item or segment of work and prior to covering up any work, the Contractor shall notify the Owner’s Representative, in writing, who will verify that the segment of work is substantially complete, all inspections and tests have been completed and the results are acceptable. The purpose of this inspection is to allow further corrective work upon, or integral to, the completed segment of work. THIS IS NOT AN ACCEPTANCE INSPECTION. If any items are determined to be deficient, need correction or are non-conforming, a Deficiency List will be prepared and issued to the respective Contractor for correction, repair, or replacement of any deficient or non-conforming items. The Owner’s Representative and Contractor's Quality Control representative will verify the correction of the deficient and/or non-conforming items prior to the start of the

next operation.

5. Pre-Final Acceptance Inspection: Prior to requesting a Pre-Final Acceptance Inspection by BTV, all work and operational systems to be inspected shall be satisfactorily completed and tested by the Contractor. The Contractor's written request for this inspection shall be made seventy-two (72) hours in advance. With the request shall come a list of any known deficiencies and when they will be corrected. If the list is too large or contains too many significant items, in the opinion of the Owner's Representative, no inspection will be held because of the incompleteness of the Work.
6. The Owner's Representative will schedule the Pre-Final Acceptance Inspection and will prepare a list of deficient items (punch list) discovered during the inspection. If during the inspection, the list becomes too large or too many significant items are on the list, the inspection will be canceled by the Owner's Representative. After the inspection is completed, the Deficiency List will be transmitted to the Contractor for correction of the deficient items.
7. Final Acceptance Inspection: After the Contractor has completed all items on the Deficiency List (generated from the Pre-Final Acceptance Inspection), he shall request a Final Acceptance Inspection. The request shall be made in writing at least seventy-two (72) hours in advance of the inspection. All areas must be cleaned and ready for turnover prior to this inspection. The Owner's Representative, the design consultant, a representative of the funding agency (if applicable) and other interested parties will inspect the subject Work to ensure that all deficiencies have been satisfactorily attended to and that no new deficiencies have appeared and that all systems are completely functional. Any outstanding or additional deficient items will be noted and handled per the requirements of the Pre-Final Acceptance Inspection noted above until the Work is acceptable to the Owner's Representative.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 REQUIREMENTS

A. All materials required for the Contract shall be new except where specified otherwise. The Owner's Representative may elect to perform additional inspections and/or tests at the place of the manufacture, the shipping point or at the destination to verify conformance to applicable specifications. Inspections and tests performed by BTV shall not relieve the Contractor from the responsibility to meet the specifications, nor shall such inspections/tests be considered a guarantee for acceptance of materials that will be delivered at a later time.

B. Materials accepted based on a Certificate of Compliance may be sampled and inspected/tested by BTV or its designer at any time. The fact that the materials were accepted based on such certification shall not relieve the Contractor of the responsibility to use materials that conform to the specifications.

C. The Contractor shall impose upon suppliers the same quality control requirements, including inspection and test procedures, as imposed upon him by the specifications and referenced standards. The Contractor shall apply appropriate controls, designed to ensure that all materials supplied meet the requirements and specifications.

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SECTION 015050 - MOBILIZATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

B. Section 012910 "Schedule of Values”.

1.2 SUMMARY

A. The Work specified in this Section consists of preparatory work and operations including, but not limited to the following:

1. Those necessary for the movement of personnel, equipment, supplies, and incidentals to the work site.
2. For the establishment of all facilities at the Airport provided contractor office and staging area and at specific construction sites necessary for the Work on the Project.
3. For all other work and operations that must be performed or costs incurred prior to beginning work on the various Contract items on the work site.

1.3 SUBMITTALS

A. Refer to Section 013300 "Submittal Procedures" for submittal procedures.

B. Submit a Mobilization Schedule a minimum of fourteen (14) days prior to first billing for mobilization.

1.4 DELIVERY

A. Delivery to the work site of construction tools, equipment, materials, and supplies shall be accomplished in conformance with all local governing regulations.

PART 2 - PRODUCTS

2.1 PRODUCTS

A. Provide construction tools, equipment, materials, and supplies of the type and quantities that will facilitate the timely execution of the Work.

PART 3 - EXECUTION

3.1 EXECUTION AND REMOVAL

A. Provide personnel, products, construction materials, equipment, tools, and supplies at the work site at the time they are required and scheduled to be installed or utilized.

END OF SECTION 015050

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SECTION 015210 - TEMPORARY FACILITIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes requirements for temporary utilities, temporary support facilities, transportation of employees and security and protection facilities.

B. Temporary facilities are required at multiple locations including the project co-location area and the individual concourse project construction areas. Temporary facility requirements will vary based on location.

C. Initial installation of temporary facilities for contractor parking, utilities, security, bussing, and CMAR offices at the project co-location area is provided by a separate contract agreement.

D. Related Requirements:

1. Section 011000 "Summary" for work restrictions and limitations on utility interruptions.
2. Section 011420 “Security Requirements and Sensitive Security Information”.
3. Section 312319 "Dewatering" for disposal of ground water at Project site.
4. Section 321216 "Asphalt Paving" for construction and maintenance of asphalt pavement for temporary roads and paved areas.
5. Section 321313 "Concrete Paving" for construction and maintenance of cement concrete pavement for temporary roads and paved areas.

1.3 DESCRIPTION

A. The Work specified in this Section consists of furnishing, installing, operating, maintaining, and removing temporary construction barriers, enclosures, and field facilities including the Contractor's construction offices, staging areas, yards, storage areas, electrical power, telephone, water, fire protection, security equipment and sanitary service.

B. Construction Offices, Owner’s Representative Offices, Construction Yards and Storage Areas

1. The Contractor's offices, construction yards laydown and storage areas shall be located as shown as designated by the Owner’s Representative. All construction

offices, staging areas, and material storage areas are to occur within these areas.

2. Any activity that is expected to result in disturbance of the ground surface equal to or greater than one acre or part of a larger project that is expected to disturb equal to or greater than one acre, is required to be identified in their Erosion Control permit. These areas include, but are not limited to, laydowns, borrow areas, stockpiles, and storage areas regardless of the location.
3. All areas of ground disturbance are required to be stabilized in accordance with State, local, and airport rules and regulations prior to permit termination and/or closure of the Contract.
4. The Contractor shall restore any area on BTV property that becomes contaminated as a result of its operations in accordance with Airport Rule and Regulation 180. Restoration shall be either to applicable standards under Federal and State law or to such other levels as may be required by the Manager of Aviation, at the Manager's sole discretion.
5. All temporary facility sites must be inspected prior to Contract closeout.

    a. The Owner's Representative or authorized representative shall conduct an inspection of contractor areas used during the life of the project. These areas include but are not limited to, staging areas, laydown areas, borrow areas, and contractor yards and offices.

6. The Owner's Representative will ensure these areas have been properly stabilized in accordance with BTV Rules and Regulations and required permits. Site must be restored to the condition in which the Owner's Representative initially provided to the Contractor.
7. Contractor materials shall be managed in accordance with all applicable Environmental Regulations.
8. Temporary facilities which the Contractor desires to locate in secondary laydown and staging areas adjacent to the Work or within the project limits are subject to approval by the Owner's Representative. If approved, these areas must also be included as part of their erosion control permit.
9. Access to and security of the Contractor's construction offices, yard, temporary facilities, and storage areas shall be as shown on the Contract Drawings or as specified in the Contract Special Conditions.
10. Contractor Field Office (pertains to subcontractor offices at project co-location area and offices at concourse project work areas):

    a. The Contractor shall acquire all necessary permits for installation and construction work related to the Contractor's field office and fencing.
    b. Jack the mobile office unit off its wheels and provide support. Enclose the underside of the trailer with weatherproof skirting.
    c. Install tie downs in compliance with all applicable codes.
    d. Provide access to the field office. Grade the field office site, access roadway, and parking area for drainage, and surface with gravel paving or crushed stone.
    e. Water and sewer lines to the field office, if installed, shall be installed so they will not freeze.

11. All Contractor Storage Yards must be fenced. Submit fencing plan and typical details to Owner's Representative at least seven (7) days before planned

execution for review and acceptance.

12. In accordance with South Burlington Fire Department Requirements, all Temporary Facilities shall have signage that lists the following information:

    a. Company Name
    b. Contact Telephone Number
    c. Facility Address

C. Electrical Service

1. Provide lighting and power for field offices, storage facilities and other construction facilities and areas.
2. Provide power centers for electrically operated and controlled construction facilities including tools, equipment, testing equipment, interior construction lighting, heating, cooling and ventilation equipment.
3. Provide night security lighting at secured areas within construction limits at offices, storage facilities, temporary facilities and excavated areas.
4. Provide battery operated or equivalent emergency lighting facilities at construction areas where normal light failures would cause employees to be subjected to hazardous conditions. Test such facilities monthly and maintain a record of these tests for the Owner’s Representative’s review.
5. Contractor shall bear all costs associated with the consumption of temporary electric energy fee’s during construction. Contractor shall bear the costs of service permits, fees, and deposits required by the governing authorities, and connection charges and temporary easements including installation, maintenance, and removal of equipment.

D. Telephone/Communications Service:

1. The Contractor shall furnish, install, and maintain at least two (2) telephones in the Contractor's main field office. These phones shall be manned at all times by the Contractor's personnel or by an answering machine when personnel are not in the field office.
2. Comply with requirements of Division 26 Sections.

E. Water Service:

1. The Contractor shall make all connections and extensions required and shall make use of water in direct support of the Work. The Contractor shall install an approved Water Department tap at the City's water source prior to obtaining any water. Contractor shall bear all costs associated with the water consumption fee’s during construction. Subcontractors at the project co-location area and all contractors at concourse project work areas shall arrange and pay for its supply/distribution system from the City's point of connection. The location and alignment of the Contractor's temporary supply/distribution system must be approved by the Owner’s Representative prior to its installation. The Contractor shall leave in place all above ground and underground water distribution facilities unless otherwise directed by the Owner’s Representative.
2. The Contractor shall not use in place fire hydrants or standpipes as sources for construction water or potable water, or as approved by Owner’s Representative.
3. Comply with requirements of Division 22 Sections.

F. Fire Protection:

1. Furnish, install, and maintain temporary portable fire protection equipment throughout the construction period at all buildings (including the project site), maintenance shops, and fuel storage on all large construction equipment and at the location of any flammable materials or construction materials.
2. Comply with requirements of Division 21 Sections and Burlington Fire Department.

G. Sanitary Service:

1. Furnish, install, and maintain temporary sanitary facilities and services throughout the construction period.
2. Ensure that separate or single user toilets shall be provided to ensure privacy between the sexes.
3. Provide general washing facilities adequate for the number of employees.
4. Provide special washing facilities adequate for the number of employees engaged in the application of paints, coating, and other volatile or hazardous materials.

H. On-site Transportation

1. Contractor shall furnish transportation services as required for the duration of the project.
2. Provide separate line item for invoicing of transportation services.

1.4 SUBMITTALS

A. Refer to Section 013300 "Submittal Procedures" for submittal procedures.

B. At Concourse project work areas Submit a shop drawing within five (5) days of the Notice to Proceed that shows the following:

1. Temporary facilities equipment and materials (include manufacturer’s literature).
2. Details and layout of temporary installations including fences, roads, parking, buildings, storage areas, signage, and drainage plans.
3. Lighting plan showing temporary lighting facilities, electrical service panel location, electrical circuit diagram, and anticipated light level on the working roadway, pathway, or construction surface.
4. As-built description of any temporary underground utilities referenced to the Airport grid and benchmark system within five (5) days of completion of the installation.
5. Copies of all permits for all temporary facilities.

1.5 QUALITY CONTROL

A. Provide products for, and the execution of, the Work of this Section that will satisfy the requirements of all applicable codes. Provide products that satisfy the requirements of the applicable codes.

PART 2 - PRODUCTS

2.1 ELECTRICAL SERVICE

A. Provide temporary power and lighting equipment consisting of fixtures, transformers, panel boards, groundings, lamps, switches, poles, conduits and wiring sized and capable of continuous service and having adequate capacity to ensure a complete operating system. Comply with NEMA and Division 26 requirements.

2.2 TELEPHONE/COMMUNICATIONS SERVICE

A. Provide equipment that is compatible with that of the current BTV service provider and the telephone exchange to which the Contractor connects.

2.3 POTABLE WATER SERVICE

A. Provide sanitary materials and equipment that satisfies the requirements of codes and regulations pertaining to temporary water systems. Bottled products may be used if those products comply with codes. Clearly label portable containers having a dispensing tap and used only for drinking water. Provide single service disposable cups and a sanitary container for dispensing cups. A trash receptacle shall be provided and maintained beside each portable water supply.

B. If paints, coatings and other volatile or hazardous materials injurious to humans will be applied as part of the Contract, provide washing facilities with warm water of approximately 120 degrees F.

2.4 FIRE PROTECTION

A. Fire extinguishers shall be UL rated and shall comply with the International Fire Code with State of Vermont amendments.

2.5 SANITARY SERVICE

A. Provide materials and equipment adequate for the intended purposes, which will neither create unsanitary conditions nor violate the codes applicable to temporary sanitary facilities. Enclosures for toilet and washing facilities shall be weatherproof, sight proof, ventilated and sturdy, and shall be maintained in clean conditions.

B. Provide portable type toilet facilities that satisfy the requirements of OSHA.

C. Provide washing facilities as needed. Furnish soap, single-service paper towels, towel dispenser, and towel receptacle.

PART 3 - EXECUTION

3.1 ELECTRICAL SERVICE

A. The approximate location of primary power lines is shown on the Construction Drawings. The Contractor shall locate electrical service where it will not interfere with equipment, storage spaces, traffic, and prosecution of the Work or the work of others. Installation shall present a neat and orderly appearance and shall be structurally sound. Maintain service in a manner that will ensure continuous electrical service and safe working conditions.

B. Comply with requirements of Division 26 Sections.

3.2 TELEPHONE/COMMUNICATION SERVICE

A. Install temporary telephone service in a neat and orderly manner and make structurally and electrically sound to ensure continuous service. Modify, relocate, and extend, as work progress requires. Place conduit and cable where those products will not interfere with traffic, work areas, materials, handling equipment, storage areas, and the work of other contractors. Service lines may be aerial.

3.3 WATER SERVICE

A. Install the systems in a neat and orderly manner. Make them structurally and mechanically sound. Provide continuous service. Modify, relocate, and extend the systems as the Work progresses.

B. Comply with requirements of Division 22 Sections.

C. Locate systems where they will be convenient to work stations, sanitary facilities, and first aid station but will not interfere with traffic, work areas, materials handling equipment, storage areas, or the work of other contractors.

D. Provide sanitary bubbler drinking fountains if potable water service is available. Disinfect water piping before using for the potable water service.

E. Install vacuum breakers, backflow preventers, and similar devices in a manner and location that will prevent temporary water from returning to the water mains.

F. Do not incorporate any part of temporary water distribution system into the permanent water distribution system.

3.4 FIRE PROTECTION

A. Install products in conformance with the requirements of Burlington Fire Department and OSHA regulations.

1. Provide functional, approved fire extinguishers that are clearly identified for fire and an accessible supply of water during the period of construction. These fire extinguishers shall remain in place until permanent fire protection systems are functional.

B. Instruct construction personnel as to location and use of temporary fire protection equipment.

C. Comply with requirements of Division 21 Sections.

3.5 SANITARY SERVICE

A. Place temporary sanitary and washing facilities in a neat and orderly manner within the limits of the Work and convenient to the workstations. Make these facilities structurally and mechanically sound. Modify, relocate, and extend the facilities as required by progress of the Work.

B. Service toilets at those time intervals that will minimize the accumulation of wastes and prevent creation of unsanitary conditions, but not less than once a week.

C. The waste from the sanitary and wash facilities shall be disposed of in accordance with all applicable rules, regulations, and laws and with the least environmental impact.

3.6 FENCING

A. Contact all utility service companies prior to planning fence location and post locations for certification of current utilities. Locate pothole posts planned within five (5) feet of known utilities.

B. Temporary Airport Perimeter Fence shall be coordinated with BTV Operations a minimum of 30 days in advance of placement.

3.7 SIGNAGE

A. Contractor shall not provide any signage for temporary facilities without prior approval from the Owner’s Representative.

3.8 REMOVAL

A. For subcontractor office areas at the project co-location area and at all concourse project work areas The Contractor shall locate all temporary facilities including the underground utilities so they can be completely removed without damaging permanent work or the work site of other contractors.

END OF SECTION 015210

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.

B. Related Requirements:

1. Section 012300 "Alternates" for products selected under an alternate.
2. Section 012510 "Substitutions" for requests for substitutions.
3. Section 014225 "Reference Standards" for applicable industry standards for products specified.

1.3 DEFINITIONS

A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
3. Comparable Product: Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

B. Basis-of-Design Product Specification: A specification in which a specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.4 SUBMITTALS

A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number, title, and Drawing numbers and titles.

1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
2. Owner's Representative's Action: If necessary, Owner's Representative will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Owner's Representative will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.

    a. Form of Approval: As specified in Section 013300 "Submittal Procedures."
    b. Use product specified if Owner's Representative does not issue a decision on use of a comparable product request within time allocated.

B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 013300 "Submittal Procedures." Show compliance with requirements.

1.5 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
2. If a dispute arises between contractors over concurrently selectable but incompatible products, Owner's Representative will determine which products shall be used.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. This article eliminates need to include this information in each Section. Limit use of this article in each Section to unusual requirements.

B. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.

C. Delivery and Handling:

1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.

2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.

D. Storage:

1. Store products to allow for inspection and measurement of quantity or counting of units.
2. Store materials in a manner that will not endanger Project structure.
3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
6. Protect stored products from damage and liquids from freezing.
7. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

1.7 PRODUCT WARRANTIES

A. Refer to Title 18 - Warranties, Guarantees and Corrective Work of the General Contract Conditions, 2011 Edition.

B. Submittal Time: Comply with requirements in Section 017720 "Contract Closeout."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged, and unless otherwise indicated, are new at time of installation.

1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.

4. Where products are accompanied by the term "as selected," Owner's Representative will make selection.
5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
6. Or Equal: For products specified by name and accompanied by the term "or equal," or "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.

B. Product Selection Procedures:

1. Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
3. Products:

    a. Restricted List: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.
    b. Nonrestricted List: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product.

4. Manufacturers:

    a. Restricted List: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.
    b. Nonrestricted List: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed manufacturer's product.

5. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.

C. Visual Matching Specification: Where Specifications require "match Owner's Representative's sample", provide a product that complies with requirements and

matches Owner’s Representative's sample. Owner’s Representative's decision will be final on whether a proposed product matches.

1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 012510 "Substitutions" for proposal of product.

D. Visual Selection Specification: Where Specifications include the phrase "as selected by Owner’s Representative from manufacturer's full range" or similar phrase, select a product that complies with requirements. Owner’s Representative will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

A. Conditions for Consideration: Owner’s Representative will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Owner’s Representative may return requests without action, except to record noncompliance with these requirements:

1. Evidence that the proposed product does not require revisions to the Contract Documents that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.

2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.

3. Evidence that proposed product provides specified warranty.

4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.

5. Samples, if requested.

2.3 MATERIALS

A. General: Comply with requirements specified in other Sections.

1. For projects requiring compliance with sustainable design and construction practices and procedures, use products for patching that comply with requirements in Section 018113 "Sustainable Design Requirements."

B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.

1. If identical materials are unavailable or cannot be used, use materials that, when

installed, will provide a match acceptable to Owner's Representative for the visual and functional performance of in-place materials.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

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SECTION 016610 - STORAGE AND PROTECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The Work specified in this Section consists of providing storage and protection of the materials, products and supplies which are to be incorporated into the construction and indicating such storage areas on the working drawings with the location and dates when such areas will be available for each purpose.

B. Related Requirements:

1. Section 015210 "Temporary Facilities" for requirements for temporary facilities.

1.3 SUBMITTALS

A. Refer to Technical Specifications Sections 013300 "Submittal Procedures" and 013325 "Shop and Working Drawings, Product Data and Samples" for submittal procedures. Submit concurrently with submittals required in Section 013223 "Construction Layout, As-built and Quantity Surveys".

B. Submit working drawings showing locations of storage areas not indicated on the Contract Drawings.

C. Submit descriptions of proposed methods and locations for storing and protecting products.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Materials required for the storage and protection of the items specified shall be durable, weatherproof and either factory finished or painted to present an appearance acceptable to the Owner’s Representative. Storage facilities shall be uniform in appearance with similar materials used to the maximum extent possible.

PART 3 - EXECUTION

3.1 GENERAL REQUIREMENTS OF EXECUTION

A. Palletize materials, products, and supplies that are to be incorporated into the construction and stored off the ground. Material and equipment shall be stored only in those areas that are indicated as storage areas on the Contract Drawings and on the reviewed and accepted working drawings.

1. Store these items in a manner which will prevent damage and which will facilitate inspection.

2. Leave seals, tags, and labels intact and legible.

3. Maintain access to products to allow inspection.

4. Protect products that would be affected by adverse environmental conditions.

B. Periodically inspect stored products to ensure that products are being stored as stipulated and that they are free from damage and deterioration.

1. Any damaged or deteriorated materials must be replaced immediately to avoid delays in the project schedule.

C. Do not remove items from storage until they are to be incorporated into the Work.

D. The Contractor shall ensure that all protective wrappings and coverings are secure and ballasted to prevent any items from deterioration and/or subsequent dislodgment. All items on the work site that are subject to becoming windborne shall be ballasted or anchored.

3.2 HANDLING AND TRANSPORTATION

A. Handling:

1. Avoid bending, scraping, or overstressing products. Protect projecting parts by blocking with wood, by providing bracing or by other approved methods.
2. Protect products from soiling and moisture by wrapping or by other approved means.
3. Package small parts in containers such as boxes, crates, or barrels to avoid dispersal and loss. Firmly secure an itemized list and description of contents to each container.

B. Transportation:

1. Conduct the loading, transporting, unloading, and storage of products so that they are kept clean and free from damage.

3.3 STORAGE

A. Store items in a manner that shall prevent damage to the BTV's property. Do not store hydraulic fluids, gasoline, liquid petroleum, gases, explosives, diesel fuel, and other flammables in excavations. Petroleum products and chemicals must be stored in closed containers within secondary containment.

B. Provide sheltered weather-tight or heated weather-tight storage as required for products subject to weather damage.

C. Provide blocking, platforms or skids for products subject to damage by contact with the ground.

D. All material shall be stored according to the manufacturer's recommendations. Any material that has to be stored within specified temperature or humidity ranges shall have a 24-hour continuously written recording made of the applicable condition. Should the recording show that the material was not stored within the recommended ranges the material shall be considered defective and in nonconformance. If a certification from the manufacturer's engineering design representative is provided stating that the actual variations are acceptable and will in no way harm the material or affect warranties, then the deficiency will be considered corrected.

E. Store hazardous material separately, with all material marked with a label showing the hazard and how to treat exposure to the material. Store incompatible materials separately.

F. Extra materials that are left over at the completion of the Work shall be removed from the Project site by the Contractor unless they are required to be delivered to BTV as per Contract Document requirements for maintenance stock.

3.4 LABELS

A. Storage cabinets and sheds that will contain flammable substances and explosive substances shall be labeled "FLAMMABLE - KEEP FIRE AWAY" and "NO SMOKING" with conspicuous, bold lettering and conforming to OSHA requirements. Flammable substances shall be stored in flammable storage cabinets that conform to OSHA requirements.

END OF SECTION 016610

SECTION 017330 - CUTTING AND PATCHING

PART 1 - GENERAL

A. RELATED DOCUMENTS

B. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

C. Refer to Article 316, Cutting and Patching the Work in the General Contract Conditions.

1.2 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Phased construction.
4. Work by BTV.
5. Work under separate contracts.
6. Future work.
7. Purchase contracts.
8. BTV-furnished products.
9. Contractor-furnished, BTV-installed products.
10. Access to site.
11. Coordination with occupants.
12. Work restrictions.
13. Specification and drawing conventions.
14. Miscellaneous provisions.

B. Related Requirements:

1. Section 015210 "Temporary Facilities" for limitations and procedures governing temporary use of BTV's facilities.
2. Section 015719 "Temporary Environmental Controls" for environmental control requirements.
3. Section 024119 "Selective Demolition" for selective demolition of structures and other elements.
4. Section 099123 "Interior Painting" for interior painting of areas of cutting and patching.

C. Alternates: Refer to Division 01 Section 012300 "Alternates" for description of Work in this Section affected by Alternates.

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1.3 DEFINITIONS

A. Cutting: Removal of existing construction to permit installation of or to perform other Work.

B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

1.4 SUBMITTALS

A. Refer to Section 013300 "Submittal Procedures" for submittal procedures.

B. Cutting and Patching Proposal: Submit a proposal describing procedures at least thirty (30seven (7) calendar days before the time cutting and patching will be performed, requesting approval to proceed. Obtain approval of cutting and patching proposal by Owner's Representative before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work. The proposal shall include at least the following information:

1. Identification of the Contract and the Contractor's name.
2. Description of proposed work:
    a. Scope of cutting, patching, alteration, or excavation.
    b. The necessity for cutting or alteration.
    c. Drawing showing location of the requested cutting or alteration, along with radar or x-ray report.
    d. Trades that will execute the work.
    e. Products proposed to be used.
    f. Extent of refinishing to be done.
    g. Alternatives to cutting and patching.
3. Changes to Existing Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in the building's appearance and other significant visual elements.
4. Utilities: List utilities that cutting and patching procedures will disturb or affect. List utilities that will be relocated and those that will be temporarily out of service. Indicate how long service will be disrupted and proposed dates of interruption of service. Additionally, verify and locate anything in or behind the area prior to cutting.
5. Proposed Dust Control and Noise Control Measures: Submit a statement or drawing that indicates the measures proposed for use, proposed locations, and proposed time frame for their operation. Identify options if proposed measures are later determined to be inadequate.
6. Effect on the work and other surrounding work or on structural or weatherproof integrity of Project.
7. Written concurrence of each contractor or entity whose work will be affected.
8. Cost proposal, when applicable.

1.5 QUALITY CONTROL

A. Operational Elements: Do not cut and patch ANY operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance, decreased operational life or safety unless approved by the Owner's Representative. Operations elements may include, but are not limited to the following:

1. Primary operational systems and equipment.
2. Air or smoke barriers.
3. Fire protection systems.
4. Control systems.
5. Communication systems.
6. Conveying systems.
7. Electrical wiring systems.
8. Operating systems of special construction as described in Divisions 13 and 26.
9. HVAC systems.

B. Miscellaneous Elements: Do not cut and patch ANY of the following elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or those results in increased maintenance, decreased operational life or safety unless approved by the Owner's Representative. Miscellaneous elements may include, but are not limited to the following:

1. Water, moisture, or vapor barriers.
2. Membranes and flashings.
3. Exterior curtain wall construction.
4. Equipment supports.
5. Piping, ductwork, vessels and equipment.
6. Noise control and vibration control elements and systems.
7. Stud walls.
8. Roofing system

C. Visual Elements: Do not cut and patch ANY construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would reduce, in BTV's sole opinion, the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactorily manner.

1. If possible, retain the original installer or fabricator to cut and patch exposed Work listed below. If it is impossible to engage the original installer or fabricator, engage another recognized, experienced, and specialized firm as approved by the Owner's Representative. Visual elements may include, but are not limited to:

   a. Stonework and stone masonry.
   b. Ornamental metal.
   c. Matched-veneer woodwork.
   d. Preformed metal panels.
   e. Firestopping.

f. Window wall systems.
g. Terrazzo.
h. Flooring.
i. Wall coverings and finishes.
j. HVAC enclosures, cabinets, or covers.

D. Cutting and Patching Conference: Before proceeding, meet at the Project site with all parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

1.6 WARRANTY

A. Existing Warranties: Remove, replace, patch and repair materials and surfaces cut or damaged during cutting and patching operations by methods and with materials so as not to void existing warranties.

1. All effort shall be made to engage the original installer or fabricator to patch the exposed Work listed below that is damaged during selective demolition. If it is impossible to engage the original installer or fabricator, engage another recognized, experienced and specialized firm as approved by the Owner's Representative:

a. Processed concrete finishes.
b. Stonework and stone masonry.
c. Ornamental metal.
d. Matched-veneer woodwork.
e. Preformed metal panels.
f. Firestopping.
g. Window wall systems.
h. Terrazzo.
i. Flooring.
j. Wall coverings and finishes.
k. HVAC enclosures, cabinets, or covers.

1.7 MATERIALS

A. General: All patching material shall be of the type specified for the material being patched. Comply with requirements specified in other specifications Sections.

B. Existing Materials: Use materials identical to existing materials. For exposed surfaces, use materials that visually and texturally match existing adjacent surfaces to the fullest extent possible.

1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of existing materials as approved by the Owner's Representative.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.

1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers. Provide additional substrates or materials if required to achieve desired final results of patching work.
2. Immediately notify the Owner's Representative, in writing, of unsuitable, unsafe, or unsatisfactory conditions.
3. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.
4. Proceed with patching only after construction operations requiring cutting are complete and inspected by the Owner's Representative.

3.2 PREPARATION

A. Temporary Support: Provide temporary support of Work to be cut to ensure structural value or integrity.

B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the Project that might be exposed during cutting and patching operations.

C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

D. Existing Services: Where existing services are required to be removed, relocated, or abandoned, bypass such services before cutting to avoid or minimize interruption of services to occupied areas. Do not interrupt services in without approval from the appropriate authority. Refer to the appropriate Shutdown specification/procedures for applicable services.

3.3 POLLUTION CONTROLS

A. Dust Control: Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations. Reference Section 015719 "Temporary Environmental Controls" for requirements.

1. Do not use water when it may damage existing construction or create hazardous or objectionable conditions such as ice, flooding, and pollution.

2. Wet mop floors to eliminate trackable dirt and wipe down walls and doors of demolition enclosures. Vacuum carpeted areas. Professionally clean carpeted areas if required.
3. For outdoor concrete saw cutting operations, slurry waste must be vacuumed up immediately to prevent migration off-site to pervious surfaces, surface waters or drains.

B. Disposal: Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

1. Concrete slurry waste must be disposed of properly in accordance with applicable airport, local and state rules and regulations.

C. Cleaning: Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to the condition existing before selective demolition operations began.

3.4 PERFORMANCE

A. General: Employ skilled workers to perform cutting and patching. Execute cutting and demolition by methods that will prevent damage to other work and will provide a proper surface to receive patching.

1. Cut existing construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
2. Execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerance, and finishes.
3. Restore work that has been cut or removed; install new products to provide complete work in accordance with requirements of the Contract Documents.
4. Fit work airtight and fire safe to pipes, sleeves, ducts, conduit, and other penetrations through surfaces as required by the Contract Documents.

B. Cutting: Cut existing construction by sawing, drilling, breaking, chipping, grinding, and other similar operations, including excavation, using methods least likely to damage elements retained to adjoining construction. If possible, review proposed procedures with original installer and comply with original installer's written recommendations.

1. In general, use ground fault hand or small power tools designed (to short if metal is hit) for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to the size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
2. Existing Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
3. Concrete: Use a cutting machine such as an abrasive saw or a diamond-core drill.
4. Proceed with patching after construction operations requiring cutting are complete.

C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other specification Sections.

1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing. For continuous surfaces, refinish entire unit to the nearest break line. For an assembly, refinish entire unit.
3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.

    a. Where patching occurs on a painted surface, apply primer and intermediate paint coats over the patch and apply the final coat over the entire unbroken surface containing the patch. Provide additional coats until the patch blends with adjacent surfaces.

4. Ceilings: Patch, repair or re-hang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

D. Fire Rated Construction: Where rated elements are cut, reconstruct to approved designs to provide original fire rating.

3.5 CORE DRILLING

A. The Contractor shall execute a minimum of x-rays or ground penetrating radar (GPR) at each location planned for core drilling prior to submittal to the Owner's Representative and to utility representatives for approval for core drilling. The request for approval shall be submitted a minimum seven (7) days before Core Drilling. The request for approval shall indicate on the x-ray or radar information regarding alternate locations or core drilling to avoid structural members and any embedded conduit. Embedded conduit may be metallic or plastic. The x-ray or radar system shall be capable of detecting both types of conduit.

B. Core drilled "cores" and the core-drilled opening shall be inspected by Owner's Representative prior to installation of any systems in new openings.

C. The following text applies to x-ray/GPR options. If not using x-ray or GPR, delete the following paragraphs

D. The request for approval shall indicate on the x-ray or radar information regarding alternate locations or core drilling to avoid structural members and any embedded conduit. Embedded conduit may be metallic or plastic. The x-ray or radar system shall be capable of detecting both types of conduit.

E. X-ray activities may not be performed during hours of activity or occupancy in the area of the x-ray system. The Contractor shall provide all manpower and barriers required to secure the areas affected by x-ray activities.

END OF SECTION 017330

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SECTION 017419 - CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This section describes the requirements for the disposal, recovery, reuse or recycling of non-hazardous and non-asbestos containing construction and demolition waste for LEED. Note that LEED projects may have more specific requirements than identified in this section.

B. Waste materials shall be managed in accordance with all local, state, and federal regulations.

C. Related Requirements:

1. Section 013300 "Submittal Procedures" for submittal procedures.
2. Section 015719 "Temporary Environmental Controls" for environmental control procedures.
3. Section 018113 "Sustainable Design Requirements"
4. Section 024119 "Selective Structure Demolition" for disposition of waste resulting from partial demolition of buildings, structures, and site improvements [,and for disposition of hazardous waste].Section 230505 "Selective Demolition for Mechanical" for demolition of fire suppression, plumbing, and HVAC systems.
5. Section 260505 "Selective Demolition for Electrical" for demolition of electrical systems.

1.3 DEFINITIONS

A. Solid Waste: means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, air pollution control facility, or other discarded material; including solid, liquid, semisolid, or contained gaseous material resulting from industrial operations, commercial operations or community activities. Solid waste does not include any solid or dissolved materials in domestic sewage, or agricultural wastes, or solid or dissolved materials in irrigation return flows, or industrial discharges which are point sources subject to permits under the provisions of the "Colorado Water Quality Control Act", Title 25, Article 8, CRS or materials handled at facilities licensed pursuant to the provisions on “Radiation Control Act” in Title 25, Article 11, CRS. Solid waste does not include:

1. Materials handled at facilities licensed pursuant to the provisions on radiation control in Article 11 of Title 25, C.R.S.
2. Excluded scrap metal that is being recycled.
3. Shredded circuit boards that are being recycled.

B. Salvaged Materials: Defined as materials that exist on the site that can be reused, either on site or by another entity

C. Recyclable Materials: Defined as materials that exist on site or are generated during the construction process that can be recycled and/or remanufactured into another material. Recyclable waste includes, but is not limited to, the following:

1. Concrete.
2. Asphalt
3. Ferrous and non-ferrous metals.
4. Untreated wood, engineered wood.
5. Gypsum wallboard.
6. Corrugated cardboard, paper goods and packaging
7. Plastic.
8. Glass, insulation.
9. Carpet.
10. Paints, fabric.
11. Rubber.
12. Stone and brick.
13. Piping
14. Acoustical tiles and panels

D. Hazardous Waste: Per 6 CCR 1007-3, those substances and materials defined or classified as such by the Hazardous Waste Commission pursuant to 25-15-302, C.R.S., as amended. Also, see hazardous waste definition per 40 CFR 261.3.

E. Asbestos Containing Materials: Per 5 CCR 1001-10: Regulation No. 8, The Control of Hazardous Air Pollutants, Part B The Control of Asbestos- material containing more than 1% asbestos

F. Waste Diversion: A management activity that disposes of waste through methods other than incineration or landfilling. Examples include reuse and recycling.

G. Alternative Daily Cover (ADC): Material other than earthen material placed on the surface of the active face of a municipal solid waste landfill at the end of each operating day to control vectors, fires, odors, blowing litter, and scavenging. Generally these materials must be processed so they do not allow gaps in the exposed landfill face. Note that materials that are used as ADC are not considered diverted from the landfill for LEED v4 and must be included in calculations as landfilled waste.

1.4 PERFORMANCE REQUIRMENTS

A. Comply with City of South Burlington permit requirements for separations and recycling of demolished and excess material.

B. Achieve end-of-Project rates for salvage/recycling a minimum of 75 percent by weight of total non-hazardous solid waste generated by the Work. Diverted materials must include at least four material streams. Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials, including, but not limited to, the following:

1. Demolition Waste:

a. Asphalt paving.
b. Concrete.
c. Concrete reinforcing steel.
d. Brick.
e. Concrete masonry units.
f. Wood studs.
g. Wood joists.
h. Plywood and oriented strand board.
i. Wood paneling.
j. Wood trim.
k. Structural and miscellaneous steel.
l. Rough hardware.
m. Roofing.
n. Insulation.
o. Doors and frames.
p. Door hardware.
q. Windows.
r. Glazing.
s. Metal studs.
t. Gypsum board.
u. Acoustical tile and panels.
v. Carpet.
w. Carpet pad.
x. Demountable partitions.
y. Equipment.
z. Cabinets.
aa. Plumbing fixtures.
bb. Piping.
cc. Supports and hangers.
dd. Valves.
ee. Sprinklers.
ff. Mechanical equipment.
gg. Refrigerants.
hh. Electrical conduit.
ii. Copper wiring.
jj. Lighting fixtures.
kk. Lamps.
ll. Ballasts.
mm. Electrical devices.
nn. Switchgear and panelboards.
oo. Transformers.

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2. Construction Waste:

    a. Masonry and CMU.
    b. Lumber.
    c. Wood sheet materials.
    d. Wood trim.
    e. Metals.
    f. Roofing.
    g. Insulation.
    h. Carpet and pad.
    i. Gypsum board.
    j. Piping.
    k. Electrical conduit.
    l. Packaging: Regardless of salvage/recycle goal indicated in "General" Paragraph above, salvage or recycle 100 percent of the following uncontaminated packaging materials:

        1) Paper.
        2) Cardboard.
        3) Boxes.
        4) Plastic sheet and film.
        5) Polystyrene packaging.
        6) Wood crates.
        7) Plastic pails.

1.5 SUBMITTALS

A. The Contractor shall submit a list of materials and products used with Safety Data Sheets (SDS). Examples include chemicals, solvents, fuels, building materials, etc.

1. A hardcopy or electronic link to the SDS for all materials and products used, if applicable.
2. Identify storage methods for materials, including measures to segregate incompatible materials.

B. The Contractor shall submit a Waste Management Plan to the Owner’s Representative and BTV Environmental Services. Minimum Waste Management Plan requirements include the following:

1. A list of all waste streams generated by the project.

    a. At least five streams must be identified in the plan to meet LEED requirements.
    b. For each waste stream listed, the Contractor shall identify the handling/transportation method, the disposal method, and the disposal facility utilized.
    c. If the Contractor anticipates generation of hazardous waste, the Contractor shall provide its USEPA (generator) identification number.

2. Pollution Prevention Measures

    a. Describe best practices that will reduce waste. For example, waste reduction measures, requiring vendors to deliver materials in reusable packaging, etc.

3. Waste Management Plan Training.
4. Storage of materials.
5. Spill response.

C. Approval of Contractor's Waste Management Plan does not relieve the contractor of responsibility for compliance with applicable environmental regulations.

1. The contractor shall maintain a record of the amounts of construction and demolition waste generated, recycled, reused, salvaged, or disposed of, in pounds for review.
2. Hauling manifest records shall be maintained and available for review. Manifest forms are available from the Owner's Representative.

D. The Contractor shall submit a Waste Reduction Progress Report to the LEED consultant on a monthly basis identifying the following:

1. Material category.
2. Generation point of waste.
3. Identify diverted waste material stream.
4. Total quantity of waste in tons.
5. Quantity of waste salvaged, both estimated and actual in tons.
6. Quantity of waste recycled, both estimated and actual in tons.
7. Total quantity of waste recovered (salvaged plus recycled) in tons.
8. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.

E. Contractor shall complete LEED letter template for Construction and Demolition Waste, signed by Contractor, tabulating total waste material, quantities diverted and means by which it is diverted, and statement that requirements for the credit have been met.

1.6 QUALITY ASSURANCE

A. Waste Management Coordinator Qualifications: Experienced firm, with a record of successful waste management coordination of projects with similar requirements that employs a LEED-Accredited Professional as waste management coordinator. Waste management coordinator may also serve as LEED coordinator.

B. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.

C. Waste Management Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review

methods and procedures related to waste management including, but not limited to, the following:

1. Review and discuss waste management plan including responsibilities of waste management coordinator.
2. Review requirements for documenting quantities of each type of waste and its disposition.
3. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
4. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
5. Review waste management requirements for each trade.

PART 2 - PRODUCTS

2.1 A list of all materials and products used. Examples include chemicals, solvents, solvents, fuels, curing compounds, etc.

A. A hardcopy or electronic link to SDSs for all materials and products used.

B. Identify storage methods, including measures to segregate incompatible materials.

C. Alternative Daily Cover (ADC) does not qualify as material diverted from disposal and does not contribute to LEED waste diversion.

D. Refer to the Waste Management Plan.

PART 3 - EXECUTION

A. The Contractor shall not wash down equipment in such a manner as to flush grease, oils, detergents, and other contaminants onto the project site or onto airport property unless the waste is properly contained, treated, and disposed of.

B. Concrete washwater cannot be discharged to surface waters or to storm sewer systems. Discharge to the ground of concrete wash water from washing of tools and concrete mixer chutes when appropriate best management practices (BMPs) are implemented.

1. A bermed containment area that allows discharge water to infiltrate or evaporate;

    a. Alternatives to bermed containment areas include portable concrete washout bins, and industrial washout containment systems where the accumulated waste is removed from the site and disposed of properly.

2. Use of the washout site should be temporary (less than one year);
3. The washout site should not be located in an area where shallow groundwater may be present, such as near natural drainages, springs, or wetlands.
4. Upon termination of the washout site, accumulated solid waste, which includes

concrete waste and contaminated soils, must be removed from the site and disposed of properly.

C. Rejected loads and/or other wet concrete or asphalt materials are PROHIBITED TO BE PLACED ANYWHERE on BTV property. These materials must be returned to the facility of origination or other permitted facility for proper disposal.

D. Concrete saw cutting slurry must be properly contained and disposed of.

E. Unknown or questionable materials encountered during construction activities, must immediately be reported to the BTV Operations and the Owner's Representative.

F. Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work.

1. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.

END OF SECTION 017419

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SECTION 017420 - CLEANING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The Work specified in this section consists of maintaining a clean, orderly, hazard free work site during construction, and final cleaning for the Owner's Final Acceptance. Failure to maintain the work site will be grounds for withholding monthly payments until corrected to the satisfaction of the Owner’s Representative.

B. Refer to Cleanup During Construction in the General Contract Conditions

1.3 JOB CONDITIONS

A. Safety Requirements

1. Maintain the work site in a neat, orderly, and hazard-free manner in conformance with all federal, state, and local rules, codes, regulations, and orders, including all OSHA requirements, until Final Acceptance of the Work. Keep catwalks, underground structures, work site walks, sidewalks, roadways, and streets, along with public and private walkways adjacent to the work site, free from hazards caused by construction activities. Inspect those facilities regularly for hazardous conditions caused by construction activities.

B. Hazards Control

1. Store waste materials in properly labeled waste containers. This includes solid wastes, hazardous wastes, universal wastes, etc.
2. Store volatile wastes in covered metal containers and remove those wastes from work site daily.
3. Do not accumulate wastes that create hazardous conditions.
4. If volatile and noxious substances are being used in spaces that are not naturally ventilated adequately, provide artificial ventilation.
5. Hazard controls shall conform to the applicable federal, state, and local rules and regulations.
6. Provide appropriate waste receptacles in all areas in which employees are working. Waste receptacles shall be kept covered at all times. All materials on site shall be anchored and covered to prevent any objects from becoming wind-borne.

C. Access

1. Maintain the work site to permit access by other Owner contractors as required and to allow access by emergency personnel.

1.4 SUBMITTALS

A. Washing Plan: The Contractor shall prepare a plan describing the specific procedures and materials to be utilized for any equipment, vehicle, etc., washing activities. The plan must be submitted to the Owner's Representative and approved by the Owner's Representative and Environmental Services.

1. Outdoor washing at BTV is not allowed unless the materials will be collected or managed in a manner to ensure that they will not enter the municipally owned separate storm sewer system (MS4). The materials can only be disposed at a location pre-approved by BTV Environmental Services (refer to BTV SWMP). Failure to comply with this requirement would result in the discharge of non-stormwater.

a. Outdoor wash materials that contain soaps or other cleaning chemicals must be collected and disposed of off site

2. Indoor washing must be conducted in accordance with the Best Management Practices (BMPs) detailed in the BTV SWMP. Refer to Section 015719 "Environmental Controls". In addition, all indoor washing must be conducted in a manner that ensures that there are no prohibited discharges to the sanitary sewer system.

a. All wash-water that will be disposed of into the sanitary sewer must comply with City of South Burlington rules and regulations pertaining to prohibited discharges.

PART 2 - PRODUCTS

2.1 CLEANING MATERIALS

A. Utilize the type of cleaning materials recommended by the manufacturer for the surfaces to be cleaned.

B. Maintain current Safety Data Sheets (SDS) on site for all chemicals. BTV Environmental Services must approve the chemicals used prior to discharge to the sanitary sewer system.

C. Ensure proper disposal of all wastes generated from the use of these materials. The Contractor must ensure compliance with all environmental regulations. No wastes can be disposed of on BTV property.

PART 3 - EXECUTION

3.1 INTERIM CLEANING

A. Clean the work site every shift/workday for the duration of the construction Contract. Maintain structures, grounds, storage areas and other areas of work site, including public and private properties immediately adjacent to work site, free from accumulations of waste materials caused by construction operations. Place waste materials in covered metal containers. All hard concrete, steel, wood, and finished walking surfaces shall be swept clean daily.

B. Remove or secure loose material on open decks and on other exposed surfaces at the end of each workday or more often in a manner that will maintain the work site hazard free. Secure material in a manner that will prevent dislodgment by wind and other forces.

C. Sprinkle waste materials with water or acceptable chemical palliative to prevent blowing of dust.

D. Promptly empty waste containers when they become full and legally dispose of the contents at dumping areas off the Owner's property.

E. Control the handling of waste materials. Do not permit materials to be dropped or thrown from structures.

F. Immediately remove spillage of construction related materials from haul routes, work site, private property, public rights of way, or on the Burlington International Airport site.

G. Clean only when dust and other contaminants will not precipitate upon newly painted surfaces.

H. Cleaning shall be done in accordance with manufacturer's recommendation.

I. Cleaning shall be done in a manner and using such materials as to not damage the Work.

J. Clean areas prior to painting or applying adhesive.

K. Clean all heating and cooling systems prior to operations. If the Contractor is allowed to use the heating and cooling system, it shall be cleaned prior to testing.

L. Clean all areas that will be concealed prior to concealment.

M. Dispose of all fluids according to the approved Washing Plan.

3.2 FINAL CLEANING

A. Refer to Article, Clean-up Upon Completion in the General Contract Conditions, 2011

Edition. Additionally, the Contractor, shall at a minimum, complete the following:

1. Inspect interior and exterior surfaces, including concealed spaces, in preparation for completion and acceptance.
2. Remove dirt, dust, litter, corrosion, solvents, discursive paint, stains, and extraneous markings.
3. Remove surplus materials, except those materials intended for maintenance.
4. Remove all tools, appliances, equipment, and temporary facilities used in the construction.
5. Remove detachable labels and tags. File them with the manufacturer's specifications for that specific material for the Owner's records.
6. Repair damaged materials to the specified finish or remove and replace.
7. After all trades have completed their work and just before Final Acceptance, all catch basins, manholes, drains, strainers and filters shall be cleaned; roadway, driveways, floors, steps and walks shall be swept. Interior building areas shall be vacuum cleaned and mopped.
8. Final cleanup applies to all areas, whether previously occupied and operational or not.
9. Dispose of all fluids according to the approved Washing Plan.

END OF SECTION 017420

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SECTION 017515 - SYSTEM STARTUP, TESTING AND TRAINING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Provide complete startup, testing, and operator training services to ensure operability of all systems supplied.

B. Coordinate all start-up and testing with BTV Commissioning Authority or BTV Asset Management through the Owner's Representative.

1.3 SUBMITTALS

A. Refer to Section 013300 "Submittal Procedures" and 013325 "Shop and Working Drawings, Product Data and Samples" for submittal procedures. Submit the following:

1. Test procedures.
2. Test reports.
3. Training outline.

B. Submit Qualification Data: For facilitator, instructor, and videographer.

C. Attendance Record: For each training module submit the following:

1. Module title.
2. Module description.
3. Length of instruction time.
4. Participant names.

D. Evaluations: For each participant and for each training module, submit results and documentation of performance-based test.

1.4 QUALITY ASSURANCE

A. Facilitator Qualifications: A firm or individual experienced in training or educating personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.

B. Instructor Qualifications: A factory-authorized service representative, experienced in operation and maintenance procedures and training.

C. Videographer Qualifications: A professional videographer who is experienced photographing demonstration and training events similar to those required. Recordings shall be high-resolution 4k with a minimum framerate of 60Hz.

D. Preconstruction Conference: Conduct conference at Project site to comply with requirements in Section 014510 "Contractor Quality Control". Review methods and procedures related to demonstration and training including, but not limited to, the following:

1. Inspect and discuss locations and other facilities required for instruction.
2. Review and finalize instruction schedule and verify availability of educational materials, instructor's personnel, audiovisual equipment, and facilities needed to avoid delays. Ensure that students are notified at least 14 [insert other] days prior to the start of instruction.
3. Review required content of instruction.
4. For instruction that must occur outside, review weather and forecasted weather conditions and procedures to follow if conditions are unfavorable.

1.5 COORDINATION

A. Coordinate instruction schedule with BTV’s operations. Adjust schedule as required to minimize disrupting BTV's operations and to ensure availability of BTV's personnel. As required, include multiple classed to accommodate various shifts.

B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.

C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Owner’s Representative.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 FIELD TESTS AND ADJUSTMENTS

A. All electrical and mechanical equipment including the interfaces with control systems and the communication system, and all alarm and operating modes for each piece of equipment, shall be tested by the Contractor to the satisfaction of the Owner’s Representative before any facility is put into operation. Tests shall be as specified herein and shall be made to determine whether the equipment has been properly assembled, aligned and connected. Any changes, adjustments, or replacements

required to make the equipment operate as specified shall be carried out by the Contractor as part of the Work.

1. At least thirty (30) days before the time allowed in the construction schedule for commencing startup and testing procedures, the Contractor shall submit to the Owner's Representative six (6) copies of the detailed procedures the Contractor proposes for testing and startup of all electrical and mechanical equipment. These procedures are submitted for review and acceptance by BTV.
2. The Contractor's startup and testing procedures shall include detailed descriptions of all pre-operational hardware, electrical, mechanical and instrumentation used for testing work.

    a. Each control device, item of electrical, mechanical and instrumentation equipment, and all control circuits shall be considered in the testing procedures which shall be designed in a logical sequence to ensure that all equipment has been properly serviced, aligned, connected, wired, calibrated and adjusted prior to operation.
    b. Motors shall be tested in accordance with ANSI/IEEE Publication 112. The Contractor is advised that failure to observe these precautions may place the acceptability of the subject equipment in question, and the Contractor may either be required to demonstrate that the equipment has not been damaged, or replace it as determined by the Owner's Representative.

3. Testing procedures shall be designed to duplicate as nearly as possible all conditions of operations and shall be carefully selected to ensure that the equipment is not damaged. All filters shall be in place during startup and testing.

    a. Once the Owner's Representative has accepted the testing procedures, the Contractor shall provide checkout, alignment, adjustment and calibration signoff forms for each item of equipment and each system that will be used.
    b. The Contractor and the Owner's Representative shall use the signoff forms in the field jointly to ensure that each item of electrical, mechanical and instrumentation equipment and each system has been properly installed and tested. The Contractor shall cooperate with project-wide systems contractors where startup and testing is to be conducted concurrently.

4. Any special equipment needed to test equipment shall be provided by the Contractor to the Owner at no cost for a period of thirty (30) days during startup.

B. Before starting up the equipment, the Contractor shall properly service it and other items, which normally require service in accordance with the maintenance instructions. The Contractor shall be responsible for lubrication and maintenance of equipment and replacement filters throughout the entire equipment "break-in" period described by the manufacturer.

1. The Contractor shall be responsible for the startup, adjustment, preliminary maintenance, and checkout of all equipment and instrumentation. All systems shall be carefully checked for conformance with the design criteria.
2. If any equipment or system does not operate as specified in the Contract, the Contractor shall immediately replace or repair components until it operates

properly.

3. The Contractor shall submit a test report to the Owner's Representative within thirty (30) days after completion of the system startup period.

3.2 SYSTEMS STARTUP AND TESTING

A. The Contractor shall be responsible for a 30-day startup period during which time all hardware, electrical and mechanical equipment, communications, alarm systems, and associated devices shall be energized and operated under local and automatic controls. The Contractor shall be present during the startup period with adequate labor and support personnel to adjust equipment and troubleshoot system failures that might arise.

B. When a piece of electrical or mechanical equipment is found to be in conflict with specific criteria, an experienced representative of the manufacturer shall adjust the item.

C. If adjustments fail to correct the operation of a piece of equipment or fixture, the Contractor shall remove the equipment or fixture from the Project site and replace it with a workable replacement that meets the specification requirements.

D. The 30-day startup period shall commence thirty (30) days prior to the Contract completion date and shall be completed prior to final payment. If, during the startup, any system fails to operate in accordance with Contract requirements, the failure shall be corrected and the startup period shall begin again.

1. At the end of the startup period, all filters shall be replaced with new ones.
2. The Owner may provide, at its option, a Commissioning Representative to observe or participate in the startup and testing of any system. The Contractor shall coordinate with the Commissioning Representative relating to scheduling, reporting, forms, methods, and procedures of the startup and testing.

3.3 FINAL INSTRUCTIONS AND OPERATION TRAINING

A. After startup and testing is completed, the Contractor shall demonstrate to the Owner's personnel the proper manner of operating the equipment, programming messages, making adjustments, responding to alarms and emergency signals, and maintaining the system.

B. The Contractor shall provide on-the-job training by a suitably qualified instructor to designated personnel and shall instruct them in the operation and maintenance of the systems. In the event qualified instructors on the Contractor's staff are not available, the Contractor shall arrange with the equipment manufacturer for such instruction at no additional cost to the Owner.

C. The Contractor shall provide a minimum of eight (8) hours of operator training to the Airport per shift. Classes shall accommodate up to five (5) people at a time with up to two (2) separate courses (one for each shift).

D. The Contractor shall provide a syllabus to the Owner's Representative at least seven (7) calendar days prior to the start of each course that outlines topics to be covered, the proposed time allotted to each topic, and the target audience of the training session (technical, casual operator, overview, etc.). The Contractor shall not commence any training courses until the syllabus has been reviewed and approved by the Owner's Representative.

E. Verify that all formats noted below are most currently used by BTV.

F. The Contractor shall video record all training sessions and provide to the Owner's Representative. The Contractor shall provide video recordings in format as required in Section 017900 "Demonstration and Training".

G. The Contractor shall provide an annotated syllabus to the Owner's Representative that indicates topics contained on each tape.

H. The contractor shall provide instruction for obtaining live help for questions relating operation and troubleshooting.

END OF SECTION 017515

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SECTION 017720 - CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Special Sections, apply to this Section.

1.2 SUMMARY

A. Work specified in this Section includes procedures required prior to Final Acceptance of the Work in addition to those specified in Title 20 – Final Completion and Acceptance of The Work in the General Contract Conditions, and Technical Specification Section 017840 "Contract Record Documents".

B. This Section also includes procedures and penalties to ensure prompt completion of the Project Closeout.

C. Related Sections:

1. Title 20 of the General Contract Conditions.
2. Section 017840 "Contract Record Documents" for required record documents.
3. Closeout Checklist.

D. SUBMITTALS

1. Submit written Certification to the Owner’s Representative that, in the opinion of the Contractor, the Work is complete.
2. Submit final survey within 60 days after issuance of Substantial Completion.
3. Submit a Final Statement of Accounting to the Owner’s Representative.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 PREPARATION FOR FINAL INSPECTION

A. Before requesting inspection for Final Acceptance of the Work by the Owner, the Contractor shall inspect, clean, and repair the Work as required.

B. The Contractor shall ensure that all items on the Closeout Checklist have been addressed and accepted by the Owner’s Representative.

3.2 FINAL INSPECTION

A. The Contractor shall submit written certification to the Owner's Representative when, in the opinion of the Contractor, the Work is complete. Such communication shall certify that:

1. The Work has been inspected by the Contractor for conformance with the Contract Documents.
2. The Work has been completed in conformance with the Contract Documents, including all punchlist items.
3. The Work is ready for final inspection by the Owner.
4. All as-built documents have been submitted and accepted.
5. All damaged or destroyed real, personal, public, or private property impacted by the Work has been repaired or replaced.
6. All Warranties and Bonds have been completed, executed, submitted, and accepted.
7. All personnel badges and vehicle permits have been returned to BTV Airport Security.

B. The Owner's Representative will inspect the Work in accordance with the Section 2002.1 of the General Contract Conditions.

C. If the Owner's Representative finds incomplete or defective Work:

1. The Owner's Representative may, at the Owner's Representative's sole discretion, either terminate the inspection, or prepare a punchlist and notify the Contractor in writing, listing the incomplete or defective Work.
2. The Contractor shall take immediate steps to remedy all identified deficiencies and resubmit a written certification to the Owner's Representative that Work is complete.
3. The Owner's Representative will then re-inspect the Work.

3.3 REINSPECTION FEES

A. Should the Owner's Representative be required to perform re-inspections of the Work due to the Contractor prematurely claiming the status of the Work to be complete:

1. The Contractor shall compensate the Owner for such additional services at the rate of $125.00 per man-hour, with a minimum charge of $250.00.
2. The City shall deduct the amount of such compensation from the final payment to the Contractor.

3.4 FINAL SURVEY FEES

A. The Contractor shall complete and submit the final survey for applicable portions of the work within 60 days after issuance of Substantial Completion. If the Contractor fails to complete and submit the final survey within this time frame it is understood that BTV will arrange for a qualified surveying company to complete this work at the Contractor's

expense. All costs associated with BTV arranging for and completing the final survey will be deducted from the final payment including compensation due the Owner for the Owner's Representative's time to manage this work.

1. The Owner's Representative's rate of compensation shall be set at $150.00 per man-hour.
2. Survey submittals needing to be revised may extend the 60-day time frame at the Owner's Representative's discretion.
3. Costs, including the Owner's Representative's, for the review of the resubmitted survey shall be deducted from the final payment.

3.5 LATE CLOSEOUT FEES

A. Within 100 days after issuance of substantial completion, all documentation required by this Contract to achieve Project Closeout shall be submitted. Failure to submit all required documentation shall result in fees to compensate the Owner for project management work while the project remains open.

1. Fees at the rate of $450 per day.
2. The resubmittal of required documents may extend the 100-day time frame at the Owner's Representative's discretion.

3.6 FINAL ADJUSTMENT OF ACCOUNTS

A. Submit a Final Statement of Accounting to the Owner's Representative.

B. The Final Statement of Accounting shall reflect all adjustments to the Contract amount and shall include the following:

1. The original Contract Value.
2. Additions and deductions resulting from the following:
    a. Approved Change Orders.
    b. Allowances.
    c. Final quantities for unit price items, including required backup for the quantities.
    d. Deductions for corrected work.
    e. Penalties.
    f. Deductions for liquidated damages.
    g. Deductions for re-inspection payments.
    h. Other adjustments.
3. Total Contract Value, as adjusted.
4. Previous payments.
5. Sum remaining due.

C. If required, the Owner's Representative will prepare a final Change Order, reflecting the approved adjustments to the Contract Value that were not included in previously

issued Change Orders.

3.7 FINAL APPLICATION FOR PAYMENT

A. The Contractor shall submit the final application for payment in accordance with the procedures and requirements detailed in Final Settlement in the General Contract Conditions.

END OF SECTION 017720

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SECTION 017825 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The Work specified in this Section consists of preparing and submitting operation and maintenance data for mechanical, electrical, and other specified equipment/products.

B. Coordinate all the requirements of the required data with BTV Operations.

1.3 SUBMITTALS

A. Refer to Section 013300 "Submittal Procedures" for submittal procedures.

B. All submittals must be provided in electronic data.

C. Submit one (1) electronic copy and three (3) bound hard copies of the proposed Operation and Maintenance Data Manual not less than 30 days prior to system startup or 60 days prior to acceptance tests and final inspection, whichever is the earlier date.

1. The submitted copies shall provide the Information following the MasterFormat standard. Equipment/Data shall be organized using Section formatting within the 50 MasterFormat Divisions.

D. Submit one (1) electronic copy and three (3) bound hard copies of Operation and Maintenance Data Manual within ten days after [system startup] [commissioning] is complete. These copies shall incorporate any comments made on the previous submittals, along with final readings on all settings and gauges taken while the system is in fully satisfactory operation.

PART 2 - PRODUCTS

2.1 PRODUCT REQUIREMENTS

A. The following products are the requirements of hard copies:

1. Paper size: 8-½ inches x 11 inches.
2. Paper: White bond, at least 20-pound weight.

3. Text: Typewritten.
4. Printed data: Manufacturer's catalog cuts, brochures, operation, and maintenance data. Clear reproductions thereof will be acceptable. If this data is in color, all final manuals must contain color data.
5. Drawings: 8½ inches x 11 inches, bound with the text. Larger drawings are acceptable provided they are folded to fit into a pocket inside the rear cover of the manual. Reinforce edges of large drawings.
6. Prints of drawings: Black ink on white paper, sharp in detail and suitable for making reproductions.
7. Flysheets: Separate each portion of the manual with colored, neatly prepared flysheets briefly describing the contents of the ensuing portion.
8. Covers: Provide 40 to 50 mil, clear plastic, front and plain back covers for each manual. The front covers shall contain the information required in paragraph 3.2 below.
9. Bindings: Conceal the binding mechanism inside the manual. Lockable 3-ring binders shall be provided.
10. Training Videos: Provide in digital electronic format as per current BTV requirements.

    a. Refer to Section 017900 - Demonstration and Training for video requirements.

PART 3 - EXECUTION

3.1 GENERAL

A. Assemble each operation and maintenance manual using the manufacturer's latest standard commercial data, and include all additional information that is unique to the Project.

3.2 COVER

A. Include the following information on the front cover and on the inside cover sheet:

1. Operation and maintenance instructions.
2. Title of structure or facility.
3. Title and number of Contract.
4. Contractor’s name and address.
5. General subject of the manual.

3.3 CONTENTS OF THE MANUAL

1. Table of Contents, which references, at a minimum, three heading levels.
2. Index of Equipment/Data with entries for equipment type and MasterFormat Division and Section.
3. A Master Index that contains index entries for all submitted Operation and

Maintenance Data Manuals.

a. Equipment/Data shall be indexed by equipment type and MasterFormat Division and Section.

4. Name, address, and telephone numbers of Contractor, suppliers and installers along with the manufacturer's order number and description of the order.
5. Name, address, and telephone numbers of manufacturer's nearest service representatives.
6. Name, address, and telephone number of nearest parts vendor and service agency.
7. Copy of guaranties and warranties issued to, and executed in the name of, the Owner.
8. Anticipated date the Owner assumes responsibility for maintenance.
9. Description of system and component parts including theory of operation.
10. Pre operation check or inspection list.
11. Procedures for starting, operating, and stopping equipment.
12. Post operation check or shutdown list.
13. Inspection and adjustment procedures.
14. Troubleshooting and fault isolation procedures for on-site level of repair.
15. Emergency operating instructions.
16. Accepted test data.
17. Maintenance schedules and procedures.
18. Test procedures to verify the adequacy of repairs.
19. One (1) copy of each wiring diagram.
20. One (1) copy of each piping diagram.
21. Location where all measurements are to be made.
22. One (1) copy of each duct diagram.
23. One (1) copy of control diagram.
24. One (1) copy of each accepted shop drawing.
25. One (1) copy of software programs imputable or changeable on site.
26. Ordering information.
27. Training course material used to train BTV staff, including slides and other presentation material.
28. Provide the following information, unless the item is covered in the Manufacturer's Operation and Manual:

    a. Manufacturer's parts list with catalog names, numbers, and illustrations.
    b. A list of components that are replaceable by the Owner.
    c. An exploded view of each piece of the equipment with part designations.
    d. List of manufacturer's recommended spare parts, current prices, and recommended quantities for two years of operation.
    e. List of special tools and test equipment required for the operation, maintenance, adjustment, testing and repair of the equipment, instruments and components.
    f. Scale and corrosion control procedures.
    g. Disassembly and re-assembly instructions.
    h. Troubleshooting and repair instructions.
    i. Calibration procedures.

END OF SECTION 017825

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SECTION 017840 - CONTRACT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. The Work specified in this Section consists of maintaining, marking, recording, and submitting Contract record documents that include shop drawings, warranties, Contract Documents, and contractor records.

B. Related Requirements:

1. Section 013100 "Project Management and Coordination".
2. Section 013223 "Construction Layout, As-built and Quantity Surveys".
3. Section 013300 "Submittal Procedures".
4. Section 017720 "Contract Closeout".
5. Section 017825 "Operation and Maintenance Data".

1.3 SUBMITTALS

A. Each submittal of record documents shall contain the following information:

1. Date.
2. Project title and numbers.
3. Contractor's name and address.
4. Title and number of each record document.
5. Certification that each document as submitted is complete and accurate.
6. Signature of the Contractor or the Contractor's authorized representative.

B. At the completion of this Contract, deliver all record documents including the following:

1. As-built shop drawings, diagrams, illustrations, schedules, charts, brochures and other similar data.
2. Warranties, guarantees, and bonds.
3. Contract Documents.
4. Contractor records.

C. As-built Contract Drawings shall be maintained and provided with each monthly progress payment application upon Owner’s Representative request. A complete set shall be submitted prior to final payment.

1. The Contractor shall provide a single electronic copy of each Contract drawing sheet which has been used to produce work during the payment period or work that payment is being requested on, which records the current as-built conditions of work, including the posting of any change orders or change directives not shown on the Contract Documents at the time of Contract signing.

    a. The Contractor must show as-built work completed through the payment application date including but not limited to utilities, empty conduit, conduit for actual electrical lines, plumbing, HVAC, location of anchor bolts and support points for use by others.
    b. The Contractor shall be liable for any costs incurred by the Owner or a third party due to errors or lack of information provided on the as-built drawings.
    c. All markings on drawings shall be legible to identify the portion of work completed.
    d. For projects utilizing BIM system by the Contractor or a consultant of the Contractor, all data formats shall be compatible and as approved by the Owner's Representative.

1.4 QUALITY CONTROL

A. Submit electronically scanned copies of all documents required by Chapter 17 "Special Inspection and Testing" of the International Building Code 2021 as amended by the State of Vermont. Keep scale and clarify dimension where electronic copies are not as originally scaled and dimensioned.

B. For projects utilizing BIM for Revit, follow approved BIM execution for record documents, formats, and quality control and assurance procedures.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 MAINTENANCE OF DOCUMENTS

A. The Contractor must follow all the procedures established in the Contract Documents.

B. The Contractor shall maintain at the work site on a current basis one (1) record copy of all drawings, specifications, addenda, change orders, approved shop drawings, working drawings, product data and samples in good order and marked currently to record all changes made during construction.

C. Maintain at the field office one copy of the following record documents:

1. Contract Documents:

    a. Contract Drawings with all clarifications, requests for information, directives, changes, and as-built conditions clearly posted.

b. Contract Specifications with all clarifications, requests for information, changes, directives and record of manufacturer actually used along with product trade name.
c. Reference Standards in accordance with Section 014225 "Referenced Standards".
d. Affirmative Action Plan and documents.
e. One (1) set of drawings to record the following:

1) Horizontal and vertical location of underground utilities affected by the Work.
2) Location of internal utilities; include valves, controls, conduit, duct work, switches, pressure reducers, size reducers, transitions, crosses, tees, filters, motors, heaters, dampers, regulators, safety devices, sensors, access doors and appurtenances that are concealed in the construction shall be shown with dimensions given from a visible and recognizable reference to the item being located in all three dimensions. The drawings shall also reference the applicable submittal for the item being located.
3) Field changes of dimensions and details including as-built elevations and location (station and offset).
4) Details not on original Contract Drawings but obtained through requests for information or by other communications with the Owner.

2. Contractor Records:

a. Daily Quality Control Reports.
b. Certificates of compliance for materials used in construction.
c. Completed inspection list.
d. Inspection and test reports.
e. Test procedures.
f. Qualification of personnel.
g. Approved submittals.
h. Material and equipment storage records.
i. Safety Plan
j. Erosion, sediment, hazardous and quality plans.
k. Hazardous material records.
l. First report of injuries.

3.2 RECORDINGS

A. Label each document page or article "PROJECT RECORD" in two-inch high letters.

B. Keep record documents current daily.

C. Legibly mark copies of the Contract Drawings to record actual construction.

D. Legibly mark up each Section of the specifications and Contract Drawings to record:

1. Manufacturer, trade name, catalog number and supplier of each product and item

actually installed.

2. Changes made by change orders, requests for information, substitutions, and variations approved by submittals.

3.3 DOCUMENT MAINTENANCE

A. Follow all the required processes of the approved BIM Execution Plan as approved by BTV for this specific project or in formats acceptable to BTV BIM management system.

B. Do not use record documents for construction purposes.

C. Make documents available for inspection by the Owner's Representative and any others having jurisdiction.

3.4 MONTHLY REVIEW

A. Prior to any application for payment, the Owner's Representative or the Owner's Representative's designated representative will inspect the record documents to ensure that they are being maintained and contain the most current correct data with particular attention to as-built drawings.

B. If, during the inspection, the Owner's Representative determines that the documents are not being maintained and kept current as to as-built conditions, an amount may be withheld from the payment request and deducted from the Contract value to cover the Owner's cost of collecting and recording the as-built Contract data. This cost will be determined based on $100.00 per man-hour of effort.

END OF SECTION 017840

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SECTION 017900 - DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:

1. Demonstration of operation of systems, subsystems, and equipment.
2. Training in operation and maintenance of systems, subsystems, and equipment.
3. Demonstration and training video recordings.

1.3 INFORMATIONAL SUBMITTALS

A. Instruction Program: Submit outline of instructional program for demonstration and training, including a list of training modules and a schedule of proposed dates, times, length of instruction time, and instructor's names for each training module. Include learning objective and outline for each training module.

1. Indicate proposed training modules using manufacturer-produced demonstration and training video recordings for systems, equipment, and products in lieu of video recording of live instructional module.

B. Qualification Data: For facilitator and/or instructor and videographer.

C. Attendance Record: For each training module, submit list of participants and length of instruction time.

D. Evaluations: For each participant and for each training module, submit results and documentation of performance-based test.

1.4 CLOSEOUT SUBMITTALS

A. Demonstration and Training Video Recordings: Submit two (2) copies within fifteen (15)) days of end of each training module.

1. Identification: On each copy, provide an applied label with the following information:

a. Name of Project.

b. Name and address of videographer.
c. Name of Architect.
d. Name of Construction Manager.
e. Name of Contractor.
f. Date of video recording.

2. Closed Caption: Videos shall contain a visible text version of all speech provided in the recording.
3. Transcript: Prepared and bound in format matching operation and maintenance manuals. Mark appropriate identification on front and spine of each binder. Include a cover sheet with same label information as the corresponding video recording. Include name of Project and date of video recording on each page.
4. Transcript: Prepared in PDF electronic format. Include a cover sheet with same label information as the corresponding video recording and a table of contents with links to corresponding training components. Include name of Project and date of video recording on each page.
5. At completion of training, submit complete training manual(s) for Owner's use a preapproved electronic media and format.

1.5 QUALITY ASSURANCE

A. Facilitator Qualifications: A firm or individual experienced in training or educating personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.

B. Instructor Qualifications: A professional instructor/trainer who is experienced in operation and maintenance procedures and training.

C. Videographer Qualifications: A professional videographer who is experienced photographing demonstration and training events similar to those required.

D. Pre-instruction Conference: Conduct conference at Project site to comply with requirements in Section 014510 "Contractor Quality Control". Review methods and procedures related to demonstration and training including, but not limited to, the following:

1. Inspect and discuss locations and other facilities required for instruction.
2. Review and finalize instruction schedule and verify availability of educational materials, instructor's personnel, audiovisual equipment, and facilities needed to avoid delays.
3. Review required content of instruction.
4. For instruction that must occur outside, review weather and forecasted weather conditions and procedures to follow if conditions are unfavorable.

1.6 COORDINATION

A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's

personnel.

1. Include multiple classes to accommodate various shifts, as necessary.

B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.

C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Owner's Representative.

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

A. Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.

B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following as applicable to the system, equipment, or component:

1. Basis of System Design, Operational Requirements, and Criteria: Include the following:

    a. System, subsystem, and equipment descriptions.
    b. Performance and design criteria if Contractor is delegated design responsibility.
    c. Operating standards.
    d. Regulatory requirements.
    e. Equipment function.
    f. Operating characteristics.
    g. Limiting conditions.
    h. Performance curves.

2. Documentation: Review the following items in detail:

    a. Emergency manuals.
    b. Operations manuals.
    c. Maintenance manuals.
    d. Project record documents.
    e. Identification systems.
    f. Warranties and bonds.
    g. Maintenance service agreements and similar continuing commitments.

3. Emergencies: Include the following, as applicable:

a. Instructions on meaning of warnings, trouble indications, and error messages.
b. Instructions on stopping.
c. Shutdown instructions for each type of emergency.
d. Operating instructions for conditions outside of normal operating limits.
e. Sequences for electric or electronic systems.
f. Special operating instructions and procedures.

4. Operations: Include the following, as applicable:

a. Startup procedures.
b. Equipment or system break-in procedures.
c. Routine and normal operating instructions.
d. Regulation and control procedures.
e. Control sequences.
f. Safety procedures.
g. Instructions on stopping.
h. Normal shutdown instructions.
i. Operating procedures for emergencies.
j. Operating procedures for system, subsystem, or equipment failure.
k. Seasonal and weekend operating instructions.
l. Required sequences for electric or electronic systems.
m. Special operating instructions and procedures.

5. Adjustments: Include the following:

a. Alignments.
b. Checking adjustments.
c. Noise and vibration adjustments.
d. Economy and efficiency adjustments.

6. Troubleshooting: Include the following:

a. Diagnostic instructions.
b. Test and inspection procedures.

7. Maintenance: Include the following:

a. Inspection procedures.
b. Types of cleaning agents to be used and methods of cleaning.
c. List of cleaning agents and methods of cleaning detrimental to product.
d. Procedures for routine cleaning
e. Procedures for preventive maintenance.
f. Procedures for routine maintenance.
g. Instruction on use of special tools.

8. Repairs: Include the following:

a. Diagnosis instructions.
b. Repair instructions.
c. Disassembly; component removal, repair, and replacement; and

reassembly instructions.

d. Instructions for identifying parts and components.

e. Review of spare parts needed for operation and maintenance.

PART 3 - EXECUTION

3.1 PREPARATION

A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 017825 "Operation and Maintenance Data".

B. Set up instructional equipment at instruction location.

3.2 INSTRUCTION

A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.

B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.

1. Contractor will furnish an instructor to describe basis of system design, operational requirements, criteria, and regulatory requirements.
2. Owner will furnish an instructor to describe Owner’s operational philosophy.
3. Owner’s Representative will furnish Contractor with names and positions of BTV participants.

C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.

1. Schedule training with Owner, through Owner’s Representative, with at a minimum of thirty (30) days advance notice.

D. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.

E. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of an appropriate performance-based test.

F. Cleanup: Collect used and leftover educational materials and remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

3.3 DEMONSTRATION AND TRAINING VIDEO RECORDINGS

A. General: Engage a qualified commercial videographer to record demonstration and training video recordings. Record each training module separately. Include classroom instructions and demonstrations, board diagrams, and other visual aids, but not student practice.

1. At beginning of each training module, record each chart containing learning objective and lesson outline.

B. Video Recordings: Submit video recordings in an electronic format and delivery method acceptable to Owner's Representative. Recordings shall be high-resolution with a minimum framerate of 60Hz.

1. File Names: Utilize file names based upon name of equipment generally described in video segment, as identified in Project specifications.
2. Contractor and Installer Contact File: Using appropriate software, create a file for inclusion on the Equipment Demonstration and Training DVD that describes the following for each Contractor involved on the Project:

a. Name of Contractor/Installer.
b. Business address.
c. Business phone number.
d. Point of contact.
e. E-mail address.

C. Recording: Mount camera on tripod before starting recording, unless otherwise necessary to adequately cover area of demonstration and training. Display continuous running time.

1. Film training session(s) in segments not to exceed 15 minutes.

a. Produce segments to present a single significant piece of equipment per segment.
b. Organize segments with multiple pieces of equipment to follow order of Project Manual table of contents.
c. Where a training session on a particular piece of equipment exceeds 15 minutes, stop filming and pause training session. Begin training session again upon commencement of new filming segment.

D. Light Levels: Verify light levels are adequate to properly light equipment. Verify equipment markings are clearly visible prior to recording.

1. Furnish additional portable lighting as required.

E. Narration: Describe scenes on video recording by either audio narration by microphone during recording or video recording is recorded. Include description of items being viewed.

1. Closed Caption: Videos shall contain a visible text version of all speech provided in the recording.

2. Transcript: Prepared and bound in format matching operation and maintenance manuals. Mark appropriate identification on front and spine of each binder. Include a cover sheet with same label information as the corresponding video recording. Include name of Project and date of video recording on each page.
3. Transcript: Prepared in PDF electronic format. Include a cover sheet with same label information as the corresponding video recording and a table of contents with links to corresponding training components. Include name of Project and date of video recording on each page.

F. Transcript: Provide a transcript of the narration. Display images and running time captured from videotape opposite the corresponding narration segment.

G. Failure of Video Recordings: If video recordings submitted by Contractor do not comply with Project requirements, or have audio and/or video problems, Contractor will be required to repeat training and video recording in compliance with this Section in order to re-create the training video.

END OF SECTION 017900

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SECTION 018113 - SUSTAINABLE DESIGN REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Sustainable design Project goals.
2. Sustainable design product requirements.

B. Related Sections:

1. Section 015729 - Temporary Indoor Air Quality Controls: Construction indoor air quality management plan and HVAC air filters, building flush-out, and indoor air quality testing.
2. Section 017419 - Construction Waste Management and Disposal: Recycling and adaptively reusing construction waste.
3. Section 019100 - Commissioning: General commissioning requirements.
4. Section 230800 - Commissioning of HVAC: Mechanical systems commissioning requirements.
5. Individual Specification Sections for additional product requirements.
6. Section <_____-_____>: Electrical system commissioning requirements.
7. Section <_____-_____>: Plumbing system commissioning requirements.

1.2 REFERENCE STANDARDS

A. American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE):

1. ASHRAE 52.2 - Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size.
2. ASHRAE 62.1 - Ventilation for Acceptable Indoor Air Quality.
3. ASHRAE 90.1 - Energy Efficient Design of New Buildings Except Low-Rise Residential Buildings.

B. ASTM International (ASTM):

1. ASTM C1371 - Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers.
2. ASTM C1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer.
3. ASTM E408 - Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques.

4. ASTM E903 - Standard Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres.
5. ASTM E1918 - Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field.
6. ASTM E1980 - Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.

C. Carpet and Rug Institute (CRI):

1. CRI Green Label Plus Testing Program.
2. CRI Green Label Testing Program.

D. Forest Stewardship Council (FSC):

1. FSC Guidelines.

E. Green Seal (GS):

1. GC-03 - Anti-Corrosive Paints.
2. GS-11 - Product Specific Environmental Requirements.
3. GS-36 - Aerosol Adhesives.

F. GREENGUARD Environmental Institute:

1. GREENGUARD Children and Schools Certification Program.

G. International Standards Organization (ISO):

1. ISO 14021 - Environmental Labels and Declarations - Self-Declared Environmental Claims (Type II Environmental Labeling).

H. Scientific Certification Systems (SCS):

1. SCS EC10.2 - Environmental Certification Program Indoor Air Quality Performance.

I. Sheet Metal and Air Conditioning Contractors (SMACNA):

1. SMACNA IAQ - IAQ Guidelines for Occupied Buildings Under Construction.

J. South Coast Air Quality Management District (SCAQMD):

1. SCAQMD Rule 1113 - Architectural Coatings.
2. SCAQMD Rule 1168 - Adhesive and Sealant Applications.

K. U.S. Environmental Protection Agency (EPA):

1. ENERGY STAR Voluntary Labeling Program.
2. EPA IAQ Testing - Compendium of Methods for the Determination of Air Pollutants in Indoor Air.

3. EPA Construction General Permit.

1.3 SUSTAINABLE PROJECT GOALS

A. Comply with the following general sustainable Project goals. Refer to specific Specification Sections for more detailed requirements.

1. Notify Owner and Architect/Engineer when conflicts arise between Work performance and sustainable Project goals.

B. Use resources efficiently:

1. Reuse existing buildings and materials.
2. Furnish materials that use resources efficiently.
3. Use construction practices that achieve efficient use of resources and materials.
4. Recycle or reuse Project Site waste.
5. Furnish recycled content materials.
6. Furnish materials that can be recycled.

C. Avoid scarce, irreplaceable, or endangered resources:

1. Furnish materials from abundant, well-managed resources.
2. Furnish materials that are replaceable, renewable, or can be replenished.
3. Furnish materials that minimize damage to natural habitats.

D. Use durable materials:

1. Furnish materials with longest usable life.
2. Furnish materials that can be reused.
3. Furnish materials with least maintenance requirements.

E. Create spaces that are healthy for occupants:

1. Furnish low-toxicity products and materials.
2. Furnish materials without toxic maintenance requirements.
3. Furnish mechanical equipment that provides fresh air and does not trap water or pollutants.

F. Use energy efficiently:

1. Furnish materials with low embodied energy.
2. Furnish materials that save energy during building operations.

G. Use water efficiently:

1. Use construction practices that use water efficiently.
2. Furnish water conserving appliances and equipment.
3. Landscape Project Site for water conservation.
4. Capture and utilize rainwater.

H. Furnish materials that generate least amount of pollution.

I. Protect and restore natural habitats on Site.

1.4 SUBMITTALS

A. Section 013300 - Submittal Procedures contains requirements for submittals.

B. Product Data:

1. Submit data for filter media and filter efficiency.

C. Manufacturer's Certificate: Certify products listed below meet or exceed specified requirements.

1. Certify paving material solar reflectance index.

a. Indicate solar reflectance index and percent of total Site hardscape surfaces for each paving material.

2. Certify roofing material solar reflectance index.

a. Indicate roof slope, solar reflectance index, and percent of total roof surface for each roofing material.

3. Certify plumbing fixture water consumption rates.

a. Indicate manufacturer and model number of each fixture and fitting and water consumption rates.

4. Certify source and origin for any salvaged and reused products.

a. Include description and location of each salvaged and reused product in completed construction.

5. Certify recycled material content for recycled content products permanently installed as part of Project.

a. Indicate postconsumer recycled content percent by weight.
b. Indicate preconsumer recycled content percent by weight.
c. Indicate recycled content materials according to ISO 14021.

6. Certify source for regional materials for products permanently installed as part of Project.

a. Indicate manufacturing or fabrication location and distance to Site in miles.
b. Indicate percent by weight of each product qualifying as regional material.

7. Certify lumber is harvested from Forest Stewardship Council certified well-managed forest.

a. Indicate certifying agency and agency accreditation by Forest Stewardship Council.
b. Include chain-of-custody documentation tracking wood product from forest to installed product.
c. Include description and location of each certified wood-based product in completed construction.

8. Certify volatile organic compound content for each interior adhesive and sealant and related primer.

a. Include data sheet indicating volatile organic compound content, in g/L, for each product.

9. Certify volatile organic compound content for each interior paint and coating.

a. Include data sheet indicating volatile organic compound, in g/L, and chemical component content for each product.

10. Certify volatile organic compound content for each carpet **and carpet cushion**.

a. Include independent test results indicating that each carpet complies with CRI Green Label Plus Testing Program.
b. Include independent test results indicating each carpet cushion complies with CRI Green Label Testing Program.

11. Certify each composite wood **and agrifiber** product contains no added urea-formaldehyde resins.

a. Include data sheet indicating urea-formaldehyde resin content for each product.

D. Construction Photographs: Submit photographs of measures protecting materials from moisture for the following:

1. Absorptive materials, including but not limited to masonry units, lumber, finished architectural woodwork, flush wood doors, gypsum board, acoustical ceiling tiles, and insulation.
2. Ducts and other HVAC equipment.

E. Product Cost Data:

1. Submit cost of products, excluding cost of labor and equipment for installation, for the following products installed as part of permanent construction:

a. Salvaged, refurbished, and reused products.
b. Products with recycled material content.
c. Regional products.
d. Rapidly renewable products.
e. Certified wood products.

F. Construction Plans:

1. Construction Waste Management Plan: Provide according to Section 017419 - Construction Waste Management and Disposal.
2. Construction Indoor Air Quality (IAQ) Plan: Indicate absorptive material and HVAC system protection; source control; pathway interruption; housekeeping; and construction sequencing.
3. Materials Reuse Management Plan: Indicate list of salvaged, refurbished, or reused materials and products to be incorporated into the Work. Include source for each material and product and intended locations within completed construction. Calculate value of reused materials as a percentage of total Project material and product cost.

    a. Submit monthly report of actual reused materials and products purchased for the Work. Adjust plan as required to ensure compliance with specified results.

4. Recycled Materials Management Plan: Indicate list of proposed materials and products with recycled content to be incorporated into the Work. Include total and weighted recycled content cost data for each proposed material and product. Calculate value of recycled content as a percentage of total Project material and product cost.

    a. Submit monthly report of actual recycled materials and products purchased for the Work. Adjust remaining proposed materials and products to ensure compliance with specified results.

5. Regional Materials Management Plan: Indicate list of proposed regional materials and products to be incorporated into the Work. Include total and weighted regional material cost data for each proposed material and product. Calculate value of regional materials as a percentage of total Project material and product cost.

    a. Submit monthly report of actual regional materials and products purchased for the Work. Adjust remaining proposed materials and products to ensure compliance with specified results.

1.5 QUALITY ASSURANCE

A. Perform Work according to the sustainable project goals.

1. Owner and Architect/Engineer identified Project sustainable Project goals that are believed to be attainable.
2. Furnish products with materials and properties for entire Project to meet or exceed specified sustainable Project goals.
3. Perform Work using means and methods for entire Project to meet or exceed specified sustainable Project goals.

1.6 QUALIFICATIONS

A. Monitor and manage compliance with this Section under direct supervision of an experienced firm, or individual employed and assigned by General Contractor.

1.7 PREINSTALLATION MEETINGS

A. Section 013000 - Administrative Requirements includes requirements for pre-installation meeting.

B. Convene minimum **one** week prior to commencing Work of this Section.

1. Review submittal and documentation requirements.
2. Review construction procedures and temporary facilities.

PART 2 - PRODUCTS

2.1 PROHIBITED MATERIALS

A. Do not use materials containing asbestos, polychlorinated biphenyls (PCB), or other hazardous materials.

B. Do not use HCFC-based refrigerants or halon extinguishing agents.

C. Do not use materials containing butyl for interior locations.

2.2 HVAC FILTERS

A. Temporary Return Air Filters: ASHRAE 52.2 minimum efficiency reporting value (MERV) of 8.

2.3 PAVING MATERIALS

A. Paving Surfaces: Minimum solar reflectance index (SRI) of 29, calculated according to ASTM E1980.

1. Reflectance: Measured according to ASTM E903, ASTM E1918, or ASTM C1549.
2. Emittance: Measured according to ASTM E408 or ASTM C1371.

2.4 ROOFING MATERIALS

A. Roof Surface: Minimum SRI of **78** for 75 percent of roof area, calculated according to ASTM E1980.

1. Reflectance: Measured according to ASTM E903, ASTM E1918, or ASTM C1549.
2. Emittance: Measured according to ASTM E408 or ASTM C1371.

OR

B. Roof Surface: ENERGY STAR compliant with the following performance:

1. Emissivity: Minimum 0.9 for 75 percent of roof area according to ASTM E408.

2.5 REUSED MATERIALS

A. Furnish the following materials salvaged, refurbished, or reused from on-Site or other sources, as available.

1. Timber framing.
2. Slate shingles.

2.6 RECYCLED CONTENT MATERIALS

A. Furnish the following materials with maximum available recycled content.

1. Concrete with pozzolan admixtures.
2. Structural steel framing.
3. Steel joists.
4. Metal floor and roof decking.
5. Steel stairs and railings.
6. Metal siding and roofing.
7. Aluminum framed storefronts and entrance.
8. Aluminum windows.
9. Aluminum curtain wall.
10. Steel stud framing.
11. Gypsum board.
12. Acoustical ceiling panels.

2.7 REGIONAL MATERIALS

A. Furnish the following materials extracted, harvested or recovered, and manufactured within 500 miles of Project Site.

1. Concrete.
2. Concrete masonry units.
3. Brick masonry units.
4. Gypsum board.
5. Wood flooring.

2.8 CERTIFIED WOOD MATERIALS

A. Wood-Based Materials: Furnish the following materials certified according to FSC Guidelines for minimum 50 percent of wood-based materials.

1. Structural wood decking.
2. Wood cabinets.
3. Wood wall paneling.

2.9 LOW-EMITTING MATERIALS - ADHESIVES AND SEALANTS

A. Adhesives and Sealants: Maximum volatile organic compound content according to product and testing requirements of CA/DHS/EHLB/R-174.

B. Adhesives, Sealants, and Sealant Primers: Maximum volatile organic compound content according to SCAQMD Rule 1168.

C. Aerosol Adhesives: Maximum volatile organic compound content according to GS-36.

2.10 LOW-EMITTING MATERIALS - PAINTS AND COATINGS

A. Paints and Coatings: Maximum volatile organic compound content according to product and testing requirements of CA/DHS/EHLB/R-174.

****** [OR] ******

B. Architectural Paints and Coatings: Maximum volatile organic compound content according to GS-11.

C. Anti-Corrosive and Anti-Rust Paints: Maximum volatile organic compound content according to GC-03.

D. Clear Wood Finishes, Floor Coatings, Stains, Primers, and Shellacs: Maximum volatile organic compound content according to SCAQMD Rule 1113.

2.11 LOW-EMITTING MATERIALS - FLOORING SYSTEMS

A. Flooring Systems: Maximum volatile organic compound content according to product and testing requirements of CA/DHS/EHLB/R-174 for the following:

1. Carpet.
2. Carpet cushion.
3. Carpet adhesive.
4. Hard surface flooring.
5. Sealers and stains for concrete, wood, bamboo, and cork flooring.
6. Tile setting adhesives.
7. Tile grouts.

****** [OR] ******

B. Carpets: Maximum volatile organic compound content according to CRI Green Label Plus Testing Program.

C. Carpet Cushions: Maximum volatile organic compound content according to CRI Green Label Testing Program.

D. Hard Surface Flooring: FloorScore certified for VOC content according to SCS EC10.2.

E. Concrete, Wood, Bamboo, and Cork Floor Finishes: Maximum volatile organic compound content according to SCAQMD Rule 1113, including sealers and stains.

F. Tile Setting Adhesives and Grout: Maximum volatile organic compound content according to SCAQMD Rule 1168.

2.12 LOW-EMITTING MATERIALS - COMPOSITE WOOD

A. Composite Wood Products: Manufactured and fabricated to contain no added urea-formaldehyde resins.

2.13 LOW-EMITTING MATERIALS - FURNITURE AND FURNISHINGS

A. Furniture and Seating: GREENGUARD "Children and Schools" certified.

2.14 LOW-EMITTING MATERIALS - CEILING AND WALL SYSTEMS

A. Ceiling and Wall Systems: Maximum volatile organic compound content according to product and testing requirements of CA/DHS/EHLB/R-174 for the following:

1. Gypsum board.
2. Insulation.
3. Acoustical ceiling systems.
4. Wall coverings.

2.15 EQUIPMENT AND APPLIANCES

A. Equipment and Appliances: ENERGY STAR compliant for appliances, office equipment, electronics, and commercial food service equipment.

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PART 3 - EXECUTION

3.1 SUSTAINABLE SITES

A. Perform storm water management and erosion control Work according to **EPA Construction General Permit or local erosion and sedimentation control standards**, **whichever is more stringent**.

B. Limit site disturbance to **the following areas:**

1. 40 feet beyond building perimeter.
2. 10 feet beyond walkways, patios, surface parking, and utilities less than 12 inches diameter.
3. 15 feet beyond primary roadway curbs and main utility trenches.
4. 25 feet beyond pervious paving areas.

3.2 ENERGY AND ATMOSPHERE

A. Perform commissioning Work as specified in **Section 019100 – Commissioning** and **Section 230800 - Commissioning of HVAC,** for the following:

1. Fundamental building systems.

B. Perform Work to meet or exceed minimum energy efficiency and performance according to the **local energy code**.

C. Perform Work without use of CFC-based refrigerants in HVAC building systems.

D. Perform ventilation Work according to ASHRAE 62.1.

3.3 MATERIALS AND RESOURCES

A. Recycle or salvage minimum of **50** percent by weight of non-hazardous construction **, demolition,** and land-clearing waste.

3.4 INDOOR ENVIRONMENTAL QUALITY

A. Accept absorptive materials on-Site in manufacturer's sealed, protective packaging. Inspect for damage.

B. Store absorptive materials in enclosed, environmentally conditioned space to prevent moisture absorption.

C. Do not store or install absorptive materials within building until building is enclosed and materials are protected from exposure to elements.

D. Protect installed absorptive materials from damage with temporary exterior enclosure to prevent moisture absorption.

E. Perform ventilation Work according to ASHRAE 62.1.

F. Develop and implement Construction IAQ management plan including the following:

1. Comply with minimum requirements of SMACNA IAQ.
2. Protect stored and installed absorptive materials from moisture damage.
    a. Store materials on elevated platforms under cover and in dry location.
    b. When materials are not stored in enclosed location, cover tops and sides of material with secured waterproof sheeting.
3. Protect HVAC equipment during construction.
    a. Shut down return side of HVAC system whenever possible during heavy construction or demolition.
    b. When HVAC system is operated during heavy construction, furnish disposable temporary filters.
4. Replace filtration media immediately before occupancy.
5. Conduct minimum two-week building flush-out with new filtration media at 100 percent outside air after construction ends and before occupancy.
6. Perform building flush-out before occupancy by supplying total outdoor air volume of 14,000 cu ft/sq ft of floor area while maintaining indoor environment at minimum 60 degrees Fand maximum 60 percent relative humidity.

****** [OR] ******

7. Perform building flush-out before occupancy by supplying total outdoor air volume of 3,500 cf/sf of floor area. Continue building flush-out after occupancy by supplying outdoor air at minimum rate of 0.30 cfm/sfof floor area or design minimum outside air rate, whichever is greater, until total outdoor air volume of 14,000 cf/sf of floor area is delivered to interior spaces. During each day of flush-out, begin ventilation minimum t hours before occupancy and continue for duration of occupancy.

****** [OR] ******

8. Conduct baseline indoor air quality testing procedure consistent with EPA IAQ Testing.

END OF SECTION 018113

SECTION 019113 - GENERAL COMMISSIONING REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 01 Specification Sections, apply to this Section.

B. Basis of Design (BOD) documentation included by reference for information only.

C. Specification Sections:

1. 013100 – Project Management and Coordination
2. 013119 – Project Meetings
3. 013210 – Schedule
4. 013300 – Submittal Procedures
5. 014510 – Contractor Quality Control
6. 017515 – System Startup, Testing, and Training
7. 017825 – Operations and Maintenance Data
8. 017900 – Demonstration and Training
9. 071113 – Bituminous Dampproofing
10. 071326 – Self-Adhering Sheet Waterproofing
11. 071413 – Hot Fluid-Applied Rubberized Asphalt Waterproofing
12. 071418 – Fluid-Applied Waterproofing Deck System
13. 071900 – Water Repellents
14. 072100 – Thermal Insulation
15. 072500 – Weather Barriers
16. 072726 – Fluid-Applied Membrane Air Barriers
17. 074213.13 – Formed Metal Wall Panels
18. 074213.19 – Insulated Metal Wall Panels
19. 074293 – Soffit Panels
20. 075323 – Ethylene-Propylene-Diene-Monomer (EPDM) Roofing
21. 076200 – Sheet Metal Flashing and Trim
22. 077100 – Roof Specialties
23. 077129 – Manufactured Roof Expansion Joints
24. 077200 – Roof Accessories
25. 079200 – Joint Sealants
26. 079500 – Expansion Control
27. 081113 – Hollow Metal Doors and Frames
28. 083113 – Access Doors and Frames
29. 083323 – Overhead Coiling Doors
30. 083730 – High Speed Rolling Doors
31. 084113 – Aluminum-Framed Entrances and Storefronts
32. 084413 – Glazed Aluminum Curtain Walls
33. 086300 – Metal-Framed Skylights
34. 087100 – Door Hardware

35. 087113 – Automatic Door Operators
36. 088000 – Glazing
37. 088113 – Decorative Glass Glazing
38. 088813 – Fire-Resistant Glazing
39. 089000 – Louvers
40. 211313 – Wet-Pipe Sprinkler Systems
41. 211316 – Dry-Pipe Sprinkler Systems
42. 220513 – Common Motor Requirements for Plumbing Equipment
43. 220533 – Heat Tracing for Plumbing Piping
44. 220716 – Plumbing Equipment Insulation
45. 220719 – Plumbing Piping Insulation
46. 221116 – Domestic Water Piping
47. 221123 – Domestic Water Pumps
48. 221329 – Sanitary Sewage Pumps
49. 221429 – Sump Pumps
50. 223300 – Electric, Domestic Water-Heaters
51. 230513 – Common Motor Requirements for HVAC Equipment
52. 230533 – Heat Tracing for HVAC Piping
53. 230593 – Testing, Adjusting, and Balancing for HVAC
54. 230596 – HVAC Smoke Control Testing
55. 230713 – Duct Insulation
56. 230719 – HVAC Piping Insulation
57. 230923 – Direct Digital Control (DDC) System for HVAC
58. 230993.11 – Sequence of Operations for HVAC DDC
59. 232513 – Water Treatment for Closed-Loop Hydronic Systems
60. 233413 – Axial HVAC Fans
61. 233416 – Centrifugal HVAC Fans
62. 233423 – HVAC Power Ventilators
63. 233600 – Air Terminal Units
64. 235700 – Heat Exchangers for HVAC
65. 238216.11 – Hydronic Air Coils
66. 238219 – Fan Coil Units
67. 238239.13 – Cabinet Unit Heaters
68. 238239.16 – Propeller Unit Heaters
69. 238239.19 – Wall and Ceiling Unit Heaters
70. 260510 – Testing, Acceptance, and Certification
71. 260519 – Low-Voltage Electrical Power Conductors and Cables
72. 260526 – Grounding and Bonding for Electrical Systems
73. 260573 – Arc Flash and Overcurrent Protective Device Coordination Study
74. 260923 – Lighting Control Devices
75. 260933 – Central Dimming Controls
76. 260943 – Distributed Digital Lighting Control System
77. 260943.23 – Relay-based Lighting Controls
78. 262200 – Low-Voltage Transformers
79. 262300 – Low-Voltage Switchgear
80. 262413 – Switchboards
81. 262416 – Panelboards
82. 262713 – Electricity Metering
83. 262816 – Enclosed Switches and Circuit Breakers
84. 262913 – Enclosed Controllers

85. 262923 – Variable-Frequency Motor Controllers
86. 263100 – Photovoltaic Collectors
87. 263353 – Central Battery Equipment
88. 263323 – Static Uninterruptible Power Supply
89. 263600 – Transfer Switches
90. 265100 – Interior Lighting
91. 265600 – Exterior Lighting
92. 271300 – Communications Backbone Cabling
93. 271333 – Communications System Interfaces
94. 271500 – Communications Horizontal Cabling
95. 272100 – Local Area Networks (LANS)
96. 272100 – Public Wireless LAN (WIFI)
97. 274111 – Video Surveillance and Environmental monitoring System (VSEMS)
98. 274133 – Master Antenna Television System
99. 274219 – Multi-User Flight Information System (MUFIDS)
100. 275123 – Emergency Communications System
101. 275319 – Public Safety Distributed Antenna System (DAS)
102. 281300 – Access Control
103. 282300 – Video Surveillance
104. 283100 – Intelligent Life Safety Networked Fire Alarm Systems

1.2 SUMMARY

A. The CMAR (will employ an independent Commissioning Authority (CxA). The Commissioning Authority is an independent and knowledgeable third party, hired to verify that equipment and systems installed as part of the project operate as intended. The Commissioning Authority will inform the Owner's Representative and Owner of the results of the commissioning and provide suggestions, as necessary, to correct deficiencies in observed performance or installation

B. This section (019113) defines requirements for members of the Commissioning Team, roles and activities associated with the commissioning process are defined herein. All construction team members, including equipment manufacturers and manufacturers' representatives, shall review this document, understand their responsibilities in the commissioning process and include associated efforts in their respective scopes of work.

C. Scope

1. Commissioning requirements common to all Sections
2. Systems and equipment functional performance testing
3. Validation of proper and thorough installation of systems and equipment
4. Equipment performance verification and sign off
5. Documentation of tests, procedures, and observations.
6. Review of BTV Training agency.

D. Section includes general requirements that apply to implementation of commissioning without regard to specific systems, assemblies, or components.

1.3 DEFINITIONS

A. Acceptance Phase: The phase of the project when the facility and its systems and equipment are inspected, tested, verified, and documented; and when most of the Functional Performance Testing and formal training occurs. This will generally occur after the Construction Phase is complete (start-up and checks have been accomplished).

B. Basis of Design (BOD): A document, provided by the DOR, that records concepts, calculations, decisions, and product selections used to meet the Contract and to satisfy applicable regulatory requirements, standards, and guidelines. The document includes both narrative descriptions and lists of individual items that support the design process.

C. Building Enclosure Commissioning (BECx): A quality-oriented process used to verify that building enclosure components are installed and perform collectively according to the OPR. Commissioning does not serve as a guarantee, certification, warranty, etc. of performance by equipment, components, assemblies, or systems constructed and designed by others.

D. Building Enclosure Testing Matrix: The matrix that includes all building enclosure performance testing detailed in the project specifications. The matrix will be updated throughout the project to reflect test results and any additional testing required (e.g. additional testing requirements triggered by failing test results) and use the matrix to track building envelope performance testing for the duration of the envelope commissioning process. Included in the matrix is specification reference to tests, assembly to be tested, test frequency, pass/fail criteria, test procedures, date of testing, and test results.

E. Commissioning Authority (CxA): The Party retained by BTV who will oversee the Commissioning process as well as develop and stipulate many of the Commissioning requirements. They will also manage the Commissioning process and ensure and validate that systems and equipment are designed, installed, and tested to meet BTV's requirements.

F. Commissioning Coordinator (CxC): Individuals, appointed by the installing CMAR, each having the authority to act on behalf of the entity he or she represents, explicitly organized to implement the commissioning process through coordinated action.

G. Commissioning Plan: A document that outlines the organization, schedule, allocation of resources, responsibilities, contact information and documentation requirements of the commissioning process.

H. Construction Phase: Phase of the project during which the facility is constructed and/or systems and equipment are installed, started, tested, and balanced. CMAR and subcontractors complete the installation, complete start-up documentation, submit operation and maintenance information, establish trends, and perform any other applicable requirements to get systems started. CMAR and Vendors may also conduct equipment specific training.

I. Construction Manager at Risk (CMAR): As used herein, is a general reference to the installing contractors, subcontractors, or vendors.

J. Deficiency: A condition in the installation or function of a component, piece of equipment or system that does not comply with the Contract Documents, i.e., does not perform properly or is not complying with the design intent.

K. Energy Management Control System (EMCS): The computer-based heating, ventilation, and air-conditioning (HVAC) control system.

L. Factory Authorized Representative: An individual fully trained on the equipment and certified or authorized by the manufacturer to perform the respective task.

M. Factory Testing: Testing of equipment off-site at the manufacturer's facility. The testing may be witnessed by the members of the project team upon request.

N. Functional Performance Testing (FPT): The detailed and thorough testing of building systems and their interactions with building components and other building systems.

O. Issue Log: This list is maintained and updated by the Commissioning Authority that includes all Issue items that relate to Commissioning activities and site observations requiring CMAR action or response.

P. Integrated System Test (IST): The commissioning procedure that verifies the performance of integrated building systems will maintain integrity and can operate in coordination with other systems in the same environment.

Q. Maximum Failure Limit: The maximum percentage of a test population that is permitted to fail before the test is considered a failure and subject to correction and retesting. Where test sampling is used, the Maximum Failure Limit shall be the maximum percentage of a test sample that is permitted to fail before an entirely new sample must be selected for testing.

R. Monitoring-based commissioning (MBCx) is the integration of permanent energy monitoring systems, real-time energy analysis, and ongoing commissioning. MBCx is an ongoing performance analysis of an operational building that provides real-time equipment performance information to the building operators.

S. MBCx Plan: A document that outlines the organization, schedule, allocation of resources, and documentation requirements of the monitoring-based commissioning process. Typically, this is provided as a section of or supplement to the CxA's Commissioning Plan.

T. Operation and Maintenance (O&M) Documentation: CMAR-developed documentation designed to address the needs of facilities personnel and customized for the context of the specific facility and installation. This includes manufacturer's literature (including O&M manuals, parts lists, troubleshooting guides, etc.), CMAR-developed instructions for start-up and shut-down, control sequences, and other installation-specific information as defined in the contract documents.

U. Pre-functional Checklist (PFC): Provided by the CxA to the CMAR and includes a list of items for inspection and elementary component tests to be conducted with a goal of verifying proper installation of equipment. Pre-functional Checklists are primarily static inspections and procedures which prepare the equipment or system for initial operation. The CxA shall sign-off that checklists are complete.

V. Sampling: Functionally testing only a fraction of the total number of identical or near identical pieces of equipment.

W. Seasonal Tests: FPTs which are deferred until the system(s) will experience conditions closer to their design conditions such as testing in summer or winter seasons.

X. Simulated Condition: Condition created for the purpose of testing the response of a system (e.g., applying a hair dryer to a space sensor simulating a hot space condition and confirming appropriate response from the VAV box).

Y. Simulated Signal: Disconnecting a sensor and using a signal generator to send an amperage, resistance or pressure to the transducer and DDC system to simulate a sensor value.

Z. Start-Up: Refers to the quality control process whereby the CMAR verifies the proper installation of a device or piece of equipment, executes the manufacturer's starting procedures, completes the Start-Up Checklist, energizes the device, verifies that it is in proper working order and ready for dynamic testing, including Start-Up Tests.

AA. Systems, Subsystems, Equipment, and Components: Where these terms are used together or separately, they shall mean "as-built" systems, subsystems, equipment, and components.

BB. Systems Manual: Developed by the CxA, a systems manual provides future operating staff with documentation to understand and optimally operate the commissioned systems. This manual will consist of O&M documentation, other “as-built” information, and CxA documentation of commissioned systems.

CC. Test, Adjust, and Balance (TAB): Refers to the test, adjust, and balance process or the Testing, Adjusting, and Balancing CMAR.

DD. Trending: Monitoring and recording a history of parameters typically using the EMCS.

1.4 COMMISSIONING PROCESS OVERVIEW

A. The following provides a brief overview of the Commissioning Process and tasks associated with each phase. This process shall meet LEED v4 fundamental and enhanced commissioning requirements including Option 1-Path 2: Enhanced and Monitoring-Based Commissioning and Option 2: Envelope Commissioning.

B. Design:

1. The CxA conducts a commissioning scoping meeting to review the process with

Owner. Expectations of the commissioning process are defined and incorporated into the planning documents.

2. The CxA develops the Owner's Project Requirements based on input from BTV and previously created design development documentation including Project Definition Booklets, Project Validation Reports, and the Design Analysis Report (DAR), which functions as the A/E's Basis of Design.
3. The CxA develops a comprehensive commissioning specification and works with the A/E to incorporate into the project's construction documents.
4. The CxA performs design reviews of 30%, 60%, and 95% design submittals. This consists of reviewing equipment and systems for installation, integration, testing, operations, maintenance, training, and warranty requirements. The CxA participates in comment resolution meetings with the A/E.
5. The CxA develops a comprehensive and project specific Commissioning Plan which provides the preliminary structure, schedule and coordination for the Commissioning Process.

C. Construction:

1. The CxA facilitates a Commissioning Kickoff meeting; all Commissioning Team members shall be present as the process, roles and responsibilities and commissioning related questions will be addressed.
2. The CxA will attend OAC meetings to provide updates to the team as needed per the Owner's Representative.
3. BTV will lead separate Commissioning update meetings held with both East and West CEP CxAs to promote collaboration between teams and confirm commissioning requirements are consistent across projects throughout construction. These will be scheduled by the Owner's Representative.
4. The CxA will lead Commissioning meetings, held with the CMAR, applicable subcontractors, and other members of the Cx team. All necessary parties shall plan to attend, scope, coordinate, schedule future commissioning activities and resolve open actions. One representative from the CMAR is required to attend every meeting in person.
5. The CxA will provide regular onsite staff to act as the main point of contact for all commissioning activities. The CxA will submit, through Unifier, site visit reports to BTV as construction progresses.
6. Equipment documentation and submittals shall be concurrently submitted to the DOR and CxA for review. Documentation and submittals shall include, but not be limited to shop drawings, equipment to be commissioned, detailed start-up procedures, completed start-ups forms, O&M's and warranty information. All review comments shall be uploaded to Unifier.
7. The CxA develops equipment specific Pre-functional Checklists. The CMAR, under their own direction, shall execute and document completion of initial system checkouts, system start-ups and execution of Pre-functional Checklists. The CxA reviews all initial checkout, start-up and Pre-functional Checklist documentation to ensure they were completed according to approved contract documents. The CxA will witness start-up of selected equipment.
8. CxA will review all pre-functional checklists and startup documentation. Functional performance testing will not begin until the equipment to be tested has met the prerequisites for functional testing outlined in the CMARs Role's and Responsibilities. In addition to this requirement, the CxA will track the completion

progress of checklists at each commissioning meeting. If the CMAR is not completing pre-functional checklists within a timely manner (at the discretion of the CxA), Owner's Representative will be notified in writing.

9. The CxA develops specific equipment and system Functional Performance Test (PFT) procedures; test procedures will systematically test each systems mode of operation. The FPTs will be submitted formally to BTV and the construction team. All parties shall review the FPTs to ensure test steps are feasible, safe and equipment protection is provided with necessary written alarm limits to be used during the test; FPTs are executed by the CMAR, under the oversight of, and documented and signed by the CxA.
10. Items of non-compliance in material, installation or setup are documented by the CxA and corrected at the CMAR's expense. If the CMAR does not agree the items identified by the CxA are non-compliant or deficient, they will bring these issues to the attention of the Owner's Representative within 2 business days in writing. For items that form part of the project's current critical path, the notice shall be given within 24 hours. All non-compliant systems will be retested.
11. The CxA reviews O&M documentation for systems being commissioned ensuring completeness and compliance with contract documents.
Commissioning shall be completed before substantial completion and building occupancy. If the project requires a phased turnover approach, the CxA will functionally test those systems included within the scope of the project which are required to operate the site boundary which will be turned over. A preliminary commissioning report will be generated to satisfy IECC 2021 State of Vermont Amendments.
12. The CxA issues a commissioning report to the Owner.
13. The CxA issues a Systems Manual to the Owner.
14. The CxA issues a Current Facilities Requirements and Operations and Maintenance Plan to the Owner in accordance with LEED v4.
15. The CxA updates the Monitoring-Based Commissioning Plan with project specific information in accordance with LEED v4.

D. Occupancy:

1. The CxA reviews training plans provided by the CMAR and reviews training documentation was completed. Owner's Representative and BTV Maintenance will define the appropriate training requirements as is required for LEEDv4
2. Deferred functional testing, including any seasonal testing, may be required during the occupancy phase to test under peak season loads.
3. 10-months and 22 months after the substantial completion milestone, the CxA shall meet with the Owner and facility maintenance personnel to review the facility operating procedures and determine if any warranty related issues are outstanding and shall be resolved by the CMAR.

1.5 EQUIPMENT AND SYSTEMS TO BE COMMISSIONED

A. The Commissioning process involves a complete and thorough evaluation of the operation and performance of all components, systems, and sub-systems. The following equipment shall be commissioned under this project; equipment is subject to change as design and construction documents evolve over the course of the project.

HVAC Systems	Notes
Air Handling Units	1
Air to Air Energy Recovery Units	1
Gas-Fired Make-Up Air Units	1
Pumps	1
Piping Systems	1
Ductwork	1
Variable Frequency Drives	1
Packaged A/C and HP Units	1
Terminal Units	1
Unit Heaters	1
Exhaust /Relief Fans	1
HVAC Control and Building Automation System (EMCS)	1
Test & Balance (verification)	1
Heat Exchangers and Snowmelt System	1
Infrared Radiant Heaters	1
Fin Tube Heaters	1
Fan Coil Units	1
Energy Metering (Water and Electric)	1
Smoke Control Fans	1
Electrical Systems	Notes
Lighting Schedules, Occupancy, and Daylight Dimming Controls	1
Switchgear	3
Distribution Panel Circuit Breakers	3
UPS/Central Battery/Lighting Inverter Systems	1
Ground Fault Protection/Detection	3
Automatic Transfer Switches	1
Photovoltaic System	1
Integrated Systems Testing for Emergency Power System	1
Plumbing Systems	Notes
Domestic Hot Water Systems and Heaters	1
Plumbing Equipment and Fixtures	1
Reduced Pressure Backflow Preventers	3
Sewage Ejector Pumps	1
Building Envelope	Notes
Enclosure materials, components, systems, and assemblies intended to provide shelter and environmental separation between interior and exterior or between two or more environmentally distinct interior spaces	3
Thermal Control Systems / Insulation components and assemblies 1. Roofing and skylights	3

2. Above grade vertical windows, doors, and louver assemblies 3. Below grade vertical walls 4. Below grade horizontal walls and slabs 5. Transitions and penetrations through the previously listed assemblies	
Air Control / Air Barrier Components and Assemblies 1. Roofing 2. Above and below grade vertical walls 3. Below grade horizontal walls	3
Moisture Control – Water Proofing and Vapor Barrier Components and Assemblies 1. Roofing 2. Above and below grade vertical walls 3. Below grade horizontal walls	3
Life Safety Systems	Notes
Fire Alarm	2
Smoke Control Systems	2
Fire and Smoke Dampers	2
Communications Systems	Notes
Access Control (ACS)	4
Network LANs	4
Closed Circuit Television (CCTV) System	4
Emergency Communications System (ECS)	4
Wi-Fi Systems	4
Distributed Antenna Systems (DAS)	4
Flight Information Display Systems (MUFIDS/FIDS)	4
Common Use Equipment (CUPPS)	4
Specialty Systems	Notes
Pre-Conditioned Air Units	1

Notes:

1. CxA creates PFCs and FPTs to document installation and functionality of these systems. CMAR execute PFCs and CxA will track their completion. FPTs are executed by the CMAR, under the oversight of, and documented by the CxA.
2. CxA creates PFCs and DOR creates FPTs per local codes. The CMAR execute PFCs and CxA will track their completion. FPTs are executed by the CMAR and witnessed by the DOR and CxA. Final acceptance by AHJ per local code.
3. The CMAR create FPTs per specifications. The CMAR execute FPTs and CxA shall witness a portion of the testing. CxA shall track completion of all required testing.
4. The CMAR create FPTs for individual systems. The CMAR execute FPTs and CxA shall witness a portion of the testing. CxA will develop ISTs which are executed by the CMAR, under the oversight of, and documented by the CxA.

1.6 ACTION SUBMITTALS

A. CxA is responsible for submitting the following documents:

1. Final Commissioning Plan
2. Pre-Functional Checklists: For each system or component as defined in the section “Equipment and Systems to be Commissioned”
3. Functional Performance Tests: For each system or component as defined in the section “Equipment and Systems to be Commissioned”
4. Building Enclosure Test Matrix
5. Formal acceptance recommendation for each component or system tested, following successful completion of testing
6. Final Commissioning Report
7. Systems Manual for LEED Submission
8. Current Facilities Requirements (CFR) and Operations and Maintenance (O&M) Plan for LEED Submission.

B. CMAR is responsible for submitting the following documents:

1. Completed pre-functional checklists: For each system or component.
2. All specification required installation and testing report deliverables typically located within that products Quality Assurance section.
3. Test equipment calibration certificates
4. Any additional documentation required to support the Commissioning Plan.

1.7 INFORMATIONAL SUBMITTALS

A. CxA submittals:

1. Commissioning Meeting Minutes
2. Commissioning Site Observation Reports
3. Preliminary Commissioning Report delivered prior to each phased turnover requiring a City Inspection, including the following:

    a. Compiled test results.
    b. Updated Issues Log.
    c. Updated Checklist log.

4. Final Commissioning Report, submitted after the last substantial completion milestone of the project, including the following:

    a. Compiled test results.
    b. Seasonal test results.
    c. Warranty walkthrough results.
    d. Completed issues log.
    e. Completed checklist log.

1.8 COMMISSIONING TEAM

A. Members Appointed by CMAR:

1. The CMAR shall appoint a CxC. The CxC(s) will coordinate the involvement of all subcontractors to implement the commissioning process.

2. The commissioning team shall consist of, but not be limited to, representatives of CMAR listed below, including Project superintendent and subcontractors, installers, suppliers, and specialists deemed appropriate by the CxA and other members as appointed by the Owner.

    a. Quality Control and/or Commissioning Coordinator
    b. Mechanical
    c. Plumbing
    d. Electrical
    e. Testing, Adjusting and Balancing
    f. Building Automation (EMCS) or Temperature Controls
    g. Communications (LAN, WIFI, MUFIDS, DAS)
    h. Access Control
    i. Video Surveillance
    j. Emergency Communication System
    k. Life Safety / Fire Alarm
    l. Enclosure and Testing Technicians
    m. Vendor/Manufacturer

B. Members Appointed by Owner's Representative As Needed:

1. CxA: The designated person, company, or entity that plans, schedules, and coordinates the commissioning team to implement the commissioning process. BTV will engage the CxA under a separate contract.
2. Representatives of BTV Sustainability, Owner's Representative, and BTV Maintenance personnel.
3. Architect and engineering design professionals.
4. Operation and Maintenance Personnel

1.9 BTV'S RESPONSIBILITIES

A. Identify BTV Maintenance personnel to participate in commissioning team activities as outlined in the Commissioning Plan or contract documents.

B. Coordinate activities specified in paragraph below with DOR and Architect-Consultant agreements.

C. Provide access to project software platforms so commissioning team can communicate efficiently with the project teams.

D. Provide the BoD documentation, prepared by DOR, and approved by BTV, to the CxA for use in developing the commissioning plan, systems manual, and operation and maintenance training plan.

E. Provide interpretations and clarifications of the Owner's Project Requirements.

F. Review and comment on commissioning documentation such as the Commissioning Plan, weekly reports, checklists, functional performance tests and final Commissioning Report.

G. Provide final approval for completion of the commissioning work.

1.10 CMAR'S RESPONSIBILITIES

A. CMAR shall assign representatives with expertise and authority to act on its behalf and shall schedule them to participate in and perform commissioning process activities including, but not limited to, the following:

1. Include Commissioning requirements in price and plan for work.
2. Correct performance deficiencies identified in test.
3. Resolve issues identified by the CxA recorded in BIM360.
4. Attend commissioning team meetings held on a biweekly basis and progressing to weekly meetings as construction project nears completion. One representative from the CMAR is required to attend every meeting in person.
5. Include commissioning process activities in the construction schedule.
6. Review and complete construction pre-functional checklists provided by the CxA prior to commencing functional testing. CxA shall sign-off that checklists are complete.
7. Review Functional Performance Test procedures provided by the Commissioning Authority and provide comments on feasibility of test plans.
8. CMAR shall incorporate the Commissioning process into the construction schedule, outlining Commissioning tasks with precedents or prerequisites to each task. These tasks will apply to many systems and the CMAR shall incorporate as such. Examples of enumerated tasks include, but are not limited to:

    a. CMAR preparation of the Training Plan
    b. Any Testing Agency activities including enclosure
    c. CMAR documentation of pipe pressure testing, flushing, and cleaning of applicable systems
    d. Documentation of the Start-Up Procedures for equipment and systems
    e. TAB of applicable system
    f. Preparation of the O&M Manual content
    g. FPT and Acceptance
    h. Observation Period and System Optimization
    i. Occupant or other Regulatory Agency testing or approval process

9. Assist the CxA in preparation for the specific FPT procedures. CMARs, subcontractors, and vendors shall review the FPTs to ensure feasibility, safety, and equipment protection and provide necessary written alarm limits to be used during the tests. Damage caused to equipment performed in accordance with the approved procedures that is the result of malfunctioning equipment or contract deficiencies, shall be the responsibility of the CMAR.
10. Record start-up and testing procedures.
11. Air and water TAB shall be completed with discrepancies and problems remedied before functional testing of the respective air or water related systems.
12. Provide skilled technicians to execute starting of equipment and functional testing. Ensure technicians are available and present during the agreed upon schedules and for enough duration to complete the necessary tests, make

system adjustments and correct issues identified by the CxA.

13. Demonstrate the operation of each installed system under the oversight of the CxA. Assist the CxA in manipulation of the system undergoing testing.
14. Correct deficiencies as interpreted by the CxA, CMAR, A/E and Owner. Conduct retesting of equipment and systems under the oversight of the CxA.
15. Demonstrate the operation of all systems as specified.
16. Operate systems, with assistance of BTV Maintenance, during FPT's and other acceptance testing.
17. Assist the CxA in the connection to the monitoring-based commissioning software (such as Skyspark or similar platform) to the building automation system.

    a. Participate in necessary coordination meetings.
    b. Coordinate with CxA the point naming convention utilized.
    c. Supply any and all required IP addresses, logins, and passwords or other log in credentials for access to any BAS component or software program shall be provided to the owner and CxA.

B. Acceptance Phase: The following delineates the commissioning-related responsibilities of the CMAR (and their subcontractors) during the Acceptance Phase.

1. Work in conjunction with CxA in FPT and shall include, but not limited to the following:

    a. Operate and Manipulate systems and equipment to facilitate testing (as dictated in this section, relevant technical sections and the Commissioning Plan).
    b. Operate and Manipulate EMCS and other control systems to facilitate FPT (as dictated in this section, relevant technical sections and the Commissioning Plan).

2. Correct any work not in accordance with Contract Documents.
3. Maintain record documentation, update and resubmit it after Functional Completion.
4. Compensate BTV for additional CxA fees and expenses incurred to retest equipment and systems following testing failures.
5. Conduct all Training as specified in construction documents and directed by BTV
6. Monitor systems, equipment, and areas throughout and log and diagnose all alarms during this period. Maintain trends and logs of all critical parameters. Forward the logs and trends on a weekly basis throughout all Transition Periods.

C. Warranty Period: The following delineates the commissioning-related responsibilities of the CMAR (and their subcontractors) during the Warranty Period.

1. Provide warranty service
2. Respond to and document Warranty issues
3. Correct any deficiencies identified throughout the Warranty Period
4. Update record documentation to reflect any changes made throughout the Warranty Period and resubmit final Record Drawings and data records at the close of the Warranty period

1.11 CxA'S RESPONSIBILITIES

A. Organize and lead the commissioning team through the entire project.

1. The CxA is not responsible for design concept, design criteria, compliance with codes, design or general construction scheduling, cost estimating, or construction management.
2. The CxA will assist as necessary with problem-solving non-conformance items or deficiencies but ultimately the responsibility resides with the CMAR and A/E.
3. The primary role of the CxA is to develop and coordinate the execution of a testing plan and observe/document equipment functionality (e.g. which systems are functioning in accordance with the documented design intent and in accordance with contract documents).
4. The CxA shall write a Monitoring Based Commissioning Plan that shall include the following.

    a. Roles and responsibilities;
    b. Measurement requirements (meters, points, metering systems, data access);
    c. The points to be tracked, with frequency and duration for trend monitoring;
    d. The limits of acceptable values for tracked points and metered values (where appropriate, predictive algorithms may be used to compare ideal values with actual values); the elements used to evaluate performance, including conflict between systems, out-of-sequence operation of systems components, and energy and water usage profiles;
    e. An action plan for identifying and correcting operational errors and deficiencies;
    f. Training to prevent errors;
    g. Planning for repairs needed to maintain performance; and
    h. The frequency of analyses in the first year of occupancy (at least quarterly).

B. Provide and update construction phase commissioning plans.

C. Convene commissioning team meetings to discuss commissioning activities and current issues and resolutions. Meeting minutes will be developed and issued to the team.

D. Provide Project-specific Pre-Functional Checklists and Functional Performance Test procedures.

E. Review equipment submittals, shop drawings, and O&M documentation for systems and components included in the commissioned systems list

F. Oversee the execution of commissioning process activities which will include, but is not limited to, reviewing equipment submittals, pre-functional checklists, training, operating and maintenance data, tests, and test reports to verify compliance with the OPR. When a requirement is not met, the CxA will report the failure in the Issues Log.

G. Prepare and maintain the CxA Issues Log. Monitor the resolution of CxA issues and close once the work is satisfactory completed.

H. Prepare and maintain completed pre-functional checklist log.

I. Organize, lead, witness and document the functional performance tests.

J. Provide weekly site observation reports and update issues within BIM 360 with recommended actions to Owner and CMAR, as appropriate.

K. Review training plan which will be provided by the BTV and Operations and Maintenance personnel. Comments will be provided to ensure training is representative of installed systems and beneficial to the end user.

L. Prepare and distribute Final Commissioning Report, Systems Manual, Current Facilities Requirement Guide and Operations and Maintenance Plan.

M. Witness and document 10-month and 22-month Warranty review in the presence of the CMAR, BTV Maintenance, and Owner's Representative assigned personnel.

N. Witness a selection of systems, assemblies, equipment, and component startup.

O. Compile CMAR-submitted test data, inspection reports, and certificates; include them in the systems manual and commissioning process report.

1.12 ISSUES LOG

A. CxA shall maintain an Issues Log (required information, identified deficiencies, work required, etc.) that relates to Commissioning only. Each item shall be tracked with the initiator, the parties responsible, due date, the date of closure, and a description of the resolution. Each item shall be categorized for sorting and tracking and for documentation on applicable forms. All issues to be entered into BIM 360 for tracking.

B. CxA will provide this list to the Owner's Representative during regular project meetings as appropriate to keep all parties informed.

C. All parties indicated as responsible for an action item shall respond to Owner's Representative. Responses are due within 10 days of action items being identified to the team.

1.13 PRE-START UP

A. PREREQUISITES

1. All equipment, components, and devices applicable to the Pre-Start Up must be installed, and the Pre-Start Up must be documented and approved. This includes installation, identification labeling, insulation, and all other requirements for placing systems into dynamic operation.

B. COMMON ELEMENTS

1. Required submittal documentation shall be present and located convenient to

testing area.

2. CMAR shall submit the completed Pre-Start Up Procedures at least 10 business days prior to the start of Functional testing. CxA shall review the Pre-Start Up Procedure documentation at the beginning of Start Up. CMAR shall demonstrate to Owner's Representative, BTV Maintenance and BTV Sustainability that access is enough to perform required maintenance.
3. System and equipment configurations shall be compared against the contract documents.

1.14 INSTRUMENTATION

A. All test instruments described in this section shall be acceptable for any portion of the commissioning process herein described. If the CxA determines that test instrumentation is required to execute the functional performance testing, the CxA will develop a plan with BTV and the CMAR to safely perform any measurements. If the CxA is providing or using any test equipment listed below, the CxA will submit calibration documentation

B. All instruments shall conform to the standards specified in the most recent edition of "NEBB Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems" regarding accuracy and calibration status. Current calibration certificates must be available to the CxA if requested.

C. Test instrument accuracy and resolution must match or exceed that of the system component being verified or calibrated.

D. Test instruments must be used within guidelines as recommended by instrument manufacturer. All measuring methods must be appropriate to the instrument application and measurements must be repeatable under equivalent conditions.

E. Standard Testing Instrumentation: Standard instrumentation normally used for performance assessment and diagnosis shall be provided by CMAR performing the test. These include, but are not limited to:

1. Electronic Manometer (for Air and Flow Hood)
2. Electronic Manometer (for Water)
3. Temperature Instruments
4. Pressure Instruments
5. Humidity Instruments
6. CO2 Instrument
7. Sound Meter
8. Electronic Multimeter
9. Tachometer
10. Ultrasonic Flow Meter
11. Others as required

1.15 START-UP

A. Prerequisites

1. All equipment, components, and devices applicable to the FPT must be started, and the Start-Up must be documented and approved. This includes completion of Start-Up Procedures, pressure testing (of equipment, duct and piping), flushing/cleaning, identification labeling, insulation, and all other requirements for placing systems into dynamic operation.
2. Unless specifically agreed to by BTV and CxA, all support systems shall be complete prior to FPT.
3. The CxA shall determine the optimal sequence of testing.

B. Common Elements

1. Required submittal documentation shall be present and located convenient to testing area. Validate that all required documentation has been submitted and complete per the contract requirements.
2. CMAR shall provide the completed Start-Up Procedures at the time of testing. CxA shall review the Start-Up Procedure documentation and spot-check at the beginning of FPT.

C. Procedure

1. Purpose:

    a. Verify adherence to, and documentation of, quality control processes involved with preparing systems and equipment for operation.
    b. These procedures shall be performed on all installed systems and equipment and no sampling strategy is used for the start-up process.
    c. The Commissioning process requires all Parties to collaborate to establish the optimal standard of care for starting systems and equipment.
    d. After the procedures are established, the CMAR performs them and documents them with the Start-up Procedures that are developed by the CMAR.

2. Start-Up Procedures: The content of these Start-Up Procedures shall provide the minimally acceptable content in accordance with the OEM field quality control requirements. Generic refers to the fact that the protocols may be created before the shop drawings are finalized. These procedures and protocols will normally be common across different manufacturers.
3. Content of Start-Up Procedures: Start-Up Procedures shall generally include the following for each item of equipment or system (as applicable):

    a. Project-specific designation, location, and service.
    b. Indication of the Party performing and documenting the Start-Up Procedure.
    c. Clear explanation of the inspection, test, measurement, and outcome with a Pass/Fail indication and a record of measure parameters.
    d. A Start-up Checklist item indicating that proper maintenance clearances have been maintained.

4. Recording and Documentation of Factory Start-Up: Manufacturer’s start-up

protocols shall be executed, and forms shall be completed by a qualified/authorized technician.

5. Recording and Documentation of non-Factory Start-Up: The start-up tests and checklists shall be completed by a qualified technician.
6. Commissioning Authority Review: CxA will review and spot-check procedures and sign-off that checklists are complete.
7. Documentation Completion: The individual executing the start-up must complete the start-up and pre-functional documentation for any given equipment and acknowledge acceptability with the indication of who did the associated task.
8. Sampling and Final Submission: All (100% of) systems are started and documented per the approved procedures and NO sampling strategy is used. Completed Start-up and pre-functional checklists for all pieces of equipment associated with independent systems shall be submitted to CxA prior to any associated FPT. Any outstanding item shall be clearly indicated, and an associated Action Item must be entered to track resolution.
9. BTV Access: CMAR shall allow access by BTV representatives to inspect the equipment and ensure its proper operation.

1.16 TEST, ADJUST, AND BALANCE

A. CxA shall review TAB reports.

B. The CxA shall select up to 10% of the readings from the Balancing Reports and verify performance readings. Readings selected by the CxA may include:

1. Supply air diffuser readings (both minimum and maximum readings for variable air volume boxes).
2. Main and branch supply duct traverse readings.
3. Outside/return air flow readings.
4. Exhaust airflow readings.
5. Water flow readings.
6. Ampere readings.
7. Water pressure drop readings through coils, heat exchangers, and other hydronic elements.

C. For all readings, a deviation of more than 10% between the verification reading and reported data shall be considered as failing the FPT. The maximum failure rate for the sample is 10%. If any deviation less than 10% has a cumulative impact on overall performance of the system or its energy consumption it shall be considered as failing the FPT.

D. If greater than 10% of sample readings have failed, the TAB contractor shall justify all noted failures or rebalance and re-document the system as determined by the Owner's Representative.

1.17 FUNCTIONAL PERFORMANCE TESTING

A. Objectives and Scope

1. The CxA shall coordinate the execution of the FPTs. The CMAR shall perform the following tasks in support of functional testing

    a. Demonstrate the performance of the system to verify it is operating according to the documented design intent and Contract Documents.
    b. Bring all commissioned systems from a state of substantial completion to full dynamic operation.
    c. Identify and correct performance deficiencies.
    d. Operate each system through all modes of operation (seasonal, occupied, unoccupied, warm-up, cool-down, normal and emergency power, fire alarm, part- and full-load) where there is a specified system response.
    e. Verify each sequence in the sequences of operation as required.
    f. Verify responses to abnormal operational modes and conditions, such as power failure, freeze conditions, no flow, equipment failure, etc.

B. Development of Test Procedures

1. CxA shall develop specific test procedures to verify and document proper operation of each piece of equipment and system.
2. CxA shall develop fill-in forms for use during FPT, based on the test procedures.
3. Not less than 14 days prior to execution of FPT, CxA shall submit completed test procedures to the Owner's Representative to review the tests for feasibility, safety, equipment and warranty protection, and scope.
4. EMCS trends shall have been established as required in the design documents. These shall generally be reviewed prior to or during FPT.
5. Capacities and adjusted/balanced conditions as applicable shall be subject to review.
6. Sequencing Verification: For applicable systems and equipment, all modes of operation shall be verified for proper sequencing.
7. System and equipment configurations shall be compared against the contract documents.
8. All adjusted, balanced, controlled systems shall be assessed to determine the optimal setting for the system as applicable. The optimal settings should be determined to establish reliable, efficient, safe, and stable operation.

C. Scheduling:

1. CMAR shall notify the CxA and the Owner's Representative that systems are ready for testing and for the CxA to schedule the FPT activity.
2. To the extent practical, tests shall be scheduled to allow efficient and contiguous testing of inter-related systems and equipment.
3. Scheduling shall be applied to allow the earliest possible start for testing.
4. The CxA will coordinate with Owner representatives that are required to attend.

D. Phasing:

1. Non-interdependent segments of the project testing may be phased.
2. Phasing of FPT for this project shall be coordinated between the CxA, CMAR, and the Owner's Representative as the project progresses.

E. Participation:

1. CxA shall organize, lead, witness and document FPTs after Start-Up Procedure documentation of systems and equipment has been reviewed and accepted.
2. CMAR shall demonstrate the performance of the system as documented in the FPTs. The CMAR shall plan to include in their scope of work manipulation of the systems or equipment, provision of supporting equipment or materials (lifts, ladders, specialty test equipment, safety equipment), and on-the-spot remediation of minor identified deficiencies whenever possible.
3. Required participating Parties shall be indicated in the test plan for each individual FPT. CxA to coordinate with Owner representatives with required notice.
4. Required participating parties shall be available on-site throughout the testing of any given system for which they are required participants.

F. Completeness:

1. All systems must be completed and fully operational prior to the time of the test.
2. All start up, factory authorized field testing, independent testing agency tests, PFC's, TAB procedures must be complete and without deficiencies. The control systems must be tested and operational for the respective system or component.

G. Test Documentation:

1. CxA shall organize, lead, witness and document the tests.
2. CxA shall record all test results on the forms developed for the testing.
3. CxA shall 'Pass' or 'Fail' the testing and record the date and time of the test.
4. Deficiencies shall be clearly indicated when the test is failed.
5. When all related testing is completed successfully, CxA shall recommend acceptance of the system or component.
6. In the case of specialized testing, CxA shall witness and review the testing reports prepared by the CMAR.

H. Acceptance Criteria

1. The Acceptance Criteria shall be as follows unless specifically indicated within applicable individual specification sections or test procedures.

    a. Accuracy/repeatability on sensing devices will be as specified for the device. The CMAR will use calibrated instruments for independent validation of sensing devices.
    b. Sequence-related criteria will be as specified in the documents.
    c. Results will be within the specified performance values, or as accepted by the DOR.

I. Deficiencies

1. CxA shall record the results of each functional test. All deficiencies or non-conformance issues shall be brought to CMAR's attention immediately, noted in the Issues Log, and reported to the Owner's Representative through

BIM 360 within 72 hours.

a. Corrections of identified minor deficiencies may be made during the tests where feasible. In such cases, the deficiency will be noted on the FPT documents.
b. Critical deficiencies with potential schedule or cost impacts shall be reported to the Owner's Representative directly through email within 24 hours of discovery.

2. CMAR shall correct all identified deficiencies as directed by the Owner's Representative and will not impact the project schedule.

a. CxA shall maintain CMAR's response to each deficiency in the Issues Log.
b. CMAR shall correct each deficiency and notify CxA upon completion by completing an action item in a written response following project protocol.
c. CMAR shall schedule repeat testing and ensure CxA is available to observe.

3. Disputes:

a. CMAR shall notify the Owner's Representative and CxA immediately if the responsibility or nature of any identified deficiency is in dispute.
b. The CxA shall document as a disputed deficiency in the Issues Log.
c. The CMAR shall negotiate a resolution to the dispute with the Owner's Representative.
d. Upon resolution, CxA shall update the Issues Log in BIM 360 to reflect the status of the deficiency

J. Sampling Strategy:

1. Sampling percentage shall be as indicated in the Cx Plan.
2. Where no sampling percentage is indicated, the implied sampling percentage is 100% and all units shall be tested.
3. It is BTV's intent to verify all systems are functioning as intended prior to turnover and substantial completion. However, for some systems it has been determined to be most cost effective and provide the best value to BTV to employ a testing sampling strategy. The following systems will be tested at the following rates

a. Mechanical: Terminal Units (VAVs) and Cabinet Unit Heaters. A random selection of 25% of this type of equipment will be tested.
b. Plumbing: 10% of all plumbing fixtures will be tested
c. Electrical: 25% of all lighting control system sensors, devices, and digital control points and sequences will be tested (including Daylighting and Occupancy)
d. Building Enclosure: See BECx section for further details. A minimum of 20% of all testing will be witnessed by the CxA. A more detailed failure criteria will be applicable to these systems.

4. Sampling Strategy Failure Criteria: If more than 10% of tested equipment fails the functional performance test, then the system must be retested at a later date.

Upon the first retest, a new random selection of 10% of all equipment (of the type that failed) will be retested. Of those items tested during the retest, more than 10% fails again, a meeting will be held with all parties involved and BTV will determine a path forward. Further testing will be negotiated between BTV, the CMAR, and the CxA. The CMAR shall be responsible for additional retesting unless agreed to by the Owner's Representative.

K. Maximum Failure Limit:

1. Maximum Failure Limit shall be as indicated in the test plan.
2. When the maximum number of failures is reached, testing on that sample will be terminated and re-testing will be scheduled.
3. If no Maximum Failure Limit is indicated, the implied failure limit is 0% and all tested samples must pass.
4. Where sample tests involve multiple systems (i.e., checking strainers on different hydronic systems), the Maximum Failure Limit will apply per system.
5. The responsible CMARs shall reimburse BTV for the CxA's cost of that sample test and redo the start-up and TAB for the applicable devices/systems.
6. All work necessitated by sample failures shall be at no cost to BTV.

L. Manufacturer's Defects:

1. If 10% of identical pieces of equipment fail to perform to the Contract Documents (mechanically or substantively) due to a manufacturing defect, all identical units may be considered unacceptable by the Owner's Representative.
2. For the purposes of defining 'identical equipment' for this Section, size or capacity alone does not constitute a difference.
3. In case of failure due to manufacturer's defects, the CMAR shall provide BTV with the following:
    a. Manufacturer's response in writing as to the cause of the failure and proposed resolution.
    b. Manufacturer shall implement their proposed resolution on a representative sample of the product.
    c. The Owner's Representative will determine whether a replacement of all identical units or a repair is acceptable.
    d. Upon acceptance, the CMAR shall replace or repair all identical items at their expense and shall extend the warranty accordingly (if the original equipment warranty had begun).
    e. Manufacturer shall pay the costs of all retesting necessitated by the failure.

M. Building Enclosure Testing

1. CMAR tests shall be scheduled and documented in accordance with the Specifications. Conduct a pre-construction meeting with commissioning team to coordinate testing procedures. The CxA will witness selected CMAR tests.
2. The CMAR will hire a third-party testing company as required to provide all tools, plastic wrap, test chambers, tape, water pumps, hoses, instruments, laptop computers, PDA's, software programs and services required to perform all referenced testing standards listed in the specifications or on the testing matrix.

This includes providing the connection to systems to be tested, operation of the test equipment & instrumentation and generating test results as required. If there is a conflict between this specification and other specifications the greater number of tests shall need to be priced and executed.

3. The Commissioning Process includes Functional Performance Testing that is intended to test systems functional performance. The BTV and CxA shall review and comment on the tests prior to approval. The CMAR shall provide the required labor, materials, and test equipment identified in the test procedure to perform the tests. The Commissioning Agent will witness and document some of the testing. The CMAR shall sign the test reports to verify tests were performed.
4. Number of tests should be performed accordance with the specification or a minimum of three tests per unique assembly and/or side of the concourse, needs to take place after the installation of the first system. Moreover, at least one test needs to be performed, per system, prior to completing 10% of the installation, also at least two tests need to be performed prior to completing 30% and 50% of each systems installation. In the event of any conflict between the other Contract Documents and the foregoing minimum criteria, the more stringent shall govern.

    a. Provide copies of all reports required in the referenced test procedure, for review.

5. Failure of On-Going Building Enclosure Field Testing: Upon failure of a test during on-going building enclosure testing, the sample rate increases in accordance with the specification requirements for that system. The CxA may suggest solutions to identified deficiencies however the burden of responsibility to solve, correct and retest problems is with the CMAR(s) and A/E. For continued non-conformance items, the CMAR should create a plan to address systemic issues should they be identified through the commissioning process.

N. Communications Systems

1. Structured Cabling Plant Verification (Example - Backbone and Horizontal Links as defined by BICSI). CxA will work with all stakeholders to develop a general test procedure for structured cabling requirements. CxA will witness 10% of this testing. Tests include but not limited to:

    a. Backbone Cable Test Results
    b. Horizontal Cable Test Results
    c. Outlet and Patch Panel Termination Integrity
    d. Installation Compliance in accordance with Codes, Specifications, Standards, and BTV Design Standards Manuals (DSM)
    e. Spot Test Ratio (10%)

2. Device Testing Verification (Example: Access Control Maglock Device). CxA will work with all stakeholders to develop (1) general test procedure for each system listed above. Each system will have a list of devices, and associated testing requirements for each device type. CxA will witness the CMAR perform 10% of this testing. Tests include but not limited to:

    a. Basic Function Test

b. Power On/Off/Cycle
c. Functional Integrity with performance parameters, expected results, pass/fail thresholds
d. Focus, Field of View, Signal to Noise Ratios, Data Transmission – Viewable by Technical Field Monitor

3. Standalone System Verification (Example: Access Control System functionality without Other System Interfaces, Fire Alarm, CCTV, Life Safety etc.). CxA will work with all stakeholders to develop (1) functional performance test plan for each system listed above. CxA will witness 100% of this testing (one test per system). Tests include but not limited to:

   a. Detailed Feature/Function Testing – Wide Dynamic Range, Pan Tilt Zoom Home Reset, Automatic Gain etc.)
   b. Network Connectivity - Bandwidth, Throughput and Latency Test Results etc.
   c. Field of View, Visibility, Glare as evidenced by CCTV Operator through CCTV System Software etc.
   d. GUI/Application & Business Rules verification – Drop Downs Function, PTZ Functions operate through Software GUI.

4. Integrated Systems Verification (Example Access Control System Functioning in alignment with Sequence of Operations with Fire Alarm, Life Safety, CCTV Systems Etc.) These tests will include only the integrated functions that are shared between these systems. All subsystems listed below must go through the standalone testing process first, prior to the integrated system testing. CxA will develop (3) integrated systems tests, one for each category listed below. CxA will witness 100% of these three tests

   a. Life Safety systems (i.e. including but not limited to: ECS, DAS, FIDS, FA, etc.)
   b. Security (i.e. including but not limited to: ACS, CCTV, FA)
   c. Operations (i.e. including but not limited to: FIDS, CUPPS, SACN-Enterprise Networks, phones, etc.)
   d. Examples of the testing include:
      1) Example: Door Hold Open activates local alarm, Door Open Alarm notifies Security Center, CCTV Camera Records Door Hold Open Event etc. Door Resets local alarm after Alarm is cleared etc.
      2) Example; GIDS/FIDS Monitors shunt or display Visual Paging Messaging on initiation from Fire Alarm System and/or activation from Fire Command Center etc.

5. Constraint Identification – Specific information required from other parties for the CxA to develop comprehensive test plans

   a. CxA requires the following information from each system vendor / installing contractor to perform the scope of writing standalone and/or integrated testing plans
      1) Original designs, specifications, test plans,
      2) O&M manuals

3) Change management logs, system updates, upgrades, etc.
4) Current design docs from the engineer of record for the expansion
5) Current system specs from each vendor
6) Functional block diagrams
7) Network diagrams
8) Details related to data exchanges in effect today
9) ICDs that are available (Interface Control Documents)

b. CxA may send each vendor a questionnaire to get additional information in order to develop integrated testing plans.

1.18 CLOSEOUT

A. Commissioning Report

1. A final summary report by the CxA shall be provided to the Owner's Representative, focusing on evaluating commissioning process issues and identifying areas where the process could be improved.
2. Include all acquired documentation, logs, minutes, reports, deficiency lists, communications, findings, unresolved issues, etc., compiled in appendices, and provided with the summary report.
3. Pre-Start Up verification, Start Up checklists, TAB, functional tests, and monitoring reports shall not be included the final report, but shall be submitted as part of the Commissioning Record in the O&M manuals.

B. Logs

1. CxA shall submit an updated Issues Log upon substantial completion of the project.

C. Acceptance

1. CxA shall recommend acceptance of each test in writing to the Owner's Representative.
2. The CxA shall note each satisfactorily demonstrated function on the test documentation.
3. Tests shall be considered accepted only upon formal acceptance by the Owner's Representative.

D. Training

1. The CMAR shall be responsible for training coordination and scheduling and ultimately for ensuring that training is completed.
2. The CxA shall witness the content and adequacy of the training of BTV personnel for commissioned equipment. Any issues shall be noted in the Issues Log and reported immediately to the Owner's Representative.

E. Operation and Maintenance Manual and Record Drawing Review

1. Prior to substantial completion, the CxA shall review the O&M manuals,

documentation, and redlined as-built drawings for systems that were commissioned to verify compliance with the Specifications.

2. The CxA shall review completed record drawings and document any discrepancies in the Issues Log.

1.19 WARRANTY PERIOD

A. Warranty Walkthrough

1. General Requirements

a. CMAR and CxA, as directed by the Owner's Representative, shall participate in an on-site walkthrough to review the condition of the project prior to expiration of the CMAR's warranty (the "warranty walkthrough").
b. The warranty walkthrough shall occur not less than nine (9) months following substantial completion, and not more than eleven (11) months following substantial completion.
c. An additional warranty walkthrough will be completed at 22 months
d. Any deficiencies identified during the warranty walkthrough shall be identified and tracked using the Issues Log in BIM 360 and shall be provided in writing to the Owner's Representative.

2. Required Attendees:

a. CMAR, and subcontractors representatives
b. TAB
c. CxA
d. Owner's Representative, or authorized representative
e. BTV Asset Manager, or authorized representative

3. CMAR's Responsibilities

a. CMAR shall provide personnel at the warranty walkthrough as necessary to facilitate operation of equipment and testing procedures. Confirm with the Owner's Representative a full list of attendees with their contact information not less than (4) weeks prior to scheduled warranty walkthrough. Required attendees shall include:

1) CMAR's Project Manager.
2) Manufacturer's representative(s) for commissioned equipment.
3) Electrical Subcontractors.
4) Mechanical Subcontractors.
5) Others, as required by the Owner's Representative.

b. CMAR, or designated subcontractors or manufacturer's representative under direction of CMAR, shall operate equipment during the warranty walkthrough as directed by the Owner's Representative.

4. CxA's Responsibilities

a. CxA, under direction from the Owner's Representative and BTV Asset Management, shall facilitate the inspection and verification of all commissioned systems as part of the on-site warranty walkthrough (not considered a retest).
b. CxA shall perform visual inspection of equipment to document any warranty-related defects or damage.
c. CxA shall perform witness operation of the equipment to affirm the equipment is operating in compliance with Contract Documents.
d. The CxA shall document any deficiencies found during the warranty walkthrough in the Issues Log and notify the Owner's Representative.
e. Required documentation:

1) Not less than (4) weeks prior to the scheduled warranty walkthrough, submit a warranty inspection checklist to the Owner including:

a) A section for each individual piece of equipment.
b) Expected attendees and responsibilities.
c) Fields or checkboxes for each individual inspection procedure or measurement as directed by the Owner's Representative.

2) CxA shall provide the approved warranty inspection checklist for use on-site at the warranty walkthrough.
3) CxA shall provide the current Issues Log for use on-site at the warranty walkthrough.
4) CxA shall provide an updated Issues Log to the Owner's Representative following completion of the warranty walkthrough.

B. Seasonal Testing

1. During the warranty period, seasonal testing (tests delayed until weather conditions are closer to the system's design) shall be completed as part of this contract.
2. The CxA shall coordinate this activity with the Owner's Representative and the CMAR.
3. Tests will be executed, documented and deficiencies corrected by the appropriate parties, with BTV maintenance staff and the CxA witnessing.
4. Any final adjustments to the O&M manuals and Record Drawings due to the testing will be made by the responsible parties.
5. If seasonal testing conditions are still not favorable during the warranty review walk than seasonal testing shall be rescheduled to at the Owner and CxA's discretion.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 019113

Attachment B:
Construction Manager's Response to Request for Proposals

ATTACHMENT B

CONTRACTOR'S RESPONSE TO
REQUEST FOR PROPOSALS

PATRICK LEAHY

BURLINGTON INTERNATIONAL AIRPORT

NORTH TERMINAL IMPROVEMENT PROJECT



CONSTRUCTION MANAGEMENT AT RISK PROPOSAL

PREPARED BY

eci | Engelberth construction, inc.

Celebrating 50 YEARS

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PATRICK LEAHY
BURLINGTON
INTERNATIONAL AIRPORT

NORTH TERMINAL IMPROVEMENTS PROJECT

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- Required Signed Certifications
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* *City Of Burlington Contractors Prqualification Submitted On 7/18/2023*



August 11, 2023

Mr. Larry Lackey
Director of Planning, Engineering & Sustainability
Patrick Leahy Burlington International Airport
1200 Airport Drive, #1
South Burlington, Vermont 05403

Dear Larry & The CM Selection Committee,

It is with much excitement that Engelberth Construction submits our construction management qualifications and price proposal for the Airport's North Terminal Improvement Project. This is such an exciting time for the Patrick Leahy Burlington International Airport and we are proud to be a partner in its' continued growth, and look forward to maintaining our relationship spanning more than twenty-five years.

Having recently completed the Terminal Integration Project, and just days away from turning over the Passenger Boarding Bridge for Gate 12 and the current North Terminal Renovation, Engelberth truly understands the challenges, including stringent FFA security requirements of working in a busy airport environment. Our success is owed in part to our veteran management team, supervisory staff and the collaborative effort put forth by all parties, Engelberth/Jacobs/BTV to provide creative solutions, sound decisions and transparency throughout all phases of the project. Overseeing the North Terminal Improvement Project for Engelberth will be the same outstanding team that successfully completed the Terminal Integration Project; Project Manager Brendan Jones, Superintendent John Bissonette and Chris Yandow, Director of Preconstruction Services. With no learning curve on how to work at the Airport or time needed to get familiar with team members, the team will hit the ground running as we swiftly work toward an April, 2024 Ground Breaking.

Upon being awarded the project, Engelberth's preconstruction team will quickly reach out to the market to start creating interest and excitement amongst subcontractors. We will utilize a collaborative approach working with the design team to finalize a design that is aesthetically pleasing and within the project's budget. We will investigate possible alternatives to the design and ensure drawings are concise through ongoing constructability reviews. The concerted process practiced by Engelberth Construction during the preconstruction process will carry forward into construction with a well thought out plan in place that will enable construction to proceed at a safe and efficient pace, saving the Airport both time and money.

Our past experience at the Airport speaks well to our ability to work in and around busy public spaces without interrupting the daily activities and pedestrian flow of this high traffic facility. Safety and security is of the utmost importance, and something we take very seriously. Preconstruction safety and security orientation for all personnel that will step onto the job site will be mandatory. Working together as a collaborative team, the new North Terminal Improvements will exceed expectations and continue to make BTV one of the warmest, friendliest and efficient Airports in the Country. In the meantime, should you have any questions, please do not hesitate to reach out.

Sincerely,

Pierre G. LeBlanc
President
Pierre.leblanc@engelberth.com / 802.846.2330

PRECONSTRUCTION SERVICES

A COLLABORATIVE PROJECT ENVIRONMENT

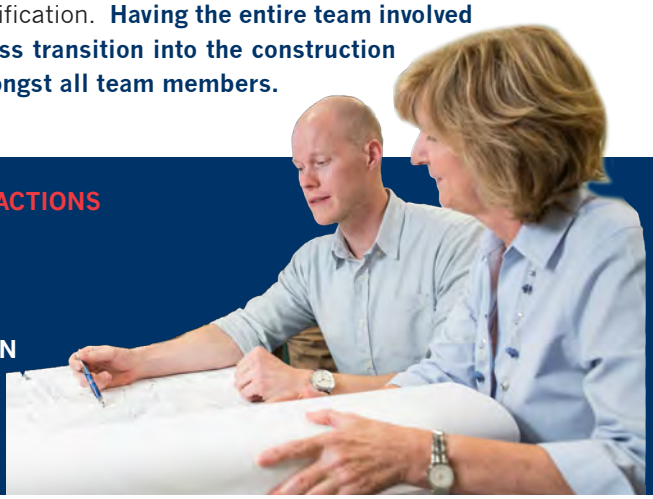
From day one Engelberth Construction insists on a collaborative approach amongst all project team members. Preconstruction Manager Chris Yandow will bring together all relevant stakeholders, owners, consultants, architects and engineers to work together in a coordinated and integrated manner to successfully and safely achieve the goals and budget set forth for the North Terminal Expansion of the Patrick Leahy International Airport. **Engelberth's multi-discipline team approach will provide effective planning, communication and decision-making and will ensure all program goals for the project are fulfilled with the efforts of the design team being carried forward into construction.** To create a collaborative environment we will clearly define the project goals and responsibilities of team members, create an environment where members are comfortable communicating openly and further build upon our relationship with all team members through our transparent and open-book approach.



ENGELBERTH'S UNIQUE PRECONSTRUCTION SERVICES/RESOURCES

Approximately thirty five percent of a project's cost comes from the site, mechanical and electrical trades. It's imperative that priority is given to these critical areas of construction to ensure proper systems and materials are being used and installed properly. **Unlike most construction firms, Engelberth employs in-house specialists that analyze, estimate and coordinate these trades.** Greg Cadieux and Steve Myers spent several years of their careers working as designers for mechanical and electrical firms. They have the capacity to analyze the proposed systems, provide information on alternative means and methods and understand control sequences of operations and required controls infrastructure. They will interact with the engineering staff during design to ensure tie-ins to the existing terminal are appropriate, energy efficient and are the best overall value for the Airport's construction dollars. Having these in-house specialists brings numerous advantages, including enhanced accuracy, improved communication, cost control, and the ability to proactively address challenges during the early stages of a construction project. Time and time again these resources have saved our clients substantial up-front and long-term cost savings.

To further enhance our preconstruction services and the overall success of the North Terminal Renovation project, we believe it's critical to engage both our project manager and superintendent, not just our estimating team, from day one of the project. Coordination and logistics planning will be critical as we safe guard pedestrian and vehicular traffic and minimize the impact construction has on the Air Operations Area and overall flow of the Airport. Senior Project Manager Brendan Jones and Superintendent John Bissonette will develop comprehensive logistics and safety plans along with a detailed project schedule with input from Airport officials. They will also provide input on material selections, constructability and subcontractor qualification. **Having the entire team involved from the very beginning will ensure a smooth and seamless transition into the construction phase and further promote a collaborative team effort amongst all team members.**



ENGELBERTH'S SUCCESS IS BUILT ON THESE CRITICAL ACTIONS

- WE LISTEN
- WE ASK THE RIGHT QUESTIONS
- WE PROVIDE ACCURATE AND RELIABLE INFORMATION
- WE SEEK CREATIVE SOLUTIONS
- WE DELIVER WHAT WE PROMISE

ESTIMATING

Estimates provided by Engelberth during preconstruction will be prepared by all in-house personnel, including our aforementioned experts in the site, mechanical and electrical trades. Input will be solicited from local subcontractors to confirm interest, discuss bidding strategies, logistics, means and methods and to review labor availability. Equipment and material suppliers are contacted to verify lead times and current unit costs. This is extremely important in today's market as some materials and equipment are taking six to nine months for delivery. From the very beginning we will create the balance between constructability and affordability suggesting cost savings alternative construction techniques and materials.

Working closely with Jacobs we will prepare an initial estimate based on the 30% design documents and in-depth conversations with the Design Team. To provide a meaningful estimate at this point, our estimating team will outline the entire work for all disciplines and make reasonable assumptions based on our recent work at the Patrick Leahy Burlington International Airport. The estimate will be based on historical unit prices along with information gathered from subcontractors for labor costs and suppliers for materials and equipment costs. As the design progresses we will continuously provide a system of checks and balances utilizing transparency and collaborative communications to keep the design and budget in alignment.



The 60% Design Estimate will provide a more defined scope of the project cost and will include detailed quantity take-off and pricing. In addition to providing cost and scheduling information, our review of these drawings will be an opportunity to QC the drawings and offer constructability feedback to ensure they are being prepared free of conflicting information. Real time estimating will continue throughout design as our team works collaboratively to accurately calculate and predict costs, durations and quantities and provide up-to-date and accurate information from which informed decisions can be made and potential issues or deviations identified and corrected. The 80% Design Estimate serves as a critical milestone and will help the Airport Authority make fully informed decisions before finalizing the drawings. A complete take-off and pricing will be performed along with a constructability review and suggestions for value engineering.

Once the design is complete and ready for bidding, a formal bid package is assembled identifying specific requirements for pre-qualified subcontractors and material vendors in order to maximize the strengths and efforts of the local workforces for the benefit of the project. The estimating process culminates with a guaranteed maximum price (GMP) cost estimate that includes a risk management de-scoping process to recommend awarding subcontractors and material vendors based on a fully analyzed bid providing the best value for the Patrick Leahy Burlington International Airport.

For every estimate/budget performed, Engelberth will provide the Patrick Leahy Burlington International Airport with a comprehensive package consisting of the following items:

- A detailed estimate itemized by division and line item
- Narrative describing the design intent and basis of the cost
- Schedules for both preconstruction and construction phase activities
- A list of recommendations to identify:
  - Design or Program Issues
  - Value Management/Cost Saving Alternatives

After each estimate presentation, a follow up list of recommendations will identify:

- Design or Program issues
- Value Management and Cost Savings Alternatives
- Constructability Review: Identification of drawing issues which impact construction

VALUE ENGINEERING ANALYSIS

Engelberth Construction uses a systematic and proactive approach to value engineering/analysis to maximize the effect of every dollar spent and is a critical component of our estimating process. We view cost reduction as a four step process. The first and most important element of cost reduction is to assure adequate competition. Our team will work with the Design Team to assure the specifications and other elements of design are open to multiple bidders including Disadvantaged/Minority Businesses. Second, it is imperative that the documents are clear and concise. The more detailed the drawings, the better return on the number and quality of subcontractor bidders that will be interested in the project. Our pre-construction team will review the documents prior to issuing them for bid and make suggestions as needed. Third, we will suggest changes in the design that will enable a reduction in the duration of the construction. In construction as in many endeavors, "time is money". Only after those steps have been taken, Engelberth will suggest changes in the design to reduce scope or change materials. By being actively involved throughout the design phase, Engelberth understands the program requirements as well as those items in the design which are of particular importance. Cost reduction suggestions are provided with that background and knowledge complimented by our experience with airport construction. True value engineering is a process that occurs throughout the entire design phase.

CONSTRUCTABILITY REVIEWS

Starting from day one and continuing throughout the estimating process, Engelberth's team will review the drawings and documents for gaps, duplications, conflicting information, potential for early release packages and ways to enhance the overall value of the project. We will compile a list of these comments using Procore, Engelberth's project management system for tracking and resolution, and share the information with the project team. By preparing our own detailed estimates for all trades including site, mechanical and electrical, Engelberth is uniquely able to fully comment on the contents of the design documents. **Performing detailed constructability reviews and working collaboratively with the design team has afforded Engelberth and its clients with the following benefits:**

- Early detection and resolution of potential construction issues, reducing change orders and construction delays
- Improved project coordination and integration of various building systems
- Cost savings
- Enhanced safety by identifying and addressing potential hazards before construction begins
- Increased project quality and reduced rework
- A smooth and successful project

LOGISTICS PLANNING & COORDINATION

Logistics planning and coordination is an essential aspect of any construction project, however projects such as the North Terminal Expansion Project require an elevated level of planning due to the high volume of daily pedestrian traffic through the airport and the security requirements of the FAA & TSA. Having recently completed the Terminal Integration Project, Engelberth's project team has a strong understanding of the Airport's work flow and the security measures that must be adhered to at all times by Airport patrons, construction workers and visitors. Crane Use permits and requirements, utility shut downs, tie-ins to the existing building, etc. will all need to be careful planned, coordinated and orchestrated. Project Manager Brendan Jones and Superintendent John Bissonette will spend considerable time working with the Airport Authority and Jacobs during the preconstruction phase to evaluate proposed construction phasing plans, provide recommendations that may save time and money, develop a logistic plan that ensures the safety of the Airport's occupants, meets FAA security requirements and minimizes the impact of construction on Airport operations.

Our project team has developed a preliminary logistics plan that includes options for haul routes, lay down areas, security fencing and crane placement for your review. This is a preliminary plan and will require input from numerous parties prior to being finalized.

SCHEDULING

Project Manager Brendan Jones has developed a preliminary schedule for the project. The schedule includes all elements of the design, estimating, bidding and award, material procurement, mobilization, site and building construction, commissioning, final inspection, certificate of occupancy and final completion. We believe it is critical to identify every activity required, allocate an appropriate amount of time for each and then arrange all activities in the proper sequence. Based on Brendan's analysis, he is confident that Engelberth can complete the North Terminal Expansion project in nineteen months. As the schedule is further developed it will be cost and resource loaded to provide accurate cash flow projections and to determine the proper resources required for each activity. During construction the schedule will be updated weekly to reflect actual progress and quickly communicated to the construction team with any necessary changes needed to maintain the overall project objectives.

ADMINISTRATIVE MANAGEMENT

Preconstruction Manager Chris Yandow will lead the preconstruction phase of the project for Engelberth Construction with the help of his dedicated estimating staff, in addition to Project Manager Brendan Jones and Superintendent John Bissonette. He will coordinate weekly meetings between the Airport Authority, Jacobs and Design Team members to review the design progress, cost estimates, value engineering and constructability review ideas/comments, logistics planning and scheduling along with other project details. Meetings will be held in-person and via tele-conferencing. Daily communications between Engelberth team members and design team members will occur via telephone, email, or in-person communications.



ASSESSMENT OF CURRENT MARKET

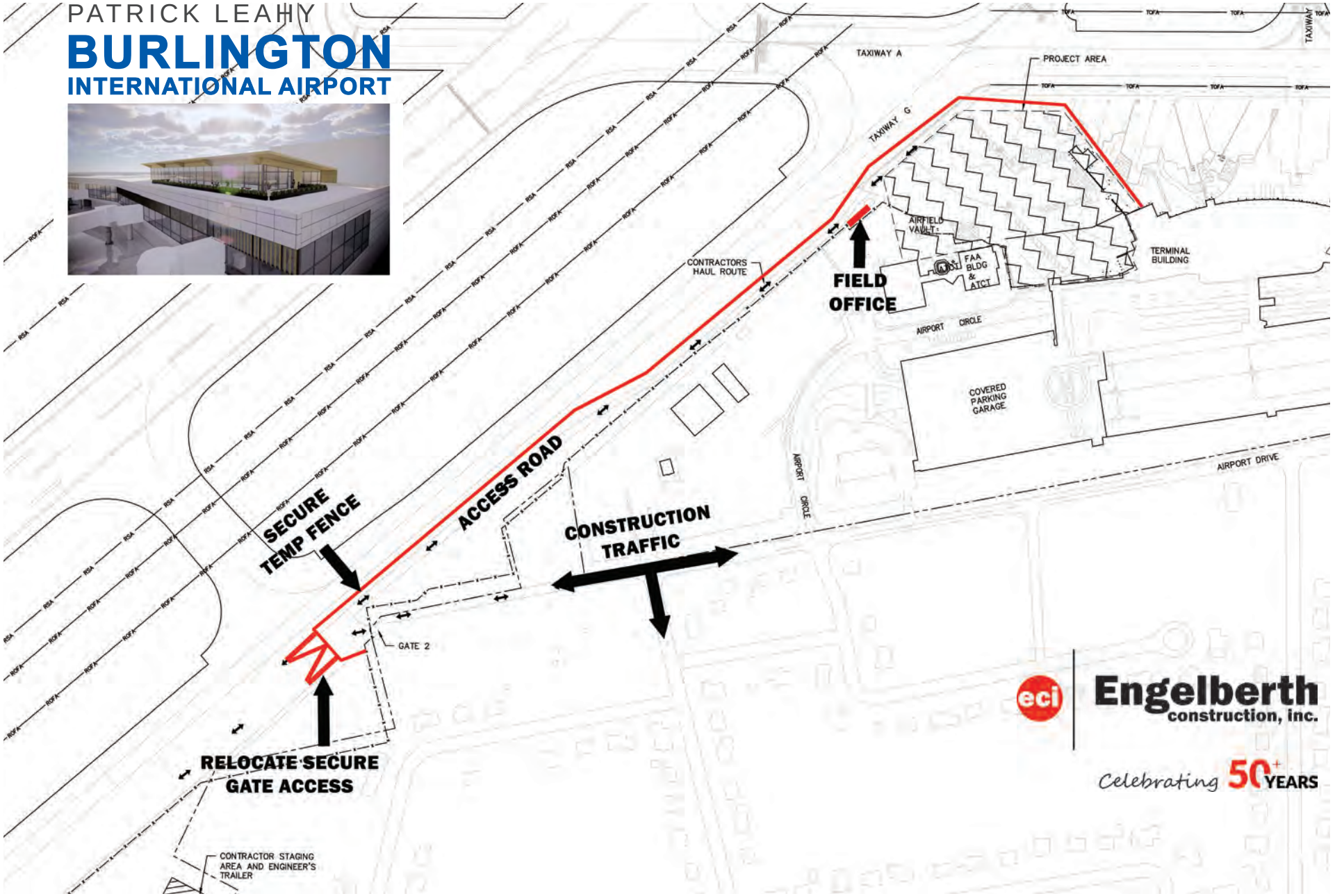
Supply chain issues, shortages of construction materials, along with labor force challenges continue to cause construction delays in the northeast. Working collaboratively with designers to encourage material selections based on availability and leaning on our strong relationships with local subcontractors, Engelberth has been able to effectively navigate the current market with little impact to our projects. Our preconstruction team communicates with suppliers weekly to stay abreast of material lead times and availability enabling us to provide our clients with accurate information. We will work closely with Jacob throughout the design phase to suggest systems and materials that can be available to us in a timely fashion to meet the schedule. Once selections are finalized we will review the lead times and place orders early to eliminate costly schedule delays. Long lead items that we currently anticipate ordering early for the North Terminal Expansion project include:

- Air Handling Equipment
- Electrical Switchgear, Transformers and Emergency Generator
- Elevator
- Wood Timber Beams

Unlike some of the larger national firms working in the area, Engelberth maintains outstanding relationships with the local subcontractors and is considered a favorite to work for. As with our own employees, we utilize a collaborative team approach with subcontractors, respecting their expertise and recognizing them for a job well done. In return we regularly secure select pricing and scheduling preference for our clients. If at any point during construction the schedule begins to slip due to lack of labor, Engelberth has the ability to supplement subcontractor crews with our own in-house workforce to ensure the project is completed on schedule. As you know, based on our past and current work at the Airport, our veteran workforce includes quality carpenters and craftsmen that are extraordinary at what they do.



LOGISTICS PLAN

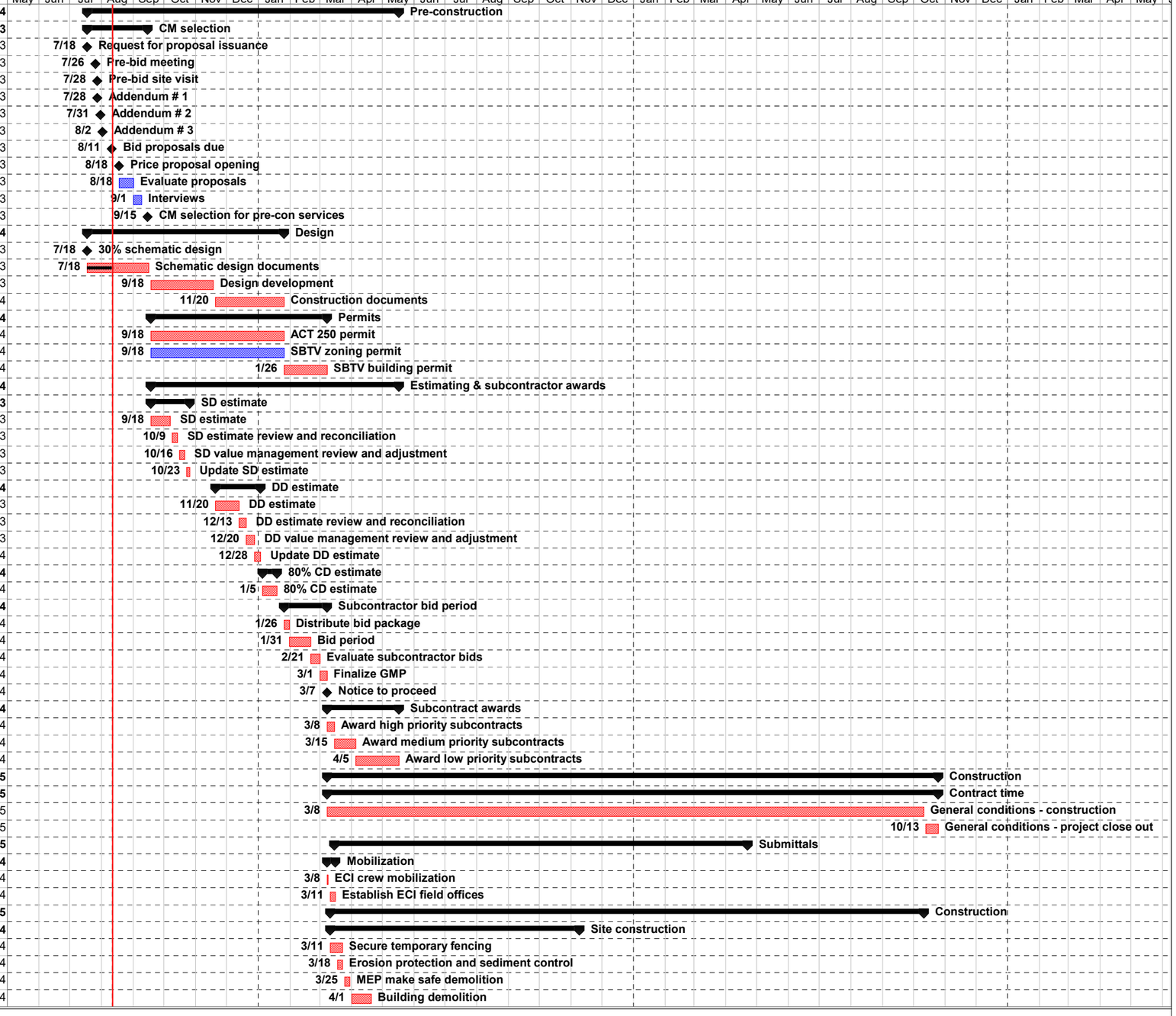


Engelberth construction, inc.

BTV North Terminal Improvement
Patrick Leahy Burlington International Airport
South Burlington, VT

August 11, 2023

ID	Task Name	Duration	Start	Finish
1	**Pre-construction**	**213 days**	**Tue 7/18/23**	**Thu 5/16/24**
2	**CM selection**	**42 days**	**Tue 7/18/23**	**Fri 9/15/23**
3	Request for proposal issuance	0 days	Tue 7/18/23	Tue 7/18/23
4	Pre-bid meeting	0 days	Wed 7/26/23	Wed 7/26/23
5	Pre-bid site visit	0 days	Fri 7/28/23	Fri 7/28/23
6	Addendum # 1	0 days	Fri 7/28/23	Fri 7/28/23
7	Addendum # 2	0 days	Mon 7/31/23	Mon 7/31/23
8	Addendum # 3	0 days	Wed 8/2/23	Wed 8/2/23
9	Bid proposals due	0 days	Fri 8/11/23	Fri 8/11/23
10	Price proposal opening	0 days	Fri 8/18/23	Fri 8/18/23
11	Evaluate proposals	10 days	Fri 8/18/23	Thu 8/31/23
12	Interviews	5 days	Fri 9/1/23	Fri 9/8/23
13	CM selection for pre-con services	0 days	Fri 9/15/23	Fri 9/15/23
14	**Design**	**133 days**	**Tue 7/18/23**	**Thu 1/25/24**
15	30% schematic design	0 days	Tue 7/18/23	Tue 7/18/23
16	Schematic design documents	43 days	Tue 7/18/23	Fri 9/15/23
17	Design development	45 days	Mon 9/18/23	Fri 11/17/23
18	Construction documents	45 days	Mon 11/20/23	Thu 1/25/24
19	**Permits**	**120 days**	**Mon 9/18/23**	**Thu 3/7/24**
20	ACT 250 permit	90 days	Mon 9/18/23	Thu 1/25/24
21	SBTV zoning permit	90 days	Mon 9/18/23	Thu 1/25/24
22	SBTV building permit	30 days	Fri 1/26/24	Thu 3/7/24
23	**Estimating & subcontractor awards**	**170 days**	**Mon 9/18/23**	**Thu 5/16/24**
24	**SD estimate**	**28 days**	**Mon 9/18/23**	**Wed 10/25/23**
25	SD estimate	15 days	Mon 9/18/23	Fri 10/6/23
26	SD estimate review and reconciliation	5 days	Mon 10/9/23	Fri 10/13/23
27	SD value management review and adjustment	5 days	Mon 10/16/23	Fri 10/20/23
28	Update SD estimate	3 days	Mon 10/23/23	Wed 10/25/23
29	**DD estimate**	**28 days**	**Mon 11/20/23**	**Tue 1/2/24**
30	DD estimate	15 days	Mon 11/20/23	Tue 12/12/23
31	DD estimate review and reconciliation	5 days	Wed 12/13/23	Tue 12/19/23
32	DD value management review and adjustment	5 days	Wed 12/20/23	Wed 12/27/23
33	Update DD estimate	3 days	Thu 12/28/23	Tue 1/2/24
34	**80% CD estimate**	**10 days**	**Fri 1/5/24**	**Thu 1/18/24**
35	80% CD estimate	10 days	Fri 1/5/24	Thu 1/18/24
36	**Subcontractor bid period**	**30 days**	**Fri 1/26/24**	**Thu 3/7/24**
37	Distribute bid package	3 days	Fri 1/26/24	Tue 1/30/24
38	Bid period	15 days	Wed 1/31/24	Tue 2/20/24
39	Evaluate subcontractor bids	7 days	Wed 2/21/24	Thu 2/29/24
40	Finalize GMP	5 days	Fri 3/1/24	Thu 3/7/24
41	Notice to proceed	0 days	Thu 3/7/24	Thu 3/7/24
42	**Subcontract awards**	**50 days**	**Fri 3/8/24**	**Thu 5/16/24**
43	Award high priority subcontracts	5 days	Fri 3/8/24	Thu 3/14/24
44	Award medium priority subcontracts	15 days	Fri 3/15/24	Thu 4/4/24
45	Award low priority subcontracts	30 days	Fri 4/5/24	Thu 5/16/24
46	**Construction**	**416 days**	**Fri 3/8/24**	**Fri 10/24/25**
47	**Contract time**	**416 days**	**Fri 3/8/24**	**Fri 10/24/25**
48	General conditions - construction	406 days	Fri 3/8/24	Fri 10/10/25
49	General conditions - project close out	10 days	Mon 10/13/25	Fri 10/24/25
50	**Submittals**	**280 days**	**Fri 3/15/24**	**Mon 4/21/25**
310	**Mobilization**	**6 days**	**Fri 3/8/24**	**Fri 3/15/24**
311	ECI crew mobilization	1 day	Fri 3/8/24	Fri 3/8/24
312	Establish ECI field offices	5 days	Mon 3/11/24	Fri 3/15/24
313	**Construction**	**405 days**	**Mon 3/11/24**	**Fri 10/10/25**
314	**Site construction**	**172 days**	**Mon 3/11/24**	**Fri 11/8/24**
315	Secure temporary fencing	10 days	Mon 3/11/24	Fri 3/22/24
316	Erosion protection and sediment control	5 days	Mon 3/18/24	Fri 3/22/24
317	MEP make safe demolition	5 days	Mon 3/25/24	Fri 3/29/24
318	Building demolition	15 days	Mon 4/1/24	Fri 4/19/24

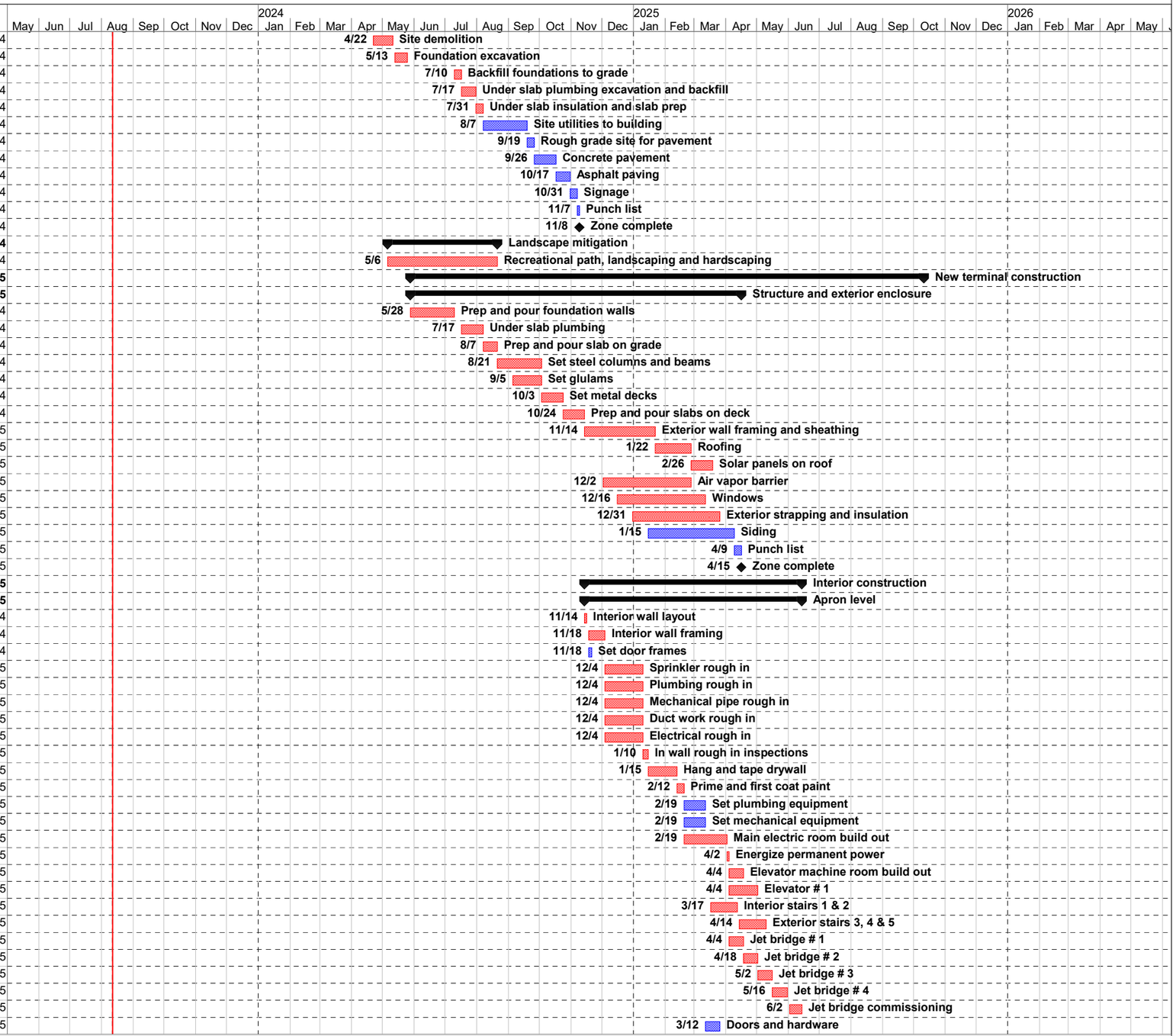


Engelberth construction, inc.

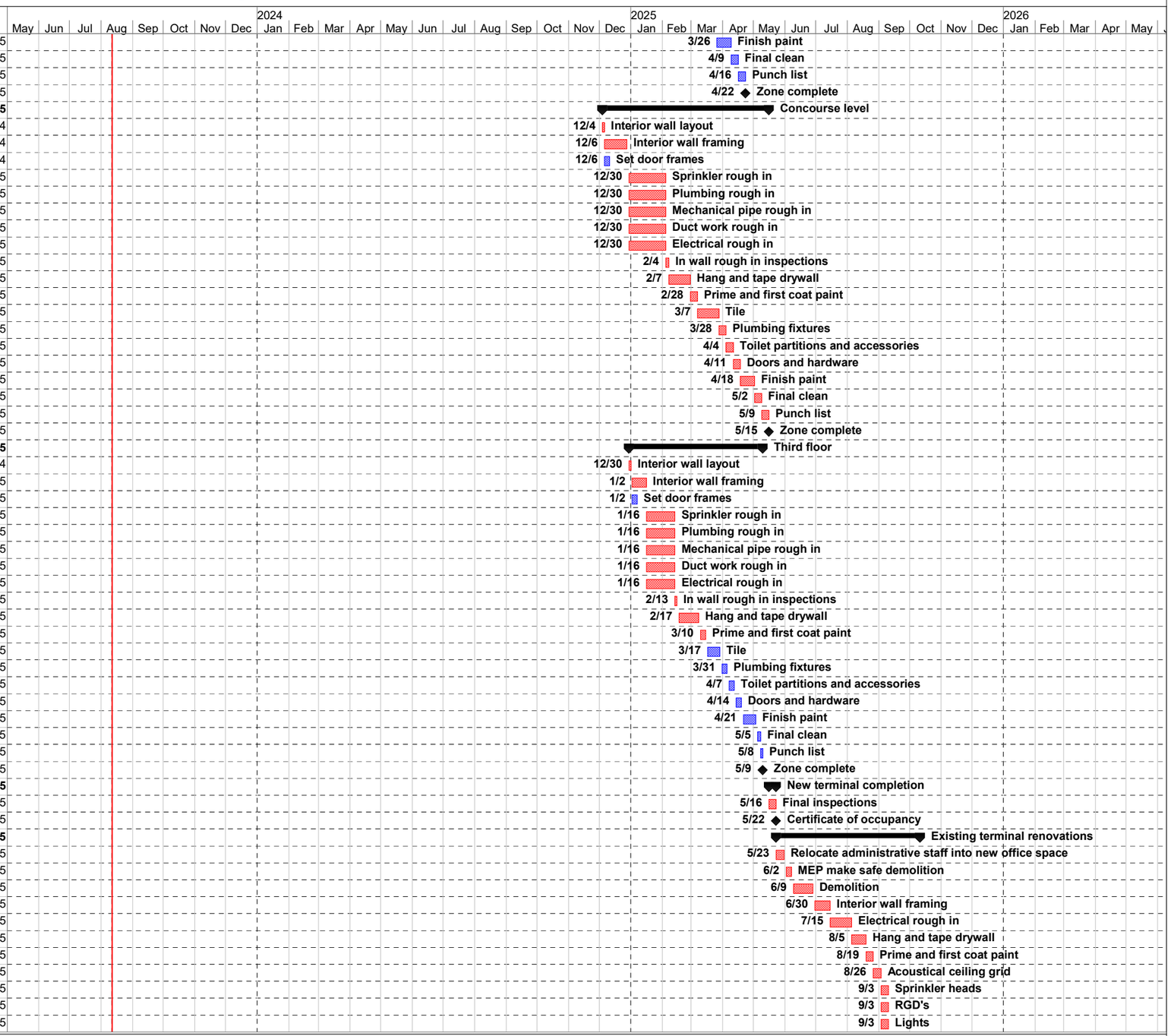
BTV North Terminal Improvement
Patrick Leahy Burlington International Airport
South Burlington, VT

August 11, 2023

ID	Task Name	Duration	Start	Finish
319	Site demolition	15 days	Mon 4/22/24	Fri 5/10/24
320	Foundation excavation	10 days	Mon 5/13/24	Fri 5/24/24
321	Backfill foundations to grade	5 days	Wed 7/10/24	Tue 7/16/24
322	Under slab plumbing excavation and backfill	10 days	Wed 7/17/24	Tue 7/30/24
323	Under slab insulation and slab prep	5 days	Wed 7/31/24	Tue 8/6/24
324	Site utilities to building	30 days	Wed 8/7/24	Wed 9/18/24
325	Rough grade site for pavement	5 days	Thu 9/19/24	Wed 9/25/24
326	Concrete pavement	15 days	Thu 9/26/24	Wed 10/16/24
327	Asphalt paving	10 days	Thu 10/17/24	Wed 10/30/24
328	Signage	5 days	Thu 10/31/24	Wed 11/6/24
329	Punch list	2 days	Thu 11/7/24	Fri 11/8/24
330	Zone complete	0 days	Fri 11/8/24	Fri 11/8/24
331	**Landscape mitigation**	**75 days**	**Mon 5/6/24**	**Tue 8/20/24**
332	Recreational path, landscaping and hardscaping	75 days	Mon 5/6/24	Tue 8/20/24
333	**New terminal construction**	**350 days**	**Tue 5/28/24**	**Fri 10/10/25**
334	**Structure and exterior enclosure**	**225 days**	**Tue 5/28/24**	**Tue 4/15/25**
335	Prep and pour foundation walls	30 days	Tue 5/28/24	Tue 7/9/24
336	Under slab plumbing	15 days	Wed 7/17/24	Tue 8/6/24
337	Prep and pour slab on grade	10 days	Wed 8/7/24	Tue 8/20/24
338	Set steel columns and beams	30 days	Wed 8/21/24	Wed 10/2/24
339	Set glulams	20 days	Thu 9/5/24	Wed 10/2/24
340	Set metal decks	15 days	Thu 10/3/24	Wed 10/23/24
341	Prep and pour slabs on deck	15 days	Thu 10/24/24	Wed 11/13/24
342	Exterior wall framing and sheathing	45 days	Thu 11/14/24	Tue 1/21/25
343	Roofing	25 days	Wed 1/22/25	Tue 2/25/25
344	Solar panels on roof	15 days	Wed 2/26/25	Tue 3/18/25
345	Air vapor barrier	60 days	Mon 12/2/24	Tue 2/25/25
346	Windows	60 days	Mon 12/16/24	Tue 3/11/25
347	Exterior strapping and insulation	60 days	Tue 12/31/24	Tue 3/25/25
348	Siding	60 days	Wed 1/15/25	Tue 4/8/25
349	Punch list	5 days	Wed 4/9/25	Tue 4/15/25
350	Zone complete	0 days	Tue 4/15/25	Tue 4/15/25
351	**Interior construction**	**147 days**	**Thu 11/14/24**	**Fri 6/13/25**
352	**Apron level**	**147 days**	**Thu 11/14/24**	**Fri 6/13/25**
353	Interior wall layout	2 days	Thu 11/14/24	Fri 11/15/24
354	Interior wall framing	10 days	Mon 11/18/24	Tue 12/3/24
355	Set door frames	3 days	Mon 11/18/24	Wed 11/20/24
356	Sprinkler rough in	25 days	Wed 12/4/24	Thu 1/9/25
357	Plumbing rough in	25 days	Wed 12/4/24	Thu 1/9/25
358	Mechanical pipe rough in	25 days	Wed 12/4/24	Thu 1/9/25
359	Duct work rough in	25 days	Wed 12/4/24	Thu 1/9/25
360	Electrical rough in	25 days	Wed 12/4/24	Thu 1/9/25
361	In wall rough in inspections	3 days	Fri 1/10/25	Tue 1/14/25
362	Hang and tape drywall	20 days	Wed 1/15/25	Tue 2/11/25
363	Prime and first coat paint	5 days	Wed 2/12/25	Tue 2/18/25
364	Set plumbing equipment	15 days	Wed 2/19/25	Tue 3/11/25
365	Set mechanical equipment	15 days	Wed 2/19/25	Tue 3/11/25
366	Main electric room build out	30 days	Wed 2/19/25	Tue 4/1/25
367	Energize permanent power	2 days	Wed 4/2/25	Thu 4/3/25
368	Elevator machine room build out	10 days	Fri 4/4/25	Thu 4/17/25
369	Elevator # 1	20 days	Fri 4/4/25	Thu 5/1/25
370	Interior stairs 1 & 2	20 days	Mon 3/17/25	Fri 4/11/25
371	Exterior stairs 3, 4 & 5	20 days	Mon 4/14/25	Fri 5/9/25
372	Jet bridge # 1	10 days	Fri 4/4/25	Thu 4/17/25
373	Jet bridge # 2	10 days	Fri 4/18/25	Thu 5/1/25
374	Jet bridge # 3	10 days	Fri 5/2/25	Thu 5/15/25
375	Jet bridge # 4	10 days	Fri 5/16/25	Fri 5/30/25
376	Jet bridge commissioning	10 days	Mon 6/2/25	Fri 6/13/25
377	Doors and hardware	10 days	Wed 3/12/25	Tue 3/25/25



ID	Task Name	Duration	Start	Finish
378	Finish paint	10 days	Wed 3/26/25	Tue 4/8/25
379	Final clean	5 days	Wed 4/9/25	Tue 4/15/25
380	Punch list	5 days	Wed 4/16/25	Tue 4/22/25
381	Zone complete	0 days	Tue 4/22/25	Tue 4/22/25
382	**Concourse level**	**115 days**	**Wed 12/4/24**	**Thu 5/15/25**
383	Interior wall layout	2 days	Wed 12/4/24	Thu 12/5/24
384	Interior wall framing	15 days	Fri 12/6/24	Fri 12/27/24
385	Set door frames	3 days	Fri 12/6/24	Tue 12/10/24
386	Sprinkler rough in	25 days	Mon 12/30/24	Mon 2/3/25
387	Plumbing rough in	25 days	Mon 12/30/24	Mon 2/3/25
388	Mechanical pipe rough in	25 days	Mon 12/30/24	Mon 2/3/25
389	Duct work rough in	25 days	Mon 12/30/24	Mon 2/3/25
390	Electrical rough in	25 days	Mon 12/30/24	Mon 2/3/25
391	In wall rough in inspections	3 days	Tue 2/4/25	Thu 2/6/25
392	Hang and tape drywall	15 days	Fri 2/7/25	Thu 2/27/25
393	Prime and first coat paint	5 days	Fri 2/28/25	Thu 3/6/25
394	Tile	15 days	Fri 3/7/25	Thu 3/27/25
395	Plumbing fixtures	5 days	Fri 3/28/25	Thu 4/3/25
396	Toilet partitions and accessories	5 days	Fri 4/4/25	Thu 4/10/25
397	Doors and hardware	5 days	Fri 4/11/25	Thu 4/17/25
398	Finish paint	10 days	Fri 4/18/25	Thu 5/1/25
399	Final clean	5 days	Fri 5/2/25	Thu 5/8/25
400	Punch list	5 days	Fri 5/9/25	Thu 5/15/25
401	Zone complete	0 days	Thu 5/15/25	Thu 5/15/25
402	**Third floor**	**94 days**	**Mon 12/30/24**	**Fri 5/9/25**
403	Interior wall layout	2 days	Mon 12/30/24	Tue 12/31/24
404	Interior wall framing	10 days	Thu 1/2/25	Wed 1/15/25
405	Set door frames	3 days	Thu 1/2/25	Mon 1/6/25
406	Sprinkler rough in	20 days	Thu 1/16/25	Wed 2/12/25
407	Plumbing rough in	20 days	Thu 1/16/25	Wed 2/12/25
408	Mechanical pipe rough in	20 days	Thu 1/16/25	Wed 2/12/25
409	Duct work rough in	20 days	Thu 1/16/25	Wed 2/12/25
410	Electrical rough in	20 days	Thu 1/16/25	Wed 2/12/25
411	In wall rough in inspections	2 days	Thu 2/13/25	Fri 2/14/25
412	Hang and tape drywall	15 days	Mon 2/17/25	Fri 3/7/25
413	Prime and first coat paint	5 days	Mon 3/10/25	Fri 3/14/25
414	Tile	10 days	Mon 3/17/25	Fri 3/28/25
415	Plumbing fixtures	5 days	Mon 3/31/25	Fri 4/4/25
416	Toilet partitions and accessories	5 days	Mon 4/7/25	Fri 4/11/25
417	Doors and hardware	5 days	Mon 4/14/25	Fri 4/18/25
418	Finish paint	10 days	Mon 4/21/25	Fri 5/2/25
419	Final clean	3 days	Mon 5/5/25	Wed 5/7/25
420	Punch list	2 days	Thu 5/8/25	Fri 5/9/25
421	Zone complete	0 days	Fri 5/9/25	Fri 5/9/25
422	**New terminal completion**	**5 days**	**Fri 5/16/25**	**Thu 5/22/25**
423	Final inspections	5 days	Fri 5/16/25	Thu 5/22/25
424	Certificate of occupancy	0 days	Thu 5/22/25	Thu 5/22/25
425	**Existing terminal renovations**	**98 days**	**Fri 5/23/25**	**Fri 10/10/25**
426	Relocate administrative staff into new office space	5 days	Fri 5/23/25	Fri 5/30/25
427	MEP make safe demolition	5 days	Mon 6/2/25	Fri 6/6/25
428	Demolition	15 days	Mon 6/9/25	Fri 6/27/25
429	Interior wall framing	10 days	Mon 6/30/25	Mon 7/14/25
430	Electrical rough in	15 days	Tue 7/15/25	Mon 8/4/25
431	Hang and tape drywall	10 days	Tue 8/5/25	Mon 8/18/25
432	Prime and first coat paint	5 days	Tue 8/19/25	Mon 8/25/25
433	Acoustical ceiling grid	5 days	Tue 8/26/25	Tue 9/2/25
434	Sprinkler heads	5 days	Wed 9/3/25	Tue 9/9/25
435	RGD's	5 days	Wed 9/3/25	Tue 9/9/25
436	Lights	5 days	Wed 9/3/25	Tue 9/9/25

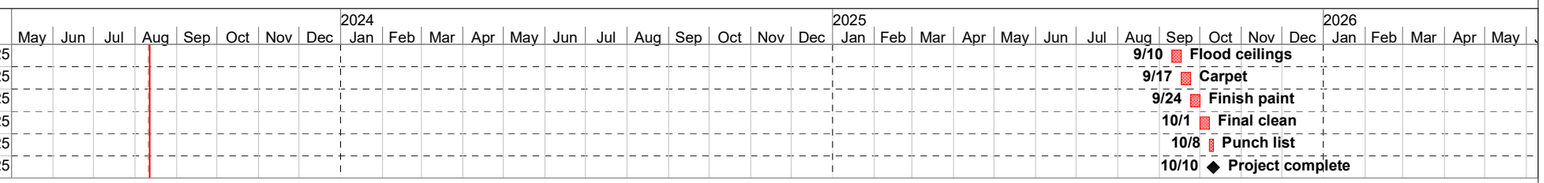


Engelberth construction, inc.

BTV North Terminal Improvement
Patrick Leahy Burlington International Airport
South Burlington, VT

August 11, 2023

ID	Task Name	Duration	Start	Finish
437	Flood ceilings	5 days	Wed 9/10/25	Tue 9/16/25
438	Carpet	5 days	Wed 9/17/25	Tue 9/23/25
439	Finish paint	5 days	Wed 9/24/25	Tue 9/30/25
440	Final clean	5 days	Wed 10/1/25	Tue 10/7/25
441	Punch list	3 days	Wed 10/8/25	Fri 10/10/25
442	Project complete	0 days	Fri 10/10/25	Fri 10/10/25



WORKING IN OCCUPIED BUILDINGS

Every day Engelberth employees work safely in occupied spaces including airports, hospitals, academic and manufacturing facilities. We understand how to become a welcome member in these environments, working safely and efficiently with minimal disruption to their daily activities. Creative planning, coordination, logistics planning and daily communications keep employees, patients, students and travelers all moving about as if construction was never happening. Engelberth's Safety & Logistics Planning when working in occupied facilities includes:

- Fencing/Restricting Access To Areas Under Construction
- Maintaining A Clean Job Site
- Traffic Control
- Specific Routing & Delivery Times For Material Deliveries
- Daily Communications With Stakeholders
- Signage
- Contamination & Vibration Control
- Egress/Safe Access For Emergency Vehicles
- Construction Of Temporary Walls (Noise Control)
- Off-Shift Work Hours



Temporary wall with graphics used by Engelberth to keep construction contained during the TIP Project at BTV

SAMPLING OF AIRPORT CONSTRUCTION EXPERIENCE

PATRICK LEAHY
BURLINGTON INTERNATIONAL AIRPORT
TERMINAL INTEGRATION PROJECT

Site: So. Burlington, Vermont
Type: Design Build
Value: $16.1 Million
Detail: To increase efficiencies in passenger processing and screening, BTV selected Engelberth Construction as their design builder to design and construct a new centralized and consolidated screening checkpoint facility to improve the experience of travelers at BTV. The Terminal Integration Project (TIP) is a two story, 33,400 sf addition off of the south end of the main terminal. The expansion features a four lane streamlined security checkpoint equipped with state-of-the-art screening technology, K9 and Pre-Check lanes, re-composure area and access to the South Concourse departure gates on the first floor. A new escalator, stairway and elevator lead travelers to the second floor where a light filled space provides panoramic views of Mount





Mansfield and Camel's Hump. Newly created space on the second floor provides an expanded seating area, rest rooms, future retail space and the corridor to the North Concourse departure gates. The design greatly reduces the Airport's carbon footprint, increases safety and convenience of travelers, and allows for future expansions and advanced technologies.

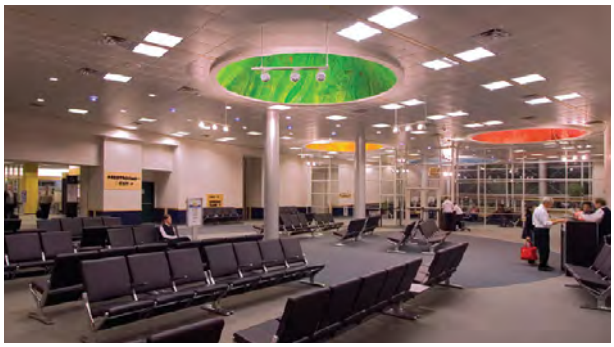






PATRICK LEAHY
BURLINGTON INTERNATIONAL AIRPORT
NORTH TERMINAL EXPANSION II

Site: So. Burlington, Vermont
Type: Construction Management
Value: $5.3 Million
Detail: To ease congestion associated with the continued growth of BTV, Engelberth Construction was selected to expand the Airport's North Terminal for a second time. Included in the addition was five (5) boarding bridges along a 16 foot wide jetway, a new TSA security area to accommodate the overflow of passengers in the expanded area, additional space for gate seating, and a second bridge that linked the parking garage to the terminal. Unique to the project design were hand painted skylights that bring natural light into the space and a glimpse of passing clouds, birds and aircraft.





PATRICK LEAHY
BURLINGTON INTERNATIONAL AIRPORT
SOUTH TERMINAL EXPANSION

Site: So. Burlington, Vermont
Type: Construction Management
Value: $4.6 Million
Detail: With the expansion of jet service coming to the Airport, including Jet Blue, the Airport needed to expand its terminal to accommodate the space needs of A320 jets. Engelberth Construction completed a 28,000 sf extension several years after completing a major addition and renovation



to the main terminal in 1998. The two-story addition included three new jetways, six gates, a passenger holding area, passenger screening area, rest room facilities and space for administrative offices.



MANCHESTER BOSTON REGIONAL AIRPORT
TERMINAL AIR HANDLING UNIT REPLACEMENT

Site: Manchester, New Hampshire
Type: Construction Management
Value: $4.7 Million
Detail: Engelberth Construction successfully replaced four(4DX Air Handling Units(AHUs) with four custom AHUs and an Evaporative Cooled Chiller on the roof of the main terminal building at Manchester Boston Regional Airport. The scope of work included associated mechanical and electrical infrastructure and roof replacement in the general area of the work. Special safety and security precautions were set in place in accordance with the airport and FAA regulations, along with scheduled phasing to allow for minimal disruptions to the airport. This included off-shift work hours.





PATRICK LEAHY
BURLINGTON INTERNATIONAL AIRPORT
NORTH TERMINAL RENO & PASSENGER BOARDING BRIDGE

Site: So. Burlington, Vermont
Type: General Contracting
Value: $3.8 Million
Detail: Engelberth Construction is currently overseeing two projects at BTV which are in the final stages of construction. The new Passenger Boarding Bridge will service the new gate 12 that was constructed as part of the Terminal Integration Project. Concrete footings, foundations, structural steel, utilities, including heating and cooling and apron paving are part of the $1.7 million project. The $2.1 million North Terminal Renovation consists of the demolition of the old TSA Security Checkpoint, removal of escalators, in fill of the floor area created by their removal and the installation of new flooring and finishes to create additional space for an existing retail storefront.







AVIATION & AIRPORT PROJECT EXPERIENCE

BURLINGTON INTERNATIONAL AIRPORT
South Burlington, VT

- Terminal Integration Project (TSA) (2021/2022)
- North Terminal Renovation (2023)
- Gate 12 Boarding Bridge (2023)
- Terminal Expansion/Renovation & Parking Structure
- North Terminal Expansion & Parking Structure Addition
- North Terminal Expansion Project II
- South Terminal Expansion
- NOAA Weather Service Renovations
- Passenger Boarding Bridges *(Multiple Projects)*
- Gates I & II National Weather Service
- Gates 6 & 9 Renovations
- North Concourse Restroom Renovation
- United Airlines Ticket Counter Relocation

HERITAGE AVIATION
South Burlington, VT

- Fixed Base Operations Center (Gut/Renovation) (Offices, Hangar, Pilot Amenities)

MANCHESTER-BOSTON REGIONAL AIRPORT
Manchester, NH

- Terminal Air Handling Unit Replacement

PRATT & WHITNEY
South Burlington, VT

- Hangar/Maintenance Facility
- Reconfiguration/Renovation

VERMONT NATIONAL GUARD
South Burlington, VT

- Camp Johnson Maintenance Facility

PATRICK LEAHY
BURLINGTON INTERNATIONAL AIRPORT
TERMINAL INTEGRATION PROJECT

South Burlington, VT

OWNER
City of Burlington
Burlington, VT

ARCHITECT
Corgan Associates, Inc.
New York, NY
Scott + Partners Architects
Essex Junction, VT

ENGINEER
Jacobs Engineering Group, Inc.
Bedford, NH

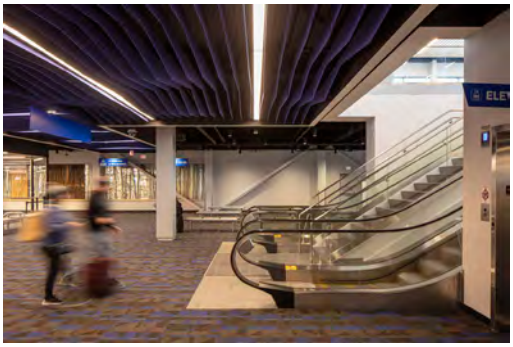
TYPE
Design Build

Due to sustained growth at the airport, BTV was experiencing significant passenger processing surges during peak periods causing delays and bottlenecks. This resulted in the TSA's need for assistance from area airport agents to cover the associated inefficiencies within the two, separate security checkpoints at BTV.

After careful thought and planning, the answer came in the development of a new, centralized and consolidated security screening checkpoint (SSCP) facility. The new "Terminal Integration Project" (TIP), a two-story, 33,400 sf addition off the south end of the main terminal, features a four-lane streamlined security checkpoint equipped with state-of-the-art screening technology, K9 and PreCheck lanes, re-composure area and access to South Concourse departure gates on the first floor.









The new vertical circulation provision escalator, stairs and an elevator take passengers to the second floor, leading to a light filled space with 13-foot-high ceilings and large windows with panoramic views of Mount Mansfield and Camel's Hump. There, passengers encounter expanded seating, restrooms, future retail space and the corridor to the North Concourse departure gates. Much of the existing two levels of the south end of the main terminal were reconfigured to allow space for queuing as well as TSA offices, mechanical and electrical rooms.

The design greatly reduces BTV's carbon footprint, increases safety and convenience of travelers, and allows for future expansions and advanced technologies.



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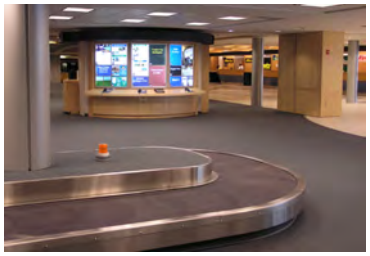
PATRICK LEAHY
BURLINGTON INTERNATIONAL AIRPORT
NORTH TERMINAL EXPANSION

So. Burlington, VT

OWNER
Burlington International Airport
South Burlington, VT

ARCHITECT
Freeman French Freeman
Burlington, VT

TYPE
Construction Management

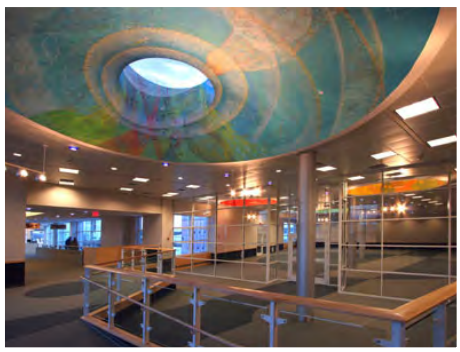


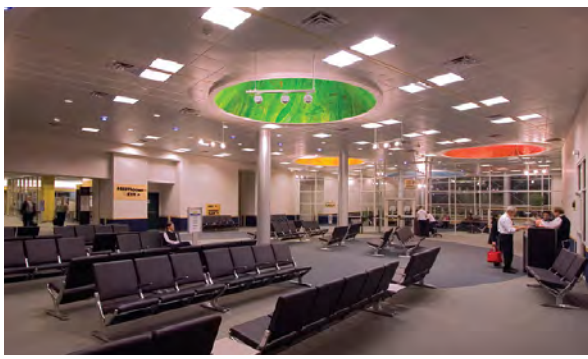


With more than one million passengers passing through its interior, the BIA terminal building is one of the busiest public buildings in the State. To ease growing pains, this project included the addition of five (5) boarding bridges, a new TSA security area, and a pedestrian bridge that linked the parking garage to the terminal. The new bridge offers passengers weather protection and views to airport activities while the new design and layout of the terminal effectively meets security needs while providing a calming and functional space for travelers. Positioned directly above the expanded secure waiting areas, views to the exterior include four (4) circular skylights with conical walls expanding up to nearly 8 meters in diameter. The unique skylights frame glimpses of passing clouds, birds and aircraft.



2006 AIAVT Excellence in Architecture Design Awards *MERIT AWARD*
Interior Architecture





eci Engelberth construction, inc.

South Burlington, VT

OWNER
Burlington International Airport
South Burlington, VT

ARCHITECT
Freeman French Freeman
Burlington, VT

TYPE
Construction Management

PATRICK LEAHY
BURLINGTON INTERNATIONAL AIRPORT
SOUTH TERMINAL EXPANSION









With expanded jet service coming to the Burlington International Airport, the Airport needed to expand its terminal to accommodate the needs of new air carriers. Engelberth Construction completed a new 28,000 sf extension to the south end of the terminal. The new two story addition includes three new jetways, six gates, a passenger holding area, passenger screening area, new offices, maintenance areas and restroom facilities. The project was completed on-time while minimizing disruptions to the daily activities of the airport.

eci Engelberth construction, inc.

PATRICK LEAHY
BURLINGTON INTERNATIONAL AIRPORT
TERMINAL EXPANSION & RENOVATION

South Burlington, VT

OWNER
City of Burlington
Burlington, VT

ARCHITECT
Freeman French Freeman
Burlington, VT

TYPE
Construction Management





The 18,000 square foot renovation and 12,000 square feet of new space provide travelers with enlarged ticket, baggage, waiting areas and a new mezzanine, snackbar, restrooms, elevator and escalator. The attention to detail and design on this project is apparent from the propeller-designed ceramic floor tile to the quality of materials and craftsmanship in the maple woodwork, granite, wall carpet and glass block throughout the facility.



"From the start we knew that there were many challenges, an extremely tight construction schedule, employee and traveler safety, parking issues and the need to minimize disruptions to the airports daily activities. By utilizing a team approach and open communications between all team members, Engelberth addressed these challenges head on and creatively resolved issues before they became potential problems."

J.J. Hamilton, Director of Aviation
Burlington International Airport



eci Engelberth construction, inc.

PATRICK LEAHY
BURLINGTON INTERNATIONAL AIRPORT
NORTH PARKING GARAGE EXPANSION

South Burlinton, VT

OWNER
Burlington International Airport
South Burlingtom, VT

ARCHITECT
Freeman French Freeman
Burlington, VT

TYPE
Construction Management





Continuing our relationships with the Burlington International Airport, Engelberth Construction was hired to expand the north end of the airport's existing three-story parking structure by a total of 422,000 sf to accommodate 600 additional vehicles. The project included extending the elevator, stair tower and vestibule to serve the additional two parking levels as well as a 40,000 sf green roof with 145,000 sf designated for future voltaic panels.

During construction 417 double tee beams, each weighing 66,000 lbs, were set in less than two months time, two weeks ahead of schedule, with zero injuries. This was a major safety hurdle and helped earn Engelberth the Safety and Health Achievement Recognition Program (SHARP) designation by the Vermont Department of Labor for this project. Engelberth is only the 3rd contractor in the United States to receive this prestigious award, an OSHA consultative cooperative program.





Engelberth construction, inc.

MANCHESTER-BOSTON REGIONAL AIRPORT
AIR HANDLING UNIT REPLACEMENT

Manchester, NH

OWNER
Manchester-Boston Regional Airport
Manchester, NH

ARCHITECT
Lavallee Brensinger Architects
Manchester, NH

TYPE
Construction Management

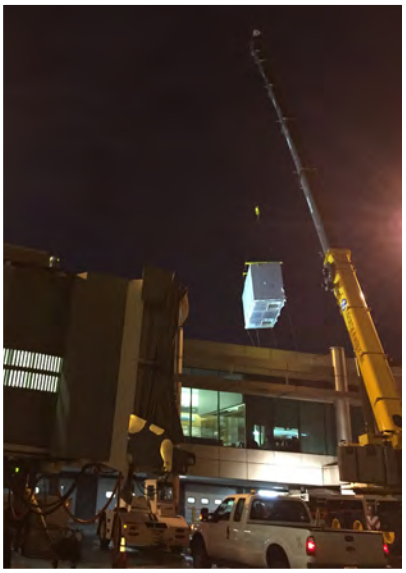


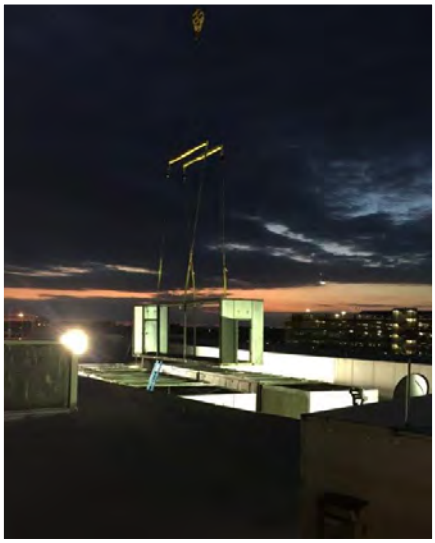
Engelberth Construction successfully replaced four DX Air Handling Units (AHUs) with four custom AHUs and an Evaporative Cooled Chiller on the roof of the main terminal building at Manchester-Boston Regional Airport. The scope of work for this federally funded project included all associated mechanical and electrical infrastructure, and roof replacement in the general areas of the work. Special safety and security precautions were set in place in accordance with the airport and FAA regulations, along with scheduled phasing to allow for minimal disruptions to the airport.













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HERITAGE AVIATION
FBO SERVICE & MAINTENANCE FACILITY

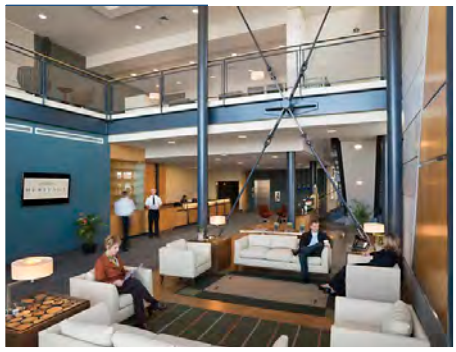
Burlington, VT

OWNER
Heritage Aviation
Burlington, VT

ARCHITECT
Truex Cullins Architects
Burlington, VT

TYPE
Construction Management

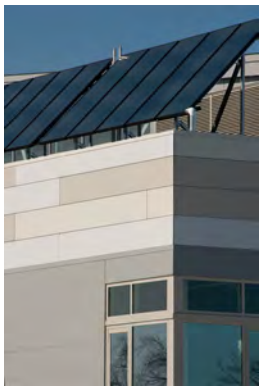








Located at the Burlington International Airport, Heritage Aviation provides full FBO (Fixed Base Operation), maintenance, and fueling services out of their new 79,000 sf facility. The project included the complete gut and renovation of an empty 60,000 sf hangar and a 25 – foot wide addition. Designed to take advantage of the magnificent views of the Vermont landscape and surrounding activities of the airport, two-story windows and multiple large-format skylights introduce an abundance of natural sunlight into the building.



Waiting pilots and crew members enjoy first class amenities such as a reception area, pilots lounge, quiet rooms, weather and briefing areas, cinema, fitness center, conference rooms, a dining facility and observation deck.

Heritage Aviation's facility is one of the first LEED-certified hangars in the nation, with added features that utilize solar and wind energy, rainwater collection and reuse, and features one of the largest green roofs in New England. The building is scheduled to achieve a USGBC LEED Silver Certification.

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CONSTRUCTION MANAGEMENT TEAM

KEY TEAM MEMBERS

- Pierre LeBlanc, President/Principal In Charge
- Chris Yandow, Preconstruction Manager
- Brendan Jones, Senior Project Manager
- John Bissonette, Superintendent
- Ryan Low, Project Engineer
- Shawn Davis, PE, MEP Coordinator
- Justin Yandow, Lead Estimator
- Greg Cadieux, Mechanical Estimator
- Steve Myers, Electrical Estimator
- Jane O'Neil, Project Administrator

The team Engelberth Construction has proposed for the North Terminal Improvement Project is the same team that successfully completed the Terminal Integration Project at the Patrick Leahy Burlington International Airport. Truly one of Engelberth's finest, we are confident this team's experience, qualifications and past performance at the Airport is unparalleled to the competition. The proposed team will remain fully engaged with the project until final occupancy is achieved in November, 2025.

TEAM MEMBERS AVAILABILITY

Preconstruction Manager Chris Yandow is actively working on four projects. He typically oversees up to five projects at one time with the assistance of Engelberth's estimating staff. Two of his current projects will be wrapping up and moving forward into construction in the next month, leaving Chris readily available to jump on this project immediately following award. It's anticipated Chris will spend approximately fifty percent of his time working on the North Terminal Improvement Project.

Project Manger Brendan Jones is currently managing the North Terminal Renovation Project and the new Passenger Boarding Bridge that will service Gate 12 at the Patrick Leahy Burlington International Airport. He is also overseeing the $25 million renovation of the Hills Agriculture/Science Building at the University of Vermont. All three of these projects will be finished by the end of August leaving Brendan 100% ready and available to begin working on this project. It's anticipated that Brendan will spend approximately 70% of his time working on the North Terminal Renovation Project. Superintendent John Bissonette is currently working with Brendan on the aforementioned renovation of the Hills Agriculture/Science Building at the University of Vermont. It's anticipated that John will be remain at the University through the month of September assisting building occupants settle into their new space and addressing any last minute changes that may be required. John is currently not scheduled for another project and is anxiously awaiting his next assignment. John would be on site full time at the Airport and would be assisted by a full time assistant superintendent. The timing of the North Terminal Improvement Project fits perfectly with our proposed team members and Engelberth's overall work schedule.



PROJECT TEAM STRUCTURE

PATRICK LEAHY

BURLINGTON INTERNATIONAL AIRPORT



BURLINGTON INTL. AIRPORT
Nic Longo
Larry Lackey

JACOBS
Stu Moncrieff, P.E.

PIERRE LEBLANC
President/
Principal In Charge

REBECCA ADAMS
Safety Director

JACOBS DESIGN TEAM MEMBERS

CHRIS YANDOW
Preconstruction Manager

BRENDAN JONES
Sr. Project Manager

JUSTIN YANDOW
Lead Estimator

SHAWN DAVIS, P.E.
MEP Coordinator

JOHN BISSONETTE
Superintendent

RYAN LOW
Project Engineer

JANE O'NEIL
Project Administrator

JASON PETERS
Site/ Infrastructure Estimator

GREG CADIEUX
Mechanical Estimator

STEVE MYERS, LEED AP
Electrical Estimator

ASST. SUPERINTENDENT
To Be Determined

ENGELBERTH CONSTRUCTION'S WORKFORCE

QUALIFIED SUBCONTRACTORS & SUPPLIERS

eci | Engelberth construction, inc.

Celebrating 50+ YEARS

CHRIS YANDOW
PRECONSTRUCTION MANAGER



EXPERTISE

Industry experience 31 years

Leadership, Communication & Coordination

Owner's advocate on cost and constructability issues

Proactive approach to identify potential construction issues

Oversees value management process

REFERENCES

Kyle Dodson
Greater Burlington YMCA
802.652.8133

Bizhan Yahazadeh
Norwich University
802.458.2617

Jay Scambio
Loon Mountain
401.474.3570

RELEVANT EXPERIENCE

Patrick Leahy
Burlington International Airport
Terminal Integration Project
South Burlington, Vermont
33,400 sf Addition For 4-Lane Security Check Point, Gate Departures, Expanded Seating Area, Restrooms
$16,100,000

Patrick Leahy
Burlington International Airport
Parking Structure Expansion II
South Burlington, Vermont
North End Expansion Of 600 Vehicles, Elevator/Vestibule, Level Counting System, Green Roof
$12,500,000

City Of South Burlington
City Hall, Library & Community Ctr.
South Burlington, Vermont
49,625 sf 3-Story Building, Office & Meeting Space For City Hall, Public Library & Community Ctr. For Gathering
$19,100,000

Heritage Aviation
Fixed Base Operations Center
South Burlington, Vermont
79,000 sf Rehab Of Hangar, Office Space, Pilot Amenities, Fuel Station, Plane Servicing Space
$18,600,000

Greater Burlington YMCA
Community Fitness Center
Burlington, Vermont
50,000 sf Facility, Gymnasium, Fitness & Wellness Areas, Track, Weight Room, Aquatics Center, Child Care Center
$19,800,000

Norwich University
Mack Hall Academic Facility
Northfield, Vermont
53,000 sf Academic Bldg., Interactive Classrooms, Cybersecurity War Operations Ctr., Study Spaces, Lounges, 400 Seat Auditorium
$21,400,000

Other Project Experience - Sampling

Loon Mountain Base Lodge	$34,500,000
Keene State College Living & Learning Complex	$26,500,000
UVM Hill Science & Agricultural Bldg. Renovation	$25,000,000
Vermont Psychiatric Care Hospital	$23,000,000
Norwich University Ainsworth/Webb/Dewey Halls Reno	$22,100,000
Kendal at Hanover Health Center Addition/Renovation	$21,900,000
Peabody Home Senior Living Community Expansion	$20,900,000
Howard Center Office Headquarters	$17,000,000
Green Mtn. Power Systems Office Building	$6,000,000

EDUCATION & PROFESSIONAL DEVELOPMENT

- B.S. Civil Engineering, University of Vermont



BRENDAN JONES
SENIOR PROJECT MANAGER



EXPERTISE

Industry experience 22 years

Monitoring schedules and negotiating with subcontractors to ensure on-time project completion

Creative problem solving/conflict resolution

High end quality construction

REFERENCES

Rita Coppola-Wallace
Williams College
413.458.5168

Andrew Hanson
FujiFilm Dimatix
603.443.8327

Tim Harris
Green Mtn. Valley School
802.583.7861

RELEVANT EXPERIENCE

Patrick Leahy
Burlington International Airport
Terminal Integration Project
South Burlington, Vermont
33,400 sf Addition For 4-Lane Security Check Point, Gate Departures, Expanded Seating Area, Restrooms
$16,100,000

Patrick Leahy
Burlington International Airport
Parking Structure Expansion II
South Burlington, Vermont
North End Expansion Of 600 Vehicles, Elevator/Vestibule, Level Counting System, Green Roof
$12,500,000

Williams College
Williams Inn
Williamstown, Massachusetts
3-Story, 58,000 sf Inn with 64 Guest Rooms, Restaurant & Event Space
$46,000,000

Patrick Leahy
Burlington International Airport
North Terminal Reno & Boarding Bridge
South Burlington, Vermont
Demo & Reconfigure Old Security Check Point For Additional Retail Store Front, New Boarding Bridge For Gate 12
$3,800,000

Heritage Aviation
Fixed Base Operations Center
South Burlington, Vermont
79,000 sf Rehab Of Hangar, Office Space, Pilot Amenities, Fuel Station, Plane Servicing Space
$18,600,000

University of Vermont
Hills Science & Ag Building Reno
Burlington, Vermont
Renovation Of Offices, Classroom & Conference Space For The Dept. Of Agriculture
$25,000,000

Other Project Experience - Sampling

Spruce Camp Base Lodge	$24,800,000
Dartmouth College 1953 Dining Commons Renovation	$20,000,000
State of Vermont Forensics Laboratory/Office	$12,800,000
Williams College Campus Bookstore	$8,100,000
Keurig Green Mountain Staff Services Building Fit-Up	$7,500,000
Dimatix/FujiFilm Plant Reconfiguration	$7,500,000
Green Mtn. Valley School Racing Performance Center	$7,000,000
Williams College St. Anthony Hall Renovation	$6,700,000
General Dynamics Headquarters/Office Relocation	$5,100,000

EDUCATION & PROFESSIONAL DEVELOPMENT

- B.S. Degree, University of Richmond, E.C. Robins School of Business
- Healthcare Construction Certification, 2011



JOHN BISSONETTE
SUPERINTENDENT



EXPERTISE

Industry experience 35 years

Coordination and quality management of subcontractors

Detail oriented, quality conscious

Complex projects on tight sites or occupied facilities

REFERENCES

Dave Blatchly
University of Vermont
802.656.2189

John Silvia
Nolato GW, Inc.
802.234.9941

Andrew Hanson
FujiFilm Dimatix
603.443.8327

RELEVANT EXPERIENCE

Patrick Leahy
Burlington International Airport
Terminal Integration Project
South Burlington, Vermont
33,400 sf Addition For 4-Lane Security Check Point, Gate Departures, Expanded Seating Area, Restrooms
$16,100,000

Patrick Leahy
Burlington International Airport
North Terminal Expansion
South Burlington, Vermont
33,400 sf Addition For 4-Lane Security Check Point, Gate Departures, Expanded Seating Area, Restrooms
$5,300,000

Dartmouth College
McLauglin Cluster Residences
Hanover, New Hampshire
136,840 sf in 6 Residence Halls, Singles/Doubles for 342 Students
$42,000,000 ** Asst. Superintendent*

University of Vermont
Hills Science & Ag Building Reno
Burlington, Vermont
Renovation Of Offices, Classroom & Conference Space For The Dept. Of Agriculture
$25,000,000

University of Vermont
Given Infill Office Building
Burlington, Vermont
35,000 sf New Research Oriented Office Space Built Within An Existing Building, Offices, Conference Space, Lab Storage
$9,100,000

University of Vermont
Votey Hall STEM Bldg. Renovation
Burlington, Vermont
Interior Renovations of Teching Labs, Offices and Classroom Space
$8,100,000

Other Project Experience - Sampling

Dartmouth Hitchcock Med. Center Patient Room Conversions. . . . $11,500,000
Nolato GW Manufacturing Expansion I & II $9,800,000
Middlebury College Forrest Hall Residence Renovation. $8,200,000
Dimatix/FujiFilm Reconfiguration Project $7,500,000
Baird Center School/First Call. $6,500,000
Wyndham/Hilton Hotel Renovations - Burlington $6,000,000
DHMC Helipot & Maintenance Facility $2,600,000
UVM Ctr. For Health & Well Being Renovation $1,400,000

EDUCATION & PROFESSIONAL DEVELOPMENT

- 30 Hour OSHA Training, CPR & First Aid Certification
- Associated Builders/Contractors Supervisory Training
- Healthcare Construction Certification, 2011



JUSTIN YANDOW
LEAD ESTIMATOR



EXPERTISE

Industry experience 20 years

Accurate and detailed estimating and analysis

Knowledge of energy efficient and sustainable construction materials and systems

Value management analysis guaranteeing greatest quality achieved per construction dollar

REFERENCES

Jay Scambio
Loon Mountain
401.474.3570

Todd Merchant
University of Vermont
802.316.6742

Sandra Silla
Evernorth
802.863.8424

RELEVANT EXPERIENCE

Patrick Leahy
Burlington International Airport
North Terminal Reno & Boarding Bridge
South Burlington, Vermont
Demo & Reconfigure Old Security Check Point For Additional Retail Store Front, New Boarding Bridge For Gate 12
$3,800,000

Vermont SportsCar
Corporate Headquarters
Milton, Vermont
75,000 sf Office & Service Facility For Assembly & Maintenance Of Performance Rally Cars
$8,000,000

University of Vermont
Hills Science & Ag Building Reno
Burlington, Vermont
Renovation Of Offices, Classroom & Conference Space For The Dept. Of Agriculture
$25,000,000

Loon Mountain
West Base Lodge
Lincoln, New Hampshire
New 51,000 sf 3-Story Lodge, Services Include Spaces For Retail, Rental, Dining And Kitchen Facilities
$34,500,000

Jay Peak Mtn. Resort
Hotel Jay Conference Ctr. & Waterpark
Jay, Vermont
300,000 sf Hotel, Six Floors, 130 Rooms, Restaurants, Retail, Waterpark
$91,000,000

10th Cavalry Apartments
Rehabilitation/Renovation
Colchester, Vermont
Rehab of Three (3) Historic Bldgs. To Create Sixty (60) Affordable Multi-Family Apts., New MEP Systems
$24,000,000

Other Project Experience - Sampling

MGM Grand at Foxwood Resort Casino $528,000,000
Vernon Homes Senior Living Community Expansion. $23,000,000
UVM Redstone Lofts Student Housing. $20,000,000
Grace Cottage Hospital New Clinic Building $15,600,000
Riverhouse Apartments $12,000,000
CISCO Systems Office Fit-Up $10,000,000
Hampton Inn Hotel - St. Albans $9,800,000
Dewitt Building Rehabilitation $6,556,000
Alice Peck Hospital Central Sterile Reprocessing. $4,200,000
Windsor County Courthouse Addition & Renovation $3,600,000

EDUCATION & PROFESSIONAL DEVELOPMENT

- B.S. Mechanical Engineering, Syracuse University
- L.C. Smith College of Engineering and Computer Science



PRECONSTRUCTION MANAGEMENT STRATEGY

Engelberth's project successes are directly attributed to our preconstruction efforts utilizing detailed, in-depth and collaborative involvement with both the Owner and design team members that sets the stage for increased value in the construction phase. **Strategies that have been developed and proven very beneficial include our review and feedback of developing plans during design, detailed material and quantity take-offs supporting estimates at all design stages, and development of full project schedules including critical non-construction activities such as design and permitting.** These processes are key drivers for understanding a project's budget and schedule and establish the baseline for the most valuable outcome.



In-house site, mechanical and electrical coordinators/ estimators skilled in their individual trades will provide constructability and quality control comments to the design team that could enhance either the construction schedule or budget. A few examples from past projects and outcomes include:

- A site grading review for material cut and fill for a project in a very inaccessible and remote area saved importing 6,500 cy of fill to a mountain top project site.
- A mechanical review suggested a revised piping and valving scheme for a hot water heating system saved over 5,000 lf of pipe and $300,000.
- An electrical review noted that sizing of main switchgear based on Watts/SF might be larger than necessary – a reduced gear size saved $200,000.
- Identifying the source and availability of long lead items for an emerging manufacturing client including air handling units, electrical switchgear, panel boards, circuit breakers, transformers and emergency generators reflected mission critical schedule impacts. A pre-purchase effort in conjunction with the design team to source and buy various components prior to subcontractor bidding drastically reduced the impact to the schedule.

These strategies of overcoming project hurdles have provided meaningful and real-time benefit to our projects.

Specifically for the North Terminal project, the same disciplined strategies during the preconstruction effort will be employed to develop best value for the benefit of the Airport and the project.

A few examples include discussing immediately at the 30% design stage:

- Evaluating exterior wall framing details and flooring solutions.
- Discussing early selections for a packaged light fixture buyout process.
- Evaluating pre-purchasing elevator, air handler equipment, switchgear and panel boards against the project schedule.
- Coordinating electrical service requirements with Green Mountain Power.

PAST AND ONGOING LITIGATION/MEDIATION

LITIGATION/MEDIATION CASES

Following is a complete list of all litigation, arbitration and mediation that Engelberth Construction has been involved with over the past five (5) years.

William Ringwig v. Engelberth Construction, Inc., et al. State of Vermont, Chittenden Superior Court Complaint filed on January 30, 2019. Plaintiff, subcontractor employee, alleged bodily injury sustained from a scissor lift. Defendant Engelberth's Motion to Dismiss Granted

Mary Emily Kane, v. Champagne Drywall and Engelberth Construction, Inc. – Commonwealth of Massachusetts, Franklin Superior Court. Complaint filed on June 28, 2018. Plaintiff alleges bodily injury arising from improperly stacked drywall. Engelberth tendered defense and indemnity to negligent drywall subcontractor. Matter Settled July 28, 2020.

Richard Lorenz v. Engelberth Construction, et al. State of New Hampshire, Merrimack County Complaint filed on March 13, 2019. Plaintiff is a temporary worker assigned to Engelberth subcontractor alleging bodily injury sustained from falling off a ladder. Defense and indemnity tendered to subcontractor.

Thomas Savastano and Ann Savastano v. Bankers Standard Insurance Co. and Engelberth Construction, Inc. State of New Hampshire, Cheshire County Superior court. Plaintiffs' Cross-Claim filed August 19, 2020 alleging construction vibrations damaged plaster in Plaintiffs' 150-year old home. Matter Settled at Mediation, November, 2020.

SMS Services, Inc. v. Engelberth Construction, Inc. et al. State of New Hampshire, Merrimack County Superior Court. Plaintiff's Complaint filed August 31, 2020 alleging Breach of Contract for unjustified backcharges. Matter Settled at Mediation, March, 2021.

ENGELBERTH CONSTRUCTION, INC
COMPANY OVERVIEW

OUR STORY *Celebrating* 50 YEARS

In 1972 Engelberth Construction was established in Colchester, Vermont on the cornerstones of hard work, trust, integrity, and pride in craftsmanship. While new services, techniques and technology helped fuel our growth, it has been our core values that have truly solidified our position as one of the largest and most highly recognized construction management firms in northern New England.

Long-term relationships with some of the regions finest institutions and corporate organizations have enabled the opening of an additional full-service office in Concord, New Hampshire, providing ease of access to clients all throughout New England.



"Our long-standing client relationships are based on trust, genuine respect, and our commitment to provide quality construction. Our warranty is our word – if there's a problem, we fix it, simple as that!"

Pierre LeBlanc, President and CEO
Engelberth Construction

OUR PEOPLE

Our people are the critical building blocks that make an Engelberth project stand out from the rest. Solution driven team leaders and supervisors lead our crews with confidence and years of construction experience, while our highly trained craftsman perfect their trade with remarkable results. While most construction firms completely outsource their work to subcontractors, Engelberth Construction continues to maintain one of the largest construction workforces in the region, enabling us to GUARANTEE your project schedule. Whether we perform work with our own forces or utilize proven, local subcontractors, our hands-on builder's perspective keeps us very close to the building process. With this approach, we can better plan and manage your project because we know what it takes to build in the field.









PHILOSOPHY AND APPROACH

Like a national construction company, Engelberth offers top notch service and decades of experience. Unlike a national company, we put a greater focus on providing personal attention to our clients and supporting our local communities. We approach each and every project as if it were our one and only, providing you with the attention and detail necessary to ensure success. Utilizing an open book approach to managing work, we share details about every cost associated with your project; ie. materials, labor, profit, etc. Our goal is to be as transparent as possible, leaving no questions of hidden fees or costs, misleading estimates or unattainable schedules.

We are guided by the belief that the preconstruction phase of a project provides the foundation for success. A full complement of in-house preconstruction planning services help facilitate development of well aligned scopes of work, high quality, well-coordinated documentation, competitive procurement, local participation, safe and efficient logistics planning and optimal schedules for your project. Utilizing a team approach, Engelberth relies on all three entities, Owner, Designer and Contractor to ensure that your project goals are fulfilled, and the efforts of the design team are carried forward into a successful construction experience.

LEGAL OWNERSHIP/ STRUCTURE

Engelberth Construction was Incorporated in the State of Vermont in 1972. Company ownership is shared amongst seven shareholders with Pierre LeBlanc, President being the primary owner controlling over fifty percent of the company's shares.

The following company leaders also retain shares/ ownership of Engelberth.

- Brad Walker, VP Of Operations
- Chris Yandow, Director Of Preconstruction Services
- Brendan Jones, Senior Project Manager
- Tim Engelberth, Senior Project Manager
- Brock Rouse, Industrial Services Division Director
- Frank Clark, Chief Financial Officer



FINANCIAL STRENGTH

Piece of mind can be had when Engelberth is on site. A financially sound and stable organization since our inception, we maintain excellent relationships with our surety and financial institutions. With no long-term debt, and substantial net worth, Engelberth has never been limited in project size or total bonding capacity. Current bonding levels reach as high as $125 million per project with a $200 million aggregate.

STATE OF VERMONT

OFFICE OF SECRETARY OF STATE

Certificate of Good Standing

I, Sarah Copeland Hanzas, Vermont Secretary of State, do hereby certify that according to the records of
this office

ENGELBERTH CONSTRUCTION, INC.

a Domestic Profit Corporation formed under the laws of the State of VERMONT, was filed for record in this office on May 30, 1972.

I further certify that the company has perpetual duration, that its most recent annual report is on file, and that as of this date, articles of dissolution / withdrawal have not been filed.

July 31, 2023

Given under my hand and seal of office, at Montpelier, the State Capital.

Sarah Copeland Hanzas
Vermont Secretary of State

Business ID: 0066146
Certificate Number: 2014126103001

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 5/30/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Janet Rockefeller	
Hickok & Boardman Insurance Group 346 Shelburne Rd Burlington, VT 05401	PHONE (A/C, No, Ext): (802) 383-1667	FAX (A/C, No):
	E-MAIL ADDRESS: jrockefeller@hbinsurance.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
	INSURER A : Travelers Indemnity Co	25666
INSURED	INSURER B : CNA	
Engelberth Construction, Inc. 150 Water Tower Circle Suite 101 Colchester, VT 05446	INSURER C : Standard Fire Insurance Company	19070
	INSURER D : Pacific Insurance Co LTD	10046
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT X LOC OTHER:			DT-CO-977K8687-IND-23	6/1/2023	6/1/2024	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG EMPL BENEFITS L	$ 2,000,000 $ 300,000 $ 10,000 $ 2,000,000 $ 4,000,000 $ 4,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY / SCHEDULED AUTOS HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY			810-0N697520-23-26-G	6/1/2023	6/1/2024	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
B	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION $			6083457783	6/1/2023	6/1/2024	EACH OCCURRENCE AGGREGATE	$ 10,000,000 $ 10,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y / N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		UB-6K291581-23-26-G	6/1/2023	6/1/2024	X PER STATUTE / OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
D	Prof Liab/Pollution			04 CPI KL6795	6/1/2023	6/1/2024	Ea Inc/Aggr	2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Installation Incl Rigging Ops Limit: $1,000,000- Special Form/Replacement Cost
Rigging Ops Only(Millwright Legal Liability) Limit: $2,500,000 any one lift
Charter Oak Fire Ins Co. - Policy #QT6601D936261 Eff. 6/1/2023 to 6/1/2024

States covered under Workers' Compensation section 3.A include VT, MA, NH, NY.
Waiver Of Subrogation on the Workers Compensation policy is not available in the State of NH.

SEE ATTACHED ACORD 101

CERTIFICATE HOLDER

SAMPLE

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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AGENCY CUSTOMER ID: ENGECON-01 MKAVANAGH

LOC #: 0

ADDITIONAL REMARKS SCHEDULE

AGENCY		NAMED INSURED
Hickok & Boardman Insurance Group		Engelberth Construction, Inc. 150 Water Tower Circle Suite 101 Colchester, VT 05446 Chittenden
POLICY NUMBER		
SEE PAGE 1		
CARRIER	NAIC CODE	EFFECTIVE DATE: SEE PAGE 1
SEE PAGE 1	SEE P 1	

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance

Description of Operations/Locations/Vehicles:
Contractors Professional Liability - Claims Made - Retro Date: 01/16/1997
Construction Job Site Pollution - Claims Made Retro Date: 01/16/1997

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August 1, 2023

Patrick Leahy Burlington International Airport
Attn: Larry Lackey, Director of Planning, Engineering & Sustainability
1200 Airport Drive
South Burlington VT 05403

RE: **ENGELBERTH CONSTRUCTION, INC.**
Prequalification: North Terminal Improvement Project

Dear Mr. Lackey:

This letter will serve to confirm that Engelberth Construction, Inc. is a highly regarded and valued client of Alliant Insurance Services, Inc. and Western Surety Company of 200 Glastonbury Boulevard, Suite 200, Glastonbury CT 06033, Phone number (860) 815-9573.

Western Surety Company has enjoyed the privilege of providing Engelberth Construction, Inc. with Performance and Payment bonds for many years. During this relationship, the surety has considered supporting individual contracts with values approaching $125,000,000 and corresponding backlogs approaching $200,000,000. Western Surety Company is prepared to execute the required Performance and Payment bonds at 100% of the contract sum until contractual obligations have been satisfied.

Naturally, as is customary within the surety industry, all bid and final bond approvals will be contingent upon a favorable underwriting review of project specifics, including contract terms, conditions, bond forms and confirmation of complete project financing.

Should you require additional assurance regarding the technical ability or bonding capacity of Engelberth Construction, Inc., please do not hesitate to contact our office at (860) 269-2179.

Very truly yours,

Kathleen M Flanagan
Surety Account Manager
Construction Services Group

OUR CUTTING-EDGE APPROACH TO PERFECTION

At Engelberth Construction, we continually look for better, safer, and more efficient ways to deliver superior services to our clients and collaborate with our consulting partners.

Advances in construction technology enable us to integrate various software platforms to efficiently manage projects and provide real-time data to assist with estimating, scheduling, project management, quality assurance and billing. From collaboration and coordinating design, to estimating in preconstruction, to detailed planning at the project level, we integrate the right technology into our process so that the entire team, including designers and subcontractors, can continually improve efficiency, constructability, and predictability in our projects. Following is an overview of the technology that will be used on the North Terminal Improvement Project.

PROCORE PROJECT MANAGEMENT

We utilize Procore Construction Project Management, a cloud-based construction management software application to document and manage everything from meeting minutes to shop drawings, submittals, RFIs, and daily logs. Procore brings simple, easy-to-learn, and easy-to-implement solutions to each of our projects. This cloud-based project management software provides access to real-time data anytime and anywhere. Connecting people, information, and processes to streamline operations in the field has never been easier. The use of Procore has increased project transparency and accountability, and has greatly improved communication and insight across project teams.

- The platform allows multiple stakeholders, such as owners, general contractors, subcontractors, architects, and engineers, to access and share project information in real-time.
- Procore is accessible via web browsers and also provides mobile applications for iOS and Android devices, enabling users to access project information and perform tasks while on-site. The mobile app allows for capturing and sharing photos, creating punch lists, and recording daily logs.
- Overall, Procore aims to improve construction project efficiency, reduce rework, enhance communication and collaboration, and provide better visibility into project performance through its comprehensive set of construction management tools and features.

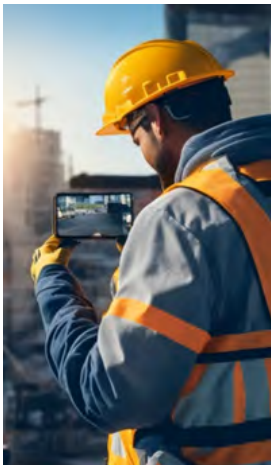
BUILDING INFORMATION MODELING (BIM)

When opportunity allows, we leverage a suite of Building Information Modeling (BIM) tools to enhance communication and collaboration. Our highly-trained engineers are proficient in using Autodesk's suites of BIM software, including Navisworks, Revit, AutoCad, QTO, Design Review, and Laser Scanning. At every step in a building delivery process, they have the ability to model it, coordinate it, estimate it, plan it, and then virtually build it — all before we even put a shovel in the ground. BIM technology has proven effective in enhancing communication, improving coordination among trades, and reducing risk by enabling quicker, more accurate decision-making throughout the design and construction process. These advantages have resulted in substantial cost savings for our clients.

360 PHOTO CAPTURING FOR CONSTRUCTION

360 photos are increasingly being utilized in the construction industry to capture and document various stages of a construction project. These photos are typically taken using specialized cameras or smartphone apps that can capture a full 360-degree view of the surroundings.

360 photos are used in construction for:



- **Site Assessment**: Document existing conditions of the site.
- **Progress Monitoring** throughout the construction process.
- **Documentation and Reporting**: Create visual reports, presentations, and progress updates for stakeholders, clients, and regulatory bodies.
- **Quality Control and Issue Resolution**: Prompt identification of issues facilitates timely resolution, reducing the likelihood of rework or costly delays.
- **Collaboration and Communication**: Virtually explore the site. Fosters better understanding, facilitates decision-making, and enables remote feedback.

Overall, the use of 360 photos enhances project management, documentation, communication, and issue resolution.

TIMELAPSE CAMERAS FOR CONSTRUCTION



Time-lapse cameras for construction are specialized cameras designed to capture and condense long-term construction projects into shorter videos or sequences. These cameras are typically mounted in a fixed position and capture a series of images at regular intervals over an extended period. The collected images are then stitched together to create a time-lapse video that showcases the entire construction process in an accelerated format.

By utilizing time-lapse cameras, construction companies can document and showcase their projects from start to finish, capturing significant milestones, structural changes, and the overall progress in an engaging and visually compelling format. These videos can be used for project management, marketing and promotion, stakeholder updates, and as valuable assets for future reference.

LASER SCANNING FOR CONSTRUCTION

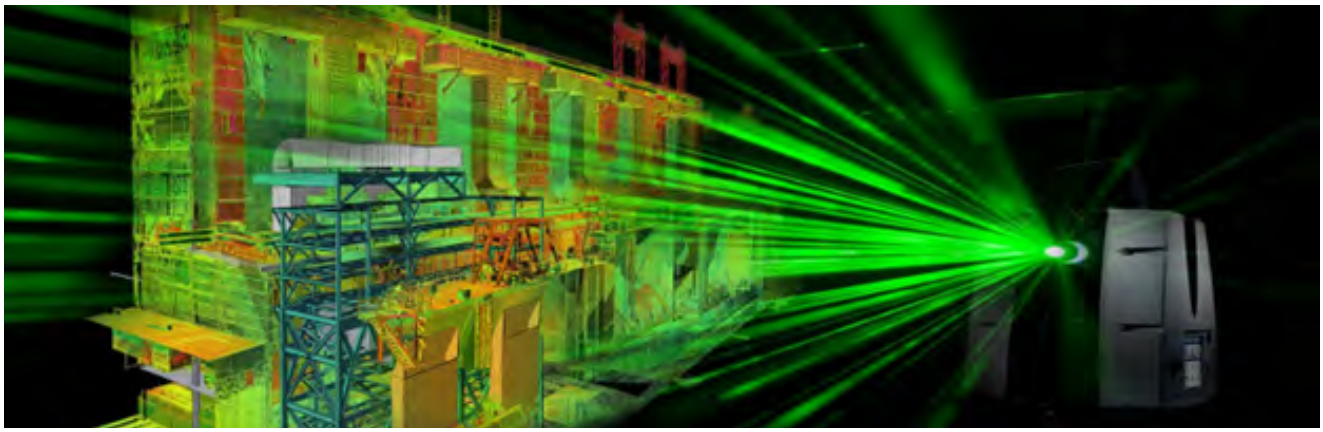
Laser scanning, also known as 3D laser scanning or LiDAR (Light Detection and Ranging) scanning, is a technology used in the construction industry to capture accurate and detailed measurements of existing structures, terrain, or objects. It involves using laser beams to rapidly and precisely measure the distances between the scanner and various surfaces, creating a three-dimensional representation of the scanned area.

The process begins with a laser scanner, which emits laser beams that bounce off surfaces and return to the scanner. The scanner measures the time it takes for the laser pulses to travel to the surface and back, using this information to calculate distances and create a point cloud—a collection of millions of individual points in 3D space.

The captured point cloud data contains detailed information about the shape, size, and geometry of the scanned area, including buildings, landscapes, and infrastructure. This data can be used for a variety of purposes in construction, including:

- **As-Built Documentation:** example: Pictures of all in-wall MEP rough-in prior to drywall.

- **Clash Detection and Coordination**: By integrating the point cloud data with Building Information Modeling (BIM) software, potential clashes or conflicts between existing structures and new construction elements can be identified and resolved before construction begins.
- **Quality Control and Verification**: Compare the actual construction progress with the intended design.
- **Site Analysis and Planning**: Provides detailed information about the topography and terrain of a construction site.



- **Structural Analysis**: Point cloud data can be used to generate accurate 3D models of existing structures.

Laser scanning offers numerous benefits in construction, such as improved accuracy, reduced measurement time, and enhanced project visualization. It has become an essential tool for construction professionals, enabling them to streamline workflows, improve project outcomes, and minimize costly errors.

The platforms Engelberth uses for Laser scanning are **www.earthcam.net/procore/** and **www.structionsite.com/.**

QUICK RESPONSE (QR) CODES

A simple and cost-effective method to quickly access real-time data on a construction site is QR Codes. Over the last 10-15 years with smartphone and tablet technology, most working on a construction site have a mobile device. This makes for the implementation of QR technology on project sites easy to set up and quilcky receive data saving time and money on preparing physical posters, signs, logbooks, etc.



An example is a QR code for a room-by-room sign off by all trades for completeness of work. All the punch list work at Dartmouth Hall and DHMC ED Expansion were done using the QR codes generated in Procore. When the code is scanned with the camera tool in the Procore app, it brings up the specific location with a list of options i.e. Punch List, Observation, Incidents, Action Plans, RFIs, Submittals, and Photos that are associated with that location.

The document generated is printed and taped to the inside door of the room/location it is associated with. Once up it can be used by architects and owners to generate punch list items, or any other items listed above. Our crews and subcontractors can then close out open items and view RFIs and other documents that have been tagged to that location.

ENGELBERTH CONSTRUCTION, INC.



Colchester, VT | Concord, NH
www.engelberth.com

Attachment C:
Burlington Construction Manager Conditions for Construction Contracts

ATTACHMENT C

BURLINGTON STANDARD CONTRACT CONDITIONS FOR CONSTRUCTION CONTRACTORS

1. **DEFINITIONS:**
   - **a.** The "Contract" shall mean the Contract between Contractor and the City to which these conditions apply and includes this Attachment C.
   - **b.** The "Contractor" shall mean Engelberth Construction, Inc.
   - **c.** The "City" shall mean the City of Burlington, Vermont or any of its departments.
   - **d.** The "Effective Date" shall mean the date on which the Contract becomes effective according to its terms, or if no effective date is stated, the date that all parties to it have signed.
   - **e.** The "Parties" shall mean the parties to this Contract.
   - **f.** The "Work" shall mean the services being provided by the Contractor, as provided in the Contract.

2. **REGISTRATION:** The Contractor agrees to be registered with the Vermont Secretary of State's office as a business entity doing business in the State of Vermont at all times this contract is effective. This registration must be complete prior to contract execution.

3. **INSURANCE & INDEMNIFICATION:** The insurance and indemnification provisions set forth in Attachment C-1 are incorporated by this reference as though fully set forth. Any provisions of this Contract for indemnification, defense, release of liability, or warranty, shall survive termination hereof.

4. **CONFLICT OF INTEREST:** The Contractor shall disclose in writing to the City any actual or potential conflicts of interest or any appearance of a conflict of interest by the Contractor, its employees or agents, or its subcontractors, if any.

5. **PERSONNEL REQUIREMENTS AND CONDITIONS:** A Contractor shall employ only qualified personnel with responsible authority to supervise the work. The City shall have the right to approve or disapprove key personnel assigned to administer activities related to the Contract.

   Except with the approval of the City, during the life of the Contract, the Contractor shall not employ:

   1. Any City employees who are directly involved with the awarding, administration, monitoring, or performance of the Contract or any project(s) that are the subjects of the Contract.

   2. Any City employees so involved within one (1) year of termination of employment with the City.

   The Contractor warrants that no company or person has been employed or retained (other than a bona fide employee working solely for the Contractor) to solicit or secure this Contract, and that no company or person has been paid or has a contract with the Contractor to be paid, other than

a bona fide employee working solely for the Contractor, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of the Contract. For breach or violation of this warranty, the City shall have the right to annul the Contract, without liability to the City, and to regain all costs incurred by the City in the performance of the Contract.

The City reserves the right to require removal of any person employed by a Contractor from work related to the Contract, for misconduct, incompetence, or negligence, in the opinion of the City, in the due and proper performance of Contractor's duties, or who neglects or refuses to comply with the requirements of the Contract.

6. **PERFORMANCE**: Contractor warrants that performance of Work will conform to the requirements of this Contract. Contractor shall use that degree of ordinary care and reasonable diligence that an experienced and qualified provider of similar services would use acting in like circumstances and experience in such matters and in accordance with the standards, practices and procedures established by Contractor for its own business.

7. **RESPONSIBILITY FOR SUPERVISION:** The Contractor shall assume primary responsibility for general supervision of Contractor employees and any subcontractors for all work performed under the Contract and shall be solely responsible for all procedures, methods of analysis, interpretation, conclusions, and contents of work performed under the Contract. The Contractor shall be responsible to the City for all acts or omissions of its subcontractors and any other person performing work under this Contract.

8. **INSPECTION OF WORK:** The City shall, at all times, have access to the Contractor's work for the purposes of inspection, accounting, and auditing, and the Contractor shall provide whatever access is considered necessary to accomplish such inspections. At any time, the Contractor shall permit the City or representative for the City the opportunity to inspect any plans, drawings, estimates, specifications, or other materials prepared or undertaken by the Contractor pursuant to the Contract, as well as any preparatory work, work-in-progress, or completed work at a field site.

   Conferences, visits to a site, or an inspection of the work, may be held at the request of any involved party or by representatives of the City.

9. **UTILITIES & ACCESS:** Whenever a facility or component of a private, public, or cooperatively-owned utility will be affected by any proposed construction, the Contractor will counsel with the City and will enter into any necessary contacts and discussions with the affected owners regarding any requirement necessary for revisions of facilities or existing installations, both above and below ground. Any such installations must be completely and accurately exhibited on any detail sheets or plans. The Contractor shall inform the City, in writing, of any such contacts and the results thereof.

   The City shall provide the land and/or construction easements for the land upon which the Work under this Contract is to be done, and will, so far as is convenient, permit the Contractor to use as much of the land as is required for the erection of temporary construction facilities and storage of materials, together with the right of access to same, but beyond this, the Contractor shall

provide at the Contractor's cost and expense any additional land required.

10. PROTECTION OF PROPERTY:

A. In General: Contractor shall avoid damage, as a result of its operations, to trees, plant life, existing sidewalks, curbs, streets, alleys, pavements, utilities, adjoining property, the work of other contractors, and the property of the City and others. Contractor shall, at its own expense, repair any damage to any property caused by Contractor's operations.

B. Underpinning and Shoring: Contractor shall become familiar with the requirements of local and state laws applicable to underpinning, shoring and other work affecting adjoining property, and wherever required by law Contractor shall shore up, brace, underpin, secure and protect as may be necessary all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be affected in any way by the excavations or other operations connected with the work to be performed under this Contract.

C. Damage to Utilities: Contractor shall be responsible for all damage to any utility equipment or structures caused by its acts or omissions to act, whether negligent or otherwise, and shall leave the utility equipment or structures in as good condition as they were in prior to the commencement of operations under this contract. However, any utility equipment or structures damaged as a result of any act, or omission to act, of the contractor may, at the option of the city department, utility company, or other party owning or operating the utility equipment or structures damaged, be repaired by the city department, utility company, or other party, and in that event, the cost of repairs shall be borne by Contractor.

11. PUBLIC RELATIONS: Throughout the performance of the Contract, the Contractor will endeavor to maintain good relations with the public and any affected property owners. Personnel employed by or representing the Contractor shall conduct themselves with propriety. The Contractor agrees to inform property owners and/or tenants, in a timely manner, if there is need for entering upon private property as an agent of the City, in accordance with 19 V.S.A. § 35 and §.503, to accomplish the work under the Contract. The Contractor agrees that any work will be done with minimum damage to the property and disturbance to the owner. Upon request of the Contractor, the City shall furnish a letter of introduction to property owners soliciting their cooperation and explaining that the Contractor is acting as an agent of the City.

12. ACKNOWLEDGEMENTS: Acknowledgment of the City's support must be included in any and all publications, renderings and project publicity, including audio/visual materials developed under this contract.

13. APPEARANCES:

A. Hearings and Conferences: The Contractor shall provide services required by the City and necessary for furtherance of any work covered under the Contract. These services shall include appropriate representation at design conferences, public gatherings and hearings, and appearances before any legislative body, commission, board, or court, to justify, explain and

defend its contractual services covered under the Contract.

The Contractor shall perform any liaison that the City deems necessary for the furtherance of the work and participate in conferences with the City, at any reasonable time, concerning interpretation and evaluation of all aspects covered under the Contract.

The Contractor further agrees to participate in meetings with the City and any other interested or affected participant, for the purpose of review or resolution of any conflicts pertaining to the Contract.

The Contractor shall be equitably paid for such services and for any reasonable expenses incurred in relation thereto in accordance with the Contract.

B. Appearance as Witness: If and when required by the City, the Contractor, or an appropriate representative, shall prepare and appear for any litigation concerning any relevant project or related contract, on behalf of the City. The Contractor shall be equitably paid, to the extent permitted by law, for such services and for any reasonable expenses incurred in relation thereto, in accordance with the Contract.

14. RESPONSIBILITY OF COST: The Contractor shall furnish and pay the cost, including taxes (except tax-exempt entities) and all applicable fees, of all the necessary materials and shall furnish and pay for full time on-site superintendence during any construction activity, labor, tools, equipment, and transportation. The Contractor shall perform all the Work required for the construction of all items listed and itemized under Attachment A (Request for Proposals) and Attachment B (Contractor's Response to Request for Proposals) and in strict accordance with the Contract Documents and any amendments thereto and any approved supplemental plans and specifications. The Contractor agrees to pay all claims for labor, materials, services and supplies and agrees to allow no such charge, including no mechanic's lien, to be fixed on the property of the City.

15. PAYMENT PROCEDURES: The City shall pay or cause to be paid to the Contractor or the Contractor's legal representative payments in accordance with the Contract. When applicable, for the type of payment specified in the Contract, a progress report shall summarize actual costs and any earned portion of fixed fee. All payments will be made in reliance upon the accuracy of all representations made by the Contractor, whether in invoices, progress reports, emails, or other proof of work.

All invoices and correspondence shall indicate the applicable project name, project number and the Contract number. When relevant, the invoice shall further be broken down in detail between projects.

When applicable, for the type of payment specified in the Contract, expenses for meals and travel shall be limited to the current approved in-state rates, as determined by the State of Vermont's labor contract, and need not be receipted. All other expenses are subject to approval by the City and must be accompanied by documentation to substantiate their charges.

No approval given or payment made under the Contract shall be conclusive evidence of the

performance of the Contract, either wholly or in part, and no payment shall be construed to be acceptance of defective work or improper materials.

The City agrees to pay the Contractor and the Contractor agrees to accept as full compensation, for performance of all services rendered and expenses encompassed in conformance therewith, the fee specified in the Contract.

16. **DUTY TO INFORM CITY OF CONTRACT DOCUMENT ERRORS:** If Contractor knows, or has reasonable cause to believe, that a clearly identifiable error or omission exists in the Contract Documents, including but not limited to unit prices and rate calculations, Contractor shall immediately give the City written notice thereof. Contractor shall not cause or permit any Work to be conducted which may relate to the error or omission without first receiving written notice by the City that City representatives understand the possible error or omission and have approved of modifications to the Contract Documents or that Contractor may proceed without any modification being made to Contract Documents.

17. **NON-APPROPRIATION:** The obligations of the City under this Contract are subject to annual appropriation by the Burlington City Council. If no funds or insufficient funds are appropriated or budgeted to support continuation of payments due under this Contract, the Contract shall terminate automatically on the first day of the fiscal year for which funds have not been appropriated. The Parties understand and agree that the obligations of the City to make payments under this Contract shall constitute a current expense of the City and shall not be construed to be a debt or a pledge of the credit of the City. The decision whether or not to budget and appropriate funds during each fiscal year of the City is within the discretion of the Mayor and City Council of the City. The City shall deliver written notice to Contractor as soon as practicable of any non-appropriation, and Contract Contractor shall not be entitled to any payment or compensation of any kind for work performed after the City has delivered written notice of non-appropriation.

18. **CHANGE ORDERS & AMENDMENTS:** No changes or amendments to the Contract shall be effective unless documented in writing and signed by authorized representatives of the City and the Contractor. All changes affecting the Project's construction cost, length of time, or modifications of the terms or conditions of the Contract, must be authorized by means of a written Contract Change Order which is mutually agreed to by the City and Contractor. The Contract Change Order will include extra Work, Work for which quantities have been altered from those shown in the Bid Schedule, as well as decreases or increases in the quantities of installed units from those shown in the Bid Schedule because of final measurements. All changes must be recorded on a Contract Change Order (which form is part of these Contract Documents) and fully executed before they can be included in a partial payment estimate. Changes for Work, quantities, and/or conditions will include any respective time adjustment, if justified. Time adjustments will require an updated Project Schedule with the Change Order.

19. **EXTENSION OF TIME:** The Contractor agrees to prosecute the work continuously and diligently, and no charges or claims for damages shall be made by the Contractor for delays or hindrances, from any cause whatsoever, during the progress of any portion of services specified in the Contract. The Contractor may request an extension of time for such delays or hindrances, if any.

Time extensions may be granted by amendment only for excusable delays, such as delays beyond the control of the Contractor and without the fault or negligence of the Contractor.

The City may suspend the work or any portion thereof for a period of not more than ninety (90) days at its discretion or such further time as agreed by the Contractor. The Contractor will be allowed an extension of contract time directly attributable to any suspension.

20. PUBLIC HEALTH EMERGENCY:

A. Compliance with Mandates and Guidance: The Contractor is advised that public health emergencies—meaning public health emergencies, as declared by the City, the State of Vermont, or the Federal Government—may introduce significant uncertainty into the project. The Contractor must comply with all local, state, federal orders, directives, regulations, guidance, advisories during a public health emergency. Contractor shall adhere to the below provisions and consider public health emergencies as it develops project schedules and advances the Work.

B. Creation of Public Health Emergency Plan: For any work performed on-site at a City location, the Contractor shall create a public health emergency plan acceptable to the City. The Contractor shall be responsible for following this plan and ensuring that the project or site is stable and in a safe and maintainable condition.

a. Public Health Emergency Plan: The Public Health Emergency Plan will contain:
   i. Measures to manage risk and mitigate potential impacts to the health and safety of the public, the City and Contractor's workers;
   ii. Explicit reference to any health and safety performance standards and mandates provided by the City, the State of Vermont, the Federal government, or other relevant governmental entities;
   iii. A schedule for possible updates to the plan as standards and mandates change; and
   iv. Means to adjust the schedule and sequence of work should the emergency change in nature or duration.

b. Review and Acceptance of Plan:
   i. Contractor must provide the plan to the City by the Effective Date of this Contract or by one (1) week prior to the commencement of on-site activities, whichever is later.
   ii. The City shall have sole discretion to require changes to the plan.
   iii. The City may revisit the plan at any time to verify compliance with obligations that arise under a state of emergency.

C. Enforcement & Stoppage of Work: Contractor fails to comply with either 1) the approved public health emergency plan, or 2) any local, state, federal orders, directives, regulations, guidance, or advisories during a public health emergency, the City may stop Work under the

Contract until such failure is corrected. Such failure to comply shall constitute a breach of the Contract.

Upon stoppage of work, the City may allow Work to resume, at a time determined by the City, under this Contract if such failure to comply is adequately corrected. The City shall have sole discretion in determining if Contractor has adequately corrected its failure to comply with the above.

If Contractor's breach of Contract has not been cured within seven (7) days after notice to stop Work from the City, then City may terminate this Contract, at its discretion.

D. City Liability Relating to Potential Delays: If a public health emergency is declared, the City will not be responsible for any delays related to the sequence of operations or any expenses or losses incurred as a result of any delays. Any delays related to a public health emergency will be excusable, but will not be compensable.

21. FORCE MAJEURE: Neither Party to this Contract shall be liable to the other for any failure or delay of performance of any obligation under this Contract to the extent the failure or delay is caused by acts of God, public health emergencies, epidemics, acts of the public enemy, acts of superior governmental authority, weather conditions, riots, rebellion, sabotage, or any other circumstances for which it is not responsible or which is not under its control ("Force Majeure"). To assert Force Majeure, the nonperforming party must prove that a) it made all reasonable efforts to remove, eliminate, or minimize the cause of delay or damage, b) diligently pursued performance of its obligations, c) substantially fulfilled all obligations that could be fulfilled, and d) timely notified the other part of the likelihood or actual occurrence of a Force Majeure event. If any such causes for delay are of such magnitude as to prevent the complete performance of the Contract within two (2) years of the originally scheduled completion date, either Party may by written notice request to amend or terminate the Contract. The suspension of any obligations under this section shall not cause the term of this Contract to be extended and shall not affect any rights accrued under this Contract prior to the occurrence of the Force Majeure. The Party giving notice of the Force Majeure shall also give notice of its cessation.

22. PAYMENT FOR EXTRA WORK, ADDITIONAL SERVICES OR CHANGES: The City may, in writing, require or agree to changes, or additions to or deletions from the originally contemplated scope of work.

The value of such changes, to the extent not reflected in other payments to the Contractor, shall be incorporated in an amendment and be determined by mutual agreement, by one or more of the following:

1. Fixed Price. By a price that is not subject to any adjustment on the basis of the Contractor's expenses experienced in performing the work. The Contractor is fully responsible for all costs and resulting profit or loss.

2. Rate Schedule. By unit prices designated in the Contract, or by unit prices covered under any subsequent contracts.

3. Actual Cost. By amounts determined on the basis of actual costs incurred, as distinguished from forecasted expenditures.

No changes for which additional fee payment is claimed shall be made unless pursuant to a written order from the City, and no claim for payment shall be valid unless so ordered.

The Contractor agrees to maintain complete and accurate records of all change work, in a form satisfactory to the City. The City reserves the right to audit the records of the Contractor related to any extra work or additional services. Any such services rendered shall be subject, in all other respects, to the terms of the Contract. When changes are so ordered, no additional work shall be performed by the Contractor until a Contract amendment has been fully executed, unless written notice to proceed is issued by the City. Any claim for extension of time that may be necessitated as a result of extra work or additional services and changes shall be given consideration and evaluated insofar as it directly relates to the change.

23. FAILURE TO COMPLY WITH TIME SCHEDULE: If the City is dissatisfied because of slow progress or incompetence in the performance of the Work in accordance with the schedule for completion of the various aspects of construction, the City shall give the Contractor written notice in which the City shall specify in detail the cause of dissatisfaction. Should the Contractor fail or refuse to remedy the matters complained of within five days after the written notice is received by the Contractor, the City shall have the right to take control of the Work and either make good the deficiencies of the Contractor itself or direct the activities of the Contractor in doing so, employing such additional help as the City deems advisable. In such events, the City shall be entitled to collect from the Contractor any expenses in completing the Work. In addition, the City may withhold from the amount payable to the Contractor an amount approximately equal to any interest lost or charges incurred by the City for each calendar day that the Contractor is in default after the time of completion stipulated in the Contract Documents.

24. RETURN OF MATERIALS: Contractor agrees that at the expiration or termination of this Contract, it shall return to City all materials provided to it during its engagement on behalf of City.

25. ACCEPTANCE OF FINAL PAYMENT; RELEASE: Contractor's acceptance of the final payment shall be a release in full of all claims against the City or its agents arising out of or by reason of the Work. Any payment, however, final or otherwise, shall not release the Contractor or its sureties from any obligations under the Contract Documents or any performance or payment bond.

26. OWNERSHIP OF THE WORK: The Contractor agrees that the ownership of all studies, data sheets, survey notes, subsoil information, drawings, tracings, estimates, specifications, proposals, diagrams, calculations, EDM and other material prepared or collected by the Contractor, hereafter referred to as "instruments of professional service", shall become the property of the City as they are prepared and/or developed in the course of the Contract. The Contractor agrees to allow the City access to all "instruments of professional service" at any time. The Contractor shall not

copyright any material originating under the Contract without prior written approval of the City. No publications or publicity of the work, in part or in total, shall be made without the express written agreement of the City, except that Contractor may in general terms use previously developed instruments of professional service to describe its abilities for a project in promotional materials.

27. **PROPRIETARY RIGHTS:** The Parties under the Contract hereby mutually agree that, if patentable discoveries or inventions should result from work performed by the Contractor under the Contract, all rights accruing from such discoveries or inventions shall be the sole property of the Contractor. The Contractor, however, agrees to and does hereby grant to the City an irrevocable, nonexclusive, non-transferable, and royalty-free license to the manufacture, use, and disposition of any discovery or invention that may be developed as a part of the Work under the Contract.

28. **PUBLIC RECORDS:** The Contractor understands that any and all records related to and acquired by the City, whether electronic, paper, or otherwise recorded, are subject to the Vermont Public Records Act and that the determination of how those records must be handled is solely within the purview of City. The Contractor shall identify all records that it considers to be trade secrets as that term is defined by subsection 317(c)(9) of the Vermont Public Records Act and shall also identify all other records it considers to be exempt under the Act. It is not sufficient to merely state generally that the record is proprietary or a trade secret or is otherwise exempt. Particular records, pages or section which are believed to be exempt must be specifically identified as such and must be separated from other records with a convincing explanation and rationale sufficient to justify each exemption from release consistent with Section 317 of Title 1 of the Vermont Statutes Annotated.

29. **RECORDS RETENTION AND ACCESS:** The Contractor agrees to retain, in its files, and to produce to the City—within the time periods requested—all books, documents, electronic data media (EDM), accounting records, and other records produced or acquired by the Contractor in the performance of this Contract which are related to the City, at any time during this Contract and for a period of at least three (3) years after its completion or termination. In addition, if any audit, claim, or litigation is commenced before the expiration of that three (3) year period, the records shall be retained until all related audits, claims, or litigation are resolved. The Contractor further agrees that the City shall have access to all the above information for the purpose of review and audit during the Contract period and any time within the aforementioned retention period. Copies of all of the above referenced information shall be provided to the City, if requested, in the format in which the records were obtained, created, or maintained, such that their original use and purpose can be achieved. Contractor, subcontractors, or their representatives performing work related to the Contract, are responsible to ensure that all data and information created or stored on EDM is secure and can be duplicated and used if the EDM mechanism is subjected to power outage, obsolescence, or damage.

30. **WARRANTY:** In addition to any warranty provided by the manufacturer or distributor, Contractor guarantees the Work performed, and all materials or equipment furnished, to be free from defects in material and workmanship for a minimum period of one (1) year from the date of the City's acceptance of completion. The Contractor's warranty is not intended and shall not be interpreted as a limitation upon the City's rights or a waiver of manufacturer and distributor

warranties, any subcontractor warranties, or any other warranties provided in connection with the Work.

Contractor, at its own expense, shall make any repairs, or replacement necessary to correct these defects to the satisfaction of the City.

This warranty of material and workmanship applies only:

1. To the property only as long as it remains in the possession of the City.

2. To the Work that has not been subject to accident, misuse, or abuse by someone other than the Contractor.

3. To the Work that has not been modified, altered, defaced, or had repairs made or attempted by someone other than the Contractor.

4. If the Contractor is immediately notified in writing within ten (10) days of first knowledge of the defect by the City.

5. If the Contractor is given the first opportunity to make any repairs, replacements, or corrections to the defective construction at no cost to the City within a reasonable period of time.

Under no circumstances shall Contractor be liable by virtue of this warranty or otherwise for damage to any person or property whatsoever for any special, indirect, secondary or consequential damages of any nature however arising out of the use or inability to use because of the construction defect.

If the Contractor is unable, after receipt of two (2) written notices given to Contractor by the City, to successfully repair or replace the labor, equipment, or materials within six (6) months of the second notice, then the District's repair and replace warranty shall be deemed to have failed and the City's rights and remedies shall not be limited by the provisions of this section.

31. CONTRACT DISPUTES: In the event of a dispute between the parties to this Contract, each party will continue to perform its obligations unless the Contract is terminated in accordance with these terms.

32. SETTLEMENTS OF MISUNDERSTANDINGS: Neither Party shall file any litigation arising from this Contract without first attempting in good faith to resolve the Parties' dispute through negotiated settlement or mediation; provided, however, that any applicable statute of limitations shall toll during any period in which the Parties are actively and mutually engaged in dispute resolution; and provided further that nothing herein shall prevent either Party from seeking emergency relief in appropriate circumstances from a court of competent jurisdiction.

33. CITY'S OPTION TO TERMINATE: The Contract may be terminated in accordance with the following provisions, which are not exclusive:

A. Termination for Convenience: At any time prior to completion of services specified under the Contract, the City may terminate the Contract for any reason by submitting written notice via certified or registered mail to the Contractor, not less than fifteen (15) days prior to the termination date, of its intention to do so. If the termination is for the City's convenience, and the Contractor has satisfactorily performed all obligations in accordance with the Contract Documents, payment to the Contractor will be made promptly for all direct costs incurred to the date of the notice of termination and costs of materials obtained in preparation for Work but not yet installed or delivered, less any payments previously made, plus a reasonable fee for overhead and profit. However, if a notice of termination is given to a Contractor prior to completion of twenty (20) percent of the estimated services, as set forth in the approved Work Schedule and Progress Report, the Contractor will be reimbursed for that portion of any reasonable and necessary expenses incurred to date of the notice of termination plus a reasonable fee to the date of said termination. Such requests for reimbursement shall be supported with factual data and shall be subject to the City's approval. The Contractor shall make no claim for additional compensation against the City by reason of such termination.

B. Termination for Cause:

i. Breach: Contractor shall be in default if Contractor fails in any manner to fully perform and carry out each and all conditions of this Contract, including, but not limited to, Contractor's failure to begin or to prosecute the Work in a timely manner or to make progress as to endanger performance of this Contract; failure to supply a sufficient number of properly skilled employees or a sufficient quantity of materials of proper quality; failure to perform the Work unsatisfactorily as determined by the City; failure to neglect or refuse to remove materials; or in the event of a breach of warranty with respect to any materials, workmanship, or performance guaranty. Contractor will not be in default for any excusable delays as provided in Sections 18-20.

The City may give Contractor written notice of such default. If Contractor does not cure such default or provide a plan to cure such default which is acceptable to the City within the time permitted by the City, then the City may terminate this contract for cause.

ii. Dishonest Conduct: If Contractor engages in any dishonest conduct related to the performance or administration of this Contract then the City may immediately terminate this contract.

iii. Cover: In the event the City terminates this contract as provided in this section, the City may procure, upon such terms and in such manner as the City may deem appropriate, services similar in scope and level of effort to those so terminated, and Contractor shall be liable to the City for all of its costs and damages, including, but not limited to, any excess costs for such services, interest, or other charges the City incurs to cover.

iv. Rights and Remedies Not Exclusive: The rights and remedies of the City provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

34. GENERAL COMPLIANCE WITH LAWS: The Contractor and any subcontractor approved under this Contract shall comply with all applicable Federal, State and local laws, including but not limited to the Burlington Livable Wage Ordinance, the Non-Outsourcing Ordinance, and the Union-Deterrence Ordinance and shall provide the required certifications attesting to compliance with these ordinances (see attached ordinances and certifications).

35. SAFETY REQUIREMENTS: The Contractor shall comply with all pertinent provisions of the Occupational Safety and Health Administration (OSHA) and any VOSHA (Vermont OSHA) Safety and Health requirements, including the provision and use of appropriate safety equipment and practices.

The Contractor, and not the City, shall be responsible for the safety, efficiency, and adequacy of Contractor's or its subcontractors' plant, appliances, equipment, vehicles, and methods, and for any damages, which may result from their failure or their improper construction, maintenance or operation.

36. CIVIL RIGHTS AND EQUAL EMPLOYMENT OPPORTUNITY: During performance of the Contract, the Contractor will not discriminate against any employee or applicant for employment because of religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status, crime victim status, or genetic information. Contractor, and any subcontractors, shall comply with any Federal, State, or local law, statute, regulation, executive order, or rule that applies to it or the services to be provided under this contract concerning equal employment, fair employment practices, affirmative action, or prohibitions on discrimination or harassment in employment.

37. CHILD SUPPORT PAYMENTS: By signing the Contract, the Contractor certifies, as of the date of signing the Contract, that the Contractor (a) is not under an obligation to pay child support; or (b) is under such an obligation and is in good standing with respect to that obligation; or (c) has agreed to a payment plan with the Vermont Office of Child Support Services and is in full compliance with that plan. If the Contractor is a sole proprietorship, the Contractor's statement applies only to the proprietor. If the Contractor is a partnership, the Contractor's statement applies to all general partners with a permanent residence in Vermont. If the Contractor is a corporation, this provision does not apply.

38. TAX REQUIREMENTS: By signing the Contract, the Contractor certifies, as required by law under 32 VSA, Section 3113, that under the pains and penalties of perjury, the Contractor is in good standing with respect to payment, or in full compliance with a plan to pay, any and all taxes due the State of Vermont as of the date of signature on the Contract.

39. NO GIFTS OR GRATUITIES: The Contractor shall not make any payment or gift or donation of substantial value to any elected official, officer, employee, or agent of the City during the term of this Contract.

40. ASSIGNMENT: Contractor shall not sublet or assign this Work, or any part of it, without the written consent of the City. If any subcontractor is approved, Contractor shall be responsible and liable for all acts or omissions of that subcontractor for any Work performed. If any subcontractor is approved, Contractor shall be responsible to ensure that the subcontractor is paid as agreed and that no lien is placed on any City property.

41. TRANSFERS, SUBLETTING, ASSIGNMENTS, ETC: Contractor shall not assign, sublet, or transfer any interest in the work, covered by this Contract, without prior written consent of the City and further, if any subcontractor participates in any work involving additional services, the estimated extent and cost of the contemplated work must receive prior written consent of the City. The approval or consent to assign or sublet any portion of the work, shall in no way relieve the Contractor of responsibility for the performance of that portion of the work so transferred. The form of the subcontractor's contract shall be as developed by the Contractor and approved by the City. The Contractor shall ensure that insurance coverage exists for any operations to be performed by any subcontractor as specified in the insurance requirements section of this Contract.

The services of the Contractor, to be performed under the Contract, shall not be transferred without written authorization of the City. Any authorized sub-contracts shall contain all of the same provisions contained in and attached to the original Contract with the City.

42. CONTINUING OBLIGATIONS: The Contractor agrees that if because of death, disability, or other occurrences, it becomes impossible to effectively perform its services in compliance with the Contract, neither the Contractor nor its surviving members shall be relieved of their obligations to complete the Contract unless the City agrees to terminate the Contract because it determines that the Contractor is unable to satisfactorily execute the Contract.

43. INTERPRETATION & IMPLEMENTATION: Provisions of the Contract shall be interpreted and implemented in a manner consistent with each other and using procedures that will achieve the intent of both Parties.

44. ARM'S LENGTH: This Contract has been negotiated at arm's length, and any ambiguity in any of its terms or provisions shall be interpreted in accordance with the intent of the Parties and not against or in favor of either the City or Contractor.

45. RELATIONSHIP: The Contractor is an independent contractor and shall act in an independent capacity and not as officers or employees of the City. To that end, the Contractor shall determine the method, details, and means of performing the work, but will comply with all legal requirements in doing so. The Contractor shall provide its own tools, materials, or equipment. The Parties agree that neither the Contractor nor its principal(s) or employees are entitled to any employee benefits from the City. Contractor understands and agrees that it and its principal(s) or employees have no right to claim any benefits under the Burlington Employee Retirement System, the City's worker's compensation benefits, health insurance, dental insurance, life insurance, or any other employee

benefit plan offered by the City. The Contractor agrees to execute any certifications or other documents and provide any certificates of insurance required by the City and understands that this Contract is conditioned on its doing so, if requested.

The Contractor understands and agrees that it is responsible for the payment of all taxes on the above sums and that the City will not withhold or pay for Social Security, Medicare, or other taxes or benefits or be responsible for any unemployment benefits.

46. CHOICE OF LAW: Vermont law, and rules and regulations issued pursuant thereto, shall be applied in the interpretation, execution, and enforcement of this Contract, notwithstanding conflicts of law principles. Any provision included or incorporated herein by reference which conflicts with said laws, rules, and regulations shall be null and void. Any provision rendered null and void by operation of this provision shall not invalidate the remainder of this Contract to the extent capable of execution.

47. JURISDICTION: All suits or actions related to this Contract shall be filed and proceedings held in the State of Vermont, notwithstanding any other law.

48. BINDING EFFECT AND CONTINUITY: This Contract shall be binding upon and shall inure to the benefit of the Parties, their' respective heirs, successors, representatives, and assigns. If a dispute arises between the Parties, each Party will continue to perform its obligations under this Contract during the resolution of the dispute, until the Contract is terminated in accordance with its terms.

49. SEVERABILITY: The invalidity or unenforceability of any provision of this Contract or the Contract Documents shall not affect the validity or enforceability of any other provision, which shall remain in full force and effect, provided that the Parties can continue to perform their obligations under this Contract in accordance with the intent of this Contract.

50. ENTIRE CONTRACT & AGREEMENT: This Contract, including the Contract Documents, constitutes the entire Contract, agreement, and understanding of the Parties with respect to the subject matter of this Contract. Prior or contemporaneous additions, deletions, or other changes to this Contract shall not have any force or effect whatsoever, unless embodied herein.

51. APPENDICES: The City may attach, to these specifications, appendices containing various forms and typical sample sheets for guidance and assistance to the Contractor in the performance of the work. It is understood, however, that such forms and samples may be modified, altered, and augmented from time to time by the City as occasions may require. It is the responsibility of the Contractor to ensure that they have the latest versions applicable to the Contract.

52. NO THIRD PARTY BENEFICIARIES: This Contract does not and is not intended to confer any rights or remedies upon any person or entity other than the Parties. Enforcement of this Contract and all rights and obligations hereunder are reserved solely to the Parties. Any services or benefits which third parties receive as a result of this Contract are incidental to this Contract, and do not create any rights for such third parties.

53. WAIVER: Notwithstanding the passage of time, a Party's failure or delay in exercising any right, power, or privilege under this Contract, whether explicit or by lack of enforcement, shall not operate as a waiver, nor shall any single or partial exercise of any right, power, or privilege preclude any other or further exercise of such right, power, or privilege.

54. FEDERAL CONTRACT REQUIREMENTS: In addition to the foregoing conditions, the Federal Contract Requirements and Byrd Anti-Lobbying Amendment are attached to this Attachment C as **Attachment C-2** and made a part hereof by this reference as though fully set forth.

55. SCHEDULES: The Contractor shall prepare and submit for the City's information a Schedule for the Work. The schedule, including the time required for design and construction, shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, shall provide for expeditious and practicable execution of the Work, and shall include allowances for periods of time required for the City's review and for approval of submissions by authorities having jurisdiction over the Project.

56. SUBMITTALS: Prior to submission of any Submittals, the Contract shall prepare a Submittal schedule, and submit the schedule for the City's approval. The City's approval shall not unreasonably be delayed or withheld. The Submittal schedule shall (1) be coordinated with the Contractor's schedule (2) allow the City reasonable time to review Submittals, and (3) be periodically updated to reflect the progress of the Work. The City shall review and approve or take other appropriate action on Submittals. Review of Submittals is not conducted for the purpose of determining the accuracy and completeness of other details, such as dimensions and quantities; or for substantiating instructions for installation or performance of equipment or systems; or for determining that the Submittals are in conformance with the Contract Documents, all of which remain the responsibility of the Contractor as required by the Contract Documents. The City's action will be taken in accordance with the submittal schedule approved by the City or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the City's judgment to permit adequate review.

57. CONSTRUCTION DOCUMENTS: The Construction Documents shall establish the quality levels of materials and systems required. The Contractor shall provide the Construction Documents to the City for the City's information. If the City discovers any deviations between the Construction Documents and the Contract Documents, the City shall promptly notify the Contractor of such deviations in writing. The Construction Documents shall not modify the Contract Documents unless the City and Contractor execute a Modification. The failure of the City to discover any such deviations shall not relieve the Contractor of the obligation to perform the Work in accordance with the Contract Documents.

58. PERMITS: The Contractor shall secure the building permit and any municipal, local and state permits necessary for the proper execution and completion of the Work and which are legally required. The Contractor has included the cost of the South Burlington Construction Permit in the Contract Price. The Contractor shall secure and pay for all sub-trade permits necessary for proper execution of the Work and Substantial Completion of the Project.

59. TESTS AND INSPECTIONS: Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities. Unless otherwise provided, the Owner shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the City, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals.

60. CONCEALED OR UNKNOWN CONDITIONS: If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the City before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The City shall promptly investigate such conditions and, if the City determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, shall recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the City determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the City shall promptly notify the Contractor in writing, stating the reasons.

61. HAZARDOUS MATERIALS: The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the City in writing. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the City and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor's reasonable additional costs of shut-down, delay and start-up.

62. The City shall not be responsible for materials or substances the Contractor brings to the site unless such materials or substances are required. The Contractor shall indemnify the City for the cost and expense the City incurs (1) for remediation of a material or substance the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations, except to the extent that the cost and expense are due to the City's fault or negligence.

63. If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the City shall indemnify the Contractor for all cost and expense thereby incurred.

64. TIME LIMIT ON CLAIMS: The City and Contractor shall commence all claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other, arising out of or related to the Contract within the time period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work.

65. DISPUTE RESOLUTION:

Any Claim between the City and Contractor shall be resolved in accordance with the provisions set forth in this section. For any Claim subject to, but not resolved by mediation, the method of binding dispute resolution shall be as follows:

[**X**] Litigation in a court of competent jurisdiction

66. MEDIATION: If a dispute arises out of or relates to this Agreement, or the breach thereof, and if said dispute cannot be settled through direct discussions between the parties, the parties agree to endeavor to settle the dispute by mediation as a condition precedent to litigation. Either party may commence mediation by providing to the other party a written request for mediation, setting forth the subject of the dispute and the relief requested. Mediation shall commence within thirty (30) days of notice to the other party. The parties will cooperate with one another in selecting a mediator and in scheduling the mediation proceedings. The parties covenant that they will participate in the mediation in good faith, and that they will share equally in its costs. The mediation shall be conducted in Burlington, Vermont unless another location is mutually agreed upon. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation.

Attachment C-1:
Insurance, Bonds & Indemnification

Attachment C-1
Insurance, Bonds & Indemnification

INSURANCE: Prior to beginning any work, the Contractor shall obtain the following insurance coverage from an insurance company registered and licensed to do business in the State of Vermont and having an A.M. Best insurance rating of at least A-, financial size category VII or greater (www.ambest.com). The certificate of insurance coverage shall be documented on forms acceptable to the City. Compliance with minimum limits and coverage, evidenced by a certificate of insurance showing policies and carriers that are acceptable to the City, must be received prior to the Effective Date of the Contract. If this Contract extends to more than one year, evidence of continuing coverage must be submitted to the City on an annual basis. Copies of any insurance policies may be required.

The Contractor is responsible to verify and confirm in writing to the City that: (i) Contractor shall cause each Subcontractor to purchase and maintain in full force and effect policies of insurance as specified in this exhibit, except for coverage limits, which shall be agreed upon between Owner and Contractor; (ii) all work activities related to the Contract shall meet minimum coverage and limits; and (iii) all coverage shall include adequate protection for activities involving hazardous materials.

No warranty is made that the coverage and limits listed herein are adequate to cover and protect the interests of the Contractor for the Contractor's operations. These are solely minimums that have been developed and must be met to protect the interests of the City.

A. Commercial General Liability: With respect to all operations performed by the Contractor, subcontractors, agents or workers, it is the Contractor's responsibility to ensure that commercial general liability insurance coverage, covering bodily injury and property damage, on an occurrence form, provides all major divisions of coverage including, but not limited to:

1. Premises Operations
2. Independent Contractors' Protective
3. Products and Completed Operations
4. Personal Injury Liability
5. Medical Expenses

Coverage limits shall not be less than:

1.	General Aggregate	$2,000,000
2.	Products-Completed/Operations	$2,000,000
3.	Personal & Advertising Injury	$1,000,000
4.	Each Occurrence	$1,000,000
5.	Damage to Rented Premises	$ 250,000
6.	Med. Expense (Any one person)	$ 5,000

B. Workers' Compensation/Employer Liability: With respect to all operations performed, the

Contractor shall carry workers' compensation insurance in accordance with the laws of the State of Vermont and ensure that all subcontractors carry the same workers' compensation insurance for all work performed by them under this contract. Minimum limits for Employer's Liability:

1. Bodily Injury by Accident: $500,000 each accident

2. Bodily Injury by Disease: $500,000 policy limit,
$500,000 each employee

For contracts involving work of any kind or nature on Lake Champlain, Workers' Compensation/Employer's Liability policy shall include a Maritime Endorsement (USL&H).

C. Automobile Liability: The Contractor shall carry commercial automobile liability insurance covering all motor vehicles, including owned, non-owned and hired, used in connection with the Contract. Each policy shall provide coverage with a limit not less than: $1,000,000 - Combined Single Limit for each occurrence.

D. Professional Liability/Errors & Omissions:

1. General: The Contractor shall carry appropriate professional liability insurance covering errors and omissions made during their performance of contractual duties with the following minimum limits:

   (a) $2,000,000 - Annual Aggregate/Policy Limit

   (b) $1,000,000 - Per Claim

2. Deductibles: The Contractor is responsible for any and all deductibles.

3. Coverage: The Contractor shall maintain continuous professional liability coverage for the period of the Contract and for a period of five years following substantial completion of construction.

E. Special Coverages

a. Cyber liability, including privacy liability: $1,000,000

b. Builders' Risk

The Contractor **s**hall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk "all-risk" or equivalent policy form in the amount of the initial Contract Sum. Property insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of

coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any applicable legal requirements. This insurance shall include the interests of the Owner, Contractor, Subcontractors and Sub-Subcontractors in the project as their interests may appear. If the property insurance requires deductibles, the Owner shall pay costs on paid claims not covered because of such deductibles, except to the extent that the Contractor, any direct or lower tier subcontractor, or any other party for whom the Contractor is responsible caused the loss, and to the extent this exception applies, the Contractor shall pay the deductible with its own funds outside the Contract Sum.

The City and Contractor waive all rights against each other and any of their subcontractors, sub-subcontractors, agents and employees, each of the other, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by property insurance obtained or other property insurance applicable to the Work. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

c. Pollution Liability (Contractor's) – Included or $1,000,000 Per Claim/Per Aggregate

F. Umbrella/Excess Liability:

1. $10,000,000 Each Event Limit
2. $10,000,000 General Aggregate Limit
3. Umbrella/Excess Liability is excess above Commercial General Liability, Automobile Liability, and Workers' Compensation/Employer Liability.

All policies shall be endorsed to provide the City thirty (30) days' notice of cancellation. Each policy (except workers compensation/employers' liability and errors & omissions/professional liability) shall be endorsed to name the City and its officers, employees, agents, successors, and assigns as additional insureds on a primary, non-contributory basis. Each policy (except errors & omissions/professional liability) shall be endorsed to waive subrogation against the City.

G. Payment, Performance and Warranty Bonds: The Contractor shall purchase and maintain insurance and provide bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract. Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

H. INDEMNIFICATION: Contractor shall hold harmless, indemnify, and defend the City and its officers, employees, agents, successors, and assigns (collectively, the "Indemnitees")

from and against all claims, causes of action, lawsuits, damages, liabilities, liens, penalties, fines, and costs (including attorneys' fees and costs) of every kind and nature whatsoever (collectively, "Claims") arising from or relating to this Contract or Contractor's operations hereunder, excepting any Claims arising from the City's own gross negligence or willful misconduct. Contractor's indemnification and defense obligations shall survive termination of this Contract, and Contractor shall ensure that any subcontract for work under this Contract requires the subcontractor to satisfy the same indemnification and defense obligations in favor of the Indemnitees.

Attachment C-2:
Federal Aid Contract Requirements and Byrd Anti-Lobbying Certification

Attachment C-2

Federal Aid Contract Requirements

This is a federal aid contract. The request for Proposals, Notice to Bidders, or other solicitation for this Contract may contain or incorporate by reference certain federal requirements, which are hereby incorporated by this reference as though fully set forth.

If this is a state-aid construction contract, unless otherwise indicated in, or modified by, any Contract Document, the 2024 VTrans Standard Specifications for Construction Contracts (or more current version) are incorporated herein by this reference as though fully set forth. In case of any conflict between the provisions thereof and the provisions of Attachment C-1 of this Contract regarding indemnification and defense, the more stringent requirements shall apply. The 2024 Standard Specifications are available here for reference purposes: https://vtrans.vermont.gov/highway/construct-material/construct-services/pre-contractspecifications/vermont/2024.

If this is a federal-aid construction contract, applicable provisions of form FHWA-1273 are incorporated herein by this reference as though fully set forth. The current version of this form is available here for reference purposes: https://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf.

If this is a federal-aid construction contract, it shall be governed by the requirements of Section 70914 of the Build America, Buy America Act (BABAA), under Title IX of the Infrastructure Investment and Jobs Act, Pub. L. 177-58.

If this agreement is for professional services related to a project that is subject to the Build America, Buy America Act (BABAA) requirements under Title IX of the Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. 177-58: While professional services are not subject to BABAA, the Consultant understands that they are responsible for ensuring that, absent a waiver by the appropriate federal agency, the City shall not approve for use in this project, any iron, steel, manufactured products, or construction materials unless such materials have been produced in the United States. The Consultant shall obtain all necessary compliance certificates for work that is within the Consultant's scope of work. Failure to do so shall be a default under this agreement.

Guidance on complying with BABAA is outlined by the Office of Management and Budget's Memorandum M-22-11, Initial Implementation Guidance on Application

of Buy America Preference in Federal Financial Assistance Programs for Infrastructure, April 18,2022.

The Contractor or Consultant shall comply with all applicable federal, state, and local laws, including applicable provisions of 2 C.F.R. Part 200, and in particular applicable provisions of Appendix II to Part 200, available here for reference: https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200/appendix-Appendix%20II%20to%20Part%20200.

The Contractor or Consultant shall not discriminate against any person in its use of the Grant based upon race, color, sex, gender (including pregnancy, general identity, or gender expression), sexual orientation, religion, national origin, ancestry or place of birth, mental or physical disability, age, or family status.

The Contractor or Consultant shall comply with the Equal Opportunity Clause set forth in 41 C.F.R. 60-1.4(b), available here for reference: https://www.ecfr.gov/current/title-41/subtitle-B/chapter-60/part-60-1/subpart-A/section-60-1.4#p-60-1.4(b).

Any requirement of any of the Contract Documents allowing City inspection or audit of any kind or nature relating to the Contract shall extend to any state or federal agency.

If this contract involves the procurement of telecommunications equipment or services, then the contract provisions referenced in Federal Acquisition Regulation 4.2105 are hereby incorporated into this Contract by reference as though fully set forth, and are available here for reference: https://www.acquisition.gov/far/4.2105#FAR_4_2105.

BYRD ANTI-LOBBYING AMENDMENT

Contractors who apply or bid for an award of $100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING – REQUIRED FOR CONTRACTS OVER $100,000

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Contractor, Engelberth Construction, Inc., certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.



Signature of Contractor's Authorized Official

Pierre G. LeBlanc, President
Engelberth Construction, Inc.

9-12-2024
Date

Attachment D:
Burlington Livable Wage Ordinance Certification

ATTACHMENT D

Certification of Agreement to Comply with the City of Burlington's Livable Wage Ordinance

I, Pierre G. LeBlanc, on behalf of Engelberth Construction, Inc. ("the Contractor"), in connection with a contract for construction services to be provided to the City of Burlington ("the City"), hereby certify, under oath, that the Contractor (and any of its subcontractors or subgrantees under this contract) shall comply with the City's Livable Wage Ordinance ("LWO"), B.C.O. 21-80 et seq., and that:

(1) The Contractor shall pay all "covered employees" as defined by the LWO (including covered employees of subcontractors or subgrantees) a livable wage (as determined, or adjusted, annually by the City's chief administrative officer), and shall provide required paid time off for the term of the contract *(or the duration of the contracted project)*;
   (a) Full-time employees are entitled to 12 days of paid time off per year; and
   (b) Part-time employees are entitled to 12 days of paid time off per year on a prorated basis;
   (c) For a covered employer that provides employer assisted health care, the livable wage shall be at least $17.44 per hour; and
   (d) For a covered employer that does not provide employer assisted health care, the livable wage shall be at least $18.59 per hour.

(2) The Contractor shall post a notice regarding the applicability of the LWO in the workplace or in other locations where covered employees normally work, and where such notice can be readily seen;

(3) Upon request of the City's chief administrative officer, the Contractor, for itself and, as applicable, for any of its subcontractors or subgrantees, shall provide payroll records, health insurance enrollment records, and other relevant documentation, as deemed necessary by the chief administrative officer, within ten (10) business days from receipt of the City's request;

(4) The Contractor shall cooperate in any investigation conducted pursuant to the LWO by the City's designated accountability monitors or the City's Office of City Attorney & Corporate Counsel;

(5) The Contractor shall not retaliate, nor allow any of its subcontractors or subgrantees to retaliate, against an employee or other person because such employee or person has exercised rights or is planning to exercise rights protected under the LWO, or has cooperated in an investigation conducted pursuant to the LWO;

(6) The Contractor is required to insert in all subcontracts the requirements of the LWO. The Contractor is liable for violations of the LWO committed by its covered subcontractors.

Date: September 16, 2024

By: _____
Contractor, or its duly authorized agent
Pierre G. LeBlanc, President

Subscribed and sworn to before me:

Date: September 16, 2024

_____
Notary Public

Margaret Stackman
My Commision Expires 1-31-2025
Credential # 157.0000559

Attachment E:
Burlington Outsourcing Ordinance Certification

ATTACHMENT E

Certification of Compliance with the City of Burlington's Outsourcing Ordinance

I, Pierre G. LeBlanc, on behalf of Engelberth Construction, Inc. (Contractor) and in connection with the Patrick Leahy Burlington International Airport Project NexT Project, hereby certify under oath that (1) Contractor shall comply with the City of Burlington's Outsourcing Ordinance (Ordinance §§ 21-90 – 21-93); (2) as a condition of entering into this contract or grant, Contractor confirms that the services provided under the above-referenced contract will be performed in the United States or Canada.

Dated at Colchester, Vermont this 21st day of May, 2024.

By:_____
Pierre G. LeBlanc, President

Subscribed and sworn to before me: _____
Margaret Stackman, Notary
My Commission Expires: 1/31/2025
Credential #157.0000559

Attachment F:
Burlington Union Deterrence Ordinance Certification

ATTACHMENT F

Certification of Compliance with the City of Burlington's
Union Deterrence Ordinance

I, Pierre G. LeBlanc, President, on behalf of Engelberth Construction, Inc. (Contractor) and in connection with Patrick Leahy Burlington International Airport Project NexT Project, hereby certify under oath that Engelberth Construction, Inc. (Contractor) has not advised the conduct of any illegal activity, and it does not currently, nor will it over the life of the contract advertise or provide union deterrence services in violation of the City's union deterrence ordinance.

Dated at Colchester, Vermont this 21st day of May, 2024.

By:_____
Pierre G. LeBlanc, President

Attachment G:
Construction Manager's Certificate of Insurance

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
9/19/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Acrisure New England Partners Insurance Services, LLC
10 Research Parkway, Suite 400
Wallingford, CT 06492

CONTACT NAME: Matthew Campbell
PHONE (A/C, No, Ext):
FAX (A/C, No):
E-MAIL ADDRESS: macampbell@acrisure.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : The Travelers Indemnity Company	25658
INSURER B : Continental Casualty Company	20443
INSURER C : Pacific Insurance Company, Limited	10046
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Engelberth Construction, Inc.
150 Water Tower Circle
Suite 101
Colchester, VT 05446

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT X LOC OTHER:	X	X	DT-CO-977K8687-IND-24	6/1/2024	6/1/2025	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG EMPL BENEFITS L	$ 2,000,000 $ 300,000 $ 10,000 $ 2,000,000 $ 4,000,000 $ 4,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY SCHEDULED AUTOS HIRED AUTOS ONLY NON-OWNED AUTOS ONLY	X	X	810-0N697520-24-26-G	6/1/2024	6/1/2025	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
B	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION $	X	X	6083457783	6/1/2024	6/1/2025	EACH OCCURRENCE AGGREGATE	$ 10,000,000 $ 10,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y / N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	X	UB-6K291581-24-26-G	6/1/2024	6/1/2025	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
C	Prof/Pollution Liab	X	X	04 CPI KL6795	6/1/2024	6/1/2025	OCC/AGG	2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Installation Incl Rigging Ops Limit: $1,000,000- Special Form/Replacement Cost
Rigging Ops Only(Millwright Legal Liability) Limit: $2,500,000 any one lift
Charter Oak Fire Ins Co. - Policy #QT6601D936261 Eff. 6/1/2024 to 6/1/2025

States covered under Workers' Compensation section 3.A include VT, MA, NH, NY.
Waiver Of Subrogation on the Workers Compensation policy is not available in the State of NH.

SEE ATTACHED ACORD 101

CERTIFICATE HOLDER

Burlington International Airport
1200 Airport Drive
South Burlington, VT 05403

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
Acrisure New England Partners Insurance Services, LLC	Engelberth Construction, Inc. 150 Water Tower Circle Suite 101 Colchester, VT 05446 Chittenden
POLICY NUMBER SEE PAGE 1	
CARRIER: SEE PAGE 1 — NAIC CODE: SEE P 1	EFFECTIVE DATE: SEE PAGE 1

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance

Description of Operations/Locations/Vehicles:
Contractors Professional Liability - Claims Made - Retro Date: 01/16/1997- Policy # 04 CPI KL6795
Construction Job Site Pollution - Claims Made Retro Date: 01/16/1997 - Policy # 04 CPI KL6795

Project #: 23-7748
Project Name: Burlington International Airport NexT Project

Additional insured status applies to City of Burlington and its officers, employees, agents, successors, and assigns under General Liability CG D2 46 09 19, Auto Liability CA T3 53 0215, Umbrella Liability 75504 03/15 and Pollution Liability CL 28 36 01/16 per terms and conditions of attached forms. Additional insured status applies to City of Burlington and its officers, employees, agents, successors, and assigns under General Liability CG T1 00 02 19 and CG D2 46 04 19 on a Primary Non-Contributory basis for ongoing and completed operations per terms and conditions of attached forms. Waiver of Subrogation in favor of City of Burlington under General Liability CG D3 16 02 19, Auto Liability CA T3 53 0215, Umbrella Liability CNA75504XX 03-15, Pollution Liability CL 28 24 10 16 and Workers Compensation WC 00 03 13 00 01 per terms and conditions of attached forms.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BLANKET ADDITIONAL INSURED
(Includes Products-Completed Operations If Required By Contract)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

PROVISIONS

The following is added to **SECTION II – WHO IS AN INSURED**:

Any person or organization that you agree in a written contract or agreement to include as an additional insured on this Coverage Part is an insured, but only:

a. With respect to liability for "bodily injury" or "property damage" that occurs, or for "personal injury" caused by an offense that is committed, subsequent to the signing of that contract or agreement and while that part of the contract or agreement is in effect; and

b. If, and only to the extent that, such injury or damage is caused by acts or omissions of you or your subcontractor in the performance of "your work" to which the written contract or agreement applies. Such person or organization does not qualify as an additional insured with respect to the independent acts or omissions of such person or organization.

The insurance provided to such additional insured is subject to the following provisions:

a. If the Limits of Insurance of this Coverage Part shown in the Declarations exceed the minimum limits required by the written contract or agreement, the insurance provided to the additional insured will be limited to such minimum required limits. For the purposes of determining whether this limitation applies, the minimum limits required by the written contract or agreement will be considered to include the minimum limits of any Umbrella or Excess liability coverage required for the additional insured by that written contract or agreement. This provision will not increase the limits of insurance described in Section **III** – Limits Of Insurance.

b. The insurance provided to such additional insured does not apply to:

(1) Any "bodily injury", "property damage" or "personal injury" arising out of the providing, or failure to provide, any professional architectural, engineering or surveying services, including:

(a) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders or change orders, or the preparing, approving, or failing to prepare or approve, drawings and specifications; and

(b) Supervisory, inspection, architectural or engineering activities.

(2) Any "bodily injury" or "property damage" caused by "your work" and included in the "products-completed operations hazard" unless the written contract or agreement specifically requires you to provide such coverage for that additional insured during the policy period.

c. The additional insured must comply with the following duties:

(1) Give us written notice as soon as practicable of an "occurrence" or an offense which may result in a claim. To the extent possible, such notice should include:

(a) How, when and where the "occurrence" or offense took place;

(b) The names and addresses of any injured persons and witnesses; and

(c) The nature and location of any injury or damage arising out of the "occurrence" or offense.

(2) If a claim is made or "suit" is brought against the additional insured:

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(a) Immediately record the specifics of the claim or "suit" and the date received; and

(b) Notify us as soon as practicable and see to it that we receive written notice of the claim or "suit" as soon as practicable.

(3) Immediately send us copies of all legal papers received in connection with the claim or "suit", cooperate with us in the investigation or settlement of the claim or defense against the "suit", and otherwise comply with all policy conditions.

(4) Tender the defense and indemnity of any claim or "suit" to any provider of other insurance which would cover such additional insured for a loss we cover. However, this condition does not affect whether the insurance provided to such additional insured is primary to other insurance available to such additional insured which covers that person or organization as a named insured as described in Paragraph **4.**, Other Insurance, of Section **IV** – Commercial General Liability Conditions.

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c. Method Of Sharing

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

d. Primary And Non-Contributory Insurance If Required By Written Contract

If you specifically agree in a written contract or agreement that the insurance afforded to an insured under this Coverage Part must apply on a primary basis, or a primary and non-contributory basis, this insurance is primary to other insurance that is available to such insured which covers such insured as a named insured, and we will not share with that other insurance, provided that:

(1) The "bodily injury" or "property damage" for which coverage is sought occurs; and

(2) The "personal and advertising injury" for which coverage is sought is caused by an offense that is committed;

subsequent to the signing of that contract or agreement by you.

5. Premium Audit

a. We will compute all premiums for this Coverage Part in accordance with our rules and rates.

b. Premium shown in this Coverage Part as advance premium is a deposit premium only. At the close of each audit period we will compute the earned premium for that period and send notice to the first Named Insured. The due date for audit and retrospective premiums is the date shown as the due date on the bill. If the sum of the advance and audit premiums paid for the policy period is greater than the earned premium, we will return the excess to the first Named Insured.

c. The first Named Insured must keep records of the information we need for premium computation, and send us copies at such times as we may request.

6. Representations

By accepting this policy, you agree:

a. The statements in the Declarations are accurate and complete;

b. Those statements are based upon representations you made to us; and

c. We have issued this policy in reliance upon your representations.

The unintentional omission of, or unintentional error in, any information provided by you which we relied upon in issuing this policy will not prejudice your rights under this insurance. However, this provision does not affect our right to collect additional premium or to exercise our rights of cancellation or nonrenewal in accordance with applicable insurance laws or regulations.

7. Separation Of Insureds

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this Coverage Part to the first Named Insured, this insurance applies:

a. As if each Named Insured were the only Named Insured; and

b. Separately to each insured against whom claim is made or "suit" is brought.

8. Transfer Of Rights Of Recovery Against Others To Us

If the insured has rights to recover all or part of any payment we have made under this Coverage Part, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

9. When We Do Not Renew

If we decide not to renew this Coverage Part, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date.

If notice is mailed, proof of mailing will be sufficient proof of notice.

SECTION V – DEFINITIONS

1. "Advertisement" means a notice that is broadcast or published to the general public or specific market segments about your goods, products or services for the purpose of attracting customers or supporters. For the purposes of this definition:

a. Notices that are published include material placed on the Internet or on similar electronic means of communication; and

b. Regarding websites, only that part of a website that is about your goods, products or services for the purposes of attracting customers or supporters is considered an advertisement.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BUSINESS AUTO EXTENSION ENDORSEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

GENERAL DESCRIPTION OF COVERAGE – This endorsement broadens coverage. However, coverage for any injury, damage or medical expenses described in any of the provisions of this endorsement may be excluded or limited by another endorsement to the Coverage Part, and these coverage broadening provisions do not apply to the extent that coverage is excluded or limited by such an endorsement. The following listing is a general coverage description only. Limitations and exclusions may apply to these coverages. Read all the provisions of this endorsement and the rest of your policy carefully to determine rights, duties, and what is and is not covered.

A. BROAD FORM NAMED INSURED

B. BLANKET ADDITIONAL INSURED

C. EMPLOYEE HIRED AUTO

D. EMPLOYEES AS INSURED

E. SUPPLEMENTARY PAYMENTS – INCREASED LIMITS

F. HIRED AUTO – LIMITED WORLDWIDE COVERAGE – INDEMNITY BASIS

G. WAIVER OF DEDUCTIBLE – GLASS

H. HIRED AUTO PHYSICAL DAMAGE – LOSS OF USE – INCREASED LIMIT

I. PHYSICAL DAMAGE – TRANSPORTATION EXPENSES – INCREASED LIMIT

J. PERSONAL PROPERTY

K. AIRBAGS

L. NOTICE AND KNOWLEDGE OF ACCIDENT OR LOSS

M. BLANKET WAIVER OF SUBROGATION

N. UNINTENTIONAL ERRORS OR OMISSIONS

PROVISIONS

A. BROAD FORM NAMED INSURED

The following is added to Paragraph **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

Any organization you newly acquire or form during the policy period over which you maintain 50% or more ownership interest and that is not separately insured for Business Auto Coverage. Coverage under this provision is afforded only until the 180th day after you acquire or form the organization or the end of the policy period, whichever is earlier.

B. BLANKET ADDITIONAL INSURED

The following is added to Paragraph **c.** in **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

Any person or organization who is required under a written contract or agreement between you and that person or organization, that is signed and executed by you before the "bodily injury" or "property damage" occurs and that is in effect during the policy period, to be named as an additional insured is an "insured" for Covered Autos Liability Coverage, but only for damages to which this insurance applies and only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Section **II**.

C. EMPLOYEE HIRED AUTO

1. The following is added to Paragraph **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

An "employee" of yours is an "insured" while operating an "auto" hired or rented under a contract or agreement in an "employee's" name, with your permission, while performing duties related to the conduct of your business.

2. The following replaces Paragraph **b.** in **B.5.**, **Other Insurance**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

b. For Hired Auto Physical Damage Coverage, the following are deemed to be covered "autos" you own:

(1) Any covered "auto" you lease, hire, rent or borrow; and

(2) Any covered "auto" hired or rented by your "employee" under a contract in an "employee's" name, with your

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permission, while performing duties related to the conduct of your business.

However, any "auto" that is leased, hired, rented or borrowed with a driver is not a covered "auto".

D. EMPLOYEES AS INSURED

The following is added to Paragraph **A.1.**, **Who Is An Insured**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

Any "employee" of yours is an "insured" while using a covered "auto" you don't own, hire or borrow in your business or your personal affairs.

E. SUPPLEMENTARY PAYMENTS – INCREASED LIMITS

1. The following replaces Paragraph **A.2.a.(2)**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

(2) Up to $3,000 for cost of bail bonds (including bonds for related traffic law violations) required because of an "accident" we cover. We do not have to furnish these bonds.

2. The following replaces Paragraph **A.2.a.(4)**, of **SECTION II – COVERED AUTOS LIABILITY COVERAGE**:

(4) All reasonable expenses incurred by the "insured" at our request, including actual loss of earnings up to $500 a day because of time off from work.

F. HIRED AUTO – LIMITED WORLDWIDE COVERAGE – INDEMNITY BASIS

The following replaces Subparagraph **(5)** in Paragraph **B.7.**, **Policy Period, Coverage Territory**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

(5) Anywhere in the world, except any country or jurisdiction while any trade sanction, embargo, or similar regulation imposed by the United States of America applies to and prohibits the transaction of business with or within such country or jurisdiction, for Covered Autos Liability Coverage for any covered "auto" that you lease, hire, rent or borrow without a driver for a period of 30 days or less and that is not an "auto" you lease, hire, rent or borrow from any of your "employees", partners (if you are a partnership), members (if you are a limited liability company) or members of their households.

(a) With respect to any claim made or "suit" brought outside the United States of America, the territories and possessions of the United States of America, Puerto Rico and Canada:

(i) You must arrange to defend the "insured" against, and investigate or settle any such claim or "suit" and keep us advised of all proceedings and actions.

(ii) Neither you nor any other involved "insured" will make any settlement without our consent.

(iii) We may, at our discretion, participate in defending the "insured" against, or in the settlement of, any claim or "suit".

(iv) We will reimburse the "insured" for sums that the "insured" legally must pay as damages because of "bodily injury" or "property damage" to which this insurance applies, that the "insured" pays with our consent, but only up to the limit described in Paragraph **C.**, Limits Of Insurance, of SECTION **II** – COVERED AUTOS LIABILITY COVERAGE.

(v) We will reimburse the "insured" for the reasonable expenses incurred with our consent for your investigation of such claims and your defense of the "insured" against any such "suit", but only up to and included within the limit described in Paragraph **C.**, Limits Of Insurance, of SECTION **II** – COVERED AUTOS LIABILITY COVERAGE, and not in addition to such limit. Our duty to make such payments ends when we have used up the applicable limit of insurance in payments for damages, settlements or defense expenses.

(b) This insurance is excess over any valid and collectible other insurance available to the "insured" whether primary, excess, contingent or on any other basis.

(c) This insurance is not a substitute for required or compulsory insurance in any country outside the United States, its territories and possessions, Puerto Rico and Canada.

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You agree to maintain all required or compulsory insurance in any such country up to the minimum limits required by local law. Your failure to comply with compulsory insurance requirements will not invalidate the coverage afforded by this policy, but we will only be liable to the same extent we would have been liable had you complied with the compulsory insurance requirements.

(d) It is understood that we are not an admitted or authorized insurer outside the United States of America, its territories and possessions, Puerto Rico and Canada. We assume no responsibility for the furnishing of certificates of insurance, or for compliance in any way with the laws of other countries relating to insurance.

G. WAIVER OF DEDUCTIBLE – GLASS

The following is added to Paragraph **D.**, **Deductible**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

No deductible for a covered "auto" will apply to glass damage if the glass is repaired rather than replaced.

H. HIRED AUTO PHYSICAL DAMAGE – LOSS OF USE – INCREASED LIMIT

The following replaces the last sentence of Paragraph **A.4.b.**, **Loss Of Use Expenses**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

However, the most we will pay for any expenses for loss of use is $65 per day, to a maximum of $750 for any one "accident".

I. PHYSICAL DAMAGE – TRANSPORTATION EXPENSES – INCREASED LIMIT

The following replaces the first sentence in Paragraph **A.4.a.**, **Transportation Expenses**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

We will pay up to $50 per day to a maximum of $1,500 for temporary transportation expense incurred by you because of the total theft of a covered "auto" of the private passenger type.

J. PERSONAL PROPERTY

The following is added to Paragraph **A.4.**, **Coverage Extensions**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

Personal Property

We will pay up to $400 for "loss" to wearing apparel and other personal property which is:

(1) Owned by an "insured"; and

(2) In or on your covered "auto".

This coverage applies only in the event of a total theft of your covered "auto".

No deductibles apply to this Personal Property coverage.

K. AIRBAGS

The following is added to Paragraph **B.3.**, **Exclusions**, of **SECTION III – PHYSICAL DAMAGE COVERAGE**:

Exclusion **3.a.** does not apply to "loss" to one or more airbags in a covered "auto" you own that inflate due to a cause other than a cause of "loss" set forth in Paragraphs **A.1.b.** and **A.1.c.**, but only:

a. If that "auto" is a covered "auto" for Comprehensive Coverage under this policy;

b. The airbags are not covered under any warranty; and

c. The airbags were not intentionally inflated.

We will pay up to a maximum of $1,000 for any one "loss".

L. NOTICE AND KNOWLEDGE OF ACCIDENT OR LOSS

The following is added to Paragraph **A.2.a.**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

Your duty to give us or our authorized representative prompt notice of the "accident" or "loss" applies only when the "accident" or "loss" is known to:

(a) You (if you are an individual);

(b) A partner (if you are a partnership);

(c) A member (if you are a limited liability company);

(d) An executive officer, director or insurance manager (if you are a corporation or other organization); or

(e) Any "employee" authorized by you to give notice of the "accident" or "loss".

M. BLANKET WAIVER OF SUBROGATION

The following replaces Paragraph **A.5.**, **Transfer Of Rights Of Recovery Against Others To Us**, of **SECTION IV – BUSINESS AUTO CONDITIONS** :

5. Transfer Of Rights Of Recovery Against Others To Us

We waive any right of recovery we may have against any person or organization to the extent required of you by a written contract signed and executed prior to any "accident" or "loss", provided that the "accident" or "loss" arises out of operations contemplated by

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such contract. The waiver applies only to the person or organization designated in such contract.

N. UNINTENTIONAL ERRORS OR OMISSIONS

The following is added to Paragraph **B.2.**, **Concealment, Misrepresentation, Or Fraud**, of **SECTION IV – BUSINESS AUTO CONDITIONS**:

The unintentional omission of, or unintentional error in, any information given by you shall not prejudice your rights under this insurance. However this provision does not affect our right to collect additional premium or exercise our right of cancellation or non-renewal.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

XTEND ENDORSEMENT FOR CONTRACTORS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

GENERAL DESCRIPTION OF COVERAGE – This endorsement broadens coverage. However, coverage for any injury, damage or medical expenses described in any of the provisions of this endorsement may be excluded or limited by another endorsement to this Coverage Part, and these coverage broadening provisions do not apply to the extent that coverage is excluded or limited by such an endorsement. The following listing is a general coverage description only. Read all the provisions of this endorsement and the rest of your policy carefully to determine rights, duties, and what is and is not covered.

A. Who Is An Insured – Unnamed Subsidiaries

B. Blanket Additional Insured – Governmental Entities – Permits Or Authorizations Relating To Operations

C. Incidental Medical Malpractice

D. Blanket Waiver Of Subrogation

E. Contractual Liability – Railroads

F. Damage To Premises Rented To You

PROVISIONS

A. WHO IS AN INSURED – UNNAMED SUBSIDIARIES

The following is added to **SECTION II – WHO IS AN INSURED**:

Any of your subsidiaries, other than a partnership, joint venture or limited liability company, that is not shown as a Named Insured in the Declarations is a Named Insured if:

a. You are the sole owner of, or maintain an ownership interest of more than 50% in, such subsidiary on the first day of the policy period; and

b. Such subsidiary is not an insured under similar other insurance.

No such subsidiary is an insured for "bodily injury" or "property damage" that occurred, or "personal and advertising injury" caused by an offense committed:

a. Before you maintained an ownership interest of more than 50% in such subsidiary; or

b. After the date, if any, during the policy period that you no longer maintain an ownership interest of more than 50% in such subsidiary.

For purposes of Paragraph **1.** of Section **II** – Who Is An Insured, each such subsidiary will be deemed to be designated in the Declarations as:

a. An organization other than a partnership, joint venture or limited liability company; or

b. A trust;

as indicated in its name or the documents that govern its structure.

B. BLANKET ADDITIONAL INSURED – GOVERNMENTAL ENTITIES – PERMITS OR AUTHORIZATIONS RELATING TO OPERATIONS

The following is added to **SECTION II – WHO IS AN INSURED**:

Any governmental entity that has issued a permit or authorization with respect to operations performed by you or on your behalf and that you are required by any ordinance, law, building code or written contract or agreement to include as an additional insured on this Coverage Part is an insured, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" arising out of such operations.

The insurance provided to such governmental entity does not apply to:

a. Any "bodily injury", "property damage" or "personal and advertising injury" arising out of operations performed for the governmental entity; or

b. Any "bodily injury" or "property damage" included in the "products-completed operations hazard".

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C. INCIDENTAL MEDICAL MALPRACTICE

1. The following replaces Paragraph **b.** of the definition of "occurrence" in the **DEFINITIONS** Section:

b. An act or omission committed in providing or failing to provide "incidental medical services", first aid or "Good Samaritan services" to a person, unless you are in the business or occupation of providing professional health care services.

2. The following replaces the last paragraph of Paragraph **2.a.(1)** of **SECTION II – WHO IS AN INSURED**:

Unless you are in the business or occupation of providing professional health care services, Paragraphs **(1)(a)**, **(b)**, **(c)** and **(d)** above do not apply to "bodily injury" arising out of providing or failing to provide:

(a) "Incidental medical services" by any of your "employees" who is a nurse, nurse assistant, emergency medical technician or paramedic; or

(b) First aid or "Good Samaritan services" by any of your "employees" or "volunteer workers", other than an employed or volunteer doctor. Any such "employees" or "volunteer workers" providing or failing to provide first aid or "Good Samaritan services" during their work hours for you will be deemed to be acting within the scope of their employment by you or performing duties related to the conduct of your business.

3. The following replaces the last sentence of Paragraph **5.** of **SECTION III – LIMITS OF INSURANCE**:

For the purposes of determining the applicable Each Occurrence Limit, all related acts or omissions committed in providing or failing to provide "incidental medical services", first aid or "Good Samaritan services" to any one person will be deemed to be one "occurrence".

4. The following exclusion is added to Paragraph **2.**, **Exclusions**, of **SECTION I – COVERAGES – COVERAGE A – BODILY INJURY AND PROPERTY DAMAGE LIABILITY**:

Sale Of Pharmaceuticals

"Bodily injury" or "property damage" arising out of the violation of a penal statute or ordinance relating to the sale of pharmaceuticals committed by, or with the knowledge or consent of, the insured.

5. The following is added to the **DEFINITIONS** Section:

"Incidental medical services" means:

a. Medical, surgical, dental, laboratory, x-ray or nursing service or treatment, advice or instruction, or the related furnishing of food or beverages; or

b. The furnishing or dispensing of drugs or medical, dental, or surgical supplies or appliances.

6. The following is added to Paragraph **4.b.**, **Excess Insurance**, of **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**:

This insurance is excess over any valid and collectible other insurance, whether primary, excess, contingent or on any other basis, that is available to any of your "employees" for "bodily injury" that arises out of providing or failing to provide "incidental medical services" to any person to the extent not subject to Paragraph **2.a.(1)** of Section **II** – Who Is An Insured.

D. BLANKET WAIVER OF SUBROGATION

The following is added to Paragraph **8.**, **Transfer Of Rights Of Recovery Against Others To Us**, of **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**:

If the insured has agreed in a contract or agreement to waive that insured's right of recovery against any person or organization, we waive our right of recovery against such person or organization, but only for payments we make because of:

a. "Bodily injury" or "property damage" that occurs; or

b. "Personal and advertising injury" caused by an offense that is committed;

subsequent to the execution of the contract or agreement.

E. CONTRACTUAL LIABILITY – RAILROADS

1. The following replaces Paragraph **c.** of the definition of "insured contract" in the **DEFINITIONS** Section:

c. Any easement or license agreement;

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2. Paragraph **f.(1)** of the definition of "insured contract" in the **DEFINITIONS** Section is deleted.

F. DAMAGE TO PREMISES RENTED TO YOU

The following replaces the definition of "premises damage" in the **DEFINITIONS** Section:

"Premises damage" means "property damage" to:

a. Any premises while rented to you or temporarily occupied by you with permission of the owner; or

b. The contents of any premises while such premises is rented to you, if you rent such premises for a period of seven or fewer consecutive days.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PRIMARY AND NON-CONTRIBUTORY

This endorsement modifies insurance provided under the following:

CONTRACTORS PROFESSIONAL AND PROTECTIVE INDEMNITY PLUS (CPPI+)

SECTION V. - CONDITION Other Insurance Item **18 c.** is deleted and replaced with the following:

c. The coverage afforded under this Policy for an "additional insured" is primary and non-contributory to any other insurance available to such "additional insured" when required by written contract or written agreement between the "insured" and the "additional insured" executed prior to a "claim" or "pollution incident" involving such "additional insured". However, to the extent that the "additional insured" is named as an additional insured on another insurance policy that also provides primary and non-contributory coverage, we shall share with that other insurance as follows:

1. If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach, each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

2. If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF SUBROGATION

This endorsement modifies insurance provided under the following:

CONTRACTORS PROFESSIONAL AND PROTECTIVE INDEMNITY PLUS (CPPI+)

SECTION V - CONDITIONS, paragraph **11. Subrogation** is deleted and replaced with the following:

11. Subrogation

In the event of any payment under this Policy, an "insured" will execute and deliver all requested instruments and papers to us and take whatever other actions are reasonably necessary and requested by us to exercise our rights of subrogation. An "insured" will do nothing to waive or prejudice our rights of subrogation. We will have priority over an "insured" in allocation of any recovery, and any amounts recovered in excess of our total payment and our cost of recovery will be paid to the "insured". The Policy Aggregate Limit of Insurance will be reinstated by the amount recovered by us, less our cost of recovery.

We waive our rights of subrogation under this Policy only to the extent such a waiver is required by written contract or written agreement executed by an "insured" prior to a "claim", "protective indemnity claim", "pollution incident", "professional incident", or "protective incident".

All other terms and conditions remain unchanged.

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or organization which may be liable to the **Insured** because of injury or damage to which this insurance may also apply; and

vi. will not voluntarily make a payment, except at its own cost, assume any obligation, or incur any expense, other than for first aid, without the Insurer's prior consent.

3. Cooperation

With respect to both **Coverage A - Excess Follow Form Liability** and **Coverage B – Umbrella Liability**, the **Named Insured** will cooperate with the Insurer in addressing all **claims** required to be reported to the Insurer in accordance with this paragraph **O. Notice of Claims/Crisis Management Event/Covered Accident,** and refuse, except solely at its own cost, to voluntarily, without the Insurer's approval, make any payment, admit liability, assume any obligation or incur any expense related thereto.

P. Notices

Any notices required to be given by an **Insured** shall be submitted in writing to the Insurer at the address set forth in the Declarations of this Policy.

Q. Other Insurance

If the **Insured** is entitled to be indemnified or otherwise insured in whole or in part for any **damages** or **defense costs** by any valid and collectible **other insurance** for which the **Insured** otherwise would have been indemnified or otherwise insured in whole or in part by this Policy, the limits of insurance specified in the Declarations of this Policy shall apply in excess of, and shall not contribute to a **claim**, **incident** or such event covered by such **other insurance.**

With respect to **Coverage A – Excess Follow Form Liability** only, if:

a. the **Named Insured** has agreed in writing in a contract or agreement with a person or entity that this insurance would be primary and would not seek contribution from any other insurance available;

b. **Underlying Insurance** includes that person or entity as an additional insured; and

c. **Underlying Insurance** provides coverage on a primary and noncontributory basis as respects that person or entity;

then this insurance is primary to and will not seek contribution from any insurance policy where that person or entity is a named insured.

R. Premium

All premium charges under this Policy will be computed according to the Insurer's rules and rating plans that apply at the inception of the current **policy period**. Premium charges may be paid to the Insurer or its authorized representative.

S. In Rem Actions

A quasi *in rem* action against any vessel owned or operated by or for a **Named Insured**, or chartered by or for a **Named Insured**, will be treated in the same manner as though the action were *in personam* against the **Named Insured.**

T. Separation of Insureds

Except with respect to the limits of insurance, and any rights or duties specifically assigned in this Policy to the **First Named Insured**, this insurance applies:

1. as if each **Named Insured** were the only **Named Insured**; and

2. separately to each **Insured** against whom a **claim** is made.

U. Transfer of Interest

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Assignment of interest under this policy shall not bind the Insurer unless its consent is endorsed hereon.

V. Unintentional Omission

Based on Insurer's reliance on the **Named Insured's** representations as to existing hazards, if the **Named Insured** should unintentionally fail to disclose all such hazards at the effective date of this Policy, the Insurer will not deny coverage under this Policy because of such failure.

W. Waiver of Rights of Recovery

The Insurer waives any right of recovery it may have against any person or organization because of payments the Insurer makes under this Policy if the **Named Insured** has agreed in writing to waive such rights of recovery in a contract or agreement, and only if the contract or agreement:

1. is in effect or becomes effective during the **policy period**; and
2. was executed prior to loss**.**

VII. DEFINITIONS

For purposes of this Policy, words in bold face type, whether expressed in the singular or the plural, have the meaning set forth below.

Advertisement means a notice that is broadcast or published to the general public or specific market segments about the **Named Insured's** goods, products or services for the purpose of attracting customers or supporters. For the purposes of this definition:

A. notices that are published include material placed on the Internet or on similar electronic means of communication; and

B. regarding web-sites, only that part of a web-site that is about the **Named Insured's** goods, products or services for the purposes of attracting customers or supporters is considered an **advertisement.**

Aircraft means any machine or device that is capable of atmospheric flight.

Arbitration proceeding means a formal alternative dispute resolution proceeding or administrative hearing to which an **Insured** is required to submit by statute or court rule or to which an **Insured** has submitted with the Insurer's consent.

Asbestos means the mineral in any form whether or not the asbestos was at any time airborne as a fiber, particle or dust, contained in or formed a part of a product, structure or other real or personal property, carried on clothing, inhaled or ingested, or transmitted by any other means.

Authorized Insured means any **executive officer**, member of the **Named Insured's** risk management or in-house general counsel's office, or any **employee** authorized by the **Named Insured** to give or receive notice of a **claim.**

Auto means:

A. a land motor vehicle, trailer or semitrailer designed for travel on public roads, including any attached machinery or equipment; or

B. any other land vehicle that is subject to a compulsory or financial responsibility law or other motor vehicle insurance law where it is licensed or principally garaged.

However, **auto** does not include **mobile equipment.**

Bodily injury means bodily injury, sickness or disease sustained by a person, including death, humiliation, shock, mental anguish or mental injury sustained by that person at any time which results as a consequence of the bodily injury, sickness or disease.

Claim means a:

A. suit; or

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TRAVELERS

ONE TOWER SQUARE
HARTFORD CT 06183

WORKERS COMPENSATION
AND
EMPLOYERS LIABILITY POLICY

ENDORSEMENT WC 00 03 13 (00) - 001

POLICY NUMBER:

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit any one not named in the Schedule.

SCHEDULE

DESIGNATED PERSON:

DESIGNATED ORGANIZATION:

ANY PERSON OR ORGANIZATION FOR WHICH THE INSURED HAS AGREED BY WRITTEN CONTRACT EXECUTED PRIOR TO LOSS TO FURNISH THIS WAIVER.

DATE OF ISSUE: ST ASSIGN: PAGE 1 OF 1

c. a limited liability company, the **Named Insured** is an **Insured**. The **Named Insured's** members are also **Insureds**, but only with respect to the conduct of the **Named Insured's** business. The **Named Insured's** managers are **Insureds**, but only with respect to their duties as the **Named Insured's** managers.

d. an organization other than a partnership, joint venture or limited liability company, the **Named Insured** is an **Insured**. The **Named Insured's executive officers** and directors are **Insureds**, but only with respect to their duties as the **Named Insured's** officers or directors. The **Named Insured's** stockholders are also **Insureds**, but only with respect to their liability as stockholders.

e. a trust, the **Named Insured** is an **Insured**. The **Named Insured's** trustees are also **Insureds**, but only with respect to their duties as trustees.

2. Each of the following are also **Insureds**:

a. The **Named Insured's volunteer workers** but only while performing duties related to the conduct of the **Named Insured's** business.

b. The **Named Insured's employees**, other than either the **Named Insured's executive officers** (if the **Named Insured** is an organization other than a partnership, joint venture or limited liability company) or the **Named Insured's** managers (if the **Named Insured** is a limited liability company), but only for acts within the scope of their employment by the **Named Insured** or while performing duties related to the conduct of the **Named Insured's** business.

However, none of these **employees** or **volunteer workers** are **Insureds** for:

i. **bodily injury** or **personal and advertising injury**:

(a) to the **Named Insured**, to the **Named Insured's** partners or members (if the **Named Insured** is a partnership or joint venture), to the **Named Insured's** members (if the **Named Insured** is a limited liability company), to a co-**employee** while in the course of his or her employment or performing duties related to the conduct of the **Named Insured's** business, or to the **Named Insured's** other **volunteer workers** while performing duties related to the conduct of the **Named Insured's** business;

(b) to the **spouse**, child, parent, brother or sister of that co-**employee** or **volunteer worker** as a consequence of paragraph **(i)(a)** above;

(c) for which there is any obligation to share damages with or repay someone else who must pay damages because of the injury described in paragraph **i. (a)** or **(b)** above; or

(d) arising out of his or her providing or failing to provide professional health care services.

ii. **property damage** to property:

(a) owned, occupied or used by;

(b) rented to, in the care, custody or control of, or over which physical control is being exercised for any purpose by;

the **Named Insured**, any of the **Named Insured's employees**, **volunteer workers**, any partner or member (if the **Named Insured** is a partnership or joint venture), or any member (if the **Named Insured** is a limited liability company).

C. With respect to the **Coverage C - Crisis Event Management** and the **Coverage D - Key Employee**, the **Named Insured** is the **Insured.**

V. LIMITS OF INSURANCE

A. Multiple Insureds, claims, claimants

The limits of insurance shown in the Declarations of this Policy and the rules below fix the most the

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ATTACHMENT H
UPDATED EXECUTIVE ESTIMATE PACKAGE

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT

PROJECT NEXT

SOUTH BURLINGTON, VERMONT

ESTIMATE UPDATE

Project #23-7748

Revised

May 22, 2024

Engelberth construction, inc.

Colchester, VT | Concord, NH

www.engelberth.com

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PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT

PROJECT NEXT

SOUTH BURLINGTON, VERMONT

Engelberth Construction has prepared an 80CD estimate update for the proposed Burlington International Airport (BTV) Project NexT located in South Burlington, Vermont. The work includes a new three level 67,696 sf addition, four renewed passenger boarding bridges; 20,000 sf of renovations to the existing; 50 new geothermal wells, associated sitework, airport furniture, the permit, and the required landscape allowance. The estimated construction cost is approximately $58.1M. The following is a breakdown between the various program components:

			Total Cost*
01 Addition - Apron & Concourse Level	Base Project	$	40,303,180
02a Addition - Admin Level Core & Shell	Base Project	$	1,656,845
05 Geothermal Wells	Base Project	$	2,240,650
04 Sitework	Base Project	$	2,493,117
01a Addition - Airport Furniture		$	740,916
07 Landscape Requirement		$	496,817
Sub Total - Base Project Value		**$**	**47,931,525**
Project Alternates			
02b Addition - Admin Level - Fitup		$	1,763,178
03 Addition - Jet Bridges		$	4,378,522
04a Sitework - Aprons		$	1,950,238
06 Renovation Work		$	2,037,490
Project Total with all Alternates		**$**	**58,060,953**

* Includes all General Conditions, Contingencies, Insurances, and Fee's

The estimate was developed by our in-house estimating team of sitework, architectural/structural, and MEP specialists. A detailed estimate report is provided which identifies material and system takeoff information and associated pricing. The construction value is based on a combination of subcontractor pricing and estimated values and does not include non-construction related items such as design services, zoning permit fees, and owner contingencies. Some assumptions were necessary to prepare the cost estimate at this phase of design and are provided as clarifications for further review by BTV and the design team to assist in understanding our interpretation of the work.

A project timeline has been created to reflect remaining preconstruction and construction activities as we understand them to be:

80CD Estimate Update..... May 10, 2024
Finalize GMP..... Upon Completion of CD documents
Construction Duration..... August 2, 2024 – April 23, 2026

The estimate is based on the 80% Construction Documents dated April 5, 2024, with subsequent updates, as issued by Jacobs.

The estimate was prepared with 2024/2025 pricing; construction delayed past the timeline identified in the Construction Schedule is subject to 5% – 6% escalation per year.

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT
PROJECT NEXT
SOUTH BURLINGTON, VT

The estimate is based on the documents as enumerated in Section #5 and the following assumptions and clarifications:

Division 1 – General Requirements

1. General conditions are based on the enclosed schedule.
2. A 3% design and estimating contingency is included.
3. A payment and performance bond is included.
4. A South Burlington Fire Department construction permit is included.
5. Builder's Risk insurance is included.
6. OCP insurance is included.
7. The Gate Guard per note 4 on C1.101 is not included. Utilization of the access control currently in place is assumed.
8. All access to the building site will be by means of a non-secure corridor and barricaded from the secure airside via fencing, because of this badged escorts are not included or understood to be required. See the ECI logistics plan for further information.
9. Work within the existing terminal on the secure side will be by badged workers.
10. The following are provided by the owner:
    a. Engineer and architect services.
    b. All testing services.
    c. Planning, Zoning and ACT 250 permits.
    d. Initial site survey control.
    e. Hazardous waste testing and remediation.

Division 2 – Existing Conditions

1. Remediation of any hazardous materials in the existing building or in the soils is not included.
2. Provide demolition as shown in the drawings in the existing space, including ceiling and floor demolition.
3. All site and utility demolition waste is salvaged, recycled or removed and disposed of at an approved permitted waste facility.

Division 3 – Concrete

1. Any hardeners, densifiers or other specialty concrete additives such as Barrier One are not included.
2. The Polished Concrete scope of work includes the following:
    a. Route out all defined joints & fill with Metzger McGuire Edge-Pro 80 Joint Filler.
    b. Diamond Grind the floor using 60/80 steel grit diamonds.

   c. Diamond Grind the floor using 50 grit resin diamonds.
   d. Diamond Grind the floor using 100 resin diamond pucks.
   e. Apply RioFlect Densifier to floor surface, allow material to react to the concrete and to penetrate into the floor.
   f. Diamond Grind the floor using 200 resin diamond pucks.
   g. Diamond Grind the floor using 400 resin diamond pucks.
   h. Diamond Grind the floor using 800 resin diamond pucks.
   i. Apply RioFlect Guard.
   j. Burnish the floor using diamond coated pad.
2. Sika 1/8" Urethan mortar without a cove base is included for the Resinous Flooring RF3.

Division 4 – Masonry

1. Wall reinforcement includes #5 bars 2'8" O.C. grouted in 12" CMU walls and 8" CMU walls.

Division 5 – Metals

1. Specialty coatings on structural or miscellaneous steel are not included. Steel is either bare or galvanized, whichever is indicated on the drawings.

Division 7 – Thermal and Moisture Protection

1. Furnish and apply fluid-applied air and vapor barrier CCW Barriseal at the new addition exterior walls behind the metal panels, and CMU veneer with CCW 705 self-adhering sheet membrane at the perimeter of the rough openings.
2. Furnish and apply a fluid-applied foundation waterproofing system, including CCW Barricoat at the exterior of the new below grade perimeter foundation walls (not at new walls being built against existing walls along grid lines 7.2, S4, & CC) from grade down to bottom of footings with 2" rigid insulation from grade down to top of footings.
3. Furnish and apply fluid-applied elevator pit waterproofing (1 Elevator – 1 Pit), including CCW Barricoat at the exterior of the elevator pit foundation walls from top of walls down to bottom of footings with 2" rigid insulation from top of walls down to top of footings.
4. Membrane Roofing assemblies include the following scope of work. (Excludes mineral wool roof insulation):
   a. Adhere Elevate V-force 40 mil SA vapor barrier at the following locations:
      i. Cross laminated wood deck substrate.
      ii. Admin level base walls, max 1.5'.
      iii. Perimeter parapets, inside face only.
   b. Mechanically fasten R-19 polyisocyanurate insulation with ½" gypsum cover board at the following locations:
      i. Admin level base walls, max 1.5'.
      ii. Perimeter parapets, inside face only.
   c. Adhere 20 psi (Type II, Class 1) ¼" tapered polyisocyanurate insulation system using low-rise foam adhesives.
      i. Adhesive ribbons are spaced per manufacturer uplift requirements 12"- 6"- 4".
      ii. Minimum thickness, 3.5" at roof drains; maximum thickness, 14.5".
      iii. Combined R-value to equal average R-45 per VT state efficiency code.
   d. Adhere ½" DensDeck Prime cover board using low-rise foam adhesives.
      i. Adhesive ribbons are spaced per manufacturer uplift requirements. 12"- 6"- 4".

   e. Adhere Elevate 60 mil TPO using LVOC adhesives. All seams and flashings are hot air welded.
   f. Shop fabricated ES-1 compliant, 24ga Kynar finished metal flashings.
   g. Tile-tech porcelain pavers with 2" – 22" leveling pedestal system.
   h. A Carlisle SynTec Systems manufacturer/warranty.
   i. This pricing includes mechanically attached insulation systems only. Adhesive attachment is not permitted by warranty due to uplift requirements.
   j. Insulation systems meet average R-45. The thickness is min. 7" and max. 18".
5. Standing Seam Roof systems include the following. (Excludes mineral wool roof insulation).
   a. Adhere Elevate V-force 40 mil SA vapor barrier on cross laminated sloped wood deck.
      i. At perimeter, install roof blocking per detail on A541-D1 & D3.
      ii. Loose lay 7.8" of flat 20 psi (Type II, Class 1) polyisocyanurate insulation. R-value to equal min. R-45 per VT state efficiency code.
   b. Fastening rates meet manufacturer uplift requirements, 1 fastener per 2 sf.
   c. SA bitumen underlayments over the entire roof area.
   d. Mechanically-fasten synthetic underlayments over the entire roof area.
   e. 24ga Kynar finished Elevate UC-3 standing seam metal roof system:
      i. 20" wide panel profile, with 1.5" double-lock seams.
      ii. 304 stainless steel expansion cleats spaced 12" o.c.
      iii. Manufacturer premium color.
   f. Shop-fabricated 24ga Kynar finished ES-1 compliant metal systems at perimeter.
   g. Guardian horizontal lifeline system (180 LF) with 7 anchor posts.
   h. Manufacturer to remain UnaClad (Elevate Building Products).
   i. The insulation system meets minimum R-45. The thickness is 12".
6. The applied fireproofing material is Cafco Blaze Shield II, a regular density fireproof material manufactured by Isolatek International.
   a. Floor beams, columns, braces - 2 hours.
   b. Roof beams and deck - 1 hour.

Division 8 – Openings and Glass & Glazing

1. Furnish and install Albany Door Systems Model Ultra Tough 1500 rubber door in lieu of the specified Rytec Fast Seal doors.

Division 9 – Finishes

1. Painting of exposed or fireproofed structural steel ceilings is not included.
2. Furnish and install a maple slat wood ceiling with slats 5 ¼" x ¾" thick with a ¾" reveal between each slat. This is the same system as the TIP project. Any seismic above seismic C is not included.
3. 18ga sheet metal in walls 9' AFF at the Electrical and Communication rooms is not included.
4. Wall Panels WP-1 thru WP-5 and MET-1 thru MET-4 are carried by allowance as final product information was not available in time for final pricing.

Division 10 – Specialties

1. Furnish and install interior signage.
2. Exterior signage is not included.
3. Dynamic signage, information kiosks, and electric signage are not included.
4. Furnish and install a Flare-ST-H See Through 70" fireplace with 24" High Glass.

Division 11 – Equipment

1. Residential appliances are not included.

Division 12 – Furnishings

1. Window treatments are not included.
2. Furnish and install airport furniture for Hold Rooms 230, 231, 232, 233, 234 and 235 as Arconas Flyaway series with Grad A Esprit Vinyl Upholstery with laminate table tops. All other furniture and seating is not included.

Division 14 – Conveying Equipment

1. Furnish and install one Otis Gen3 Edge elevator system with 5,000 lb capacity, 200 fpm, machine roomless with machine at top of hoistway, four stops, and three front and two rear openings.

Division 21 – Fire Suppression

1. The water entrance serves both fire protection and domestic water functions. Furnish and install backflow prevention on each branch for protection against system contamination.
2. A fire pump is not anticipated or included for the fire protection system.
3. Seismic restraints are not included.

Division 22 – Plumbing

1. Furnish and install electronic trap primers with outlet manifolds.

Division 23 – Heating, Ventilating, and Air Conditioning

1. All fan-coil units are two-pipe configuration with hot water heating or chilled water cooling via six-way control valve.

Division 25 – Integrated Automation

1. Connect the North Terminal expansion to the existing controls network via a new building controller. Modify the controls front end appropriately to accommodate the new controls work.
2. Individual equipment controllers are furnished and installed by the controls contractor; new equipment is purchased without factory controls.
3. The communication protocol for the new control work is BACnet/IP or a similar IP-based network compatible with the existing facility.

Division 26 – Electrical

1. Relocate the site electrical utilities.
2. The pad-mounted transformer is furnished and installed by the utility company.
3. A Budget for Burlington Electric Department fees are included.
4. Ice melt is included for the gutter only, ice melt for pitched roofs is not included.

5. Lightning protection includes complete inspection and re-certification of the system in pricing. If corrections are required, an itemized list of requirements will be provided.
6. Light fixture type AA1 is wired to panel EH1L1.
7. Assumptions are made for lighting control symbols not shown on the symbol legend with an attempt to meet the lighting control matrix on E-702.
8. Assume emergency lighting is provided via an emergency circuit. Emergency drivers are not included.
9. Utility back charges are not included.
10. Not all lighting selections meet BABA lighting requirements. Waivers or alternate fixtures may be required.
11. The generator does not meet BABA requirements.
12. Distribution equipment does not meet BABA requirements.

Division 27 – Communications

1. The ladder rack called out by sheet keynote 1 on T-201B is included as 18" to match the ladder rack shown on T-201A.

Division 28 – Electronic Safety and Security

1. Furnish and install the cable for the security system equipment.
2. Installation of the security system is included, refer to the Allowances for equipment furnishing.
3. Simplex fire alarm costs are not included.
4. Security pathways are 1" per TY001 in lieu of ¾"C listed on T001.
5. Mass Notification in Specification Section 284700 is not included.

Division 31 – Earthwork

1. Ledge drilling, blasting and removal (and replacement) of boulders greater than one cy are not anticipated or included.
2. Excavation, removal, disposal, and replacement of unsuitable materials is not anticipated or included.
3. Excavation, removal, and disposal of hazardous materials or soils is not anticipated or included.
4. With the exception of geothermal well operations, only 'normal' dewatering is provided. A high water table is not anticipated.
5. Sheeting, shoring, or bracing is not anticipated or included.

Division 32 – Exterior Improvements

1. Assume the generator pad is 12" thick concrete with 12" of crushed aggregate base.
2. Assume sidewalks are 5" thick with 12" of crushed aggregate base.
3. A temporary 8' high chainlink security fence with barbed wire along the truck access route from the end of Airport Drive to the construction site is included. The fence is installed with driven posts and removed after construction is complete.
4. The Landscaping scope of work is carried by an allowance as required by the City of South Burlington permit requirements for landscape improvements. The allowance does not reflect a specific scope of work. (See Project Allowances).

Division 33 – Utilities

1. 50 closed loop geothermal wells drilled to a depth of 460' are included.
2. Relocation of the existing electrical cabinet at the northeast corner of the new North Terminal building is not included. No information is provided on the plans.

Division 34 – Transportation

1. Remove and dispose of the existing passenger boarding bridges from gates 3, 4, 5, and 6.
2. Furnish and install four renewed passenger boarding bridges, including:
    a. Gates N1 and N2: Three Tunnel JBY Jetway Model A3-68/141.
    b. Gates N3 and N4: Three Tunnel JBY Jetway Model A3-64/131.
    c. Four 90KVA 400Hz + 28 VDC combination solid state ground power units.
    d. Four 60-ton preconditioned air units (PCA).
    e. A 12-month warranty.

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT
PROJECT NEXT
SOUTH BURLINGTON, VT

Allowances include the cost of labor, material, equipment and subcontract costs; unless otherwise noted. Allowances do not include overhead and profit, insurance, or bond costs.

The estimate includes the following allowances:

Division 1 – General Requirements

1. Allow $236,936 for winter conditions and snow removal.
2. Allow $34,800 for temporary electrical usage.
3. Allow $496,817 for landscaping to satisfy the City of South Burlington landscape allocation requirement.

Division 26 – Electrical

1. Allow $250,000 for relocation buildout of IDF room 290.

Division 27 – Communications

1. Allow $16,000 to furnish and install PA equipment, pending specifications.

Division 28 – Electronic Safety and Security

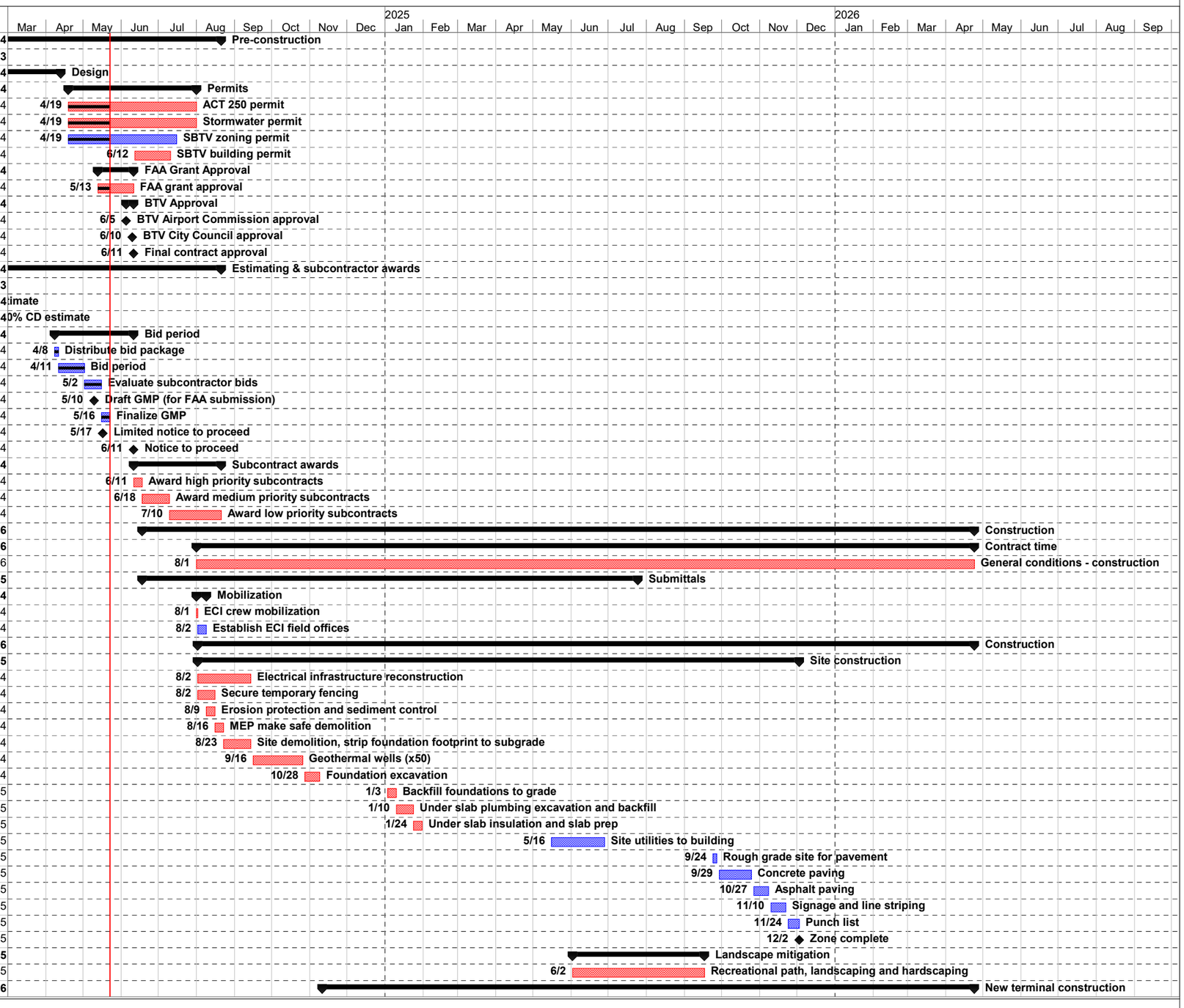
1. Allow $480,515 to furnish the security system equipment, pending specifications.

Engelberth construction, inc.

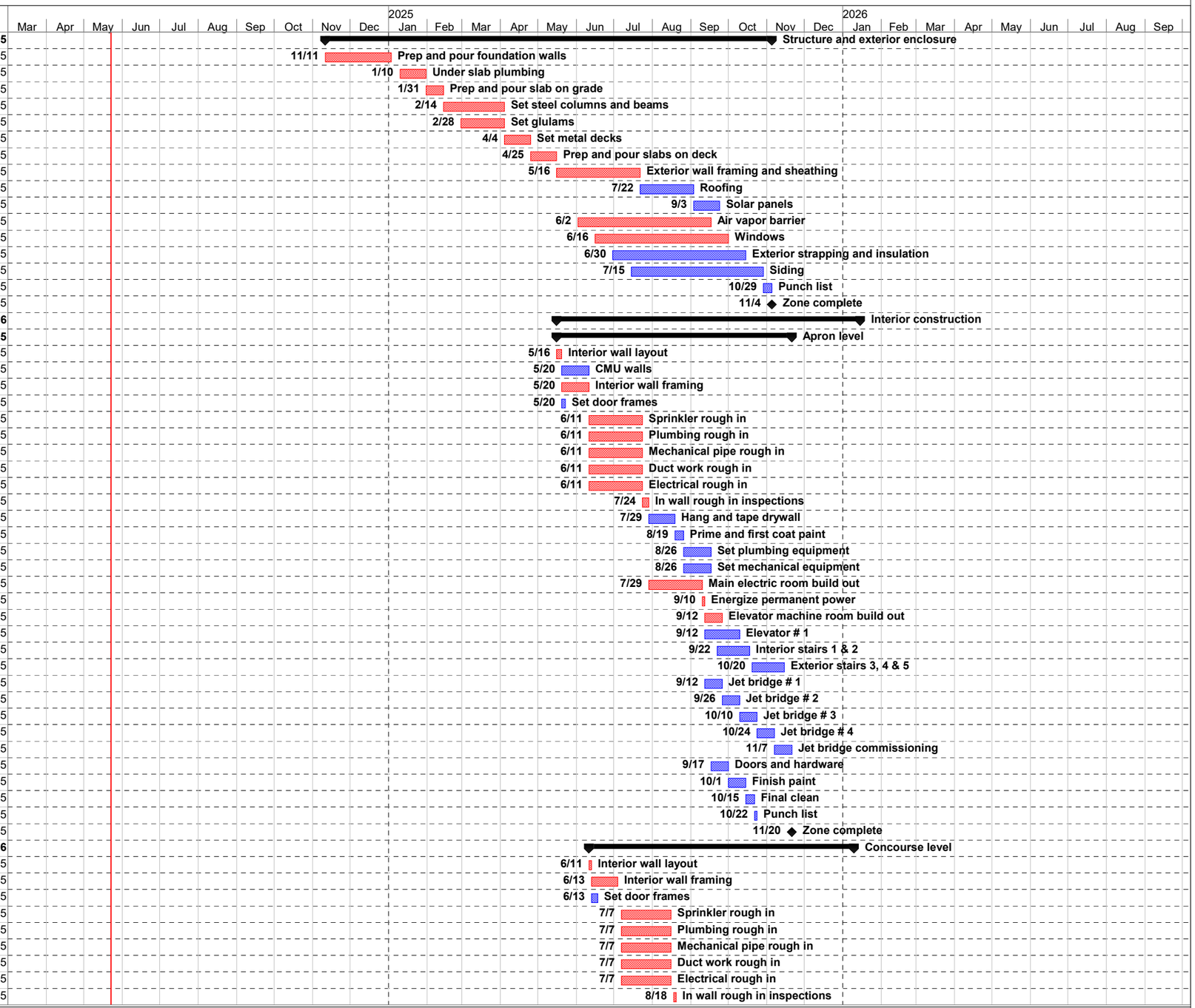
BTV NEXT North Terminal Improvements
Patrick Leahy Burlington International Airport
South Burlington, VT

May 22, 2024

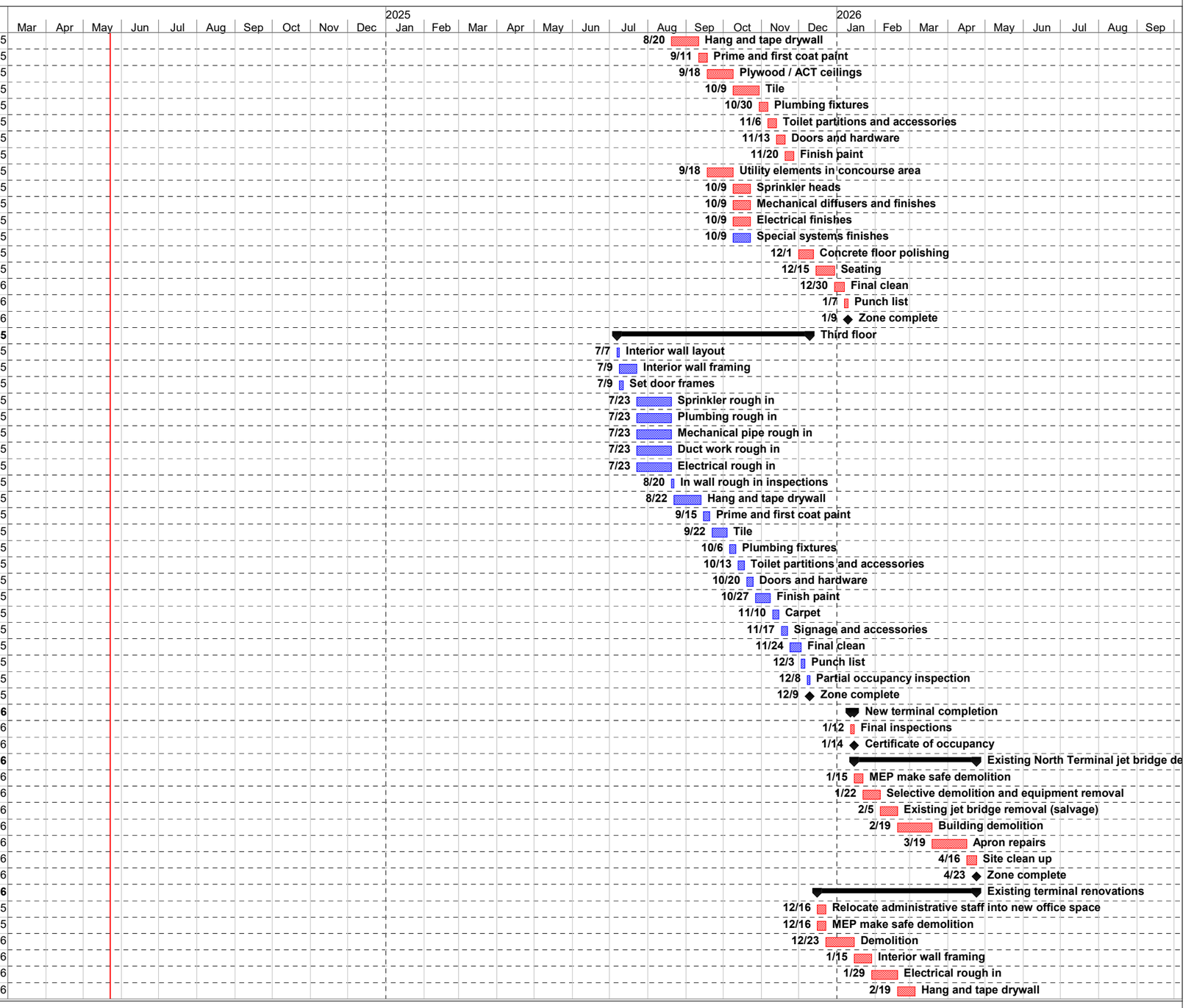
ID	Task Name	Duration	Start	Finish
1	**Pre-construction**	**279 days**	**Tue 7/18/23**	**Tue 8/20/24**
2	**CM selection**	**42 days**	**Tue 7/18/23**	**Fri 9/15/23**
14	**Design**	**189 days**	**Tue 7/18/23**	**Fri 4/12/24**
20	**Permits**	**72 days**	**Fri 4/19/24**	**Wed 7/31/24**
21	ACT 250 permit	72 days	Fri 4/19/24	Wed 7/31/24
22	Stormwater permit	72 days	Fri 4/19/24	Wed 7/31/24
23	SBTV zoning permit	60 days	Fri 4/19/24	Mon 7/15/24
24	SBTV building permit	20 days	Wed 6/12/24	Wed 7/10/24
25	**FAA Grant Approval**	**20 days**	**Mon 5/13/24**	**Mon 6/10/24**
26	FAA grant approval	20 days	Mon 5/13/24	Mon 6/10/24
27	**BTV Approval**	**4 days**	**Wed 6/5/24**	**Tue 6/11/24**
28	BTV Airport Commission approval	0 days	Wed 6/5/24	Wed 6/5/24
29	BTV City Council approval	0 days	Mon 6/10/24	Mon 6/10/24
30	Final contract approval	0 days	Tue 6/11/24	Tue 6/11/24
31	**Estimating & subcontractor awards**	**221 days**	**Mon 10/9/23**	**Tue 8/20/24**
32	**SD estimate**	**28 days**	**Mon 10/9/23**	**Wed 11/15/23**
37	**DD estimate**	**26 days**	**Mon 12/18/23**	**Wed 1/24/24**
42	**60% CD estimate**	**28 days**	**Mon 1/8/24**	**Wed 2/14/24**
47	**Bid period**	**45 days**	**Mon 4/8/24**	**Tue 6/11/24**
48	Distribute bid package	3 days	Mon 4/8/24	Wed 4/10/24
49	Bid period	15 days	Thu 4/11/24	Wed 5/1/24
50	Evaluate subcontractor bids	10 days	Thu 5/2/24	Wed 5/15/24
51	Draft GMP (for FAA submission)	0 days	Fri 5/10/24	Fri 5/10/24
52	Finalize GMP	5 days	Thu 5/16/24	Wed 5/22/24
53	Limited notice to proceed	0 days	Fri 5/17/24	Fri 5/17/24
54	Notice to proceed	0 days	Tue 6/11/24	Tue 6/11/24
55	**Subcontract awards**	**50 days**	**Tue 6/11/24**	**Tue 8/20/24**
56	Award high priority subcontracts	5 days	Tue 6/11/24	Mon 6/17/24
57	Award medium priority subcontracts	15 days	Tue 6/18/24	Tue 7/9/24
58	Award low priority subcontracts	30 days	Wed 7/10/24	Tue 8/20/24
59	**Construction**	**470 days**	**Tue 6/18/24**	**Thu 4/23/26**
60	**Contract time**	**439 days**	**Thu 8/1/24**	**Thu 4/23/26**
61	General conditions - construction	439 days	Thu 8/1/24	Thu 4/23/26
62	**Submittals**	**280 days**	**Tue 6/18/24**	**Thu 7/24/25**
322	**Mobilization**	**6 days**	**Thu 8/1/24**	**Thu 8/8/24**
323	ECI crew mobilization	1 day	Thu 8/1/24	Thu 8/1/24
324	Establish ECI field offices	5 days	Fri 8/2/24	Thu 8/8/24
325	**Construction**	**438 days**	**Fri 8/2/24**	**Thu 4/23/26**
326	**Site construction**	**338 days**	**Fri 8/2/24**	**Tue 12/2/25**
327	Electrical infrastructure reconstruction	30 days	Fri 8/2/24	Fri 9/13/24
328	Secure temporary fencing	10 days	Fri 8/2/24	Thu 8/15/24
329	Erosion protection and sediment control	5 days	Fri 8/9/24	Thu 8/15/24
330	MEP make safe demolition	5 days	Fri 8/16/24	Thu 8/22/24
331	Site demolition, strip foundation footprint to subgrade	15 days	Fri 8/23/24	Fri 9/13/24
332	Geothermal wells (x50)	30 days	Mon 9/16/24	Fri 10/25/24
333	Foundation excavation	10 days	Mon 10/28/24	Fri 11/8/24
334	Backfill foundations to grade	5 days	Fri 1/3/25	Thu 1/9/25
335	Under slab plumbing excavation and backfill	10 days	Fri 1/10/25	Thu 1/23/25
336	Under slab insulation and slab prep	5 days	Fri 1/24/25	Thu 1/30/25
337	Site utilities to building	30 days	Fri 5/16/25	Fri 6/27/25
338	Rough grade site for pavement	3 days	Wed 9/24/25	Fri 9/26/25
339	Concrete paving	20 days	Mon 9/29/25	Fri 10/24/25
340	Asphalt paving	10 days	Mon 10/27/25	Fri 11/7/25
341	Signage and line striping	10 days	Mon 11/10/25	Fri 11/21/25
342	Punch list	5 days	Mon 11/24/25	Tue 12/2/25
343	Zone complete	0 days	Tue 12/2/25	Tue 12/2/25
344	**Landscape mitigation**	**75 days**	**Mon 6/2/25**	**Tue 9/16/25**
345	Recreational path, landscaping and hardscaping	75 days	Mon 6/2/25	Tue 9/16/25
346	**New terminal construction**	**368 days**	**Mon 11/11/24**	**Thu 4/23/26**



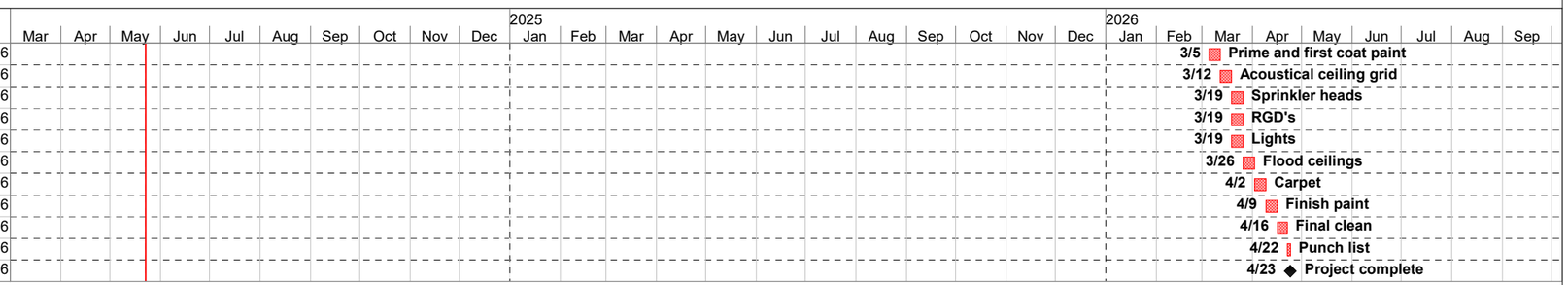
ID	Task Name	Duration	Start	Finish
347	**Structure and exterior enclosure**	**250 days**	**Mon 11/11/24**	**Tue 11/4/25**
348	Prep and pour foundation walls	35 days	Mon 11/11/24	Thu 1/2/25
349	Under slab plumbing	15 days	Fri 1/10/25	Thu 1/30/25
350	Prep and pour slab on grade	10 days	Fri 1/31/25	Thu 2/13/25
351	Set steel columns and beams	35 days	Fri 2/14/25	Thu 4/3/25
352	Set glulams	25 days	Fri 2/28/25	Thu 4/3/25
353	Set metal decks	15 days	Fri 4/4/25	Thu 4/24/25
354	Prep and pour slabs on deck	15 days	Fri 4/25/25	Thu 5/15/25
355	Exterior wall framing and sheathing	45 days	Fri 5/16/25	Mon 7/21/25
356	Roofing	30 days	Tue 7/22/25	Tue 9/2/25
357	Solar panels	15 days	Wed 9/3/25	Tue 9/23/25
358	Air vapor barrier	75 days	Mon 6/2/25	Tue 9/16/25
359	Windows	75 days	Mon 6/16/25	Tue 9/30/25
360	Exterior strapping and insulation	75 days	Mon 6/30/25	Tue 10/14/25
361	Siding	75 days	Tue 7/15/25	Tue 10/28/25
362	Punch list	5 days	Wed 10/29/25	Tue 11/4/25
363	Zone complete	0 days	Tue 11/4/25	Tue 11/4/25
364	**Interior construction**	**167 days**	**Fri 5/16/25**	**Wed 1/14/26**
365	**Apron level**	**132 days**	**Fri 5/16/25**	**Thu 11/20/25**
366	Interior wall layout	2 days	Fri 5/16/25	Mon 5/19/25
367	CMU walls	15 days	Tue 5/20/25	Tue 6/10/25
368	Interior wall framing	15 days	Tue 5/20/25	Tue 6/10/25
369	Set door frames	3 days	Tue 5/20/25	Thu 5/22/25
370	Sprinkler rough in	30 days	Wed 6/11/25	Wed 7/23/25
371	Plumbing rough in	30 days	Wed 6/11/25	Wed 7/23/25
372	Mechanical pipe rough in	30 days	Wed 6/11/25	Wed 7/23/25
373	Duct work rough in	30 days	Wed 6/11/25	Wed 7/23/25
374	Electrical rough in	30 days	Wed 6/11/25	Wed 7/23/25
375	In wall rough in inspections	3 days	Thu 7/24/25	Mon 7/28/25
376	Hang and tape drywall	15 days	Tue 7/29/25	Mon 8/18/25
377	Prime and first coat paint	5 days	Tue 8/19/25	Mon 8/25/25
378	Set plumbing equipment	15 days	Tue 8/26/25	Tue 9/16/25
379	Set mechanical equipment	15 days	Tue 8/26/25	Tue 9/16/25
380	Main electric room build out	30 days	Tue 7/29/25	Tue 9/9/25
381	Energize permanent power	2 days	Wed 9/10/25	Thu 9/11/25
382	Elevator machine room build out	10 days	Fri 9/12/25	Thu 9/25/25
383	Elevator # 1	20 days	Fri 9/12/25	Thu 10/9/25
384	Interior stairs 1 & 2	20 days	Mon 9/22/25	Fri 10/17/25
385	Exterior stairs 3, 4 & 5	20 days	Mon 10/20/25	Fri 11/14/25
386	Jet bridge # 1	10 days	Fri 9/12/25	Thu 9/25/25
387	Jet bridge # 2	10 days	Fri 9/26/25	Thu 10/9/25
388	Jet bridge # 3	10 days	Fri 10/10/25	Thu 10/23/25
389	Jet bridge # 4	10 days	Fri 10/24/25	Thu 11/6/25
390	Jet bridge commissioning	10 days	Fri 11/7/25	Thu 11/20/25
391	Doors and hardware	10 days	Wed 9/17/25	Tue 9/30/25
392	Finish paint	10 days	Wed 10/1/25	Tue 10/14/25
393	Final clean	5 days	Wed 10/15/25	Tue 10/21/25
394	Punch list	2 days	Wed 10/22/25	Thu 10/23/25
395	Zone complete	0 days	Thu 11/20/25	Thu 11/20/25
396	**Concourse level**	**147 days**	**Wed 6/11/25**	**Fri 1/9/26**
397	Interior wall layout	2 days	Wed 6/11/25	Thu 6/12/25
398	Interior wall framing	15 days	Fri 6/13/25	Thu 7/3/25
399	Set door frames	3 days	Fri 6/13/25	Tue 6/17/25
400	Sprinkler rough in	30 days	Mon 7/7/25	Fri 8/15/25
401	Plumbing rough in	30 days	Mon 7/7/25	Fri 8/15/25
402	Mechanical pipe rough in	30 days	Mon 7/7/25	Fri 8/15/25
403	Duct work rough in	30 days	Mon 7/7/25	Fri 8/15/25
404	Electrical rough in	30 days	Mon 7/7/25	Fri 8/15/25
405	In wall rough in inspections	2 days	Mon 8/18/25	Tue 8/19/25



ID	Task Name	Duration	Start	Finish
406	Hang and tape drywall	15 days	Wed 8/20/25	Wed 9/10/25
407	Prime and first coat paint	5 days	Thu 9/11/25	Wed 9/17/25
408	Plywood / ACT ceilings	15 days	Thu 9/18/25	Wed 10/8/25
409	Tile	15 days	Thu 10/9/25	Wed 10/29/25
410	Plumbing fixtures	5 days	Thu 10/30/25	Wed 11/5/25
411	Toilet partitions and accessories	5 days	Thu 11/6/25	Wed 11/12/25
412	Doors and hardware	5 days	Thu 11/13/25	Wed 11/19/25
413	Finish paint	5 days	Thu 11/20/25	Wed 11/26/25
414	Utility elements in concourse area	15 days	Thu 9/18/25	Wed 10/8/25
415	Sprinkler heads	10 days	Thu 10/9/25	Wed 10/22/25
416	Mechanical diffusers and finishes	10 days	Thu 10/9/25	Wed 10/22/25
417	Electrical finishes	10 days	Thu 10/9/25	Wed 10/22/25
418	Special systems finishes	10 days	Thu 10/9/25	Wed 10/22/25
419	Concrete floor polishing	10 days	Mon 12/1/25	Fri 12/12/25
420	Seating	10 days	Mon 12/15/25	Mon 12/29/25
421	Final clean	5 days	Tue 12/30/25	Tue 1/6/26
422	Punch list	3 days	Wed 1/7/26	Fri 1/9/26
423	Zone complete	0 days	Fri 1/9/26	Fri 1/9/26
424	**Third floor**	**109 days**	**Mon 7/7/25**	**Tue 12/9/25**
425	Interior wall layout	2 days	Mon 7/7/25	Tue 7/8/25
426	Interior wall framing	10 days	Wed 7/9/25	Tue 7/22/25
427	Set door frames	3 days	Wed 7/9/25	Fri 7/11/25
428	Sprinkler rough in	20 days	Wed 7/23/25	Tue 8/19/25
429	Plumbing rough in	20 days	Wed 7/23/25	Tue 8/19/25
430	Mechanical pipe rough in	20 days	Wed 7/23/25	Tue 8/19/25
431	Duct work rough in	20 days	Wed 7/23/25	Tue 8/19/25
432	Electrical rough in	20 days	Wed 7/23/25	Tue 8/19/25
433	In wall rough in inspections	2 days	Wed 8/20/25	Thu 8/21/25
434	Hang and tape drywall	15 days	Fri 8/22/25	Fri 9/12/25
435	Prime and first coat paint	5 days	Mon 9/15/25	Fri 9/19/25
436	Tile	10 days	Mon 9/22/25	Fri 10/3/25
437	Plumbing fixtures	5 days	Mon 10/6/25	Fri 10/10/25
438	Toilet partitions and accessories	5 days	Mon 10/13/25	Fri 10/17/25
439	Doors and hardware	5 days	Mon 10/20/25	Fri 10/24/25
440	Finish paint	10 days	Mon 10/27/25	Fri 11/7/25
441	Carpet	5 days	Mon 11/10/25	Fri 11/14/25
442	Signage and accessories	5 days	Mon 11/17/25	Fri 11/21/25
443	Final clean	5 days	Mon 11/24/25	Tue 12/2/25
444	Punch list	3 days	Wed 12/3/25	Fri 12/5/25
445	Partial occupancy inspection	2 days	Mon 12/8/25	Tue 12/9/25
446	Zone complete	0 days	Tue 12/9/25	Tue 12/9/25
447	**New terminal completion**	**3 days**	**Mon 1/12/26**	**Wed 1/14/26**
448	Final inspections	3 days	Mon 1/12/26	Wed 1/14/26
449	Certificate of occupancy	0 days	Wed 1/14/26	Wed 1/14/26
450	**Existing North Terminal jet bridge demolition**	**71 days**	**Thu 1/15/26**	**Thu 4/23/26**
451	MEP make safe demolition	5 days	Thu 1/15/26	Wed 1/21/26
452	Selective demolition and equipment removal	10 days	Thu 1/22/26	Wed 2/4/26
453	Existing jet bridge removal (salvage)	10 days	Thu 2/5/26	Wed 2/18/26
454	Building demolition	20 days	Thu 2/19/26	Wed 3/18/26
455	Apron repairs	20 days	Thu 3/19/26	Wed 4/15/26
456	Site clean up	6 days	Thu 4/16/26	Thu 4/23/26
457	Zone complete	0 days	Thu 4/23/26	Thu 4/23/26
458	**Existing terminal renovations**	**91 days**	**Tue 12/16/25**	**Thu 4/23/26**
459	Relocate administrative staff into new office space	5 days	Tue 12/16/25	Mon 12/22/25
460	MEP make safe demolition	5 days	Tue 12/16/25	Mon 12/22/25
461	Demolition	15 days	Tue 12/23/25	Wed 1/14/26
462	Interior wall framing	10 days	Thu 1/15/26	Wed 1/28/26
463	Electrical rough in	15 days	Thu 1/29/26	Wed 2/18/26
464	Hang and tape drywall	10 days	Thu 2/19/26	Wed 3/4/26



ID	Task Name	Duration	Start	Finish
465	Prime and first coat paint	5 days	Thu 3/5/26	Wed 3/11/26
466	Acoustical ceiling grid	5 days	Thu 3/12/26	Wed 3/18/26
467	Sprinkler heads	5 days	Thu 3/19/26	Wed 3/25/26
468	RGD's	5 days	Thu 3/19/26	Wed 3/25/26
469	Lights	5 days	Thu 3/19/26	Wed 3/25/26
470	Flood ceilings	5 days	Thu 3/26/26	Wed 4/1/26
471	Carpet	5 days	Thu 4/2/26	Wed 4/8/26
472	Finish paint	5 days	Thu 4/9/26	Wed 4/15/26
473	Final clean	4 days	Thu 4/16/26	Tue 4/21/26
474	Punch list	2 days	Wed 4/22/26	Thu 4/23/26
475	Project complete	0 days	Thu 4/23/26	Thu 4/23/26



PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT

PROJECT NEXT

SOUTH BURLINGTON, VT

The estimate is based on the following documents:

- 80% Construction Document Design Progress Drawing Set, prepared by Jacobs and Hoyle Tanner, as enumerated on the attached Current Drawings list.
- 80% Construction Document Project Manual, prepared by Jacobs and Hoyle Tanner, as enumerated on the attached Current Specifications list.
- 80% Construction Document Clarification, dated April 24, 2024, received April 25, 2024, as enumerated on the attached Current Drawings and Specifications lists.
- Ground Loop Heat Exchanger and Test Borehole Specifications, dated April 3, 2024, issued by Jacobs as response to RFI P-8. (Identified as Sections 235750.1 and 235750.2 on the Current Specifications list.)
- Passenger Boarding Bridge Foundation Detail Placeholder Sketch, dated April 26, 2024, issued by Jacobs as response to RFI P-2.

Engelberth Construction, Inc.

Printed on Fri May 10, 2024 at 10:30 am EDT

Job #: 23-7748 BTV Project NexT
Burlington Intl. Airport Airport Drive
So. Burlington, Vermont 05403

Current Drawings

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
General					
G-000	COVER SHEET	0	04/05/2024	04/05/2024	80CD (04/05/24)
G-001	INDEX	0	04/05/2024	04/05/2024	80CD (04/05/24)
G-002	INDEX	0	04/05/2024	04/05/2024	80CD (04/05/24)
Life Safety					
LS100	LIFE SAFETY SUMMARY	0	04/05/2024	04/05/2024	80CD (04/05/24)
LS101	LIFE SAFETY APRON LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
LS102	LIFE SAFETY CONCOURSE LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
LS103	LIFE SAFETY ADMIN LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
Civil					
C0.001	GENERAL NOTES, LEGEND AND ABBREVIATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
C1.100	GENERAL PLAN AND SURVEY CONTROL	0	04/05/2024	04/05/2024	80CD (04/05/24)
C1.101	SITE ACCESS AND STAGING PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C1.201	EROSION CONTROL NOTES AND DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
C2.101	APRON EXISTING PAVEMENT PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C2.102	APRON EXISTING UTILITIES PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C2.103	LANDSIDE EXISTING CONDITION PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C2.201	APRON PAVEMENT DEMOLITION PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C2.202	APRON UTILITY DEMOLITION PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C2.203	LANDSIDE DEMOLITION PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C3.101	APRON PROPOSED PAVING PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C3.102	PCC JOINTING PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C3.103	APRON PROPOSED UTILITY PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C3.104	APRON PROPOSED GRADING PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C3.105	APRON SPOT GRADING PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C3.106	LANDSIDE PROPOSED CONSTRUCTION AND UTILITY PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C3.107	INFIELD PROPOSED GRADING AND DRAINAGE PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
C4.101	PAVEMENT DETAILS - SHEET 1	0	04/05/2024	04/05/2024	80CD (04/05/24)
C4.102	PAVEMENT DETAILS - SHEET 2	0	04/05/2024	04/05/2024	80CD (04/05/24)
C4.103	DRAINAGE DETAILS - SHEET 1	0	04/05/2024	04/05/2024	80CD (04/05/24)
C4.104	DRAINAGE DETAILS - SHEET 2	0	04/05/2024	04/05/2024	80CD (04/05/24)
C4.105	FENCE DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
C4.106	LANDSIDE DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
C5.101	APRON PAVEMENT MARKING PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)

Engelberth Construction, Inc.

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
C5.102	APRON MARKING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
C6.101	BORING LOGS - SHEET 1	0	04/05/2024	04/05/2024	80CD (04/05/24)
C6.102	BORING LOGS - SHEET 1	0	04/05/2024	04/05/2024	80CD (04/05/24)
Structural					
S-001	GENERAL STRUCTURAL NOTES	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-002	SPECIAL INSPECTIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-003	ABBREVIATIONS & SYMBOLS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-004	DESIGN WIND LOAD	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-005	DESIGN SNOW LOAD	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-101	APRON FOUNDATION PLAN - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-101-A	APRON FOUNDATION PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-101-B	APRON FOUNDATION PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-102	CONCOURSE FRAMING PLAN - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-102-A	CONCOURSE FRAMING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-102-B	CONCOURSE FRAMING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-102-C	CONCOURSE FRAMING PLAN - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-103	ADMIN LEVEL & LOW ROOF FRAMING PLAN - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-103-A	ADMIN LEVEL & LOW ROOF FRAMING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-103-B	ADMIN LEVEL & LOW ROOF FRAMING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-103-D	LOW ROOF FRAMING PLAN - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-104	HIGH ROOF FRAMING PLAN - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-104-A	HIGH ROOF FRAMING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-104-B	HIGH ROOF FRAMING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-110	ROOF CLT DIAPHRAGM PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-201	SHEAR CORE WALL PLANS AND ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-202	SHEAR CORE WALL PLANS AND ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-203	SHEAR CORE WALL ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-211	FRAMING ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-212	FRAMING ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-401	ENGLARGED FRAMING PLANS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-501	TYPICAL FOUNDATION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-502	TYPICAL FOUNDATION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-504	FOUNDATION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-505	FOUNDATION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-506	FOUNDATION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-507	FOUNDATION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-510	TYPICAL FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-511	TYPICAL FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)

Engelberth Construction, Inc.

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
S-512	TYPICAL FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-513	TYPICAL FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-514	TYPICAL FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-515	TYPICAL MASONRY DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-516	TYPICAL MASONRY DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-520	FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-521	FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-522	FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-530	FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-531	FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-532	FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-533	FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-534	FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-540	FRAMING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-601	SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
S-602	SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
Architectural					
A-001	ANNOTATIONS SYMBOLS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-002	MOUNTING HEIGHTS, DOOR/FRAME TYPES A-002	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-003	ASSEMBLIES	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-004	ASSEMBLIES / GLAZING TYPES	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-005	PARTITION TYPES	0	04/05/2024	04/05/2024	80CD (04/05/24)
AD101	OVERALL - APRON LEVEL - DEMOLITION	0	04/05/2024	04/05/2024	80CD (04/05/24)
AD101A	APRON LEVEL - DEMOLITION AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
AD101B	APRON LEVEL - DEMOLITION AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
AD101E	APRON LEVEL - DEMOLITION AREA E	0	04/05/2024	04/05/2024	80CD (04/05/24)
AD102	OVERALL - CONCOURSE LEVEL - DEMOLITION	0	04/05/2024	04/05/2024	80CD (04/05/24)
AD102A	CONCOURSE LEVEL - DEMOLITION AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
AD102B	CONCOURSE LEVEL - DEMOLITION AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
AD102C	CONCOURSE LEVEL - DEMOLITION AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
AD102D	CONCOURSE LEVEL - DEMOLITION AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
AD102E	CONCOURSE LEVEL - DEMOLITION AREA E	0	04/05/2024	04/05/2024	80CD (04/05/24)
AD201	DEMOLITION ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-011	OVERALL SLAB EDGE PLAN - APRON LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-012	OVERALL SLAB EDGE PLAN - CONCOURSE LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-013	OVERALL SLAB EDGE PLAN - ADMIN LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-101	OVERALL PLAN - APRON LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-101A	FLOOR PLAN APRON LEVEL - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)

Engelberth Construction, Inc.

Job #: 23-7748 BTV Project NexT
Burlington Intl. Airport Airport Drive
So. Burlington, Vermont 05403

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
A-101B	FLOOR PLAN APRON LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-102	OVERALL PLAN - CONCOURSE LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-102A	FLOOR PLAN CONCOURSE LEVEL - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-102B	FLOOR PLAN CONCOURSE LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-102C	FLOOR PLAN CONCOURSE LEVEL - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-102D	FLOOR PLAN CONCOURSE LEVEL - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-103	OVERALL PLAN - ADMIN LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-103A	FLOOR PLAN ADMIN LEVEL - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-103B	FLOOR PLAN ADMIN LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-104	OVERALL PLAN - ROOF	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-104A	ROOF PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-104B	ROOF PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-201	ELEVATIONS - EAST OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-202	ELEVATIONS - PARTIAL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-203	ELEVATIONS - PARTIAL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-221	CURTAINWALL ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-222	CURTAINWALL ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-223	CURTAINWALL ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-230	INTERIOR STOREFRONT ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-301	BUILDING SECTIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-302	BUILDING SECTIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-311	WALL SECTIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-312	WALL SECTIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-313	WALL SECTIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-314	WALL SECTIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-315	WALL SECTIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-401	VERTICAL CIRCULATION	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-402	VERTICAL CIRCULATION	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-403	VERTICAL CIRCULATION	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-404	EXTERIOR VERTICAL CIRCULATION	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-410	VERTICAL CIRCULATION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-415	ENLARGED UITILITY ELEMENT PLANS AND DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-416	ENLARGED PLANS/ELEVS - CONCOURSE LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-501	PLAN DETAILS - APRON LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-502	PLAN DETAILS - CONCOURSE LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-503	PLAN DETAILS - ADMIN LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-511	SECTION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-512	SECTION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
A-513	SECTION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-531	SHAFT DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-541	ROOF DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-551	EXPANSION JOINT PLAN DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-552	EXPANSION JOINT SECTION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-553	EXPANSION JOINT SECTION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-561	INTERIOR STOREFRONT DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-621	DOOR SCHEDULE	0	04/05/2024	04/05/2024	80CD (04/05/24)
A-622	DOOR DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
AG001	SIGN TYPES	0	04/05/2024	04/05/2024	80CD (04/05/24)
AG101	OVERALL SIGNAGE PLAN - APRON LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
AG102	OVERALL SIGNAGE PLAN - CONCOURSE LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
AG102A	SIGNAGE PLAN LEVEL 2 - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
AG102B	SIGNAGE PLAN LEVEL 2 - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
AG102C	SIGNAGE PLAN LEVEL 2 - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
AG102D	SIGNAGE PLAN LEVEL 2 - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
AG103	OVERALL SIGNAGE PLAN - ADMIN LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
AG103A	SIGNAGE PLAN LEVEL 3 - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
AG103B	SIGNAGE PLAN LEVEL 3 - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
Interiors					
I-101	OVERALL FINISH PLAN - APRON LEVEL	1	04/24/2024	04/25/2024	80CD-Clarification 1 (04/24/24)
I-101A	FINISH PLAN APRON LEVEL - AREA A	1	04/24/2024	04/25/2024	80CD-Clarification 1 (04/24/24)
I-101B	FINISH PLAN APRON LEVEL - AREA B	1	04/24/2024	04/25/2024	80CD-Clarification 1 (04/24/24)
I-102	OVERALL FINISH PLAN - CONCOURSE LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-102A	FINISH PLAN CONCOURSE LEVEL - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-102B	FINISH PLAN CONCOURSE LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-102C	FINISH PLAN CONCOURSE LEVEL - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-102D	FINISH PLAN CONCOURSE LEVEL - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-103	OVERALL FINISH PLAN - ADMIN LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-103A	FINISH PLAN ADMIN LEVEL - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-103B	FINISH PLAN ADMIN LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-105A	OVERALL FURNITURE PLAN - CONCOURSE LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-105B	OVERALL FURNITURE PLAN - ADMIN LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-111	OVERALL REFLECTED CEILING PLAN -APRON LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-111A	REFLECTED CEILING PLAN APRON LEVEL - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-111B	REFLECTED CEILING PLAN APRON LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-112	OVERALL REFLECTED CEILING PLAN - CONCOURSE LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-112A	REFLECTED CEILING PLAN CONCOURSE LEVEL - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)

Engelberth Construction, Inc.

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
I-112B	REFLECTED CEILING PLAN CONCOURSE LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-112C	REFLECTED CEILING PLAN CONCOURSE LEVEL - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-112D	REFLECTED CEILING PLAN CONCOURSE LEVEL - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-113	OVERALL REFLECTED CEILING PLAN -ADMIN LEVEL	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-113A	REFLECTED CEILING PLAN ADMIN LEVEL - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-113B	REFLECTED CEILING PLAN ADMIN LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-301	INTERIOR ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-302	INTERIOR ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-303	INTERIOR ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-304	INTERIOR ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-305	INTERIOR ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-412	ENLARGED RESTROOM PLAN AND ELEVATION	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-413	ENLARGED RESTROOM PLAN, RCP AND ELEVATION	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-414	ENLARGED OPEN SEATING 210 FLOOR PLAN, RCP AND ELEVATIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-601	INTERIOR DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-602	INTERIOR DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-603	MILLWORK DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-604	MILLWORK DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-605	MILLWORK DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-606	MILLWORK DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-611	RCP, FINISH, APPLIANCES, AND FIXTURES LEGENDS	1	04/24/2024	04/25/2024	80CD-Clarification 1 (04/24/24)
I-631	FLOOR TRANSITION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
I-632	CEILING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
Mechanical					
M-001	GENERAL NOTES, LEGENDS, AND SYMBOLS	0	04/05/2024	04/05/2024	80CD (04/05/24)
MD101B	APRON LEVEL MECHANICAL DEMOLITION PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
MD101E	APRON LEVEL MECHANICAL DEMOLITION PLAN - AREA E	0	04/05/2024	04/05/2024	80CD (04/05/24)
MD102B	CONCOURSE LEVEL MECHANICAL DEMOLITION PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
MD102C	CONCOURSE LEVEL MECHANICAL DEMOLITION PLAN - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
MD102D	CONCOURSE LEVEL MECHANICAL DEMOLITION PLAN - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
MD102E	CONCOURSE LEVEL MECHANICAL DEMOLITION PLAN - AREA E	0	04/05/2024	04/05/2024	80CD (04/05/24)
MD103B	ADMIN LEVEL MECHANICAL DEMOLITION PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-101	APRON LEVEL DUCTWORK PLAN - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-101A	APRON LEVEL DUCTWORK PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-101B	APRON LEVEL DUCTWORK PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-102	CONCOURSE LEVEL DUCTWORK PLAN - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-102A	CONCOURSE LEVEL DUCTWORK PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-102B	CONCOURSE LEVEL DUCTWORK PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)

Engelberth Construction, Inc.

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
M-102C	CONCOURSE LEVEL DUCTWORK PLAN - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-102D	CONCOURSE LEVEL DUCTWORK PLAN - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-103	ADMIN LEVEL DUCTWORK PLAN - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-103A	ADMIN LEVEL DUCTWORK PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-103B	ADMIN LEVEL DUCTWORK PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-111	APRON LEVEL PIPING PLAN - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-111A	APRON LEVEL PIPING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-111B	APRON LEVEL PIPING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-112	CONCOURSE LEVEL PIPING PLAN - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-112A	CONCOURSE LEVEL PIPING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-112B	CONCOURSE LEVEL PIPING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-112C	CONCOURSE LEVEL PIPING PLAN - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-112D	CONCOURSE LEVEL PIPING PLAN - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-113	ADMIN LEVEL PIPING PLAN - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-113A	ADMIN LEVEL PIPING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-113B	ADMIN LEVEL PIPING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-301	BUILDING SECTION - MECHANICAL DUCT RISERS	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-302	MECHANICAL DIAGRAMS	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-303	GEOTHERMAL DESIGN	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-401	ENLARGED PLANS	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-501	MECHANICAL DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-502	MECHANICAL DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-503	MECHANICAL DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-504	MECHANICAL DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-601	MECHANICAL SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-602	MECHANICAL SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-603	MECHANICAL SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-701	MECHANICAL CONTROLS	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-702	MECHANICAL CONTROLS	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-703	MECHANICAL CONTROLS	0	04/05/2024	04/05/2024	80CD (04/05/24)
M-704	MECHANICAL CONTROLS	0	04/05/2024	04/05/2024	80CD (04/05/24)
Electrical					
E-001	ELECTRICAL GENERAL NOTES, ABBREVIATIONS AND DRAWING LIST	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-002	ELECTRICAL SYMBOLS	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-003	ELECTRICAL SYMBOLS	0	04/05/2024	04/05/2024	80CD (04/05/24)
ED101A	APRON LEVEL ELECTRICAL DEMOLITION PLAN -AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
ED101B	APRON LEVEL ELECTRICAL DEMOLITION PLAN -AREA B	1	04/24/2024	04/25/2024	80CD-Clarification 1 (04/24/24)
ED101C	APRON LEVEL ELECTRICAL DEMOLITION PLAN -AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)

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Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
ED101E	APRON LEVEL ELECTRICAL DEMOLITION PLAN - AREA E	0	04/05/2024	04/05/2024	80CD (04/05/24)
ED102A	CONCOURSE LEVEL ELECTRICAL DEMOLITION PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
ED102B	CONCOURSE LEVEL ELECTRICAL DEMOLITION PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
ED102C	CONCOURSE LEVEL ELECTRICAL DEMOLITION PLAN - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
ED102D	CONCOURSE LEVEL ELECTRICAL DEMOLITION PLAN - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
ED102E	CONCOURSE LEVEL ELECTRICAL DEMOLITION PLAN - AREA E	0	04/05/2024	04/05/2024	80CD (04/05/24)
ES100	OVERALL ELECTRICAL SITE PLAN	0	04/24/2024	04/25/2024	80CD-Clarification 1 (04/24/24)
ES101	ELECTRICAL SERVICE PLAN	1	04/24/2024	04/25/2024	80CD-Clarification 1 (04/24/24)
EG101A	GROUNDING PLAN -AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
EG101B	GROUNDING PLAN -AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
EG201A	LIGHTNING PROTECTION PLAN - AREA A	0	04/24/2024	04/25/2024	80CD-Clarification 1 (04/24/24)
EG201B	LIGHTNING PROTECTION PLAN - AREA B	0	04/24/2024	04/25/2024	80CD-Clarification 1 (04/24/24)
EL101A	APRON LEVEL LIGHTING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
EL101B	APRON LEVEL LIGHTING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
EL102A	CONCOURSE LEVEL LIGHTING PLAN -AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
EL102B	CONCOURSE LEVEL LIGHTING PLAN -AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
EL102C	CONCOURSE LEVEL LIGHTING PLAN -AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
EL102D	CONCOURSE LEVEL LIGHTING PLAN -AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
EL103A	ADMIN LEVEL LIGHTING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
EL103B	ADMIN LEVEL LIGHTING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
EP101A	APRON LEVEL POWER PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
EP101B	APRON LEVEL POWER PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
EP101C	APRON LEVEL POWER PLAN - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
EP102A	CONCOURSE LEVEL POWER PLAN -AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
EP102B	CONCOURSE LEVEL POWER PLAN -AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
EP102C	CONCOURSE LEVEL POWER PLAN -AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
EP102D	CONCOURSE LEVEL POWER PLAN -AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
EP103A	ADMIN LEVEL POWER PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
EP103B	ADMIN LEVEL POWER PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
EP104A	HIGH ROOF POWER PLAN -AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
EP104B	HIGH ROOF POWER PLAN -AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-401	ENLARGED ELECTRICAL & TELECOM ROOMS	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-402	STAIR SECTIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-403	STAIR SECTIONS	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-502	ELECTRICAL DETAILS	0	04/24/2024	04/25/2024	80CD-Clarification 1 (04/24/24)
E-600	DEMOLITION ONELINE DIAGRAM	1	04/24/2024	04/25/2024	80CD-Clarification 1 (04/24/24)
E-601	ELECTRICAL ONELINE DIAGRAM	1	04/24/2024	04/25/2024	80CD-Clarification 1 (04/24/24)
E-602	ELECTRICAL GROUNDING RISER DIAGRAM	0	04/05/2024	04/05/2024	80CD (04/05/24)

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Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
E-701	LUMINAIRE SCHEDULE	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-702	EQUIPMENT CONNECTION SCHEDULE	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-703	PANEL SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-704	PANEL SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-705	PANEL SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-706	PANEL SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-707	PANEL SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-708	PANEL SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-709	PANEL SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
E-710	LIGHTING CONTROL MATRIX	0	04/05/2024	04/05/2024	80CD (04/05/24)
Plumbing					
P-001	PLUMBING ANNOTATIONS & SYMBOLS	0	04/05/2024	04/05/2024	80CD (04/05/24)
PD101	PLUMBING DEMOLITION PLAN APRON LEVEL - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
PD101B	PLUMBING DEMOLITION PLAN APRON LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
PD102	PLUMBING DEMOLITION PLAN CONCOURSE LEVEL - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
PD102B	PLUMBING DEMOLITION PLAN CONCOURSE LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
PD102E	PLUMBING DEMOLITION PLAN CONCOURSE LEVEL - AREA E	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-100	PLUMBING PLAN UNDERGROUND - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-100A	PLUMBING PLAN UNDERGROUND - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-100B	PLUMBING PLAN UNDERGROUND - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-101	PLUMBING PLAN APRON LEVEL - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-101A	PLUMBING PLAN APRON LEVEL - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-101B	PLUMBING PLAN APRON LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-102	PLUMBING PLAN CONCOURSE LEVEL - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-102A	PLUMBING PLAN CONCOURSE LEVEL - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-102B	PLUMBING PLAN CONCOURSE LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-103	PLUMBING PLAN ADMIN LEVEL - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-103A	PLUMBING PLAN ADMIN LEVEL - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-103B	PLUMBING PLAN ADMIN LEVEL - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-104	PLUMBING PLAN ROOF - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-104A	PLUMBING PLAN ADMIN LEVEL ROOF - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-104B	PLUMBING PLAN ADMIN LEVEL ROOF - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-105	ENLARGED PLANS	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-106	ENLARGED PLANS	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-200	OVERALL SANITARY & VENT ISOMETRIC	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-201	RESTROOM SANITARY & VENT ISOMETRICS	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-202	OVERALL DOMESTIC ISOMETRIC	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-203	RESTROOM DOMESTIC ISOMETRICS	0	04/05/2024	04/05/2024	80CD (04/05/24)

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P-204	STORM DRAINAGE ISOMETRIC	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-501	PLUMBING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-502	PLUMBING DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
P-601	PLUMBING SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
Fire Alarm					
F001	FIRE ALARM/FIRE SUPPRESSION LEGEND AND GENERAL NOTES	0	04/05/2024	04/05/2024	80CD (04/05/24)
FAD102	OVERALL CONCOURSE LEVEL FIRE ALARM DEMOLITION PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA101	OVERALL APRON LEVEL FIRE ALARM PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA101A	PARTIAL APRON LEVEL FIRE ALARM PLAN AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA101B	APRON LEVEL FIRE ALARM PLAN AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA102	OVERALL CONCOURSE LEVEL FIRE ALARM PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA102A	PARTIAL CONCOURSE LEVEL FIRE ALARM PLAN AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA102B	PARTIAL CONCOURSE LEVEL FIRE ALARM PLAN AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA102C	PARTIAL CONCOURSE LEVEL FIRE ALARM PLAN AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA102D	PARTIAL CONCOURSE LEVEL FIRE ALARM PLAN AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA103	OVERALL ADMIN LEVEL FIRE ALARM PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA103A	PARTIAL ADMIN LEVEL FIRE ALARM PLAN AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA103B	PARTIAL ADMIN LEVEL FIRE ALARM PLAN AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA501	FIRE ALARM DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA601	FIRE ALARM RISER DIAGRAM	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA602	NORTH TERMINAL EXISTING FIRE ALARM RISER DIAGRAM 1	0	04/05/2024	04/05/2024	80CD (04/05/24)
FA603	NORTH TERMINAL EXISTING FIRE ALARM RISER DIAGRAM 2	0	04/05/2024	04/05/2024	80CD (04/05/24)
Fire Suppression					
FSD101	OVERALL APRON LEVEL FIRE SUPPRESSION DEMOLITION PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
FSD102	OVERALL CONCOURSE LEVEL FIRE SUPPRESSION DEMOLITION PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS100	OVERALL APRON LEVEL FIRE SUPPRESSION PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS101A	PARTIAL APRON LEVEL FIRE SUPPRESSION PLAN AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS101B	PARTIAL APRON LEVEL FIRE SUPPRESSION PLAN AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS102	OVERALL CONCOURSE LEVEL FIRE SUPPRESSION PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS102A	PARTIAL CONCOURSE LEVEL FIRE SUPPRESSION PLAN AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS102B	PARTIAL CONCOURSE LEVEL FIRE SUPPRESSION PLAN AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS102C	PARTIAL CONCOURSE LEVEL FIRE SUPPRESSION PLAN AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS102D	PARTIAL CONCOURSE LEVEL FIRE SUPPRESSION PLAN AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS103	OVERALL ADMIN LEVEL FIRE SUPPRESSION PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS103A	PARTIAL ADMIN LEVEL FIRE SUPPRESSION PLAN AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS103B	PARTIAL ADMIN LEVEL FIRE SUPPRESSION PLAN AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS501	FIRE SUPPRESSION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
FS502	FIRE SUPPRESSION DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)

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FS601	FIRE SUPPRESSION RISER DIAGRAM	0	04/05/2024	04/05/2024	80CD (04/05/24)
Telecommunications					
T-001	TELECOMMUNICATIONS LEAD SHEET	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-002	TELECOMMUNICATIONS OUTLET AND PATHW AY SCHEDULES AND MATRICES	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-003	TELECOMMUNICATIONS GENERAL NOTES	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-004	TELECOMMUNICATIONS RESPONSIBILTY MATRIX	0	04/05/2024	04/05/2024	80CD (04/05/24)
TD-101	APRON LEVEL - DEMOLITION TELECOMMUNICATIONS PLAN - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
TD-101A	APRON LEVEL - DEMOLITION TELECOMMUNICATIONS PLAN - AREA A & B	0	04/05/2024	04/05/2024	80CD (04/05/24)
TD-101B	APRON LEVEL - DEMOLITION TELECOMMUNICATIONS PLAN - AREA C & D	0	04/05/2024	04/05/2024	80CD (04/05/24)
TD-102	CONCOURSE LEVEL - DEMOLITION TELECOMMUNICATIONS PLAN - OVERALL	0	04/05/2024	04/05/2024	80CD (04/05/24)
TD-102A	CONCOURSE LEVEL - DEMOLITION TELECOMMUNICATIONS PLAN - AREA A & B	0	04/05/2024	04/05/2024	80CD (04/05/24)
TD-102B	CONCOURSE LEVEL - DEMOLITION TELECOMMUNICATIONS PLAN - AREA C & D	0	04/05/2024	04/05/2024	80CD (04/05/24)
TD-401	DEMOLITION TELECOMMUNICATIONS ENLARGED PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-101	APRON LEVEL - TELECOMMUNICATIONS OVERALL PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-101A	APRON LEVEL - TELECOMMUNICATIONS FLOOR PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-101B	APRON LEVEL - TELECOMMUNICATIONS FLOOR PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-102	CONCOURSE LEVEL - TELECOMMUNICATIONS OVERALL PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-102A	CONCOURSE LEVEL -TELECOMMUNICATIONS FLOOR PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-102B	CONCOURSE LEVEL - TELECOMMUNICATIONS FLOOR PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-102C	CONCOURSE LEVEL - TELECOMMUNICATIONS FLOOR PLAN - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-102D	CONCOURSE LEVEL - TELECOMMUNICATIONS FLOOR PLAN - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-103	ADMIN LEVEL - TELECOMMUNICATIONS FLOOR OVERALL PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-103A	ADMIN LEVEL - TELECOMMUNICATIONS FLOOR PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-103B	ADMIN LEVEL - TELECOMMUNICATIONS FLOOR PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-201A	APRON LEVEL - TELECOMMUNICATIONS CEILING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-201B	APRON LEVEL - TELECOMMUNICATIONS CEILING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-201C	APRON LEVEL - TELECOMMUNICATIONS CEILING PLAN - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-202A	CONCOURSE LEVEL - TELECOMMUNICATIONS CEILING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-202B	CONCOURSE LEVEL - TELECOMMUNICATIONS CEILING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-202C	CONCOURSE LEVEL - TELECOMMUNICATIONS CEILING PLAN - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-202D	CONCOURSE LEVEL - TELECOMMUNICATIONS CEILING PLAN - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-203A	ADMIN LEVEL -TELECOMMUNICATIONS CEILING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-203B	ADMIN LEVEL -TELECOMMUNICATIONS CEILING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-401	TELECOMMUNICATIONS ENLARGED PLAN - ROOM 213	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-402	TELECOMMUNICATIONS ENLARGED PLAN - ROOM 203	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-403	TELECOMMUNICATIONS ENLARGED PLAN - ROOM 302	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-404	TELECOMMUNICATIONS ENLARGED PLAN - RELOCATED	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-405	TELECOMMUNICATIONS ENLARGED PLAN - EXISTING ROOM 290	0	04/05/2024	04/05/2024	80CD (04/05/24)

Drawing No.	Drawing Title	Revision	Drawing Date	Received Date	Set
T-406	TELECOMMUNICATIONS ENLARGED PLAN - CONFERENCE ROOMS	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-501	TELECOMMUNICATIONS DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-502	TELECOMMUNICATIONS DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-503	TELECOMMUNICATIONS DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-504	TELECOMMUNICATIONS DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-601	TELECOMMUNICATIONS SINGLE LINE DIAGRAM	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-602	TELECOMMUNICATIONS BACKBONE SCHEDULES	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-702A	CONCOURSE LEVEL - PUBLIC ADDRESS CEILING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-702B	CONCOURSE LEVEL - PUBLIC ADDRESS CEILING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-702C	CONCOURSE LEVEL - PUBLIC ADDRESS CEILING PLAN - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-702D	CONCOURSE LEVEL - PUBLIC ADDRESS CEILING PLAN - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-703A	ADMIN LEVEL - PUBLIC ADDRESS CEILING PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-703B	ADMIN LEVEL - PUBLIC ADDRESS CEILING PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
T-753	PAGING SYSTEM DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
Security					
TY-001	SECURITY LEAD SHEET	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-002	SECURITY OUTLET AND PATHW AY SCHEDULE AND MATRICES	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-003	SECURITY GENERAL NOTES	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-004	SECURITY RESPONSIBILITY MATRIX	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-101	APRON LEVEL - SECURITY OVERALL PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-101A	APRON LEVEL - SECURITY FLOOR PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-101B	APRON LEVEL - SECURITY FLOOR PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-102	CONCOURSE LEVEL - SECURITY OVERALL PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-102A	CONCOURSE LEVEL - SECURITY FLOOR PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-102B	CONCOURSE LEVEL - SECURITY FLOOR PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-102C	CONCOURSE LEVEL - SECURITY FLOOR PLAN - AREA C	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-102D	CONCOURSE LEVEL - SECURITY FLOOR PLAN - AREA D	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-103	ADMIN LEVEL - SECURITY OVERALL PLAN	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-103A	ADMIN LEVEL - SECURITY FLOOR PLAN - AREA A	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-103B	ADMIN LEVEL - SECURITY FLOOR PLAN - AREA B	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-501	SECURITY DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-502	SECURITY DETAILS	0	04/05/2024	04/05/2024	80CD (04/05/24)
TY-601	SECURITY SINGLE LINE DIAGRAM	0	04/05/2024	04/05/2024	80CD (04/05/24)

Engelberth Construction, Inc.

Printed on Fri May 10, 2024 at 10:31 am EDT

Job #: 23-7748 BTV Project NexT
Burlington Intl. Airport Airport Drive
So. Burlington, Vermont 05403

Current Specifications

Number	Description	Revision	Issued Date	Received Date	Set
00 - Procurement and Contracting Requirements					
000000a	Title Page	0	04/05/24	04/05/24	80CD
000000b	Table of Contents	0	04/05/24	04/05/24	80CD
0- - FAA Standard Specifications					
0-0-C-100	Contractor Quality Control Program	0	04/05/24	04/05/24	80CD
0-0-C-102	Temporary Air and Water Pollution-Soil Erosion and Siltation Control	0	04/05/24	04/05/24	80CD
0-0-C-110	Method of Estimating Percentage of Material Within Specification Limits PWL	0	04/05/24	04/05/24	80CD
0-1-P-101	Preparation-Removal of Existing Pavements	0	04/05/24	04/05/24	80CD
0-1-P-152	Excavation-Subgrade and Embankment	0	04/05/24	04/05/24	80CD
0-1-P-154	Subbase Course	0	04/05/24	04/05/24	80CD
0-1-P-209	Crushed Aggregate Base Course	0	04/05/24	04/05/24	80CD
0-1-P-401	Asphalt Mix Pavement	0	04/05/24	04/05/24	80CD
0-1-P-403	Asphalt Mix Pavement Base Course	0	04/05/24	04/05/24	80CD
0-1-P-501	Cement Concrete Pavement	0	04/05/24	04/05/24	80CD
0-1-P-603	Emulsified Asphalt Tack Coat	0	04/05/24	04/05/24	80CD
0-1-P-605	Joint Sealants for Pavements	0	04/05/24	04/05/24	80CD
0-1-P-610	Concrete for Miscellaneous Structures	0	04/05/24	04/05/24	80CD
0-2-F-162	Chain-Link Fence	0	04/05/24	04/05/24	80CD
0-3-D-701	Pipe for Storm Drains and Culverts	0	04/05/24	04/05/24	80CD
0-3-D-751	Manholes-Catch Basins-Inlets and Inspection Holes	0	04/05/24	04/05/24	80CD
0-3-D-754	Trench Drain	0	04/05/24	04/05/24	80CD
0-4-T-901	Seeding	0	04/05/24	04/05/24	80CD
0-4-T-905	Topsoil	0	04/05/24	04/05/24	80CD
0-4-T-908	Mulching	0	04/05/24	04/05/24	80CD
01 - General Requirements					
011100	Summary of Work	0	04/05/24	04/05/24	80CD
011101	Additional Contract Provisions	0	04/05/24	04/05/24	80CD
011400	Work Sequence and Contstraints	0	04/05/24	04/05/24	80CD
011420	Security Requirements & Sensitive Security Information	0	04/05/24	04/05/24	80CD
011430	Vehicle and Equipment Permitting	0	04/05/24	04/05/24	80CD
011810	Utilities Interface	0	04/05/24	04/05/24	80CD
012510	Substitutions	0	04/05/24	04/05/24	80CD
012910	Schedule of Values	0	04/05/24	04/05/24	80CD

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013100	Project Management and Coordination	0	04/05/24	04/05/24	80CD
013119	Project Meetins	0	04/05/24	04/05/24	80CD
013210	Schedule	0	04/05/24	04/05/24	80CD
013223	Construction Layout-As-Built and Quantity Surveys	0	04/05/24	04/05/24	80CD
013233	Photographic Documentation	0	04/05/24	04/05/24	80CD
013300	Submittal Procedures	0	04/05/24	04/05/24	80CD
013325	Shop and Working Drawings, Product Data, and Samples	0	04/05/24	04/05/24	80CD
013510	Construction Safety	0	04/05/24	04/05/24	80CD
013516	Alteration Project Procedures	0	04/05/24	04/05/24	80CD
013520	Construction Safety - Airside	0	04/05/24	04/05/24	80CD
014100	Regulatory Requirements	0	04/05/24	04/05/24	80CD
014510	Contractor Quality Control	0	04/05/24	04/05/24	80CD
015050	Mobilization	0	04/05/24	04/05/24	80CD
015210	Temporary Facilities	0	04/05/24	04/05/24	80CD
016000	Product Requirements	0	04/05/24	04/05/24	80CD
016610	Storage and Protection	0	04/05/24	04/05/24	80CD
017330	Cutting and Patching	0	04/05/24	04/05/24	80CD
017419	Construction Waste Management and Disposal	0	04/05/24	04/05/24	80CD
017420	Cleaning	0	04/05/24	04/05/24	80CD
017515	System Startup, Testing and Training	0	04/05/24	04/05/24	80CD
017720	Contract Closeout	0	04/05/24	04/05/24	80CD
017825	Operation and Maintenance Data	0	04/05/24	04/05/24	80CD
017840	Contract Record Documents	0	04/05/24	04/05/24	80CD
017900	Demonstration and Training	0	04/05/24	04/05/24	80CD
018113	Sustainable Design Requirements	0	04/05/24	04/05/24	80CD
019113	General Commissioning Requirements	0	04/05/24	04/05/24	80CD
02 - Existing Conditions					
024119	Selective Demolition	0	04/05/24	04/05/24	80CD
03 - Concrete					
033000	Cast-in-Place Concrete	0	04/05/24	04/05/24	80CD
033543	Polished Concrete Finishing	0	04/05/24	04/05/24	80CD
04 - Masonry					
042200	Concrete Unit Masonry	0	04/05/24	04/05/24	80CD
05 - Metals					
051200	Structural Steel Framing	0	04/05/24	04/05/24	80CD
053100	Steel Decking	0	04/05/24	04/05/24	80CD
054000	Cold-Formed Metal Framing	0	04/05/24	04/05/24	80CD

Number	Description	Revision	Issued Date	Received Date	Set
055000	Metal Fabrications	0	04/05/24	04/05/24	80CD
055113	Metal Pan Stairs and Railings	0	04/05/24	04/05/24	80CD
055813	Column Covers	0	04/05/24	04/05/24	80CD
057000	Decorative Metal	0	04/05/24	04/05/24	80CD
06 - Wood, Plastics, and Composites					
061300	Heavy Timber Construction	0	04/05/24	04/05/24	80CD
061719	Cross-Laminated Timber	0	04/05/24	04/05/24	80CD
061800	Glued-Laminated Construction	0	04/05/24	04/05/24	80CD
064023	Interior Architectural Woodwork	0	04/05/24	04/05/24	80CD
064116	Plastic-Laminate-Clad Architectural Cabinets	0	04/05/24	04/05/24	80CD
07 - Thermal and Moisture Protection					
072100	Thermal Insulation	0	04/05/24	04/05/24	80CD
072726	Fluid-Applied Membrane Air Barriers	0	04/05/24	04/05/24	80CD
074113.16	Standing-Seam Metal Roof Panels	0	04/05/24	04/05/24	80CD
074213.23	Metal Composite Material Wall Panels	0	04/05/24	04/05/24	80CD
075423	Thermoplastic-Polyolefin Roofing	0	04/05/24	04/05/24	80CD
076200	Sheet Metal Flashing and Trim	0	04/05/24	04/05/24	80CD
077129	Manufactured Roof Expansion Joints	0	04/05/24	04/05/24	80CD
077200	Roof Accessories	0	04/05/24	04/05/24	80CD
077210	Rooftop Fall Arrest System	0	04/05/24	04/05/24	80CD
078100	Applied Fire Protection	0	04/05/24	04/05/24	80CD
078123	Intumescent Fire Protection	0	04/05/24	04/05/24	80CD
078413	Penetration Firestopping	0	04/05/24	04/05/24	80CD
078443	Joint Firestopping	0	04/05/24	04/05/24	80CD
079200	Joint Sealants	0	04/05/24	04/05/24	80CD
079513.13	Interior Expansion Joint Cover Assemblies	0	04/05/24	04/05/24	80CD
079513.16	Exterior Expansion Joint Cover Assemblies	0	04/05/24	04/05/24	80CD
08 - Openings					
081113	Hollow Metal Doors and Frames	0	04/05/24	04/05/24	80CD
083323	Overhead Coiling Doors	0	04/05/24	04/05/24	80CD
083344	Overhead Coiling Fire Curtains	0	04/05/24	04/05/24	80CD
084313	Aluminum-Framed Storefronts	0	04/05/24	04/05/24	80CD
084413	Glazed Aluminum Curtain Walls	0	04/05/24	04/05/24	80CD
087100	Door Hardware	0	04/05/24	04/05/24	80CD
088000	Glazing	0	04/05/24	04/05/24	80CD
088300	Mirrors	0	04/05/24	04/05/24	80CD
089119	Fixed Louvers	0	04/05/24	04/05/24	80CD

Number	Description	Revision	Issued Date	Received Date	Set
089516	Wall Vents	0	04/05/24	04/05/24	80CD
09 - Finishes					
092116.23	Gypsum Board Shaft Wall Assemblies	0	04/05/24	04/05/24	80CD
092216	Non-Structural Metal Framing	0	04/05/24	04/05/24	80CD
092900	Gypsum Board	0	04/05/24	04/05/24	80CD
093013	Ceramic Tiling	0	04/05/24	04/05/24	80CD
095113	Acoustical Panel Ceilings	0	04/05/24	04/05/24	80CD
095123	Acoustical Tile Ceilings	0	04/05/24	04/05/24	80CD
095426	Suspended Wood Ceilings	0	04/05/24	04/05/24	80CD
096513	Resilient Base and Accessories	0	04/05/24	04/05/24	80CD
096536	Static-Control Resilient Flooring	0	04/05/24	04/05/24	80CD
096723	Resinous Flooring	0	04/24/24	04/25/24	80CD-Clarification 1
096813	Tile Carpeting	0	04/05/24	04/05/24	80CD
097200	Wall Coverings	0	04/05/24	04/05/24	80CD
099123	Interior Painting	0	04/05/24	04/05/24	80CD
099300	Staining and Transparent Finishing	0	04/05/24	04/05/24	80CD
10 - Specialties					
101423.16	Room-Identification Panel Signage	0	04/05/24	04/05/24	80CD
102113.13	Metal Toilet Compartments	0	04/05/24	04/05/24	80CD
102213	Wire Mesh Partitions	0	04/05/24	04/05/24	80CD
102219	Demountable Partitions	0	04/05/24	04/05/24	80CD
102600	Wall and Door Protection	0	04/05/24	04/05/24	80CD
102800	Toilet, Bath, and Laundry Accessories	0	04/05/24	04/05/24	80CD
104413	Fire Protection Cabinets	0	04/05/24	04/05/24	80CD
104416	Fire Extinguishers	0	04/05/24	04/05/24	80CD
12 - Furnishings					
123623.13	Plastic-Laminate-Clad Countertops	0	04/05/24	04/05/24	80CD
123661.16	Solid Surfacing Countertops	0	04/05/24	04/05/24	80CD
123661.19	Quartz Agglomerate Countertops	0	04/05/24	04/05/24	80CD
124816	Entrance Floor Grilles	0	04/05/24	04/05/24	80CD
14 - Conveying Equipment					
140000	Passenger Boarding Bridge	0	04/24/24	04/25/24	80CD-Clarification 1
142123	Machine Room-Less Electric Traction Passenger Elevators	0	04/05/24	04/05/24	80CD
21 - Fire Suppression					
211000	Water-Based Fire-Suppression Systems	0	04/05/24	04/05/24	80CD
22 - Plumbing					
220500	Common Work Results for Plumbing	0	04/05/24	04/05/24	80CD

Number	Description	Revision	Issued Date	Received Date	Set
220510	Common Motor Requirements for Plumbing Equipment	0	04/05/24	04/05/24	80CD
220520	Expansion Fittings and Loops	0	04/05/24	04/05/24	80CD
220530	Escutcheons, Sleeves and Sleeve Seals	0	04/05/24	04/05/24	80CD
220550	Meters and Gages	0	04/05/24	04/05/24	80CD
220560	Piping and Equipment Identification	0	04/05/24	04/05/24	80CD
220570	Hangers and Supports	0	04/05/24	04/05/24	80CD
220580	Plumbing Piping Heat Tracing	0	04/05/24	04/05/24	80CD
220700	Plumbing Insulation	0	04/05/24	04/05/24	80CD
221010	Plumbing Piping	0	04/05/24	04/05/24	80CD
221020	Plumbing Specialties	0	04/05/24	04/05/24	80CD
221030	Interceptors and Traps	0	04/05/24	04/05/24	80CD
223000	Water Heaters	0	04/05/24	04/05/24	80CD
223300	Inline Domestic Water Pumps	0	04/05/24	04/05/24	80CD
223600	Ejectors and Pumps	0	04/05/24	04/05/24	80CD
224000	Plumbing Fixtures	0	04/05/24	04/05/24	80CD
23 - Heating, Ventilating, and Air Conditioning (HVAC)					
230400	Basic HVAC Requirements	0	04/05/24	04/05/24	80CD
230500	Common Work Results for HVAC Equipment	0	04/05/24	04/05/24	80CD
230505	Selective Demolition for Mechanical	0	04/05/24	04/05/24	80CD
230513	Common Motor Requirements for HVAC Equipment	0	04/05/24	04/05/24	80CD
230516	Expansion Fittings and Loops for HVAC Piping	0	04/05/24	04/05/24	80CD
230517	Sleeves and Sleeve Seals for HVAC Piping	0	04/05/24	04/05/24	80CD
230518	Escutcheons for HVAC Piping	0	04/05/24	04/05/24	80CD
230519	Meters and Gages for HVAC Piping	0	04/05/24	04/05/24	80CD
230523	Valves for HVAC Piping	0	04/05/24	04/05/24	80CD
230529	Hangers and Supports for HVAC Ductwork, Piping and Equipment	0	04/05/24	04/05/24	80CD
230593	Testing, Adjusting, and Balancing for HVAC	0	04/05/24	04/05/24	80CD
230713	Duct Insulation	0	04/05/24	04/05/24	80CD
230719	HVAC Piping Insulation	0	04/05/24	04/05/24	80CD
232113	Hydronic Piping	0	04/05/24	04/05/24	80CD
232116	Hydronic Piping Specialties	0	04/05/24	04/05/24	80CD
232123	Hydronic Pumps	0	04/05/24	04/05/24	80CD
232300	Refrigerant Piping	0	04/05/24	04/05/24	80CD
233113	Metal Ducts	0	04/05/24	04/05/24	80CD
233600	Air Terminal Units	0	04/05/24	04/05/24	80CD
233713	Diffusers, Registers, and Grilles	0	04/05/24	04/05/24	80CD
235750.1	Ground Loop Heat Exchanger	0	04/03/24	04/26/24	80CD-RFI P-8

Number	Description	Revision	Issued Date	Received Date	Set
235750.2	Test Borehole	0	04/03/24	04/26/24	80CD-RFI P-8
238219	Fan Coil Units	0	04/05/24	04/05/24	80CD
26 - Electrical					
260010	Supplemental Requirements for Electrical	0	04/05/24	04/05/24	80CD
260011	Facility Performance Requirements for Electrical	0	04/05/24	04/05/24	80CD
260519	Low-Voltage Electrical Power Conductors and Cables	0	04/05/24	04/05/24	80CD
260523	Control-Voltage Electrical Power Cables	0	04/05/24	04/05/24	80CD
260526	Grounding and Bonding for Electrical Systems	0	04/05/24	04/05/24	80CD
260529	Hangers and Supports for Electrical Systems	0	04/05/24	04/05/24	80CD
260533.13	Conduits for Electrical Systems	0	04/05/24	04/05/24	80CD
260536	Cable Trays for Electrical Systems	0	04/05/24	04/05/24	80CD
260543	Underground Ducts and Raceways for Electrical Systems	0	04/05/24	04/05/24	80CD
260544	Sleeves and Sleeve Seals for Electrical Raceways and Cabling	0	04/05/24	04/05/24	80CD
260553	Identification for Electrical Systems	0	04/05/24	04/05/24	80CD
260573.13	Short-Circuit Studies	0	04/05/24	04/05/24	80CD
260573.16	Coordination Studies	0	04/05/24	04/05/24	80CD
260573.19	Arc-Flash Hazard Analysis	0	04/05/24	04/05/24	80CD
260913	Electrical Power Monitoring	0	04/05/24	04/05/24	80CD
260923	Lighting Control Devices	0	04/05/24	04/05/24	80CD
260936	Modular Dimming Controls	0	04/05/24	04/05/24	80CD
260943.16	Addressable Luminaire Lighting Controls	0	04/05/24	04/05/24	80CD
262213	Low-Voltage Distribution Transformers	0	04/05/24	04/05/24	80CD
262300	Low-Voltage Switchgear	0	04/05/24	04/05/24	80CD
262413	Switchboards	0	04/05/24	04/05/24	80CD
262416	Panelboards	0	04/05/24	04/05/24	80CD
262713	Electricity Metering	0	04/05/24	04/05/24	80CD
262726	Wiring Devices	0	04/05/24	04/05/24	80CD
262816	Enclosed Switches and Circuit Breakers	0	04/05/24	04/05/24	80CD
262923	Variable-Frequency Motor Controllers	0	04/05/24	04/05/24	80CD
263213.16	Gas-Engine-Driven Generator Sets	0	04/05/24	04/05/24	80CD
263600	Transfer Switches	0	04/05/24	04/05/24	80CD
264113	Lightning Protection for Structures	0	04/05/24	04/05/24	80CD
264313	Surge Protective Devices for Low-Voltage Electrical Power Circuits	0	04/05/24	04/05/24	80CD
265000	Lighting	0	04/05/24	04/05/24	80CD
265213	Emergency and Exit Lighting	0	04/05/24	04/05/24	80CD
265613	Lighting Poles and Standards	0	04/05/24	04/05/24	80CD
28 - Electronic Safety and Security					

Engelberth Construction, Inc.

Number	Description	Revision	Issued Date	Received Date	Set
283111	Digital Addressable Fire Alarm System	0	04/05/24	04/05/24	80CD
284700	Mass Notification Systems	0	04/05/24	04/05/24	80CD


eci
Engelberth
construction, Inc.

5th AMENDMENT TO THE AGREEMENT BETWEEN JACOBS ENGINEERING GROUP INC. AND THE CITY OF BURLINGTON REGARDING NORTH TERMINAL IMPROVEMENTS PROJECT

5th Amendment to the Agreement Between JACOBS ENGINEERING GROUP INC. and The City of Burlington regarding NORTH TERMINAL IMPROVEMENTS PROJECT (the "5th Amendment") is made and entered into as of the _____ day of _____ 2026, by and between the City of Burlington, a Vermont municipal corporation ("City"), and JACOBS ENGINEERING GROUP INC. ("Consultant") (collectively, "the parties").

Background

A. The parties entered into that certain agreement, dated as of September 21, 2022 (the "Agreement") in order to provide Data Collection, Preliminary Design, Permitting, and Project Administration Services for improvements to the North end of the Terminal building at Patrick Leahy Burlington International Airport.

B. The parties entered into an amended Agreement, dated as of April 4, 2023 (the "1st Amendment"), to perform additional data collection and additional project administration services. This was required after initial building evaluation necessitated more detailed building and subsurface information.

C. The parties entered into an amended Agreement, dated as of December 12, 2023 (the "2nd Amendment"), to advance the design through Issued For Construction (IFC) design plans and specifications. The 2nd Amendment also added construction phase services.

D. The parties entered into an amended Agreement, dated as of January 4, 2024 (the "3rd Amendment"), to include a soil investigation program and the preparation of a Corrective Action Plan to remediate unsuitable soils within the project area. The 3rd Amendment also removed the preparation of Enabling Packages to facilitate an early start to construction activities.

E. The parties entered into an amended Agreement, dated as of December 5, 2024 (the "4th Amendment"), to include final architectural and structural design services relating to the specific elevator type required, coordination of the site soils corrective action plan, and additional permitting and project management tasks.

F. The original Agreement, the 1st Amendment, the 2nd Amendment, the 3rd Amendment, and the 4th Amendment represent the entire agreement prior to entering into this 5th Amendment.

F. The parties now desire to enter into this 5th Amendment in order to revise the Agreement, as follows:

1. Add Article B.II, Task 24. This additional permitting is required for the recreational path and associated operational stormwater permit and South Burlington Zoning permit. This Task includes subconsultant costs only.
2. Add Article B.VIII, Tasks 1 and 2. Task 1 is for the establishment of a secure storage room on the apron level, for the purpose of TSA inspection, clearance, and storage of items for retail sale within the secure areas of the terminal. Task 2 is for the establishment of a new break room at the southwest corner of the new building on the apron level.
3. Add Article E, Tasks 2.1 and 5.1, and adjust scope for Tasks 11 and 12. These additional Construction Administration tasks include reviewing and responding to additional submittals, reviewing and providing responses to additional requests for information (RFIs), additional general construction administration support, and geotechnical coordination with the contractor due to the unexpected ground conditions. The adjustments to Article include subconsultant costs as further outlined in Attachments B, C, D, E, and F of this 5th Amendment.
4. Add Article F, Task 2.1 to delete unused overtime hours that have not been required to date on the project.

NOW THEREFORE, in consideration of the Background described above and other good and valuable consideration, IT IS AGREED by and between the City and Consultant as follows:

1. In Section 5, Part A, first paragraph, the original text of:

"Amount. The City shall pay the Consultant for completion of the Work in accordance with Exhibit A – Scope of Work, which is contained within Attachment A, in the amount of Five Million Forty-Nine Thousand Four Hundred Eighty-Nine dollars and No cents ($5,049,489.00)."

will be replaced with:

"**Amount.** The City shall pay the Consultant for completion of the Work in accordance with Exhibit A – Scope of Work, which is contained within Attachment A, in the amount of Five Million Four Hundred Fifty-Four Thousand Nine Hundred and Fourteen dollars and No Cents ($5,454,914.00)."

2. In Section 5, Part C, the original text of:

"**Maximum Limiting Amount**. The total amount that may be paid to the Consultant for all services and expenses under this Contract shall not exceed the maximum limiting amount of $5,049,489.00. The City shall not be liable to Consultant for any amount exceeding the maximum limiting amount without duly authorized written approval."

will be replaced with:

"**Maximum Limiting Amount**. The total amount that may be paid to the Consultant for all services and expenses under this Contract shall not exceed the maximum limiting amount of $5,454,914.00. The City shall not be liable to Consultant for any amount exceeding the maximum limiting amount without duly authorized written approval."

5. Except as specifically amended by the terms of this 5th Amendment, the Agreement remains in full force and effect. Unless specifically defined in this 5th Amendment, all terms shall have the meanings contained in the Agreement.

IN WITNESS WHEREOF, this 5th Amendment is executed as of the day and date first above written.

CONSULTANT	**CITY OF BURLINGTON, VERMONT**
By: _____	By: _____
Caitlin Johnson, BEng, EMBA, FCMI	Nicolas Longo, C.M.
Vice President – Director of Operations	Director of Aviation
Northeast Transportation	Patrick Leahy Burlington
Jacobs Engineering Group Inc.	International Airport

A list of Attachments to this Amendment is shown on the following page.

Attachments to Amendment No. 5

The following six (6) attachments are part of this Amendment:

Attachment A – Summary of Contractual Project Fees to Date
Attachment B – Jacobs Engineering Group Inc. Scope & Fee Proposal (Amendment No. 5)
Attachment C – Subconsultant Proposal – EIV Technical Services (Article B.II Services)
Attachment D – Subconsultant Proposal – John Turner Consulting (Article E Services)
Attachment E – Subconsultant Proposal – Hoyle Tanner & Associates (Article E Services)
Attachment F - Subconsultant Proposal – EIV Technical Services (Article E Services)

Attachment A

Summary of Contractual Project Fees to Date

- **Original Agreement**
- **Amendment No. 1**
- **Amendment No. 2**
- **Amendment No. 3**
- **Amendment No. 4**
- **Amendment No. 5**

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT (KBTV)
1200 Airport Drive, #1
South Burlington, VT 05403

PROJECT NEXT - NORTH TERMINAL IMPROVEMENTS PROJECT
AIP No. Varies

FEE SUMMARY

*** Hours are for Jacobs only, and do not include Subconsultant efforts**

	Original Agreement		Amendment No. 1		Amendment No. 2		Amendment No. 3		Amendment No. 4		Amendment No. 5		Revised Total Contract	
Lump Sum Articles	**Hours***	**Fee**	**Hours***	**Fee**	**Hours***	**Fee**	**Hours***	**Fee**	**Hours***	**Fee**	**Hours***	**Fee**	**Hours***	**Fee**
Article A: Data Collection	112	$58,800	381	$110,555									493	$169,355
Article B: Preliminary Design and Permitting														
Article B.I: Programming, Basis of Design (BoD), and 30% Design	3843	$750,400			(320)	($55,227)			0	($40,000)			3523	$655,173
Article B.II: Permitting	125	$41,600							272	$121,000	0	$15,240	397	$177,840
Article B.III: 60% Design					4352	$743,309							4352	$743,309
Article B.IV: 80% Design					3704	$629,674							3704	$629,674
Article B.V: Enabling Packages					638	$107,836	(638)	($107,836)					0	$0
Article B.VI: Issued for Construction (IFC) Package					3169	$544,380			300	$125,900			3469	$670,280
Article B.VII: Soil Evaluation, Corrective Action Plan, and SSDS Design							60	$108,758					60	$108,758
Article B.VIII: Additional Design											130	$20,196	130	$20,196
Article C: Procurement and Arrangements for Construction					118	$22,365							118	$22,365
Article D: Project Management, Admin., and Owner's Rep Services	346	$57,400	18	$3,051	1384	$253,941			1,080	$203,300			2828	$517,692
Total Lump Sum Fee	**4,426**	**$908,200**	**399**	**$113,606**	**13,045**	**$2,246,278**	**-578**	**$922**	**1,652**	**$410,200**	**130**	**$35,436**	**18,675**	**$3,714,642**

	Original Agreement		Amendment No. 1		Amendment No. 2		Amendment No. 3		Amendment No. 4		Amendment No. 5		Revised Total Contract	
Cost Plus Articles	**Hours***	**Fee**	**Hours***	**Fee**	**Hours***	**Fee**	**Hours***	**Fee**	**Hours***	**Fee**	**Hours***	**Fee**	**Hours***	**Fee**
Article E: Construction Administration					1,947	$361,631			64	$54,700	1,833	$550,149	3,844	$966,480
Article F: Resident Engineering (Full-Time)					5,880	$953,952					(1,056)	($180,160)	4,824	$773,792
Article G: Environmental Monitoring Services - ***Not Used***														
Total Cost Plus Fee	**0**	**$0**	**0**	**$0**	**7,827**	**$1,315,583**	**0**	**$0**	**64**	**$54,700**	**777**	**$369,989**	**8,668**	**$1,740,272**

	Original Agreement	Amendment No. 1	Amendment No. 2	Amendment No. 3	Amendment No. 4	Amendment No. 5	Revised Total Contract
TOTAL PROJECT FEE	**$908,200**	**$113,606**	**$3,561,861**	**$922**	**$464,900**	**$405,425**	**$5,454,914**

Notes	
Jacobs Overhead Rate (2022 Rate - Applies to entire project duration)	102.74%
Jacobs Profit (Labor)	10.00%
Jacobs Profit (Subconsultants)	0.00%
Mileage Rate ($/mi.) (Original Agreement and Amendment No. 1)	$0.585
Mileage Rate ($/mi.) (Amendment Nos. 2, 3, 4 & 5)	$0.665
Round Trip Mileage from Jacobs Office (Bedford, NH) to BTV	330

	Original Agreement	Amendment No. 1	Amendment No. 2	Amendment No. 3	Amendment No. 4	Amendment No. 5	Revised Total Contract
Fee Breakdown by Entity	**Fee**		**Fee**				**Fee**
Jacobs Engineering Group Inc.	$721,519	$62,904	$3,357,161	($92,223)	$319,033	$230,685	$4,599,079
Vermont Survey & Engineering	$19,440	$12,832					$32,272
John Turner Consulting	$22,500		$40,000			$70,000	$132,500
Hoyle, Tanner & Associates	$64,268		$124,785			$54,500	$243,553
City Point Partners, LLC	$17,973						$17,973
Wagner Hodgson	$40,000				$20,000		$60,000
EIV Technical Services	$22,500				$74,400	$50,240	$147,140
VHB		$5,000		$99,543	$43,967		$148,510
Advanced Infrastructure Design		$32,870					$32,870
Code Red Consultants, LLC			$39,915	($6,398)			$33,517
Schlosser Signs					$7,500		$7,500
	$908,200	**$113,606**	**$3,561,861**	**$922**	**$464,900**	**$405,425**	**$5,454,914**

Attachment B

Jacobs Engineering Group Inc. Scope & Fee Proposal (Amendment No. 5)

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT (BTV)
City of Burlington, Vermont
Project NEXT - North Terminal Improvements
Design, Procurement, Management, and Construction Phase Services
AIP No. Varies

FEE SUMMARY - Amendment No. 5

Lump Sum Articles	Hours*	Fee
Article A: *(Not Used)*		
Article B: Design and Enabling Packages		
Article B.I: Programming, Basis of Design (BoD), and 30% Design		
Article B.II: Permitting	0	$ 15,240
Article B.III: 60% Design		
Article B.IV: 80% Design		
Article B.V: Enabling Packages (Site/Utilities, Mechanical, and Structural)		
Article B.VI: Issued for Construction (IFC) Documents		
Article B.VII: Soil Evaluation, Corrective Action Plan, and SSDS Design		
Article B.VIII: Additional Design	130	$ 20,196
Article C: Procurement and Arrangements for Construction		
Article D: Project Management and Owner's Representative Services		
Total Lump Sum Fee	**130**	**$ 35,436**

** Hours shown do not include subconsultant(s) efforts*

Actual Cost Articles	Hours*	Fee
Article E: Construction Administration	2,457	$ 550,149
Article F: Resident Engineering	(1,056)	$ (180,160)
Total Actual Cost Fee	**1,401**	**$ 369,989**

** Hours shown do not include subconsultant(s) efforts*

Estimated Total Fee - 5th Amendment	**$ 405,425**

5th Amendment Subconsultants (Included in Total Fee Shown Above)	Reference	Fee
EIV - Additional Permitting	Attachment C	*$15,240*
John Turner Consulting - Additional Materials Testing	Attachment D	*$70,000*
Hoyle, Tanner & Associates - Constructon Administration	Attachment E	*$54,500*
EIV - Construction Period Stormwater Inspection & Reporting	Attachment F	*$35,000*

*** Net amount; Refer to scope deletion in Article B.I and addition in Article B.VI*

Notes	
Jacobs Audited Overhead Rate (2022 Rate)	102.74%
Jacobs Profit (Labor)	10.00%
Jacobs Profit (Subconsultants)	0.00%
Mileage Rate ($/mi.)	$0.665
Round Trip Mileage from Jacobs Office (Bedford, NH) to BTV	330

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT (BTV)
City of Burlington, Vermont
Project NEXT - North Terminal Improvements
Design, Procurement, Management, and Construction Phase Services
AIP No. TBD

Article B.II: Permitting

Task ID	WORK ITEM	Principal in Charge	Project Manager	Project Engineer	Engineer	Structural Engineer	MEP Engineer	Utility Engineer	Environ. Scientist	CADD	Admin Assistant	TOTAL
24	**ADDITIONAL PERMITTING.** Subconsultant cost only.											0
	TOTAL HOURS	0	0	0	0	0	0	0	0	0	0	**0**
	RATE	$130	$95	$66	$51	$76	$84	$74	$63	$45	$30	
	PAYROLL ESTIMATE	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**

TOTAL PAYROLL		**$0**
Overhead	102.74%	$0
Subtotal		$0
Profit	10%	$0
Payroll Fee		$0
Subconsultants		$15,240
Expenses		$0
Lump Sum Total		**$15,240**

Subconsultant Summary:

Subconsultant and Scope of Work	Fee
EIV Technical Services - Additional Permitting relating to recreational path and associated operational stormwater permit and South Burlington Zoning permit.	$15,240
Total Subconsultants:	**$15,240**

Expense Summary by Task ID:

Task ID	Expense Item	Amount
	[None]	$0
Total Expenses:		**$0**

NOTE: All submissions are assumed to be electronic, in PDF format. No plan/specifications reprographics costs are included in this Agreement.

Article B.II: Permitting - Total Fee = $15,240

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT (BTV)
City of Burlington, Vermont
Project NEXT - North Terminal Improvements
Design, Procurement, Management, and Construction Phase Services
AIP No. TBD

Article B.VIII: Additional Design

Task ID	WORK ITEM	Principal in Charge	Project Manager	Lead Architect	Project Architect	Structural Engineer	MEP Engineer	Elect. Engineer	F/P Engineer	Telecom Engineer	Admin Assistant	TOTAL
1	**SECURE STORAGE ROOM DESIGN.** This Task is for the establishment of a secure storage room on the apron level, for the purpose of TSA inspection, clearance, and storage of items for retail sale within the secure areas of the terminal. The design will include new walls, electrical, security/access control, mechanical adjustments (if necessary), and fire protection modifications (if necessary) The design for this dedicated area will be formally issued to the Contractor as a design Bulletin.		2	8	8	2	4	12	8	8		52
2	**BREAK ROOM DESIGN.** This Task is for the establishment of a new break room at the southwest corner of the new building on the apron level. The design will include new walls, electrical, security/access control, mechanical adjustments, and fire protection modifications (if necessary). Per the client's request, a new penetration through an existing fire-rated wall will be included to achieve the desired access to thee break room. The design for this new break room will be formally issued to the Contractor as a design Bulletin.		2	12	8	12	8	12	16	8		78
	TOTAL HOURS	0	4	20	16	14	12	24	24	16	0	**130**
	RATE	$130	$95	$81	$61	$76	$84	$74	$63	$45	$30	
	PAYROLL ESTIMATE	$0	$380	$1,620	$976	$1,064	$1,008	$1,776	$1,512	$720	$0	**$9,056**

Subconsultant Summary:

Subconsultant and Scope of Work	Fee
[None]	$0
Total Subconsultants:	**$0**

Expense Summary by Task ID:

Task ID	Expense Item	Amount
	[None]	$0
	Total Expenses:	**$0**

NOTE: All submissions are assumed to be electronic, in PDF format. No plan/specifications reprographics costs are included in this Agreement.

TOTAL PAYROLL		**$9,056**
Overhead	102.74%	$9,304
Subtotal		$18,360
Profit	10%	$1,836
Payroll Fee		$20,196
Subconsultants		$0
Expenses		$0
Lump Sum Total		**$20,196**

Article B.VIII: Additional Design - Total Fee = $20,196

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT (BTV)
City of Burlington, Vermont
Project NEXT - North Terminal Improvements
Design, Procurement, Management, and Construction Phase Services
AIP No. Varies

Article E: Construction Administration

Note: Items below are expanded scope and 10% fee is applied.

Task ID	WORK ITEM	Principal in Charge	Project Manager	Lead Architect	Project Architect	Lead MEP	Mech. Engineer	F/P Engineer	Elect. Engineer	Telcom Engineer	Lead Structural	Struct. Engineer	Lead Civil	Civil Engineer	CADD/ BIM	Admin Assistant	TOTAL
2.1	**REVIEW PROJECT SUBMITTALS (ADDITIONAL).** This Task increases the amount of project submittals from 100 to 500 (an increase of 400 submittals). The hours for this Task have been pro-rated proportionally based on the level of effort planned under Task 2 of the original Agreement.		32	80	160	80	160	80	160	160	80	160	32	80			1264
11	**REQUESTS FOR INFORMATION (RFIs).** This Task is for providing formal responses to RFIs submitted by the Contractor. Based on the current amount of RFIs submitted (128), this Task establishes a budget based on 160 RFIs for the duration of the project.		18	72	72	8	36	8	36	36	8	36	3	36			369
12	**GEOTHERMAL COORDINATION.** This Task includes time spend assisting the contractor and their on-site well driller with unexpected ground conditions. Limestone and voids within the planned wellfield requires adjustment to well depths on a case-by-case basis and varification of the overall viability of the final wellfield. This Task also includes review of 48-hour test data from installed wells and adjustments to the mechanical design to best accomodate the final wellfield configuration. Mechanical adjustments will be formally issued as part of a design Bulletin.		40			80	80										200
	TOTAL HOURS	0	90	152	232	168	276	88	196	196	88	196	35	116	0	0	1833
	RATE	$130	$95	$81	$61	$101	$56	$66	$66	$61	$101	$51	$66	$51	$45	$28	
	PAYROLL ESTIMATE	$0	$8,550	$12,312	$14,152	$16,968	$15,456	$5,808	$12,936	$11,956	$8,888	$9,996	$2,310	$5,916	$0	$0	**$125,248**

TOTAL PAYROLL		**$125,248**
Overhead	102.74%	$128,680
Subtotal		$253,928
Profit	10%	$25,393
Payroll Fee		$279,321
Cost Plus Fee Total		**$279,321**

Note: Items below are additional hours for previously defined scope, and no fee (0%) is applied.

Task ID	WORK ITEM	Principal in Charge	Project Manager	Lead Architect	Project Architect	Lead MEP	Mech. Engineer	F/P Engineer	Elect. Engineer	Telcom Engineer	Lead Structural	Struct. Engineer	Lead Civil	Civil Engineer	CADD/ BIM	Admin Assistant	TOTAL
5.1	**GENERAL CONSTRUCTION ADMINISTRATION SUPPORT (ADDITIONAL).** This Task increases the time allocation for the Project Manager and Lead Architect to align more closely with actual time spent on the project thus far. The previous estimate of 6 hr/week for the Project Manager and 2 hr/week for the Lead Architect has proven insufficient. This task increases the budget for the remaining estimated 26 weeks of the project to 12 hrs/week for both the Project Manager and the Lead Architect.		312	312													624
	TOTAL HOURS	0	312	312	0	0	0	0	0	0	0	0	0	0	0	0	624
	RATE	$130	$95	$81	$61	$101	$56	$66	$66	$61	$101	$51	$66	$51	$45	$28	
	PAYROLL ESTIMATE	$0	$29,640	$25,272	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$54,912**

TOTAL PAYROLL		**$54,912**
Overhead	102.74%	$56,417
Subtotal		$111,329
Profit	0%	$0
Payroll Fee		$111,329
Subconsultants		$159,500
Expenses		$0
Cost Total		**$270,829**

Subconsultant Summary:

Subconsultant and Scope of Work	Fee
John Turner Consulting *- Materials Testing (Concrete, Bituminous Pavement, Aggregates, Compaction, Fireproofing). This item increases the budget from the $40,000 included in the original agreement to a total of* ***$110,000.***	$70,000
Hoyle, Tanner & Associates *- Construction Administration services relating to airside civil components, including revision to Gate 1/1A/1B parking position and Passenger Boarding Bridges at Gates 1-4.*	$54,500
EIV *- Construction period stormwater and erosion control inspection, in accordance with issued permits.*	$35,000
Total Subconsultants:	**$159,500**

Expense Summary by Task ID:

Task ID	Expense Item	Amount
	[None]	$0
	Total Expenses:	**$0**

Article E: Construction Administration- Total Fee = $550,149

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT (BTV)
City of Burlington, Vermont
Project NEXT - North Terminal Improvements
Design, Procurement, Management, and Construction Phase Services
AIP No. TBD

Article F: Resident Engineering

Task ID	WORK ITEM	Principal in Charge	Project Manager	Project Engineer	Resident Engineer	Electrical Engineer	Mech. Engineer	Resident Engineer (OT)	Architect	Admin Assistant	TOTAL
RESIDENT PROJECT REPRESENTATIVE (RPR) SERVICES - Budget Adjustment Based on RPRp											
2.1	On-site RPR (Weekdays - M-F - 410 days) - ***(DELETE 400 BUDGETED OT HOURS)***							(400)			**(400)**
	On-site RPR (Saturdays - 82 days) - ***(DELETE SATURDAY RPR COVERAGE)***							(656)			**(656)**
	TOTAL HOURS	0	0	0	0	0	0	-1056	0	0	**(1056)**
	RATE	$130	$85	$51	$51	$66	$61	$77	$75	$28	
	PAYROLL ESTIMATE	$0	$0	$0	$0	$0	$0	-$80,784	$0	$0	**($80,784)**

TOTAL PAYROLL		**($80,784)**
Overhead	102.74%	($82,997)
Subtotal		($163,781)
Profit	10%	($16,378)
Payroll Fee		($180,160)
Subconsultants		---
Expenses		$0
Cost Plus Fee Total		**($180,160)**

Subconsultant Summary:

Subconsultant	Scope of Work	Fee
[None]	---	---
Total Subconsultants:		**---**

Expense Summary by Task ID

Task ID	Lodging	Per Diem (Full)	Per Diem (Partial)	Mileage	Notes	Subtotal
			[No Adjustment to Expense Budget]			$0
Total Expenses:						**$0**

Expense Notes:

1. No adjustment to expense budget.

Article F: Resident Engineering - Total Hours =	**-1,056**
Article F: Resident Engineering - Total Fee =	**($180,160)**

Attachment C

Subconsultant Proposal – EIV Technical Services
Article B.II Services

EIV TECHNICAL SERVICES

The City Gardens Building
355 Main Street, Unit 500
Winooski, VT 05404
Tel: 802-497-3653

September 11, 2025

Stu Moncrieff
Project Manager
JACOBS
Two Executive Park Drive, Suite 205
Bedford, NH 03110

Re: Patrick Leahy Burlington International Airport
North Concourse Replacement and Recreational Path Projects
Environmental Consulting Services

Dear Mr. Moncrieff:

We appreciate the opportunity to be your team's environmental permitting specialist for the above referenced project. We are writing to amend our original scope and increase the budget for our services that extended beyond December 31, 2024. Due to the additional Sketch Plan and Master Plan permit process, the amount of permitting, design support and duration extended into late winter 2025. EIV also supported grant funds with leading the Section 10 process for project NeXT. Additionally, the City of South Burlington updated their parcel map so that the proposed rec path would continue through just one parcel, instead of several, triggering a 3-9050 operational stormwater permit. An Act 250 permit amendment, INDC, and local zoning approvals were all required for the proposed rec path. Due to the above referenced additional work items, we have needed to increase the amount of team coordination and meeting time.

We are submitting this proposal as an amendment to increase our consulting services for an additional lump sum of **$15,240.17**. If you have any questions or require additional information, please do not hesitate to contact me directly at 802-324-5522.

Sincerely,
EIV Technical Services

Jacqueline Dagesse, MBA, CPESC, PMP
President / Environmental Engineer

EIV Technical Services

The City Gardens Building
355 Main Street, #500
Winooski, VT 05404

PROPOSAL

Environmental Permit Consulting Services

Burlington International Airport - North Concourse

Replacement and Recreational Path

Article B.II - Permitting Services (Lump Sum)

No.	Description	Manager IV	Environmental Specialist Supervisor	Environmental Biologist	Environmental Specialist III	Admin.	Total Hours
B.II.1	Permitting Coordination with BTV, Jacobs, and the various agencies.	5	10				200
B.II.2	City of South Burlington permitting assistance (Sketch Plan, Master Plan,Site Plan, and Zoning).	10	20				120
B.II.3	Two Vermont NRB Act 250 Permit - assume "Minor Amendment".	10	26				72
B.II.4	Operational Stormwater Permit 3-9050	10	30				64
B.II.5	Vermont ANR Individual Stormwater Permit 3-9020	5	30				46
B.II.6	Project Coordination, meetings, and Water / Wastewater Allocation Determination	0	2				130
	Hours	**40**	**118**	**0**	**0**	**0**	**632**
	Direct Rate	$50.00	$45.00	$40.00	$30.00	$28.00	
	Payroll Expense	**$2,000.00**	**$5,310.00**	**$0.00**	**$0.00**	**$0.00**	**$5,310.00**

Expense Detail:

Mileage:		$ 0.00
Prints:	$1,500	$ 1,500.00
Postage:	280 @ $0.55	$ 154.00
Misc.:	Incidentals	$ 0.00
		$ 1,654.00

Payroll Expense	$ 5,310.00
OH @ 132.60%	$ 7,041.06
Subtotal	12,351.06
Fixed Fee @10%	$ 1,235.11
Labor Total	$ 13,586.17
Direct Expenses	$ 1,654.00
TOTAL - Article B.II	**$ 15,240.17**

Expense Exclusions:

Permit Fees, Filing Fees, Etc.
Certified Mailings (Abutter Notifications)

Summary of Fees:

Article B.II:	**$**	**15,240.17**
-	$	-
TOTAL:	**$**	**15,240.17**

Jacqueline Dagesse, MBA, CPESC
President / Environmental Engineer
(802) 497-3653
jdagesse@eivtech.com

Proposal Accepted By:

Signature: _____

Printed Name: _____

Title/Company: _____

Date: _____

Attachment D

Subconsultant Proposal – John Turner Consulting
Article E Services

JOHN TURNER CONSULTING

CHRIS COTE
802-295-1100
CHRISC@CONSULTJTC.COM
12 GREGORY DRIVE, UNIT 7, S. BURLINGTON, VT 05403

October 24, 2025

Stu Moncrieff, P.E.
Jacobs
Manager of Projects | New England Aviation
Two Executive Park Drive, Suite 205
Bedford, NH 03110
M:+1.603.496.9267 | Stu.Moncrieff@jacobs.com

Proposal for

BTV North Terminal Expansion

South Burlington, VT

JTC Proposal #24-1019

Dear Stu:

John Turner Consulting, Inc. (JTC) is pleased to submit this proposal for materials testing and special inspection services for the BTV North Terminal Expansion project located in South Burlington, VT. The original contract amount of $40,000.00 has been exceeded since billing was released for March of 2025. Materials Testing and Special Inspections are still ongoing and JTC is looking to amend the original contract amount provided by Jacobs Engineering. There are still a number of items not completed including concrete slabs, soil compaction, structural steel, masonry, fireproofing, and apron reconstruction.

WHY CHOOSE JTC'S TEAM

JTC provides qualified, cross-trained personnel for the various areas of inspection while remaining extremely competitive with our fee schedules. Each of our technicians and registered professionals are supported by the expertise of the entire staff. With over 130 technical professionals, JTC can provide staff on short notice to cover almost any inspection need. JTC is one of the few firms in New England with ICC (International Building Code) certified inspectors for performing quality inspections for a variety of applications.

JTC offers the following strengths and benefits:

- Our cross-trained, multi-certified staff can provide multiple services during a single visit. We provide certified inspectors and a fully credentialed testing laboratory, to ensure that the scope of work is completed proficiently, accurately, and safely – assuring our client's interests are well protected.
- JTC's S. Burlington, VT laboratory is accredited through the VTrans Quality Assurance program.
- Our licensed professional geotechnical engineers are available to support projects throughout New England, from geotechnical investigations to knowledgeable peer review of reports prepared by other firms.

Providing engineering solutions since 1997

- *Construction Engineering & Inspection*
- *Environmental Consulting*
- *Geotechnical Engineering*
- *Materials Testing*
- *Special Inspections*
- *Building Sciences*
- *Pavement Consulting*
- *Sustainability & Energy Services*

9 locations throughout New England:

- *Newington, CT*
- *Sutton, MA*
- *Woburn, MA*
- *Bangor, ME*
- *Lisbon, ME*
- *Dover, NH*
- *North Hampton, NH (corporate office)*
- *Hartland, VT*
- *South Burlington, VT*

- A large service area with 9 offices strategically located throughout New England.



PROPOSED FEES

JTC's proposed rates are listed in the following tables. ***The additional estimated cost to complete the materials testing and special inspections for the project is $70,000.00 or a total of $110,000.00.***

Thank you for the opportunity to submit this proposal for your review. Please indicate acceptance by signing our attached rate sheet. In addition, please initial the Terms and Conditions and complete the attached Project Information sheet.

We look forward to working with you.

Respectfully,
JOHN TURNER CONSULTING, INC.

Chris Cote
Vermont Manager
12 Gregory Drive, Unit 7
South Burlington, VT 05403
chrisc@consultjtc.com
Ph: 802-295-1100

FIELD SERVICES	PROPOSED RATES
A. Soils, Concrete, and/or Masonry Field Testing Cross-trained materials testing technician	$350.00 per ½ day (1-4 Hours) $650.00 per full day (4-8 Hours) $110.00/HR Overtime (8+ Hours)
Laboratory Testing	
• Washed sieve analysis (includes coarse and fine aggregate and #200 wash)	$120.00 each
• Moisture density relationship	$150.00 each
• Compression testing of concrete cylinders	$22.00 each
• Compression testing of 2x2 mortar cubes	$22.00 each
• Compression testing of 3x6 grout samples	$28.00 each
• Compression testing of masonry prisms 2-high	$130.00 each
B. Structural Special Inspections • Structural steel framing • Wood framing • Shear connectors • Steel decking • Cold form metal framing • Steel stairs and handrails/guardrails	$950.00 per visit + mileage from inspector's residence
• Ultrasonic Testing and Magnetic Particle	$2,460.00 per visit
• Pre-Construction Meetings	$130.00 per hour
C. Fireproofing: Spray Applied *(thicknesses only)*	$950.00 per visit
• Adhesion/Cohesion	$65.00 each
• Density Tests	$75.00 each
D. Firestopping Inspection	$1200.00 per visit
• Report/UL System and RFI review	$105.00 per hour
E. Bituminous Concrete Pavement Inspection	$600.00 per half day $1050.00 per full day
F. Bituminous Concrete Plant Inspector	$1,100.00 per day

PERSONNEL	RATE
Principal Engineer/P.E./Principal-in-Charge	$225.00 per hour
Senior Geotechnical Engineer/P.E.	$180.00 per hour
Senior Staff Engineer	$155.00 per hour
Staff Engineer	$145.00 per hour
Field Engineer	$135.00 per hour
Special Inspector	$135.00 per hour
Project Manager	$135.00 per hour

OTHER	RATE
Nuclear Density Gauge Rental	$50.00 per day
Sample Pick Up *(plus mileage)*	$50.00 per trip
Travel *(portal to portal plus mileage)*	$0.67 per mile
Rerouting Same Day Scheduling	.5 x Hourly Rate
Overtime *(over 8 hours per day; nights and weekends)*	1.5 x Normal Hourly Rate
Last Minute/On-Site Cancellation Fee	4-hour minimum

Notes:

1. Field personnel charges are based on a four-hour minimum.
2. Rates apply for travel time (portal to portal will be charged at the hourly rate of the service being provided).
3. Travel expenses outside New England are invoiced at direct cost plus 10% administrative overhead.
4. The rates included herein are subject to re-negotiation after 1 year.
5. 5. Time used for half and full day charge determination is calculated including travel time from the nearest branch office to the work.

Agreed to this _____ day of _____, 20_____

By: _____

Title: _____

Firm: _____

John Turner Consulting, Inc.
Terms and Conditions

John Turner Consulting, Inc. (JTC) shall perform the services outlined in this agreement (attached) for the stated fee arrangement (attached).

Access to Site
Unless otherwise stated, JTC will have access to the site for activities necessary for the performance of the services. JTC will take reasonable precautions to minimize any damage due to these activities but has not included in the fee the cost of restoration of any resulting damage.

Fees
See attached fee schedule. Total fees for a project are based upon schedules and workflow. If applicable, any total fee indicated, except stated lump sum, shall be understood to be an estimate, based upon rates listed, and shall not be exceeded by more than ten percent, without written approval of CLIENT.

Billings/Payments
Invoices shall be submitted by John Turner Consulting, Inc. monthly. Invoices shall be due in full in 30 days. A finance charge of 1.5% per month (18% per year) will be assessed for each month payment is outstanding. After 90 days, CLIENT agrees to pay all costs of collection, including reasonable attorneys' fees.

Hidden Conditions and Hazardous Materials
A condition is hidden if concealed by existing finishes or is not capable of investigation by reasonable visual observation. If JTC has reason to believe that such a condition may exist, CLIENT shall authorize and pay for all costs associated with the investigation of such a condition. If (1) CLIENT fails to authorize such investigation after due notification, or (2) JTC has no reason to believe that such a condition exists, JTC shall not be responsible for the existing condition or any resulting damages to persons or property. JTC shall have no responsibility for the discovery, presence, handling, removal, disposal or exposure of persons to hazardous materials of any form that are not related to the service provided.

Indemnification
JTC and CLIENT mutually agree, to the fullest extent permitted by law, to indemnify and hold each other harmless from any and all damage, liability or cost (including reasonable attorneys' fees and defense costs) to the extent caused by their own negligent acts, errors or omissions and those of anyone for whom they are legally liable, and arising from the project that is the subject of this agreement. Neither party is obligated to indemnify the other in any manner whatsoever for the other's own negligence.

Risk Allocation
In recognition of the relative risks and benefits of the project to both CLIENT and to JTC, CLIENT agrees, to the fullest extent permitted by law, to limit JTC's total liability to CLIENT, for any and all damages or claim expenses (including attorneys' fees) arising out of this agreement, from any and all causes, to the total amount of $25,000, the amount of JTC's fee (whichever is greater) or other amount agreed upon when added under Special Conditions.

Termination of Services
This agreement may be terminated upon 5 days written notice by either party should the other fail to perform his obligations hereunder. In the event of termination, CLIENT shall pay John Turner Consulting, Inc. for all services, rendered to the date of termination, all reimbursable expenses, and reasonable termination expenses.

Witness Fees
JTC's employees shall not be retained as expert witnesses except by separate, written agreement. CLIENT agrees to pay JTC's legal expenses, administrative costs and fees pursuant to JTC's then current fee schedule for JTC to respond to any subpoena.

Ownership of Documents
All documents produced by John Turner Consulting, Inc., under this agreement shall remain the property of John Turner Consulting, Inc. and may not be used by CLIENT for any other purpose without the written consent of JTC.

Employees
Client agrees that it will not, during the term of this agreement, or within one year afterward, hire any person who has been an employee of John Turner Consulting, Inc. If client violates its obligations under this section, it will be liable to John Turner Consulting, Inc for liquidated damages in an amount equal to two years of billing (4160 hours) for employee at the current hourly billing rate. The provision of this section shall survive any termination of this Agreement. The provisions of this section shall also be adhered to by the client's client and/or owner of said project.

Jobsite Safety
In performing construction observation visits to the jobsite, JTC shall have no control over or responsibility for the Contractor's means, methods, sequence, techniques or procedures in performing the Work. These are solely the responsibilities of the Contractor, who is also responsible for complying with all health and safety precautions as required by any regulatory agencies. Jobsite safety is the responsibility of the general contractor, who has control over the construction employees and the jobsite.

Dispute Resolution
As a prerequisite to filing a negligence suit, CLIENT agrees to obtain a Certificate of Merit. Any claim or dispute between CLIENT and John Turner Consulting, Inc. shall be submitted to non-binding mediation, subject to the parties agreeing to a mediator(s). Unless otherwise specified, this agreement shall be governed by the laws of the state of New Hampshire no matter where the project is located.

Initials: _____(CLIENT) Initials: _____(JTC)

Date: _____ Date: _____

Attachment E

Subconsultant Proposal – Hoyle Tanner & Associates
Article E Services

Amendment No. 3

ESTIMATE OF CONSTRUCTION ADMIN COST
for
NORTH TERMINAL UPGRADES

at
BURLINGTON INTERNATIONAL AIRPORT
for
BURLINGTON INTERNATIONAL AIRPORT
South Burlington, Vermont
June 9, 2025

HOYLE, TANNER PROJECT NO. 23.391501.00

	Original Contract	Amendment #1	Amendment #2	Amendment #3	Total Contract	
Article I - Project Administration **Hoyle Tanner Phase 01**	$6,200	$0	$0	$0	$6,200	LUMP SUM
Article Ia - Project Administration - Amendment #1 **Hoyle Tanner Phase 02**	$0	$8,500	$0	$0	$8,500	LUMP SUM
Article II – Planning **Hoyle Tanner Phase 20**	$7,100	$0	$0	$0	$7,100	LUMP SUM
Article III – Design **Hoyle Tanner Phase 40**	$49,800	$0	$0	$0	$49,800	LUMP SUM
Article IIIa – Design - Amendment #1 **Hoyle Tanner Phase 41**	$0	$115,500	($14,200)	$0	$101,300	LUMP SUM
Article IV – Construction Administration **Hoyle Tanner Phase 71**	$0	$0	$0	$54,500	$54,500	ACTUAL COST PLUS FIXED FEE
Expenses **Hoyle Tanner Phase 99**	$1,168	$0	$0	$0	$1,168	ACTUAL COST
Expenses - Amendment #1 **Hoyle Tanner Phase 98**	$0	$785	$14,200	$0	$14,985	ACTUAL COST
TOTAL ESTIMATED PROJECT COST:	$64,268	$124,785	$0	$54,500	$243,554	

BURLINGTON INTERNATIONAL AIRPORT

NORTH TERMINAL UPGRADES

Article IV - Construction Administration
Hoyle Tanner Phase 71

HOYLE, TANNER PROJECT NO. 23.391501.00

		ESTIMATED HOURS BY LABOR CLASSIFICATION								
Task	**Description**	**Principal Engineer $89.50** /HR	**Engineering Manager $82.50** /HR	**Project Manager $77.00** /HR	**Senior Engineer $48.00** /HR	**Staff Engineer $43.00** /HR	**Sr CADD Tech $51.50** /HR	**Admin Support $40.00** /HR	**Total Hours**	**Total Labor Cost**
1	Establish and maintain a tracking system for all Project construction records (Request for Information (RFI), project changes, and Shop Drawings)							6	6	$240.00
2	Shop Drawing & Submittal Review. This scope assumes no more than 20 shop drawings and materials lists reviews and considers contractor resubmittal as another separate submittal. Review of the Contractor's job mix formula for Hot Mix Airport Pavement (P-401) to be included.			12		20		4	36	$1,944.00
3	Coordinate with RPR to verify that all testing requirements are satisfied. Review acceptance tests required by specifications.			4		6			10	$566.00
4	Requests for Information (RFIs) will be responded to through the preparation of written directives and sketches		4	70		80	16	4	174	$10,144.00
5	Provide consultation and advice to the RPR and Contractor		2	25		10			37	$2,520.00
6	Review punch list items			8		6			14	$874.00
7	Review the Contractor's record drawings and create asbuilts			6			16		22	$1,286.00
8	Assist with final project report			2		4		2	8	$406.00
9	Retain project records file; including grants, contracts and construction files.			1				2	3	$157.00
	TOTAL HOURS	**0**	**6**	**128**	**0**	**126**	**32**	**18**	**310**	
	TOTAL DIRECT LABOR	**$0.00**	**$495.00**	**$9,856.00**	**$0.00**	**$5,418.00**	**$1,648.00**	**$720.00**		**$18,137.00**

DIRECT LABOR		$18,137.00
OVERHEAD	161.30%	$29,254.98
		$47,391.98
REIMBURSABLE EXPENSES		$0.00
SUBCONSULTANTS		$0.00
		$0.00
PROFIT	15%	**$7,100**
ESTIMATED TOTAL COST		$54,500.78
ACTUAL COST PLUS FIXED FEE		**$54,500**

Hoyle, Tanner & Associates, Inc. **150 Dow Street, Manchester, NH 03101**

Attachment F

Subconsultant Proposal – EIV Technical Services

Article E Services

EIV TECHNICAL SERVICES

The City Gardens Building
355 Main Street, Suite 500
Winooski, VT 05404
Tel: 802-497-3653

September 11, 2025

Stu Moncrieff
New England Aviation Project Manager
JACOBs

Re: Burlingtin International Airport
Project NeXT and Recreational Path
EPSC Specialist Consulting Services

Dear Mr. Moncrieff:

We appreciate your consideration of EIV as your team's Erosion Prevent and Sediment Control (EPSC) Specialist for the above referenced project. Catie Calabrese will be the dedicated environmental inspector, and I will serve as her back up. EIV held two preconstruction conferences with the Vermont Agency of Natural Resources (ANR) stormwater specialist. Catie will inspect the construction project work bi-weekly and following any rain events. These inspection reports will be distributed to ANR, the contractor's OSPC and the airport representative. We anticipate the project work to last from 2025-2026. Actual time will be billed at $110/hr and mileage reimbursed at the currently approved federal rate. This work will have a maximum limit amount of $35,000, and only actual time and expense will be billed.

Feel free to contact me with any questions regarding this submission.

Sincerely,
EIV Technical Services

Jacqueline Dagesse, MBA, CPESC, PMP
President / Environmental Engineer

CHANGE ORDER No. 7

February 19, 2026

PROJECT: BTV Project NexT – North Terminal Improvements
Patrick Leahy Burlington International Airport
AIP No. - Various

OWNER: City of Burlington / Patrick Leahy Burlington International Airport
1200 Airport Drive, #1
South Burlington, VT 05403

CONTRACTOR: Engelberth Construction, Inc. (ECI)
150 Water Tower Circle
Colchester, VT 05446

CONTRACT DATE: October 4, 2024

DESCRIPTION OF CHANGE: This Change incorporates various ECI Proposed Change Orders (PCOs) as detailed herein. These PCOs include cost adjustments related to final design, AHJ request(s), Owner requests, and unknown existing conditions.

JUSTIFICATION FOR CHANGE: See attached.

COST SUMMARY:	Original Contract Price	$	47,931,525.00
	Previous Additions (Deletions)	$	10,966,367.82
	Final Contract Price Prior to This Change	$	58,897,892.82
	Net Increase (Decrease) for This Change	$	4,311,819.69
	Final Contract Price Including This Change	**$**	**63,209,712.51**

CONTRACT TIME:	Original Contract Time Allowed	952	Days
(CALENDAR DAYS)	Previous Additions (Deletions)	31	Days
	Contract Time Prior to This Change	983	Days
	Net Increase (Decrease) for This Change	0	Days
	Contract Time Including This Change	**983**	**Days**

THIS DOCUMENT SHALL SERVE AS AN AMENDMENT TO THE CONTRACT AND ALL ORIGINAL TERMS AND CONDITIONS SHALL APPLY HERETO.

THE CHANGES DESCRIBED HEREIN ARE APPROVED:

Jacobs Engineering Group Inc.	**Federal Aviation Administration**
By: 	By:
Name: Stu Moncrieff, Project Manager	Name:
Date: February 19, 2026	Date:

THE CHANGES DESCRIBED HEREIN ARE ACCEPTED:

Engelberth Construction, Inc.	**Patrick Leahy Burlington International Airport**
By:	By:
Name: Brendan Jones, Project Manager	Name: Nicolas Longo, C.M., Director of Aviation
Date:	Date:

CHANGE ORDER No. 7

Date: February 19, 2026
6
Project: BTV Project NexT – North Terminal Improvements
Patrick Leahy Burlington International Airport
AIP No. - Various

Owner: City of Burlington / Patrick Leahy Burlington International Airport
1200 Airport Drive, #1
South Burlington, VT 05403

Contractor: Engelberth Construction, Inc. (ECI)
150 Water Tower Circle
Colchester, VT 05446

Owner's Rep: Jacobs Engineering Group, Inc. (Jacobs)
2 Executive Park Drive, Suite 205
Bedford, NH 03110

SUMMARY

This Change Order incorporates the following Potential Change Orders (PCOs) submitted by ECI:

- PCO #008 – VE, Change Electrical Feeders from Cu to Al
- PCO #015 – Submittal 262413-01, Change Generator Panel Configurations
- PCO #018 – Alternate #06 – Level 2 Renovations of Existing Terminal
- PCO #026 – IFC, Additional Electrical Work
- PCO #044 – Alternate #07: Landscape Requirement
- PCO #050 – Bulletin #2 Misc. Mechanical Changes
- PCO #051 – Stairwell Door Hardware Changes
- PCO #053 – Jet Blast Wall Demo
- PCO #054 – Exterior Envelope Commissioning
- PCO #056 – Owner-provided Wireless Access Points (WAPs)
- PCO #058 – Gate 1 Fixed Section Foundation
- PCO #063 – Concrete Slab in Interstitial Space
- PCO #064 – Bulletin #4, Additional Demo, Fencing, and PCC
- PCO #067 – Power Changes (Gate 3 & 4 Panels)
- PCO #068 – Power Changes (OH Door Voltage Change)
- PCO #072 – Additional Water Line Piping and Valves
- PCO #076 – Trench Heater UL Design and Fireproofing
- PCO #077 – NW Corner Fence & Utility Changes
- PCO #078 – Delete Landscaping Phase 7
- PCO #079 –Additional HW, CW, and GW Pumps (All except Division 260000)
- PCO #082 – Change DC-1, Add Heat Exchanger and Pumps (All except Division 230000)
- PCO #086 – Replace Carpet on Pedestrian Bridge
- PCO #087 – Concourse West Side Furniture
- PCO #(TBD) – Addition to Exit Ramp
- PCO #(TBD) – Additional Excavation and Backfill for Geothermal
- PCO #(TBD) – Additional Gas Piping for New Meter
- PCO #(TBD) – Additional Line Striping at Gate 1
- PCO #(TBD) – Add Mop Sink
- PCO #(TBD) – Asphalt Pavement at Gate 1/Loop D
- PCO #(TBD) – Lock Cores/Cylinders

CHANGE ORDER ITEMS

Change Order Item No. 7.01 – VE, Change Electrical Feeders from Cu to Al

DESCRIPTION: This Change is to implement the value engineering suggestion to change the electrical wiring from copper to aluminum for the main service feed to the main switchgear and generator. This VE change does not change the feeders from the main switchgear to the subpanels; they will remain copper. This Change is proposed by ECI as PCO #008.

JUSTIFICATION: This Change will result in a credit back to the Owner for the lower cost associated with the wiring material change.

REIMBURSEMENT: The cost associated with this item is a credit back to the Owner.

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #008, and believes the credit for the change in materials and labor to be fair and reasonable.

Change Order Item No. 7.02 – Submittal 262413-01, Change Generator Panel Configurations

DESCRIPTION: This Change is for the additional cost to change the generator electrical panel from a one-section panel to a four-section switchgear. This Change is proposed by ECI as PCO #015.

JUSTIFICATION: Separating emergency loads from all other loads are required by NFPA 70 Article 700, unless an AHJ variance is approved.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #015, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.03 – Alternate #06, Level 2 Renovations of Existing Terminal

DESCRIPTION: This Change incorporates the renovation of approximately 13,000 square feet of existing space on the concourse level. This item was included in the original project procurement as Alternate Item #06, and this Change is to formally award the work to ECI. This Change is proposed by ECI as PCO #018. Note: Divisions 02 and 09 of this work were awarded separately under Change Order No. 2.

JUSTIFICATION: This Change was included in the original project procurement and is now being awarded to maintain project schedule.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #018.and believes the cost for labor and materials is fair and reasonable. The original bid amount for the 2nd floor renovations at the time of procurement was $2,037,490.00. Following the procurement period, significant changes were made to the HVAC and electrical systems, as the design team finalized the demolition and renovation plans. The final price at IFC was $3,058,469.19, of which $1,115,910.00 was awarded as part of Change order No. 2. The balance of $1,942,559.19 is being awarded as part of this Change.

Change Order Item No. 7.04 – IFC, Additional Electrical Work

DESCRIPTION: This Change is for the additional electrical scope of work that changed from the 80% bid set to the 100% IFC set for work in the base building area, at the Apron and Concourse Levels. This Change is proposed by ECI as PCO #026.

JUSTIFICATION: The electrical work in this area is related to the general power wiring, distribution, lighting, fire alarm, A/V and security systems.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #026, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.05 – Alternate #07: Landscape Requirement

DESCRIPTION: This Change is for the change in cost for the landscape adjustment. The CM carried a value of $496,817 for the landscape requirement. That value was based on a calculated value based on overall project value and South Burlington landscaping requirements, as contract drawings were not available at that time. This Change is proposed by ECI as PCO #044.

JUSTIFICATION: Once contract drawings were received and work was competitively bid out for site, landscaping, and fencing scopes of work, the costs exceeded the originally budgeted value of $496,817.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #044, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.06 – Bulletin #2 Misc. Mechanical Changes

DESCRIPTION: This Change is for the miscellaneous changes made to the mechanical and plumbing scope of work from Bulletin #2. The additional cost covers various duct size and (1) fire-smoke damper size increases, changes/additions to condensate drainage system, exhaust fan static pressure and horsepower in AHU-1-1 increase, starters for all (4) exhaust fans, additional insulation, other minor mechanical changes, and permit fees. This Change is proposed by ECI as PCO #050.

JUSTIFICATION: Bulletin #2 was issued to incorporate system changes following issuance of the IFC drawings. Some of these changes had a large effect on the cost to install the mechanical system.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #050, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.07 – Stairwell Door Hardware Changes

DESCRIPTION: This Change is to modify the stairwell door hardware sets from electric strikes to fail safe electrified locks as requested by the Fire Marshall (AHJ). This Change is proposed by ECI as PCO #051.

JUSTIFICATION: The Fire Marshall (AHJ) requested that the change be made for various door hardware systems.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #051, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.08 – Jet Blast Wall Demo

DESCRIPTION: This Change is for the additional work required due to the concealed existing conditions of the exterior wall scheduled for demolition. The wall to be demolished was called out as an existing CMU wall, however after initial excavation, it was discovered that the actual construction of the wall was a masonry veneer on a cast-in-place concrete jet blast wall. Additionally, the wall included extensive rebar in the wall and a large 16' wide by 2' thick foundation. This Change is proposed by ECI as PCO #053.

JUSTIFICATION: This existing wall was scheduled for demolition to make way for the expanded terminal building. Upon demolition of the wall, this concealed condition was discovered, revealing that the wall was in fact more difficult to demolish than was previously anticipated, incurring additional time and materials onsite by the subcontractor.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #053, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.09 – Exterior Envelope Commissioning

DESCRIPTION: This Change is to add a whole building blower door test at the end of the project, which has been determined to be the minimum requirement by the VT 2020 CBES permit requirements. There is also a one-time progress inspection when the building envelope is approximately 20% complete to review details and workmanship relative to the design intent to ensure better final tests results. This Change is proposed by ECI as PCO #054.

JUSTIFICATION: This additional Cx scope is required to meet the permitting requirements of VT 2020 CBES.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #054, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.10 – Owner-provided Wireless Access Points (WAPs)

DESCRIPTION: This Change is for the additional costs for the contractor to provide network switches, wireless access points (WAPs), and other required supporting components that were previously scheduled to be Owner provided equipment. This Change is proposed by ECI as PCO #056.

JUSTIFICATION: Stu to assist with this Justification

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #056, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.11 – Gate 1 Fixed Section Foundation

DESCRIPTION: This Change is for the cost increase associated with additional materials and labor for a larger foundation to support the passenger boarding bridge (PBB) fixed bridge extension at Gate #1. The 65' PBB fixed bridge extension was previously approved under Change Order No. 2, Item 2.02. Item 2.02 included costs for the fixed bridge extension, design and engineering costs for the foundation design, and budget pricing for an assumed foundation. Post Change Order No. 2 approval, Design and Engineering services for the foundation,

revealed that the required foundation was to be more substantial then proposed under Item 2.02. This Change is proposed by ECI as PCO #058.

JUSTIFICATION: Following approval of Change Order No. 2, Item 2.02, design and engineering services commenced on the foundation design. Those design efforts revealed that the budgeted/assumed foundation was insufficient to properly support the additional bride extension structure. This enlarged foundation is required to properly support the additional PBB fixed bridge extension.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #058, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.12 – Concrete Slab in Interstitial Space

DESCRIPTION: This Change is to add a concrete slab on grade in the interstitial space between the new and existing building CMU walls. This Change is proposed by ECI as PCO #063.

JUSTIFICATION: This space is non-habitable per building code, and the original design intent was to leave the floor unfinished. During construction, it became apparent that air circulation in this space was poor and moisture may be concentrated due to the unfinished (gravel) floor. It was decided that a vapor barrier and concrete floor was the best solution to avoid long-term moisture problems in the building.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #063, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.13 – Bulletin #4, Additional Demo, Fencing,and PCC

DESCRIPTION: This Change is for the additional work required under Bulletin #4, which includes additional site/electrical demolition, fencing, and PCC concrete. This Change is proposed by ECI as PCO #064.

JUSTIFICATION: This is additional site work associated with Bulletin #4, which addressed changes associated with post-IFC changes to Gate #1, approved under Change Order No. 2, Item 2.02.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #064, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.14 – Power Changes (Gate 3 & 4 Panels)

DESCRIPTION: This Change is for the additional cost to revise the passenger boarding bridge power plans per response to RFI #154. Revisions include refeeding power for JB's 3 and 4 to an existing panel board in the existing electrical room. Conduit for the original power scheme had already been roughed in per the original plans. Additionally, there were breaker size changes for all PBB's included in this change. This Change is proposed by ECI as PCO #067.

JUSTIFICATION: Due to load increases on all Gate Panelboards, 'NH1D3' is overloaded. In lieu of increasing NH1D3 to a 1200A board, a site walk with the electrical designer, CM, and Owner determined sufficient capacity on existing panel 'DP-1'. Based on the findings of the site walk, direction was provided to re-feed 'Gate 3' and 'Gate 4' panelboards to existing distribution board 'DP-1'.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #067, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.15 – Power Changes (OH Door Voltage Change)

DESCRIPTION: This Change is for the cost increase associated with changing the electrical voltage for the overhead doors 130A, 130B, 221A, 221B, 235A, & 235B from 120-volt to 480-volt power feeds per the response to RFI # 143. This Change is proposed by ECI as PCO #068.

JUSTIFICATION: Following a change in requirement from 120-volt to 480-volt power feeds for the overhead doors and fire curtains, changes in circuiting were required.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #068, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.16 – Additional Water Line Piping and Valves

DESCRIPTION: This Change is for the cost increase associated with additional piping and gate valves required for the installation of the new water line servicing the new building. This Change is proposed by ECI as PCO #068.

JUSTIFICATION: Upon excavation for the new water line, it was discovered that the information on the base mapping was incorrect. The water line was further from the building, and the pipe routing was such that the water department asked for additional gate valves to allow for future isolation of portions of the water system if needed.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #068, and has returned the PCO to ECI for revision. Upon re-submission, the cost will only be recommended for approval if it is fair and reasonable for the additional labor and materials.

Change Order Item No. 7.17 – Trench Heater UL Design and Fireproofing

DESCRIPTION: This Change is to add an independent UL modeling of the perimeter trench heaters on the concourse level, and the application of additional spray fireproofing along the steel trench heater enclosure. This Change is proposed by ECI as PCO #076.

JUSTIFICATION: During a scheduled inspection with the Fire Marshal, the trench heater enclosures at the perimeter of the concourse level were inspected. The Fire Marshal requested an evaluation of the 2-hour fire rating for this unique design scenario, where the individual components were 2-hour fire rated, but the overall design assembly was not rated. As requested by the Fire Marshal, the complete trench heater assembly was modeled by a fire code consultant using a UL263 test criteria. The model results indicated a need for additional spray fire retardant material on the rear (outside facing) part of the perimeter I-beams. This Change includes the cost of the UL263 evaluation and the application of additional fireproofing material.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #076, and believes the cost for additional modeling, materials, and labor to be fair and reasonable.

Change Order Item No. 7.18 – NW Corner Fence & Utility Changes

DESCRIPTION: This Change is for additional work associated with grading, site electrical and addition of a precast block wall between the FAA ATCT & Building and the new terminal building. This Change is proposed by ECI as PCO #077.

JUSTIFICATION: This change is to resolve grading and utility conflicts encountered in the Northwest area of the project site, between the FAA ATCT & Building and the new terminal building.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #077, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.19 – Delete Landscaping Phase 7

DESCRIPTION: This Change is for the cost credit associated with the change in scope to delete Phase 7 from the landscaping scope of work. This Change is proposed by ECI as PCO #078.

JUSTIFICATION: Phase 7 will not be able to be completed due to the scheduling conflict with SBTV and their subsurface water management system that will not be installed for the foreseeable future.

REIMBURSEMENT: The cost associated with this item is a credit back to the Owner.

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #078, and believes the credit offered for the materials and labor to be fair and reasonable.

Change Order Item No. 7.20 – Additional HW, CW, and GW Pumps (All except Division 260000)

DESCRIPTION: This Change is for the cost increase associated with adding a 3rd pump to each of the Hot Water, Chilled Water, and Ground Water pump systems, per the response to RFI #151. In addition to adding the pumps to each system, the Ground Water Pumps were upsized from 7.5HP to 10HP to better serve the change in system location and horizontal pipe length in the system. This Change is proposed by ECI as PCO #079.

JUSTIFICATION: The additional pump for each system will provide the recommended redundancy if one of the pumps in the system were to fail.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #079, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.21 – Change DC-1, Add Heat Exchanger and Pumps (All Except Division 230000)

DESCRIPTION: This Change is for the cost increase associated with providing a larger dry cooler DC-1 and adding a heat exchanger and pumps to this mechanical cooling system, per the response to RFI #163. This Change is proposed by ECI as PCO #082.

JUSTIFICATION: This scope of work is required to provide more cooling capacity to support the geothermal system.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #082, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.22 – Replace Carpet on Pedestrian Bridge

DESCRIPTION: This Change is for the cost increase associated with replacing the carpet on the pedestrian bridge abutting the western limits of the new building. This Change is proposed by ECI as PCO #086.

JUSTIFICATION: This Change is required due to damage associated with the construction activities, the movement of materials through the bridge, and the installation/demolition of a temporary wall to separate the bridge from the new building.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #086, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.23 – Concourse West Side Furniture

DESCRIPTION: This Change is for the cost increase associated with adding fixed furniture in the concourse rooms adjacent to the holdrooms. This Change is proposed by ECI as PCO #087.

JUSTIFICATION: This Change is to complete the furnishings on the concourse level, so that passengers will have areas to sit. This fixed furniture will complement the traditional holdroom seating provided along the east side of the new building.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs has reviewed the detailed pricing submitted by ECI with PCO #087, and believes the cost for additional materials and labor to be fair and reasonable.

Change Order Item No. 7.24 – Addition to Exit Ramp

DESCRIPTION: This Change is for the cost increase associated with widening the concourse exit ramp adjacent to the new building. This Change will be proposed by ECI as a future PCO.

JUSTIFICATION: This Change is to widen the throat of the existing exit ramp to better align with passengers exiting the terminal from the new building. This will facilitate the flow of passengers and simplify their navigation through the terminal.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs will review the detailed pricing to be submitted by ECI as part of a future PCO. The cost will only be recommended for approval if it is fair and reasonable for the additional labor and materials.

Change Order Item No. 7.25 – Additional Excavation and Backfill for Geothermal

DESCRIPTION: This Change is for the cost increase associated with additional excavation and backfill for the geothermal system. This Change will be proposed by ECI as a future PCO.

JUSTIFICATION: This Change is for the cost associated with additional excavation and backfill for the geothermal well field. Due to unsuitable soil conditions, the well field needed to be relocated to an alternate location with more favorable conditions. The new location was farther from the building, which necessitated longer runs for the geothermal piping. This required careful placement and compaction of the soils to support the required pavement, some of which is subject to aircraft loading.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs will review the detailed pricing to be submitted by ECI as part of a future PCO. The cost will only be recommended for approval if it is fair and reasonable for the additional labor and materials.

Change Order Item No. 7.26 – Additional Gas Piping for New Meter

DESCRIPTION: This Change is for the cost increase associated with additional gas piping to service the existing building. This Change will be proposed by ECI as a future PCO.

JUSTIFICATION: This Change is for the cost associated with reconnecting the existing building to a new gas meter installed by the local gas company. The original design plans called for the existing gas meter for the existing building to remain. Unon coordination with the gas company, they advised that they wanted to move the gas meter across Airport Drive. The gas company absorbed the cost of the meter relocation and connection to the gas main, however the connection from the meter to the existing building became the responsibility of the Owner.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs will review the detailed pricing to be submitted by ECI as part of a future PCO. The cost will only be recommended for approval if it is fair and reasonable for the additional labor and materials.

Change Order Item No. 7.27 – Additional Line Striping at Gate 1

DESCRIPTION: This Change is for the cost increase associated with additional line striping at Gate 1. This Change will be proposed by ECI as a future PCO.

JUSTIFICATION: This Change is for the cost associated with additional line striping at Gate 1. This due to the change from a single aircraft parking position at Gate 1, to the 1/1A/1B setup as currently designed. This change includes additional layout and materials, with no additional mobilization cost required.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs will review the detailed pricing to be submitted by ECI as part of a future PCO. The cost will only be recommended for approval if it is fair and reasonable for the additional labor and materials.

Change Order Item No. 7.28 – Asphalt Pavement at Gate 1/Loop D

DESCRIPTION: This Change is for the cost increase associated with paving the area adjacent to new Gate 1A parking position. This Change will be proposed by ECI as a future PCO.

JUSTIFICATION: This Change is for the cost associated with additional pavement to the west of the Gate 1A parking position. This due to the change from a single aircraft parking position at Gate 1, to the 1/1A/1B setup as currently designed. The change to accommodate additional aircraft resulted in an area near the electrical vault needing to be paved to support ground service equipment.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs will review the detailed pricing to be submitted by ECI as part of a future PCO. The cost will only be recommended for approval if it is fair and reasonable for the additional labor and materials.

Change Order Item No. 7.29 – Lock Cores/Cylinders

DESCRIPTION: This Change is for the cost increase associated with providing lock cores and cylinders for all locks in the new building. This Change will be proposed by ECI as a future PCO.

JUSTIFICATION: This Change is for the cost associated with transferring the cost obligation of the lock cores and cylinders from the Owner to the Contractor. For security reasons, these are normally specified as Owner supplied items. For simplicity of tracking the costs and coordinating the work, for this project the cost responsibility will be transferred to the Contractor as part of this change.

REIMBURSEMENT: The cost associated with this item is eligible for reimbursement under current or future AIP, CDS, or BIL grant(s).

COST: Jacobs will review the detailed pricing to be submitted by ECI as part of a future PCO. The cost will only be recommended for approval if it is fair and reasonable for the additional labor and materials.

CHANGE ORDER SUMMARY

Item No.	PCO No.	Item Description	Amount Approved[(1)]	Add. Contract Days	AIP Eligible
7.01	008	VE, Change Electrical Feeders from Cu to Al	($76,547.34)	0	✓
7.02	015	Submittal 262413-01, Change Generator Panel Configurations	$30,918.72	0	✓
7.03	018	Alternate #06 – Level 2 Renovations of Existing Terminal	$1,942,559.19	0	✓
7.04	026	IFC, Additional Electrical Work	$81,137.71	0	✓
7.05	044	Alternate #07: Landscape Requirement	$248,023.00	0	✓
7.06	050	Bulletin #2 Misc. Mechanical Changes	$53,241.25	0	✓
7.07	051	Stairwell Door Hardware Changes	$14,318.83	0	✓
7.08	053	Jet Blast Wall Demo	$40,601.61	0	✓
7.09	054	Exterior Envelope Commissioning	$11,707.50	0	✓
7.10	056	Owner-provided Wireless Access Points (WAPs)	$311,186.51	0	✓
7.11	058	Gate 1 Fixed Section Foundation	$127,335.23	0	✓
7.12	063	Concrete Slab in Interstitial Space	$17,282.50	0	✓
7.13	064	Bulletin #4, Additional Demo, Fencing, and PCC	$208,484.93	0	✓
7.14	067	Power Changes (Gate 3 & 4 Panels)	$56,248.41	0	✓
7.15	068	Power Changes (OH Door Voltage Change)	$23,997.03	0	✓
7.16	072	Additional Water Line Piping and Valves	$20,000.00	0	✓

7.17	076	Trench Heater UL Design and Fireproofing	$30,885.50	0	✓
7.18	077	NW Corner Fence & Utility Changes	$80,948.18	0	✓
7.19	078	Delete Landscaping Phase 7	($52,311.00)	0	✓
7.20	079	Additional HW, CW, and GW Pumps (All except Division 260000)	$174,994.79	0	✓
7.21	082	Change DC-1, Add Heat Exchanger and Pumps (All except Division 230000)	$39,610.38	0	✓
7.22	086	Replace Carpet on Pedestrian Bridge	$47,376.35	0	✓
7.23	087	Concourse West Side Furniture	$302,320.41	0	✓
7.24	(TBD)	Addition to Exit Ramp	$50,000.00	0	✓
7.25	(TBD)	Additional Excavation and Backfill for Geothermal	$250,000.00	0	✓
7.26	(TBD)	Additional Gas Piping for New Meter	$20,000.00	0	✓
7.27	(TBD)	Additional Line Striping at Gate 1	$50,000.00	0	✓
7.28	(TBD)	Asphalt Pavement at Gate 1/Loop D	$200,000.00	0	✓
7.29	(TBD)	Lock Cores/Cylinders	$7,500.00	0	✓
		TOTALS	**$4,311,819.69**	**0**	

Note: PCOs marked “TBD” are pending workup of final costs.

END OF CHANGE ORDER NO. 7

NOTE: The following Attachment dividers will be updated upon finalization of CO #7 items and costs, before circulation for final review and signatures.

Attachment A

PCO #050

Bulletin #2 Misc. Mechanical Changes

Attachment B

PCO #051

Stairwell Door Hardware Changes

Attachment C

PCO #053

Jet Blast Wall Demo

Attachment D

PCO #054

Exterior Envelope Commissioning

Attachment E

PCO #056

Owner-provided Wireless Access Points (WAPs)

Attachment F

PCO #058

Gate 1 Fixed Section Foundation

Attachment G

PCO #063

Concrete Slab in Interstitial Space

Attachment H

PCO #064

Add'l 7 PCC Apron Panels

Attachment I

PCO #077

NW Corner Fence & Utility Changes

PATRICK LEAHY
BURLINGTON
INTERNATIONAL AIRPORT

To: Airport Commissioners
From: Marie Friedman, CPA, Director of Finance
Date: March 25, 2026
Re: Financial Highlights Report for April 1st, 2026 meeting

- This month's financial package includes the February P&L, Revenue Recovery Metrics and the Banking Balance report.

- BTV renewed the Grant Anticipation Note (GAN) in early July. There is one drawdown for AIP-149 (South Apron Construction) for $372,000 under the new GAN. The Airport has $9,628,000 million still available to draw on if needed. Interest rates are adjusted monthly. Interest paid on the GAN is eligible for reimbursement under a future PFC application.

- The Airport is working on a new PFC Application. This will include the buildout of the SRE Building anticipated financing as well as local share match on upcoming AIP grants.

- Year-to-date (YTD) Revenues through February were $18.4 Million. Operating revenues are higher than the prior year, primarily due to the increases realized in parking garage revenues and terminal concession revenues. The parking garage revenues are higher (due to increasing the daily rate). Landing fees are lower than the prior year. Starting in February 2026, incentives for Breeze will expire, and they will begin paying landing fees on some of their routes. Please refer to the P&L for more detail. The Airport Revenue recovery schedule is included as well. All metrics are recovering as expected. This shows five revenue sources and how they performed over time. The data points represent a trailing twelve month for each month.

- Expenses thru February were $13 Million. This is a 2.5% increase over prior year. Please refer to the P&L for more detail.

- Cash update: As of February 28, 2026, BTV had $5,385,728 in the Airport International account and did not owe the City any money.

A: 1200 Airport Drive, #1 South Burlington, VT 05403
P: 802.863.2874

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT

Budget Performance Report
Fiscal Year to Date 2/28/2026

Account	Account Description	Amended Budget	YTD Encumbrances	FY 2026 YTD Transactions	Remaining Balance	% Used/ Received	FY 2025 YTD Transactions
	REVENUES						
4050	Parking Fines	35,000	-	6,300	28,700	18%	-
4247	Fees and Permits	110,000	-	112,002	(2,002)	102%	105,667
4267	Utility Reimbursement	151,000	-	102,014	48,986	68%	106,754
4268	Sale of Gasoline	650,000	-	421,666	228,334	65%	435,616
4295	Parking Fees	8,100,000	-	5,530,897	2,569,103	68%	4,979,684
4297	CFC's	2,200,000	-	1,568,692	631,308	71%	1,594,656
4345	Advertising Revenues	200,000	-	34,075	165,925	17%	79,850
4380	Third Party Gateway	1,000	-	375	626	+++	346
4385	Ticket Sales	20,000	-	-	20,000	0%	-
4390	Concessions	425,000	-	341,044	83,956	80%	303,534
4440	Taxi Fees	195,000	-	170,743	24,257	88%	167,404
4445	Terminal Rent - Exclusive	1,125,000	-	732,741	392,259	65%	700,979
4450	Terminal Rent - Commonuse	1,725,228	-	1,001,346	723,882	58%	1,106,826
4455	Terminal Concessions Airport	800,000	-	620,039	179,961	78%	546,246
4460	Rental Car Concessions	3,800,000	-	2,778,074	1,021,926	73%	2,723,089
4465	Rent Grounds	619,341	-	366,701	252,640	59%	386,085
4470	Rent Buildings	1,123,000	-	704,659	418,341	63%	752,840
4475	Landing Fees	2,300,000	-	1,423,891	876,109	62%	1,619,440
4480	PFC Revenue	2,800,000	-	1,842,350	957,650	66%	1,854,989
4505	Terminal Non Airline	670,000	-	450,223	219,777	67%	385,143
4535	Misc Rev	1,000	-	372	629	37%	12,963
4600	Fees For Services	6,500	-	6,370	130	98%	5,330
4961	Property Tax Reimbursement - Airport	215,365	-	140,022	75,343	65%	145,246
	Total Revenues	$ 27,272,434	$ -	$ 18,354,594	$ 8,917,840	67%	$ 18,012,687

EXPENDITURES

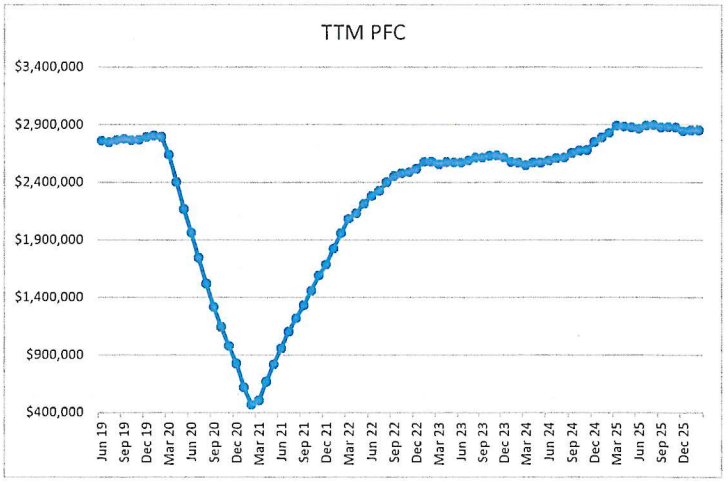
Account	Account Description	Amended Budget	YTD Encumbrances	FY 2026 YTD Transactions	Remaining Balance	% Used/ Received	FY 2025 YTD Transactions
5000	Salaries and Wages	4,306,266	-	2,572,936	1,733,330	60%	2,334,830
5100	Overtime	389,000	-	319,623	69,377	82%	260,944
5200	Other Personnel Services	520,888	-	315,957	204,931	61%	329,139
5400	Employee Benefits	1,923,196	-	1,244,340	678,856	65%	1,153,271
		7,139,350	-	4,452,856	2,686,494		4,078,184
6000	Office Supplies	4,400	-	1,823	2,577	41%	1,599
6005	Postage	200	-	129	71	64%	88
6007	Shipping and Moving	30,000	73	10,283	19,645	34%	18,083
6010	Computer Equipment	48,000	1,782	22,511	23,707	47%	19,625
6015	Computer Software	8,000	-	-	8,000	0%	-
6017	Computer Licensing and Maint.	288,405	-	231,819	56,586	80%	217,165
6020	Office Equipment	8,000	-	357	7,643	4%	550
6025	Furnishings	257,500	151,149	100,177	6,174	39%	22,354
6200	Medical Fees And Supplies	9,010	361	6,954	1,695	77%	1,482
6202	Printing/Copying/Paper Mgt	18,015	-	6,188	11,827	34%	9,469
6203	Dues/Subscriptions	219,100	-	154,429	64,671	70%	113,960
6206	Custodian Supplies	130,000	-	61,792	68,208	48%	69,347
6208	Special Supplies	86,000	2,192	48,503	35,305	56%	42,735
6210	Small Tools and Equipment	55,000	1,000	17,989	36,011	33%	14,533
6211	Specialized Equipment	76,871	13,966	10,418	52,487	14%	-
6212	Fuel	788,000	-	558,294	229,706	71%	504,240
6214	Clothing And Uniforms	48,000	-	3,419	44,581	7%	23,648
6215	Uniform Laundering	39,000	1,543	14,457	23,000	37%	11,269
6216	Oil & Grease & Antifreeze	16,496	-	4,604	11,892	28%	5,695
6222	Runway De-Ice	294,545	-	260,052	34,493	88%	49,039
6294	Donations	3,000	-	-	3,000	0%	5
6300	Repair & Maintenance	2,537,830	623,999	814,295	1,099,535	32%	1,806,146
6350	Legal Notice & Advertising	1,700	-	1,608	92	95%	465
6400	Utilities	1,873,525	-	1,170,600	702,925	62%	993,487
6500	Professional and Consultant Svs	1,980,601	133	985,359	995,109	50%	865,075
6530	Rentals	18,500	-	13,069	5,431	71%	4,200
6600	Maintenance Contracts	364,800	34,520	172,872	157,408	47%	134,115
6605	Radio Maintenance	51,900	1,302	41,297	9,301	80%	5,328
6610	Custodial Contracts	831,409	-	588,047	243,362	71%	542,680
6615	Property Repairs	316,595	30,000	111,713	174,882	35%	180,375
6625	Equipment Maintenance Repairs	264,500	29,807	158,990	75,702	60%	139,946
6700	Travel & Training	102,800	-	55,737	47,063	54%	58,951
6800	Fees for Services	24,785	-	11,995	12,790	48%	4,316
7200	Capital Leases	837,763	38,707	615,290	183,766	73%	396,600
7230	Insurance	416,773	-	259,078	157,695	62%	304,270
7303	Regulatory and Bank Fees	225,000	-	140,000	85,000	62%	149,228
7312	Real Estate Taxes	896,195	285,048	570,097	41,050	64%	568,445
7652	Discretionary Spending	55,000	-	14,100	40,900	26%	26,563
8015	Indirect Fees	557,778	-	371,852	185,926	67%	381,224
8017	Indirect Fees - City Attorney	34,004	-	22,669	11,335	67%	61,776
8135	Airport Security To Police	1,370,477	-	913,648	456,829	67%	982,672
8400	Special Events/Project	38,500	-	12,823	25,677	33%	-
	Total Expenditures	$ 22,367,327	$ 1,215,581	$ 13,012,192	$ 8,139,554	64%	$ 12,808,931
	Net Operating Revenues			$ 5,342,403			$ 5,203,756

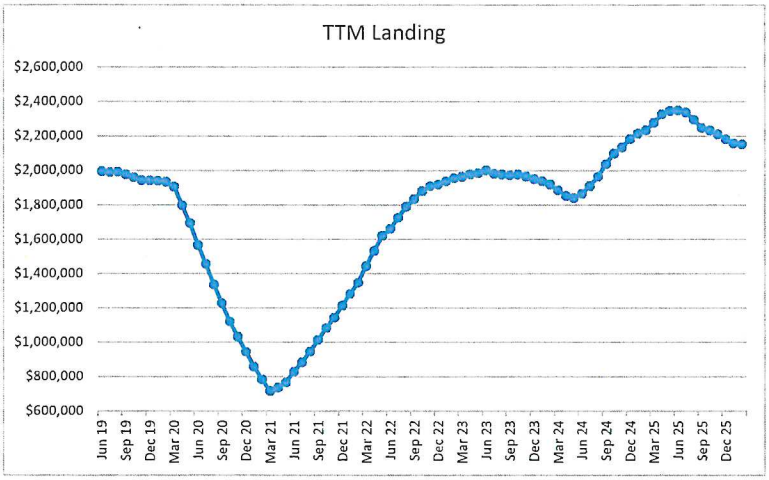
Net Operating Revenues (which are used to pay for Bond payments, Capital and FAA projects)

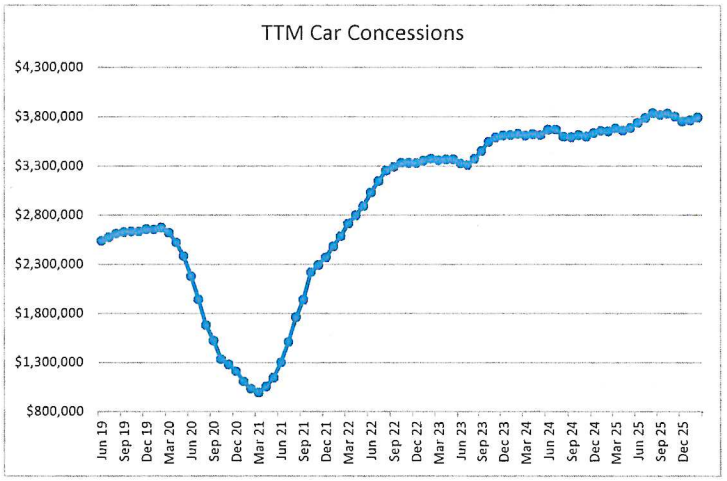
Recovery Metrics

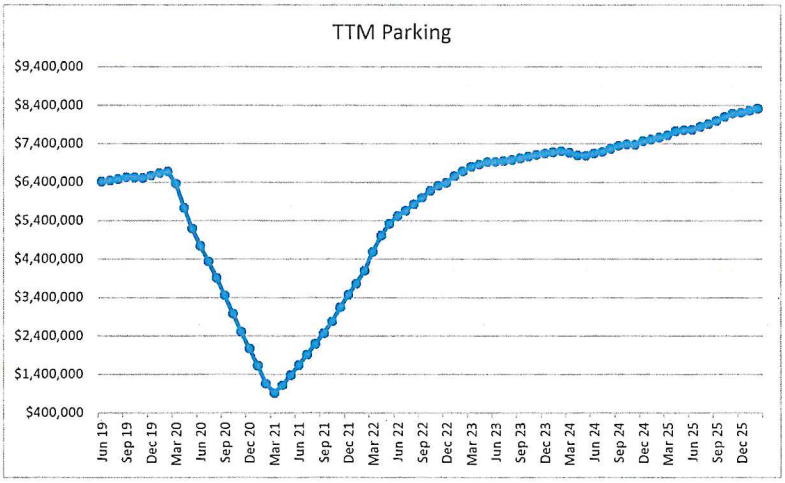
	At Feb 2020	Minimum	Drop	Current	Recovery
Parking	$6,670,572	$911,595	-86%	$8,315,721	125%
PFCs	$2,797,591	$467,680	-83%	$2,853,132	102%
Car Concessions	$2,673,896	$994,488	-63%	$3,792,217	142%
Landing Fees	$1,933,993	$291,209	-85%	$2,153,545	111%
CFCs	$1,568,752	$352,036	-78%	$2,165,956	138%

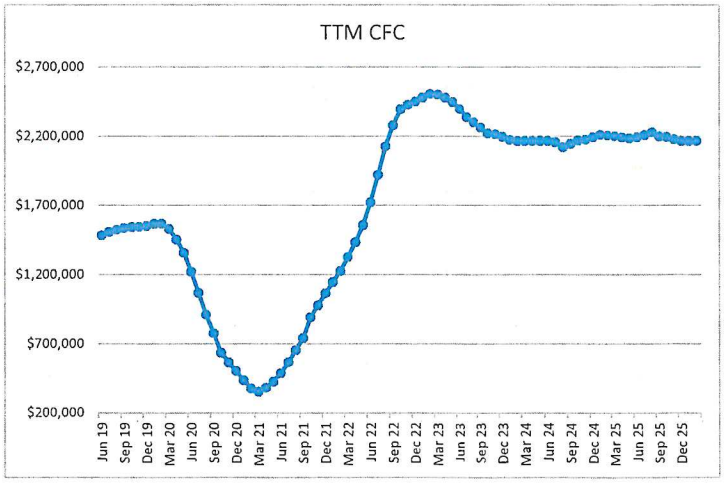
All figures are trailing twelve months











Burlington International Airport

Cash and Investments
February 28, 2026

Account	Account Description	2/28/2026
Unrestricted Bank Accounts		
1000_400	Bank Account Airport	5,385,728
1050_496	Cash Restricted AIP Deposit Keybank	52,920
Restricted Bank Accounts		
1050_420	Cash Restricted Escrows - Airport PFC TD Bank	6,012,738
1000_415	Bank Account - PFC Prepaid Cash Account	491,892
1000_420	Bank Account CFC	4,520,752
1050_416	Cash Restricted Revenue Bond DSR-Zion Trustee	3,528,742
1050_492	Cash Restricted Air Debt Service Fund - Interest	129,553
1050_401	Cash Restricted Air Debt Service Fund-Principal	1,277,088
1050_402	Cash Restricted Air Debt Service Fund-Sinking	780,443
1050_425	Cash Restricted Escrows - Airport - Op Maint Res	5,768,660
1050_430	Cash Restricted Airport Renewal and replacement - Zion	333,507
1050_495	Projects Operating Acct/Escrow GAN Keybank	279
Total Cash and Investments		28,282,303
1100_999	(Due To) / Due From Pooled Cash (timing)	-

Comparative Information on Primary Airport bank account

		2/28/2026
1000_400	Bank Account Airport - Current Fiscal year	5,385,728
1000_400	Bank Account Airport - Prior Fiscal year - January 2025	7,331,500
1000_400	Bank Account Airport - Two prior years - January 2024	1,638,921

To: Airport Commission

From: Larry Lackey, Director of Planning, Engineering and Environmental Compliance

Date: April 1, 2026

Subject: Airport Commission Construction Update

1. **Environmental Assessment (est. $.25M).** The purpose of this project is to evaluate environmental impacts related to the mitigation of obstructions with in the aircraft approach surfaces to the runways. This is in follow up to the recently completed Master Plan, which includes obstruction identification and environmental review. Completed, working on close out documents.

2. **South Terminal Replacement Project ($73M).** The purpose of this project is for overall terminal efficiencies and a better passenger experience. Due to increased aircraft seating existing passenger hold areas are overcrowded during peak times as identified in the recent Master Plan Update. Recently the opportunity had risen through the Airport Terminal Improvement Program (ATP) from the Bipartisan Infrastructure Law. We have submitted our request for full build out of this project, including: Demolition of the existing South Concourse; new Terminal improvements (approximately 45,000 SF of new gross floor area on 2 levels); five (5) new aircraft gates; up to four (4) new passenger boarding bridges (PBB), new passenger circulation and hold rooms; future concessions space; and apron construction within demolished South Concourse footprint. The South Terminal Replacement Project will be approximately 160' farther from Taxiway A as the existing South Concourse. We were not selected this past year and have reapplied for FFY23 design only. We have moved forward with schematics and preliminary cost estimates for existing potential funding source applications. ATP application for funding was submitted in January.

3. **Cargo Apron Construction Project ($4.7M).** The purpose of this project is to provide additional space for other potential cargo carry operations. Have submitted 7460-1 (Air Space Review) to FAA for this project. The scoping of the he project, design only has been completed with the FAA. The IFE process for completion before a FAA Grant Application in April has been completed. Grant Application was submitted on April 3, 2023. Grant has been issued, moving to finalize contract. The contract has been issued to Hoyle, Tanner and Associates with the design to start. It has been determined that this project will require additional FAA technical operations review prior to proceeding. The FAA updated review has been issued as favorable, and the project design is moving forward. The Project design is complete. Working on permit applications. The project has been advertised for bid. We will be applying for a grant on April 15, 2026 for construction.

4. **SRE Building Construction ($29M).** The purpose of this project is to replace the existing out dated facilities, which does not meet the storage needs of the required equipment to maintain the airfield. A contract for study is being completed with programing and scoping moving forward. The scoping session with the FAA has been completed. The final scope is complete with the IFE process was completed. The Grant Application was submitted to the FAA. Contract has been signed with Passero Associates to design and bid this project. Site investigations were completed in November. The site plan is developed with the building design at 30%. We have had page turn of the draft plans. Applications for permits are being moved forward. A pre –Application meeting was held with South Burlington Planning and Development Staff in preparation for an upcoming DRB hearing. Permit Applications are being prepared. We presented to the South Burlington DRB on June 3rd. The hearing was not closed. There were items that needed follow up. We have followed up on these items and are scheduled back with the DRB on July 1, 2025. The SB DRB process has been completed. Permits have been issued. Bids for construction were received on January 9, 2026. We had 3 bidders. The low bid was provided by Engleberth Construction. We are moving this forward.

5. **FAA CIP for FY26 and next 5 years.** We met with the FAA Airports Division on September 17, 2025. Items discussed for FFY26, cargo apron construction, SRE building construction, obstruction removal easements, final application to complete project NeXT, RSIP Phase 6 considering receipt of the $7.3M grant from OLDCC, centralized deicing and the following 5 years. We updated the CIP with these consideration and have received the FAA's comments on this. We will be updating again and resubmitting. Submitted and Accepted.

6. **BETA – Development**
   Communication and coordination with Beta on the first phase of the Electric Aircraft Assemble Facility and Valley West Hangar for all aspects of permitting, environmental, engineering, utilities and attendance at public hearing and construction meetings. The first Phase is complete. We are coordinating with Beta on all aspects of their new development. Currently the child care center, manufacturing B build permitting in moving forward with the Alia Hangar under construction.

7. **South Apron and TW G Ext. Development ($6.6)**. The purpose of this project is to provide much needed additional general aviation apron area on the airfield. Completed, working on closeout documents.

8. **Glycol System Upgrade (est. $3.5M).** The purpose of this project is to improve the glycol system (De-icing). We have had additional follow up discussions with the FAA and it appears this is eligible for funding and is being added back into our FAA CIP. We have received and reviewed the site evaluation and process review scope. We brought this for Airport Commission approval last month subsequently, it was approved by City Council. Study is moving forward. We visited the Syracuse Airport to evaluate and understand the technology they were using to compare to our Portland Jetport visit. The Draft study has been issued and is under review by the airport team. A review session with Stantec was completed. We had a joint meeting last week with our consultant and our FBO Heritage Flight to get their input. The final report is completed. A 7460 – 1 (Siting review) has been submitted for the siting of the first site location for review. This has been determined to be our priority project with the most

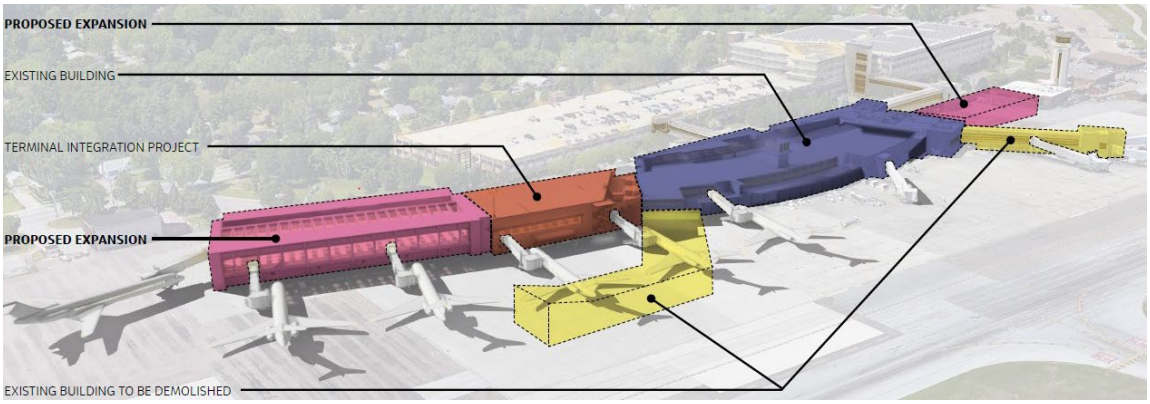
recent FAA CIP review. We are working on our CIP with the FAA, to see when this can be funded. Then we can start scoping the project with the FAA. Awaiting sitting review response from FAA.

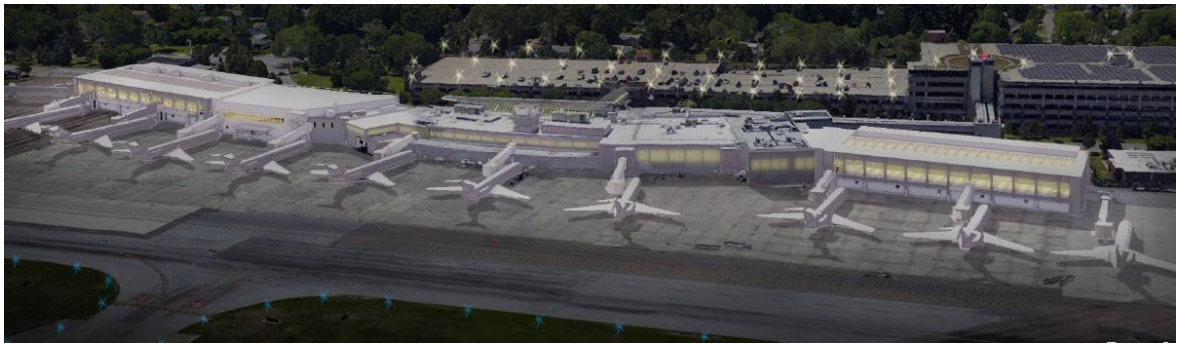
9. **North Terminal Improvement Project ($2.2M)**. The purpose of this project is for overall terminal efficiencies and a better passenger experience due to the completion of the TIP the north terminal will be upgraded to provide more capacity for passengers and concessions. This includes the removal of the existing north TSA station along with the removal of the existing escalators. This project is under design and funding is anticipated from the recent approval of the Infrastructure Law. Received Bids with the selected bidder being Engelberth Construction, Inc. Preparing and submitting Grant Application. This will become a FFY23 Project. We have received the Grant from the FAA. Construction is nearing completion, and should be complete by September 15th. There was a delay related to the glass for the new restaurant area. Construction is complete with final inspection with the FAA completed on 10/30/23. Project closeout in process. We have applied for an additional grant to add additional egress lanes in both the North and South Terminal locations. A grant application was submitted April 26th to the FAA. Received BOF approval to accept the Grant on June 17, 2024, City Council to vote on June 25, 2024. Grant has been issued for the two new egress lanes. A review of the issued funding is being reviewed by the airport on how much money can actually be used from the grant for this project. This determination is close to being resolved. Due to FAA rules this grant is being sent back because it does not support the full extent of this project.

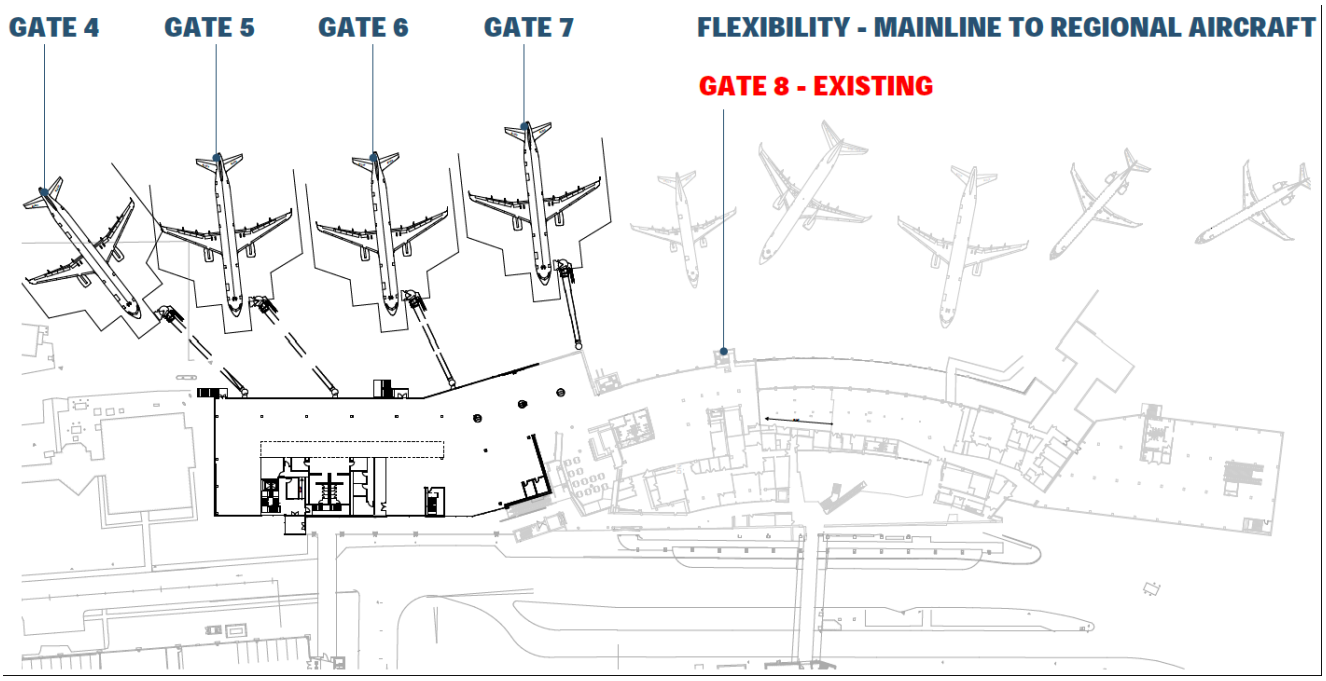
10. **PROJECT NEXT: North Terminal Replacement Project and New PBB's ($69M)**. The purpose of this project is for overall terminal efficiencies and a better passenger experience. Due to increased aircraft seating existing passenger hold areas are overcrowded during peak times as identified in the recent Master Plan Update. Recently the opportunity had risen from Senator Leahy's office through Congressional Directed Spending. We have submitted our request for full build out of this project Phase III Terminal Improvement Project, including: Demolition of the existing North Concourse; new Terminal Improvement (approximately 25,000 SF of new gross floor area on 2 levels); five (5) new aircraft gates; six (6) new passenger boarding bridges (PBB), new passenger circulation and hold rooms; future concessions space; and apron construction within demolished North Concourse footprint. Contract for 30% design has been issues to Jacobs Engineering Group. Geo-technical site work has been completed. Data collection and design currently on going. We submitted to the FAA for a Construction Manager at Risk (CMAR) RFQ/P construction development process. We received approval from the FAA on this procurement process. The RFQ/P for CMAR has been advertised with a pre-bid meeting and site visit by prospective contractors completed. CMAR Proposals received reviewed and scored. Also, held interviews with the top 3 contractors. This has been scored and we can let you know the selected contractor at the AC meeting. As reported the CMAR selected is Engelberth Construction Company. The contract with our design engineer, Jacobs Engineering Group, is completing the 80% design to move to pricing. We received City Council approval to accept the Grant on March 25 for this project, as brought for your approval during our last meeting. Our CMAR is in the process of receiving bids for the final price for this project. The FAA asked us to submit a draft grant application for administrative review prior to final construction pricing to help us expedite the grant issuance, with them once final pricing is in. The Draft Application was completed and submitted on March 27. The FAA grant application was submitted on May 23. Received BOF approval to accept

the Grant on June 17, 2024, City Council to vote on June 25, 2024. We received the Grants for this project. The work has started and is ongoing the project. We submitted the NeXT Grant Application - 3 with Contractor Change Orders to support the new passenger boarding bridges and the second floor renovations, on April 28, 2025. This grant was recently received. The jet bridges have been ordered and the bases are being set. We are working on the final grant application for items that will wrap this project up. This includes but is not limited to the balance of the second floor renovation, additional apron and heating and cooling systems. We have submitted the final grant for this project on February 24, 2026. We have already received and responded to the FAA comments. We are awaiting issuance.

Conceptual Renderings – North and South Terminal (concourse) Improvements







11. **RW 15 – 33 Improvements – Mill and Overlay (15M).** The project is complete, with a few minor punch list items to be completed. Final inspection was completed with the FAA present. We are moving this project to close out.

12. **Airfield Pavement Plan Update ($.25M).** The purpose of this project is to update the outdated pavement condition report done in 2017. All surfaces will be evaluated so we can plan on future improvement for the safety of the aircraft users. Scoping has been completed with the FAA. We have completed the IFE. A Grant Application was submitted on April 3, 2023. Investigations have started, and the grant has been issued. Moving to finalize contract. The Contract has been issued to HTA with the investigations being completed. The report has been finalized. We will move to closure with this project.

13. **TW C/G Rehabilitation ($4.6M).** The purpose of this project is to improve the pavement condition of the airport's taxiway C and intersection at taxiway G. Bids were received on April 24, 2025. We received 2 bids. Pike Industries was the lowest most responsive bidder. The FAA Grant Application was submitted on April 28, 2025. Construction will begin in the spring of 2026. This grant was recently received. A NOA has been given to the contractor with contract being completed. Contracts have been issued with the Contractor with construction starting in the spring.

14. **Obstruction Removal ($0.5M).** The purpose of this project is to remove potential obstructions with in the aircraft approach surfaces to runways 15 and 33. Environmental Assessment is almost complete with the scoping session with the FAA to be scheduled. FAA Grant Application is pushed back to May 1, 2026. This is due to a review of our existing easement and a determination if others may be

required Construction will begin as soon after grant is issued as possible taking into environmental conditions. We completed the scoping session with the FAA on the easement and obstruction removal support services. We are awaiting the final scope and fee from our consultant.

15. **Runway 33 Threshold Bar Improvement Project ($.25M).** The purpose of this project is to remove the damaged navigational aid, replace the lights and rings, and place a quick dry durable concrete for a longer term fix. This project has been completed and the FAA flight check completed. Closeout will be completed with the RW 15-33 Project.

16. **VTANG Arrester Cable Drainage (Stormwater) Project ($1.5M).** This project involves repairing and modifying the existing Aircraft Arresting Systems (AAS), which are safety mechanisms designed to rapidly decelerate aircraft during landings or takeoffs by catching the aircraft with cables or barriers. The improvements will include upgrading the drainage system by adding infiltration galleries and connecting it to the existing stormwater system, ensuring continued compliance with state and federal stormwater regulations. Enhancements include upgrading the sump pump capabilities to establish redundant drainage functions in each barrier pit, updating the control system for flood-level monitoring, and relocating the Arresting Gear Markers. The AAS at Leahy BTV are the only functioning systems for this installation and are critical to operations. This project is being completed concurrently with the Runway 15 – 33 Rehabilitation Project. The project was bid. Engineers Construction, Inc. (ECI) was selected to complete this work. We have a signed contract from ECI and have received final documents from VTANG. The contract has been executed by the Airport. The project is complete, with a few minor punch list items to be completed. Final inspection was completed with VTANG present. We are moving this project to close out.

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT

Patrick Leahy Burlington International Airport Board of Commissioners Residential Sound Insulation Program Update Report

April 1, 2026

ADDITIONAL INFORMATION IS UPLOADED TO WWW.BTVSOUND.COM

BACKGROUND:

Residential Sound Insulation Programs:

The purpose of the project is to convert a sample of incompatible residential units to a compatible land use by installing an acoustical treatment package which will provide relief from aircraft noise by upgrading interior living areas. Upgrades may include replacement of windows and doors with acoustically rated products and installation or upgrade of ventilation systems. The sound insulation treatments are designed to reduce the interior noise levels to below 45 DNL and provide a minimum noise level reduction of 5dB.

PHASES OF THE RESIDENTIAL SOUND INSULATION PROGRAM (RSIP)

1. **Residential Sound Insulation Project - Phase 2 ($2.20M)** The purpose of the project was to convert incompatible residential units to a compatible land use by installing an acoustical treatment package which will provide relief from aircraft noise by upgrading interior living areas as defined in the Phase 1 project and the Noise Compatibility Program. The Airport continued implementation of its Residential Sound Insulation Program (RSIP). This grant included: community outreach, historic review, design and bidding of 52 homes, noise reduction of 6 homes which construction improvements were substantially completed and close out is ongoing with the contractor. Properties were located within the 70+ DNL FAA accepted 2023 noise contours. The installation of noise reduction materials for the 5 properties was completed. Materials were purchased for the 6th property however the homeowner left the

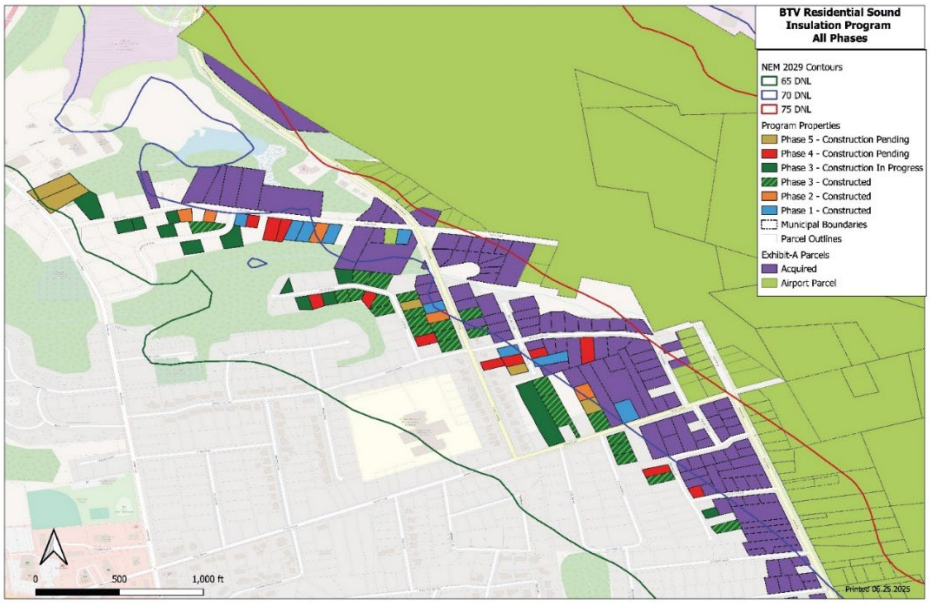
A: 1200 Airport Drive, #1 South Burlington, VT 05403
P: 802.863.2874

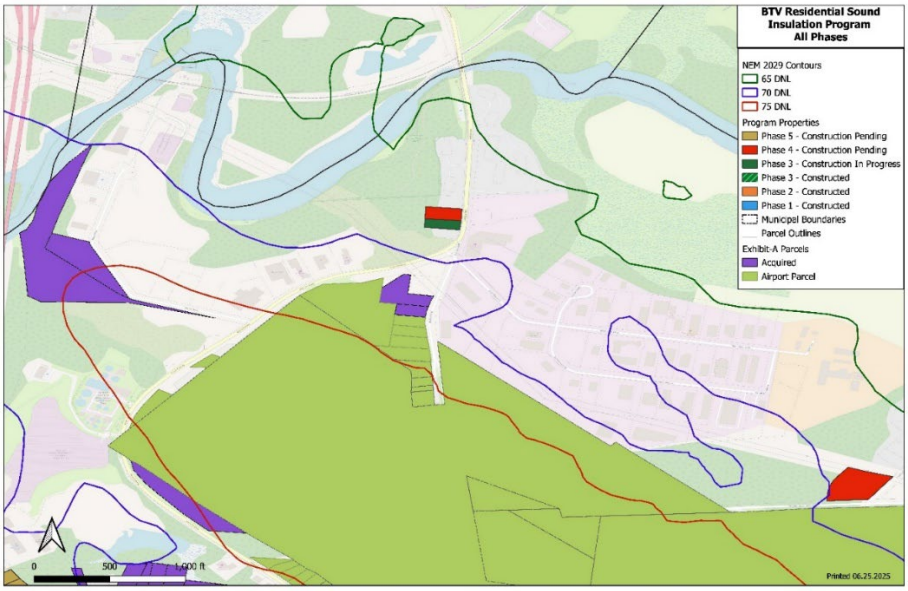
area. It will be completed with the next phase of homes. The close out is completed with the contractor. Moving to closure.

2. **Residential Sound Insulation Project - Phase 3 ($6.2M).** The Airport is continued implementation of its Residential Sound Insulation Program (RSIP) as described in more detail above. This grant was issued and includes: the construction improvements of the 52 Homes designed and bid in Phase 2, in addition it provides for community outreach, historic review, design and bidding of the next approximately 50 homes for improvements. The schedule for installing the noise insulating improvements for the 52 homes started in 2024. The Construction Improvements has started on this phase of homes and will continue through September 2025 Punch list items were completed in January 2026. Moving to Closure.

3. **Residential Sound Insulation Project - Phase 4 ($3.9M EST.).** The Airport is proposing to continue implementation of its Residential Sound Insulation Program (RSIP) as described in more detail above. We are currently reviewing the status of the programing and will be able to detail this in our next month's airport commission meeting. The initial grant for 16 of the 50 homes for construction improvements was submitted grant was received from the FAA. Also in the grant was the funding for the next 50 homes. As discussed we are completing the required new acoustical testing for the balance of the 50 homes so we can do a follow grant application on those homes. (See update above) The Buy American process moving forward but awaiting grant for the 16 homes. We received the grant for this phase however; the amount ($)'s was slightly less than what the application was. Based on instructions from the FAA we will leave the scope intact for this project and just amend the grant during closure. The Contact with Strong Tower to start construction improvements has been signed. The Construction Improvements has started on this phase of homes and will continue through December 2025. Punch list items were completed in January. Moving to Closure.

4. **Residential Sound Insulation Project - Phase 5 ($2.4M EST.).** The Airport is proposing to continue implementation of its Residential Sound Insulation Program (RSIP) as described in the first paragraph in this report. It includes the construction improvements of 6 units that remain in the above 70 DNL contour. Also, due to the change in the FAA acoustical requirement additional funding is being requested for homes in outreach from Phase 4. We submitted a grant application to the FAA on April 28, 2025 for this phase. The grant was just recently issued. Contract documents and submittals are in progress. The Pre-Construction meeting held with the FAA. Construction to start in the spring.





5. **<u>Noise Exposure Map Updates (NEM) (est. $.85M).</u>** The purpose of the Federal Aviation Administration (FAA) grant is to prepare a 14 C.F.R Part 150 Noise Exposure Map (NEM) update for Patrick Leahy Burlington International Airport (Leahy BTV). The NEM Update replaced the maps which were accepted by the FAA in 2019. Under the Federal requirements, the previous NEM Update indicated an update would be completed once the F-35A aircraft have been operational for one year. This project is complete and we are moving it to closure.

6. **Residential Sound Insulation Project "Construction" – OLDCC (DOD) ($8.1M EST.).** We received this grant funding. Communication is ongoing with the OLDCC office. Design has been completed for the first round of bids, that include homeowner participation agreements in place, for the first 37 units. We plan on advertising for bids for these on April 14, 2026. We are anticipating construction to start in July. We are planning the second round of bids later this year.

7. **Residential Sound Insulation Project - Phase 6 ($2.5M).** The Airport is proposing to continue implementation of its Residential Sound Insulation Program (RSIP) as described in the first paragraph in this report. This phase will include the outreach, design and preparation for a full construction grant application in the next round. We completed scoping with the FAA on March 19, 2026 on this project. We are moving forward with the scope and independent fee estimates with our consultants. A grant application will be submitted on April; 15, 2026 for this project.

BTV

PATRICK LEAHY BURLINGTON INTERNATIONAL AIRPORT

Patrick Leahy Burlington International Airport

April 1, 2026

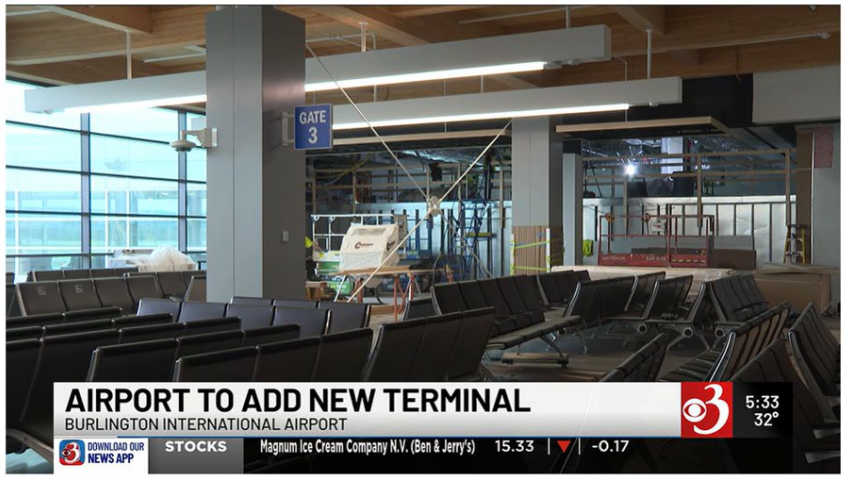
Airport Commission

Director's Report



New Burlington airport terminal on track to open by end of March

Published: Mar. 12, 2026 at 6:16 PM EDT



The Burlington International Airport expects to open its new terminal soon, capping a $68 million project years in the making.

ECONOMY

vtdigger

New Burlington airport terminal to open in coming weeks, officials say

The project is replacing four existing gates in the facility's north terminal with four more-spacious ones that branch off of a glassy, timber-framed concourse.

By Shaun Robinson
March 12, 2026, 5:32 pm

Leahy Burlington International Airport's new terminal sees first flights take off and land

A major milestone for air travel in Vermont, with the first arrivals at and departures from the new space



Project NexT Grand Opening!



Media Advisory
March 29, 2026
Contact:
Jeffrey Bartley
Director of Innovation & Marketing
Patrick Leahy Burlington International Airport
802-734-6596 (c/t) / jbartley@btv.aero

Leahy BTV to Host Project NexT Opening Day Press Conference and Celebration

South Burlington, VT - The Patrick Leahy Burlington International Airport (Leahy BTV) will host a special Opening Day Media Event to celebrate the official debut of Project NexT. This milestone marks the first day the newly expanded terminal space will open and operating. The first scheduled flight is set to arrive at 11:45 AM.

The event will include a press conference, formal remarks from airport and local leadership, and a grand reveal of the new terminal expansion.

WHO: Mayor Emma Mulvaney-Stanak; Nic Longo, Director of Aviation and Jeff Bartley, Director of Innovation & Marketing from Leahy BTV; a video from Senator Peter Welch will be shown
WHAT: Project NexT Opening Day, Press Conference, and Grand Celebration
WHEN: Monday, March 31, 2026 | 10:30 AM
WHERE: Project NexT, Patrick Leahy Burlington International Airport

Media Instructions:
Members of the media are asked to park in the service lane to the right upon entering Airport Circle. All guests and media will need to venture through TSA. After, please proceed through the terminal to the second floor on the north side of the airport (Air Traffic Control Tower side). We highly recommend arriving by 10:15 AM.

Safety Note:
All attending media must complete AeroPass sign-up prior to arrival to access the secured area. Registration can be completed here by Monday, March 30th at 2:00 PM: https://patrick-leahy-burlington-international-airport.monday.com/boards/18404602180

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Staff Appreciation Lunch



2026 American Association of Airport Executives Northeast Chapter Conference – Hershey, PA



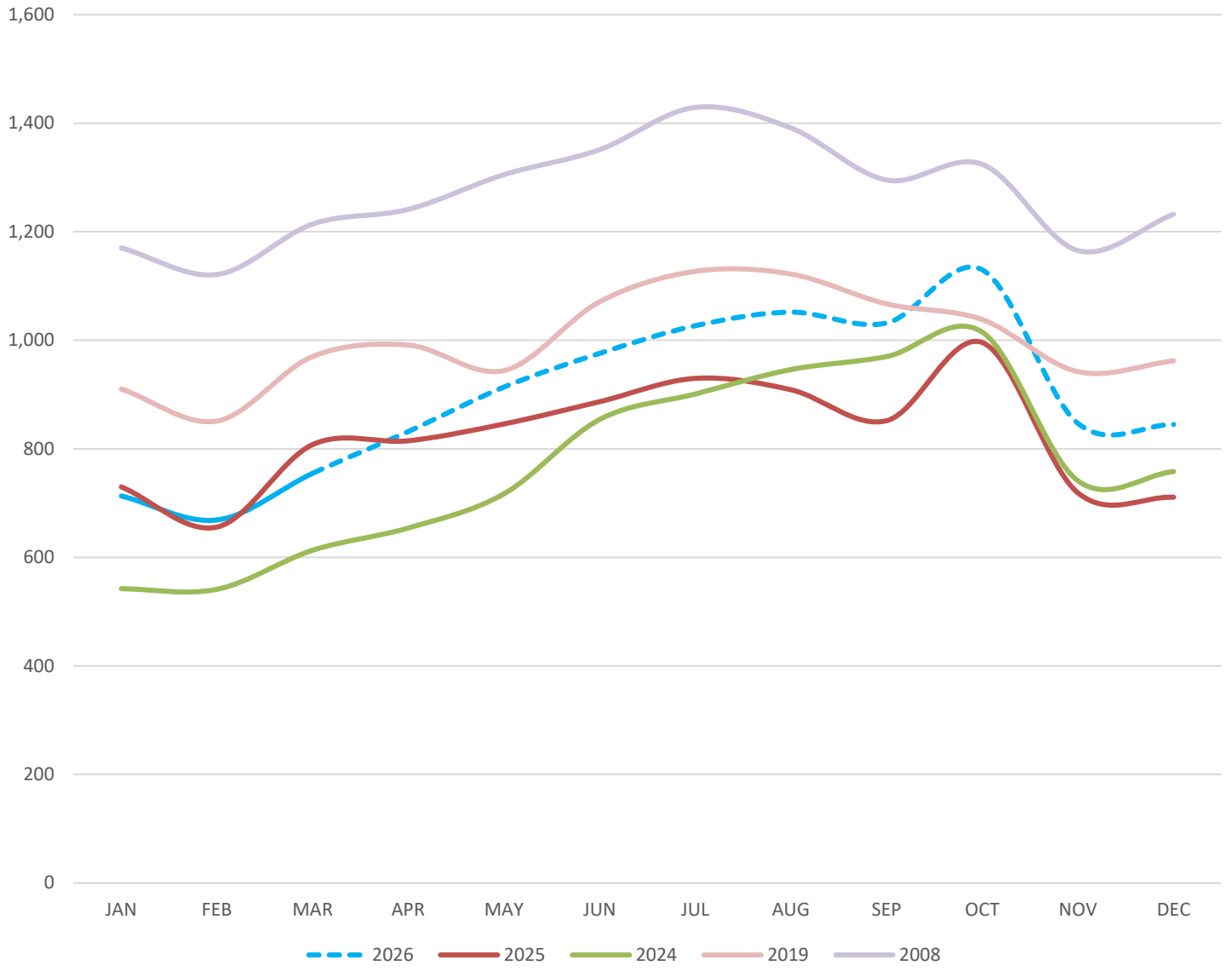


Events & Items

- Current Items:
  - American Council of Engineering Companies in Vermont (ACECVT) Transportation Technical Workshop Presentation
  - Project NexT Grand Opening
- Conferences:
  - Snow Symposium, April 2026
  - Jumpstart Conference, June 2026

2026 Scheduled Departures; Projections

	2026	2025	2024	2019	2008
JAN	713	730	542	910	1,170
FEB	669	656	541	851	1,121
MAR	755	808	613	970	1,214
APR	832	815	654	991	1,241
MAY	914	846	717	944	1,305
JUN	976	887	854	1,071	1,351
JUL	1,027	930	901	1,127	1,429
AUG	1,052	909	946	1,122	1,391
SEP	1,032	852	970	1,067	1,295
OCT	1,130	996	1,015	1,038	1,324
NOV	847	719	741	942	1,165
DEC	845	711	758	962	1,232
TOTAL	10,794	9,859	9,341	11,995	15,238

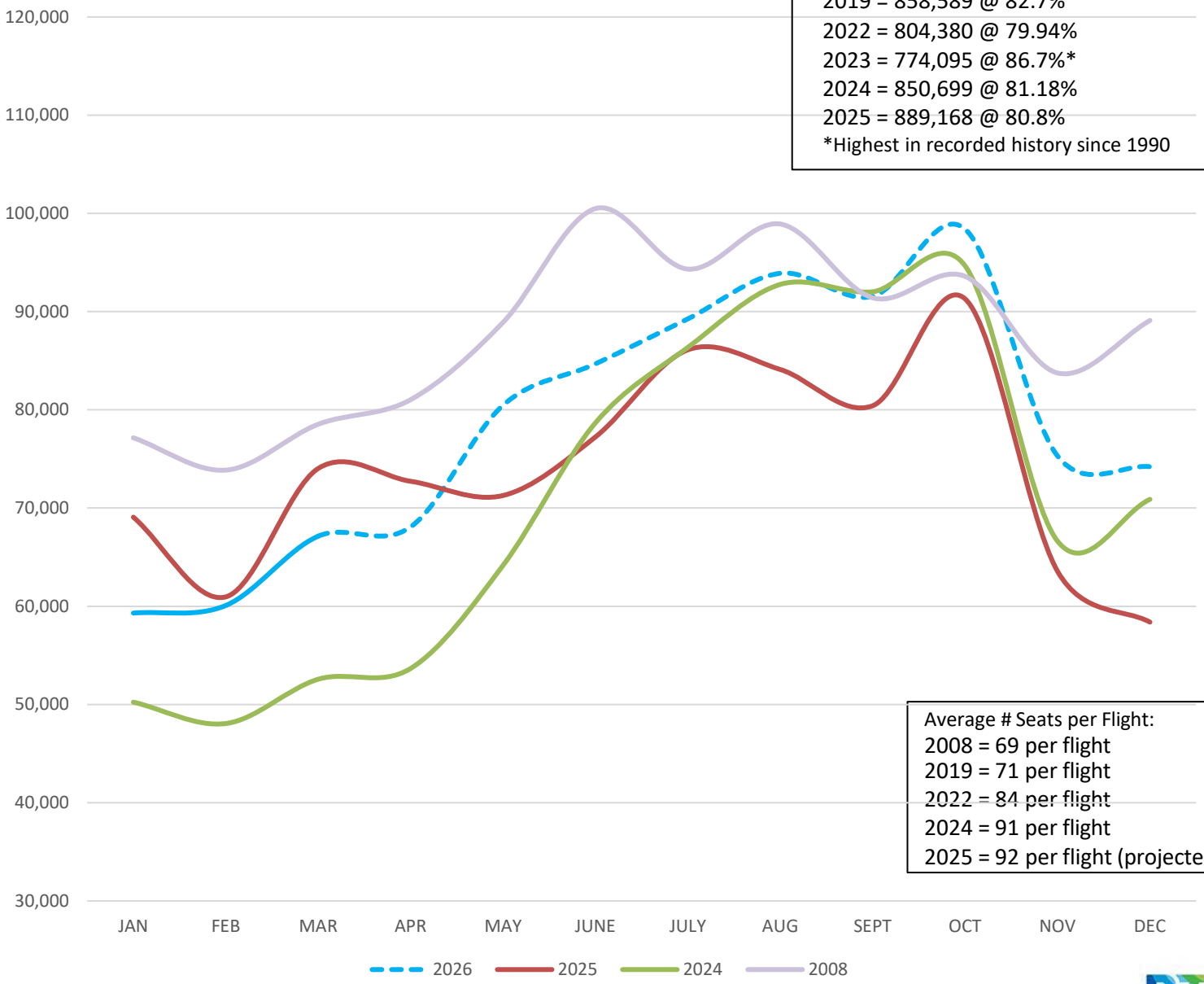


2026

Scheduled Seats; Past & Projections

	2026	2025	2024	2019	2008
JAN	59,302	69,073	50,245	63,905	77,163
FEB	60,078	60,958	48,066	60,240	73,873
MAR	67,135	74,030	52,577	68,428	78,540
APR	68,073	72,724	53,671	66,566	81,040
MAY	80,470	71,276	64,163	67,379	88,905
JUNE	84,684	77,239	78,672	78,828	100,488
JULY	89,269	86,108	86,352	84,658	94,329
AUG	93,912	84,106	92,765	83,786	98,916
SEPT	91,558	80,415	92,016	76,194	91,407
OCT	98,406	91,292	94,651	75,193	93,590
NOV	75,304	63,563	66,633	66,096	83,757
DEC	74,207	58,384	70,888	67,316	89,107
TOTALS	942,398	889,168	850,699	858,589	1,051,115

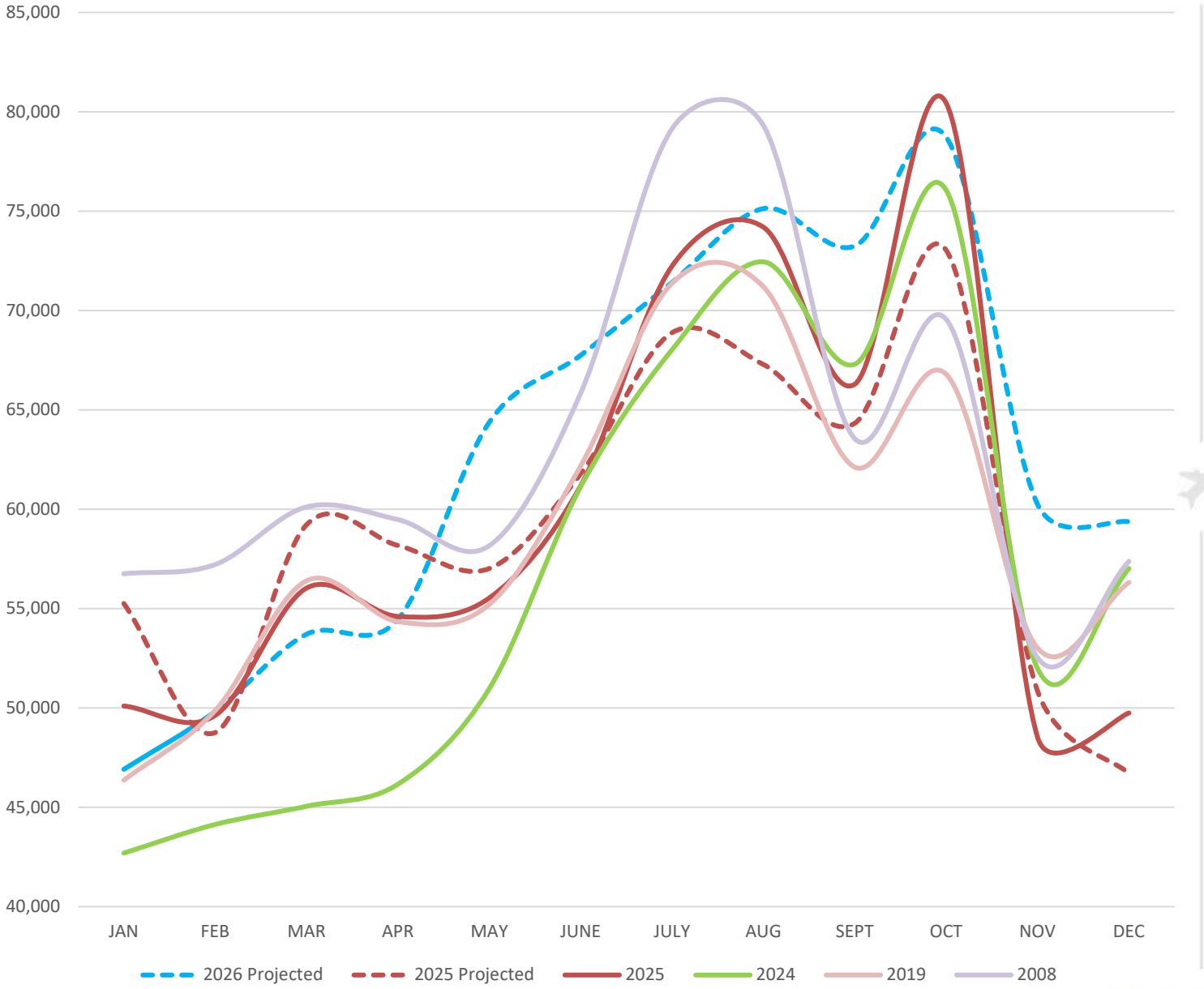
Total Annual Seats and Load Factor:
2008 = 1,051,115 @ 74.6%
2019 = 858,589 @ 82.7%
2022 = 804,380 @ 79.94%
2023 = 774,095 @ 86.7%*
2024 = 850,699 @ 81.18%
2025 = 889,168 @ 80.8%
*Highest in recorded history since 1990



Average # Seats per Flight:
2008 = 69 per flight
2019 = 71 per flight
2022 = 84 per flight
2024 = 91 per flight
2025 = 92 per flight (projected)

2026 Passenger Statistics

	2026	2025	2024	2019	2008
JAN	46,909	50,093	42,691	46,356	56,751
FEB	49,816	49,619	44,133	49,867	57,216
MAR	53,708	56,029	45,049	56,400	60,116
APR	54,458	54,601	46,158	54,340	59,478
MAY	64,376	55,533	50,972	55,209	58,166
JUNE	67,747	61,182	61,136	62,180	65,845
JULY	71,415	72,243	68,026	71,381	79,154
AUG	75,130	74,199	72,448	71,200	79,304
SEPT	73,246	66,294	67,296	62,116	63,544
OCT	78,725	80,446	76,054	66,795	69,556
NOV	60,243	48,517	51,977	53,007	52,516
DEC	59,366	49,739	57,012	56,314	57,375
TOTALS	755,139	718,495	681,925	705,165	759,021



*Numbers reflected Passengers departing from BTV
**Underlined numbers are future estimates