

Burlington Development Review Board

Department of Permitting & Inspections
645 Pine Street
Burlington, VT 05401
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Sean McKenzie, (Alternate)



BURLINGTON DEVELOPMENT REVIEW BOARD

Tuesday, December 7, 2021, 5:00 PM

PUBLIC HEARING NOTICE

Physical location: 645 Pine Street, Front Conference Room, Burlington VT 05401
and

Zoom: <https://us02web.zoom.us/j/82003470763?pwd=OVhzd3FsekxQQW53d0pjMU9PZ0ZBQT09>

Password: 429811

Webinar ID: 820 0347 0763

**Telephone: +1 929 205 6099 or +1 301 715 8592 or +1 312 626 6799 or +1 669 900 6833 or
+1 253 215 8782 or +1 346 248 7799**

- 1. ZAP-21-17; 48-50 Greene Street (RM, Ward 2C) On Point Properties, Inc / Olivia Chandler**
Appeal of zoning application denial for fire escape.
- 2. ZP-21-732; 278 Main Street (RH, Ward 8E) COTS / Bob Duncan**
Major impact review of 16-unit addition to existing building.
- 3. ZP-21-723; 321 Manhattan Drive (RM, Ward 2C) 321 Manhattan LLC / Sam Gardner**
Establish a short term rental (bed & breakfast).

Plans may be viewed upon request by contacting the Department of Permitting & Inspections between the hours of 8:00 a.m. and 4:30 p.m. Participation in the DRB proceeding is a prerequisite to the right to take any subsequent appeal. Please note that ANYTHING submitted to the Zoning office is considered public and cannot be kept confidential. This may not be the final order in which items will be heard. Please view final Agenda, at www.burlingtonvt.gov/dpi/drb/agendas or the office notice board, one week before the hearing for the order in which items will be heard.

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. For accessibility information or alternative formats, please contact Human Resources Department at (802) 540-2505.

The programs and services of the City of Burlington are accessible to people with disabilities. Individuals who require special arrangements to participate are encouraged to contact the Zoning Division at least 72 hours in advance so that proper accommodations can be arranged. For information call 865-7188 (TTY users: 865-7142).

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BURLINGTON DEVELOPMENT REVIEW BOARD

Deliberative Agenda

December 7, 2021

Immediately following DRB Regular Agenda

Physical location: 645 Pine Street, Front Conference Room, Burlington VT 05401

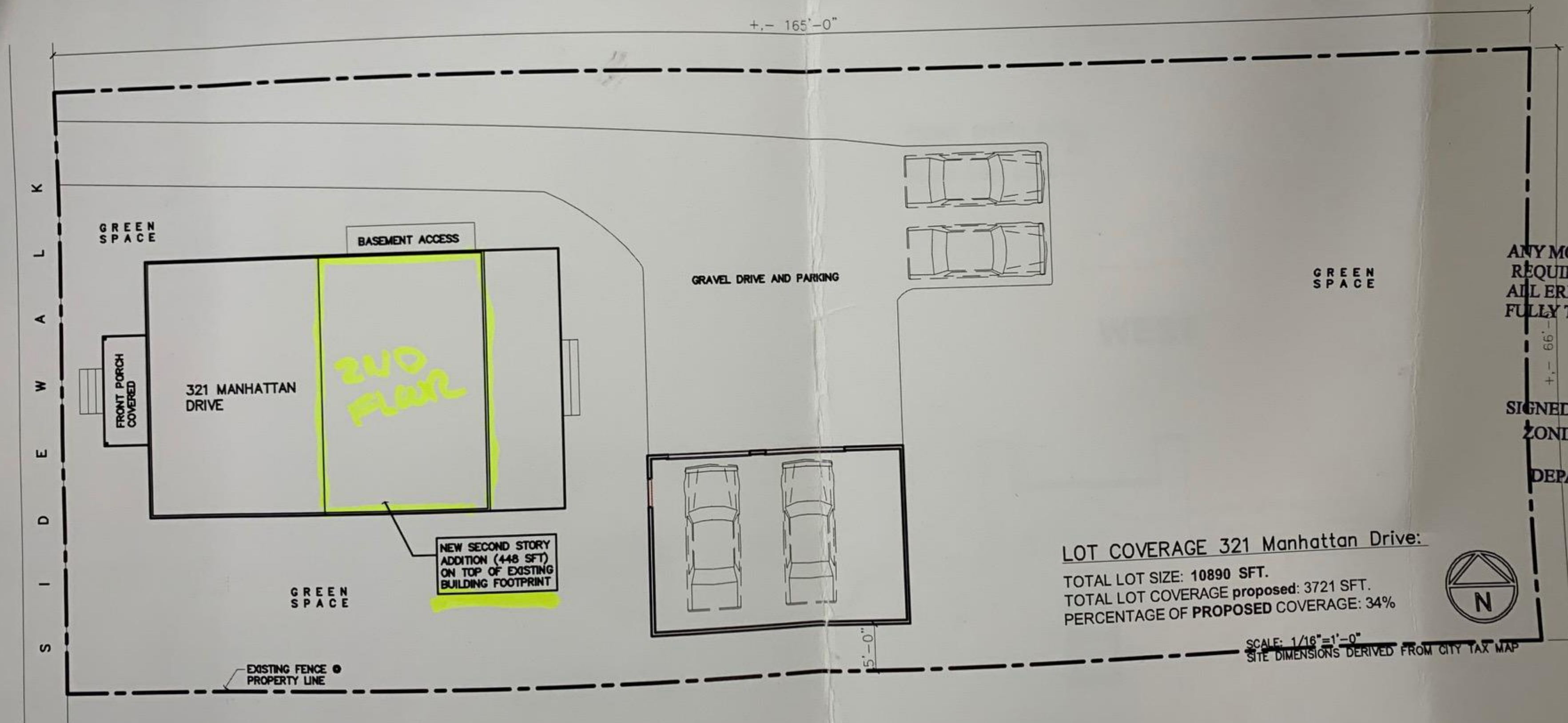
- 1. ZP-21-690; 111 Colchester Ave (I, Ward 1E) Gail Henderson-King / UVM Medical Center Inc**
Request approval of so-called "Mod B" building to be permanent. (Project Manager, Mary O'Neil)
- 2. ZAP-21-13; 240-242 Pearl St (RM, Ward 2C) John Dubie / Lakeside Pharmacy Holdings Inc**
Replace nonconforming sign with new nonconforming sign. (Project Manager, Mary O'Neil)
- 3. ZP-21-609; 53 Front St (RM, Ward 3C) Anna Thelemarck / Deluca & Gould**
Construct new accessory dwelling unit with excess lot coverage. (Project Manager, Mary O'Neil)

**The above are agenda items from the November 16, 2021 DRB hearing. Additional deliberative items may be added from the December 7, 2021 hearing.*

Board members please call our office if you will not be able to attend. Thank you.

Note: No additional testimony will be taken from interested parties during this meeting, although they are welcome to attend.

MANHATTAN DRIVE



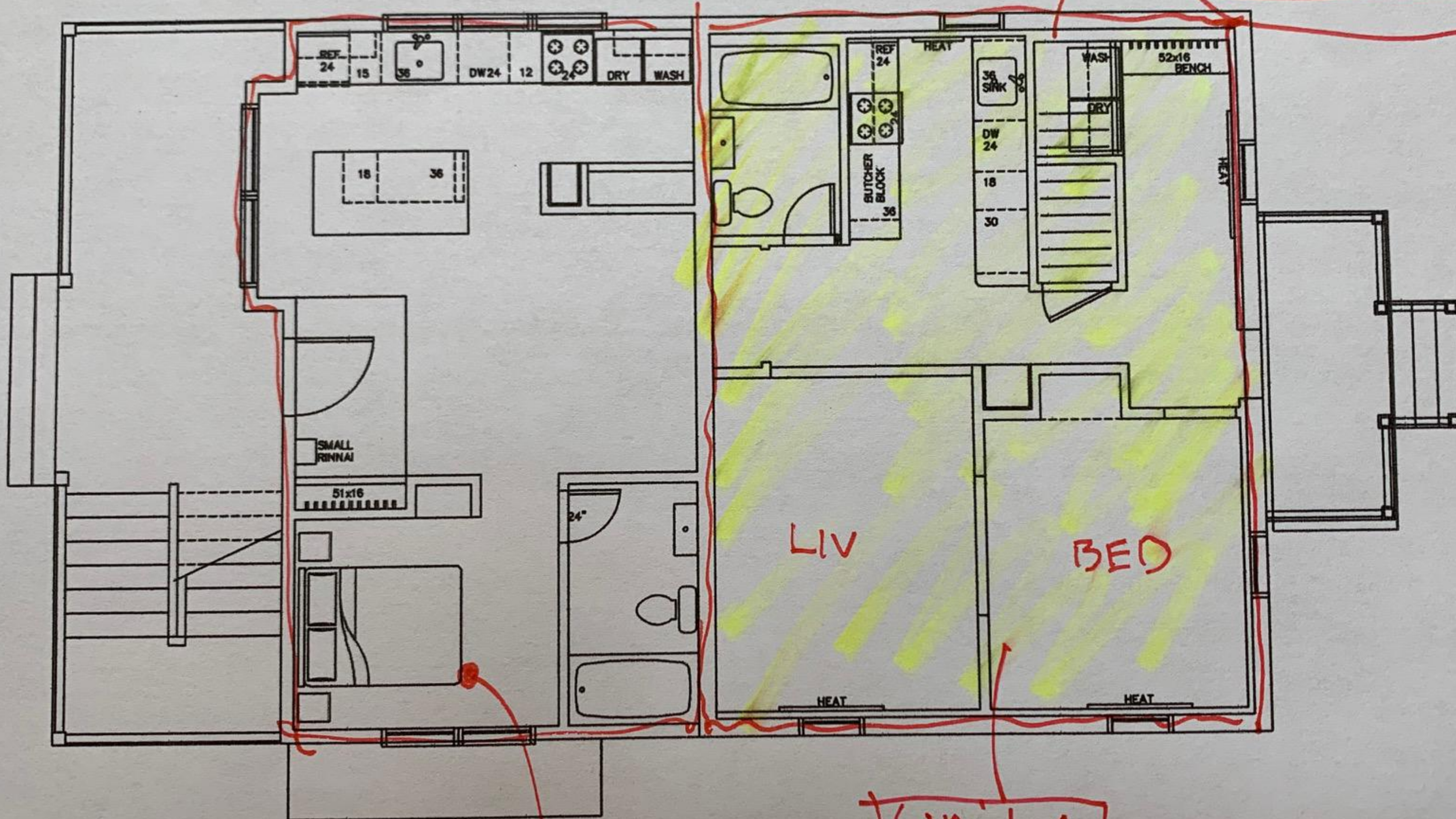
ANY MODIFICATION
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ALL ERRORS IN DIM
FULLY THE RESPONS

FIN

SIGNED *[Signature]*
ZONING PERMIT #
REVI
DEPARTMENT OF
BURL

1ST FLOOR:

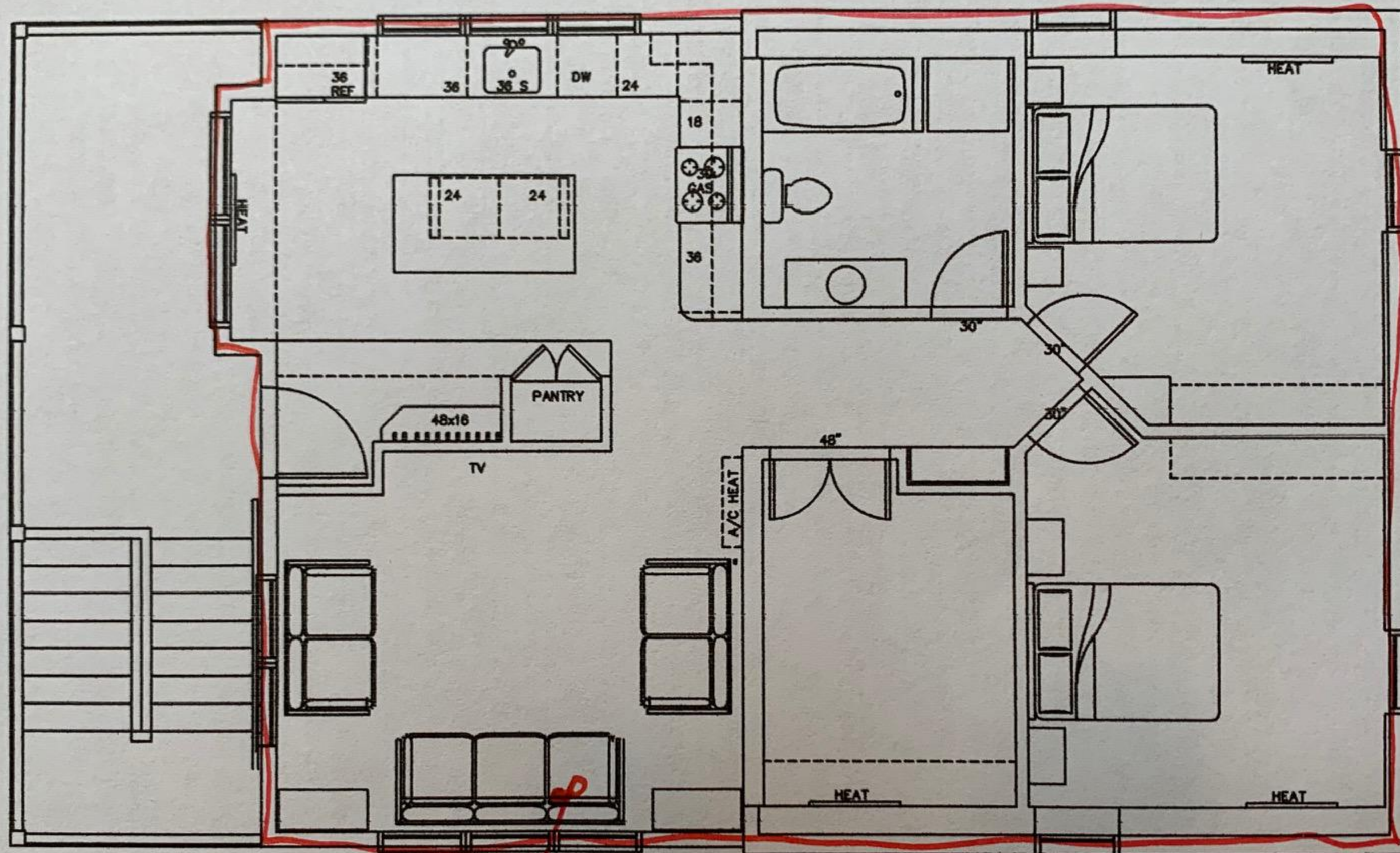
1 Bedroom
Bed + Breakfast



Unit 1

Unit 2

2ND FLOOR:



UNIT 3
owner unit

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Tuesday, December 7, 2021, 5:00 PM

AGENDA

Physical location: 645 Pine Street, Front Conference Room, Burlington VT 05401
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- I. **Agenda**
- II. **Communications**
- III. **Minutes**
- IV. **Consent**
- V. **Public Hearing**
 1. **ZAP-21-17; 48-50 Green Street Appeal (RM, Ward 2c) On Point Properties, Inc / Olivia Chandler**
Appeal of zoning application denial for fire escape. (Project Manager, Mary O'Neil)
 2. **ZP-21-732; 278 Main Street (RH, Ward 8E) COTS / Bob Duncan**
Major impact review of 16-unit addition to existing building. (Project Manager, Ryan Morrison)
 3. **ZP-21-723; 321 Manhattan Drive (RM, Ward 2C) 321 Manhattan LLC / Sam Gardner**
Establish a short-term rental (bed & breakfast). (Project Manager, Ryan Morrison)
- VI. **Certificate of Appropriateness**
 1. **ZP-21-700; 43 Starr Farm Road (RL, Ward 4N) Birchwood Properties LLC / Michael Koch**
Seeking additional surface parking and maximum parking waiver. (Project Manager, Scott Gustin)
 2. **ZP-21-677; 27 Lakeview Terrace (RM, Ward 3C) James Fayette**
Construct retaining wall along rear boundary. (Project Manager, Scott Gustin)
- VII. **Other Business**
 1. **81 Dunder Road (RL-W, Ward 5S) Jonathan Heller**
Follow up for zoning permit for short-term rental. (Project Manager, Ryan Morrison)
- VIII. **Adjournment**

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Department of Permitting & Inspections

Zoning Division
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William Ward, Director
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Ryan Morrison, Associate Planner
Vacant, Planning Technician
Celeste Crowley, Planning & Zoning Clerk
Ted Miles, Zoning Specialist
Charlene Orton, Permitting & Inspections Administrator



MEMORANDUM

TO: Development Review Board
FROM: Ryan Morrison, Associate Planner
DATE: December 7, 2021
RE: ZP-21-732; 278 Main Street

=====

Note: These are staff comments only; decisions on projects are made by the Development Review Board, which may approve, deny, table or modify any project. THE APPLICANT OR REPRESENTATIVE MUST ATTEND THE MEETING.

Zone: RH Ward: 8E

Applicant/Owner: Duncan Wisniewski Architecture / Committee on Temporary Shelter

Request: Construct a new, 16-unit multifamily building addition to the existing 10-family community house.

Applicable Regulations:

Article 2 (Administrative Mechanisms), Article 3 (Applications, Permits, and Project Reviews), Article 4 (Zoning Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Review Standards), Article 8 (Parking), Article 9 (Inclusionary & Replacement Housing)

Background Information:

The applicant proposes a new 16-unit multifamily building addition to the existing 10-family community house. The 4-story addition will attach to the rear of the existing building, and site improvements will consist of reconfigured parking, a trash/recycling enclosure, and covered bicycle storage. The application proposes all 16 new units to be inclusionary.

The applicant brought the proposal in front of the Technical Review Committee on May 13, 2021, and had two sketch plan reviews with the Design Advisory Board and Development Review Board on May 11, 2021 and June 1, 2021, respectively.

Previous zoning actions for this property are noted below.

- 🚧 **Zoning Permit 92-030;** demolish porch and construct a new 2-story porch (side). July 1991.
- 🚧 **Zoning Permit 03-057;** enclose two screened-in porches, adding stairs and modifying the parking area. August 2002.
- 🚧 **Zoning Permit 05-585FC;** extend existing wood fence. May 2005.
- 🚧 **Zoning Permit 15-1223CA;** replace wooden siding with fiber cement board siding. June 2015.
- 🚧 **Sketch Plan Review 21-0961SP;** sketch plan review for a 16 unit multifamily building addition to the existing 10-family community house. June 1, 2021.

Recommendation: Certificate of Appropriateness and Major Impact Approval as per, and subject to, the following findings and conditions.

I. Findings

Article 2: Administrative Mechanisms

Part 7: Enforcement

Section 2.7.8 Withhold Permit

There are two permits associated with the property that have never been closed out, and remain 'permit indeterminate' (92-030 & 03-057). The applicant will be tasked with closing these permits before being able to obtain any future certificates of occupancy. **Affirmative finding as conditioned**

Article 3: Applications and Reviews

Part 2, Applications and Permits

Section 3.2.1 Pre-Application Conferences

(b) Technical Review Committee

A TRC meeting was held on May 13, 2021. Information was provided to the applicants by all interested city departments and agencies. **Affirmative finding**

(c) Sketch Plan Review

The applicant submitted for sketch plan review with both the Design Advisory Board (DAB) and the Development Review Board (DRB) on May 11, 2021 and June 1, 2021, respectively. No major issues were brought up by either board. **Affirmative finding**

(d) Pre-Application Neighborhood Meeting

A Pre-Application Public Neighborhood Meeting shall be required for all development involving the construction of five (5) or more dwelling units and/or ten thousand (10,000) s.f. or more of gross floor area of non-residential development in order to allow neighbors to become aware of potential development projects at an early stage of a development's conceptual design and for applicants to take into consideration neighborhood comments and concerns. Procedures and requirements regarding matters including but not limited to scheduling, location, public notice, and documentation shall be set forth by the department of planning and zoning.

A Public Neighborhood Meeting was held on September 8, 2021 and November 10, 2021. The necessary documentation has been included with the application. **Affirmative finding**

Part 3, Impact Fees

Section 3.3.2 Applicability

Any new development or additions to existing buildings which result in new dwelling units or in any new non-residential buildings square footage are subject to impact fees.

Impact fees shall be calculated based on the total gross square footage of the principal use. Based on the estimate provided, the new development will result in approximately 14,200 sf of new gross floor area. Because the project involves inclusionary housing, some reductions may be granted through the Community Economic Development Office (CEDO). The applicant is encouraged to work with them to finalize any impact fee reductions. Standard impact fees are as follows:

SF of Project 14,200

Department	<u>Residential</u>	
	Rate	Fee
Traffic	0.208	2,953.60
Fire	0.235	3,337.00
Police	0.047	667.40
Parks	0.789	11,203.80
Library	0.488	6,929.60
Schools	1.019	14,469.80
Total	2.786	\$ 39,561.20

Affirmative finding as conditioned

Section 3.3.8 Time and Place of Payment

Impact fees must be paid to the city's chief administrative officer / city treasurer according to the following schedule:

- a) *New buildings: Impact fees must be paid at least seven days prior to occupancy of a new building or any portion thereof.*

Affirmative finding as conditioned

Part 5, Conditional Use & Major Impact Review:

Section 3.5.2 Applicability

(b) Major Impact Review

Major Impact Review shall be required for the approval of all development involving any one or more of the following:

- *The creation of ten (10) or more dwelling units in the RH zoning district.*

The project creates 16 new dwelling units. Major Impact Review is required. **Affirmative finding**

Section 3.5.4 Submission Requirements

Any development subject to Major Impact Review under this Part shall also include an affidavit or certification documenting that the Pre-Application Public Neighborhood Meeting requirement pursuant to Se. 3.2.1 (d) has been satisfied in accordance with the procedures and requirements set forth by the department of planning and zoning [now the Department of Permitting and Inspections].

This documentation has been provided. The proposal went to two Public Neighborhood Meetings – September 8 and November 10, 2021. **Affirmative finding**

Section 3.5.6 Review Criteria

(b) Major Impact Review Standards

1. *Not result in undue water, air, or noise pollution;*

The proposed construction is not expected to result in undue water, air, or noise pollution. Stormwater is addressed under Sec. 5.5.3. **Affirmative finding**

2. *Have sufficient water available for its needs;*

The application contains a letter from the Dept. of Public Works confirming that there is adequate water available for the proposed development. **Affirmative finding**

3. *Not unreasonably burden the city's present or future water supply or distribution system;*
See 2 above. **Affirmative finding**

4. *Not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result;*

An Erosion Prevention and Sediment Control (EPSC) plan, subject to review and approval by the city's Stormwater Program, will be required prior to zoning permit release. **Affirmative finding**

5. *Not cause unreasonable congestion or unsafe conditions on highways, streets, waterways, railways, bikeways, pedestrian pathways or other means of transportation, existing or proposed;*
The property fronts on Main Street, a heavily utilized public street with sidewalks on both sides of the street, and access to public transportation in close proximity. Sixteen new units should not create unreasonable congestion or unsafe conditions on these public facilities. However, as required under Sec. 8.1.16 CDO (see below), the applicant has provided a Transportation Demand Management Plan that discusses traffic impacts and how the development will address them.

Affirmative finding

6. *Not cause an unreasonable burden on the city's ability to provide educational services;*

The project will not cause an unreasonable burden on the city's ability to provide educational services. **Affirmative finding**

7. *Not place an unreasonable burden on the city's ability to provide municipal services;*

The project was reviewed by the Technical Review Committee on May 13, 2021. The applicant was informed of various requirements needing to be addressed to satisfy various city departments and agencies. There were no requirements or comments that identified any major issues to address. All comments have been forwarded to the applicant. Impact fees will be paid to help offset what impacts there are on municipal services. **Affirmative finding**

8. *Not have an undue adverse effect on rare, irreplaceable or significant natural areas, historic or archaeological sites, nor on the scenic or natural beauty of the area or any part of the city;*

See Sec. 6.2.2 (a) & 6.3.2 (b). **Affirmative finding**

9. *Not have an undue adverse effect on the city's present or future growth patterns nor on the city's fiscal ability to accommodate such growth, nor on the city's investment in public services and facilities;*

The proposed development will significantly intensify the degree of residential development onsite. In addition to the existing community house that houses up to ten families, there will be sixteen new dwelling units within the new building addition. The project is proposed within a zoning district that enables development at a higher density than the nearby residential and institutional zones. It will have no adverse impact on the city's present or future growth patterns.

Affirmative finding

10. *Be in substantial conformance with the city's municipal development plan;*

The new multifamily building addition is located in an area that is zoned for high density development. The immediate area has a variety of employment, service, and recreational opportunities. Conformance with the city's municipal development plan will be met.

Additionally, the proposal complements the Municipal Development Plan in other specific areas.

- *Retain its moderate scale and urban form in its most densely developed areas, while creating opportunities for increased densities.* [MDP, Built Environment, Page III-1]
- *Conserve the existing elements and design characteristics of its neighborhoods, and maintain neighborhood proportions of scale and mass.* [MDP, Built Environment, Page III-1]
- *Ensure people with disabilities have equal access to the built environment.* [MDP, Built Environment, Page III -2.]
- *Encourage a healthier regional balance of affordable housing in each community, proximate to jobs and affording mobility and choice to low income residents.* [MDP, Housing Plan, Page IX-1]
- *Enforce ordinances, such as inclusionary zoning and minimum housing, which promote housing opportunities, safety, and affordability.* [MDP, Housing Plan, Page IX-1]
- *Encourage a wide range of housing options to meet different and changing needs of households with children, the elderly, people with disabilities, and moderate- and low-income households.* [MDP, Housing Plan, Page IX-2]
- *Support housing models, organizations, and programs that insure perpetual affordability, fill gaps in the housing tenure ladder, and increase the overall supply of housing in the community.*[MDP, Housing Plan, Page IX-2]

Affirmative finding

11. Not have an undue adverse impact on the present or projected housing needs of the city in terms of amount, type, affordability and location;

This project will add to the city's housing stock, specifically its inclusionary stock. No details have been provided as to pricing, but affordability requirements as articulated in the CDO must be met. The 16 new dwelling units are all proposed to be inclusionary, which fashions itself around affordability. The project will have no adverse impact on the present or projected housing needs of the city. **Affirmative finding**

12. Not have an undue adverse impact on the present or projected park and recreation needs of the city.

Residents of the project may utilize the city's parks and recreation resources; however, impacts are expected to be moderate and typical of new residential development. Impact fees will be paid to help offset what impacts there are on park resources. **Affirmative finding**

Article 4: Maps & Districts

Sec. 4.4.5, Residential Districts:

(a) Purpose

(5) Residential High Density (RH)

The Residential High Density (RH) district is intended primarily for high density attached multi-family residential development. Development is intended to be intense with high lot coverage, large buildings, and buildings placed close together. Parking is intended to be hidden either behind or underneath structures. The proposed development is exclusively residential, has parking hidden in the rear, and will have relatively high, but conforming, lot coverage. Residents of the building will live within easy walking distance of a variety commercial uses. **Affirmative finding**

(b) Dimensional Standards & Density

The density and intensity of development, dimensions of building lots, the heights of buildings and their setbacks from property lines, and the limits on lot coverage shall be governed by the following standards:

Table 4.4.5-2: Base Residential Density

District	Maximum dwelling units per acre¹
High Density: RH	40 units/acre
<i>Inclusive of new streets but exclusive of existing streets, and without bonuses or any Inclusionary Zoning allowances.</i>	

Given a density allowance of 40 units per acre, 1,089 sf of lot area is required per unit. An 18,040 sf lot size would allow for up to 16 dwelling units. In combination with the existing community house (1 dwelling unit), the proposal will result in 17 dwelling units. The proposed 16 units will be inclusionary units, and thus count for a density bonus in accordance with Article 9 (see below). Projects that conform with inclusionary housing requirements may get up to a density of 46 units per acre in the RH zone. **Affirmative finding**

Table 4.4.5-3: Residential District Dimensional Standards

Zoning District	Max. Lot Coverage¹	Setbacks^{1, 3, 4, 5, 6}				Max. Height¹
		Front²	Side³	Rear	Waterfront	
RH	80%	Min/Max: Ave of 2 adjacent lots on both sides +/- 5-feet	Min: 10% of lot width Or ave. of side yard setback of 2 adjacent lots on both sides Max required: 20-feet	Min: 25% of lot depth but in no event less than 20' Max required: 75-feet	NA	35-feet

1. An additional ten per cent (10%) lot coverage may be permitted for accessory residential features per (d)3A below. Measurement of and exceptions to coverage, setback, and height standards are found in Art 5.

2. Average front yard setback of the principal structures on the 2 adjacent lots on both sides within the same block having the same street frontage. See Sec. 5.2.4.

3. In no event shall the side yard setback be required to exceed 20-feet, or the rear-yard setback be required to exceed 75-feet.

4. Additional setbacks from the lakeshore and other water features may be applicable per the requirements of the Sec 4.5.4 Riparian and Littoral Conservation Overlay Zone.

5. The side yard setback shall be calculated based on the 4 adjacent properties (2 on each side of the subject property). The right side yard setback is the average of the right side yard setback of the principal structures on

Table 4.4.5-3: Residential District Dimensional Standards

Zoning District	Max. Lot Coverage ¹	Setbacks ^{1, 3, 4, 5, 6}				Max. Height ¹
		Front ²	Side ³	Rear	Waterfront	
these 4 properties. The left yard setback is the average of the left side yard setback of the principal structures on these 4 properties. The adjacent properties shall be within the same block having the same street frontage as the subject property. See Sec. 5.2.5. 6. Where there are fewer than 2 adjacent lots on both sides within the same block having the same street frontage, the average side yard setback shall be calculated from the fewer number of lots. Where there are no adjacent lots, the setback shall be 10% of the lot width.						

In addition to the density bonus for inclusionary housing noted above, there are bonuses for height and lot coverage as well. The project will result in 73.5% lot coverage, less than the 80% allowed in the RH (and the 92% bonus coverage allowance for inclusionary housing). By creating inclusionary housing, the project can get a maximum height allowance of 47 ft. The plans show compliance with this height requirement. Note that Section 5.2.6 (b) exempts non-habitable elevator towers from height limits. The proposal includes an elevator tower above the 47 ft height limit. The plans indicate compliant setbacks as well. With a lot width of 90 ft, and a depth of 200 ft, minimum side and rear yard setbacks are required at 9 ft and 50 ft, respectively. The plans indicate compliance with these standards. Front yard setbacks are not applicable given that this is a rear addition. Sec. 5.2.5 below allows accessory structures less than 15 ft in height to be setback at least 5 ft from side and rear yard property lines. **Affirmative finding**

(c) Permitted & Conditional Uses

Multifamily residential development is a permitted use in the RH zone. **Affirmative finding**

(d) District Specific Regulations

Each unit will be limited to no more than 4 unrelated adult occupants. **Affirmative finding as conditioned**

Article 5: Citywide General Regulations

Sec. 5.2.3, Lot Coverage Requirements

The RH zone sets a limit of 80% lot coverage, and with the inclusionary housing aspect of the proposal, the project can get a coverage of up to 92%. The proposal will result in 73.5% lot coverage. **Affirmative finding**

Sec. 5.2.4, Buildable Area Calculation

Not applicable.

Sec. 5.2.5, Setbacks

The plans indicate that the main building addition will comply with minimum setback requirements of Table 4.4.5-3. This section allows driveways, parking, and accessory structures (less than 15 ft in height) a setback of at least 5 ft from side and rear yard property lines. All new driveway and parking, as well as accessory structures, will be setback 5 ft from the property lines. **Affirmative finding**

Sec. 5.2.6, Building Height Limits

See Sec. 4.4.5 (b) above & Article 9 below. Per the inclusionary housing standards, a maximum height of 47 ft can be achieved. Additionally, non-habitable elevator towers are exempt from height limitations. The elevation plans indicate compliance with a maximum height of 47 ft, plus an elevator tower a few feet above that. **Affirmative finding**

Sec. 5.2.7, Density and Intensity of Development Calculations

See Sec. 4.4.5 (b) above. **Affirmative finding**

Sec. 5.4.8, Historic Buildings and Sites

While the existing building at the front of the property is listed on both the National (College and Main Street Historic District) and State Historic Registries, no alterations to it are proposed. There is a rear addition to the existing building that was constructed in 1991 which the new building will attach to. **Affirmative finding**

Sec. 5.5.1, Nuisance Regulations

Nothing in the proposal appears to constitute a nuisance under this criterion. **Affirmative finding**

Sec. 5.5.2, Outdoor Lighting

Lighting plans have been submitted and closely conform to the requirements of this section. Specifically, parking lot lighting cannot exceed 4 footcandles at any point. The site photometric plan shows a few areas within the parking areas that exceed 4 footcandles. The plans shall be revised to show compliance with this standard. **Affirmative finding as conditioned**

Sec. 5.5.3, Stormwater and Erosion Control

The applicant has submitted an EPSC plan. Approval of which will be required by the Stormwater Program prior to the release of the zoning permit. **Affirmative finding as conditioned**

Article 6: Development Review Standards

Part 1, Land Division Design Standards

Not applicable.

Part 2, Site Plan Design Standards

Sec. 6.2.2, Review Standards

(a) Protection of Important Natural Features:

Not applicable. There are no important natural features at this location.

(b) Topographical Alterations:

The property has a gentle east-west downslope. No changes are proposed that will significantly alter the topography. The street frontage is developed with the existing building and landscaping, and the proposal will occur behind the existing building. The parking configuration will be altered to make room for the new building, but should not result in significant topographical alterations.

Affirmative finding

(c) Protection of Important Public Views:

Not applicable. There are no protected views from or through this site.

(d) Protection of Important Cultural Resources:

Burlington's architectural and cultural heritage shall be protected through sensitive and respectful redevelopment, rehabilitation, and infill. Archeological sites likely to yield information important to the city's or the region's pre-history or history shall be evaluated, documented, and avoided whenever feasible. Where the proposed development involves sites listed or eligible for listing on a state or national register of historic places, the applicant shall meet the applicable development and design standards pursuant to Sec. 5.4.8(b).

Not applicable. While the existing building at the front of the property is listed on both the National (College and Main Street Historic District) and State Historic Registries, no alterations to it are proposed.

(e) Supporting the Use of Renewable Energy Resources:

The plans do not include any reference to renewable energy resources to be used. No part of the application will preclude future utilization of wind, geothermal, water or other renewable sources of energy. **Affirmative finding**

(f) Brownfield Sites:

Not applicable. This site is not listed on the Vermont DEC list of identified Brownfields.

(g) Provide for nature's events:

Special attention shall be accorded to stormwater runoff so that neighboring properties and/or the public stormwater drainage system are not adversely affected. All development and site disturbance shall follow applicable city and state erosion and stormwater management guidelines in accordance with the requirements of Art 5, Sec 5.5.3.

The application triggers the need for an Erosion Prevention and Sediment Control plan, as well as a stormwater plan, to satisfy the requirements of Chapter 26 of Burlington Code of Ordinances. These plans have been submitted and await approval. Written approval from the City Stormwater program will be a requirement of the zoning permit.

Design features which address the effects of rain, snow, and ice at building entrances, and to provisions for snow and ice removal or storage from circulation areas shall also be incorporated.

There will be internal access to the new building addition from within the existing building. In addition, two ground level doors on the east wall of the addition will be covered by a portion of the second story. An entry at the rear will have a canopy cover as well.

With the proposed development area, there is some, but little, room onsite for snow storage – within the 5-foot setback areas of the driveway and parking areas, and next to the covered bike structure. **Affirmative finding**

(h) Building Location and Orientation:

The new addition is proposed to the rear of the existing building. No changes to the existing streetscape are proposed. **Affirmative finding**

(i) Vehicular Access:

The existing access off Main Street will continue to provide access to the property. The driveway will continue along the east property line to provide vehicular access to both parking areas and the trash enclosure. **Affirmative finding**

(j) Pedestrian Access:

Pedestrian access to the existing building will remain as existing. There is a front entrance with a direct walkway to the Main Street sidewalk. A new walkway between the driveway and east property line is proposed. The plans indicate a concrete ‘plaza’ where pedestrians will cross the driveway to access the new addition. This ‘plaza’ will act as a traffic calming device for the safety of crossing pedestrians. From there, a walkway will continue along the side of the addition and wrap around to the rear entrance. **Affirmative finding**

(k) Accessibility for the Handicapped:

One handicap parking space will be provided per the site plan. The building inspector has jurisdiction over ADA requirements. By his direction and per Chapter 8 of the Burlington Code of Ordinances, handicap access must be addressed. **Affirmative finding**

(l) Parking and Circulation:

Circulation within the site is clear: one driveway along the east property line to provide access to the two separate parking areas. The property is within the Multimodal Mixed-Use Parking District, which eliminates minimum onsite parking requirements. The proposal includes, however, two separate parking areas for a total of 9 onsite parking spaces. As required by Sec. 8.1.16 *Transportation Management Plan*, the applicant has submitted a Transportation Demand Management (TDM) plan for review since the proposal includes more than 10 new dwelling units. See below. **Affirmative finding**

(m) Landscaping and Fences:

Landscaping plans are included in the submittal. The applicant proposes a variety of trees, shrubs and perennials around the new development. Since the development will occur at the rear of the property, additional landscaping isn’t needed to enhance the streetscape. There is a 4 ft tall (approx.) picket fence between the existing building and the west property line (running parallel with Main Street) that will remain. Additional fencing runs along the rear half of the east property line, as well as along the rear (north) property line. The proposal includes continuing one of the existing fences to the neighbor’s fence in the northeast corner. The applicant should be aware that this permit will only allow new fencing to be permitted strictly on the subject property. If any portion of this new fencing is to occur on the neighboring property, a separate zoning permit, filed for that neighboring property, will be required. **Affirmative finding as conditioned**

(n) Public Plazas and Open Space:

The site plan identifies open space along the west side. It is assumed that this area will be open to use for tenants of the property. **Affirmative finding**

(o) Outdoor Lighting:

Where exterior lighting is proposed the applicant shall meet the lighting performance standards as per Sec 5.5.2.

See Sec. 5.5.2 above.

(p) Integrate infrastructure into the design:

Exterior storage areas, machinery and equipment installations, service and loading areas, utility meters and structures, mailboxes, and similar accessory structures shall utilize setbacks, plantings, enclosures and other mitigation or screening methods to minimize their auditory and visual impact on the public street and neighboring properties to the extent practicable.

Utility and service enclosures and screening shall be coordinated with the design of the principal building, and should be grouped in a service court away from public view. On-site utilities shall be placed underground whenever practicable. Trash and recycling bins and dumpsters shall be located, within preferably, or behind buildings, enclosed on all four (4) sides to prevent blowing trash, and screened from public view.

Any development involving the installation of machinery or equipment which emits heat, vapor, fumes, vibration, or noise shall minimize, insofar as practicable, any adverse impact on neighboring properties and the environment pursuant to the requirements of Article 5, Part 4 Performance Standards.

The plans show a trash enclosure in the northeast corner of the lot, and a transformer in the northwest corner. The roof plan shows all mechanical units proposed for use. Given the height of the structure, and the central rooftop location, these units will be difficult, if not impossible, to see from surrounding streets and properties. Mail will be delivered inside of the building. **Affirmative finding**

Part 3: Architectural Design Standards

Sec. 6.3.2 Review Standards

(a) Relate development to its environment:

1. Massing, Height and Scale:

The proposed 4-story rear addition will exceed the mass, height and scale of the existing building at the front of the property, as well as neighboring structures. However, with its location at the rear of the property, it won't be dominant along the street frontage. Neighboring buildings along this stretch of Main Street range in height from 2 to 3 stories. The scale of development is similar to nearby properties – specifically, the abutting property to the east contains a three-story multifamily building. And the property beyond that to the east contains a multifamily development as well. Given the underlying zoning (Residential High Density), the proposal fits within the intent of the zone.

Additionally, the development will utilize inclusionary housing benefits with regard to density and building height. The applicant's narrative states that all units within the addition will meet inclusionary zoning requirements. Density can increase to 46 units per acre, lot coverage can go up to 92%, and building height can reach 47 ft, as long as the requirements of Article 9 – *Inclusionary and Replacement Housing* are met. **Affirmative finding**

2. Roofs and Rooflines

The new, multi-level building addition will have flat roofs throughout. One exception to that is the elevator tower, which will have a sloped roof. In accordance with Sec. 5.2.6 (b) CDO, elevator towers are permitted to exceed maximum height limitations. Buildings within the immediate area have a variety of roof types, but more specifically, the large office building on the abutting property to the west has a flat roof. The roof/roofline of the proposed building addition will not create an anomaly in the neighborhood. **Affirmative finding**

3. *Building Openings*

The elevation drawings show a variety of window types, with fixed, awning and casement windows throughout. With the exception of the elevator tower, there aren't any blank walls. Three first level access doors are provided (east and north side), and there will be a door on the south wall that will provide access to a portion of the second floor's rooftop. **Affirmative finding**

(b) *Protection of Important Architectural Resources:*

Not applicable.

(c) *Protection of Important Public Views:*

Not applicable.

(d) *Provide an active and inviting street edge:*

Not applicable. No changes to the street edge are proposed. The existing building will remain as-is, and landscaping in front will remain.

(e) *Quality of materials:*

A mix of fiber cement, brick, and corrugated metal siding will be used on the new addition. Trifab Versaglaz will be used for the windows. Spec sheets have been provided. Generally, for new construction, a variety of materials is acceptable and are encouraged to be highly durable.

Affirmative finding

(f) *Reduce energy utilization:*

The applicant notes that the addition will be designed to meet or exceed the requirements of the CBES Codes of the State of Vermont. The new construction will be all electric, which to be successful requires a robust and air-sealed exterior. **Affirmative finding**

(g) *Make advertising features complementary to the site:*

Not applicable. No signage is proposed. A separate sign permit will be required for any future signage.

(h) *Integrate infrastructure into the building design:*

See Sec. 6.2.2 (p) above.

(i) *Make spaces secure and safe:*

The entrances to the new addition will be illuminated. There are three ground floor covered entries/exits proposed that will aid in building evacuation should the need arise. As usual, the new building addition will have to meet life safety requirements of the building code. **Affirmative finding as conditioned**

Article 8: Parking

Sec. 8.1.6, Affordable Housing and Historic Buildings Exemption

Regardless of location, the minimum off-street parking requirements found under Sec. 8.1.8 below shall not apply to any of the following:

(a) The creation of permanently affordable inclusionary housing units satisfying the applicable provisions of Article 9 Part 1 – Inclusionary Housing.

The proposed 16 units will all be inclusionary housing units. As a result, Sec. 8.1.8 (Minimum Off-Street Parking Requirements) does not apply to the proposal. Additionally, the property is in the Multimodal Mixed Use Parking District, which eliminates minimum parking requirements anyway. **Affirmative finding**

Sec. 8.1.9, Maximum On-Site Parking Spaces

The total number of off-street parking spaces provided in any parking district shall not be more than as required in Table 8.1.9-1 below:

<i>Table 8.1.9-1 Maximum Off-Street Parking Requirements</i>		
<i>Neighborhood District</i>	<i>Shared Use District</i>	<i>Multimodal Mixed-Use District</i>
<i>125% of the minimum number of spaces required for the Neighborhood Parking District for any given use as required in Table 8.1.8-1</i>	<i>100% of the minimum number of spaces required for the Neighborhood Parking District for any given use as required in Table 8.1.8-1</i>	<i>100% of the minimum number of spaces required for the Shared Parking District for any given use as required in Table 8.1.8-1</i>

Per the Shared Use Parking District, the existing community house requires 0.75 parking spaces, and 16 dwelling units would normally require 16 parking spaces (1 per unit). The site will have 9 on-site parking spaces, well below the 17 space limitation. **Affirmative finding**

Sec. 8.1.10, Off-Street Loading Requirements

Not applicable in the Multimodal Mixed Use Parking District.

Sec. 8.1.11, Parking Dimensional Requirements

While there is not a minimum parking space requirement, the spaces shown on the site plan meet the standard dimension of 18' x 9'. Per the TRC meeting of May 13, 2021, the Fire Marshal indicated adequate travel space for emergency vehicles. **Affirmative finding**

Sec. 8.1.12, Limitations, Location, Use of Facilities

Not applicable.

Sec. 8.1.13, Parking for Disabled Persons

One ADA parking space is depicted on the site. As noted above, the building inspector has jurisdiction over ADA requirements. **Affirmative finding**

Sec. 8.1.14, Stacked and Tandem Parking Restrictions

Not applicable.

Sec. 8.1.15, Waivers from Parking Requirements/Parking Management Plans

Not applicable.

Sec. 8.1.16, Transportation Demand Management

(a) Purpose

This section requires the implementation of a Transportation Demand Management (TDM) Program for certain projects for the purpose of advancing the goals of the City's land use and transportation plans, and promoting public health, safety, welfare, and protection of the environment by:

- *Reducing parking demand;*
- *Reducing car ownership;*
- *Reducing vehicle miles traveled (VMT) and congestion; and,*
- *Increasing transit use and non-motorized travel;*

(b) Applicability

A Transportation Demand Management Program shall be required for all projects located in the Multimodal Mixed Use Parking District (see Sec. 8.1.3(c)), and involving any one or more of the following:

<i>Dwelling Units</i>	<i>Creation of ten (10) or more dwelling units</i>
<i>Non-residential or Mixed Use Development</i>	<i>A building footprint of eight thousand (8,000) s.f. or more; or, the creation of fifteen thousand (15,000) s.f. or more of gross floor area.</i>

Because the proposal involves the creation of 10+ dwelling units, the applicant has prepared a transportation demand management plan. **Affirmative finding**

(c) Transportation Demand Management (TDM) Program

a. Outreach and Education

While not in the applicant's TDM plan, designation of a Transportation Coordinator who directly, or indirectly through membership in a Transportation Management Assoc., shall be responsible for:

1. Prepare and present informational and educational materials regarding available TDM strategies to all tenants and employees;
2. Organize and host an annual meeting for all tenants and employees to present and discuss available TDM strategies, and opportunities for increased use and participation;
3. Preparation and dissemination of an annual travel survey of all tenants and employees; and,
4. Record-keeping and annual reporting to City of all TDM activities offered and rates of participation (including parking utilization if applicable).

This shall be addressed in a revised TDM. **Affirmative finding as conditioned**

b. TDM Strategies

In addition to compliance with the on-site Bicycle Parking requirements found in Article 8, Part 2, the following TDM strategies shall also be included at a minimum for a period of 10 years from receipt of a Certificate of Occupancy as follows:

- i. *GMT Transit passes shall be provided to all tenants and employees for free for the first year of occupancy or employment, and at a minimum discount of 50% for every year thereafter; and,*
- ii. *A car share membership shall be offered to all tenants and employees for free for the first two years of occupancy or employment, and at a minimum discount of 50% for every year thereafter; or,*
- iii. *In lieu of i and ii above, maintain an ongoing and active membership in a Transportation Management Association (TMA) that offers equivalent TDM strategies or better.*

The applicant has indicated that COTS will join CATMA as a means of satisfying the TDM plan. CATMA offers a variety of transportation services. Compliance with this section will be required as part of permit approval. **Affirmative finding as conditioned**

c. Parking Management

Where on-site or off-site parking is also made available:

- i. *Conduct parking utilization studies at least annually for a period of 10 years from receipt of a Certificate of Occupancy;*
- ii. *With the exception of permanently affordable housing units, the cost of parking shall be un-bundled from all residential and non-residential leases and deeds and made available at a market rate;*
- iii. *Where parking spaces are made available to off-site users, parking spaces may be made available by a renewable lease, provided the term of any lease does not exceed one (1) year; and,*
- iv. *Priority parking spaces - located in closest proximity to a primary building entrance and/or public street frontage - shall be made available for each of the following:*
 - 1. *Handicapped spaces;*
 - 2. *Bicycles, scooters, and motorcycles spaces;*
 - 3. *Car-share: where 1 space must be offered for every 20 residential units, not to exceed a total of 5 spaces, subject to an agreement with a car-share provider; and,*
 - 4. *Carpool and/or Vanpool vehicles: where more than 20 spaces are available for non-residential uses. In such cases, 5 spaces or 5% of the parking spaces on site, whichever is less, must be reserved for carpool/vanpool use before 9:00 AM on weekdays.*

The final TDM shall address each of these requirements. A handicap parking space will be located closest to the building entrance. Bicycle parking is located near the rear door.

Affirmative finding as conditioned

d. TDM Agreement

Each TDM Plan shall include a signed commitment to and acknowledgement of each of the following on a form provided by the Administrative Officer:

- i. *Commitment to ongoing implementation of the TDM requirements as set forth above;*
- ii. *Acknowledgement that the project has no claim to the ongoing availability of nearby on-street public parking, and that, as is the case with other on-street public parking, the City retains the right to charge for or remove such on-street parking at any time;*

- iii. *Acknowledgement that failure to maintain transportation demand management as required above is a violation of this ordinance, and understanding that, pursuant to Sec. 2.7.8 of this ordinance, no zoning permit or certificate of occupancy may be granted until any such violation has been remedied; and,*
- iv. *Commitment to notify any subsequent owners and tenants in writing of their obligations under this section as part of any purchase and sale and/or lease agreements*

While a few components of the TDM need to be included/revised, the applicant has submitted the acknowledgement form. **Affirmative finding**

Sec. 8.2.4, Bicycle Parking Requirements

Multi-unit developments require 1 long term space per 2 bedrooms, and 1 short term space per 10 units. The site plan includes covered bike parking for 16 bicycles. Given a total of 23 bedrooms, 12 long term spaces are required. The basement storage room provides 17 enclosures reserved for tenants which can house bicycles as well. **Affirmative finding**

Article 9: Inclusionary and Replacement Housing

Section 9.1.5 Applicability

As the proposed development includes more than 5 new dwelling units, it is subject to the inclusionary housing provisions of this Article. In this case, all 16 new units (100%) are going to be inclusionary. **Affirmative finding**

Sec. 9.1.7 Certificate of Inclusionary Housing Compliance

Notwithstanding any other provision of this ordinance, no certificate of occupancy for a project covered by this chapter shall be granted unless and until a Certificate of Inclusionary Housing Compliance has been issued by the Housing Trust Fund Manager.

Final written approval of the inclusionary housing approval from the manager of the city's Housing Trust Fund is required. **Affirmative finding as conditioned.**

Sec. 9.1.12 Additional Density and Other Development Allowances

Because 100% of the new units will be inclusionary housing units, the development is allowed the following bonuses: a density of 46 units per acre and a maximum lot coverage allowance of 92%. The development will not exceed either of these bonuses. See Sec. 4.4.5 above. **Affirmative finding**

Section 9.1.17 Review of Proposal for Phasing

Not applicable.

Section 9.1.18 Timeline for Availability/Phasing of Inclusionary Units for Issuance of Certificate of Occupancy

Not applicable. All of the new units will be inclusionary.

II. Conditions of Approval

1. Per **Section 2.7.8, Withhold Permit**, the applicant is required to remedy all violations and close out all zoning permits issued after July 13, 1989 prior to issuance of a Certificate of Occupancy for this permit. See attached list for guidance on open permits/violations.

2. **At least 7 days prior to the issuance of a certificate of occupancy**, the applicant shall pay to the City Treasurer's Office or the Permitting and Inspections Department impact fees as calculated by staff based on the net new square footage of the proposed development. The applicant shall submit a final calculation of gross square footage to make final an Impact Fee assessment. As submitted, estimated Impact fees are:

SF of Project 14,200

Department	<u>Residential</u>	
	Rate	Fee
Traffic	0.208	2,953.60
Fire	0.235	3,337.00
Police	0.047	667.40
Parks	0.789	11,203.80
Library	0.488	6,929.60
Schools	1.019	14,469.80
Total	2.786	\$ 39,561.20

3. **Prior to the release of the zoning permit**, a Transportation Demand Management plan shall be provided to staff for review and approval. The TDM shall satisfactorily address each criterion required under Sec. 8.1.16 CDO.
4. **Prior to the release of the zoning permit**, the Erosion Prevention and Sediment Control plan and Stormwater plan must be approved by the Stormwater Program Manager.
5. **Prior to the release of the zoning permit**, the lighting plans shall be revised to indicate no areas of parking lot lighting exceeding 4 footcandles at any point.
6. **Prior to issuance of a certificate of occupancy**, final written approval of the inclusionary housing approval from the manager of the city's Housing Trust Fund is required.
7. **Prior to issuance of a certificate of occupancy**, proof of membership with CATMA shall be provided to staff.
8. Residential occupancy limits apply. The occupancy of any dwelling unit is limited to members of a family as defined in Article 13. Not more than four unrelated adults may occupy any dwelling unit.
9. The permit does not approve any new offsite fencing.
10. All new construction is required to meet the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances.
11. The proposed building must comply with all building and life safety code as defined by the building inspector and fire marshal.
12. A State of Vermont wastewater permit is required.
13. Standard Permit Conditions 1-15.

Department of Permitting & Inspections

Zoning Division
645 Pine Street
Burlington, VT 05401
Telephone: (802) 865-7188

William Ward, Director
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Ryan Morrison, Associate Planner
Vacant, Planning Technician
Celeste Crowley, Planning & Zoning Clerk
Ted Miles, Zoning Specialist
Charlene Orton, Permitting & Inspections Administrator



MEMORANDUM

TO: Development Review Board
FROM: Ryan Morrison, Associate Planner
DATE: December 7, 2021
RE: 81 Dunder Road; ZP-21-302; Creation of an accessory dwelling unit within the existing single family home to be used as a bed and breakfast use.

Condition #2 of ZP-21-302, approved June 17, 2021, states:

2. The applicant shall install a privacy fence along the southern property line within 90 days of this permit approval to run the length of the boundary line. Unless the applicant can come to a written agreement with the adjoining neighbor for a different fence, the fence shall be wooden and at least 6 ft tall.

A deadline of December 17, 2021 was given for the fence to be constructed. The applicant has constructed a 6 ft tall wooden fence that runs the full length of the south property line.

311 North Ave
Burlington, Vermont

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Street View - Oct 2021

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Department of Permitting & Inspections

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Ryan Morrison, Associate Planner
vacant, Permit Technician
Ted Miles, Code Enforcement Officer
Charlene Orton, Permitting & Inspections Administrator



TO: Development Review Board
FROM: Scott Gustin
DATE: December 7, 2021
RE: ZP-21-677; 27 Lakeview Terrace

=====

Note: These are staff comments only; decisions on projects are made by the Development Review Board, which may approve, deny, table or modify any project. THE APPLICANT OR REPRESENTATIVE MUST ATTEND THE MEETING.

Zone: RM Ward: 3C

Owner/Applicant: James & Susan Fayette

Request: Construct retaining wall along rear boundary and install patio and gas fire pit.

Applicable Regulations:

Article 4 (Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Review Standards)

Background Information:

The applicant is seeking approval to install a 3 ft. tall concrete block retaining wall along the western (rear) property boundary. A small patio and gas fire pit are also proposed in the rear yard.

The property's rear boundary abuts city-owned land and sits atop a steep slope. Construction of the retaining wall within 2 ft. of the property line is permissible but triggers Development Review Board review. Location atop the steep slope warrants a geotechnical analysis.

Previous zoning actions for this property are noted below:

- 11/10/21, Approval for replacement garage doors.
- 1/5/21, Construct retaining wall along rear property line (*withdrawn*).
- 4/10/17, Approval for accessory apartment over the garage and install one window.
- 9/30/11, Approval for accessory apartment over the garage and install window (*expired*).
- 10/5/95, Approval for window changes.
- 8/24/90, Approval to demolish cottage and construct new single family home.

Recommendation: Certificate of appropriateness approval as per, and subject to, the following findings and conditions:

I. Findings

Article 4: Maps & Districts

Sec. 4.4.5, Residential Districts:

(a) Purpose

(3) Residential Medium Density (RM)

The Residential Medium Density (RM) district is intended primarily for medium density residential development in the form of single family detached dwellings and attached multi-family apartments. No change in use from the existing single family home is included in this proposal.

(Affirmative finding)

(b) Dimensional Standards and Density

Residential density remains unchanged at 1 dwelling unit (and one accessory apartment).

Lot coverage is presently 40%. As proposed, it will increase slightly to 42.7% due to the patio construction. The proposed retaining wall is 15" wide and, therefore, does not affect lot coverage. The increase in lot coverage is acceptable, as the patio falls within an extra 10% lot coverage (over the standard 40% limit) for open-air amenities.

The front yard setback will remain unchanged. The application indicates that the fire pit patio will be set back at least 5' from the property lines; however, that is not clear in the site plan. The patio must be set back at least 5' from the side and rear property lines. Adjustment of the site plan may be necessary to depict this setback. The bottom of the retaining wall will be set at the rear property line and will taper inward ~ 1' as it rises in height to 3'. Note that the subsoil base of the wall must also be set within the subject property rather than encroach onto adjacent city property. This detail should be depicted in the retaining wall cross section. Encroachment into the city property would require a license subject to City Council approval and annual fees in addition to consent by the Vermont Housing and Conservation Board that holds a conservation easement on the property.

The proposed retaining wall will be an acceptable 3' in height. **(Affirmative finding as conditioned)**

(c) Permitted and Conditional Uses

The permitted single family home use remains unchanged. **(Affirmative finding)**

(d) District Specific Regulations

2. Lot Coverage

As noted above, the patio is acceptable within the extra 10% lot coverage afforded to open-air amenities. **(Affirmative finding)**

Article 5: Citywide General Regulations

Sec. 5.2.3, Lot Coverage Requirements

See Article 4 above.

Sec. 5.2.4, Buildable Area Calculation

Not applicable to the subject property.

Sec. 5.2.5, Setbacks

(b) Exceptions to Yard Setback Requirements

3. Retaining Walls

Although the retaining wall is only 3' tall, it comes within 2' of a property boundary. Therefore, Development Review Board review and approval is required. See development standards under Article 6.

Sec. 5.2.6, Building Height Limits

See Article 4 above.

Sec. 5.2.7, Density and Intensity of Development Calculations

See Article 4 above.

Sec. 5.5.1, Nuisance Regulations

Nothing in the proposal appears to result in creating a nuisance under this criterion. **(Affirmative finding)**

Sec. 5.5.2, Outdoor Lighting

(Not applicable)

Sec. 5.5.3, Stormwater and Erosion Control

As more than 400 sf of earth disturbance is proposed, a “small project erosion control” form has been provided. The city’s stormwater program staff has reviewed and approved this plan.

(Affirmative finding)

Article 6: Development Review Standards

Part 1, Land Division Design Standards

(Not applicable)

Part 2, Site Plan Design Standards

Sec. 6.2.2, Review Standards

(a) Protection of important natural features

The subject property contains no important natural features as identified in the Open Space Protection Plan. **(Affirmative finding)**

(b) Topographical alterations

The proposed retaining wall is intended to level the grade of the back yard for more usable outdoor space. Topographic changes are modest, as the proposed retaining wall is only 3’ tall.

Given the proposed wall’s location atop a steep slope, geotechnical analysis has been performed. The analysis finds that this relatively small-scale project will not adversely affect the overall stability of the existing slope, provided that it is constructed in accordance with several recommendations as to construction, foundation, and drainage. Those recommendations are incorporated into conditions of approval. Review of the geotechnical analysis and comment by the City Engineer has been requested. Any comments received will be conveyed to the applicant and the Board. **(Affirmative finding as conditioned)**

(c) Protection of important public views

The subject property is not affected by any identified public view corridor. **(Affirmative finding)**

(d) Protection of important cultural resources

The property has no historic structures and contains no archaeologically significant site points, nor is it located within an archaeologically sensitive area. **(Affirmative finding)**

(e) Supporting the use of alternative energy

No part of this proposal involves the use of alternative energy. The proposed construction will not adversely impact the actual or potential use of alternative energies by this property or neighboring properties. **(Affirmative finding)**

(f) Brownfield sites

The subject property is not an identified brownfield. **(Affirmative finding)**

(g) Provide for nature's events

See Sec. 5.5.3 for stormwater management.

(h) Building location and orientation

(Not applicable)

(i) Vehicular access

(Not applicable)

(j) Pedestrian access

(Not applicable)

(k) Accessibility for the handicapped

(Not applicable)

(l) Parking and circulation

(Not applicable)

(m) Landscaping, fences, and retaining walls

Some additional landscaping is included in the project plans; however, it is not the focus of the application. The proposed retaining wall is to be constructed of interlocking cultured stone blocks and capped with slightly wider flat cultured stone blocks. The wall is relatively small at just 3' tall and set along the rear property boundary. Public view of the wall will be from the bottom of the slope below Lakeview Terrace. As proposed, the wall is appropriately scaled and constructed for this residential application. No new fencing is proposed. **(Affirmative finding)**

(n) Public plazas and open space

(Not applicable)

(o) Outdoor lighting

(Not applicable)

(p) Integrate infrastructure into the design

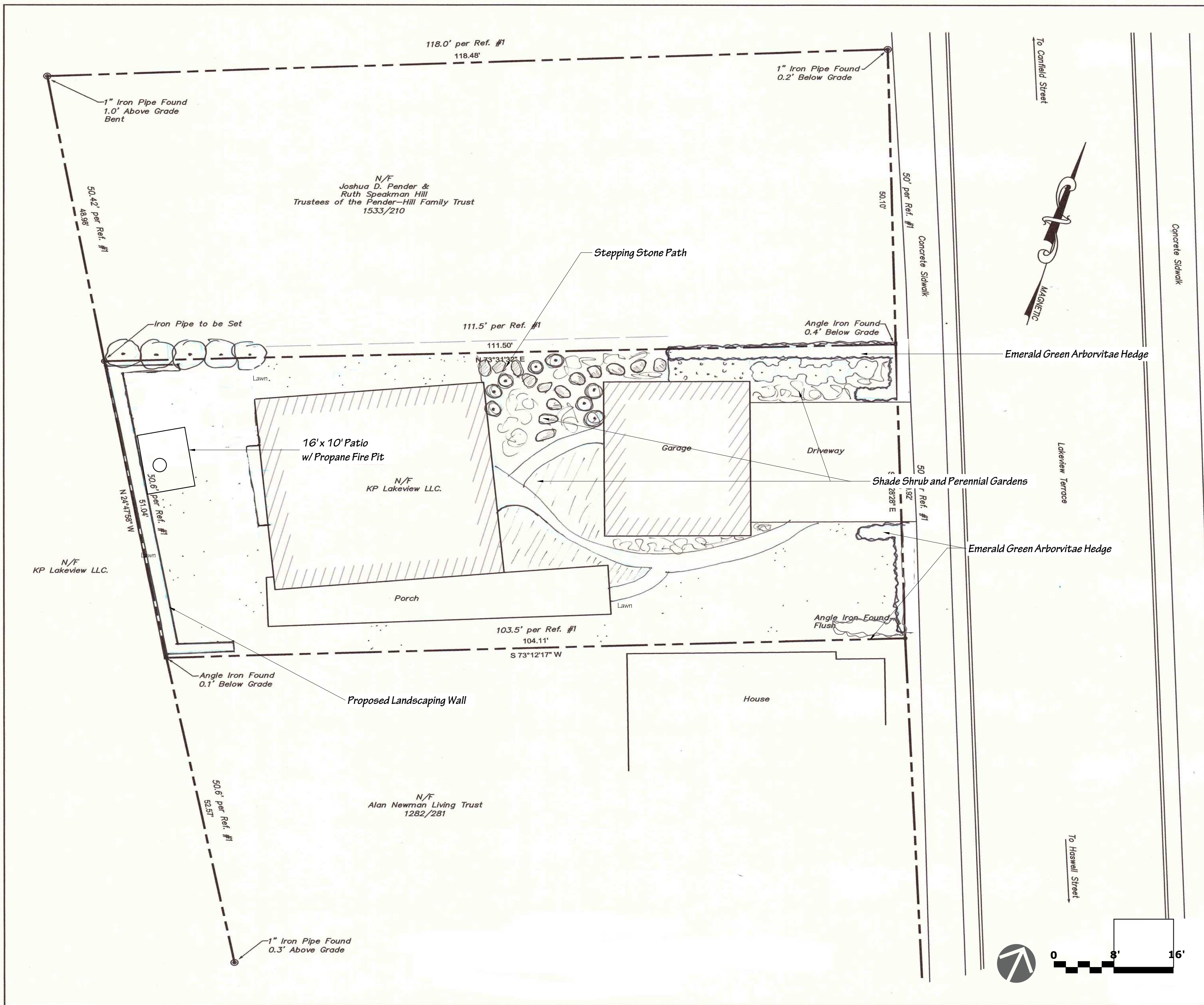
(Not applicable)

Part 3, Architectural Design Standards

(Not applicable)

II. Conditions of Approval

1. **Prior to release of the zoning permit**, revised project plans shall be submitted, subject to staff review and approval. Revised project plans shall depict the proposed patio set back at least 5' from the side and rear property lines and the entirety of the retaining wall construction within the 27 Lakeview Terrace property.
2. This permit includes the recommendations of the December 1, 2021 geotechnical analysis by Sanborn Head:
 - The MSE retaining wall should be constructed with an approved modular block facing and uniaxial geogrid with a minimum ultimate tensile strength of 3,500 psf. Soils in the reinforced zone should consist of granular structural fill compacted in lifts of no more than 8-inch thickness.
 - The bottom of the wall should be constructed with an embedment of 18 inches below the existing grade at the face of the wall. The bottom block should be placed on a 6-inch thick leveling pad, consisting of compacted structural fill or ¾ inch crushed stone placed over competent native sand subgrade.
 - A 4-inch PVC perforated drainage pipe should be placed across the length of the wall behind the bottom block. The drainage pipe should daylight at a location downslope of the face of the wall. The drainage pipe should be enveloped with a minimum of 12 inches of ¾ inch crushed stone wrapped in non-woven geotextile fabric (e.g., Mirafi 140N).
3. The Applicant/Property Owner is responsible for obtaining all necessary Zoning Permits and Building Permits through the Department of Public Works as well as other permit(s) as may be required, and shall meet all energy efficiency codes of the city and state as required.
4. Standard permit conditions 1-15.



MEMORANDUM

To: Mr. James Fayette
From: Daniel Thabault, E.I.T.
Shawn Kelley, Ph.D., P.E.
File: 5084.00
Date: December 1, 2021
Re: Slope and Proposed Retaining Wall Evaluation
27 Lakeview Terrace
Burlington, VT

INTRODUCTION

Sanborn, Head & Associates, Inc. (Sanborn Head) prepared this memorandum as a summary of our evaluation of the existing slope and proposed retaining wall construction (Project) at 27 Lakeview Terrace in Burlington, VT (Site). This memorandum has been prepared for James Fayette (Client) in accordance with our proposal dated November 4, 2021.

PROJECT AND SITE DESCRIPTION

The Project Site is located on the west side of Lakeview Terrace and consists of a 0.12-acre residential parcel with a 3-story single family home and separate garage structure. The home has an approximately 17-foot wide backyard, measured from the back of the home to the west property line, that sits on top of a large slope. Topography of the backyard slopes gently down to the west from the back of the house and drops off steeply near the property line. The slope to the west of the Site is approximately 80 feet in height with an approximate 50 to 60 percent grade.

Based on our correspondence with the Client and our review of the Landscape Retaining Wall Cross Section, dated September 16, 2021 and the Permit Plan, dated September 17, 2021 (Plans), we understand the proposed development consists of the construction of a new retaining wall along the western property line that will retain up to 3.0 feet of new fill. The backyard will be graded to be level with approximately 0 to 1.0 feet of fill placed from the back of the house to 5 feet from the property line, and approximately 1.0 to 3.0 feet of fill placed within 5 feet of the property line. The proposed wall will consist of a mechanically-stabilized earth (MSE) retaining wall with geogrid reinforcement and a perforated drainage pipe.

SUBSURFACE CONDITIONS

Sanborn Head performed a subsurface exploration program consisting of four (4) hand auger explorations with Dynamic Cone Penetrometer (DCP) testing. The hand augers explorations are designated HA-1 through HA-4 and their approximate locations are shown on Figure 1. Detailed logs of the hand auger explorations are provided in Attachment A. Subsurface conditions at the Site generally consist of topsoil, fill, and natural sand soils. DCP testing was performed at 2-foot intervals throughout the hand auger explorations using a Sowers Dynamic Cone Penetrometer in accordance with ASTM STP399-EB.

Fill

Fill was encountered underlying the 2 to 6-inch topsoil layer in all hand auger explorations. The fill generally consisted of brown, fine to coarse sand with little to some gravel and trace to little silt. Hand auger refusal in Fill was encountered at approximately 3 feet below ground surface (bgs) in hand augers HA-1 and HA-2 on what was interpreted to be coarse gravel/cobbles. The Fill extended to approximately 2 feet bgs in hand augers HA-3 and HA-4. DCP testing indicated the fill to be loose to medium dense.

Sand

Natural sand was encountered underlying the fill in hand augers HA-3 and HA-4. The sand generally consisted of orange-brown to tan, fine to coarse sand with trace to little gravel and trace silt. The sand extended beyond the maximum depth of exploration in hand augers HA-3 and HA-4 (10 and 7 feet bgs, respectively). DCP testing indicated the sand to be loose to medium dense.

MODELING APPROACH

Sanborn Head used Slide2 2021 to evaluate the global stability of one slope section for existing and proposed conditions. Slide2 2021, developed by Rocscience, Inc. of Toronto, Ontario, is a comprehensive 2-dimensional limit equilibrium slope stability program that analyzes various potential failure surfaces through a slope to identify the minimum factor of safety based on the input geometry, soil strength, and unit weight parameters, and is widely accepted in engineering practice.

The geometry of the existing slope was based on the site topography survey provided by the Client, dated August 4, 2021, as well as topographic information from Google Earth (2021). Generalized subsurface conditions were developed based on the subsurface conditions encountered in our hand auger explorations and our experience with soils in the area.

Soil properties used in the modeling were estimated based on observations made during the subsurface exploration program, correlations with similar soils, and our engineering judgement. Soil properties used at each section are included in Attachment B.

Sanborn Head developed an existing conditions model at cross section A-A' (location shown in Figure 1) based on the assumed conditions as described above. A surcharge load of 2000

pounds per square foot (psf) was considered to account for the existing home foundation closest to the slope. A proposed model was then developed based on the proposed grading. The proposed wall was modeled as an MSE with 3-foot geogrid and reinforced soil backfill. The Bishop method was used for calculating the slope factor of safety for existing and proposed conditions. Attachment B presents the slope stability model results.

RESULTS

The results of our slope stability analysis indicate that the factor of safety for both the existing and proposed conditions is 1.31. These analyses were performed considering a local failure under static conditions.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our slope stability analyses and our review of existing conditions at the Site, it is our opinion that the construction of the proposed retaining wall will not have adverse effects on the overall stability of the existing slope, provided the wall is constructed as shown on the Plans and per our recommendations below. Moreover, we believe that the proposed grading and construction of the wall, with proper drainage as recommended below, will increase the level of erosion protection at the crest of the slope.

Design and construction of the wall should be performed in accordance with the following recommendations:

- The MSE retaining wall should be constructed with an approved modular block facing and uniaxial geogrid with a minimum ultimate tensile strength of 3,500 psf. Soils in the reinforced zone should consist of granular structural fill compacted in lifts of no more than 8-inch thickness.
- The bottom of the wall should be constructed with an embedment of 18 inches below the existing grade at the face of the wall. The bottom block should be placed on a 6-inch thick leveling pad, consisting of compacted structural fill or $\frac{3}{4}$ inch crushed stone placed over competent native sand subgrade.
- A 4-inch PVC perforated drainage pipe should be placed across the length of the wall behind the bottom block. The drainage pipe should daylight at a location downslope of the face of the wall. The drainage pipe should be enveloped with a minimum of 12 inches of $\frac{3}{4}$ inch crushed stone wrapped in non-woven geotextile fabric (e.g., Mirafi 140N).

CONSTRUCTION MONITORING

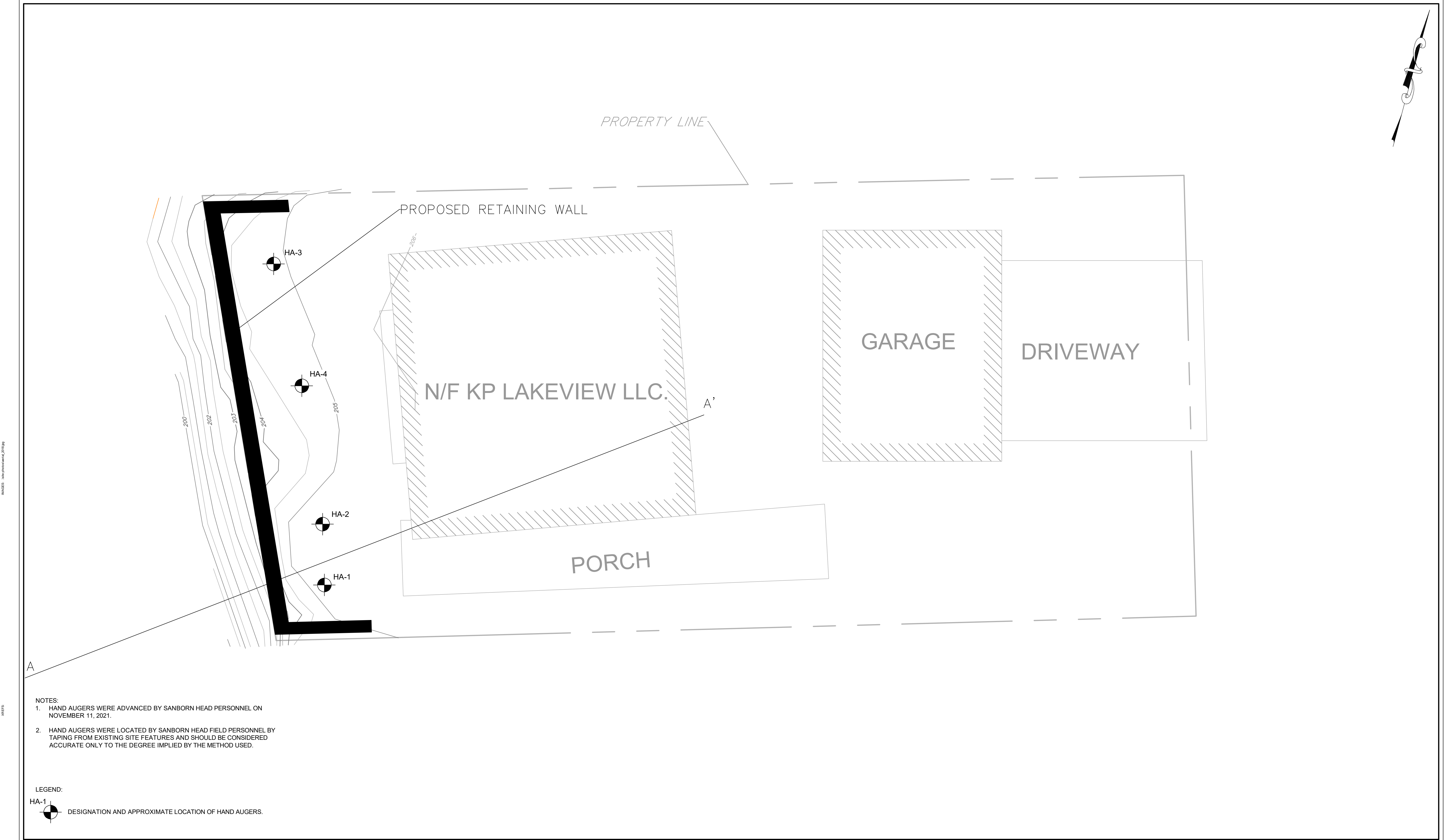
We recommend that Sanborn Head be provided the opportunity to review the design plans and specifications to see that the recommendations of this memorandum have been properly incorporated. We further recommend that our firm be retained during construction to observe excavation and wall construction. The geotechnical engineer in the field should observe the work for compliance with the recommendations in this memorandum and assist in the development of design changes should subsurface conditions differ from those anticipated prior to the start of construction.

DPT/SPK/BJB: spk

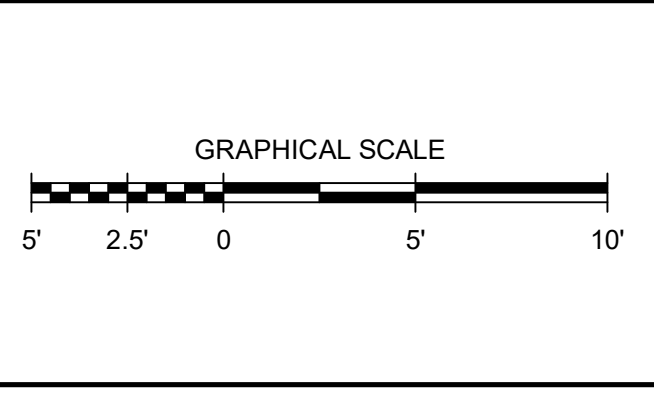
Encl. Figure 1 – Exploration Location Plan
Attachment A – Hand Auger Logs
Attachment B – Slope Stability Analysis Results

P:\5000s\5084.00\Source Files\20211201 Lakeview Terrace Wall Memo.docx

FIGURES



FILE: 27 LAKEVIEW TERRACE PROPOSED RETAINING WALL.dwg
DATE: 12/15/2021
BY: S. KELLEY



NO.	DATE	DESCRIPTION	BY

DRAWN BY: A. LULIAS
DESIGNED BY: D. THABAULT
REVIEWED BY: S. KELLEY
PROJECT MGR: D. THABAULT
PIC: S. KELLEY
DATE: DECEMBER 2021

27 LAKEVIEW TERRACE PROPOSED RETAINING WALL BURLINGTON, VERMONT		PROJECT NUMBER: 5084.00
EXPLORATION LOCATION PLAN		FIGURE NUMBER: 1

ATTACHMENT A
HAND AUGER LOGS

Description and Classification of Soil

1. **Density or Consistency:** The density or consistency of a soil sample is based on the Standard Penetration Test N-value according to the following table:

Density of Granular Soil	SPT N-Value		Consistency of Cohesive Soil
Very Loose	0-4	<2	Very Soft
Loose	4-10	2-4	Soft
Medium Dense	10-30	4-8	Medium Stiff
Dense	30-50	8-15	Stiff
Very Dense	>50	15-30	Very Stiff
		>30	Hard

The Standard Penetration Resistance, or N-value in blows per foot, is the sum of the blows recorded over the second and third 6-inch interval.

A number followed by "/3" indicates the distance that the sampler advanced. For example "100/4" indicates that 100 blows of a 140 pound hammer falling 30 inches advanced the sampler 4 inches. "WOR/24" indicates the weight of the drilling rods without the hammer caused the sampler to advance 24 inches.

"WOH" indicates the static weight of the 140 pound hammer and the drilling rods attached to the split spoon sampler were sufficient to cause the sampler to advance.

"WOR" indicates the static weight of the drilling rods attached to the split spoon sampler was sufficient to cause the sampler to advance.

2. **Color:** The color of a soil sample is based on visual observation.

3. Soil Components

- A. **Description:** The components of a soil sample are described by visually estimating the percentage of each component by weight of the total sample using a Modified Burmister System.

- i. **Major Component:** The major soil component is written with upper case letters for granular soil (e.g., SAND, GRAVEL) and a combination of upper and lower case letters for fine grained soil (e.g., Silty CLAY, Clayey SILT).
- ii. **Minor Component:** The minor soil components are written with the first letter of each soil type in upper case, and the remaining letters in lower case (e.g., Gravel, Silt). The minor components are identified and prefaced in the description based on the following percentages:

Preface	Percentage
and	35-50
some	20-35
little	10-20
trace	0-10

- iii. **Note:** The actual percentages of gravel soil may differ from that measured when sampling with a standard split spoon sampler because of the relatively small sampler diameter. Also, it is not possible to identify the presence of boulders and cobbles using a standard split spoon sampler.

B. Definitions

- i. **Granular Soil:** A granular soil sample is defined by the following particle sizes as referenced to a standard sieve:

Material	Description	Standard Sieve Limit	
		Upper	Lower
Boulders	C-sized	--	36 inch
	B-sized	36 inch	24 inch
	A-sized	24 inch	12 inch
Cobbles	--	12 inch	3 inch
Gravel	coarse	3 inch	3/4 inch
	fine	3/4 inch	No. 4
Sand	coarse	No. 4	No. 10
	medium	No. 10	No. 40
	fine	No. 40	No. 200

- ii. **Fine Grained Soil:** The degree of plasticity of fine-grained soils is defined as follows:

Material	Degree of Plasticity	Plasticity Index (PI)	Smallest Thread Diameter (in.)
SILT	Non-Plastic	0	None
Clayey SILT	Slight	1 to 5	1/4
SILT & CLAY	Low	5 to 10	1/8
CLAY & SILT	Medium	10 to 20	1/16
Silty CLAY	High	20 to 40	1/32
CLAY	Very High	40+	1/64

- iii. **Organic Soil:** An organic soil sample is classified by observation of the sample structure as follows:

Material	Description
TOPSOIL	Surficial soils that support plant life and which contain organic matter.
SUBSOIL	Soil underlying the topsoil which may contain very fragments of plant fibers.
PEAT	Deposits of plant remains in which the original plant fibers may be visible.
ORGANIC SILT	Deposit of plant remains in which the original plant fibers have been destroyed, may have high sand content. Usually found underlying peat.

- iv. **Non-Soil Constituents:** Non-soil constituents (artificial or anthropogenic material, organic materials, cobbles and boulders) are described as follows:

The following terminology is used to denote size ranges of non-soil constituents:

Descriptive Term	Size Range	Comparative Term
Specks	< No. 200 Sieve	Silt and Clay fines
Particles	No. 200 Sieve to No. 4 Sieve	Sand
Fragments	No. 4 Sieve to 3 in.	Gravel
Pieces	3 in. to 12 in.	Cobbles
Blocks	> 12 in.	Boulders

The following terminology is used to describe the frequency that a non-soil constituent is observed by estimating the percentage of the constituent by weight of the total sample:

Descriptor	Percentage
very few	0-5
few	5-10
common	10-20
frequent	20-35
numerous	35-50

4. **Moisture Content:** The moisture content of a soil sample is based on the observable presence of water according to the following table:

Dry	Moisture is not apparent, dusty.
Moist	No visible water.
Wet	Visible free water.

5. **Other Pertinent Characteristics:** Pertinent characteristics observed in a soil sample should be noted according to the following table:

Soil Structure Produced by Deposition of Sediments	
Stratified	Random soil deposits of varying components of color.
Varved	Alternating soil deposits of varying thickness (i.e., clays or silts).
Stratum	Soil deposit > 12 inches thick.
Layer	Soil deposit 3 inches to 12 inches thick.
Seam	Soil deposit 1/8 inch to 3 inches thick.
Parting/Lens	Soil deposit <1/8 inch thick.



Project: 27 Lakeview Terrace
Location: Burlington, VT
Project No.: 5084.00

Log of Hand Auger HA-1

Ground Elevation: 205.1 feet
Datum: NAVD 88 (Assumed)

Sanborn, Head & Associates, Inc.

Drilling Method: 3" O.D. AMS Hand Auger

Sampling Method: Bag

Groundwater Readings

Date	Time	Depth to Water	Ref. Pt.
11/11/21	---	No Groundwater Encountered	

Depth of Casing	Depth of Hole	Stab. Time
-----------------	---------------	------------

Drilling Company: N/A

Foreman: N/A

Date Started: 11/11/21

Date Finished: 11/11/21

Logged By: D. Thabault

Checked By: S.Kelley

Depth (ft)	Sample Information					Stratum		Geologic Description	Remarks
	Sample No.	Depth (ft)	Spoon Blows per 6 in	Pen/ Rec (in)	Field Testing Data	Log	Description		
0							---0'--- TOPSOIL ---0.5'---	(0 to 0.5'): Dark brown, fine to coarse SAND, trace Silt. Moist. TOPSOIL.	Sowers Dynamic Cone Penetrometer Blows/1.75 inches: 7, 9, 14
							(0.5 to 1'): Brown, fine to coarse SAND, trace Silt. Moist. FILL. (1 to 2'): Brown, fine to coarse SAND, some Gravel, trace Silt. Moist. FILL.		
2							FILL (2 to 3'): Brown, fine SAND, trace Gravel, trace Silt. Moist. FILL.		
							---3'---	Hand auger terminated at 3 feet due to hand auger refusal.	
4									
6									
8									
10									
12									
14									
16									

BORING LOG C:\USERS\DT\HABAU\TDOCUMENTS\JOBS - LOCAL\LAKEVIEW TERRACE WALL\SS\5084.00 LOGS.GPJ 2017 SANBORN HEAD V1 GLB 2017 SANBORN HEAD V1 GDT 12/1/21



Project: 27 Lakeview Terrace
Location: Burlington, VT
Project No.: 5084.00

Log of Hand Auger HA-2

Ground Elevation: 205.2 feet
Datum: NAVD 88 (Assumed)

Sanborn, Head & Associates, Inc.

Drilling Method: 3" O.D. AMS Hand Auger

Sampling Method: Bag

Groundwater Readings

Date	Time	Depth to Water	Ref. Pt.	Depth of Casing	Depth of Hole	Stab. Time
11/11/21	---	No Groundwater Encountered				

Drilling Company: N/A

Foreman: N/A

Date Started: 11/11/21

Date Finished: 11/11/21

Logged By: D. Thabault

Checked By: S.Kelley

Depth (ft)	Sample Information					Stratum		Geologic Description	Remarks
	Sample No.	Depth (ft)	Spoon Blows per 6 in	Pen/ Rec (in)	Field Testing Data	Log	Description		
0							---0'--- TOPSOIL	(0 to 0.5'): Dark brown, fine to coarse SAND, trace Silt. Moist. TOPSOIL.	Sowers Dynamic Cone Penetrometer blows/1.75 inch increments: 5, 8, 8
							---0.5'--- FILL	(0.5 to 2'): Brown, fine to coarse SAND, little Gravel, trace Silt. Moist. FILL.	
2							---3'---	(2 to 3'): Brown, fine SAND, some Gravel, trace Silt. Moist. FILL.	
4								Hand auger terminated at 3 feet due to hand auger refusal.	
6									
8									
10									
12									
14									
16									

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Sanborn, Head & Associates, Inc.

Drilling Method: 3" O.D. AMS Hand Auger

Sampling Method: Bag

Drilling Company: N/A

Foreman: N/A

Date Started: 11/11/21

Logged By: D. Thabault

Date Finished: 11/11/21

Checked By: S.Kelley

Groundwater Readings

Date	Time	Depth to Water	Ref. Pt.	Depth of Casing	Depth of Hole	Stab. Time
11/11/21	---	No Groundwater Encountered				

Depth (ft)	Sample Information					Stratum		Geologic Description	Remarks
	Sample No.	Depth (ft)	Spoon Blows per 6 in	Pen/ Rec (in)	Field Testing Data	Log	Description		
0							TOPSOIL	(0 to 0.2'): TOPSOIL.	Sowers Dynamic Cone Penetrometer Blows/1.75 inches:
							FILL	(0.2 to 2'): Brown, fine to coarse SAND, trace Gravel. Moist. FILL.	
2								(2 to 3.5'): Orange-brown, fine SAND, some Silt. Moist.	3, 3, 3
4								(3.5 to 6.5'): Tan, fine to coarse SAND, little fine Gravel, trace Silt. Moist.	8, 12, 8
6							SAND	(6.5 to 10'): Gray-tan, fine to coarse SAND, little fine to coarse Gravel, trace Silt. Moist.	6, 12, 16
8									4, 10, 10
10								Hand auger terminated at 10 feet. No refusal encountered.	8, 10, 11
12									
14									
16									

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Project: 27 Lakeview Terrace
Location: Burlington, VT
Project No.: 5084.00

Log of Hand Auger HA-4

Ground Elevation: 204.9 feet
Datum: NAVD 88 (Assumed)

Sanborn, Head & Associates, Inc.

Drilling Method: 3" O.D. AMS Hand Auger

Sampling Method: Bag

Groundwater Readings

Date	Time	Depth to Water	Ref. Pt.	Depth of Casing	Depth of Hole	Stab. Time
11/11/21	---	No Groundwater Encountered				

Drilling Company: N/A

Foreman: N/A

Date Started: 11/11/21

Date Finished: 11/11/21

Logged By: D. Thabault

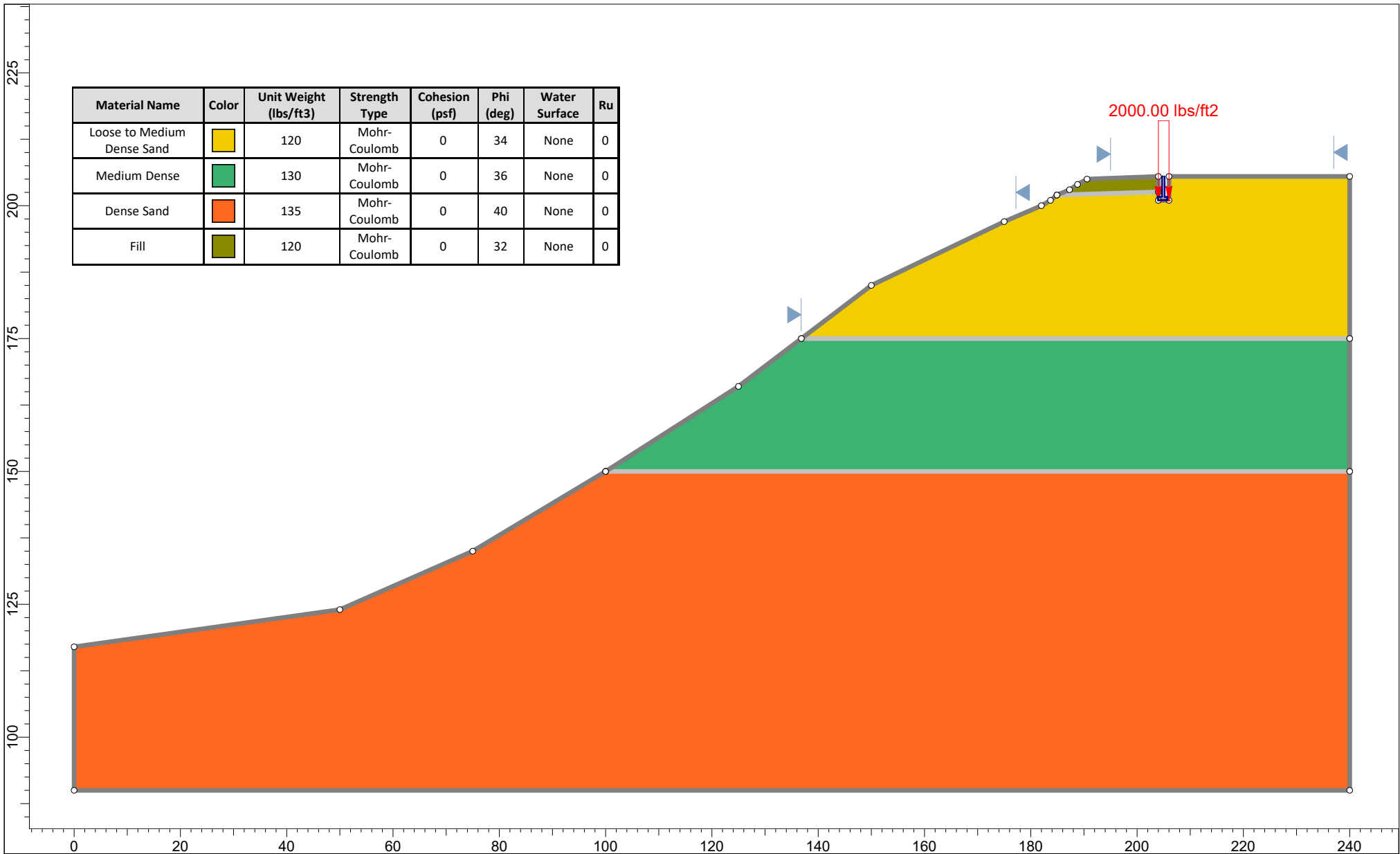
Checked By: S.Kelley

Depth (ft)	Sample Information					Stratum		Geologic Description	Remarks
	Sample No.	Depth (ft)	Spoon Blows per 6 in	Pen/ Rec (in)	Field Testing Data	Log	Description		
0							TOP SOIL 0'-----0.2'-----	(0 to 0.2'): TOPSOIL.	Sowers Dynamic Cone Penetrometer Blows/1.75 inches:
							FILL (0.2 to 2'): Brown to gray, fine to coarse SAND, little Silt, trace fine to coarse Gravel. Moist. FILL.		
2							-----2'-----	(2 to 3'): Orange-brown, fine to medium SAND, little Silt. Moist.	4, 4, 5
								(3 to 4'): Orange-brown, fine to coarse SAND, trace Gravel, trace Silt. Moist.	
4								(4 to 5.5'): Orange-brown, fine to coarse SAND, little Gravel, trace Silt. Moist.	6, 7, 8
								(5.5 to 7'): Gray-tan, fine to coarse SAND, little Gravel, trace Silt. Moist.	
6							-----7'-----	Hand auger terminated at 7 feet. No refusal encountered.	8, 14, 12
8									
10									
12									
14									
16									

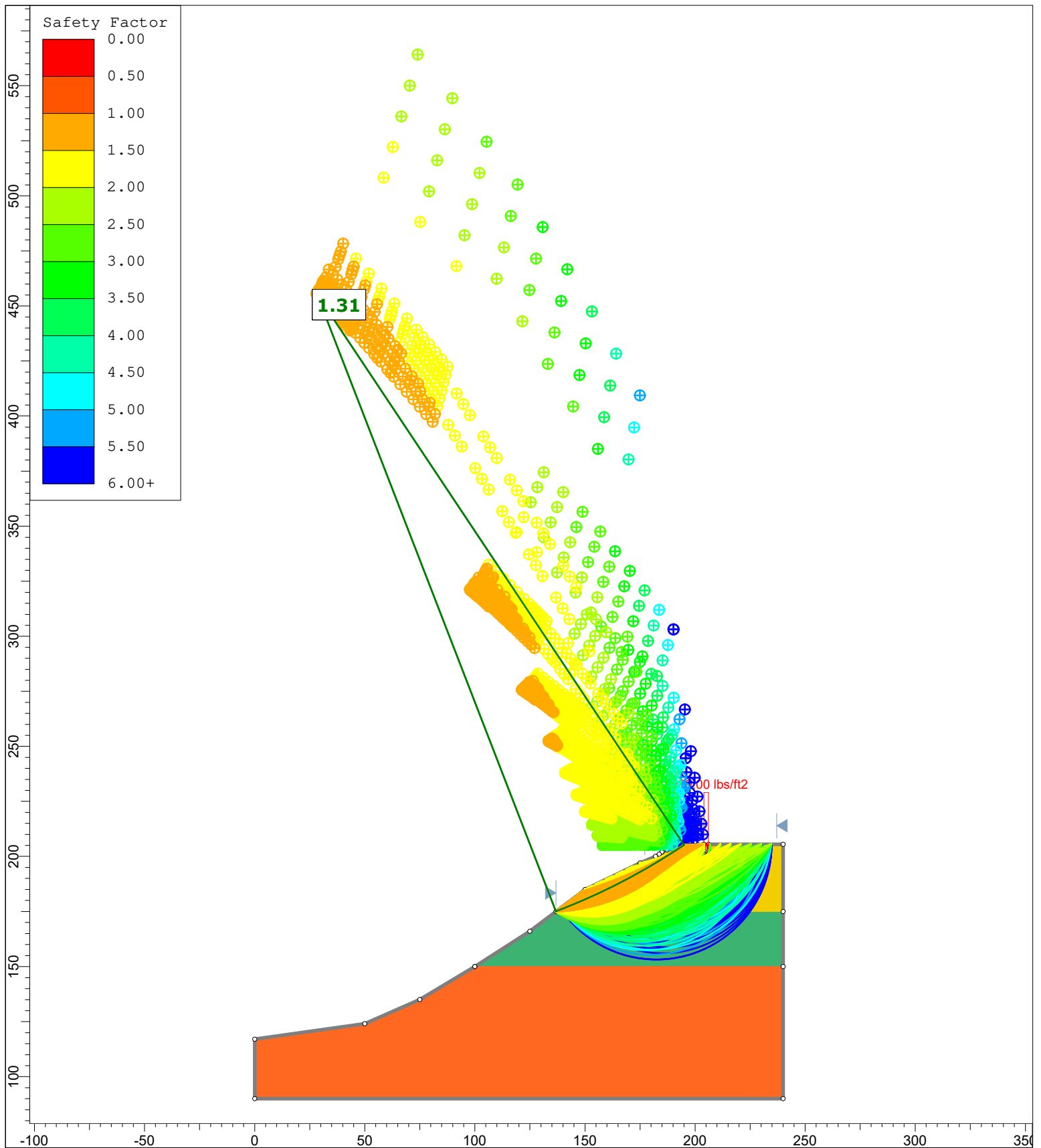
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ATTACHMENT B

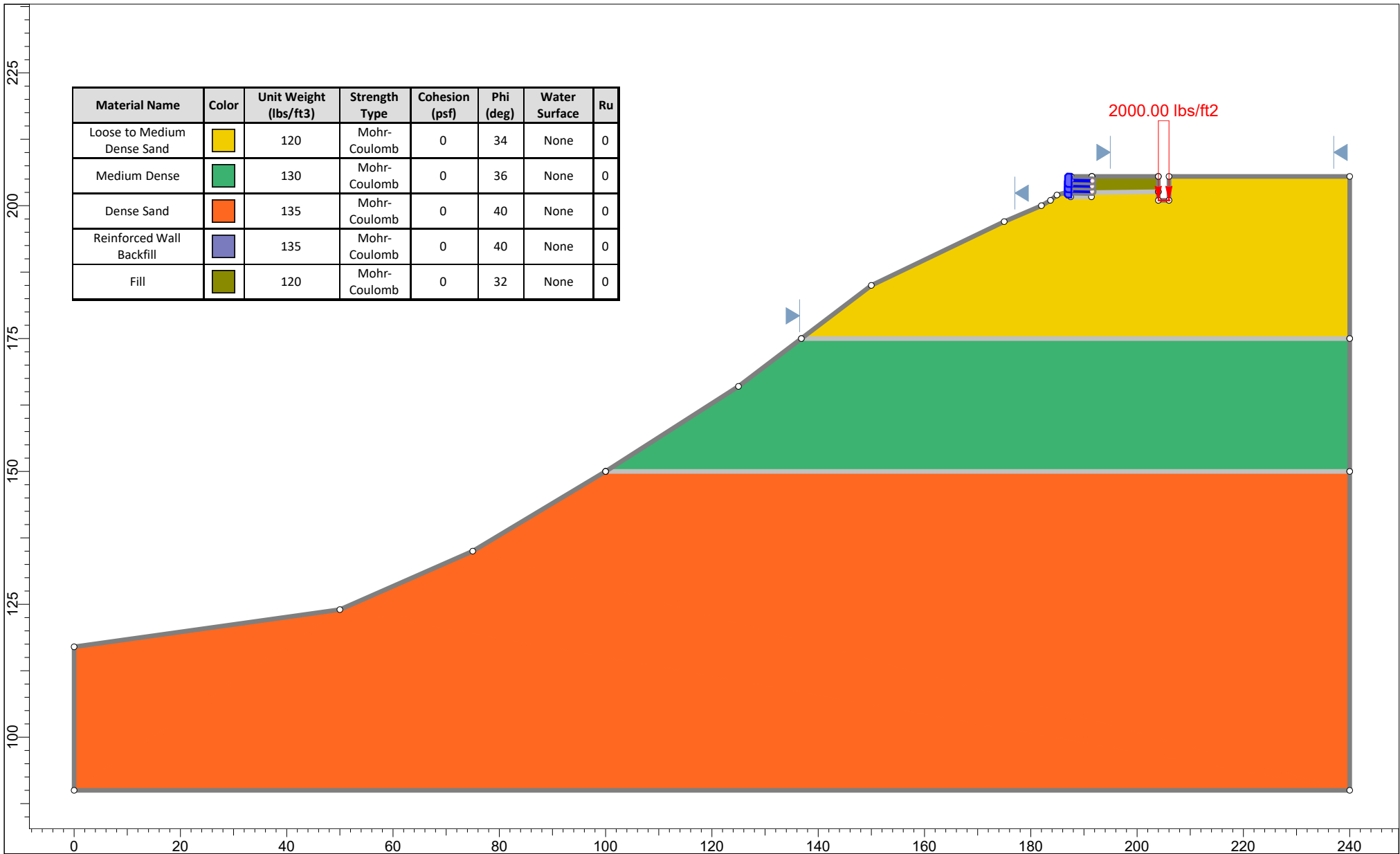
SLOPE STABILITY ANALYSIS RESULTS



	Project		27 Lakeview Terrace - Proposed Retaining Wall	
	Group		A -A' - Existing Conditions	Scenario
	Drawn By		D. Thabault	Company
	Date		12/01/2021	Sanborn, Head & Associates, Inc.
				File Name

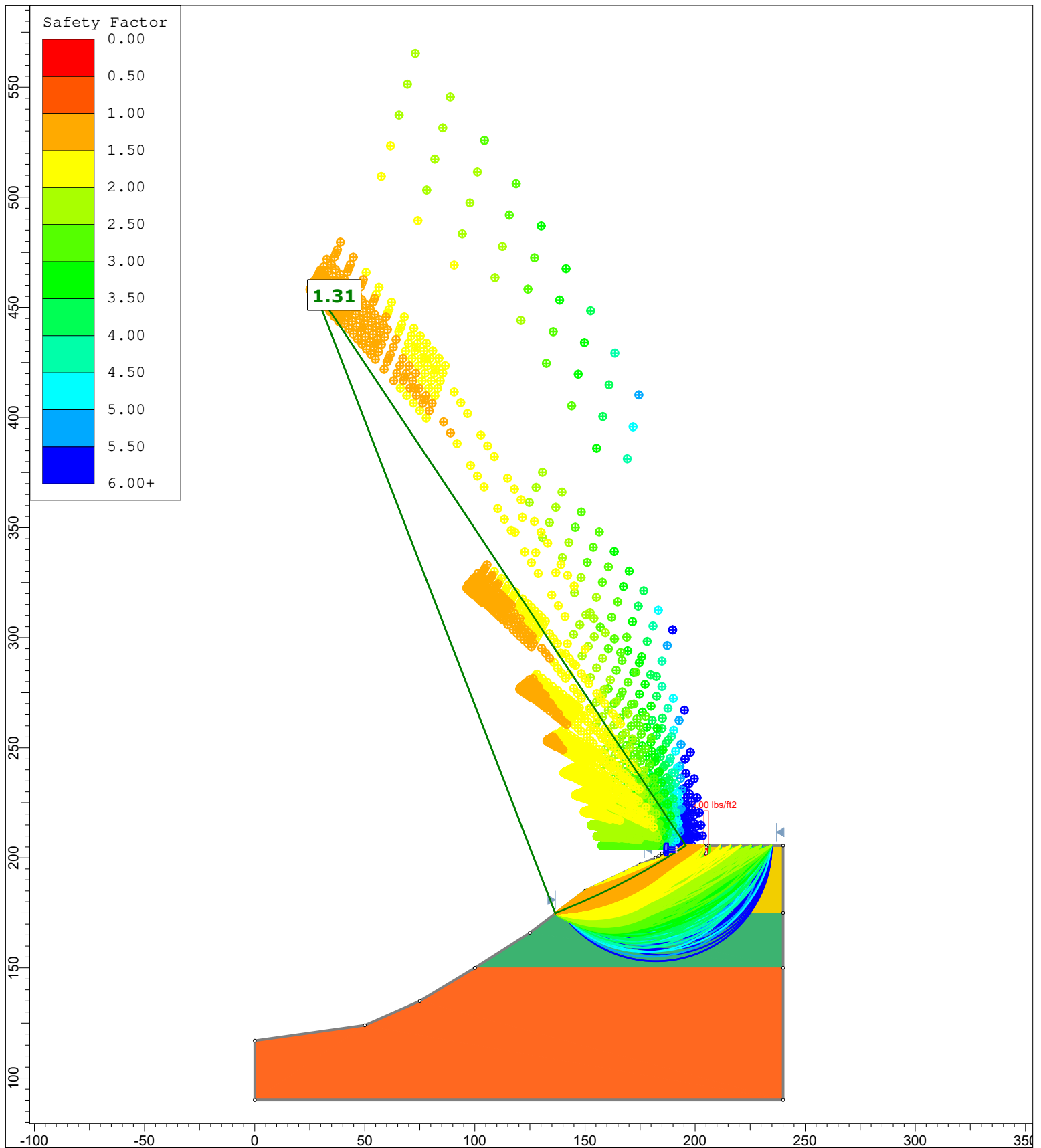


	Project		27 Lakeview Terrace - Proposed Retaining Wall	
	Group	A -A' - Existing Conditions	Scenario	Static Analysis - Bishop Method
	Drawn By	D. Thabault	Company	Sanborn, Head & Associates, Inc.
	Date	12/01/2021	File Name	27 Lakeview SS.slmd
	SLIDEINTERPRET 9.013			



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
Loose to Medium Dense Sand		120	Mohr-Coulomb	0	34	None	0
Medium Dense		130	Mohr-Coulomb	0	36	None	0
Dense Sand		135	Mohr-Coulomb	0	40	None	0
Reinforced Wall Backfill		135	Mohr-Coulomb	0	40	None	0
Fill		120	Mohr-Coulomb	0	32	None	0

	Project		27 Lakeview Terrace - Proposed Retaining Wall	
	Group	Proposed Conditions	Scenario	Static Analysis - Input Parameters
	Drawn By	D. Thabault	Company	Sanborn, Head & Associates, Inc.
	Date	12/01/2021	File Name	27 Lakeview SS.slmd



	Project		27 Lakeview Terrace - Proposed Retaining Wall	
	Group	Proposed Conditions	Scenario	Static Analysis - Bishop Method
	Drawn By	D. Thabault	Company	Sanborn, Head & Associates, Inc.
	Date	12/01/2021	File Name	27 Lakeview SS.slmd



Department of Permitting & Inspections

Zoning Division
645 Pine Street
Burlington, VT 05401
Telephone: (802) 865-7188

William Ward, Director
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Ryan Morrison, Associate Planner
Vacant, Planning Technician
Ted Miles, Zoning Specialist
Charlene Orton, Permitting & Inspections Administrator



TO: Development Review Board
FROM: Ryan Morrison, Associate Planner
DATE: December 7, 2021
RE: ZP-21-723; 321 Manhattan Drive

=====

Note: These are staff comments only; decisions on projects are made by the Development Review Board, which may approve, deny, table or modify any project. THE APPLICANT OR REPRESENTATIVE MUST ATTEND THE MEETING.

Zone: RM Ward: 2C

Owner/Applicant: 321 Manhattan Drive LLC / Sam Gardner

Request: Convert one unit within the existing triplex into a bed and breakfast (short term rental).

Applicable Regulations:

Article 3 (Applications, Permits, & Project Reviews), Article 4 (Zoning Maps and Districts), Article 8 (Parking)

Background Information:

The applicant is requesting approval to convert one unit within the existing triplex into a bed and breakfast (short term rental). No alterations to the building or site are proposed.

Previous zoning actions for this property:

- **Zoning Permit;** new fence. Approved September 11, 1974.
- **Zoning Permit 89-283;** new fence. Approved June 22, 1989.
- **Zoning Permit 89-301;** new shed. Approved June 27, 1989.
- **Zoning Permit 20-0647CA;** remove shed and back porch, build 2-car garage and back deck. Approved January 24, 2020.
- **Zoning Permit 20-0701CA;** convert single family to a triplex. Approved February 21, 2020.

Recommendation: **Conditional Use approval** as per, and subject to, the following findings and conditions.

I. Findings

Article 3: Applications, Permits, and Project Reviews

Part 5, Conditional Use & Major Impact Review:

Section 3.5.6 (a) Conditional Use Review Standards

Approval shall be granted only if the DRB, after public notice and public hearing, determines that the proposed conditional use and associated development shall not result in an undue adverse effect on each of the following general standards:

1. *Existing or planned public utilities, facilities or services are capable of supporting the proposed use in addition to the existing uses in the area;*

The conversion of one, 1-bedroom unit within the existing triplex to a short term rental use (bed and breakfast) has no appreciable impacts on existing or planned public utilities, services, or facilities. The applicant is advised to check with VT DEC as to whether a state wastewater permit is needed. **Affirmative finding as conditioned**

2. *The character of the area affected as defined by the purpose or purposes of the zoning district within which the project is located, and specifically stated policies and standards of the municipal development plan;*

The property is located within the residential – medium density zone. The neighborhood consists of a mixture of residential properties of varying unit counts. The subject rental will continue to serve as a place for people to stay, except that it will serve occupants on a short term basis rather than long term. The owner/applicant resides in one of the units onsite. **Affirmative finding**

3. *The proposed use will not have nuisance impacts from noise, odor, dust, heat, and vibrations greater than typically generated by other permitted uses in the same zoning district;*

As noted above, the short term rental will continue to serve as a place for people to stay within the neighborhood, albeit on a short term basis. The short term rental is not expected to generate nuisance impacts from noise, odor, dust, and the like. **Affirmative finding**

4. *The transportation system is capable of supporting the proposed use in addition to the existing uses in the area. Evaluation factors include street designations and capacity; level of service and other performance measures; access to arterial roadways; connectivity; transit availability; parking and access; impacts on pedestrian, bicycle and transit circulation; safety for all modes; and adequate transportation demand management strategies;*

Little change in traffic is expected. The unit configuration remains unchanged. Rather than residents arriving and departing, short term guests will arrive and depart within established timeframes. Additionally, the property is well within walking distance to transit stops throughout the area. **Affirmative finding as conditioned**

5. *The utilization of renewable energy resources;*

No part of this application would prevent the use of wind, water, solar, or other renewable energy resources. **Affirmative finding**

6. *Any standards set forth in existing City bylaws and city and state ordinances;*

The short term rental must adhere to the life safety standards and provide payment of applicable rooms and meals taxes as per the State of Vermont. **Affirmative finding as conditioned**

(b) Major Impact Review Standards

Not applicable.

(c) Conditions of Approval:

In addition to imposing conditions of approval necessary to satisfy the General Standards specified in (a) or (b) above, the DRB may also impose additional conditions of approval relative to any of the following:

1. *Mitigation measures, including but not limited to screening, landscaping, where necessary to reduce noise and glare and to maintain the property in a character in keeping with the surrounding area.*

The short term rental is not expected to produce adverse effects in need of mitigation. **Affirmative finding**

2. *Time limits for construction.*

No construction timeline or phasing is included in this proposal. **Affirmative finding**

3. *Hours of operation and/or construction to reduce the impacts on surrounding properties.*

It is recommended that guest check-ins be limited to 7:00 am – 10:00 pm to minimize noise, traffic, and neighborhood nuisances. **Affirmative finding as conditioned**

4. *That any future enlargement or alteration of the use return for review to the DRB to permit the specifying of new conditions; and,*

Any future enlargement or alteration will be reviewed under the zoning regulations in effect at that time. **Affirmative finding as conditioned**

5. *Such additional reasonable performance standards, conditions and safeguards, as it may deem necessary to implement the purposes of this chapter and the zoning regulations.*

Not applicable.

Article 4: Maps & Districts

Sec. 4.4.5, Residential Districts:

(a) Purpose

(5) Residential High Density (RH)

The Residential Medium Density (RM) district is intended primarily for medium density residential development in the form of single-family detached dwellings and attached multi-family apartments. The existing triplex is consistent with this intent. Permitting one unit as a short term rental use remains consistent with the intent of the zone. **Affirmative finding**

(b) Dimensional Standards and Density

Not applicable. No changes to the density or site are proposed.

(c) Permitted and Conditional Uses

The “bed and breakfast” (short term rental) use is conditional in the RM zone. Owner occupancy is required, and up to 5 rooms may be let. In this case, the applicant is the owner and lives onsite. The applicant proposes to rent out a ‘one-bedroom’ unit on a short term basis. The particular unit (Unit 1) contains one bedroom and a living room which could possibly be construed as a separate rental room within the unit. The living room space can be used within the bed and breakfast unit, but it cannot be counted as a bedroom for occupancy. A new zoning permit would be required in order to permit the living room, or any other room(s) within the triplex, as a bed and breakfast room. **Affirmative finding as conditioned**

(d) District Specific Regulations

1. Setbacks

Not applicable.

2. Lot Coverage

Not applicable.

3. Accessory Residential Structures, Buildings, and Uses

Not applicable.

4. Residential Density

(c) Residential Occupancy Limits

In all residential districts, the occupancy of any dwelling unit is limited to members of a family as defined in Article 13.

Each unit within the structure will be limited to occupancy by a family, including no more than 4 unrelated adults and their minor children. **Affirmative finding as conditioned**

5. Uses

Not applicable.

6. Residential Development Bonuses

Not applicable.

Article 8: Parking

Sec. 8.1.8, Minimum Off-Street Parking Requirements

Multi-unit attached dwelling uses in the Shared Parking District require 1 parking space per unit. “Bed & Breakfast” uses require 1 parking space per rental room. By converting one unit to a ‘one-room’ bed and breakfast use, the minimum parking requirement remains at 3 onsite spaces. The property has 4 parking spaces. **Affirmative finding**

II. Conditions of Approval

1. The living room space can be used within the bed and breakfast unit, but it cannot be counted as a bedroom for occupancy. A new zoning permit will be required in order to permit the living room, or any other room(s) within the triplex, as a bed and breakfast room.
2. The occupancy of each unit on the property shall be limited to members of a family, as defined in Article 13. No more than 4 unrelated adults and their minor children may reside in any unit.
3. The subject property must be, and remain, owner occupied as long as the bed and breakfast (short term rental) remains in operation.
4. The short term rental must adhere to the life safety standards and provide payment of applicable rooms and meals taxes as per the State of Vermont.
5. It is recommended that guest check-ins be limited to 7:00 am – 10:00 pm to minimize noise, traffic, and neighborhood nuisance.
6. All guest parking shall be on-site and off-street.
7. A state wastewater permit may be required. It is the applicant’s responsibility to inquire with VT DEC as to whether such permit is necessary.
8. Any additional B&B room, or physical alteration, will require a new zoning permit, subject to regulations in effect at the time of permit application submittal.

9. The applicant will have to ensure compliance with state regulations regarding short-term B&B type rentals, including but not limited to payment of required rooms and meals taxes and compliance with Division of Fire Safety standards and Health Department standards.
10. The Applicant/Property Owner is responsible for obtaining all necessary Zoning Permits and Building Permits through the Department of Public Works as well as other permit(s) as may be required, and shall meet all energy efficiency codes of the city and state as required.
11. Standard permit conditions 1-15.

Department of Permitting and Inspections

Zoning Division
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Ryan Morrison, Associate Planner
Vacant, Planning Technician
Celeste Crowley, Permit Administrator



MEMORANDUM

To: Development Review Board
From: Mary O'Neil, AICP, Principal Planner
Date: December 7, 2021
RE: 48-50 Greene Street, ZAP 21-17 (original permit ZP 21-639)

Note: These are staff comments only. Decisions on projects are made by the Development Review Board, which may approve, deny, table or modify any project. THE APPLICANT OR REPRESENTATIVE MUST ATTEND THE MEETING.



File Number: ZAP 21-17, Appeal of ZP 21-639

Location: 48-50 Greene Street

Zone: RM **Ward:** 2C

Parking District: Neighborhood

Date application accepted: August 31, 2021

Date of Administrative Decision: September 15, 2021

Date of Appeal: September 28, 2021

Applicant/ Owner: Lee Bissonette, represented by Liam Murphy

Request: "Repair of Fire Escape"

Staff Site visit: September 8, 2021

Background:

- **Building Permit 1659;** repair the side porch on existing house. May 21, 1984.
- **Building Permit 1547;** construct fire escape (2nd means of egress) from grade to third floor. April 1984.
- **Building Permit 780099;** replace some slate and 22' of metal flashing on roof. August 1977.
- **Electrical Permit 134148;** install 3rd floor EB Panel. Replace 2 sockets with 4 sockets with new 2/0 to weatherhead; put heating system on separate meter "3rd floor. Install 30 gal elec water htr for 3rd floor. January 1977.
- **Zoning Permit 77-167;** replace a 7' x 9' porch in the front of the house. August 1976.
- **Notice of No Zoning or Permit;** April 6, 1976.
- **Building Permit 77-167;** replace the porch deck. August 1976.

- **Notice of Violation July 1974;** Conversion of a two apartment house into a three apartment house (conversion of attic into a unit) without having obtained a zoning permit. July 1974.
- **Building Permit 24-558;** convert heating system to gas. January 1974.
- **Building Permit 73-451;** install gas space heater. September 1972.

Overview:

48-50 Greene Street, constructed c. 1900 is listed on the Vermont State Register of Historic Resources. The original “fire escape” was constructed via building permit in 1984. This permit is an after-the-fact zoning permit for the replacement of the exterior stairs to the third floor. Upon inspection the building inspector advised the owner that the completed work had exceeded the 2020 building permit issued for repair, requiring zoning review.

Although currently used as a triplex, there are no permits on file for the conversion of a duplex to a triplex. A Notice of Violation was issued in July 1974 for the creation of a unit by finishing the attic, turning a duplex into a triplex. No further resolution is identified within the zoning, building or code enforcement record.

A staff site visit confirmed that multiple alterations have occurred to the property without benefit of building or zoning permits. There is evidence of window and door alterations, with no zoning or building permits issued.

48-50 Greene Street was included on the Vermont State Register of Historic Resources in 1978. The Assessor’s revaluation photograph of 1984 illustrates the newly constructed exterior stairs.

The **Design Advisory Board** reviewed the application at their September 14, 2021 meeting. The Board took the following action:

Motion by Ron Wanamaker: I move to deny the application to reconstruct stairs, based on Section 5.4.8 and Section 6.3.2 (i), *Makes Spaces Safe and Secure*.

Emily Morse: 2nd.

Vote 4-0.

Motion carries.

The appeal was filed September 28, 2021; within the 15 day (administrative decision) appeal period and therefore timely.

Recommended motion: Certificate of Appropriateness denial, based on the following Findings:

I. Findings

Article 2: Administrative Mechanisms

Section 2.7.8 Withhold Permit

Per this standard, the applicant is required to remedy all violations and close out all zoning permits issued after July 13, 1989 prior to issuance of a Certificate of Occupancy for this permit. See attached list for guidance on open permits/violations. **Affirmative finding as conditioned.**

Article 3: Applications, Permits and Project Reviews

Section 3.1.2 Zoning Permit Required

A. Exterior Work

1. *Additions to existing buildings, garages, accessory buildings, or other structures*
2. *Alterations to building elevations/appearances*
3. *Change of use or expansion of use*

B) Interior Work

1. *Increase in habitable living space*
2. *Installation of additional kitchen*
3. *Change in use*
5. *Increase or decrease in the number of units.*

The zoning application was precipitated by the direction of Building Official Kim Ianelli who instructed the owner that the completed work has exceeded the scope of work approved in a June 2020 building permit (“Repair fire escape”.) A review of the zoning and building permit history as well as a site visit reflect a change in use (duplex to triplex), an expansion of habitable living area into the attic, and exterior alterations that have been undertaken without appropriate permits. A Notice of Violation was issued in 1974 for the change of use without issuance of a permit.

While an Affirmative Finding would acknowledge this application for exterior changes (although after-the-fact), the absence in required permitting for obviously completed work recommends continued evaluation by Code Enforcement.

Adverse Finding.

Section 3.2.7 Administrative Review and Approval

(a) Administrative Authority

The application to “repair” the fire escape met standards for staff review. As the building is listed on the Vermont State Register, the application was forwarded to the Design Advisory Review for their recommendation relative to the changes introduced by the replacement staircase. That Board’s recommendation for denial informed the administrative decision, which was issued September 15, 2021.

Affirmative finding for Administrative Review

(d) Appeal of Administrative Decisions

The applicant filed a timely appeal September 28, 2021.

Affirmative finding.

Part 4: Site Plan and Design Review

Section 3.4.2 Applicability

(a) Site Plan Review:

Site Plan Review shall be required for the approval of all development subject to the provisions of this ordinance with the exception of single-family dwellings not otherwise subject to the requirements of Design Review.

Site plan Review is required for the changes to the exterior staircase. **Affirmative finding.**

(b) Design Review

Design Review shall be required for the approval of all development subject to the provisions of this ordinance within the Design Review Overlay District as defined in Article 4, Section 4.5.1 and any of the following:



3. Any development subject to the provisions of Article 5, Part 4 – Special Use Regulations.

48-50 Greene Street is listed on the Vermont State Register of Historic Resources, which therefore engages the standards of Section 5.4.8, Historic Buildings and Sites. Furthermore, Greene Street falls within the Design Review Overlay District, as illustrated in Map 4.5.1-1.

Article 4: Zoning Maps and Districts

Section 4.4.5

(b) Dimensional Standards and Density

Table 4.4.5-2 Base Residential Density permits a maximum of 20 dwelling units per acre. With a lot size of 2640 sq.ft. ($2640 / 43,560 = .06$ acres x 20 dwelling units/acre = 1 unit.) Providing an exterior staircase to an unpermitted dwelling unit is

irreconcilable with the ordinance. **Adverse finding.**

Table 4.4.5-3 Residential District Dimensional Standards limits lot coverage to 40% in the RM Zoning District (with an allowance of an additional 10% “bonus” features.) No site plan nor a coverage calculation was provided, and no construction plans were submitted. There is no site plan on file to determine previously approved coverage. Aerial photos depict a substantial amount of lot coverage. As the stairs to the third floor are central to the lot, setback compliance

for the stairs is assumed.

The building permit indicated the repair was to retain the existing dimensions.

No finding possible.



48-50 Greene Street 2019 Orthophotography

No site plan or construction documents were provided to assess the lot and setbacks.
No finding possible.

(c) Permitted and Conditional Uses

Duplex and Multi-family residential are both permitted uses in the RM zoning district. There is no evidence that a zoning permit was issued for the current triplex use. A NOV issued in 1974 confirms the City’s action against the additional unit.

Adverse finding.

(d) District Specific Regulations

1. Setbacks

2. *Lot Coverage*
See above.
3. *Accessory Residential Structures, Buildings, and Uses*
The application does not relate to garages, barns, sheds, tennis courts or similar accessory features. Not applicable.
4. *Residential Density*
See Table 4.4.5-2, above.
5. *Uses*
 - a. *Exceptions for Neighborhood Commercial Uses.* Not applicable.
6. *Residential Development Bonuses*
The application was not seeking any development bonuses. Not applicable.

Although the appeal relates to administrative denial of a replacement staircase, the issue of residential density and alterations to the building to accommodate the attic living space are irreconcilably related. Without a separate determination as the expanded living space and additional dwelling unit, **Adverse finding.**

Article 5: Citywide General Regulations

Section 5.2.1 Existing Small Lots.

Not applicable.

Section 5.2.2 Required Frontage or Access

Not applicable.

Section 5.2.3 Lot Coverage Requirements

See Section 4.4.5-3, above.

Section 5.2.4 Buildable Area Calculation

Not applicable.

Section 5.2.5 Setbacks

See Section 4.4.5-3, above.

Section 5.2.6 Building Height Limits

See Section 4.4.5-3, above.

Section 5.2.7 Density and Intensity of Development Calculations

See Section 4.4.5 (b), above.

Part 3: Non Conformities

Not applicable.

Section 5.4.8 Historic Buildings and Sites

The City seeks to preserve, maintain, and enhance those aspects of the city having historical, architectural, archaeological, and cultural merit. Specifically, these regulations seek to achieve the following goals:

To preserve, maintain and enhance Burlington's historic character, scale, architectural integrity, and cultural resources;

To foster the preservation of Burlington's historic and cultural resources as part of an attractive, vibrant, and livable community in which to live, work and visit;

To promote a sense of community based on understanding the city's historic growth and development, and maintaining the city's sense of place by protecting its historic and cultural resources; and,

To promote the adaptive re-use of historic buildings and sites.

(a) Applicability:

These regulations shall apply to all buildings and sites in the city that are listed, or eligible for listing, on the State or National Register of Historic Places.

48-50 Greene Street, identified as the Cassius B. Russell residence, is listed on the Vermont State Register of Historic Resources. See attached historic narrative.

(b) Standards and Guidelines:

The following development standards, following the Secretary of the Interior's Standards for the Treatment of Historic Properties, shall be used in the review of all applications involving historic buildings and sites subject to the provisions of this section and the requirements for Design Review in Art 3, Part 4. The Secretary of the Interior's Standards are basic principles created to help preserve the distinctive character of a historic building and its site. They are a series of concepts about maintaining, repairing and replacing historic features, as well as designing new additions or making alterations. These Standards are intended to be applied in a reasonable manner, taking into consideration economic and technical feasibility.

1. *A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.*

The home was constructed c. 1900 as the residence of Cassius B. Russell. As the use remains residential, it continues the historic use. The conversion of the third floor attic to habitable space has spurred the life safety need for the exterior staircase; receiving a building permit in 1984 for a second means of egress. This application is an after-the-fact permit for its replacement, which introduces new intrusion relative to the first floor porch. **Adverse finding.**

2. *The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.*

The alteration of features; specifically the inclusion of an iron support post on the (visible) front porch, is an unacceptable and avoidable alteration to the character of the historic structure.

Adverse finding.

3. *Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.*

There are no conjectural features, but an alteration that changes the character of the structure.

Adverse finding.

4. *Changes to a property that have acquired historic significance in their own right will be retained and preserved.*

None identified.

5. *Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.*

The one story veranda with turned posts is a defining feature of the Queen Anne structure. The introduction of an iron post within the feature is a disruption. **Adverse finding.**

6. *Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials recognizing that new technologies may provide an appropriate alternative in order to adapt to ever changing conditions and provide for an efficient contemporary use. Replacement of missing features will be substantiated by documentary and physical evidence.*

The exterior staircase is not a historic feature. Not applicable.

7. *Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.*

Providing additional support by introducing non-historic materials on a façade visible from the street is a physical treatment that mars the historic character of the structure. Piercing the first floor porch roof for the iron column is a physical treatment that has caused damage to historic building fabric, and portends future material damage with structural exposure to the elements.

Adverse finding.

8. *Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.*

There are no known archaeological resources on site. Not applicable.

9. *New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale, and proportion, and massing to protect the integrity of the property and its environment.*

The stair replacement introduces non-historic building fabric that diminishes the historic integrity of the structure. A common resolution to achieve building and life safety code for multi-story, multi-unit structures is to sprinkle the building; a much preferred solution than the replacement staircase under appeal. As the ordinance has been updated since the original

building permit was issued in 1984 for the exterior stairs, replacement options should follow best practices and reflect the regulations now in effect. **Adverse finding.**

10. *New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

The method of support for this replacement staircase is distracting and is an adverse alteration to the historic porch/house. A more sympathetic solution is needed, consistent with the current regulations to protect the safety of the tenants as well as the historic integrity of the residence.

Adverse finding.



1984-85 Assessor Revaluation photograph
Stairs are new build

Article 6: Development Review Standards

Part 1: Land Division Design Standards

Not applicable.

Part 2: Site Plan Design Standards

Sec. 6.2.2 Review Standards

(a)Protection of Important Natural Features:

There are no identified natural features within the application. The replacement stairs were described to have been constructed in the same location as the 1984 stairway. **Affirmative finding.**



(b) Topographical Alterations:
Not applicable.

(c) Protection of Important Public Views: Not applicable.

(d) Protection of Important Cultural Resources:

Burlington's architectural and cultural heritage shall be protected through sensitive and respectful redevelopment, rehabilitation, and infill. Archeological sites likely to yield information important to the city's or the region's pre-history or history shall be evaluated, documented, and avoided whenever feasible. Where the proposed development involves sites listed or eligible for listing on a state or national register of historic places, the applicant shall meet the applicable development and design standards pursuant to Sec. 5.4.8(b).

See Section 5.4.8, above.

(e) Supporting the Use of

Renewable Energy Resources:

No part of the application precludes the use of wind, water, solar, geothermal or other renewable energy resource. Not applicable.

(f) Brownfield Sites:

Not applicable.

(g) Provide for nature's events:

Special attention shall be accorded to stormwater runoff so that neighboring properties and/or the public stormwater drainage system are not adversely affected. All development and site disturbance shall follow applicable city and state erosion and stormwater management guidelines in accordance with the requirements of Art 5, Sec 5.5.3.

Design features which address the effects of rain, snow, and ice at building entrances, and to provisions for snow and ice removal or storage from circulation areas shall also be incorporated.



Other than the roof eave, the top of the landing has no canopy. The stair, itself, is uncovered. Relevant building code here, as provided by the building official:

If the stairs are new here is what the code says: NFPA 101:7.2.2.6.5 Outside Stairs, Accumulation of Snow, Ice or Water: New outside stairs, ramps and landings, other than the primary entrance, shall be designed to minimize the accumulation of snow, ice and water by a roof or other approved means. (Cross reference to NFPA 1:14.4.1) Plans would need to be reviewed in order to give the best answer.

Treads are to be 11" deep for new stairs (10" if 1-2 unit dwelling or a fire escape)

While the building official has not opined on the code compliance of the replacement stairs, she has determined that the work done exceeded the building permit and required a zoning permit. If intended to be a principal

entry to a dwelling unit, it should be design to address the effects of rain and snow, which it does not. **Adverse finding.**

(h) Building Location and Orientation:

The applicant proposed the replacement stairs appear in the same location as the previous. The orientation of the building remains original. Not applicable.

(i) Vehicular Access:

No change. Not applicable.

(j) Pedestrian Access:

Not applicable.

(k) Accessibility for the Handicapped:

ADA access is under the jurisdiction of the building inspector.

(l) Parking and Circulation:

No change.

(m) Landscaping and Fences:

Not applicable.

(n) Public Plazas and Open Space:

Not applicable.

(o) Outdoor Lighting:

Where exterior lighting is proposed the applicant shall meet the lighting performance standards as per Sec 5.5.2.

No lighting is included within this application. Not applicable.

(p) Integrate infrastructure into the design:

Exterior storage areas, machinery and equipment installations, service and loading areas, utility meters and structures, mailboxes, and similar accessory structures shall utilize setbacks, plantings, enclosures and other mitigation or screening methods to minimize their auditory and visual impact on the public street and neighboring properties to the extent practicable.

Any development involving the installation of machinery or equipment which emits heat, vapor, fumes, vibration, or noise shall minimize, insofar as practicable, any adverse impact on neighboring properties and the environment pursuant to the requirements of Article 5, Part 4 Performance Standards.

The application is an after-the-fact permit to “repair” an exterior stair originally erected in 1984. The design of the stair, which rises from the ground level to the third story has been altered by the addition of a support column between the first floor porch and the third floor landing. The contractor has carried the weight of the upper deck landing down onto an iron plinth, mounted through the second floor porch roof, continuing to a porch mounted iron-angle. The design is awkward on this historic



structure; may overly burden the first floor porch deck (the porch lattice shows deflection) and hinders escape from the second floor turret window. **Adverse finding.**



Part 3: Architectural Design Standards Sec. 6.3.2 Review Standards

(a) Relate development to its environment:

1. Massing, Height and Scale:

The egress stair replaces another installed in 1984. In that manner, the visually intrusion is similar. The earlier stair did not have the additional porch support which is obtrusive and especially visible from the public right-of-way. **Adverse finding.**

2. Roofs and Rooflines.

Current building code may require a roof cover over the stairs. See 6.2.2. (g), above. No roof cover or entry shelter is included in this reconstruction.

The piercing of the porch roof introduces an opening in the building envelope that will

invite water and early structural failure. The solution was ill-advised from the standpoint of building care and protecting the character defining features of the building. **Adverse finding.**

3. Building Openings

The replacement of a third floor window with an entry door has not received zoning approval, although the 1984 building permit notes the introduction of a door. There are other noted door and window alterations that similarly lack permitting.

Adverse finding.



First floor south/east entry; entry door appears to have been relocated, one door sealed off.

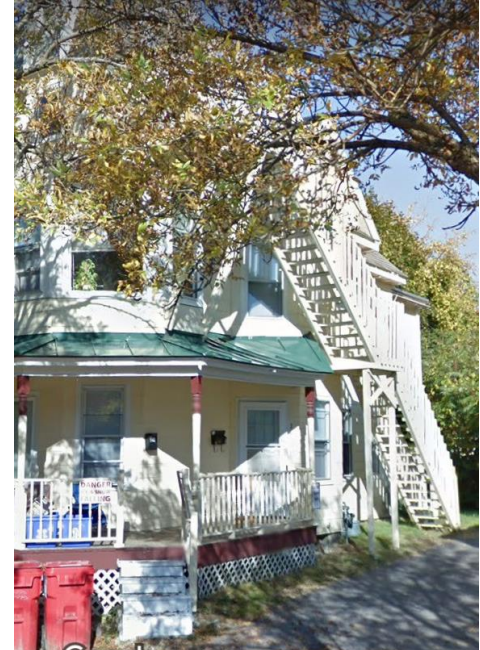
(b) Protection of Important Architectural Resources:

Burlington's architectural and cultural heritage shall be protected through sensitive and respectful redevelopment, rehabilitation, and infill. Where the proposed development involves buildings listed or eligible for listing on a state or national register of historic places, the applicant shall meet the applicable development and design standards pursuant to Sec. 5.4.8. The introduction of new buildings to a historic district listed on a state or national register of historic places shall make every effort to be compatible with nearby historic buildings.

See Section 5.4.8.

(b) Protection of Important Public Views:

Not applicable.



(d) Provide an active and inviting street edge:

The stairs themselves appear to be in the same location as the previous stairs; but the iron support pole that rises vertically through the first floor porch roof is a visual intrusion that is particularly damaging to the porch and to the visual and material integrity of the historic structure. **Adverse finding.**

(e) Quality of materials:

All development shall maximize the use of highly durable building materials that extend the life cycle of the building, and reduce maintenance, waste, and environmental impacts. Such materials are particularly important in certain highly trafficked locations such as along major streets, sidewalks, loading areas, and driveways. Efforts to incorporate the use of recycled content materials and building materials and products that are extracted and/or manufactured within the region are highly encouraged.

Owners of historic structures are encouraged to consult with an architectural historian in order to determine the most appropriate repair, restoration or replacement of historic building materials as outlined by the requirements of Art 5, Sec. 5.4.8.

There is no evidence of consultation with an architectural historian prior to constructing this replacement staircase. The method chosen is inconsistent with the historic character of the structure and introduces adverse visual impact; literally opening a wound on the building envelope. **Adverse finding.**

(f) Reduce energy utilization:

Not applicable.

(g) Make advertising features complementary to the site:

Not applicable.

(h) Integrate infrastructure into the building design:

See Section 6.2.2 (p), above.

(i) Make spaces secure and safe:

These exterior staircases were intended to provide egress to upper floor residents. The original was constructed with a building permit in 1984. The building official has not closed out the 2020 building permit, so code compliance is unknown.

Alternate satisfaction of egress code can be accomplished by providing sprinklering to avoid the visual intrusion on a historic property.

There is no evidence within the zoning history record that the third floor unit ever received zoning approval. **Adverse finding.**

NOTE: These are staff comments only. The Development Review Board, who may approve, table, modify, or deny projects, makes decisions.

RECEIVED

SEP 28 2021

CITY OF BURLINGTON
DEVELOPMENT REVIEW BOARD

ZP # 21-639, 48-50 Greene Street

NOTICE OF APPEAL TO DEVELOPMENT REVIEW BOARD

NOW COMES Applicant On Point Properties (Lee Bissonnette) (“Applicant”), by and through his counsel, MSK Attorneys, and hereby files this Notice of Appeal of a Design Advisory Board Decision (“DAB”) dated September 15, 2021 pursuant to Burlington Comprehensive Development Ordinance (“CDO”) § 12.2.2.

Applicant owns the subject property, located at 48-50 Greene Street (the “Property”). The Property is a triplex and the building was originally constructed in 1900.

In 1984 a Building Permit was issued to construct a fire escape, a second means of egress, from grade to the third floor of the building. In June 2021, the Application applied for and was issued a building permit to “[r]epair and replace portions of fire escape with matching materials in same footprint. Not a replacement of the entire escape.”

The repair and replacement work contemplated by the June 2021 building permit was completed over the summer of 2021. The Building Inspector scheduled a final inspection on August 25, 2021. At the inspection, the Building Inspector asserted that the work completed was more extensive than contemplated by the building permit and informed Applicant that it had to obtain an after-the-fact zoning permit for such work.

On August 31, 2021, Applicant applied for the after-the-fact zoning permit as directed by the Building Inspection (the “Zoning Application”). The Zoning Application requires administrative approval subject CDO § 6.2.2, Site Plan Design Standards - Review Standards, CDO § 6.3.2, Architectural Design Standards – Review Standards, and CDO § 5.4.8, Historic Buildings and Sites. The Zoning Application was submitted to the DAB for its recommendation.

The DAB held a hearing on the Zoning Application on September 14, 2021. On September 15, 2021, the DAB issued a decision recommending that the Zoning Application be denied on the basis that the work did not comply with CDO §5.4.8, relative to historic buildings and sites, and CDO § 6.3.2(i), relative to safe and secure spaces.

On September 17, 2021, the Zoning Administrator issued a denial of the Zoning Application on the basis that the work did not comply with CDO §5.4.8, relative to historic buildings and sites, and CDO § 6.3.2(i), relative to safe and secure spaces.

Applicant asserts that the repair and replacement that was undertaken relative to a pre-existing and previously-approved fire escape did not require zoning approval.

If the Board determines that a zoning permit is required, then Applicant requests that this Development Review Board conclude that the Zoning Application, and work undertaken pursuant to the June 2021 building permit, complies both with both CDO §§ 5.4.8. and 6.3.2(i) and issue a zoning permit for the Zoning Application. The repair work undertaken does not materially alter the historic character of the Property or the structure in light of the permitted existing fire escape. Any changes from the previous fire escape are minimal and are required to ensure continued safe use of the Property. Further, the existence of the fire escape itself is required for the continued safe and secure use of the Property.

Therefore, Applicant requests that the DRB conclude that the no zoning permit was required given that the work was merely repair of an existing fire escape or in the alternative, that the Zoning Application complies with all relevant provisions of the CDO, including § 5.4.8 and 6.3.2(i), and issue a zoning permit for the after-the-fact repair of the fire escape.

Dated this ___ day of September 2021 in Burlington, Vermont.

MSK ATTORNEYS

By:

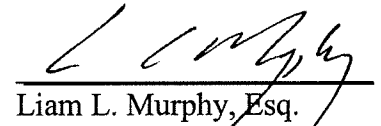
Liam L. Murphy, Esq.
275 College Street, PO Box 4485
Burlington, Vermont 05406-4485
(802) 861-7000
lmurphy@mskvt.com

Attorneys for Appellant

Dated this 28th day of September 2021 in Burlington, Vermont.

MSK ATTORNEYS

By:



Liam L. Murphy, Esq.

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Attorneys for Appellant



Department of Permitting and Inspections

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SEP 28 2021

BURLINGTON
PERMITTING & INSPECTIONS

Appeal of an Administrative Decision Request

Use this form to appeal any Administrative Decision or Notice of Violation - See Sec. 12.2.2 of the Zoning Ordinance.

SUBJECT LOCATION ADDRESS: 48-50 Greene Street

Subject Property Owner: Lee Bissonette

Appellant: Lee Bissonette

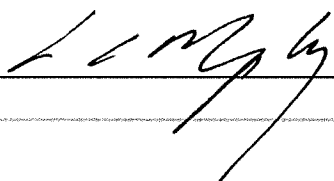
Agent/Representative: Liam Murphy, Esq., MSK Attorneys

Mailing Address: 275 College Street, PO Box 4485

City, St, Zip: Burlington, VT 05406-4485

Day Phone: 802-861-7000

Email: lmurphy@mskvt.com

Appellant Signature: 

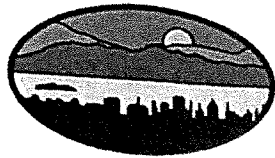
Date: 9/28/21

In order for your request to be considered complete, **ALL** of the following information **must** be provided, as applicable:

- ☐ The Appeal **fee of \$250**;
- ☐ Description of the decision under appeal;
- ☐ Description of the property subject to the appeal;
- ☐ Reference to the regulatory provisions applicable to the appeal;
- ☐ Relief requested by the appellant;
- ☐ Alleged grounds why such requested relief is believed proper under the circumstances.

Office Use Only:

Check No. Amount Paid Zoning Permit #



City of
Burlington, Vermont
645 Pine Street

Zoning Permit – Reasons for Denial

ZP #: 21-639

Tax ID:

Issue Date: September 15, 2021

Decision: Denied

Property Address: 48-50 Greene Street

RECEIVED

SEP 28 2021

Description: "Repair Fire Escape"

BURLINGTON
PERMITTING & INSPECTION

Reasons for Denial:

1. Lack of conformance with **Section 5.4.8 Historic Buildings and Sites** (reference is made to the Design Advisory Board staff report for specific standards, and Design Advisory Board meeting minutes of 9.14.2021.)
2. Conflict with **Section 6.3.2. (i), Make Spaces Safe and Secure.**

An interested person may appeal a decision of the Zoning Administrator to the Development Review Board within 15 days of the decision date.

<https://www.burlingtonvt.gov/DPI/Appealing-a-Zoning-Decision>



Via Hand Delivery and Electronic Mail

September 28, 2021

City of Burlington Development Review Board
Charlene Orton, Administrator for Zoning
City Hall
149 Church Street
Burlington, VT 05401
corton@burlingtonvt.gov

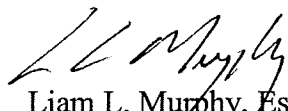
Re: Appeal of ZP # 21-639, 48-50 Greene Street, Burlington, Vermont dated September 15, 2021

Good afternoon, Ms. Orton,

Enclosed for filing is a Notice of Appeal of ZP #21-639 concerning the property located at 48-50 Greene Street in Burlington, Vermont. Also enclosed are a copy of the Decision that is being appealed and a check in the amount of \$250.00 for the filing fee.

Please do not hesitate to contact me with any questions or concerns.

Very truly yours,


Liam L. Murphy, Esq.
lmurphy@mskvt.com

Enclosures (3)

cc: Mr. Lee Bisonnette
Elizabeth E. Filosa, Esq.

RECEIVED

SEP 28 2021

PERMITTING & INSPECTIONS

RECEIVED

SEP 28 2021

BURLINGTON
PERMITTING & INSPECTIONS

July 5, 1974

Mr. John P. Larkin
15 Renkin Street
Colchester, Vermont 05446

Dear Mr. Larkin:

Please be advised that the third floor attic apartment at 50 Greene Street, Burlington, Vermont, which is owned by you, is in violation of Section 22, Table 1A, Section 82-A-1 and Section 82-B, of the Code of Ordinances for the City of Burlington.

The two apartment house at the above address, was converted into three apartments, without having obtained a zoning permit, an occupancy permit and without having the proper minimum lot size for multiple family use.

You are hereby requested to conform to the Code of Ordinances within seven days, by vacating and the elimination of said apartment or this matter will be referred to the City Attorney for prosecution.

I am sending this letter by certified mail, and this will be the last notice.

Sincerely yours

Raymond A. Wheel
Zoning Administrator

RAW:red



Historic Preservation
Montpelier, VT 05602

HISTORIC SITES & STRUCTURES SURVEY
Individual Structure Survey Form

COUNTY:	Chittenden
TOWN:	Burlington
LOCATION:	48-50 Greene St.
COMMON NAME:	
FUNCTIONAL TYPE:	residence
OWNER:	Eugene E. & Elizabeth Weltin
ADDRESS:	34 South St. Essex Junction, Vt. 05452
ACCESSIBILITY TO PUBLIC:	Yes ☐ No ☒ Restricted ☐
LEVEL OF SIGNIFICANCE:	Local ☒ State ☒ National ☐

GENERAL DESCRIPTION:

Structural System

1. Foundation: Stone ☒ Brick ☐ Concrete ☐ Concrete Block ☐
2. Wall Structure
 - a. Wood Frame: Post & Beam ☐ Balloon ☒
 - b. Load Bearing Masonry: Brick ☐ Stone ☐ Concrete ☐ Concrete Block ☐
 - c. Iron ☐ d. Steel ☐ e. Other:
3. Wall Covering: Clapboard ☐ Board & Batten ☐ Wood Shingle ☐ Shiplap ☐ Novelty ☐ Asbestos Shingle ☐ Sheet Metal ☐ Aluminum ☐ Asphalt Shingle ☐ Brick Veneer ☐ Stone Veneer ☐ Bonding Pattern: Other: asbestos
4. Roof Structure
 - a. Truss: Wood ☒ Iron ☐ Steel ☐ Concrete ☐
 - b. Other:
5. Roof Covering: Slate ☒ Wood Shingle ☐ Asphalt Shingle ☐ Sheet Metal ☐ Built Up ☐ Rolled ☐ Tile ☐ Other:
6. Engineering Structure:
7. Other:

Appendages: Porches ☒ Towers ☒ Cupolas ☐ Dormers ☐ Chimneys ☒ Sheds ☐ Ells ☒ Wings ☐ Bay Window ☐ Other:

Roof Style: Gable ☒ Hip ☐ Shed ☐ Flat ☐ Mansard ☐ Gambrel ☐ Jerkinhead ☐ Saw Tooth ☐ With Monitor ☐ With Bellcast ☐ With Parapet ☐ With False Front ☐ Other:

Number of Stories: 2½

Number of Bays: 3 (3 part tower) x 4

Entrance Location: left

Approximate Dimensions: _____

THREAT TO STRUCTURE:

No Threat ☐ Zoning ☐ Roads ☐ Development ☐ Deterioration ☐ Alteration ☒ Other:

SURVEY NUMBER:

48-50 Greene St.

NEGATIVE FILE NUMBER:

78-A-219

UTM REFERENCES:

Zone/Easting/Northing

U.S.G.S. QUAD. MAP:

PRESENT FORMAL NAME:

ORIGINAL FORMAL NAME:

Cassius B. Russell

PRESENT USE: apartments

ORIGINAL USE: residence

ARCHITECT/ENGINEER:

BUILDER/CONTRACTOR:

PHYSICAL CONDITION OF STRUCTURE:

Excellent ☐ Good ☒

Fair ☒ Poor ☐

STYLE: Queen Anne

DATE BUILT: c. 1900

LOCAL ATTITUDES:

Positive ☐ Negative ☐

Mixed ☐ Other:

ADDITIONAL ARCHITECTURAL OR STRUCTURAL DESCRIPTION:

Massing - Rectangular, gable end to street, rear 2 story ell, gabled 2 1/2 story canted bay window on south elevation, offset 2nd & 3rd story canted tower with unusually shaped mansard roof on southwest corner.

Fenestration - 3 x 4; 1/1 sash, some ocular windows, lozenge transom on tower, some Queen Anne sash on north elevation.

Entrance - 2 x 2, 1 story veranda with turned posts, simple balance, plain entablature, gablet over entry; glass and panel door.

Cornice - Projecting eaves on rafter tails, partial returns in gable ends.

House was sided with asbestos approximately 20 years ago according to neighbor.

RELATED STRUCTURES: (Describe)

STATEMENT OF SIGNIFICANCE:

The facade on this Queen Anne house is complex and unusual due to the fact that there is an oddly shaped offset tower with a mansard roof on the southwest corner. The use of this tower & the window treatment distinguishes this otherwise typical middle class dwelling from its neighbors and emphasizes the popularity of the Whimsical Queen Anne style for turn of the century housing. Compatible to its neighbors in style, scale and proportions, this house contributes to the residential character of this neighborhood. The first known resident was Cassius B. Russell, a commercial traveller.

REFERENCES:

Burlington City Directories, Sanborn Insurance Maps 1900, 1906, 1912, Mrs. Needham, neighbor.

MAP: (Indicate North in Circle)



SURROUNDING ENVIRONMENT:

Open Land ☐ Woodland ☐
Scattered Buildings ☐
Moderately Built Up ☐
Densely Built Up ☒
Residential ☒ Commercial ☒
Agricultural ☐ Industrial ☐
Roadside Strip Development ☐
Other:

RECORDED BY:

Gloria Scott

ORGANIZATION:

VT. Div. for Historic Preservation

DATE RECORDED:

September 2, 1978

Fee
\$25.00

Department of Health and Safety

BUILDING PERMIT

Burlington, Vermont
Room 17, City Hall

3 - No 1547

5/30

864-4211
862-6082

PLEASE TYPE OR PRINT ALL INFORMATION

Date Apr. 1121 19 84 Zoning Permit #
Location 48.50 Shuman St. Bob Lee
Owner Of Property Richard Lee Address Tel. 862-2561 - W. W.D.
Contractor Amique Co. Tel. No.
Address No. St. City

ESTIMATED COST \$ 5,000 Construction to be started Apr. 19 84

DESCRIPTION OF WORK

CODE IDENTIFICATION 0.5

To ~~construct~~ construct a fire escape (2nd means of egress) from grade to 3rd floor.

Plans submitted & reviewed w/ J. Rogers. Copy attached.

CONDITIONS OF PERMIT

RD 4/12/84

All construction to be completed in accordance with the Zoning Laws and Building Regulations of the City of Burlington and the State of Vermont, and conforming to the Regulations of the National Board of Fire Underwriters and any and all Federal Regulations now in effect.

☒ Call for Rough Framing Inspections

☐ A Certificate of Occupancy is required before this structure is occupied

John Rogers 4/12/84
BUILDING OFFICIAL DATE

Inspector's Copy

Department of Health and Safety
BUILDING PERMIT

3 - No. 1547

Burlington, Vermont
Room 17, City Hall

TEL. 864-4211
862-6082

\$ 25.00

PLEASE TYPE OR PRINT ALL INFORMATION

Date Apr. 11/21 19 84 Zoning Permit # _____

Location 50 Greene St.

Owner Of Property Richard Lee Address _____

Bob Lee

Tel. 863-2561 - W. No.

Contractor Sumner Co.

Tel. No. _____

Address No. _____ St. _____ City _____

ESTIMATED COST \$ 5,000 Construction to be started Apr. 19 84

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☐ Certificate of Occupancy is required
before this structure is occupied

John Rogers 4/12/84
BUILDING OFFICIAL DATE

Office Copy J. Rogers

THIS PERSON
GIVES OUT ALL
1783 BOCA

50 GREEN ST., BURL
ROBERT LEE 863-2561

Dept. of Public Health

RECEIVED

APR 9 198

SPECIFICATIONS

FILE:

ROUTING

1. STAIRCASE AND DWELLING ACCESS TO MEET
ALL TOWN & STATE BUILDING REQUIREMENTS
INCLUDING, BUT NOT LIMITED TO THE FOLLOW

A. ACCESS TO THE FIRE ESCAPE WILL BE
BY OUTSWINGING DOOR ✓

B. LUMBER TO BE NON-DETERIORATING PRESSURE
TREATED ~~WHAT KIND OF CONSTRUCTION IS THIS~~

C. BOLTS, SUPPORTS AND SIMILAR DEVICES SHALL
BE NON-CORRODING

D. THE FIRE ESCAPE SHALL BE 24" IN WIDTH
BETWEEN THE RAILS. STAIR TREAD WIDTH
SHALL BE 30". ✓ LANDINGS 40" WIDE

E. STAIR RISERS SHALL ^{BE NO MORE THAN 8" HIGH} ~~BE LESS THAN 8"~~
AND STAIR TREADS SHALL BE ^{LESS} ~~GREATER~~ THAN
~~8"~~ 8"

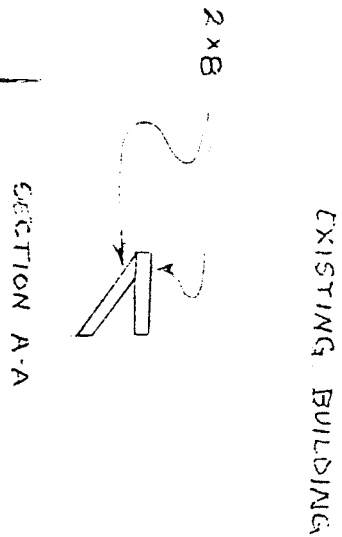
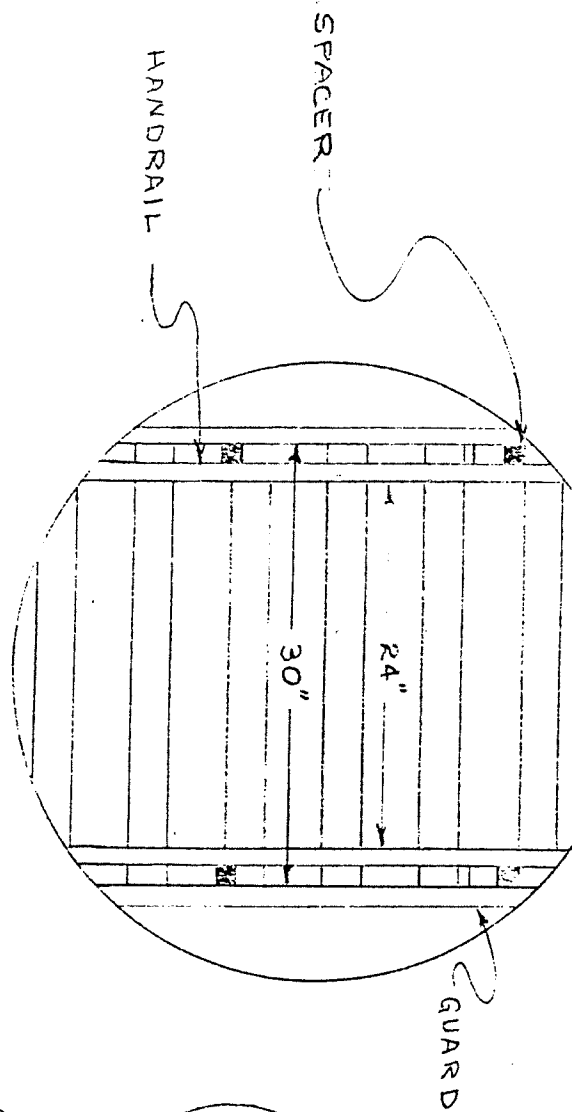
F. ALL LANDINGS AND TREADS SHALL HAVE
2X4'S PLACED ON EDGE SPACED SUFFICIENTLY
APART TO REDUCE THE ACCUMULATION OF
SNOW AND ICE. HOW?

SHALL BE CAPABLE OF MEETING
PARA 1707.4 - FIRE ESCAPES SUB-PARA G.
NAMELY THE FIRE ESCAPE SHALL BE CAPABLE
OF SUSTAINING ALL LOADS SPECIFIED
IN THAT PARAGRAPH. $\sqrt{100 \text{ LBS/SQ. FT.}}$

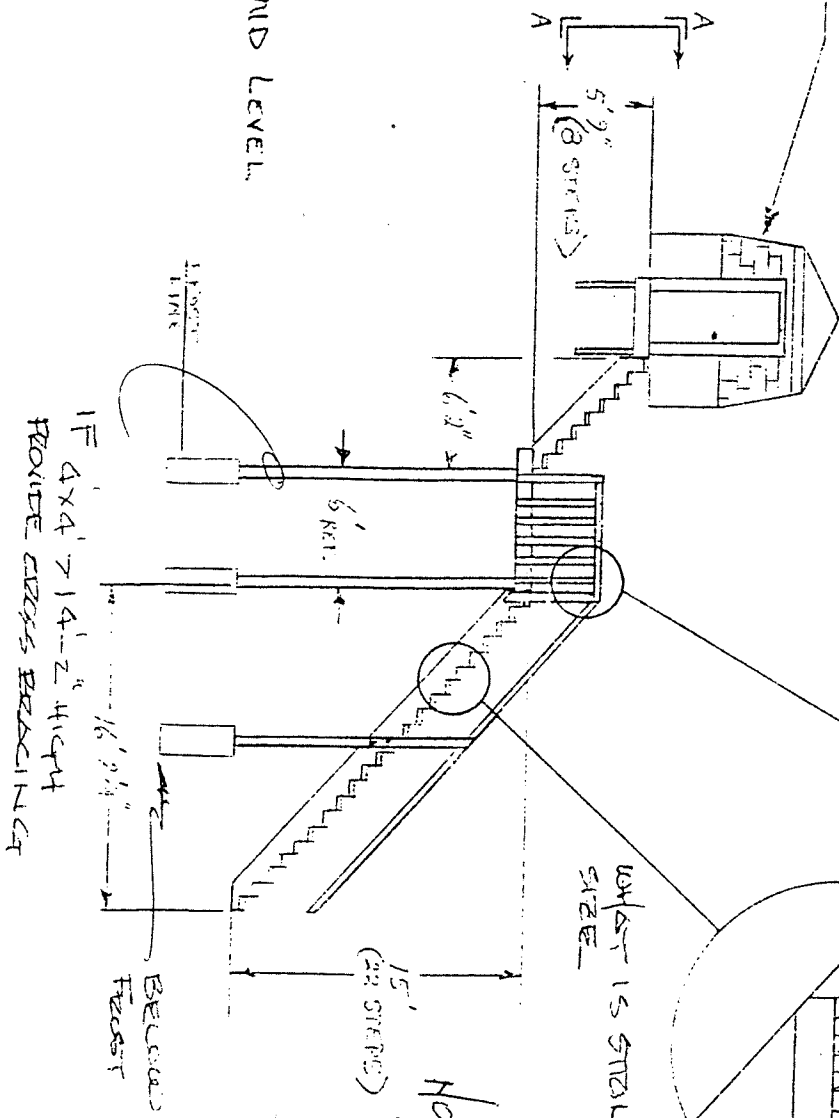
H. GUARDS SHALL BE 43" IN HEIGHT MEASURED
VERTICALLY FROM A POINT ON THE TREAD
ONE INCH BACK FROM THE LEADING EDGE.
SPACING 2,

I. HANDRAILS SHALL BE 32" IN HEIGHT MEASURED
SAME AS THE GUARD. ✓

J. GUARDS SHALL HAVE 2X2'S PLACED 6" O
ALL AROUND EXCEPT WHERE THE BUILDING
* PROVIDES SUFFICIENT GUARDING.



GROUND LEVEL





Department of Permitting & Inspections

Zoning Division
645 Pine Street
Burlington, VT 05401
Telephone: (802) 865-7188

William Ward, Director
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Ryan Morrison, Associate Planner
vacant, Planning Technician
Ted Miles, Zoning Specialist
Charlene Orton, Permitting & Inspections Administrator



TO: Development Review Board
FROM: Scott Gustin
DATE: December 7, 2021
RE: ZP-21-700; 43 Starr Farm Road

=====

Note: These are staff comments only; decisions on projects are made by the Development Review Board, which may approve, deny, table or modify any project. THE APPLICANT OR REPRESENTATIVE MUST ATTEND THE MEETING.

Zone: RL Ward: 4N

Owner/Applicant: Birchwood Prop, LLC / Michael Koch

Request: Parking expansion and related maximum parking space waiver.

Applicable Regulations:

Article 2 (Administrative Mechanisms), Article 4 (Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Criteria & Guidelines), Article 8 (Parking)

Background Information:

The applicant is seeking approval to construct additional surface parking. A waiver of the maximum parking standards in Article 8 of the CDO is needed in order to do so. A similar proposal was reviewed and approved by the Development Review Board in January 2019. That project to increase from 54 to 75 parking spaces has been constructed. In the meantime, the lot coverage standards in the CDO associated with senior housing have been revised to match those for inclusionary housing. The January 2019 approval was limited by the then-lower lot coverage limit and did not fully address the applicant's requested parking. The applicant is now seeking a follow-up approval for 23 additional parking spaces possible under the current lot coverage limit.

Previous zoning actions for this property are noted below:

- 8/18/20, Approval for a freestanding sign
- 9/2/20, Approval for residing the building
- 1/8/19, Approval of parking expansion and related maximum parking waiver
- 9/15/14, Approval to replace access ramp with new
- 8/13/12, Approval to replace sign
- 4/2/12, Approval to replace sign
- 10/19/10, Approval for wall-mounted LED light fixtures
- 8/13/10, Approval to construct courtyards, storage shed, gazebo, and fence
- 6/17/03, Approval to install emergency generator
- 4/3/02, Approval to construct pavilion
- 11/14/00, Approval to replace canopy
- 5/20/97, Approval to install sign
- 11/2/92, Approval of adult daycare

- 10/8/92, Approval to install storage shed and additional fencing
- 8/24/92, Approval to replace fencing
- 6/4/85, Approval to enclose covered entry
- 8/11/82, Approval to install chain link fence
- 7/30/82, Approval to replace flat roof with pitched roof
- 9/21/79, Approval to relocate dishwashing area
- 4/16/74, Denial to construct medical services building
- 4/17/73, Approval to construct a 50' X 59' addition
- 5/19/70, Approval to construct a 1,200 sf front entry addition
- 5/20/69, Approval to construct a 50-bed addition
- 10/15/68, Approval to construct a 100-bed addition
- 3/28/67, Approval to construct a 1,500 sf kitchen addition
- 10/19/65, Approval to construct a 48' X 90' addition
- 1/24/64, Amended approval to construct a nursing home
- 5/29/63, Approval to construct a nursing home

Recommendation: **Initial application review and continuation** pending receipt of required transportation demand management information.

I. Findings

Article 2: Administrative Mechanisms

Sec. 2.7.8 Withhold Permit

Most of the old zoning permits for this property have been closed out with certificates of occupancy since the January 2019 zoning permit approval. Two additional zoning permits have since expired without certificates of occupancy. These zoning permits (19-0479SN for signage & 19-0468CA for additional parking and maximum parking waiver) must be closed out with final certificates of occupancy prior to closing out this new zoning permit with a certificate of occupancy. **(Affirmative finding if conditioned)**

Article 4: Maps & Districts

Sec. 4.4.5, Residential Districts:

(a) Purpose

(1) Residential Low Density (RL)

The subject property is located in the RL zone. This zone is intended primarily for low density residential development in the form of single detached dwellings and duplexes. Some other residential uses, such as this convalescent facility, are allowed as conditional uses. No change or expansion of use is proposed. **(Affirmative finding)**

(b) Dimensional Standards & Density

No change in residential density is proposed.

Lot coverage will increase to 43.2%. This coverage is allowable per the provisions of Sec. 4.4.5 (d) 6 B, which allows up to 44% lot coverage for senior housing facilities.

With frontage along three city streets, the property has three front yards and just one side yard. Two front yard setbacks, along North Avenue and Starr Farm Road, affect this proposal. The

proposed parking is located in the northeast corner of the property and complies with the front yard setbacks.

Building height remains unchanged. **(Affirmative finding)**

(c) Permitted & Conditional Uses

The convalescent home is a conditional use in the RL zone. No change or expansion of use is proposed. **(Affirmative finding)**

(d) District Specific Regulations

1. Setbacks

No setback encroachments are sought. **(Not applicable)**

2. Lot Coverage

No lot coverage exceptions are being sought. **(Not applicable)**

3. Accessory Residential Structures and Uses

(Not applicable)

4. Residential Density

(Not applicable)

5. Uses

No neighborhood commercial use is included in this proposal. **(Not applicable)**

6. Residential Development Bonuses

See Sec. 4.4.5 (b) as to additional lot coverage allowance for senior housing.

Article 5: Citywide General Regulations

Sec. 5.2.3, Lot Coverage Requirements

See Sec. 4.4.5 (b) above.

Sec. 5.2.4, Buildable Area Calculation

The subject property does not contain steep slopes or wetlands. The lot is composed entirely of buildable area. **(Affirmative finding)**

Sec. 5.2.5, Setbacks

See Sec. 4.4.5 (b) above.

Sec. 5.2.6, Building Height Limits

See Sec. 4.4.5 (b) above.

Sec. 5.2.7, Density and Intensity of Development Calculations

See Sec. 4.4.5 (b) above.

Sec. 5.5.1, Nuisance Regulations

Nothing in the proposal appears to result in creating a nuisance under this criterion. **(Affirmative finding)**

Sec. 5.5.2, Outdoor Lighting

New outdoor lighting is proposed for illumination of the expanded parking area. The photometric plan depicts acceptable fixture locations and illumination levels. Mounting heights are noted and are acceptable. An actual depiction of the proposed fixture is lacking and is needed.

(Affirmative finding if conditioned)

Sec. 5.5.3, Stormwater and Erosion Control

The required erosion prevention and sediment control plan has been reviewed and approved by city stormwater program staff. Existing subsurface stormwater storage chambers will accommodate runoff from the expanded surface parking. **(Affirmative finding)**

Article 6: Development Review Standards

Part 1, Land Division Design Standards

(Not applicable)

Part 2, Site Plan Design Standards

Sec. 6.2.2, Review Standards

(a) Protection of important natural features

The subject property contains no important natural features as defined in the Open Space Protection Plan. The area to be paved is currently grassy lawn. The proposed site plan depicts a single honey locust tree that will be relocated or replaced. It will be more than offset with additional new landscaping as part of the project. **(Affirmative finding)**

(b) Topographical alterations

The property is essentially flat and will remain so. **(Affirmative finding)**

(c) Protection of important public views

The subject property is not affected by any identified public view corridor. **(Affirmative finding)**

(d) Protection of important cultural resources

The property contains no known archaeologically significant features. **(Affirmative finding)**

(e) Supporting the use of alternative energy

This application contains no provision for alternative energy utilization, nor does it adversely affect potential for such utilization on the subject or neighboring properties. **(Affirmative finding)**

(f) Brownfield sites

The subject property is not an identified brownfield. **(Affirmative finding)**

(g) Provide for nature's events

See Sec. 5.5.3 for stormwater management.

Sufficient area remains onsite for seasonal snow storage. **(Affirmative finding)**

(h) Building location and orientation

(Not applicable)

(i) Vehicular access

Vehicular access will remain unchanged. Private driveways will provide access to the site.

(Affirmative finding)

(j) Pedestrian access

Pedestrian access remains unchanged. The building's primary entrance abuts the public sidewalk along Starr Farm Road. **(Affirmative finding)**

(k) Accessibility for the handicapped

Handicap accessibility features are present onsite. No changes to them are associated with this proposal. **(Affirmative finding)**

(l) Parking and circulation

See Article 8 below.

(m) Landscaping and fences

As noted above, a single tree that was planted as part of the previous parking lot expansion will be relocated or replaced. The existing line of trees and shrubs along the North Avenue and Starr Farm Road frontages will be retained. These plantings are intended to screen the surface parking from said public streets. The new landscaping is a continuation of existing landscaping done with the prior parking lot expansion. Several new honey locust trees are proposed within and adjacent to the parking area, as are a variety of perennial lilies. **(Affirmative finding)**

(n) Public plazas and open space

No public plaza or open space is included or required in this proposal. **(Not applicable)**

(o) Outdoor lighting

See Sec. 5.5.2.

(p) Integrate infrastructure into the design

No new ground mounted mechanical equipment is included in the project plans. **(Not applicable)**

Part 3, Architectural Design Standards

Sec. 6.3.2, Review Standards

(Not applicable)

Sec. 8.1.8, Minimum Off-Street Parking Requirements

The subject property is located within the Neighborhood Parking District (the Multimodal Mixed-Use Parking District stops just shy of this property along North Avenue). Within that district, the minimum parking requirement for a convalescent/nursing home is 1 parking space per 4 beds. In this case, the facility is permitted for 160 beds and requires at least 40 parking spaces. The property is permitted for 75 spaces but contains just 73 parking spaces. **(Affirmative finding)**

Sec. 8.1.9, Maximum Parking Spaces

This section limits surface parking to 125% of the Neighborhood Parking District minimum parking requirement. In this case, the maximum permissible parking for a 160-bed convalescent/nursing home is 50 spaces. Given that 98 spaces are proposed, a maximum parking waiver is required.

4. Waiver of Maximum Parking Limitations

A. The applicant requesting the waiver shall also provide:

(i) A peak demand parking study for two similar uses in the area; and,

A parking analysis has been provided. It is the same one as submitted for the 2019 maximum parking waiver but remains pertinent to the current request. The analysis includes the subject property and two other area nursing homes. The current parking ratio at the subject facility is 0.425. The expressed need is 0.6. The other two facilities, Starr Farm Nursing Center and Green Mountain Nursing have ratios of 0.66 and 0.932, respectively. **(Affirmative finding)**

(ii) A TDM Plan pursuant to the requirements of Sec. 8.1.16

Not yet submitted. **(No finding possible)**

B. The following additional criteria shall be addressed regarding how:

(i) The need for additional parking cannot reasonably be met through provision of on-street parking or shared parking with adjacent or nearby uses;

On-street parking is not allowed along Starr Farm Road or the nearby stretch of North Avenue. Most neighboring uses are single family homes. The nearby public school has its own parking challenges without surplus to share. **(Affirmative finding)**

(ii) The proposed development demonstrates that its design and intended uses will continue to support high levels of existing or planned transit and pedestrian activity;

The disparity between parking demand and parking availability contributes to a significant use of alternative transportation. The parking analysis asserts that 20% of employees already use transportation other than single occupancy vehicles. This figure should be updated to reflect current conditions. The property is served by public sidewalks, a nearby GMT bus stop, and onsite bike parking. The parking management plan recommends that the applicant formalize measures to encourage alternative transportation measures to lessen onsite parking demand. Recommended new measures include providing bus pass credits, incentivizing carpools, staggering work shifts and pursuing at least a 1-year membership with CATMA. Implementation of all recommendations per Sec. 8.0, Parking Management Plan, of the RSG parking analysis are prerequisite to the requested maximum parking waiver. **(Affirmative finding if conditioned)**

(iii) The site plan indicates where additional parking can be redeveloped to a more intensive transit supportive use in the future.

Transit supportive use is not a defined term in the city's Comprehensive Development Ordinance. Review of pertinent literature indicates that transit supportive use provides services or activities which are attractive and convenient to transit riders and pedestrians. Practically speaking, the facility is too small and too far removed from the city center to be heavily served by alternative means of transportation. As noted above, some measures are in place already to encourage use of alternative transportation, and additional steps should be taken to formalize and broaden such measures. Insofar as this particular criterion is concerned, the site could be wholly or partially redeveloped in the future. Such redevelopment could conceivably include transit supportive uses. **(Affirmative finding)**

Sec. 8.1.10, Off-Street Loading Requirements (Not applicable)

Sec. 8.1.11, Parking Dimensional Requirements

Parking spaces are striped at 9' X 18' and are consistent with present parking standards. Back up length of 22' is noted, whereas 23' is the standard for 90-degree spaces. Substandard back-up length is allowed under current standards only following consultation with the City Engineer – that has not occurred. Per Sec. 6.2.2 (l), the enlarged parking area shall be bordered by concrete curbing or similar barrier to prevent parking on adjacent green spaces. **(Adverse finding)**

Sec. 8.1.12, Limitations, Location, Use of Facilities

(a) Offsite parking facilities

(Not applicable)

(b) Front yard parking restricted

The proposed parking expansion is compliant with applicable front yard setbacks as noted in Article 4 above. Consistent with this criterion, the new parking is located to the side of the building. Given its placement between the building and the road, screening of the additional parking is required. Screening between the road and the parking was installed as part of the prior parking expansion. **(Affirmative finding)**

(c) Shared parking

(Not applicable)

(d) Single story structures in Shared Use Districts

(Not applicable)

(e) Joint use of facilities

(Not applicable)

(f) Availability of facilities

None of the proposed parking will be used for the storage or display of vehicles or materials by offsite users. Parking will be for employees and visitors. **(Affirmative finding)**

Sec. 8.1.13, Parking for Disabled Persons

The site plan depicts several existing handicap parking spaces in close proximity to the building's main entrance. Associated striping is also shown. No new ADA spaces are proposed. ADA compliance is administered via the city's building permit process. **(Affirmative finding)**

Sec. 8.1.14, Stacked and Tandem Parking Restrictions

(Not applicable)

Sec. 8.1.15, Waivers from Parking Requirements / Parking Management Plans

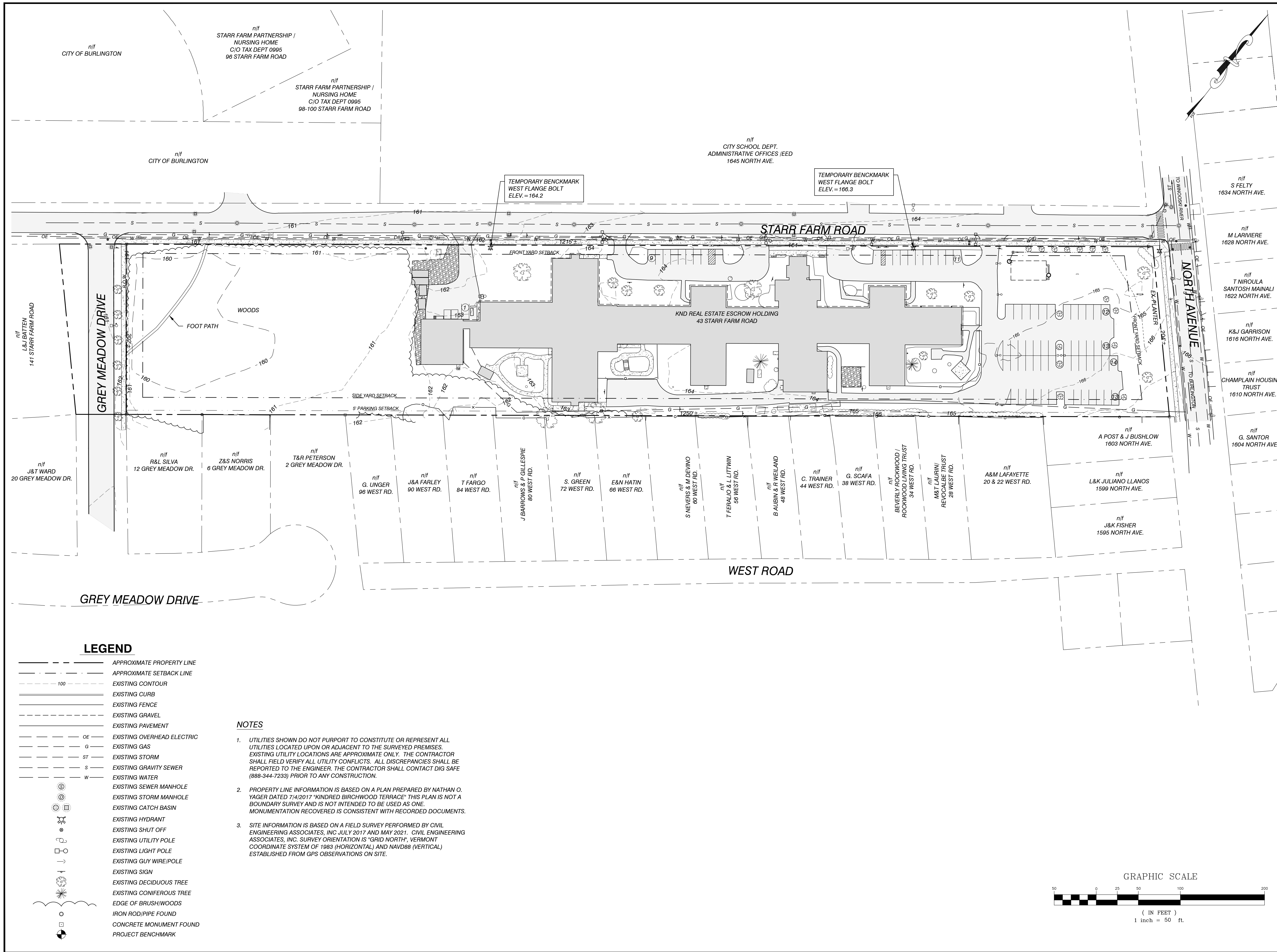
(Not applicable)

Sec. 8.1.16, Transportation Demand Management

Nothing has been submitted to address the standards of this section. No maximum parking waiver may be granted without an acceptable TDM plan in place. **(No finding possible)**

II. Conditions of Approval

None yet proposed.



SITE ENGINEER:



CIVIL ENGINEERING ASSOCIATES, INC.
10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403
P: 802-864-2323 FAX: 802-864-2271 web: www.cea-vt.com

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DRAWN
MAB

CHECKED
MCK

APPROVED
CJG

CLIENT:

BIRCHWOOD
PROP LLC
c/o BIRCHWOOD
OPERATIONS LLC

43 STARR FARM ROAD
BURLINGTON, VT

PROJECT:

BIRCHWOOD
TERRACE

43 STARR FARM ROAD
BURLINGTON, VT

BURLINGTON



LOCATION MAP

1" = 2000'

DATE	CHECKED	REVISION
09/23/21	MLK	ZONING PERMIT

EXISTING
CONDITIONS SITE
PLAN

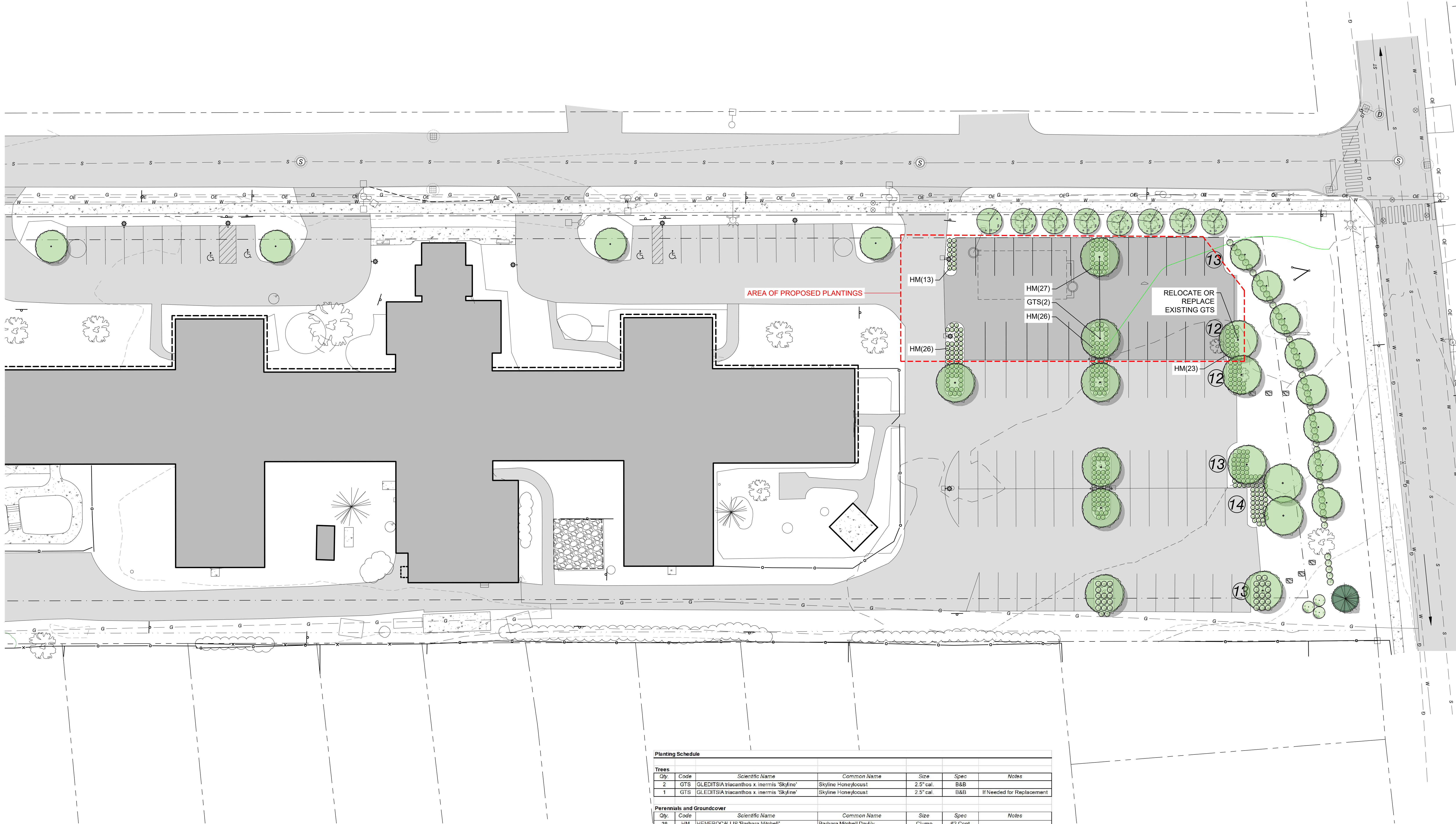
DATE
09/23/2021

SCALE
1" = 50'

PROJ. NO.
17158

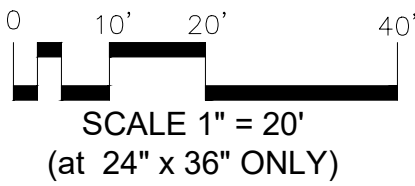
DRAWING NUMBER

C1.0



Planting Schedule						
Trees						
Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes
2	GTS	GLEDITSIA triacanthos x. inermis 'Skyline'	Skyline Honeylocust	2.5" cal.	B&B	
1	GTS	GLEDITSIA triacanthos x. inermis 'Skyline'	Skyline Honeylocust	2.5" cal.	B&B	If Needed for Replacement
Perennials and Groundcover						
Qty.	Code	Scientific Name	Common Name	Size	Spec	Notes
38	HM	HEMEROCALLIS 'Barbara Mitchell'	Barbara Mitchell Daylily	Clump	#2 Cont.	
38	HM	HEMEROCALLIS 'Happy Returns'	Happy Returns Daylily	Clump	#2 Cont.	
39	HM	HEMEROCALLIS 'Purple d'Oro'	Purple d'Oro Daylily	Clump	#2 Cont.	

REVISED
09/21/2021



revisions	date	revisions	date
Revise Landscape and Lighting	12/07/2018	Add Landscape and Lighting	09/21/2021
Add boulders	02/06/2019		

T. J. Boyle Associates, LLC

landscape architects • planning consultants

301 college street • burlington • vermont • 05401 802 • 658 • 3555

<http://www.tjboyle.com>



jbo/kh
design by

jbo/kh
drawn by

12/07/2018
date

1" = 20'

Birchwood Terrace
Landscape Planting Plan

sheet no:

L-101

REVISED
09/21/2021

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jbo/jkh
design by
jbo/jkh
drawn by
12/07/2018
date

Birchwood Terrace

sheet no.

L-202

3
L-202
PARKING LOT POLE
NTS

1
L-202
PARKING LOT FIXTURE
NTS

Job:
Type:
Notes:

Page 1 of 4

The Philips Gardco SRS straight round steel pole consists of a one-se circumferentially welded to a structural quality hot rolled carbon steel an electrostatically applied, thermally cured TOC polyester powderco full base cover, hand hole, ground lug and top cap.

PREFIX

HEIGHT

SIZE

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a Refer to notes below for exclusions and limitations. For questions or concerns, please consult the S

PREFIX	HEIGHT	SIZE
SRS	10'	3"
	14'	4"
	16'	5"
	20'	
	25', 25H	
	30', 30H	

1. Refers to relative strength based on wind load factors. H = Heavy.

FINISH

OPTIONS

PP

BRP

BLP

WP

NP

QV

FGV

OC

SC

Prime Painted

Bronze Paint

Black Paint

White Paint

Natural Aluminum Paint

Galvanized Blue Ring

Finished Paint over Galvanized (specify color)

Optional Color Paint Specify RAL designation per ISO 3104.

Special Color Paint Specify Must supply color chip.

FES

AHH

Coatings

CL

Single Mount Bullhorn Bracket

GM-080-19

GM-080-24

Footcandle Output

Additional Hand H

Indicates size (1/2", 3/4", 1", 1 1/4") height above base and orientation. See Pole Orientation Information on S.

Coupling - Internal

Indicates height above base and on hole. See Pole Orientation Information on S.

Single - 19"

Single - 24"

Refer to Steel Po

1611 Clovis Barker Road, San Marcos, TX 78666
(800) 227-0718 (512) 753-1000 FAX: (512) 753-7855 steelighting.com
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Philips Gardco reserves the right to change materials or modify the design of its product notification as part of the company's continuing product improvement program.
79413-1/10611

GARDCO

by @ignify

Site &
EcoFo
ECF-S small

Gardco EcoForm Gen-2 combines economy with performance in luminaire. Capable of delivering up to 27,800 lumens or more in a profile LED luminaire. EcoForm offers a new level of customer va features an innovative retrofit arm kit, simplifying site conversio eliminating the need to drill additional holes in most existing pole control systems available for further energy savings. Includes S innovative way to provide assistance throughout the life of the p

Ordering guide

Prefix	Height in Ft.	Size in Feet	Finish	Mounting	Notes
ECF-S	32L	530	WW-G2	SF	

ECF-S EcoForm area steel area, small

32L 32 LED (2 modules)

530 530mA 1000mA 1.5A 1000mA

WW-G2 Warm White 3000K, 70 CRI Generation 2

SF The Tc mount 1 receiver 3000K, 70 CRI Generation 2

Options	Options	Options
DDP** 0-10V External dimming (Rtr control by others)	DMB** Integral with #3 lens	PCB** Photocell
DDC** Dual Circuit Control	DMB** Integral with #7 lens	TLB** Turret L
LLC** Integral wireless module	DMB** Integral with #7 lens	TLB** Turret L
BL** SR driver connected to Ziga socket	DMB** Integral with #7 lens	TLB** Turret L
DMB** Automatic Profile Dimming	DMB** Integral with #7 lens	TLB** Turret L
CSB** Safety 50% Dimming, 3 hours	DMB** Integral with #7 lens	TLB** Turret L
CSB** Safety 50% Dimming, 8 hours	DMB** Integral with #7 lens	TLB** Turret L
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CSB** Safety 50% Dimming, 636 hours	DMB** Integral with #7 lens	TLB** Turret L
CSB** Safety 50% Dimming, 639 hours	DMB** Integral with #7 lens	TLB** Turret L
CSB** Safety 50% Dimming, 642 hours	DMB** Integral with #7 lens	TLB** Turret L
CSB** Safety 50% Dimming, 645 hours	DMB** Integral with #7 lens	TL

BIRCHWOOD
43 Starr Farm Road
Photos taken: 09-30-2021

Looking southwest from North Avenue:



Looking southwest from North Avenue:



Looking northeast towards North Avenue:



Looking northeast towards North Avenue:



MEMO

TO: Alicia Dimario, Executive Director, Birchwood Terrace
CC: Jess Phelps, Dinse P.C.
FROM: Mark Smith, PE
DATE: November 15, 2018
SUBJECT: Starr Farm Road Facility Parking

RSG has performed an analysis of parking needs for the Birchwood Terrace¹ nursing facility on Starr Farm Road in Burlington, VT. This memo includes the following sections:

1. Problem statement
2. Relevant parameters for improvement, including city ordinance restrictions
3. Background information for the facility
4. Current parking management efforts
5. Parking supply and need survey results
6. Comparison to two similar nearby facilities
7. Study findings
8. Parking management recommendations (plan)

1.0 PROBLEM STATEMENT

Birchwood Terrace currently has parking needs that significantly exceed the capacity of their on-site parking area(s). A substantial contributing factor to this condition is a recent restriction to on-street parking along Starr Farm Road, forcing all parking on-site.

2.0 PROJECT PARAMETERS

To provide more parking spaces, the City of Burlington zoning regulations require a parking study, per Comprehensive Development Ordinance (CDO) Sec. 8.1.9 Maximum Parking Spaces – Item 5:

- A. The applicant requesting the waiver shall also provide a peak demand parking study for two similar uses in the area; and,
- B. The following additional review criteria shall be addressed regarding how:
 - (i) The need for additional parking cannot reasonably be met through provision of on-street parking or shared parking with adjacent or nearby uses;

¹ A.k.a. Kindred Transitional Care & Rehabilitation Birchwood Terrace

- (ii) The proposed development demonstrates that its design and intended uses will continue to support high levels of existing or planned transit and pedestrian activity; and,
- (iii) The site plan indicates where additional parking can be redeveloped to a more intensive transit supportive use in the future.

The Burlington CDO² calls for 1 parking space for 4 beds (Convalescent Homes), with a 125% maximum. Thus, for Birchwood the maximum parking allowed is 50 spaces, assuming the current permit allowance for 160 beds.

3.0 BACKGROUND

Birchwood Terrace is a 144-bed³ Skilled Nursing Facility (SNF) that provides short term and long-term care to the Greater Burlington area's most frail seniors, with as many as 104 residents calling Birchwood their permanent home. As a SNF, we are governed by both the state and federal government, which requires that we provide services that meet each individual's care needs. This includes, but is not limited to, 24-hour nursing care and services, access to a physician 24 hours/day, medication management, 3 meals/day, physical therapy, occupational therapy, speech therapy, respiratory therapy, daily activities, Social Services, laundry and housekeeping services, facility maintenance, laboratory services, x-ray services, transportation, banking, etc. There are also mandated staffing requirements to ensure the facility provides adequate staffing based on the residents' needs.

The Facility employs or contracts 168 employees and is a 24/hour a day business. Staff includes:

- Nursing⁴/medical – (3) 8-hours shifts, 7 days a week
 - LNA/CLA – 6:00 am to 2:30 pm, 2:00 pm to 10:30pm, and 10pm to 6:30 am
 - LPN/RN – 6:45 am to 3:15 pm, 2:45 pm to 11:15pm, and 10:45pm to 7:15 am
 - Physicians – hours vary
- Maintenance – Monday through Friday 7:30 am to 4:30 pm, and as needed
- Administration – Monday through Friday from 7:30 am to 6:00 pm
- Therapy – PT, OT, ST, RT⁵ - 7 days a week from 7:00 am to 5:00 pm
- Culinary/Dietary – 7 days a week, from 5:00 am to 7:30 pm
- Laundry/Housekeeping – 7 days a week, from 5:00 am to 6:00 pm

Visitors/Vendors

The facility welcomes family, friends, guests and vendors at any time. Peak visiting hours are from 10:00 am to 1:00 pm and again from 4:00 pm to 7:00 pm. It is not uncommon for there to be 20-25 visitors here at peak times.

² Section 8.1.8

³ The facility is permitted for 160 beds, however only 144 beds are available at this time.

⁴ Licensed/Certified Nursing Assistant, Licensed Practical Nurse/Registered Nurse

⁵ Physical, occupational, speech or respiratory

Student Nursing

The facility also partners with the local colleges to provide educational and practical training for their Nursing Programs. Both the University of Vermont and Vermont Technical College utilize Birchwood as their clinical site for practicum work. Class sizes range from 8 students to 30 students, with 1 to 4 clinical instructors to oversee their work.

4.0 BIRCHWOOD PARKING MANAGEMENT

On-Street Parking

Parking along Starr Farm Road or North Avenue is currently not allowed.

Shared Parking

Shared parking takes advantage of 2 adjacent parking lots where the associated land use is complementary to each. Typically, these are applicable in large mixed land use developments where residential uses (peaking in the nighttime hours) complement commercial uses, which peak in the daytime.

Birchwood is situated in a largely residential area with no neighboring businesses or institutions with complementary parking needs. Flynn Elementary School is located across Starr Farm Road to the north, with their own parking restrictions. Birchwood has worked with School Administration to limit/cease use of Birchwood's parking lot for school drop-offs and pick-ups.

Off-Site Parking

Birchwood has pursued several off-site parking options within the last year, including:

- Leddy Park
- North Avenue Alliance Church
- St. Mark's Church
- Price Chopper, Colchester
- Elks Lodge

Parking was either not available at these locations, or the number of spaces available was far less than the facility's current additional needs.

Parking Demand Management

- Birchwood encourages travel by other transportation modes for all employees, however, many visitors and nursing students do not have the luxury of time required to ride transit for a short duration visit.
- Sidewalks currently exist on Starr Farm Rd. leading from the facility to North Avenue.
- Transit is readily available throughout the day via the North Avenue GMT line, with north and southbound stops at Starr Farm Rd.
- Bike parking is available on-site, however peak parking demand still occurs in winter months, when biking is impractical.
- Currently 33 employees utilize alternate means of transportation to get to work.

Other Considerations

Signage has been recently upgraded on-site to indicate where parking is allowed and how each lot is used.

Employee vehicle placards are implemented to ensure only authorized vehicles use designated parking areas.

Ideally, all parking should be within close proximity of the facility, minimizing travel time, thus optimizing staff's ability to get to work, which directly impacts patient care.

Parking should have adequate lighting for employee and vehicle safety, as well as the ability to be maintained in the winter time.

5.0 BIRCHWOOD FACILITY PARKING

Existing Site Parking Supply

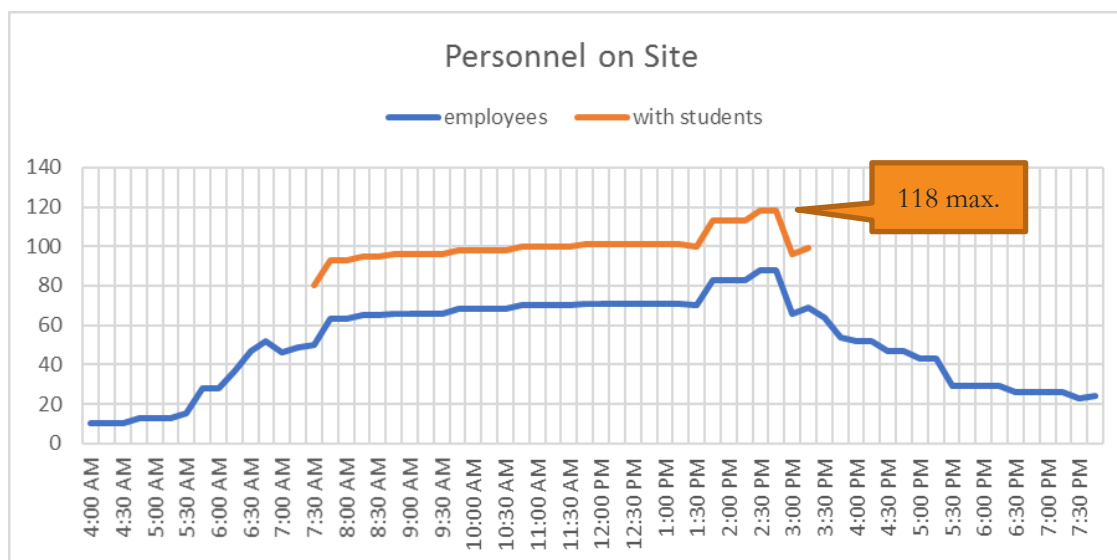
The existing facility has 5 general parking areas (see site plan):

- The maintenance area on the SW end, which serves company vehicle parking only (# of spaces unknown/undesigned)
- The SW visitor lot (9 spaces)
- The NW visitor lot (11 Spaces)
- The NE Employee Lot (24 spaces)
- The SE Employee Lot (24 spaces)

Total parking is 68 spaces + the maintenance lot capacity

Parking Need

RSG polled facility management for the number of employees and the hours (shifts) for each group. Detailed personnel shift data by time of day is attached. Plotting this data shows a theoretical maximum need, with and without the visiting student population, as shown in Figure 1. There are an estimated maximum of 118 personnel on-site, not including visitors.

FIGURE 1. MAXIMUM PARKING NEED BASED ON PERSONNEL

RSG staff observed parking activity on 10/5, 10/10, 10/24 and 10/26. Observations include:

- Employee parking was full and overflowed into grass areas by as many as 24 vehicles (72 vehicles vs. 48 available spaces).
- Visitor parking was 50-80% full (10-16 of 20 spaces occupied), however peak visitor hours are known to occur later than the times of observations.
- There were 3-4 vehicles in the maintenance area (no actual designated spaces).

Comparing the maximum observed parking vs. maximum personnel on-site data illustrates that significant TDM⁶ measures, such as car-pooling and use of alternate modes, are already in place.

Parking Ratios – Supply vs. Need

The current parking supply is 68 designated spaces. [space/permitted bed ratio = 68/160 or **0.425**]

Based on site observations, the current parking need is determined as follows:

- 72+ employee (personnel)
- 20 visitor
- 4 maintenance area

Total need is at least 96 spaces. [space/bed ratio = 96/160, or **0.600**]

⁶ Transportation Demand Management

6.0 OTHER EXAMPLE FACILITIES

Starr Farm Nursing Center, Starr Farm Road, Burlington:

- Recent aerial photos show 99 parking spaces for this 150-bed facility⁷
- The resulting parking space/bed ratio = 99 / 150, or **0.660**

Green Mountain Nursing, Fort Ethan Allen, Colchester:

- Recent aerial photos show 68 parking spaces for this 73-bed facility
- The resulting parking space/bed ratio = 68 / 73, or **0.932**

7.0 SUMMARY OF FINDINGS

Our findings include:

1. Birchwood Terrace provides a comprehensive care service that entails a wide variety of services and subsequent staffing needs.
2. Birchwood's operation has aspects that demand more parking (e.g. visiting nurses) than typical convalescent nursing facilities, as implied by the City CDO.
3. Staffing hours are well staggered to maximize parking efficiency (e.g. shift changes are staggered to minimizing space needs).
4. The current site is well situated to take advantage of the use of alternate transportation modes and estimated staff participation in use of alternate modes well exceeds current norms (33/168=20%)⁸
5. Comparing theoretical employee demand to observed maximum parking indicates excellent TDM measures are already taking place.
6. On-site employee parking needs regularly exceed supply, as observed, by at least 24 spaces.
7. Other typical facilities (see examples) supply more parking (i.e. ratio of spaces per patient bed) than Birchwood.
8. A waiver is justified on the maximum spaces allowed by the CDO for 96 spaces (vs. 50 allowed).

⁷ Facility capacity was determined from website information.

⁸ VTrans TDM guidelines suggest 5-10% is typical

8.0 PARKING MANAGEMENT PLAN

With daily on-site personnel and nursing students peaking at 118 persons, plus visitors and vendors/contractors, the CDO restriction to 50 parking spaces⁹ is clearly not appropriate or applicable.

Even with a waiver on the restriction of the maximum parking spaces, site constraints may limit parking to less than the suggested 96 spaces, thus parking management is essential.

To minimize the necessary parking demand, Birchwood Terrace can take the following measures:

1. Optimize the site layout for the number of parking spaces, loading, and site circulation.
2. Ensure continued easy access to the existing bus stops on North Avenue (i.e. via sidewalk), some 450 feet away.
3. Provide on-site bicycle parking, including secure parking for overnight storage and during inclement weather.
4. Continue to encourage the use of alternate modes by employees by:
 - a. Providing incentives such as health insurance credits, bus pass credits, or other rewards.
 - b. Providing a flexible workspace, allowing staggered shifts, telecommuting where possible.
 - c. Exploring rideshare options such as carpooling/vanpooling.
 - d. Offering a guaranteed ride home program.
5. Create sensible rules for on-site parking that ensure opportunities for shared use between users is maximized.
6. Optimize shift staggering so that the availability of spaces is optimized.
7. Consider obtaining a 1-year membership in the Chittenden Area Transportation Management Association (CATMA). CATMA provides a range of services that assist an organization to better understand and manage their transportation demands. As a member of CATMA, Birchwood Terrace will have access to their knowledge base and programs. In addition, CATMA may be able to assist with the following programs:
 - a. Securing off-site parking;
 - b. Coordinating shuttles to and from the site, if needed;
 - c. Guaranteed ride home program;
 - d. Implementing a Bulk Transit Pass program for employees; and
 - e. Providing regional expertise on parking management strategies.

⁹ Maximum 1 space per 4 beds plus 25% (i.e. $160/4 \times 1.25$)

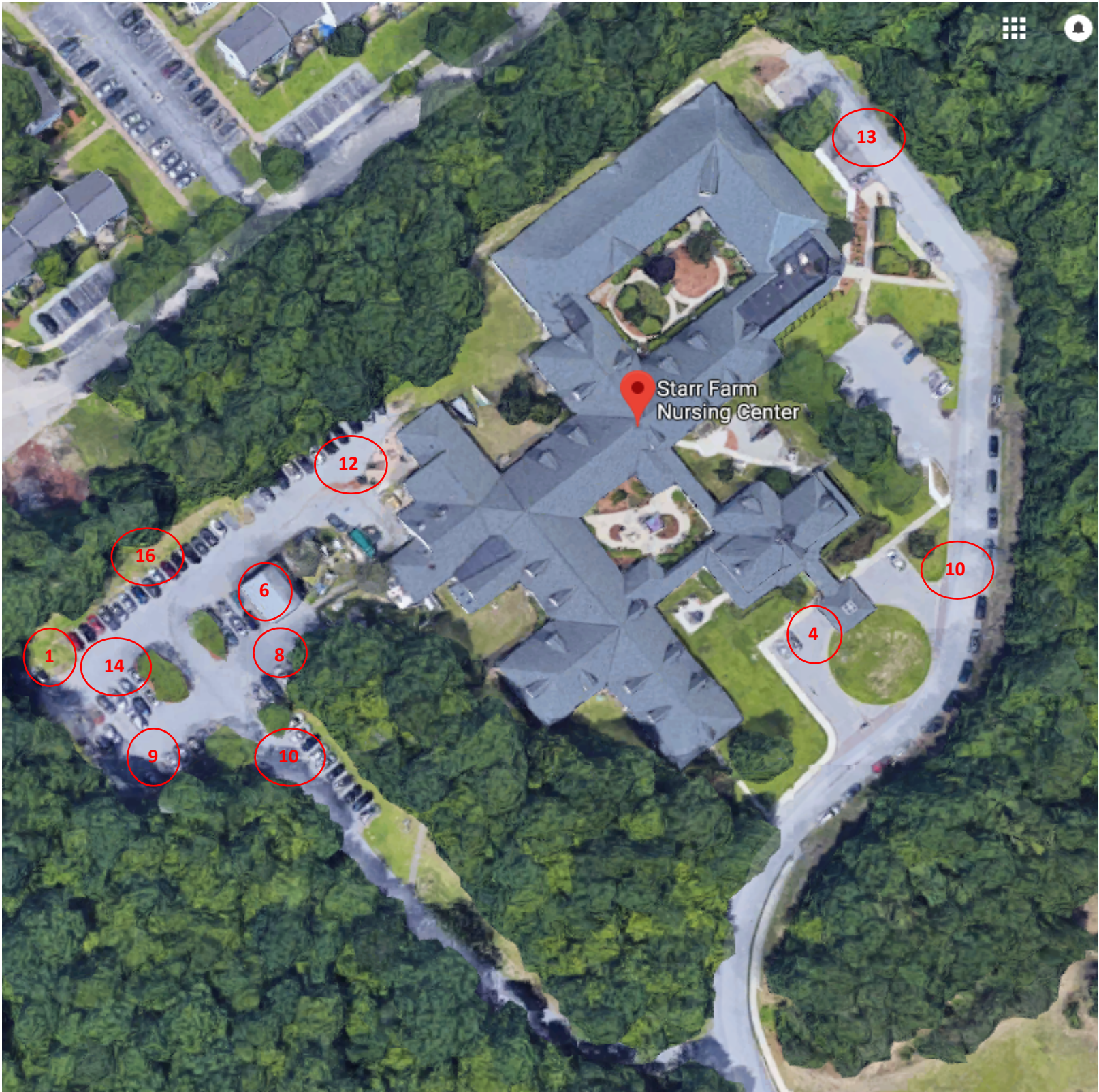
END OF MEMO

Attachments:

1. Birchwood Terrace site map
2. Starr Farm site map
3. Green MT Nursing site map
4. Birchwood personnel on-site by time-of-day data







13
16
4
12
6
4
10
9
14
1
10
99

1114 Ethan Allen Ave, Essex Junction, VT 05452



MEMORANDUM

To: City of Burlington, Department of Planning and Zoning

From: Birchwood Terrace/Civil Engineering Associates, Inc.

Date: September 30, 2021

Re: Birchwood Terrace Senior Housing Bonus/Site Plan Approval Request

Introduction:

Birchwood Terrace (“Birchwood”), a convalescent home in Burlington’s New North End, seeks approval of a senior housing bonus and related site plan to allow for the continued and effective operation of its skilled nursing facility – a vital community resource. Birchwood is located at 43 Starr Farm Road (tax lot number: 023-4-026-001). Birchwood was built in 1965 and has operated at this site since construction (on a lot of approximately 6.03 acres).

Brief Parking History:

In roughly 2016, the City restricted parking along Starr Farm Road for safety reasons (chiefly proximity to an adjacent public elementary school). This substantially limited Birchwood’s off-site parking. Birchwood was subsequently issued a Notice of Violation for expanding the area used for parking without obtaining zoning approval. In January 2018, the City and Birchwood entered into a stipulation to allow for sufficient time to address the violation. In addressing parking issues, Birchwood first attempted to address its needs by increasing off-site parking on nearby public streets, including Grey Meadow Drive, but this met with substantial neighborhood opposition. The lack of on-street parking led to a substantial investment in exploring options on the lot for bringing the property into compliance with existing zoning while still allowing the site to function and provide the level of care its residents require. Since this time, Birchwood has worked with the City to develop a plan to provide the additional parking needed for its operation on the property. In November of 2020, the City Council approved a zoning change that altered the senior housing bonus to increase the maximum lot coverage from 40% to 44% in the RL zoning district (matching the maximum lot coverage available for an inclusionary housing bonus in the RL zoning district).

Lot Coverage – Senior Housing Bonus:

Given the level of staffing required to operate this site under current federal and state requirements and to provide for visitation, Birchwood’s current parking capacity does not meet its operational needs. Birchwood commissioned a parking demand study (previously submitted to the City) indicating a need for at least 96 parking spaces to accommodate its existing uses and level of care. Birchwood’s current maximum lot coverage, however, is capped at 40%. At 40%

lot coverage, Birchwood may only have approximately 75 parking spots and there are not viable parking spaces available on nearby public streets to make up the difference.

Per Section 4.4.5(d)(A)(iv) of the City's Comprehensive Development Ordinance, the City's Development Review Board has the discretion to grant a senior housing bonus and increase the maximum lot coverage of Birchwood's lot from 40% to 44%. If the DRB approves such a senior housing bonus, then Birchwood could construct up to 98 parking spaces on its property and effectively cover Birchwood's parking needs on site.

Conclusion:

In sum, Birchwood respectfully requests approval of the site plan submitted in connection with this application and DRB approval of a senior housing bonus to allow for up to 44% lot coverage and 98 parking spots at its facility. Birchwood remains committed to providing quality care to City residents.

Attachments:

- Zoning Permit Application
- Property Owner Consent Form
- COA Level II Checklist
- Standard EPSC Form
- Civil Plan Set
- Landscaping and Lighting Plans
- Existing Conditions Photos

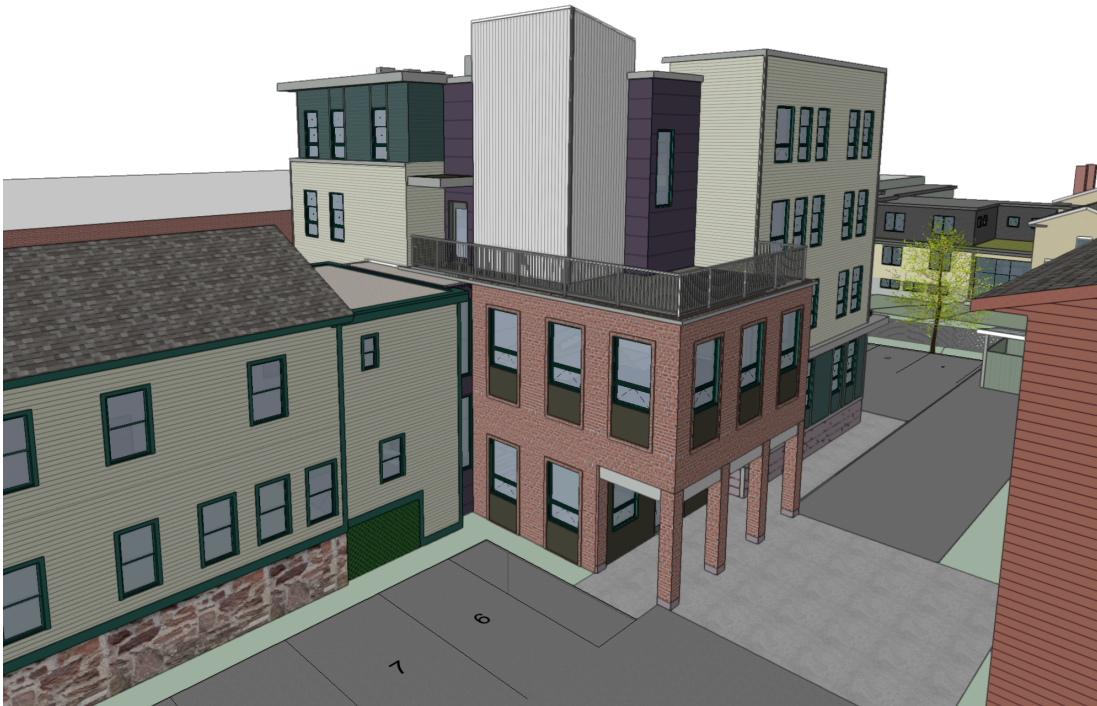
COTS

278 Main Street
BURLINGTON, VT 05401

COA Level II Zoning Application

APPLICANTS:

COMMITTEE ON TEMPORARY SHELTER & EVERNORTH



October 15, 2021

COTS 278 MAIN STREET

Prepared for: The City of Burlington Department of Permitting & Inspections

Prepared by: Duncan Wisniewski Architecture

October 15, 2021

The Committee On Temporary Shelter (COTS), in partnership with Evernorth (EN), is pleased to present this Certificate of Appropriateness Level II Zoning Application for an addition to and very minimal renovations of its existing Family Shelter (zoned as Community House), to the City of Burlington Department of Permitting and Inspections for review under the Comprehensive Development Ordinance.

The proposal includes very minimal changes to the existing building (primarily at the point of intersection between new and old) and a new addition that totals approximately 14,200 SF (four floors plus basement). This addition includes 16 units of affordable housing, all of which will comply with the City's inclusionary zoning requirements based upon income. Compliance with the basic inclusionary zoning requirements (15% of total units) allows for increased density (40 units to 46 units/acre), increased height (35' to 45'), and increased lot coverage (80% to 92%). The zoning summary included in this packet explores these bonuses in detail.

As required prior to submission of this zoning application, we presented the proposed project to the combined Wards 1 and 8 Neighborhood Planning Assembly on September 8, 2021; therefore, please schedule this proposal for the earliest possible Conservation, Design Advisory and Design Review Board meetings.

Sincerely,



Bob Duncan

enc: filed via electronic submission

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TEXT

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- ZONING NARRATIVE
- ZONING SUMMARY

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- TRANSPORTATION DEMAND MANAGEMENT PLAN
- NPA 1 & 8 AGENDA
- WATER/SEWER "ABILITY TO SERVE" LETTER

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- A0.2 CONTEXT PHOTOGRAPHS
- A0.3 CONTEXT PHOTOGRAPHS
- L1.0 ARCHITECTURAL SITE PLAN
- L1.1 LANDSCAPE PLAN
- A1-0.0 BASEMENT PLAN
- A1-1.0 FIRST FLOOR PLAN
- A1-2.0 SECOND FLOOR PLAN
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- A1-4.0 FOURTH FLOOR PLAN
- A1-5.0 ROOF PLAN
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- SITE LIGHTING & FIXTURE CUT SHEETS
- C1.0 EXISTING CONDITIONS SITE PLAN
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- C2.1 PROPOSED GRADING & DRAINAGE PLAN
- C2.2 PROPOSED UTILITY PLAN
- C3.0 ESPC SITE PLAN
- C3.1 EPSC NOTES & DETAILS
- C4.0 SITE DETAILS
- C4.1 UTILITY DETAILS
- C4.2 STORMWATER

ZONING PERMIT APPLICATION FEES

COA Level II APPLICATION FEE: ECC \$3,990,000.

- \$15 + \$140 Filing Fee
- \$2.20/\$1,000 ECC or \$.10/SF, whichever is greater = $\$3,990 \times 2.20 = \$8778 + \$155 = \8933 .

MAJOR IMPACT FEE: ECC \$3,990,000.

- $\$250 + \$1.21/\$1,000 \text{ ECC} = \$3,990 \times 1.21 = \$4827.90 + \$250 = \$5077.90$

TOTAL DUE w/application: $\$8933 + \$5077.90 =$ **\$14,010.90.**

COA Level II Development Review Fee: (due prior to release of DRB approval)

- $\$4.5/\$1,000 \text{ ECC} = \$17,955 \text{ or } \$0.25/\text{sq. ft.} = \$6250$. Use \$17,955.

TOTAL DUE prior to release of permit: **\$17,955.**

COTS 278 MAIN STREET

October 15, 2021

PROJECT OVERVIEW

The site is located on Main Street in Burlington, across from Edmunds Elementary and Middle Schools, and currently includes an existing Community House that serves homeless families. The existing building was remodeled for the YWCA in 1991, and again remodeled in about 2003 for its current use. The property is zoned Residential High Density (RH), and with a lot size of 18,015 SF (.414 acres), increased density of 46 units/acre due to inclusionary zoning requirement, and is thus allowed to have a total of 19 units. Existing Community House is classified as one unit, thus allowing for a maximum of 18 units of new construction, 16 are proposed. Please refer to attached Zoning Summary for more details.

DESIGN OVERVIEW

The 25% rear yard setback requirement limits expansion of the building in a northerly direction. Because the existing building is not served by an elevator, and since the new construction will have an elevator, the addition has been sited such that its entrance is easily served by the elevator, and the elevator can also serve the existing Community House, thus allowing for accessibility to the existing second floor, a feature not previously available. It is important programmatically to separate residents in the new apartments from residents in the Community House (primarily to offer apartment residents a clear break between shelter housing and permanent housing); consequently, the main entrance to the new addition is centrally located on the lot. While pedestrians approaching the main entrance will share driveway circulation with vehicles accessing the two parking areas, we are paving a portion of this access with a concrete walkway, and creating a defined concrete “plaza” space at the main entrance, in each case to establish the importance of pedestrian circulation and to downplay vehicular circulation. This walkway falls within the side yard setback as allowed under Section 5.2.5 (b)2 (“walkways”).

The new addition will be four stories in height as allowed by the bonus height granted under inclusionary zoning. The addition connects to an earlier addition to the original building's ell, and we propose to remove the gable roof of the addition, thus more aptly connecting the new addition at its third floor terrace connection. The new addition is composed of a variety of unit sizes and types, and its first and second floors match the existing building to facilitate elevator access to the existing floors. Since the first floor is approximately 5' above grade, the basement of the addition allows windows of sufficient size to serve three small units on that floor. The second floor accommodates a common room for building residents, that can be used for social events, birthday parties, etc. Above that space on the third floor is an open terrace, which allows for additional exterior space for residents.

Although onsite parking is not required because all units will be permanently affordable, parking is provided on site in two locations. COTS recognizes that there are basic needs for Community House staff parking as well as limited parking needs for both Community House and apartment residents; accordingly, we have provided a total of nine (9) spaces.

Trash storage will be located in an enclosed structure, as will all long-term bicycle storage, as indicated on the Site Plan. The addition features a stair porch connection to the first floor, part of which falls within the rear yard setback, allowed as per Section 5.2.5 (b)2 (“steps to first floor entries”).

Proposed lot coverage falls well below the 92% that is allowed.

CONTEXT

The neighborhood context varies in both use and building type/size. Consolidated Communications has its main building directly to the west, and is a totally interior focused building with brick exterior. To the east is a condominium complex of three stories in height. Directly to the north is a mixed use two story building comprised of office space and apartments. Materials range from the brick exterior of the Consolidated Communications building, to wood siding of the condominium complex, to a mixture of brick, wood, stucco and metal siding of the building to the north.

SITE DESIGN

The new construction connects to the existing building at its north end, and the addition steps on its north side to maintain the 25% rear yard setback. As mentioned earlier, site constraints necessitate the addition's main entrance to be in the center of the site. Given the limited access options, both pedestrian and vehicular circulation share the same site circulation, thus techniques of material differences have been employed to emphasize pedestrian circulation and alert vehicle drivers to the presence of pedestrians.

Trash will be collected in the same way it is now, although frequency of collection may increase. The trash truck currently enters the site and traverses to the rear to collect trash, and then backs that distance out to the street.

SITE LIGHTING & UTILITY SERVICES

Site lighting currently is limited to some building mounted lighting. The new building entrance will have soffit mounted recessed lighting, parking lot area lighting, and building mounted pedestrian path lighting, as indicated on the Site Plan. All exterior lighting are LED fixtures that are full cutoff, dark sky compliant, and have been designed to not interfere with neighboring properties. Lighting will be controlled by a 365-day astronomical time clock and integrated high/low motion/ambient sensors. All fixtures are DLC or energy star rated.

All utilities will be underground from existing municipal services. Existing sewer, water and gas services will be maintained. New 3 phase primary electrical service will be provided via an existing pad mounted transformer to the Northeast to a new pad mount transformer located on the North end of the property, with underground secondary service from there to the building's basement.

CIVIL

The project civil engineer (Civil Engineering Associates) has communicated with DPW to assure that the design meets city requirements, including sufficient water and sewer services, as well as a storm water mitigation design that utilizes underground infiltration structures to mitigate stormwater flow. In light of guidance received from the City Stormwater Section (DPW), we have designed a subsurface stormwater treatment and peak flow mitigation facility which has the volume to fully infiltrate the 2-year design storm and to reduce the 10-year peak flow and volumes amounts to less than existing conditions. The existing building is currently sprinklered, and the design anticipates full sprinklering of both existing and new construction.

BUILDING DESIGN

The Owner's building program requires a mix of unit sizes and types, including small Studio units (5), one BR units (4), and two bedroom units (7). There will be minor changes to the existing building where a wheelchair lift space will be removed and the space utilized for other purposes.

The site is zoned high density residential, and since all units meet inclusionary zoning requirements, certain bonuses are offered, including additional height and lot coverage, and no requirements for parking. The new addition connects to the existing building at its two+story north end.

The massing of the building is broken into several components: the entry with shared space and terrace above; circulation components (stairs, elevator, corridors); and the living units. The entry component is clad in brick, partly in homage to the original building's brick construction, partly for its durability close to the ground; the elevator is clad in metal vertical siding, capped by a sloping roof, relating to towers that abound nearby and in the City; the stairs and corridors are clad in horizontal large format fiber cement panels; and the living units are clad primarily in horizontal fiber cement lap siding, accented by bands of horizontal large format fiber cement panels at both the first floor and fourth floor. The base of the building is clad in thin porcelain tiles, relating back to the stone base of the original building, and laid in somewhat of a random pattern more representative of the random pattern of the stone foundations. We hope to provide roof-mounted solar PV, but won't know if this feasible until well into construction and costs have been finalized.

New roofing will be flat, sloping internally to drain. The elevator "tower" roof slopes to the north so as to drain onto the flat roof and not cause issues at the entrance to the third floor terrace. The overall massing of the building is consistent in scale with nearby buildings, including the Consolidated Communications building to the west, 230 College Street to the north, and the condominium complex to the east side.

Rooftop mounted mechanical equipment is shown on the roof plan, and has been included in the building modeling. As you will see, the equipment is not visible in the perspectives we've provided (except for aerial view).

The new construction is proposed to be "all-electric", although investigating methods for heating of domestic hot water are currently being explored, and thus the selection for that has not been finalized. Making the decision to not use fossil fuels for space heating or cooling requires a major commitment in envelope systems (continuous exterior wall insulation, aggressive air sealing means and methods, R60 roof insulation, etc.). We will be working closely with BED energy services to utilize their expertise and maximize opportunities for incentives to conserve energy.

OTHER

Civil Engineering Associates has calculated existing and proposed vehicle trip ends based upon the ITE Trip Generation Handbook, the results of which show very minor increases in vehicle trip ends when comparing the proposed development to the existing development. Please see the Transportation Demand Management Plan. NPA attendance: This project was presented to the combined Wards 1 & 8 NPA on September 8, 2021 (see attached agenda, or CEDO, youtube, etc. for recorded meeting).

The design will meet applicable state and federal handicapped accessibility requirements for both site and units. All apartments are designed to meet FHA requirements and one will be accessible in accordance with the 2010 ADA, as required by both funding sources and City of Burlington Code of Ordinances.

ZONING NARRATIVE

This application to the Department of Permitting & Inspections of the City of Burlington for 278 Main Street is made on behalf of COTS & Evernorth by Bob Duncan of Duncan Wisniewski Architecture. This project falls into the permit type "COA Level II", due to project cost and major impact. The proposed development consists of very minimal interior renovations to the existing structure and a 16 apartment unit additions. Site improvements include improved pedestrian and vehicular circulation, enclosed trash receptacles and enclosed bike storage, modest open space usage for tables, and additional landscaping featuring native species. The following is the required narrative which explains compliance with the Comprehensive Development Ordinance and an appendix of submitted forms and drawings.

1. Zoning District Requirements:

The attached Zoning Summary summarizes uses, density, height, lot coverage, proposed development, etc. of this parcel.

2. Major Impact (Article 3, Part 5)

The proposal falls under 3.5.2 (b) Major Impact Review as a development in RHD district of 10 or more units. As such, it is required to comply the Major Impact Review Standards of Section 3.5.6(b).

a. Major Impact Review Standards: the drawings, supporting documents, letters from City departments and staff show that the proposal complies with these standards.

- (1) Not result in undue water, air or noise pollution: the proposed project will not increase water, air or noise pollution. Wastewater and stormwater systems have been approved; all heating and cooling is predominantly supplied without fossil fuels; unlike other commercial or industrial uses, the addition of 16 small units will not create undue noise pollution.
- (2) Have sufficient water available for its needs: approved by DPW.
- (3) Not unreasonably burden the city's present or future water supply or distribution system: approved by DPW.
- (4) Not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result: stormwater design/retention system has been approved by DPW.
- (5) Not cause unreasonable congestion or unsafe conditions on highways, streets, waterways, railways, bikeways, pedestrian pathways or other means of transportation, existing or proposed: no adverse comments received at TRC meeting on 5/13/21, therefore in compliance.
- (6) Not cause an unreasonable burden on the city's ability to provide educational services: no adverse comments received at TRC meeting on 5/13/21, therefore in compliance.
- (7) Not place an unreasonable burden on the city's ability to provide municipal services: no adverse comments received at TRC meeting on 5/13/21, therefore in compliance.
- (8) Not have an undue adverse effect on rare, irreplaceable or significant natural areas, historic or archaeological sites, nor on the scenic or natural beauty of the area or any part of the city: not applicable.
- (9) Not have an undue adverse effect on the city's present or future growth patterns nor on the city's fiscal ability to accommodate such growth, nor on the city's investment in public services and facilities: as an example of infill/smart growth planning, this development will not have an undue adverse impact.
- (10) Be in substantial conformance with the city's municipal development plan and all incorporated plans:
- (11) Not have an undue adverse impact on the present or projected housing needs of the city in terms of amount, type, affordability and location: clearly a project that is providing all units meeting inclusionary criteria will not have an undue adverse impact.
- (12) Not have an undue adverse impact on the present or projected park and recreation needs of the city:

3. Special Uses and Performance Standards (Article 5): See the attached Zoning Summary for lot coverage, buildable area, setbacks, and building height restrictions.

- a. 5.4.8(b)(9): New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale, and proportion, and massing to protect the integrity of the property and its environment: The proposed design complies. The new work is differentiated, and scaled appropriately.

- b. 5.4.8(b)(10): New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired: If this addition were ever to be removed, the historic property would be unimpaired.
- c. 5.5.2 Outdoor Lighting: Refer to civil site plan.
- d. 5.5.3 Stormwater and Erosion Control: Refer to civil site plan.

4. Land Division and Site Development Principles and Design Standards (Article 6) Section 6.2.2 Review Standards:

- a. Protection of Important Natural Features: not applicable.
- b. Topographical Alterations: not applicable.
- c. Protection of Important Public Views: not applicable.
- d. Protection of Important Cultural Resources: not applicable.
- e. Supporting the Use of Renewable Energy Resources: the new addition allows (structural capacity and conduit connection(s) from roof to electrical room) for rooftop solar PV if financially feasible.
- f. Brownfield Sites: not applicable.
- g. Provide for nature's events: the existing site does not accommodate stormwater control. The project will incorporate stormwater control features, and has been review with DPW.
- h. Building Location and Orientation: new addition has been designed to respect the historic building, and its connection to the historic building occurs and steps back from its existing north wall. While the addition is taller than the existing building, its connection steps back at the third floor to further separate new from old.
- i. Vehicular Access: the existing site access will be maintained and used to serve two small parking areas, as well as direct access to trash removal, which will be handled the same as it is currently.
- j. Pedestrian Access: pedestrian access to the new addition will share the vehicular access drive. To emphasize the importance of this access, and de-emphasize the vehicular access, a portion of the access drive will be paved with concrete to designate it as a sidewalk; additionally, the space in front of the main entry will also be paved in concrete to create an arrival plaza, a space which also de-emphasizes vehicular use, and with programming and supervision, can also be used for pedestrian activities.
- k. Accessibility for the Handicapped: the building will be fully handicapped accessible in accordance with City, State and Federal requirements.
- l. Parking and Circulation: The two small parking areas are essentially concealed from streetview, a four space lot near the main entry, and a five space lot at the rear of the parcel. While parking is not required by ordinance, the Owner recognizes that there is some need for staff parking and also for building residents.
- m. Landscaping and Fences: refer to Site Plan.
- n. Public Plazas and Open Space: not applicable.
- o. Outdoor Lighting: refer to site plan. Designed to conform to Section 5.5.2.
- p. Integrate infrastructure into the design: resident storage is located in the new basement. Long-term bicycle storage is located in a structure on the northwest corner of the site. Resident mail will be delivered inside. Trash is being collected and stored in a new trash enclosure. Residents and building occupants will bring all internally generated trash to the new trash enclosure.

Section 6.3.2 Review Standards

- a. Relate development to its environment:
 - 1. Massing, Height and Scale: The building's design reflects and relates to the existing building and its context: while the addition is four stories, it connects to the existing building at the third floor where the new terrace matches the height of the new flat roof of the original building's 1991 addition. The fourth floor steps back from there, and the building's massing is not visible from the street. The assembly of materials relates to the existing building's masonry and horizontal lap siding.
 - 2. Roofs and Rooflines: The flat roofing relates to other nearby buildings to the west and north. The design includes flat roofs both to be consistent with context and because it is easier to control and direct stormwater with flat roofs.
 - 3. Building Openings: While not located on Main Street, the principal entrance of the addition is located east side, and relates directly to the internal building circulation system. The new entrance, identified by a covered portico finished in masonry to relate to the original building, directly leads to the new elevator that serves both

the new addition and the existing building. The existing building features punched openings, and the new addition also uses the same patterning, albeit with different shapes and systems.

- b. Protection of Important Architectural Resources: The addition has been designed to comply with Section 5.4.8.
- c. Protection of Important Public Views: not applicable.
- d. Provide an active and inviting street edge: The original building occupies the majority of the street edge, and its prominent entrance will remain.
- e. Quality of materials: all materials are high quality, including brick veneer, fiber cement lap siding, fiber cement panels and metal siding. All new windows will be fiberglass, storefront entry door system and related glazing will be anodized aluminum.
- f. Reduce energy utilization: The addition will be designed to meet or exceed the requirements of the CBES Codes of the state of Vermont, which exceed the Guidelines for Energy Efficient Construction pursuant to the requirements of Article VI. Energy Conservation, Section 8 of the City of Burlington Code of Ordinances. The new construction will be “all-electric”, which to be successful requires a robust and air-sealed exterior.
- g. Make advertising features complementary to the site: not applicable.
- h. Integrate infrastructure into the building design: resident storage, including bicycle storage is all located inside. Resident mail will be delivered inside. Trash is being collected and stored at ground level and will be collected 2X/week from the Haswell Street driveway. Residents and building occupants will bring all internally generated trash to the trash collection room on the ground floor. Rooftop mechanicals will be located to be concealed or otherwise located to minimize any visibility by pedestrians from the street level.
- i. Make spaces secure and safe: The building has been designed to comply with all applicable building codes. The building entrances will be adequately lit, and an intercom system for building access will be incorporated for apartment residents and guests.

ZONING SUMMARY

Existing Uses	Existing shelter for ten homeless families, one room/family, shared bathing, cooking, living rooms. This use has been permitted as a Community House, and thus counts as one unit for density purposes. Total area of existing building: 5,600 SF
Zoning District	Residential High Density (RH); max density is 40 units/acre, maximum lot coverage is 80%. Density increased to 46 units/acre and 92% lot coverage upon compliance with the 15% inclusionary zoning requirement.
Primary Permitted Uses	Appendix A allows, among others, residential (duplex, multi-family, assisted living, boarding house (up to 4), Group Home, etc. See Appendix A, Use Table for full list.
Primary Conditional Uses	With CU approval: Emergency Shelter, boarding house (5 or more). See Appendix A, Use Table for full list.
Lot Size	18,015 SF (.414 acres) as surveyed. Frontage: 90' +/-; Depth: (198' East, 202' West).
Inclusionary Zoning	Applicable when creation of 5 or more units. When applied, IZ increases density in RH to 46 units/acre, and lot coverage to 92%.
Density	Residential density @ 40 units/acre: Lot size 18,015 SF (18,015 SF/ 43,560 SF = .414 X 40 = 16.56 units; 16.56 rounds up to 17 units less one existing = 16 new units. Residential density @ 46 units/acre: Lot size 18,015 SF (18,015 SF/ 43,560 SF = .414 X 46 = 19.04 units; therefore, total allowable number of units is 19.04 rounded down to 19, less one existing = 18 new units. Proposal is for 16 new units.
Lot Coverage	80% increased to 92% w/IZ.
Setbacks	Front: avg of two adjacent lots on both sides, +/- 5'; side: 10% of width, minimum 5', maximum 20'; rear: 25% of lot depth, minimum 20', maximum 75'. Front setback is existing.
Height	Max 35'; however, the Table in Section 9.1.12 allows for an increase in height of 12' when a minimum increase of 5% of units complying with IZ. This increase is easily exceeded by the program intent of the project, which is that all units will meet IZ requirements.
Proposed use	New multi-family units in an addition to the existing building (Community House) on its north end.
Parking requirements	Section 8.1.6 Affordable Housing and Historic Buildings Exemption: <i>Regardless of location, the Minimum Off-Street Parking Requirements found under Sec. 8.1.8 below shall not apply to any of the following:</i> <i>(a) The creation of permanently affordable inclusionary housing units satisfying the applicable provisions of Article 9 Part 1 - Inclusionary Housing (see Sec. 9.1.10 Income Eligibility and Sec. 9.1.11 Calculating Rents and Selling Prices);</i>
Conclusions	The existing site can be developed to include as much as 18 new housing units; the lot coverage can be increased to 92%; the allowable building height is increased to 47' (35' + 12'). There are no minimum parking requirements.



**Burlington Department of Public Works
Stormwater Program**

234 Penny Lane (Water Plant)
Burlington, VT 05401

PH: 802-863-4501 Email: stormwater@burlingtonvt.gov



Standard Erosion Prevention & Sediment Control (EPSC) Plan

This questionnaire and associated EPSC plan sheets are required for projects

- on properties other than single family (R1) or duplexes (R2) that require a level II or III Certificate of Appropriateness or Major Impact zoning applications and involve 5000 sq. ft. or more of earth disturbance; or
- any activity where a zoning permit is not required but where the project involves 10,000 sq. ft. or more of earth disturbance; or
- if requested by the Stormwater Program due to project characteristics such as slope, soils or proximity to drainage structures or waterbodies.

Please note that you must submit EPSC plan and detail sheets as outlined in section A below.

All projects involving redevelopment or addition of impervious surface must submit the stormwater management screening project (attached) for evaluation or meet with the Stormwater Program to determine the stormwater management requirements for your project.

1. Project Location 278 Main Street Burlington Vt 05402

2. Zoning Permit Address (if different from above): _____

3. Brief Project Description (i.e. building construction, subdivision, site work)

This project proposes the construction of a 4 story multi-residential housing unit and improved parking and access

Please see attached plan set for additional detail.

4. Owner Name: Committee on Temporary Shelter

5. Owner Mailing Address: P.O. Box 1616 Burlington, VT 05402

6. Owner Phone: 802-540-3084 x 201

6. Owner email: jonathanf@cotsonline.org

7. Contractor Name: TBD

☐ Contractor not known at this time

8. Contractor Phone: TBD

9. Contractor Email: TBD

10. Estimated Project Start Date March, 2022

Estimated End Date ~~October, 2022~~

APRIL, 2023

11. Area of Land Disturbance +/- 13,250 sq. ft.

12. Total proposed (existing + new) amount of impervious: +/- 13,260 sq. ft.

14. Does your project require a State Construction Stormwater Permit (9020 or INDC) ? ☐ Yes ☒ No

(You will be required to submit proof of your authorization to discharge prior to initiation of earth disturbance).

A. REQUIRED PLAN SHEETS:

15. Plan sheet(s) MUST BE ATTACHED showing the following:

☒ Limits of disturbance

☒ Location of stockpiles (if any)

☒ Location of stabilized construction entrances

☐ Phasing plan (if appropriate)

☒ Direction of stormwater flow on site

☒ Location of sediment control BMP's (silt fence etc.)

☒ Stabilization measures

16. Detail sheet MUST BE ATTACHED and include details for all EPSC measures listed on the EPSC Plan Sheet. Additionally, notes must be included related to:

- ☒ Daily inspection of roadways and sweeping as necessary
- ☒ Dewatering measures (if applicable)
- ☒ Temporary site stabilization requirements
- ☒ Final site stabilization requirements
- ☐ Winter site stabilization (for disturbance after November 1)
- ☐ Inspection requirements

B. EPSC QUESTIONNAIRE (See last page for typical solutions to these questions)

A) Do you anticipate the need for any dewatering of excavations during the construction? ☐ Yes ☒ No

- If yes, please indicate which plan sheet has details for how dewatering operations will be managed to prevent the discharge of sediment laden water. Sheet(s): Not applicable

B) Will excavated soil be stockpiled on the site? ☒ Yes ☐ No If yes, show locations and EPSC measures for the stockpile on plan sheet(s)

- If no, where is the ultimate disposal of excess soil? Additional soil maybe trucked off site but its ultimate location is not known at this time.

C) Do you plan to park construction vehicles on or disturb City owned property like the greenbelt area? ☐ Yes ☐ No

- If yes, tell us how you agree to repair all disturbances or damage to City owned property and provide a written approval from the City allowing construction vehicles to park on City owned property.

Not applicable

- If no, then please monitor all construction and visitor vehicles and advise all not to park on City owned property.

D) Will stockpiles or disturbed soils be present and/or exposed after Nov. 1st of any construction year? ☐ Yes ☒ No

- If yes, tell us how you plan to stabilize any stockpile and/or disturbed soils.

Not applicable

Do you agree to abide by the following conditions?

☒Y ☐N Applicant will call 863-4501 or email gjohnson@burlingtonvt.gov at least 24 hours prior to initiating earth disturbance and submit the **name and contact (cell phone and email) of the erosion control coordinator for the project**

☒Y ☐N Applicant will post the attached notice in a visible location

☒Y ☐N I acknowledge that it is the responsibility of the owner and his/her representatives to ensure that:

- sediment does not enter surface water bodies (streams, ditches, ponds, lakes, wetlands etc.)
- sediment does not enter City conveyance infrastructure (catch basins, sewers etc.) and
- All sediment must be removed from the city ROW (sidewalks and roadways) by the end of each work

☒Y ☐N Sediment control measures will be installed prior to the initiation of earth disturbance.

- ☒ Y ☐ N During the non-winter construction season (April 15 – November 1): After an initial **14 day** period of initial disturbance, temporary or permanent stabilization (mulching, erosion control matting or tarps for stockpiles or other approved method) of exposed areas and stockpiles will occur at the end of each work day unless:
- Earthwork is to continue in the area within the next 24 hours **and** there is NO liquid precipitation forecast for the next 24 hours; or
 - If work is occurring in a self contained excavation (no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation or utility trenches).
- ☒ Y ☐ N During the winter construction period from November 1 to April 15, any **new disturbance** must be temporarily or permanently stabilized (mulching, erosion control matting or tarps for stockpiles, or other approved method) will occur at the end of each work day unless:
- Earthwork is to continue in the area within the next 24 hours **and** there is NO liquid precipitation forecast for the next 24 hours; or
 - If work is occurring in a self-contained excavation (no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation or utility trenches)
- ☒ Y ☐ N The perimeter of the site and all BMPs will be inspected at the **end of each workday** to ensure that sediment will not leave the site. If sediment has travelled beyond the site boundary, it shall be swept up or otherwise removed and deposited on-site in an upgradient area at the **end of each work day**.
- ☒ Y ☐ N The owner and his/her representatives shall abide by the best management practices (BMPs) indicated in the plan and conditions and in the Vermont DEC Low Risk Site Handbook for Erosion Prevention and Sediment Control (2006). Contact 802-863-4501 for a hard copy or go to the web:
http://vtwaterquality.org/stormwater/docs/construction/sw_low_risk_site_handbook.pdf
- ☒ Y ☐ N If soils will be exposed after November 1st and winter construction has not been permitted the project will **notify DPW prior to October 15th and ensure that sediment control is installed PRIOR to soil freezing**. If the project is completed during the winter months, an additional inspection will be required to ensure that the sediment control is buttoned up for the winter.
- ☒ Y ☐ N Within 48 hours of reaching final grading, the exposed soil will be seeded and mulched or covered with erosion control matting (for slopes steeper than 3:1 or high wind prone areas). Erosion control matting is preferred.
- ☒ Y ☐ N The owner will contact DPW to schedule a stabilization inspection when site work is finished and stabilization measures (seeding and mulching or matting) have been installed.

AGREEMENT

By filling out and signing this plan, I agree to abide by the terms and conditions outlined above. Failure to follow this plan can result in a stop work order by the City of Burlington, fines, or both.

By: ☒ Owner ☐ Contractor

Jordan Farrell

Name

[Signature]
Signature

10-15-2
Date

Additional Conditions of Approval:

AN EROSION PREVENTION AND SEDIMENT CONTROL PLAN

FOR THE PROJECT AT:

278 Main Street

HAS BEEN FILED WITH THE CITY OF BURLINGTON
STORMWATER MANAGEMENT PROGRAM IN ACCORDANCE
WITH CHAPTER 26 OF THE BURLINGTON CODE OF ORDINANCES

THIS REQUIRES THAT MEASURES BE INSTALLED OR TAKEN TO
PREVENT SEDIMENT FROM LEAVING THE SITE AND ENTERING
WATERWAYS AND IMPACTING CITY INFRASTRUCTURE
(RIGHT OF WAY AND STORMDRAINS)

FOR QUESTIONS OR TO REPORT SEDIMENT LEAVING THE SITE
CALL 802-863-4501

This notice to be posted in full view at all times during earth
disturbance. Additional conditions on attached.

Plan Approved by: _____ Date: _____
Burlington Stormwater Program

TYPICAL SOLUTIONS TO PREVENT OR CONTROL SEDIMENT AND EROSION

STOCKPILES

- Cover small stockpiles with a tarp when not being used.
- Install silt fencing or other appropriate devices around the stockpiles to filter sediment.
- Cover stockpiles with straw or other approved mulching material.
- Plan to remove any unusable material as soon as possible from the site to an approved location.
- Plant grass and mulch stockpiles that will be on site for more than 14 days.
- Cover, vegetate or install erosion matting on stockpiles that will remain disturbed over the winter.

DISTURBED AREAS

- Maintain vegetated buffers around disturbed areas.
- Install silt fencing or other appropriate device to filter sediment washing off from disturbed areas. Remember that the bottom of the silt fence must be “keyed in” (dug into ground) to work correctly.
- To prevent sediment from running off your site via your driveway (or other paved areas where you can’t install silt fence) use a row of hay bales or tube sand.
- Cover disturbed areas as soon as possible with straw or other approved mulching material. Use erosion control matting in high wind, traffic or slopes steeper than 3:1 (horizontal to vertical), and follow the manufacturer’s guidelines staple the matting down.
- Plant grass and mulch or use erosion control matting all disturbed areas that will remain exposed for more than 14 days.
- Cover, vegetate or install erosion matting on areas that will remain disturbed over the winter.
- Protect ditches, catch basins or water bodies off-site by using silt fencing, gravel check dams or other approved sediment control methods.

CONSTRUCTION VEHICLES

- Do not park construction vehicles on City owned green space. Vehicles disturb vegetation and compact the soil, thereby reducing its ability to infiltrate stormwater. Any green belt disturbance will need to be permanently stabilized with grass seed and erosion control matting.
- Prevent sediment from leaving the project by cleaning the tires of vehicles, or use clean gravel at project access points to clean tires.
- Sweep city streets, sidewalks and bikepaths daily or as needed to remove sediment transported from the project.

RESOURCES

The Vermont Handbook for Erosion Prevention and Sediment Control at:
http://vtwaterquality.org/stormwater/docs/construction/sw_low_risk_site_handbook.pdf

The City of Burlington Stormwater Program Page at
<http://www.burlingtonvt.gov/DPW/Stormwater-Management>



Stormwater Management Plan Pre-Screening

Please provide the following information to the Stormwater Program (stormwater@burlingtonvt.gov, ph: 863-4501) in order to determine what the requirements will be for your project.

- General Information

- Project Address: 278 Main Street
- Owner: Committee on Temporary Shelter
- Engineer: Civil Engineering Associates, Inc.
- Brief project description:

This project proposes the construction of a 4 story multi-residential housing unit and improved parking and access.

- Stormwater Management Plan

- Impervious¹ change summary

Condition	Type	Total Impervious (s.f.)
Existing Conditions	Existing Impervious	9,730
Proposed	Total Proposed (1+2+3)	13,260
	1) New ²	4,000
	2) Existing to Remain	3,365
	3) Redeveloped	5,895
Net New	Total Proposed – Existing	3,530

If available at this time:

- Existing conditions: *description of existing conditions, description of existing stormwater system, existing drainage issues, current connectivity to City system*

The existing stormwater runoff is primarily handled via sheet flow from the site. The low point of the property is at the northwest corner of the property. Overland flow from that location proceeds northwesterly to the parking lot at Consolidated Communications where a catch basin collects and transports the flows to the city Stormwater collection system.

- Proposed Conditions: *description of proposed conditions, brief description of proposed stormwater system, proposed method of discharge to receiving water or City system (overland flow, direct connection via pipe, existing or new manhole or CB)*

The new impervious surface is proposed to be mitigated through the use of a subsurface stormwater chamber system. This system will provide both initial runoff reduction through its storage of intercepted flow but will also provide storage capacity beyond the initial storm duration that is not offered under the existing conditions. The carrying capacity of the system components is 2" of direct runoff from all of the impervious surfaces on the property. It should be noted that the south 1/4 of the site drains to Main Street (and not into the chambers) and this will not change under the proposed conditions. When the system becomes inundated, runoff will overflow to the northwest corner of the site just as it does under existing conditions.

¹ Impervious = any surface off of which water runs off rather than infiltrates, including, but not limited to rooftops and paved/unpaved (gravel/packed dirt) driveways, walkways and patios

² Impervious where there is not currently impervious

**COTS 278 Main Street
Transportation Demand Management Plan**

There are no parking requirements for this project, as per Section 8.1.6 Affordable Housing and Historic Buildings Exemption, which states: *Regardless of location, the Minimum Off-Street Parking Requirements found under Sec. 8.1.8 below shall not apply to any of the following:*

(a) The creation of permanently affordable inclusionary housing units satisfying the applicable provisions of Article 9 Part 1 - Inclusionary Housing (see Sec. 9.1.10 Income Eligibility and Sec. 9.1.11 Calculating Rents and Selling Prices);

Absent of any zoning requirements for parking, COTS recognizes the necessity of cars and is providing 9 parking spaces to serve the existing building and the new addition. In our analysis of parking needs, COTS has researched the parking demands experienced at the 90 units of permanent affordable housing that it owns and operates, a high percentage of which is dedicated to households who have experienced homelessness. One property with 14 units has 2 tenants (14%) who own cars; in another property with 29 units, 6 tenants (20%) own cars. We expect to see similar car ownership numbers at this location, and have used 20% as a planning tool.

Existing Conditions

The existing building is zoned as a Community House and is occupied as a shelter for families and is staffed. There are 10 bedrooms in the existing facility. Many of the families served by COTS do not have cars, and rely on the site's proximity to bus routes, as well as the many services such as schools, library, the YMCA, and food stores that are all within a few blocks.

Proposed Conditions

The proposed addition will create 16 units in addition to the 10 bedrooms in the existing facility. We expect to see similar car ownership numbers at this location as at other COTS facilities. If one were to count the existing bedrooms as units for traffic computation purposes, then a 20% vehicle parking demand would require approximately 5 parking spaces. Based upon this projected demand, the nine proposed spaces will allow extra spaces for staff and visitors, as well as some flexibility in actual demand.

The ITE Trip Generation manual was used to estimate project generated vehicle trips. Land Use Code 221 – Multifamily Housing (Mid-Rise 3 stories or more) was used to develop the estimated additional trip generation associated with this proposed building addition. The unadjusted values indicate that the proposed addition will create 6 AM Peak Hour vehicle trip ends and 7 PM Peak Hour trip ends.

Transportation demand management for this facility is heavily oriented toward location and supportive transportation infrastructure. The site location is well suited for non-automobile trips as the site is positioned close to the bus route, schools, library, YMCA and grocery stores. Furthermore, street parking and public lots are available nearby, and the City opens its garages during snow removal periods for residents of the city who do not have dedicated parking.

As outlined above, only 20% of the typical occupants of these units own a vehicle. When taking into account the staffing requirements for the facility, a conservative estimate of the traffic would be 40% of that which would be traditionally experienced at a Multifamily mid-rise apartment building.

Utilizing the upper 40% values the adjusted trip generation analysis values indicate that the proposed addition will create 3 AM Peak Hour vehicle trip ends and 3 PM Peak Hour trip ends. These are de minimis values in relation to the approximate 1400 AM and 1800 PM Peak hour trip end volumes on Main Street.

Wards 1 & 8 Neighborhood Planning Assembly (NPA)
September 8, 2021 7:00-9:00PM
Hybrid Meeting

Zoom – please click the link below to join the webinar

<https://us02web.zoom.us/j/84036123619>

Telephone:

US: +1 929 205 6099

Webinar ID: 840 3612 3619

International numbers available: <https://us02web.zoom.us/j/84036123619>

You Tube:

YouTube Live Stream: NPA Wards 1&8

Click on upcoming/next meeting

YouTube Livestream: NPA Wards 1&8 Playlist, click on upcoming/next meeting: https://youtube.com/playlist?list=PLIjLFn4BZd2Pa3H8I30gy_gZ3NL6orXcN

Note: *This is for live streaming purposes only. Ward residents should participate via Zoom or in person if they wish to vote or speak*

In Person – Sharon Bushor Room, Burlington City Hall

We will determine who from our Wards will serve on the Ad Hoc Committee on Redistricting at this meeting. Please note the rearrangement of our traditional agenda to get this important work done.

- | | |
|--------|--|
| 7:00PM | Announcements, Introductions |
| 7:05PM | Speakout |
| 7:15PM | Appointment of Ward representatives to Ad Hoc Committee on Redistricting
Overview and Expectations – Tom Derenthal
'Self-nominations' and nominations
Nominee introductions and statements with NPA Q&A
Election |
| 7:45PM | Burlington's Capital Plan, November Ballot Items – Martha Keenan, Capital & Special Projects Director, Clerk & Treasurer's Office |
| 8:10PM | Addition, COTS Family Shelter at 278 Main Street – Bob Duncan, Duncan Wisniewski Architecture |
| 8:25PM | City Council Reports |
| 8:50PM | School Commissioner Reports |
| 9:00PM | Adjourn |



City of Burlington
Department of Public Works

Water Resources Division
234 Penny Lane
Burlington, VT 05401
802.863.4501 P
www.burlingtonvt.gov/DPW

Chapin Spencer
PUBLIC WORKS DEPARTMENT DIRECTOR

Megan Moir
WATER RESOURCES DIVISION DIRECTOR

September 8, 2021

Bob Duncan
Duncan-Wisniewski Architecture
255 South Champlain Street
Burlington, VT 05401

Re: Water and Sewer Capacity for a 16 unit Addition at 278 Main Street

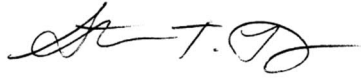
Dear Bob,

This letter is to inform you, Burlington Planning & Zoning, the State of Vermont Environmental District and other interested parties that the City of Burlington's water and wastewater facilities have sufficient capacity to handle flows associated a 16 unit addition at above address. Using Table 8-1 from the State of Vermont's latest (2019) Environmental Protection Rules we have calculated the additional flows to be 5,760 gpd (gals/day) for water and 4,112 gpd for sewer.

Flow from this area is treated at our Main Wastewater Plant located on Lavalley Lane. It is important to note that this letter only addresses treatment plant and not distribution or collection system capacities. *Our collection system serving this area is a combined sewer system (CSS) so our efforts over many years has been to remove stormwater input to the CSS to reduce the frequency and/or duration of combined sewer overflows (CSOs) . We have a draft final combined sewer offset policy that in summary requires customers contributing more than 1,000 gpd new flow to our CSS to either 1) remove stormwater input from their site to offset increased wastewater baseflow or if not feasible, then 2) pay a fee to Water Resources so we can construct a stormwater project within the same sewershed to mitigate your increased input to our system.* We will be happy to provide you or your client more direction regarding our offset policy.

This letter is good for a period of three (3) years. Any changes in flow estimates or property usage requires reapplication. Please feel free to call me at 343-0125 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Roy". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Steve Roy, P.E.
Senior Water Resources Engineer
Burlington Public Works

EXISTING BUILDING



WEST SIDE YARD



FRONT OF EXISTING BUILDING, SOUTH SIDE



EXISTING BUILDING



EXISTING STONE FOUNDATION



EXISTING STONE FOUNDATION



REAR OF EXISTING BUILDING

278 MAIN STREET

BURLINGTON, VERMONT

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DUNCAN • WISNIEWSKI ARCHITECTURE
A Professional Corporation

SCHEMATIC DESIGN

Duncan
Wisniewski
ARCHITECTURE



DATE: 09.30.2021

255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

A0.1

SITE CONTEXT



288 MAIN STREET WEST SIDE



288 MAIN STREET WEST SIDE



288 MAIN STREET SOUTH EAST SIDE



VIEW OF PROPERTY LOOKING SOUTH



VIEW FROM PROPERTY LOOKING AT REAR NEIGHBOR TO THE NORTH

278 MAIN STREET

BURLINGTON, VERMONT

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SCHEMATIC DESIGN

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A0.2

MAIN STREET



EDMUNDS SCHOOL



MEMORIAL AUDITORIUM



CONSOLIDATED COMMUNICATIONS



288 MAIN STREET



300 MAIN STREET

278 MAIN STREET

BURLINGTON, VERMONT

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A0.3

PLANT SCHEDULE FOR 278 MAIN STREET

TREES

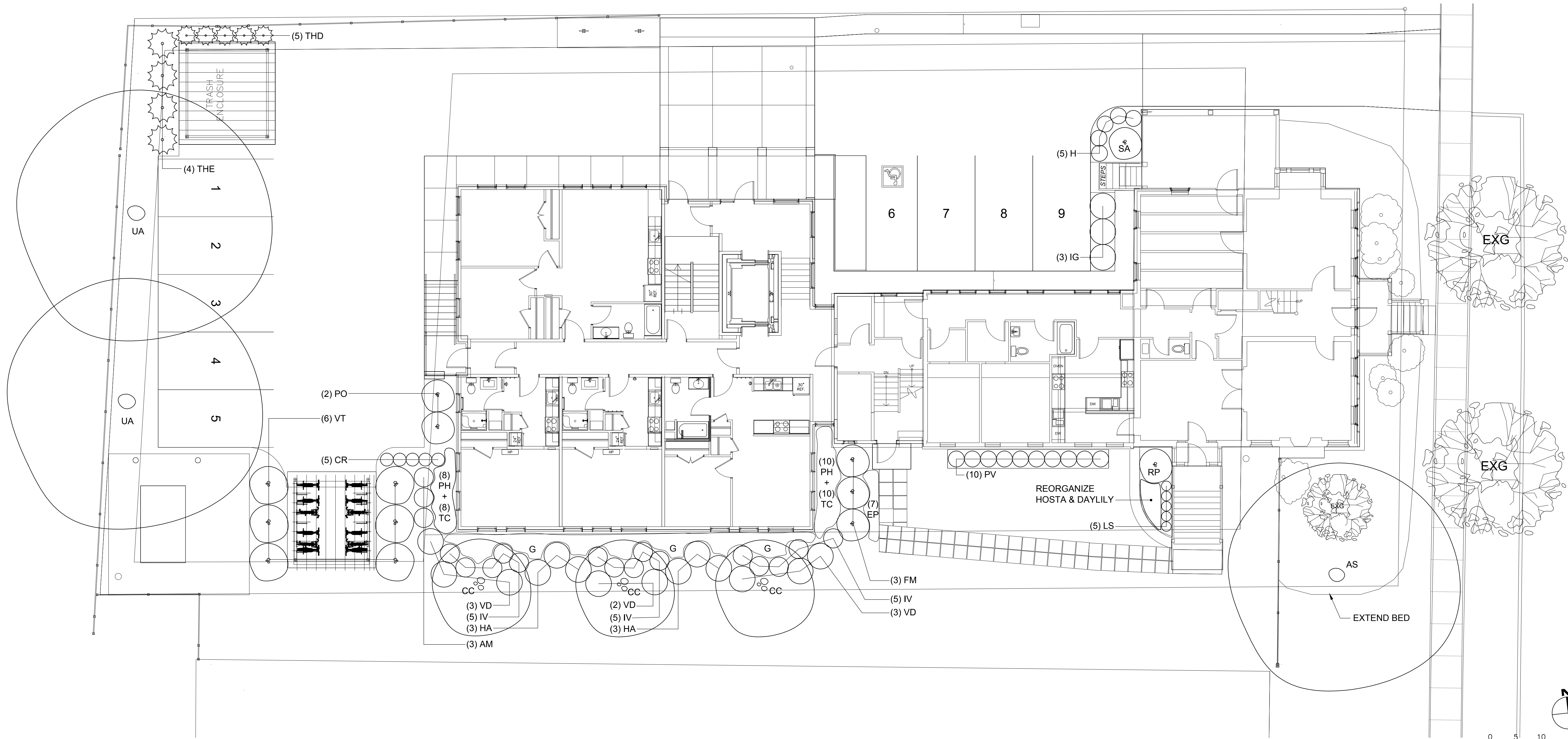
Key	Botanical Name / Common Name	Characteristics	Size	Qty.
AS	Acer saccharum / Sugar Maple	orange fall foliage	2.5-2" cal	1
CC	Cercis canadensis / Eastern Redbud	pink spring blooms, fall foliage	2-2.5" cal	3
UA	Ulmus Americana 'Princeton' / Elm cultivar	classic vase shaped canopy	2.5-2" cal	2

SHRUBS

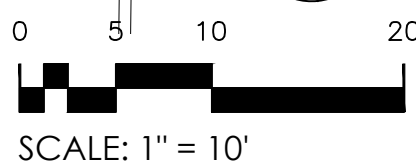
Key	Botanical Name / Common Name	Characteristics	Size	Qty.
AM	Aronia melanocarpa 'Viking' / Purple Chokeberry	white fragrant spring blooms, fall foliage, berries	3 gal	3
FM	Fothergilla major 'Blue Shadow' / Fothergilla	white spring blooms, blue-grey foliage	3 gal	3
HA	Hydrangea arborescens 'Annabelle' / Smooth Hydrangea	white summer blooms	3 gal	6
IG	Ilex glabra 'Densa' / Inkberry	broadleaf evergreen, summer berries	3 gal	3
IV	Ilex verticillata 'Red Sprite' / Female Compact Winterberry	red fall/winter berries, red fall foliage	3 gal	13
IV	Ilex verticillata 'Jim Dandy' / Male Winterberry	red fall foliage	3 gal	1
PO	Physocarpus opulifolius 'Ginger Wine' / Ninebark	white spring blooms, burgundy foliage	3 gal	2
RP	Rhododendron prinophyllum 'Marie Hoffman' / Roseshell Azalea	pink spring blooms	3 gal	1
SA	Symphoricarpus Albus / Snowberry	late summer white berries	3 gal	1
THD	Thuja occidentalis 'Degroot's Spire' / Columnar Arborvitae	evergreen, columnar	5-6' hgt	5
THE	Thuja occidentalis 'Emerald Green' / Pyramidal Arborvitae	evergreen, pyramidal	6-7' hgt	4
VD	Viburnum dentatum 'Blue Muffin' / Arrowwood	white spring blooms, fall berries and foliage	3 gal	8
VT	Viburnum trilobum 'Bailey Compact' / Highbush Cranberry	white spring blooms, fall berries and foliage	3 gal	6

PERENNIALS

KEY	Botanical Name / Common Name	Characteristics	Size	Qty.
CR	Cimicifuga racemosa 'Pink Spike' / Bugbane	white fragrant summer blooms, burgundy foliage		5
EP	Echinacea purpurea 'Prairie Splendor' / Coneflower	pink summer blooms		7
G	Wild Native Sod (Vaccinium angustifolium, Comus canadensis, Gaylussacia baccata / Blueberry, Bunchberry, Huckleberry)	Groundcover: Native Sod by the Pallet		143 sqft
H	Hosta 'Blue Angel' / Hosta	blue green heart shaped leaves		5
LS	Lobelia siphilitica 'Great Blue' / Cardinal Flower	blue summer blooms		5
PV	Panicum virgatum 'Shenandoah' / Native Switch Grass	red leaves and gold seedheads		10
PH	Phlox divaricata 'Blue Moon' / Woodland Phlox	blue spring blooms, groundcover		18
TC	Tiarella cordifolia 'Oakleaf' / Foam Flower	white spring blooms, groundcover		18



PRELIMINARY - NOT FOR CONSTRUCTION



525 HERCULES DRIVE
SUITE 2B
COLCHESTER, VT 05446
802.522.0676
CYNTHIA@CYNTHIAKNAUF.COM
CYNTHIAKNAUF.COM

Knauf
LANDSCAPE ARCHITECTURE

Duncan Wisniewski
ARCHITECTURE

256 SOUTH CHAMPLAIN STREET
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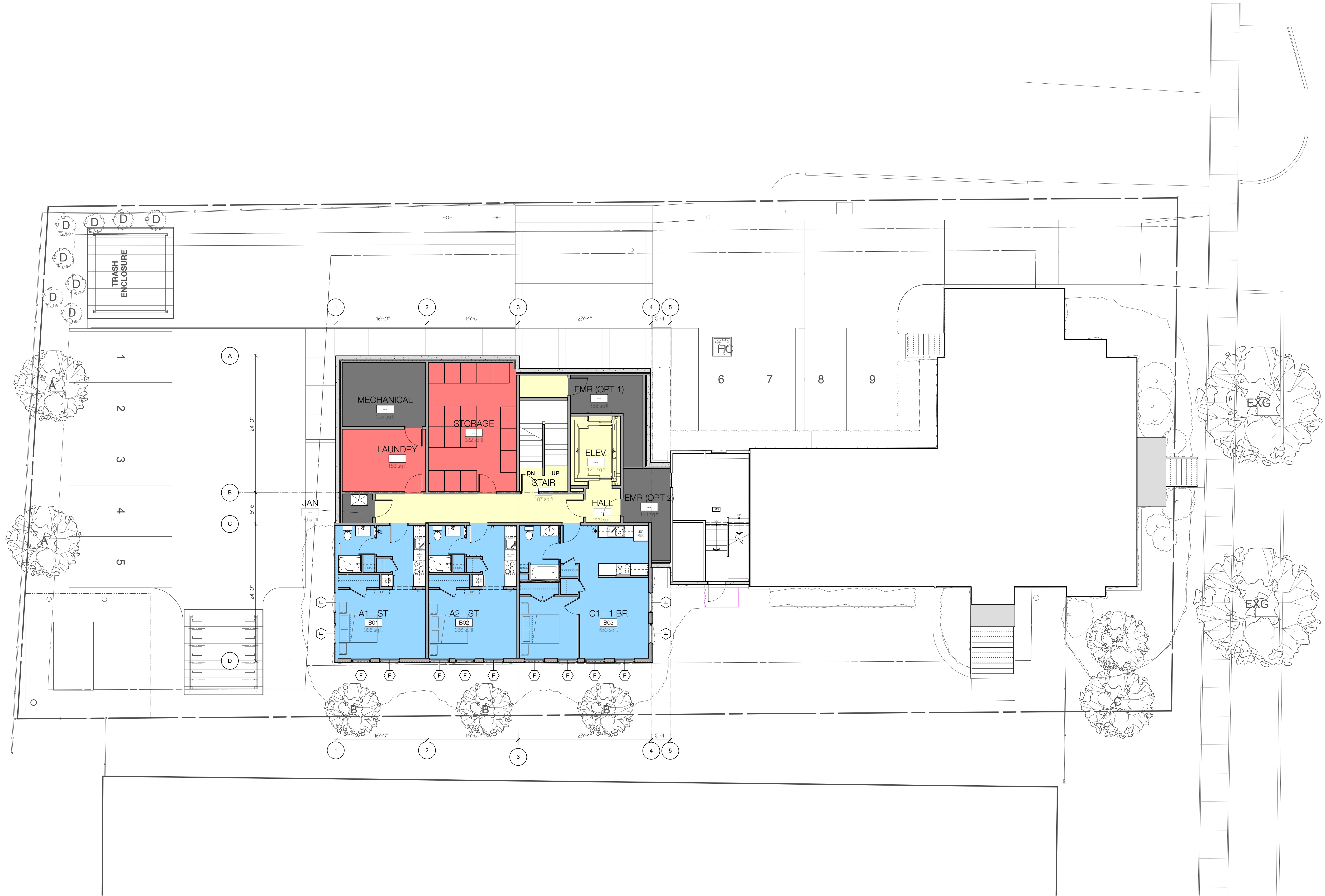
PROJECT NAME
278 Main Street
278 Main Street
Burlington, Vermont

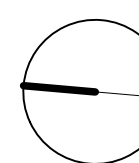
SHEET TITLE
Planting Plan

REVISIONS:

DATE: 10.13.21
SCALE: As Indicated
DRAWN BY: ABC

SHEET
L1.1



 **BASEMENT FLOOR PLAN**
Scale: 1/8" = 1'-0"



278 MAIN STREET
BURLINGTON, VERMONT

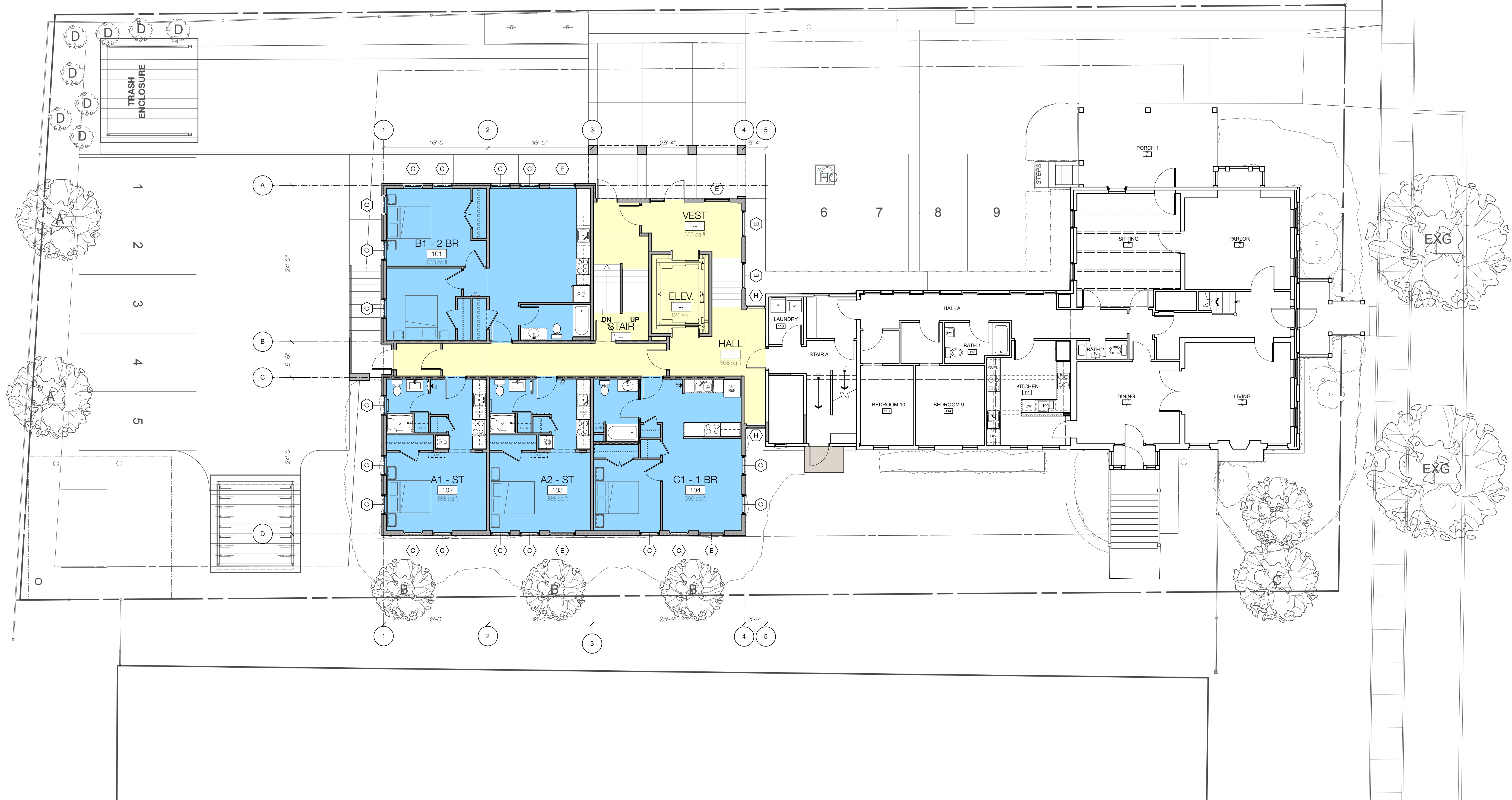
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DATE: 09.30.2021
DRAWN: ABC

A1-0.0



FIRST FLOOR PLAN
Scale: 1/8" = 1'-0"

0 10 15 20 FT

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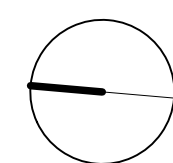
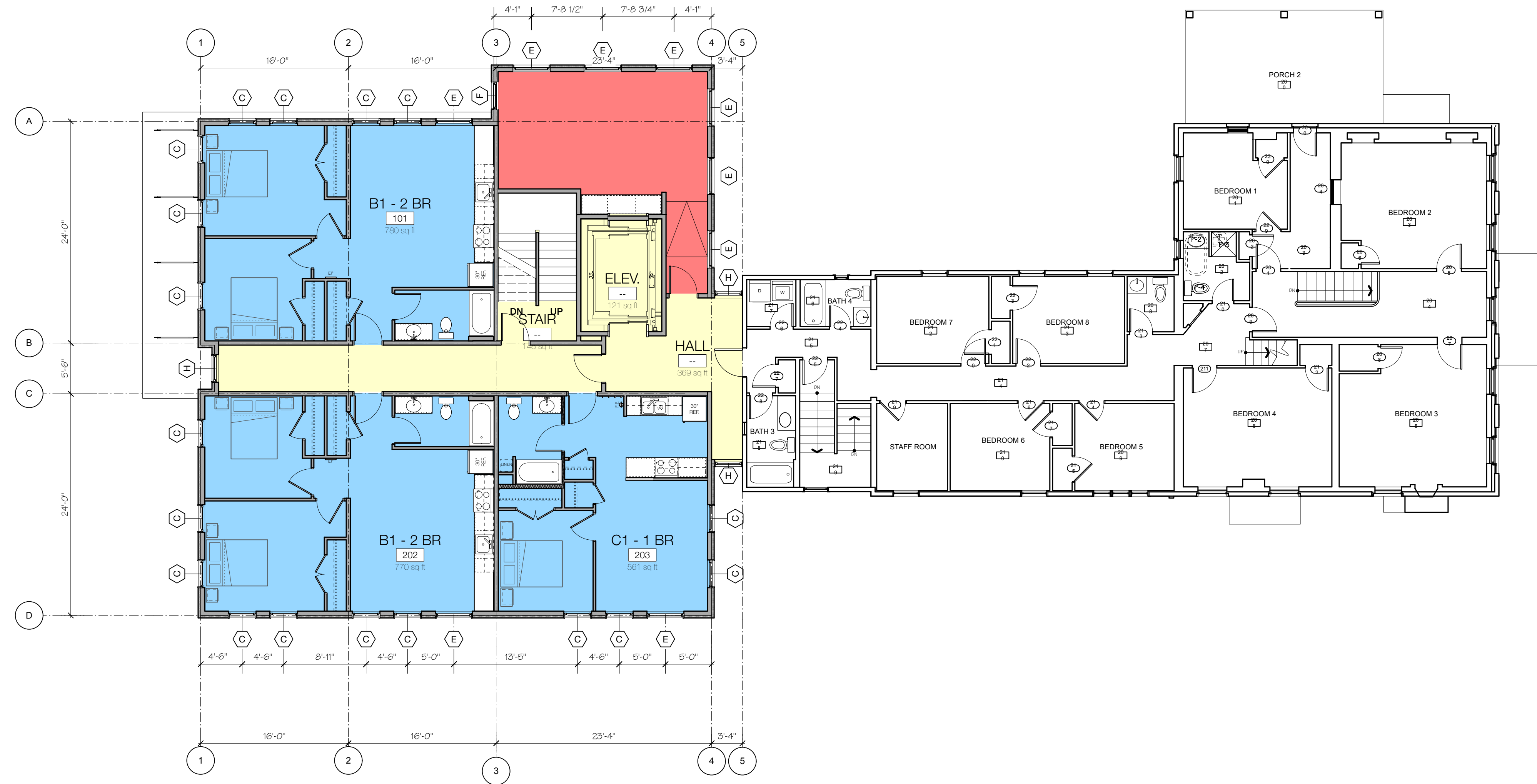
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SECOND FLOOR PLAN

Scale: 1/8" = 1'-0"

0 10 15 20 FT

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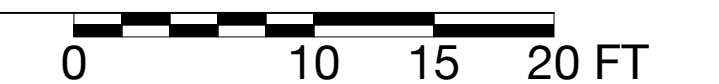
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THIRD FLOOR PLAN
Scale: 1/8" = 1'-0"



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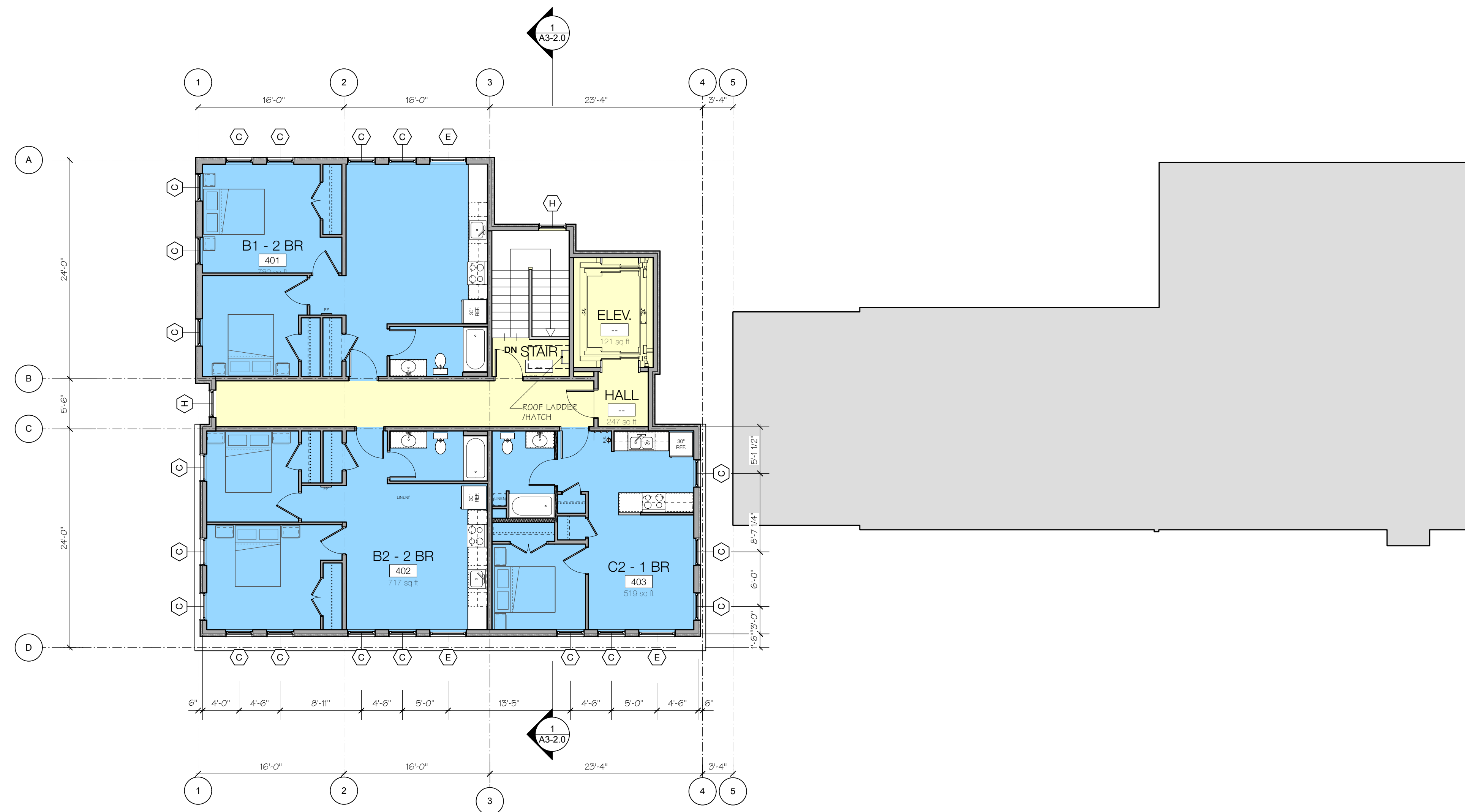
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DRAWN: SB, PJC

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FOURTH FLOOR PLAN
Scale: 1/8" = 1'-0"

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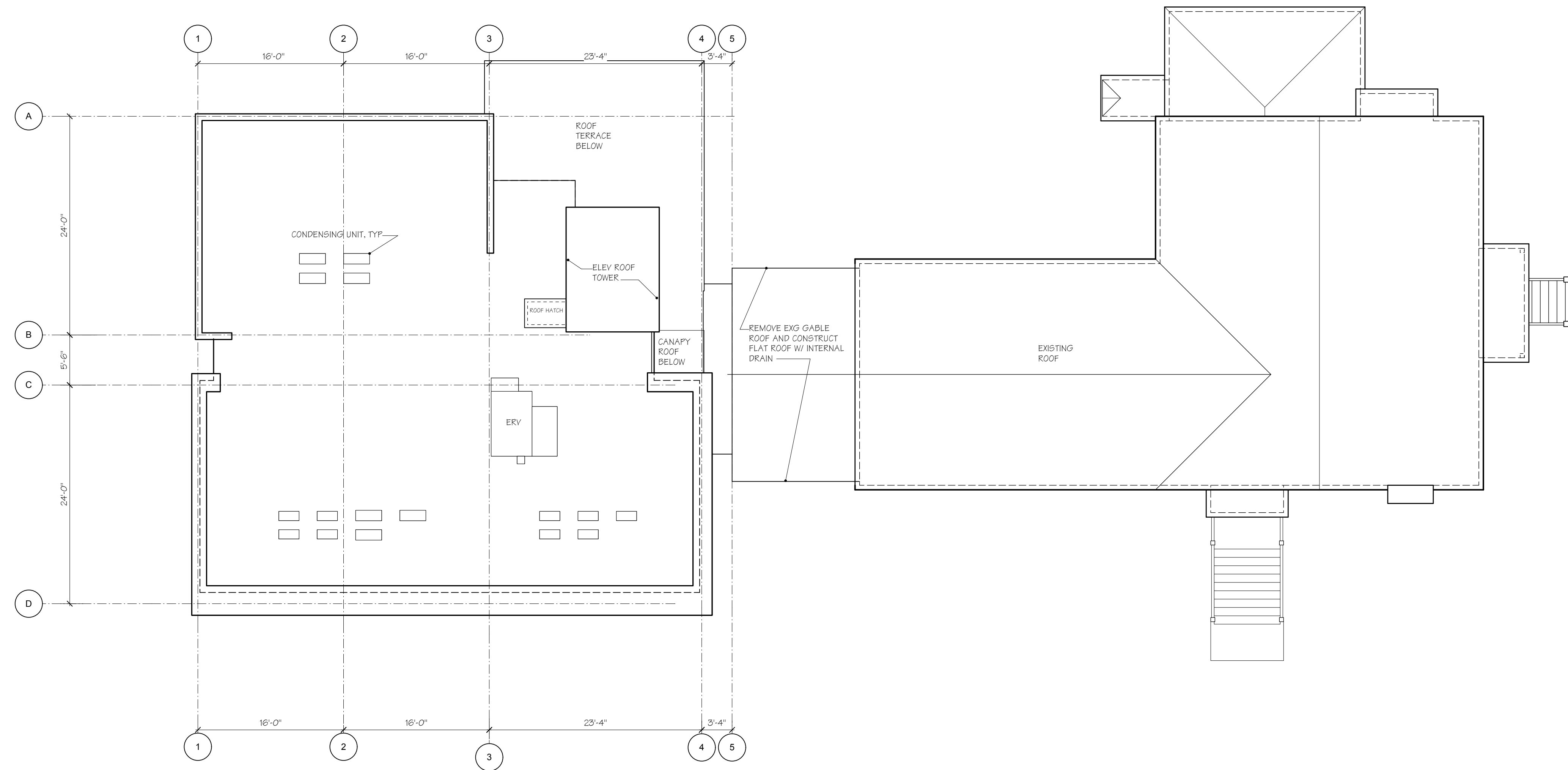
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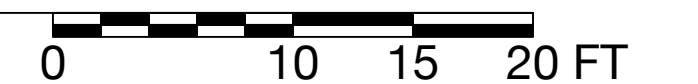
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A1-4.0



ROOF PLAN
Scale: 1/8" = 1'-0"



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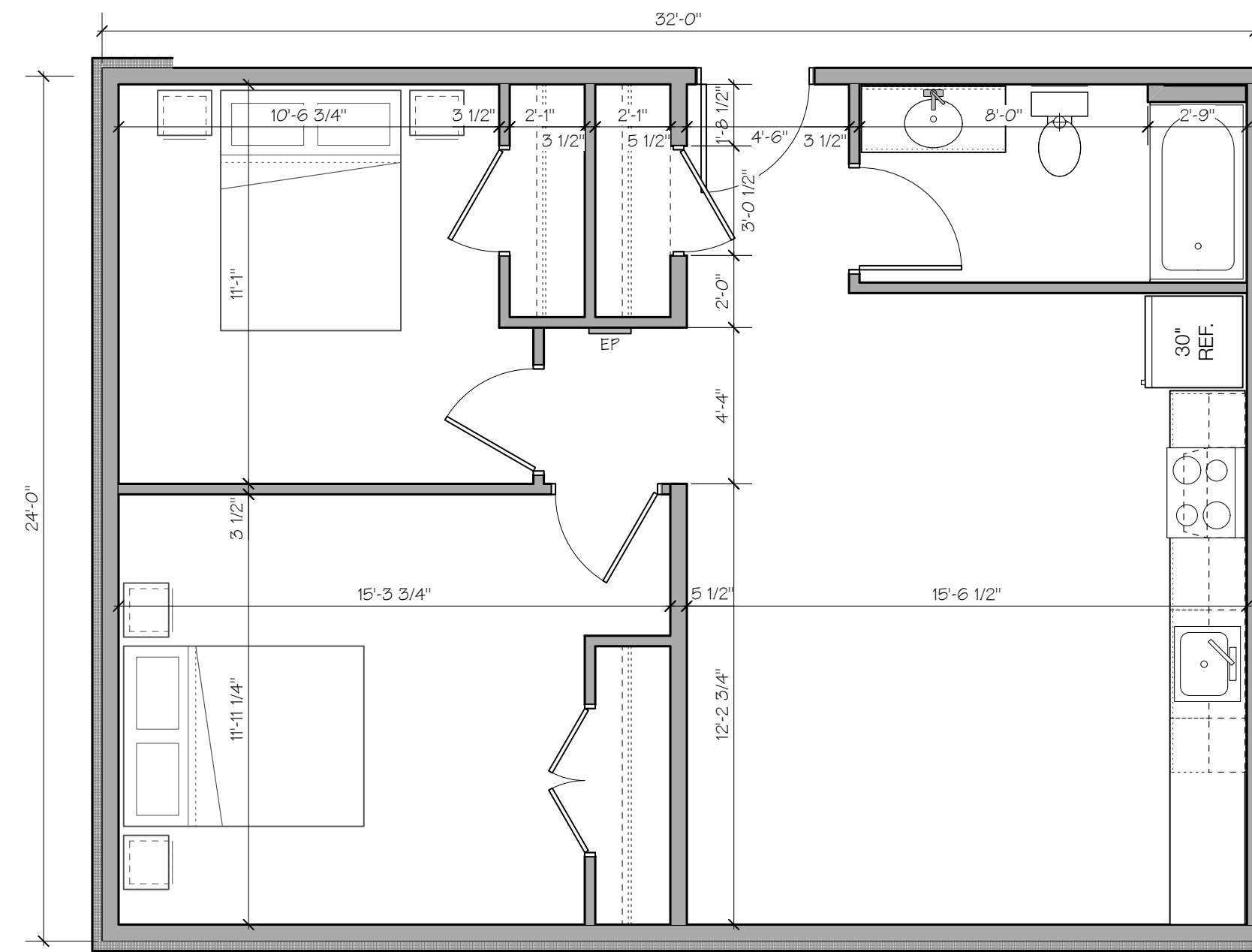
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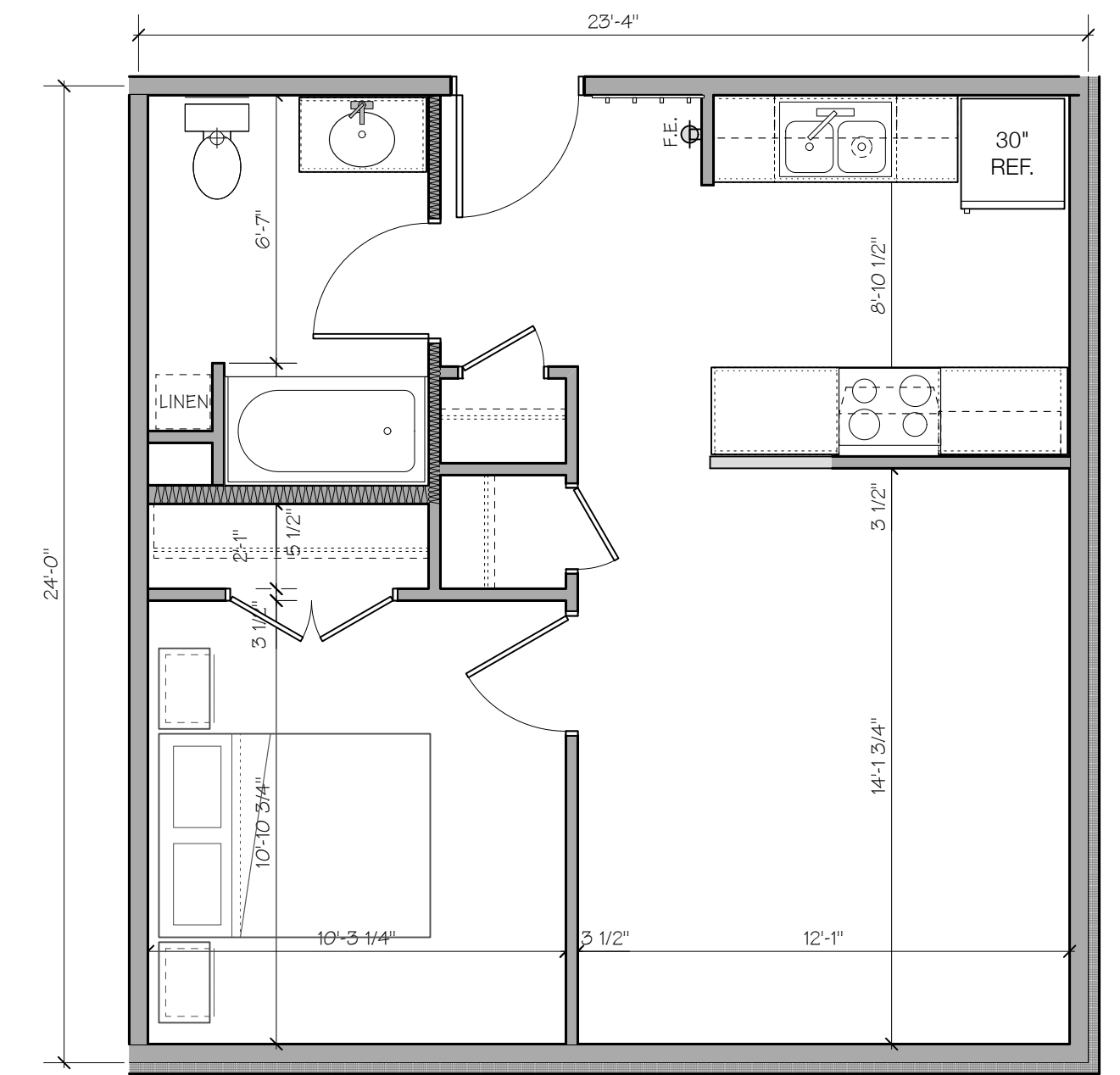
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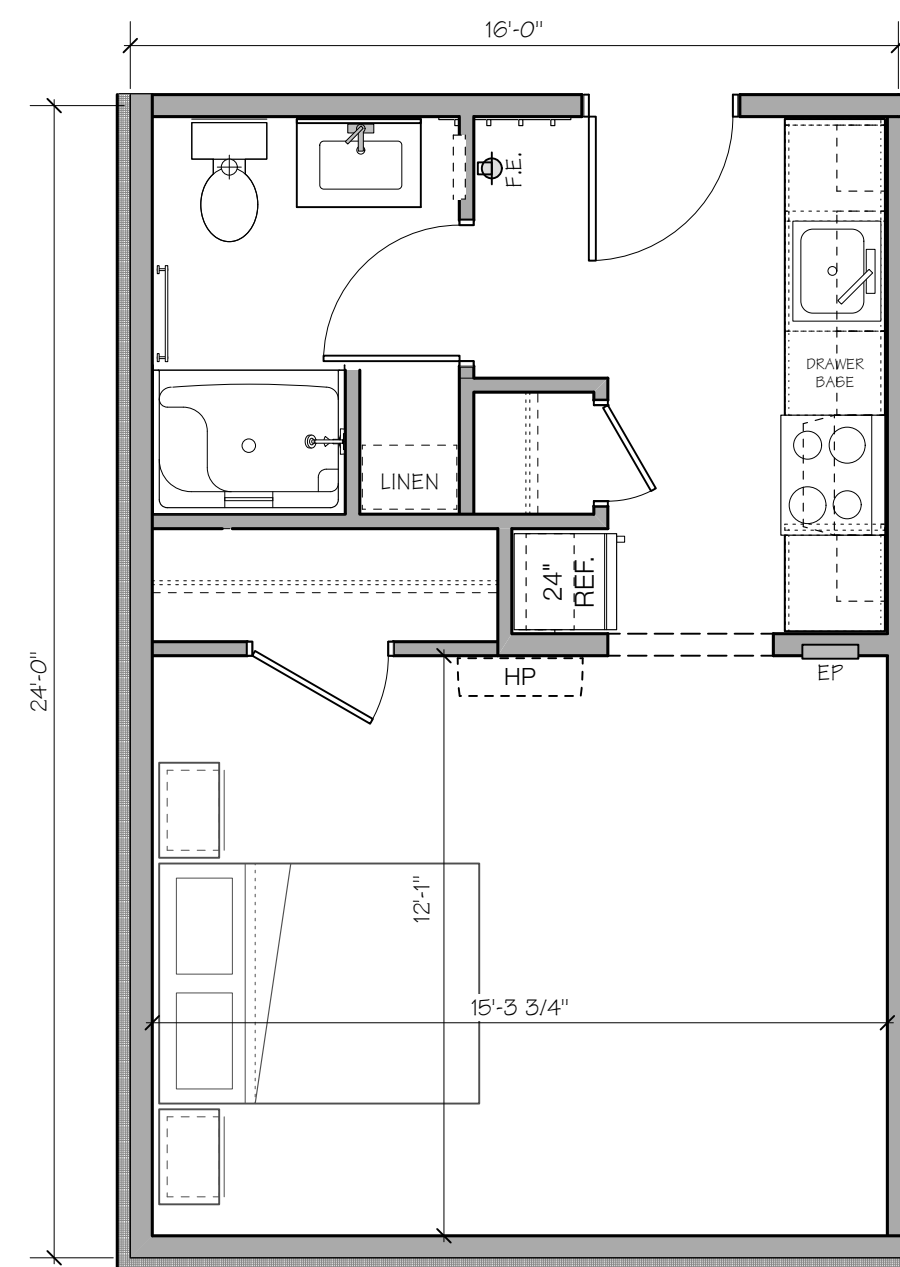
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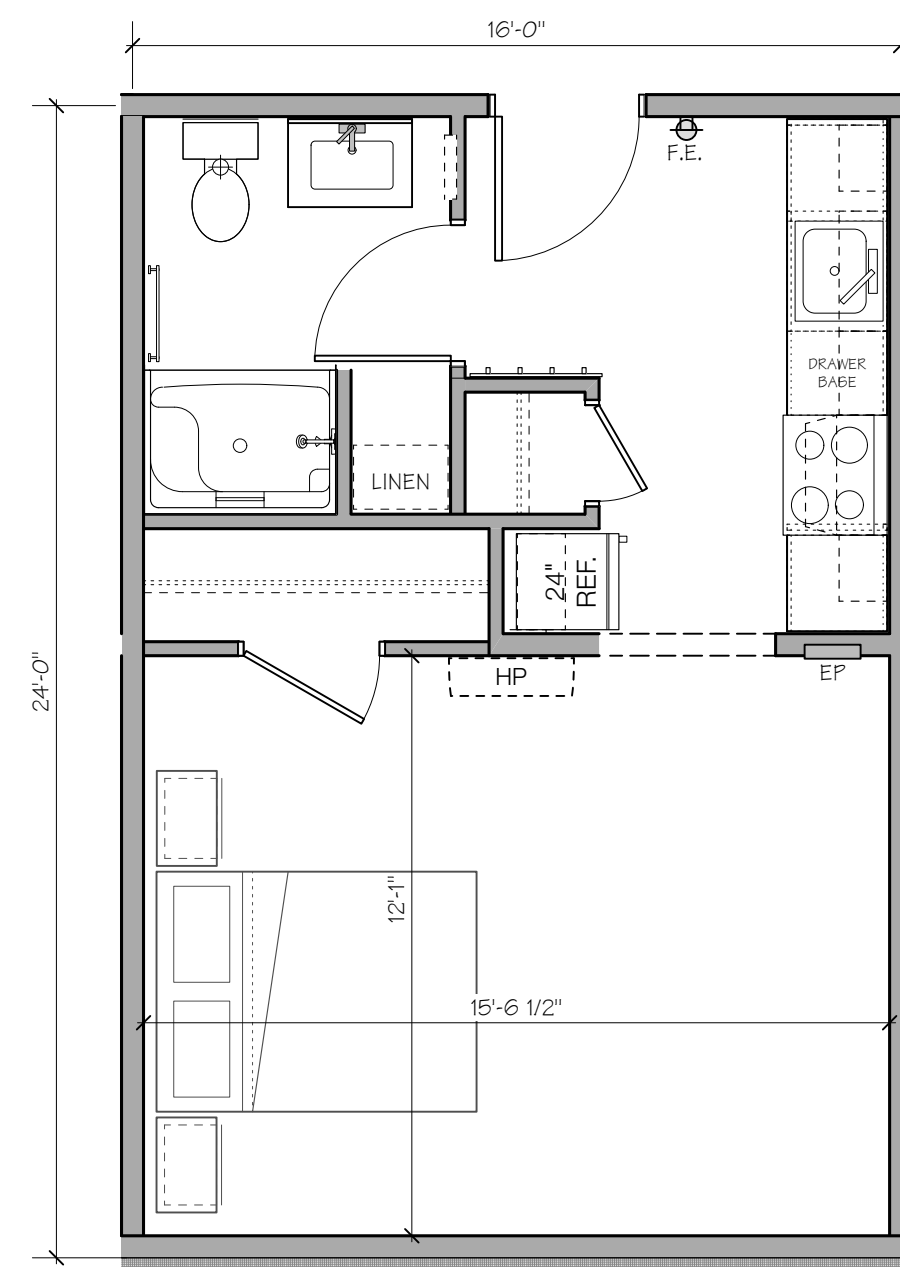
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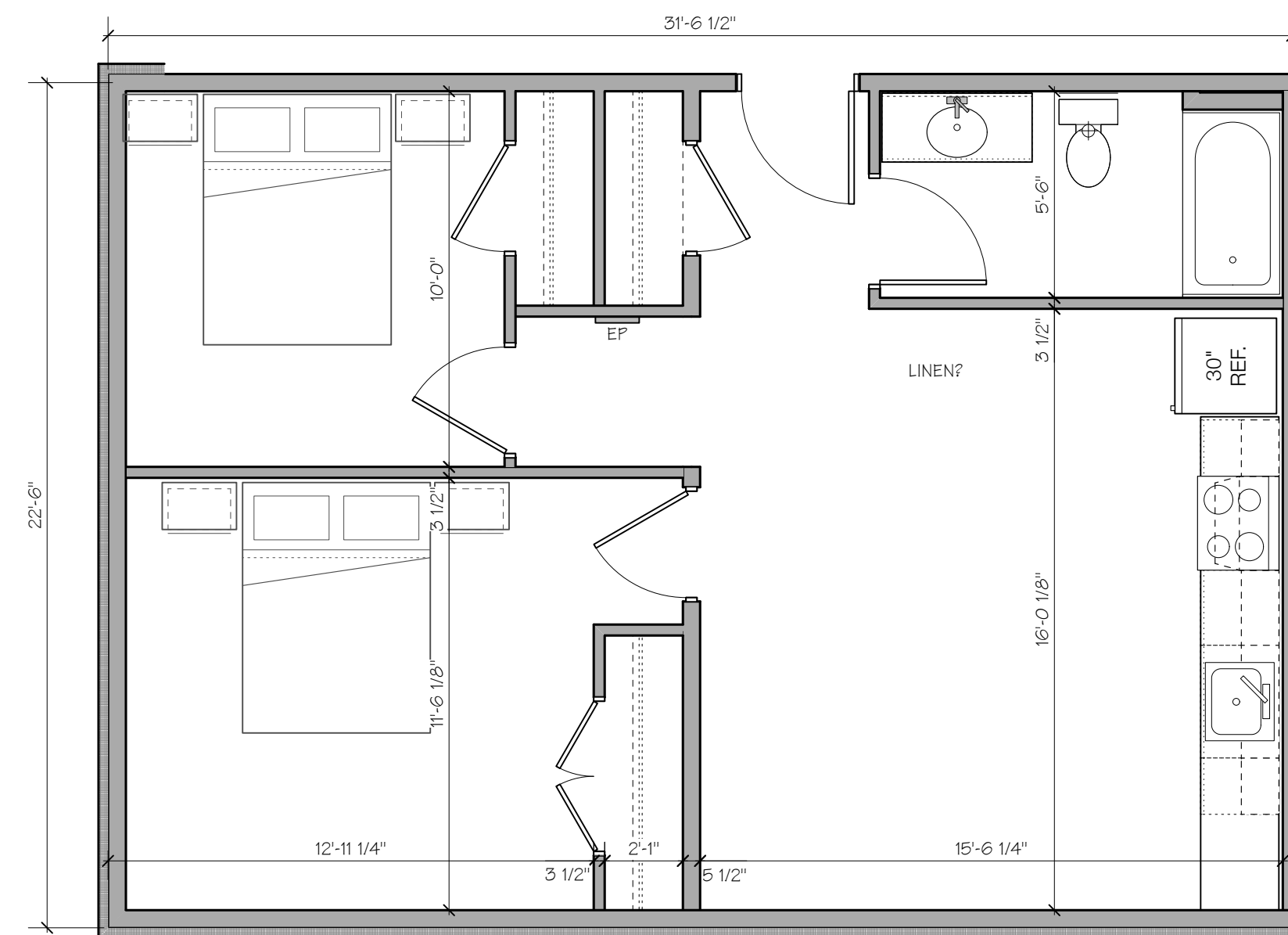
C1 UNIT C1 - 551 SF, UNITS: 104, 203, 303
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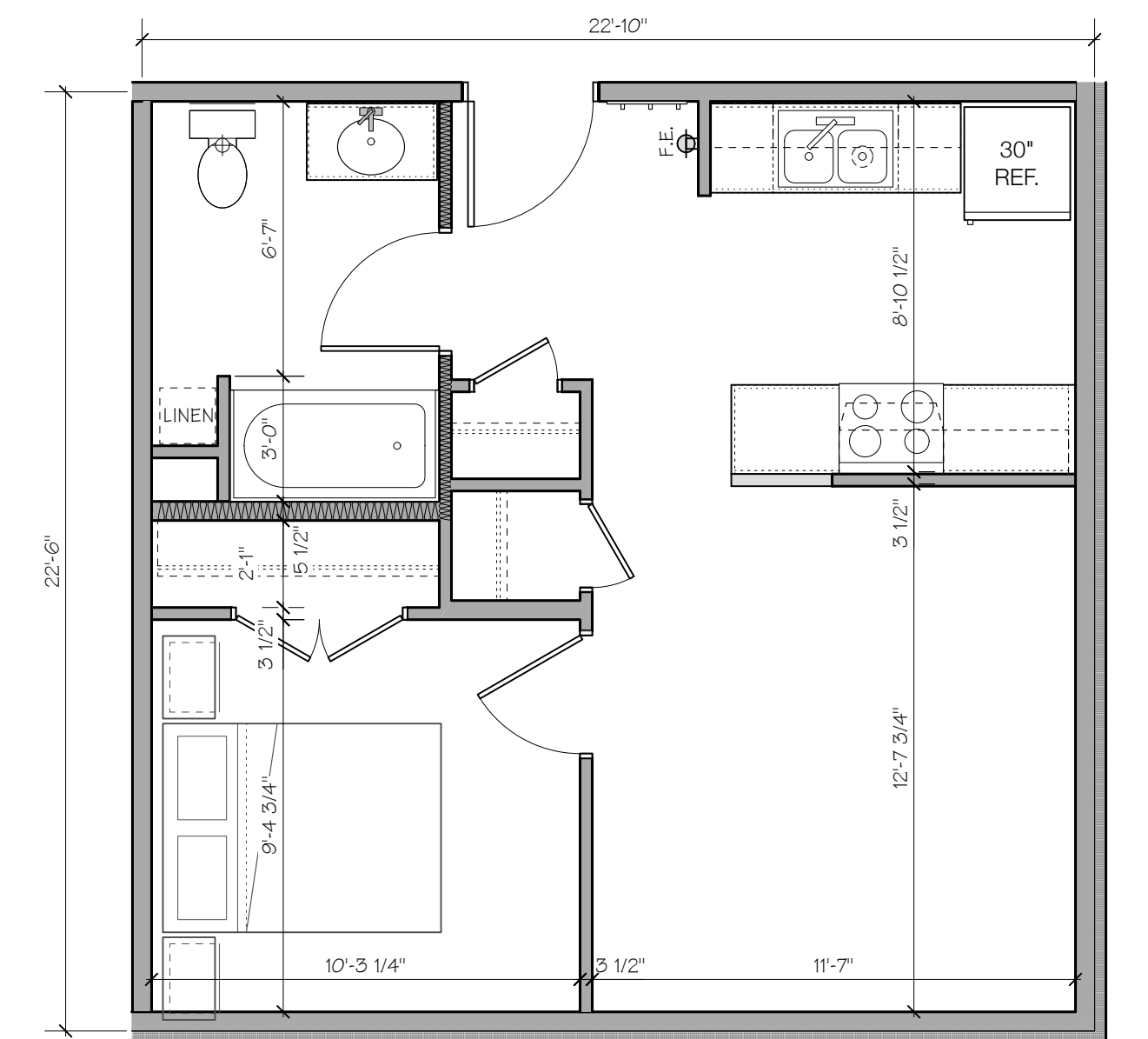
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A2 UNIT D2 - 362 SF NET, UNITS: B02, 103
Scale: 1/4" = 1'-0"



B2 UNIT B2 - 672 SF NET, UNIT: 402
Scale: 1/4" = 1'-0"



C2 UNIT C2 - 505 SF NET, UNIT: 403
Scale: 1/4" = 1'-0"

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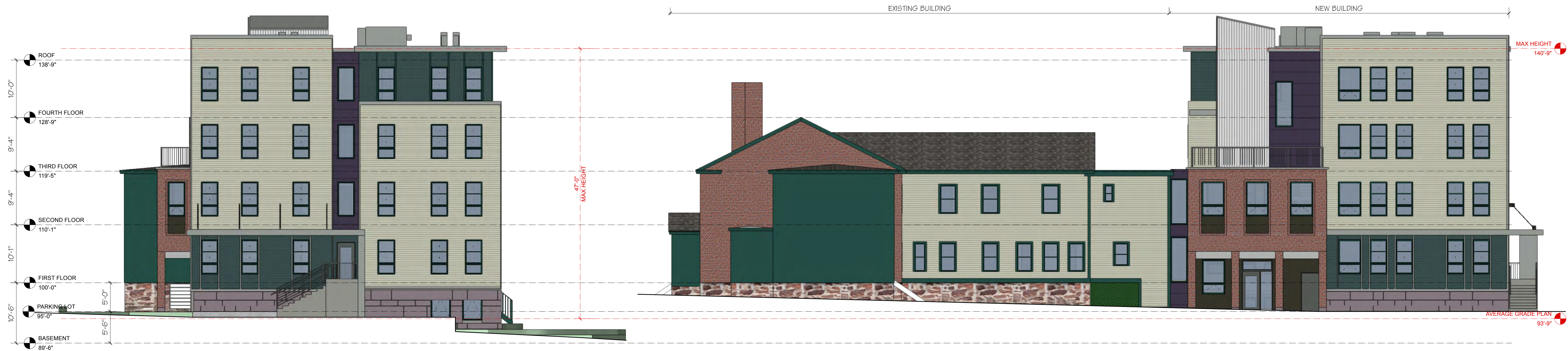
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A1-7.0



1 NORTH ELEVATION
Scale: 1/8" = 1'-0"

2 EAST ELEVATION
Scale: 1/8" = 1'-0"



5 SOUTH ELEVATION
Scale: 1/8" = 1'-0"



4 WEST ELEVATION
Scale: 1/8" = 1'-0"

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A2-1.0



VIEW LOOKING NORTH WEST FROM ABOVE

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VIEW LOOKING NORTH WEST FROM SIDEWALK

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VIEW LOOKING NORTH WEST

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VIEW LOOKING SOUTH WEST

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VIEW LOOKING SOUTH EAST

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VIEW LOOKING NORTH FROM SIDE WALK

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BURLINGTON, VERMONT

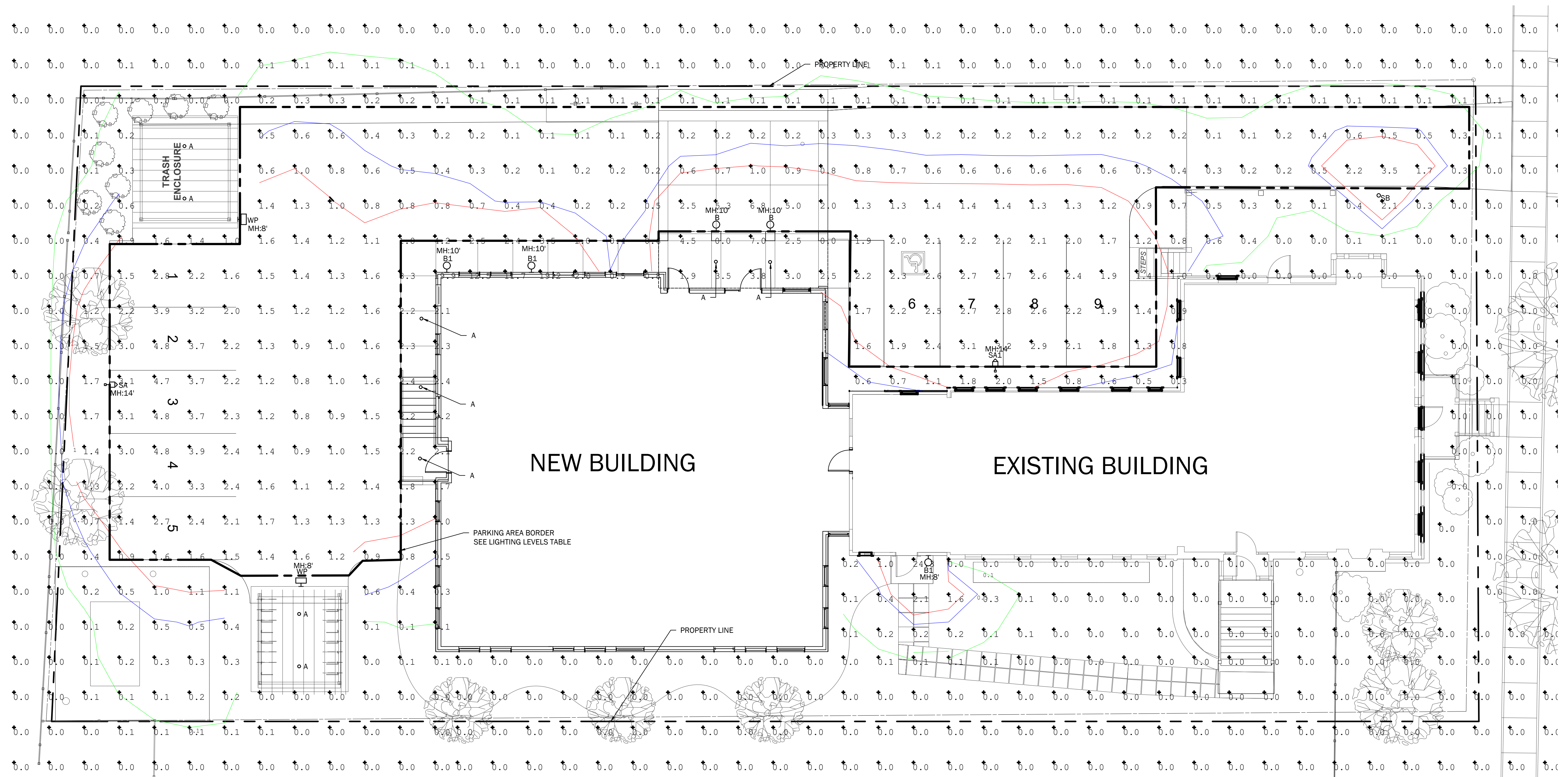
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LIGHTING FIXTURE SCHEDULE							
TYPE	MANUFACTURER & MODEL NO.	DESCRIPTION	LAMPS	WATTS	LUMENS	VOLTS	REMARKS
A	JUNO JSF-5IN07LM-30K-90CRI-MVO LTZT-WH	5" RECESSED	LED	10	700	120/277	0-10V DIMMING, MOUNT TO UNDERSIDE OF CANOPY, PROVIDE MOTION CONTROL UNDER NORTH CANOPY
B	COOPER LIGHTING 9002-W1-RW-LED3090-W-BK	EXTERIOR WALL SCONCE	LED	10	726	120/277	BUILDING MOUNTED FIXTURE REFER TO MOUNTING HEIGHT ON PLAN
B1	COOPER LIGHTING 9003-W1-RW-LED3090-W-BK	EXTERIOR WALL SCONCE	LED	20	1358	120/277	BUILDING MOUNTED FIXTURE REFER TO MOUNTING HEIGHT ON PLAN
SA	LITHONIA DSXO-LED-P1-30K-BLC-MVOLT-SPA	POLE LIGHT	LED	38	3586	120/277	PROVIDE 12' POLE LITHONIA# SSS-10'-4C-DM19AS-DBLXD, ON 2' BASE, MOUNTING HEIGHT OF 14' AFG.
SA1	LITHONIA DSXO-LED-P1-30K-T3S-MVOLT-SPA-HS	POLE LIGHT	LED	38	3586	120/277	PROVIDE 12' POLE LITHONIA# SSS-10'-4C-DM19AS-DBLXD, ON 2' BASE, MOUNTING HEIGHT OF 14' AFG.
SB	COOPER LIGHTING BRT6-A1-730-U-T3-30-BK	BOLLARD	LED	5.4	489	120/277	
WP	LITHONIA WIDGE2-LED-P1-30K-80CRI-VW-MVOLT-SMR-NLTAIR2 PIR	WALL PACK	LED	10	1122	120/277	WALL PACK TO BE MOUNTED AT 8" AFG. WALL PACK TO DIM TO 0% WHEN UNOCCUPIED, 50% WHEN MOTION IS DETECTED

LIGHTING ISOLINES LEGEND	
COLOR	FOOTCANDLES
RED	1.0
BLUE	0.5
GREEN	0.1

LIGHTING LEVELS TABLE				
Description	Symbol	Avg	Max	Min
PARKING LOT	+	1.4 fc	6.6 fc	0.1 fc

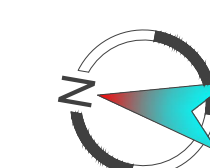
SITE PHOTOMETRIC PLAN
SCALE: 1/8" = 1'-0"



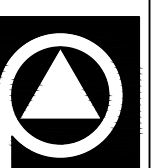
PERMIT SET

9/30/21

278 MAIN STREET



Pearson & Associates
MECHANICAL & ELECTRICAL ENGINEERS
A SUBSIDIARY OF DuBOIS & KING INC.



DATE: 09.30.2021
DRAWN BY: CDJ

DESCRIPTION
Lanterra 9002-W1 (Up or Down) and 9002-W2 (Up and Down) are small 2.5" O.D., line voltage cylinder fixtures with dimmable LED. The luminaire comes in various mountings, surface mount with integral driver in the housing, remote driver mount with round and square wall plates and square wall integral driver, all of which can be mounted over standard 4 inch j-box. The luminaire also comes with various field replaceable optics. It also comes with various lens, louvers and colors or dichroic filters, which can combine up to two at once to create multiple lighting effects. The fixture may be used indoors or outdoors and carries IP66 rating.

SPECIFICATION FEATURES
Material
Housing and hood are precision-machined from corrosion resistant billet stock 6061-T6 aluminum, C802 brass, C802 bronze*, C102 copper or 303/304 stainless steel.
Finish
Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS* chemical film undercoating and polyester powder coat paint finish, surpassing the rigorous demands of the outdoor environment. A variety of standard colors are available.
Natural Metals
Fixtures constructed from brass, bronze, copper or stainless steel are left unpainted to reveal the natural beauty of the material. Brass, bronze* and copper will patina naturally over time.
Hood
Hood is removable and accepts up to two internal accessories at once (lenses, louvers and filters) to achieve multiple lighting effects. Weep holes prevents water and mineral stains from collecting on the lens, even in

Catalog #	Type
Project	B
Comments	Date
Prepared by	



the straight up position. The flush lens design reduces fixture length, minimizes debris collection and prevents water and mineral stains from collecting on the lens.
Gasket
Housing and hood are sealed with a high temperature silicone O-ring gasket to prevent water intrusion.
Lens
Tempered glass lens, factory sealed with high temperature silicone O-ring to prevent water intrusion and breakage due to thermal shock.
Hardware
Stainless steel hardware is standard to provide maximum corrosion resistance.
Electrical
Long life LED system coupled with electronic driver (120-277V/50-60Hz) is compatible with TRIAC (Leading Edge Dimming), ELV (Trailing Edge Dimming) and 0-10V dimming to deliver optical performance. Light can be dimmed from 100-1% while maintaining constant CCT. It will operate in -30°C to 50°C unless noted otherwise. The driver incorporates

Series	Direction	Hood	LED CCT & CR	Field Replaceable Optic 1	Field Replaceable Optic 2	Finish	Light Level	Voltage	Mounting	Options
9002	W1	Up or Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z
9002	W2	Up and Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z
9002	W1	Up or Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z
9002	W2	Up and Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z

ORDERING INFORMATION
Notes: 1. Only available for double head option (R2). 2. Premium metal not available for R2M option. 3. Only available for Single head, Up or down (R1) with R2M only. 4. Not available for double head with R2M only. 5. Remote Driver up to 92'. * ROHS Compliant - For Natural materials consult factory.

COOPER Lighting Solutions
Specifications and dimensions subject to change without notice.
TD500023EN 11-28-18

Lumiere

DESCRIPTION
Lanterra 9003-W1 (Up or Down) and 9003-W2 (Up and Down) are 3.25" O.D., line voltage cylinder fixtures with dimmable LED. The luminaire comes in various mountings, surface mount with integral driver in the housing, remote driver mount with round and square wall plates and square wall integral driver, all of which can be mounted over standard 4 inch j-box. The luminaire also comes with various beam optics. It also comes with various lens, louvers and colors or dichroic filters, which can combine up to two at once to create multiple lighting effects. The fixture may be used indoors or outdoors and carries IP66 rating.

SPECIFICATION FEATURES
Material
Housing, hood and mounting stem are precision-machined from corrosion resistant billet stock 6061-T6 aluminum.
Finish
Fixtures constructed from 6061-T6 aluminum are double protected by an ROHS compliant chemical film undercoating and polyester powder coat paint finish, surpassing the rigorous demands of the outdoor environment. A variety of standard colors are available.
Hardware
Stainless steel hardware is standard to provide maximum corrosion resistance.
Electrical
Long life LED system coupled with electronic driver (120-277V/50-60Hz) is compatible with TRIAC (Leading Edge Dimming), ELV (Trailing Edge Dimming) and 0-10V dimming to deliver optical performance. Light can be dimmed from 100-1% while maintaining constant CCT. It will operate in -30°C to 50°C unless noted otherwise. The driver incorporates surge protection. LEDs are available in 2700K, 3000K, 3500K at 90CRI and 97CRI, 4000K at 80CRI and 97CRI, 5000K

at 80CRI and are industry leading high output with 87% lumen maintenance at 60,000hrs.
Compliance
Components are UL recognized and luminaires are cULus listed for 50°C ambient environments unless noted otherwise, wet location listed, and ROHS compliant. IP66 Rated. DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.
Warranty
Lumiere warrants the Lanterra series of fixtures against defects in material and workmanship for five (5) years. Auxiliary equipment such as LED drivers carries the original manufacturer's warranty.

Series	Direction	Hood	LED CCT & CR	Field Replaceable Optic 1	Field Replaceable Optic 2	Finish	Light Level	Voltage	Mounting	Options
9003	W1	Up or Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z
9003	W2	Up and Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z
9003	W1	Up or Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z
9003	W2	Up and Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z

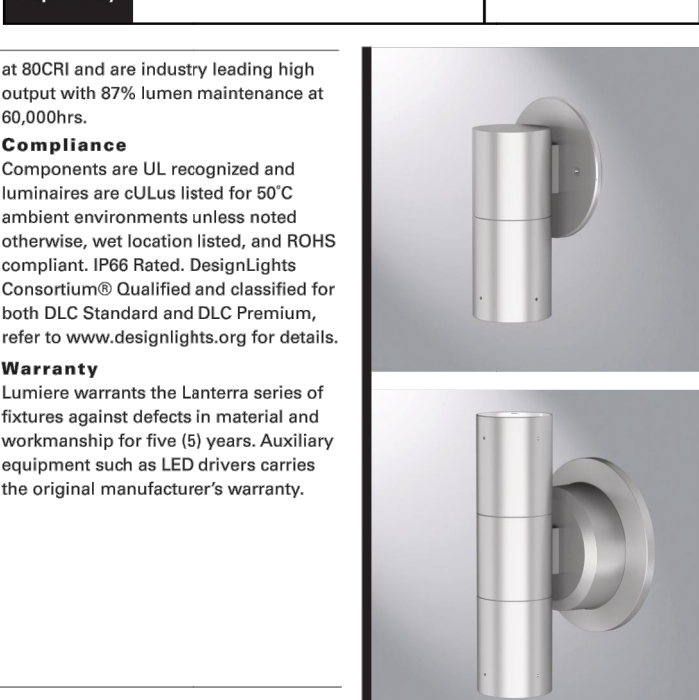
Series	Direction	Hood	LED CCT & CR	Field Replaceable Optic 1	Field Replaceable Optic 2	Finish	Light Level	Voltage	Mounting	Options
9003	W1	Up or Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z
9003	W2	Up and Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z
9003	W1	Up or Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z
9003	W2	Up and Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z

ORDERING INFORMATION
Notes: 1. Only available for double head option (R2). 2. Premium metal not available for R2M option. 3. Only available for Single head, Up or down (R1) with R2M only. 4. Not available for double head with R2M only. 5. Remote Driver up to 92'. * ROHS Compliant - For Natural materials consult factory.

COOPER Lighting Solutions
Specifications and dimensions subject to change without notice.
TD500024EN 11-28-18

Lumiere

Catalog #	Type
Project	B1
Comments	Date
Prepared by	



at 80CRI and are industry leading high output with 87% lumen maintenance at 60,000hrs.
Compliance
Components are UL recognized and luminaires are cULus listed for 50°C ambient environments unless noted otherwise, wet location listed, and ROHS compliant. IP66 Rated. DesignLights Consortium® Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.
Warranty
Lumiere warrants the Lanterra series of fixtures against defects in material and workmanship for five (5) years. Auxiliary equipment such as LED drivers carries the original manufacturer's warranty.

Series	Direction	Hood	LED CCT & CR	Field Replaceable Optic 1	Field Replaceable Optic 2	Finish	Light Level	Voltage	Mounting	Options
9003	W1	Up or Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z
9003	W2	Up and Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z
9003	W1	Up or Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z
9003	W2	Up and Down	RV	Standard CR	S Spot	S Spot	Standard Point Finish	Light Level 1 (10W)	120-277V	SV/P2Z

ORDERING INFORMATION
Notes: 1. Only available for double head option (R2). 2. Premium metal not available for R2M option. 3. Only available for Single head, Up or down (R1) with R2M only. 4. Not available for double head with R2M only. 5. Remote Driver up to 92'. * ROHS Compliant - For Natural materials consult factory.

COOPER Lighting Solutions
Specifications and dimensions subject to change without notice.
TD500024EN 11-28-18

Project	Catalog #	Type	SB
Prepared by	Notes	Date	



McGraw-Edison

BRT6 Bollard

Round LED Pedestrian Luminaire

Typical Applications
Outdoor • Walkway • Perimeter • Landscapes • Hardscapes

Product Certifications



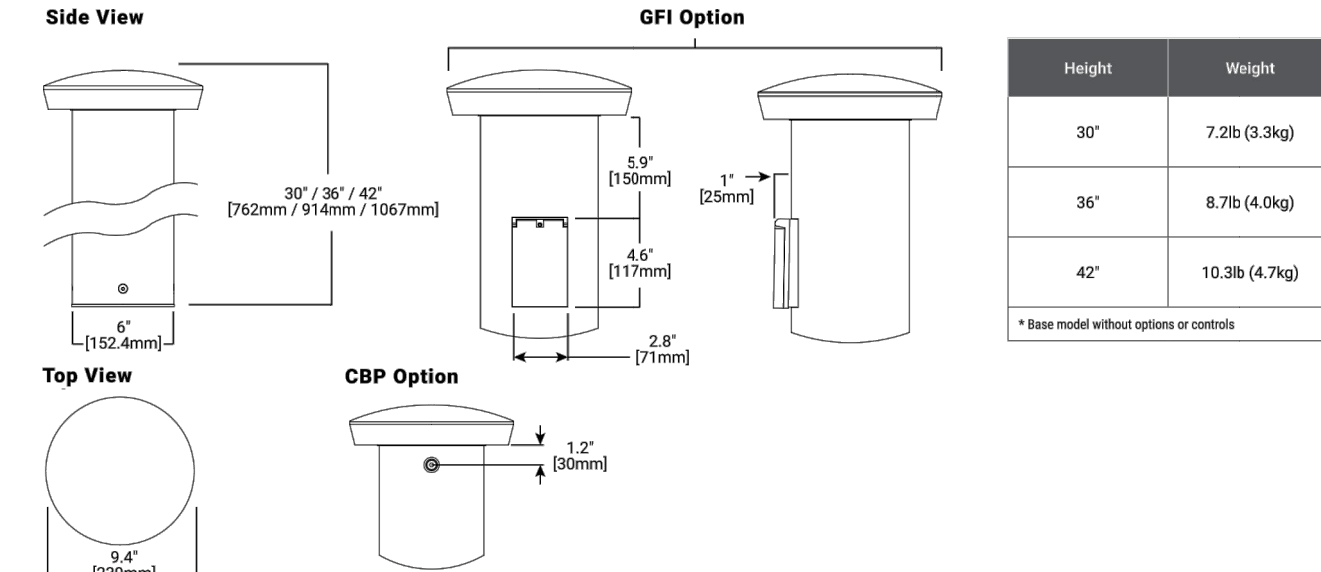
Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Optical Distributions page 2
- Energy and Performance Data page 3

Quick Facts

- 4 Optical Distributions
- Available in 30", 36", and 42"
- Lumen packages range from 560 - 4400 (5W - 49W)
- Efficacy up to 122 lumens per watt
- Zero uplight on all configurations

Dimensional Details



COOPER Lighting Solutions

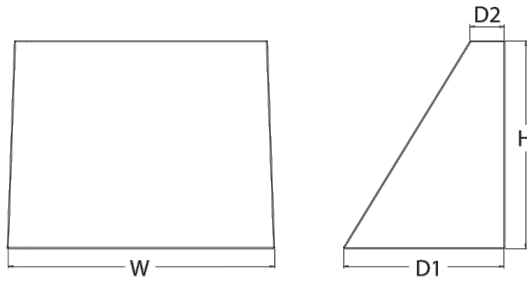
PS200048EN page 1
May 12, 2021 11:54 AM

WDGE2 LED Architectural Wall Sconce Precision Refractive Optic



Specifications

Depth (D1): 7"
Depth (D2): 1.5"
Height: 9"
Width: 11.5"
Weight: 13.5 lbs (without options)



Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean, rectangular design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance. WDGE2 with industry leading precision refractive optics provides great uniform distribution and optical control. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

WDGE LED Family Overview

Luminaire	Optics	Standard EM, 0°C	Cold EM, -20°C	Sensor	P6	P1	P3	P4	P5	P6
WDGE1 LED	Visual Comfort	4W	18W	Standalone / nLight	750	1,200	2,000	3,000	4,500	6,000
WDGE2 LED	Visual Comfort	10W	18W	Standalone / nLight	700	1,200	2,000	3,200	4,200	5,200
WDGE3 LED	Precision Refractive	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	12,000	12,000
WDGE4 LED	Precision Refractive	15W	18W	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WDGE2 LED P3 40K 80CRI VF MVOLT SRM DBDXB

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting	Shipped Included	Shipped Separately
WDGE2 LED	P1	27K	2700K	70CRI	120V	Type I Short	WV1	WV5
	P2	30K	3000K	80CRI	120V	Type II Medium	WV2	WV6
	P3	40K	4000K	LW Limited Wavelength	120V	Type III Medium	WV3	WV7
	P4	50K	5000K	120V	Type IV Medium	WV4	WV8	WV9

Options	Finish
E10WH Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C min)	D08DB Dark bronze
E20WH Emergency battery backup, Certified in CA Title 20 MAEDBS (18W, -20°C min)	D01DB Black
P1 Photocell, Button type	D03DB Natural aluminum
DMC2 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	D04DB White
BCE Bottom conduit entry for back box (P8WB), Total of 4 entry points.	D05DB Sandstone
	D06DB Textured dark bronze
	D07DB Textured black
	D08DB Textured dark bronze
	D09DB Textured natural aluminum
	D10DB Textured white
	D11DB Textured sandstone

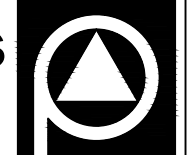
LITHONIA LIGHTING

COMMERCIAL OUTDOOR
One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
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WDGE2 LED Rev. 08/31/21

278 MAIN STREET

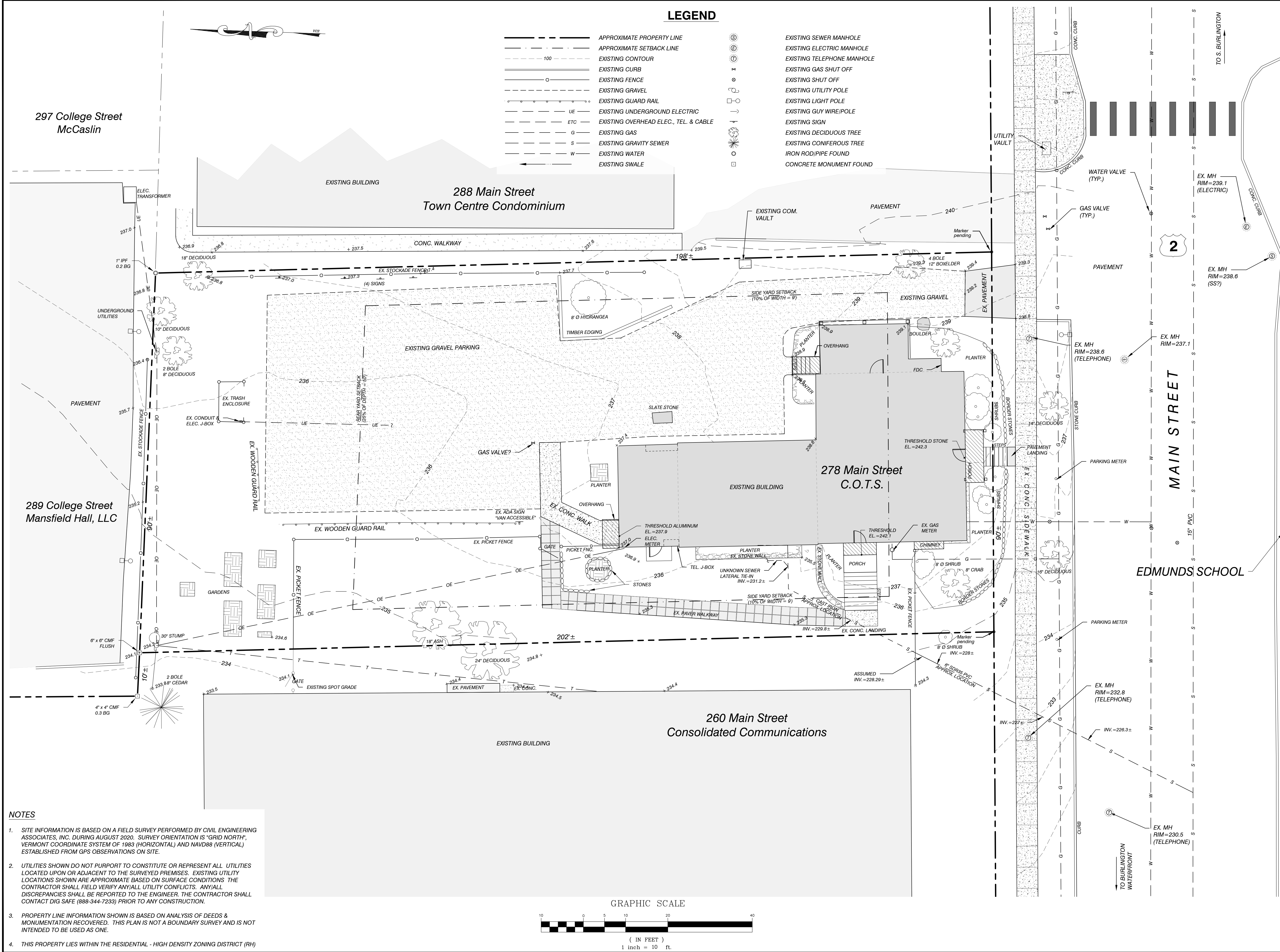
Pearson & Associates
MECHANICAL & ELECTRICAL ENGINEERS
A SUBSIDIARY OF DuBOIS & KING INC.



DATE: 09.30.2021
DRAWN BY: CDJ

PERMIT SET

9/30/21



SITE ENGINEER:

CIVIL ENGINEERING ASSOCIATES, INC.
10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403
P: 802-864-2323 FAX: 802-864-2271 web: www.cea-vt.com

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DSM

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DSM

CLIENT:

Committee on
Temporary Shelter

P.O. Box 1616
Burlington, VT 05402

PROJECT:

C.O.T.S.
Main Street Shelter

278 MAIN STREET
CITY of BURLINGTON, VT

LOCATION MAP

DATE

CHECKED

REVISION

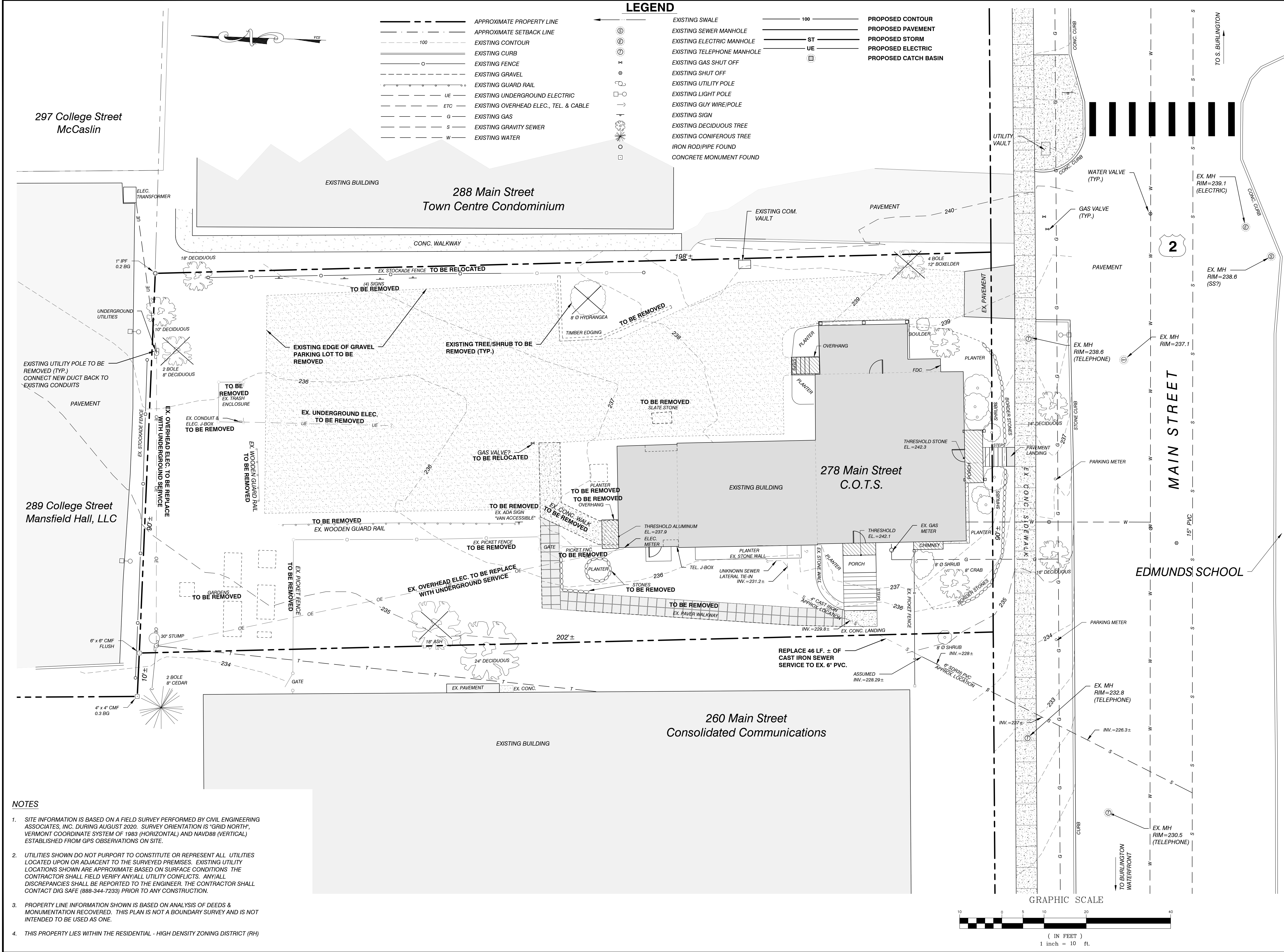
EXISTING
CONDITIONS
PLAN

DATE
09/30/2021

SCALE
1" = 10'

PROJ. NO.
21177

DRAWING NUMBER
C1.0



SITE ENGINEER:

CIVIL ENGINEERING ASSOCIATES, INC.
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CLIENT:

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Temporary Shelter

P.O. Box 1616
Burlington, VT 05402

PROJECT:

C.O.T.S.
Main Street Shelter

278 MAIN STREET
CITY of BURLINGTON, VT

LOCATION MAP

1" = 2000'

DATE

CHECKED

REVISION

DATE

09/30/2021

SCALE

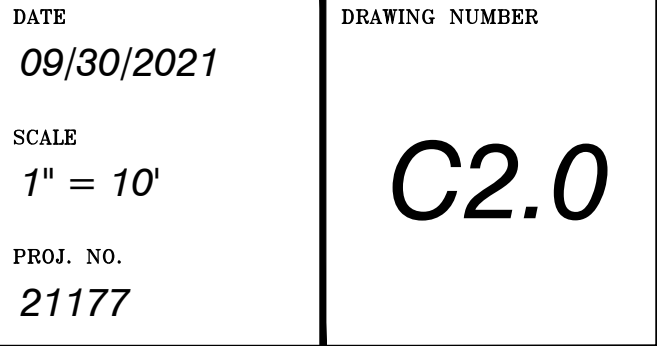
1" = 10'

PROJ. NO.

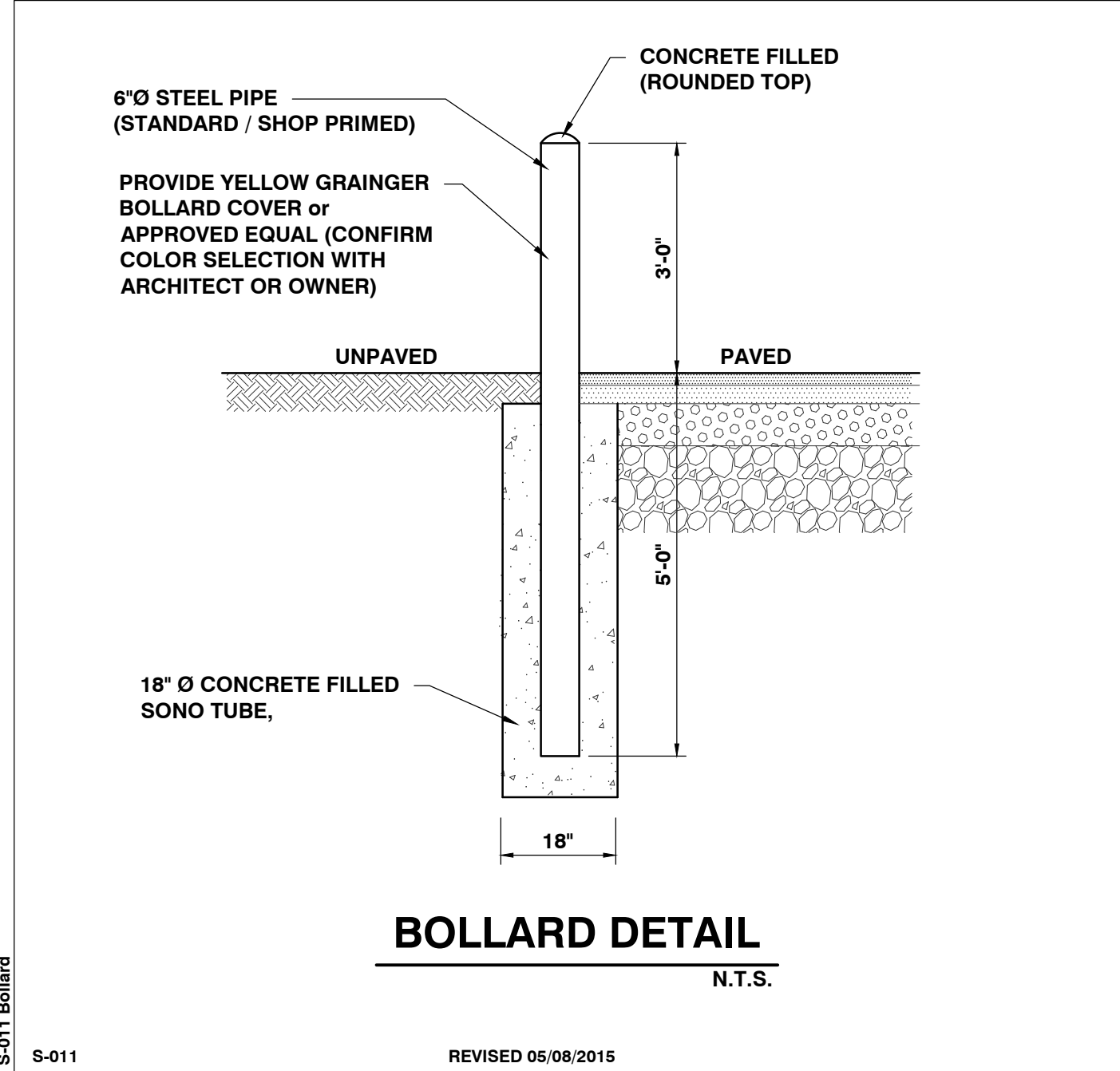
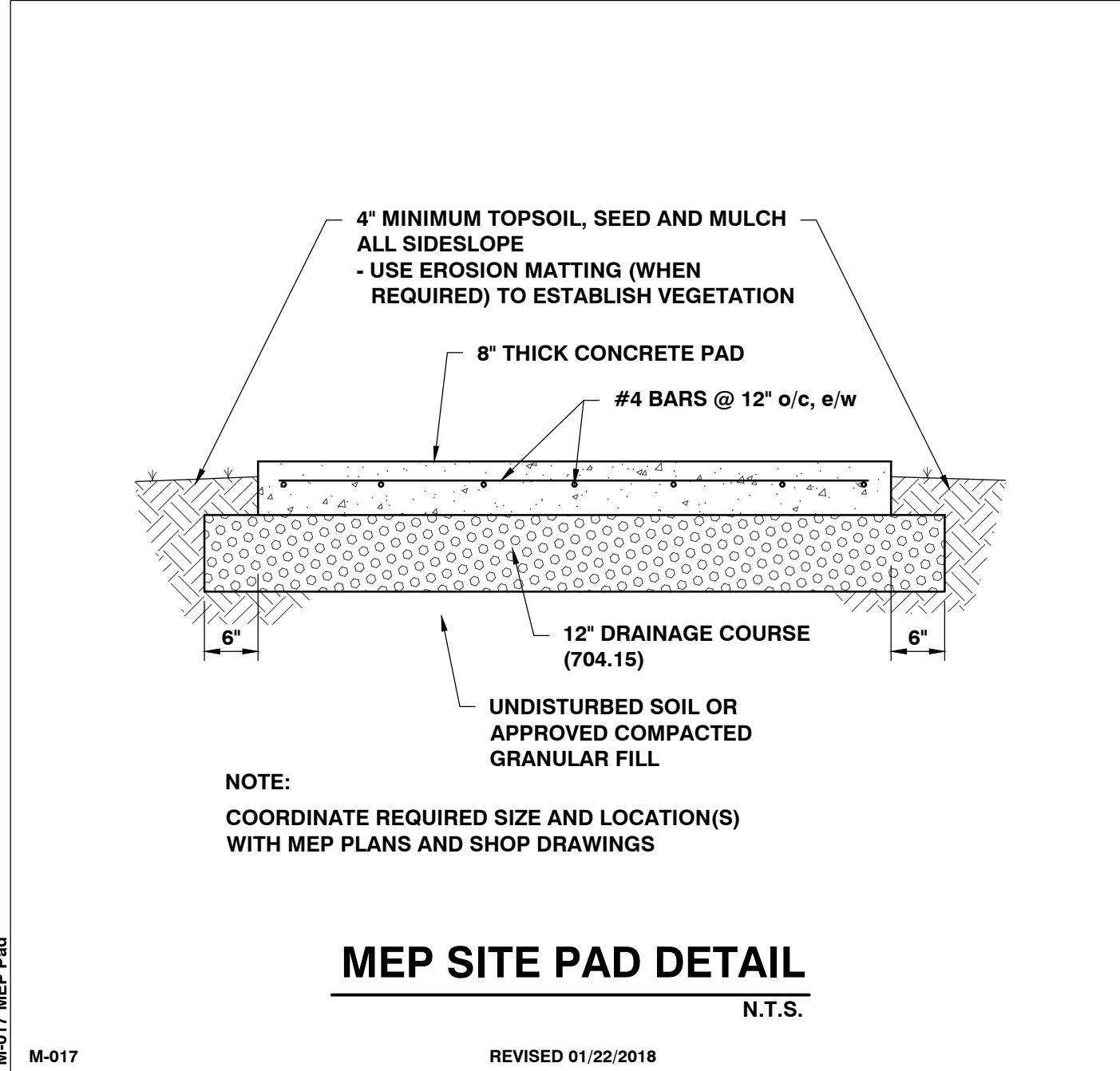
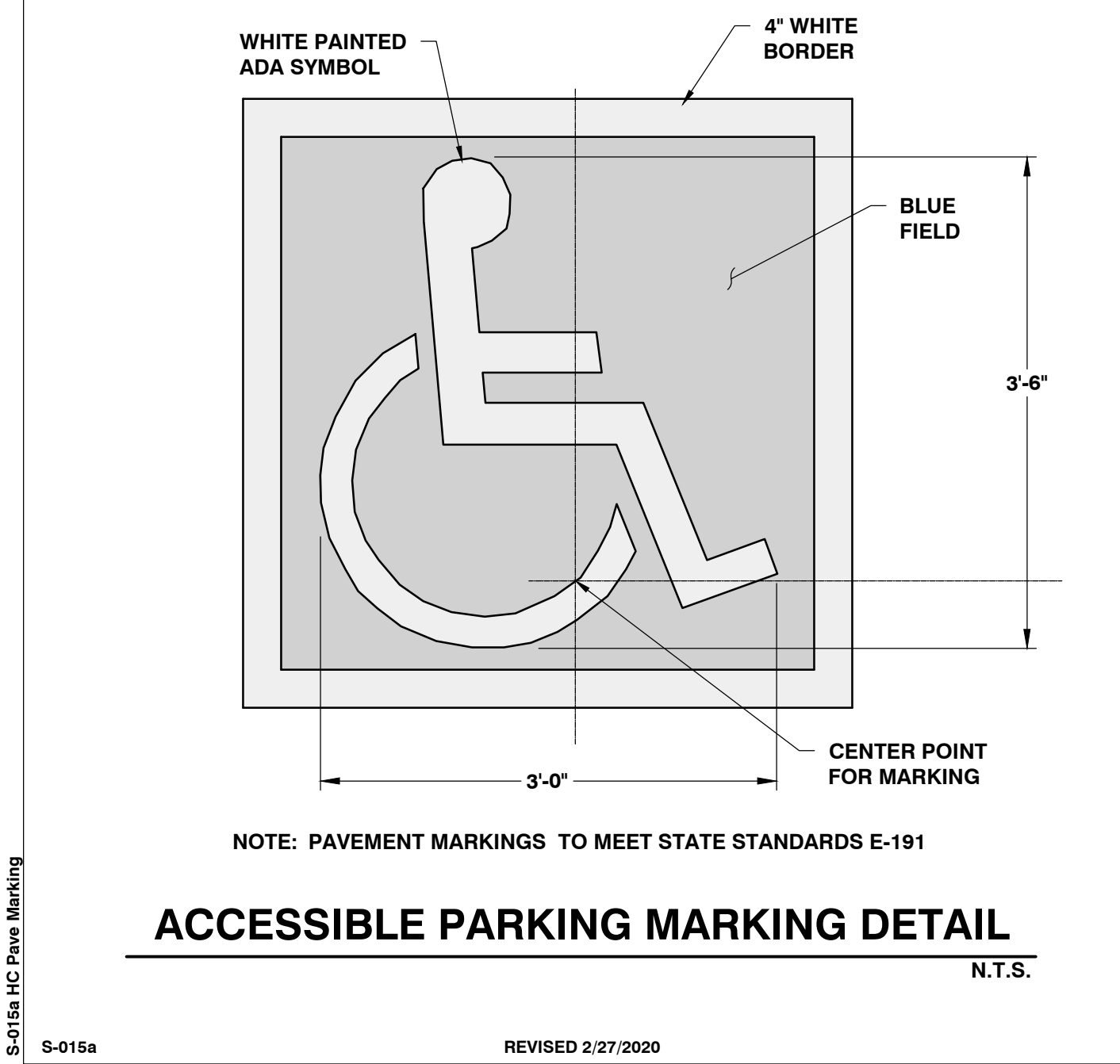
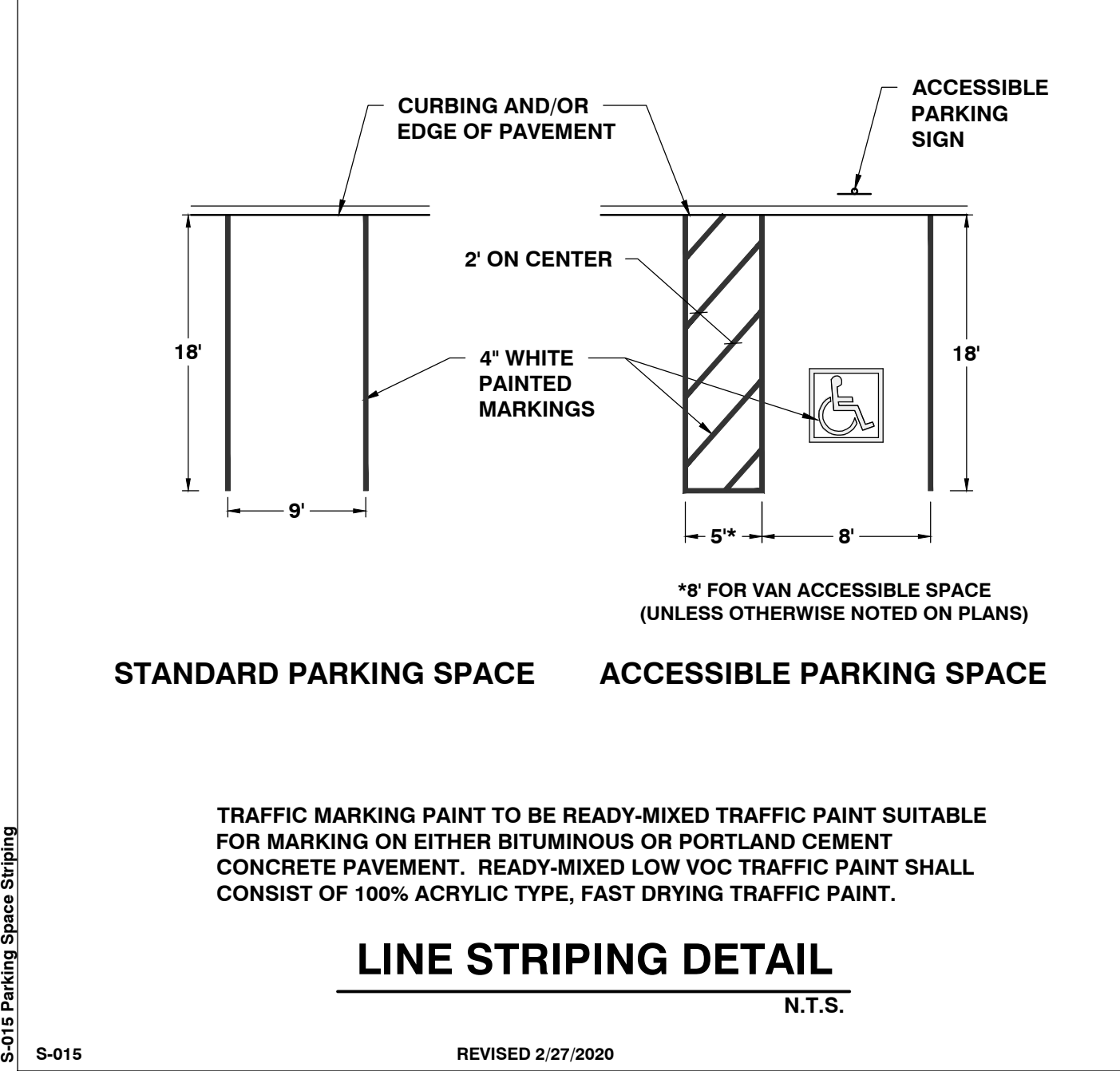
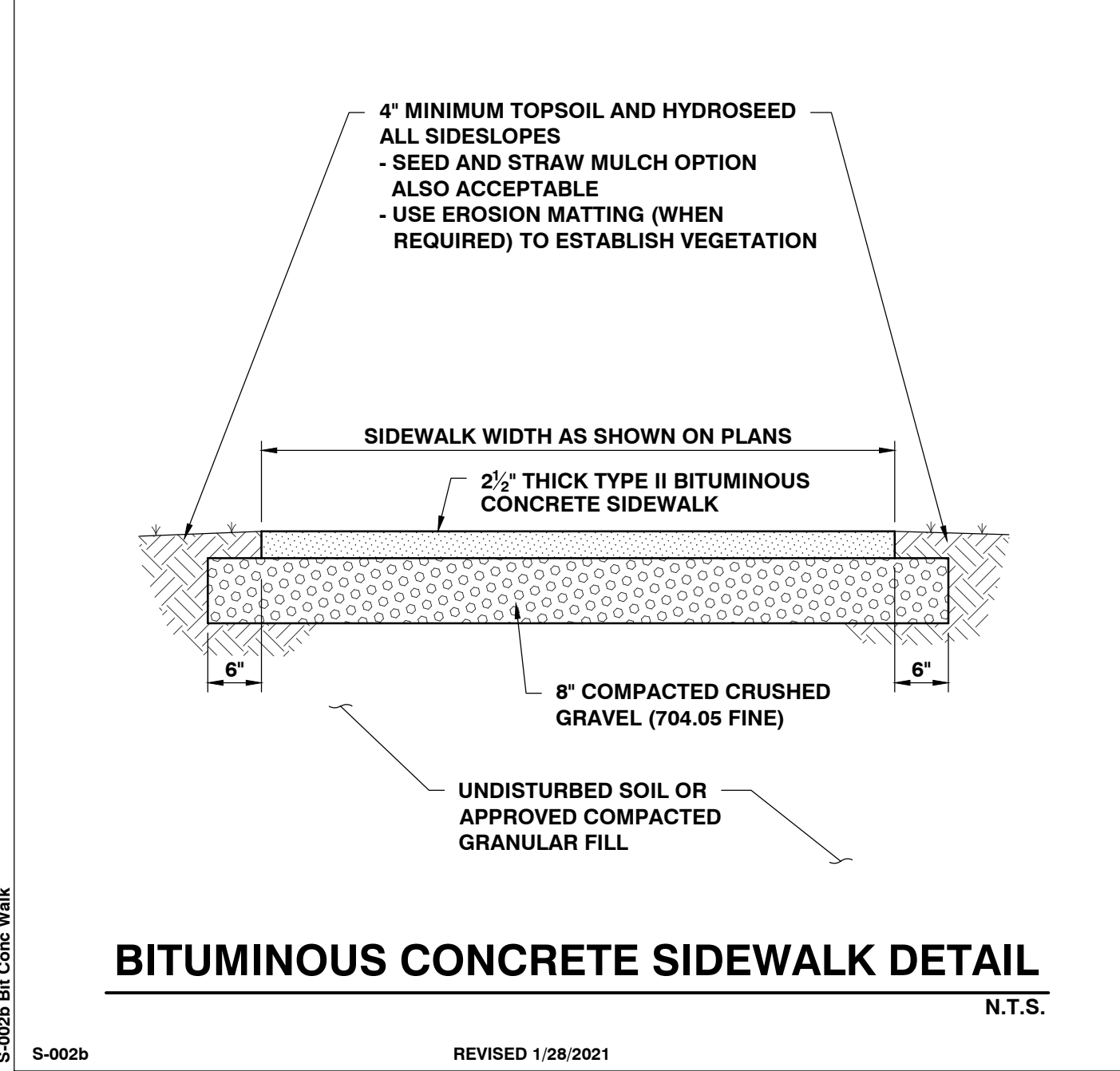
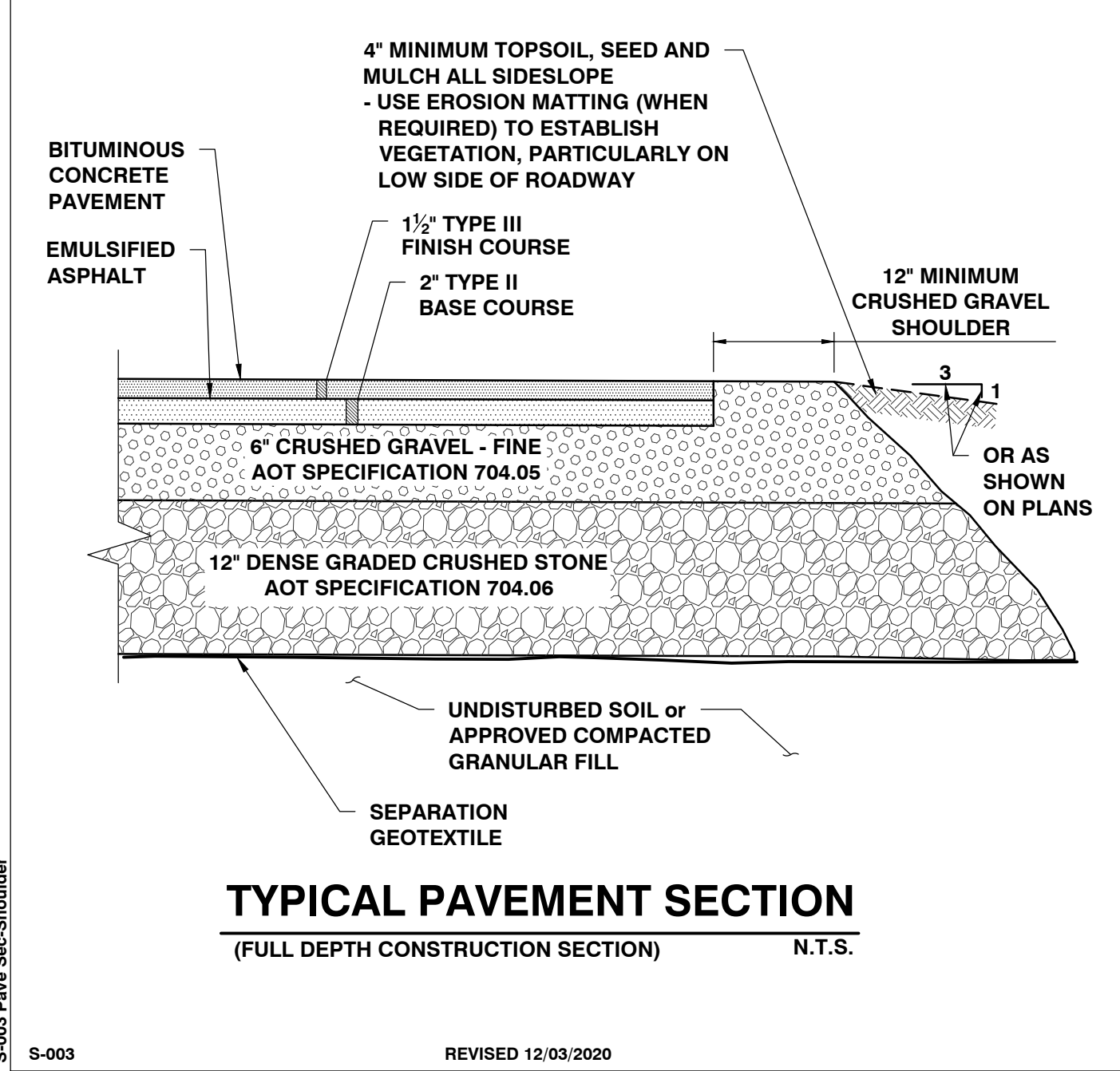
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DRAWING NUMBER

C1.1



CATEGORY	REQUIRED	EXISTING LOT	PROPOSED LOT
PARCEL		0.41 ± AC. 18,005 ± S.F.	0.41 ± AC. 18,005 ± S.F.
SETBACK			
FRONT YARD	AVG. 2 ADJ. LOTS BOTH SIDES (± 5')	6' ±	6' ±
SIDE YARD	10% LOT WIDTH MAX. 20'	16' ±	9' ±
REAR YARD	25% LOT DEPTH MIN. 20' MAX. 75'	108' ±	53' ±
LOT COVERAGE	80% MAX.	54%	73%
MAX. HEIGHT	35'		



SITE ENGINEER:

CIVIL ENGINEERING ASSOCIATES, INC.
10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403
P: 802-864-2323 FAX: 802-864-2271 web: www.caa-vt.com

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DSM

CLIENT:

Committee on
Temporary Shelter

P.O. Box 1616
Burlington, VT 05402

PROJECT:

C.O.T.S.
Main Street Shelter

278 MAIN STREET
CITY of BURLINGTON, VT

DATE	CHECKED	REVISION

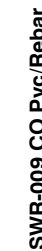
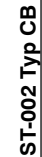
SITE DETAILS

DATE
09/30/2021

SCALE
AS SHOWN

PROJ. NO.
21177

DRAWING NUMBER
C4.0



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DSM

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Burlington, VT 05402

278 MAIN STREET
CITY of BURLINGTON, VT

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DRAWING NUMBER

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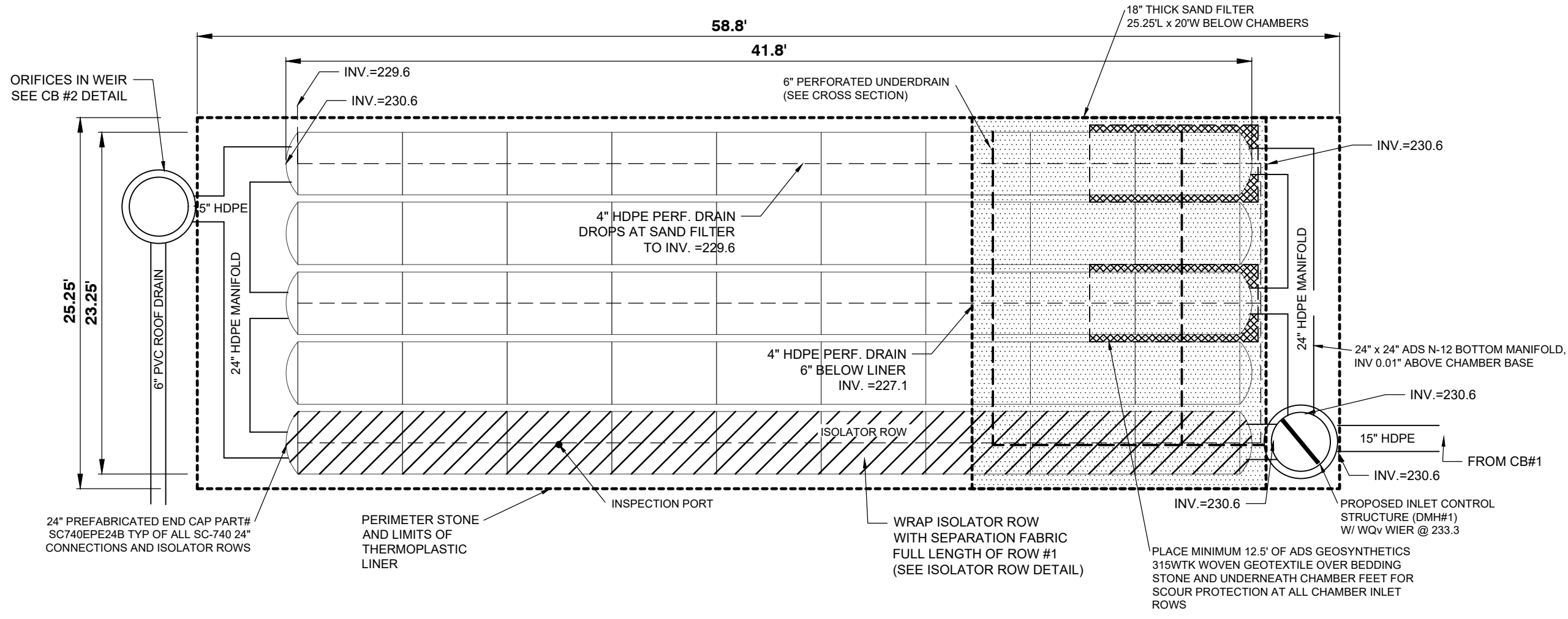
ADVANCED DRAINAGE SYSTEMS, INC.

CONCEPTUAL LAYOUT
(20) STORMTECH SC-740 CHAMBERS
(10) STORMTECH SC-740 END CAPS
INSTALLED WITH 6" COVER STONE, 6" BASE STONE, 40% STONE VOID
INSTALLED SYSTEM VOLUME: 363.3 CF (STORMTECH SYSTEM ONLY)
INSTALLED SYSTEM VOLUME: 361 CF (STORMTECH SYSTEM + SAND FILTER)
AREA OF SYSTEM: 1,234 SF
PERIMETER OF SYSTEM: 2,468 FT

PROPOSED ELEVATIONS
MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED): 241.10
MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC): 235.10
MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC): 234.6
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT): 234.6
MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT): 233.6
TOP OF STONE: 233.6
TOP OF CHAMBER: 233.1
24" BOTTOM MANIFOLD INVERT: 230.6
24" CONNECTION INVERT (ISOLATOR ROW): 230.6
BOTTOM OF CHAMBER: 230.10
BOTTOM OF STONE: 227.6

NOTES

- SAND FILL PLACED UNDER STORMTECH CHAMBER SYSTEMS MUST BE PROPERLY SPECIFIED AND COMPACTED SUCH THAT THE STRUCTURAL REQUIREMENTS SPECIFIED IN THE STORMTECH DESIGN MANUAL ARE MET.
- STRUCTURAL BEDDING STONE AND SEPARATION GEOTEXTILE IS REQUIRED OVER SAND FILL AND MUST BE INSTALLED AS PER THE STORMTECH DESIGN MANUAL.
- STORMTECH DOES NOT DESIGN SAND FILTER SYSTEMS AND CANNOT PROVIDED TECHNICAL INFORMATION ON HYDRAULIC PERFORMANCE, FILTER LONGEVITY, OR EFFECTIVENESS OF SAND FILTERS.



STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-740 OR SC-310.
- CHAMBERS SHALL BE MANUFACTURED FROM VIRGIN POLYPROPYLENE OR POLYETHYLENE RESINS.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL MEET ASTM F2922 (POLYETHYLENE) OR ASTM F2418-16 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
 - A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
 - A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET, THE 50 YEAR CREEP MODULUS DATA SPECIFIED IN ASTM F2418 OR ASTM F2922 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
 - STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.

CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310/SC-740 SYSTEM

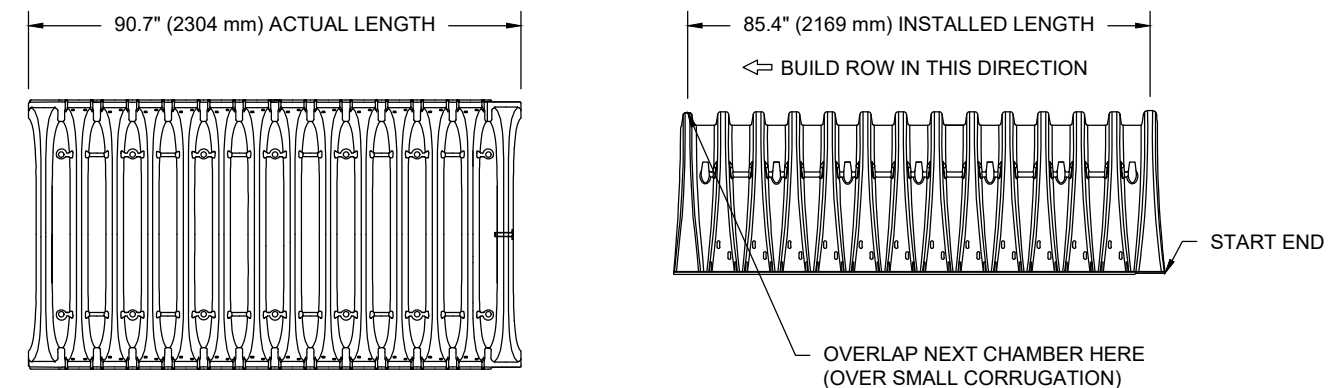
- STORMTECH SC-310 & SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-310 & SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOTTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4"-2" (20-50 mm).
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-310 & SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC740EPE08T / SC740EPE08TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	0.5" (13 mm)
SC740EPE08B / SC740EPE08BPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	0.6" (15 mm)
SC740EPE08B / SC740EPE08BPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	0.7" (18 mm)
SC740EPE10B / SC740EPE10BPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	1.2" (30 mm)
SC740EPE12B / SC740EPE12BPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	1.3" (33 mm)
SC740EPE15T / SC740EPE15TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	1.8" (45 mm)
SC740EPE15B / SC740EPE15BPC	24" (600 mm)	18.5" (470 mm)	0.1" (3 mm)	---

ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

2

SC-740 TECHNICAL SPECIFICATIONS

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
F FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
E INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 14" (355 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145' A-1, A-2.4, A-3 OR AASHTO M43' 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
D EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
C FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}
B DRAINAGE SAND: PROVIDE 18" LAYER OF FILTER SAND ABOVE SUBGRADE.	FINE AGGREGATE CONCRETE SAND OR EQUAL	ASTM C-33	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}
A UNDER DRAIN STONE: PROVIDE 12" LAYER OF UNDERDRAIN STONE ABOVE SUBGRADE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43' 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. NO. 4 (AASHTO M43) STONE.
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

NOTES:

- SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- ONCE LAYER 'D' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'E' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'D' OR 'E' AT THE SITE DESIGN ENGINEER'S DISCRETION.

SITE ENGINEER:



CIVIL ENGINEERING ASSOCIATES, INC.
10 MANSFIELD VIEW LANE, SOUTH BURLINGTON, VT 05403
P: 802-864-2323 FAX: 802-864-2271 web: www.cca-vt.com

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DRAWN

MAB

CHECKED

DSM

APPROVED

DSM

CLIENT:

Committee on
Temporary Shelter

P.O. Box 1616
Burlington, VT 05402

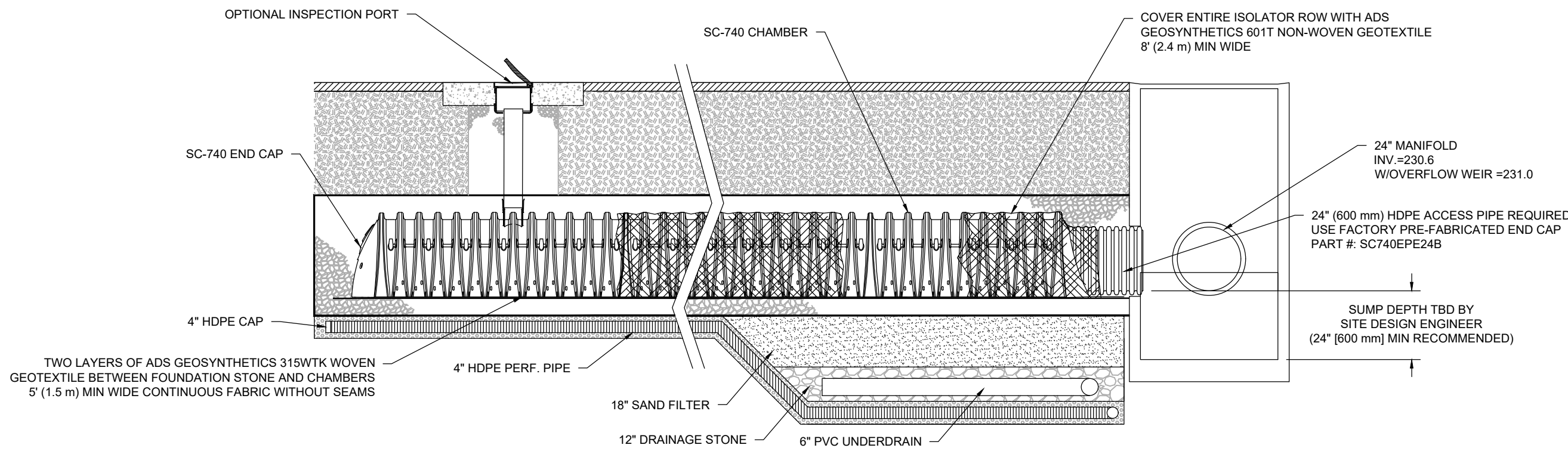
PROJECT:

C.O.T.S.
Main Street Shelter

278 MAIN STREET
CITY of BURLINGTON, VT

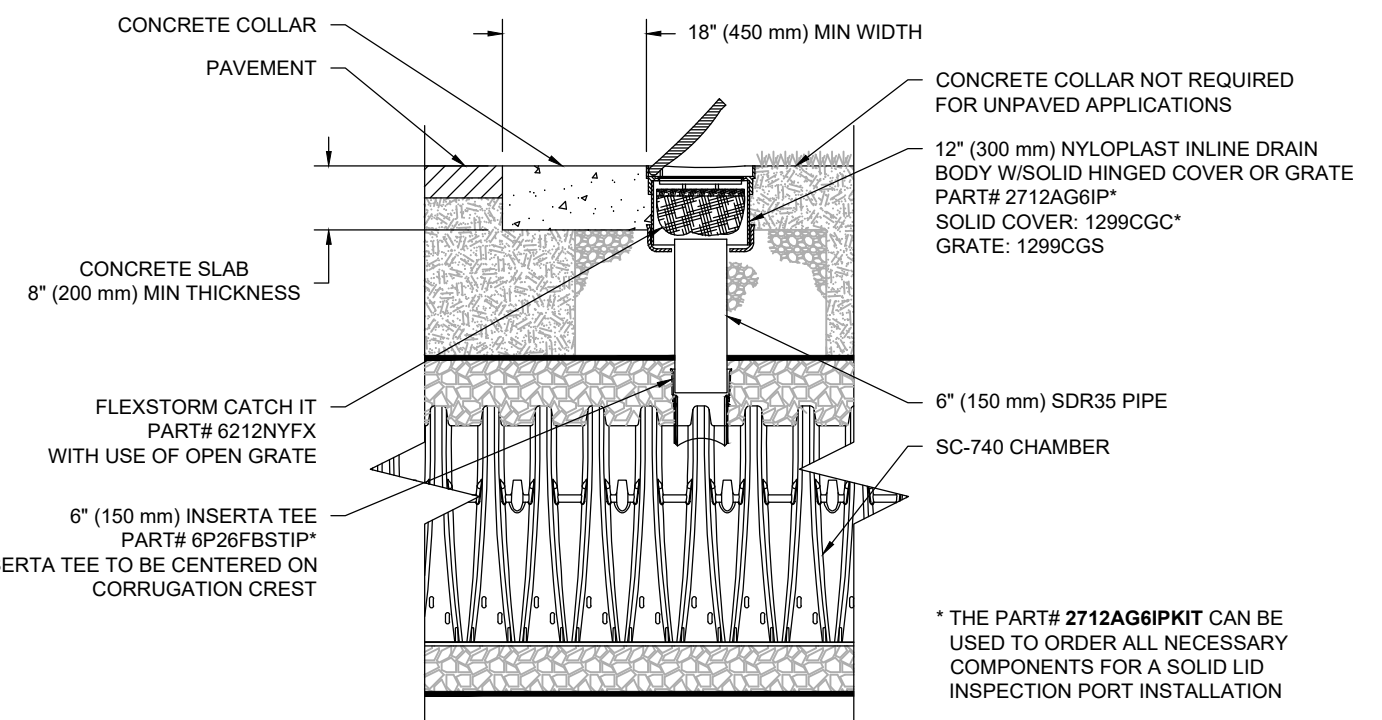
3

SC-740 ISOLATOR ROW DETAIL



4

SC-740 6" (150 mm) INSPECTION PORT DETAIL



INSPECTION & MAINTENANCE

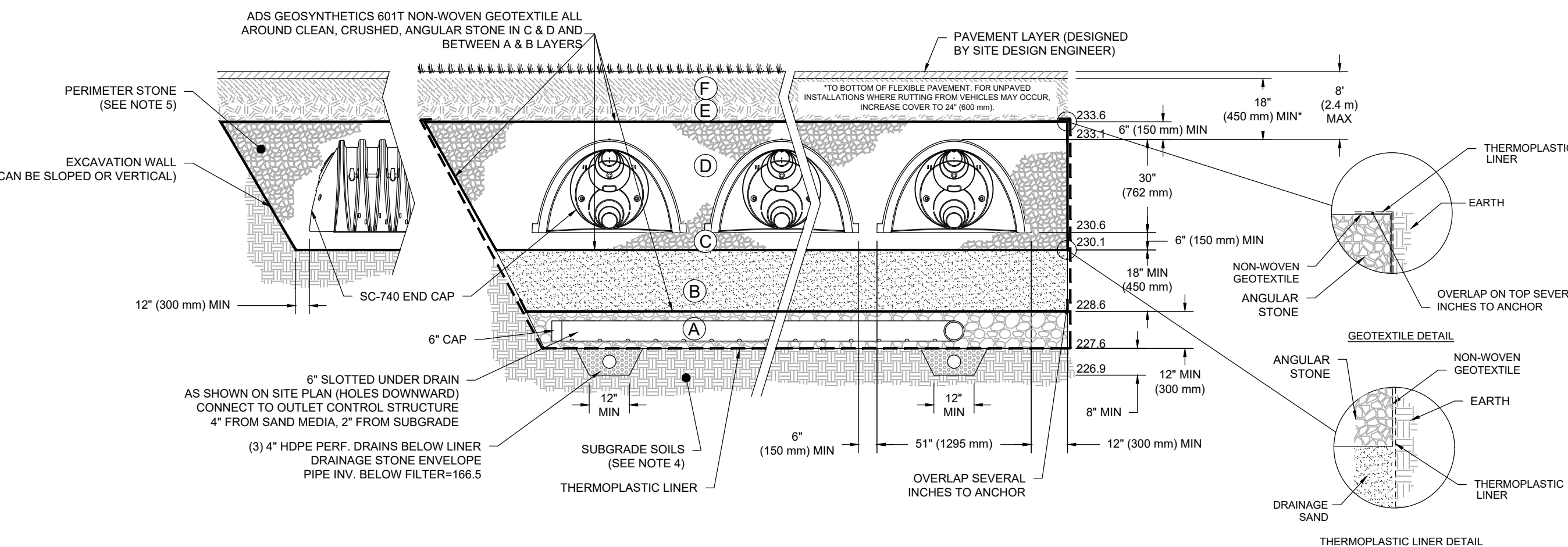
- STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
 - REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
 - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
- REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
 - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
 - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
 - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

1

SC-740 CROSS SECTION DETAIL



**STORMWATER
DETAILS**

DATE
09/30/2021

SCALE
AS SHOWN

PROJ. NO.
21177

DRAWING NUMBER

C4.2

December 1, 2021

278 Main Street Transportation Demand Management Program ZP-21-732

Outreach and education

Outreach and education will be provided through membership in Chittenden Area Transportation Management Association (CATMA). This will include educational materials, annual tenant meeting to help increase participation, annual travel surveys, and record keeping and reporting of TDM offers and participation rates.

TDM Strategies

The project will maintain an ongoing and active membership with CATMA to offer TDM strategies.

Parking Management

Annual parking studies will be made via membership in CATMA. Limited onsite parking will be made available to tenants in the project and will be unbundled from leases. Parking utilization studies will be conducted through membership in CATMA. No spots will be made available to off-site users. Handicap parking and covered bicycle storage is provided as per code.



Department of Permitting and Inspections

645 Pine Street
Burlington, VT 05401-8415
Phone: (802) 865-7188
www.burlingtonvt.gov/dpi

Transportation Demand Management Plan

Use this form for all applications for zoning permits for projects located in Burlington's Multimodal Mixed Use Parking District and including the creation of 10 or more dwelling units, a building footprint of 8,000 sf or more, or the creation of 15,000 sf or more gross floor area.

A TDM plan shall address each of the following items (see Sec. 8.1.16 (c) Transportation Demand Management (TDM) Program, of the Comprehensive Development Ordinance for details).

- I. Outreach and Education
- II. TDM Strategies
- III. Parking Management

TDM Agreement

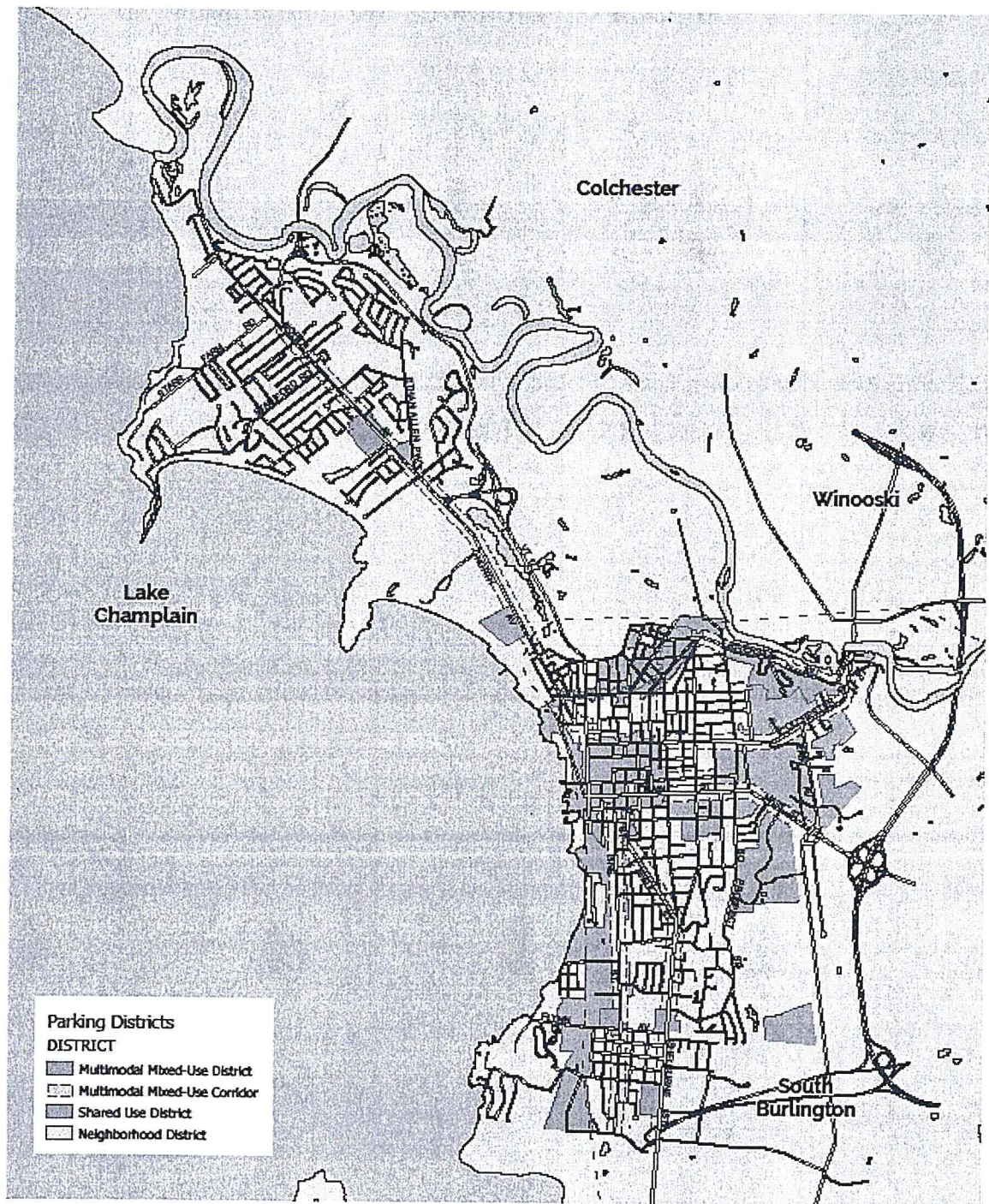
- Commitment to ongoing implementation of the TDM requirements I, II, & III as set forth above;
- Acknowledgement that the project has no claim to the ongoing availability of nearby on-street public parking, and that, as is the case with other on-street public parking, the City retains the right to charge for or remove such on-street parking at any time;
- Acknowledgement that failure to maintain transportation demand management as required above is a violation of the Comprehensive Development Ordinance, and understanding that, pursuant to Sec. 2.7.8 of the CDO, no zoning permit or certificate of occupancy may be granted until any such violation has been remedied; and,
- Commitment to notify any subsequent owners and tenants in writing of their obligations under this section as part of any purchase and sale and/or lease agreements.

Property Owner: COMMITTEE ON TEMPORARY SHELTER

Applicant: COX / BOB DUFFAN

Number of vehicle parking spaces: 9 Number of bicycle parking spaces: 16

Zoning Permit Number: 21-21-732



**CITY OF
BURLINGTON**



Parking Districts Map

*Burlington Comprehensive Development Ordinance, Map 8.13-1
Districts effective Jan. 30, 2008 with amendments effective 10-21-2020 (ZA-20-04)*

THINBRICK
COLLECTION



Glen-Gery



Silverbrook Thin Brick

The Craft of Thin Brick **4**

Thin Brick **12**

- Woodsmoked Series
- Craftsman Series
- Emporium Series
- La Paloma Series
- Designer Klaycoat® Series
- Burlesque Glazed Series
- Feldhaus Series
- Elements Series
- Linen Series
- Black Hills Series
- Couture Series
- Settler Series
- Colonial Series
- Cushwa® Calvert® Series

Installation Methods **20**

Mortar & Shapes **24**

Picture Perfect, Virtual Design Tool **26**

Thick + Thin

Meet thin brick.

Glen-Gery thin brick is a compelling alternative developed to give architects, engineers, builders and homeowners a choice that expands their design potential.

Less is more.



The logical solutions

Add stylish appeal of brick during any stage in a building's life cycle

Reduced wall costs by eliminating shelf angles, lintels and other support elements that are required for full-size brick

Easy installation options that do not require a skilled laborer

Great for many interior applications including ceilings and kitchen backsplashes



Olde City Thin Brick

It's time to create.

LET'S GET STARTED.



Imaginative and spirited.

Thin brick designs range from the bold and striking to the subtly elegant. The Milwaukee thin brick featured here only begin to suggest the possibilities.

Milwaukee
Couture Series



Cedar Lake Thin Brick



Bayhill Thin Brick

At the heart of it all.

AN INTELLIGENT ALTERNATIVE.

A true original.

As these Nob Hill thin brick rooms show, the unique style and refinement of Glen-Gery thin brick enriches many interior designs.



Nob Hill
Element Series



Flagstaff Thin Brick

Thin Brick

PRODUCT OFFERING

Product Overview

Glen-Gery thin brick is the pinnacle of form and function. With a striking appearance, its style is just as convincing as its strength. Whether you take it inside or outside, this brick has the pull to be the centerpiece.



Details

Suggested use: interior and exterior applications including accent walls, kitchens, bar surround, archways, fireplaces and more! Available in more than 100 color variations.

See the next few pages for color options, or visit www.glengery.com.

Specs

Thin brick comes in various sizes and thicknesses based on the product type selected. Please visit glengery.com for specific details.

Trending Colors



Olde City



Silverbrook



Nob Hill



Woodsmoked



White Glaze

Woodsmoked Thin Brick Series

Instantly timeless and impossible to duplicate, the handmade Woodsmoked range is one of the most beautiful ways to reveal your individual style. No two handmade brick look the same, and that is exactly why they remain one of the most premium and sought after brick products available.

Catalog size: Handmade Oversize Thin Brick

[York]



Lorraine White



Smokey Mountain



Woodsmoked
(white mortar)



Woodsmoked
(black mortar)

Craftsman Thin Brick Series

Time tested, craft perfected. Subtly contoured and highly dependable, there is no substitute appeal of genuine Handmade Brick. Homeowners love the look and builders love the dependability and conformity to architectural specifications.

Catalog size: Handmade Oversize Thin Brick

[York]



Lorraine Full Range



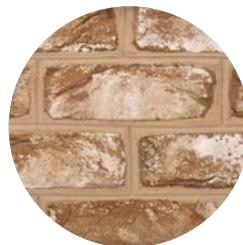
French Provincial



Antique Ivory



Avignon



Old Savannah



Rockdale



Sahara



Barlow

CRAFTSMAN SERIES CONTINUED...



Cherry Lane



Belgium



Monticello



Rose Full Range



Victorian



Georgian



Virginia Blend



Brandywine



Shenandoah



Scotch Tradition



Trevanion



Royal Essex



Atlanta



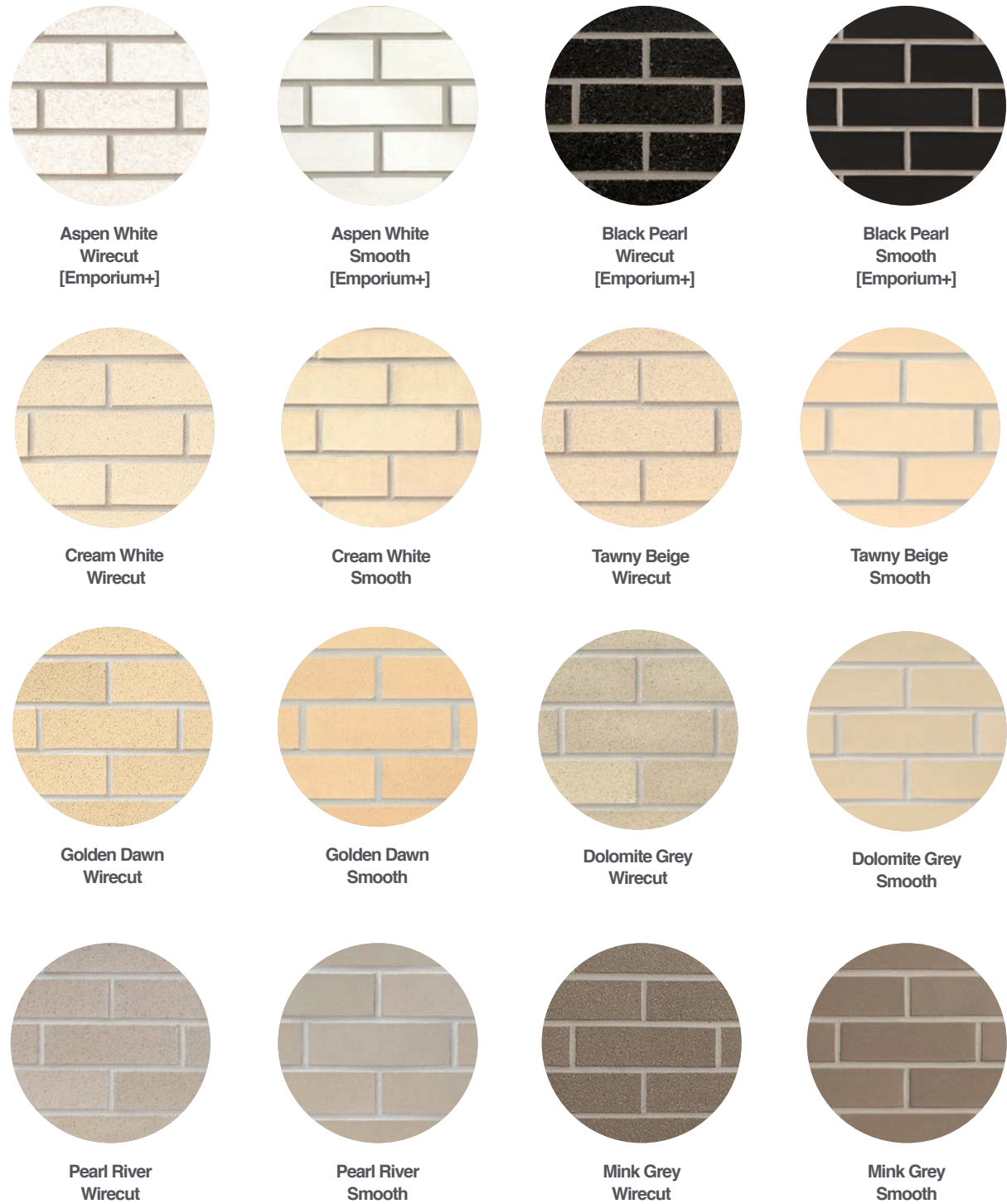
Donohue

Emporium Thin Brick Series

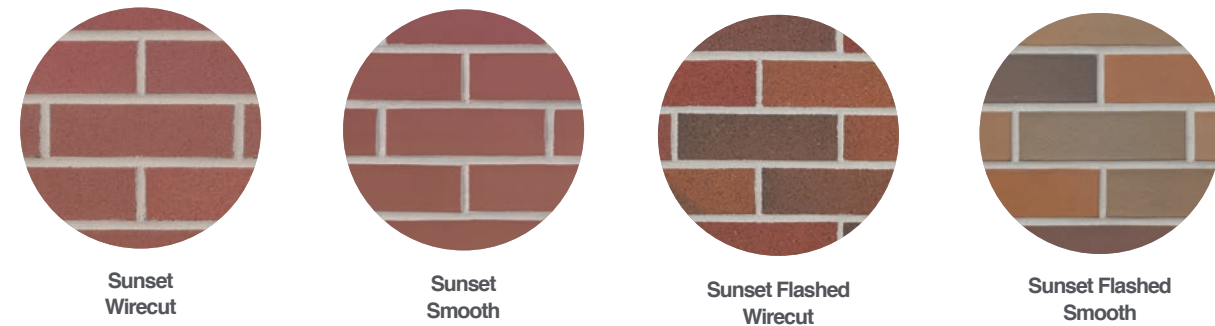
Emporium’s wirecut, smooth and smooth ironspot finishes offer unrivaled quality, sophistication and a contemporary, refined color palette. These bricks are a standout design feature in their own right, ably suiting today’s mood or classical environments.

Catalog size: Modular Thin Brick

[Hanley]



EMPORIUM SERIES CONTINUED...



La Paloma Thin Brick Series

Reflecting the contemporary Spanish artists that inspired them, the bold and confident La Paloma range of icy white, blue and coal black bricks, express a deeper level of desire and creativity. With outstanding quality, these eye-catching through-the-body bricks transform buildings into works of art, in a spirit Dali would be proud of.

Catalog size: Modular Thin Brick

[International]



Designer Klaycoat® Thin Brick Series

The Designer Series of klaycoat smooth finished brick speak volumes. Available in four standard, neutral colors, the Designer Series will appeal to the contemporary spirit. Create a 100% custom design by blending two, three, four or more klaycoat products together.

Catalog size: Modular Thin Brick

[Hanley]



Khaki Stone



Stone Grey



Urban Grey



Charcoal

Burlesque Glazed Thin Brick Series

Luster – Beautiful, fully glazed bricks that bring a touch of glamour to your project and make a design statement that will stand the test of time. Designed for both interior and exterior applications, the Burlesque range offers stylish elegance that's ideal for feature brickwork.

Catalog size: Modular Thin Brick

[Hanley]



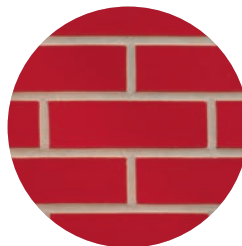
White



White with
Speck



Cloud Grey



Cardinal Red



Bermuda Blue



Black

Feldhaus Thin Brick Series

The German-made, Feldhaus thin brick is specially crafted to the most exacting tolerances and specifications. A century and a half of brickmaking expertise culminates in this versatile product's beautiful, wide-ranging colors, textures and clay bodies. This is a palette suited to the most ambitious design intentions, compatible with precast or any other installation system.

Catalog size: Modular Thin Brick

[International]



100 Classic Cream
Smooth



757 Cream
Waterstruck



764 Gray White
Waterstruck



800 Classic Gray
Smooth



773 Rustic Gray
Waterstruck



387 Rustic Red
Flashed



400 Classic Red
Smooth



401 Classic Red
Velour



313 Red Flashed
Velour



714 Sundown
Flashed



664 Deep Wine
Handform



567 Coal Brindle
Smooth



511 Onyx
Smooth



737 Plowed Earth
Waterstruck



777 Onyx
Waterstruck



700 Anthracite
Smooth

Element Thin Brick Series

Everyday life is interesting, varied and about home—feeling comfortable. This versatile range provides an old world look with unique papercut texture and slightly rounded edges.

Catalog size: Modular Thin Brick

[Caledonia]



Bayhill



Nob Hill



Olde Detroit



Aberdeen



Cedar Lake



Caledonia Classic

Linen Thin Brick Series

Step out of the traditional reds and into the world of wonderful linen whites. This fresh, crisp range of white to grey toned bricks speak volumes with their absence of color and heavily textured faces.

Catalog size: Modular Thin Brick

[Caledonia]



Sandcastle



St. Cloud



Silverbrook



Garrison Grey

Black Hills Thin Brick Series

The endless red earth and cream landscape of the upper Midwest parts of the United States inspire our Black Hills Series. This series with its earthy tones is able to adapt to many different styles; depending on the architecture of your home it creates a modern or vintage feel.

Catalog size: Modular Thin Brick

[Caledonia]



Washington



Mt. Rushmore



Lincoln



Jefferson



Roosevelt

Couture Thin Brick Series

This adaptable range provides a subtle rustic-look with a soft texture, multi-dimensional layered coloring and slightly rounded edges. The Couture Series products will provide a sense of warmth and comfort within your home.

Catalog size: Modular Thin Brick

[Caledonia]



Rosewood



Milwaukee



Flagstaff



Stratford



St. Windsor



Rustic Burgundy



Black Beauty

Industrial Rustic Thin Brick Series

Rustic, charming and full of character. Each brick in the Industrial Rustic Series appears to have stood the test of time and, like a fine wine, has only gotten better with age. The products in this range have a story to tell and add unsurmountable character to anywhere they are used.

Catalog size: Standard Thin Brick

[Mid-Atlantic]



Olde Dublin



Olde City



Olde England



Olde London

Settlers Thin Brick Series

The allure of the Settlers Series lies in the neutral tones and unique finishes. Upgrade any project with the versatility of this series, as these bricks complement a wide range of colors, building materials, and styles of architecture.

Catalog size: Modular Thin Brick

[Mid-Atlantic]



Provincial



Stonewall



Valley Forge

Colonial Thin Brick Series

True, tried and tested, the Colonial Molded range offers traditional colors and textures, making it the perfect brick for classic architecture. These brick pair well with modern elements for a unique old, but new charm. Enjoy adding substance and quality to your project.

Catalog size: Modular Thin Brick

[Mid-Atlantic]



Danish



26-HB Flashed



53-DD



51-DDX

Cushwa® Calvert® Thin Brick Series

The Cushwa Calvert Molded range offers centuries proven texture and color combinations with unrivaled quality among each sand-finished brick. The standout design features of these products are their ability to stand out in today's modern or classical environments.

Catalog size: Modular Thin Brick

[Mid-Atlantic]



Rose Full Range



Cambridge



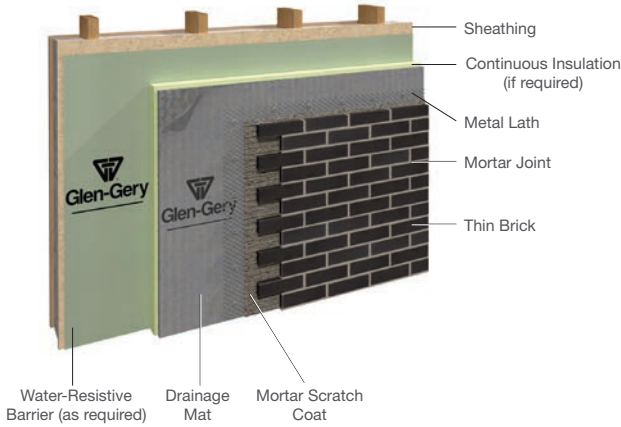
Shenandoah

Build + admire.

One of the many beauties of thin brick is the various methods available when it comes to installation. Whether its interior or exterior, thin brick lends itself to the installer.

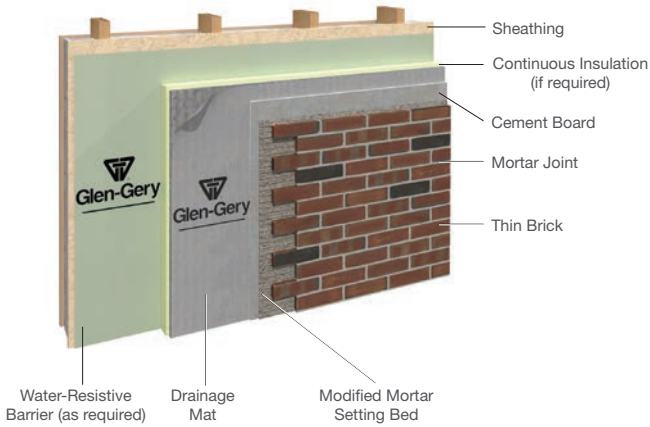
Thin Brick | Installation Methods

THICK SET – EXTERIOR APPLICATION



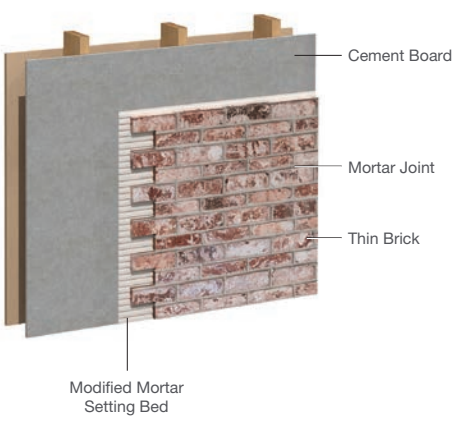
This traditional method of installation is for residential and small commercial applications 1-2 stories. Mortar and metal lath support the thin brick veneer.

THIN SET – EXTERIOR APPLICATION



This method offers enhanced performance for thinner veneers and commercial projects greater than 10 feet in height.

THIN SET – INTERIOR APPLICATION ONLY



This method is typically used by an installation professional for larger wall areas.

ADHESIVE – INTERIOR APPLICATION ONLY



For capable do-it-yourselfers, projects with Glen-Gery thin brick can be used for interior walls, kitchens, fireplaces and other distinctive design elements. Installers can use adhesive applications with either masonry/concrete backing or wood/steel stud framing.

Performance verified.

ADVANCED THIN MASONRY TECHNOLOGY.



Durable masonry **support.**

The Thin Tech masonry support system extends and magnifies the usefulness of thin brick, with high-grade galvanized steel support and thermal-set coating that deliver superior strength and durability.

Stratford Thin Brick
Thin Tech® Elite



Thin Tech®

+

Thin Tech **advantages**

Allows mortar to surround the support tie creating a positive mechanical lock between the brick, mortar and panel

The space created by the channels of Thin Tech Elite panel can eliminate the need for a second layer of weather-resistive barrier. Alternately, a drainage mat can be used with Thin Tech Classic panels

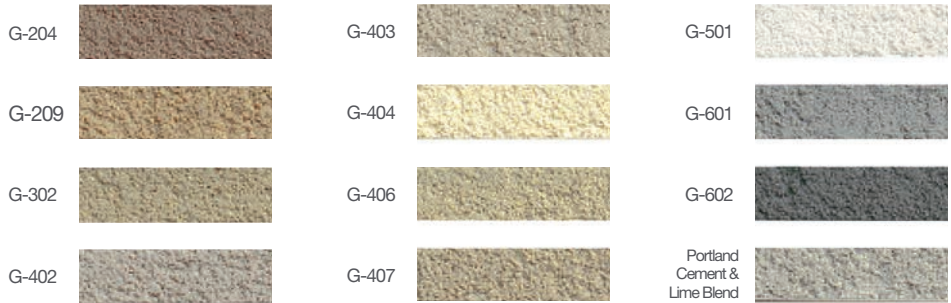
No relief angles or foundations needed for support as panels are attached with screw fasteners provided by Glen-Gery

Thin Tech fasteners are available in lengths to easily accommodate installations with up to 2" of rigid foam insulation

For more information visit www.glengery.com/thin-tech

Finishing strong.

Choosing the right mortar color can make all the difference when building your vision. Whether you're going for contrast or a more even-toned aesthetic, our range of mortar colors can help bring your ideal look to life. See the full suite of mortar colors at glengery.com.



See the dramatic effects of our mortar colors, each installed with Trevanion Handmade brick.

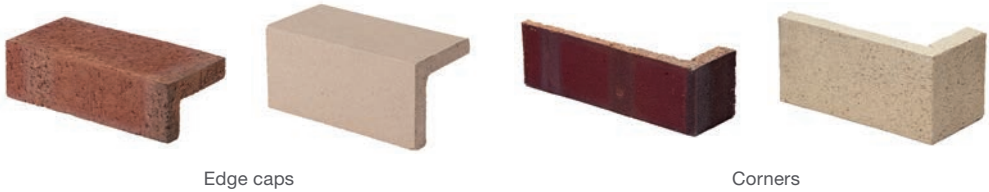


Add a tasteful touch with an unexpected mortar technique.



Aesthetics with purpose.

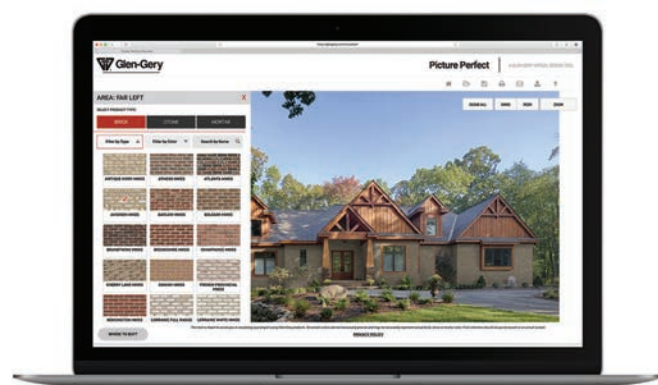
Combining construction functionality with the final degree of visual finish, precisely crafted shapes are available to help perfect any installation featuring Glen-Gery thin brick.



See it before you live it.

With the Picture Perfect design tool from Glen-Gery, you can visualize your project with any Glen-Gery building product, including thin brick. Try one look or try them all, and see what fits for you.

Find your style at glengery.com/visualizer



Cedar Lake Thin Brick; Glen-Gery Landmark Collection Sonoma Glen Ridge

You + Your Style

It all comes together at glengery.com



Discover the possibilities at glengery.com

Cover Image: Silverbrook Thin Brick

A BRAND OF

BRICKWORKS

Due to printing limitations, color and texture may vary from actual product. Final selection should always be based on an actual product sample. For more information, contact your Glen-Gery representative. © 2021 Glen-Gery Corporation • 2/21

Not all thin bricks are recommended for use in interior paving applications. Please consult a masonry professional to ensure proper design/installation.

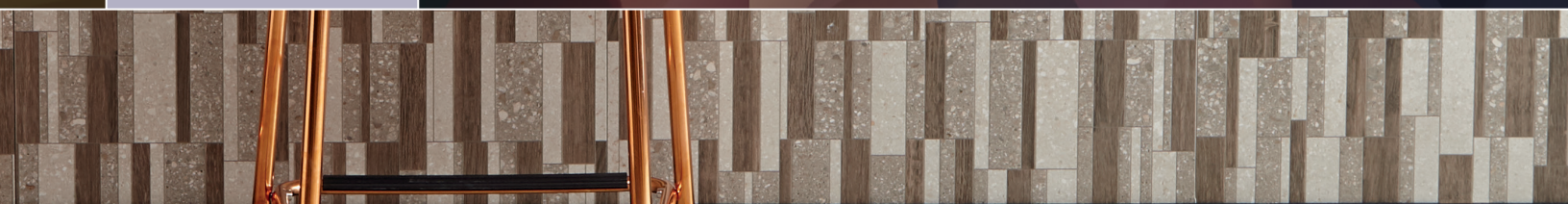


CONCRETE LOOK

FLOOR

MUSEO™

COLORBODY™ PORCELAIN & 2 X 3 ABSTRACT MOSAIC WITH
GLAZED CERAMIC 2 X 2 MOSAIC



 daltile®
IMAGINE WHAT'S POSSIBLE™

FLOOR

MUSEO™

COLORBODY™ PORCELAIN & 2 X 3 ABSTRACT MOSAIC WITH
GLAZED CERAMIC 2 X 2 MOSAIC

A Work of Art

Museo™ is a true masterpiece fit for sophistication and grandeur. This artistic collection is inspired by the raw, natural look of concrete and terrazzo subtly paired with the simple elegance of timber. Available in large-format sizes with multiple mosaic details, Museo is meant to be showcased on a grand scale.

• SCULPTED DESIGN

- 24 x 24 Interwoven Trellis provides the luxurious pairing of concrete and wood for exquisite style
- 12 x 24 block offered in two different color mixes
- Mosaics available in 2 x 3 Abstract and 2 x 2 sizes

• MANUFACTURED LOCALLY

- Floor tile Made in the USA with Reveal Imaging® Technology
- Available in white, light grey and dark grey color options



Cover photo features Museo™ Natural Grey 12 x 24 on the floor, Block Grey Mix 12 x 24 on bar wall and Aviano™ Trentino Greige 10 x 14 on the back wall.
Above photo features Museo™ Exhibition White 12 x 24 and Interwoven Trellis 24 x 24 on the floor.

CONCRETE LOOK

USAGE



FLOOR



WALL



COUNTERTOP



SHOWER
FLOOR



EXTERIOR
FLOOR



STEPWISE™



TRU-EDGE™



MADE IN
THE U.S.A.



LARGE
FORMAT



MOSAIC/
DECO



ENCAUSTIC



TERRAZZO



PAVER



CUSTOMIZE



FLEXFIT™



PC



LOW HIGH
SEE CHARTS FOR FULL
PRODUCT DETAILS

SPECIAL FEATURES

SIZES:



24 x 48
Floor Tile



24 x 24
Floor Tile



12 x 24
Floor Tile



2 x 2
Mosaic



2 x 3 Abstract
Mosaic

FINISHES: MATTE

FLOOR TILE



EXHIBITION WHITE MU30



ARTISTIC GREY MU31



NATURAL GREY MU32

24 X 24 INTERWOVEN TRELLIS



EXHIBITION WHITE
TRELLIS MU33

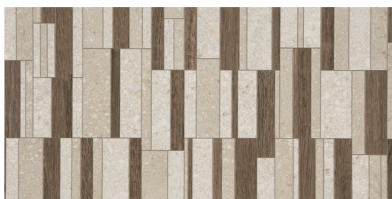


ARTISTIC GREY
TRELLIS MU34



NATURAL GREY
TRELLIS MU35

12 X 24 BLOCK



BLOCK WHITE MIX MU36



BLOCK GREY MIX MU37

2 X 3 ABSTRACT MOSAIC



EXHIBITION
WHITE MU30

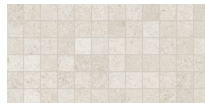


ARTISTIC GREY
MU31



NATURAL GREY
MU32

2 X 2 MOSAIC



EXHIBITION WHITE
MU30



ARTISTIC GREY
MU31



NATURAL GREY
MU32



SLIP RESISTANT



WATERPROOF



STAINPROOF



DENTPROOF



SCRATCH-RESISTANT*



FIRE-RESISTANT*
*Not Applicable to Mesh-Mounted
Mosaics



CLIMATEPRO™



SIMPLICLEAN™

SIZES

			Thickness	Sq. Ft./ Carton	Pieces/ Carton
	24 x 48 Floor Tile	(23-3/8" x 46-15/16") (59.44 cm x 119.3 cm)	5/16"	15.26	2
	24 x 24 Floor Tile / Interwoven Trellis	(23-3/8" x 23-3/8") (59.44 cm x 59.44 cm)	5/16"	15.20	4
	12 x 24 Floor Tile / Block	(11-5/8" x 23-3/8") (29.56 cm x 59.44 cm)	5/16"	15.12	8
	2 x 2 Mosaic* (Dot-mounted)	(12" x 24" Sheet) (30.48 cm x 60.96 cm Sheet)	1/4"	24.00	12
	2 x 3 Abstract Mosaic (Mesh-mounted)	(12" x 12" Sheet) (30.48 cm x 30.48 cm Sheet)	3/8"	9.70	10

* Glazed Ceramic

APPLICATIONS

	Target DCOF wet	Suitable
Dry & Level – Interior Floor	N/A	✓
Wet & Level – Interior Floor	≥ 0.42	✓
Shower Floors (Residential or Light Commercial)	≥ 0.42	✓*
Exterior Floor Applications (including pool decking & other wet areas with minimal footwear)	≥ 0.60	
Ramps & Inclines	≥ 0.65	
Walls/Backsplashes	N/A	✓
Countertops	N/A	✓
Pool Linings	N/A	✓*

A DCOF value of ≥0.42 is the standard for tiles specified for level interior spaces expected to be walked upon when wet, as stated in ANSI A137.1-A326.3. For more information about DCOF and the DCOF AcuTest™, visit daltile.com/DCOF.

APPLICATION NOTES:

Suitable for exterior applications in freezing and non-freezing climates, when proper installation methods are followed.

2 x 2 Mosaic suitable for exterior applications in non-freezing climates, when proper installation methods are followed.

* Mosaic tile only

PERFORMANCE CHARACTERISTICS

	ASTM#	Floor Result	2 x 3 Mosaic Result	2 x 2 Mosaic Result
Water Absorption	C373	< 0.5%	< 0.5%	< 3.0%
Breaking Strength	C648	> 275 lbs	> 275 lbs	> 250 lbs
Scratch Hardness	MOHS	8.0	8.0	8.0
Chemical Resistance	C650	Resistant	Resistant	Resistant

For additional information on test results, visit us at: daltile.com/information/TestResults.



TRIM

Type	Number	Size	Pieces/ Carton
 Bullnose	P-43F9	3 x 24	10
 Cove Base	P-36C9TB	6 x 12	22
 Cove Base Outcorner	PC-36C9TB	1 x 6	15

Cove base trim is intended to coordinate with floor tile in the standard 90-degree installation position.

Cove base and cove corner trim are suitable for non-freezing climates only.

INSTALLATION

Grout Joint Recommendation	Shade Variation
Floor: 1/8" (3/16" when installing tile with a length 15" or greater in a staggered brick-joint pattern; overlap should not exceed 33%). Mosaic: 1/8"	 High (V3)

DURABILITY

Floor Surface Wear Resistance

1	Residential Bathrooms	3	All Residential / Light Commercial
2	All Residential Areas	④	All Residential / Commercial

NOTES

Since there are variations in all fired ceramic and natural products, tile and trim supplied for your particular installation may not match samples. Final confirmation should be made from actual tiles and trim prior to installation. Manufactured in accordance with ANSI A137.1 standards.

Not for use on ramps. Water, oil, grease, improper drainage and certain footwear can create slippery conditions. Floor applications expected to be exposed to these conditions require extra caution in product selection.

For additional information refer to "Factors to Consider" at: daltile.com/Factors.

Special consideration needs to be given when installing tiles greater than 15 inches. Please refer to daltile.com/LargeTiles for more information.

Special care should be taken when grouting with dark pigmented colors. A grout release is recommended to prevent finely powdered pigments from lodging in the pores of the surface. Use of a latex modified thin-set is recommended for installation.



All or select items within this series meet the requirements for these qualifications. For more information, visit daltile.com.

7834 C.F. Hawn Freeway,
Dallas, Texas 75217 | 1.800.933.TILE

To view the complete collection of
Daltile® products and information,
visit our website at daltile.com.



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What's on the inside counts.



So what's on the outside matters.





Her first steps. That one mismatched recliner.
Drawings up on the fridge, piano notes and an
overfull bookcase. There are countless little
things we treasure. So count on James Hardie to
**protect everything inside,
from everything outside.**

Make inspired choices every step of the way.

Give your home a beautiful new beginning. From siding style options and color choices, down to the detailed selections of trim, soffit and fascia, find all the tools you need to create with confidence.

HardiePlank® Lap Siding Select Cedarmill® Evening Blue
HardieShingle® Siding Straight Edge Panel Evening Blue
HardieTrim® Boards Arctic White
HardieSoffit® Vented Select Cedarmill® Arctic White



**THINK OF YOUR
HOME AS A
BLANK CANVAS.
THE POSSIBILITIES
ARE ENDLESS.**



HardieShingle® Siding Straight Edge Panel Light Mist
HardieTrim® Boards Arctic White



HardieShingle® Siding Straight Edge Panel Light Mist
HardieTrim® Boards Arctic White

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The home you've always imagined? It's at your fingertips.

Sometimes, a project like this feels like a huge undertaking. But we promise it's easier than it seems. When picking the siding style for your home, there are a few things to keep in mind:

- 1 Craft confidently.** This is an extension of you. Your personality. Your tastes. Reflect your lifestyle with siding materials and designs that reveal what you cherish.
- 2 Look beyond the surface of the siding to see if the material is designed to withstand the rigors of the climate where you live.** While other sidings take a one-size-fits-all approach, only James Hardie® siding and trim are specifically engineered to stand up to the climate where they are used. The unique formulation of our fiber cement siding makes it a better all-around performer than wood-based or vinyl siding, delivering superior resistance to weather, fire and damage from pests.
- 3 Take the long view.** Weighing costs? Re-siding your home returns more value than any other major home exterior project*, making it a better investment for your home. High-performance fiber cement siding can help you spend less time and money maintaining your home. So you can enjoy more, and work less, over the many years to come.
- 4 Browse the ColorPlus® Technology finish collections to find colors that complement your home's setting and your personality.** No other siding brand matches our combination of styles, textures and color finishes to capture the design you desire.
- 5 Pick out the finishing details.** Make it truly yours. The trim, soffit and fascia will complete your home's exterior, giving your home instant curb appeal. When you select a James Hardie Complete Exterior™, the accent pieces work together to complement the siding in both style and performance. All backed by exceptional warranties from a single manufacturer.

IT'S TIME TO ELEVATE YOUR HOME



"As we started looking at the house, we thought well maybe we should re-side it. Now I think it reflects more what's on the inside of our house. It looks like a different house—It looks like a new house."

Lisa and Mike H. used James Hardie® products to re-side their home.



Siding that stands up.
For a house that stands out.

It's easy to get swept away by the James Hardie collection of profiles and products. The closer you look, the more you'll understand why over 8 million homeowners have chosen North America's most popular brand of siding.

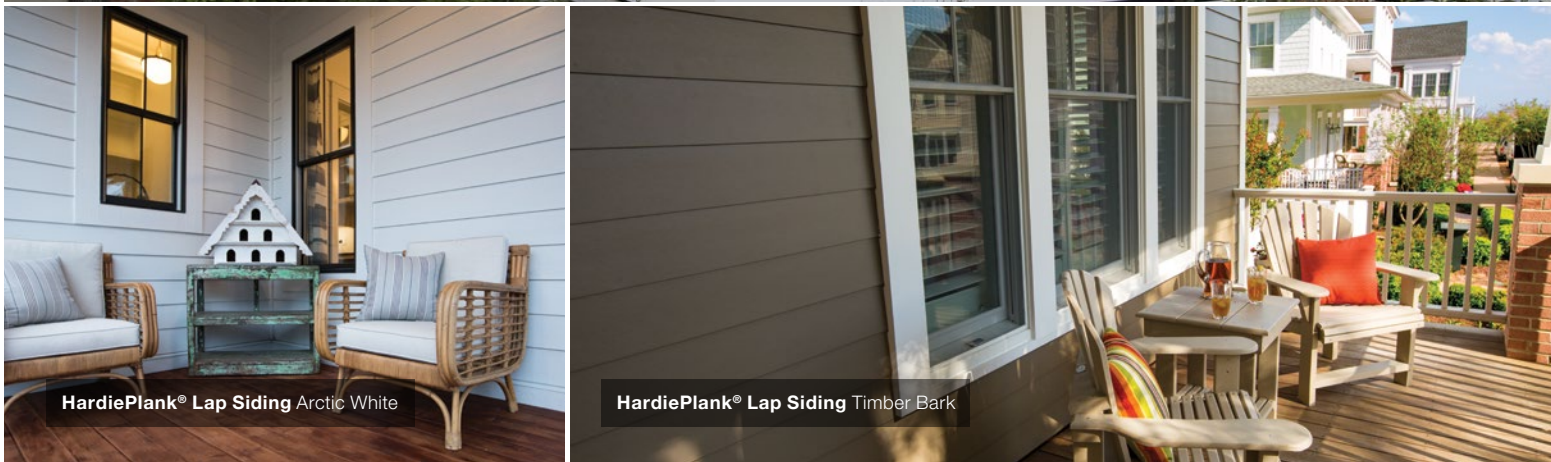
HardiePlank® Lap Siding Stone Gray
HardiePanel® Vertical Siding Stone Gray
HardieTrim® Batten Boards Stone Gray
HardieTrim® Boards Cobble Stone

Captivating and timeless with a modern touch.

Wrap your home in clean, classic lines with the low maintenance HardiePlank® lap siding that fits the way you live now. Available in a variety of widths to capture different home styles, you can select the smooth lap siding for a more contemporary style, or enjoy the genuine warmth of wood grain texture. Select a beaded lap board to add detailed horizontal definition for a signature look.



HardiePlank® Lap Siding White Bungalow
HardieTrim® Boards White House



HardiePlank® Lap Siding Arctic White

HardiePlank® Lap Siding Timber Bark

HARDIEPLANK® LAP SIDING
REFLECTS THE COMFORTS OF HOME.
WARM AND WELCOMING.



“James Hardie® siding was really able to provide the aesthetic I was going for. Now our home looks back to its original, ‘Gone with the Wind’ farmhouse look and feel.”

Holly W. used James Hardie® products to re-side her 1800s-era farmhouse.

Charming and elegant with historic vibes.

Replicate the handcrafted look of cedar that’s suggestive of a rustic cottage or grand Cape Cod-style home. Shingle siding adds instant charm to any home – whether it’s located a stone’s throw from the sea or many leagues away.



**HARDIESHINGLE® SIDING IS ENCHANTING,
REMINISCENT OF SUNNY DAYS SPENT
RELAXING AT THE SHORE.**

“Having something we knew would last and would still look good for a long time was a huge factor in our decision.”

Chris and Minna Z. replaced fading and cracking cedar siding with James Hardie® siding with transformative results.

Where rustic
meets refined.

Traveling from the coast to the countryside, HardiePanel® vertical siding transforms homes into modern farmhouses that would feel right at home on the prairie or in the rolling hills. Add HardieTrim® boards for traditional board and batten accents or keep the design clean and contemporary with the panel's smooth texture.



HardiePanel® Vertical Siding Light Mist
HardieTrim® Batten Boards Light Mist
HardieTrim® Boards Arctic White

ACCENTUATE YOUR HOME'S INVITING
FEATURES WITH HARDIEPANEL®
VERTICAL SIDING.



HardiePanel® Vertical Siding Arctic White
HardieTrim® Batten Boards Arctic White



HardiePanel® Vertical Siding Cobble Stone
HardieTrim® Batten Boards Cobble Stone
HardieTrim® Boards Arctic White



HardiePanel® Vertical Siding Evening Blue
HardieShingle® Siding Straight Edge Panel Evening Blue
HardieTrim® Boards Arctic White
HardieSoffit® Select Cedarmill® Arctic White



HardiePlank® Lap Siding Smooth Gray Slate
HardieTrim® Boards Arctic White



HardieShingle® Siding Straight Edge Panel Iron Gray
HardieTrim® Boards Iron Gray



HardiePlank® Lap Siding Select Cedarmill® Khaki Brown
HardieTrim® Boards Navajo Beige

Live colorfully
ever after.

Color speaks to everyone differently. Some are drawn to light, clean colors, or bright, luscious hues, while others love dark, dramatic shades and neutral, earth tones. We have curated collections of ColorPlus® Technology finishes that can capture the look you love. Choose the right color combination with confidence using the dynamic Home Color Tool on our website. And James Hardie® siding and trim enhanced with ColorPlus® Technology can save you time, money and maintenance headaches down the road. The baked on color retains the look you love longer than house paint applied on site, helping your home look great for years to come.

EXPRESS YOUR
PERSONALITY
WITH INSPIRING
COMBINATIONS.



Durable in any season. Delightful on any home.

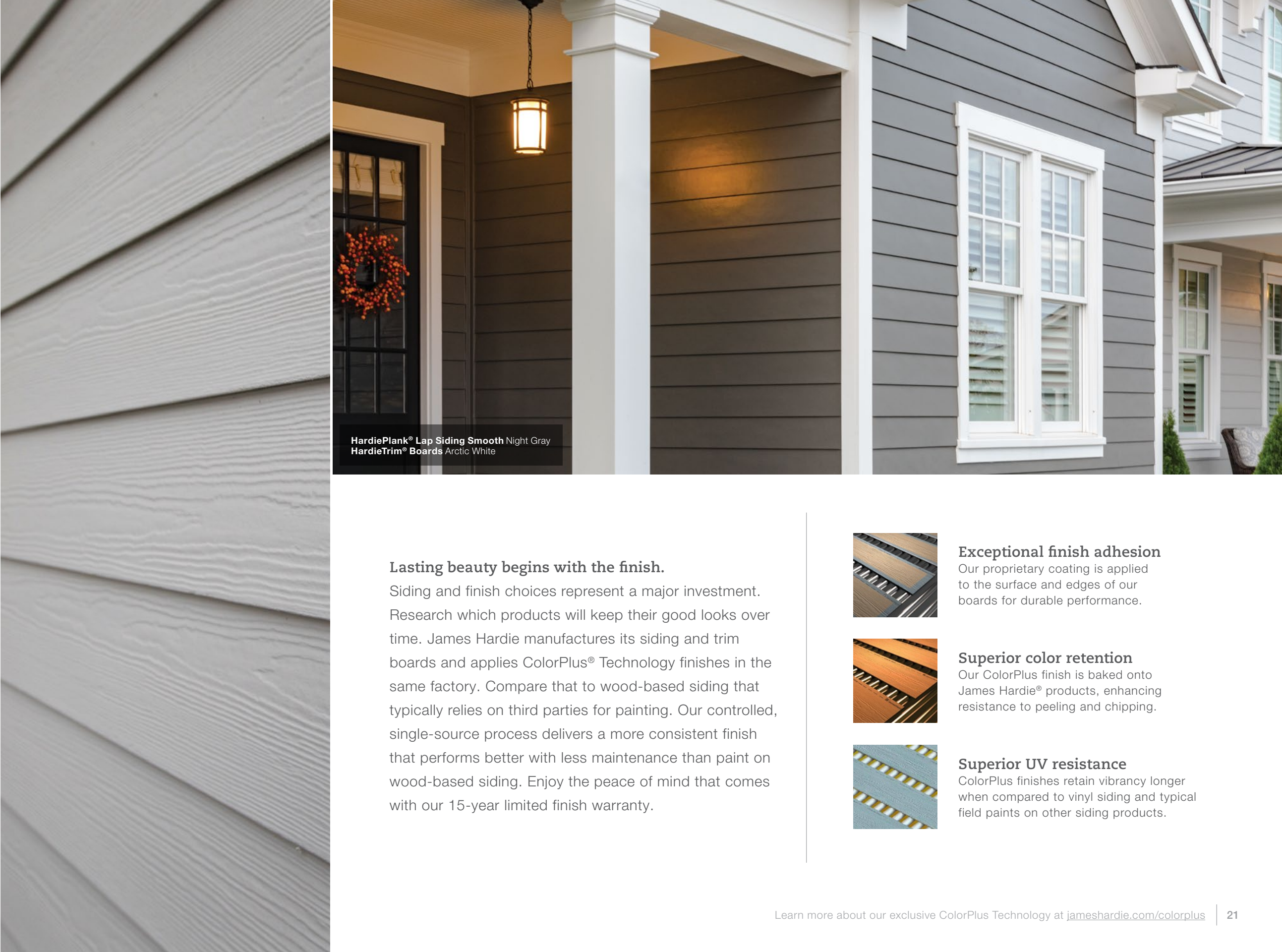
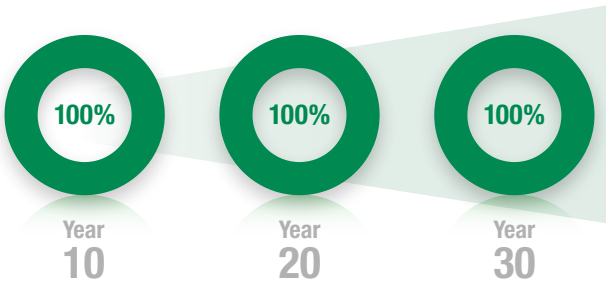
James Hardie® siding is made to withstand the harshest elements. Rain, wind, snow, sun — whatever Mother Nature throws at you. All while providing beauty built to last.

Love your look, wherever you live.

As you get further into your journey, you'll discover the importance of style that endures. Only James Hardie® fiber cement siding and trim are specifically designed to perform beautifully wherever you live. Our HZ5® products resist shrinking, swelling and cracking even after years of wet or freezing conditions. Our HZ10® products stand up to hot, humid conditions, blistering sun and more.

Unlike other brands, James Hardie doesn't prorate its substrate warranties

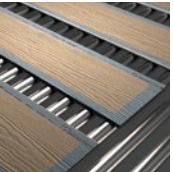
- 30-year non-prorated, limited siding warranty
- 15-year non-prorated, limited trim warranty



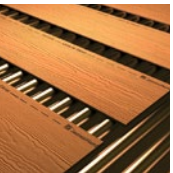
HardiePlank® Lap Siding Smooth Night Gray
HardieTrim® Boards Arctic White

Lasting beauty begins with the finish.

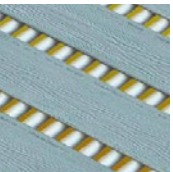
Siding and finish choices represent a major investment. Research which products will keep their good looks over time. James Hardie manufactures its siding and trim boards and applies ColorPlus® Technology finishes in the same factory. Compare that to wood-based siding that typically relies on third parties for painting. Our controlled, single-source process delivers a more consistent finish that performs better with less maintenance than paint on wood-based siding. Enjoy the peace of mind that comes with our 15-year limited finish warranty.



Exceptional finish adhesion
Our proprietary coating is applied to the surface and edges of our boards for durable performance.



Superior color retention
Our ColorPlus finish is baked onto James Hardie® products, enhancing resistance to peeling and chipping.



Superior UV resistance
ColorPlus finishes retain vibrancy longer when compared to vinyl siding and typical field paints on other siding products.

Superior siding — it’s the easiest decision along the way.

Your home should be your rock. James Hardie designs superior strength into every fiber cement board to resist swelling, buckling, warping and splitting, despite what nature brings. No wood, wood-based, vinyl or other fiber cement siding can match our overall ability to protect your home’s exterior from the elements. Before long, wood-based siding can show the effects of damage caused by weather, water, fire and pests. James Hardie® siding is specifically engineered to better resist the harsh conditions nature unleashes.



JAMES HARDIE® SIDING

WOOD-BASED SIDING



vs



Resists Weather

James Hardie siding
Resists shrinking, swelling and cracking in changing weather

Wood-based siding
Shrinks and swells with changes in moisture and humidity



vs



Resists Fire

James Hardie siding
Won't burn and is recognized by fire departments nationwide†

Wood-based siding
Will burn when exposed to a significant source of heat or flame



vs



Resists Pests

James Hardie siding
Won't be eaten by woodpeckers and other pests

Wood-based siding
Subject to damage from woodpeckers and other pests

*The images illustrate samples of HardiePlank® lap siding and engineered wood both unexposed (left) and exposed (right) to repeated cycles of wetting and drying. **The images represent HardiePlank® lap siding and engineered wood siding samples exposed to a blowtorch flame for 90 seconds. †James Hardie® siding complies with ASTM E136 as a noncombustible cladding and is recognized by fire departments across the U.S. including Marietta, GA, Flagstaff, AZ and Orange County, CA. ††Images depict undamaged HardiePlank® lap siding and engineered wood exhibiting woodpecker damage.

James Hardie® siding provides authentic design that vinyl siding can’t match.

Our products are up to 5x thicker than vinyl siding, providing deeper shadow lines and a warmer wood grain texture with seams that are less visible. When investing in your home, don’t be misled by vinyl siding’s short term cost. Its color can be more susceptible to fading. Vinyl siding may also crack, buckle or sag with weather stress and time, possibly diminishing your home’s charm and value.



JAMES HARDIE® SIDING

VINYL SIDING



vs



Resists Weather

James Hardie siding

Resists damage from wind, rain, freezing temperatures and hail.

Vinyl siding

Can be damaged by hail and more prone to cracks, buckling or warping with extreme temperature changes.



vs



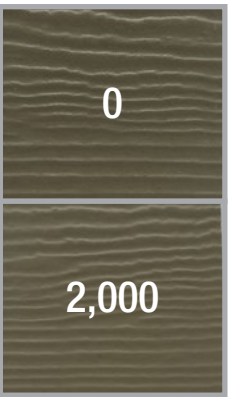
Resists Heat

James Hardie siding

Noncombustible and resists damage from extreme heat.

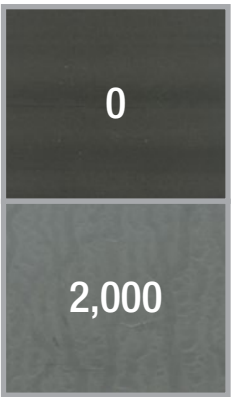
Vinyl siding

Vulnerable to melting caused by flame, grills and Low-E windows.



vs

Hours of UV light exposure



Resists Fading

James Hardie siding

ColorPlus® Technology finishes are baked onto the boards, creating consistent color that performs better and looks brighter on homes.

Vinyl siding

Color stability varies with product quality, which can affect susceptibility to color change.

*The images illustrate samples of HardiePlank® lap siding both unexposed (left) and exposed (right) to repeated cycles of wetting and drying. Image of vinyl siding illustrates potential damage from hail or other impact. ** The images represent HardiePlank® lap siding sample exposed to a blowtorch flame for 90 seconds, and a vinyl siding sample heated to 140°F for 30 seconds. †Within a controlled lab environment, samples were exposed to an accelerated QUV test of 2,000 hours under ASTM G154-12a.



HardiePanel® Vertical Siding Aged Pewter
HardieShingle® Siding Straight Edge Panel Aged Pewter
HardiePlank® Lap Siding Aged Pewter
HardieTrim® Boards Arctic White

Prepare for your remodel with these helpful checklists.

Important steps for a successful re-side

- ☐ Don't just cover up an existing problem. To fix a damaged exterior, the old siding should always be completely removed.
- ☐ Have your home inspected for moisture damage, mold, termites or rot. If any of these are found, address the problem to avoid future structural issues.
- ☐ Your contractor should apply a weather-resistant barrier, such as HardieWrap® weather barrier. In fact, most building codes now require this.
- ☐ Be sure your new siding is installed according to manufacturer's instructions for optimal product performance.

Points to cover when meeting with a contractor

- ☐ Make sure the contractor's proposal includes everything you requested and the price is based on the entire project, start to finish.
- ☐ Focus on value rather than price – the credentials, attention to detail and provisions for maintaining a safe and tidy workspace are important factors that should also influence your contractor decision.
- ☐ Carefully read the contractor's workmanship warranty policy.
- ☐ Remember, the proposal is not a contract. Once you get a written contract, compare it to the proposal to ensure all your needs are met.

For homes designed to be lived in, without looking that way.

Finishing touches, down to the details. Complete your home's distinctive exterior design with trim and soffit that complement your siding and color choices in both style and performance. You can select James Hardie® products with confidence, knowing that they have earned the endorsements of trusted authorities across the building industry.



Discover why James Hardie is the recognized leader at jameshardie.com/leader



HardiePlank® lap siding
is backed by the **Good Housekeeping Seal**



Chosen by builders
annually as a **Brand Leader**
in **Builder Magazine**



Green Builder Magazine Readers'
Choice, **"Most Sustainable Product"** 2019



Featured on the **DIY Network's Blog Cabin**
every year since 2012



Money Magazine singles out
HardiePlank® lap siding as a
great value



Featured in **This Old House's Idea Home**, the Farmhouse at Emerson Green 2016

You can also check out more inspirational photos of gorgeous homes featuring our products on Houzz and Pinterest.

Explore your design options with our Home Color Tool at jameshardie.com/color

Siding colors shown in these images may deviate from actual ColorPlus® Technology colors. For best results in color selection, please refer to Statement Collection™ product samples or Dream Collection™ color fan decks.

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TRIFAB® VG (VERSAGLAZE®)
TRIFAB® VG 450, 451 & 451T (THERMAL) FRAMING SYSTEMS &
TRIFAB® 451UT (ULTRA THERMAL) FRAMING SYSTEM



Design + Performance

Versatility with Unmatched Fabrication Flexibility



Geisinger Professional Building
Jenkins Township, Pennsylvania
ARCHITECT
Mericle Commercial Real Estate Services
Wilkes-Barre, Pennsylvania
GLAZING CONTRACTOR
Sterling Glass, Inc., Scranton, Pennsylvania
PHOTOGRAPHER
© Perzel Photography Group

Trifab® VersaGlaze® is built on the proven and successful Trifab® platform – with all the versatility its name implies. There are enough framing system choices, fabrication methods, design options and performance levels to please the most discerning building owner, architect and installer. The 4.5" depth Trifab® VersaGlaze® Framing System family is available with non-thermal, thermal and ultra-thermal performance levels. The ultra-thermal Trifab® 451UT Framing System, is designed for the most demanding thermal performance and employs a dual Isolock® thermal break.

AESTHETICS

Trifab® VersaGlaze® Framing Systems offer designers a choice of front-, center-, back- or multi-plane glass applications. Structural silicone

glazing (SSG) and weatherseal glazing options further expand designers' choices, allowing for a greater range of possibilities for specific project requirements and architectural styles. All systems have a 4-1/2" frame depth; Trifab® VersaGlaze® 450 has 1-3/4" sightlines, while Trifab® VersaGlaze® 451/451T and Trifab® 451UT have 2" sightlines.

With seamless incorporation of Kawneer entrances or windows, including GLASSvent® visually frameless ventilators, Trifab® framing can be used on almost any project. These framing systems can also be packaged with Kawneer curtain walls and overhead glazing, thereby providing a full range of proven, and tested, quality products for the owner, architect and installer from a single-source supplier.

ECONOMY

Trifab® VersaGlaze® 450/451/451T/451UT Framing Systems offer a variety of fabrication choices to suit your project:

- **Screw Spline** – for economical continuous runs utilizing two-piece vertical members that provide the option to pre-assemble units with controlled shop labor costs and smaller field crews for handling and installation. (available for all systems)
- **Shear Block** – for punched openings or continuous runs using tubular moldings with shear block clips that provide tight joints for transporting large pre-assembled multi-lite units. (available for 450/451/451T systems)
- **Stick** – for fast, easy field fabrication. Field measurements and material cuts can be done when metal is on the jobsite. (available for 450/451/451T systems)
- **Pre-glazed** – The combination of screw spline construction with pre-glazing in the shop accelerates installation and reduces field labor time while minimizing disruption to the surrounding area or existing tenants. Making it an exceptional choice for new or retrofit applications, particularly in urban areas or where space is limited. (available for 451/451T/451UT framing)



Brighton Landing
Cambridge, Massachusetts
ARCHITECT
ADD Inc., Cambridge, Massachusetts
GLAZING CONTRACTOR
Ipswich Bay Glass Company, Inc., Rowley, Massachusetts
PHOTOGRAPHER
© Gordon Schenck, Jr.

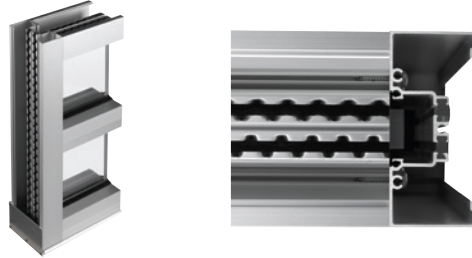
All systems can be flush glazed from either the inside or outside. The weatherseal option provides an alternative to SSG vertical mullions for Trifab® VersaGlaze® 450/451/451T. This ABS/ASA rigid polymer extrusion allows complete inside glazing and creates a flush glass appearance on the building exterior without the added labor of scaffolding or swing stages. Additionally, high-performance flashing options are engineered to eliminate perimeter sill fasteners and associated blind seals.

FOR THE FINISHING TOUCH

Architectural Class I anodized aluminum and painted finishes in fluoropolymer (AAMA 2605) and solvent-free powder coatings (AAMA 2604) offer a variety of color choices.

PERFORMANCE

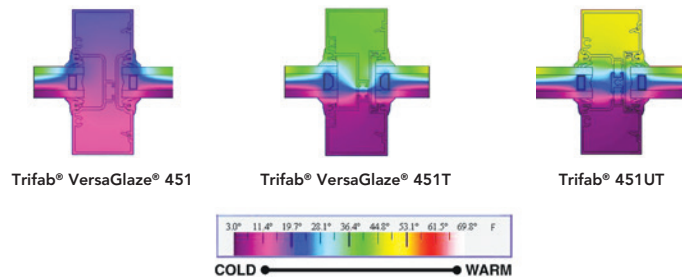
Kawneer's Isolock® thermal break technology creates a composite section, prevents dry shrinkage and is available on Trifab® VersaGlaze® 451T. For even greater thermal performance, a dual Isolock® thermal break is used on Trifab® 451UT.



Trifab® 451UT uses a dual Isolock® thermal break (right) and features a new high-performance sill design, which incorporates a screw-applied end dam (left), ensuring positive engagement and tight joints between the sill flashing and end dam.

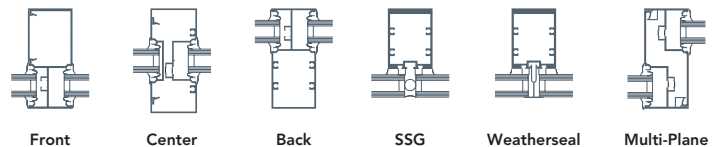
U-factor, CRF values and STC ratings for Trifab® framing systems vary depending upon the glass plane application. Project-specific U-factors can be determined for each individual project. (See the Kawneer Architectural Manual or Kawneer.com for additional information.)

Thermal simulations showing temperature variations from exterior/cold side to interior/warm side.



PERFORMANCE TEST STANDARDS

Air Infiltration	ASTM E283
Water	AAMA 501, ASTM E331
Structural	ASTM E330
Thermal	AAMA 1503
Thermal Break	AAMA 505, AAMA TIR-A8
Acoustical	AAMA 1801, ASTM E1425



PRODUCT GREEN GUIDE

Trifab™ 451UT Framing System

The Trifab™ 451UT (Ultra Thermal) framing system is designed for the most demanding thermal performance and employs a “dual” Isolock® Thermal Break.



RATING SYSTEMS

LEED v4 BD+C: New Construction

- ✓ EA: Optimize Energy Performance
- EA: Renewable Energy Production
- ✓ MR: Environmental Product Declarations
- ✓ MR: Sourcing of Raw Materials
- ✓ MR: Material Ingredients
- ✓ MR: Source Reduction - Lead, Cadmium, and Copper
- ✓ MR: Construction and Demolition Waste Management
- EQ: Thermal Comfort
- ✓ EQ: Daylight
- ✓ EQ: Quality Views
- ✓ EQ: Acoustic Performance

Living Building Challenge 3.1

- | | |
|---------------------------------|-----------------------------------|
| ✓ IMP 06: Net Positive Energy | ✓ IMP 12: Responsible Industry |
| ○ IMP 07: Civilized Environment | ✓ IMP 13: Living Economy Sourcing |
| ✓ IMP 08: Healthy Interior | ✓ IMP 14: Net Positive Waste |
| ✓ IMP 09: Biophilic Environment | ○ IMP 16: Universal Access |
| ✓ IMP 10: Red List | |

WELL Building Standard

- | | |
|-----------------------------------|-----------------------------------|
| ✓ 01: Air Quality Standards | ✓ 28: Cleanable Environment |
| ○ 03: Ventilation Effectiveness | ✓ 54: Circadian Lighting |
| ✓ 04: VOC Reduction | ○ 56: Solar Glare Control |
| ○ 08: Healthy Entrance | ✓ 61: Right to Light |
| ✓ 11: Fundamental Material Safety | ✓ 62: Daylight Modeling |
| ✓ 12: Moisture Mgmt | ✓ 63: Daylight Fenestration |
| ✓ 14: Air Filtration Mgmt | ○ 72: Accessible Design |
| ○ 15: Increased Ventilation | ✓ 74: Exterior Noise Intrusion |
| ○ 19: Operable Windows | ○ 76: Thermal Comfort |
| ✓ 25: Toxic Material Reduction | ✓ 97: Material Transparency |
| ✓ 26: Enhanced Material Safety | ✓ 98: Organizational Transparency |

FEATURES

- 2" (50.8mm) sightline
- 4-1/2" (114.3mm) depth
- Infill options up to 1-1/8" (28.6)
- Ultra thermal performance
- Blast mitigation
- Center glazed
- Flush glazed from either the inside or outside
- Screw Spline fabrication
- Single-span
- Storefront, Ribbon Window or Punched Openings
- Standard anodized finishes only

DOCUMENTS



Declare™

Document no. KAW-0014 & 0015
Red List Free



Environmental Product Declaration

Document no. 47868332121.104.1
Product-specific Type III EPD



Material Transparency Summary

Document no. MTSC060EN
Manufacturer Material Ingredient Inventory

190, 350 AND 500 STANDARD ENTRANCES



Single-Source Packages Generate Versatile First Impressions



Curtis Culwell Center
Garland, Texas
ARCHITECT
HKS, Inc., Dallas, Texas
GLAZING CONTRACTOR
B & B Glass, Inc., Dallas, Texas
PHOTOGRAPHER
© Blake Marvin – HKS

Tough yet attractive, Kawneer's Standard Entrances are designed as a single-source package of door, door frame and hardware that is easily adaptable to custom requirements. Designed to complement new or remodel construction as well as modern or traditional architecture, they are engineered, constructed and tested to make a good first impression while withstanding the rigors of constant use by occupants and visitors.

PERFORMANCE

To resist both lever arm and torsion forces that constantly act on any door, all three entrances feature welded corner construction with Sigma deep penetration and fillet welds plus mechanical fastenings at each corner – a total of 16 welds per door. Each door corner comes with a limited lifetime warranty, good for the life of the door under normal use. It is transferable from building owner to owner and is in addition to the standard two-year warranty covering material and workmanship of each Kawneer door.



1. Thermoplastic elastomer weatherstrip in blade stop of frame jams, header or transom bar.
2. Integral polymeric fin attached to adjustable astragal, creating an air barrier between pairs of doors.
3. Optional surface-applied bottom weatherstrip with flexible blade gasket. Extruded raised lip on threshold to provide continuous contact for bottom weatherstrip.
4. Standard 1/4" beveled glass stops to sheet water and dirt off without leaving residue.
5. Available in all finishes offered by Kawneer.

ECONOMY

Kawneer's bulb neoprene weatherstripping forms a positive seal around the door frame and provides a substantial reduction in air infiltration, resulting in improved comfort and economies in heating and cooling costs. The system is wear- and temperature-resistant and replaces conventional weatherproofing. The bottom weatherstrip at the interior contains a flexible blade gasket to meet and contact the threshold, enhancing the air and water infiltration performance characteristics.

190 NARROW STILE ENTRANCE

- Is engineered for moderate traffic in applications such as stores, offices and apartment buildings
- Vertical stile measures 2-1/8", top rail 2-1/4" and bottom rail 3-7/8"
- Results in a slim look that meets virtually all construction requirements

350 MEDIUM STILE ENTRANCE

- Provides extra strength for applications such as schools, institutions and other high-traffic applications
- Vertical stiles and top rails measure 3-1/2"
- Bottom rail measures 6-1/2" for extra durability

500 WIDE STILE ENTRANCE

- Creates a monumental visual statement for applications such as banks, libraries and public buildings
- Vertical stiles and top rail measures 5"; bottom rail measures 6-1/2"
- Results in superior strength for buildings experiencing heavy traffic conditions

GENERAL

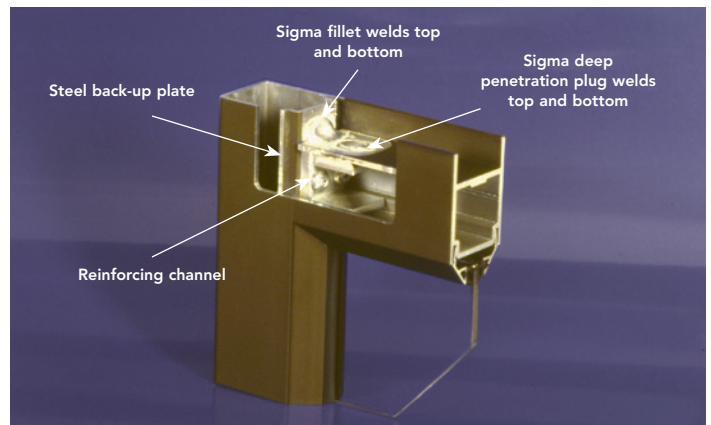
- Heights vary up to 10'; widths range from approximately 3' to 4'
- Door frame face widths range to a maximum of 4", while depths range to 6"
- Door operation is single- or double-acting with maximum security locks or touch bar panics standard
- Architect's classic 1" round, bent bar push/pull hardware is available in various finishes and sizes
- Infills range from 1/4" to 1"

FOR THE FINISHING TOUCH

Architectural Class I anodized aluminum finishes are available in clear and Permanodic® color choices.

Painted finishes, including fluoropolymer, that meet AAMA 2605 are offered in many standard choices and an unlimited number of specially designed colors.

Solvent-free powder coatings add the "green" element with high performance, durability and scratch resistance that meet the standards of AAMA 2604.



Job Name:	
Tag#	



Submittal Data Sheet

3MXS24NMVJU

3 Port, 2-Ton Outdoor Heat Pump



Complete warranty details available from your local dealer or at www.daikincomfort.com. To receive the 12-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Quebec. *If product is installed in a commercial application, limited warranty period is 5 years.*

Outdoor Specifications

Compressor	Hermetically Sealed Swing Type			
Refrigerant	R-410A			
Refrigerant Oil	PVE (FVC50K)			
Airflow Rate (cfm)	Cooling		Heating	
	H	2,094	H	2,094
	M	2,094	M	1,951
	L	1,981	L	1,119
Sound Power Level (dBA)	52 / 54			
Dimensions (H x W x D) (in)	28-15/16 x 34-1/4 x 12-5/8			
Weight (Lbs)	137			

Efficiency

	SEER	EER	HSPF
Non-Ducted	17.9	12.7	12.5
Ducted	14	9.7	8.2
Mixed	15.95	11.2	10.35

Performance

Cooling (Btu/hr)	
Rated	24,000
Operating Range	14°F – 115°F

Rated Cooling Conditions: Indoor: 80°F DB/67°F WB
Outdoor: 95°F DB/75°F WB

Heating (Btu/hr)	
Rated	24,000
Operating Range	5°F – 60°F

Rated Heating Conditions: Indoor: 70°F DB/60°F WB
Outdoor: 47°F DB/43°F WB

Electrical

	208/60/1	230/60/1
System MCA	18.7	18.7
System MFA	20	20
Compressor RLA	15.5	15.5
Outdoor fan motor FLA	.33	.33
Outdoor fan motor W	51	51

MFA: Max. fuse amps MCA: Min. circuit amps (A) FLA: Full load amps (A)
RLA: Rated load amps (A) W: Fan motor rated output (W)

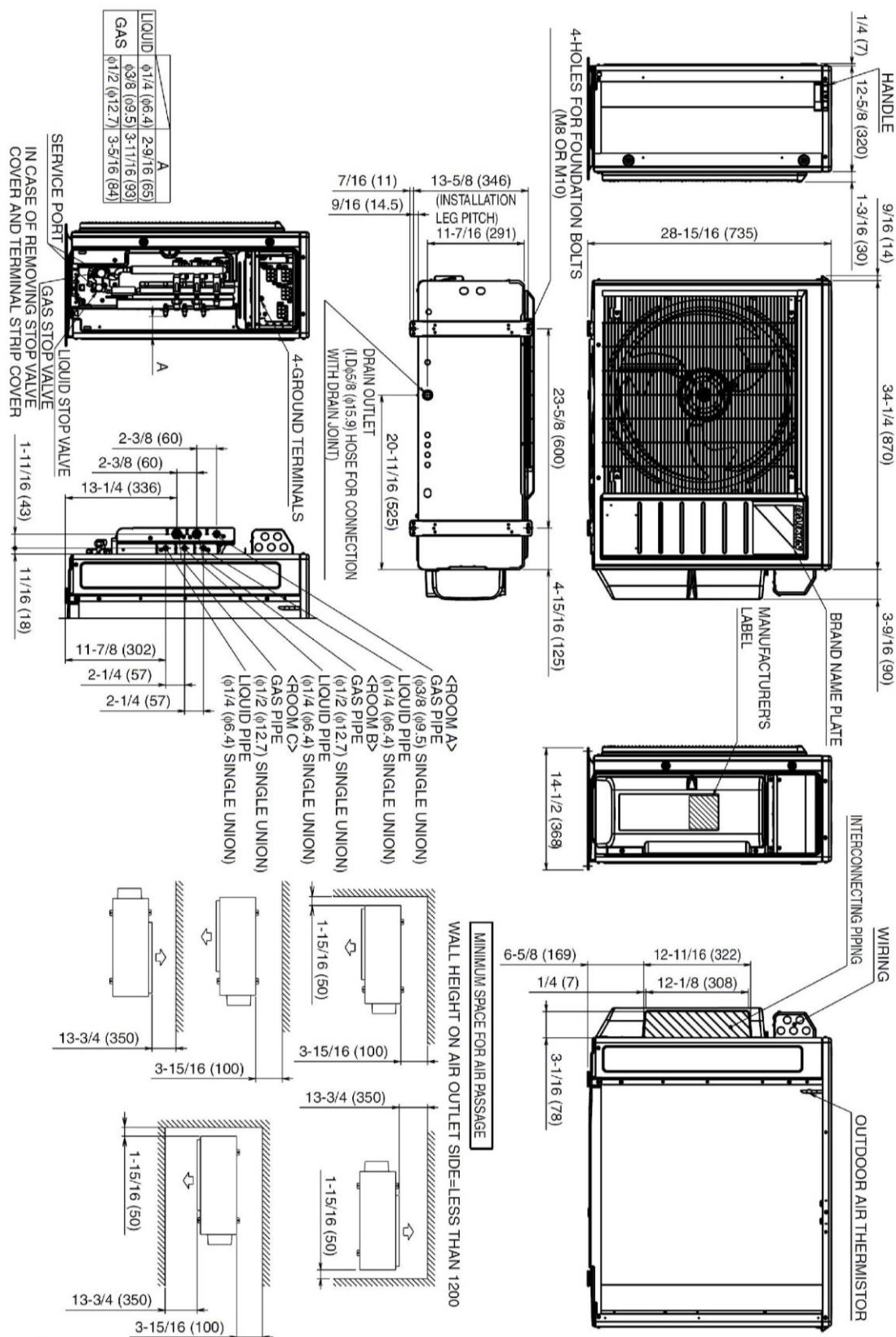
Piping

Liquid (in)	¼ x 3
Gas (in)	3/8 x 1, ½ x 2
Drain (in)	11/16
Max. Interunit Piping Length (ft)	230
Max. Interunit Height Difference (ft)	49.25
Chargeless (ft)	131.6
Additional Charge of Refrigerant (oz/ft)	.21

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3MXS24NMVJU Dimensional Data



C: 3D093198

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Submittal Creation Date: June 2017

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Optional Accessories



Included	Part Number	Description
	DACA-WB-3	Mounting Bracket
	KEH063A4E	Drain Pan Heater 2/3/4MXS & 2/3MXL
	KPW063A4	Air Adjustment Grille
	KKG063A42	Back protection wire net
	KKG063A43	Side protection wire net
	KPS063A41	Snow hood (intake side plate)
	KPS063A44	Snow hood (intake rear plate)
	KPS063A47	Snow hood (outlet)

3MXS24NMVJU Capacity Tables



Non- Ducted, 60 Hz, 208-230V

Combination of indoor unit	Cooling Capacity of each indoor unit				Heating Capacity of each indoor unit	
	Each Capacity				Total Indoor Unit Capacity	
	A room	B room	C room	D room	Rating	(min ~ max)
07	7.60	—	—	—	7.60	7.30 ~ 8.40
	8.80	—	—	—	8.80	8.70 ~ 9.70
09	9.80	—	—	—	9.80	7.40 ~ 10.80
	11.30	—	—	—	11.30	10.00 ~ 12.50
12	13.00	—	—	—	13.00	7.50 ~ 14.40
	15.00	—	—	—	15.00	9.90 ~ 16.70
15	16.30	—	—	—	16.30	8.90 ~ 18.00
	18.80	—	—	—	18.80	9.40 ~ 20.80
18	19.50	—	—	—	19.50	8.90 ~ 21.60
	22.50	—	—	—	22.50	9.40 ~ 25.00
07+07	7.60	7.60	—	—	15.20	8.90 ~ 16.80
	8.75	8.75	—	—	17.50	9.30 ~ 19.40
07+09	7.69	9.61	—	—	17.30	8.90 ~ 19.20
	8.89	11.11	—	—	20.00	9.20 ~ 22.20
07+12	7.31	12.79	—	—	20.10	9.00 ~ 22.80
	8.25	14.45	—	—	22.70	9.10 ~ 26.60
07+15	6.31	15.79	—	—	22.10	10.00 ~ 26.40
	6.69	16.71	—	—	23.40	8.70 ~ 31.30
07+18	6.00	18.00	—	—	24.00	10.10 ~ 30.00
	6.00	18.00	—	—	24.00	8.70 ~ 36.00
09+09	9.75	9.75	—	—	19.50	9.00 ~ 21.60
	11.25	11.25	—	—	22.50	9.10 ~ 25.00
09+12	8.92	12.48	—	—	21.40	9.10 ~ 25.20
	9.63	13.48	—	—	23.10	9.00 ~ 29.70
09+15	7.80	15.60	—	—	23.40	10.10 ~ 28.80
	7.93	15.87	—	—	23.80	9.70 ~ 34.40
09+18	7.06	16.94	—	—	24.00	10.10 ~ 30.00
	7.06	16.94	—	—	24.00	8.60 ~ 36.00
12+12	11.70	11.70	—	—	23.40	9.20 ~ 28.80
	11.90	11.90	—	—	23.80	9.00 ~ 34.40
12+15	9.88	14.12	—	—	24.00	10.20 ~ 30.00
	9.88	14.12	—	—	24.00	8.60 ~ 36.00
12+18	8.84	15.16	—	—	24.00	10.20 ~ 30.00
	8.84	15.16	—	—	24.00	8.60 ~ 36.00
15+15	12.00	12.00	—	—	24.00	10.80 ~ 30.00
	12.00	12.00	—	—	24.00	8.40 ~ 36.00
15+18	10.91	13.09	—	—	24.00	10.80 ~ 30.00
	10.91	13.09	—	—	24.00	8.40 ~ 36.00
18+18	12.00	12.00	—	—	24.00	10.90 ~ 30.00
	12.00	12.00	—	—	24.00	8.30 ~ 36.00
07+07+07	7.13	7.13	7.13	—	21.40	10.00 ~ 25.20
	7.70	7.70	7.70	—	23.10	8.60 ~ 29.70
07+07+09	6.98	6.98	8.73	—	22.70	10.10 ~ 27.60
	7.26	7.26	9.08	—	23.60	8.60 ~ 32.90
07+07+12	6.40	6.40	11.19	—	24.00	10.10 ~ 30.00
	6.40	6.40	11.20	—	24.00	8.50 ~ 36.00
07+07+15	5.33	5.33	13.33	—	24.00	10.80 ~ 30.00
	5.33	5.33	13.32	—	24.00	8.30 ~ 36.00
07+07+18	4.80	4.80	14.40	—	24.00	10.80 ~ 30.00
	4.80	4.80	14.40	—	24.00	8.30 ~ 36.00
07+09+09	6.86	8.57	8.57	—	24.00	10.10 ~ 30.00
	6.85	8.57	8.57	—	24.00	8.50 ~ 36.00
07+09+12	6.00	7.50	10.49	—	24.00	10.20 ~ 30.00
	6.00	7.50	10.50	—	24.00	8.50 ~ 36.00
07+09+15	5.05	6.32	12.63	—	24.00	10.90 ~ 30.00
	5.05	6.32	12.63	—	24.00	8.30 ~ 36.00
07+09+18	4.57	5.71	13.71	—	24.00	10.90 ~ 30.00
	4.57	5.71	13.71	—	24.00	8.30 ~ 36.00

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3MXS24NMVJU Capacity Tables



Combination of indoor unit	Cooling Capacity of each indoor unit					
	Heating Capacity of each indoor unit					
	Each Capacity				Total Indoor Unit Capacity	
	A room	B room	C room	D room	Rating	(min ~ max)
07+12+12	5.33	9.33	9.33	—	24.00	10.30 ~ 30.00
	5.34	9.33	9.33	—	24.00	8.40 ~ 36.00
07+12+15	4.57	8.00	11.43	—	24.00	10.90 ~ 30.00
	4.57	8.00	11.42	—	24.00	8.30 ~ 36.00
07+12+18	4.17	7.30	12.52	—	24.00	10.90 ~ 30.00
	4.17	7.30	12.52	—	24.00	8.30 ~ 36.00
07+15+15	4.01	10.00	10.00	—	24.00	11.20 ~ 30.00
	3.99	10.00	10.00	—	24.00	8.20 ~ 36.00
09+09+09	8.00	8.00	8.00	—	24.00	10.20 ~ 30.00
	8.00	8.00	8.00	—	24.00	8.50 ~ 36.00
09+09+12	7.06	7.06	9.89	—	24.00	10.30 ~ 30.00
	7.06	7.06	9.88	—	24.00	8.40 ~ 36.00
09+09+15	6.00	6.00	12.00	—	24.00	10.90 ~ 30.00
	6.00	6.00	11.99	—	24.00	8.30 ~ 36.00
09+09+18	5.45	5.45	13.10	—	24.00	10.90 ~ 30.00
	5.45	5.45	13.08	—	24.00	8.30 ~ 36.00
09+12+12	6.32	8.84	8.84	—	24.00	10.30 ~ 30.00
	6.31	8.84	8.84	—	24.00	8.40 ~ 36.00
09+12+15	5.45	7.64	10.91	—	24.00	10.90 ~ 30.00
	5.45	7.64	10.91	—	24.00	8.20 ~ 36.00
09+12+18	5.00	7.00	12.00	—	24.00	10.90 ~ 30.00
	5.00	7.00	12.00	—	24.00	8.20 ~ 36.00
09+15+15	4.80	9.60	9.60	—	24.00	11.20 ~ 30.00
	4.80	9.60	9.60	—	24.00	8.20 ~ 36.00
12+12+12	8.00	8.00	8.00	—	24.00	10.40 ~ 30.00
	8.00	8.00	8.00	—	24.00	8.40 ~ 36.00
12+12+15	7.00	7.00	10.01	—	24.00	11.00 ~ 30.00
	7.00	7.00	10.00	—	24.00	8.20 ~ 36.00

3MXS24NMVJU Capacity Tables



Ducted, 60 Hz, 208-230V

Combination of indoor unit	Cooling Capacity of each indoor unit					
	Heating Capacity of each indoor unit					
	Each Capacity				Total Indoor Unit Capacity	
	A room	B room	C room	D room	Rating	(min ~ max)
09	9.10	—	—	—	9.10	7.30 ~ 9.60
	10.70	—	—	—	10.70	10.40 ~ 12.50
12	12.10	—	—	—	12.10	7.30 ~ 12.10
	14.30	—	—	—	14.30	10.40 ~ 16.70
15	14.40	—	—	—	14.40	8.10 ~ 15.10
	16.60	—	—	—	16.60	10.10 ~ 20.80
18	16.70	—	—	—	16.70	8.10 ~ 18.10
	18.80	—	—	—	18.80	10.10 ~ 25.00
09+09	8.35	8.35	—	—	16.70	8.80 ~ 18.10
	11.05	11.05	—	—	22.10	9.60 ~ 25.00
09+12	7.87	11.03	—	—	18.90	8.80 ~ 21.00
	8.46	11.83	—	—	20.30	9.60 ~ 27.30
09+15	7.07	14.13	—	—	21.20	9.40 ~ 24.00
	7.20	14.40	—	—	21.60	9.40 ~ 29.70
09+18	6.91	16.59	—	—	23.50	9.40 ~ 27.00
	6.76	16.24	—	—	23.00	9.40 ~ 32.00
12+12	10.60	10.60	—	—	21.20	8.80 ~ 24.00
	10.80	10.80	—	—	21.60	9.60 ~ 29.70
12+15	9.68	13.82	—	—	23.50	9.40 ~ 27.00
	9.47	13.53	—	—	23.00	9.40 ~ 32.00
12+18	8.73	14.97	—	—	23.70	9.40 ~ 27.00
	8.47	14.53	—	—	23.00	9.40 ~ 32.00
15+15	11.85	11.85	—	—	23.70	9.90 ~ 27.00
	11.50	11.50	—	—	23.00	9.10 ~ 32.00
15+18	10.82	12.98	—	—	23.80	9.90 ~ 27.00
	10.45	12.55	—	—	23.00	9.10 ~ 32.00
18+18	12.00	12.00	—	—	24.00	9.90 ~ 27.00
	11.50	11.50	—	—	23.00	9.10 ~ 32.00
09+09+09	7.83	7.83	7.83	—	23.50	9.90 ~ 27.00
	7.67	7.67	7.67	—	23.00	9.00 ~ 32.00
09+09+12	6.97	6.97	9.76	—	23.70	9.90 ~ 27.00
	6.76	6.76	9.46	—	23.00	9.00 ~ 32.00
09+09+15	5.95	5.95	11.90	—	23.80	10.40 ~ 27.00
	5.75	5.75	11.50	—	23.00	8.80 ~ 32.00
09+09+18	5.45	5.45	13.10	—	24.00	10.40 ~ 27.00
	5.23	5.23	12.55	—	23.00	8.80 ~ 32.00
09+12+12	6.26	8.77	8.77	—	23.80	9.90 ~ 27.00
	6.06	8.47	8.47	—	23.00	9.00 ~ 32.00
09+12+15	5.45	7.64	10.91	—	24.00	10.40 ~ 27.00
	5.23	7.32	10.45	—	23.00	8.80 ~ 32.00
09+12+18	5.00	7.00	12.00	—	24.00	10.40 ~ 27.00
	4.79	6.71	11.50	—	23.00	8.80 ~ 32.00
09+15+15	4.80	9.60	9.60	—	24.00	10.70 ~ 27.00
	4.60	9.20	9.20	—	23.00	8.60 ~ 32.00
12+12+12	8.00	8.00	8.00	—	24.00	9.90 ~ 27.00
	7.67	7.67	7.67	—	23.00	9.00 ~ 32.00
12+12+15	7.00	7.00	10.00	—	24.00	10.40 ~ 27.00
	6.71	6.71	9.58	—	23.00	8.80 ~ 32.00

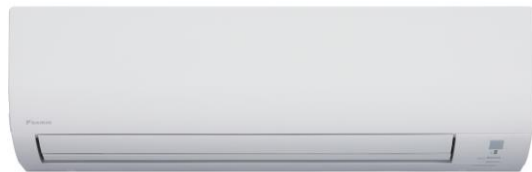
Job Name:	
Tag#	



Submittal Data Sheet

FTX09NMVJU / RXL09QMVJU

0.75-Ton Wall Mounted Heat Pump System



Complete warranty details available from your local dealer or at www.daikincomfort.com. To receive the 12-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Quebec. If product is installed in a commercial application, limited warranty period is 5 years.

Indoor Specifications

Airflow Rate (cfm)	Cooling		Heating	
	H	M	H	M
	417	297	403	328
	L	SL	L	SL
	244	141	251	215
Sound (dBA) H / M / L / SL	43 / 36 / 30 / 19		43 / 36 / 29 / 25	
Dimensions (H × W × D) (in)		11-1/4 × 30-5/16 × 8-3/4		
Weight (Lbs)		18		

Outdoor Specifications

Compressor	Hermetically Sealed Swing Type			
Refrigerant	R-410A			
Refrigerant Oil	PVE (FVC50K)			
Airflow Rate (cfm)	Cooling		Heating	
	H		H	
	1,105		922	
	L		L	
	865		777	
Sound Power Level (dBA)	49			
Dimensions (H x W x D) (in)	21-5/8 x 26-9/16 x 11-3/16			
Weight (Lbs)	60			

Efficiency

Cooling		Heating	
SEER	20.0	HSPF	12.5
EER	12.5	COP	4.20

Performance

Cooling (Btu/hr)	
Rated (Min/Max)	9,000 (4,400 / 10,900)
Sensible @ AHRI	8,170
Moisture Removal gal/h	.32
Operating Range	50°F – 115°F

Rated Cooling Conditions: Indoor: 80°F DB/67°F WB
Outdoor: 95°F DB/75°F WB

Heating (Btu/hr)	
1: @ 47° Rated (Min/Max)	10,900 (4,400 / 16,000)
2: @ 17° Rated	6,700
3: @ 5° Max	10,900
Operating Range	-13°F – 60°F

1: Rated Heating Conditions: Indoor: 70°F DB/60°F WB
Outdoor: 47°F DB/43°F WB
2: Rated Heating Conditions: Indoor: 70°F DB/60°F WB
Outdoor: 17°F DB/15°F WB
3: Rated Heating Conditions: Indoor: 70°F DB/60°F WB
Outdoor: 5°F DB/5°F WB

Electrical

	208/60/1	230/60/1
System MCA	9.5	9.5
System MFA	15	15
Compressor RLA	8.5	8.5
Outdoor fan motor FLA	.15	.15
Outdoor fan motor W	18	18
Indoor fan motor FLA	.20	.20
Indoor fan motor W	21	21

MFA: Max. fuse amps MCA: Min. circuit amps (A) FLA: Full load amps (A)
RLA: Rated load amps (A) W: Fan motor rated output (W)

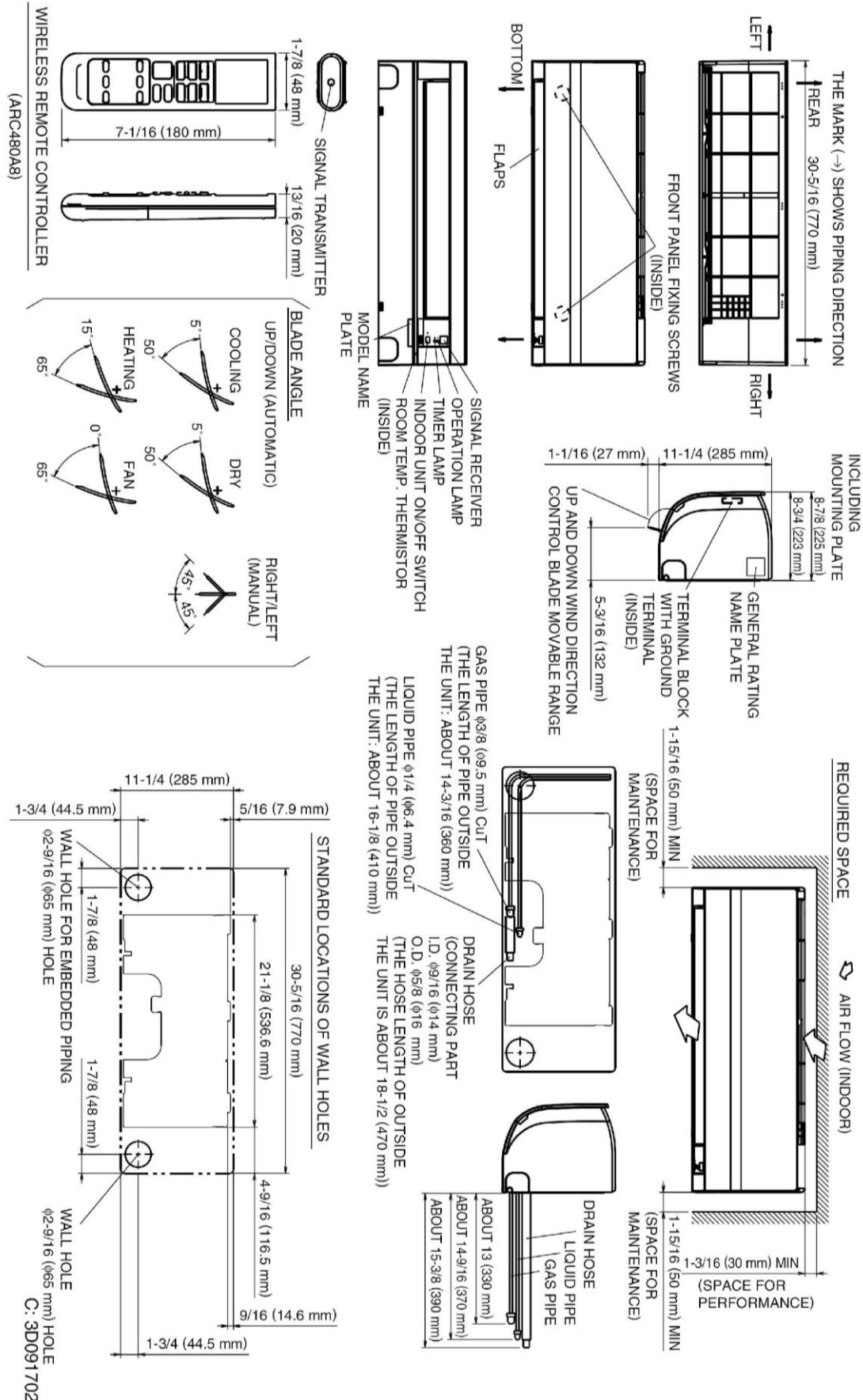
Piping

Liquid (in)	1/4
Gas (in)	3/8
Drain (in)	5/8
Max. Interunit Piping Length (ft)	65.625
Max. Interunit Height Difference (ft)	49.25
Chargeless (ft)	32.8
Additional Charge of Refrigerant (oz/ft)	.21

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FTX09NMVJU Dimensional Data



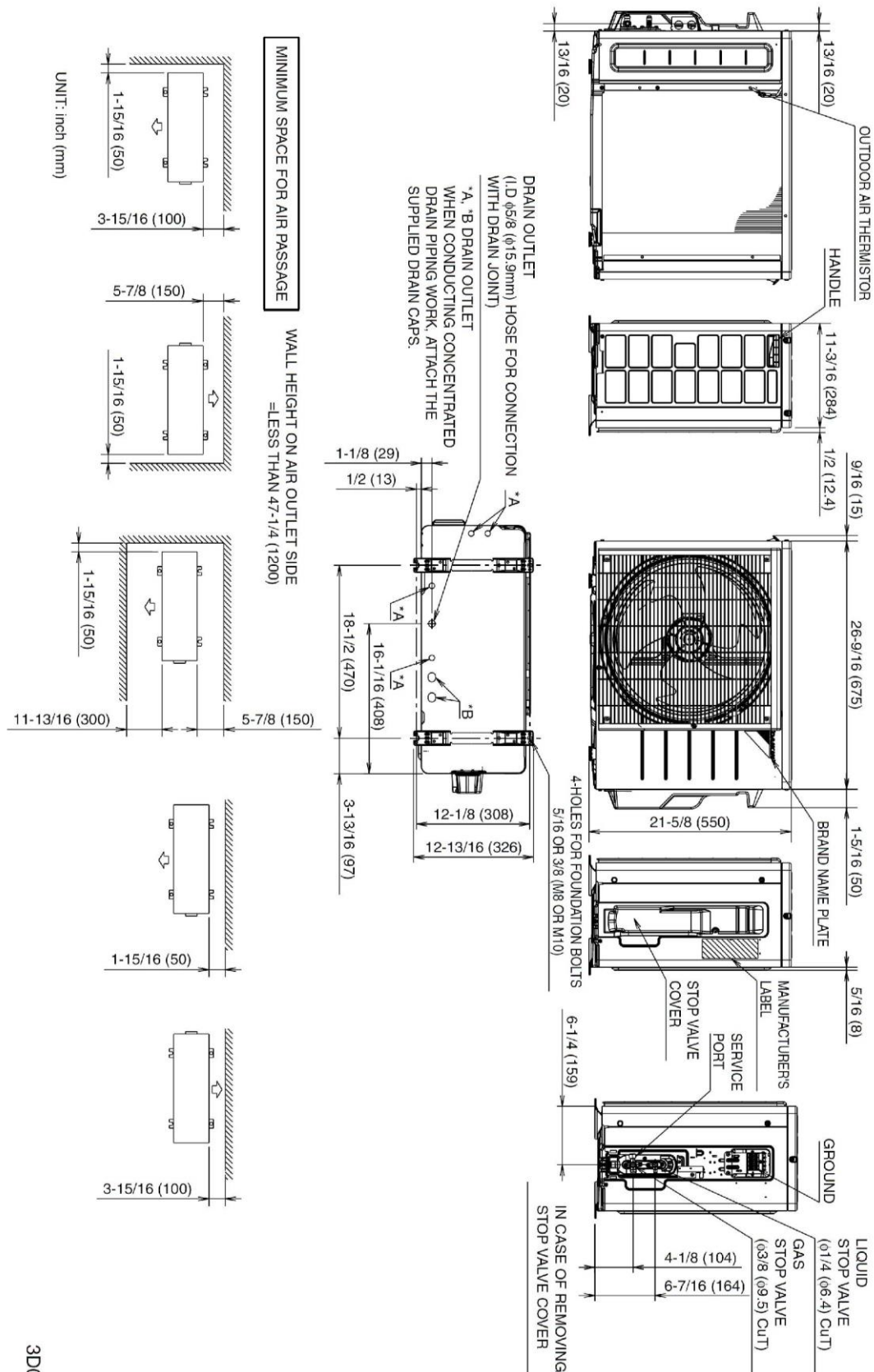
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RXL09QMVJU Dimensional Data



3D092206A

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Submittal Creation Date: June 2017

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Optional Accessories



Indoor Unit

Included	Part Number	Description
	BRP072A43	Wireless Interface Adapter (S21 Adapter Included)
	DACA-TS1-1	Daikin ENVi Intelligent Thermostat Kit
	BRC944B2-A08	Wired Remote Controller kit (Adaptor Required)
	BRCW901A08	Wired Remote Controller Cord - 8m (Included in above kit)
	DACA-BRCW901P10	Remote Controller Cable, Plenum Rated, 10 ft
	DACA-BRCW901P25	Remote Controller Cable, Plenum Rated, 25 ft
	KRP067A41	Adaptor for wired remote controller (09 & 12)
	KAF970A45	Titanium apatite photocatalytic air-purifying filter WITH frame
	KAF970A46	Titanium apatite photocatalytic air-purifying filter WITHOUT frame
	DACA-CP1-1	Inline Condensate Pump (Fits inside all Daikin wall & floor mount units)
	DACA-CP4-1	External Condensate Pump
	KRP928BB2S + KRP067A41	Interface Adaptor for DIII-NET

Outdoor Unit

Included	Part Number	Description
	DACA-WB-1	Powder-Coated Wall-Mounted Bracket
	KPW937E4	Air direction adjustment grille (09 & 12)
	KEH067A41E	Daikin BMS Drain Pan Heater Small (09 & 12)
	KKG067A41	Back protection wire net (09 & 12)
	KPS067A41	Snow hood (intake side plate) (09 & 12)
	KPS067A42	Snow hood (intake rear plate) (09 & 12)
	KPS067A44	Snow hood (outlet) (09 & 12)
	KKP937A4	Drain Plug for OD Unit

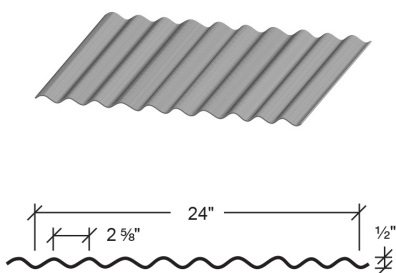
Daikin North America LLC 5151 San Felipe, Suite 500 Houston, TX 77056

(Daikin's products are subject to continuous improvements. Daikin reserves the right to modify product design, specifications and information in this data sheet without notice and without incurring any obligations)

EXPOSED FASTENING SYSTEMS

CORRUGATED

The Corrugated metal wall panel is ideal for a variety of market places, including residential, light commercial, agricultural and storage facilities. The Corrugated metal wall panel can be used in both vertical and horizontal applications.



Features and Benefits:

- UL 790 external fire rating is available

Product Specifications

- **Applications:** Roof and Wall
- **Coverage Widths:** 24"
- **Rib Spacing:** 2 5/8" on center
- **Rib Height:** 1/2"
- **Minimum Slope:** 3:12
- **Panel Attachment:** Exposed Fastening System
- **Gauges:** 29 (standard); 26 (optional)
- **Finishes:** Smooth (standard)
- **Coatings:** Galvalume Plus®, Signature® 200

CATEGORY	CHARACTERISTIC	TEST METHOD	PURPOSE	RESULT
STRUCTURAL	Negative Wind Loads	AISI S100	North American Specification for the Design of Cold-Formed Steel Structural Members	See Section Properties and Allowable Load Table Section
	Gravity Loads	AISI S100	North American Specification for the Design of Cold-Formed Steel Structural Members	See Section Properties and Allowable Load Table Section

Descriptions and specifications contained herein were in effect at the time this publication was approved for printing. In a continuing effort to refine and improve products, MBCI reserves the right to discontinue products at any time or change specifications and/or designs without incurring obligation. To ensure you have the latest information available, please inquire or visit our website at www.mbc.com. Application details are for illustration purposes only and may not be appropriate for all environmental conditions, building designs or panel profiles. Projects should be designed to conform to applicable building codes, regulations and accepted industry practices. If there is a conflict between this manual and project erection drawings, the erection drawings will take precedence. MBCI's insulated metal panel product line is manufactured by Metl-Span®. © 2020 MBCI®, part of the Cornerstone Building Brands family. All rights reserved. 0706209991111/RevA/MS/0720



STONE LOOK

FLOOR

DIGNITARY™

STONE ATTACHÉ™ COLLECTION – COLORBODY™ PORCELAIN

 **daltile®**
IMAGINE WHAT'S POSSIBLE™

FLOOR

DIGNITARY™

STONE ATTACHÉ™ COLLECTION – COLORBODY™ PORCELAIN

Ageless and Innovative – the Dignitary™ Series

The imaginative Dignitary Series provides depth on surfaces as it replicates French limestone embedded with fossil layers and natural veins. Beautiful in any setting, this outstanding ColorBody™ porcelain tile is equally suited to traditional or contemporary styles, bringing ageless dimension to every application. An array of colors in matte finish are available in three large-format sizes and a coordinating mosaic. Polished and textured finishes, as well as a 2 cm thickness, are also available in select sizes.

• REIMAGINING A CLASSIC

- Small fossils and veining replicate the look of French limestone that has stood the test of time
- Six rich neutral colors appeal to contemporary tastes
- 2 cm thick tile available in 24 x 24 size and three colors

• AGELESS BEAUTY ANYWHERE

- Three finishes offer the ability to stretch designs from floors to walls, indoors, and out
- Three large-format sizes plus an abstract mosaic all provide dimensional depth

STONE LOOK

USAGE



SPECIAL FEATURES

SEE CHARTS FOR FULL
PRODUCT DETAILS

Cover photo features Dignitary™ Superior Taupe 24 x 48 on the floor, Superior Taupe 12 x 24 on the left wall, Luminary White 12 x 24 on the right wall, and Superior Taupe abstract mosaic on the shower wall. Above photo features Dignitary™ Superior Taupe 24 x 48 on the floor and Luminary White 12 x 24 on the wall.

SIZES:



24 x 48
Floor Tile



24 x 24
Paver Tile



24 x 24
Floor Tile



12 x 24
Floor Tile



Abstract
Mosaic

FINISHES: MATTE | LIGHT POLISHED | TEXTURED

COLOR PALETTE



LUMINARY WHITE



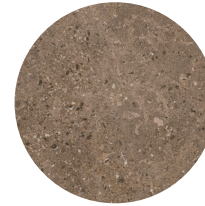
NOTABLE BEIGE



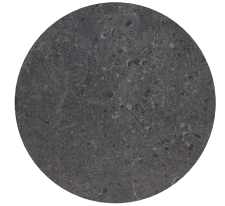
EMINENCE GREY



SUPERIOR TAUPE



HERALD BROWN



GOVERNOR BLACK

FLOOR TILE – Available in Matte, Light Polished & Textured



LUMINARY WHITE DR07*



NOTABLE BEIGE DR09*



EMINENCE GREY DR10



SUPERIOR TAUPE DR08*



HERALD BROWN DR12



GOVERNOR BLACK DR11

ABSTRACT MOSAIC – Available in Matte only



LUMINARY
WHITE DR07*



NOTABLE
BEIGE DR09*



EMINENCE
GREY DR10



SUPERIOR
TAUPE DR08*



HERALD
BROWN DR12



GOVERNOR
BLACK DR11

* Available in 2 cm thickness
in 24 x 24 size



SLIP RESISTANT



WATERPROOF



STAINPROOF



DENTPROOF



SCRATCH-RESISTANT*
*Applicable to products with Matte and
Textured Finishes



FIRE-RESISTANT*
*Not Applicable to Mesh-Mounted
Mosaics



CLIMATEPRO™



SIMPLICLEAN™

VISIT THE WHY TILE PAGE AT WWW.DAL TILE.COM FOR A COMPLETE LIST OF QUALIFICATIONS AND EXCLUSIONS.

			Thickness	Sq. Ft./ Carton	Pieces/ Carton
	24 x 48 ❖ Floor Tile	(23-3/8" x 47-1/16") (59.50 cm x 119.50 cm)	7/16"	15.50	2
	24 x 24 ■ Paver Tile	(23-7/16" x 23-7/16") (59.50 cm x 59.50 cm)	13/16" (2cm)	7.76	2
	24 x 24 ❖ Floor Tile	(23-3/8" x 23-3/8") (59.44 cm x 59.44 cm)	5/16"	15.20	4
	12 x 24 Floor Tile	(11-5/8" x 23-3/8") (29.65 cm x 59.44 cm)	5/16"	15.12	8
	Abstract ❖ Mosaic (Mesh Mounted)	(12" x 12" Sheet) (30.48 cm x 30.48 cm Sheet)	5/16"	3.88	4

- ❖ Available in Matte only
- Available in 2cm thickness with textured surface in DR07, DR08 and DR09 colors only

	Target DCOF wet	Suitable
Dry & Level – Interior Floor	N/A	✓
Wet & Level – Interior Floor	≥ 0.42	✓*
Shower Floors (Residential or Light Commercial)	≥ 0.42	✓**
Exterior Floor Applications (including pool decking & other wet areas with minimal footwear)	≥ 0.60	✓***
Ramps & Inclines	≥ 0.65	
Walls/Backsplashes	N/A	✓
Countertops	N/A	✓
Pool Linings	N/A	✓**

A DCOF value of ≥ 0.42 is the standard for tiles specified for level interior spaces expected to be walked upon when wet, as stated in ANSI A137.1-A326.3. For more information about DCOF and the DCOF AcuTest™, visit daltille.com/DCOF.

Suitable for exterior applications in freezing and non-freezing climates, when proper installation methods are followed.

- * Matte and Textured only
** Mosaic tile only
*** Textured and paver tile only



All or select items within this series meet the requirements for these qualifications. For more information, visit daltile.com.

Type	Number	Size	Pieces/ Carton
Bullnose	P-43F9	3 x 24	10
Cove Base	S-36C9T	6 x 12	20
Cove Base Outcorner	SC-36C9T	1 x 6	10

Cove base trim is intended to coordinate with floor tile in the standard 90-degree installation position.

Grout Joint Recommendation	Shade Variation
Floor: 1/8" (3/16" when multiple sizes are installed in a modular pattern, and/or when installing tile with a length 15" or greater in a staggered brick-joint pattern; overlap should not exceed 33%.) Mosaic: 1/8"	Random (V4)

	ASTM#	Result
Water Absorption	C373	< 0.5%
Breaking Strength	C648	> 275 lbs > 1000 lbs (2 cm)
Scratch Hardness	MOHS	8.0
Chemical Resistance	C650	Resistant

For additional information on test results, visit us at:
daltile.com/information/TestResults.

Floor Surface Wear Resistance			
1	Residential Bathrooms	3	All Residential / Light Commercial
2	All Residential Areas	4	All Residential / Commercial

Since there are variations in all fired ceramic and natural products, tile and trim supplied for your particular installation may not match samples. Final confirmation should be made from actual tiles and trim prior to installation. Manufactured in accordance with ANSI A137.1 standards.

Not for use on ramps. Water, oil, grease, improper drainage and certain footwear can create slippery conditions. Floor applications expected to be exposed to these conditions require extra caution in product selection.

For additional information refer to "Factors to Consider" at: daltile.com/Factors.

Random visuals enhance the natural beauty of this product. To achieve optimal results, all tile should be selected from multiple cartons and shading and graphic arrangement planned prior to installation.

Special consideration needs to be given when installing tiles greater than 15 inches. Please refer to daltile.com/LargeTiles for more information.

Manufacturer Advisory: All tile is measured by the DCOF AcuTest™ method. Tiles with DCOF values <0.42 are not recommended for use in areas with wet or slippery conditions. For more information, see ANSI standard A137.1 section 6.2.2.10, available at www.tileusa.com.

Special care should be taken when grouting with dark pigmented colors. A grout release is recommended to prevent finely powdered pigments from lodging in the pores of the surface. Use of a latex modified thin-set is recommended for installation.



December 4, 2021

City of Burlington
Development Review Board
149 Church Street
Burlington, VT 05401

Re: Repair of Existing Approved Fire Escape, 48-50 Greene Street
Building Permit 2020 28919200000 BP; ZAP 21-17 (Original permit ZP 21-639)
On-Point Properties, LLC, Owner and Applicant.

Gentlepersons,

The matter before the board concerns work done to improve the safety of an existing approved fire escape at 48-50 Greene Street.

The pre-existing approved fire escape is shown on the next page in a 1984 City Assessor's photo of the building. The current fire escape is shown in the December, 2021 photo on the next following page.

On his own volition, the owner determined that he wished to make the existing approved fire escape safer by repairing or replacing the existing decades old wood. He discussed what permits were required with the City Building Inspector and obtained a Building Permit for "*Repair and Replace portions of the fire escape with matching materials in the same footprint. Not a replacement of the entire staircase*". See Exhibit 1.

There is no dispute that the fire escape was repaired with matching materials except two items as shown on the 2021 photo below:

1. The addition of structural post beneath the staircase to improve stability of the fire escape
2. The addition of a beam on the side of the staircase to improve stability of the fire escape.

The staff asserts a zoning permit is required because the two additions were beyond the scope of the Building Permit and that such zoning permit needs to be reviewed in accordance with the standards of Section 5.4.8 of the Burlington Land Use Regulations (Historic Buildings and Sites) because the building is on the Vermont Register of Historic Places.

The applicant asserts that the two additional items installed to improve the structural integrity of the fire escape does not change or adversely affect the existing historic character of the building. The existing fire escape was approved by the City and installed in 1984 prior to the ownership of the applicant. The applicant acknowledges that the existing approved fire escape may affect the

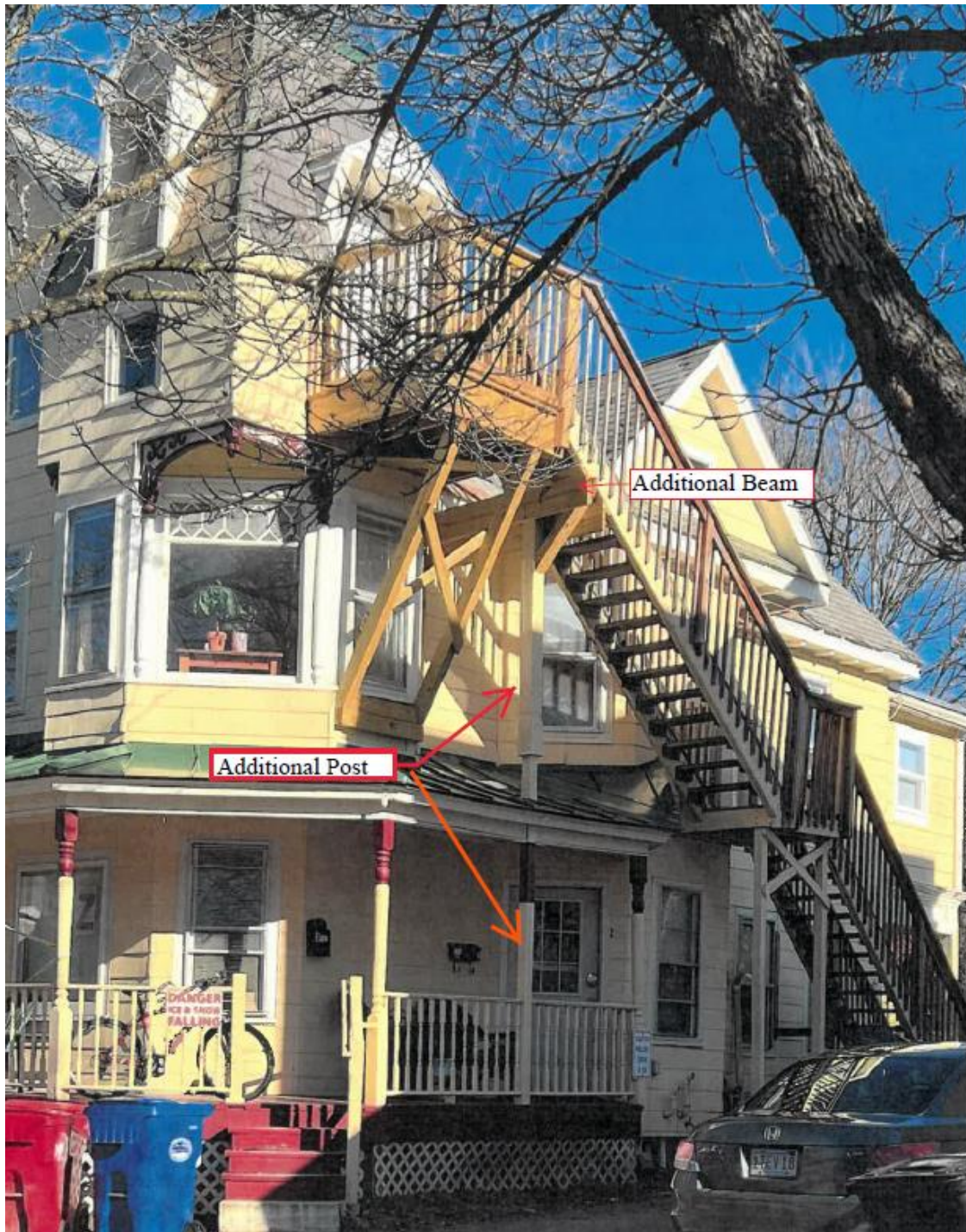
historic character of the building, but such existing fire escape was approved the city and has been in place for over 35 years and there is no question can legally remain in place.



**1984-85 Assessor Revaluation photograph
Stairs were newly built at that time**

MSK
ATTORNEYS

275 College Street, PO Box 4485 | Burlington, VT 05406-4485 | phone 802 861-7000 | Fax 861-7007 | mskvt.com



2021 Photo of stairs with additional structural supports

MSK
ATTORNEYS

275 College Street, PO Box 4485 | Burlington, VT 05406-4485 | phone 802 861-7000 | Fax 861-7007 | mskvt.com

The issues before the board are:

- A. Whether the two structural additions are beyond the scope of the Building Permit?
- B. If so, do the structural additions require a zoning permit?
- C. If a zoning permit is required, do the additions comply with requirements of 5.4.8?

If the Board decides that such additions do require a zoning permit and do not meet the requirements of 5.4.8, then the applicant will remove the two additions and seek another means to add stability to the fire escape using “matching materials within the same footprint” of the existing approved fire escape. With such removal no zoning permit would be required and the Building Permit should be then be able to be closed.

Despite the relative straight forward and minor nature of the issues before the Board, the staff had attempted to unduly complicate the appeal.

Instead of focusing on the two structural additions and whether such trigger the need for a zoning permit and whether such additions may comply with the requirements of the Land Use Regulations, the Staff has tried to assert that there should not be any fire escape because the third floor unit has not been approved as a dwelling unit (even though staff acknowledges that it has existed since at least 1975).

The staff’s discussion of an alleged unapproved unit and alleged addition of a new staircase is unnecessary and unsupported. The current owner purchased the property as an existing three unit building in the mid-1980s long after the acknowledged conversion of the property to a three unit in the 1970s and after the construction of the fire escape in 1984. The staff appears to be trying to re-litigate the applicability to use violations of the 15 year statute of limitation under the so-called “Bianchi” statute of limitations which was settled two years ago in *In re 204 North Avenue* 2019 VT 52, 117. Further this is not a case of discontinuance for more than 60 days as recently decided in *In re 15-17 Weston Street* NOV 2021 VT 85.

Since most of the items raised by staff are irrelevant to the matters before the Board, the applicant is not going to respond to most of the issues raised in the staff memo. However, the applicant would note the staff memo attempts to portray the applicant as seeking to add a new staircase to the building to serve an unapproved dwelling unit. Such assertion is entirely factually inaccurate. The third unit has been in the building since the 1970s and as can be seen in the photos, the fire escape has been in existence since at least 1984. Further, in the 35+ years Applicant has owned the property, it has been inspected numerous times by Code Enforcement and no issues have been ever raised about the alleged violations claimed by staff or about the fire escape in particular. We further note that staff was selective in listing the permits obtained by the applicant for work on the building since there are many permits obtained which were omitted from the list in the memo.



Finally, it appears that the staff is attempting to leverage a voluntary application to upgrade the safety of an element of the building into an effort to undermine and seek the discontinuance of pre-existing non-conforming uses and other uses protected by law. Such approach, if upheld by the Board, will send a strong message to the landlord community—the City of Burlington will punish you if you try to improve your property even for safety reasons. The result will be that landlords will just not improve their properties and the quality of the housing stock will be diminished.

We trust the Board will focus on the issues raised by the applicant's efforts to merely improve the safety of the existing permitted fire escape on his building.

We look forward to discussing these issues further with you at the hearing

Stay well.

Sincerely,

/s/ Liam L. Murphy

Liam L. Murphy, Esq.
lmurphy@mskvt.com

c: On Point Properties





Department of Public Works

Permit No: 20 289192 00000 BP

BUILDING PERMIT

645 Pine Street, Suite A

P.O. Box 849, Burlington, VT 05402

Telephone (802) 863-9094/ Fax (802) 863-0466

Working Together for Burlington - Preserving, Improving Our Community

Fees

\$119.00

Admin Fees \$0.00

Recording Fees \$15.00

\$134.00

Issue Date: 06/05/2020

Street Address: 48-50 GREENE STREET

Estimated Cost: \$14,000.00

Construction Starting Date: 06/05/2020

Owner On Point Properties Inc.
PO BOX 81
COLCHESTER VT 05446

No: 802-316-7219 (Primary)

Owner/Contractor On Point Properties Inc.
PO BOX 81
COLCHESTER VT 05446

No: 802-316-7219 (Primary)

DESCRIPTION OF WORK:

CODE ID: Repairs

Specific to VT Fire & Building Safety Code: Repair and replace portions of fire escape with matching materials in same footprint. Not a replacement of entire escape.

Signature below represents
Certificate of Completion

CONDITIONS OF PERMIT: All work performed by the applicant shall comply with the codes and ordinances of the City of Burlington. This permit authorizes the applicant to proceed with the work described above in accordance with the codes. This permit shall not be construed as authority to violate, cancel or set aside any of the provisions of the codes. The applicant must contact the department to schedule inspections of the work and obtain final project approvals.

APPLICANT SIGNATURE _____

LICENSE #: _____

- ☐ CALL FOR FOUNDATION INSPECTION
- ☐ CALL FOR ROUGH FRAMING OR ROUGH-IN INSPECTION
- ☒ CALL FOR FINAL INSPECTION
- ☐ BUILDING CERTIFICATE OF OCCUPANCY IS REQUIRED
- ☐ ZONING CERTIFICATE OF OCCUPANCY IS REQUIRED
- ☐ LEAD SAFE PRACTICES REQUIRED

Inspector

Date _____



278 Main Street Transportation Demand Management Program ZP-21-732

Outreach and education

Transportation Coordinator: Jonathan Farrell, COTS Facilities Director

Outreach and education will be provided through membership in Chittenden Area Transportation Management Association (CATMA). This will include educational materials, annual tenant meeting to help increase participation, annual travel surveys, and record keeping and reporting of TDM offers and participation rates.

TDM Strategies

The project will maintain an ongoing and active membership with CATMA to offer TDM strategies as per item iii in the ordinance. Free CarShare VT memberships will be offered to tenants via the CarShare MobilityShare program.

Parking Management

Annual parking studies will be made via membership in CATMA. Limited onsite parking will be made available to tenants in the project and will be unbundled from leases. Parking utilization studies will be conducted through membership in CATMA. No spots will be made available to off-site users. Handicap parking and covered bicycle storage is provided as per code. Discussions are underway with CarShare VT as to whether a CarShare car can be located onsite; there are currently 7 existing CarShare cars within 3 blocks. Carpool/vanpool vehicle spaces are not required as non-residential parking spaces are not offered in this project.

Burlington Development Review Board

Department of Permitting & Inspections
645 Pine Street
Burlington, VT 05401
www.burlingtonvt.gov/DPI/DRB
Telephone: (802) 865-7188
Fax (802) 863-0466

Brad Rabinowitz
AJ LaRosa
Geoff Hand
Brooks McArthur
Caitlin Halpert
Chase Taylor
Leo Sprinzen
Sean McKenzie, (Alternate)



BURLINGTON DEVELOPMENT REVIEW BOARD

Tuesday, December 7, 2021, 5:00 PM

Minutes

Physical location: 645 Pine Street, Front Conference Room, Burlington VT 05401

Board Members Present: Brad Rabinowitz, Brooks McArthur (remote), Caitlin Halpert (remote), Chase Taylor (remote), Leo Sprinzen, and Geoff Hand (remote)

Board Members Absent: Sean McKenzie (Alt), A.J. LaRosa.

Staff Members: Mary O'Neil, Ryan Morrison, Scott Gustin

I. Agenda

43 Starr Farm Road has requested a continuance to a future meeting. A January meeting is likely. A vote is needed to defer.

II. Communications

A communication relate to the 48-50 Greene St. appeal was submitted yesterday and posted online today. An email from the building inspector was provided as a companion to the above.

Another document relative to a TDM plan for 278 Main Street has been provided as well.

III. Minutes

The draft minutes for the November 16, 2021 DRB hearing are posted on the website.

IV. Public Hearing

1. ZAP-21-17; 48-50 Green Street Appeal (RM, Ward 2c) On Point Properties, Inc / Olivia Chandler (Liam Murphy on behalf of Lee Bissonette)

Appeal of zoning application denial for fire escape. (Project Manager, Mary O'Neil)

Liam Murphy, MSK attorneys present. Lee Bissonette, participates via phone.
BR – swears them in.

Mary O'Neil – presents case for appeal.

Geoff Hand - to staff - can you describe the changes made to the fire escape?

Mary O'Neil – some repair evident on the lower risers. A great deal of wood putty. The second set of risers and the entire third floor landing are largely replaced. Support posts replaced, a new iron vertical support post descends through the first floor porch,

The programs and services of the City of Burlington are accessible to people with disabilities. Individuals who require special arrangements to participate are encouraged to contact the Zoning Division at least 72 hours in advance so that proper accommodations can be arranged. For information call 865-7188 (TTY users: 865-7142).

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descending to first floor porch to an angle iron. The weight of the carrying iron post is evident in the deflection of the first floor porch skirting.

Brad Rabinowitz – negative impacts to the historic structure?

Mary O’Neil - elaborates on the standards of review; first brought to our attention by zoning inspector. Ultimately we received a zoning permit application for the work. Brought to DAB for recommendation, as they have purview over changes to historic structures. Articles 6 relative to Development Review; Article 5, Section 5.4.8 for the treatment of Historic Buildings and Structures. Design Advisory Board voted unanimously to deny the application on the standards of safety and security, and Section 5.4.8 relative to negative impact to historic building introduced by the “repair” of fire escape.

Liam Murphy – presents client’s case. Applicant on his own volition went to building officials to repair fire escape. Repair in same footprint. We do not believe that any changes in place require a zoning permit. If it does, we will go and remove this post and then we will be in compliance. Staff report goes far outside the scope of this application.

Geoff Hand – can you share with us any plans submitted?

Liam Murphy – There are no plans. This fire escape was permitted by the city to enhance the safety and stability of the property. We are concerned that all the other issues raised here, if the board starts upholding or getting into violations the message will go out to the landlord community DON’T. They will get punished. The issue is, does this require a zoning? And if they do, does it change the historic character of the building? The remedy is to repair them, not to require the structure to come down.

Brad Rabinowitz – we get people coming in all the time who want to change a post with 4 x 4 pressure treated post, and then they want to change the railings. Step by step, they are changing the character of the building.

Liam – the staff report suggests that the entire fire escape should be removed....assertion we have an illegal property, and if we remove the unit on the third floor, then we need to remove the fire escape. We understand that we are bound by permits. My client wants to make this a safer fire escape. The changes were not material.

Brad Rabinowitz – Changes could have been made without those posts.

Caitlin Halpert – Is there an engineer report about structural integrity of the previous stair, and the need for the post in question?

Liam – yes. I’m sorry, I can’t find the letter.

Brad Rabinowitz – can you summarize the letter?

Liam – our client did engage a structural engineer to go look at the property. *“At the request of Mr. Bissonette, CIS gave instruction that the removal of the wood post would compromise the structural integrity. Upon my on-site inspection the removal of the*

post on the upper edge would compromise the existing support system.” If you were walking down the street, you would not notice this.

Caitlin Halpert – Mary, are you asserting that the stairs that were repaired and replaced were not legally installed? The unit was not legal, but it is your stance that the stairs were not legally installed?

Mary O’Neil – There is no zoning permit for the third unit. There is no zoning permit for the erection of the staircase. There is a building permit from 1984. It was not uncommon for the building inspector to issue a permit without confirmation of a zoning permit. Similarly, the electrical inspector did not check with zoning before issuing a permit in 1977 to install a meter for the third unit. The building permit in 1984 for the stairs was not to provide a fire escape to a third unit; it was to provide fire egress for the third floor.

Liam Murphy – I do not think a zoning permit would have been required in 1984.

Mary O’Neil – The zoning ordinance was amended several times between the 1973 and 1994 zoning ordinances. I do not have those documents in front of me.

Geoff Hand – asks for a copy of the engineering study.

Lee Bissonette – This was a repair. The contractor said the fire escape would be safer with the additional post. Mary mentioned a roof penetration.

Geoff Hand – Did you ask your contractor about the additional work? I feel like you are putting us in the position of reviewing something after you have done the work.

Lee Bissonette – No, I did not ask him. It was something when they took the decking off, tying it to the top deck. He said it would be safer than having those 45s going in. That fire escape has been there 35-40 years. Looking back on it, I have a professional telling me something to make it safer.

Brad Rabinowitz – I would suggest there were other options at that moment to address concerns rather than changing it. That kind of conversation and result happens frequently.

Lee Bissonette – This was more expensive. I asked if this is the only way, he was convinced....it was better for what I got out of it. Much better to go straight up and down rather than on an angle. If there is any other way, that particular contractor did not have it. I have a picture of about 25 fire escapes in Burlington. There is no doubt that my fire escape is the safest one in Burlington. I bet firemen would give it thumbs up.

Brad Rabinowitz – closes public hearing.

2. ZP-21-732; 278 Main Street (RH, Ward 8E) COTS / Bob Duncan

Major impact review of 16-unit addition to existing building. (Project Manager, Ryan Morrison)

Bob Duncan and Jonathan Farrell are sworn in.

Dave Marshall with applicant team. Sworn in.

Bob Duncan presents a synopsis of the plan, goes through permit plan set. Explains each of the plans and renderings. Went to Conservation Board last night, received unanimous approval. Dave Marshall is here to offer further information.

Brad Rabinowitz – Can you give us a brief description of the detention?

Dave Marshall – Civil Engineering Associates. Envision yourself looking from Main Street into the site. Everything under today's conditions drains northwesterly. We propose a similar path, as you move around the building, a formalization of the existing gravel parking area...if the rainfall is heavy enough; it drains onto the Consolidated Communications property to a catch basin. We want to return the favor with stormwater facility, and use the Stormwater Manual as adopted by the City. 6-7 ' of silty sand on the site, tilled material, water table 6-7 feet down. If we can utilize that sand, infiltrate. If appropriate soils, that is the expectation. Takes stormwater runoff from the pavement surfaces as well as the roof, on the right hand side to the left of the building, there is an isolated row. Most of the solids settle out. Provide treatment but also protection, infiltrating into the ground. We can contain, on site. The 10-year event, the state standards, what is leaving the site is less than peak flow of today's conditions. Good, not great, but good. Better neighbors to everyone downstream.

Brad Rabinowitz – asks about 10-year storm event. Just overflows and leaves the site?

Dave Marshall – the frequency of what is draining onto the neighboring property will be better.

Bob Duncan – Cut sheets on materials have been provided. The Transportation Demand Management Plan has been provided today. Assuming that is an acceptable solution to the TDM, we think it is complete.

Scott Gustin – The structure of the TDM appears to be here. The only thing that needs to be tied up is the Car Share requirement. One space would be required. If Car Share is willing to do it, fine. If they do not want to do it that is fine.

Jonathan Farrell – We have spoken to Car Share. There are currently 7 Car Share vehicles within a couple of blocks. We are still talking. We are 100% inclusionary, so they are lesser inclined to use Car Share. You still have to pay per mile, per day. Ridership goes down. There is a piece about TDM, yet a standard about parking not being required for inclusionary units. There is a rub there.

Scott Gustin – It would be worthwhile for you to submit something to me for the ordinance committee. It is in Committee. There is an upcoming meeting. It would help provide clarity.

Brad Rabinowitz asks if any board members have questions. (None.) It looks impressive.

Brad Rabinowitz – closes public hearing 6:13 pm.

3. ZP-21-723; 321 Manhattan Drive (RM, Ward 2C) 321 Manhattan LLC / Sam Gardner

Establish a short-term rental (bed & breakfast). (Project Manager, Ryan Morrison) Sam Gardner is present (remotely)

Applicant is sworn in.
No questions from board members.
Brad Rabinowitz closes public hearing 6:16 pm.

v. Certificate of Appropriateness

1. ZP-21-700; 43 Starr Farm Road (RL, Ward 4N) Birchwood Properties LLC / Michael Koch

Seeking additional surface parking and maximum parking waiver. (Project Manager, Scott Gustin)

There is a request to defer. Scott has penciled in for a January date.

Alicia Dimario is present from the Nursing Home.

Scott Gustin – the applicant (engineer, Michael Koch) requested the deferral.

Brookes McArthur – motion to defer to a future date.

Chase – 2nd.

Vote 6-0 to defer to a future date.

Motion carries.

2. ZP-21-677; 27 Lakeview Terrace (RM, Ward 3C) James Fayette

Construct retaining wall along rear boundary. (Project Manager, Scott Gustin)

James Fayette, Sean (geotechnical expert) is sworn in.

Explains 3' high retaining wall on the westerly boundary of Lakeview Terrace. Steep embankment, intersects with City property. (Scott Gustin puts plans on the screen.)

We want to put a patio and gas fire pit. Requested to get a geotechnical report, submitted for DRB. We did receive staff comments last week. We have been here a little over a year. The slope continues to slough off. This would allow us to retain our property line. There is a mutual benefit.

Brad Rabinowitz – I looked on Google Earth today. It seems that this is a common situation.

James Fayette – yes, similar things

Brad Rabinowitz – are you doing any tree clearing?

James Fayette – no trees. Just grass. Terminates to the city slope, which is heavily vegetated with trees and thick brush. We are not looking to disturb that. We will use a small backhoe to pull material back, installing the base and rock wall with geotech retainment, backfilling it. Not very complicated.

Brad Rabinowitz asks if any board members have any questions or comments. None.

Brad Rabinowitz asks about setbacks for patio and property line.

James Fayette – will get that submitted.

Leo Sprinzen – gas fire pit. Buried line?

James Fayette – probably place a tank northwest corner of the house.

Brad Rabinowitz – don't you have natural gas to your street?

James Fayette – yes there is.

Brookes McArthur – looks like a good project.

Brad Rabinowitz – closes public hearing 6:25 p.m.

VI. Other Business

1. 81 Dunder Road (RL-W, Ward 5S) Jonathan Heller

Follow up for zoning permit for short-term rental. (Project Manager, Ryan Morrison)

Brad Rabinowitz says we have a beautiful photo of the fence.

Applicant is present, as is neighbor Tom Walsh.

Applicant Jonathan Heller – very proud of that fence. Glad you guys like it.

Tom Walsh – participated out of respect for the process. The fence adds privacy to my property.

Brad Rabinowitz – Fences make good neighbors?

Tom Walsh – That is debatable.

VII. Adjournment 6:27 pm.

Bradford L. Rabinowitz, Chair of Development Review Board

Date

Mary O'Neil, Principal Planner

Date

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