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
Springer Harris
Geoff Hand
Brooks McArthur
Kienan Christianson
Caitlin Halpert
Sean McKenzie, (Alternate)
Ravi Venkataraman, (Alternate)

BURLINGTON DEVELOPMENT REVIEW BOARD
Tuesday, December 1st, 2020, 5:00 PM
PUBLIC HEARING NOTICE

REMOTE MEETING

Zoom: https://us02web.zoom.us/j/82028668953?pwd=RE5BdFhRMFQyaStNYlJhSTFlY1RDUT09
Webinar ID: 820 2866 8953
Password: 842557
Telephone: +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099 or +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833

1. **21-0409CA/MA; 362 Riverside Ave (NAC-R, Ward 1E) Douglas Boyden and BlackRock Construction**
   64-Unit senior housing development and related site work. Lot line merger included.

2. **21-0374CA; 160 Bank Street (FD6, Ward 3C) HandySisters LLC, Catamount Hospitality LLC**
   Construct gallery seating area with canopy on south side – seeking alternative compliance as to gallery dimensions.

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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Agenda

I. Agenda
II. Communications
III. Minutes
IV. Consent

1. **21-0413CA; 400 Pine Street (ELM, Ward 5S) Alan Newman SpeakEasy Arts LLC and Howard Space Partnership**
   Exterior building renovations including new entries, canopies, and awnings. New front deck and related seating. (Project Manager: Mary O'Neil)
2. **21-0374CA; 160 Bank Street (FD6, Ward 3C) HandySisters LLC, Catamount Hospitality LLC**
   Construct gallery seating area with canopy on south side – seeking alternative compliance as to gallery dimensions. (Project Manager: Scott Gustin)

V. Public Hearing

1. **21-0076CA/CU; 400 North Street (RL, Ward 1E) William McKenna**
   Continued hearing to remove garage; construct accessory dwelling unit in backyard; driveway and parking reconstruction. (Project Manager: Ryan Morrison)
2. **21-0409CA/MA; 362 Riverside Ave (NAC-R, Ward 1E) Douglas Boyden and BlackRock Construction**
   64-Unit senior housing development and related site work. Lot line merger included. (Project Manager: Scott Gustin)

VI. Other Business

1. **Zoning Amendments**
2. **Development Review Board 2021 Schedule**

VII. Adjournment

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Department of Permitting & Inspections
Zoning Division
645 Pine Street
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Telephone:(802) 865-7188

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

TO: Development Review Board
FROM: Scott Gustin
DATE: December 1, 2020
RE: 21-0374CA; 160 Bank 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: FD6 Ward: 3C

Owner/Applicant: Handy Sisters, LLC / Catamount Hospitality, LLC

Request: Construct gallery seating area with canopy on south side – seeking alternative compliance as to gallery dimensions

Applicable Regulations:
Article 14 (Downtown Code)

Background Information:
The applicant is proposing renovations to the existing restaurant at 160 Bank Street including additional enclosed seating area, beer storage, and walk-in cooler. A new gallery and canopy are proposed along the front of the building to provide shelter for the outdoor seating presently there. The property is located within the FD6 zone, and much of the proposed work is subject to administrative zoning review under the form code standards. The applicant is seeking alternative compliance for the depth of the proposed gallery. The form code limits gallery depth to 10,' whereas the applicant is seeking 12' depth. The request is subject to review and approval by the Development Review Board upon recommendation by the Design Advisory Board.

The Design Advisory Board reviewed this application November 10, 2020 and unanimously recommended approval of the project as proposed.

Previous zoning actions for this property are noted below:

- 10/1/18, Approval to install retractable awning, relocate sheds, install pavers.
- 1/25/18, Approval to install a sign.
- 10/13/16, Approval to install rooftop hood system.
- 8/19/16, Approval to install a storage unit.
- 3/24/14, Approval to install retractable awnings.
- 4/4/13, Approval to install retractable awnings.
- 3/23/12, Approval to construct rear beer garden shelter.
- 4/14/11, Approval to construct pergola and stone service station.
- 9/20/10, Approval to convert storage space to finished dining space.

- 4/30/10, Approval to install sign.
- 4/1/10, Approval to extend wrought iron fencing.
- 2/26/10, Approval to install 3 signs.
- 2/26/10, Approval to install new rooftop HVAC unit.
- 2/16/10, Approval to renovate façade and outdoor seating area.
- 2/8/10, Approval for four signs.
- 12/21/09, Approval to add garage doors and windows.
- 1/12/89, Approval to install outdoor lighting.

Recommendation: **Consent approval** as per, and subject to, the following findings and conditions:

I. Findings
Article 14: Downtown Code
Sec. 14.7.3; Variation from the form: Administrative relief, DRB alternative compliance, and Variances
b) Alternative Compliance Granted by the Development Review Board
Up to 20% relief from numerical standards may be granted by the Development Review Board following recommendation by the Design Advisory Board. In this case, the 12' gallery depth proposed represents the maximum 20% relief possible from the 10' maximum gallery depth standard. **(Affirmative finding)**

i) DRB Alternative Compliance
A) The relief sought is necessary in order to accommodate unique site and/or Building circumstances or opportunities;
The deeper gallery, along with the proposed canopy, will provide shelter to the existing outdoor seating area. There is opportunity to enhance this outdoor seating area and to lengthen the time that it can serve as functional outdoor space for patrons. A semi-sheltered space under retractable awnings will become more permanently sheltered. **(Affirmative finding)**

B) The relief if granted is the minimum necessary to achieve the desired result;
The proposed gallery, along with the canopy, will cover essentially the entire outdoor dining area in front of the building. Narrower dimension may fall short of providing full cover. **(Affirmative finding)**

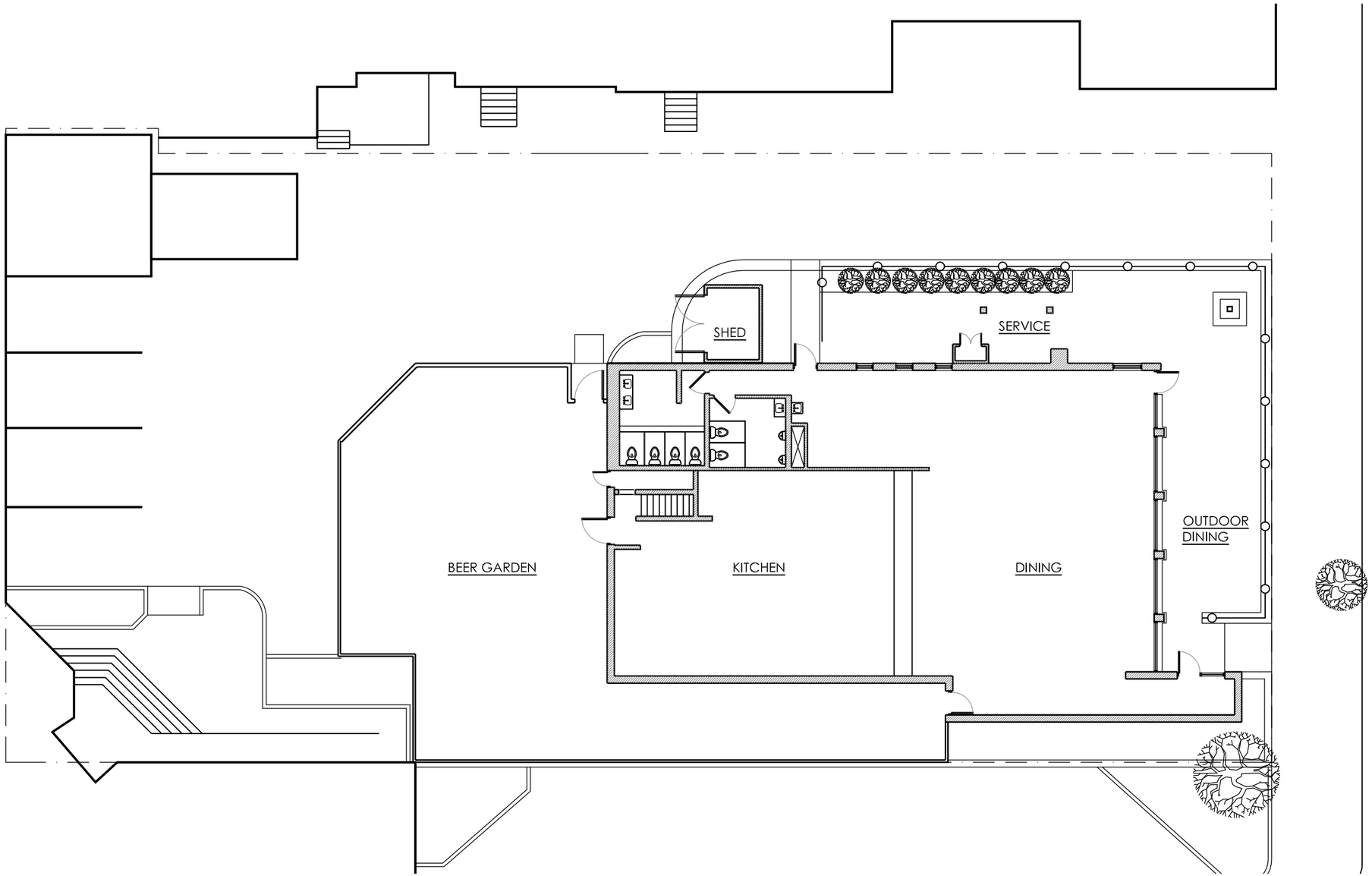
C) The property will otherwise be developed consistent with the purpose of this ordinance, the intent of the Form District, the intent and purpose of the section that the relief is being sought, and all other applicable standards;
Except for the proposed 12' depth, the proposed gallery is otherwise compliant with the form code standards for galleries. Note that the width of the gallery is limited to the width of the building façade. That appears to be the case here, although it is somewhat offset. The applicable standard is silent as to such configuration. **(Affirmative finding)**

D) The relief if granted will not impose an undue adverse burden on existing or future development of adjacent properties; and,
Nothing about a 12' deep gallery will impose an undue burden on the existing or future development of adjacent properties. **(Affirmative finding)**

E) The relief if granted will yield a result equal to or better than strict compliance with the standard being relieved.
Limiting the gallery to 10' depth would fall short of the intended purpose of sufficiently sheltering the outdoor seating area in front of the building. The 2' wider dimension will achieve the desired end goal with little perceptible difference as viewed from the street. The gallery as proposed clearly reads as intended for this frontage type. It is simply 2' wider than would otherwise be allowed. **(Affirmative finding)**

II. Conditions of Approval

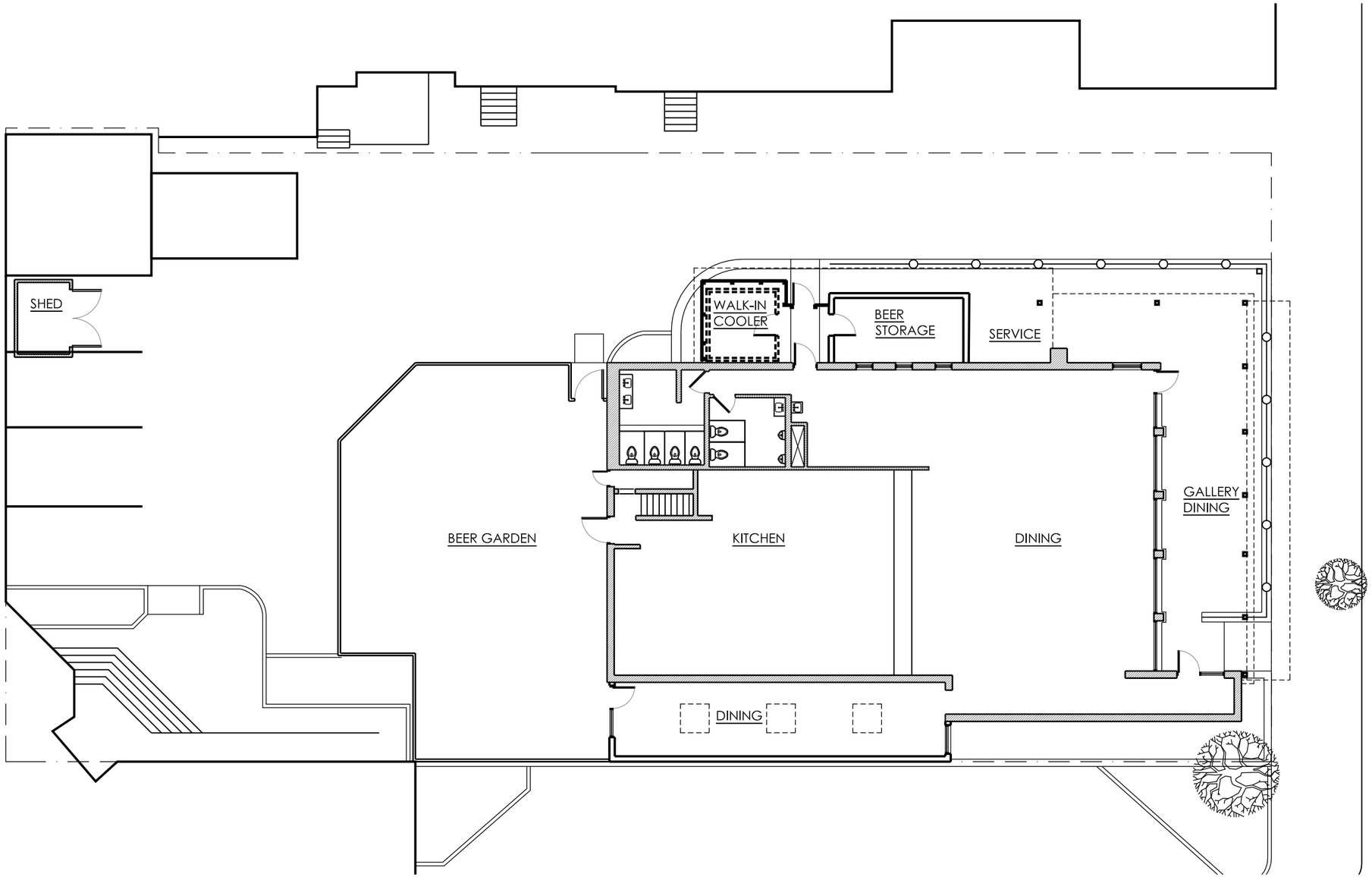
1. Standard conditions 1-15.



SITE PLAN - EXISTING
1/16" = 1'-0"

SBA
SMITH BUCKLEY ARCHITECTS
431 PINE ST STE 210 BURLINGTON VT 05401
P 802.540.0323 www.SBAVT.com

Project
The FARM HOUSE Tap and Grill
Date
September 29, 2020



SITE PLAN - PROPOSED
1/16" = 1'-0"

SBA
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431 PINE ST. STE 210 BURLINGTON VT 05401
P 802.540.0323 www.SBAVT.com

Project
The FARM HOUSE Tap and Grill
Date
September 29, 2020

SBA
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P 802 540 0323 www.SBAVT.com

Project
The FARM HOUSE Tap and Grill
Date
September 29, 2020

SBA
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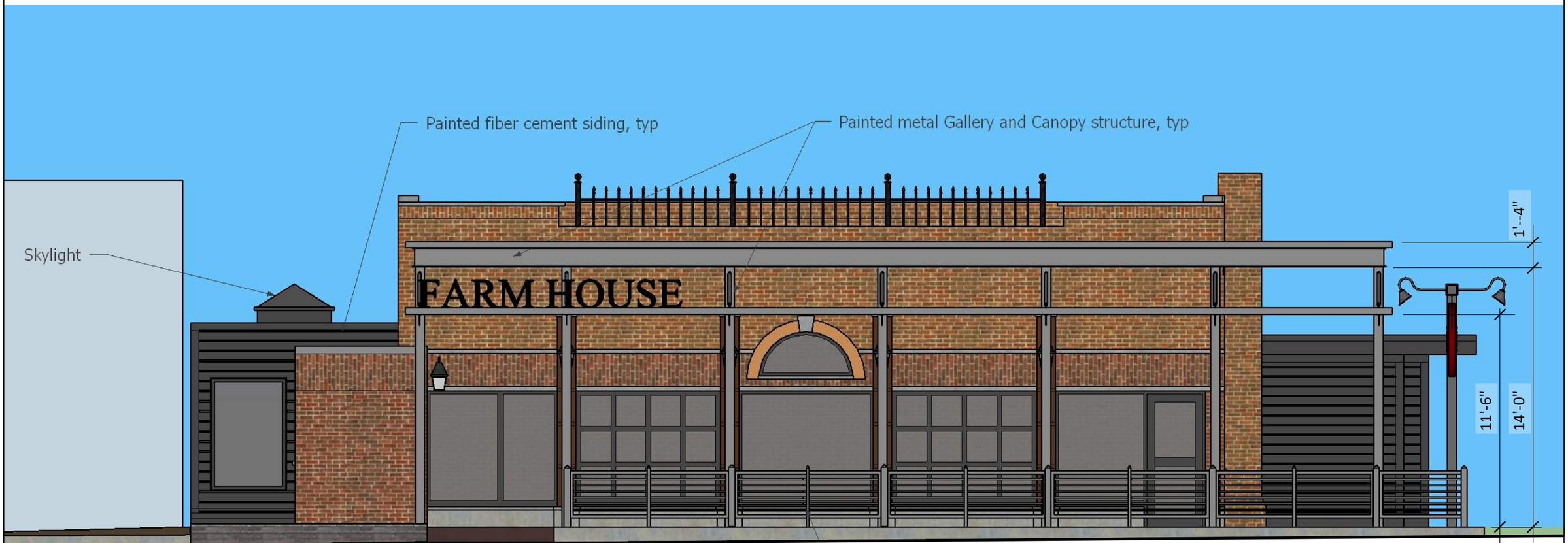

SOUTH ELEVATION
1/8" = 1'-0"

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Project
The FARM HOUSE Tap and Grill
Date
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WEST ELEVATION
1/8" = 1'-0"

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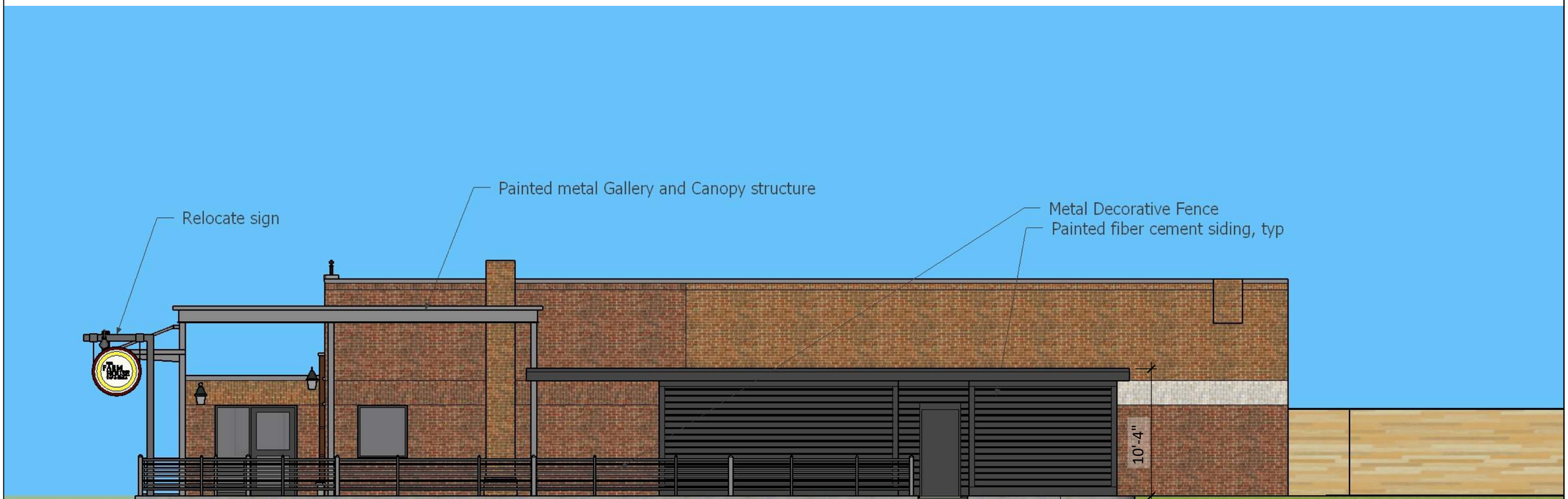

EAST ELEVATION
1/8" = 1'-0"

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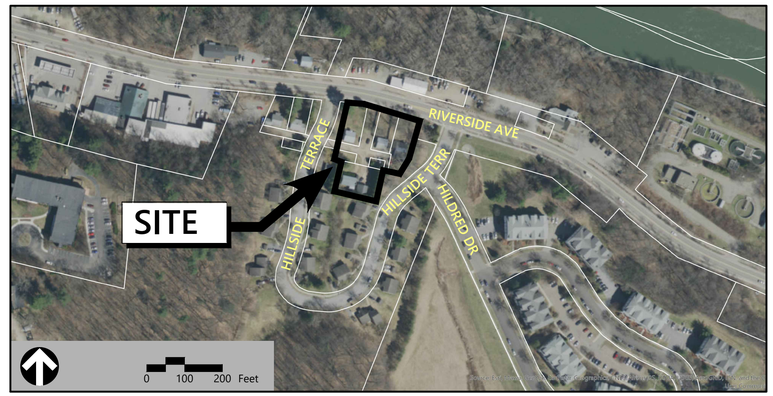
Project
The FARM HOUSE Tap and Grill
Date
September 29, 2020

Site Plans

Issued for	Zoning Permit Application
Date Issued	Sept. 8, 2020
Latest Issue	

Blackrock Riverside Avenue Senior Apartments

356 Riverside Avenue
Burlington, Vermont



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802.497.6100

Sheet Index

No.	Drawing Title	Latest Issue
C-1.10	Existing Conditions Plan	September 8, 2020
C-2.10	Site Plan	September 8, 2020
C-3.10	Grading and Drainage Plan	September 8, 2020
C-4.10	Utility Plan	September 8, 2020
C-4.20	Utility Profiles	September 8, 2020
C-5.10	Erosion Prevention & Sediment Control Plan	September 8, 2020
C-6.10	Site Details	September 8, 2020
C-6.20	Stormwater Details	September 8, 2020
C-6.30	Erosion Prevention and Sediment Control Details	September 8, 2020
C-6.40	Water and Wastewater Details	September 8, 2020
LA-1.00	Overall Planting Plan	September 8, 2020
LA-1.10	Planting Plan	September 8, 2020
LA-1.20	Planting Plan	September 8, 2020
LA-2.00	Lighting Plan	September 8, 2020
SW-1.10	Stormwater Management & Maintenance Plan	September 8, 2020

Reference Index

No.	Drawing Title	Latest Issue
D-1	City of Burlington Water System Details	March 20, 2017

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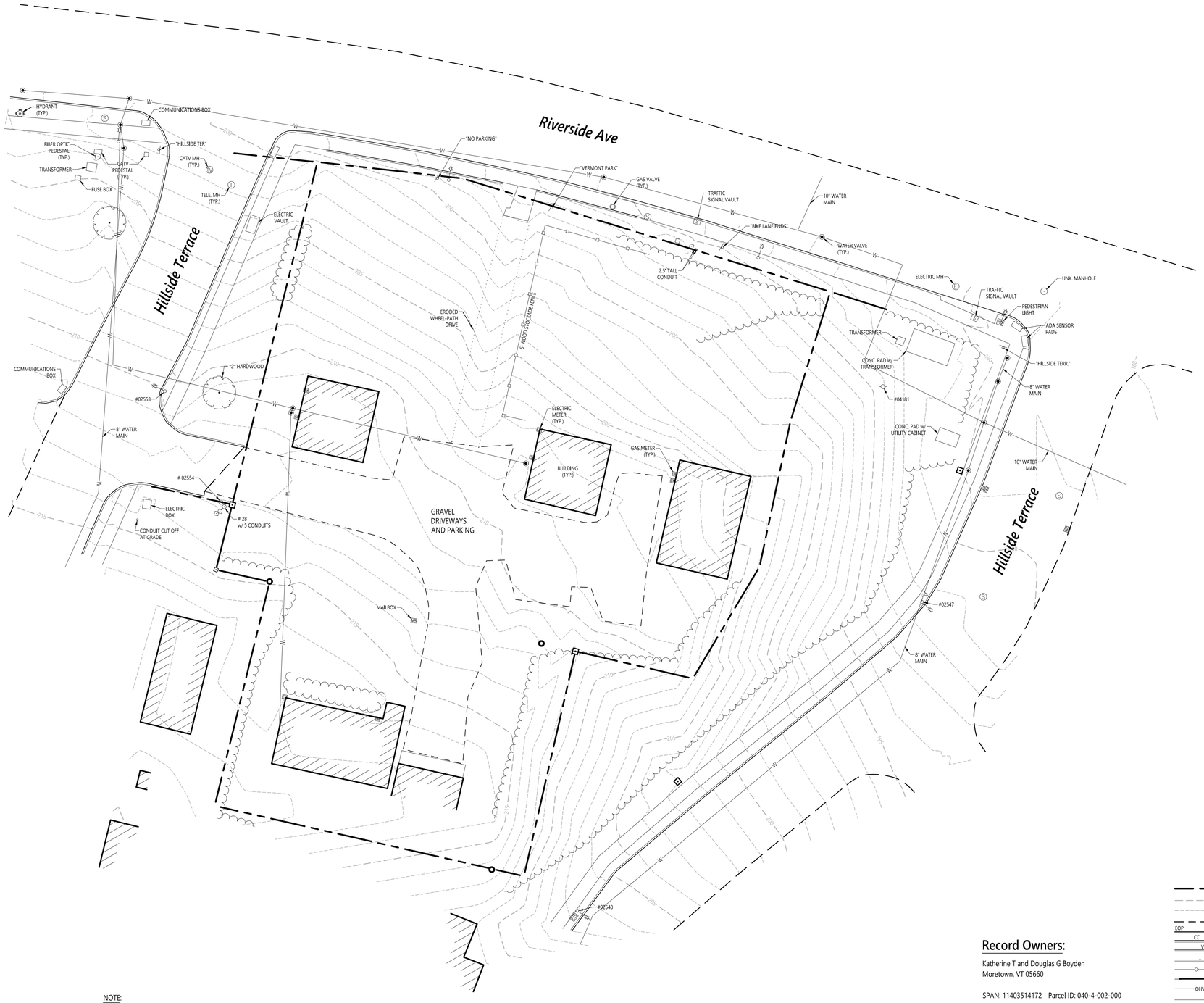
VHB Project : 58036.00
Issued for : -



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20 0 20 40
SCALE IN FEET

Record Owners:

Katherine T and Douglas G Boyden
Moretown, VT 05660

SPAN: 11403514172 Parcel ID: 040-4-002-000
SPAN: 11403514173 Parcel ID: 040-4-003.000
SPAN: 11403514176 Parcel ID: 040-4-006.000
SPAN: 11403514178 Parcel ID: 040-4-008.000

Legend:

- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- MANHOLE
- HAND HOLE
- WATER GATE
- FIRE HYDRANT
- GAS GATE
- STREET SIGN
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- GUY WIRE
- PROPERTY LINE
- INDEX CONTOUR
- INTERVAL CONTOUR
- GRAVEL
- EDGE OF PAVEMENT
- CONCRETE CURB
- VERTICAL GRANITE CURB
- GUARD RAIL
- CHAIN LINK FENCE
- DRAINAGE LINE
- OVERHEAD WIRE
- WATER LINE
- TREE LINE

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Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

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Date: September 8, 2020

Not Approved for Construction

Drawing Title
Existing Conditions Plan

Drawing Number
C-1.10

Sheet 2 of 16

Project Number
58036.00

Saved Tuesday, September 8, 2020 5:29:01 PM CHALE-SILLS Plotted Tuesday, September 8, 2020 6:43:42 PM Hale-Sills, Chris

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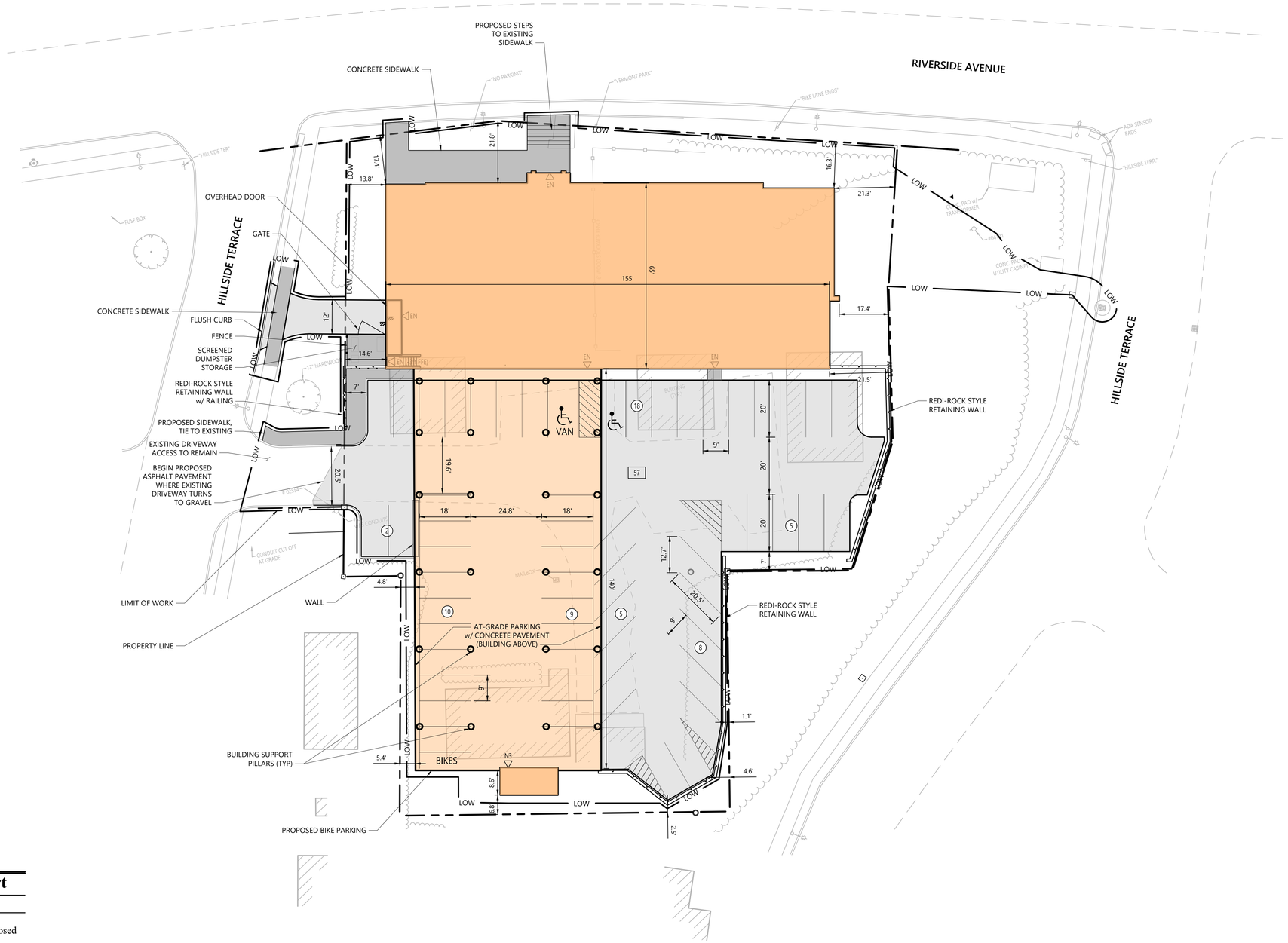

0 10 20 40 Feet

Parking Summary Chart

Description	Spaces Existing	Spaces Proposed
PARKING SPACES	N/A	55
STANDARD ACCESSIBLE SPACES	N/A	1
STANDARD ACCESSIBLE VAN SPACES	N/A	1
TOTAL SPACES	N/A	57

Zoning Summary Chart

Zoning District(S):	Neighborhood Activity Center - Riverside		
Overlay District(S):	Design Review		
Zoning Regulation Requirements	Existing	Required	Proposed
LOT AREA	38,882 SF	N/A	38,882 SF
LOT COVERAGE	29.6%		79.8%

Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

No.	Revision	Date	Appvd.

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Date: September 8, 2020

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Drawing Title
Site Plan

Drawing Number
C-2.10

Sheet 3 of 16

Project Number
58036.00

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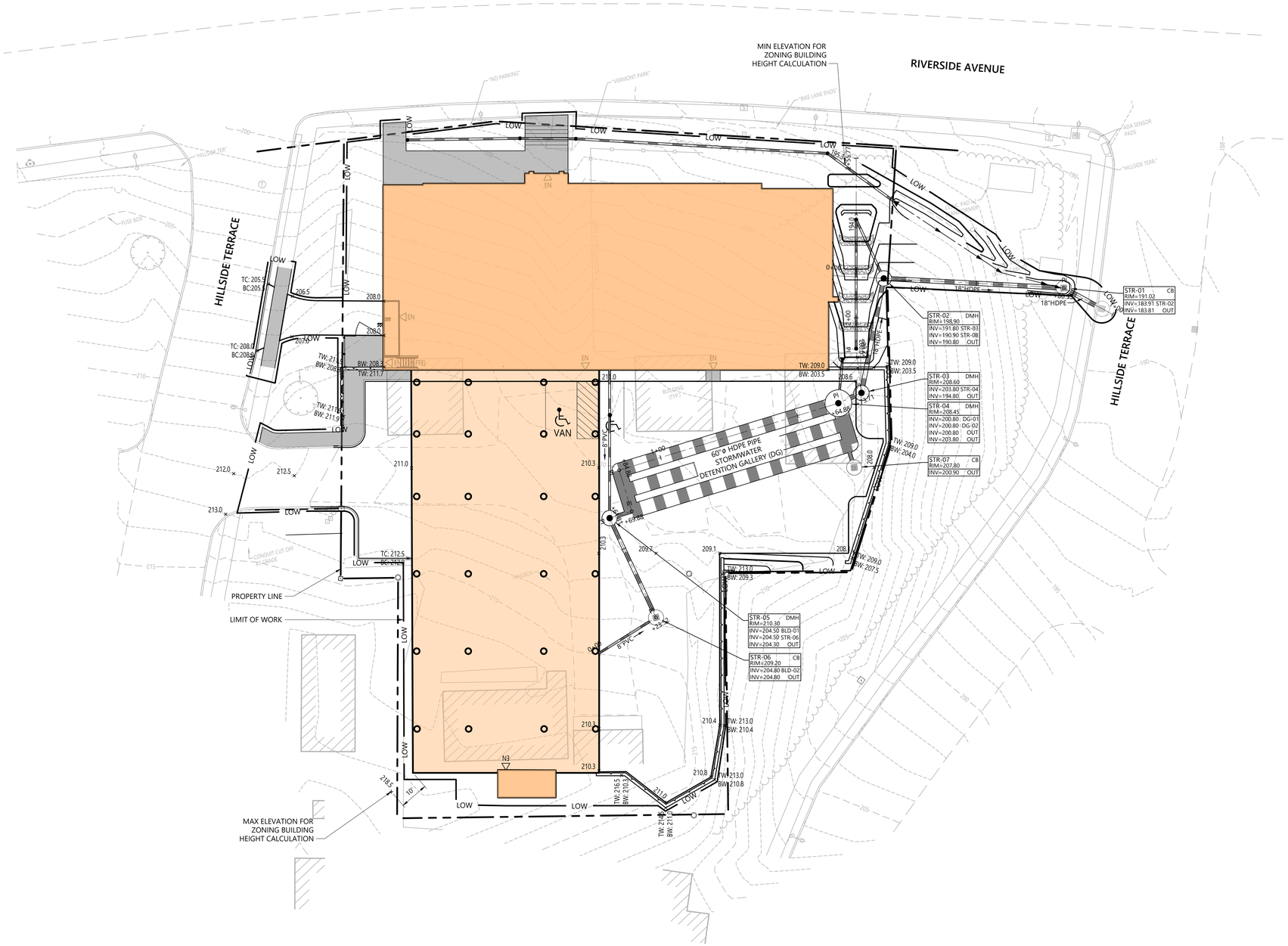

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Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

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Date: September 8, 2020

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Drawing Title: Grading and Drainage Plan

Drawing Number: C-3.10

Sheet 4 of 16

Project Number: 58036.00

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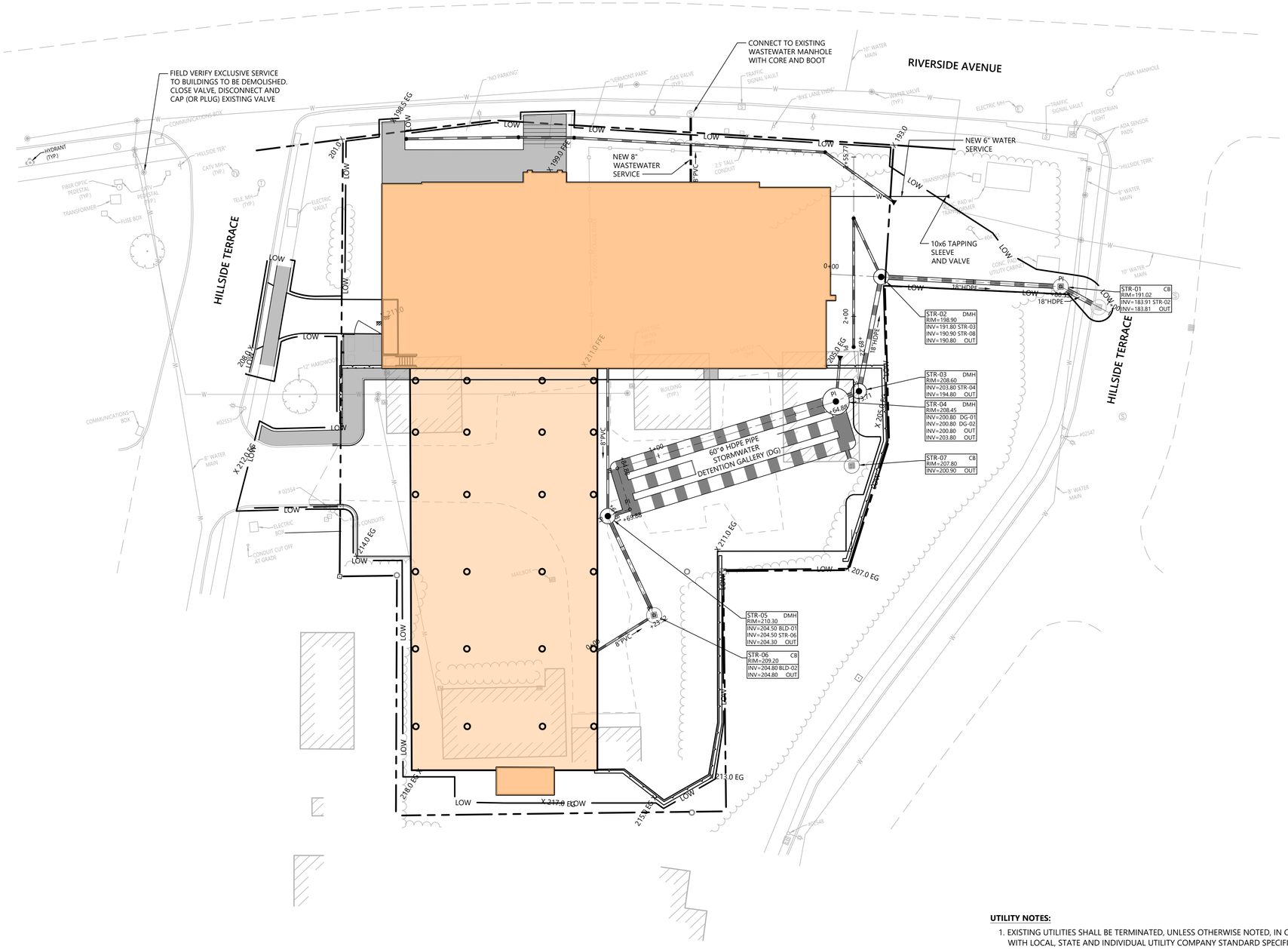

UTILITY NOTES:

1. EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
2. ALL WATER AND WASTEWATER WORK SHALL CONFORM WITH THE PROJECT SPECIFIC WATER AND WASTEWATER PERMIT ISSUED BY THE VERMONT DEPARTMENT OF CONSERVATION (VTDEC), VTDEC WASTEWATER SYSTEM AND POTABLE WATER SUPPLY RULES (EPR CHAPT. 1, "WATER/WASTEWATER RULES"), VTDEC WATER SUPPLY RULE (EPR CHAPT 21), AND FOR WORK WITHIN 10 FEET OF THE BUILDING (OR AS APPLICABLE) THE VERMONT PLUMBING CODE, LATEST EDITIONS.

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South Burlington, VT 05403
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0 10 20 40 Feet

Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

No.	Revision	Date	Appvd.

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Issued for: Zoning Permit
Date: September 8, 2020

Not Approved for Construction

Drawing Title
Utility Plan

Drawing Number
C4.10

Sheet 5 of 16

Project Number
58036.00

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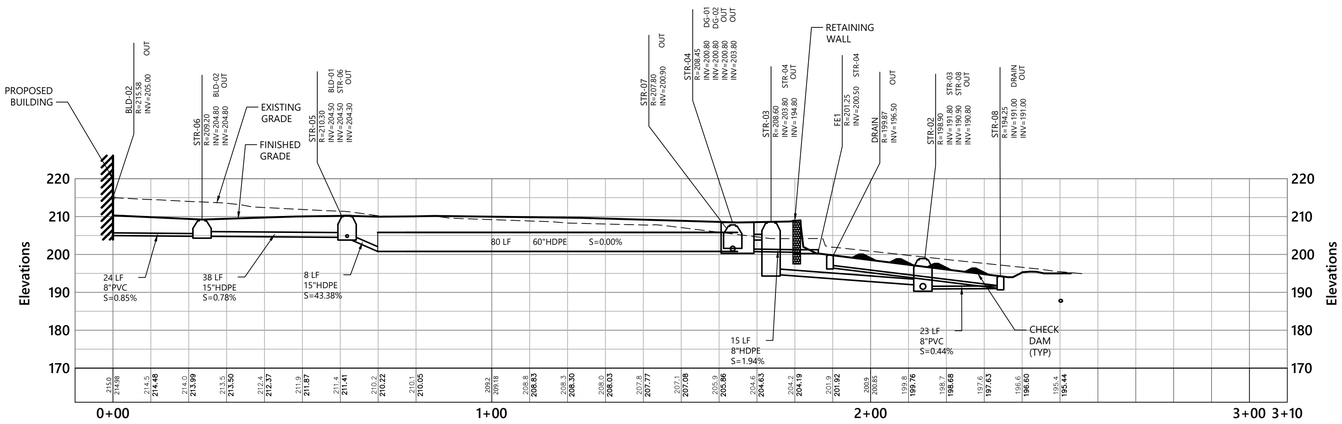
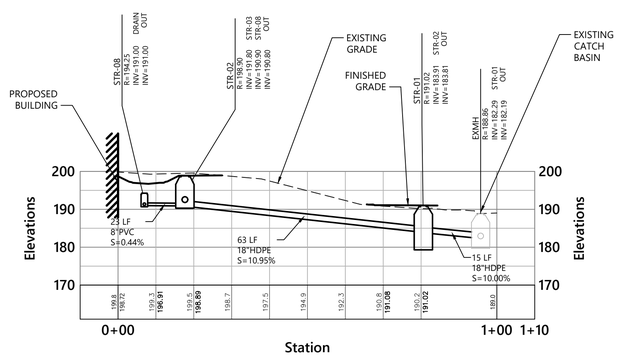


Profile View 1



Profile View 2

Vert. 0 10 20 40 Feet
Horiz. 0 10 20 40 Feet

Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

No.	Revision	Date	Appvd.

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Issued for: Zoning Permit

Date: September 8, 2020

Not Approved for Construction

Drawing Title: Utility Profiles

Drawing Number: C4.20

Sheet 6 of 16

Project Number: 58036.00

UTILITY NOTES:

1. EXISTING UTILITIES SHALL BE TERMINATED, UNLESS OTHERWISE NOTED, IN CONFORMANCE WITH LOCAL, STATE AND INDIVIDUAL UTILITY COMPANY STANDARD SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL COORDINATE UTILITY SERVICE DISCONNECTS WITH THE UTILITY REPRESENTATIVES.
2. ALL WATER AND WASTEWATER WORK SHALL CONFORM WITH THE PROJECT SPECIFIC WATER AND WASTEWATER PERMIT ISSUED BY THE VERMONT DEPARTMENT OF CONSERVATION (VTDEC), VTDEC WASTEWATER SYSTEM AND POTABLE WATER SUPPLY RULES (EPR CHAPT. 1, "WATER/WASTEWATER RULES"), VTDEC WATER SUPPLY RULE (EPR CHAPT 21), AND FOR WORK WITHIN 10 FEET OF THE BUILDING (OR AS APPLICABLE) THE VERMONT PLUMBING CODE, LATEST EDITIONS.

Saved Tuesday, September 8, 2020 6:39:57 PM CHALE SILLS Plotted Tuesday, September 8, 2020 6:45:23 PM Hale-Sills, Chris

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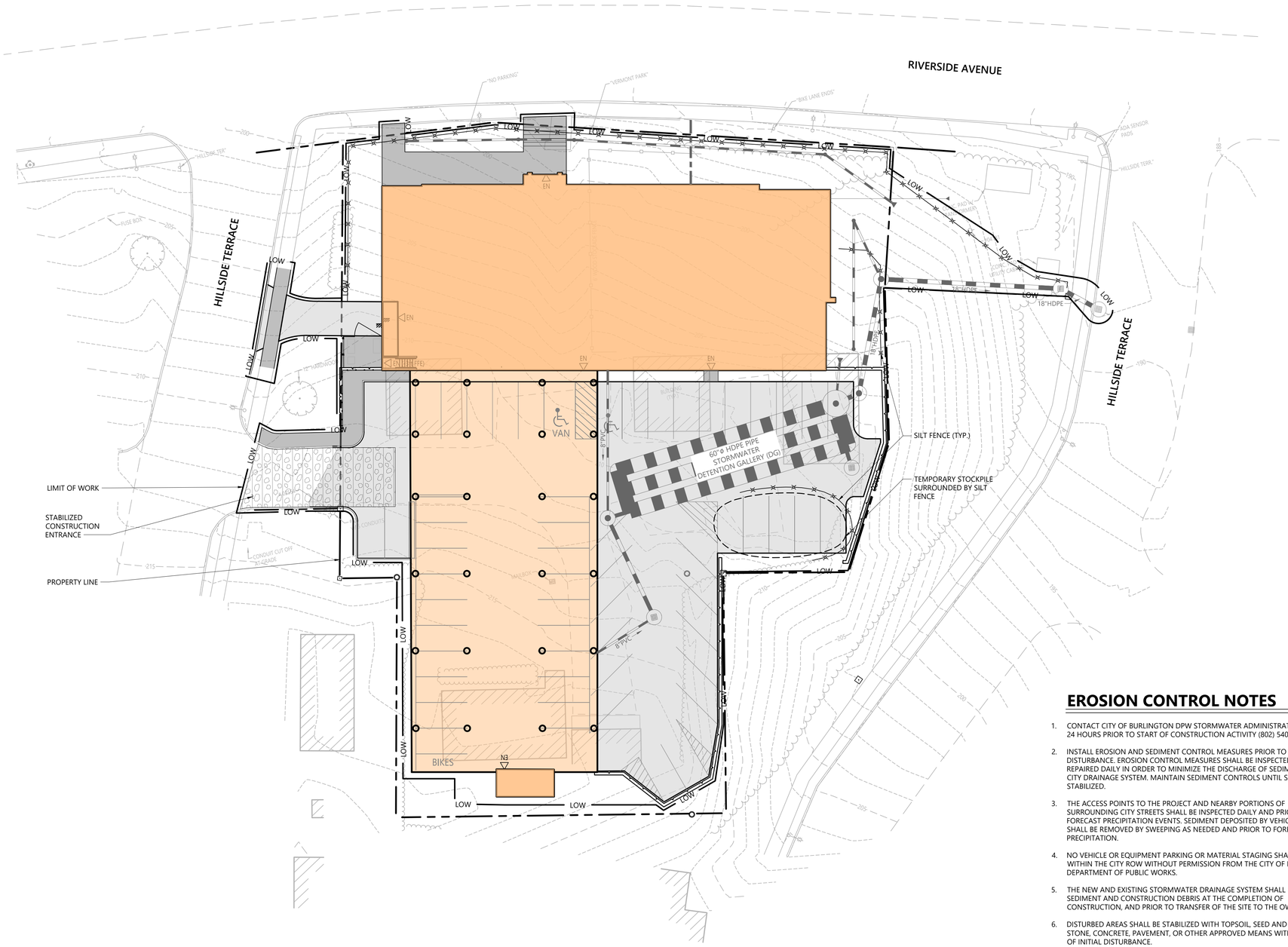

0 10 20 40 Feet

EROSION CONTROL NOTES

1. CONTACT CITY OF BURLINGTON DPW STORMWATER ADMINISTRATOR AT LEAST 24 HOURS PRIOR TO START OF CONSTRUCTION ACTIVITY (802) 540-1748.
2. INSTALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO EARTH DISTURBANCE. EROSION CONTROL MEASURES SHALL BE INSPECTED AND REPAIRED DAILY IN ORDER TO MINIMIZE THE DISCHARGE OF SEDIMENT TO THE CITY DRAINAGE SYSTEM. MAINTAIN SEDIMENT CONTROLS UNTIL SITE IS FULLY STABILIZED.
3. THE ACCESS POINTS TO THE PROJECT AND NEARBY PORTIONS OF SURROUNDING CITY STREETS SHALL BE INSPECTED DAILY AND PRIOR TO FORECAST PRECIPITATION EVENTS. SEDIMENT DEPOSITED BY VEHICLE TRACKING SHALL BE REMOVED BY SWEEPING AS NEEDED AND PRIOR TO FORECAST PRECIPITATION.
4. NO VEHICLE OR EQUIPMENT PARKING OR MATERIAL STAGING SHALL OCCUR WITHIN THE CITY ROW WITHOUT PERMISSION FROM THE CITY OF BURLINGTON DEPARTMENT OF PUBLIC WORKS.
5. THE NEW AND EXISTING STORMWATER DRAINAGE SYSTEM SHALL BE FREE FROM SEDIMENT AND CONSTRUCTION DEBRIS AT THE COMPLETION OF CONSTRUCTION, AND PRIOR TO TRANSFER OF THE SITE TO THE OWNER.
6. DISTURBED AREAS SHALL BE STABILIZED WITH TOPSOIL, SEED AND MULCH, STONE, CONCRETE, PAVEMENT, OR OTHER APPROVED MEANS WITHIN 14 DAYS OF INITIAL DISTURBANCE.
7. SILT FENCE OR OTHER APPROVED SILT BARRIER SHALL BE INSTALLED AT THE DOWNSLOPE PERIMETER OF ALL SOILS STOCKPILES.
8. THE CONTRACTOR SHALL TAKE ALL REASONABLE MEANS NECESSARY TO KEEP THE NEW STORMWATER SYSTEM FREE OF SEDIMENT AND DEBRIS DURING THE CONSTRUCTION PERIOD. DO NOT ALLOW RUNOFF FROM DISTURBED AREAS TO DRAIN THESE FEATURES UNTIL THEY HAVE RECEIVED FINAL STABILIZATION.

Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

No.	Revision	Date	Appvd.

Designed by | Checked by

Issued for: Zoning Permit
Date: September 8, 2020

Not Approved for Construction

Drawing Title
Erosion Prevention and Sediment Control Plan

Drawing Number
C6.10

Sheet 7 of 16

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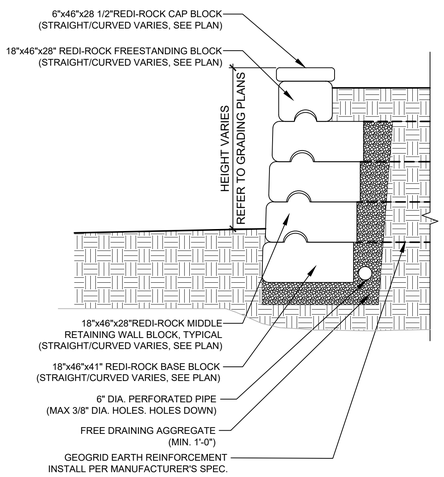
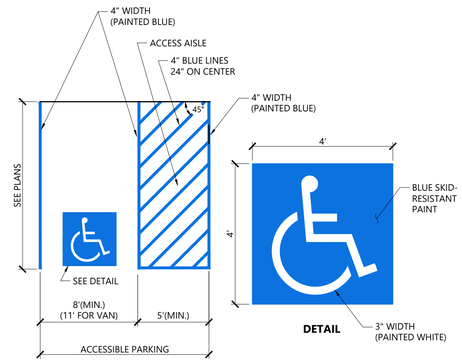


NOTES:

1. SEGMENTAL WALL IS COMPOSED OF REDI-ROCK WALL "LEDGESTONE" STYLE PRECAST CONCRETE UNITS WITH A "NEW ENGLAND LEDGESTONE" COLOR, OR SIMILAR AS APPROVED BY OWNER.
2. THIS SECTION IS FOR REFERENCE ONLY. ADDITIONAL DETAILS AND ENGINEERING MAY BE REQUIRED PRIOR TO CONSTRUCTION.
3. CONTRACTOR MAY SUBSTITUTE SIMILAR PRODUCTS WITH OWNER PRIOR APPROVAL.

Redi-Rock Style Retaining Wall

N.T.S.

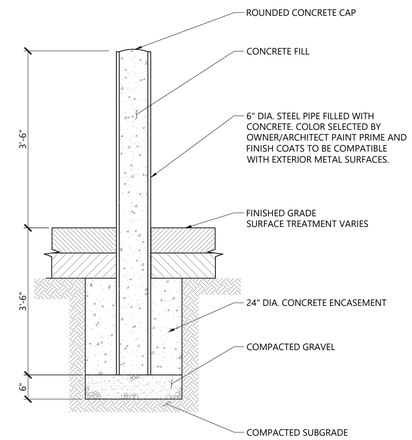


NOTES

1. ALL DIMENSIONS TO EDGES OF 4" PAVEMENT STRIPING.
2. 8' STALL WIDTH REFERS TO 8' CLEAR BETWEEN INSIDE EDGES OF PAVEMENT MARKINGS.
3. ALL SLOPES THROUGHOUT THE ACCESSIBLE PARKING AND AISLE AREAS SHALL NOT EXCEED 1.5%.

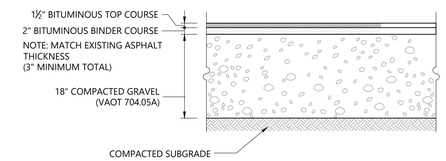
Accessible Parking Space 1/16

N.T.S. Source: VHB LD_552



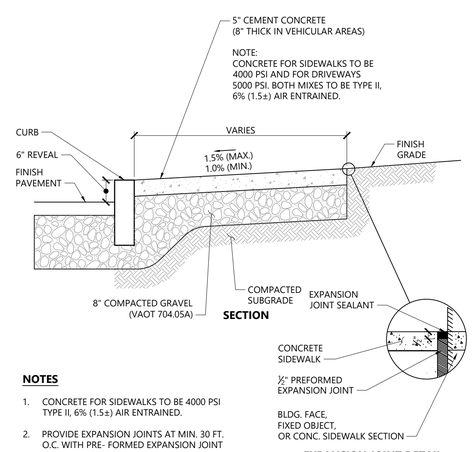
Bollard 1/16

N.T.S. Source: VHB LD_700



Standard Duty Flexible Pavement 4/18

N.T.S. Source: VHB LD

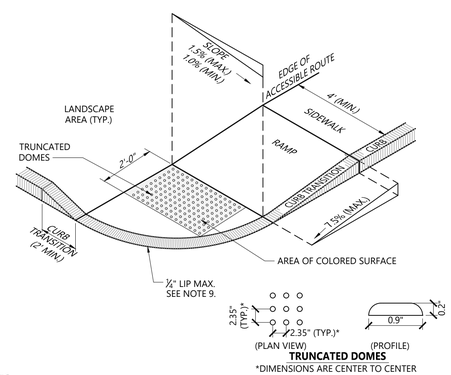


NOTES

1. CONCRETE FOR SIDEWALKS TO BE 4000 PSI TYPE II, 6% (1.5±) AIR ENTRAINED.
2. PROVIDE EXPANSION JOINTS AT MIN. 30 FT. O.C. WITH PRE- FORMED EXPANSION JOINT FILLER & SEALER.
3. PROVIDE TOOLED CONTROL JOINTS AT 6' O.C.
4. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.

Cast-In-Place Concrete Curb (CC) & Sidewalk 1/16

N.T.S. Source: VHB REV LD_420

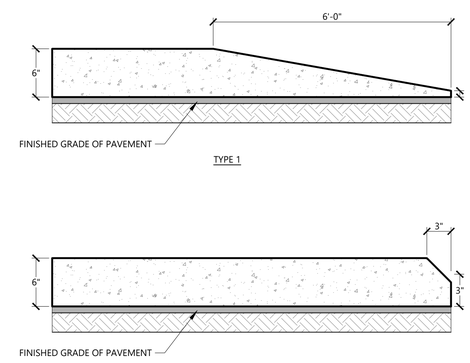


NOTES

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE AT CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE INSTALLED AND SET FLUSH.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.
12. CONTRACTOR TO SUBMIT R.F.I. FOR THIS TYPE OF ACCESSIBLE CURB RAMP FOR APEX ROADWAY CROSSINGS.

Accessible Curb Ramp (ACR) - Type 'B-D' 1/16

N.T.S. Source: VHB LD_501



Transition and End Curbs 2/17

N.T.S. Source: VHB LD

Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

No.	Revision	Date	Apprvd.

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Drawing Title
Site Details

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C-6.10

Sheet 8 of 16

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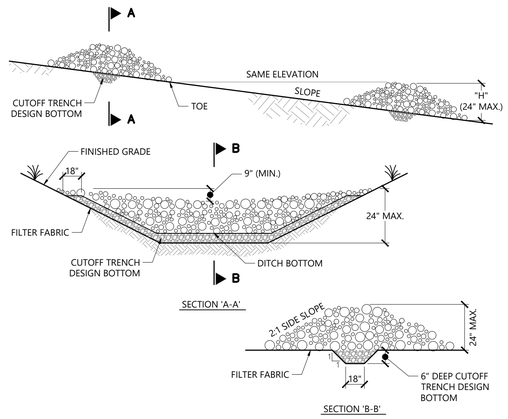


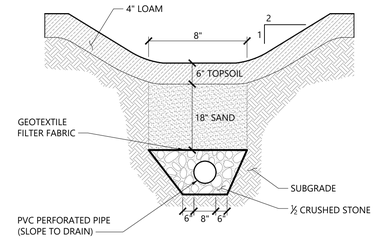
NOTES

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN USING A WELL GRADED STONE MATRIX 2 TO 9 INCHES IN SIZE.
2. SET SPACING OF CHECK DAMS AS INDICATED ON PLANS.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

Stone Check Dam

08/16

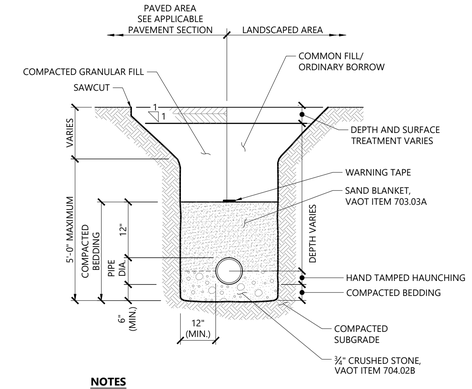
N.T.S. Source: VHB LD_VT



Dry Swale

1/16

N.T.S. Source: VHB REV LD_174



NOTES

1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.
3. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS, AND UNIFORM SUPPORT FOR THE FULL LENGTH OF THE PIPE.
4. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER THE PIPE TO ENSURE PIPE IS NOT DAMAGED

Storm Drain and Foundation Drain

1/16

N.T.S. Source: VHB LD_

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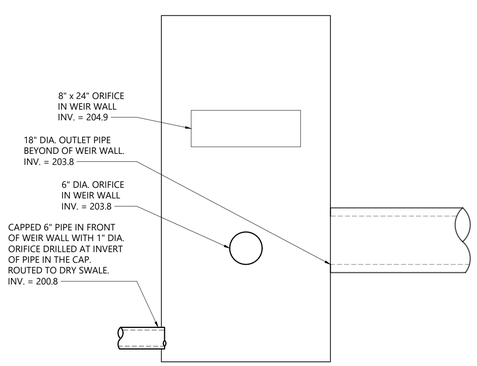
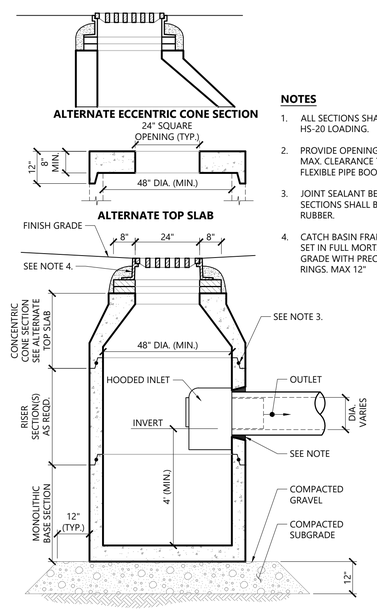


Detention Gallery Outlet Control Schematic

1/16

N.T.S. Source: VHB LD



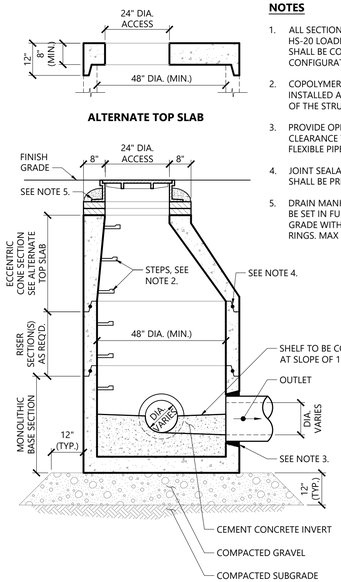
NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE FOR FLEXIBLE PIPE BOOT.
3. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
4. CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH PRECAST CONCRETE RISER RINGS. MAX 12"

Catch Basin (CB)

1/16

N.T.S. Source: VHB REV LD_101



NOTES

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING. DIAMETER OF STRUCTURES SHALL BE COORDINATED WITH PIPE CONFIGURATIONS.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
3. PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPEFOR FLEXIBLE PIPE BOOT.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH PRECAST CONCRETE RISER RINGS. MAX 12"

Drain Manhole (DMH)

1/16

N.T.S. Source: VHB LD_115

Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

No.	Revision	Date	Appvd.

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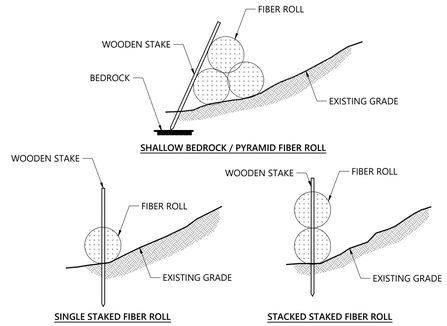


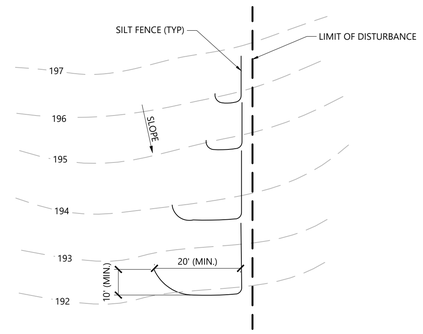
NOTES

1. FIBER ROLL SHALL BE PLACED IN SHALLOW TRENCH UP TO 4", WHERE FEASIBLE, PLACING SOIL REMOVED FROM TRENCH BEHIND THE ROLL.
2. FIBER ROLLS SHALL BE ANCHORED WITH 2" BY 2" WOODEN STAKES (36" LONG), OR SIMILAR, WHERE FEASIBLE, EITHER INSTALLED THROUGH CENTER OF ROLL (AS SHOWN) OR PLACED ON BOTH SIDES OF ROLL.
3. STAKES TO BE PLACED 4 FT APART, MINIMUM.
4. SINGLE OR DOUBLE STACKED STAKED FIBER ROLLS TO BE INSTALLED WHERE SOIL DEPTH ALLOWS. WHERE SHALLOW TO BEDROCK, PYRAMID FIBER ROLLS TO BE UTILIZED WITH STAKES, AS FEASIBLE.
5. FIBER ROLLS TO BE REPLACED OR REPLENISHED AS NEEDED DURING ACTIVE EARTH WORK.
6. PERIMETER CONTROLS SHALL NOT CROSS ACTIVE ACCESS ROUTES (E.G., ROADS) OR ACTIVE FLOW PATHS (E.G., STREAMS/RIVERS).
7. PERIMETER CONTROLS SHALL REMAIN IN PLACE AND BE MAINTAINED/REPLACED AS NEEDED UNTIL FINAL STABILIZATION IN AREA HAS BEEN ACHIEVED.

Staked Fiber Roll

08/16

N.T.S. Source: VHB LD_VT



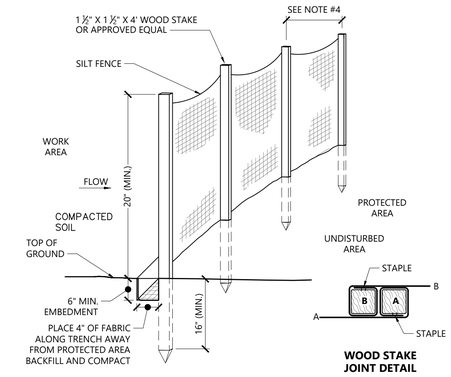
NOTES

1. SILT FENCE SHALL BE INSTALLED IN SHORTER RUNS WITH "J-HOOKS" TO AVOID CONCENTRATION OF FLOWS AT ONE LOCATION BY TRAPPING RUNOFF AT MULTIPLE POINTS ALONG A SLOPE.
2. MINIMUM WIDTH OF J-HOOK RECOMMENDED AT 20 FT WITH A DEPTH OF 10 FT. WHERE SPACE IS LIMITED (E.G., ALONG NARROW RIGHTS OF WAY), NARROWER HOOKS CAN BE USED WITH A HIGHER SPACING FREQUENCY.
3. START DOWN-GRADIENT SILT FENCE LINE AS CLOSE AS POSSIBLE TO UP-GRADIENT J-HOOK.

Installation of "J-Hooks" on Slopes

08/16

N.T.S. Source: VHB LD_VT



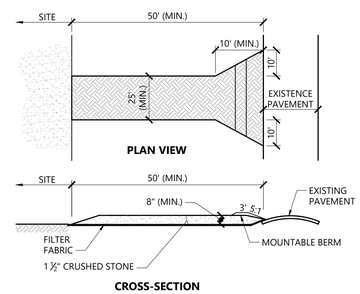
NOTES

1. WOVEN WIRE FENCE REINFORCEMENT IS REQUIRED WITHIN 50 FT UPSLOPE OF RECEIVING WATERS.
2. WHERE REQUIRED FENCE SHALL BE WOVEN WIRE, MIN. 14 GAUGE WITH A 6" MESH OPENING SHALL BE USED.
3. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUIVALENT.
4. POST SPACING FOR WIRE BACKED FENCE SHALL BE 10 FT. MAX. FOR FILTER CLOTH FENCE WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4 FT. FOR FILTER CLOTH FENCE WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6 FT.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6 INCHES AND FOLDED.
6. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE OR APPROVED EQUIVALENT.
7. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.
8. SILT FENCE SHALL NOT BE USED TO DEMARCATE LIMITS OF DISTURBANCE.

Silt Fence/ Reinforced Silt Fence Barrier

08/16

N.T.S. Source: VHB LD_650-VT



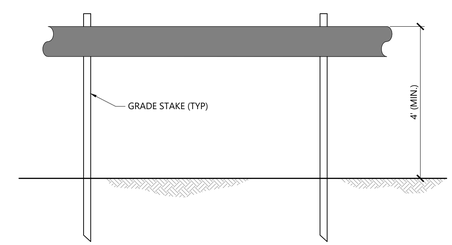
NOTES

1. AGGREGATE SIZE: USE A MATRIX OF 1 TO 4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH: NOT LESS THAN 50 FEET (EXCEPT ON SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH APPLIES)
3. THICKNESS: NOT LESS THAN EIGHT (8) INCHES
4. WIDTH: TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT MINIMUM IF THERE IS ONLY ONE ACCESS TO THE SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE
6. ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION EXITS SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

Stabilized Construction Exit

1/16

N.T.S. Source: VHB LD_682-VT



NOTES

1. BARRIER MESH TAPE OR ROPE SHALL BE INSTALLED ALONG THE PERIMETER OF THE PROJECT AREA TO DEMARCATE THE LIMIT OF DISTURBANCE. NO EARTHWORK OR STORAGE OF MATERIALS SHALL BE CONDUCTED BEYOND THIS LIMIT WITHOUT PRIOR APPROVAL FROM THE OSPC.
2. USE 3" ORANGE BARRIER MESH TAPE OR 1/2" YELLOW POLYPROPYLENE ROPE.
3. WITHIN 50' OF WATER RESOURCE AREAS, USE 2-3 ROWS OF TAPE OR ROPE. BEYOND 50' OF WATER RESOURCE AREAS USE 1 ROW OF TAPE OR ROPE.
4. TAPE OR ROPE MAY BE FASTENED TO STAKES, TREES, OR OTHER APPROPRIATE FIXED OBJECTS.
5. PROJECT DEMARCATION SHALL NOT CROSS ACTIVE ACCESS ROUTES (E.G. ROADS). PROJECT DEMARCATION MAY CROSS RESOURCES AREAS WITH EXCEPTION OF LARGER WATER BODIES WHERE IT IS NOT FEASIBLE OR ADVISABLE.
6. PROJECT DEMARCATION SHALL REMAIN IN PLACE AND BE MAINTAINED/REPLACED AS NEEDED UNTIL FINAL STABILIZATION IN THE AREA HAS BEEN ACHIEVED.

Barrier Mesh Tape or Rope

08/16

N.T.S. Source: VHB LD_VT

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58036.00

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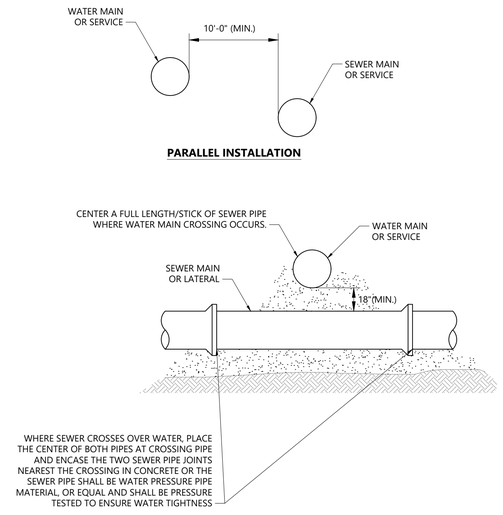
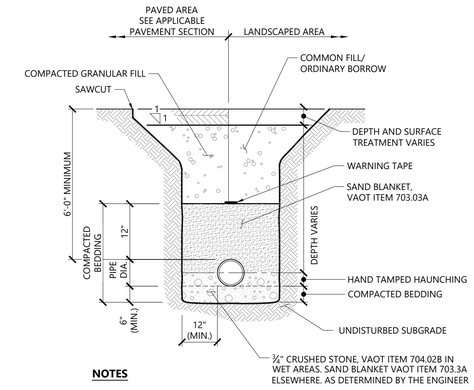


Water/Sewer Separation

1/16

N.T.S. Source: VHB LD



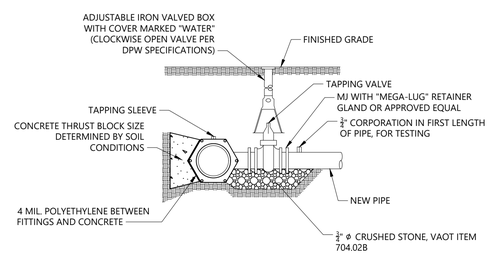
NOTES

1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.
3. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS, AND UNIFORM SUPPORT FOR THE FULL LENGTH OF THE PIPE.
4. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER THE PIPE TO ENSURE PIPE IS NOT DAMAGED
5. MATCH EXISTING PAVEMENT AND SUBBASE DEPTH IN CITY ROW

Waterline Trench

1/16

N.T.S. Source: VHB LD_



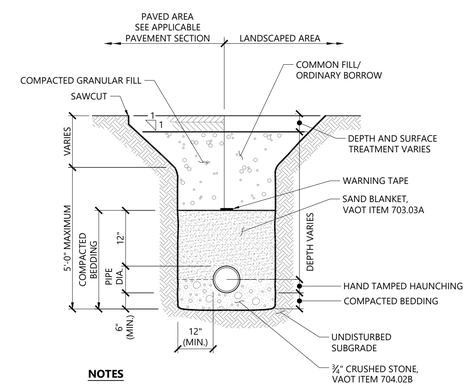
NOTES

1. WET TAPS SHALL BE PERFORMED BY PRE-APPROVED FIRMS ONLY.
2. ALL FITTINGS THAT ARE TO HAVE CONCRETE POURED AROUND THEM ARE TO BE WRAPPED WITH 4 MIL. POLYETHYLENE PRIOR TO CONCRETE PLACEMENT
3. REFER TO REFERENCE DRAWING D1 "BURLINGTON DEPARTMENT OF PUBLIC WORKS WATER SYSTEM DETAILS"

Typical Tapping Sleeve and Valve Detail

2/18

N.T.S. Source: VHB REV LD_



NOTES

1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
2. USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.
3. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS, AND UNIFORM SUPPORT FOR THE FULL LENGTH OF THE PIPE.
4. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER THE PIPE TO ENSURE PIPE IS NOT DAMAGED
5. MATCH EXISTING PAVEMENT AND SUBBASE DEPTH IN CITY ROW

Sewerline Trench

1/16

N.T.S. Source: VHB LD_

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Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

No.	Revision	Date	Appvd.

Designed by TAZ/CHS
Checked by JRZ
Issued for Zoning Permit
Date September 8, 2020

Not Approved for Construction

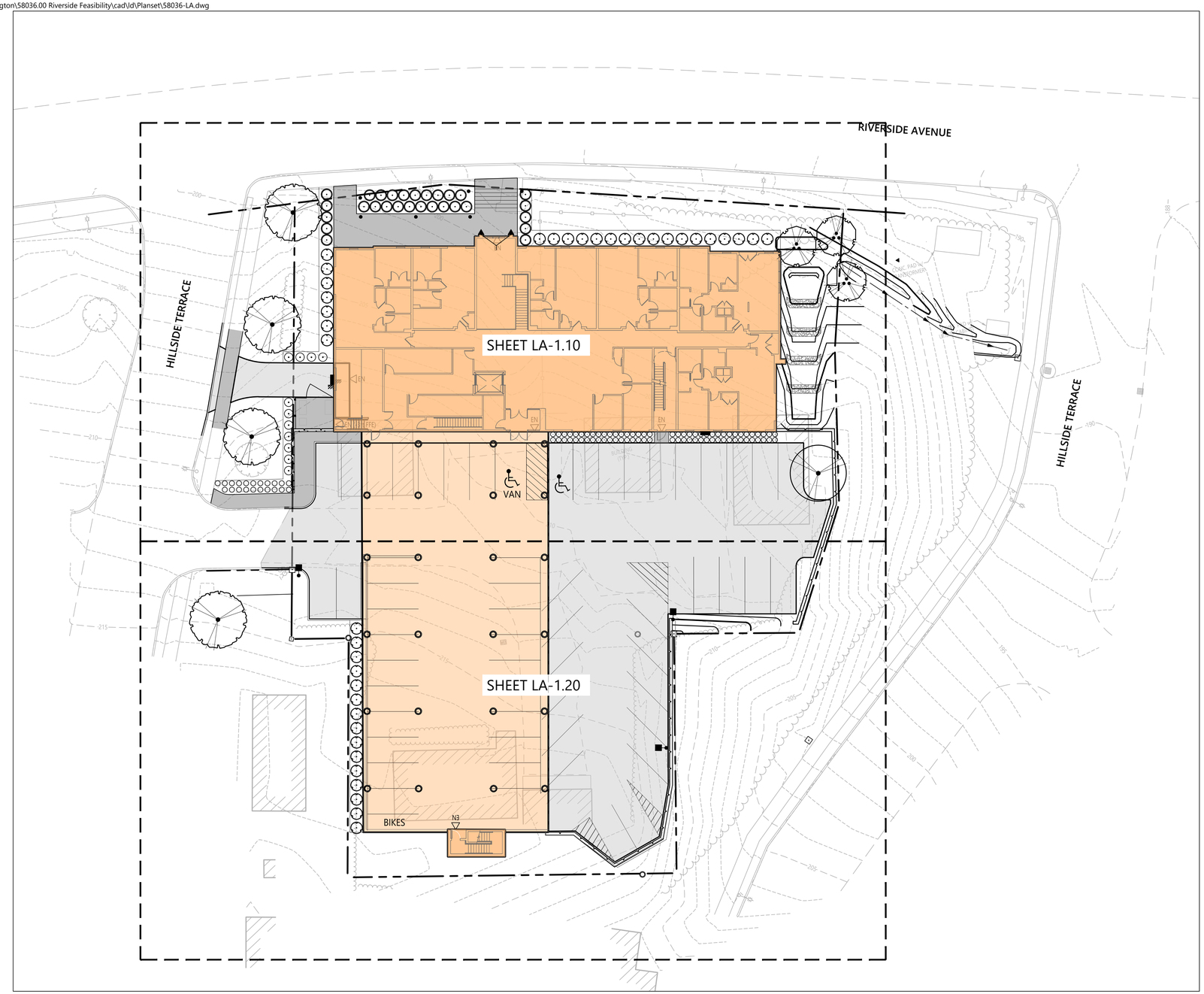
Drawing Title
Water and Wastewater Details

Drawing Number
C-6.40

Sheet 11 of 16

Project Number
58036.00

Saved Tuesday, September 8, 2020 6:07:37 PM CHALE-SILLS Plotted Tuesday, September 8, 2020 6:46:19 PM Hale-Sills, Chris



Tree Protection

1. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY CONSTRUCTION FENCE. ERECT FENCE AT EDGE OF THE TREE DRIPLINE PRIOR TO START OF CONSTRUCTION.
2. CONTRACTOR SHALL NOT OPERATE VEHICLES WITHIN THE TREE PROTECTION AREA. CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS, OR DISPOSE OF ANY WASTE MATERIALS, WITHIN THE TREE PROTECTION AREA.
3. DAMAGE TO EXISTING TREES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY A CERTIFIED ARBORIST AT THE CONTRACTOR'S EXPENSE.

Planting Notes

1. ALL PROPOSED PLANTING LOCATIONS SHALL BE STAKED AS SHOWN ON THE PLANS FOR FIELD REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL BELOW GRADE AND ABOVE GROUND UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
3. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY CONFLICT.
4. A 3-INCH DEEP MULCH PER SPECIFICATION SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, UNLESS OTHERWISE INDICATED ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
5. ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR SPECIFICATION, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
6. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS GRAPHICALLY SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLANT LIST AND PLANT LABELS PRIOR TO BIDDING.
7. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE REVIEWED BY LANDSCAPE ARCHITECT AND APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
8. ALL PLANT MATERIALS INSTALLED SHALL MEET THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND CONTRACT DOCUMENTS.
9. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.
10. AREAS DESIGNATED "LOAM & SEED" SHALL RECEIVE MINIMUM 6" OF LOAM AND SPECIFIED SEED MIX. LAWNS OVER 2:1 SLOPE SHALL BE PROTECTED WITH EROSION CONTROL FABRIC.
11. ALL DISTURBED AREAS NOT OTHERWISE NOTED ON CONTRACT DOCUMENTS SHALL BE LOAM AND SEEDED OR MULCHED AS DIRECTED BY OWNER'S REPRESENTATIVE.
12. THIS PLAN IS INTENDED FOR PLANTING PURPOSES. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

Plant Maintenance Notes

1. CONTRACTOR SHALL PROVIDE COMPLETE MAINTENANCE OF THE LAWNS AND PLANTINGS. NO IRRIGATION IS PROPOSED FOR THIS SITE. THE CONTRACTOR SHALL SUPPLY SUPPLEMENTAL WATERING FOR NEW LAWNS AND PLANTINGS DURING THE ONE YEAR PLANT GUARANTEE PERIOD.
2. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE LANDSCAPE MAINTENANCE WORK. WATER SHALL BE PROVIDED BY THE CONTRACTOR.
3. WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE INCH PER WEEK.
4. WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT.
5. CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS AT THE END OF THE ONE YEAR GUARANTEE PERIOD. CONTRACTOR SHALL TURN OVER MAINTENANCE TO THE FACILITY MAINTENANCE STAFF AT THAT TIME.

PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE
AF	4	Acer x freemanii `Sienna`	Sienna Glen Maple	2 1/2 - 3" CAL.
BN	3	Betula nigra `Heritage`	Multi-Stem Heritage River Birch	12 -14` HT.
GT	1	Gleditsia triacanthos inermis `Shademaster`	Shademaster Locust	2 1/2 - 3" CAL.
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**
CA2	11	Cornus stolonifera `Arctic Fire`	Arctic Fire Dogwood	18 - 24" SPD
MD	29	Microbiota decussata	Russian Cypress	18 - 24" SPD
RH	39	Rhus aromatica `Gro-Low`	Gro-Low Fragrant Sumac	18 - 24" SPD
GRASSES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**SIZE**
DS	74	Deschampsia cespitosa `Schottland`	Schottland Hair Grass	2 GAL.
PVS	21	Panicum virgatum `Shenandoah`	Shenendoah Switch Grass	2 GAL.

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Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

No.	Revision	Date	Apprvd.

Designed by MW
Checked by MW
Issued for Zoning Permit
Date September 8, 2020

Not Approved for Construction

Drawing Title
Overall Planting Plan

Drawing Number
LA-1.00

Sheet 12 of 16

Project Number
58036.00

Saved Tuesday, September 8, 2020 5:54:48 PM CHALE-SILLS Plotted Tuesday, September 8, 2020 6:47:01 PM Hale-Sills, Chris

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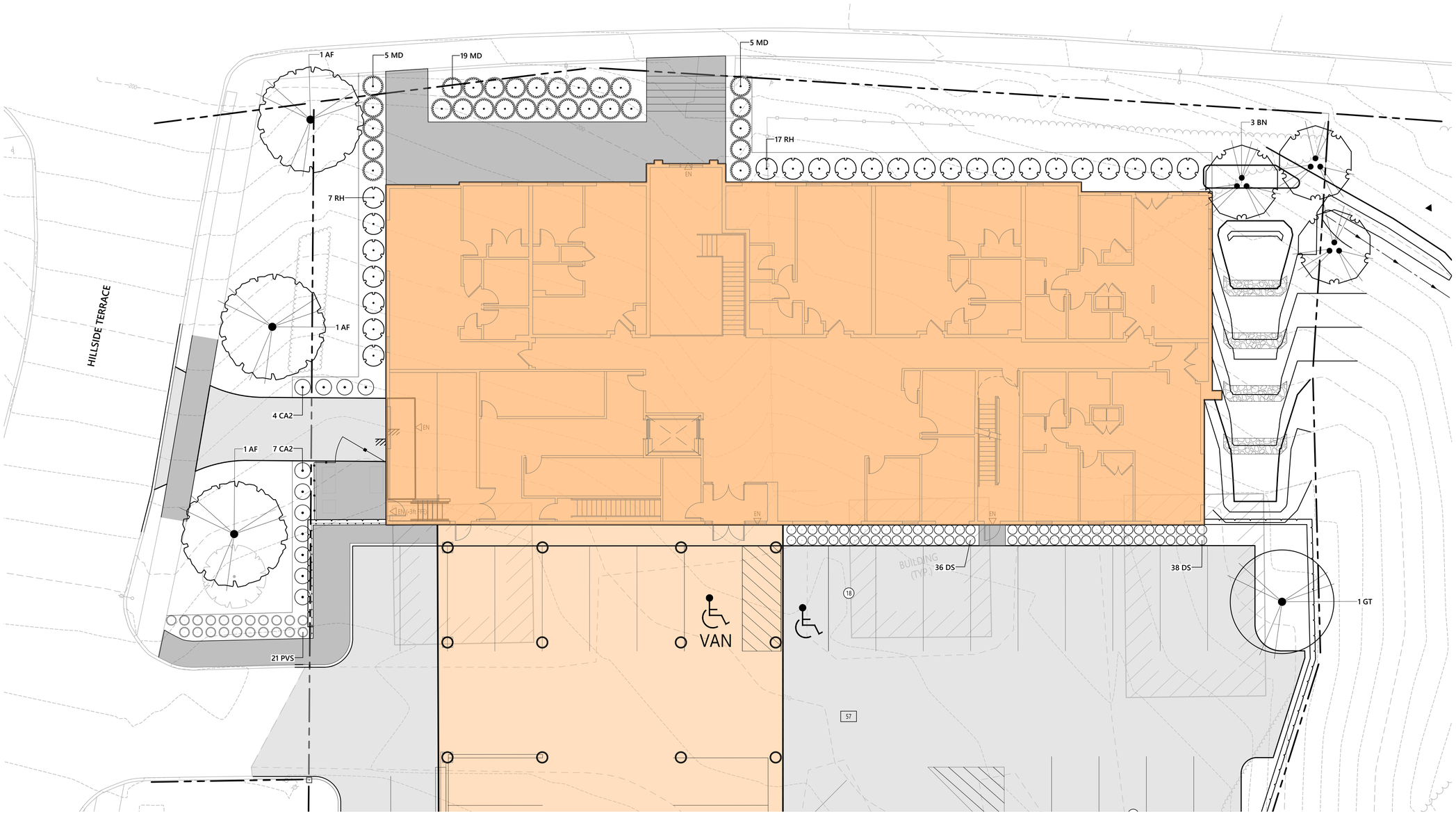

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Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

No.	Revision	Date	Appvd.

Designed by MW
Checked by MW
Issued for Zoning Permit
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Drawing Title
Planting Plan

Drawing Number
LA-1.10

Sheet 13 of 16

Project Number
58036.00

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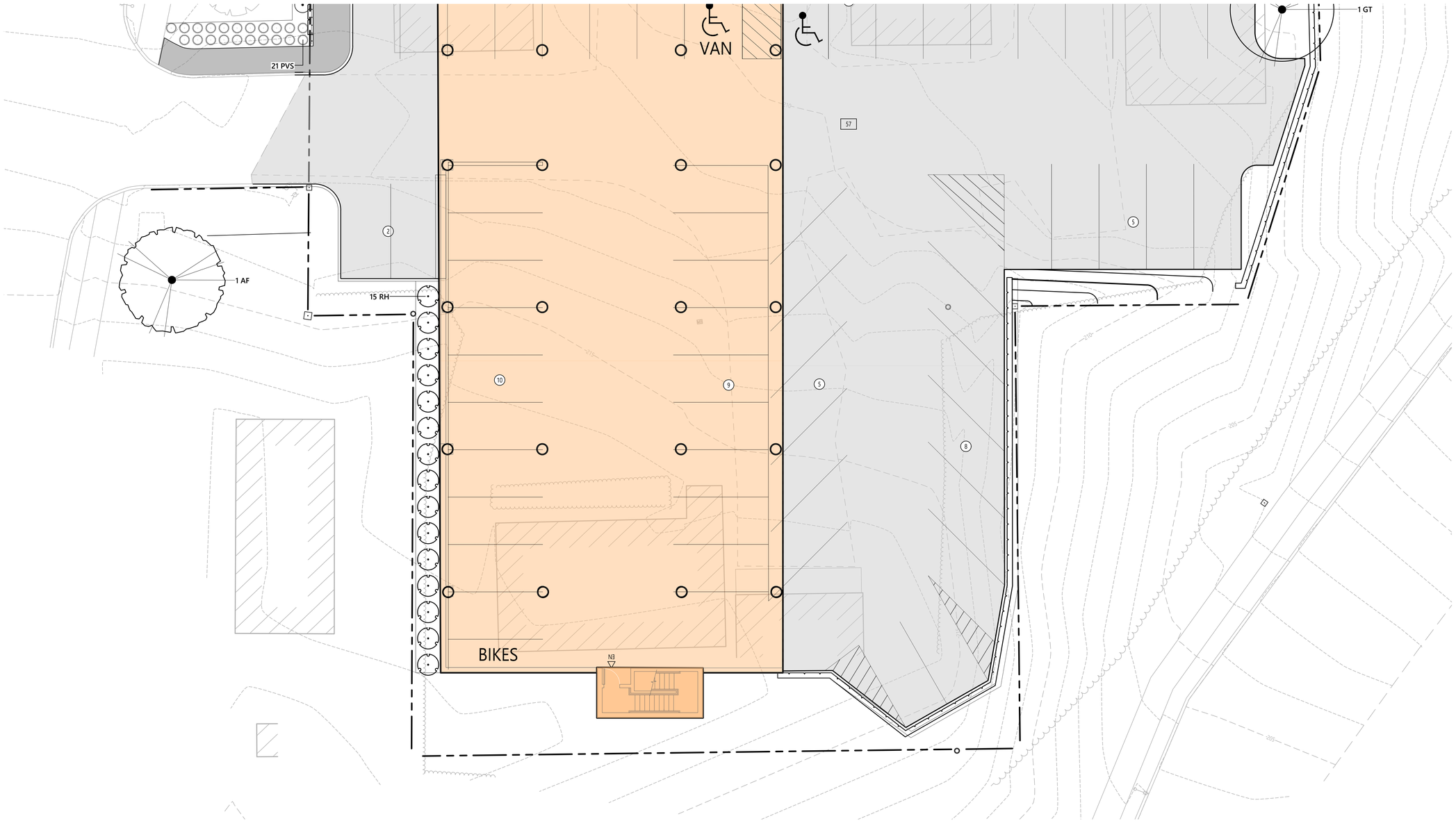

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Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
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No.	Revision	Date	Apprvd.

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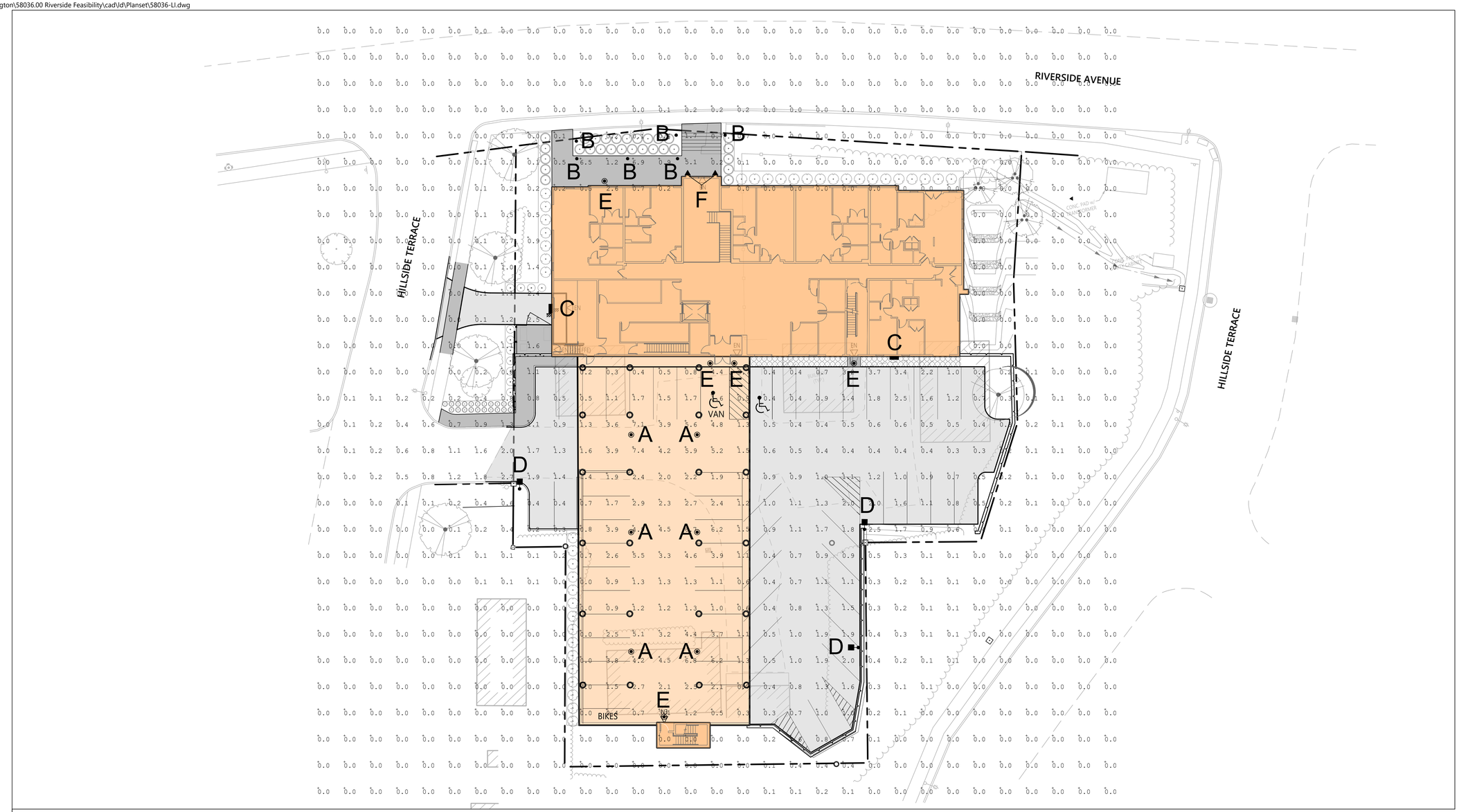
Drawing Title
Planting Plan

Drawing Number
LA-1.20

Sheet 14 of 16

Project Number
58036.00

Saved Tuesday, September 8, 2020 5:54:48 PM CHALE-SILLS Plotted Tuesday, September 8, 2020 6:47:12 PM Halle-Sills, Chris



LIGHT FIXTURE SPECIFICATIONS

Fixture A		Fixture B		Fixture C		Fixture D	
Manufacturer:	Beacon Lighting	Manufacturer:	KIM Lighting	Manufacturer:	Beacon Lighting Products	Manufacturer:	Beacon Lighting Products
Fixture:	SRT1 EDGE-LIT	Fixture:	Compact Bollard - CB32 LED	Fixture:	Traverse Wall Light TRV-D	Fixture:	Viper S
Color:	Black	Color:	Black	Color:	Black	Color:	Black
LED:	35watt - 5QW	LED:	10w	LED:	27watt - Type 3	LED:	39watt - Type 3
LED Color:	3,000k	LED Color:	3,000k	LED Color:	3,000k	LED Color:	3,000k
Voltage:	120v (verify with electrical engineer)	Voltage:	120v (verify with electrical engineer)	Voltage:	120v (verify with electrical engineer)	Voltage:	120v (verify with electrical engineer)
				Mounting:	12 Feet	Pole:	16 Feet

Fixture E		Fixture F	
Manufacturer:	Philips Lightolier	Manufacturer:	Kichler Lighting
Fixture:	SlimSurface LED - S5R (5inch)	Fixture:	Manhattan 22" Wall Light
Color:	Black	Color:	Black
LED:	650Lumen - 3,000k	LED Color:	3000k
Voltage:	120v (verify with electrical engineer)	Voltage:	120v (verify with electrical engineer)

STATISTICAL AREA SUMMARY

Grid Type: Horizontal Illuminance at finish grade.
Grid Units: Footcandles

Statistical Area	Avg	Max	Min	Avg/Min	Max/Min
1 Parking Lot and Entry Drive	1.73	7.40	0.20	8.65	37.00

Disclaimer:
This analysis was calculated in accordance with published IES calculation methods and procedures with the data as entered by the user. This analysis is based on tested IES photometric data, light loss factors as defined in the LLF value. This analysis is a mathematical model of real life situations, and it can be only as accurate as the model itself. Calculated values may vary from actual measurements in certain situations. VHB is not responsible for light output deviations due to light fixture or ballast combinations or other variables.

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Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
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No.	Revision	Date	Appvd.

Designed by MW
Checked by MW
Issued for Zoning Permit
Date September 8, 2020

Not Approved for Construction

Drawing Title
Lighting Plan

Drawing Number
LA-2.00

Sheet 15 of 16

Project Number
58036.00

STORMWATER MAINTENANCE PLAN

STORMWATER SYSTEM	SYMBOL	INSPECTION FREQUENCY	MAINTENANCE ACTIVITY TRIGGERS AND ACTIONS
CATCH BASIN (DEEP SUMP)		ANNUAL	SEDIMENT SHALL BE CLEANED OUT OF CATCH BASIN SUMPS WHEN IT ACCUMULATES TO >50% OF SUMP DEPTH.
ROOF DRAIN			ROOF DRAIN INLETS AND OUTLETS SHALL BE KEPT CLEAN OF DEBRIS.
SUBSURFACE STORAGE			INSPECT AND REMOVE DEBRIS FROM OUTLET CONTROL. REMOVE ACCUMULATION OF DEBRIS FROM PIPE CHAMBERS AS NEEDED.
DRY SWALE			WHEN WATER PONDS IN THE BOTTOM OF THE DRY SWALE FOR MORE THAN 48 HOURS THE TOP FEW INCHES OF MATERIAL SHALL BE REMOVED AND REPLACED WITH CLEAN SAND.

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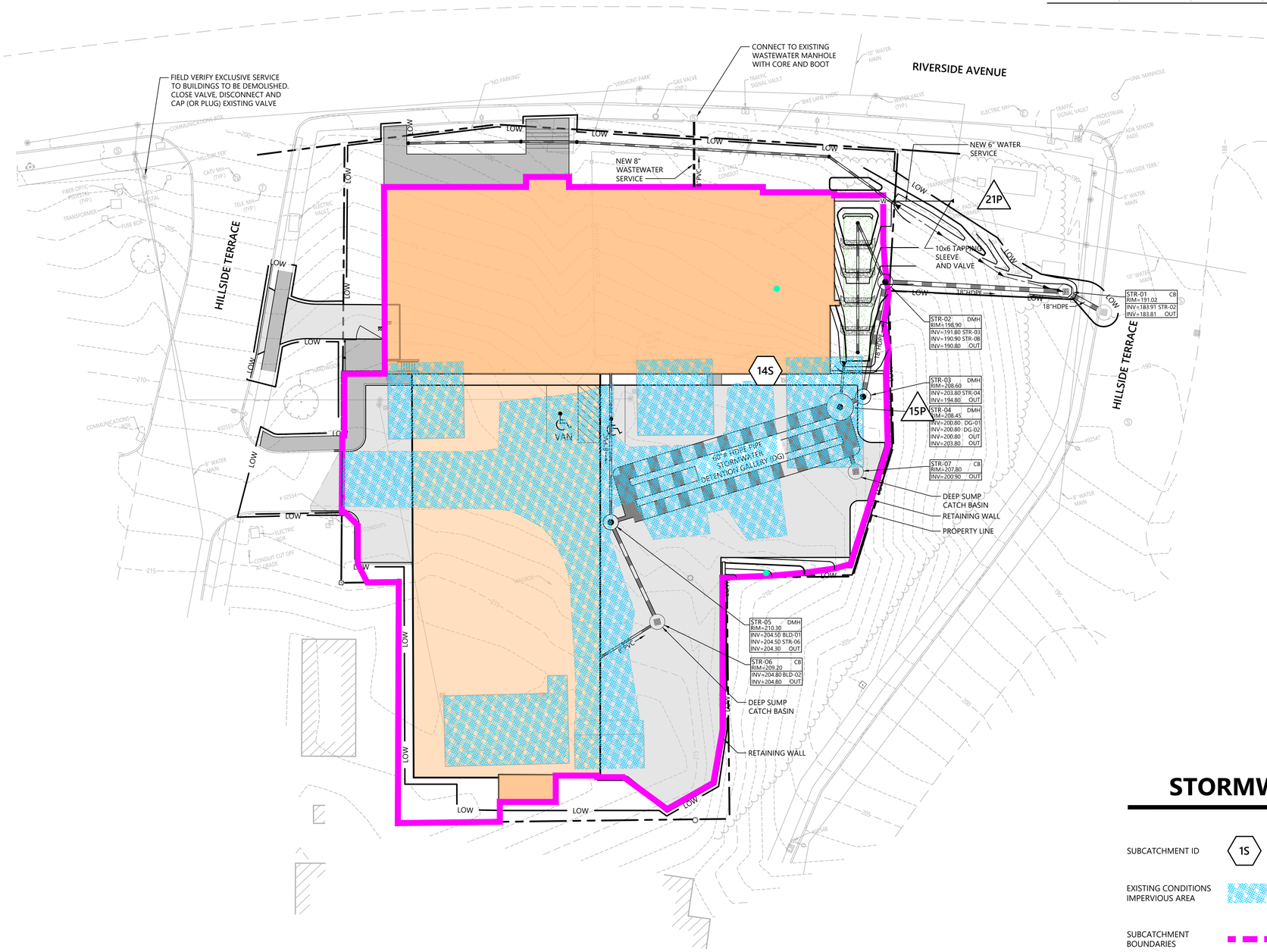

SITE PLAN INFORMATION

1. TOTAL LOT SIZE = 0.893 ACRES
2. PERCENT LOT DISTURBED = 97%
3. AREA IMPERVIOUS PRE-DEVELOPMENT
   - 3.1. TOTAL AREA =11,519 SF (0.264 AC)
   - 3.2. PERCENT OF SITE = 29.6%
4. IMPERVIOUS POST-DEVELOPMENT
   - 4.1. TOTAL AREA = 31,037 SF (0.713 AC)
   - 4.2. PERCENT OF SITE = 79.8%

STORMWATER LEGEND

SUBCATCHMENT ID — 1S

TREATMENT PRACTICE ID — 1P

EXISTING CONDITIONS IMPERVIOUS AREA

PROPOSED CONDITIONS IMPERVIOUS AREA

SUBCATCHMENT BOUNDARIES

0 10 20 40 Feet

Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

No.	Revision	Date	Appvd.

Designed by TAS/CHS — Checked by JRZ

Issued for: Zoning Permit — Date: September 8, 2020

Not Approved for Construction

Drawing Title: Stormwater Management & Maintenance Plan

Drawing Number: SW-1.10

Sheet 16 of 16

Project Number: 58036.00

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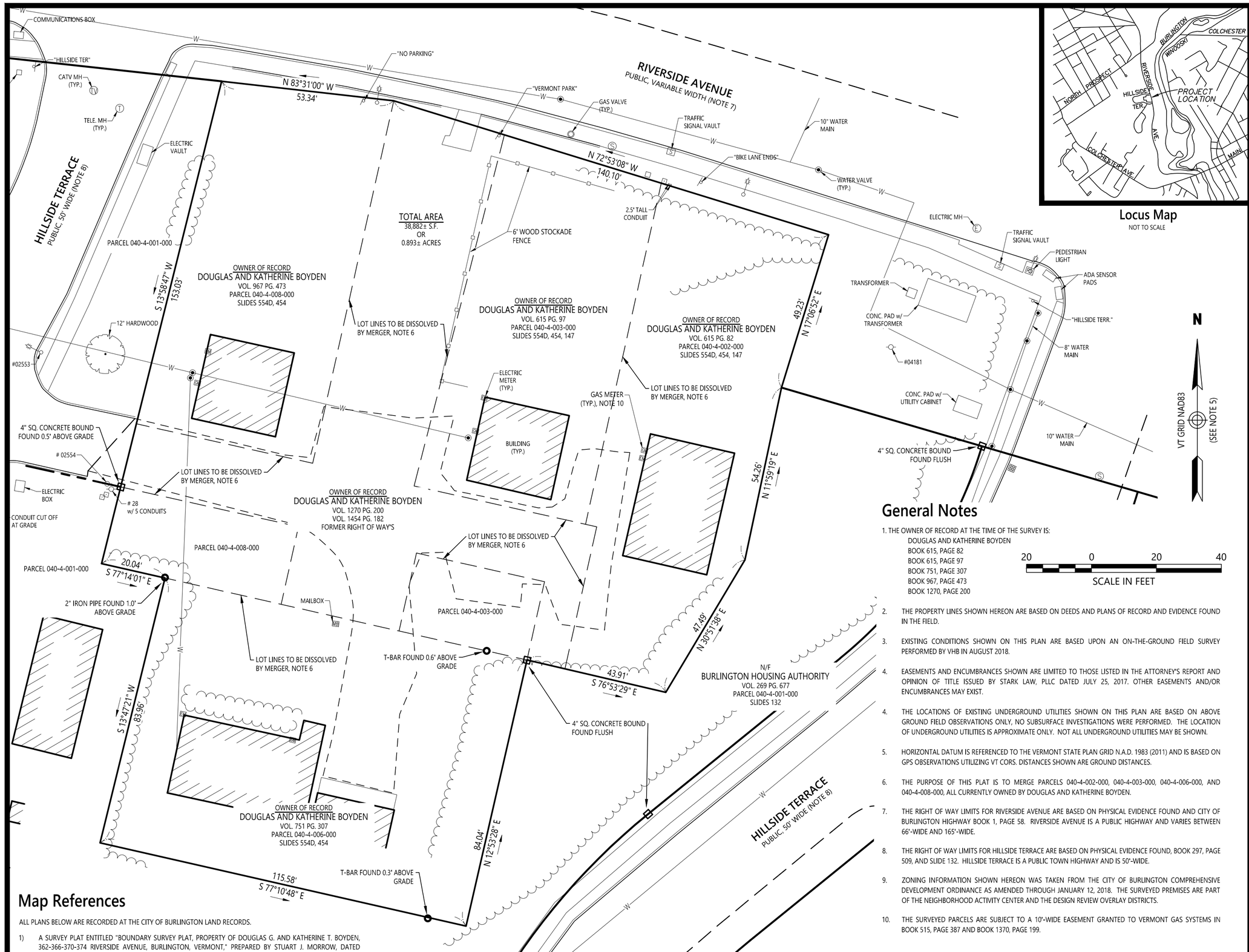

Locus Map

NOT TO SCALE

Legend

- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- MANHOLE
- WATER GATE
- FIRE HYDRANT
- GAS GATE
- BOLLARD w/LIGHT
- STREET SIGN
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- GUY WIRE
- UNDERGROUND WATE
- TREE LINE

General Notes

1. THE OWNER OF RECORD AT THE TIME OF THE SURVEY IS:
   DOUGLAS AND KATHERINE BOYDEN
   BOOK 615, PAGE 82
   BOOK 615, PAGE 97
   BOOK 751, PAGE 307
   BOOK 967, PAGE 473
   BOOK 1270, PAGE 200

20 0 20 40
SCALE IN FEET

2. THE PROPERTY LINES SHOWN HEREON ARE BASED ON DEEDS AND PLANS OF RECORD AND EVIDENCE FOUND IN THE FIELD.
3. EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON AN ON-THE-GROUND FIELD SURVEY PERFORMED BY VHB IN AUGUST 2018.
4. EASEMENTS AND ENCUMBRANCES SHOWN ARE LIMITED TO THOSE LISTED IN THE ATTORNEY'S REPORT AND OPINION OF TITLE ISSUED BY STARK LAW, PLLC DATED JULY 25, 2017. OTHER EASEMENTS AND/OR ENCUMBRANCES MAY EXIST.
4. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON ABOVE GROUND FIELD OBSERVATIONS ONLY, NO SUBSURFACE INVESTIGATIONS WERE PERFORMED. THE LOCATION OF UNDERGROUND UTILITIES IS APPROXIMATE ONLY. NOT ALL UNDERGROUND UTILITIES MAY BE SHOWN.
5. HORIZONTAL DATUM IS REFERENCED TO THE VERMONT STATE PLAN GRID N.A.D. 1983 (2011) AND IS BASED ON GPS OBSERVATIONS UTILIZING VT CORS. DISTANCES SHOWN ARE GROUND DISTANCES.
6. THE PURPOSE OF THIS PLAT IS TO MERGE PARCELS 040-4-002-000, 040-4-003-000, 040-4-006-000, AND 040-4-008-000, ALL CURRENTLY OWNED BY DOUGLAS AND KATHERINE BOYDEN.
7. THE RIGHT OF WAY LIMITS FOR RIVERSIDE AVENUE ARE BASED ON PHYSICAL EVIDENCE FOUND AND CITY OF BURLINGTON HIGHWAY BOOK 1, PAGE 58. RIVERSIDE AVENUE IS A PUBLIC HIGHWAY AND VARIES BETWEEN 66'-WIDE AND 165'-WIDE.
8. THE RIGHT OF WAY LIMITS FOR HILLSIDE TERRACE ARE BASED ON PHYSICAL EVIDENCE FOUND, BOOK 297, PAGE 509, AND SLIDE 132. HILLSIDE TERRACE IS A PUBLIC TOWN HIGHWAY AND IS 50'-WIDE.
9. ZONING INFORMATION SHOWN HEREON WAS TAKEN FROM THE CITY OF BURLINGTON COMPREHENSIVE DEVELOPMENT ORDINANCE AS AMENDED THROUGH JANUARY 12, 2018. THE SURVEYED PREMISES ARE PART OF THE NEIGHBORHOOD ACTIVITY CENTER AND THE DESIGN REVIEW OVERLAY DISTRICTS.
10. THE SURVEYED PARCELS ARE SUBJECT TO A 10'-WIDE EASEMENT GRANTED TO VERMONT GAS SYSTEMS IN BOOK 515, PAGE 387 AND BOOK 1370, PAGE 199.

Map References

ALL PLANS BELOW ARE RECORDED AT THE CITY OF BURLINGTON LAND RECORDS.

1) A SURVEY PLAT ENTITLED "BOUNDARY SURVEY PLAT, PROPERTY OF DOUGLAS G. AND KATHERINE T. BOYDEN, 362-366-370-374 RIVERSIDE AVENUE, BURLINGTON, VERMONT," PREPARED BY STUART J. MORROW, DATED FEBRUARY 2019 AND RECORDED IN MAP SLIDE 554D.

2) A SURVEY PLAT ENTITLED "ROADWAY AND PARK, CITY OF BURLINGTON, FROM BURLINGTON HOUSING AUTHORITY, RIVERSIDE AVENUE," PREPARED BY KREBS & LANSING CONSULTING ENGINEERS, INC., LAST REVISED OCTOBER 1, 1982 AND RECORDED IN MAP SLIDE 132.

3) A SURVEY PLAT ENTITLED "PROPERTY SURVEY OF THE MOSES PERELMAN ESTATE, BURLINGTON, VT," PREPARED BY HARVELL & TARTE, SURVEYORS, DATED DECEMBER 1965, AND RECORDED IN SLIDE 147.

4) A SURVEY PLAT ENTITLED "PLAN OF VERMONT PARK, JOSEPH ROSENBERG, OWNER, RIVERSIDE AVENUE, BURLINGTON, VT," PREPARED BY HOAG, STONE & ASSOCIATES, LAST REVISED APRIL 24, 1946 AND RECORDED IN SLIDE 454.

APPROVAL OF THIS LOT LINE ADJUSTMENT PLAT DOES NOT CONSTITUTE THE CREATION OF A SEPARATE PARCEL OR LOT. IT ADJUSTS THE PHYSICAL LOCATION OF THE COMMON BOUNDARY OF THE ADJOINING PARCELS OR LOTS. THIS LOT LINE ADJUSTMENT HAS BEEN APPROVED BY:

_____
CITY OF BURLINGTON ADMINISTRATIVE OFFICER / ASSISTANT ADMINISTRATIVE OFFICER

DATE_____ ZONING PERMIT # _____

Certification

THIS SURVEY IS BASED ON PHYSICAL EVIDENCE MEASURED IN THE FIELD AND WRITTEN EVIDENCE ABSTRACTED FROM PUBLIC AND PRIVATE LAND RECORDS. THIS SURVEY IS CONSISTENT WITH THAT EVIDENCE AND WAS PREPARED IN ACCORDANCE TO THE LATEST ADOPTED VERSION OF 26 V.S.A. SECTION 2596(a) AND 27 V.S.A. SECTION 1403.

November 13, 2020 — DATE

Ryan R. Cloutier — RYAN R. CLOUTIER, VERMONT LICENSED SURVEYOR #744

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Blackrock Riverside Avenue Senior Apartments

356 Riverside Ave
Burlington, Vermont

No.	Revision	Date	A

Designed by RRC — Checked by RRC
Issued for — Date November 13, 20

Drawing Title
Lot Line Adjustment Plat Owner of Record Douglas and Katherine Boyden

STATE OF VERMONT — RYAN R CLOUTIER No. 744 — LICENSED LAND SURVEYOR

Drawing Number
Sv-1

Sheet 1 of 1

Project Number
58036.00

Saved Friday, November 13, 2020 10:29:09 AM RCLOUTIER Plotted Friday, November 13, 2020 10:30:05 AM Cloutier, Ryan

NORTH ELEVATION
1/16" = 1'-0"

SBA
SMITH BUCKLEY ARCHITECTS
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P 802 540 0323 www.SBAVT.com

ZONING PERMIT DRAWINGS

Project
Riverside Avenue Senior Apartments
Date
September 8, 2020

WEST ELEVATION
1/16" = 1'-0"

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ZONING PERMIT DRAWINGS

Project
Riverside Avenue Senior Apartments
Date
September 8, 2020

SOUTH ELEVATION
1/16" = 1'-0"

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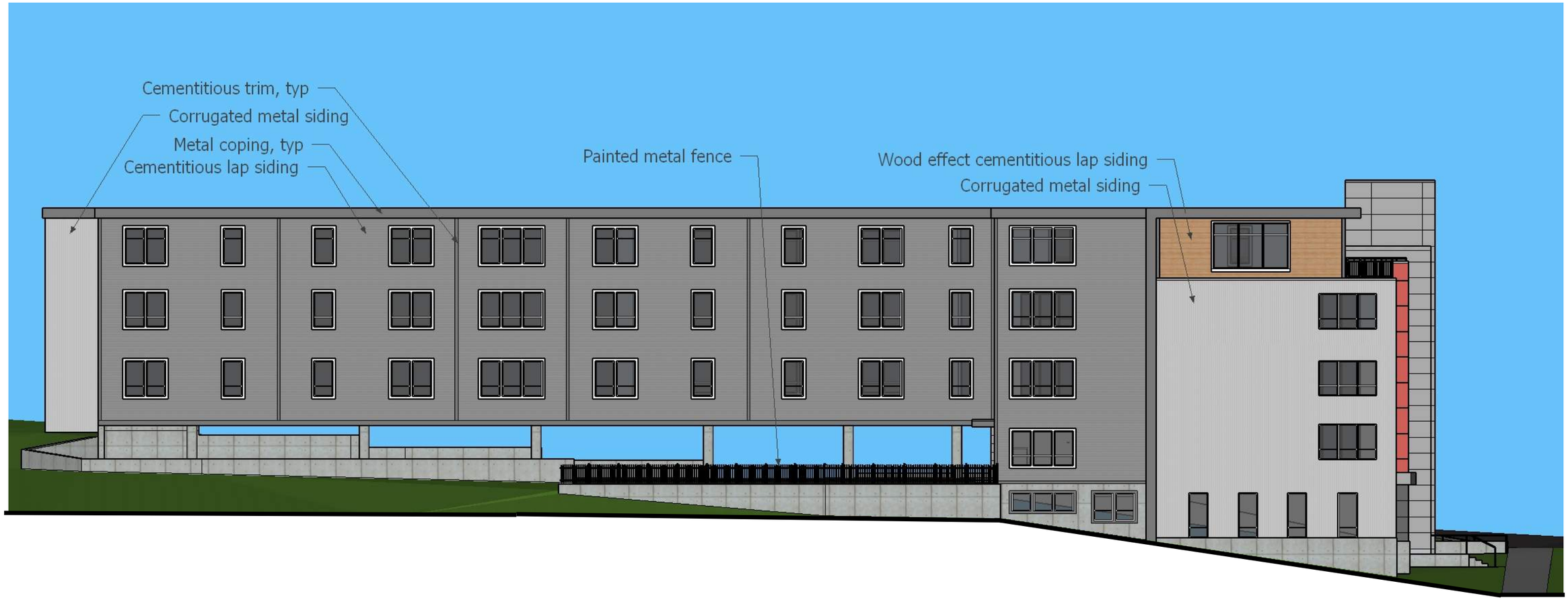
ZONING PERMIT DRAWINGS

Project
Riverside Avenue Senior Apartments
Date
September 8, 2020



EAST ELEVATION
1/16" = 1'-0"

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ZONING PERMIT DRAWINGS

Project
Riverside Avenue Senior Apartments
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ZONING PERMIT DRAWINGS

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Riverside Avenue Senior Apartments
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ZONING PERMIT DRAWINGS

Project
Riverside Avenue Senior Apartments
Date
September 8, 2020

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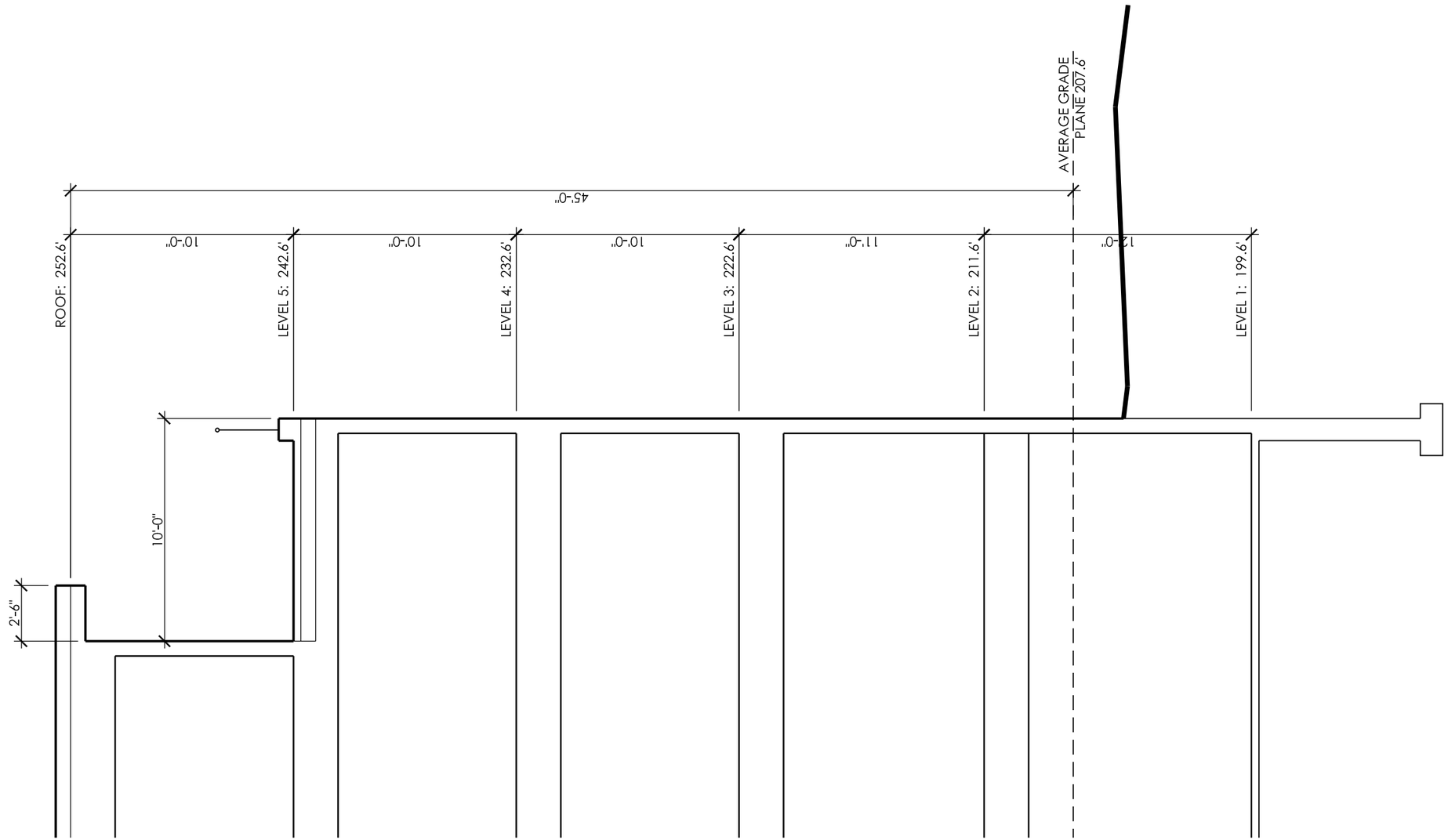

SECTION 2 LOOKING SOUTH
3/16" = 1'-0"

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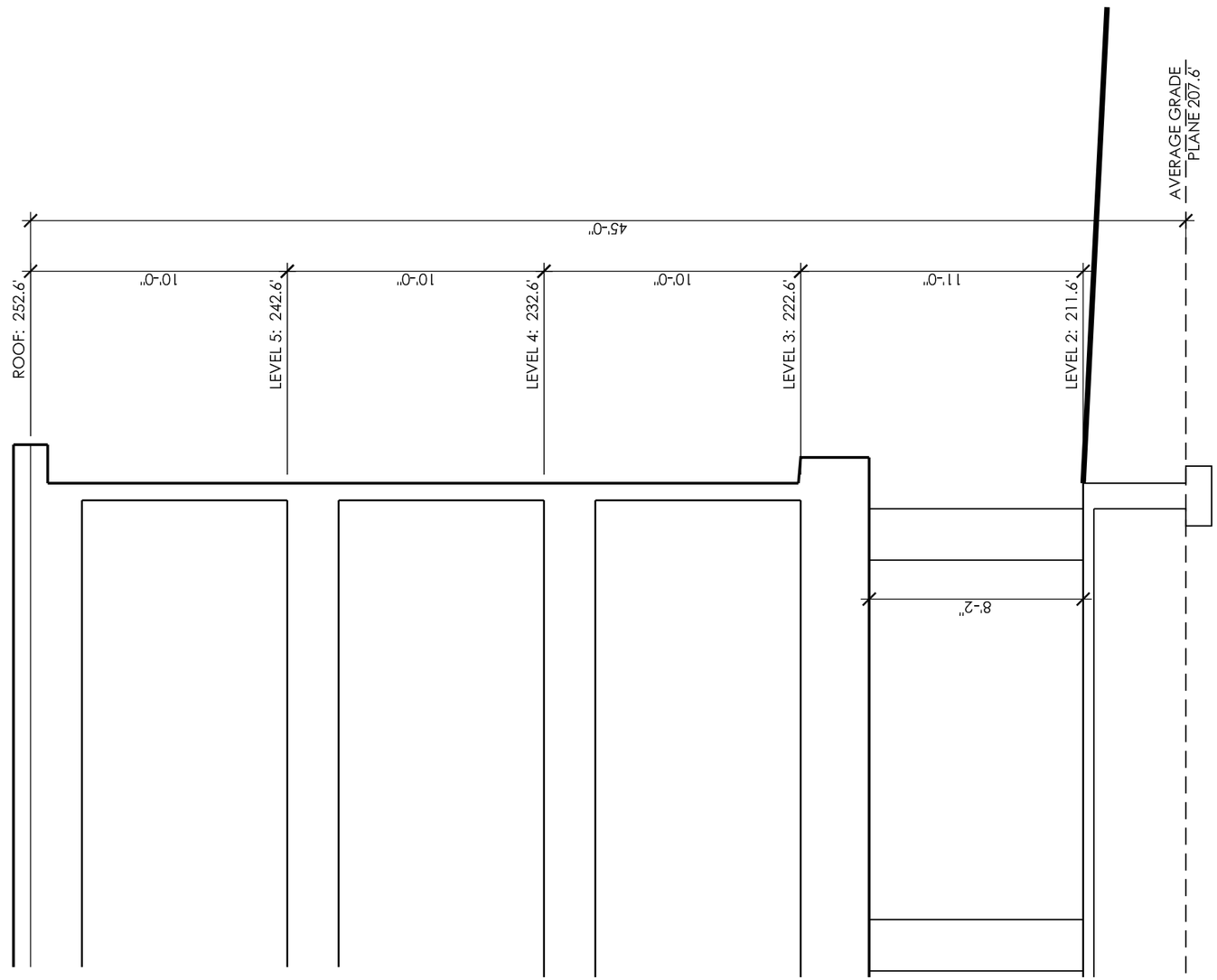

SECTION 3 AT VEHICLE ENTRANCE LOOKING SOUTH
3/16" = 1'-0"

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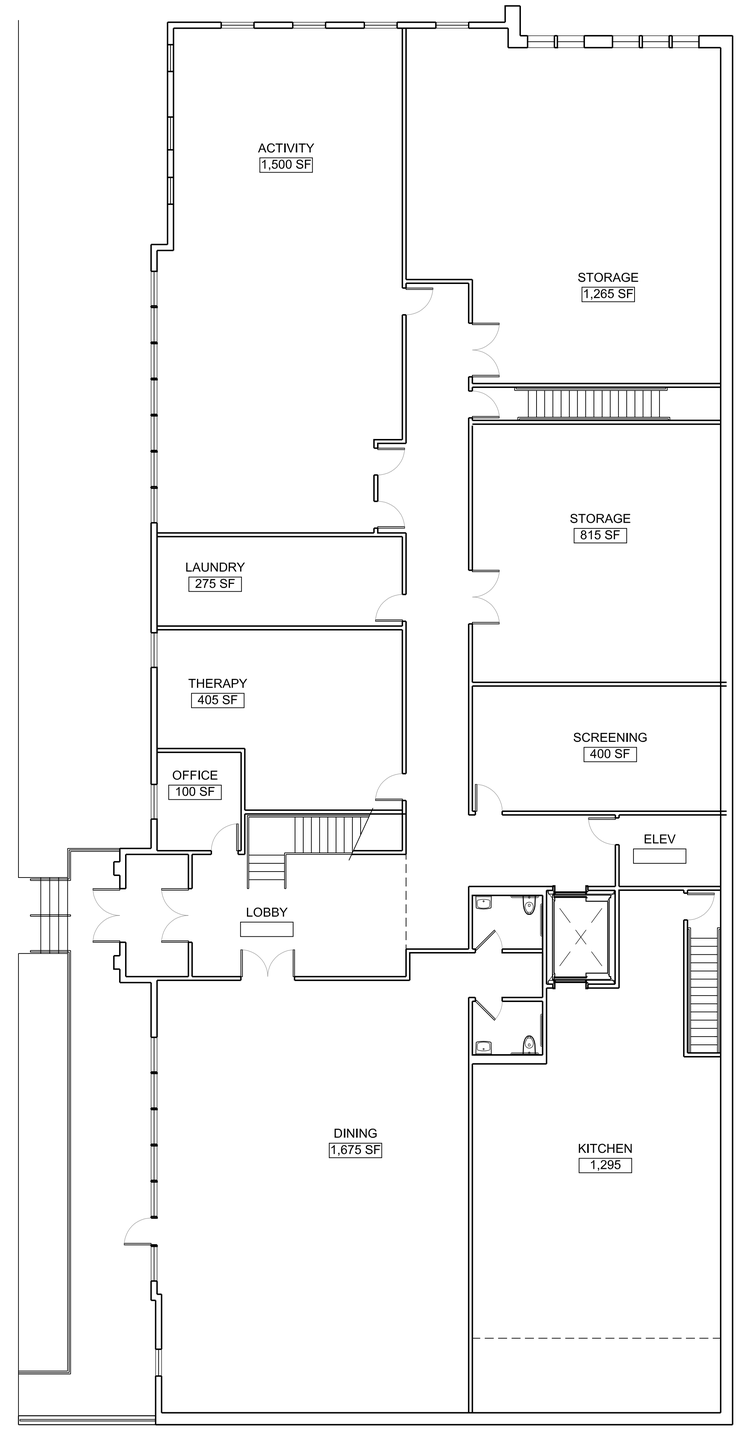

10 LEVEL 1 FLOOR PLAN

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

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802-863-6225

CIVIL ENGINEER:
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40 IDX Drive
Building 100, Suite 200
South Burlington, VT 0540
802-497-6100

BLACKROCK

RIVERSIDE AVE. SENIOR APARTMENTS

356 RIVERSIDE AVENUE, BURLINGTON, VT 05401

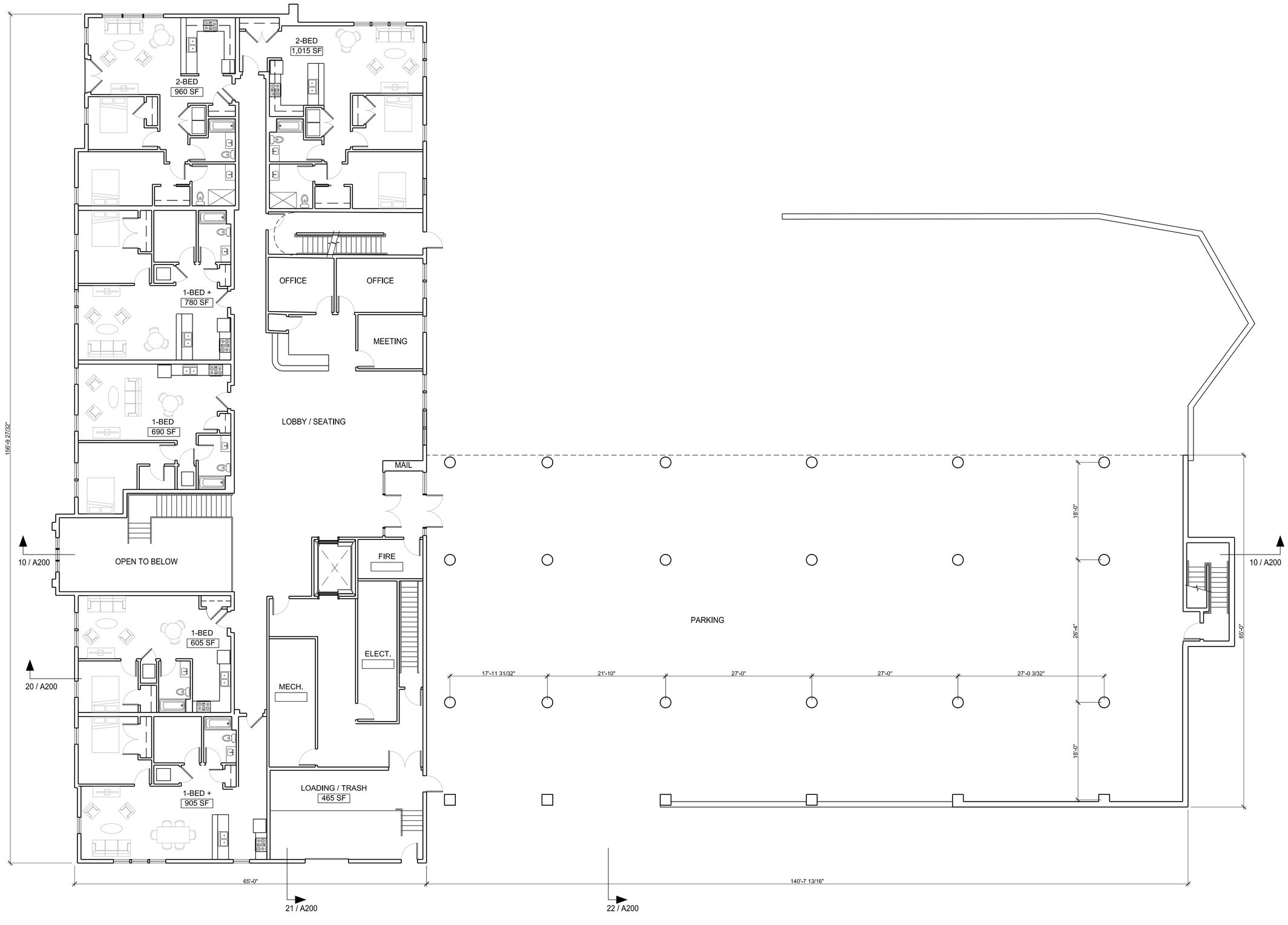
REV NUMBER	REV DATE	DESCRIPTION

ZONING PERMIT
DRAWINGS
NOT FOR
CONSTRUCTION

LEVEL 1 FLOOR PLAN

SCALE: AS NOTED
DATE: September 8, 202

A101



10 LEVEL 2 FLOOR PLAN

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

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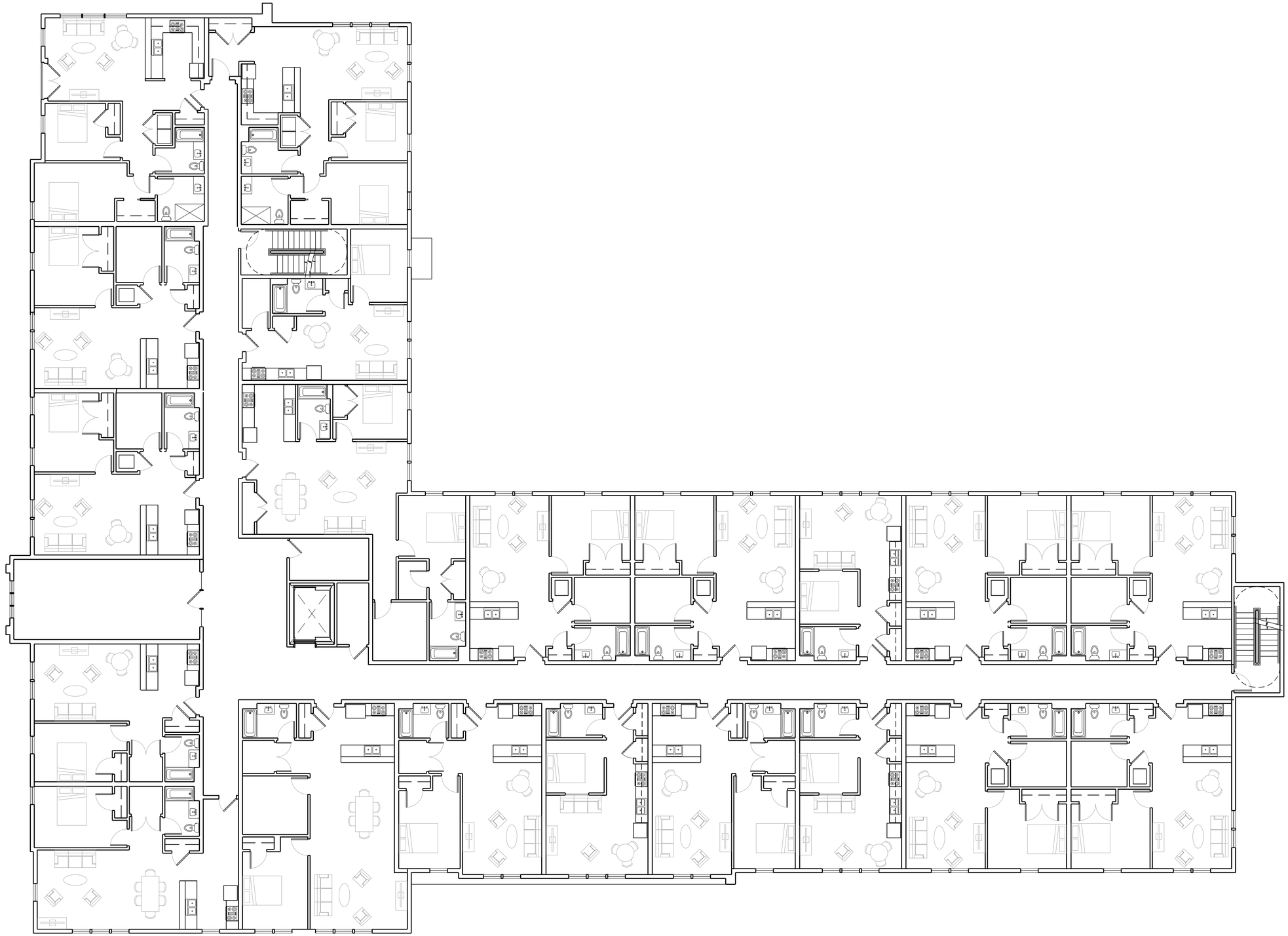
REV NUMBER	REV DATE	DESCRIPTION

ZONING PERMIT
DRAWINGS
NOT FOR
CONSTRUCTION

LEVEL 2
FLOOR PLAN

SCALE: AS NOTED
DATE: September 8, 202

A102



10 LEVEL 3 FLOOR PLAN

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

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RIVERSIDE AVE. SENIOR APARTMENTS

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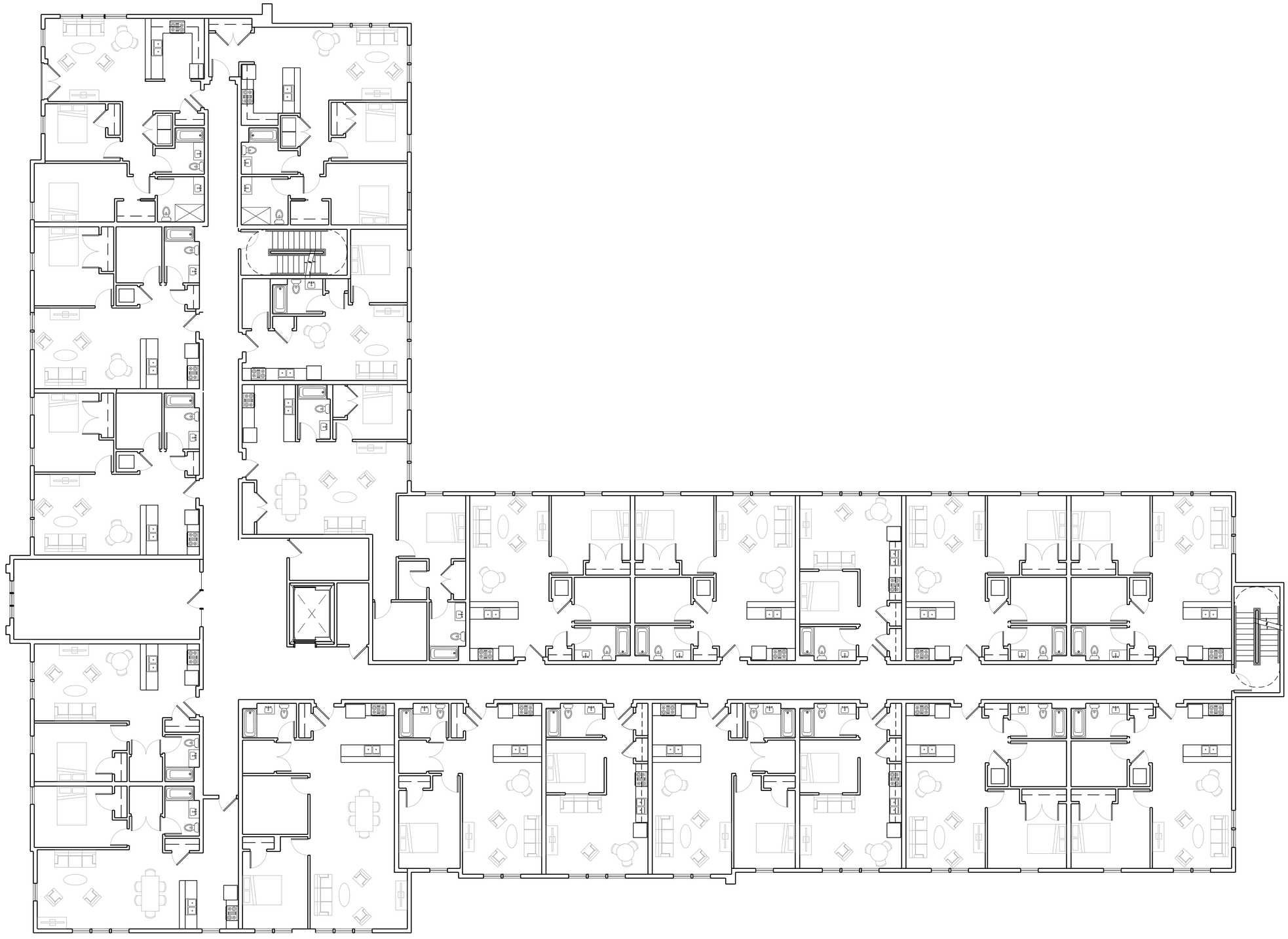
REV NUMBER	REV DATE	DESCRIPTION

ZONING PERMIT
DRAWINGS
NOT FOR
CONSTRUCTION

LEVEL 3
FLOOR PLAN

SCALE: AS NOTED
DATE: September 8, 202

A103



10 LEVEL 4 FLOOR PLAN

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

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REV NUMBER	REV DATE	DESCRIPTION

ZONING PERMIT
DRAWINGS
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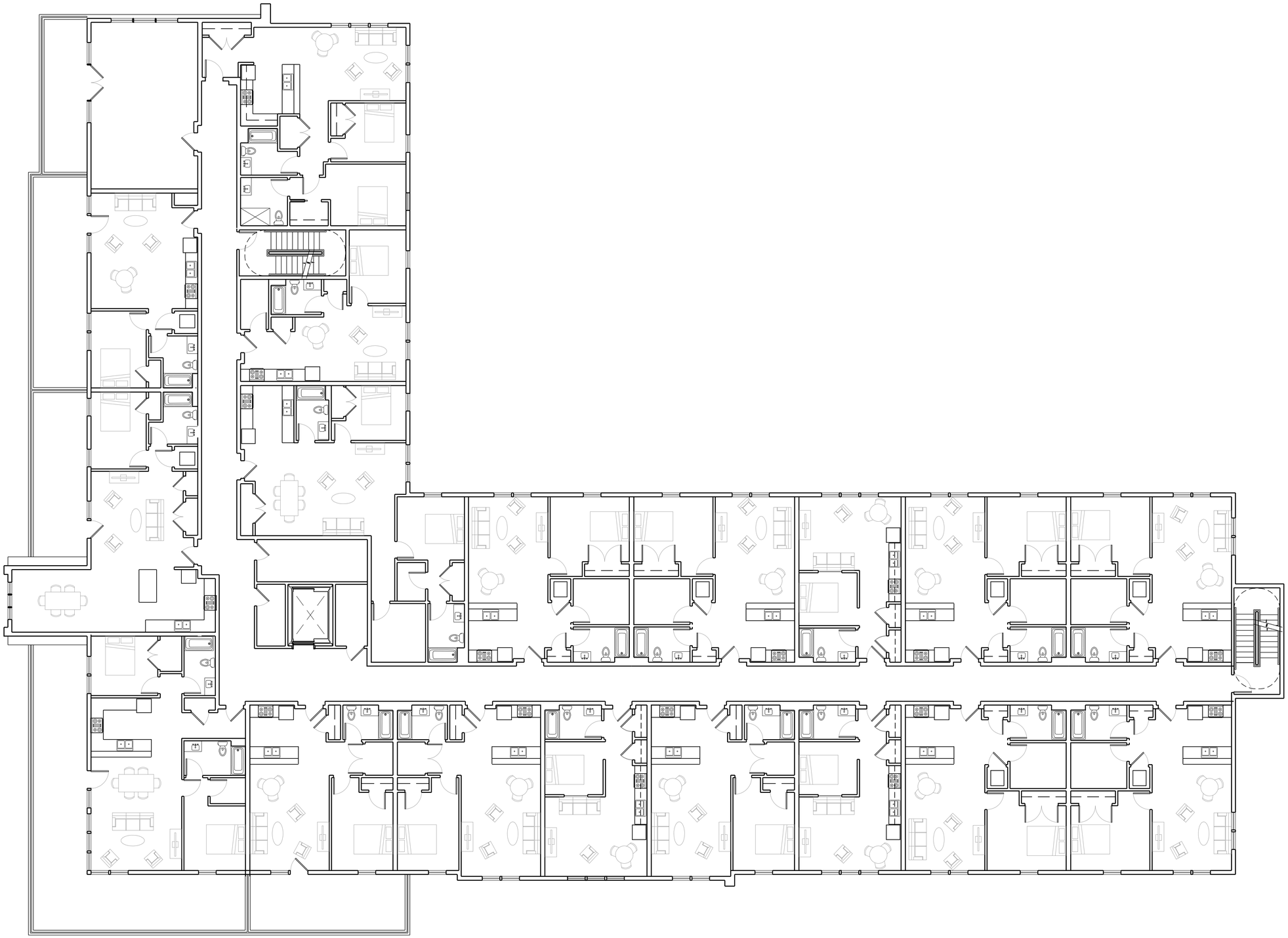
CONSTRUCTION

LEVEL 4 FLOOR PLAN

SCALE: AS NOTED
DATE: September 8, 202

A104



10 LEVEL 5 FLOOR PLAN

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

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REV NUMBER	REV DATE	DESCRIPTION

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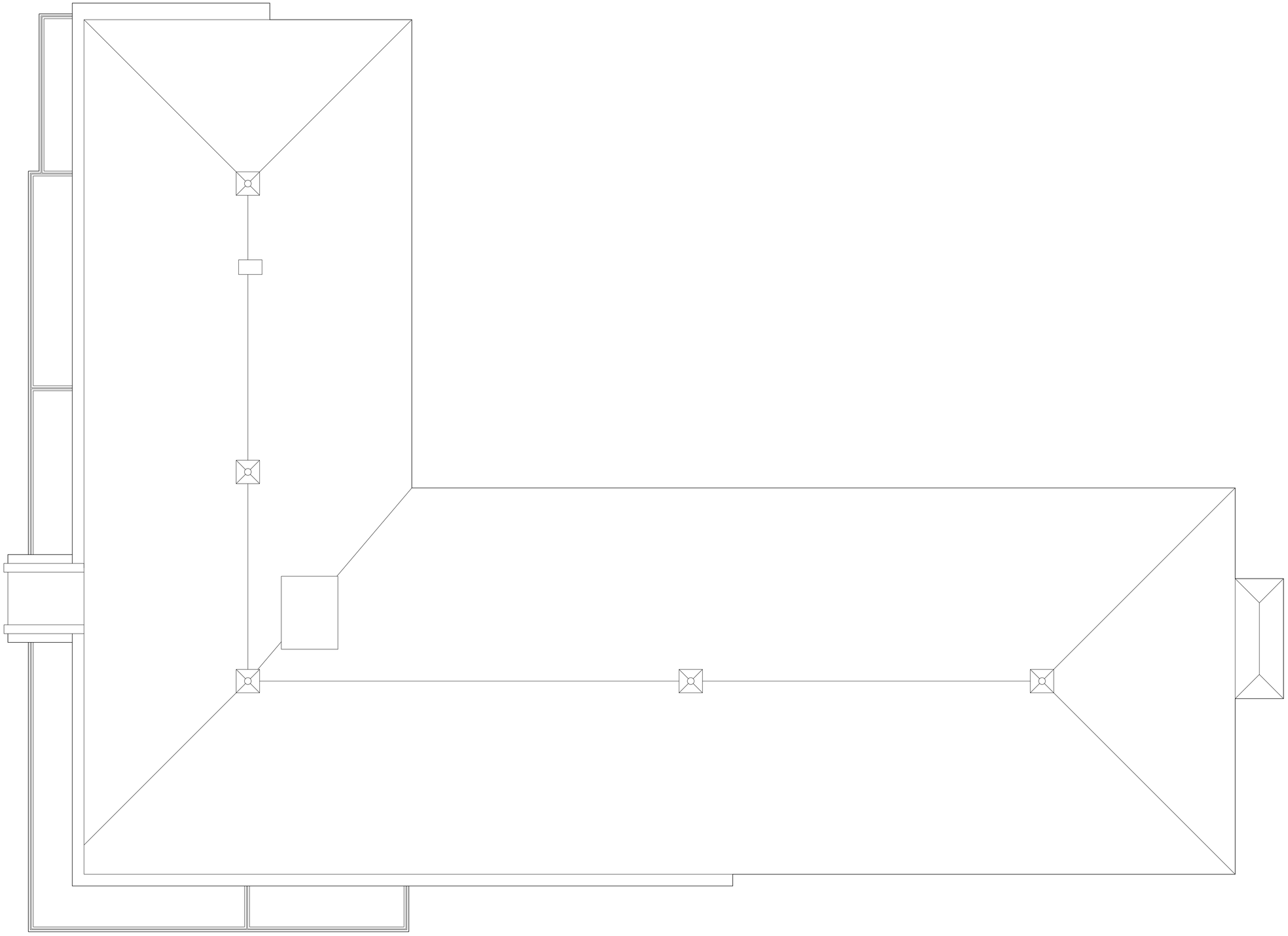
CONSTRUCTION

LEVEL 5 FLOOR PLAN

SCALE: AS NOTED
DATE: September 8, 202

A105



10 ROOF PLAN

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

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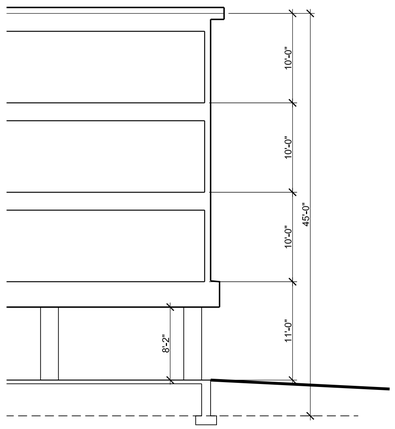
REV NUMBER	REV DATE	DESCRIPTION

ZONING PERMIT
DRAWINGS
NOT FOR
CONSTRUCTION

ROOF PLAN

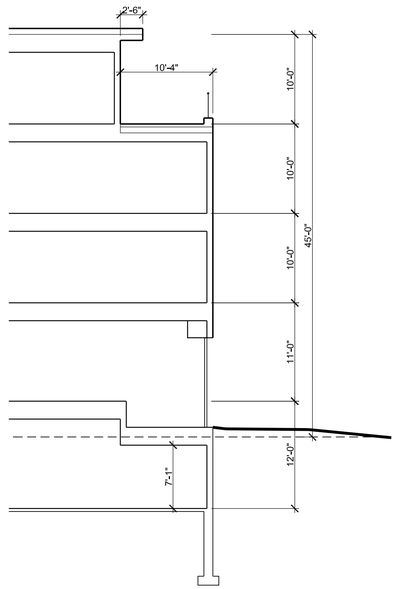
SCALE: AS NOTED
DATE: September 8, 202

A106



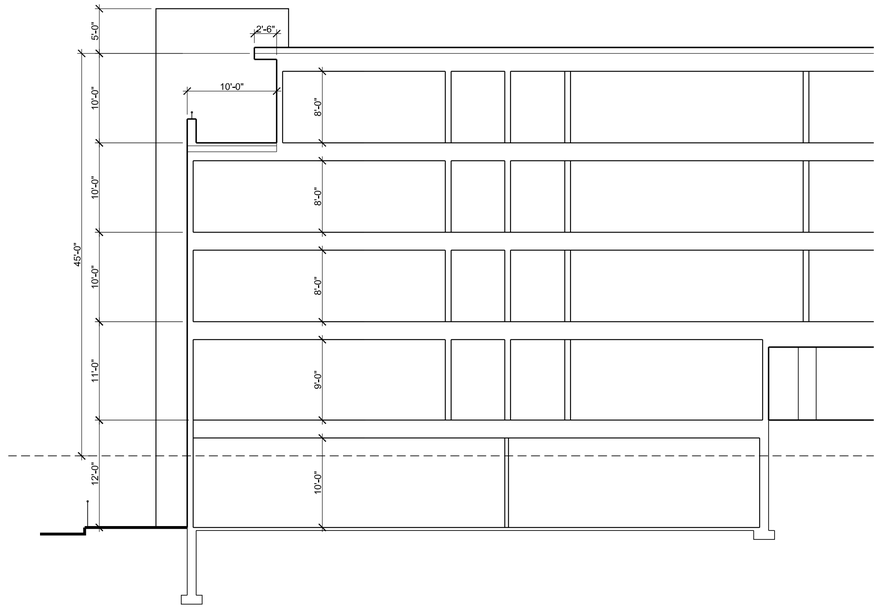
22 PARTIAL BUILDING SECTION LOOKING SOUTH

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



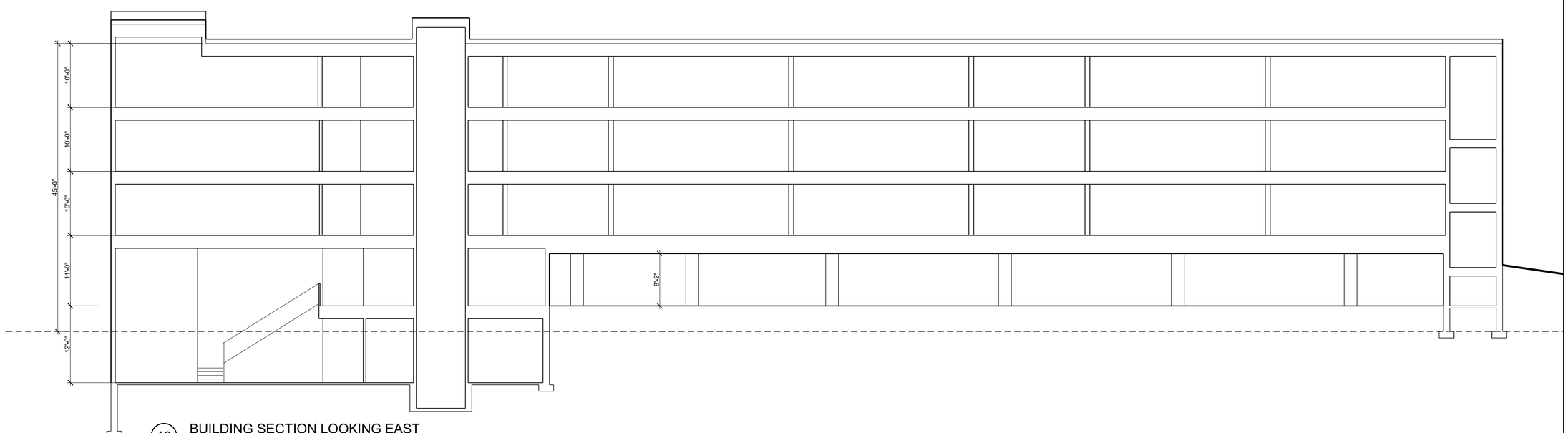
21 PARTIAL BUILDING SECTION LOOKING SOUTH

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



20 PARTIAL BUILDING SECTION LOOKING EAST

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



10 BUILDING SECTION LOOKING EAST

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

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REV NUMBER	REV DATE	DESCRIPTION

ZONING PERMIT
DRAWINGS
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CONSTRUCTION

SECTIONS

SCALE: AS NOTED
DATE: September 8, 202

A200

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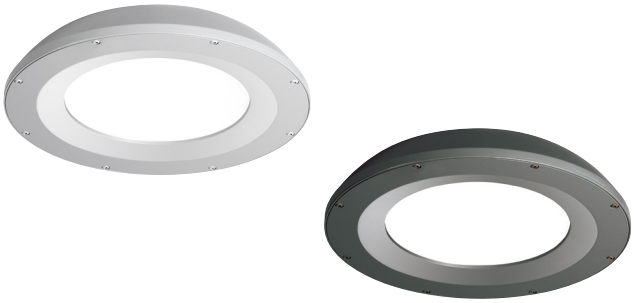
DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

SRT1 EDGE-LIT

CEILING/SURFACE/GARAGE

DRIVE EDGE-LIT



FEATURES

- For ceiling mount and parking garage applications from an 8–15 foot mounting height
- Edge-lit flat lens for optimal visual comfort and uniformity across the lens
- Two optical distributions specifically design for parking garage and canopy applications are available making the Beacon Edge-Lit luminaire both versatile and functional
- UL/cUL listed for wet locations, IP65 and 3G vibration rated
- Occupancy sensor available for complete on/off and dimming operation

RELATED PRODUCTS

Drive Edge-Lit SRT2 | Orbeon | Viper Small

SRT1 PSG PAGE
SRT2 PSG PAGE
SRT BROCHURE

SPECIFICATIONS

HOUSING

- Die-cast aluminum housing ensures long electrical component life and luminaire performance
- Corrosion resistant powder coat finish both protects and provides architectural appearance
- One piece molded silicone gasket ensures weather proof seal
- Thermally isolated driver mounted to dedicated bracket reduces operating temperatures and increases driver life and reliability

OPTICS

- Edge-lit acrylic light guide provides blended non-pixelated light for unprecedented visual comfort
- Choice of multiple light outputs with lumen range of 2000–6000
- Two distribution types: Type 5 Square Wide, Type 5 Concentrated
- Wide variety of CCT's and CRI's offered: 3000K (70CRI), 3000K (80CRI), 3500K (80CRI), 4000K (70CRI), 4000K (80CRI) or 5000K (70 CRI) CCT

ELECTRICAL

- 120V–277V 50/60Hz available
- 0–10V dimming drivers are RoHS compliant

INSTALLATION

- Standard quick mount plate over standard 4" junction box or octagonal junction box and allows for simplified fixture installation
- Standard luminaire accepts a rigid or 3/4" NPT stem for pendant mounting via wet location j-box (by others)
- Optional bird deterrent shroud available for field installation

OPTIONS/CONTROLS

- Standalone occupancy sensor available for on/off or dimming operation
- Uplight option provides approximately 800 lumens and consumes only 8 additional watts
- Vandal resistant wire guard available as an option for factory installation or as an accessory for field installation.

CERTIFICATIONS

- Listed to UL1598 for use in wet location, listed for -40ºC to 40ºC applications
- IDA approved with zero uplight for 3000K and warmer CCTs
- DLC® (DesignLights Consortium) Qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- IP65

WARRANTY

- 5 year warranty
- See HLI Standard Warranty for additional information

KEY DATA	
Lumen Range	2000–6800
Wattage Range	15–55W
Efficacy Range (LPW)	99–118
Reported Life (Hours)	50K
Weight lbs. (kg)	8 (3.6)

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HUBBELL Lighting

BEACON
design . performance . technology

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SRT1 EDGE-LIT

CEILING/SURFACE/GARAGE

ORDERING GUIDE

Example: SRT1-35-3K7-5QW-UNV-BLT-WG

CATALOG #

Series		Engine		CCT		Distribution		Voltage		Color/Finish		Options	
SRT1	Edge-Lit Parking Garage Size 1	**15**	15W Nominal 2000 lm	**3K7**	3000K, 70 CRI	**5QW**	Type 5 Square Wide	**UNV**	120V-277V	**BLT**	Black Matte Textured	**CD**	Continuous Dimming[4]
		20	20W Nominal 2500 lm	**3K8**	3000K, 80 CRI	**5C**	Type 5 Concentrated	**120**	120V	**BLS**	Black Gloss Smooth	**WG**	Wire Guard
		35	35W Nominal 4000 lm	**35K8**	3500K, 80 CRI			**208**	208V	**DBT**	Dark Bronze Matte	**UD**	Uplight Module[3]
		55	55W Nominal 6000 lm	**4K7**	4000K, 70 CRI			**240**	240V	**DBS**	Dark Bronze Gloss Smooth	**F**	Single Fuse (120, 277)[1]
				4K8	4000K, 80 CRI			**277**	277V	**GTT**	Graphite Matte Textured	**LD3**	36" Lead Length[2]
				5K7	5000K, 70 CRI					**LGS**	Light Grey Gloss Smooth	**LD6**	72" Lead Length[2]
										PSS	Platinum Silver Smooth	**LD9**	108" Lead Length[2]
										WHT	White Matte Textured	**SP10K**	10kA Surge Protection[3]
										WHS	White Gloss Smooth	**LMB**	Less Mounting Bracket
										VGT	Verde Green Textured		
										Color Option			
										CC	Custom Colors		

Control Options	
NX Standalone	
NXOS12F	NX Distributed Intelligence™, PIR Occ. Sensor, Dimming Daylight Harvesting, up to 12' MH
Sensor Controls	
SCP-8F	Remote control programmable line voltage sensor (8-12' recommended mounting height)[5]
SCP-20F	Remote control programmable line voltage sensor (12-20' recommended mounting height) [5]

Accessories (Order Separately)		
☐	**SRT1-WG**	Wire Guard
☐	**SRT-MB**	Mounting bracket for pre-installation
☐	**SRT1-BS-XXX**	Bird deterrent shroud for SRT1 version, not available with uplight
☐	**SCP-REMOTE**	Remote control for SCP option; order at least on per project to program and control

Notes:
1 Must specify voltage
2 Standard wire lead length 24"
3 SP10K LED indicator not available with uplight
4 Specify when using external 0-10V dimming system
5 120V or 277V only

PERFORMANCE DATA

Nominal Watts	Nominal Lumens	Distribution	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 70 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
15	2000	5C	2470	146.61	1	0	1	2459	145.91	1	0	1	2364	140.30	1	0	1
		5QW	2378	141.15	1	0	1	2367	140.48	1	0	1	2276	135.07	1	0	1
20	3000	5C	3093	136.86	1	0	1	3078	136.21	1	0	1	2960	130.97	1	0	1
		5QW	2974	131.60	1	0	1	2960	130.97	1	0	1	2846	125.93	1	0	1
35	4500	5C	4757	131.05	2	0	1	4734	130.42	2	0	1	4552	125.41	2	0	1
		5QW	4574	126.01	2	0	1	4552	125.41	2	0	1	4377	120.58	2	0	1
55	6500	5C	6814	127.13	2	0	1	6782	126.52	2	0	1	6521	121.66	2	0	1
		5QW	6552	122.24	3	0	1	6521	121.66	3	0	1	6270	116.98	3	0	1

ELECTRICAL DATA

Nominal Watts	System Watts	Line Voltage		AMPS AC				Dimming Range	Absolute Voltage Range on 0-10V (+)	
		VAC	HZ	120	208	240	277		VAC	HZ
15	16.9	120-277	50/60	0.14	0.08	0.07	0.06	10% to 100%	0V	10V
20	21.6	120-277	50/60	0.18	0.10	0.09	0.08	10% to 100%	0V	10V
35	34.6	120-277	50/61	0.29	0.17	0.14	0.12	10% to 100%	0V	10V
55	54.9	120-277	50/62	0.46	0.26	0.23	0.20	10% to 100%	0V	10V

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HUBBELL Lighting

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SRT1 EDGE-LIT

CEILING/SURFACE/GARAGE

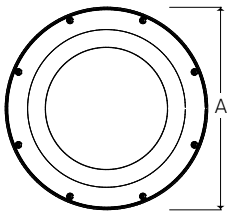
PROJECTED LUMEN MAINTENANCE

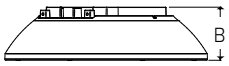
Ambient Temp.	0	25,000	*TM-21-11 36,000	50,000	100,000	Calculated L_{70} (Hours)
25°C / 77°F	1.00	0.98	0.96	0.95	0.89	278,000
40°C / 104°F	0.99	0.98	0.96	0.94	0.88	264,000

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Temperature		Lumen Multiplier
0˚C	32˚F	1.03
10˚C	50˚F	1.01
20˚C	68˚F	1.00
25˚C	77˚F	1.00
30˚C	86˚F	0.99
40˚C	104˚F	0.98
50˚C	122˚F	0.97

DIMENSIONS

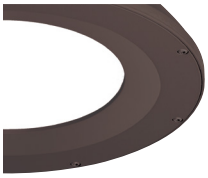




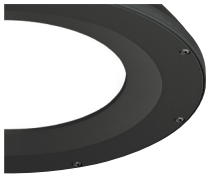
A	B	Weight
12" (304mm)	3.1" (78mm)	8lbs (3.6kg)

ADDITIONAL INFORMATION

FINISH OPTIONS



DB Dark Bronze Textured



BL Black Textured

PS Platinum Silver Smooth

GYS Gray Smooth

WH White Textured

GT Graphite Textured

Wire Guard

An optional wire guard can be specified at the factory or as an accessory for field installation.

Bird Deterrent

An optional bird shroud deterrent can be specified at the factory or as an accessory for field installation.

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TYPE:	PROJECT:
CATALOG #:	

SRT1 EDGE-LIT

CEILING/SURFACE/GARAGE

ADDITIONAL INFORMATION (CONT'D)

MOUNTING

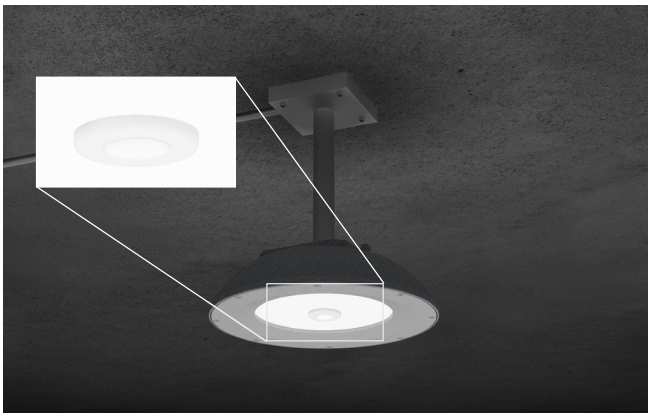
Surface Mount

Mounting plate with “quick mount” hanger for one person simple installation.

Pendant Mount

Standard 3/4" threaded entry for pendant applications.

CONTROLS

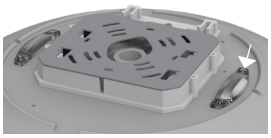


Standalone Controls

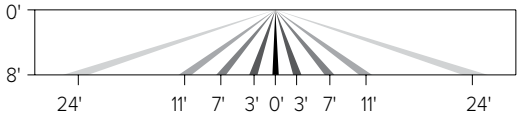
Optional passive infrared sensors are available for basic occupancy and daylight sensing. Programmable via remote or Bluetooth® phone app.

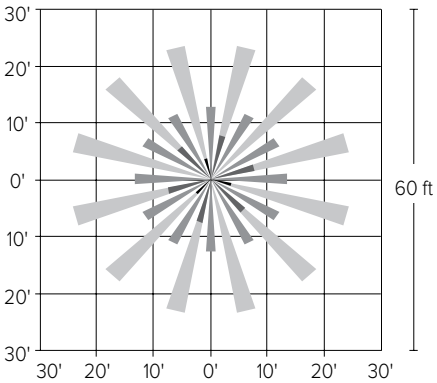
Uplight

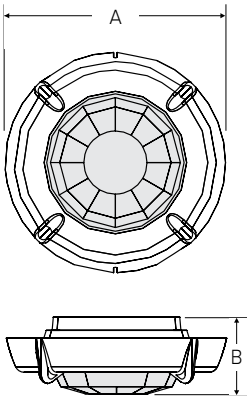
Optional uplight module provides 800 lumens of indirect illumination for improved visual quality while eliminating cave effect.



SCP-8F







A	B
2.3" (59mm)	.8" (20mm)

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DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

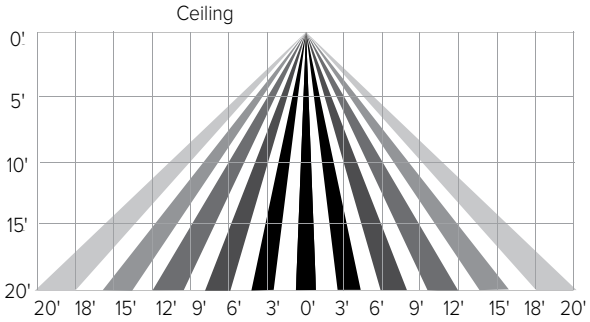
SRT1 EDGE-LIT

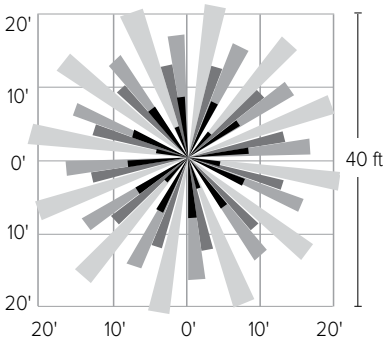
CEILING/SURFACE/GARAGE

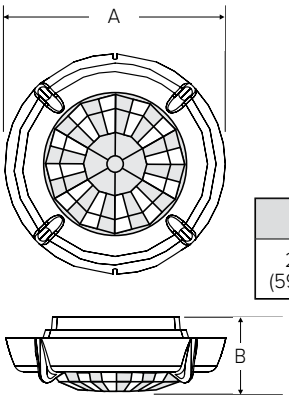
ADDITIONAL INFORMATION (CONT'D)

CONTROLS (CONT'D)

SCP-20F

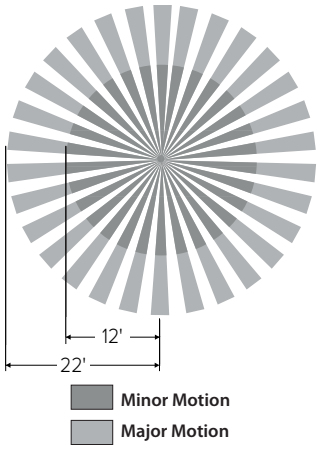




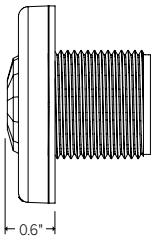


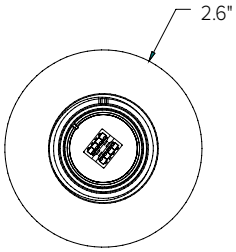
A	B
2.3" (59mm)	.8" (20mm)

NXOS12F



NXSMP-OMNI Range





USE OF TRADEMARKS AND TRADE NAMES

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KIM LIGHTING

CB LED

Compact Bollard

revision 10/3/17 • kl_cbled_spec.pdf

Type:
Job:
Catalog number:

Fixture	/ Electrical Module	/ Luminaire Finish	/ Option

See page 2

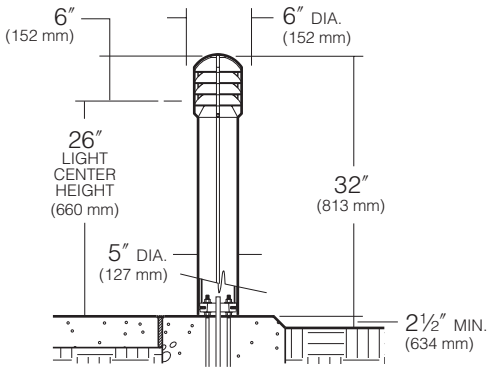
Approvals:

Date:

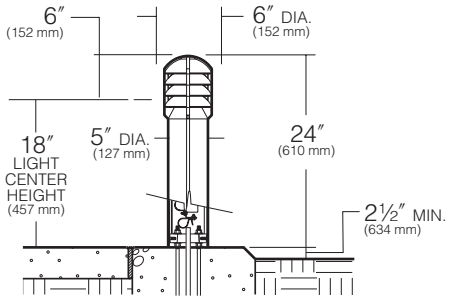
Specifications

CB Models
10 to 20 Diodes

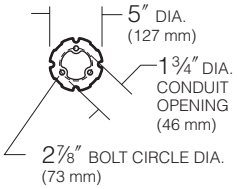
CB32
Maximum weight: 20 lb



CB24
Maximum weight: 17 lb



BASE PLAN CB



HUBBELL
HUBBELL LIGHTING, INC.

Top, Louvers: Interlocking die-cast, low-copper (<0.6% Cu) aluminum sections fasten together with concealed stainless steel screws. Louver base assembly fastens internally to riser with 4 concealed screws.

Riser: Extruded aluminum, 5″ diameter, .125″ typical wall thickness, external vertical grooves align with vertical members on louver assembly. Attaches to anchor base with 4 countersunk stainless steel flat socket head screws finished to match fixture.

Anchor Base: Heavy cast aluminum, fully concealed within riser shaft. Three ⅜″ x 10″+ 2″ zinc plated anchor bolts, each with two nuts and washers, and a rigid pressboard template.

Globe: Internally fluted, clear tempered glass, fully gasketed.

Optical Module: Each LED equipped with a directional optic for maximum beam angle projecting through louver stack spacings. LED boards to be mounted to an anodized inter-locking heat sink extrusion. (Type I) two 5-LED boards for a total of 10-LED. (Type III) three 5-LED boards for a total of 15-LED. (Type V) four 5-LED boards for a total of 20-LED. Available in 580nm Amber, 3000K, 4200K and 5100K color temperatures.

Electronic Module: All electrical components are either UL or ETL recognized, mounted on a single plate and factory prewired with quick disconnect plugs. Driver is rated for -40°F starting and has a 0-10V dimming interface for multi-level illumination options.

Finish: Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat finish. Standard colors include (BL) Black, (DB) Dark Bronze, (WH) White, (PS) Platinum Silver, (SG) Stealth Gray, (LG) Light Gray, and (CC) Custom Color (Include RAL#).

Listed to: UL 1598 Standard for Luminaires - UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products and CSA C22.2#250.0 Luminaires. RoHS compliant. Meets Buy American provisions within ARRA.

Warranty: Kim Lighting warrants Bollard LED products sold by Kim Lighting to be free from defects in material and workmanship for (i) a period of five (5) years for metal parts, (ii) a period of five (5 years for exterior housing paint finish(s), (iii) a period of five (5) years for LED Light Engines and, (iv) a period of five (5) years for LED power components (driver, surge protector and LifeShield® device), from the date of sale of such goods to the buyer as specified in Kim Lighting shipment documents for each product.

CAUTION: Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

KIM LIGHTING RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE

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Standard and Optional Features

Fixture
Cat. No. designates fixture.

Cat. No. ☐ **CB24** Compact Bollard 24″ overall height
☐ **CB32** Compact Bollard 32″ overall height

Electrical Module
LED = Light Emitting Diode

Cat. Nos. for LED Electrical Modules available:

xL

Source:
- ☐ **10L**= 10 LED (IES Type I)
- ☐ **15L**= 15 LED (IES Type III)
- ☐ **20L**= 20 LED (IES Type V)

xK

Color Temperature:
- ☐ 2K = 580nm - Amber
- ☐ 3K = 3000K
- ☐ 4K = 4200K
- ☐ 5K = 5100K

UV

Voltage:
- ☐ **UV** Universal Voltage shall range from 120V-277V

Finish
TGIC thermoset polyester powder coat paint on fixture and shaft

Color:	Black	Dark Bronze	Light Gray	Graphite	Platinum Silver	Titanium	White	Custom Color[1]
Cat. No.:	☐ **BL**	☐ **DB**	☐ **LG**	☐ **GT**	☐ **PS** ☐	☐ **TT**	☐ **WH**	☐ **CC**

[1]Custom color subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description: _____

Battery Back-up
Cat. No. ☐ **EM**
☐ **No Option**

Internal battery pack provides 90 minutes of supplemental light at 50% of initial lamp lumens.
NOTE: For CB32 only.

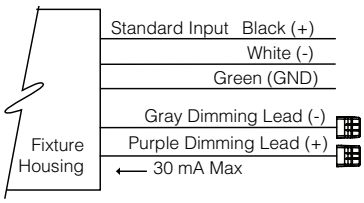
Battery Back-up

Optional Duplex Receptacle
Cat. No. ☐ **DR**
☐ **DR-GFI**
☐ **No Option**

(CB32 only) Mounted 18″ from bottom of shaft, in a cast aluminum box that is internally welded and sealed with a gasketed While-In-Use cover with locking tab. Painted to match bollard.
DR weather proof duplex receptacle rated 20A, 125V.
DR-GFI weather proof duplex receptacle with ground fault circuit interrupter rated 20A, 125V.

0-10V Dimming Interface

Driver has a 0-10V dimming interface with a dimming range of 10-100%. Is compatible with most control systems including Hubbell Building Automation wiHUBB™. Approved dimmers include Lutron Diva AVTV, Lutron Nova NFTV and NTFTV. Note: Not compatible with current sourcing dimmers. Controls compatible via Gray and Purple dimming lead.



Lumen Data

Spectroradiometric			
	3000K Average	4200K Average	5100K Average
Correlated Color Temp. CCT (K)	2800K - 3175K	3800K - 4600K	4600K - 5600K
Color Rendering Index (CRI)	≥75	≥70	≥65
Power Factor	>.90	>.90	>.90

Projected Lumen Maintenance		
mA	50,000 hrs	100,000 hrs
350mA	N/A	N/A

Based on 20LED version.

Electrical Drive Current - @350mA						
	Type 1		**Type 3**		**Type 5**	
Volts - AC	Amps - AC	System Watts	Amps - AC	System Watts	Amps - AC	System Watts
120	0.11	13	0.16	19	0.21	25
208	0.06	13	0.09	19	0.12	25
240	0.05	13	0.08	19	0.10	25
277	0.05	13	0.07	19	0.09	25

B.U.G. Rating (TM15) in Lumens where B = Backlight, U = Uplight, G = Glare			
Temperature	TYPE 1	TYPE 3	TYPE 5
3000K	B0 U2 G1	B0 U2 G1	B1 U2 G1
4200K	B0 U2 G1	B0 U2 G1	B1 U2 G1
5100K	B0 U2 G1	B0 U2 G1	B1 U2 G1

Absolute Lumens			
Temperature	TYPE 1	TYPE 3	TYPE 5
3000K	403	533	795
4200K	499	705	985
5100K	525	740	1036

LED performance and lumen output continues to improve at a rapid pace. Log onto www.kimlighting.com to download the most current photometric files from Kim Lighting's IES File Library.
For custom optics and color temperature configurations, contact factory.

TRAVERSE SERIES

SURFACE/CEILING/GARAGE

Cat.#	
Job	Type

BEACON design . performance . technology

Approvals

SPECIFICATIONS

Intended Use:
The Traverse luminaire is a wall surface mounted luminaire with a field replaceable LED light engine & optical bezel system. Internal components are totally enclosed in rain-tight and corrosion-resistant die cast aluminum housing. The TRV Luminaire is suitable for wet locations.

Construction:
- Traverse luminaire consists of a die cast aluminum two-piece housing.
- Die cast main (thermal) housing provides direct heat exchange between the LED light engine and the cool outdoor air by drawing heat through integral heat channels and out to the sculptured and functional luminaire surface.
- LED drivers are thermally isolated from the main housing, mechanically attached and heat sinked to the rear housing.
- Main housing is designed with heat dissipat ing fins for LED thermal management without the use of metallic screens, cages, or fans.
- Shape of the main housing is designed to prevent debris accumulation and as a bird nesting deterrent. The back and main housings are designed to hinge open for easy mounting and easy access.

LED/Optics:
- Optical one piece cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel.
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system.
- A two-piece die cut silicone and polycarbon ate foam gasket ensures a weather-proof seal around each individual LED and allows the Traverse luminaire to be rated for high-pressure hose down applications.
- Optical cartridge is secured to the extruded housing with fasteners and a heat pad to ensure thermal conductivity.
- Optics are held in place without the use of adhesives and the complete assembly is gasketed for high pressure hose down cleaning.
- Cartridge assembly is available in various lighting distributions using TIR designed acrylic optical lenses over each LED.

Electrical:
- 100V through 277V, 50 Hz to 60 Hz (UNV).
- Power factor is min 0.92 at full load.
- All electrical components are rated at 50,000 hours at full load and 40°C ambient conditions per MIL-217F Notice 2.
- Optional 0 to 10 volt dimming drivers are available upon request.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher.
- Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. 15A rating applies to primary (AC) side only.
- Surge protection - 20KA

Controls/Options:
- Traverse is available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the Motion Response system reduces the wattage down to a factory preset level, reducing light level accordingly. When motion is detected, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from the standard configurations
- Available with Energeni for optional set dimming with simple delay, or timed dimming based on time of night (see Energeni product page for more details www.beaconproducts.com/products/energeni
- In addition, Traverse can be specified with **SiteSync™** wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7. See ordering information or visit: www.hubbelllighting.com/sitesync/ for more details

Installation:
- Rear housing (back plate) is designed with various bolt patterns for direct wall mounting or mounting to a recessed 4" junction box.
- Rear housing has three integral 3/4" NPT power feed locations (bottom and each side) for surface mounted conduit applications.
- After mounting the rear housing to the wall or junction box, the main housing is designed to hang and hinge closed after connecting the male and female quick connectors.
- Mounting design permits a simple retrofit to existing wall luminaires that utilize surface mount or recessed junction boxes.

Finish:
- IFS polyester powder-coat electro-statically applied and thermocured.
- IFS finish consists of a five stage iron phosphate chemical pretreatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish.
- The finish meets the AAMA 605.2 perfor mance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

Listings:
- The luminaire shall bear a CSA label and be marked suitable for wet locations (standard).
- This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available at: http://www.beaconproducts.com/products/traverse

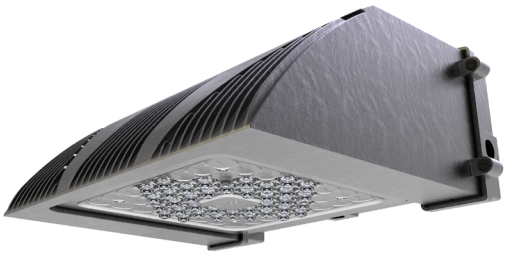
Warranty:
Five year limited warranty for more information visit: www.hubbelllighting.com/resources/warranty

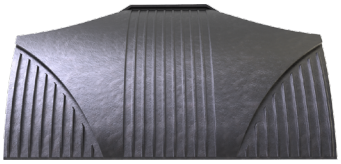
CERTIFICATIONS/LISTINGS

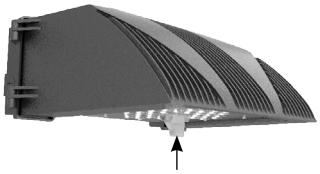
C US

*3000K and warmer CCTs only

PRODUCT IMAGE(S)

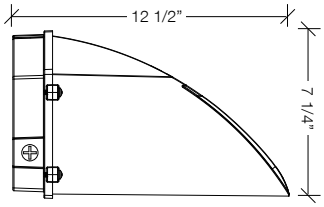




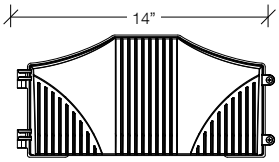


Shown with SiteSync™

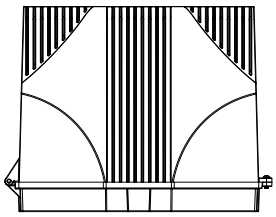
DIMENSIONS



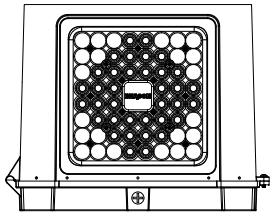
Side View



Front View



Top View



Bottom View

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HUBBELL® Lighting

ORDERING INFORMATION ORDERING EXAMPLE: TRV-D/60NB-136/5K/T5R/UNV/GENIXX/PEC/BBT

SERIES

TRV-D	Traverse Down Light
TRV-U[1]	Traverse Up Light (lens req.)

ENGINE-WATTS

24NB-27	27 Watts - LED array
24NB-55	55 Watts - LED array
36NB-80	80 Watts - LED array
48NB-110	110 Watts - LED array
60NB-136	136 Watts - LED array

LED COLOR[11]

3K	3000K
4K	4000K
5K	5000K

OPTICS

T2	Type II
T3	Type III
T4	Type IV
T5R	Type V, rectangular
2X2	Narrow spot flood
5X5	Medium flood

VOLTAGE

UNV	120-277V
347	347V
480	480V

CONTROL OPTIONS

GENI-XX[6]	Energeni
SWP[7,8]	SiteSync Wireless Pre-Commission
SWPM[7,8,9]	SiteSync Wireless Pre-Commission w/ Occupancy Sensor

SENSOR OPTIONS

MOB[3,5,7,9]	Occupancy Sensor (33% or 50% dimming)

FINISH

BBT	basic black textured
BMT	black matte textured
WHT	white textured
MBT	metallic bronze textured
BZT	bronze textured
DBT	dark bronze textured
GYS	gray smooth
DPS	dark platinum smooth
GNT	green textured
MST	metallic silver textured
MTT	metallic titanium textured
OWI	old world iron
RAL	_____

ELECTRICAL OPTIONS

PEC	Photocell, button
2PF[2,3,10]	Dual power feed
BPC[4]	Cold weather battery pack

[1] Indoor use only
[2] Not available on 24NB-27
[3] Not available @ 347V or 480V input
[4] 36NB-80 only, not available with SWP or SWPM control options
[5] Not available on 48NB-110 or 60NB-136
[6] When ordering Energeni, specify the routine setting code (example GENI-04). See Energeni brochure and instructions for setting table and options. Not available with sensor options.
[7] Not available with other control or sensor options. PEC is available with MOB and OCS.
[8] Specify group and zone. See **SiteSync** product page www.hubbelllighting.com/controls/sitesync for more details.
[9] Specify time delay; dimming level and mounting height.
[10] Not available with SWP or SWPM control options.
[11] This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available at: http://cdn.beaconproducts.com/content/products/specs/specs_files/Traverse_LED_turtle_spec_sheet.pdf

Accessories and Services (Ordered Separately)

Catalog Number	Description
SWUSB*	SiteSync loaded on USB flash drive (Windows based only)
SWTAB*	SiteSync Windows Tablet
SWBRG+	SiteSync Wireless Bridge Node

* When ordering with SiteSync, one of the following interface options must be chosen and ordered separately. Each option contains the SiteSync License, GUI and Bridge Node.

+ If needed, an additional Bridge Node can be ordered.

PRECOMMISSIONED SITESYNC ORDERING INFORMATION: When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit www.hubbelllighting.com/products/sitesync/ or contact Hubbell Lighting tech support at (800) 345-4928.

SiteSync fixtures with occupancy sensor (SWPM) require the mounting height of the fixture for selection of the lens.

Examples: TRV/24NB-55/5K/T3/UNV/SWP/DBT — SiteSync only
TRV/24NB-55/5K/T3/UNV/SWPM-20F/DBT — SiteSync with Occupancy Sensor

MOB ORDERING INFORMATION: When ordering a fixture with a dimming occupancy sensor option (MOB), please specify the appropriate information. These settings are specified in the ordering as shown in the example below.

TRV/24NB-55/5K/T3/UNV/MOB - 1 to 30 min. - 33% or 50% - ?? / DBT

High to Dim Delay — Low Level — Mounting Height (ft.)

SiteSync Lighting Control is available from our most popular brands in a broad range of award-winning product families.

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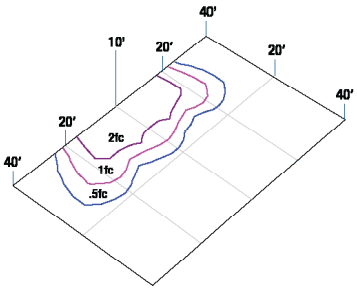
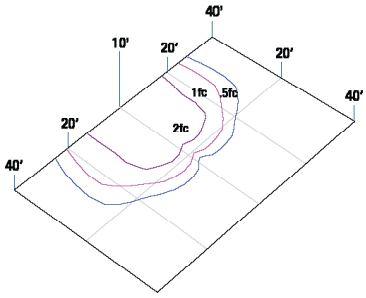
HUBBELL Lighting

PHOTOMETRICS

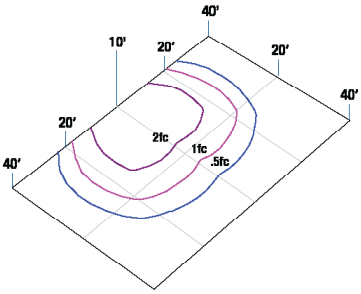
Type II
TRV-60NB-136-5K-T2



Type III
TRV-60NB-136-5K



Type IV
TRV-60NB-136-5K-T4



PERFORMANCE DATA

				5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 80 CRI)				
# LED'S	DRIVE CURRENT (MILLIAMPS)	SYSTEM WATTS	DISTRIBUTION TYPE	LUMENS	LPW[1]	B	U	G	LUMENS	LPW[1]	B	U	G	LUMENS	LPW[1]	B	U	G
24	350mA	27w	T2	2833	105	1	0	1	2805	104	1	0	1	2408	89	1	0	1
			T3	2805	104	1	0	1	2777	103	1	0	1	2392	89	1	0	1
			T4	3086	114	1	0	1	3055	113	1	0	1	2623	97	1	0	1
			T5R	3142	116	2	0	2	3111	115	2	0	2	2670	99	2	0	2
			5X5	3031	112	2	0	1	3001	111	2	0	1	2577	95	2	0	1
			2X2	3287	122	3	0	1	3254	121	3	0	1	2794	103	3	0	1
24	700mA	55w	T2	5666	102	2	0	2	5610	101	2	0	2	4816	86	1	0	2
			T3	5610	101	1	0	2	5554	100	1	0	2	4784	86	1	0	2
			T4	6171	111	1	0	2	6110	109	1	0	2	5245	94	1	0	2
			T5R	6283	113	3	0	3	6221	111	3	0	3	5341	96	3	0	3
			5X5	6063	110	3	0	1	6002	109	3	0	1	5153	94	3	0	1
			2X2	6573	118	4	0	1	6508	117	4	0	1	5587	100	4	0	1
36	700mA	80w	T2	8505	101	2	0	3	8415	100	2	0	3	7224	87	2	0	2
			T3	8415	100	2	0	2	8331	99	2	0	2	7175	86	2	0	2
			T4	9256	110	1	0	3	9164	109	1	0	3	7868	94	1	0	3
			T5R	9425	112	3	0	3	9331	111	3	0	3	8011	96	3	0	3
			5X5	9094	109	4	0	1	9003	108	4	0	1	7730	93	3	0	1
			2X2	9860	118	4	0	1	9762	116	4	0	1	8381	100	4	0	1
48	700mA	110w	T2	11332	102	3	0	3	11220	101	3	0	3	9633	87	2	0	3
			T3	11220	101	2	0	3	11108	100	2	0	3	9567	86	2	0	3
			T4	12342	111	2	0	3	12219	110	2	0	3	10491	95	2	0	3
			T5R	12567	113	4	0	4	12441	112	4	0	4	10682	96	3	0	3
			5X5	12126	109	4	0	1	12004	108	4	0	1	10307	93	4	0	1
			2X2	13147	118	5	0	1	13016	117	5	0	1	11175	101	5	0	1
60	700mA	136w	T2	14165	103	3	0	3	14025	102	3	0	3	12041	88	3	0	3
			T3	14025	102	3	0	3	13885	101	3	0	3	11959	87	3	0	3
			T4	15427	113	2	0	3	15274	111	2	0	3	13114	96	2	0	3
			T5R	15708	115	4	0	4	15259	111	4	0	4	13352	97	4	0	4
			5X5	15157	111	4	0	1	15006	110	4	0	1	12884	94	4	0	1
			2X2	16434	120	5	0	2	16269	119	5	0	2	13968	102	5	0	1

[1]Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.

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PROJECTED LUMEN MAINTENANCE

AMBIENT TEMP.	0	25,000	50,000	[1]TM-21-11 60,000	100,000	Calculated L70 (HOURS)
25°C / 77°F	1.00	0.97	0.96	0.95	0.93	>560,000

[1] Projected per IESNA TM-21-11
Data references the extrapolated performance projections for the base model in a 40°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

ELECTRICAL DATA

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	OPER. CURRENT (Amps)	SYSTEM POWER (Watts)
24	1	(350mA)	120	0.23	27.0
			277	0.10	
24	2	(700mA)	120	0.46	55.0
			277	0.20	
36	1	(700mA)	120	0.68	80.0
			277	0.30	
48	1	(700mA)	120	0.92	110.0
			277	0.40	
60	1	(700mA)	120	1.13	136.0
			277	0.49	

AMBIENT TEMPERATURE		LUMEN MULTIPLIER
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	1.00
40°C	104°F	0.99
50°C	122°F	0.98

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

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DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

VIPER S

SMALL VIPER LUMINAIRE

OPTICS STRIKE

FEATURES

- Small size companion to Viper Large
- Wide choice of different LED wattage configurations
- Nine optical distributions
- Designed to replace HID lighting up to 400W MH or HPS
- Suitable for wet locations

*3000K and warmer CCTs only

See Certification Specifications

RELATED PRODUCTS

Viper Large

CONTROL TECHNOLOGY

NX DISTRIBUTED INTELLIGENCE™ wiSCAPE™ energeni SiteSync LIGHTING CONTROL™

SPECIFICATIONS

CONSTRUCTION

- Manufactured with die cast aluminum
- Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements
- IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish
- The finish meets the AAMA 2604 performance specification which includes passing a 3,000-hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds
- External hardware is corrosion resistant

OPTICS

- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one-piece optical system
- One-piece silicone gasket ensures a weatherproof seal around each individual optic
- One-piece optical cartridge system consisting of an LED engine, optics, gasket and stainless steel bezel

INSTALLATION

- Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included

ELECTRICAL

- Luminaire accepts 100V through 277V, 347V or 480V input 50 Hz to 60 Hz (UNV)

ELECTRICAL (CONTINUED)

- Power factor is ≥ .90 at full load
- Dimming drivers are standard, but CD must be selected in options to obtain external wiring leads for dimming controls
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only
- Fixture electrical compartment contains all LED driver components
- Optional 7-pin ANSI C136.41-2013 Twist-Lock® photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices
- Ambient operating temperature -40°C to 25°C
- Surge protection: 20kA
- Lifeshield™ Circuit (see Electrical Data)

CONTROLS

- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration
- Available with Energeni for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night

CONTROLS (CONTINUED)

- In addition, Viper can be specified with SiteSync™ wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7

CERTIFICATIONS

- DLC® (DesignLights Consortium) Qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Certified to UL 1598 and UL 8750
- 3G rated for ANSI C136.31 high vibration applications with MAF mounting
- IDA approved
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See Buy American Solutions.

WARRANTY

- 5 year warranty
- See HLI Commercial and Industrial Outdoor Lighting Warranty for additional information

KEY DATA	
Lumen Range	4,045–16,216
Wattage Range	39–136
Efficacy Range (LPW)	100–124
Reported Life (Hours)	L70>60,000
Input Current Range (Amps)	0.1–1.1

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HUBBELL Lighting

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DATE: | LOCATION:

TYPE: | PROJECT:

CATALOG #:

VIPER S

SMALL VIPER LUMINAIRE

ORDERING GUIDE

Example: VPS–24L–55–4K7–4W–UNV–A–DBT–TL–GENI–04–BC

CATALOG #

VPS –

Series	
VPS	Viper Small

–

LED Engine	
24L-39	39W, LED array
24L-55	55W, LED array
36L-65	65W, LED array
36L-80	80W, LED array
48L-110	110W, LED array
60L-136	136W, LED array

–

CCT/CRI [7]	
3K7	3000K, 70 CRI
4K7	4000K, 70 CRI
5K7	5000K, 70 CRI

–

Distribution	
FR	Type 1/Front Row
2	Type 2
3	Type 3
4F (formerly 4)	Type 4
4W	Type 4 Wide
5QM	Type 5QM
5R	Type 5R (rectangular)
5W	Type 5W (round wide)
TC	Tennis Court
CR	Corner Right
CL	Corner Left

–

Rotation	
Blank	No rotation
L	Optic rotation left [5]
R	Optic rotation right [5]

–

Voltage	
UNV	120–277V
347	347V
480	480V

–

Mounting	
A	Rectangular Arm (formerly RA) for square or round pole
MAF	Mast Arm Fitter (formerly SF2) for 2⅜" OD horizontal arm
K	Knuckle (formerly PK2) limit to 30° tilt or 2⅜" OD horizontal arm or vertical tenon
WB	Wall Bracket
AD	Universal Arm for square pole
AD3	Adapter for 2.4"–4.1" round pole
AD4	Adapter for 4.2"–5.3" round pole
AD5	Adapter for 5.5"–5.9" round pole
AD6	Adapter for 6.0"–6.5" round pole

–

Color	
BLT	Black Matte Textured
BLS	Black Gloss Smooth
DBT	Dark Bronze Matte Textured
DBS	Dark Bronze Gloss Smooth
GTT	Graphite Matte Textured
LGS	Light Grey Gloss Smooth
PSS	Platinum Silver Smooth
WHT	White Matte Textured
WHS	White Gloss Smooth
VGT	Verde Green Textured
Color Option	
CC	Custom Color

–

Control Options	
NXWE	NX Wireless Enabled (module + radio)
NXSPW_E	Nx Wireless, PIR Occ. Sensor, Daylight Havesting [2]
NXSP_F	NX, PIR Occ. Sensor, Daylight Harvesting [2]
WIR	Wireless Controls, wiSCAPE
Control Options	
7PR	7-Pin Receptacle only (shorting cap, photo control, or wireless control provided by others)
7PR-SC	7-Pin Receptacle w/Shorting Cap
7PR-TL	7-Pin Receptacle w/Twist-Lock® photo control
SCP/_F	Programmable Occupancy Sensor w/ daylight control [1,2,6]
GENI-XX	ENERGENI [3]
SWP	SiteSync Pre-Commission [1,4]
SWPM_F	SiteSync Pre-Commission w/ Sensor [1,2,4]

–

Options	
BC	Backshield (available for FR, 2, 3, 4, 4W Optics)
CD	Continuous Dimming
F	Fusing
TB	Terminal Block

House Side Shield Accessories

- ☐ **HSS/VP-S/90-FB/XXX** 90° shield front or back
- ☐ **HSS/VP-S/90-LR/XXX** 90° shield left or right
- ☐ **HSS/VP-S/270-FB/XXX** 270° shield front or back
- ☐ **HSS/VP-S/270-LR/XXX** 270° shield left or right
- ☐ **HSS/VP-S/360/XXX** Full shield

Replace XXX with notation for desired finish color. Refer to page 8 for shield images.

Mounting Accessories

- ☐ **VPL-AD-RPA3** 2.4"–4.1" Round Pole Adapter for AD arm
- ☐ **VPL-AD-RPA4** 4.2"–5.3" Round Pole Adapter for AD arm
- ☐ **VPL-AD-RPA5** 5.5"–5.9" Round Pole Adapter for AD arm
- ☐ **VPL-AD-RPA6** 6.0"–6.5" Round Pole Adapter for AD arm

Notes:

1. Not available with other wireless control or sensor options
2. Specify mounting height; 8 = 8' or less, 40 = 9' to 40'
3. Specify routine setting code (example GENI-04). See ENERGENI brochure and instructions for setting table and options. Not available with sensor or SiteSync options
4. Specify group and zone at time of order. See www.hubbelllighting.com/sitesync for further details. Order at least one SiteSync interface accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node
5. Only available with FR, 2, 3, 4, 4W and 5R distributions
6. Order at least one SCP-REMOTE per project location to program and control the occupancy sensor

Accessories and Services (Ordered Separately)

- ☐ **SCP-REMOTE** Remote Control for SCP/_F option. Order at least one per project to program and control the occupancy sensor
- ☐ **SWUSB*** SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node
- ☐ **SWTAB*** Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node
- ☐ **SWBRG** SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested
- ☐ **SW7PR+** SiteSync 7-Pin on fixture module On/Off/Dim, Daylight Sensor 120–480VAC
- ☐ **BIRD-SPIKE-3** Bird Spikes

* When ordering SiteSync at least one of these two interface options must be ordered per project.
\+ Available as a SiteSync retrofit solution for fixtures with an existing 7-pin receptacle.

Hubbell Control Solutions — Accessories (Sold Separately)

NX Distributed Intelligence™

- ☐ **NXOFM-1R1D-UNV** On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120–480VAC

wiSCAPE® Lighting Control

- ☐ **WIR-RME-L** On-fixture Module (7-pin or 5-pin), On / Off / Dim, Daylight Sensor with wiSCAPE Radio, 110–480VAC

For additional information related to these accessories please visit www.hubbellcontrolsolutions.com. Options provided for use with integrated sensor, please view specification sheet ordering information table for details.

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HUBBELL Lighting

VIPER S

SMALL VIPER LUMINAIRE

CONTROLS

SiteSync — Precommissioned Ordering Information:

When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit the SiteSync family page on our website or contact Hubbell Lighting tech support at 864-678-1000.

SiteSync fixtures with Motion control (SWPM) require the mounting height of the fixture for selection of the lens.

Examples: VP-L/80L-235/4K7/3/UNV/A/DB/SWP/ SiteSync only
VP-L/80L-235/4K7/3/UNV/A/DB/SWPM-40F/ SiteSync with Motion Control

SiteSync 7-Pin Module:

- SiteSync features in a new form
- Available as an accessory for new construction or retrofit applications (with existing 7-Pin receptacle)
- Does not interface with occupancy sensors

SW7PR

NX Distributed Intelligence™ Lighting Controls:

Supports both indoor and outdoor applications in a variety of deployment options: wired, wireless and hybrid.
Integrates with and enables a wide array of luminaires including those with SpectraSync Color Tuning Technology.

NX Integrated Controls Reference								
NX Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	0–10V Dimming	On/off Control	Bluetooth® App Programming
NX Networked – Wireless								
NXOFM-1R1D-UNV	SCLNX	Yes	Yes	Yes	Yes	Yes	Yes	Yes, Bluetooth App

wiSCAPE™:

Supports remote management, monitoring and metering of outdoor wireless lighting applications such as smart campuses, smart cities, parking lots, parking lots and roadways.

wiSCAPE Reference								
wiSCAPE Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	0–10V Dimming	On/off Control	Bluetooth® App Programming
Networked – Wireless								
WIR-RME-L	WIR-RME-L	Yes	Yes	No	Yes	Yes	Yes	wiSCAPE Gateway

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TYPE: PROJECT:

CATALOG #:

VIPER S

SMALL VIPER LUMINAIRE

DELIVERED LUMENS

				5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 70 CRI)				
# of LEDs	DRIVE CURRENT (mA)	SYSTEM WATTS	DISTRIBUTION TYPE	LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G
24	500mA	39W	FR	4689	120	1	0	0	4665	120	1	0	0	4432	114	1	0	0
			2	4523	116	1	0	1	4500	115	1	0	1	4275	110	1	0	1
			3	4436	114	1	0	1	4414	113	1	0	1	4194	108	1	0	1
			4F	4362	112	1	0	2	4340	111	1	0	2	4123	106	0	0	2
			4W	4280	110	1	0	2	4258	109	1	0	2	4045	104	1	0	2
			5QM	4442	114	2	0	1	4420	113	2	0	1	4199	108	2	0	0
			5R	4472	115	2	0	2	4450	114	2	0	2	4227	108	2	0	2
			5W	4335	112	3	0	1	4336	111	3	0	1	4114	105	3	0	1
			TC	4561	117	1	0	1	4538	116	1	0	1	4311	111	1	0	1
			CL	4758	122	1	0	2	4758	122	1	0	2	4329	111	1	0	1
			CR	4773	122	1	0	2	4773	122	1	0	2	4361	112	1	0	1
24	700 mA	55W	FR	6357	118	1	0	1	6486	120	1	0	1	5804	107	1	0	1
			2	6132	114	1	0	1	6257	116	1	0	2	5599	104	1	0	1
			3	6015	111	1	0	2	6137	114	1	0	2	5492	102	1	0	2
			4F	5921	110	1	0	2	6034	112	1	0	2	5400	100	1	0	2
			4W	5793	108	1	0	2	5909	110	1	0	2	5272	98	1	0	2
			5QM	6022	112	2	0	1	6145	114	2	0	1	5499	102	2	0	1
			5R	6063	112	3	0	3	6187	115	3	0	3	5536	103	3	0	3
			5W	5908	109	3	0	1	6028	112	3	0	1	5908	102	3	0	1
			TC	6183	113	1	0	1	6309	118	1	0	1	5645	105	1	0	1
			CL	6707	122	1	0	2	6707	122	1	0	2	6117	111	1	0	2
			CR	6729	122	1	0	2	6729	122	1	0	2	6143	112	1	0	2
36	560 mA	65W	FR	7864	121	1	0	1	8041	124	1	0	1	7189	111	1	0	1
			2	7586	117	1	0	2	7757	119	1	0	2	6934	107	1	0	2
			3	7441	114	1	0	2	7609	117	1	0	2	6802	105	1	0	2
			4F	7317	110	1	0	2	7482	112	1	0	2	6688	100	1	0	2
			4W	8690	108	1	0	2	8864	110	1	0	2	7908	98	1	0	2
			5QM	7450	115	3	0	1	7618	117	3	0	1	6810	105	3	0	1
			5R	7501	115	3	0	3	7670	118	3	0	3	6857	105	3	0	3
			5W	7309	112	3	0	2	7473	115	3	0	2	6681	103	3	0	1
			TC	7540	116	1	0	1	7694	118	1	0	1	7694	122	1	0	2
			CL	8179	126	2	0	2	8179	126	2	0	2	7467	115	1	0	2
			CR	8205	126	2	0	2	8205	126	2	0	2	7492	115	1	0	2
36	700 mA	80W	FR	9535	118	1	0	1	9730	120	1	0	1	8706	107	1	0	1
			2	9197	114	1	0	2	9385	116	1	0	2	8398	104	1	0	2
			3	9022	111	1	0	2	9206	114	1	0	2	8238	102	1	0	2
			4F	8871	110	1	0	2	9052	112	1	0	2	8100	100	1	0	2
			4W	11587	108	1	0	3	11819	110	1	0	3	10544	98	1	0	3
			5QM	9033	112	3	0	1	9217	114	3	0	1	8248	102	3	0	1
			5R	9095	112	3	0	3	9280	115	3	0	3	8304	103	3	0	3
			5W	8861	109	3	0	2	9043	112	3	0	2	8092	100	3	0	2
			TC	9275	115	1	0	1	9464	118	1	0	1	8468	105	1	0	1
			CL	10060	126	2	0	2	10060	126	2	0	2	9184	115	2	0	2
			CR	10093	126	2	0	2	10093	126	2	0	2	9215	115	2	0	2
48	700 mA	110W	FR	12713	118	1	0	1	12973	120	2	0	1	11608	107	1	0	1
			2	12263	114	2	0	2	12513	116	2	0	2	11197	104	2	0	2
			3	12029	111	2	0	2	12275	114	2	0	2	10984	102	1	0	2
			4F	11828	110	1	0	3	12069	112	1	0	3	10800	100	1	0	2
			4W	11609	108	1	0	3	11841	110	1	0	3	10564	98	1	0	3
			5QM	12044	112	3	0	2	12290	114	3	0	2	10997	102	3	0	1
			5R	12126	112	3	0	3	12374	115	3	0	3	11072	103	3	0	3
			5W	12126	109	4	0	2	12057	112	4	0	2	10789	100	4	0	2
			RC	12366	115	1	0	2	12619	118	1	0	1	11290	105	1	0	2
			CL	13414	122	2	0	3	13414	122	2	0	3	12246	111	2	0	2
			CR	13458	122	2	0	3	13458	122	2	0	3	12287	112	2	0	2
60	700 mA	136W	FR	15891	117	2	0	2	16216	120	2	0	2	14511	107	2	0	1
			2	15329	113	2	0	2	15642	116	2	0	2	13997	103	2	0	2
			3	15037	111	2	0	3	15344	113	2	0	3	13730	101	2	0	3
			4F	14784	109	1	0	3	15086	111	1	0	3	13500	100	1	0	3
			4W	14802	109	2	0	3	15104	112	2	0	3	13515	100	2	0	3
			5QM	15055	111	3	0	2	15362	114	3	0	2	13747	102	3	0	2
			5R	15158	112	4	0	4	15469	114	4	0	4	13841	102	4	0	4
			5W	14781	109	4	0	2	15083	111	4	0	2	13495	100	4	0	2
			TC	15458	115	1	0	2	15834	118	1	0	2	14113	105	1	0	2
			CL	16768	123	3	0	3	16768	123	3	0	3	15309	113	2	0	3
			CR	16823	124	3	0	3	16823	124	3	0	3	15359	113	2	0	3

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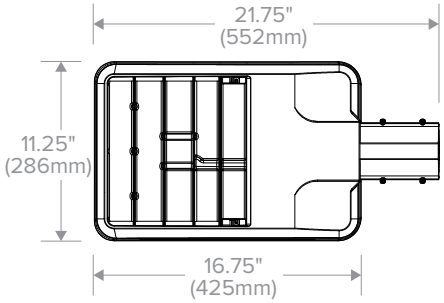
HUBBELL Lighting

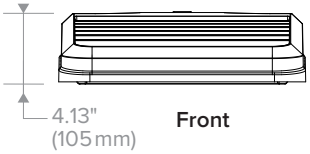
DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

VIPER S

SMALL VIPER LUMINAIRE

DIMENSIONS

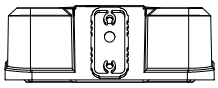




Weight	15.0 lbs (6.8 kg)
EPA	.67 ft²

A Arm (formerly RA)

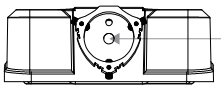
Side View



Back View

MAF (formerly SF2)

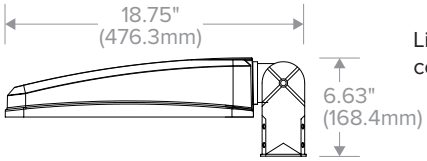
Side View



Back View

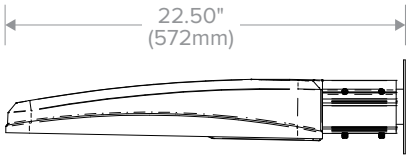
Accepts 2⅜" OD tenon, min 5" long.

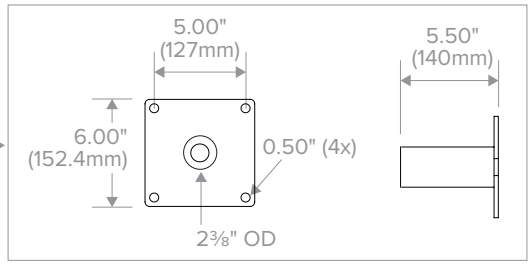
2⅜" Adjustable Knuckle (K) (formerly PK2)



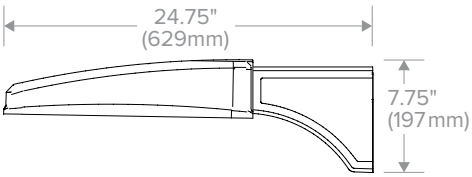
Limit to 30° tilt. Sensor, photocell and wireless controls should not be tilted above horizontal.

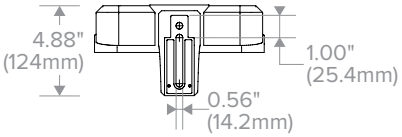
Wall Bracket (WB)





AD Decorative Arm





See page 9 for mounting details.

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LIGHTOLIER
by signify

Downlighting

SlimSurface LED

S5R, S7R & S10R Round 5", 7" and 10" Apertures

SlimSurface is a 5/8" thick LED surface mounted luminaire with the appearance of a recessed downlight. Easy to install into most standard j-boxes, the SlimSurface round apertures are available as a 5" 650lm, 7" 1000lm and 10" 2200lm fixture.

Project:
Location:
Cat.No:
Type:
Lamps: Qty:
Notes:

Ordering guide

example: S5R830K7AL

Series	CRI	CCT	Lumens	Finish	Dimming
S5R SlimSurface 5" Round	**8** 80 **9** 90[1]	**27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K	**7** 650lm	**—** White **AL** Aluminum **BK** Black	**blank** ELV / Triac (120V)
				W White **AL** Aluminum **BK** Black	**Z10U** 0-10V (120V-277V)
S7R SlimSurface 7" Round	**8** 80 **9** 90[1]	**27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K	**10** 1000lm	**—** White **AL** Aluminum **BK** Black	**blank** ELV / Triac (120V)
				W White **AL** Aluminum **BK** Black	**Z10U** 0-10V (120V-277V)
S10R SlimSurface 10" Round[2]	**8** 80 **9** 90[1]	**27K** 2700K **30K** 3000K **35K** 3500K **40K** 4000K	**22** 2200lm	**W** White **AL** Aluminum **BK** Black **MT** Metallic	**blank** ELV / Triac (120V) **Z10U** 0-10V (120V-277V)

1. Configurations using 90 CRI are only available with 2700K & 3000K CCT.
2. SlimSurface LED 10" round installs into 4-11/16" J-box (not wet location listed).

White

Aluminum

Black

Metal

Features

1. **Flange:** One piece plastic flange. Injection molded white, applied aluminum or black.
2. **Lens:** High transmittance lens allowing for smooth, comfortable light pattern.
3. **Power supply:** Integral class 2 driver. Factory wired electronic LED driver (see Electrical section for specifications)
4. **LED Strip:** Utilizes LEDs.
5. Lifetime: Expected lifetime 50,000 hours and backed by a 5-year warranty*
6. **Compliance:** Non-conductive fixture for shower light application (not applicable to metal trim model).

Dimming

Intended for ELV/Triac (120V) or 0-10V dimming (120V-277V) based on the configuration. Min 90°C supply conductors.

Electrical

Electronic power supply: RoHS compliant. Class 2 power unit. Unit tolerates sustained open and short circuit output conditions without damage.

Labels

cULus listed. ENERGY STAR® certified. All models are damp location rated for walls or ceilings. The 5" & 7" are suitable for ceiling mount wet locations when installed per instructions.

Electrical specifications	Dimming	Input volts	Input frequency	Input current	Input Power	THD Factor	Power Factor	Minimum Operating Temp.
Slim 5" 650lm	Triac	120V	50/60Hz	0.08A	9.5W	<15%	>0.9	-20°C
	0-10V	120V	50/60Hz	0.09A	10.1W	<20%	>0.9	-20°C
		277V	50/60Hz	0.04A	10.2W	<20%	>0.9	-20°C
Slim 7" 1000lm	Triac	120V	50/60Hz	0.13A	14.2W	<15%	>0.9	-20°C
	0-10V	120V	50/60Hz	0.12A	14.4W	<20%	>0.9	-20°C
		277V	50/60Hz	0.06A	14.7W	<20%	>0.9	-20°C
Slim 10" 2200lm	Triac	120V	50/60Hz	0.20A	23.2W	<20%	>0.9	-20°C
	0-10V	120V	50/60Hz	0.20A	23.2W	<10%	>0.95	-20°C
		277V	50/60Hz	0.09A	24.6W	<15%	>0.95	-20°C

Fore more details, please see LED-DIM-DL spec sheet.
* See Philips.com/warranties for warranty details.

MANHATTAN COLLECTION

Manhattan 22" LED Wall Light Textured Black

49298BKTLED (Textured Black)

Project Name:
Location:
Type:
Qty:
Comments:

Certifications/Qualifications

Location Rating	Wet
Title 24 Compliant	Yes
	www.kichler.com/warranty

Dimensions

Base Backplate	21.75 X 6.75
Extension	3.75"
Weight	8.40 LBS
Height from center of Wall opening (Spec Sheet)	11.00"
Height	22.00"
Width	7.00"

Electrical

Input Voltage	Single(120)V

Mounting/Installation

Interior/Exterior	Exterior
Mounting Weight	4.80 LBS

Photometrics

Color Rendering Index	90
Delivered Lumens	550
Kelvin Temperature	3000K

Primary Lamping

Dimmable	Yes
Expected Life Span	40000
Lamp Included	Integrated
Light Source	LED
Max or Nominal Watt	20.5W
# of Bulbs/LED Modules	2

Product/Ordering Information

SKU	49298BKTLED
Finish	Black
Style	Contemporary
UPC	783927541206

Specifications

Diffuser Description	White Glass
Material	ALUMINUM

Additional Finishes

Textured Black

Kichler
7711 East Pleasant Valley Road Cleveland, Ohio 44131-8010
Toll free: 866.558.5706 or kichler.com

Notes:
1) Information provided is subject to change without notice. All values are design or typical values when measured under laboratory conditions.
2) Incandescent Equivalent: The incandescent equivalent as presented is an approximate number and is for reference only.

KICHLER®

To: Benjamin Avery
Riverside Partners, LLC

Date: January 31, 2020

Project #: 58036.00

From: Jenn Conley, PE
Erica Quallen

Re: Riverside Independent Living
Traffic Impact Study
Burlington, VT

VHB has conducted a Traffic Impact Study (TIS) for the proposed Riverside Independent Living facility to be located at 362-374 Riverside Avenue, with access from Hillside Terrace in Burlington, Vermont.

The proposed facility will have approximately 60 units and is located on the southern side of Riverside Avenue between the loop ends of Hillside Terrace, with the access and egress point being adjacent to the westernmost intersection of Hillside Terrace and Riverside Avenue.

This Traffic Impact Study includes the following elements:

- A description of the existing roadway network in the vicinity of the site;
- A summary of the crash data within the study area;
- A description of the proposed development program;
- A trip generation estimate for the proposed development program;
- An evaluation of anticipated traffic changes for the adjacent roadway and intersections in the vicinity;
- An evaluation of traffic operations within the study area; and
- Conclusions and recommendations to support the project.

As part of this study, three different intersections were evaluated and summarized in regard to level of service (LOS) and average delay in order to estimate how the proposed project impacts the local street network. The traffic study intersections are shown in **Figure 1**.

EXISTING CONDITIONS

The project is located on Hillside Terrace, specifically on the northwest segment of the loop. Hillside Terrace is a loop road with both ends connecting to Riverside Avenue. The driveway for the proposed redevelopment is located approximately 125-feet from the west intersection of Riverside Avenue and Hillside Terrace. The location of the site in relation to the local roadway network is shown in **Figure 1**.

Figure 1: Sie Location Map

Roadway Characteristics

Hillside Terrace is a residential loop road providing access to the homes on Hillside Terrace as well as one adjacent housing development. Hillside Terrace connects on both sides to Riverside Avenue forming intersections approximately 300-feet apart along Riverside Avenue. The western intersection is an unsignalized intersection with Hillside Terrace operating under stop-control. The eastern intersection is signalized with Hillside Terrace being an actuated approach. Hillside Terrace provides sidewalks on the inner side of the loop which connect to sidewalks on Riverside Avenue.

Riverside Avenue serves as a segment of US Routes 2 and 7 and is an east-west principal arterial that parallels the Winooski River, connecting Burlington's Old North End neighborhood to downtown Winooski. In the vicinity of the project site, it is a 25 mile per hour roadway carrying between 15,000 and 16,000 vehicles per day[1].

SAFETY ASSESSMENT

A review of VTrans' most recent High Crash Location (HCL) Report (2012-2016) revealed no roadway segments or intersections within the project study area classified as an HCL by VTrans[2]. In addition, the VTrans Public Crash Data Query Tool was reviewed to investigate project area crashes for the most recent 5-year period available: January 1, 2014 through December 31, 2018. **Table 1** below summarizes the reported crashes for the primary study area over the recent five-year period. Additional detail of the crashes is included in the Appendix.

Table 1: Summary of 2014-2018 Reported Crashes

Location	Number of Crashes	Injury Crashes	Fatal Crashes	Property Damage Only	Rear End Crashes	Turning Vehicle Crashes	Wet/Snowy Road Conditions
Riverside Avenue and Hillside Terrace	25	7 (28%)	0	18 (72%)	10 (40%)	5 (20%)	5 (20%)

TRAFFIC NETWORKS

Seasonal Variation

Since it is impractical to design for the highest volume encountered during the year, VTrans guidelines recommend a compromise between capacity and cost. Design Hourly Volume (DHV) criteria allow roads to be designed for the 30th highest hourly volume of the year. VTrans Riverside Avenue Average Annual Daily Traffic (AADT) traffic volume data was obtained. The appropriate VTrans DHV adjustment factors for volumes and roadway type were researched and applied to the AADT.[3] Detailed calculations for the DHV adjustments are provided in the Appendix.

Background Growth

Background traffic growth is a function of expected land development in the region. To predict a rate at which traffic can be expected to grow during the forecast period, historical traffic growth was examined. The regression analysis chart in the 2017 VTrans Redbook[4] suggests a background growth rate of 1.03 for projecting traffic volumes from 2020 to 2025. VTrans regression analysis is provided in the Appendix.

---

1 Vermont Agency of Transportation Highway Division Traffic Research Unit, 2018 (Route Log) AADTs: State Highways. May 2019.

2 High Crash Location Report: Intersections and Segments (2012-2016), Vermont Agency of Transportation Office of Highway Safety Division.

3 ATR Station D156

4 Continuous Traffic Counter Report (The Redbook), Vermont Agency of Transportation, 2017.

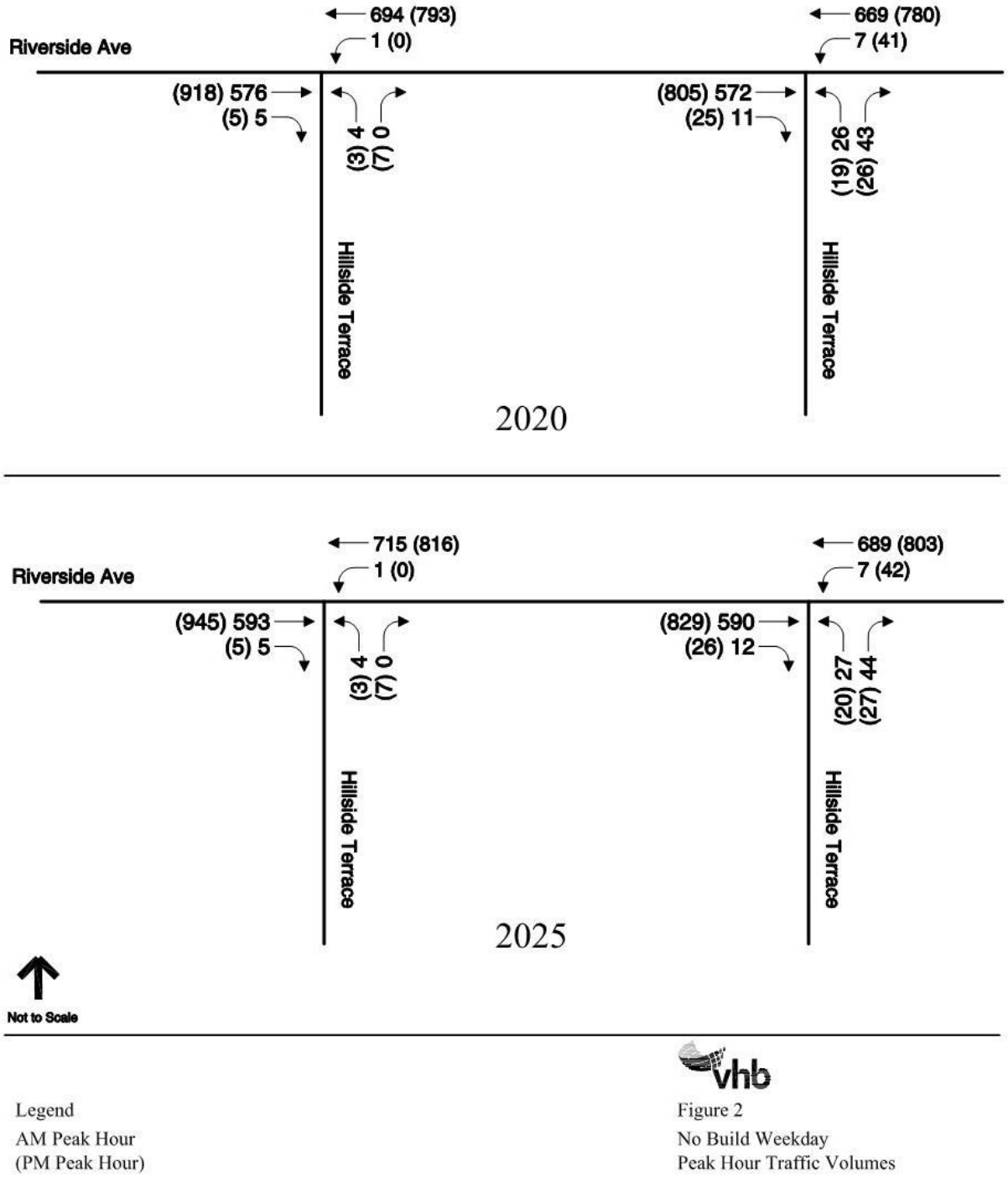
Other Development

Based on review of proposed developments in the vicinity of the project site, one project undergoing the Burlington Design Review Board process was found that was included in the background traffic volumes for this project. A housing development at 110 Riverside Avenue is being proposed and is anticipated to generate 21 weekday AM peak hour trips and 26 weekday PM peak hour trips. The trip distribution shown in the Trudell Consulting Engineers November 2019 traffic analysis was used to add these trips to the network being analyzed in this traffic analysis. A copy of the relevant data from the Trudell study can be found in the Appendix.

No Build Traffic Networks

The 2020 and 2025 No Build traffic volumes were developed by applying the growth factors from the VTrans regression analysis chart to DHV-adjusted peak hour traffic volumes and adding the other identified project traffic. The 2020 and 2025 No Build weekday AM and PM volumes are shown in **Figure 2**.

Figure 2: 2020 and 2025 No Build Traffic Volumes



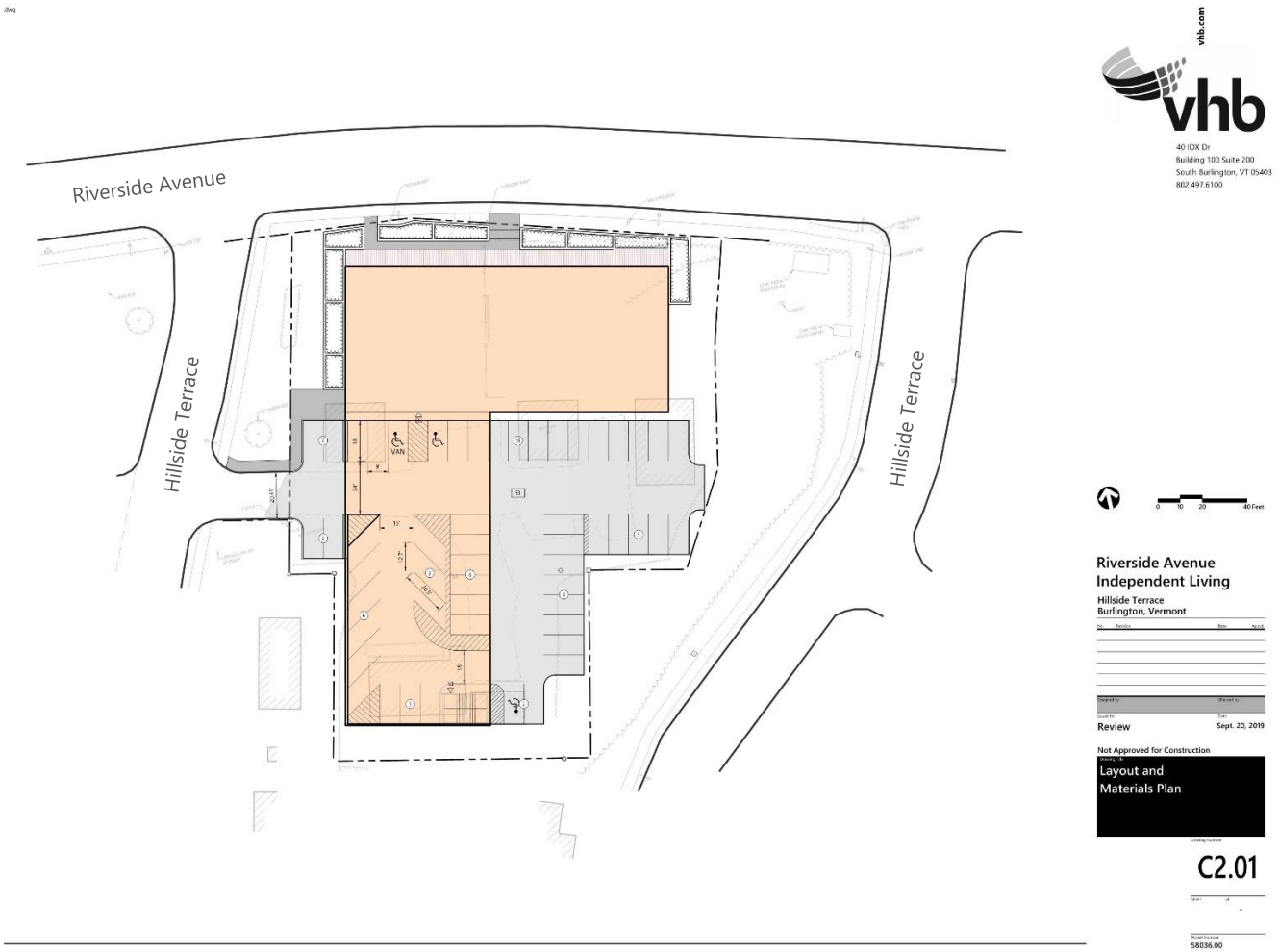
Legend
AM Peak Hour
(PM Peak Hour)

Figure 2
No Build Weekday
Peak Hour Traffic Volumes

PROPOSED DEVELOPMENT

The proposed facility will have approximately 60 independent living residential units and is located on the southern side of Riverside Avenue between the loop ends of Hillside Terrace, with the access and egress point being adjacent to the western intersection of Hillside Terrace and Riverside Avenue. The proposed layout of the project site is shown below in **Figure 3**.

Figure 3: Proposed Site Plan



TRIP GENERATION

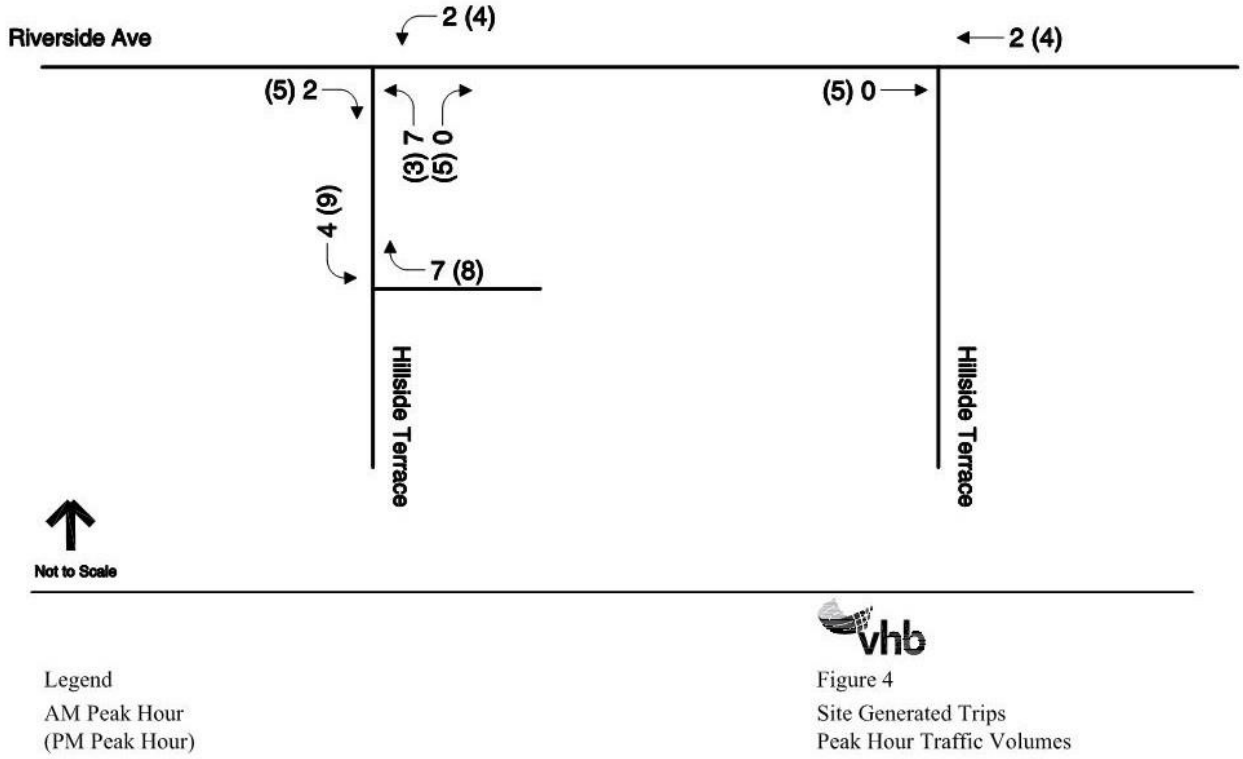
Trip estimates for the proposed development were calculated based on rates published by the Institute of Transportation Engineers (ITE) in the 10th edition of the Trip Generation Manual for the weekday AM and PM peak hours. These time periods are typically the highest volume times on the adjacent roadway network and are used for this analysis. ITE land use code (LUC) 252 – Senior Adult Housing, Attached was used to estimate peak hour

trips of the proposed development. Based on ITE estimates, the independent living facility would be expected to generate 12 trips during the weekday AM peak hour and 17 vehicle trips during the PM peak hour. **Table 2** summarizes the trip generation estimate for the proposed development. The distribution of these trips onto the roadway network was based on current travel patterns and is shown in **Figure 4**.

Table 2: Trip Generation Summary

Peak Period	Total Peak Hour Site Generated Trips
Weekday AM	
Enter	4
Exit	8
Total	12
Weekday PM	
Enter	9
Exit	8
Total	17

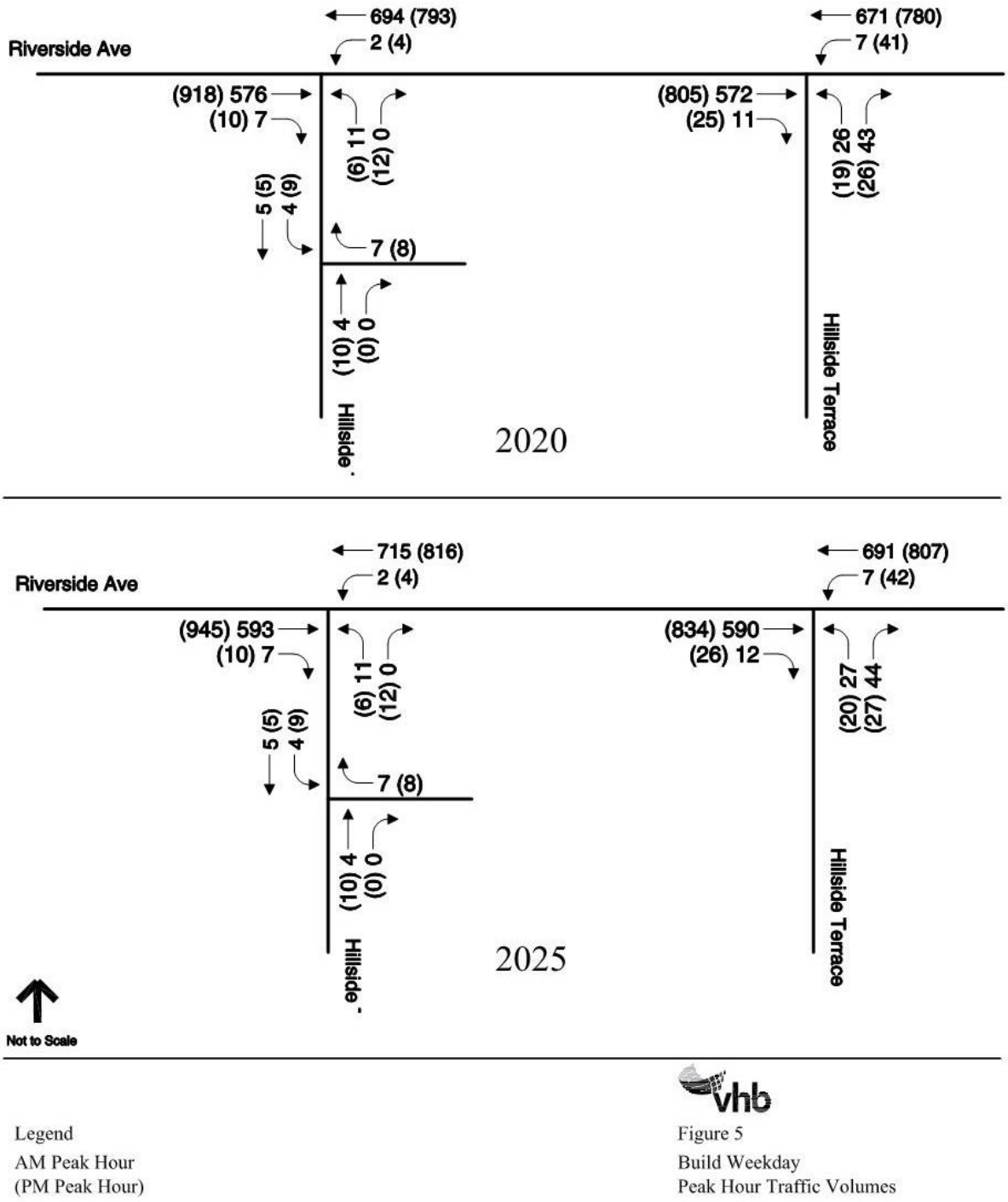
Figure 4: Site Generated Trip Distribution



Build Traffic Networks

The 2020 and 2025 Build traffic volumes were developed by combining the No Build volumes and site generated trips. The 2020 and 2025 Build weekday AM and PM volumes are shown in **Figure 2**.

Figure 5: 2020 and 2025 Build Traffic Volumes



TRAFFIC ANALYSES

Intersection capacity analyses were performed for the study area intersections. Levels of service (LOS) were calculated based on the criteria published in the *2000 Highway Capacity Manual*.[5] Level of service is the term that defines the conditions that may occur on a given roadway or at an intersection when accommodating various traffic volume loads. Levels of service range from A to F with LOS A representing generally free flowing operating conditions and LOS F representing generally congested conditions. Copies of the LOS calculations are provided in the Appendix.

Table 3 summarizes the operational analysis at the *unsignalized* study area intersection during the 2020 and 2025 weekday AM and PM peak hours under No Build and Build conditions. As shown in the table, Hillside Terrace West at Riverside Avenue experiences only two to five second increases in delay from the No Build to Build scenarios in both peak hours. LOS E is typically regarded as a deficient level of service, but it should be noted that the volume to capacity ratio is only 0.14 in the Build scenario is just over the threshold of 35 seconds of delay to be defined as LOS E. The major approach will operate at LOS A as it continues to experience free-flow conditions. The unsignalized intersection of Hillside Terrace and the site driveway will operate at LOS A from all approaches, in all conditions.

Table 4 summarizes the operational analysis at the *signalized* study area intersections during the 2020 and 2025 weekday AM and PM peak hours under No Build and Build conditions. As shown in the table, the signalized intersection of Hillside Terrace East and Riverside Avenue is expected to operate overall at LOS C or better in 2020 and 2025 both without and with the project. Project related delays are expected to be less than one second per vehicle. Overall the results indicate that the infrastructure has been built to accommodate the growth anticipated in this area.

Table 3: Unsignalized Intersection Capacity Analysis

		2020 No Build			2020 Build			2025 No Build			2025 Build		
	Intersection / Movement	**v/c[+]**	**Delay***	**LOS ****	**v/c**	**Delay**	**LOS**	**v/c**	**Delay**	**LOS**	**v/c[+]**	**Delay***	**LOS ****
AM Peak Hour	**Hillside Terrace West at Riverside Ave**												
	EB from Riverside Ave	0.34	0.0	A	0.34	0.0	A	0.35	0.0	A	0.35	0	A
	WB from Riverside Ave	0.00	0.0	A	0.00	0.1	A	0.00	0.0	A	0.00	0.1	A
	NB from Hillsde Terrace	0.03	28.5	D	0.07	30.0	D	0.03	30.5	D	0.08	32.2	D
	Hillside Terrace West at Site Driveway												
	WB from Site Driveway	DOES NOT EXIST IN NO BUILD CONDITION			0.01	8.4	A	DOES NOT EXIST IN NO BUILD CONDITION			0.01	8.4	A
	NB from Hillside Terrace				0.00	0.0	A				0.00	0.0	A
	SB from Hillside Terrace				0.00	3.2	A				0.00	3.2	A
PM Peak Hour	**Hillside Terrace West at Riverside Ave**												
	EB from Riverside Ave	0.54	0.0	A	0.55	0.0	A	0.56	0.0	A	0.56	0.0	A
	WB from Riverside Ave	0.00	0.0	A	0.01	0.1	A	0.00	0.0	A	0.01	0.2	A
	NB from Hillsde Terrace	0.07	32.0	D	0.14	36.7	E	0.08	35.4	E	0.15	40.4	E
	Hillside Terrace West at Site Driveway												
	WB from Site Driveway	DOES NOT EXIST IN NO BUILD CONDITION			0.01	8.4	A	DOES NOT EXIST IN NO BUILD CONDITION			0.01	8.4	A
	NB from Hillside Terrace				0.01	0.0	A				0.01	0.0	A
	SB from Hillside Terrace				0.01	4.7	A				0.01	4.7	A

[+] *Volume to capacity ratio*

** Delay expressed in seconds per vehicle*

*** Level of Service*

[5] Highway Capacity Manual, Federal Highway Administration, Transportation Research Board, 2000.

Table 4: Signalized Intersection Capacity Analysis

	Intersection / Movement	2020 No Build			2020 Build			2025 No Build			2025 Build		
		v/c[+]	Delay*	LOS **	v/c	Delay	LOS	v/c	Delay	LOS	v/c[+]	Delay*	LOS **
AM Peak Hour	**Hillside Terrace East at Riverside Ave**												
	EB from Riverside Ave	0.50	10.3	B	0.50	10.3	B	0.51	10.5	B	0.51	10.5	B
	WB Left Turn from Riverside Ave	0.02	6.1	A	0.02	6.1	A	0.02	6.1	A	0.02	6.1	A
	WB Through from Riverside Ave	0.57	10.1	B	0.57	10.1	B	0.59	10.3	B	0.59	10.4	B
	NB from Hillsde Terrace	0.11	30.7	C	0.11	30.7	C	0.11	30.8	C	0.11	30.8	C
	Overall	**0.45**	**11.2**	**B**	**0.45**	**11.3**	**B**	**0.46**	**11.5**	**B**	**0.47**	**11.5**	**B**
PM Peak Hour	**Hillside Terrace East at Riverside Ave**												
	EB from Riverside Ave	0.71	14.6	B	0.71	14.7	B	0.73	15.3	B	0.74	15.4	B
	WB Left Turn from Riverside Ave	0.17	7.1	A	0.17	7.1	A	0.19	7.2	A	0.19	7.3	A
	WB Through from Riverside Ave	0.67	11.8	B	0.67	11.9	B	0.69	12.3	B	0.69	12.4	B
	NB from Hillsde Terrace	0.08	30.3	C	0.08	30.3	C	0.08	30.3	C	0.08	30.3	C
	Overall	**0.55**	**13.6**	**B**	**0.55**	**13.7**	**B**	**0.57**	**14.1**	**B**	**0.57**	**14.2**	**B**

[+] *Volume to capacity ratio*

** Delay expressed in seconds per vehicle*

*** Level of Service*

CONCLUSIONS

The proposed project consists of constructing a new 60-unit Independent Living at 362-374 Riverside Avenue, with access from Hillside Terrace in Burlington, Vermont. The trip generation estimates conducted for this study indicate that the proposed development program will generate approximately 12 new vehicle trips during the weekday AM peak hour and 17 new vehicle trips during the weekday PM peak hour.

Primary access and egress will be provided via the existing residential access off Hillside Terrace which has experienced no reported crash history and is not expected to decrease in safety with the addition of this driveway. A LOS E is expected from the Hillside Terrace West approach at Riverside Avenue, but the proposed development is not likely to increase delay by more than five seconds compared to the No Build scenario. The project related delay increases are less than two seconds per vehicle at each of the study area intersections.

In conclusion, based on the results of this Traffic Impact Study, the proposed Independent Living facility project is not anticipated to generate unreasonable congestion or unsafe conditions on the adjacent roadway network.

Appendices

A. Traffic Volume Data
B. Crash Data
C. Trip Generation Summary
D. 110 Riverside Avenue Traffic Impact Analysis
E. Intersection Capacity Analysis

Appendix A

Traffic Volume Data

Intersection:	Riverside Ave and Hillside Terr West	Counter:	VHB
Town:	Burlington, VT	VTrans Site Code:	0
Start Date:	7/16/2019		

Project:	Riverside IL Housing	Project #:	58036
Location:	Burlington, VT	Sheet:	
Calculated by:	ELQ	Date:	12/11/19
Checked by:		Date:	

TMC - Riverside Ave and Hillside Terr West

TURNING MOVEMENT COUNT DATA - Totals by Movement

		SB				WB				NB				EB			
		N/A				Riverside Ave				Hillside Terrace				Riverside Ave			
	Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
1	06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	102	0	0
5	07:00 AM	0	0	0	0	0	97	0	0	0	0	0	1	0	115	0	0
6	07:15 AM	0	0	0	0	0	148	0	0	0	0	0	1	1	148	0	0
7	07:30 AM	0	0	0	0	1	154	0	0	0	0	1	1	2	151	0	0
8	07:45 AM	0	0	0	0	0	186	0	0	0	0	2	0	1	145	0	0
9	08:00 AM	0	0	0	0	0	173	0	0	0	0	0	1	1	135	0	0
10	08:15 AM	0	0	0	0	0	163	0	0	0	0	1	1	1	134	0	0
11	08:30 AM	0	0	0	0	0	147	0	0	0	0	1	2	1	158	0	0
12	08:45 AM	0	0	0	0	0	179	0	0	0	0	1	2	1	5	0	0
13	09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	04:00 PM	0	0	0	0	0	165	1	0	0	0	0	0	0	169	0	0
42	04:15 PM	0	0	0	0	0	159	2	0	2	0	2	1	5	169	0	0
43	04:30 PM	0	0	0	0	0	185	0	0	4	0	2	3	1	207	0	0
44	04:45 PM	0	0	0	0	0	192	0	0	1	0	0	4	2	235	0	0
45	05:00 PM	0	0	0	0	0	193	0	0	2	0	1	3	1	210	0	0
46	05:15 PM	0	0	0	0	0	206	0	0	0	0	0	1	1	244	0	0
47	05:30 PM	0	0	0	0	0	183	2	0	2	0	0	0	1	160	0	0
48	05:45 PM	0	0	0	0	0	175	0	0	1	0	0	4	1	149	0	0

PEAK HOUR CALCULATIONS

1 HR TOTALS

Begin Time	SB	WB	NB	EB	TOTAL
06:00 AM	0	0	0	102	102
06:15 AM	0	97	0	217	314
06:30 AM	0	245	0	366	611
06:45 AM	0	400	1	519	920
07:00 AM	0	586	3	563	1152
07:15 AM	0	662	3	584	1249
07:30 AM	0	677	4	570	1251
07:45 AM	0	669	4	576	1249
08:00 AM	0	662	3	436	1101
08:15 AM	0	489	3	300	792
08:30 AM	0	326	2	165	493
08:45 AM	0	179	1	6	186
09:00 AM	0	0	0	0	0
09:15 AM	0	0	0	0	0
09:30 AM	0	0	0	0	0
09:45 AM	0	0	0	0	0
10:00 AM	0	0	0	0	0
10:15 AM	0	0	0	0	0
10:30 AM	0	0	0	0	0
10:45 AM	0	0	0	0	0
11:00 AM	0	0	0	0	0
11:15 AM	0	0	0	0	0
11:30 AM	0	0	0	0	0
11:45 AM	0	0	0	0	0
12:00 PM	0	0	0	0	0
12:15 PM	0	0	0	0	0
12:30 PM	0	0	0	0	0
12:45 PM	0	0	0	0	0
01:00 PM	0	0	0	0	0
01:15 PM	0	0	0	0	0
01:30 PM	0	0	0	0	0
01:45 PM	0	0	0	0	0
02:00 PM	0	0	0	0	0
02:15 PM	0	0	0	0	0
02:30 PM	0	0	0	0	0
02:45 PM	0	0	0	0	0
03:00 PM	0	0	0	0	0
03:15 PM	0	166	0	169	335
03:30 PM	0	327	4	343	674
03:45 PM	0	512	10	551	1073
04:00 PM	0	704	11	788	1503
04:15 PM	0	731	14	830	1575
04:30 PM	0	776	10	901	1687
04:45 PM	0	776	6	854	1636
05:00 PM	0	759	6	767	1532

Cell ref.: 7
AM Peak Hr
07:30 AM - 8:30 AM
Vol. = 1251

Cell ref.: 43
PM Peak Hr
04:30 PM - 5:30 PM
Vol. = 1687

Intersection:	Riverside Ave and Hillside Terr East	Counter:	VHB
Town:	Burlington, VT	VTrans Site Code:	0
Start Date:	7/16/2019		

Project:	Riverside IL Housing	Project #:	58036
Location:	Burlington, VT	Sheet:	
Calculated by:	ELQ	Date:	12/11/19
Checked by:		Date:	

TMC - Riverside Ave and Hillside Terr East

TURNING MOVEMENT COUNT DATA - Totals by Movement

		SB				WB				NB				EB			
		N/A				Riverside Ave				Hillside Terrace				Riverside Ave			
	Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds
1	06:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	06:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	06:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	107	0	0
5	07:00 AM	0	0	0	0	0	95	0	0	6	0	4	1	0	111	0	0
6	07:15 AM	0	0	0	0	0	141	0	0	6	0	8	0	0	152	0	0
7	07:30 AM	0	0	0	0	0	146	0	0	14	0	7	1	1	153	0	0
8	07:45 AM	0	0	0	0	0	181	2	2	9	0	4	0	3	146	0	2
9	08:00 AM	0	0	0	0	0	162	2	2	9	0	9	1	4	130	0	0
10	08:15 AM	0	0	0	0	0	162	3	3	10	0	6	1	3	133	0	0
11	08:30 AM	0	0	0	0	0	142	2	2	5	0	5	3	5	157	0	0
12	08:45 AM	0	0	0	0	0	172	3	3	12	0	7	0	1	4	0	0
13	09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	09:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	01:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	01:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	04:00 PM	0	0	0	0	0	165	10	0	7	0	5	0	7	169	0	1
42	04:15 PM	0	0	0	0	0	158	6	0	4	0	4	1	4	170	0	0
43	04:30 PM	0	0	0	0	0	185	13	0	10	0	4	2	5	207	0	0
44	04:45 PM	0	0	0	0	0	190	7	1	7	0	3	2	3	237	0	2
45	05:00 PM	0	0	0	0	0	191	11	0	6	0	3	2	8	200	0	0
46	05:15 PM	0	0	0	0	0	197	9	0	3	0	9	1	9	141	0	0
47	05:30 PM	0	0	0	0	0	185	8	2	6	0	3	0	6	161	0	0
48	05:45 PM	0	0	0	0	0	171	12	0	3	0	9	3	10	139	0	2

PEAK HOUR CALCULATIONS

1 HR TOTALS

Begin Time	SB	WB	NB	EB	TOTAL
06:00 AM	0	0	0	107	107
06:15 AM	0	95	10	218	323
06:30 AM	0	236	24	370	630
06:45 AM	0	382	45	524	951
07:00 AM	0	565	58	566	1189
07:15 AM	0	634	66	589	1289
07:30 AM	0	658	68	573	1299
07:45 AM	0	656	57	581	1294
08:00 AM	0	648	63	437	1148
08:15 AM	0	484	45	303	832
08:30 AM	0	319	29	167	515
08:45 AM	0	175	19	5	199
09:00 AM	0	0	0	0	0
09:15 AM	0	0	0	0	0
09:30 AM	0	0	0	0	0
09:45 AM	0	0	0	0	0
10:00 AM	0	0	0	0	0
10:15 AM	0	0	0	0	0
10:30 AM	0	0	0	0	0
10:45 AM	0	0	0	0	0
11:00 AM	0	0	0	0	0
11:15 AM	0	0	0	0	0
11:30 AM	0	0	0	0	0
11:45 AM	0	0	0	0	0
12:00 PM	0	0	0	0	0
12:15 PM	0	0	0	0	0
12:30 PM	0	0	0	0	0
12:45 PM	0	0	0	0	0
01:00 PM	0	0	0	0	0
01:15 PM	0	0	0	0	0
01:30 PM	0	0	0	0	0
01:45 PM	0	0	0	0	0
02:00 PM	0	0	0	0	0
02:15 PM	0	0	0	0	0
02:30 PM	0	0	0	0	0
02:45 PM	0	0	0	0	0
03:00 PM	0	0	0	0	0
03:15 PM	0	175	12	176	363
03:30 PM	0	339	20	350	709
03:45 PM	0	537	34	562	1133
04:00 PM	0	734	44	802	1580
04:15 PM	0	761	41	834	1636
04:30 PM	0	803	45	810	1658
04:45 PM	0	798	40	765	1603
05:00 PM	0	784	42	674	1500

Cell ref.: 7
AM Peak Hr
07:30 AM - 8:30 AM
Vol. = 1299

Cell ref.: 43
PM Peak Hr
04:30 PM - 5:30 PM
Vol. = 1658

Computations - AM Peak Hour Vols

Project: 58036.00 **Location:** Burlington, VT
Calculated by: ELQ **Date:** 12/11/2019
Checked by: JC **Date:** 1/6/2020

design year 1: 2020
design year 2: 2025

Build Year Growth Factor: 1.03

Enter: 4
Exit: 7

Unadjusted Data

* underlined roadway is N/S

1: Hillside Terrace West / Site Driveway

1
Hillside Terrace West / Site Driveway

	EB	WB	NB	SB	
L					
T			4	5	
R					9
Enter	0	0	4	5	9
Exit	0	0	4	5	9
% Trucks					
Peds					PHF
Peak Hour					

Total Adjust: 1.015

2: Hillside Terrace West / Riverside Ave

2
Hillside Terrace West / Riverside Ave
Tuesday, July 16, 2019

	EB	WB	NB	SB	
L	0	0	4	0	
T	565	676	0	0	
R	5	1	0	0	1251
Enter	570	677	4	0	1251
Exit	565	680	1	5	1251
% Trucks	3%	4%	0%	0%	
Peds	0	0	3	0	PHF
Peak Hour					

Total Adjust: 1.015

3: Hillside Terrace East / Riverside Ave

3
Hillside Terrace East / Riverside Ave
Tuesday, July 16, 2019
7:30 - 8:30 AM

	EB	WB	NB	SB	
L	0	7	26	0	
T	562	651	0	0	
R	11	0	42	0	1299
Enter	573	658	68	0	1299
Exit	604	677	0	18	1299
% Trucks	2%	2%	1%	0%	
Peds	2	7	3	0	PHF
Peak Hour					

Total Adjust: 1.015

110 Riverside Ave Trip Generation

1: Hillside Terrace West / Site Driveway — same as PM

	EB	WB	NB	SB	
L					
T					
R					0
Enter	0	0	0	0	0
Exit	0	0	0	0	0
% Trucks					
Peds	0	0	0	0	PHF
Peak Hour					

2: Hillside Terrace West / Riverside Ave — same as PM

	EB	WB	NB	SB	
L					
T	2	8			
R					10
Enter	2	8	0	0	10
Exit	2	8	0	0	10
% Trucks					
Peds					PHF
Peak Hour					

3: Hillside Terrace East / Riverside Ave — same as PM

	EB	WB	NB	SB	
L					
T	2	8			
R					10
Enter	2	8	0	0	10
Exit	2	8	0	0	10
% Trucks					
Peds					PHF
Peak Hour					

2020 AM No Build

1: Hillside Terrace West / Site Driveway

	EB	WB	NB	SB	
L	0	0	0	0	
T	0	0	4	5	
R	0	0	0	0	9
Enter	0	0	4	5	9
Exit	0	0	4	5	9
% Trucks	0%				
Peds	0	0	0	0	PHF
Peak Hour					

2: Hillside Terrace West / Riverside Ave

	EB	WB	NB	SB	
L	0	0	4	0	
T	576	694	0	0	
R	5	1	0	0	1280
Enter	581	695	4	0	1280
Exit	576	698	1	5	1280
% Trucks	0%				
Peds	0	0	3	0	PHF
Peak Hour					

3: Hillside Terrace East / Riverside Ave

	EB	WB	NB	SB	
L	0	7	26	0	
T	572	669	0	0	
R	11	0	43	0	1329
Enter	584	676	69	0	1329
Exit	615	695	0	18	1329
% Trucks					
Peds	2	7	3	0	PHF
Peak Hour					

Trip Generation

1: Hillside Terrace West / Site Driveway

	EB	WB	NB	SB	
L				4	
T					
R		7			11
Enter	0	7	0	4	11
Exit	4	0	7	0	11
% Trucks					
Peds	0	0	0	0	PHF
Peak Hour					

2: Hillside Terrace West / Riverside Ave

	EB	WB	NB	SB	
L		2	7		
T					
R	2		0		11
Enter	2	2	7	0	11
Exit	0	7	0	4	11
% Trucks					
Peds					PHF
Peak Hour					

3: Hillside Terrace East / Riverside Ave

	EB	WB	NB	SB	
L					
T	0	2			
R					2
Enter	0	2	0	0	2
Exit	0	2	0	0	2
% Trucks					
Peds					PHF
Peak Hour					

Computations - AM Peak Hour Vols

Project:	58036.00	Location:	Burlington, VT
Calculated by:	ELQ	Date:	43810
Checked by:	JC	Date:	43836

2020 AM Build

* underlined roadway is N/S

1: Hillside Terrace West / Site Driveway

1
Hillside Terrace West / Site Driveway

	EB	WB	NB	SB	
L	0	0	0	4	
T	0	0	4	5	
R	0	7	0	0	20
Enter	0	7	4	9	20
Exit	4	0	11	5	20
% Trucks	0%	0%	0%	0%	
Peds	0	0	0	0	PHF
Peak Hour					

2: Hillside Terrace West / Riverside Ave

2
Hillside Terrace West / Riverside Ave
Tuesday, July 16, 2019

	EB	WB	NB	SB	
L	0	2	11	0	
T	576	694	0	0	
R	7	1	0	0	1291
Enter	582	697	11	0	1291
Exit	576	705	1	9	1291
% Trucks	0%	0%	0%	0%	
Peds	0	0	3	0	PHF
Peak Hour					

3: Hillside Terrace East / Riverside Ave

3
Hillside Terrace East / Riverside Ave
Tuesday, July 16, 2019
7:30 - 8:30 AM

	EB	WB	NB	SB	
L	0	7	26	0	
T	572	671	0	0	
R	11	0	43	0	1331
Enter	584	678	69	0	1331
Exit	615	697	0	18	1331
% Trucks	0%	0%	0%	0%	
Peds	2	7	3	0	PHF
Peak Hour					

2025 AM No Build

1: Hillside Terrace West / Site Driveway

	EB	WB	NB	SB	
L	0	0	0	0	
T	0	0	4	5	
R	0	0	0	0	9
Enter	0	0	4	5	9
Exit	0	0	4	5	9
% Trucks	0%	0%	0%	0%	
Peds	0	0	0	0	PHF
Peak Hour					

2: Hillside Terrace West / Riverside Ave

	EB	WB	NB	SB	
L	0	0	4	0	
T	593	715	0	0	
R	5	1	0	0	1318
Enter	598	716	4	0	1318
Exit	593	719	1	5	1318
% Trucks	0%	0%	0%	0%	
Peds	0	0	3	0	PHF
Peak Hour					

3: Hillside Terrace East / Riverside Ave

	EB	WB	NB	SB	
L	0	7	27	0	
T	590	689	0	0	
R	12	0	44	0	1368
Enter	601	696	71	0	1368
Exit	634	716	0	19	1368
% Trucks	0%	0%	0%	0%	
Peds	2	7	3	0	PHF
Peak Hour					

2025 AM Build

1: Hillside Terrace West / Site Driveway

	EB	WB	NB	SB	
L	0	0	0	4	
T	0	0	4	5	
R	0	7	0	0	20
Enter	0	7	4	9	20
Exit	4	0	11	5	20
% Trucks	0%	0%	0%	0%	
Peds	0	0	0	0	PHF
Peak Hour					

2: Hillside Terrace West / Riverside Ave

	EB	WB	NB	SB	
L	0	2	11	0	
T	593	715	0	0	
R	7	1	0	0	1329
Enter	600	718	11	0	1329
Exit	593	726	1	9	1329
% Trucks	0%	0%	0%	0%	
Peds	0	0	3	0	PHF
Peak Hour					

3: Hillside Terrace East / Riverside Ave

	EB	WB	NB	SB	
L	0	7	27	0	
T	590	691	0	0	
R	12	0	44	0	1371
Enter	601	698	71	0	1371
Exit	634	718	0	19	1371
% Trucks	0%	0%	0%	0%	
Peds	2	7	3	0	PHF
Peak Hour					

Computations - PM Peak Hour Vols

Project:	58036.00	Location:	Burlington, VT	Design Year 1:	2020
Calculated by:	ELQ	Date:	12/11/19	Design Year 2:	2025
Checked by:	JC	Date:	1/6/20		

Build Year Growth Factor: 1.03

Enter: 9
Exit: 8

* underlined roadway is N/S

Unadjusted Data

1: Hillside Terrace West / Site Driveway

1
Hillside Terrace West / Site Driveway

	EB	WB	NB	SB	
L					
T			10	5	
R					15
Enter	0	0	10	5	15
Exit	0	0	10	5	15
% Trucks					
Peds					PHF
Peak Hour					

same as below

Total Adjust: 1.015

2: Hillside Terrace West / Riverside Ave

2
Hillside Terrace West / Riverside Ave
Tuesday, July 16, 2019

	EB	WB	NB	SB	
L	0	0	3	0	
T	896	776	0	0	
R	5	0	7	0	1687
Enter	901	776	10	0	1687
Exit	903	779	0	5	1687
% Trucks	0%	0%	0%	0%	
Peds	0	0	11	0	PHF
Peak Hour					

same as below

Total Adjust: 1.015

3: Hillside Terrace East / Riverside Ave

3
Hillside Terrace East / Riverside Ave
Tuesday, July 16, 2019
4:30 - 5:30 PM

	EB	WB	NB	SB	
L	0	40	19	0	
T	785	763	0	0	
R	25	0	26	0	1658
Enter	810	803	45	0	1658
Exit	811	782	0	65	1658
% Trucks	1%	1%	0%	0%	
Peds	2	1	7	0	PHF
Peak Hour					

ATR ID:	D156
ATR/CTC AADT:	15923
DHV (Red Book):	1600
Corr. Count:	1592
DHV Adjust:	1.01
TMC YR adjust:	1.01
Total Adjust:	1.015

110 Riverside Ave Trip Generation

1: Hillside Terrace West / Site Driveway

	EB	WB	NB	SB	
L					
T					
R					0
Enter	0	0	0	0	0
Exit	0	0	0	0	0
% Trucks					
Peds	0	0	0	0	PHF
Peak Hour					

2: Hillside Terrace West / Riverside Ave

	EB	WB	NB	SB	
L					
T	8	5			
R					13
Enter	8	5	0	0	13
Exit	8	5	0	0	13
% Trucks					
Peds					PHF
Peak Hour					

3: Hillside Terrace East / Riverside Ave

	EB	WB	NB	SB	
L					
T	8	5			
R					13
Enter	8	5	0	0	13
Exit	8	5	0	0	13
% Trucks					
Peds					PHF
Peak Hour					

2020 PM No Build

1: Hillside Terrace West / Site Driveway

	EB	WB	NB	SB	
L	0	0	0	0	
T	0	0	10	5	
R	0	0	0	0	15
Enter	0	0	10	5	15
Exit	0	0	10	5	15
% Trucks	0%				
Peds	0	0	0	0	PHF
Peak Hour					

2: Hillside Terrace West / Riverside Ave

	EB	WB	NB	SB	
L	0	0	3	0	
T	918	793	0	0	
R	5	0	7	0	1725
Enter	923	793	10	0	1725
Exit	925	796	0	5	1725
% Trucks	0%				
Peds	0	0	11	0	PHF
Peak Hour					

3: Hillside Terrace East / Riverside Ave

	EB	WB	NB	SB	
L	0	41	19	0	
T	805	780	0	0	
R	25	0	26	0	1696
Enter	830	820	46	0	1696
Exit	831	799	0	66	1696
% Trucks	1%	1%	0%	0%	
Peds	2	1	7	0	PHF
Peak Hour					

Trip Generation

1: Hillside Terrace West / Site Driveway

	EB	WB	NB	SB	
L				9	
T					
R		8			17
Enter	0	8	0	9	17
Exit	9	0	8	0	17
% Trucks					
Peds	0	0	0	0	PHF
Peak Hour					

2: Hillside Terrace West / Riverside Ave

	EB	WB	NB	SB	
L		4	3		
T					
R	5		5		17
Enter	5	4	8	0	17
Exit	5	3	0	9	17
% Trucks					
Peds					PHF
Peak Hour					

3: Hillside Terrace East / Riverside Ave

	EB	WB	NB	SB	
L					
T	5	4			
R					9
Enter	5	4	0	0	9
Exit	5	4	0	0	9
% Trucks					
Peds					PHF
Peak Hour					

Computations - PM Peak Hour Vols

Project:	58036.00	Location:	Burlington, VT
Calculated by:	ELQ	Date:	12/11/19
Checked by:	JC	Date:	1/6/20

* underlined roadway is N/S

2020 PM Build

1: Hillside Terrace West / Site Driveway

1
Hillside Terrace West / Site Drive

	EB	WB	NB	SB	
L	0	0	0	9	
T	0	0	10	5	
R	0	8	0	0	32
Enter	0	8	10	14	32
Exit	9	0	18	5	32
% Trucks	0%	0%	0%	0%	
Peds	0	0	0	0	PHF
Peak Hour					

2: Hillside Terrace West / Riverside Ave

2
Hillside Terrace West / Riverside
Tuesday, July 16, 2019

	EB	WB	NB	SB	
L	0	4	6	0	
T	918	793	0	0	
R	10	0	12	0	1742
Enter	927	797	18	0	1742
Exit	929	799	0	14	1742
% Trucks	0%	0%	0%	0%	
Peds	0	0	11	0	PHF
Peak Hour					

3: Hillside Terrace East / Riverside Ave

3
Hillside Terrace East / Riverside A
Tuesday, July 16, 2019
4:30 - 5:30 PM

	EB	WB	NB	SB	
L	0	41	19	0	
T	809	784	0	0	
R	25	0	26	0	1705
Enter	835	824	46	0	1705
Exit	836	803	0	66	1705
% Trucks	1%	1%	0%	0%	
Peds	2	1	7	0	PHF
Peak Hour					

2025 PM No Build

1: Hillside Terrace West / Site Driveway

	EB	WB	NB	SB	
L	0	0	0	0	
T	0	0	10	5	
R	0	0	0	0	16
Enter	0	0	10	5	16
Exit	0	0	10	5	16
% Trucks	0%	0%	0%	0%	
Peds	0	0	0	0	PHF
Peak Hour					

2: Hillside Terrace West / Riverside Ave

	EB	WB	NB	SB	
L	0	0	3	0	
T	945	816	0	0	
R	5	0	7	0	1777
Enter	950	816	10	0	1777
Exit	952	820	0	5	1777
% Trucks	0%	0%	0%	0%	
Peds	0	0	0	0	PHF
Peak Hour					

3: Hillside Terrace East / Riverside Ave

	EB	WB	NB	SB	
L	0	42	20	0	
T	829	803	0	0	
R	26	0	27	0	1747
Enter	855	845	47	0	1747
Exit	856	823	0	68	1747
% Trucks	1%	1%	0%	0%	
Peds					PHF
Peak Hour					

2025 Build

1: Hillside Terrace West / Site Driveway

	EB	WB	NB	SB	
L	0	0	0	9	
T	0	0	10	5	
R	0	8	0	0	32
Enter	0	8	10	14	32
Exit	9	0	18	5	32
% Trucks	0%	0%	0%	0%	
Peds	0	0	0	0	PHF
Peak Hour					

2: Hillside Terrace West / Riverside Ave

	EB	WB	NB	SB	
L	0	4	6	0	
T	945	816	0	0	
R	10	0	12	0	1794
Enter	955	821	18	0	1794
Exit	957	823	0	14	1794
% Trucks	0%	0%	0%	0%	
Peds	0	0	11	0	PHF
Peak Hour					

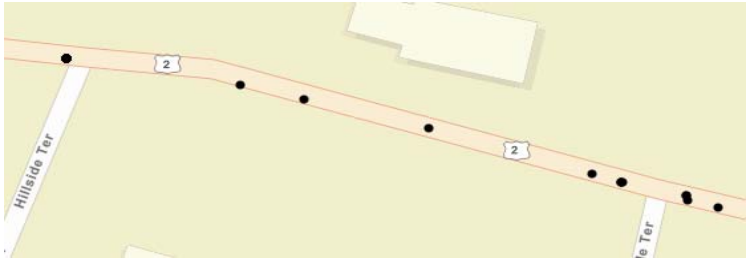
3: Hillside Terrace East / Riverside Ave

	EB	WB	NB	SB	
L	0	42	20	0	
T	834	807	0	0	
R	26	0	27	0	1756
Enter	860	849	47	0	1756
Exit	861	827	0	68	1756
% Trucks	1%	1%	0%	0%	
Peds					PHF
Peak Hour					

Appendix B

Crash Data

Riverside Avenue Crash Data



ObjectID	Crash Date	Address	Crash Type	Collision Direction	Weather	Intersection With	Road Characteristics	Surface Condition
121245	April 4, 2014, 8:28 AM	US-7 Riverside Ave	Property Damage Only	Other - Explain in Narrative	Clear	Hildred Dr	Four-way Intersection	Dry
114907	June 6, 2014, 4:57 PM	Riverside Ave	Property Damage Only	Rear End	Clear	Hillside Ter	T - Intersection	Dry
115699	June 16, 2014, 4:36 PM	Riverside Ave	Property Damage Only	Rear End	Clear	Hillside Terr	Not at a Junction	Dry
112252	July 14, 2014, 5:31 PM	US-7 Riverside Ave	Property Damage Only	Rear End	Rain	Hildred Dr	T - Intersection	Wet
115238	August 22, 2014, 5:51 PM	Riverside Ave	Injury	Rear End	Clear	Hillside Terr	T - Intersection	Dry
114077	November 2, 2014, 3:29 PM	Hillside Ter	Property Damage Only	No Turns, Thru moves only, Broadside ^<	Clear	Riverside Ave	T - Intersection	Dry
128919	March 11, 2015, 3:51 PM	US-7 Riverside Ave	Property Damage Only	No Turns, Thru moves only, Broadside ^<	Clear	Hillside Ter	T - Intersection	Dry
135032	July 8, 2015, 1:10 PM	Riverside Ave	Property Damage Only	Rear End	Clear	Hillside Drive	Not at a Junction	Dry
135866	July 27, 2015, 5:51 PM	US-7 Riverside Ave	Injury	Rear End	Clear	Hillside Ter	Not at a Junction	Dry
135855	July 28, 2015, 5:31 PM	Riverside Ave	Property Damage Only	Rear End	Clear	Hillside Terr	Not at a Junction	Dry
136731	August 18, 2015, 8:48 AM	Riverside Ave	Injury	No Turns, Thru moves only, Broadside ^<	Clear	Hillside Ter	Driveway	Dry
137378	September 1, 2015, 4:46 PM	Riverside Ave	Injury	No Turns, Thru moves only, Broadside ^<	Clear	Hillside Terr	Driveway	Dry
738237	December 29, 2015, 12:52 PM	Hillside Ter	Property Damage Only	Right Turn and Thru, Head On v^--	Freezing Precipitatior	Riverside Ave	T - Intersection	Snow
738909	April 1, 2016, 7:09 PM	Riverside Ave	Injury	Left Turn and Thru, Angle Broadside -->v--	Clear	Hillside Ter	T - Intersection	Dry
731856	April 8, 2016, 12:15 PM	Riverside Ave	Property Damage Only	Left Turn and Thru, Angle Broadside -->v--	Cloudy	Hillside Terr	T - Intersection	Wet
721369	May 13, 2016, 11:02 AM	Hillside Terr	Injury	No Turns, Thru moves only, Broadside ^<	Rain	Riverside Ave	T - Intersection	Wet
809492	August 7, 2017, 4:25 PM	Riverside Ave	Property Damage Only	Opp Direction Sideswipe	Rain	Hillside Ter	Not at a Junction	Wet
1861094	August 31, 2017, 4:53 PM	Riverside Ave	Property Damage Only	Left Turn and Thru, Head On ^v--	Clear	Hillside Ave	T - Intersection	Dry
1859927	September 14, 2017, 1:55 PM	Riverside Ave	Property Damage Only	Rear End	Cloudy	Hillside Ter	Parking Lot	Dry
810819	November 9, 2017, 12:35 AM	Riverside Ave	Injury		Clear	Hillside Ter	Not at a Junction	Dry
1861549	December 6, 2017, 4:28 PM	Riverside Ave	Property Damage Only	Rear End	Clear	Hillside Terr	T - Intersection	Dry
1856443	May 12, 2018, 5:17 PM	Riverside Ave	Injury	Right Turn and Thru, Broadside ^<--	Clear	Hillside Dr	Driveway	Dry
1856858	July 31, 2018, 4:46 PM	Riverside Ave	Property Damage Only			Hillside Terr		
1856991	August 8, 2018, 7:45 AM	Riverside Ave	Property Damage Only			Hillside Ter		
1856659	September 2, 2018, 4:28 PM	Riverside Ave	Property Damage Only	Rear End	Clear	Hillside Ter	Not at a Junction	Dry

Appendix C

Trip Generation Summary

Trip Generation - Riverside Independent Living Facility

Total Site generated trips (not accounting for internal, pass-by, or diverted trips)

Site Land Uses and Descriptions				AM PK HR OF ADJACENT STREET TRAFFIC												PM PK HR OF ADJACENT STREET TRAFFIC											
				directional dist.		average				regression		# trips				directional dist.		average				regression		# trips			
Code	Land Use	Size	Unit	% enter	% exit	# studies	Avg Rate	Std Dev.	Total by Avg	r^2	total by Eq'n	Method Chosen	Total Trips	Entering	Exiting	% enter	% exit	# studies	Avg Rate	Std Dev.	Total by Avg	r^2	total by Eq'n	Method Chosen	Total Trips	Entering	Exiting
1	2	3	4	5	6	7	8	9	10	11	12	13	14			15	16	17	18	19	20	21	22	23	24		
252	Senior Adult Housing - Attached	60	Dwelling Units	35%	65%	11	0.20	0.05	12	0.98	12	Regression	12	4	8	55%	45%	11	0.26	0.08	16	0.96	17	Regression	17	9	8

	total	entering	exiting
AM Peak Hour Total Site Trips:	12	4	8

PM Peak Hour Total Site Trips:	17	9	8

Appendix D

110 Riverside Avenue Traffic Impact Analysis

Traffic Impact Analysis 11-1-2019
Sisters and Brothers Investment Group
110 Riverside Avenue, Burlington, Vermont

Introduction

The purpose of this Traffic Impact Analysis is to update previously identified potential traffic impacts relating to the proposed construction of a 57 unit apartment building on Riverside Avenue in Burlington, Vermont. A Traffic Impact Report was conducted in 2013 for the project, which has not yet been constructed. The project is located on the south side of Riverside Avenue on the site of the former M&H Auto building. Figure 1: *Location Map* illustrates the property location in relation to the street network in the immediate area. Updates included a comparison of 2013 versus current traffic volume, an updated design hour capacity analysis, and updated crash analysis.

Figure 1: *Location Map*

Existing Conditions

Riverside Avenue is classified by VTrans as an Urban Principal Arterial, and is also known as US Route 2/7 in this location. For the purpose of this report, Riverside Ave will be referred to as running east-west. There is a single lane of travel, plus a bike lane, in each direction. The speed limit is posted at 25 miles per hour (mph) and there is an advisory speed curve warning 25 mph posted in advance of the curve in both directions. A shared-use path is located on the north side of the road, and a concrete sidewalk runs along the project's frontage on the south side of the road from the west, terminating and the eastern property boundary. An annual average daily traffic (AADT) volume of 15,900 vehicles per day was recorded in 2018 at automatic traffic recorder (ATR) station S6D156, located 0.5 miles south (or west) of Colchester Avenue. The base AADT used in the 2013 traffic study was 15,000 vpd.

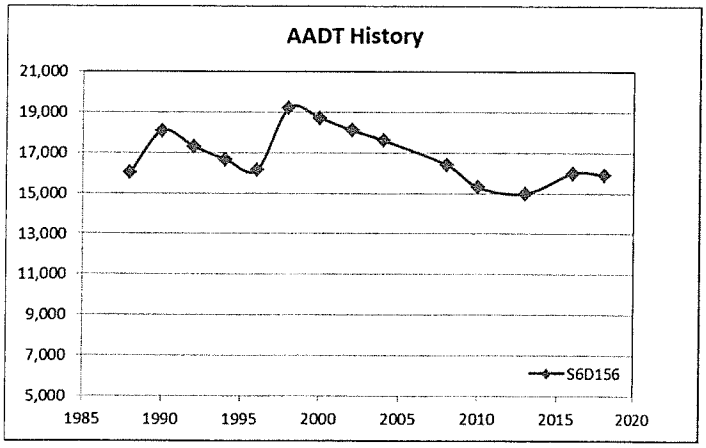
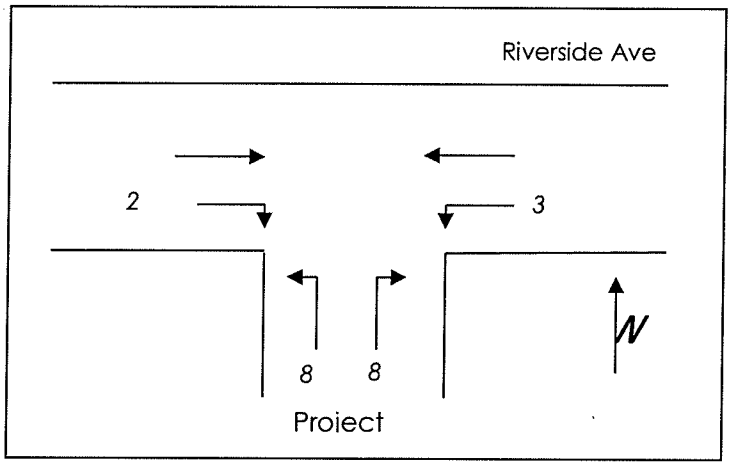


Figure 2: *Riverside Ave Traffic History*



Proposed trip distribution is based primarily on analogy to this short count. Projected traffic volumes in front of the site during morning and evening peak traffic hours are illustrated in the diagrams below.

Figure 3: *AM Peak Traffic Distribution*

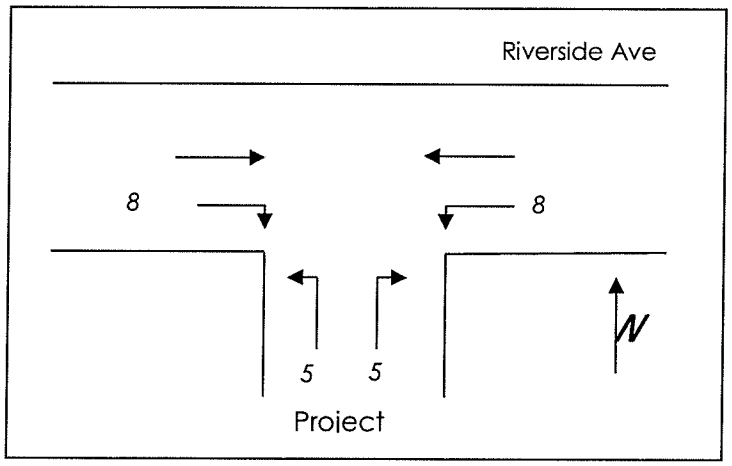


Figure 4: *PM Peak Traffic Distribution*

Level of Service Analysis – Project Driveway

A capacity analysis was performed on the intersection of the project driveway with Riverside Avenue. Because the PM Peak has a significantly higher hourly traffic volume than the AM peak (approx. 1900 vph PM Peak vs during 1150 vph AM Peak), only the PM Peak was analyzed. For analysis purposes, the eastern driveway was modeled with all of the traffic utilizing that entrance. It is anticipated that some of the right turning movements (ingress only) will take place at the western driveway. Level of Service (LOS) was calculated for the HCM2010 methodology. The HCM levels of service used in the analysis are based on control delay of critical movements and are summarized in the table below.

The table below identifies the northbound Riverside Avenue approach to the Barrett Street intersection for current traffic conditions, as identified in the Scoping Study. The distance between the intersection and the easternmost project driveway is approximately 750 feet. There are no conflicting crossings or driveways that are affected by this existing traffic queue, aside from the trailhead parking on the north side of Riverside Ave.

Table 4: *Existing Conditions - Peak Hour Analysis*

	Northbound Riverside Ave (through movement)
Traffic Volume	914 veh
Delay	65.6 s
LOS	E
Queue – 95th Percentile	572 ft
Queue – 50th Percentile	422 ft
Distance to new Drive	750 ft

The increase in traffic of 13 total trips at this intersection during the PM Peak represents less than 1% of total traffic, which is smaller than the limits of daily fluctuation in volume experienced by the intersection system.

Crash History – Project Driveway

The crash history for within a 0.2 mile (approximately 1000 ft) section of Riverside Avenue, centered on the proposed project was reviewed using the VTrans Crash Query. According to this listing, 13 crashes occurred during the five-year period between 2014 and 2018. A crash rate of 2.280 crashes per million vehicle miles (Cr/MVM) was calculated for the corridor. The critical rate calculated for Urban Principal Arterials in Vermont was noted as 7.551 Cr/MVM in the most recent Summary of Statewide Average Crash Rates, resulting in the section not being considered a high crash location.

While this section of the Riverside Ave Corridor would not be considered a High Crash Location, the adjacent intersection system includes the Colchester Ave/Barrett Street intersection, which is identified by VTrans as a High Crash Location.

Sight Distance

Sight distance measurements were taken on Riverside Avenue at the two driveway locations. The table below outlines the measured sight distance and the AASHTO recommended intersection and stopping sight distances.

Table 5: *Sight Distance*

		Measured 3/6/2013	Intersection Sight Distance[1]		Stopping Sight Distance
			Left from Stop	Right From Stop	
East Driveway	To East	342 ft	280 ft	-	155 ft
	To West	312* ft	-	240 ft	155 ft
West Driveway	To East	317 ft	280 ft	-	155 ft
	To West	676 ft	-	240 ft	155 ft

[1] Table 9-6, 9-8; A Policy on the Geometric Design of Highways and Streets, 2011, AASHTO.

intersection), and added striping for the inclusion of bicycle lanes. Several other non-pedestrian intersection improvements are recommended, including new pavement markings, protected left phase for southbound Colchester Avenue, right-turn arrow for southbound right turns, and advance lane designation signs.

The proposed project has a current Act 250 Permit (4C1282, 4C0282-1) in which they have a condition to pay a proportional fair-share monetary contribution toward the Colchester Ave/Riverside Ave/Barrett Street intersection improvements. Their contribution was calculated based on the projects proportion of overall traffic at the intersection and is in the amount of $15,260, which is to be paid prior to commencement of construction. The Burlington City Council endorsed the Short Term and 4-Way intersection improvement alternatives outlined in the report in the spring of 2019 and the City is currently pursuing implementation of these measures.

Summary of Findings

Based on review and analysis of the existing and proposed traffic conditions, the following conclusions are presented.

1. Sisters and Brothers Investment Group is proposing the construction of a 57 unit apartment building to be located at 110 Riverside Avenue in Burlington. The property is located on the south side of the road, approximately 0.15 miles west of Colchester Avenue.

2. The project will have direct access to Riverside Avenue. The eastern driveway will allow both ingress and egress, while the west driveway movements will be limited to right-in only, for direct access to the parking garage. The new driveways will replace two existing curb cuts.

3. According to ITE Trip Generation, 10th Edition, the project is expected to generate approximately 21 new trips during the AM peak, with 5 entering and 16 exiting. During the afternoon peak, the project is estimated to generate 25 trips, 15 entering and 10 exiting. The project is located on a bus line.

4. The additional 25 trips on the road resulting from the proposed project represents 1.5% of total PM design hour traffic on Riverside Avenue. The proposed trip distribution will add 13 trips to the adjacent Riverside/Barrett St intersection, an increase of just over 0.5%.

5. Level of service on Riverside Ave at the new driveway intersection is calculated as a B during the PM peak hours. Level of service at the project access will be an E (40 seconds delay) during the PM peak hour. Excessive queuing is not anticipated at the project driveway due to the low number of exiting vehicles.

6. It is estimated that the proposed project will add approximately 5 vehicles to northbound Riverside Ave at the Barrett Street/Colchester Ave intersection, and 6 vehicle trips to southbound Riverside Ave during the PM Peak. This increase is just over

Appendix E

Intersection Capacity Analysis

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	576	5	0	694	4	0
Future Volume (Veh/h)	576	5	0	694	4	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	576	5	0	694	4	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	1288			325		
pX, platoon unblocked					0.78	
vC, conflicting volume			581		1272	578
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			581		1207	578
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	100
cM capacity (veh/h)			993		157	515

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	581	694	4
Volume Left	0	0	4
Volume Right	5	0	0
cSH	1700	993	157
Volume to Capacity	0.34	0.00	0.03
Queue Length 95th (ft)	0	0	2
Control Delay (s)	0.0	0.0	28.5
Lane LOS			D
Approach Delay (s)	0.0	0.0	28.5
Approach LOS			D

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	572	11	7	669	26	43
Future Volume (vph)	572	11	7	669	26	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	1.00		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	1858		1770	1863	1674	
Flt Permitted	1.00		0.36	1.00	0.98	
Satd. Flow (perm)	1858		670	1863	1674	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	572	11	7	669	26	43
RTOR Reduction (vph)	1	0	0	0	35	0
Lane Group Flow (vph)	582	0	7	669	34	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	
Permitted Phases			6			
Actuated Green, G (s)	55.4		55.4	55.4	16.1	
Effective Green, g (s)	55.4		55.4	55.4	16.1	
Actuated g/C Ratio	0.63		0.63	0.63	0.18	
Clearance Time (s)	5.0		5.0	5.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1169		421	1172	306	
v/s Ratio Prot	0.31			c0.36	c0.02	
v/s Ratio Perm			0.01			
v/c Ratio	0.50		0.02	0.57	0.11	
Uniform Delay, d1	8.8		6.1	9.4	30.0	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	1.5		0.0	0.7	0.7	
Delay (s)	10.3		6.1	10.1	30.7	
Level of Service	B		A	B	C	
Approach Delay (s)	10.3			10.1	30.7	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
6: Hillside Terrace West & Riverside Ave

01/06/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	918	5	0	793	3	7
Future Volume (Veh/h)	918	5	0	793	3	7
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	918	5	0	793	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	1288			325		
pX, platoon unblocked					0.71	
vC, conflicting volume			923		1714	920
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			923		1802	920
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		95	98
cM capacity (veh/h)			740		62	328

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	923	793	10
Volume Left	0	0	3
Volume Right	5	0	7
cSH	1700	740	143
Volume to Capacity	0.54	0.00	0.07
Queue Length 95th (ft)	0	0	6
Control Delay (s)	0.0	0.0	32.0
Lane LOS			D
Approach Delay (s)	0.0	0.0	32.0
Approach LOS			D

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	805	25	41	780	19	26
Future Volume (vph)	805	25	41	780	19	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	1.00		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	1855		1770	1863	1682	
Flt Permitted	1.00		0.21	1.00	0.98	
Satd. Flow (perm)	1855		386	1863	1682	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	805	25	41	780	19	26
RTOR Reduction (vph)	1	0	0	0	21	0
Lane Group Flow (vph)	829	0	41	780	24	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	
Permitted Phases			6			
Actuated Green, G (s)	55.4		55.4	55.4	16.1	
Effective Green, g (s)	55.4		55.4	55.4	16.1	
Actuated g/C Ratio	0.63		0.63	0.63	0.18	
Clearance Time (s)	5.0		5.0	5.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1167		243	1172	307	
v/s Ratio Prot	c0.45			0.42	c0.01	
v/s Ratio Perm			0.11			
v/c Ratio	0.71		0.17	0.67	0.08	
Uniform Delay, d1	10.9		6.8	10.4	29.8	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	3.7		0.3	1.4	0.5	
Delay (s)	14.6		7.1	11.8	30.3	
Level of Service	B		A	B	C	
Approach Delay (s)	14.6			11.6	30.3	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	13.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	576	7	2	694	11	0
Future Volume (Veh/h)	576	7	2	694	11	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	576	7	2	694	11	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	1288			325		
pX, platoon unblocked					0.77	
vC, conflicting volume			583		1278	580
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			583		1213	580
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		93	100
cM capacity (veh/h)			991		155	515

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	583	696	11
Volume Left	0	2	11
Volume Right	7	0	0
cSH	1700	991	155
Volume to Capacity	0.34	0.00	0.07
Queue Length 95th (ft)	0	0	6
Control Delay (s)	0.0	0.1	30.0
Lane LOS		A	D
Approach Delay (s)	0.0	0.1	30.0
Approach LOS			D

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	48.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	572	11	7	671	26	43
Future Volume (vph)	572	11	7	671	26	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	1.00		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	1858		1770	1863	1674	
Flt Permitted	1.00		0.36	1.00	0.98	
Satd. Flow (perm)	1858		670	1863	1674	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	572	11	7	671	26	43
RTOR Reduction (vph)	1	0	0	0	35	0
Lane Group Flow (vph)	582	0	7	671	34	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	
Permitted Phases			6			
Actuated Green, G (s)	55.4		55.4	55.4	16.1	
Effective Green, g (s)	55.4		55.4	55.4	16.1	
Actuated g/C Ratio	0.63		0.63	0.63	0.18	
Clearance Time (s)	5.0		5.0	5.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1169		421	1172	306	
v/s Ratio Prot	0.31			c0.36	c0.02	
v/s Ratio Perm			0.01			
v/c Ratio	0.50		0.02	0.57	0.11	
Uniform Delay, d1	8.8		6.1	9.4	30.0	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	1.5		0.0	0.7	0.7	
Delay (s)	10.3		6.1	10.1	30.7	
Level of Service	B		A	B	C	
Approach Delay (s)	10.3			10.1	30.7	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	7	4	0	4	5
Future Volume (Veh/h)	0	7	4	0	4	5
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	7	4	0	4	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	17	4			4	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	17	4			4	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	999	1080			1618	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	7	4	9
Volume Left	0	0	4
Volume Right	7	0	0
cSH	1080	1700	1618
Volume to Capacity	0.01	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	8.4	0.0	3.2
Lane LOS	A		A
Approach Delay (s)	8.4	0.0	3.2
Approach LOS	A		

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	13.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	918	10	4	793	6	12
Future Volume (Veh/h)	918	10	4	793	6	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	918	10	4	793	6	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	1288			325		
pX, platoon unblocked					0.70	
vC, conflicting volume			928		1724	923
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			928		1818	923
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		90	96
cM capacity (veh/h)			737		60	327

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	928	797	18
Volume Left	0	4	6
Volume Right	10	0	12
cSH	1700	737	131
Volume to Capacity	0.55	0.01	0.14
Queue Length 95th (ft)	0	0	12
Control Delay (s)	0.0	0.2	36.7
Lane LOS		A	E
Approach Delay (s)	0.0	0.2	36.7
Approach LOS			E

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	810	25	41	784	19	26
Future Volume (vph)	810	25	41	784	19	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	1.00		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	1855		1770	1863	1682	
Flt Permitted	1.00		0.20	1.00	0.98	
Satd. Flow (perm)	1855		381	1863	1682	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	810	25	41	784	19	26
RTOR Reduction (vph)	1	0	0	0	21	0
Lane Group Flow (vph)	834	0	41	784	24	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	
Permitted Phases			6			
Actuated Green, G (s)	55.4		55.4	55.4	16.1	
Effective Green, g (s)	55.4		55.4	55.4	16.1	
Actuated g/C Ratio	0.63		0.63	0.63	0.18	
Clearance Time (s)	5.0		5.0	5.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1167		239	1172	307	
v/s Ratio Prot	c0.45			0.42	c0.01	
v/s Ratio Perm			0.11			
v/c Ratio	0.71		0.17	0.67	0.08	
Uniform Delay, d1	11.0		6.8	10.4	29.8	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	3.8		0.3	1.5	0.5	
Delay (s)	14.7		7.1	11.9	30.3	
Level of Service	B		A	B	C	
Approach Delay (s)	14.7			11.7	30.3	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	8	10	0	9	5
Future Volume (Veh/h)	0	8	10	0	9	5
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	8	10	0	9	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	33	10			10	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	33	10			10	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			99	
cM capacity (veh/h)	975	1071			1610	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	8	10	14
Volume Left	0	0	9
Volume Right	8	0	0
cSH	1071	1700	1610
Volume to Capacity	0.01	0.01	0.01
Queue Length 95th (ft)	1	0	0
Control Delay (s)	8.4	0.0	4.7
Lane LOS	A		A
Approach Delay (s)	8.4	0.0	4.7
Approach LOS	A		

Intersection Summary			
Average Delay	4.1		
Intersection Capacity Utilization	17.4%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
6: Hillside Terrace West & Riverside Ave

01/06/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	593	5	0	715	4	0
Future Volume (Veh/h)	593	5	0	715	4	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	593	5	0	715	4	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	1288			325		
pX, platoon unblocked					0.76	
vC, conflicting volume			598		1310	596
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			598		1252	596
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	100
cM capacity (veh/h)			979		145	504

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	598	715	4
Volume Left	0	0	4
Volume Right	5	0	0
cSH	1700	979	145
Volume to Capacity	0.35	0.00	0.03
Queue Length 95th (ft)	0	0	2
Control Delay (s)	0.0	0.0	30.5
Lane LOS			D
Approach Delay (s)	0.0	0.0	30.5
Approach LOS			D

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	590	12	7	689	27	44
Future Volume (vph)	590	12	7	689	27	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	1.00		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	1858		1770	1863	1675	
Flt Permitted	1.00		0.35	1.00	0.98	
Satd. Flow (perm)	1858		647	1863	1675	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	590	12	7	689	27	44
RTOR Reduction (vph)	1	0	0	0	36	0
Lane Group Flow (vph)	601	0	7	689	35	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	
Permitted Phases			6			
Actuated Green, G (s)	55.4		55.4	55.4	16.1	
Effective Green, g (s)	55.4		55.4	55.4	16.1	
Actuated g/C Ratio	0.63		0.63	0.63	0.18	
Clearance Time (s)	5.0		5.0	5.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1169		407	1172	306	
v/s Ratio Prot	0.32			c0.37	c0.02	
v/s Ratio Perm			0.01			
v/c Ratio	0.51		0.02	0.59	0.11	
Uniform Delay, d1	8.9		6.1	9.6	30.0	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	1.6		0.0	0.8	0.8	
Delay (s)	10.5		6.1	10.3	30.8	
Level of Service	B		A	B	C	
Approach Delay (s)	10.5			10.3	30.8	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	11.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	48.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	945	5	0	816	3	7
Future Volume (Veh/h)	945	5	0	816	3	7
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	945	5	0	816	3	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	1288			325		
pX, platoon unblocked					0.69	
vC, conflicting volume			950		1764	948
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			950		1882	948
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		94	98
cM capacity (veh/h)			723		54	316

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	950	816	10
Volume Left	0	0	3
Volume Right	5	0	7
cSH	1700	723	128
Volume to Capacity	0.56	0.00	0.08
Queue Length 95th (ft)	0	0	6
Control Delay (s)	0.0	0.0	35.4
Lane LOS			E
Approach Delay (s)	0.0	0.0	35.4
Approach LOS			E

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	829	26	42	803	20	27
Future Volume (vph)	829	26	42	803	20	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	1.00		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	1855		1770	1863	1682	
Flt Permitted	1.00		0.19	1.00	0.98	
Satd. Flow (perm)	1855		359	1863	1682	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	829	26	42	803	20	27
RTOR Reduction (vph)	1	0	0	0	22	0
Lane Group Flow (vph)	854	0	42	803	25	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	
Permitted Phases			6			
Actuated Green, G (s)	55.4		55.4	55.4	16.1	
Effective Green, g (s)	55.4		55.4	55.4	16.1	
Actuated g/C Ratio	0.63		0.63	0.63	0.18	
Clearance Time (s)	5.0		5.0	5.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1167		226	1172	307	
v/s Ratio Prot	c0.46			0.43	c0.01	
v/s Ratio Perm			0.12			
v/c Ratio	0.73		0.19	0.69	0.08	
Uniform Delay, d1	11.2		6.8	10.6	29.8	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	4.1		0.4	1.7	0.5	
Delay (s)	15.3		7.2	12.3	30.3	
Level of Service	B		A	B	C	
Approach Delay (s)	15.3			12.0	30.3	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	593	7	2	715	11	0
Future Volume (Veh/h)	593	7	2	715	11	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	593	7	2	715	11	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	1288			325		
pX, platoon unblocked					0.76	
vC, conflicting volume			600		1316	596
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			600		1258	596
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		92	100
cM capacity (veh/h)			977		144	503

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	600	717	11
Volume Left	0	2	11
Volume Right	7	0	0
cSH	1700	977	144
Volume to Capacity	0.35	0.00	0.08
Queue Length 95th (ft)	0	0	6
Control Delay (s)	0.0	0.1	32.2
Lane LOS		A	D
Approach Delay (s)	0.0	0.1	32.2
Approach LOS			D

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	590	12	7	691	27	44
Future Volume (vph)	590	12	7	691	27	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	1.00		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	1858		1770	1863	1675	
Flt Permitted	1.00		0.35	1.00	0.98	
Satd. Flow (perm)	1858		647	1863	1675	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	590	12	7	691	27	44
RTOR Reduction (vph)	1	0	0	0	36	0
Lane Group Flow (vph)	601	0	7	691	35	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	
Permitted Phases			6			
Actuated Green, G (s)	55.4		55.4	55.4	16.1	
Effective Green, g (s)	55.4		55.4	55.4	16.1	
Actuated g/C Ratio	0.63		0.63	0.63	0.18	
Clearance Time (s)	5.0		5.0	5.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1169		407	1172	306	
v/s Ratio Prot	0.32			c0.37	c0.02	
v/s Ratio Perm			0.01			
v/c Ratio	0.51		0.02	0.59	0.11	
Uniform Delay, d1	8.9		6.1	9.6	30.0	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	1.6		0.0	0.8	0.8	
Delay (s)	10.5		6.1	10.4	30.8	
Level of Service	B		A	B	C	
Approach Delay (s)	10.5			10.3	30.8	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	11.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	48.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	7	4	0	4	5
Future Volume (Veh/h)	0	7	4	0	4	5
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	7	4	0	4	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	17	4			4	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	17	4			4	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	999	1080			1618	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	7	4	9
Volume Left	0	0	4
Volume Right	7	0	0
cSH	1080	1700	1618
Volume to Capacity	0.01	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	8.4	0.0	3.2
Lane LOS	A		A
Approach Delay (s)	8.4	0.0	3.2
Approach LOS	A		

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	13.8%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
6: Hillside Terrace West & Riverside Ave

01/31/2020

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	935	10	4	816	6	12
Future Volume (Veh/h)	935	10	4	816	6	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	935	10	4	816	6	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	1288			325		
pX, platoon unblocked					0.69	
vC, conflicting volume			945		1764	940
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			945		1884	940
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		89	96
cM capacity (veh/h)			726		53	320

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	945	820	18
Volume Left	0	4	6
Volume Right	10	0	12
cSH	1700	726	120
Volume to Capacity	0.56	0.01	0.15
Queue Length 95th (ft)	0	0	13
Control Delay (s)	0.0	0.2	40.4
Lane LOS		A	E
Approach Delay (s)	0.0	0.2	40.4
Approach LOS			E

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	834	26	42	807	20	27
Future Volume (vph)	834	26	42	807	20	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00	
Frt	1.00		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	1855		1770	1863	1682	
Flt Permitted	1.00		0.19	1.00	0.98	
Satd. Flow (perm)	1855		353	1863	1682	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	834	26	42	807	20	27
RTOR Reduction (vph)	1	0	0	0	22	0
Lane Group Flow (vph)	859	0	42	807	25	0
Turn Type	NA		Perm	NA	Prot	
Protected Phases	2			6	4	
Permitted Phases			6			
Actuated Green, G (s)	55.4		55.4	55.4	16.1	
Effective Green, g (s)	55.4		55.4	55.4	16.1	
Actuated g/C Ratio	0.63		0.63	0.63	0.18	
Clearance Time (s)	5.0		5.0	5.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1167		222	1172	307	
v/s Ratio Prot	c0.46			0.43	c0.01	
v/s Ratio Perm			0.12			
v/c Ratio	0.74		0.19	0.69	0.08	
Uniform Delay, d1	11.3		6.9	10.7	29.8	
Progression Factor	1.00		1.00	1.00	1.00	
Incremental Delay, d2	4.2		0.4	1.7	0.5	
Delay (s)	15.4		7.3	12.4	30.3	
Level of Service	B		A	B	C	
Approach Delay (s)	15.4			12.1	30.3	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	14.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	56.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	8	10	0	9	5
Future Volume (Veh/h)	0	8	10	0	9	5
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	8	10	0	9	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	33	10			10	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	33	10			10	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			99	
cM capacity (veh/h)	975	1071			1610	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	8	10	14
Volume Left	0	0	9
Volume Right	8	0	0
cSH	1071	1700	1610
Volume to Capacity	0.01	0.01	0.01
Queue Length 95th (ft)	1	0	0
Control Delay (s)	8.4	0.0	4.7
Lane LOS	A		A
Approach Delay (s)	8.4	0.0	4.7
Approach LOS	A		

Intersection Summary			
Average Delay	4.1		
Intersection Capacity Utilization	17.4%	ICU Level of Service	A
Analysis Period (min)	15		

Memorandum

To: Ben Avery, BlackRock

Date: November 18, 2020

Project #: 58036

From: Jenn Conley, PE, PTOE

Re: Riverside Residential Transportation Demand Management (TDM)

VHB has reviewed the City ordinance regarding creation of a Transportation Demand Management (TDM) program in light of the proposed approximately 60 unit senior living residential facility proposed on Riverside Avenue. Based on the ordinance, any project that creates more than 10 dwelling units is required to create a TDM program.

According to the City of Burlington's Comprehensive Development Ordinance, the purpose of a TDM program is to reduce parking demand, car ownership, and vehicle miles traveled while increasing transit use and non-motorized travel. The proposed project is a residential land use that generates fewer trips than typical residential developments based on the demographic. Based on ITE Trip Generation data, over the course of the day, senior housing generates approximately half the number of trips that similar non-age restricted housing generates. During the commuter peak periods, that reduction is even more significant. Therefore, by definition this development is meeting the goals of a TDM program when compared to a similar residential development. In addition to a lower trip generation rate for this land use, other facilities operated by this owner include trip reducing amenities such as a twice a week grocery pickup via Hannaford to-go to reduce individual resident trips to the grocery store as well as other trip reduction strategies outlined below.

VHB offers the following comments and recommendations in regard to a TDM program at the proposed site based on City requirements.

(a) The ordinance requires creation of a Transportation Coordinator who will be responsible for providing residents and employees with information on TDM strategies during an annual meeting as well as on request. In addition, the Transportation Coordinator is required to prepare and disseminate an annual travel survey of residents and employees and provide record keeping to the City. A transportation related role is currently being performed by the Director of Residential Life at other facilities. This position is typically responsible for arranging rides for residents with Special Services Transportation Agency (SSTA) whom seniors use to travel to and from doctor appointments and other services (grocery store, haircuts, visiting family, etc). Although not a fixed route service, SSTA does provide a transit option that is demand based and does reduce trips by combining similar routes. **For the Riverside site, it is recommended that the Director of Residential Life perform the services of the Transportation Coordinator.**

40 IDX Drive, Building 100
Suite 200
South Burlington, Vermont 05403

(b) TDM strategies.

The ordinance requires GMT transit passes be provided to all tenants for free for the first year of occupancy and at a minimum discount of 50% for each year afterward. Because many residents will be using the services of SSTA over GMT, this strategy may not be a perfect match for this site. Based on some research with Chittenden Area Transportation Management Association (CATMA), membership in that organization would provide an option to provide transit access to residents via a pass program that gets billed as the pass is used instead of at a monthly pass fee. **Because these residents are not as likely to use a GMT fixed service as often as another residential project, the CATMA pay as you go transit pass program would be recommended.**

The ordinance requires offering a car share membership to all tenants and employees for free for the first two years of occupancy, and at a minimum discount of 50% for every year afterward. Later in the list there is a requirement to provide car share spaces on site at a rate of 1 space for every 20 residential units. As you know with this type of senior housing development, residents fall into two categories: residents that are very connected to their cars and resistant to giving them up and residents that are car free. This demographic may not be as comfortable with a car share; however, it is recommended that car share services and placement of a vehicle be considered for this site. Based on discussion with Car Share Vermont, this location would likely be similar to other locations where there is not anticipated to be enough demand to support placement of a vehicle.

Although this site is not expected to have suitable demand to maintain a car share service, to encourage resident's adoption and use, **it is recommended that building owner provide financial guarantees to Car Share Vermont for the placement of a vehicle on site for one year starting in year two of operation.** This will allow the Transportation Coordinator to promote this amenity in advance to the residents so that they can understand the program and potentially lend more success to the program once implemented. **If at the end of one year of operation, the car is still not used enough to justify unsubsidized placement, Car Share Vermont may remove the vehicle. Alternatively, it is also recommended that if Car Share Vermont requests additional spaces to meet demand, those be provided.**

The third TDM Strategy is, in lieu of the two items above, to join a TMA that offers equivalent or better strategies to the transit passes and car share membership outlined above. A discussion with CATMA reveals that their services do not cover car share placement or minimum lease agreements, however, CATMA can assist with the transit subsidy requirements and reporting requirements.

(c) Parking Management

Parking Utilization studies need to be conducted annually. **It is recommended that the Transportation Coordinator collect the parking utilization information.**

The cost of parking shall be unbundled from residential leases and made available at a market rate. **Based on discussions with the developer, parking can be unbundled, but would not be sold at market rates due to the unique mobility and financial needs of seniors.**

Priority parking spaces closest to the primary building entrance need to be provided for handicapped parking, bicycle, scooter and motorcycle spaces, and car share (as indicated above) for residential projects. **As outlined above, car share spaces will be assigned to priority spaces as demand dictates (with a minimum of one space for a minimum of two years). Handicapped spaces as well as bicycle, scooters and motorcycles spaces will also be provided.**

(d) TDM Agreement

It is recommended that the project provide the necessary TDM commitment as provided by the Administrative Officer.

Department of Permitting & Inspections
Zoning Division
645 Pine Street
Burlington, VT 05401
Telephone:(802) 865-7188
(802) 865-7195 (FAX)
(802) 865-7142 (TTY)

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

MEMORANDUM

To: Development Review Board
From: Ryan Morrison, Associate Planner
Date: September 15, 2020
RE: ZP20-0076CA; 400 North 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 <u>MUST</u> ATTEND THE MEETING.

File: ZP21-0076CA
Location: 400 North Street
Zone: RL **Ward**: 1E
Date application accepted: July 21, 2020
Applicant/ Owner: William McKenna
Parking District: Neighborhood
Request: Remove existing garage, construct a new, detached accessory dwelling unit structure and associated driveway, and reconfigure existing parking area serving the existing residence.

Applicable Regulations:
Article 4 (Zoning Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Review Standards), Article 8 (Parking)

Background:

- **Zoning Permit**; build an addition to the existing accessory building. July 1973
- **Zoning Permit 82-039**; replace a 10'x10' section of flat roof with a pitched roof. July 1982
- **Zoning Permit 99-504**; rear addition to the existing single family home. May 1999.

Overview:
The applicant proposes to remove an existing garage, reconfigure the existing driveway/parking area serving the existing single family home, and construct a detached accessory dwelling unit (ADU) with an associated driveway off of Dan's Court. No changes are proposed to the existing, historically contributing single family structure.

Recommendation: **<u>Continued review and deferral of action pending approval of an Erosion Prevention and Sediment Control plan and a Stormwater Plan.</u>**

I. <u>Findings</u>

<u>Article 4: Zoning Maps and Districts</u>
Section 4.4.5 Residential Districts
(a) Purpose

1. The Residential Low Density (RL) district is intended primarily for low-density residential development in the form of single detached dwellings and duplexes. The district is typically characterized by a compact and cohesive residential development pattern reflective of the respective neighborhood's development history.
An accessory dwelling unit to an existing single family residence is proposed. **Affirmative finding**

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

Table 4.4.5-1 Minimum Lot Size and Frontage: RL, RL-W, RM and RM-W.
Single detached dwelling, RL Minimum 60' frontage, RL Minimum 6,000 sq ft lot size.
400 North Street is a long, narrow, 5,100 sq ft lot, with approximately 31 feet of frontage along North Street, and 166 ft of frontage along Dan's Court, an unaccepted city street. Unaccepted streets are city owned and generally maintained in the winter months for emergency vehicle access. The property size is considered legally pre-existing, non-conforming. **Affirmative finding**

Table 4.4.5-2 Base Residential Density
Not applicable per Section 5.4.5 (a) below.

Table 4.4.5-3 Residential District Dimensional Standards

Zoning District	**Max. Lot Coverage**[1]	**Setbacks**[1, 3, 4, 5, 6]			
		Front	**Side**	**Rear**	
RL; WRL	35%	**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'	**Min:** 25% of lot depth but in no event less than 20' **Max required**: 75-feet	Height: 35-feet
400 North Street	Existing lot coverage totals 51% (based on ZP99-504). The applicant notes existing coverage to be 50%. The current proposal will result in a lot coverage total of 57.4%. Sec. 5.2.3(b)(10) allows up to an additional 650 sf of lot coverage above legally existing, non-conforming lot coverage for lot area to be occupied by an ADU.	An accessory structure on 164 North Willard St. has a setback of approx. 1.5 ft from Dan's Court. While this is an accessory structure to a triplex fronting on North Willard St., it is the only structure to base a front yard setback off Dan's Court for	Based off the 31 ft of North St. frontage, and the 166 ft of Dan's Court frontage, side yard setbacks are 3.1 ft and 16.6 ft respectively. The ADU will be setback 5+ ft from the west side yard property line, and 20+ ft from the north	No rear yard property line exists. The property has two front property lines and two side yard property lines.	20 ft to the roof ridge.

		the proposed ADU. The ADU will have a 6 ft front yard setback off Dan's Court.	side yard property line.		

Affirmative finding

(c) Permitted and Conditional Uses
An accessory dwelling unit to a single family dwelling is allowed by right. **Affirmative finding**

(d) District Specific Regulations
1. Setbacks
A. Encroachment for residential driveways
Not applicable.

B. Encroachment into the Waterfront Setback
Not applicable.

2. Height
No change. Not applicable.

3. Lot Coverage
A. Exceptions for Accessory Residential Features
No change. Not applicable.

4. Accessory Residential Structures and Uses
A. Accessory structures or buildings shall meet the dimensional requirement set forth in the district in which they are located pursuant to Sec. 4.4.5(b) of this Article and related requirements in Art 5, Part 2.
See Table 4.4.5-3 above and Article 5 below.

5. Residential Density
A. Additional Unit to multi-family
Not applicable.

B. Additions to Existing Residential Structures
No additions are proposed. Not applicable.

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.
No changes to the single family dwelling are proposed. It may be occupied only by a family as defined in Article 13 of the CDO.
Affirmative finding as conditioned

6. Uses
A. Exception for Existing Neighborhood Commercial Uses
Not applicable.

7. Residential Development Bonuses
Not applicable.

<u>Article 5: Citywide General Regulations</u>
Part 2: Dimensional Requirements
Section 5.2.2 Required Frontage or Access
400 North Street has 31 feet of frontage along North Street and 166 ft along Dan's Court.
Affirmative finding

Section 5.2.3 Lot Coverage Requirements
(b) Exceptions to Lot Coverage
(10) The DRB may grant an exemption from maximum lot coverage limits for up to 650 sq. ft. of the lot area occupied by an ADU. To grant such an exception, the DRB must find that the existing lot coverage has been lawfully created, and that the proposed location, site design, and improvements will enable on-site management of the first one inch of stormwater runoff from the lot area of the ADU exceeding the applicable lot coverage limit, and will not have undue adverse impact on public rights of way based on the review of the DPW Stormwater Program Manager.
The RL zoning district limits lot coverage to 35%, plus a 10% bonus for features such as walkways, decks, patios, open porches, etc. Zoning Permit 99-504 documented existing and proposed lot coverage for the property at 51%. The submitted plans indicate an existing lot coverage of 50% (2,540 sf). The proposal involves removing 534 sf of existing lot coverage (garage, patio, and some driveway/parking area), while adding 923 sf of new lot coverage, for an end result of 2,929 sf. This results in an increase of 389 sf of new lot coverage for the ADU, which is less than the 650 sf allowed in instances of pre-existing nonconforming lot coverage.

The applicant has submitted an Erosion Prevention and Sediment Control plan, as well as a stormwater plan, to the City's Stormwater Program Manager. Public comments/concerns have been submitted to the City regarding stormwater runoff and its effects on neighboring properties and structures, particularly considering a new curb cut on Dan's Court for the proposed driveway and walkway. The property slopes downward to the west, and concern over stormwater entering and damaging adjacent property is present. The plans are still under review, and in accordance with this section, the DRB must find that the site design and improvements will enable on-site management of the first one inch of stormwater runoff from the lot area of the ADU exceeding the applicable lot coverage limit and will not have an undue adverse impact on public rights of way based on the review of the DPW Stormwater Program Manager. **No finding possible**

Section 5.2.4 Buildable Area Calculation
Not applicable.

Section 5.2.5 Setbacks
(a) Setbacks Required
See Table 4.4.5-3 above.

(b) Exceptions to Yard Setback Requirements
(5) <u>Accessory Structures and Parking Areas.</u> Accessory structures no more than fifteen (15) in height, parking areas, and driveways may project into a required side and rear yard setback

provided they are no less than five (5) feet from a side or rear property line where such a setback is required.
The proposed ADU is just below 15 ft in height, as measured to the midpoint of the rise between the roofplate and the ridge of the highest gable, and therefore qualifies for this setback exception. However, its placement will conform to the standard side yard setback requirements of Table 4.4.5-3. The new driveway is proposed to be setback 5 ft from the north side yard property line. **Affirmative finding**

Section 5.2.6 Building Height Limits
The height of the new ADU structure is 20 ft, measured to the roof ridge, and is well under the 35 ft height maximum allowance. **Affirmative finding**

Section 5.2.7 Density and Intensity of Development Calculations
Not applicable per Sec. 5.4.5 (a) below.

Section 5.4.5 Accessory Dwelling Units
(a) Accessory Units, General Standards/Permitted Uses
Where there is a principal structure on a lot which exists as an owner-occupied single family residence, one accessory dwelling unit, that is located within or appurtenant to such single family dwelling, shall be allowed as a permitted use if the provisions of this subsection are met. An accessory dwelling unit means an efficiency or one bedroom apartment that is clearly subordinate to the principal dwelling, and has facilities and provisions for independent living, including sleeping, food preparation, and sanitation. No accessory unit shall be inhabited by more than two adult occupants. An accessory unit shall not be counted as a dwelling unit for the purposes of density calculation.
The proposed one-bedroom accessory dwelling unit will be located in an appurtenant structure. The floor plan identifies a bathroom, kitchen, living and sleeping space.

Additionally, there must be compliance with all the following:

1. *The property has sufficient wastewater capacity as certified by the Department of Public Works; and*
   The applicant will be required to secure a letter of adequate capacity from DPW for water and sewer services. **Affirmative finding as conditioned**

2. *The unit does not consist of more than 800 sq. ft. or 30 percent (30%) of the gross floor area of the principal home, whichever is greater; and*
   The ADU will total 646 sf in size, less than the 800 sf maximum allowance. **Affirmative finding**

3. *Applicable setback and coverage requirements are met;*
   See Table 4.4.5-3 and Sec. 5.2.3 (b) (10) above. **Affirmative finding**

4. *A deed or instrument for the property shall be entered into the land records by the owner containing a reference to the permit granting the accessory unit prior to the issuance of the certificate of occupancy for the unit. Such reference shall identify the permit number and*

note that the property is subject to the permit and its terms and conditions including owner occupancy. No certificate of occupancy shall be issued for the unit unless the owner has recorded such a notice.

A condition of approval will ensure this. **Affirmative finding as conditioned**

(c) Discontinuance of Accessory Units

Approval of an accessory dwelling unit is contingent upon owner occupancy of either the principal or accessory dwelling unit as a primary residence. For purposes of this section, owner-occupancy means that, after the creation of the accessory unit all individuals listed on the deed for the property must reside in the principal unit or in the accessory unit. If neither the principal unit nor the accessory unit is owner-occupied as a primary residence, the approval for the accessory dwelling unit is void and the kitchen of the accessory dwelling unit must be removed within 90 days with the entirety of the property being occupied as a single unit. When an accessory unit that is the result of additional square footage and/or a new accessory structure is proposed to be removed, revised floor plans and a revised site plan shall be required to be submitted for review and approval. Furthermore, where additional square footage is added to a single family home for purposes of creating an accessory unit and the accessory unit is at any point discontinued, none of the additional square footage shall be eligible for the purposes of increasing the number of unrelated adults that may be allowed to inhabit the property.

The property is owner occupied and shall continue to be so in order for the ADU to remain compliant. **Affirmative finding**

Section 5.4.8 Historic Buildings and Sites

Not applicable. While the existing home is listed on the State Register, the garage proposed for removal is not.

Section 5.4.9 Brownfield Remediation

Not applicable

Section 5.5.1 Nuisance Regulations

Nothing within the application suggests non-compliance with applicable nuisance regulations and performance standards per the requirement of the Burlington Code of Ordinances. **Affirmative finding**

Section 5.5.2 Outdoor Lighting

The plans do not indicate any outdoor light fixtures and will need to. The applicant will have to revise the plans to show the location of all exterior light fixtures, and submit spec sheets for said light fixtures for staff review and approval. **Affirmative finding as conditioned**

Section 5.5.3 Stormwater and Erosion Control

An Erosion Prevention and Sediment Control (EPSC) plan and a stormwater plan have been submitted to the Stormwater Program Manager for review and approval. As noted above, there is neighbor concern regarding the proposed development's adverse impact of stormwater on their property and structure(s). The EPSC and stormwater plan should be approved prior to the DRB issuing a decision on the application. **No finding possible**

Section 5.5.4 Tree Removal
Not applicable.

<u>Article 6: Development Review Standards</u>
Part 1: Land Division Design Standards
No land division is proposed. Not applicable.

Part 2: Site Plan Design Standards
Sec. 6.2.2 Review Standards

(a) Protection of Important Natural Features:

The property contains no important natural features. The ADU structure and driveway will locate on existing lawn space. After the garage and portions of existing driveway/parking that currently serve the existing single family residence are removed, those spaces will be restored to yard area. **Affirmative finding**

(b) Topographical Alterations:

There will be some minor cut/fill and regrading to accommodate the new ADU and driveway. An EPSC plan and a stormwater plan are currently under review by the Stormwater Program Manager, and should be approved prior to a DRB decision. **No finding possible**

(c) Protection of Important Public Views:
There are no protected views from or through this property. 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).

Not applicable. The principal structure at 400 North Street is listed as a contributing resource on the State of Vermont Historic Register. No alterations to this structure are proposed. The garage proposed for removal is not included on the historic listing, and is therefore not subject to the historic preservation guidelines of Sec. 5.4.8.

(e) Supporting the Use of Renewable Energy Resources:

No part of this application will preclude use of wind, solar, water, geothermal or other renewable energy resource. **Affirmative finding as conditioned**

(f) Brownfield Sites:
None identified at this location. 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.

As noted above, approval of this zoning permit is contingent on meeting the stormwater control requirements of Chapter 26 of the Burlington Code of Ordinances – Wastewater, Stormwater, and Pollution Control. There is concern over stormwater adversely impacting neighboring properties/structures. Compliance with Chapter 26 BCO should ensure that stormwater is contained onsite and does not impact neighboring properties.

There is additional concern over snow shed from the roof of the ADU – how it will likely cause damage to a neighboring structure. The DRB may want to consider requiring rooftop snow guards to mitigate snow shed from the roof.

The plans indicate entrance covers to protect from the elements. The site plan shows there to be yard space beyond the new driveway for snow storage. **No finding possible**

(h) Building Location and Orientation:

This new accessory structure will orient in a similar fashion with that of the neighboring accessory structure at 164 North Willard Street which sits approximately 2.5' ft from the edge of Dan's Court, thus maintaining a similar street edge. This accessory structure will be located in such a way so as to be secondary and subordinate in scale and design to the principal structure. **Affirmative finding**

(i) Vehicular Access:

A new driveway for the ADU is proposed off of Dan's Court which will provide one parking space. **Affirmative finding**

(j) Pedestrian Access:

While there is no sidewalk along the west side of Dan's Court, the plans indicate a walkway alongside the driveway to Dan's Court which will provide pedestrian access to the ADU. **Affirmative finding**

(k) Accessibility for the Handicapped:

ADA access is administered by the building inspector's office. None is proposed or required in this instance. **Affirmative finding**

(l) Parking and Circulation:

Parking for the existing single family residence will continue to be adequate for the 2-space minimum. The proposal calls for a new driveway/parking space for the ADU directly off Dan's Court. A new curb cut will be required and the applicant will be tasked with obtaining a permit from the Department of Public Works. **Affirmative finding**

(m) Landscaping and Fences:

No landscape plan has been submitted. There is currently a cedar hedge running along the frontage (Dan's Court) that will provide considerable screening. No new fencing is proposed. **Affirmative finding**

(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.

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 place 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 identify an electrical service box on the west elevation (street side) and a wall hung condensing unit on the east elevation. The cedar hedge that will remain will provide an adequate screen for the electrical service box. The plans will need to be updated to show any and all other outdoor mechanical units, mailboxes, trash/recycling bins, and any other new onsite utilities. **Affirmative finding as conditioned.**

Part 3: Architectural Design Standards

Sec. 6.3.2 Review Standards

(a) Relate development to its environment:

1. Massing, Height and Scale:

The proposed ADU structure will be similar in massing, height, and scale with other accessory structures along Dan's Court. **Affirmative finding**

2. Roofs and Rooflines.

The gable roof will run parallel with Dan's Court. Gable roofs are very common rooftops of homes in the immediate area. **Affirmative finding**

3. Building Openings

The ADU structure will have 3 window openings on the east and west side, one sliding door on the south side, and an entrance door and picture/casement window combo on the north side. **Affirmative finding**

(b) Protection of Important Architectural Resources:

Not applicable.

(c) Protection of Important Public Views:

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

(d) Provide an active and inviting street edge:

While the street facing façade will be one long wall (38 ft) with a few window openings, the existing cedar hedge that will remain will continue to provide a visible screen from Dan's Court. The front entrance is not oriented in a street-facing manner, and since this is not the primary structure on the property, it isn't required to be. A walkway to this building entrance has been included to connect to the street. **Affirmative 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.

The plans indicate corrugated metal siding, roofing, and trim for the entire structure. Spec sheets for the windows and doors have not been provided and will be needed. **Affirmative finding as conditioned**

(f) Reduce energy utilization:

This habitable structure will be required to meet Efficiency Vermont standards.

All new construction shall 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. **Affirmative finding as conditioned**

(g) Make advertising features complementary to the site:

New signage is not proposed or expected for this ADU. Not applicable.

(h) Integrate infrastructure into the building design:

See Section 6.2.2. (p), above.

(i) Make spaces secure and safe:

This development is subject to all applicable building and life safety codes as defined by the Burlington's Building Inspector and the Fire Marshal. **Affirmative finding as conditioned**

<u>Article 8: Parking</u>

Table 8.1.8-1 Minimum Off-Street Parking Requirements

Single family uses require 2 parking spaces in the Neighborhood Parking District. Section 5.4.5 Accessory Dwelling Units, was recently amended and removed the previous requirement for one additional parking space for an ADU. As a result, the property is still only required to have 2 off-street parking spaces. The existing driveway provides ample room for 2 parking spaces for the existing single family home, and the new proposal will add 1 off-street parking space serving the ADU. **Affirmative finding**

1. **Prior to release of the zoning permit**, the applicant shall secure a letter of adequate capacity from DPW for water and sewer services**.**
2. **Prior to the release of the zoning permit**, the applicant shall revise the plans to show the location of all exterior light fixtures, and submit spec sheets for said light fixtures for staff review and approval.
3. **Prior to the release of the zoning permit**, the plans shall be updated to show any and all other outdoor mechanical units, mailboxes, trash/recycling bins, and any other new onsite utilities.
4. **Prior to the release of the zoning permit**, the applicant shall submit spec sheets for all windows and doors to staff for review and approval.
5. The wall hung condensing unit shall meet the minimum side yard setback requirement of 3.1 ft.
6. No more than 2 adults and their minor children shall inhabit the accessory dwelling unit.
7. Any additional physical alteration or change of use to the accessory dwelling unit will require a new zoning permit, subject to regulations in effect at the time of permit application submittal.
8. **Prior to the issuance of a certificate of occupancy,** a deed or instrument for the property shall be entered into the land records by the owner containing a reference to the permit granting the accessory unit. The reference shall identify the permit number and note that the property is subject to the permit and its terms and conditions including owner occupancy.
9. Construction hours shall be limited to Monday – Friday from 7:00 AM – 5:30 PM. Saturday construction may be allowed upon request to the Development Review Board. No work on Sunday.
10. A state wastewater permit will be required, and is the responsibility of the applicant to secure.
11. It is the applicant's responsibility to obtain a curb cut permit from the Department of Public Works.
12. The applicant shall secure any associated trades permits for the interior work.
13. 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
14. Standard Permit Conditions 1-15.

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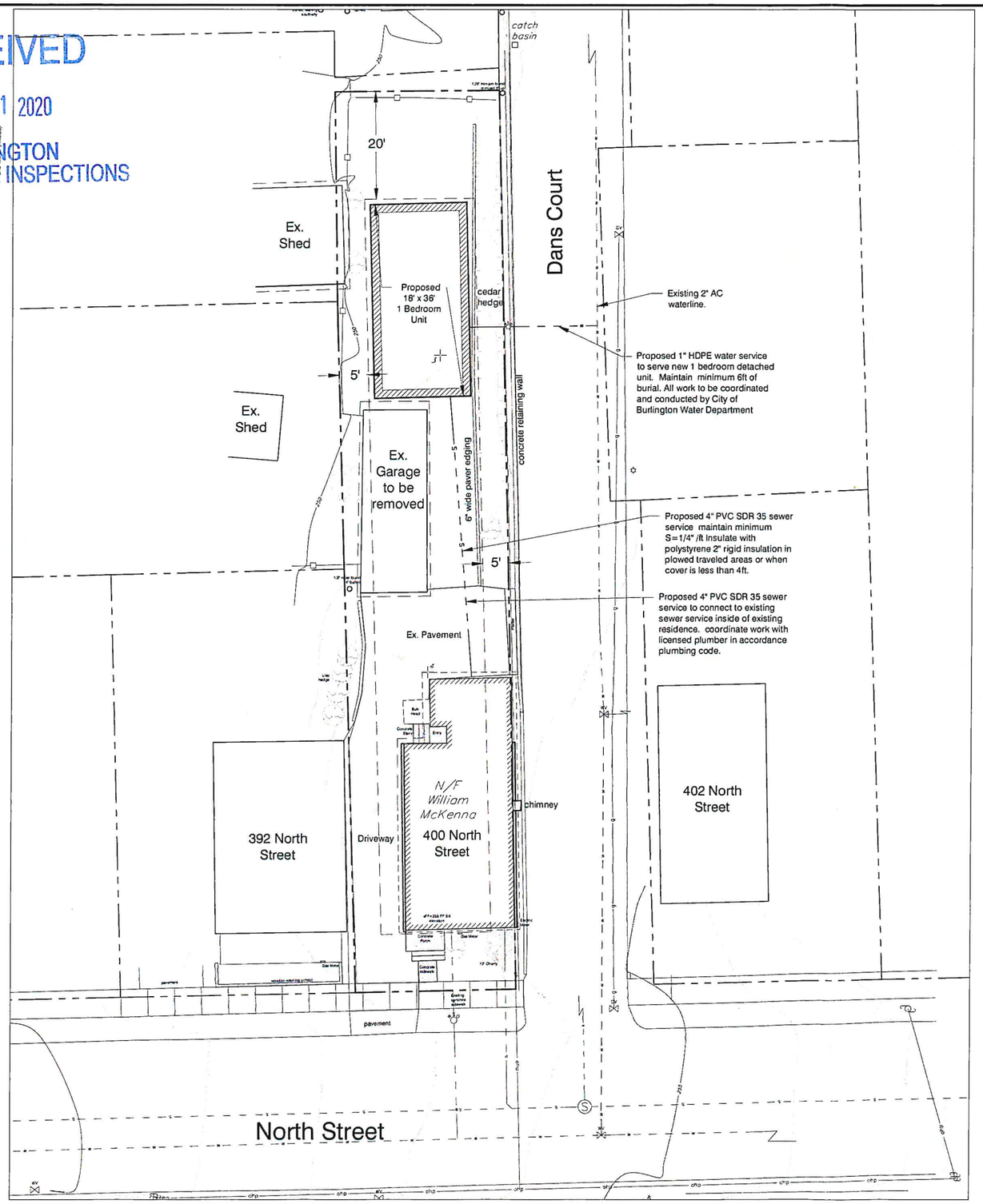
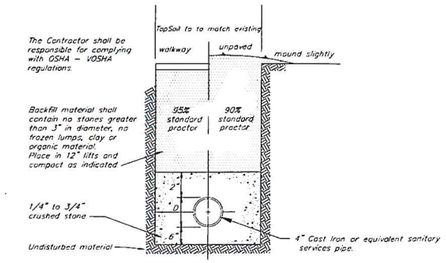
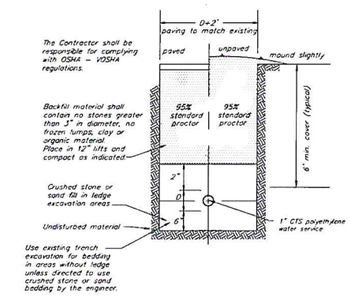




Typical Sanitary Trench Detail

N.T.S.



Typical Water Trench Details

Basis of Design Flows

Water & Sewer Design 400 North Street:

Existing House:
Water: 360 gpd gallons/day/living unit = 360 gallons per day

Sewer: 210 gpd for single family unit connected to system serving more than 50,000 gpd

Proposed Configuration 1–New Unit: (One 1 bedroom accessory unit)
Water Supply:
For 1 bedroom accessory unit
70 gallons/persons/day * 2 persons / bedroom * 1 living Unit = 140 gpd/bedroom

Wastewater Disposal:
For 1 bedroom accessory unit
70 gallons/persons/day * 2 persons / bedroom * 1 living Unit = 140 gpd/bedroom

City of Burlington Planning and Zoning Information

Owner:
William McKenna

Location Address:
400 North Street

Deed Refernece
Vol. 1419 Page 96
Date 09/28/2018

Existing Lot Area
5,071 sqft

Parcel ID
045-1-096-000

Zoning District:

Residential Low Density
Allowable Entire Lot Coverage = 35%
Primary Building Max. Height = 35 ft.
Approximate Existing lot coverage = 50% ±

Legend

- Tape9545 — Survey control point
- Iron pipe found
- Hydrant
- Utility pole
- TBM #1 — Temporary bench mark
- ohp — Overhead power line
- Right of Way monument
- Direction of surface water flow
- Existing Sign
- Pre-construction Excavation
- Existing Light Pole
- Existing Deciduous Tree
- 314.7 x — Existing Spot Grade Elevation
- w — Existing Water Line/Hydrant/Valve/Shutoff
- 317 — Existing ground contour
- g — Existing gas pipeline / valve
- ugp — Existing underground power
- ohp — Existing overhead power
- Approximate property line / right of way
- Approximate zoning setbacks
- g — Existing Gas Line/Valve
- S — Existing Sewer Line/Manhole
- Existing concrete
- Existing pavement
- Existing edge of woods/ tree line

Notes:

1. This plan is not a boundary survey. The property lines shown are based on Burlington Tax Map dated 2018 and are considered approximate.
2. The underground utilities shown on this plan are based on visible utilities located during a topographic survey performed by Krebs & Lansing in April 20, 2020. Underground utilities are approximate and not warranted to be exact or complete. Dig Safe shall be contacted prior to any excavation.
3. Elevations are based on the NAVD 88 (Geoid 12A) vertical datum.
4. Project Horizontal Coordinates derived from GPS observation using reference frame NAD83 (2011) 2010.00 epoch.

0' 10' 20' 40' 60'

Bar Scale 1" = 10'

Progress Print Draft

Date revised	Description	Checked	Date

Design	jpr
Drawn	jpr
Checked	kee/SWH
Scale	1"=10'
Date	June 18, 2020
Project	20177

Site Plan

McKenna Property

400 North Street — Burlington, Vermont

KREBS & LANSING Consulting Engineers, Inc.
164 Main Street, Colchester, Vermont 05446

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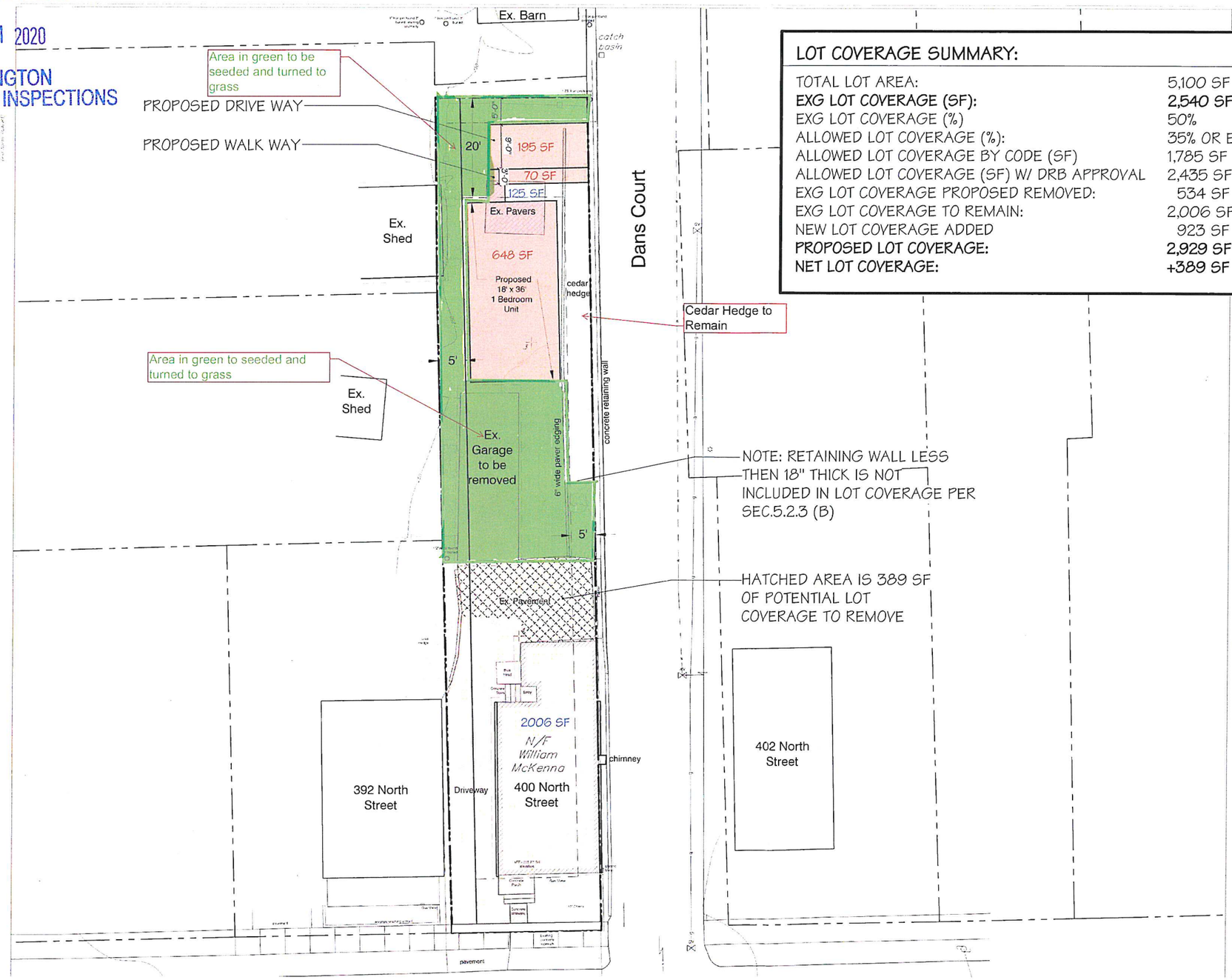

LOT COVERAGE SUMMARY:

TOTAL LOT AREA:	5,100 SF
EXG LOT COVERAGE (SF):	**2,540 SF**
EXG LOT COVERAGE (%)	50%
ALLOWED LOT COVERAGE (%):	35% OR EXG
ALLOWED LOT COVERAGE BY CODE (SF)	1,785 SF
ALLOWED LOT COVERAGE (SF) W/ DRB APPROVAL	2,435 SF
EXG LOT COVERAGE PROPOSED REMOVED:	534 SF
EXG LOT COVERAGE TO REMAIN:	2,006 SF
NEW LOT COVERAGE ADDED	923 SF
PROPOSED LOT COVERAGE:	**2,929 SF**
NET LOT COVERAGE:	**+389 SF**

City of Burlington Planning and Zoning Information

Owner: William McKenna

Location Address: 400 North Street

Deed Refernece: Vol. 1419 Page 96 Date 09/28/2018

Existing Lot Area 5,071 sqft

Parcel ID 045-1-096-000

Zoning District:

Residential Low Density
Allowable Entire Lot Coverage = 35%
Primary Building Max. Height = 35 ft.
Approximate Existing lot coverage = 50% ±

Legend

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0' 10' 20' 40' 60'

Bar Scale 1" = 10'

Progress Print Draft

400 NORTH STREET

BURLINGTON VT

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A Professional Corporation

SCHEMATIC DESIGN

Duncan Wisniewski ARCHITECTURE
255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

DATE: 06.25.2020
DRAWN: XXX, XXX

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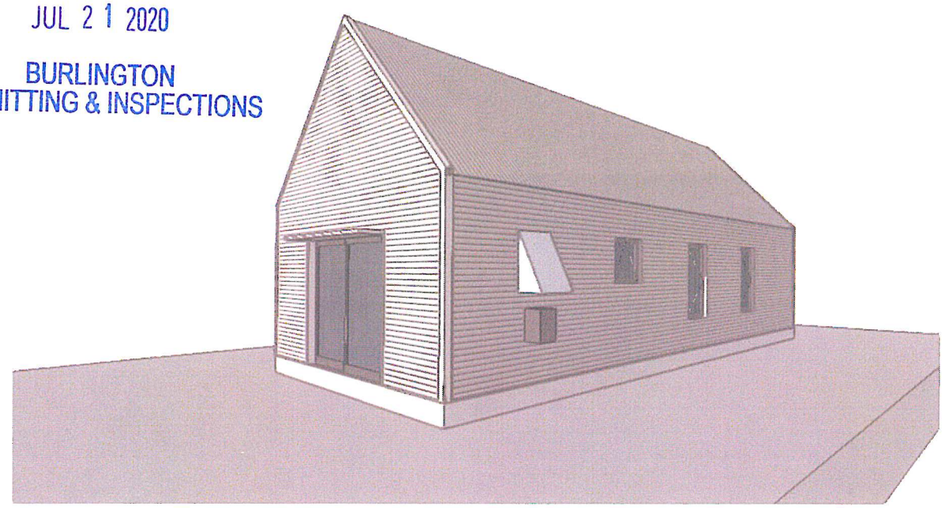
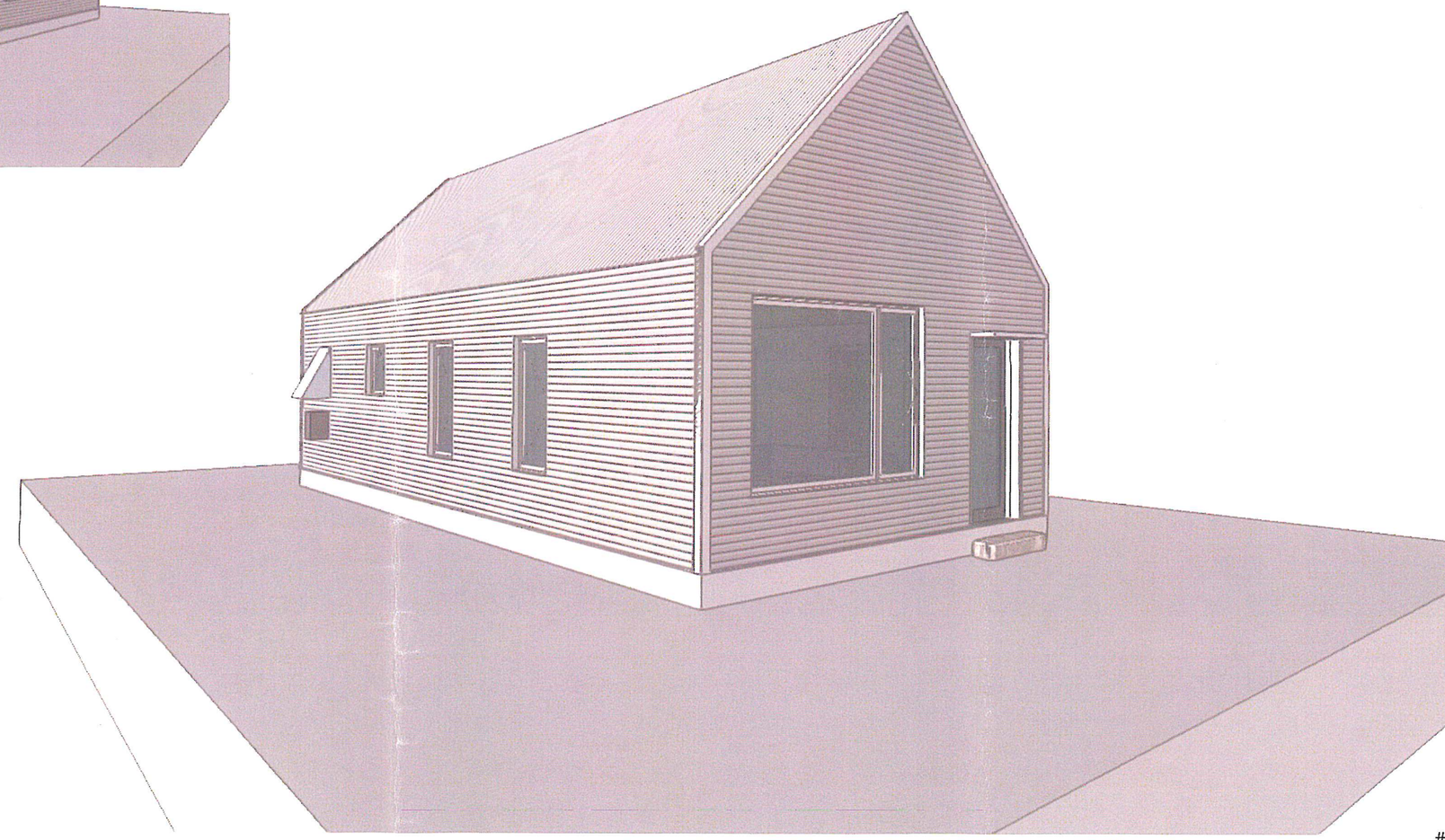


VIEW FROM SOUTH



VIEW FROM NORTH

400 NORTH STREET

BURLINGTON VT

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DUNCAN • WISNIEWSKI ARCHITECTURE
A Professional Corporation

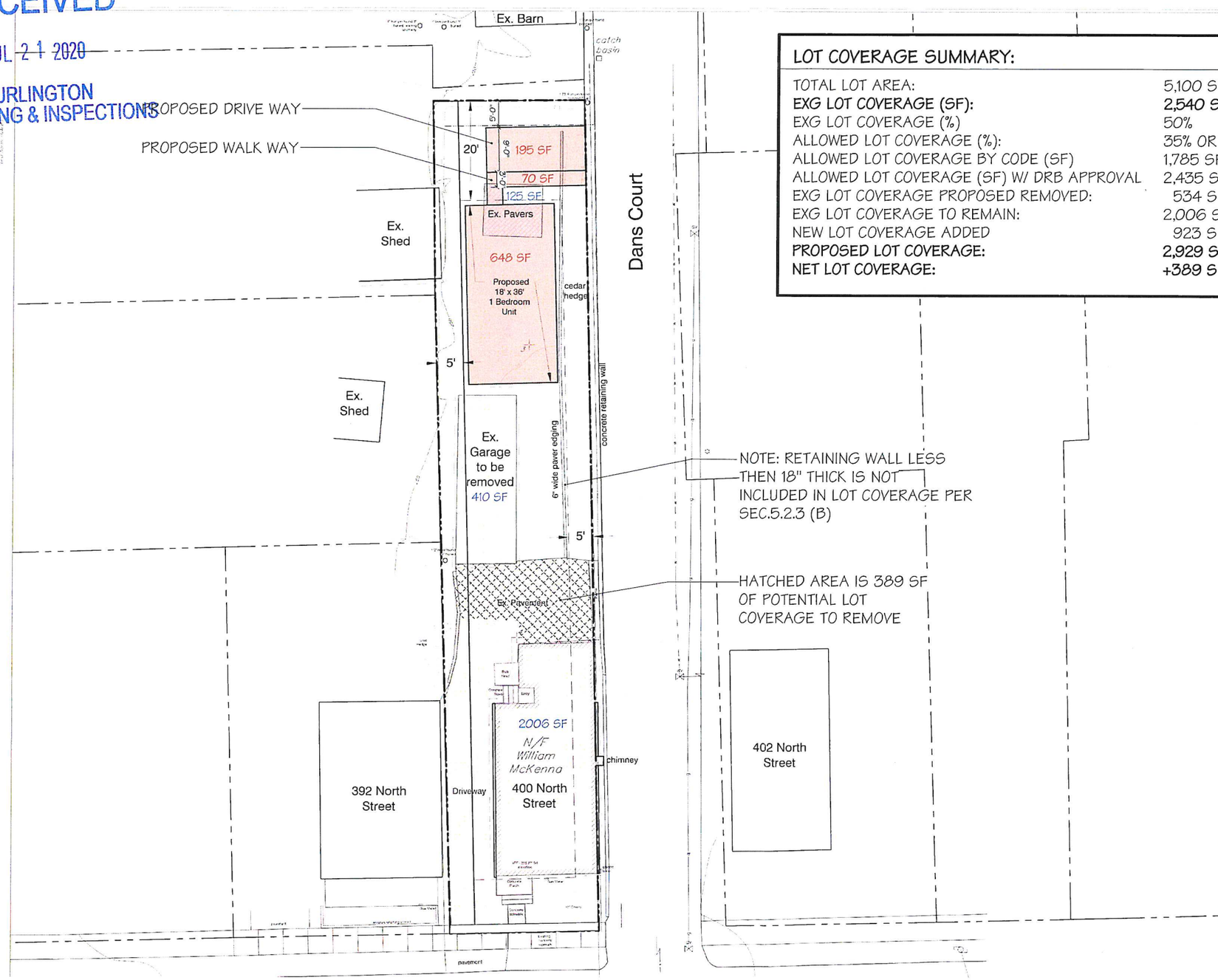
DESIGN DEVELOPMENT

Duncan Wisniewski
ARCHITECTURE
255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

DATE: 07.14.2019
DRAWN: ABC

A0-0

RECEIVED
JUL 21 2020
BURLINGTON
PERMITTING & INSPECTIONS



NOTE: RETAINING WALL LESS THEN 18" THICK IS NOT INCLUDED IN LOT COVERAGE PER SEC.5.2.3 (B)

HATCHED AREA IS 389 SF OF POTENTIAL LOT COVERAGE TO REMOVE

LOT COVERAGE SUMMARY:

TOTAL LOT AREA:	5,100 SF
EXG LOT COVERAGE (SF):	**2,540 SF**
EXG LOT COVERAGE (%)	50%
ALLOWED LOT COVERAGE (%):	35% OR EXG
ALLOWED LOT COVERAGE BY CODE (SF)	1,785 SF
ALLOWED LOT COVERAGE (SF) W/ DRB APPROVAL	2,435 SF
EXG LOT COVERAGE PROPOSED REMOVED:	534 SF
EXG LOT COVERAGE TO REMAIN:	2,006 SF
NEW LOT COVERAGE ADDED	923 SF
PROPOSED LOT COVERAGE:	**2,929 SF**
NET LOT COVERAGE:	**+389 SF**

City of Burlington Planning and Zoning Information

Owner:
William McKenna

Location Address:
400 North Street

Deed Refernece
Vol. 1419 Page 96
Date 09/28/2018

Existing Lot Area
5,071 sqft

Parcel ID
045-1-096-000

Zoning District:
Residential Low Density
Allowable Entire Lot Coverage = 35%
Primary Building Max. Height = 35 ft
Approximate Existing lot coverage = 50% ±

Legend

- Topo9545 — Survey control point
- Iron pipe found
- Hydrant
- Utility pole
- TBM #1 — Temporary bench mark
- Overhead power line
- Right of Way monument
- Direction of surface water flow
- Existing Sign
- Pre construction Excavation
- Existing Light Pole
- Existing Deciduous Tree
- Existing Spot Grade Elevation
- Existing Water Line/Hydrant/Valve/Shutoff
- Existing ground contour
- Existing gas pipeline / valve
- Existing underground power
- Existing overhead power
- Approximate property line / right of way
- Zoning setbacks
- Existing Gas Line/Valve
- Existing Sewer Line/Manhole
- Existing concrete
- Existing pavement
- Existing edge of woods/ tree line

Notes:

1. This plan is not a boundary survey. The property lines shown are based on Burlington Tax Map dated 2018 and are considered approximate.
2. The underground utilities shown on this plan are based on visible utilities located during a topographic survey performed by Kreiss & Lansing in April 20, 2020. Underground utilities are approximate and not warranted to be exact or complete. Dig Safe shall be contacted prior to any excavation.
3. Elevations are based on the NAVD 88 (Geoid 12A) vertical datum.
4. Project Horizontal Coordinates derived from GPS observation using reference frame NAD83 (2011) 2010.00 epoch.

0' 10' 20' 40' 80'
Bar Scale 1" = 10'

Progress Print Draft

400 NORTH STREET

BURLINGTON VT

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A Professional Corporation

SCHEMATIC DESIGN

Duncan Wisniewski
ARCHITECTURE
255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

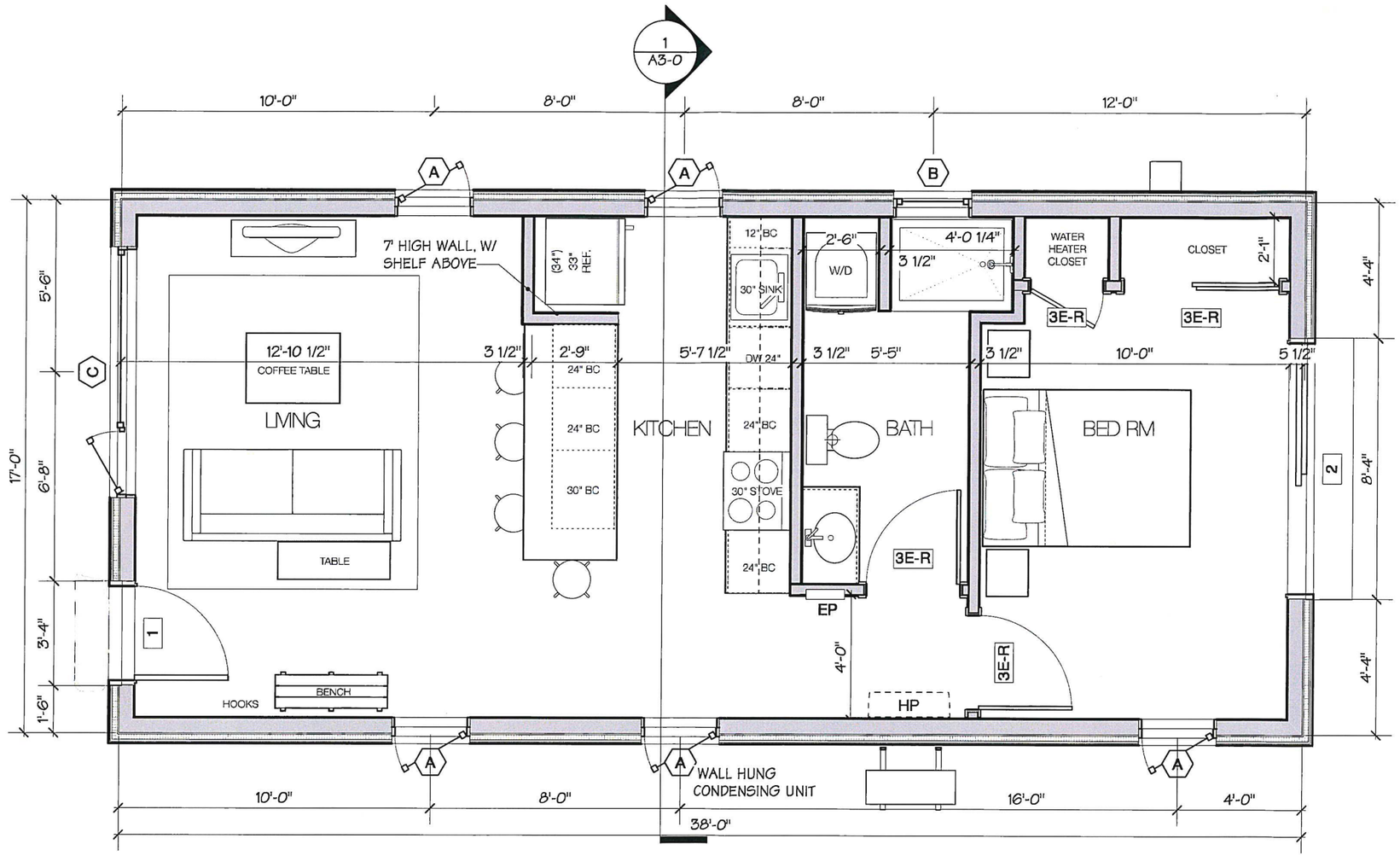
DATE: 08.25.2020
DRAWN: XXX, XXX

L1-1.1

RECEIVED

JUL 21 2020

BURLINGTON
PERMITTING & INSPECTIONS



FIRST FLOOR PLAN

Scale: 1/4" = 1'-0"

0 5 6 7 8 9 10 FT

400 NORTH STREET

BURLINGTON VT

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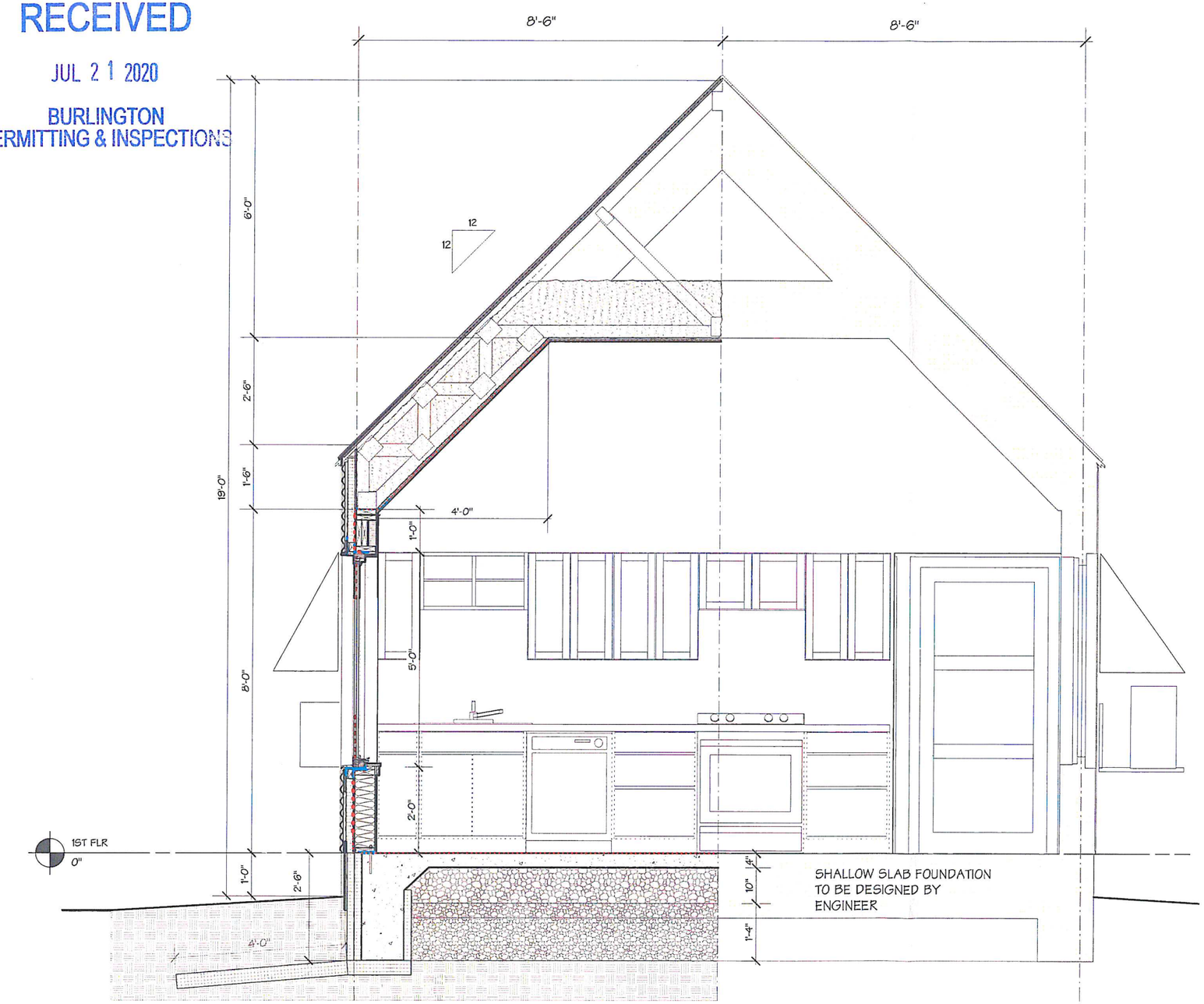
DESIGN DEVELOPMENT

Duncan Wisniewski
ARCHITECTURE
255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

DATE: 07.14.2019
DRAWN: ABC

A1-0

RECEIVED
JUL 21 2020
BURLINGTON
PERMITTING & INSPECTIONS



1 SECTION A
Scale: 3/8" = 1'-0"

ENVELOPE THERMAL SUMMARY:

ROOF:	
-SEMI-DENSE PACK 16"X R-3.7/IN=	**R-59.2**
-CODE R-VALUE	R-49
WALLS:	
-DENSE PACK 5 1/2" X R-3.5/IN=	R-19.25
-RIDGED POLYISO CONT. 2"X R-6/IN=	R-12
APROXIMATE TOTAL R-VALUE:	**R-31.25**
CODE R-VALUE	R-23
WINDOWS:	
TRIPPLE GLAZED FIBERGLASS-	**U- 0.18 (R-5.57)**
CODE R-VALUE	U-.033 (R-3.0)
SLAB EDGE:	
-EPS RIGID FOAM INSULATIO- 4" X R-4/IN=	**R-16**
CODE R-VALUE	R-15
BELLOW SLAB:	
GLAVEL- 12"X R-2.2/IN =	**R-26.4**
CODE R-VALUE	NONE

400 NORTH STREET

BURLINGTON VT

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DESIGN DEVELOPMENT

Duncan Wisniewski
ARCHITECTURE
255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

#
DATE: 07.14.2019
DRAWN: ABC

A3-0

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JUL 21 2020

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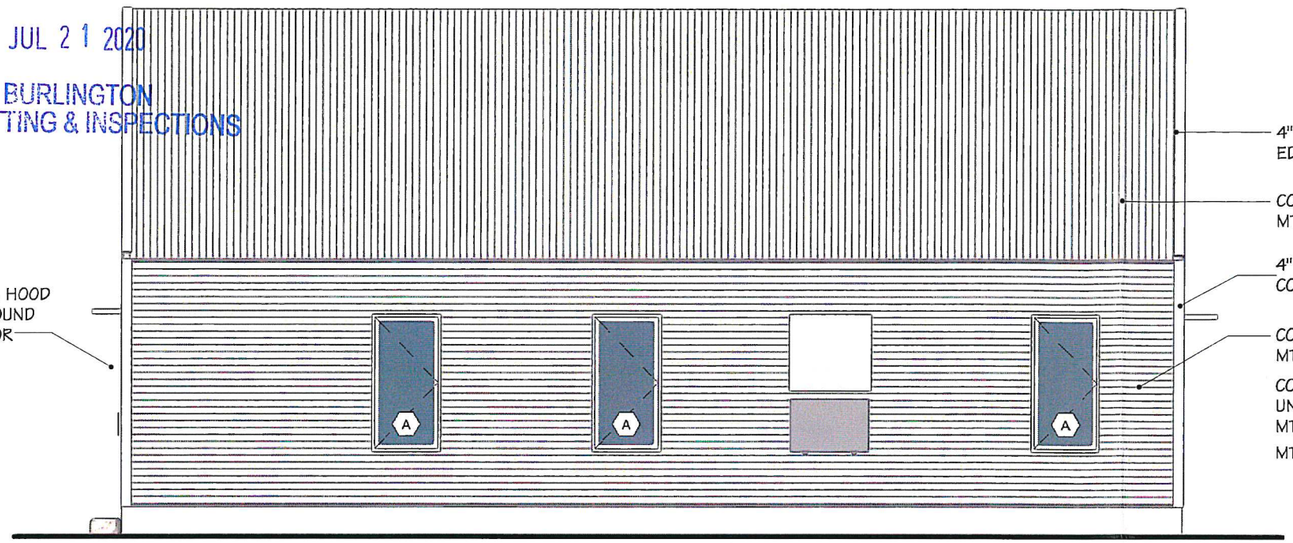
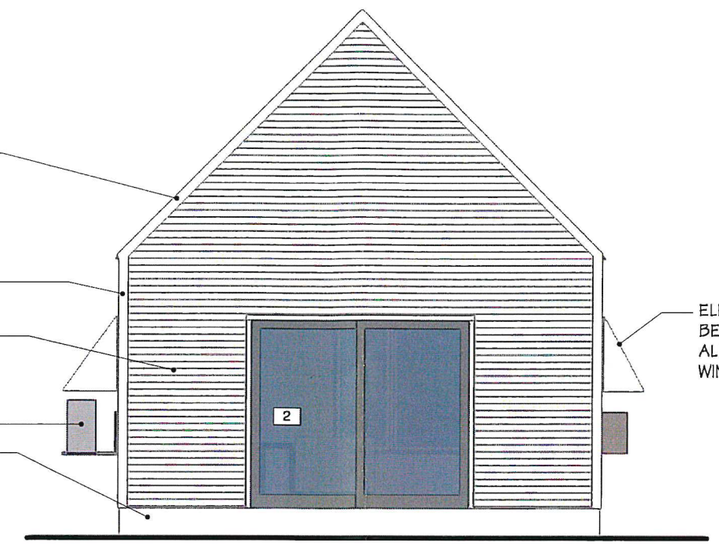
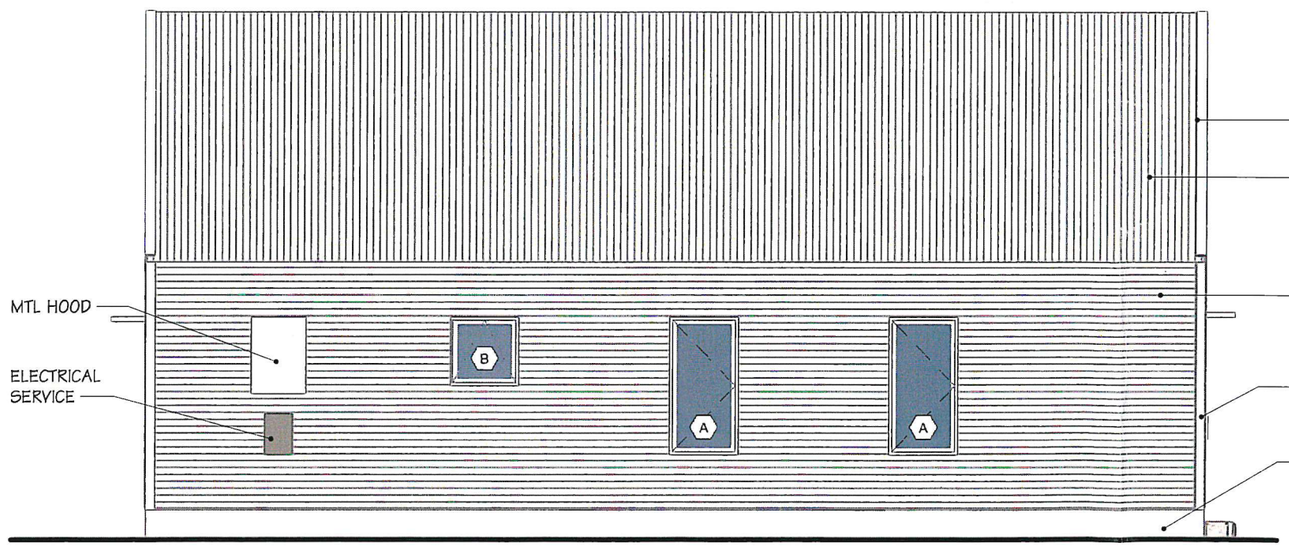


East
~~NORTH~~ ELEVATION
Scale: 3/16" = 1'-0"

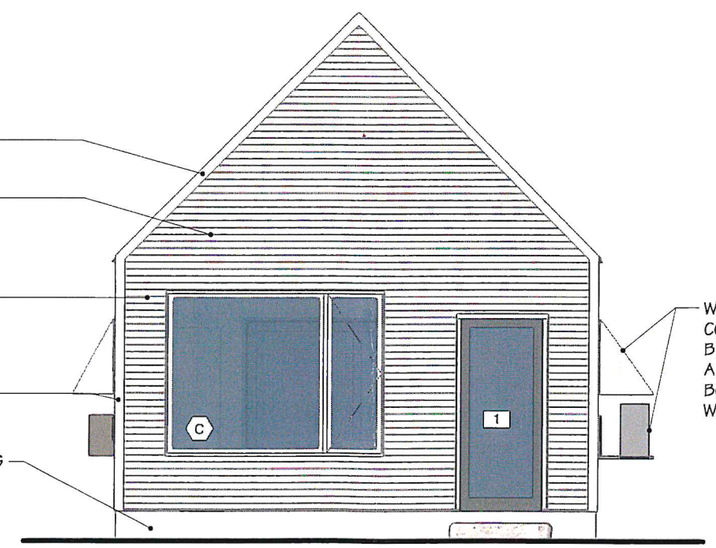
0 5 6 7 8 9 10 FT



North
~~EAST~~ ELEVATION
Scale: 3/16" = 1'-0"



West
~~SOUTH~~ ELEVATION
Scale: 3/16" = 1'-0"



South
~~WEST~~ ELEVATION
Scale: 3/16" = 1'-0"

400 NORTH STREET

BURLINGTON VT

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A Professional Corporation

DESIGN DEVELOPMENT

Duncan Wisniewski ARCHITECTURE
255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

#

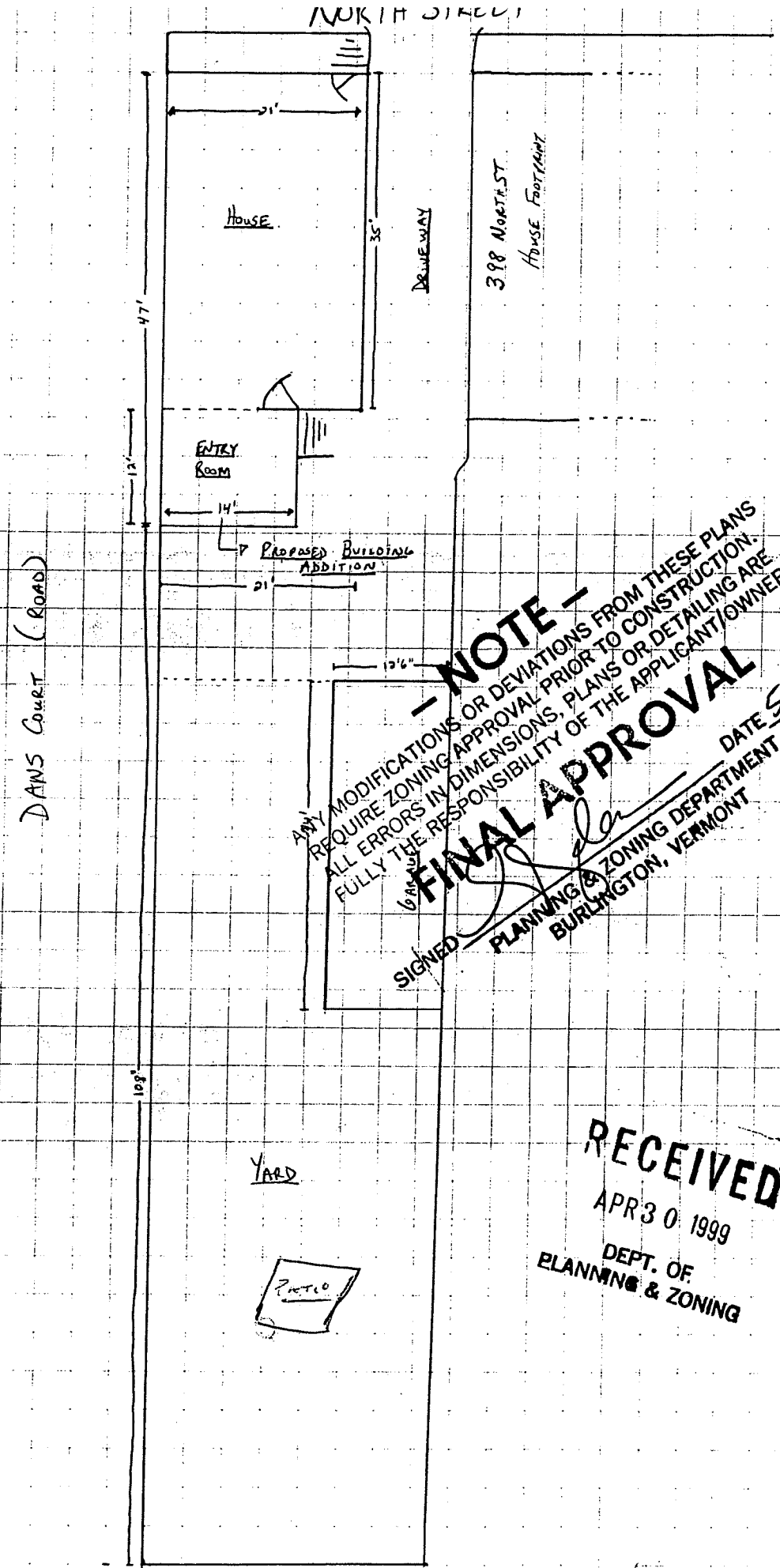
DATE: 07.14.2019
DRAWN: ABC

A4-0

400 NORTH STREET
BURLINGTON, VT
05401

863-4640

PROPOSED ADDITION
WITH NEW FOOTPRINT
and PROPERTY LINES



— NOTE —
ANY MODIFICATIONS OR DEVIATIONS FROM THESE PLANS REQUIRE ZONING APPROVAL PRIOR TO CONSTRUCTION. ALL ERRORS IN DIMENSIONS, PLANS OR DETAILING ARE FULLY THE RESPONSIBILITY OF THE APPLICANT/OWNER.

FINAL APPROVAL
SIGNED
DATE 5.1
PLANNING & ZONING DEPARTMENT
BURLINGTON, VERMONT

RECEIVED
APR 30 1999
DEPT. OF
PLANNING & ZONING

RECEIVED
JUL 21 2020
BURLINGTON
PERMITTING & INSPECTIONS

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JUL 21 2020
BURLINGTON
PERMITTING & INSPECTIONS

090
091
092
093
094
095
096
101
102
103
149
207
343
DAN'S COURT
5'ROW
ROW
10'ROW
(30)
(14)
(10)
(392)
(398)
(400)
(406)
(410)
(393)
(395)
(399)
2019

090
5'ROW
141's
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50'
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ROW
12'
3'
30's
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62'
092
35'
093
112'
50'
096
166's
166'
43'
69'
094
77'
095
77'
69'
43'
31'
DAN'S COURT
330'
(30)
(14)
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70'
42'
101
88'
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42'
102
65'
65'
48'
42's
103
88.5's
88.5's
43's
235's
10'ROW
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(406)
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(393)
(395)
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(409)
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DAN'S COURT
5'ROW
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112'
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70'
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48'
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166's
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77'
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(398)
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(406)
(410)
(393)
(395)
(399)
(409)
53'
23'
44.55
235's
19'ROW
2004

Ryan Morrison

From: James Sherrard
Sent: Wednesday, September 09, 2020 2:12 PM
To: Ryan Morrison
Subject: RE: 400 North St.

Ryan,

At this point I would request that the applicant respond to my email and address the concerns brought forth by the applicant to facilitate my review.

James Sherrard | Stormwater Program Coordinator
Water Resources Division

235 Penny Lane | P.O. Box 878
Burlington, VT 05401
(802) 863-4501 office | (802) 503-7027 mobile
jsherrard@burlingtonvt.gov

Please note that this communication and any response to it will be maintained as a public record and may be subjec disclosure under the Vermont Public Records Act.

From: Ryan Morrison
Sent: Tuesday, September 8, 2020 12:54 PM
To: James Sherrard <jsherrard@burlingtonvt.gov>
Subject: Re: 400 North St.

It does seem reasonable. I will certainly add this and your email to the applicant to the DRB packet for nex weeks meeting. If you wish to provide additional detail in writing highlighting your concerns to the DRB, I include that for their review.

From: James Sherrard <jsherrard@burlingtonvt.gov>
Sent: Tuesday, September 8, 2020 12:35 PM
To: Ryan Morrison <rmorrison@burlingtonvt.gov>
Subject: RE: 400 North St.

Ryan,

This does seem to be a reasonable concern from Mr. Cleary. So you know, I reached out to the applicant on August and have yet to receive a reply. My email to him is attached.

How do you suggest we proceed? I think we should take Mr. Cleary's outreach seriously and that would involve putt the onus on the applicant to provide a plan addressing these concerns.

James

James Sherrard | Stormwater Program Coordinator
Water Resources Division

235 Penny Lane | P.O. Box 878
Burlington, VT 05401
(802) 863-4501 office | (802) 503-7027 mobile
jsherrard@burlingtonvt.gov

Please note that this communication and any response to it will be maintained as a public record and may be subje
disclosure under the Vermont Public Records Act.

From: Joseph Campanella Cleary <campanella.cleary@gmail.com>
Sent: Tuesday, September 8, 2020 9:33 AM
To: Ryan Morrison <rmorrison@burlingtonvt.gov>; James Sherrard <jsherrard@burlingtonvt.gov>
Subject: 400 North St.

[WARNING]: External Message

Thanks,
A couple more questions:
Do you see anywhere in the proposal that shows the difference in elevation/grade between Dans Ct. and the lot, or explains how the driveway will be built? It will have to either be filled/graded up several feet, or have a very stee entry,
both of which concern us. I've attached photos which show Dan's court during a rainstorm. There are views lookin North
and South West, where you can how our garage sits just below grade at the property line. You can see that water collects in this area to drain, and already overflows the curb
when the storm drain cannot handle the volume. A curb cut or driveway would drain all of this water directly into c backyard
and garage. If the city allows this, it will be an absolute failure of the new ADU standard to protect current homeowners.

I've copied James Sherrard on this to share my concerns about stormwater...

Even if the driveway is rejected, the whole area is on a grade, and we are very concerned about stormwater pourin the back of our garage from the
roof in that area. The plans don't seem to address the grade of the property, or propose regrading (which seems to necessary), or include any drainage
work that would minimize damage to our garage. Due to the grade, and current runoff problems, it seems that 5' is enough of a setback in this area.

The garage is labeled "exterior shed" in the plans, but it is a full 2 car garage, and I have worked to stop water from flowing into
the east side of the building since we purchased our property. A large roof shedding water and snow in this area wi absolutely
cause real damage to the building, in an area that is difficult to deal with, i.e. the garage wall is on the property line, is
impossible for me to install runoff mitigation, and difficult to repair.

From Dan's court to the 400 N. St property there is a 2-3' retaining wall, and then another 1' drop to our property, a continues

to grade down toward

Is there any other information that you can provide at this time? I'm very concerned about the application of the n
ADU
ordinance in an area that already has problems with runoff and stormwater.

Thanks,

Joe Cleary
158 N. Willard St.

Begin forwarded message:

From: Ryan Morrison <rmorrison@burlingtonvt.gov>
Subject: Re: 400 North St.
Date: July 31, 2020 at 9:18:56 AM EDT
To: Joseph Campanella Cleary <campanella.cleary@gmail.com>

Hi Joseph.
As long as the pre-existing lot coverage is legit (either pre-dating the current regulations or grandfathered), then the City Council allowed for there to be an excess in lot coverage up to 650 sf for accessory dwelling units - the new ordinance was passed several months ago.

Regarding the curb cut and increase in runoff, those are Public Works Dept. matters...

Contact Caleb Manna about the curb cut - cmanna@burlingtonvt.gov
Contact James Sherrard about the runoff - jsherrard@burlingtonvt.gov

You can submit written comments any time that the DRB will see, and/or attend the hearing.

DRB meetings are being held online (Zoom). This application is being heard on Sept. 15th. Here is the link to the page that will have the agenda and meeting link uploaded within a week or so of that meeting. https://www.burlingtonvt.gov/DPI/DRB/Agendas

I am working from home 3-4 days a week, so feel free to call me anytime. 802-496-7221.

Ryan Morrison
Associate Planner
City of Burlington

From: Joseph Campanella Cleary <campanella.cleary@gmail.com>
Sent: Thursday, July 30, 2020 12:32 PM
To: Ryan Morrison <rmorrison@burlingtonvt.gov>
Subject: Re: 400 North St.

[WARNING]: External Message

Thanks! We do have a lot of questions, especially regarding the proposed expansion of (existing but non-conforming) lot coverage,
the proposed driveway from Dan's Ct. which would require a curb cut into a 3' drop/retaining wall, and the exponential increase

in runoff our garage and property would receive as a result. I don't think that the drawings or plan show the change in grade
from Dan's Ct westward, but it is a major concern that the additional impervious area, up to 57% coverage (as proposed), would cause flooding
of our garage and property damage on an ongoing basis. I believe other neighbors have similar concerns.

For reference, we are at 158 N. Willard St. and are inquiring re: ZP# 21-0076CA/CU.

I'm also curious about the permit process during the pandemic and office closures. What is the timeline for permit processing, and how are DRB hearings being held?

Could you give me a call when you have a chance? I think that would be the most efficient way to address our questions, if we
both have the proposal in front of us. 802.310.4666

Best,
Joe Cleary

On Jul 30, 2020, at 7:27 AM, Ryan Morrison <rmorrison@burlingtonvt.gov> wrote:

Joe.
I am the person to contact with questions. Let me know if you have any.

Ryan Morrison
Associate Planner
City of Burlington

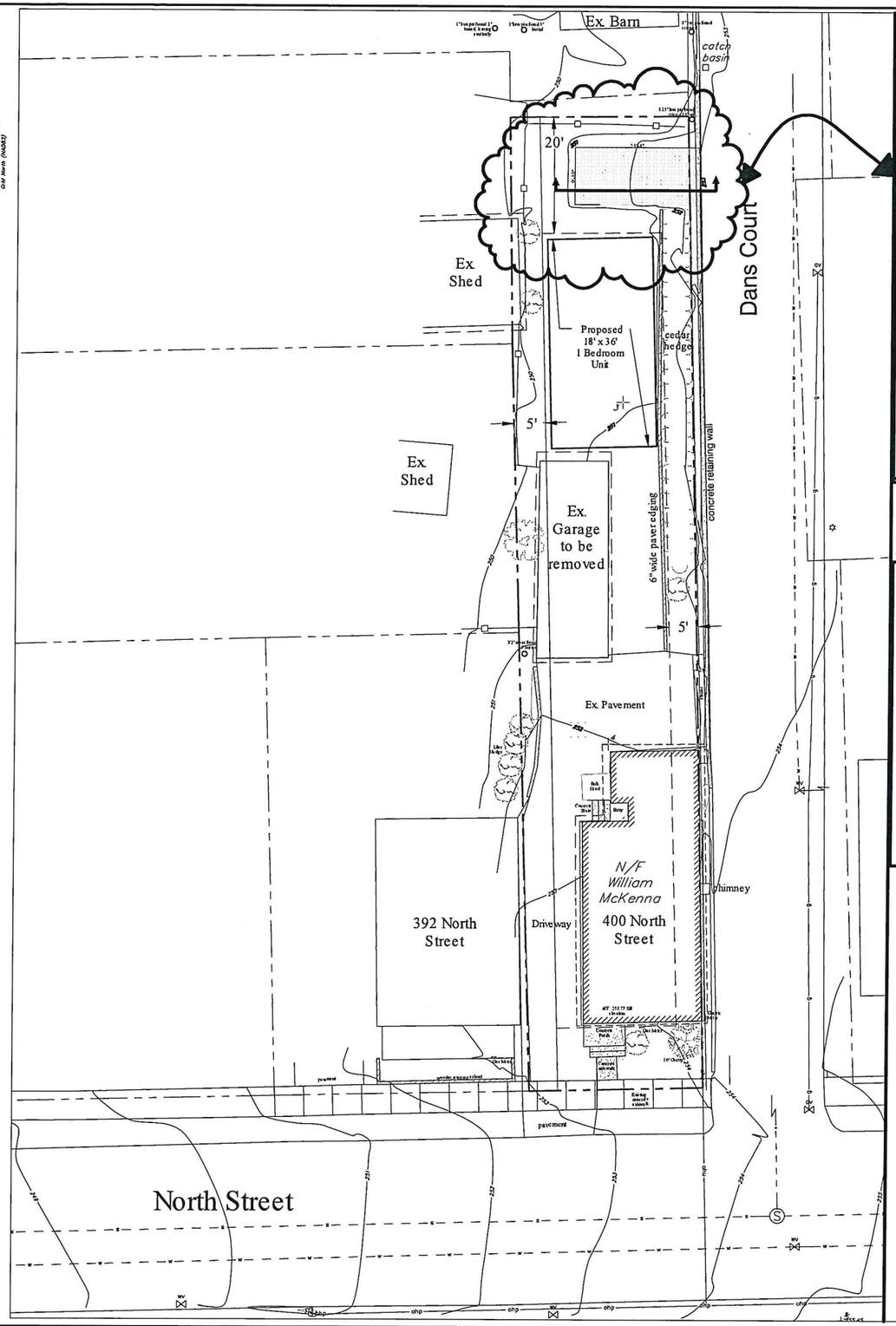
From: Joseph Campanella Cleary <campanella.cleary@gmail.com>
Sent: Wednesday, July 29, 2020 6:41 PM
To: Alison Davis <adavis@burlingtonvt.gov>
Cc: Ryan Morrison <rmorrison@burlingtonvt.gov>
Subject: Re: 400 North St.

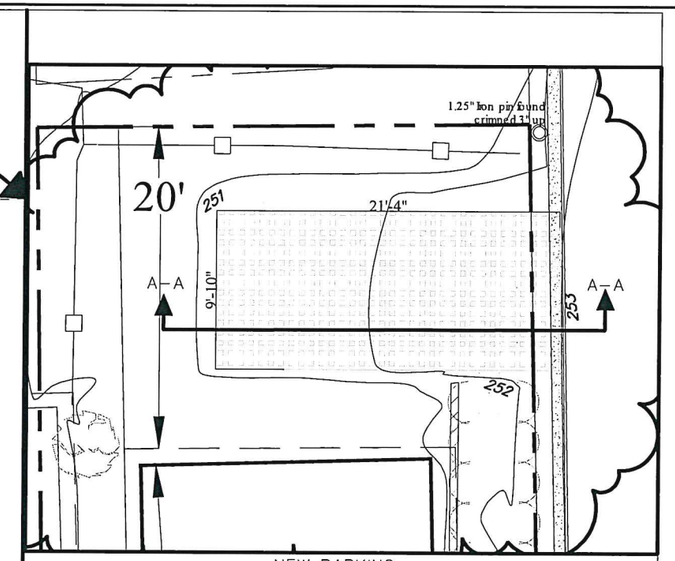
[WARNING]: External Message

Thanks, Ali...is Ryan (whom you cc'd) the point person/planner to direct further questions?
best,
Joe Cleary

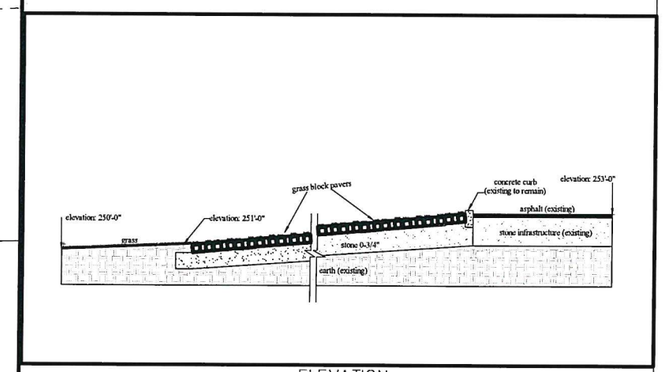
> On Jul 28, 2020, at 10:23 AM, Alison Davis <adavis@burlingtonvt.gov> wrote:
>
> Hi Joe,
> Attached is the application for 400 Street to remove garage, construct accessory dwelling unit in backyard, with driveway and parking reconstruction. Please let me know if you have trouble viewing the application.
>
> Thanks,
> Ali

>
> Alison Davis
> Zoning Clerk
>
> Department of Permitting and Inspections
> City of Burlington
> 645 Pine Street- Suite A
> Burlington, VT 05401
> 802-865-7188 (main)
> 802-863-0466 (fax)
> www.burlingtonvt.gov/PZ
> Check on your permit's status here: https://www.burlingtonvt.gov/PZ/Status
>
> Please note that this communication and any response to it will be maintained as a public record and may be subject to disclosure under the Vermont Public Records Act.
>
>
>
> -----Original Message-----
> From: Joseph Campanella Cleary <campanella.cleary@gmail.com>
> Sent: Monday, July 27, 2020 1:18 PM
> To: Alison Davis <adavis@burlingtonvt.gov>
> Subject: 400 North St.
>
> [WARNING]: External Message
>
>
> Hello,
> I'm looking for more information on ZP# 21-0076CA/CU, demolition and construction proposed for 400 N. Street.
> Do you have the application and plans (all documents submitted by applicant) in an electronic form that you could email, or do I need to stop by the office?
>
> Thanks!
>
> Joe Cleary
> 158 N. Willard St.
> <400 north st052546.pdf>





NEW PARKING
SCALE 1:50



ELEVATION
A–A
SCALE 1:50

City of Burlington
Planning and Zoning Information

Owner:
William McKenna

Location Address:
400 North Street

Deed Refernece
Vol. 1419 Page 96
Date 09/28/2018

Existing Lot Area
5,071 sqft

Parcel ID
045-1-096-000

Zoning District:
Residential Low Density
Allowable Entire Lot Coverage = 35%
Primary Building Max. Height = 35 ft.
Approximate Existing lot coverage = 50% ±

Legend

- Survey control point
- Iron pipe found
- Hydrant
- Utility pole
- TBM #1 — Temporary bench mark
- Overhead power line
- Right of Way monument
- Direction of surface water flow
- Existing Sign
- Pre-construction Excavation
- Existing Light Pole
- Existing Deciduous Tree
- Existing Spot Grade Elevation
- Existing Water Line/Hydrant/Valve/Shutoff
- Existing ground contour
- Existing gas pipeline / valve
- Existing underground power
- Existing overhead power
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- zoning setbacks
- Existing Gas Line/Valve
- Existing Sewer Line/Manhole
- Existing concrete
- Existing pavement
- Existing edge of woods/ tree line

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2. The underground utilities shown on this plan are based on visible utilities located during a topographic survey performed by Krebs & Lansing in April 20, 2020. Underground utilities are approximate and not warranted to be exact or complete. Dig Safe shall be contacted prior to any excavation.
3. Elevations are based on the NAVD 88 (Geoid 12A) vertical datum.
4. Project Horizontal Coordinates derived from GPS observation using reference frame NAD83 (2011) 2010.00 epoch.

0' 10' 20' 40' 60'
Bar Scale 1" = 10'

Progress Print Draft

Date revised	Description	Checked	Date

Design	jar
Drawn	jar
Checked	kee/bwr
Scale	1"=10'
Date	Oct. 15, 2020
Project	20177

Proposed new parking

McKenna Property

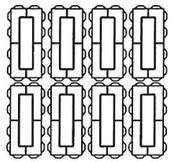
400 North Street — Burlington, Vermont

KREBS & LANSING Consulting Engineers, Inc.
164 Main Street, Colchester, Vermont 05446

AQUASTORM

DESCRIPTION: Paver **TEXTURE:** Smooth

PALLET OVERVIEW



Specifications per pallet		Imperial	Metric
Cubing		**78.39 ft²**	7.28 m²
Approx. Weight		2 245 lbs	1 018 kg
Number of rows		7	
Coverage per row		11.20 ft²	1.04 m²
Linear coverage per row	Depth	13.39 lin. ft	4.08 lin. m
	Length	6.69 lin. ft	2.04 lin. m

Unit dimensions	in	mm	Units/pallet
Height	3 15/16	100	56 units
Width	10 1/16	255	
Length	20 1/16	510	

Aqua Storm paver meet and exceeds the requirements of ASTM C1319 for Concrete Grid Paving Units.

NOTES

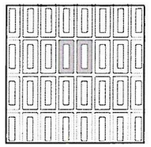
See page 48 to 51 for more technical information. When used in a permeable pavement application, see page 93 to 99 for more technical information.

JOINT WIDTH: 1 5/8" (41 mm)
% OF SURFACE OPENING: 38 %
INFILTRATOIN RATE: 2 395 in./hr (60 842 mm/hr)

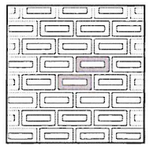
WINTER CONDITIONS

De-icing salts should never be used on grass as salt will damage it. The snowblower blade should be set to leave a 3/4 to 1 1/2 in. (2 to 4 cm) tamped snow cover to protect the grass from extreme cold and prevent it from being torn off during snow removal.

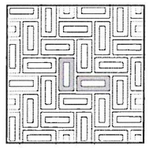
01 | Linear pattern



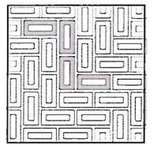
02 | Linear pattern



03 | Herringbone pattern



04 | Herringbone pattern



Patterns are for design inspiration only. The installer is responsible to calculate & purchase the correct amount of material.

Grey

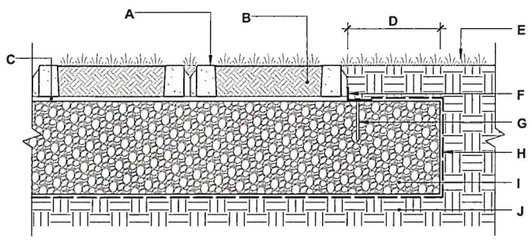
Grey

INSTALLATION GUIDE

AQUASTORM - CAVITY INFILL

GRASS INFILL

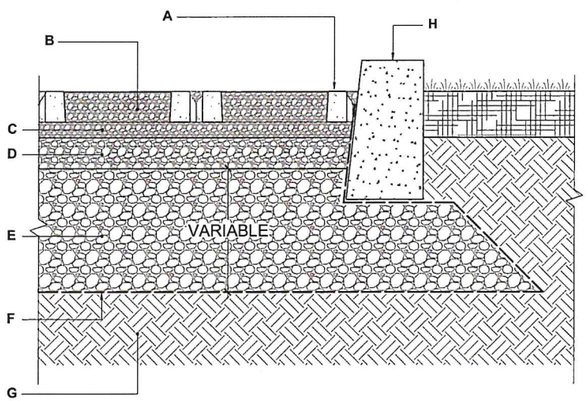
Cross section



A. TECHO-BLOC AQUASTORM PRECAST CONCRETE PAVER 3 15/16 " (100mm) THICK.
B. TOPSOIL INFILL (CAVITIES AND JOINTS)
C. SAND SETTING BED (CONCRETE SAND) 1" (25 mm)
D. EXTRA WIDTH EQUAL TO FOUNDATION THICKNESS
E. LAWN
F. PLASTIC EDGE
G. NAIL
H. GEOTEXTILE
I. COMPACTED GRANULAR BASE 0-3/4" (0-20 mm)
J. SUBGRADE

AGGREGATE INFILL

Cross section



A. TECHO-BLOC AQUASTORM PERMEABLE PAVER 3 15/16 " (100 mm) THICK.
B. JOINTS AND CAVITIES FILLING MATERIAL ASTM No 8 (CSA 2.5-10 mm) AGGREGATE
C. BEDDING COURSE 1 1/2" TO 2" (40 TO 50 mm) ASTM No 8 (CSA 2.5-10 mm) AGGREGATE
D. BASE COURSE 4" (100 mm) ASTM No 57 (CSA 5-28 mm) AGGREGATE
E. SUBBASE COURSE ASTM No 2 (CSA 40-80 mm) AGGREGATE
F. GEOTEXTILE
G. SUBGRADE
H. CONCRETE EDGE

PLEASE REFER TO P.4 FOR THE CORRECT USE AND LIMITATIONS OF PROVIDED TECHNICAL INFORMATION.

Maintenance Plan For Catch Basin 5262

1. Have catch basin professionally cleaned, repaired, and jetted as necessary to return to working order.
2. Inspect catch basin twice a year, on or before April 30, and on or before November 1.
3. Repair, unclog and jet as needed to maintain working order.
4. All repairs to be conducted in a timely matter from first noticing the problem.

Ryan Morrison

From: James Sherrard
Sent: Friday, November 13, 2020 11:56 AM
To: Will McKenna
Cc: Ryan Morrison
Subject: RE: 400 North St
Attachments: Mckenna_Plan_with_new_proposed_Driveway.pdf

Will,

Thanks for your time discussing this project yesterday. Following review and additional internal discussion I have the following conditions update and documentation requests. There are a still a couple more t's to cross and i's to dot bu believe we are getting close.

- The pervious paver driveway and provided specifications look good. Thank you for providing these.
- Following yesterdays conversation you plan on providing updated design plans noting a "french drain trench" capture roof runoff. As discussed generally yesterday, roof downspouts will discharge directly sub-surface into trench filled with gravel. This trench will have a protective fabric placed over it and then top soiled and grasse Please include depth, width, and length of the proposed trench.
- Updated Conditions of Approval
    - The Applicant will clean the catch basin following completion of construction if the basin is greater th 25% full.
    - The driveway entrance along Dan's Court will maintain the current height of the existing curb.
        - This will ensure that ponded water will not have a more preferential flow path then it does under existing conditions.
        - While the current plans note that the existing curb will remain, if the applicant were to propo a rounding or slope to this entrance that is acceptable by the Stormwater Program. As long as the existing curb elevation is maintained.

Required Documents

- New EPSC Permit (given the back and forth it would be best to submit a fully updated permit)
    - This permit can be sent to me directly.
    - This will include a new lot coverage summary.
    - The pervious paver driveway will be considered pervious for this summary.
- Updated Plan set including the gravel trench as discussed above
    - The most recent plan set is attached.

James Sherrard | Stormwater Program Coordinator
Water Resources Division

235 Penny Lane | P.O. Box 878
Burlington, VT 05401
(802) 863-4501 office | (802) 503-7027 mobile
jsherrard@burlingtonvt.gov

Please note that this communication and any response to it will be maintained as a public record and may be subject t disclosure under the Vermont Public Records Act.

From: Will McKenna <w.mckenna@acabayinc.com>
Sent: Thursday, November 12, 2020 12:00 PM
To: James Sherrard <jsherrard@burlingtonvt.gov>
Cc: Ryan Morrison <rmorrison@burlingtonvt.gov>
Subject: RE: 400 North St

External Message

Hi James,

I had the catch basin inspected and cleaned out by P&P Septic this morning. It was filled with sediment so we also jet the line connecting to the sewer line and confirmed that now it is draining properly and completely clear. Now it is in working order and in good condition.

From: Will McKenna
Sent: Monday, November 9, 2020 7:51 PM
To: 'James Sherrard' <jsherrard@burlingtonvt.gov>
Cc: Ryan Morrison <rmorrison@burlingtonvt.gov>
Subject: RE: 400 North St

Hi James,

Sorry for the delay. I am waiting on the engineers to add design detail to the plan for the proposed French drain on the west side of the property but I do have details on the driveway. Also, I have P&P septic scheduled to clean out the stor drain on Thursday morning.

A few things that I think are important to consider about the driveway:
1. The proposed techo block permeable pavers allow lots of absorption (see spec sheet)
2. The slope is very gentle (see plan)
3. The existing curb is to remain in place so storm water will not be funneled down the driveway (see plan)
4. The proposed French drain will mitigate any increase in stormwater as a result of the gently sloped permeable pave driveway.

One thing that I thought I would bring up is that it was a bit awkward to explain to the owner of Dans Court that it was going to now be my job to maintain his property so that I can fulfill a condition the city proposed in order for me to ha approval to build an ADU on my property. He did agreed to let me have the catch basin scheduled to be cleaned which think is necessary to alleviate any stormwater issues the neighbors have cited on that part of the street and is just goo

practice to have functioning infrastructure. However, I don't think that it is appropriate to have to submit a signed maintenance agreement between myself and the owner of Dans Court. I know it doesn't sound like a big deal, and I do not want to come across as being defiant, I just think that is a little bit too much to ask. I would like that portion to be removed from the conditions of approval. The last thing I would want is to cause adverse stormwater effects on neighbors properties and I think the plan in place will actually improve the situation.

From: James Sherrard <jsherrard@burlingtonvt.gov>
Sent: Thursday, November 5, 2020 8:22 AM
To: Ryan Morrison <rmorrison@burlingtonvt.gov>; Will McKenna <w.mckenna@acabayinc.com>
Subject: RE: 400 North St

Morning Will and Ryan,

As of today I have not received a reply with regards to the bulleted items laid out previously. They are shown below once again for your reference.

James

Upon further review of the submitted materials and a site visit performed on 9/18/2020 with the applicant the Stormwater Program submits the following comments.

- Dan's Court is a private road whose associated drainage infrastructure, namely Catch Basin 5262, is also privately owned.
- On the site visit performed by City SW Staff it was confirmed that this basin is filled with sediment and non-functioning.
- The applicant agreed to have this basin cleaned as a condition of approval.
- This basin is an essential component of adequate road drainage especially given the proximity to the retaining wall separating Dans Court from the adjacent eastern properties.
- Recognizing the importance of a functioning catch basin at this location to prevent overtopping of the retainin wall in existing conditions, the Stormwater Program requests as a condition of approval that the applicant ensure that annual maintenance/inspection of this basin to take place each year no later than May, 15th. Cleaning of the catch basin is required whenever the sump is 50% full. In the absence of a sump, the cat basin and the line connecting the catch basin to the combined sewer must be cleaned/jetted at the first sign c clogging.
- It is the applicant's responsibility to ensure this maintenance takes place through a written agreement with th owner(s). Copy of such agreement is subject to review and approval of the City Attorney.
- The French Drain proposed by the applicant will need to be detailed on a site plan with the discharge location shown, the proposed flow path of that discharge, and the of overland flow towards the eastly property boundary noted.
- The Stormwater Program requires design details for the proposed pervious access drive. Specifically that of th type of pavers and the sub-base.
- The Stormwater Program asks the applicant to consider designing a driveway entrance with an elevation equa to or greater than the existing curb height. This could be achieved via a gradual pavement berm located near the existing curb line. If this suggestion is not implemented, the Stormwater Program requests that the applica provide reasonable assurance that the road runoff will not access this proposed curb cut as a preferential flow path.

Stormwater Conditions of Approval

1. The applicant will have the basin cleaned prior to Stormwater Program Permitting Approval.
2. The applicant will execute a maintenance plan for catch basin 5262 located along the privately owned access road Dans Court with the express written agreement from the owner(s).

James Sherrard | Stormwater Program Coordinator
Water Resources Division

235 Penny Lane | P.O. Box 878
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(802) 863-4501 office | (802) 503-7027 mobile
jsherrard@burlingtonvt.gov

Please note that this communication and any response to it will be maintained as a public record and may be subj
to disclosure under the Vermont Public Records Act.

From: Ryan Morrison
Sent: Thursday, November 5, 2020 7:15 AM
To: Will McKenna <w.mckenna@acabayinc.com>; James Sherrard <jsherrard@burlingtonvt.gov>
Subject: Re: 400 North St

Hey Will - that looks great! Thanks. Now, how are the EPSC and Stormwater plans coming along?

From: Will McKenna <w.mckenna@acabayinc.com>
Sent: Wednesday, November 4, 2020 7:37 PM
To: Ryan Morrison <rmorrison@burlingtonvt.gov>
Subject: RE: 400 North St

External Message

Hi Ryan,

Here is a plan with the details on the driveway and a spec sheet for the permeable pavers. On the plan it shows th
the existing curb would remain as it is only 1.5-2 inches in the area that the driveway will be. Since there is no cur
cut this should alleviate the neighbors concerns. The gentle grade of the driveway and permeable pavers will not
contribute to stormwater runoff. If anything, once the catch basin is functional again, the EPSC situation will be
improved as a result of the project.
Let me know if you have any questions or feedback on this.

Thank you.

From: Ryan Morrison <rmorrison@burlingtonvt.gov>
Sent: Tuesday, October 13, 2020 1:12 PM
To: Will McKenna <w.mckenna@acabayinc.com>
Subject: 400 North St

Hi Will

Any update on the driveway drawings and EPSC/stormwater plans? I need to post this information for tl
DRB tomorrow. Thanks!
Please note that this communication and any response to it will be maintained as a public record and may be subj
to disclosure under the Vermont Public Records Act.

Department of Permitting & Inspections
Zoning Division
645 Pine Street
Burlington, VT 05401
Telephone:(802) 865-7188
(802) 865-7195 (FAX)
(802) 865-7142 (TTY)

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

MEMORANDUM

To: Development Review Board
From: Ryan Morrison, Associate Planner
Date: December 1, 2020
RE: 21-0076CA/CU; 400 North Street
==========

This application to remove an existing garage, construct a new detached accessory dwelling unit structure and associated driveway, and reconfigure the existing parking area serving the existing residence was first heard at the September 15, 2020 DRB meeting. Additional information was requested by the Board, and the public hearing was continued to the October 20, 2020 DRB meeting date. Lacking the requested information at the October 20th meeting, the hearing was continued again to the December 1, 2020 DRB meeting.

The additional information requested included notification that the associate Erosion Prevention and Sediment Control (EPSC) and stormwater plans have been approved by the Stormwater Program Manager, and information/drawings of the proposed driveway serving the ADU unit. To date, only driveway plans have been submitted, along with a maintenance plan for catch basin 5262. Approved EPSC and stormwater plans are still pending. The applicant has indicated that he hopes to be able to have those ready by the December 1st DRB meeting.

Unless the requested information is submitted in time for the December 1, 2020 DRB meeting, the DRB may continue the hearing to a later meeting date within the 6 month lifetime of the pending permit application (submitted July 21, 2020), or deny the application based on a lack of required information. If continued, the latest DRB meeting for this item to be heard within the 6 month timeframe is January 19, 2021. Otherwise, the applicant will have to request an extension to the permit's timeframe.

Department of Permitting and Inspections
Zoning Division
149 Church Street
Burlington, VT 05401
http://www.burlingtonvt.gov/PZ/
Telephone: (802) 865-7188
(802) 865-7195 (FAX)

William Ward, Director
Theodore Miles, Interim Code Compliance Officer
Charlene Orton, Permitting and Inspections Administrator
Scott Gustin, AICP, CFM, Principal Planner
Mary O'Neil, AICP, Principal Planner
Ryan Morrison, Associate Planner
Layne Darfler, Planning Technician
Alison Davis, Zoning Clerk

MEMORANDUM

To: Development Review Board
From: Mary O'Neil, AICP, Principal Planner
Date: December 1, 2020
RE: ZP21-0413CA; 400 Pine 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.

File: ZP21-0413CA
Location: 400 Pine Street
Zone: E-LM **Ward**: 5S
Parking District: Multi Modal Mixed-Use
Date application accepted: October 19, 2020
Applicant/ Owner: SpeakEasy Arts LLC dba Arts Riot / Alan Newman /Howard Space Partnership
Request: Exterior alterations including new deck, accessible ramp, stairs, new openings in façade, new metal entry canopies, new retractable awning. No change to use, egress or occupancy.

Background: (All of 400 Pine St.)

- **ZP20-1008CA;** change of use to food and beverage processing with accessory retail sales and tasting area (404 Pine St.) June 2020.
- **ZP19-00679CA**; replace existing door with double doors and revamp stairway and landing. April 2019.
- **ZP18-0917CA**; amendment to ZP17-0643CA/MA; revisions to bike shelter, retaining wall and garage door entry, grading and retaining wall, sun shade detail, siding and window sizes. May 2018.

The programs and services of the City of Burlington are accessible to people with disabilities. For accessibility information call 865-7188 (for TTY users 865-7142).

- **ZP18-0627CA** install new garage doors and louvered fans. January 2018.
- **ZP17-0616CA**; change of use from warehouse to glass production facility. June 2017.
- **ZP17-1039AW**; install awning over existing patio space. May 2017.
- **ZP17-0643CA/MA**; Demolish 2 warehouse buildings, merge 30-32 Howard Street parcel with 400 Pine Street, extinguish interior property lines, demolish duplex and construct new multi-use building. March 2017.
- **ZP16-1231CA**; renovate office space and change use of approximately 4000 sf from warehouse retail to retail with accessory wine bar. May 2016.
- **Non-applicability of Zoning Permit Requirements 16-1082NA;** using space as a pottery studio/showroom. April 2016.
- **ZP16-0784CU**; performing arts center within existing mixed use facility. No site or exterior building changes included. March 2016.
- **Zoning Permit 16-0944CA**; remove and replace two lower windows with larger windows. March 2016. Permit relinquished January 2018.
- **ZP15-1100FC**; installation of fencing to partially enclose existing outdoor seating area. September, 2015.
- **Zoning Permit 15-1226CA**; construction of permanent handicap accessible ramp at Speeder and Earl's. June 2015.
- **Non-Applicability of Zoning Permit Requirements 15-1225CA**; temporary permit, handicap ramp. May 2015.
- **Zoning Permit 14-0274CA**; change of use to woodworking shop in tenant spaces C 1, 2, &4. September 2013.
- **ZP14-0153SN**; replace three existing signs and lighting with new signs and lighting for Arts Riot. August 2013.
- **Zoning Permit 13-1187SN**; installation of 3 parallel signs for the Burlington Music Dojo. No illumination included. June 2013.
- **Zoning Permit 13-0828CA**; change of use to include art gallery and performing arts studio. Food processing to remain, and café to be reduced from 18 seats to 14 seats. Add rear entry, revise and add second front entry, replace existing entry ramp, and other associated modifications. March 2013.
- **Zoning Permit 12-0330CA**; placement of exhaust fan on clerestory area of roof for glass blowing furnace. September 2011.
- **Zoning Permit 11-0208SN**; replace existing sign with Davis Studio sign. No illumination. September 2010.
- **Zoning Permit 11-0077SN**; replace two existing signs. One parallel window sign and one projecting sign. August 2010.

- **Zoning Permit 10-0768CA**; replace 2700 sq. ft. of half lap roofing with new galvanized corrugated metal roofing. April 2010.
- **Zoning Permit 08-103CA**; exterior lighting to be installed on door/stairs and sign for Speeder and Earl's Coffee. August 2007.
- **Zoning Permit 06-384SN**; three signs for Pine Street Art Works. November 2005.
- **Zoning Permit 06-383CA**; change garage style overhead door to swinging doors with half-light windows. Same door location in rear alley of building. New light fixture over front entrance. November 2005.
- **Zoning Permit 06-198CA**; change from Burlington Futon Fabrics to retail art with accessory retail production space of 152 sf. September 2005.
- **Zoning Permit 01-507**; remove loading dock extension on the existing warehouse within the existing commercial complex. Area to be paved for additional parking and circulation areas. No change in use or other exterior changes included. June 2001.
- **Zoning Permit 00-097 / COA 099-006A**; Installation of two externally illuminated signs for the existing retail space (one parallel and one projecting.) August 1999.
- **Zoning Permit 99-045 / COA 099-006**; change of use from service (stained glass) to retail (fabric.) No exterior changes included. July 1998.
- **Zoning Permit 95-497**; installation of four awnings with lettering and illumination, two externally illuminated parallel signs and the relocation of the existing handicapped access ramp to the south entrance. The north entrance will then be made a large window with a planter in front of it. Use remains the Cheese Factory Outlet. June 1995.
- **Zoning Permit 91-277; COA 091 – 057**; installation of two parallel signs on front façade of building, store emblem over an announcement board. No illumination. March 1991.
- **Zoning Permit 85**-494; erect 2 parallel wood, non-illuminated signs, one on Howard Street and one on Pine Street side of extension in building. October 1985.
- **Zoning Permit 85-400**; remove dust collector, raise roof 3' to accommodate one overhead door to interior service yard. October 1985.
- **Zoning Permit 81-178**; replace metal roof, siding and floor. September 1980.
- **Zoning Permit 79-688**; to be used as work space consisting of ornamental iron work fabrication. Also to install two chimneys on the interior. December 1979.
- **Zoning Permit 79-653**; tear down existing stairs and replace exterior stairway. Emergency case. November 1979.
- **Zoning Permit 78-429;** the erection of a 28' x 29' two sided addition on the buildings in the rear. November 1977.
- **Zoning Permit** to use 6 Howard Street for a woodworking shop. Erect an overhanging sign. October 1977.
- **Zoning Permit** issued for a pole sign for Shelburne Spinners. January 1977.

- **Zoning Permit** to erect an overhanging sign within the property lines for Vermont Folk Furnishings. September 1975.
- **Zoning Permit** to remove one window and install one overhead door at 6 Howard Street. March 1974.
- **ZBA review**; to use the premises at 6 Howard Street for the sale and wholesaling of paint and building supplies. July 1972.
- **Zoning Permit** to use the premises for the storage and distribution of spaghetti products. Approved April 1972.
- **ZBA review**: Seeking a special exception under Title 27, Chapter 1, Section 6512-15A to use the masonry portion of the premises at 400 Pine Street for an auto repair garaged. Approved February 1972.
- **ZBA review:** Seeking a special exception under Title 27, Chapter 1, Section 6512-15B to use the premises at 400 Pine Street for the wholesaling and distribution of auto accessories. Approved November 1971.
- **ZBA review** to change a non-conforming use for a furniture stripping business. November 1971.

Overview: 400 Pine Street is a collection of assorted industrial buildings repurposed for various uses. The building proposed for alteration under this application is currently the "Arts Riot" structure immediately fronting Pine Street. No change in use, occupancy or parking is included.

The application proposes changes to the primary façade and building access, with enhanced outdoor service space inside a structural enclosure.
The building is included within the Pine Street Industrial District on the National Register of Historic Places.

The preliminary application included a seating area directly up to the front property line. The zoning district requires a 5' front yard setback. A revised plan (submitted 11.25.2020) has identified the structure within the required setback as an "accessible route", endeavoring to secure the allowable exemption from the required front yard setback.

The **Design Advisory Board** reviewed the preliminary application on November 10, 2020 and unanimously voted to recommend approval, with the following conditions:

1. The patio wall along the street edge shall be modified to increase the line of sight directed at the horizontal along the sidewalk a minimum of 25% of the linear footage.
2. The Board approves the modifications to façade, masonry openings and new fenestration.
3. The Board suggests that any future murals along the street wall be interchangeable.

Recommended motion: Denial, per the following findings:

I. <u>Findings</u>

<u>Article 2: Administrative Mechanisms</u>
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 if conditioned.**

<u>Article 4: Zoning Maps and Districts</u>

Sec. 4.4.3 Enterprise Districts

(a) Purpose:

The 2 Enterprise districts as illustrated in Map 4.4.3-1 are described as follows:

1. *The **Light Manufacturing** (E-LM) district is the primary commercial/industrial center of Burlington, and is intended primarily to accommodate enterprises engaged in the manufacturing, processing, distribution, creating, repairing, renovating, painting, cleaning, or assembling of goods, merchandise, or equipment without potential conflicts from interspersed residential uses. Other accessory commercial uses are allowed to support a wide range of services and employment opportunities. This district is intended to ensure that sufficient land area is appropriately designated within the city to provide an adequate and diversified economic base that will facilitate high-density job creation and retention. This district is primarily intended to provide for industrial uses suitable for location in areas of proximity to residential development. Development is intended to respect interspersed historic industrial buildings, and reflect the industrial aesthetic of the district's past. Parking is intended to be hidden within, behind, or to the side of structures.*

There is no change to the use or parking on the site. The application focuses on creating an entry ramp with outdoor seating, with associated changes to the building openings. **Affirmative finding.**

Table 4.4.3 -1 Dimensional Standards and Density

Districts	**Max. Intensity** (floor area ratio[1])	**Max. Lot Coverage**[1]	**Minimum Building Setbacks**[1] (feet) Front	Side	Rear[3]	**Max. Height**[1] (feet)
Light Manufacturing	2.0 FAR	80%	5 min	0[2]	10%[2]	45'
Proposed 400 Pine Street	n/a	No change	**0**	No change	No change	No change

Adverse finding for failure to meet a required 5' front yard setback for new structure.

(c) Permitted and Conditional Uses:

1. *The principal land uses that may be permitted, or conditionally permitted pursuant to the requirements of Article 3, within the Enterprise districts shall be as defined in Appendix A – Use Table.*
2. *Within the E-LM district, uses unrelated to Industrial or Art Production are*

permitted to be located on lots south of Home Avenue only when:

a. *One or more Industrial and/or Art Production use(s) exists on the lot; and*

b. *The combined gross floor area (GFA) of all other use(s) does not exceed 49% of the gross floor area on the lot. Uses limited by this provision are identified by Footnote 27 in Appendix A-Use Table; all uses marked as conditional use or with additional footnotes in Appendix A continue to apply.*

No changes to use are requested. Not applicable.

<u>Article 5: Citywide General Regulations</u>

Section 5.2.1 Existing Small Lots
Not applicable.

Section 5.2.2 Required Frontage or Access
There are no changes to the frontage or to access. **Affirmative finding.**

Section 5.2.3 Lot Coverage Requirements
There are no proposed changes to lot coverage. **Affirmative finding.**

Section 5.2.4 Buildable Area Calculation
Not applicable.

Section 5.2.5 Setbacks

(b) Exceptions to Yard Setback Requirements:

The following projections into required yard setbacks may be permitted subject to the standards of Article 6 to ensure compatibility with neighboring properties:

<u>2. Building and Site Features.</u> Eaves, sills, roof overhangs, cornices, steps to first floor entries, walkways, ramps for the disabled, fences, walls, and similar building and site features may project into a required yard setback.

The design, which included build-out to the front property line in its original submission, was modified to identify the extended deck as an "accessible route" and included a ramp to the south. (A ramp has been included along the north extension of the deck.) From rendered images, the deck is extended into the front yard setback from the north end southerly to the 2nd arched opening at approximately the midpoint of the building where the south ramp begins. Although identified as an "accessible route" on Z2.0, this portion of the new deck exceeds the exemption as defined above, and by its construction affords the opportunity for extended seating up to the property line within a required setback. If intended to be accessible, a gate would be unlikely at the entry to the distillery business.
The southerly ramp, steps to entries, the fence/wall are all allowable encroachments.
The only method of identifying this plan as an allowable exception under "ramps for the disabled" is by a positive interpretation by the building inspector.
Adverse finding for encroachment into a required front yard setback.

Section 5.2.6 Building Height Limits
Not applicable

Section 5.2.7 Density and Intensity of Development Calculations
Not applicable.

Part 3: Non Conformities
The pavement to the front property line is an existing nonconformity; the existing steps and fencing are allowable encroachments into a required setback. The project may retain the existing non-conformity but may not expand that non-conformity. The new deck, as structure proposed within a required setback, increases the level of non-conformity and may not be approved. **Adverse finding.**

Sec. 5.4.8 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.

400 Pine Street (as a collected E.B. and A.C. Whiting Company site- this building resource #20a) is listed on the National Register of Historic Places within the Pine Street Industrial District. Identified as the Fiber Machine Shop, it was built in 1915. See attached 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.*

   This structure was built as a fiber machine shop as part of the E. B. and A. C. Whiting Company. Although no longer associated with that industrial use, it has been repurposed for various uses; currently as a performing arts center, distillery, tasting room, and a coffee shop. Some building alteration has already occurred. This application includes the introduction of overhead garage doors in enlarged openings. The Design Advisory Board accepts the proposed alterations. **Affirmative 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 enlargement or introduction of new building entries will alter some original characteristics of the building; however most are in the same location as previous alterations. **Affirmative 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.*

   The newly introduced building canopies are not conjectural, and will read as new additions. The new building openings are located where there was previous alteration, and are not conjectural features. **Affirmative finding.**

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

   None identified. Not applicable.

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

   The splayed brick lintels over original openings will be altered at locations where new building openings are proposed; however these are in locations previously altered. **Affirmative 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.*

Alterations are based on new design rather than repair. There is no physical evidence or photo documentation that overhead doors or building entries originally existed as now proposed, but they are the latest in a series of alterations to building openings. **Affirmative finding.**

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.*

   No chemical treatments are proposed. **Not applicable.**

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

   None are identified at this location. **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.*

   Much of the proposed plan involves building openings that have already been modified through earlier alteration or permitting. Some opening enlargement will require masonry, lintel and sill loss. The new work will clearly be differentiated from the old. **Affirmative 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.*

    Replacing replacement window/doors is less controversial than introducing new openings where none existed or altering an existing opening that remains original. In the latter, restoration would be the only option to return to original condition. For the deck and fence barricade, removal would allow retention of the essential form and integrity of the property. **Affirmative finding.**

<u>Article 6: Development Review Standards</u>

Part 1: Land Division Design Standards
No land division is proposed. Not applicable.

Part 2: Site Plan Design Standards
Sec. 6.2.2 Review Standards

(a)Protection of Important Natural Features:

There are no important natural features at this location. The site is entirely paved or developed. **Affirmative finding.**

(b) Topographical Alterations:

Not applicable.

(c) Protection of Important Public Views:

As a listed historic structure, visibility for the public is desired. The existing fencing has somewhat diminished that opportunity; however the proposed enclosure will hinder the street view of the building's façade and observation for security purposes. See 6.2.3 (i), below. The DAB has conditioned their recommendation for approval on minimizing the street wall, which has been accomoplished in revised plans. **Affirmative finding.**

(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 (below).

(e) Supporting the Use of Renewable Energy Resources:

No part of the application will preclude the use of wind, water, solar, geothermal or other renewable energy resource. **Affirmative finding.**

(f) Brownfield Sites:

Although 400 Pine Street is listed on the Vermont DEC list of Brownfields for the presence of arsenic and PAH, this was associated with redevelopment of "The Vaults" (along Howard Street.) It is a low priority site, with no land restriction. The current application does not impose any additional regulatory concern. **Affirmative finding.**

(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.

Changes proposed are exterior structural alterations. No site disturbance is anticipated, albeit deck supporting framework.

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.

The application includes new metal canopies over new and existing openings (Plan Z5.1) **Affirmative finding.**

(h) Building Location and Orientation:

There is no proposed alteration to the building location or orientation. **Affirmative finding.**

(i) Vehicular Access:

No change is proposed to motor vehicular access. Bike racks will be incorporated to support non-motorized transit. The applicant is working on an agreement with DPW for an encroachment permit to install the racks along the ROW. **Affirmative finding if conditioned.**

(j) Pedestrian Access:

The building has immediate access to the public sidewalk. The site abuts the Champlain Parkway improvement area, where plans have anticipated right-of-way improvements and included a steel "baseboard" at the deck perimeter to provide a durable edge for plowing as well as a pour stop for the replacement sidewalk. The Department of Public Works has been engaged with review of the plans; their review and approval of proposed alterations so as not to conflict with Champlain Parkway improvements will be a condition of any decision.
A newly marked pedestrian path will connect to the southwesterly access ramp as well as a striped pedestrian path from the parking area north of the building. (Plan Z2.0) **Affirmative finding if conditioned.**

(k) Accessibility for the Handicapped:

The plan includes accessible ramps at both the north and southwest of the building. **Affirmative finding.**

(l)Parking and Circulation:

Five angled parking spaces are illustrated on plan Z2.0. As part of the Multi-modal multi-use parking district, there are no longer any minimum parking requirements, but the existing parking plan as approved remains in effect unless a specific request is made to remove the parking requirements based upon the change in regulation. (ZA20-04) **Affirmative finding.**

(m) Landscaping and Fences:

A portion of this request is to enclose the outdoor service area with a structured barrier. The proposed fence will meet the Clear Site Triangle required relative to proximity to a drive lane. Planting boxes will act as dividers between businesses along the deck. **Affirmative finding.**

(n) Public Plazas and Open Space:

There is no requirement within the ordinance to provide a public plaza. The application seeks to identify and enclose an outdoor service area (as opposed to open space.) **Affirmative finding.**

(o) Outdoor Lighting:

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

"Festoon" lighting, strung from steel posts is proposed. Typically of low output (and of commercial grade), there is no anticipated adverse impact. **Affirmative finding.**

(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 place 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.

There is no exterior mechanical equipment installation or relocation, utility or service enclosures included within this application. **Affirmative finding.**

Part 3: Architectural Design Standards
Sec. 6.3.2 Review Standards

(a)Relate development to its environment:

1. Massing, Height and Scale:

There is no change proposed to the building's massing, scale or height. Not applicable.

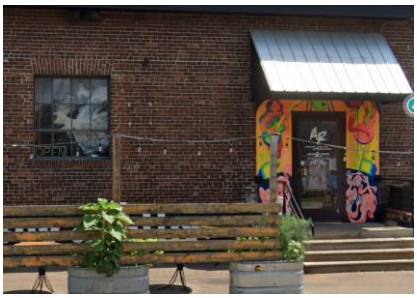
2. Roofs and Rooflines.

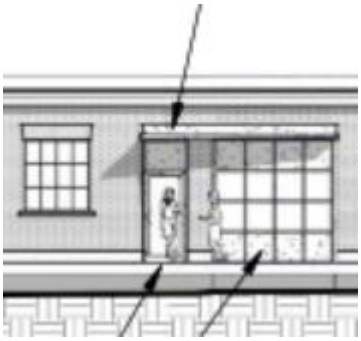
Roofs will remain as existing. New canopies are proposed over entrances. **Affirmative finding.**

3. Building Openings

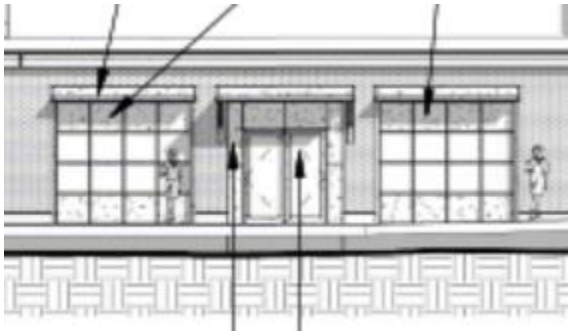
Several notable changes are proposed for building openings.

At the north end of the building, a new entry will be created through the masonry façade, and the non-masonry infill entry will be removed and replaced with an overhead door.





At the center of the façade, two double hung window openings will be replaced with overhead doors.



The entrance to a distillery use will be Copper patina:

Distillery

The 2017 National Register narrative defines the four, double door entries on the west (all now altered) and the remaining original 12 light metal windows with splayed brick lintels and brick sills. The proposed removal of replacement windows in the 2nd bay to create overhead door openings will not be a loss of original windows, but will eliminate the characteristic opening size and lintel/sill detail. Visual inspection suggests, however, that the opening has been altered with an observable masonry repair. The DAB has voted to support these changes. **Affirmative finding.**

(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.

(c) Protection of Important Public Views:

See Section 6.2.2. (c), above.

(d) Provide an active and inviting street edge:

Building facades shall be varied along the street edge by the integration of architectural features, building materials, or physical step-backs of the façade along its length. ..This may be accomplished by incorporating fenestration patterns, bays, horizontal and vertical façade articulations, the rhythm of openings and prominent architectural features such as porches, patios, bays, articulated bases, stepping back an elevation relative to surrounding structures, and other street level details. The use of traditional façade components such as parapet caps, cornices, storefronts, awnings, canopies, transoms, kick plates, and recessed entries are highly encouraged. In areas where high volumes of pedestrian traffic are desired, the use of architectural recesses and articulations at the street level are particularly important in order to facilitate the flow of pedestrian traffic.

Non-residential buildings should provide visual access into the interior of the building at street level through the use of large transparent windows and/or window displays in order to create a dynamic and engaging public streetscape. The use of mirrored, frosted, or tinted glass shall not be permitted along an active pedestrian street level façade.

The application includes the use of entry canopies over newly designed entryways, with low output decorative lighting. Other than window and door alterations, the existing building plane will remain as existing.

The proposal to construct an elevated deck, with staggered enclosure of the seating area separates the space from the public realm and proposes to diminish the opportunity to provide an inviting street presence per this standard. It minimizes the opportunity to gain visual access into the building, and segregates the space from the pedestrian street level. Both visually and functionally, the elevated space with solid fencing separates the building and its uses from the street level. The Design Advisory Board conditioned their recommendation for approval by a requirement to increase the line of sight directed at the horizontal along the sidewalk a minimum of 25% of the linear footage. This revised plan reflects that change. **Affirmative 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.

Hemlock is proposed for the wood deck and barrier wall cladding. Corten steel is illustrated for the deck base. Both are considered durable for the purposes proposed.

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.

Neither repair, restoration nor replacement of historic building materials are proposed. New materials will be introduced at the location of previous alteration or as part of this plan. **Affirmative finding.**

(f) Reduce energy utilization:

All new construction is required to meet the Guidelines for Energy Conservation, Section 8 of the City of Burlington Code of Ordinances. **Affirmative finding if conditioned.**

(g)Make advertising features complementary to the site:

Any signs will require separate permitting. **Affirmative finding if conditioned.**

(h) Integrate infrastructure into the building design:

See Section 6.2.2 (p), above.

(i)Make spaces secure and safe:

Spaces shall be designed to facilitate building evacuation, accessibility by fire, police or other emergency personnel and equipment, and, to the extent feasible, provide for adequate and secure visibility for persons using and observing such spaces. Building entrances/entry points shall be visible and adequately lit.

New construction shall conform to all building and life safety code as defined by the building inspector and the fire marshal.

The proposed fence enclosure threatens to limit visible accessibility of the outdoor service area, and associated building entries. The Design Advisory Board advised the applicant to limit the street wall by 25%, which is reflected in this revised plan. **Affirmative finding.**

Article 8: Parking

No changes are proposed to the uses that would alter the previously approved parking plan. Not applicable.

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

Exterior Improvements to 400-412 Pine Street

Burlington VT

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Zoning Permit R2

DATE 11/25/2020

Zoning

Z1.0 Removals for Exterior Improvements
Z2.0 Proposed Exterior Plan
Z5.0 Existing Elevations
Z5.1 West Elevation
Z5.2 North Elevation
Z5.3 Section A @ Artsriot North
Z5.7 Section F @ Distillery
Z6.1 North Birdseye
Z6.2 South Birdseye
Z6.3 Artsriot North
Z6.4 Artsriot South
Z6.5 Artsriot Distillery
Z6.6 Views from across Pine Street
Z6.7 Artsriot Outdoor Dining - North
Z6.8 Artsriot Outdoor Dining - South
Z6.9 Distillery Outdoor Seating

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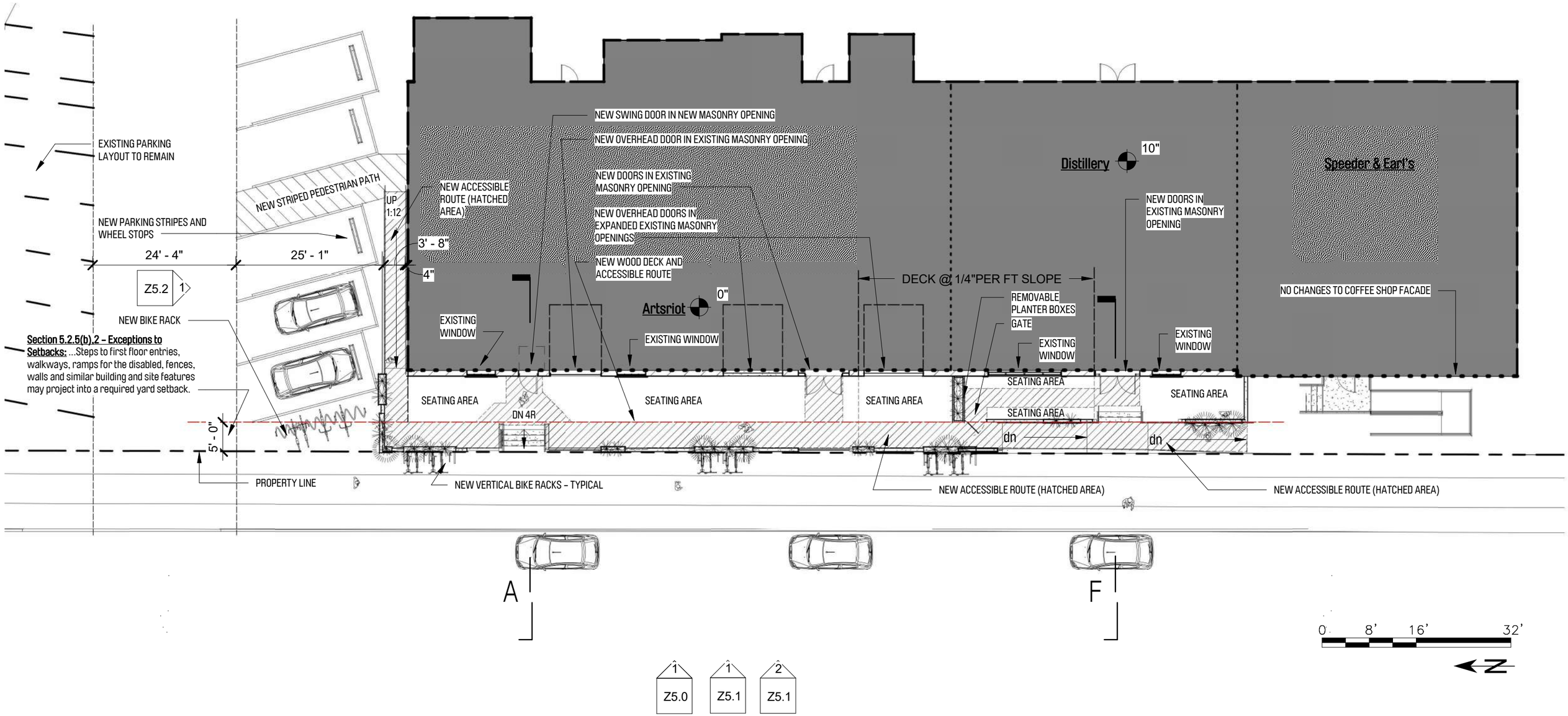
DATE 11/25/2020
SCALE 1/16" = 1'-0"

Removals for Exterior Improvements

Z1.0



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Proposed Exterior Plan

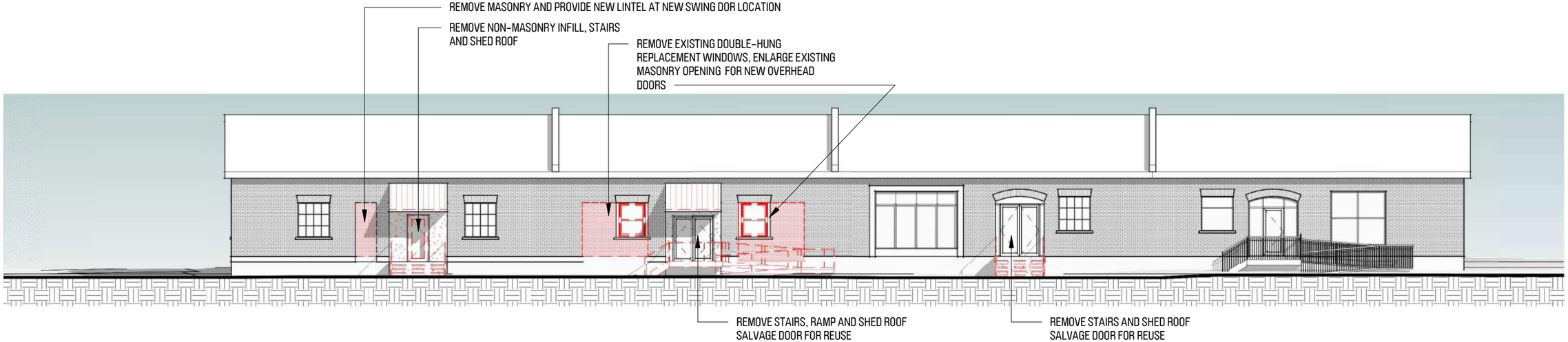
Z2.0

2
Z5.0

Pine Street (West) Elevation Existing

1/16" = 1'-0"

0 8' 16' 32'



1
Z5.0

Pine Street (West) Elevation Removals

1/16" = 1'-0"

0 8' 16' 32'

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SCALE 1/16" = 1'-0"

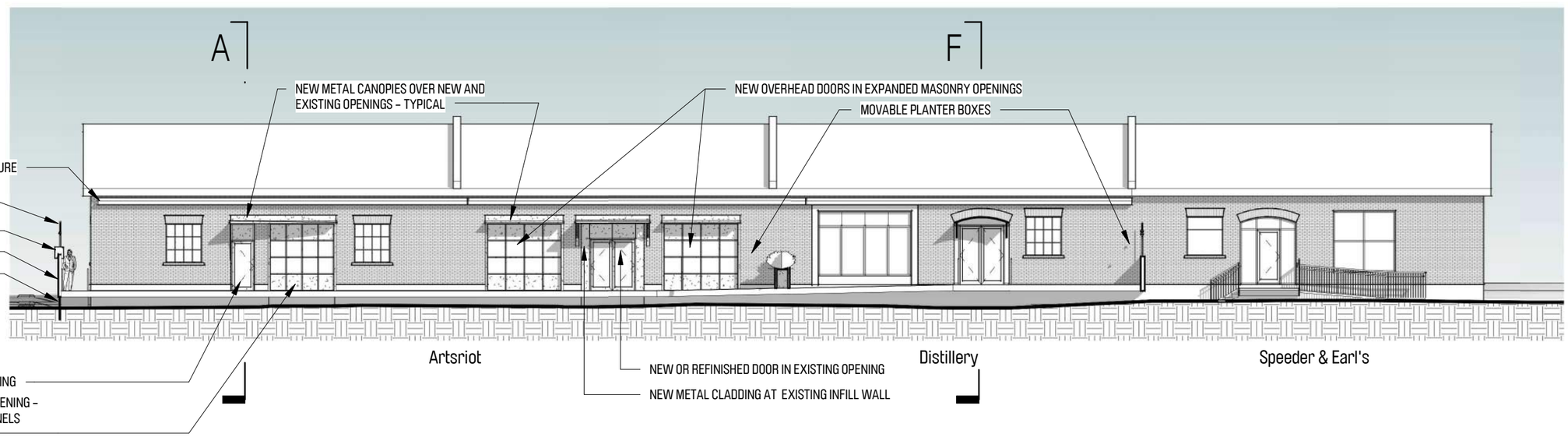
Existing Elevations

Z5.0

2 / Z5.1 Pine Street (West) Elevation - Color

1/16" = 1'-0"

0 8' 16' 32'



1 / Z5.1 Pine Street (West) Elevation

1/16" = 1'-0"

0 8' 16' 32'

STEEL ENTRY "ARBORS" AND METAL ENTRY CANOPIES ARE PLANNED AS ARTISTIC WORKS. THIS DRAWING DEPICTS APPROXIMATIONS OF THE FINAL SHAPE AND FORM TO BE DEVELOPED.

NOTE: THE APPLICANT INTENDS TO CREATE ARTISTIC MURALS ON THE FRONT, STREET-FACING FACADE - AT THE NEW WOOD FENCE AND ALSO AT THE BUILDING WALL. THE ZONING ORDINANCE CATEGORIZES SUCH MURALS AS SIGNAGE. THE APPLICANT WILL FILE A MASTER SIGN PLAN FOR THE PROJECT AT A FUTURE DATE.

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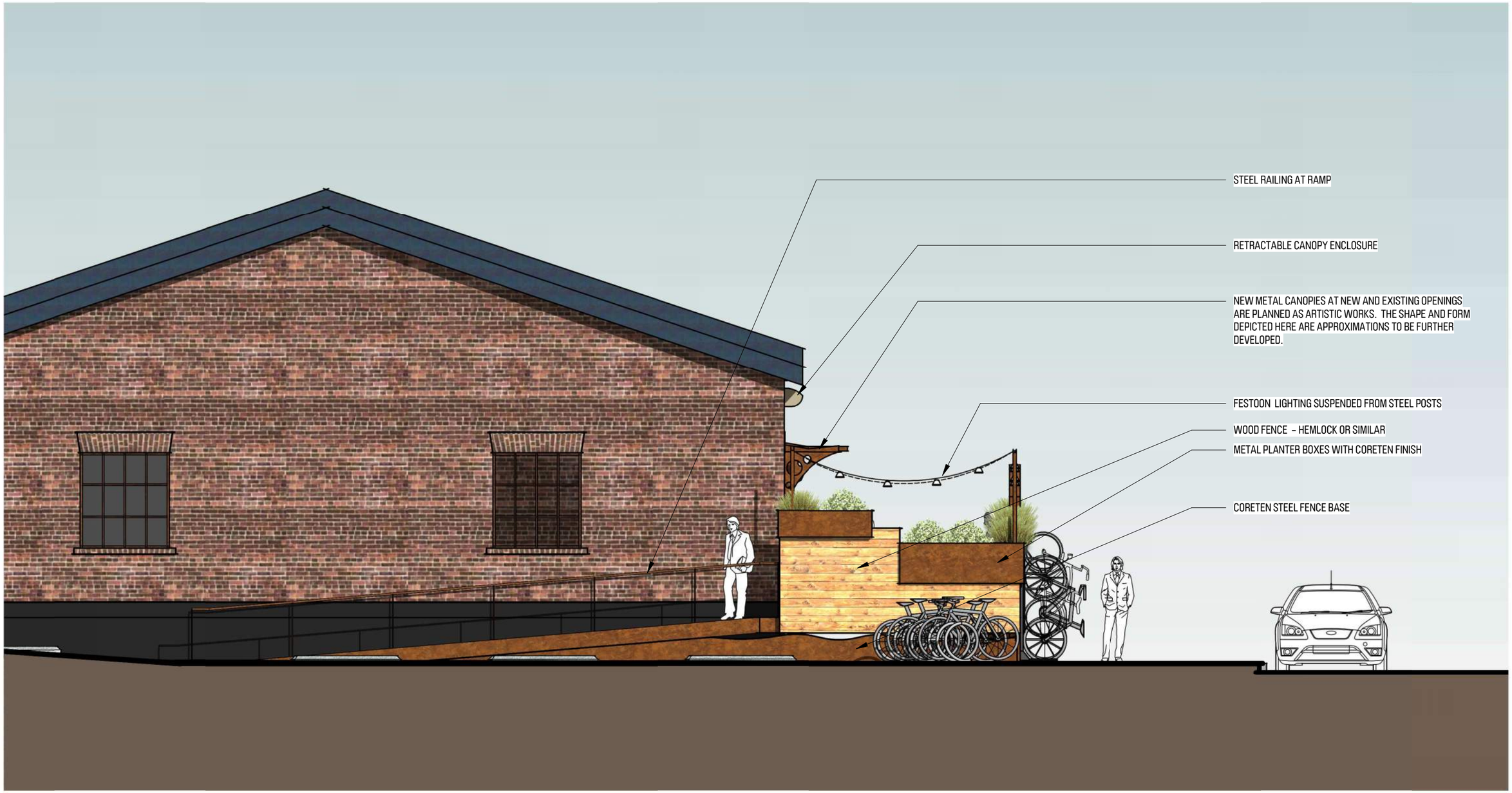
DATE 11/25/2020

SCALE As indicated

West Elevation

Z5.1



STEEL ENTRY "ARBORS" AND METAL ENTRY CANOPIES ARE PLANNED AS ARTISTIC WORKS. THIS DRAWING DEPICTS APPROXIMATIONS OF THE FINAL SHAPE AND FORM TO BE DEVELOPED.

0 4' 8' 12'

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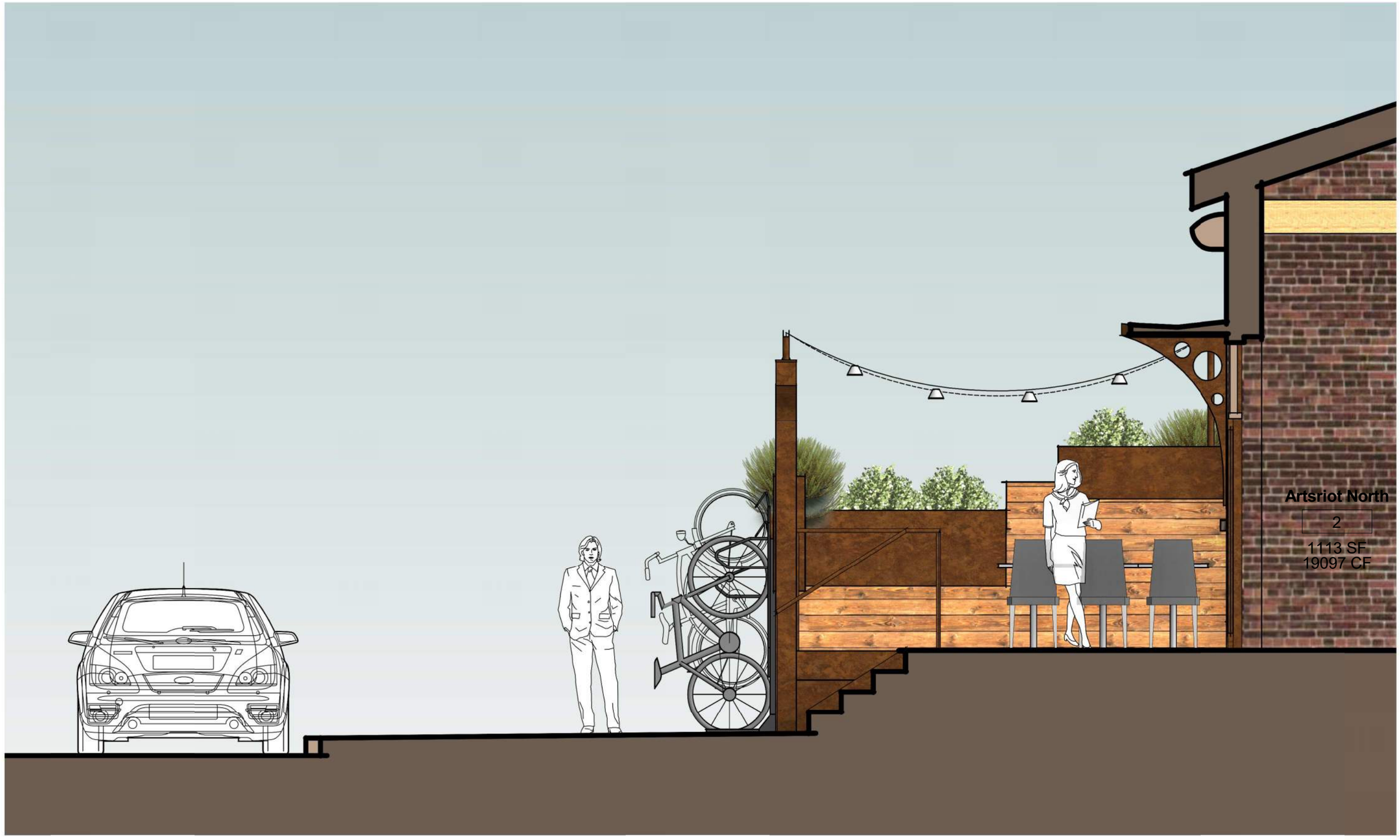
SCALE As indicated

North Elevation

Z5.2



STEEL ENTRY "ARBORS" AND METAL ENTRY CANOPIES ARE PLANNED AS ARTISTIC WORKS. THIS DRAWING DEPICTS APPROXIMATIONS OF THE FINAL SHAPE AND FORM TO BE DEVELOPED.

0 2' 4' 6'

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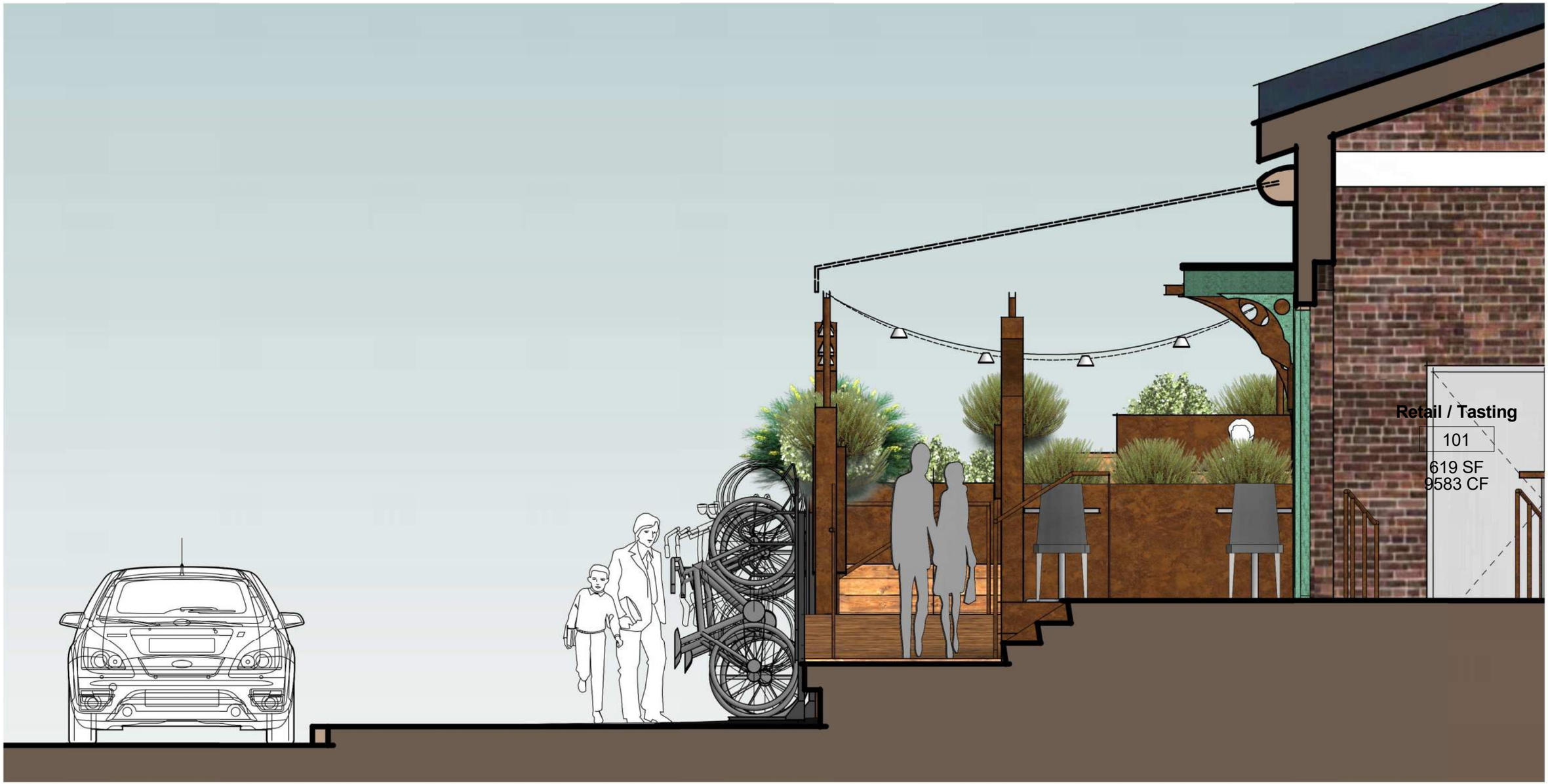
SCALE As indicated

Section A @ Artsriot North

Z5.3



STEEL ENTRY "ARBORS" AND METAL ENTRY CANOPIES ARE PLANNED AS ARTISTIC WORKS. THIS DRAWING DEPICTS APPROXIMATIONS OF THE FINAL SHAPE AND FORM TO BE DEVELOPED.

0 2' 4' 6'

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DATE 11/25/2020
SCALE As indicated

Section F @ Distillery

Z5.7

STEEL ENTRY "ARBORS" AND METAL ENTRY CANOPIES ARE PLANNED AS ARTISTIC WORKS. THIS DRAWING DEPICTS APPROXIMATIONS OF THE FINAL SHAPE AND FORM TO BE DEVELOPED.

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SCALE 1/4" = 1'-0"

North Birdseye

Z6.1

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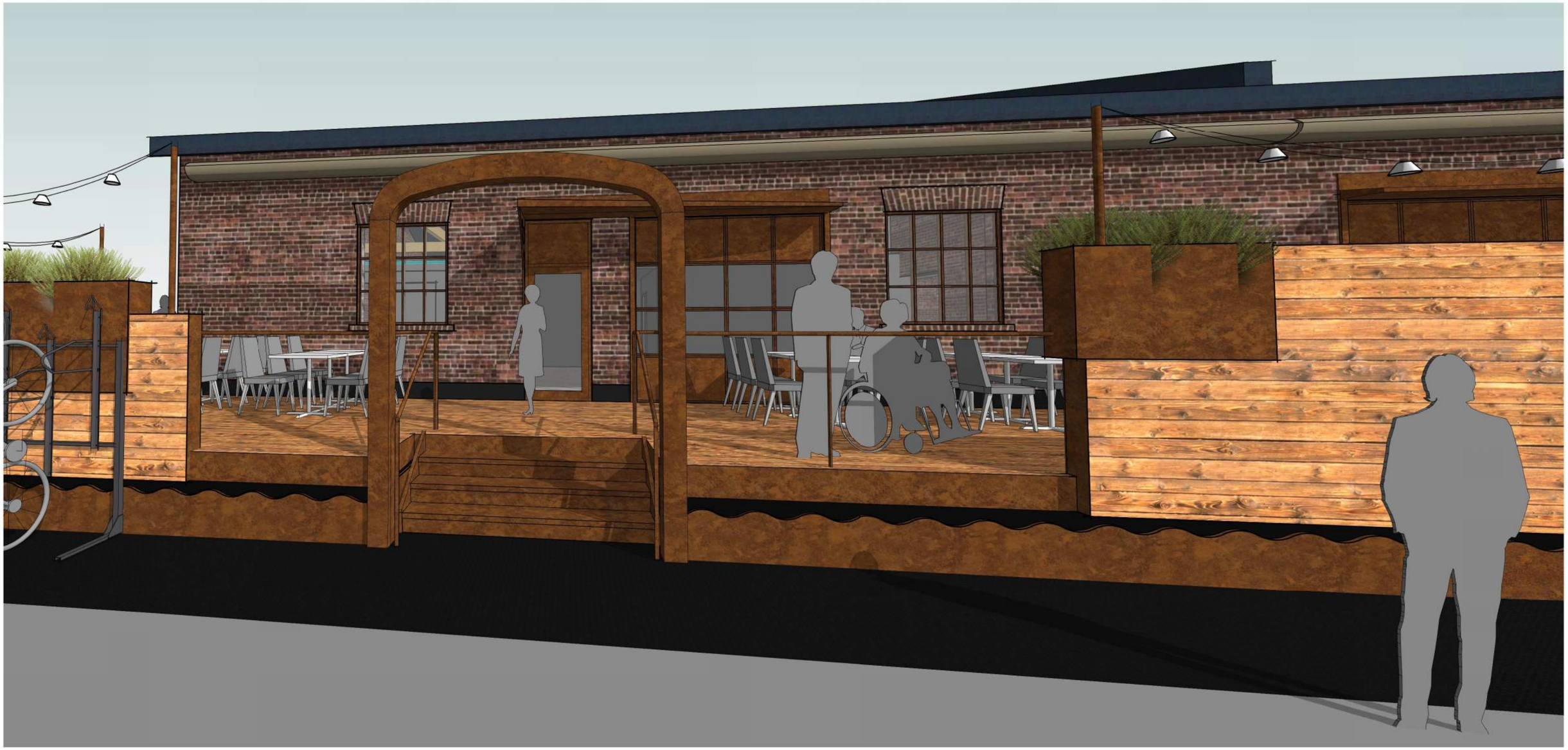
SCALE 1/4" = 1'-0"

South Birdseye

Z6.2



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Exterior Improvements to 400-412 Pine Street

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DATE 11/25/2020
SCALE

Artsriot North

Z6.3

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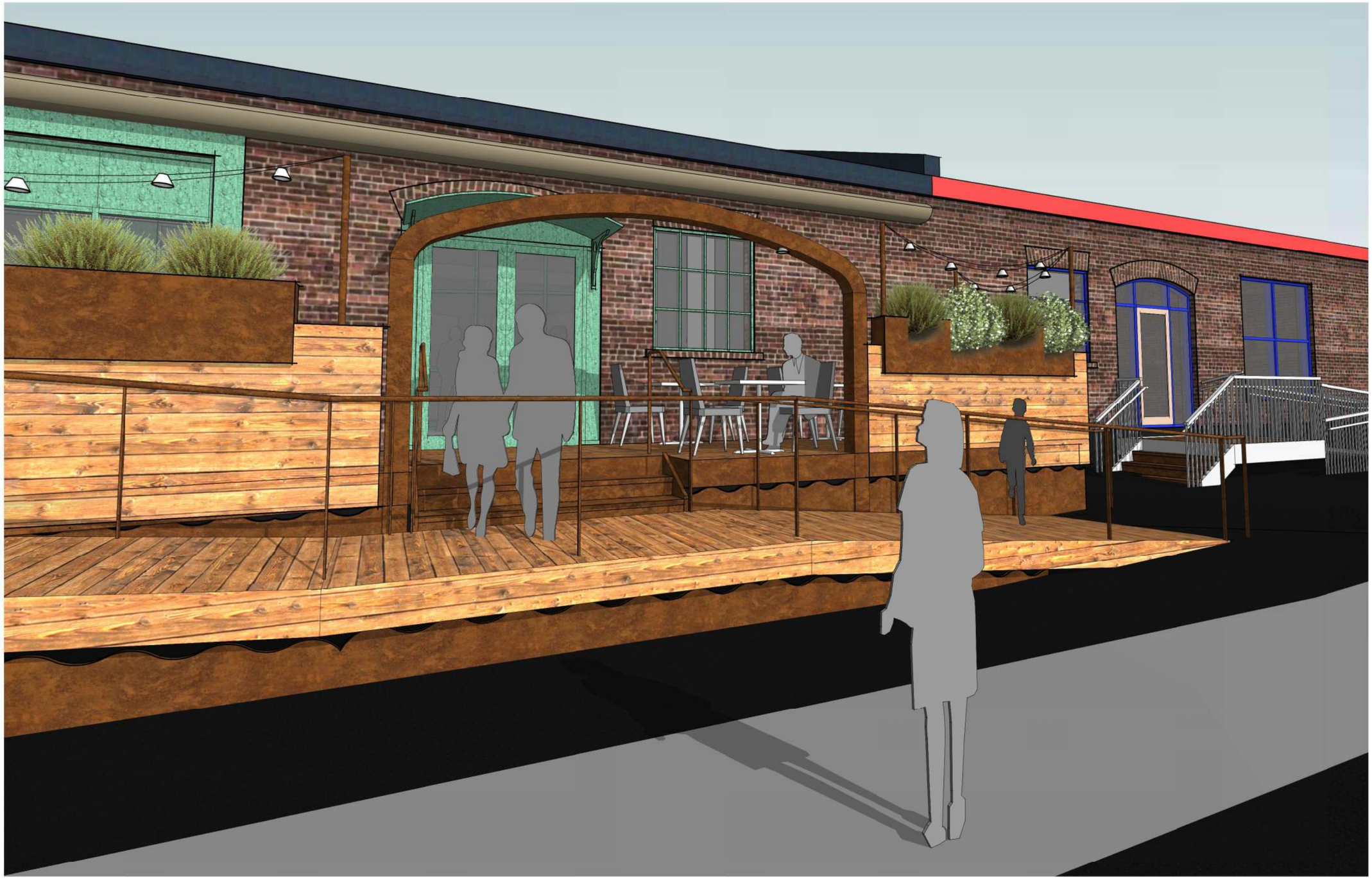
DATE 11/25/2020
SCALE

Artsriot South

Z6.4



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Exterior Improvements to 400-412 Pine Street

Burlington VT

Zoning Permit R2

DATE 11/25/2020
SCALE

Artsriot Distillery

Z6.5

1 / Z6.6 Across Street - North

STEEL ENTRY "ARBORS" AND METAL ENTRY CANOPIES ARE PLANNED AS ARTISTIC WORKS. THIS DRAWING DEPICTS APPROXIMATIONS OF THE FINAL SHAPE AND FORM TO BE DEVELOPED.

2 / Z6.6 Across Street - South

SBA
SMITH BUCKLEY ARCHITECTS
431 PINE STREET, SUITE 210 BURLINGTON VT 05401
P 802 540 0323 www.SBAVT.com

Exterior Improvements to 400-412 Pine Street

Burlington VT

Zoning Permit R2

DATE	11/25/2020
SCALE	1/4" = 1'-0"

Views from across Pine Street

Z6.6

SBA
SMITH BUCKLEY ARCHITECTS
431 PINE STREET, SUITE 210 BURLINGTON VT 05401
P 802 540 0323 www.SBAVT.com

Exterior Improvements to 400-412 Pine Street

Burlington VT

Zoning Permit R2

DATE	11/25/2020
SCALE	1/4" = 1'-0"

Artsriot Outdoor Dining - North

Z6.7

SBA
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Exterior Improvements to 400-412 Pine Street

Burlington VT

Zoning Permit R2

DATE	11/25/2020
SCALE	1/4" = 1'-0"

Artsriot Outdoor Dining - South

Z6.8

STEEL ENTRY "ARBORS" AND METAL ENTRY CANOPIES ARE PLANNED AS ARTISTIC WORKS. THIS DRAWING DEPICTS APPROXIMATIONS OF THE FINAL SHAPE AND FORM TO BE DEVELOPED.

SBA
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Exterior Improvements to 400-412 Pine Street

Burlington VT

Zoning Permit R2

DATE 11/25/2020
SCALE 1/4" = 1'-0"

Distillery Outdoor Seating

Z6.9

DEVELOPMENT REVIEW BOARD

January - December 2021

Regularly Scheduled Meetings

Date of Meeting	Day of Week	Time	Location	PH Deadline - Wed 4pm	COA Deadline - Wed 4pm
January 5th, 2021	Tuesday	5pm	DPW Conference Room	December 9th, 2020	December 16th, 2020
January 19th, 2021	Tuesday	5pm	DPW Conference Room	December 23rd, 2020	December 30th, 2020
February 2nd, 2021	Tuesday	5pm	DPW Conference Room	January 6th, 2021	January 13th, 2021
February 16th, 2021	Tuesday	5pm	DPW Conference Room	January 20th, 2020	January 27th, 2021
March 3rd, 2021	**Wednesday**	5pm	DPW Conference Room	February 4th, 2021	February 11th, 2021
March 16th, 2021	Tuesday	5pm	DPW Conference Room	February 17th, 2021	February 24th, 2021
April 6th, 2021	Tuesday	5pm	DPW Conference Room	March 10th, 2021	March 17th, 2021
April 20th, 2021	Tuesday	5pm	DPW Conference Room	March 24th, 2021	March 31st, 2021
May 4th, 2021	Tuesday	5pm	DPW Conference Room	April 7th, 2021	April 14th, 2021
May 18th, 2021	Tuesday	5pm	DPW Conference Room	April 21st, 2021	April 28th, 2021
June 1st, 2021	Tuesday	5pm	DPW Conference Room	May 5th, 2021	May 12th, 2021
June 15th, 2021	Tuesday	5pm	DPW Conference Room	May 19th, 2021	March 26th, 2021
July 6th, 2021	Tuesday	5pm	DPW Conference Room	June 9th, 2021	June 16th, 2021
July 20th, 2021	Tuesday	5pm	DPW Conference Room	June 23rd, 2021	June 30th, 2021
August 3rd, 2021	Tuesday	5pm	DPW Conference Room	July 14th, 2021	July 21st, 2021
August 17th, 2021	Tuesday	5pm	DPW Conference Room	July 21st, 2021	July 28th, 2021
September 7th, 2021	Tuesday	5pm	DPW Conference Room	August 11th, 2021	August 18th, 2021
September 21st, 2021	Tuesday	5pm	DPW Conference Room	August 25th, 2021	September 1st, 2021
October 5th, 2021	Tuesday	5pm	DPW Conference Room	September 8th, 2021	September 15th, 2021
October 19th, 2021	Tuesday	5pm	DPW Conference Room	September 22nd, 2021	September 29th, 2021
November 2nd, 2021	Tuesday	5pm	DPW Conference Room	October 6th, 2021	October 13th, 2021
November 16th, 2021	Tuesday	5pm	DPW Conference Room	October 20th, 2021	October 27th, 2021
December 7th, 2021	Tuesday	5pm	DPW Conference Room	November 10th, 2021	November 17th, 2021
December 21st, 2021	Tuesday	5pm	DPW Conference Room	November 24th, 2021	December 1st, 2021

CITY OF BURLINGTON

ORDINANCE 6.04
Sponsor: Office of City Plann
Planning Commission, Ordi
Committee
Public Hearing Dates: 09/14/2

In the Year Two Thousand Twenty

First reading: 07/13/20
Referred to: Ordinance Comm
Rules suspended and placed i
stages of passage: _____
Second reading: 09/14/20
Action: adopted
Date: 09/14/20
Signed by Mayor: 09/21/20
Published: 09/30/20
Effective: 10/21/20

An Ordinance in Relation to

COMPREHENSIVE DEVELOPMENT ORDINANCE –
Minimum Parking Requirements
ZA #20-04

It is hereby Ordained by the City Council of the City of Burlington as follows:

That Appendix A, Comprehensive Development Ordinance, of the Code of Ordinances of the City Burlington, Article 8: Parking, Part 1: General Requirements, be and hereby is amended by amendi Sections 8.1.3, Parking Districts, Map 8.1.3-1, Parking Districts, 8.1.6, Existing Structures: Exemp Downtown District, 8.1.8, Minimum Off-Street Parking Requirements, Table 8.1.8-1 Minimum Of Street Parking Requirements, 8.1.9, Maximum Parking Spaces, 8.1.10, Off-Street Loading Require 8.1.11, Parking Dimensional Requirements, Table 8.1.11-1, Minimum Parking Dimensions, 8.1.12, Limitations, Location, Use of Facilities, 8.1.13, Parking for Disabled Persons, 8.1.14 Stacked and Tandem Parking Restrictions, 8.1.15 Waivers from Parking Requirements/Parking Management Pl and adding Section 8.1.16 Transportation Demand Management, thereto to read as follows:

ARTICLE 8: PARKING

PART 1: GENERAL REQUIREMENTS

Sec. 8.1.1 Purpose As written.

Sec. 8.1.2 Applicability As written.

Sec. 8.1.3 Parking Districts

The demand for parking is highly dependent on the context within which a given use or structure is lo Factors such as proximity to other related uses, availability of public transportation, the density o uses, and the ability to share parking with nearby uses are all factors which influence the dema

individual and dedicated on~~ff~~-site parking. For the purposes of this Article, the following three (3) I Districts as illustrated in Map 8.1.3-1 are hereby created:

(a) Neighborhood Parking District:

This parking district establishes the baseline of parking requirements throughout the city wh demand for on-~~ff~~site parking is largely dependent on the needs and characteristics of an individ or land use.

(b) Shared Use Parking District:

This parking district reduces the requirements from the baseline standards recognizin opportunities exist to share parking demand between related nearby land uses, and that travel between these uses may not be strictly automobile dependent.

(c) ~~Downtown~~ Multimodal Mixed-Use Parking District:

This parking district ~~further reduces~~ eliminates the minimum on-site parking requirements ~~fr~~ ~~baseline standards~~ of Sec. 8.1.8 recognizing ~~that~~ the opportunity for extensive sharing of p demand between nearby mixed land uses; ~~occurs; that a majority of~~ makes travel to and be proximate land uses ~~is~~ largely independent from an automobile; and that an array of non-vel transportation modes, public parking facilities, and frequent transit service greatly reduces the ne independent on-site parking for individual land uses.

This Parking District includes all properties in the following Zoning Districts:

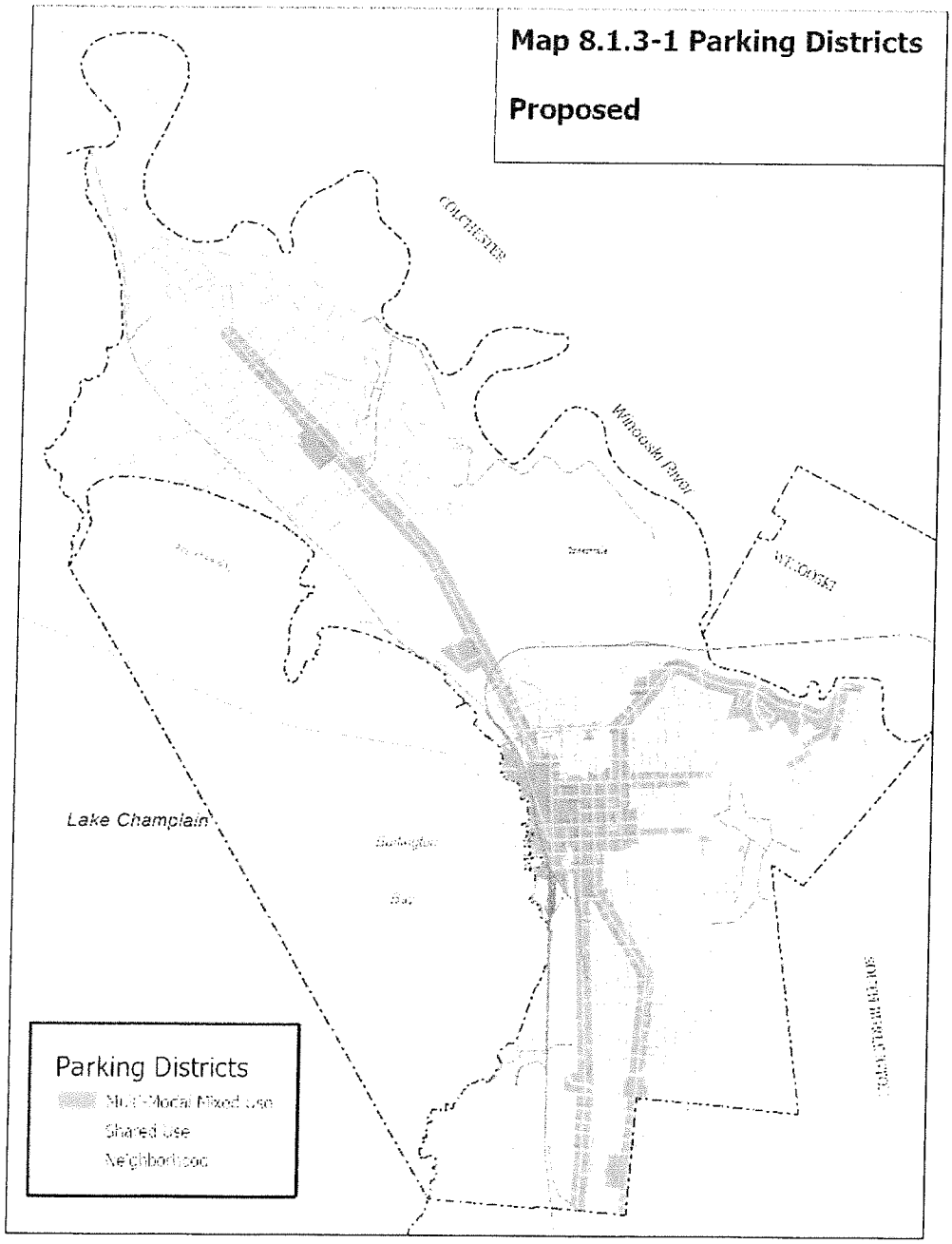
(a) Downtown Core (FD6)
(b) Downtown Center (FD5)
(c) Downtown Waterfront – Public Trust (DW-PT)
(d) Neighborhood Activity Center (NAC)
(e) Neighborhood Mixed Use (NMU)
(f) NAC – Riverside (NAC-R)
(g) NAC – Cambrian Rise (NAC-CR)

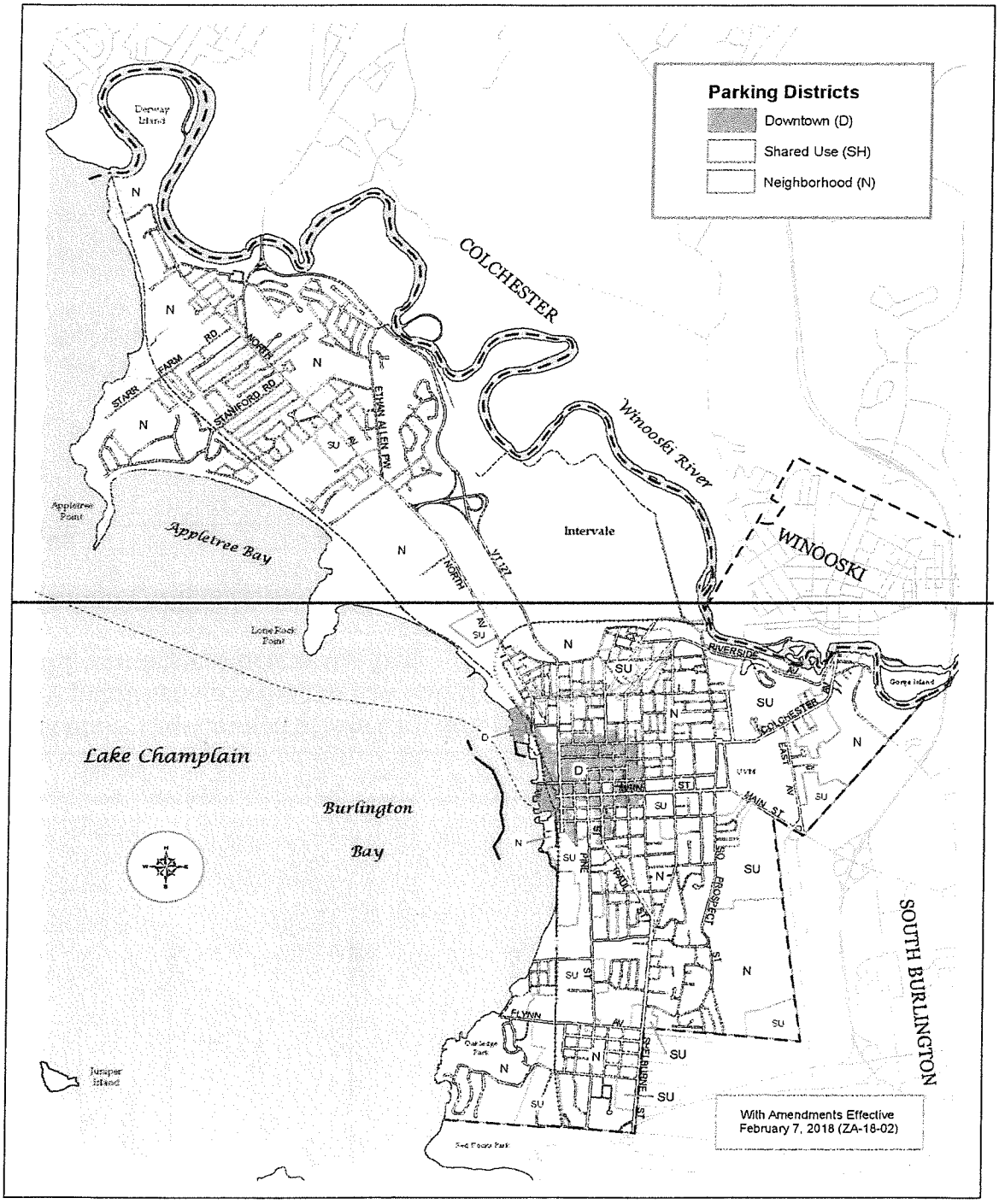
With the exception of those properties subject to Part 3 - Institutional Parking Management Plan Parking District also includes all properties with street frontage on the following major thoroug to a maximum depth of 200 ft.:

(a) North Avenue from Battery Park to Plattsburg Avenue
(b) Colchester Avenue
(c) Pearl Street
(d) North Winooski Avenue
(e) Riverside Avenue from North Winooski Avenue to Colchester Avenue
(f) Battery Street
(g) Main Street
(h) College Street to South Williams Street
(i) Pine Street
(j) Saint Paul Street
(k) Shelburne Street

With respect to permits issued with parking requirements in this Parking District prior to the eff date of the amendment to eliminate minimum onsite parking, an administrative permit amendmen

be requested to remove the parking requirement based upon the change in regulation. This c
apply to permits containing public parking provided in exchange for an Article 4 Developmen
(See Sec. 4.4.1(d)(5)(A)). For those permits, the public parking provided shall be maintained.





Map 8.1.3 -1 Parking Districts

Sec. 8.1.4 Existing Structures As written.

Sec. 8.1.5 Existing Structures-Change or Expansion of Use As written.

Sec. 8.1.6 ~~Existing Structures:~~ Affordable Housing and Historic Buil Exemption ~~in Downtown District~~

~~Any nonresidential use within a structure lawfully in existence prior to January 1, 2007 in any Dow Parking District shall be exempt from the requirements of this Article when applying for a change other nonresidential use.~~ Regardless of location, the Minimum Off-Street Parking Requirements 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 app provisions of Article 9 Part 1 - Inclusionary Housing (*see Sec. 9.1.10 Income Eligibility a 9.1.11 Calculating Rents and Selling Prices*);

(b) The adaptive reuse and/or substantial rehabilitation of a building listed on the State or N Register of Historic Places; and

(c) The creation of an Accessory Dwelling Unit subject to the provisions of Sec. 5.4.5.

Sec. 8.1.7 Non-conforming Residential Structure As written.

Sec. 8.1.8 Minimum Off-Street Parking Requirements

A minimum number of off-street ~~P~~parking spaces for all uses and structures shall be provided in acco with Table 8.1.8-1 below.

(a) Where a use is not listed ~~no requirement is designated and the use is not comparable to any of listed uses~~, the minimum parking requirements shall be determined by the DRB upon recommendation by the administrative officer based upon a determination that the use is substa equivalent in use, nature, and impact to a listed use ~~the capacity of the facility and its associated~~

(b) When the calculation yields a fractional number of required spaces, the number of spaces shal rounded to the nearest whole number.

(c) The minimum off-street parking requirement for a development with inclusionary housing uni provided on site shall be reduced by the percentage of inclusionary units required by Article 9.

(Example: A 100-unit residential development with a requirement of 15% inclusionary units shall provide minimum off-street parking based on 85 dwelling units.)

Table 8.1.8-1 Minimum Off-Street Parking Requirements

	Neighborhood Districts	**Shared Use Districts**	**Multimodal Mixed-Use ~~Downtown~~ Districts**
RESIDENTIAL USES[1]	**Per Dwelling Unit except as noted**		
Multi-unit attached dwelling units, studio units or 1-bedroom dwelling unit.	2	1	~~1~~0
Single Family detached and Duplex	2	2	~~1~~0
1. Adjusted for development with inclusionary housing units per Sec. 8.1.8(c).			
RESIDENTIAL USES - SPECIAL[1]	**Per Dwelling Unit except as noted**		
Assisted Living	0.5	0.5	0~~.4~~
Bed and Breakfast (per room, in addition to single-family residence)	1	0.75	0~~.5~~
Boarding House (per two (2) beds)	1	0.75	0~~.5~~
Community House	1	0.75	0~~.5~~
Convalescent Home (per four (4) beds)	1	1	~~1~~0
Dormitory (per two (2) beds)	1	1	~~1~~0
Emergency Shelter	0	0	0
Group Home (per two (2) beds)	1	1	~~1~~0
Historic Inn (per room, in addition to single-family residence)	1	0.75	0~~.5~~
Sorority & Fraternity (per two (2) beds)	1	1	~~1~~0
NON-RESIDENTIAL USES	**Per 1,000 square feet of gross floor area (gfa) except as noted**		
Adult Day Care (per two (2) employees)	1	1	~~1~~0
Agricultural Use	~~None~~0	~~None~~0	~~None~~0
Amusement Arcade	2	1	0
Animal Boarding/Kennel/Shelter	2.5	1.5	~~1~~0
Animal Grooming (per grooming station)	1	1	0
Animal Hospitals/Veterinarian Office	3	2	~~1~~0
Appliance & Furniture Sales/Service	2.5	1	~~1~~0
Aquarium	1.3	1	~~1~~0
Art Gallery/Studio	3.3	2.5	~~1~~0
Auction Houses	3.3	2.5	~~1~~0
Automobile & Marine Parts Sales	2.5	1.5	~~1~~0

Table 8.1.8-1 Minimum Off-Street Parking Requirements

	Neighborhood Districts	**Shared Use Districts**	**Multimodal Mixed-Use ~~Downtown~~ Districts**
Automobile Body Shop	2 plus 1/bay	2 plus 1/bay	~~2 plus 1/bay~~0
Automobile Repair/Service	2 plus 1/bay	2 plus 1/bay	~~2 plus 1/bay~~0
Automobile Sales – New & Used	2	2	~~1~~0
Bakery	2.5	2.5	~~1~~0
Bank, Credit Union	2.5	2	~~1~~0
Bar/Tavern	4	3	~~None~~0
Beauty/Barber Shop (per station/chair)	1	1	~~None~~0
Bicycle Sales/Repair	2.5	1	~~None~~0
Billiard Parlor (per game table)	1	1	~~None~~0
Boat Repair/Service	2	2	~~1~~0
Boat Sales/Rental	2	2	~~1~~0
Boat Storage	3	2	~~1~~0
Bowling Alley (per lane)	3	2	~~1~~0
Building Material Sales	3.3	2.5	~~1~~0
Café (per four (4) seats)	1	~~None~~0	~~None~~0
Camp Ground (per camping space)	1	1	~~1~~0
Car Wash (stacking spaces per wash bay)	4	4	40
Cemetery	~~None~~0	~~None~~0	~~None~~0
Cinema (per four (4) seats)	1	1	~~None~~0
Club, Membership	3.3	2.5	~~1~~0
Community Center	3.3	2.5	~~1~~0
Community Garden (per ten (10) plots)	1	1	~~None~~0
Conference Center	3	2	~~1~~0
Contractor Yard (per 1,000 gfa of office space)	2.5	2	~~2~~0
Convenience Store	3	2	~~1~~0
Convention Center	n/a	3	~~2~~0
Courthouse	n/a	3.3	~~2~~0
Crematory (per FTE employee)	1	1	~~1~~0
Crisis Counseling Center	4	3	~~1~~0

Table 8.1.8-1 Minimum Off-Street Parking Requirements

	Neighborhood Districts	**Shared Use Districts**	**Multimodal Mixed-Use ~~Downtown~~ Districts**
Daycare - Home (6 children or less)	~~None~~0	~~None~~0	~~1 drop-off~~0
Daycare - Large (Over 20 children) (per two (2) employees)	1 plus 1 drop-off per 5 children	1 plus 1 drop-off per 5 children	~~2 drop-off~~0
Daycare - Small (20 children or less) (per two (2) employees)	1 plus 1 drop-off per 5 children	1 plus 1 drop-off per 5 children	~~1~~0
Dental Lab	2	1	~~None~~0
Distribution Center (per 3,000 gfa)	1	0.75	0~~.75~~
Dry Cleaning Plant	1.3	1	~~1~~0
Dry Cleaning Service	2.5	2	~~2~~0
Film Studio	3.3	2.5	~~1~~0
Fire Station (per apparatus)	2	2	~~1~~0
Food & Beverage Processing	1.3, plus 3 per 1,000 gfa devoted to patron use	1, plus 2 per 1,000 gfa devoted to patron use	~~1~~0
Fuel Service Station (per employee/shift)	1	1	~~1~~0
Funeral Home (per four (4) seats)	1	1	~~1~~0
Garden Supply Store (per 1,000 gfa of retail area.)	3	2	~~1~~0
General Merchandise/Retail	3	2	~~None~~0
Grocery Store	3	2	~~None~~0
Hazardous Waste Collection/Disposal (per two (2) employees on the largest shift)	1	1	~~n/a~~0
Health Club	3	2	~~1~~0
Health Studio	2	1	~~None~~0
Hospitals (per patient bed)	2	2	~~2~~0
Hostel (per two (2) beds)	0.5	0.5	~~None~~0
Hotel/Motel (per room)	1	0.75	0~~.75~~
Laundromats (per washing machine)	1	1	~~None~~0
Library	1.3	1	~~None~~0
Lumber Yard (per 1,000 gfa of retail area.)	3	2	~~1~~0
Manufacturing-Light	1.3, plus 3 per 1,000 gfa	1.3, plus 2 per 1,000 gfa	~~1~~0

Table 8.1.8-1 Minimum Off-Street Parking Requirements

	Neighborhood Districts	**Shared Use Districts**	**Multimodal Mixed-Use ~~Downtown~~ Districts**
	devoted to patron use.	devoted to patron use.	
Manufacturing	1.3, plus 3 per 1,000 gfa devoted to patron use.	1.3, plus 2 per 1,000 gfa devoted to patron use.	~~1~~0
Marina (per berth)	0.5	0.5	0~~.5~~
Medical Lab	2	1	~~None~~0
Museum	1.3	1	~~1~~0
Office - General	2	2	~~2~~0
Office - Medical, Dental	3	2	~~1~~0
Office – Technical	2	2	~~2~~0
Open Air Markets	~~None~~0	~~None~~0	~~None~~0
Operations Center - Taxi (per three (3) employees)	1	1	~~1~~0
Operations Center - Truck/Bus (per 3,000 gfa)	1	0.75	0~~.75~~
Park (per playing area)	5	~~None~~0	~~None~~0
Parking Garage – Private	~~None~~0	~~None~~0	~~None~~0
Parking Lot – Private	~~None~~0	~~None~~0	~~None~~0
Performing Arts Center (per four (4) seats)	1	1	~~None~~0
Performing Arts Studio	1	~~None~~0	~~None~~0
Pet Store	2.5	1	~~None~~0
Pharmacy	3	2	~~1~~0
Photo Studio	2.5	1	~~None~~0
Photography Lab	1	1	~~None~~0
Police Station	2.5	2	~~2~~0
Post Office	1.3	1	~~1~~0
Post Office - Local	2	2	~~None~~0
Printing Plant	1.3	1	~~1~~0
Printing Shop	2	2	~~None~~0
Public Transit Terminal	1 per 200 gfa of public waiting space	1 per 200 gfa of public waiting space	~~None~~0
Public Works Yard/Garage	~~None~~0	~~None~~0	~~None~~0

Table 8.1.8-1 Minimum Off-Street Parking Requirements

	Neighborhood Districts	**Shared Use Districts**	**Multimodal Mixed-Use ~~Downtown~~ Districts**
Radio & TV Studio	2	2	~~2~~0
Rail Equip. Storage & Repair	~~None~~0	~~None~~0	~~None~~0
Recording Studio	1.3	1	~~1~~0
Recreational Facility - Indoor (per four (4) seats)	1	1	0~~.5~~
Recreational Facility - Outdoor (per playing field)	15	10	~~None~~0
Recreational Facility - Outdoor Commercial	Larger of 1 per 4 seats or 15 per playing field	Larger of 1 per 4 seats or 10 per playing field	~~1 per 6 seats~~0
Recreational Vehicle Sales – New and Used	2	2	~~1~~0
Recycling Center - Large above 2,000 gfa	~~None~~0	~~None~~0	~~None~~0
Recycling Center - Small 2,000 gfa or less	~~None~~0	~~None~~0	~~None~~0
Research Lab	2.5	2	~~2~~0
Restaurant	4	3	~~None~~0
Restaurant – Take-Out	4	3	~~None~~0
Salon/Spa	4	4	~~2~~0
School - Secondary (per Classroom)	7	5	~~2~~0
School - Primary (per Classroom)	1.5	1.5	~~1.5~~0
School – Preschool Large (over 20 children) (per two (2) employees	1 plus 1 drop-off per 5 children	1 plus 1 drop-off per 5 children	~~1 plus 1 per 5 children~~0
School – Preschool Small (up to 20 children) (per two (2) employees	1 plus 1 drop-off per 5 children	1 plus 1 drop-off per 5 children	~~1~~0
School - Trade/Professional	5	3	~~1~~0
School, - Post-Secondary	2	2	~~2~~0
Solid Waste Facility - Incinerator, Landfill, Transfer Station	~~None~~0	~~None~~0	~~None~~0
Tailor Shop	2	1	~~None~~0
Vehicle Salvage	~~None~~0	~~None~~0	~~None~~0
Warehouse	0.5	0.35	0~~.35~~
Warehouse - Self Storage Facility	1 per resident manager, plus 1 per 100	1 per resident manager, plus 1 per 100	~~1 per resident manager, plus 1 per~~

Table 8.1.8-1 Minimum Off-Street Parking Requirements

	Neighborhood Districts	**Shared Use Districts**	**Multimodal Mixed-Use ~~Downtown~~ Districts**
	leasable storage spaces	leasable storage spaces	~~100 leasable storage spaces~~0
Warehouse - Retail	3.3	2.5	~~2.5~~0
Wholesale Sales	1.3	1	~~1~~0
Worship, Place of (per four (4) seats)	1	1	~~1~~0

Sec. 8.1.9 Maximum On-Site Parking Spaces

The total number of off-street parking spaces provided in ~~all~~ any parking districts shall not be more ~~125% of the minimum number of spaces required for the Neighborhood Parking District for any gi~~ ~~use~~ as required in Table 8.1.~~8~~9-1 below. ~~In no case shall the maximum number of required spaces b~~ ~~than one (1) per unit of measurement (beds, units, 1000 gross sqft, etc.) for the use.~~

Table 8.1.9-1 Maximum Off-Street Parking Requirements

Neighborhood District	**Shared Use District**	**Multimodal Mixed-Use Distr**
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	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	100% of the minimum number spaces required for the Shared Pa District for any given use as requ in Table 8.1.8-1

(a) **Exemptions**: The following shall ~~reduce~~ not be included in the maximum number of allo spaces required by this section:

~~*1. Structured Parking:* Spaces provided within the footprint of a structure containing one or other uses, including rooftop, at grade, or below grade spaces shall not be counted towar maximum, provided the floor area dedicated to parking is less than 50% of the total gross floor a the structure;~~

~~2~~1. ***Public Parking:*** Spaces provided and available for use by the public shall not be counted to the maximum. Such spaces shall be available to the public at a minimum of nights and weekend be signed or marked accordingly;

~~3~~2. ***Carpool, Vanpool, and Car-Share Parking:*** Spaces dedicated for vehicles participating carpool, vanpool, or car-share program shall not be counted towards the maximum. Such spaces be reserved for such use, and be signed or marked accordingly; and,

~~4~~3. ***Alternative Fueled Vehicle Parking.*** Parking spaces dedicated for vehicles operating on prin alternative fuels including but not limited to electric, natural gas, and hydrogen shall not be co

towards the maximum. Such spaces shall be reserved for such use and be signed and/or the painted with the words "Alternative Fueled Vehicles Only."

~~5~~4. ***Waiver of Maximum Parking Limitations.*** Parking in excess of the maximum parking lim of this section, or a request for one parking space where none would otherwise be permitted, waived by the DRB pursuant to the provisions of Sec 8.1.15 with the following additional require

A. The applicant requesting the waiver shall also provide:

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

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

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

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

(ii) The proposed development demonstrates that its design and intended uses will co 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 int transit supportive use in the future.

Sec. 8.1.10 Off-Street Loading Requirements.

Outside of the ~~Downtown~~ Multimodal Mixed-Use Parking District, every structure constructed af effective date of this ordinance and used for non-residential use shall provide sufficient space f unloading and loading of vehicles. The adequacy of any proposed loading areas shall be considered a of the site plan and traffic circulation review. Such loading areas shall have access to a public alle public street in such a way to minimize conflicts with the circulation of other vehicles and pedestria screened from public view, and provide safe and effective access to the city's street network.

Sec. 8.1.11 Parking Dimensional Requirements

The following standards in Table 8.1.11-1 below shall be ~~used~~ applicable in all Parking Districts to ensu safe, adequate, and convenient access and circulation. These standards shall be adhered to except in situations where a lesser standard is deemed necessary by the DRB after consultation with the city engi due to site topography, location of existing or proposed structures, lot configuration, and/or the need to preserve pervious lot coverage for on-site stormwater management, existing trees, and mature vegetatio

Mechanical access parking shall be exempt from the dimensional requirements of this section.

Table 8.1.11-1 Minimum Parking Dimensions

~~Angle of~~ Parking Space Type	Space Width (A) ~~of Space~~	Space Length (B) ~~of Space~~	Vertical Clearance (C) (Stall and Aisle)	~~Width of Angled Space~~	~~Length of Angled Space~~	~~Minimum Back-Up Length~~
Standard ~~Cars~~						
Parallel ~~Parking~~	~~8~~9.0'	~~22~~18.0'	7.5'	-	-	-
45° Angle[2]	9.0'[1]	~~20~~18.0'	7.5'	~~12.7'~~	~~20.5'~~	~~15.0'~~
60° Angle[2]	9.0'[1]	~~20~~18.0'	7.5'	~~10.4'~~	~~21.8'~~	~~18.0'~~
90° Angle[2]	9.0'[1]	~~20~~18.0'	7.5'	~~9.0'~~	~~20.0'~~	~~24.0'~~
~~Aisle width (one-way)~~	~~10'~~					
~~Aisle width (two-way)~~	~~20'~~					
Compact[3] ~~Cars~~	Compact spaces must be clearly identified with pavement marking and signage.					
Parallel ~~Parking~~	~~8.0~~7.5'	~~20~~15.0'	6.8'	-	-	-
45° Angle[2]	8.0'	~~18~~16.0'	6.8'	~~11.2'~~	~~18.3'~~	~~13.0'~~
60° Angle[2]	8.0'	~~18~~16.0'	6.8'	~~9.2'~~	~~19.8'~~	~~15.0'~~
90° Angle[2]	8.0'	~~18~~16.0'	6.8'	~~8.0'~~	~~18.0'~~	~~20.0'~~
Tandem	9.0'	36'	7.5'			
Scooter/Motorcycle	4'	8.0'	6.8'			
Aisle Width (D)						
Aisle width (one-way)	12' 14' for 60° angled spaces 90° angled spaces not permitted		7.5'			
Aisle width (two-way)	20' 23' for 90° angled spaces		7.5'			

[1] The minimum stall width may be reduced to 8.5' for spaces dedicated to residential uses.

[2] Angled spaces may be either head-in or back-in.

[3] The overall proportion of compact spaces may not exceed 50%.

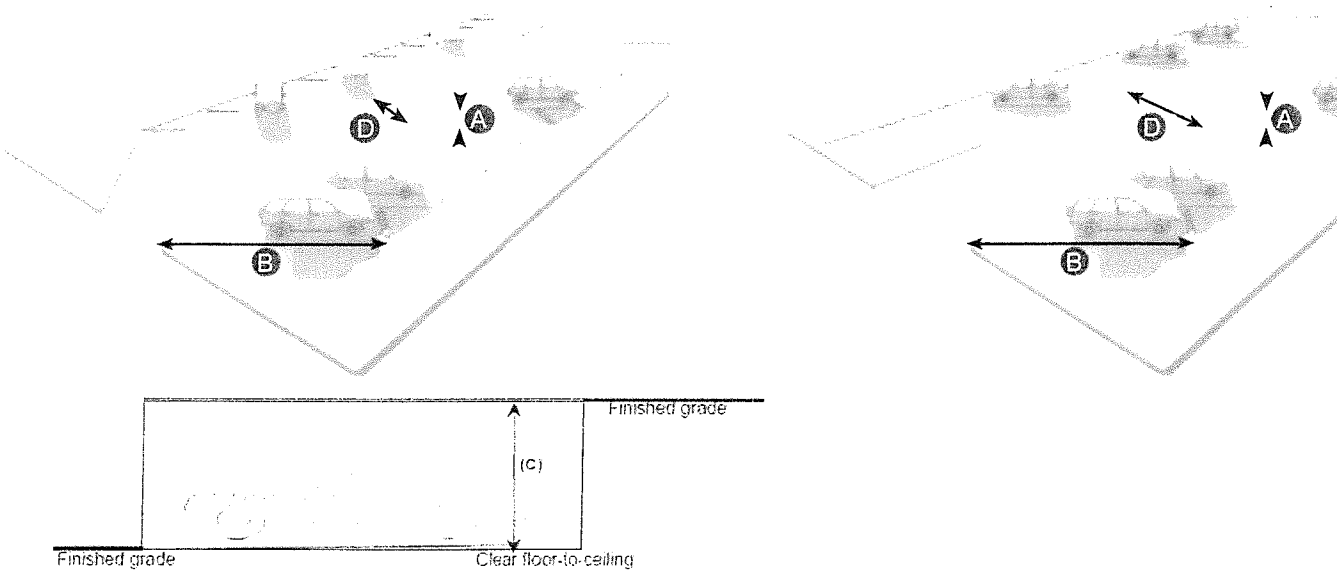


Illustration 8.1.11-A - Parking Dimensions

Sec. 8.1.12 Limitations, Location, Use of Facilities

(a) Off-Site parking facilities:

Except for single and two-family dwellings, required parking facilities may be located on a parcel of land. The off-site parking area shall be within the same zoning district~~e~~ as the use it or ~~is~~ in a zoning~~e~~ district that allows parking lots or parking garages as ~~primary~~ Principal uses. Pa that serves any use located outside a residential zoning~~e~~ district shall not be located within a resid zoneing district. ~~Off-site parking spaces shall be subject to the site plan design standards of Art Part 2. The maximum parking limitations of Section 8.1.9 apply.~~ Off-site parking facilities shall follows:

1. *Neighborhood Parking District*: No more than 50% of the total required off-street parking Table 8.1.8-1 shall be provided at a distance greater than 600 feet from the use it is intend serve. ~~For residential uses, a minimum of 1 space per unit shall be provided on-site.~~

2. ~~*Downtown and*~~ *Shared U~~u~~se Parking Districts*: Any off-site parking shall be provided within feet of the use it is intended to serve unless such parking is provided as part of a Pa Management Plan pursuant to Sec. 8.1.15 approved by the DRB.

3. The distance from the off-site parking to the associated use shall be measured in walking dis along a sidewalk or other pedestrian path separated from street traffic from the nearest pa space to the principle pedestrian entrance to the building housing the use. Such off-site pa shall not reduce the required parking for any other use utilizing the property on which it is lo

unless such shared use is approved by the development review board per Sec. 8.1.15 (b). T
to use the off-site parking to meet the minimum parking requirements of Sec. 8.1.8 r
guaranteed for the duration of the use as evidenced by a deed, ~~or~~ easement, lease, or similar
instrument as approved by the City Attorney and recorded in the Burlington land records.
~~off-site parking for parking spaces in excess of the minimum parking requirements of Se~~
~~may be secured by lease or similar written instrument.~~

~~(b) Downtown Street Level Setback:~~

~~In order to maintain an active streetscape, any off-street parking occupying street level frontag~~
~~Downtown Parking District shall be setback from the front property line in order to reserve stre~~
~~frontage for pedestrian-oriented uses.~~

(~~c~~b) Front Yard Parking Restricted:

Required parking in all residential zoning districts shall not be located in a required front yard s
area abutting a public street, except alleys. This prohibition extends from the edge of the publi
of-way into the required front yard setback for the entire width of the property with the excepti
single access drive no more than eighteen feet (18') or less in width. The provisions of this sub
shall not be applicable during such times as when the winter parking ban pursuant to Section 20
the Code of Ordinances is in effect. Where parking is provided outside the front yard setba
either partially or entirely between the principle structure and the street, such parking shall be sc
to the extent practicable from view from the public street.

(~~d~~c) Shared Parking ~~in Neighborhood Parking Districts~~:

In the event that a mix of uses occupy a single structure or parcel of land located in a Neighborh
Shared Use Parking District, the total requirement for off-street parking shall be the sum
individual uses unless it can be shown that the peak parking demands are offset and spaces
shared (for example: retail and residential, or theater and office uses) as evidenced by a shared p
analysis utilizing the most current edition of the Urban Land Institute's Shared Parking Repo
ITE's Shared Parking Guidelines, or other comparable and industry-recognized publications. ~~I~~
~~cases the parking required must at least meet the requirements for Shared Use Districts.~~

(~~e~~d) Single Story Structures in Shared Use Districts:

In the event that a single story structure is proposed to be located in a Shared Use District, the
requirements for off-street parking shall be calculated as for a Neighborhood Parking District
provision does not apply to single story structures existing and occupied as of the effective date
ordinance.

(~~f~~e) Joint Use of Facilities:

The required parking for two (2) or more uses, structures, or parcels may be combined in a s
parking facility if it can be shown by the applicant to the satisfaction of the DRB that the use
joint facility does not materially overlap with other dedicated parking in such facility, and pro
that the proposed use is evidenced by a ~~irrevocable~~ deed, lease, contract, reciprocal easement, or si
written instrument establishing the joint use acceptable to the city attorney.

(~~g~~f) Availability of Facilities:

Required parking pursuant to this Article shall be available for parking of operable passenger v used by residents, customers and employees only, and shall not be used for the storage or dis vehicles or materials. The distribution of parking spaces for any and all individual uses will be r to be arranged in such a way as to ensure optimal access and use by the patrons of such use(s).

~~**(h) Compact Car Parking:**~~

~~Compact parking spaces may be used in parking structures or lots. Up to fifteen (15%) percen total parking spaces in a parking garage may be designated for compact cars. Such spaces s signed or the space painted with the words "Compact Car Only."~~

Sec. 8.1.13 Parking for Disabled Persons

Parking spaces for disabled persons in all Parking Districts shall comply with current the American Disabilities Act guidelines and shall be at least eight feet (8') wide with an adjacent access aisle a five feet (5') wide. Parking access aisles shall be part of an accessible route to the building or f entrance. Accessible parking spaces shall be designated as reserved for the disabled by a sign showi symbol of accessibility. Painting of the paved area for the dedicated parking spaces alone shall sufficient as the sole means of identifying these spaces.

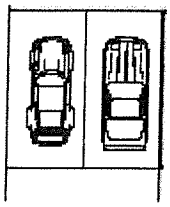
Sec. 8.1.14 Stacked and Tandem Parking Restrictions

Except as otherwise provided below, all parking facilities in all Parking Districts shall be designed s each motor vehicle may proceed to and from the parking space provided for it without the moving other motor vehicle. The requirements for minimum or maximum spaces continue to apply for stacke Tandem parking.

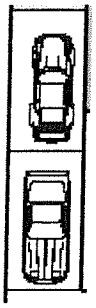
(a) Stacked or valet parking may be allowed if an attendant is present to move vehicles. If st parking is used for required parking spaces, a written guarantee must be filed with the ensuring that an attendant will always be present when the lot is in operation. ~~The require for minimum or maximum spaces continue to apply for stacked parking.~~

(b) Tandem Parking ~~may~~ shall be allowed for all dwelling units (whether attached or detac Each dwelling unit may have a pair of tandem parking spaces, however any pair of ta parking spaces shall not serve more than one dwelling unit ~~single family detached dwelling accessory apartments, duplex dwelling units, and~~. Tandem parking shall also be allowe dedicated employee-only parking where signed as such. ~~In no case shall more than 4 pa spaces (2 pairs) in total be provided in tandem on any one lot.~~

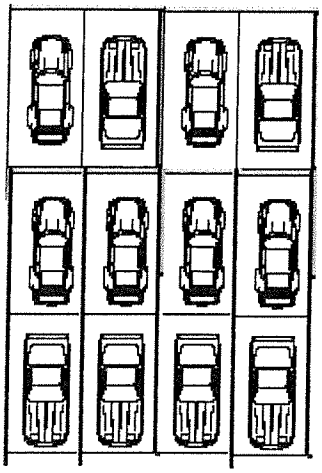
(c) Stacked parking shall be allowed for single-family detached dwelling units and Accessory Dwelling Units with no requirement for an attendant to be present.



Normal



Tandem



Stacked

Sec. 8.1.15 Waivers from Parking Requirements/ Parking Management Pla

(a) Parking Waivers

The total number of parking spaces required pursuant to this Article may be ~~reduced~~ modified to the that the applicant can demonstrate that the proposed development can be adequately served by a efficient approach that more effectively satisfies the intent of this Article and the goals of the mu development plan to reduce dependence on the single-passenger automobile.

Any waiver granted for a residential use shall not exceed fifty percent (50%) of the required num parking spaces ~~except for the adaptive reuse of a historic building pursuant to Sec. 5.4.8 which n waived by as much as one hundred percent (100%)~~. Any waiver granted for a non-residential use n as much as ninety percent (90%) ~~except that a waiver for ground floor retail uses in any Form or Use district may be as much as one hundred percent (100%).~~ Waivers shall only be granted by the or by the administrative officer pursuant to the provisions of Sec. 3.2.7 (a)7.

In order to be considered for a waiver, the applicant shall submit a Parking Management Plan that sp why the parking requirements of Sec. 8.1.8 or Sec. 8.1.9 are not applicable or appropriate for the pro development, and proposes an alternative that more effectively meets the intent of this Article. A P Management Plan shall include, but not be limited to:

(1) A calculation of the parking spaces required pursuant to Table 8.1.8-1, and Sec. 8.1.9 regarding parking maximums where applicable.

(2) A narrative that outlines how the proposed Parking Management Plan addresses the specific nee the proposed development, and more effectively satisfies the intent of this Article and the go the Municipal Development Plan.

(3) An analysis of the anticipated parking demand for the proposed development. Such an analysis s include, but is not limited to:

A. Information specifying the proposed number of employees, customers, visitors, clients, shift deliveries;

B. Anticipated parking demand by time of day and/or demand by use;

C. Anticipated parking utilizing shared spaces or dual use based on a shared parking analysis utilizing current industry publications;

D. Availability and frequency of public transit service within a distance of 800-feet.

E. A reduction in vehicle ownership in connection with housing occupancy, ownership, or typ

F. Any other information established by the administrative officer as may be necessary to understand the current and projected parking demand.

(4) Such a plan shall identify strategies that the applicant will use to reduce or manage the dem for parking into the future which may include but are not limited to:

A. A telecommuting program;

B. Participation in a Transportation Management Association including methods to increase th of mass transit, car pool, van pool, or non-auto modes of travel;

C. Implementation of a car-share program;

D. Development or use of a system using offsite parking and/or shuttles; and,

E. Implementation of public transit subscriptions for employees.

(5) An analysis and narrative pursuant to Sec. 8.1.9 regarding waivers of parking maximums w applicable.

Prior to any approval by the DRB pursuant to this section, the means by which the Parking Manag Plan will be guaranteed and enforceable over the long term, such as a contract, easement, o means, and whether the city should be a party to the management contract or easement, shall be acceptable to the city attorney.

(b) Shared Parking for Off-Site Use

Onsite parking spaces may be made available for use by off-site users subject to review and approv Parking Management Plan by the DRB.

~~The~~ A Parking Management Plan for Shared Parking for Off-Site Use must include the following:

1. A calculation of the parking spaces required pursuant to Table 8.1.8-1 and a calculation of those pa spaces to be shared for off-site parking use.
2. Information specifying the actual onsite demand for required parking by day, time of day, and b and also information specifying when and how much parking would be made available to off-site
3. A narrative that outlines how the proposed ~~p~~Parking ~~m~~Management ~~p~~Plan will allow for shared required parking spaces with off-site users; how it will enable continued availability of required pa spaces pursuant to Table 8.1.8-1 while also affording off-site parking use of those spaces.

The Parking Management Plan must demonstrate to the satisfaction of the DRB that making s available to off-site users does not negatively affect their ability for onsite users to park due to either

1. There being an excess of onsite spaces beyond that necessary to satisfy the requirements of Sec. and/or,

2. The spaces are to be made available during off-peak hours of the onsite and/or required users.

Parking spaces being made available to off-site users may be made available:

- Either with or without a fee;
- For transient use by the general public; and/or,
- By lease, provided the term of any lease does not exceed one (1) year.

Prior to any approval by the DRB pursuant to this section, the means by which the ~~p~~Parking ~~m~~Manag ~~p~~Plan will be guaranteed and enforceable over the long term, such as a contract, easement, or other and whether the city should be a party to the management contract or easement, shall be made acc to the city attorney.

Sec. 8.1.16 Transportation Demand Management

(a) **Purpose**: This section requires the implementation of a Transportation Demand Management (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 environ 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 project located in the Multimodal Mixed Use Parking District (see Sec. 8.1.3(c)), and involving any one more of the following:

Dwelling Units	Creation of ten (10) or more dwelling units
Non-residential or Mixed Use Development	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.

(c) **Transportation Demand Management (TDM) Program**: A TDM Program shall include each the following elements at a minimum:

a. **Outreach and Education**:

i. Designation of a Transportation Coordinator who directly, or indirectly through membership in a Transportation Management Association, shall be responsible fo each of the following:

1. Preparing and presenting informational and educational materials regard available TDM strategies to all tenants and employees;
2. Organizing and hosting an annual meeting for all tenants and employees present and discuss available TDM strategies, and opportunities for incre use and participation;
3. Preparation and dissemination of an annual travel survey of all tenants a employees; and,
4. Record-keeping and annual reporting to the City of all TDM activities of and rates of participation (including parking utilization if applicable).

b. **TDM Strategies**: In addition to compliance with the on-site Bicycle Parking requireme found in Article 8, Part 2, the following TDM strategies shall also be included at a mini 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 th year of occupancy or employment, and at a minimum discount of 50% for every thereafter; and,

ii. A car share membership shall be made available to all tenants and employees for for the first two years of occupancy or employment, and at a minimum discount o 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 strat or better.

c. **Parking Management**: Where on-site or off-site parking is also made available:

i. Conduct parking utilization studies at least annually;

ii. With the exception of permanently affordable housing units, the cost of parking 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 b made available by a renewable lease, provided the term of any lease does not exc one (1) year; and

iv. Priority parking spaces - located in closest proximity to a primary building entra and/or public street frontage - shall be made available for each of the following:

1. Handicapped spaces;
2. Bicycles, scooters, and motorcycle spaces;
3. Car-share: where 1 space must be offered for every 20 residential units, n exceed a total of 5 spaces, subject to an agreement with a car-share provid and
4. Carpool and/or Vanpool vehicles: where more than 20 spaces are availabl non-residential uses. In such cases, 5 spaces or 5% of the parking spaces

site, whichever is less, must be reserved for carpool/vanpool use before 9 AM on weekdays.

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 O

i. Commitment to ongoing implementation of the TDM requirements as set forth a

ii. Acknowledgement that the project has no claim to the ongoing availability of ne on-street public parking, and that, as is the case with other on-street public parki 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 a required above is a violation of this ordinance, and understanding that, pursuant 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.

Review and Enforcement: The Administrative Officer shall be responsible for determining compliance with the TDM Program requirements as set forth above, and ongoing implementatic shall be included as a condition of any discretionary or administrative permit required for development subject to the conditions of this Section.

Failure to maintain a TDM Program as required above shall be a violation of this ordinance, and pursuant to Sec. 2.7.8 of this ordinance no zoning permit or certificate of occupancy may be gra without a TDM Program in effect.

Guidelines regarding compliance with these TDM requirements shall be developed and provided to applicants by the Administrative Officer.

** Material stricken out deleted.
*** Material underlined added.

IN RELATION TO

CDO-Minimu Parking Requirements ZA #20-04

Introduced by Office of City Planning, Planning Commission, Ordinance Committee

Councilor

Read in City Council first time

July 13, 20 20.

Attest,

, Clerk.

Rules suspended, an ...ance placed in all stages of passage.

Att

, Clerk.

Read in City Council second time

September 14, 20 20.

Attest,

, Clerk.

Passed in City Council at meeting held

September 14, 20 20.

Attest,

, Clerk.

Approved September 21, 20 20

, Mayor.

I, DFO Goodwin, City Clerk of the City of Burlington and Clerk of the City Council of said City, do hereby certify that the within written Ordinance has been duly published according to Law and the Charter of the City, and in compliance with said Charter this certificate is hereto attached.

And the within Ordinance was ordered published for Wednesday day

namely the 30th day of September, 2020.

Adopted 09/14/20 Published 09/30/20 Effective 10/21/20

DFO Goodwin, City Clerk

Distribution

I hereby certify that this Ordinance has been sent to the following department(s on

David White, Office of City Plannir
Meagan Tuttle, Office of City Plann
Linda Blanchard, City Attorney's Of
Assistant City Attorney Sturtevant

Attest:

Lori Olberg
Licensing, Voting and Records Coordi

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CITY OF BURLINGTON

ORDINANCE 6.0
Sponsor: Office of City Plann
Planning Commission, Ordi
Committee

Public Hearing Dates: 11/09/

First reading: 08/10/20
Referred to: Ordinance Com
Rules suspended and placed i
stages of passage:
Second reading: 11/09/20
Action: adopted
Date: 11/09/20
Signed by Mayor: 11/10/20
Published: 11/25/20
Effective: 12/16/20

In the Year Two Thousand Twenty

An Ordinance in Relation to

COMPREHENSIVE DEVELOPMENT ORDINANCE –
Front Yard Parking
ZA #20-07

It is hereby Ordained by the City Council of the City of Burlington as follows:

That Appendix A, Comprehensive Development Ordinance, of the Code of Ordinances of the City of Burlington be and hereby is amended by amending Sections 8.1.12(c), Front Yard Parking Restricted, a 6.2.2(i), Vehicle Access, thereof to read as follows:

Sec. 8.1.12 Limitations, Location, Use of Facilities

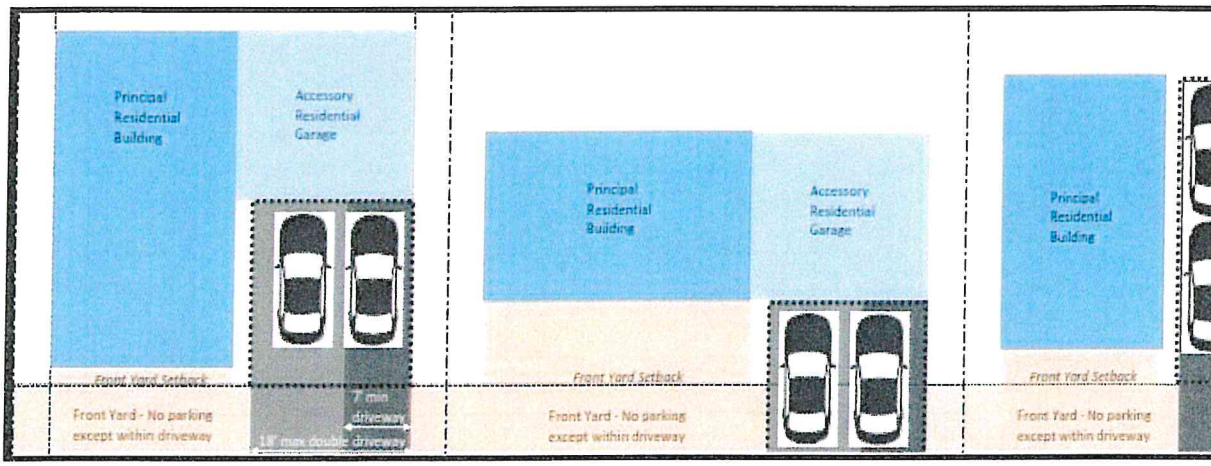
(a) - (b) As written.

*(c) **Front Yard Parking Restricted and Residential Driveways:***

~~Required p~~Parking spaces in all residential zoning districts shall ~~not~~ be located to the side or rear of the principal residential structure. Parking spaces shall not be located within a front yard setback except within a driveway and located to the side or rear of the principal residential structure. ~~in a required front yard setback area abutting a public street, except alleys. This prohibition extends from the edge of the public right-of-way into the required front yard setback for the entire width of the property with the exception of a single access drive no more than eighteen feet (18') or less in width.~~

Notwithstanding the above paragraph, parking spaces may be located within a driveway in front of garages that have been converted to habitable space.

Figure 8.1.12-1 (Illustrative purposes only)



The provisions of this subsection shall not be applicable during such times as when the winter parking ban pursuant to Section 20-56 of the Code of Ordinances is in effect.

~~Where parking is provided outside the front yard setback, but either partially or entirely between the principle structure and the street, such parking shall be screened to the extent practicable from view from the public street.~~

Residential driveways shall be a minimum of 7 feet in width or consist of two 1.5' driveway strips made of pavement or pervious pavement. The maximum width for single or shared access driveways shall be 18' except where a physical barrier taller than 6" (other than a structural column) exists along one side of the parking stall. In such cases, the maximum width may be increased by 1'. Where such a physical barrier exists along both sides of the parking stall, the maximum width may be increased by 2'. In a residential district, driveways and parking areas shall be set back a minimum of 5' from side and rear property lines. Driveways that have a slope of 5% or greater (towards the right of way) shall be made of a solid surface including conventional pavement, pavers or pervious pavement.

(d) - (h) *As written.*

Sec. 6.2.2 Review Standards

(a) – (h) As written.

(i) Vehicular Access:

Curb cuts shall be arranged and limited in number to reduce congestion and improve traffic safet secondary access point from side roads is encouraged where possible to improve traffic flow and safety along major streets. The width and radius of curb cuts should be kept to the minimum wid necessary, and sight triangles and sufficient turnarounds for vehicles shall be provided to reduce potential for accidents at points of egress.

~~Residential driveways shall be a minimum of seven (7) feet in width or consist of two (2) two (2 driveway strips made of pavement or pervious pavement. The maximum width for single or sha access driveways shall be eighteen (18) feet. In a residential district, driveways and parking are shall be set back a minimum of five (5) from side and rear property lines. Driveways that have slope of five (5) percent or greater (towards the right of way) shall be made of a solid surface including conventional pavement, pavers or pervious pavement.~~

Driveways for commercial properties may require a traffic study to identify the impacts of the movement of traffic to and from the property, and design for safe access. Access for service and loading areas should be located behind buildings or otherwise screened from streets or public ways with landscaping or other barriers. Whether commercial or residential, shared driveways are encouraged, where possible and appropriate.

(j) – (p) As written.

** Material stricken out deleted.
*** Material underlined added.

lb/KS: Ordinances 2020/Zoning Amendment – ZA 20-07, Front Yard Parking, Secs. 8.1.12(c), 6.2.2(i)
11/5/20

ORIGINAL

AN ORDINANCE
IN RELATION TO

CDO - Front Yard Parking ZA #20-07

Introduced by

Councilor/ Office of City Planning, Planning Commission, Ordinance Committee

Read in City Council first time

August 10, 20 20.

Attest,

, Clerk.

Rules suspended, and o[illegible]d in all stages of passage.

At[illegible]

, Clerk.

Read in City Council second time

November 9, 20 20.

Attest,

, Clerk.

Passed in City Council at meeting held

November 9, 20 20.

Attest,

, Clerk.

Approved November 10, 20 20

I, DFO Goodwin, City Clerk of the City of Burlington and Clerk of the City Council of said City, do hereby certify that the within written Ordinance has been duly published according to Law and the Charter of the City, and in compliance with said Charter this certificate is hereto attached.

And the within Ordinance was ordered published for Wednesday day,

namely the day of November, 20 20.

Adopted 11/09/20 Published 11/25/20 Effective 12/16/20

, DFO, City Clerk

* * * * * * * *

Distribution

I hereby certify that this Ordinance has been sent to the following department(s) on

David White/Meagan Tuttle, Office of City Planning
City Attorney's Office, Linda Blanchar
Kim Sturtevant

Attest:
Lori Olberg
Licensing, Voting & Records Coordinato

* * * * * * * *

CITY OF BURLINGTON

ORDINANCE 6.05
Sponsor: Office of City Planning
Planning Commission, Ordinar
Committee

Public Hearing Dates: 11/09/2

First reading: 08/10/20
Referred to: Ordinance Comm
Rules suspended and placed in al
stages of passage:
Second reading: 11/09/20
Action: adopted
Date: 11/09/20
Signed by Mayor: 11/10/20
Published: 11/25/20
Effective: 12/16/20

In the Year Two Thousand Twenty

An Ordinance in Relation to

COMPREHENSIVE DEVELOPMENT ORDINANCE –
311 North Ave Rezone, parks lot coverage standards, WRM
Height Exemption
ZA #20-09

It is hereby Ordained by the City Council of the City of Burlington as follows:

That Appendix A, Comprehensive Development Ordinance, of the Code of Ordinances of the City of Burlington be and hereby is amended by deleting Section 4.4.5(d)(2), Height, and Map 4.4.5-2, Waterfron RM Height Exemptions; amending Map 4.3.1-1, Base Zoning Districts, Map 4.4.5-1, Residential Zoning Districts, Map 4.4.6-1, Recreation, Conservation, Open Space Districts, and Table 4.4.6-2, City Park Lot Coverage Maximum Standards, thereof to read as follows:

Sec. 4.4.5 Residential Districts

(a) – (c) As written.

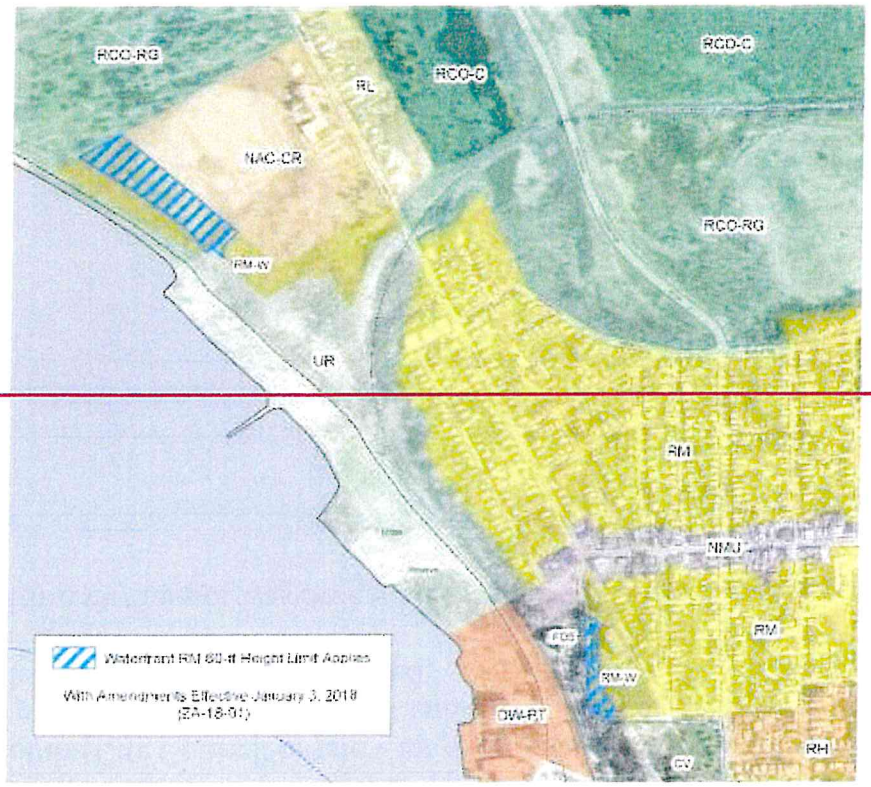
(d) District Specific Regulations

1. Setbacks- *As Written*

~~**2. Height**~~

~~**A. Exceptions in the Waterfront RM District.**~~

~~In order is to preserve vistas of harbor activity within the breakwater area and panoramic views of t mountain and lake from adjoining areas yet provide for additional development opportunities near tl downtown area of the city, the maximum building height which may be permitted by the DRB shall no more than sixty (60) feet in the area beyond two hundred (200) feet inland from the ordinary high water mark and below a base elevation of one hundred eighty (180) feet in the Waterfront Residenti Medium Density district.~~



~~**Map 4.4.5-2 Waterfront RM Height Exemptions**~~

3. through 8. renumbered as 2. through 7., otherwise as written.

Sec. 4.4.6 Recreation, Conservation and Open Space Districts

(a) Purpose As written

(b) Dimensional Standards and Density

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

Table 4.4.6 -1 Dimensional Standards and Density As written.

Table 4.4.6 -2 City Park Lot Coverage Maximum Standards

Park	**Lot Coverage**
Texaco Beach/Cambrian Rise	10%
Baird ~~Battery Park and Extension~~ Calahan ~~Champlain Street~~	15%

Leddy North Beach and Campground Oakledge Schmanska Smalley Staff Farm	
Appletree Lakeside	20%
~~Waterfront Park~~	~~25%~~
~~City Hall Park~~ Pomeroy Roosevelt	30%
~~Perkins Pier~~ [1]	~~70%~~

~~1. Perkins Pier is a marina facility.~~

(c) - (d) As written

**See attached map excerpts identified as Excerpt of Base Zoning Map 4.3.1-1 for Proposed ZA-20-09, Excerpt of Residential Districts Map 4.4.5-1 for Proposed ZA-20-09, Excerpt of Recreation, Conservatio Open Space Districts Map 4.4.6-1 for Proposed ZA-20-09, changes as indicated in each corresponding legend, consistent with the map excerpt.

** Material stricken out deleted.
*** Material underlined added.

ORIGINAL

AN ORDINANCE

IN RELATION TO

DO - 311 North Ave Rezone parks lot coverage
tandards, WRM Height Exemption ZA #20-09

ntroduced by

Councilor Office of City Planning, Planning Commission
Ordinance Committee
Read in City Council first time
ugust 10, 20 20.

Attest,

, Clerk.

Rules suspended, and ordinance placed in all stages of passage.

Atte

, Clerk.

Read in City Council second time
November 9, 20 20.

Attest,

, Clerk.

Passed in City Council at meeting held
November 9, 20 20.

Attest,

, Clerk.

Approved November 10, 20 20

I, DFO Goodwin, City Clerk of the City of Burlington and Clerk of the City Council of said City, do hereby certify that the within written Ordinance has been duly published according to Law and the Charter of the City, and in compliance with said Charter this certificate is hereto attached.

And the within Ordinance was ordered published for Wednesday day,

namely the day of November, 20 20.

Adopted 11/09/20 Published 11/25/20 Effective 12/16/20

, DFO, City Clerk

* * * * * * * *

Distribution

I hereby certify that this Ordinance has been sent to the following department(s) on

David White & Meagan Tuttle, Office of City Planning

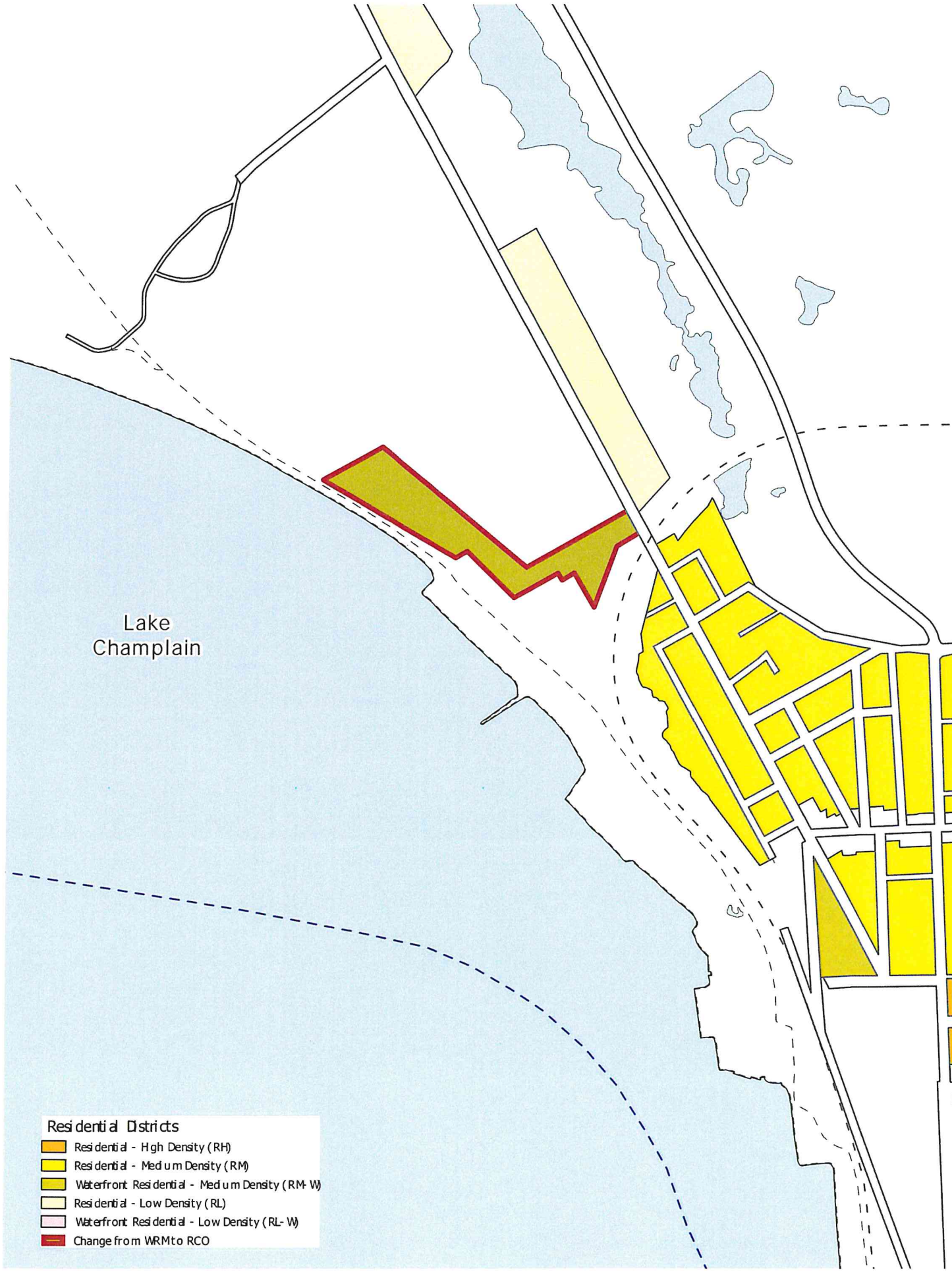
Linda Blanchard, City Attorney's Office and Kim Sturtevant

Attest:

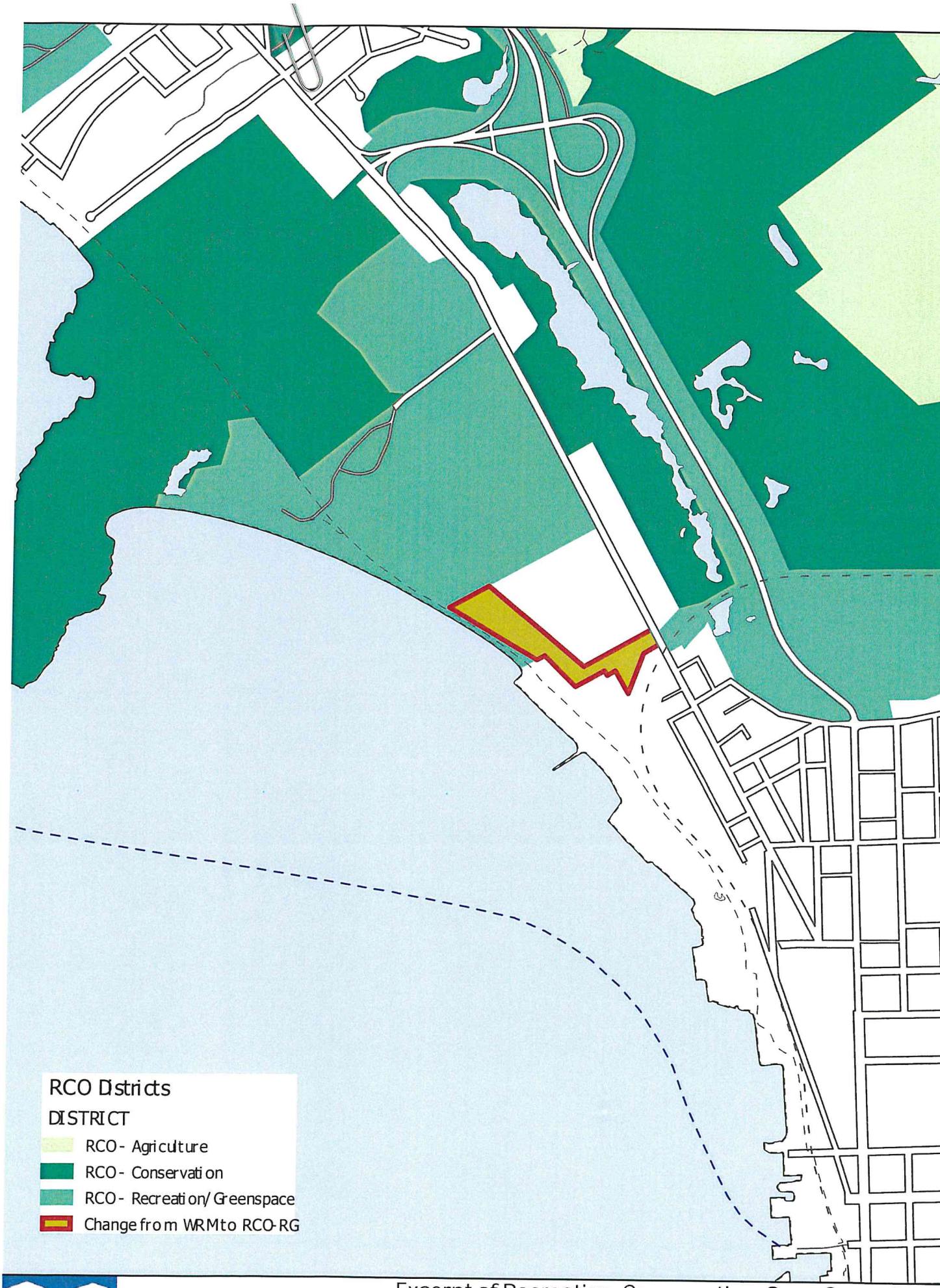
Lori Olberg
Licensing, Voting & records Coordinator

* * * * * * * *

Excerpt of Base Zoning Distri



Excerpt of Residential Distr



Excerpt of Recreation, Conservation, Open Space Distri

CITY OF BURLINGTON

ORDINANCE 6.0
Sponsor: Office of City Plan
Planning Commission, Ord
Committee

Public Hearing Dates: 11/09

In the Year Two Thousand Twenty

First reading: 10/19/20
Referred to:
Rules suspended and placed in stages of passage:
Second reading: 11/09/20
Action: adopted
Date: 11/09/20
Signed by Mayor: 11/10/20
Published: 11/25/20
Effective: 12/16/20

An Ordinance in Relation to

COMPREHENSIVE DEVELOPMENT ORDINANCE –
Daycare and Preschool in RCO District
ZA #21-01

It is hereby Ordained by the City Council of the City of Burlington as follows:

That Appendix A, Comprehensive Development Ordinance, of the Code of Ordinances of the City of Burlington be and hereby is amended by amending Sections 5.4.1, Small and Large Day Care Centers a Small and Large Preschools, Table 8.1.8-1, Minimum Off Street Parking Requirements, Section 13.1.2 Definitions, and Appendix A, Use Table, thereof to read as follows:

Sec. 5.4.1 ~~Small and Large~~ Day Care Centers and ~~Small and Large~~ Preschools

In addition to the provisions of Art 3, Part 5 for conditional uses, and applicable site and design rev standards in Art 6, the following additional regulations shall be applicable to an application involvi ~~small~~ day care center or~~,~~ ~~large day care center, small~~ preschool~~, or large preschool~~ where such uses treated as conditional uses pursuant to Appendix A – Use Table:

(a) No playground equipment shall be located within the front yard;

(b) [Reserved]

(c) The site plan review shall insure adequate and safe drop-off and pickup space is provided an traffic problems are not created;

(d) Any additions, signage, or site improvements shall be residential in character;

(e) The facility shall be licensed by the State of Vermont;

(f) No more than one residential unit may be converted for the creation of a single ~~small~~ day care c ~~large day care center, small preschool,~~ or ~~large~~ preschool. Such a conversion shall be exempt fro requirements of Article 9, Part 2- Housing Replacement; and,

(g) The neighborhood is not overburdened with other ~~small~~ day care centers~~, large day care centers, preschools,~~ or ~~large~~ preschools.

22 ***Sec. 8.1.8 Minimum Parking Requirements***

23 A minimum number of off-street parking spaces for all uses and structures shall be provided in acco
24 with Table 8.1.8-1 below.

25 (a) – (c) As written.

Table 8.1.8-1 Minimum Off-Street Parking Requirements

	Neighborhood District	**Shared Use District**	**Multimodal Mixed-Use District**
RESIDENTIAL USES[1]	**Per Dwelling Unit except as noted**		
***	***		
RESIDENTIAL USES—Special	**Per Dwelling Unit except as noted**		
***	***		
NON-RESIDENTIAL USES	**Per 1,000 square feet of gross floor area (gfa) except as noted**		
***	***	***	***
Daycare~~– Large (Over 20 children)~~ (per two (2) employees)	1 plus 1 drop-off per 5 children	1 plus 1 drop-off per 5 children	0
~~Daycare – Small (20 children or less) (per two (2) employees)~~	~~1 plus 1 drop-off per 5 children~~	~~1 plus 1 drop-off per 5 children~~	~~0~~
***	***	***	***
School – Preschool ~~Large (over 20 children)~~ (per two (2) employees)	1 plus 1 drop-off per 5 children	1 plus 1 drop-off per 5 children	0
~~School – Preschool Small (up to 20 children) (per two (2) employees~~	~~1 plus 1 drop-off per 5 children~~	~~1 plus 1 drop-off per 5 children~~	~~0~~
***			

26

27 ***Sec. 13.1.2 Definitions***

28 For the purpose of this ordinance certain terms and words are herein defined as follows:

29 Unless defined to the contrary in Section 4303 of the Vermont Planning and Development Act as
30 amended, or defined otherwise in this section, definitions contained in the building code of the City o

Burlington, Sections 8-2 and 13-1 of the Code of Ordinances, as amended, incorporating the curre adopted edition of the American Insurance Association's "National Building Code" and the Natior Protection Association's "National Fire Code" shall prevail.

Additional definitions specifically pertaining to Art. 14 planBTV: Downtown Code can be found i 14.8, and shall take precedence without limitation over any duplicative or conflicting definitions o Article.

***

Day Care Center: (See Article 5 for specific provisions.)

(a) **Family Day Care Home:** For the purposes of this ordinance, family day care home shall h same meaning as that set forth in 24 V.S.A. sec. 4412 (5).

(b) ~~**Small**~~ **Day Care Center:** A state licensed daycare facility. ~~serving no more than twenty (20 time children in total.~~

~~(c) **Large Day Care Center:** A state-licensed facility providing day care services for more tha twenty (20) full-time children.~~

***

School: The academic space and accessory uses for the teaching of children or adults.

(a) **Primary:** elementary school, inclusive of grades K-8.

(b) **Secondary:** a high school and/or vocational center for attendance after elementary/primary s granting a high school diploma for levels of education inclusive of grades 9-12.

(c) **Post-Secondary:** after high school, including colleges, community colleges, universiti continuing education.

(d) **Trade or Professional:** a school that offers instruction in skilled trades.

(e) ~~**Small**~~ **Preschool**: a school providing educational services for children from 3 years of age their admission to first grade and that may include kindergarten. ~~, serving no more than twent full-time children in total.~~

~~(f) **Large Preschool**: a school providing educational services to children from 3 years of age unti admission to first grade and that may include kindergarten, for more than twenty (20) full children in total.~~

***

Appendix A-Use Table-All Zoning Districts

	Urban Reserve	Recreation, Conservation & Open Space			Institutional	Residential			Downtown Mixed Use[1]	Neighborhood Mixed Use				Enterpris
USES	UR	RCO - A	RCO - RG	RCO - C	I	RL/W	RM/W	RH	DW-PT[16]	NMU	NAC	NAC- RC	NAC-CR	E-AE
RESIDENTIAL USES	UR	RCO-A[1]	RCO - RG	RCO - C	I	RL/W	RM/W	RH	DW-PT[16]	NMU	NAC	NAC- RC	NAC-CR	E-AE
***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
RESIDENTIAL SPECIAL USES	UR	RCO-A	RCO - RG	RCO - C	I	RL/W	RM/W	RH	DW-PT[16]	NMU	NAC	NAC- RC	NAC-CR	E-AE
***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
NON-RESIDENTIAL USES	UR[21]	RCO - A	RCO - RG	RCO - C	I	RL/W	RM/W	RH	DW-PT[16]	NMU	NAC	NAC- RC	NAC-CR	E-AE
***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
~~Daycare-Large (Over 20 children) (see Sec. 5.4.1)~~	~~N~~	~~N~~	~~N~~	~~N~~	~~CU~~	~~CU[13]~~	~~CU[13]~~	~~CU[13]~~	~~N~~	~~Y~~	~~Y~~	~~Y~~	~~Y~~	~~N~~
~~Daycare-Small (Up to 20 children)~~ Day Care Center (see Sec. 5.4.1)	N	CU[8]	CU[8]	CU[8]	CU	CU[13]	CU[13]	CU[13]	N	Y	Y	Y	Y	CU
Daycare—Family Home	N	N	N	N	Y	Y	Y	Y	N	Y	Y	Y	Y	N
***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
~~School-Preschool Large (over 20 children) (see Sec. 5.4.1)~~	~~N~~	~~N~~	~~N~~	~~N~~	~~CU~~	~~CU[13]~~	~~CU[13]~~	~~CU[13]~~	~~N~~	~~Y~~	~~Y~~	~~Y~~	~~Y~~	~~N~~
School—Preschool ~~Small (up to 20 children)~~ (see Sec. 5.4.1)	N	CU[8]	CU[8]	CU[8]	CU	CU[13]	CU[13]	CU[13]	N	Y	Y	Y	Y	CU
***	***	***	***	***	***	***	***	***	***	***	***	***	***	***

Footnotes: 1. – 7. As written.

8. ~~Small daycare~~Day Care centers and ~~small~~ preschools in the RCO zones shall only be allowed ~~as part of~~ a small museum~~s~~ is the principal use. ~~and shall constitute less than 50% of the gross floor area of the muse~~

9. - 32. As written

i. As written.

Legend: As written.

* Material stricken out deleted.

** Material underlined added.

ORIGINAL

AN ORDINANCE
IN RELATION TO

CDO - Daycare and Preschool in RCO District

ZA #21-01

Introduced by

~~Council/~~ Office of City Planning, Planning Commission, Ordinance Committee

Read in City Council first time

October 19, 20 20.

Attest,

, Clerk.

Rules suspended, and or [illegible] in all stages of passage.

Attes.,

, Clerk.

Read in City Council second time

November 9, 20 20.

Attest,

, Clerk.

Passed in City Council at meeting held

November 9, 20 20.

Attest,

, Clerk.

Approved November 10, 20 20

I, DFO Goodwin, ~~City Clerk~~ of the City of Burlington and Clerk of the City Council of said City, do hereby certify that the within written Ordinance has been duly published according to Law and the Charter of the City, and in compliance with said Charter this certificate is hereto attached.

And the within Ordinance was ordered published for Wednesday day,

namely the day of November, 20 20.

Adopted 11/09/20 Published 11/25/20 Effective 12/16/20

, DFO ~~City Clerk~~/

* * * * * * * *

Distribution

I hereby certify that this Ordinance has been sent to the following department(s) on

David White & Meagan Tuttle, Office of City Planning

Linda Blanchard, Kim Sturtevant, City Attorney's Office

Attest:

Lori Olberg
Licensing, Voting & Records Coordinatc

* * * * * * * *

CITY OF BURLINGTON

ORDINANCE 4.06
Sponsor: Office of City Plannir
Planning Commission, Ordin
Committee
Public Hearing Dates: ~~02/18/~~

In the Year Two Thousand Twenty

First reading: 12/16/19
Referred to: !/6 Worksessio

An Ordinance in Relation to

Rules suspended and placed in
stages of passage:
Second reading: ~~02/18/20~~
Action: adopted
Date: 02/18/20
Signed by Mayor: ~~03/03/20~~
Published: 03/11/20
Effective: 04/01/20

COMPREHENSIVE DEVELOPMENT ORDINANCE –
Accessory Dwelling Units
ZA #20-03

It is hereby Ordained by the City Council of the City of Burlington as follows:

That Appendix A, Comprehensive Development Ordinance, of the Cod-e of Ordinances of the City Burlington be and hereby is amended by amending Section 5.2.3, Lot Coverage Requirements; Sect 5.3.4 Nonconforming Uses; 5.3.5, Nonconforming Structures; Section 5.4.5, Accessory Dwelling U Section 8.1.14, Stacked and Tandem Parking Restrictions; Article 13, Definitions; and Appendix A- Table All Zoning Districts, thereof to read as follows:

Sec. 5.2.3 Lot Coverage Requirements

Where a maximum lot coverage is specified pursuant to the requirements of Article 4, no building or of a building or impervious surface or other form of coverage shall exceed such maximum allowable except as specifically authorized by this ordinance.

(a) Calculating Lot Coverage As written.

(b) Exceptions to Lot Coverage

In all districts, the following shall not be counted as lot coverage:

(1) - (9) As written

(10) The DRB may grant an exemption from maximum lot coverage limits for up to 650 sq. ft., lot area occupied by an ADU. To grant such an exemption, the DRB must find that the existing l coverage has been lawfully created, and that the proposed location, site design, and improvemen will enable on-site management of the first one inch of stormwater runoff from the lot area of the ADU exceeding the applicable lot coverage limit, and will not have undue adverse impact on pul rights of way based on the review of the DPW Stormwater Program Manager.

Sec. 5.3.4 Nonconforming Uses

(a) *Changes and Modifications:*

A nonconforming use may be changed to a conforming use pursuant to all applicable provisions this ordinance. When a nonconforming use has been made conforming, it shall not be made nonconforming again.

Any change or modification to a nonconforming use, other than to full conformity under this Ordinance, shall only be allowed as specified below and shall require conditional use approval pursuant to the provisions of Article 3, Part 5 by the DRB.

(1) *Nonconforming Non-Residential Use:* As written

(2) *Nonconforming Residential Use:*

A change or expansion of a non-conforming residential use may be allowed subject to condit use approval pursuant to the provisions of Article 3, Part 5 by the DRB provided:

A. Such an expansion does not add any dwelling units except as may be permitted for adapti reuse or residential conversion bonuses approved per the provisions of Sec. 4. 54. (d)(7) ; <u>for Accessory Dwelling Units per the provisions of Sec.5.4.5.</u>;
B. Such an expansion does not increase the degree of non-conformity of any non-conformin structure; and,
C. In such cases where the non-conforming residential use is located in a zoning district whe residential uses are generally permitted, expansion of a non-conforming residential uses i an existing and previously uninhabited attic or basement within the principle structure ma permitted subject to administrative review provided no additional dwelling units are creat <u>except for Accessory Dwelling Units per Sec.5.4.5</u>.

(b) *Discontinuance:* As written.

Sec. 5.3.5 Nonconforming Structures

(a) Changes and Modifications

Nothing in this Part shall be deemed to prevent normal maintenance and repair or structural repai moving of a non-complying structure pursuant to any applicable provisions of this Ordinance.

Any change or modification to a nonconforming structure, other than to full conformity under thi Ordinance, shall only be allowed subject to the following:

1. Such a change or modification may reduce the degree of nonconformity and shall not inc the nonconformity except as provided below.

   Within the residential districts, and subject to Development Review Board approval, exist nonconforming single-family homes and community centers (existing enclosed spaces on that project into side and/or rear yard setbacks may be vertically expanded so long as the

expansion does not encroach further into the setback than the existing structure. Such expansion shall be of the existing nonconformity (i.e. setback) and shall:

i) Be subject to conformance with all other dimensional requirements (i.e. height, lo coverage, density and intensity of development);

ii) Not have an undue adverse impact on adjoining properties or any public interest t would be protected by maintaining the existing setbacks; and,

iii) Be compatible with the character and scale of surrounding structures.

Existing accessory buildings of 15 feet in height or less shall not exceed 15 feet tall as expanded.

Within all districts, and subject to the Development Review Board approval, structures fo purpose of creating an ADU may be constructed on lots with legally non-conforming lot coverage per Sec.5.2.3 (b) 10.

2. Such a change or modification shall not create any new nonconformity; and,

3. Such a change or modification shall be subject to review and approval under the Design Re provisions of Article 3, Part 4.

When any portion of a nonconforming structure has been made conforming, it shall not be nonconforming again except as provided for historic building features pursuant to Sec. 5.2.6(b)(3

A non-conforming residential structure may be enlarged up to the dimensional standards o underlying zoning district, subject to review and approval by the DRB pursuant to Art. 3, Part 4 D Review and Art. 3, Part 5 Conditional Use Review. Adaptive reuse or residential conversion bo may allow a greater expansion than the underlying zoning district allows approved per the provi of Article 4.

(b) Demolition. As written.

Sec. 5.4.5 Accessory Dwelling Units

(a) Accessory Units, General Standards/Permitted Uses:

Where there is a ~~primary~~ principal structure on a lot which exists as an owner-occupied single fa residence, one accessory dwelling unit, that is located within or appurtenant to such single family dwelling, shall be allowed as a permitted use if the provisions of this subsection are met. An accessory dwelling unit means an efficiency or one- bedroom apartment that is clearly subordina the ~~primary~~ principal dwelling, and has facilities and provisions for independent living, including sleeping, food preparation, and sanitation. No accessory unit shall be inhabited by more than two adult occupants. An accessory unit shall not be counted as a dwelling unit for the purposes of den calculation. Additionally, there must be compliance with all the following:

1. The property has sufficient wastewater capacity as certified by the D~~d~~epartment of P~~p~~ W~~w~~orks; and

2. The unit does not consist of more than 800 sq. ft., or 30 percent (30%) of the ~~total hab floor~~Gross Floor Aarea ~~of the building~~ of the principal home~~, inclusive of the accessory dw unit~~, whichever is greater; and

3. Applicable setback and coverage requirements are met, except as provided for in Sec. 5.2.3 (and

~~4. One additional parking space which may be legally allocated to the accessory unit must be pro for the accessory unit; and,~~

~~5~~4. A deed or instrument for the property shall be entered into the land records by the owner containing a reference to the permit granting the accessory unit prior to the issuance of the certificate of occupancy for the unit. Such reference shall identify the permit number and not that the property is subject to the permit and its terms and conditions including owner occupa No certificate of occupancy shall be issued for the unit unless the owner has recorded such a notice.

~~*(b) Conditional Use Approval for Accessory Units:*~~
~~If any of the following are also proposed, conditional use approval, as well as development revie provisions of Article 6 shall be required:~~

~~1. A new accessory structure;~~

~~2. An increase in the height or habitable floor area of the existing dwelling;~~

~~3. An increase in the dimensions of any parking area;~~

~~*(c)*~~ *(b) Discontinuance of Accessory Units:*

Approval of an accessory dwelling unit is contingent upon owner-occupancy of either the ~~single-family~~ principal or accessory dwelling unit as a primary residence. For purposes of this section, owner-occupancy means that, after the creation of the accessory unit all individuals listed on the for the property must reside in the ~~primary~~ principal unit or in the accessory unit. If neither the ~~primary~~ principal unit nor the accessory unit is ~~no longer~~ owner-occupied as a primary residence approval for the accessory dwelling unit is void and the kitchen of the accessory dwelling unit m be removed within 90 days with the entirety of the property being occupied as a single unit. Whe accessory unit that is the result of additional square footage and/or a new accessory structure is proposed to be removed, revised floor plans and a revised site plan shall be required to be submit for review and approval.

Furthermore, where additional square footage is added to a single family home for purposes of creating an accessory unit and the accessory unit is at any point discontinued, none of the additio square footage shall be eligible for the purposes of increasing the number of unrelated adults that be allowed to inhabit the property.

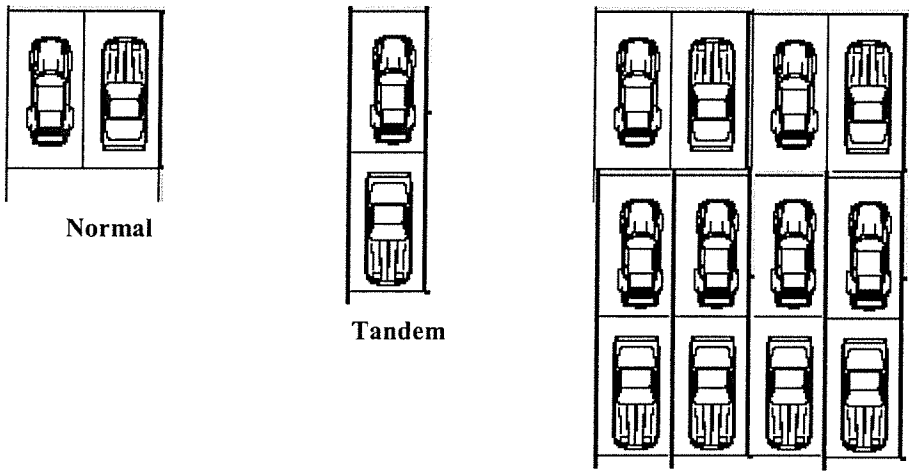
Sec. 8.1.14 Stacked and Tandem Parking Restrictions

Except as otherwise provided below, all parking facilities shall be designed so that each motor vehicle may proceed to and from the parking space provided for it without the moving of any ot motor vehicle.

(a) Stacked or valet parking may be allowed if an attendant is present to move vehicles. If stac parking is used for required parking spaces, a written guarantee must be filed with the City ensuring that an attendant will always be present when the lot is in operation. The requirem for minimum or maximum spaces continue to apply for stacked parking.

(b) Tandem Parking may be allowed for single family detached dwelling units, accessory apartments, duplex dwelling units, and dedicated employee-only parking signed as such. In case shall more than 4 parking spaces (2 pairs) in total be provided in tandem on any one lo

(c) Stacked parking shall be allowed for single-family detached dwelling units and Accessory Dwelling Units with no requirement for an attendant to be present.



Sec. 13.1.2 Definitions.

For the purpose of this ordinance certain terms and words are herein defined as follows:

Unless defined to the contrary in Section 4303 of the Vermont Planning and Development Act as amended, or defined otherwise in this section, definitions contained in the building code of the City Burlington, Sections 8-2 and 13-1 of the Code of Ordinances, as amended, incorporating the current adopted edition of the American Insurance Association's "National Building Code" and the National Protection Association's "National Fire Code" shall prevail.

Additional definitions specifically pertaining to Art. 14 planBTV: Downtown Code can be found in 14.8, and shall take precedence without limitation over any duplicative or conflicting definitions of t Article.

***

Accessory Dwelling Unit or Apartment (ADU): An efficiency or one-bedroom apartment that is clear subordinate to a single-family dwelling, and has facilities and provisions for independent living, includi sleeping, food preparation, and sanitation.~~, provided the unit does not exceed 30% of the total habitable area of the single-family dwelling.~~

***

APPENDIX A – Use Table – All Zoning Districts -- *See proposed changes per excerpt attached.

** Material stricken out deleted.
*** Material underlined added.

lb/KS/Ordinances 2019/Zoning Amendment – ZA #20-03 Accessory Dwelling Units, Sec. 5.2.3, 5.3.4, 5.3.5, 5.4.5, 8.1.14, Art. 13 & App.
12/11/19; 1/30/20

Excerpt of *Appendix A- Use Table –All Zoning Districts*

	Urban Reserve	Recreation, Conservation & Open Space			Institutional	Residential			Downtown Mixed Use[1]	Neighborhood Mixed Use				Enterprise	
USES	**UR**	**RCO - A**	**RCO - RG**	**RCO - C**	**I**	**RL/W**	**RM/W**	**RH**	**DW-PT[16]**	**NMU**	**NAC**	**NAC-RC**	**NAC -CR**	**E-AE**	**E-LM**
RESIDENTIAL USES	**UR**	**RCO - A[1]**	**RCO - RG**	**RCO - C**	**I**	**RL/W**	**RM/W**	**RH**	**DW-PT[16]**	**NMU**	**NAC**	**NAC-RC**	**NAC -CR**	**E-AE**	**E-LM**
Single Detached Dwelling	N	N[1]	N	N	Y	Y	Y	N[30]	N	N[30]	N[30]	N[30]	N	N	N
~~Accessory Dwelling Unit~~ ~~*(See Art.5, Sec.5.4.5)*~~	~~N~~	~~N~~	~~N~~	~~N~~	~~Y~~	~~Y~~	~~Y~~	~~N~~	~~N~~	~~N~~	~~N~~	~~N~~	~~N~~		
Attached Dwellings - Duplex	N	N[1]	N	N	Y	CU[2]	Y	Y	N	Y[3]	N	Y	N	N	N
Attached Dwellings - Multi-Family (3 or more)	N	N[1]	N	N	CU	N	Y	Y	N	Y	Y	Y	Y	N	N
Attached Dwelling(s) – Mixed-Use[26]	N	N[1]	N	N	CU	CU	CU	CU	N	Y	Y	Y	Y	N	N

*Balance of **Appendix A—Use Table –All Zoning Districts** As written.

ORIGINAL

AN ORDINANCE

IN RELATION TO

Comprehensive Development Ordinance - Accessory Dwelling Units ZA #20-03

Introduced by

~~Councilor~~ Office of City Planning, Ordiannce Committee

Read in City Council first time

December 16, 20 19.

Attest,

, Clerk.

Rules suspended, and ordinance placed in all stages of passage.

, 20 .

Attest,

, Clerk.

Read in City Council second time

February 18, 20 20.

Attest,

, Clerk.

Passed in City Council at meeting held

February 18, 20 20.

Attest,

, Clerk.

Approved 3-3, 20 20

I, DFO Goodwin, ~~City Clerk~~ of the City of Burlington and Clerk of the City Council of said City, do hereby certify that the within written Ordinance has been duly published according to Law and the Charter of the City, and in compliance with said Charter this certificate is hereto attached.

And the within Ordinance was ordered published for Wednesday day,

namely the 11th day of March, 20 20.

Adopted 02/18/20 Published 03/11/20 Effective 04/01/20

, ~~City Clerk~~

* * * * * * * *

Distribution

I hereby certify that this Ordinance has been sent to the following department(s) on

Office of City Planning
Assistant City Attorney Sturtevant
City Attorney's Office, Linda Blanchar

Attest:
Lori Olberg
Licensing, Voting and Records Coordina

* * * * * * * *

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
Layne Darfler, Planning Technician
Ted Miles, Zoning Specialist
Charlene Orton, Permitting & Inspections Administrator

TO: Development Review Board
FROM: Scott Gustin
DATE: December 1, 2020
RE: 21-0409CA/MA; 362- 374 Riverside Avenue
==========

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: NAC-R Ward: 1E

Owner/Applicant: Douglas Boyden / Blackrock Construction

Request: Construct a 64-unit senior housing building and related site improvements

Applicable Regulations:
Article 3 (Applications, Permits, and Project Reviews), Article 4 (Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Review Standards), Article 8 (Parking), Article 9 (Inclusionary & Replacement Housing), Article 10 (Subdivision)

Background Information:
The applicant is seeking approval to construct a 64-unit senior housing complex with related site improvements. The associated dining area will be open to the public and will serve as a café. The site presently consists of 4 detached single dwelling units on individual lots under common ownership. The applicant proposes to demolish these homes and to merge the parcels into one parcel as part of the proposed development. The project is large enough to require "major impact" review and is subject to review by the Conservation Board and Design Advisory Board in addition to the Development Review Board.

The applicants did sketch plan review of this proposal with the Development Review Board on December 17, 2019. The Design Advisory Board reviewed this application October 27, 2020 and unanimously recommended approval as proposed. The Conservation Board reviewed this application November 2, 2020 and unanimously recommended approval of the project with the condition that the applicant prioritize geotechnical analysis of the property due to concern about the soil quality and stability.

Previous zoning actions for this property are noted below.
362 Riverside Ave:
- 6/30/92; Approval of renovations to existing single family home.
- 8/6/98; Approval of lot line adjustment.

366 Riverside Ave:
- 8/6/89; Approval of lot line adjustment.

370 Riverside Ave:
- 5/7/96; Approval to remove and replaced detached garage.

374 Riverside Ave:

- No prior zoning actions.

Recommendation: <u>Major Impact & Certificate of Appropriateness approval</u> as per, and subject to, the following findings and conditions:

I. Findings

Article 3: Applications and 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 proposed residential building will be served by the municipal water and wastewater systems. Adequate reserve capacity is likely available; however, written confirmation from the Department of Public Works is required before a state wastewater permit can be issued. **(Affirmative as conditioned finding)**

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

The subject property is part of the Neighborhood Activity Center – Riverside zone that extends along much of that street's length. This zone is intended primarily to allow a mix of commercial and residential development. A variety of retail and service businesses are allowed along with some light industrial uses. Development is intended to be compatible with nearby residences and is to be aesthetically pleasing for motorists, transit users, pedestrians, and businesses. The proposed development is almost entirely residential, but the dining area along Riverside will be open to the public and serve as a café. The building sits within close proximity to commercial uses within this mixed use zone. Residents of the building will live within easy walking distance of a variety commercial establishments. The proposed senior housing facility fits within the mixed use context of the NAC-R zone. **(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;*

The proposed senior housing facility is not expected to generate exceptional noise, odor, dust, heat, or vibrations. **(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;

A traffic analysis has been provided with this application. The analysis presents data as to background traffic information and crash history, anticipated peak hour traffic generation, and level of service (LOS) impacts on nearby intersections.

Use of the project for senior housing cuts anticipated traffic generation by approximately half as compared to age-unrestricted housing. AM peak hour trip generation is 12, and PM peak hour trip generation is 17. These figures are relatively small and will impact nearby intersection LOS minimally or not at all as reflected in the LOS analysis of build and no-build scenarios now and in 2025. The Department of Public Works has reviewed the traffic analysis and concurs with its findings. No specific transportation improvements are warranted. **(Affirmative finding)**

and,

5. *The utilization of renewable energy resources;*

No utilization of renewable energy resources is included in the project plans. Construction of the project; however, will not preclude use of renewable energy resources on this property or neighboring properties. **(Affirmative finding)**

and,

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

No identified conflicts. Required building and/or life safety codes will be under the review of the building inspector.

(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. It will connect to the city sewer and water systems. Stormwater is addressed under Sec. 5.5.3. **(Affirmative finding)**

2. Have sufficient water available for its needs;

See Sec. 3.5.6 (a) 1.

3. Not unreasonably burden the city's present or future water supply or distribution system;

See Sec. 3.5.6 (a) 1.

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 plan has been provided. It is under review by the city's Stormwater Program staff. Final approval is pending. **(Affirmative finding as conditioned)**

5. Not cause unreasonable congestion or unsafe conditions on highways, streets, waterways, railways, bikeways, pedestrian pathways or other means of transportation, existing or proposed;

See Sec. 3.5.6 (a) 3.

6. Not cause an unreasonable burden on the city's ability to provide educational services;
As a senior housing facility, the project will not cause an unreasonable burden on the city's ability to provide educational services. The project may qualify for a waiver of the school impact fee. **(Affirmative finding)**

7. Not place an unreasonable burden on the city's ability to provide municipal services;
Project review by the Technical Review Committee took place December 12, 2019. 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).

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. Rather than several detached homes, there will be a 64-unit senior housing building. 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 proposed development conforms to the express goals of the city's municipal development plan in a number of ways.

- The project constitutes infill development of an intensity more appropriate to this neighborhood activity zone than the existing detached single family homes (Distinctive – Policies).
- The new development will comply with current energy efficiency standards and will tie into existing infrastructure (Dynamic – Policies).
- As required, a transportation demand management plan is included in the project proposal and will limit use of single occupancy vehicles and support use of alternative means of transportation (Dynamic – Policies & Connected – Policies).
- The development will bring about substantial opportunity for new housing in a presently under-developed site. The proposed units will be available to individuals with a range of incomes (Inclusive – Policies).
- The project brings about greater intensity and activity to this site within an identified neighborhood activity center (Connected – Policies). **(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 senior housing stock. No details have been provided as to pricing, but affordability requirements as articulated in the CDO must be met. It 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)**

(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 proposed development is not expected to generate offsite noise or glare substantial enough to require mitigation. **(Affirmative finding)**

2. Time limits for construction.
No construction schedule is included in the application. The standard time frame is 3 years (1 year to start and 2 more to finish) with one phase. **(Affirmative finding)**

3. Hours of operation and/or construction to reduce the impacts on surrounding properties.
Hours of operation do not pertain to the proposed residential development.

No days or hours of construction are noted in the application. Typical days and hours of construction within residential neighborhoods are Monday – Friday from 7:00 AM – 5:00 PM. Saturday construction may be allowed upon request. No work on Sunday. Unless the applicants request different construction days and hours, these typical standards will apply. **(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.

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.
To be addressed in conditions of approval.

Article 4: Maps & Districts
Sec. 4.4.2, Neighborhood Mixed Use Districts:
(a) Purpose
(3) Neighborhood Activity Center – Riverside (NAC-R)
The Neighborhood Activity Center – Riverside zone is intended primarily to allow a mix of commercial and residential development. A variety of retail and service businesses are allowed along with some light industrial uses. Development is intended to be compatible with nearby residences and is to be aesthetically pleasing for motorists, transit users, pedestrians, and businesses. The proposed development is mostly residential but sits within close proximity to commercial uses within this mixed use zone. Residents of the building will live within easy

walking distance of a variety commercial uses. The proposed senior housing facility fits within the mixed use context of the NAC-R zone. **(Affirmative finding)**

(b) Dimensional Standards & Density
With a total floor area of 76,960 sf and a property area of 38,882 sf, proposed FAR comes to 1.98. This FAR is below the 2.0 FAR limit allowed even without the senior housing bonus.

Several lots will be combined into one lot, and the new building and parking will be constructed. Resultant lot coverage will be 79.8%. This percentage is a touch below the maximum permissible 80%.

The lot is irregular with similarly irregular street frontages. No minimum setbacks apply, except that the building must be at least 12' from the curb along its public street frontages. It is. No other setbacks apply to this property.

Building height must be at least 2 stories and 22' tall and no more than 45' tall (with the senior housing bonus). As proposed, building height varies by section and grade. Overall, the structure is at, or below, the 45' height limit as measured from the average surrounding grades.
(Affirmative finding)

(c) Permitted & Conditional Uses
Multifamily residential development and cafes are permitted uses in the NAC-R zone.
(Affirmative finding)

(d) District Specific Regulations
3 B: Senior Housing
The applicants are proposing a senior housing development and are employing the associated senior housing bonus that affords an additional 10' of building height and corresponding FAR. As such, at least 25% of units must be reserved for low-moderate income senior households, including at least 10% reserved for low-income households. Of the 64 units in total, 25% is 16 units with 10% being 6. **(Affirmative finding as conditioned)**

Article 5: Citywide General Regulations
Sec. 5.2.3, Lot Coverage Requirements
See Sec. 4.4.2 (b).

Sec. 5.2.4, Buildable Area Calculation
See Sec. 4.4.2 (b).

Sec. 5.2.5, Setbacks
See Sec. 4.4.2 (b).

Sec. 5.2.6, Building Height Limits
See Sec. 4.4.2 (b).

Sec. 5.2.7, Density and Intensity of Development Calculations
See Sec. 4.4.2 (b).

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
An exterior lighting plan has been provided and includes fixture types, locations, and illumination levels. The fixture types are acceptable – all are cut-off except for one. The one exception is acceptable as a low-output lighting fixture. Entryway and walkway illumination levels are acceptable. The parking lot lighting; however, is too bright. Maximum permissible illumination is 4 footcandles with a 20:1 uniformity ratio. Lighting levels go up to 7.4 footcandles and need to be adjusted downward to conform to this standard. **(Affirmative finding as conditioned)**

Sec. 5.5.3, Stormwater and Erosion Control
No stormwater infrastructure exists onsite today. As proposed, runoff will be collected from rooftop and paved surfaces, attenuated, and discharged at a controlled rate. Peak stormwater flows are reduced from existing conditions in all scenarios post-construction. The proposed stormwater management plan is under review by the city's stormwater program staff, and final approval is required prior to construction. **(Affirmative finding)**

Article 6: Development Review Standards
Part 1, Land Division Design Standards
No land division is proposed. Several lots will be merged into one.
(Not applicable)

Part 2, Site Plan Design Standards
Sec. 6.2.2, Review Standards
(a) Protection of important natural features
The property is not affected by any significant natural features as identified by the Natural Resource Protection Overlay map. The properties contain some trees and open lawn areas. Trees will be removed in order to clear the site for redevelopment with the senior housing facility.
(Affirmative finding)

(b) Topographical alterations
The project plans contain information as to existing and proposed grades. The site is sloped uphill away from Riverside Avenue and will remain so. Fairly limited topographic alteration is proposed. In large part, the building will be built with grades largely as they are now with some cut into the slope for the rear part of the building and related parking.

Given the history of unstable slopes along the northern side (along the river) of Riverside Avenue, the Conservation Board recommended a geotechnical analysis of the property prior to construction. The applicants have agreed and intended to perform such analysis in any event. **(Affirmative finding as conditioned)**

(c) Protection of important public views
The site contains no identified public view corridors. **(Affirmative finding)**

(d) Protection of important cultural resources

The project site has no known archaeological significance. It contains no archaeological site points, nor is it located within an archaeologically sensitive area. The buildings to be demolished are not included in an historic register. **(Affirmative finding)**

(e) Supporting the use of alternative energy
See Sec. 6.3.2 (f).

(f) Brownfield sites
The subject property is not included on the Vermont DEC Hazardous Site List. It is, however, close to a former city dump (now developed with Riverwatch condos) that is included on the hazardous site list. If not done already, a phase 1 ESA should be conducted with follow up analysis as necessary in coordination with VT Dept. of Environmental Conservation.
(Affirmative finding as conditioned)

(g) Provide for nature's events
The applicants have provided an erosion control plan and a post-construction stormwater management plan for review by the City's stormwater engineering staff.

Building entries are sheltered. Much of the parking is underneath the building. The driveway accessing the parking adjoins green space sufficient for wintertime snow storage. Similarly, there is adjacent green space for snow storage related to the open parking area. **(Affirmative finding)**

(h) Building location and orientation
The subject property is bordered on three sides by city streets. Appropriately, the proposed building is oriented towards Riverside Avenue and is set close to that front property line. The development pattern along this stretch of Riverside Avenue is irregular, and there is little "street wall" to reinforce. The building as proposed will strengthen the streetscape along this section of road. **(Affirmative finding)**

(i) Vehicular access
A single primary curb cut and driveway will serve the proposed development. As recommended by this criterion, the driveway access will be along a secondary street, rather than Riverside Avenue. Sight lines at the driveway/street intersection appear to be adequate. A second curb cut and driveway will provide service vehicle access. The second curb cut should be limited to 16' wide, as recommended by Public Works. **(Affirmative finding as conditioned)**

(j) Pedestrian access
The building's primary entrance facing Riverside Avenue connects to the public sidewalk with a front walkway. The building's secondary frontage along Hillside Terrace is also served by a pedestrian walkway connecting an interior side entrance with the public sidewalk. The walkways are to be concrete and differentiated from the asphalt driveways. **(Affirmative finding)**

(k) Accessibility for the handicapped
Handicap parking and access points are provided within the sheltered rear parking area. The primary entrance along Riverside Avenue is accessed by steps as well as by a level walkway. Additional accessibility provisions are under the purview of the building inspector. **(Affirmative finding)**

(l) Parking and circulation
Given that the proposed building faces city streets on three sides, there is no back side to the building. That said, all of the parking is set behind the building as viewed from Riverside Avenue. Much of the parking is underneath the proposed building. A portion of the parking will be uncovered to the east. Screening of the parking as viewed from Hillside Terrace (west and east) will be provided with proposed landscaping and also by grade. As the parking extends south away from the building it drops below surrounding grades. Parking and circulation are dimensionally accurate per the standards of Article 8. **(Affirmative finding)**

(m) Landscaping and fences
A landscaping plan has been provided and depicts planting locations and species. Plantings are concentrated along the building's primary frontage facing Riverside Avenue. It continues around the corner along the secondary western frontage. Entryways are accented, and screening is provided. Additional plantings will serve to screen the rear parking area as viewed from Hillside Terrace.

Limited fencing is proposed for screening of parking and the dumpster enclosure. No fence detail is evident and is needed.

Several stretches of retaining wall are proposed where required by grade. Pre-formed "redi-rock" style blocks will be used. Visibility is limited but appears consistent with sections of exposed building foundation. **(Affirmative finding as conditioned)**

(n) Public plazas and open space
No public plazas are proposed. Given the limited amount of available ground space around the building, outdoor community space for residents will be provided on 4th story roof decks. Such location will likely afford residents expansive views of the Intervale and beyond. **(Affirmative finding)**

(o) Outdoor lighting
See Sec. 5.5.2.

(p) Integrate infrastructure into the design
A dumpster enclosure sits between the building and Hillside Terrace. While the location is not ideal, the enclosure is screened and is tucked into the corner of the building. Mailboxes are located within the residential lobby.

Interior mechanical space is depicted on the floor plans. See Plan A102. Electrical service connection is not evident on the utility plan. Power lines serving the building must be buried and utility boxes must be screened. **(Affirmative finding as conditioned)**

Part 3, Architectural Design Standards
Sec. 6.3.2, Review Standards

(a) Relate development to its environment:

1. Massing, Height and Scale:
The proposed building is large. In an effort to mitigate perceived mass, the structure is broken into several distinct sections defined by recesses, projections, and differing building materials. Storefront fenestration at ground level along Riverside Avenue helps to further define and

distinguish the building's primary interface with the public street. Building height differs by section and along the adjacent grades. Height is compliant at 45' as demonstrated by two building height sections. Although much larger than the single family homes it will replace, scale of the building is not dissimilar to that of the nearby Riverwatch Condos. **(Affirmative finding)**

2. Roofs and Rooflines.
A flat roof is proposed albeit in several different sections. Such roof form is common among similar structures and within this mixed use zone. **(Affirmative finding)**

3. Building Openings
Fenestration is patterned consistently throughout the building and is appropriate for this residential application. As noted above, street level storefront glazing is proposed along Riverside Avenue. **(Affirmative finding)**

(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.

As noted above, none of the single family homes to be removed are not historic. Much of the adjacent development is relatively new. The proposed structure will not adversely impact Burlington's wealth of historic resources. **(Affirmative finding)**

(c) Protection of Important Public Views:

(Not applicable)

(d) Provide an active and inviting street edge:

The proposed building will be set close to Riverside Avenue with a prominent front entry facing the street. Landscaping will soften the hard edge of exposed building foundation, and the embellished front entrance will invite pedestrians from the sidewalk into the building. Storefront glazing will afford visual access into the building from the public sidewalk. **(Affirmative 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.

As is common with other recent residential buildings of similar scale, the building will be clad in cementitious siding (panel and lap) along with sections of corrugated metal siding and metal coping. Painted metal railing and fencing will provide accent and screening. Except for the aluminum storefront windows, most windows will be vinyl. **(Affirmative finding)**

(f) Reduce energy utilization:

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.

New structures should take advantage of solar access where available, and shall undertake efforts to reduce the impacts of shadows cast on adjacent buildings where practicable, in order to provide opportunities for the use of active and passive solar utilization.

No utilization of renewable energy is evident in the project plans. The building is set far enough from adjacent structures to avoid adverse shadow impacts. **(Affirmative finding)**

(g) Make advertising features complementary to the site:

Some placeholder signage is depicted in the project plans and should be removed. All exterior signs are subject to separate zoning permit and are not included in this application review. **(Affirmative finding as conditioned)**

(h) Integrate infrastructure into the building design:

See Section 6.2.2. (p), above.

(i) Make spaces secure and safe:

Construction shall comply with all required building and life safety codes as determined by the building inspector and fire marshal.

Building entrances/entry points shall be visible and adequately lit, and intercom systems for multi-family housing should be incorporated where possible, to maximize personal safety.

Exterior entries will be illuminated as depicted in the outdoor lighting plan. Intercom systems are recommended to maximize personal safety. **(Affirmative finding as conditioned)**

Article 8: Parking

Sec. 8.1.8, Minimum Off-Street Parking Requirements

The subject property is located in the multimodal mixed-use parking district. As such, there is no onsite minimum parking requirement. As proposed, 57 onsite parking spaces will be provided. **(Affirmative finding)**

Sec. 8.1.10, Off-Street Loading Requirements

The 57 parking spaces proposed are fewer than the 64 that would be required in the shared use parking district. Therefore, the proposed parking remains below the maximum permissible limit. **(Affirmative finding)**

Sec. 8.1.11, Parking Dimensional Requirements

The proposed parking spaces and circulation aisles are compliant with the standards of Table 8.1.11-1. **(Affirmative finding)**

Sec. 8.1.12, Limitations, Location, Use of Facilities

(a) Off-Site Parking Facilities

None proposed. **(Not applicable)**

(b) Front Yard Parking Restricted

(Not applicable)

(c) Shared Parking
(Not applicable)

(d) Single Story Structures in Shared Use Districts
(Not applicable)

(e) Joint Use of Facilities
As there is no minimum onsite parking requirement, this subsection may be moot. In any event, parking will be provided for residents and guests alike. **(Affirmative finding)**

(f) Availability of Facilities
As noted above, the parking to be constructed as part of this development will serve residents and visitors. It may not be used for the storage or display of vehicles or materials. **(Affirmative finding)**

Sec. 8.1.13, Parking for Disabled Persons
Two ADA parking spaces are depicted next to the building. These spaces shall be marked and signed as required for handicap spaces. **(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
(b) Applicability
As the project is located within the multimodal mixed-use parking district and includes more than 10 new dwelling units, it is subject to the standards of this section. **(Affirmative finding)**

(c) Transportation Demand Management Program
The applicant has provided a transportation demand management program prepared by VHB that addresses each of the following items.

a. *Outreach and Education:*
   The senior housing facility will have a Director of Residential Life. This individual will also serve as the Transportation Coordinator. In that role, the individual will prepare and disseminate materials as to TDM strategies and resources available to residents. The Transportation Coordinator will also be responsible for record keeping and annual reporting to the city as required by this criterion. **(Affirmative finding)**

b. *TDM Strategies:*
   This criterion requires subsidy for GMT passes and car share memberships for all residents and employees or membership in a transportation management association (such as CATMA). In this case, residents of the senior housing facility will be served by Special Services Transportation Agency (SSTA). As such, demand for GMT passes is likely to be limited. The applicant's TDM plan proposes CATMA's pay-as-you-go

transit pass program instead. Given the ongoing availability of SSTA services for this senior housing facility, this alternative is acceptable. The TDM also proposes car share availability starting after the first year of operation. Following that, and based on demand over the course of a full year, the car share service will remain as is, expand, or be removed. As with bus passes, provision of SSTA services is likely to curtail demand for car share. The applicant's TDM proposal is a reasonable way to provide the service and assess the demand prior to making a long-term commitment. **(Affirmative finding)**

c. *Parking Management:*
As parking spaces will be provided onsite, annual parking utilization studies will be required with related reporting to the city. As noted above the Transportation Coordinator will be responsible for conducting these studies (or having them done by a qualified 3rd party) and reporting to the city. As required, priority parking spaces will be provided. **(Affirmative finding)**

d. *TDM Agreement:*
A written agreement committing to ongoing implementation of the TDM plan is required and will be executed upon permit approval. **(Affirmative finding as conditioned)**

Sec. 8.2.5, Bicycle Parking Requirements
The 64 senior housing units require at least 6 long term bike parking spaces and 6 short term bike parking spaces. The site plans depict an area for bike parking within the sheltered garage area; however, details are lacking as to type of bicycle parking, and the location is unacceptable located far from a primary building entrance. **(No finding possible)**

Article 9: Inclusionary and Replacement Housing
Sec. 9.1.5, Applicability
As the proposed development is exclusively senior housing and is utilizing the senior housing bonus, it is exempt from the inclusionary housing standards of Article 9. As noted in Article 4 above, the affordability requirements of the senior housing bonus of Sec. 4.4.4.2 (d) 3 B apply. Details as to affordability of the required affordable senior housing units must be reviewed and approved by the city's Housing Trust Fund manager. **(Affirmative finding as conditioned)**

Article 10: Subdivision
Sec. 10.1.5, Lot Line Adjustments
As required, a boundary survey depicting the merged parcels and including the required signature block for the administrative officer has been provided. Following approval and signature, the mylar must be filed in the city's land records within 180 days. **(Affirmative finding as conditioned)**

II. Conditions of Approval
Conditions of approval are proposed in the event that satisfactory bike parking details are provided prior to close of the public hearing.

1. **Prior to release of the zoning permit**, revised project plans and additional materials shall be submitted, subject to staff review and approval. The revised plans and additional materials shall include the following:

a. Wastewater capacity letter issued by the Dept. of Public Works;
b. Revised parking lot lighting levels compliant with the standards of Sec. 5.5.2;
c. Curb cut width of 16' or less for the dumpster access;
d. Fence and dumpster enclosure detail; and,
e. Signed transportation demand management (TDM) agreement committing to TDM measures included in Article 8 of these findings and as required by Sec. 8.1.16 of the Comprehensive Development Ordinance.

2. **Prior to release of the zoning permit**, approval of the erosion prevention and sediment control plan and of the stormwater management plan shall be granted by the Burlington stormwater program.
3. **Prior to construction**, the applicant shall have a geotechnical analysis of the property performed by a qualified individual or firm.
4. **Prior to construction,** a phase 1 ESA shall be conducted with follow up analysis as necessary in coordination with the VT Dept. of Environmental Conservation.
5. **Within 180 days of approval**, the signed mylar of the lot merger shall be recorded within the city's land records.
6. **Prior to issuance of a certificate of occupancy,** a Certificate of Inclusionary Housing Compliance reflecting compliance with the affordability requirements of the senior housing bonus shall be obtained from the Housing Trust Fund Manager. At least 25% of the 64 units must be reserved for low-moderate income senior households, including at least 10% reserved for low-income households.
7. At least **7 Days prior to issuance of a certificate of occupancy,** the applicant shall pay to the Zoning Division the impact fee as calculated by staff based on the net new square footage of the proposed development.
8. Days and hours of construction shall be Monday – Friday from 7:00 AM – 5:00 PM. Saturday construction may be allowed upon request. No work on Sunday.
9. All power lines serving the building shall be buried, and the electrical meters shall be screened.
10. No outdoor signs are included in this permit approval. All outdoor signs are subject to separate zoning permit review and approval.
11. 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.
12. Standard conditions 1-15.

Scott Gustin

From: Debra Miller <[redacted]>
Sent: Monday, November 30, 2020 5:21 PM
To: Scott Gustin; Lori Olberg
Subject: 12/1 DRB Meeting - 21-0374CA 160 Bank Street

External Message

Hello Scott and Lori,

We own the property at 170 Bank Street neighboring this project. The deed to our property states that th is a 10 foot right of way on the our westerly side of our building, which also includes the air space. The dee also states that we have a right of way in the back parking lot area that grants us area to turn vehicles, truc and teams.
Currently that turn around space is very limited, hence inserting another shed will become a problem. Thi lane is also a Fire Lane.

The current Farmhouse outdoor seating area facing Bank Street and on the side facing our building, is at m on the property. We would have issue with any expansion, on ground or air space in front of this propert on the easterly side. If anything is past the property line, in the air, it would block the view heading towar our business, and the view of the Marketplace.

Our building is an Historic Building, not sure if 160 Bank Street is also.

We will attend the Zoom meeting tomorrow but wanted to give you the Deed information in advance.

Deb & Tom Miller
Miller Properties LLC

Scott Gustin

From: Jed Davis <[redacted]>
Sent: Monday, November 30, 2020 5:59 PM
To: Scott Gustin
Cc: Cleary Buckley
Subject: Re: FW: 12/1 DRB Meeting - 21-0374CA 160 Bank Street

External Message

Scott,
Yes, they always make a point of objecting to anything and everything that we try to do at Farmhouse. There is a right of way - it is essentially that paved driveway between their property ar the Farmhouse property - which I am well aware of. The new proposed shed they refer to on the E side of the Farmhouse building does not impede on this right of way at all, so they must be confus as to the intended location. The shed is within the curb line, on our property, and certainly well out the right of way. And the front canopy in no way impedes on the air space over the right of way, if t is even contemplated in any deed.

So thankfully for them, their comment **"We would have issue with any expansion, on ground o air space in front of this property, or on the easterly side."** is a moot point because none of ou proposed plan would do so. There is no "expansion". It is all well within our property line(s) and it a avoids this right of way.

On Mon, Nov 30, 2020 at 5:23 PM Scott Gustin <SGustin@burlingtonvt.gov> wrote:

Jed,

FYI, see below.

Scott

Scott Gustin, AICP, CFM

Principal Planner & Asst. Administrative Officer

Dept. of Permitting & Inspections

645 Pine Street

Burlington, VT 05401

(802) 865-7189

SMITH BUCKLEY ARCHITECTS

Brad Rabinowitz, Chair
Development Review Board, Department of Permitting and Inspections
City of Burlington
645 Pine Street
Burlington VT 05401

December 1, 2020

Re: ZP21-0413CA; 400 Pine Street

Dear Mr. Rabinowitz,

First, my apologies for writing such a long letter. We expected to appear before you today on the consent agenda with a positive staff report recommending approval of our project. Instead, we write today on the following three points with regard to the above referenced application: 1) Summary of the review process to date, 2) Application of the ordinance, 3) Preference of Design Schemes under consideration

Summary of the review process to date:
We presented our project to the Design Advisory Board (DAB), on November 10. The staff report contained somewhat negative assessments of the project with regard to a few of the more subjective criteria under Sec. 6.3.2, and it made no recommended motion. Nevertheless, after a thorough design review, the DAB voted unanimously to approve the project with conditions. The most important condition called for was to increase the open zones of the fence with line-of-sight to the building facade to be a minimum of 25% of the linear footage of the fence. We agreed this would improve the design and submitted our revisions in a new drawing set labeled "R1" on November 20.

On November 23, on the same day that our project was posted to the DRB website on the consent agenda, we received communications from Zoning Staff asserting that the raised platform must be pulled back to meet the 5 foot front building setback, or face certain denial.

We responded that Staff was not applying 5.2.5(b)2 correctly. However, faced with the prospect of a DRB Staff Report recommending denial, we submitted a further revised plan set "R2," making explicit the role of the integrated elevated walkway, or "deck," plays: serving as both outdoor dining area and providing a complete and connected accessible route, extending ADA compliant access to two tenant spaces not currently served. Our hope was that Staff would agree that – taken as an integrated whole - we met the criteria for the exceptions to the setback.

In fact, in both Schemes the entire elevated deck level is either sloped ramp (100 - 120 lineal feet) or level connecting walkway between ramps (20 – 40 lineal feet) seamlessly joining three different interior floor heights for universal access.

While we preferred our original scheme, as amended per DAB conditions, we felt it was worth attempting to fit within Staff's narrow reading of 5.2.5(b)2, if it meant a smoother path to approval. Therefore, the "R2" scheme defined the accessible route as the perimeter zone within the setback, and added a ramp at the South end.

To be clear: We did not think it was necessary to define the accessible route this way or to add the ramp at the southern end, but Staff seemed to imply it was the only way we could be approved. And yet, the Staff Report dated December 1 reviewing Scheme "R2" recommends denial despite the clarifications and changes.

Application of the ordinance
We designed this project with priority given to application of the Development Principles and Design Standards of Article 6 as required by the CDO. Top of mind in our design process were the following from 6.0.1:

(e) Promote personal safety and accessibility for those with disabilities in the design of publicly accessible outdoor and indoor spaces.

(h) Ensure that public buildings, structures, and spaces, be designed and constructed to the highest standards in order to reflect community values, inspire future development, foster civic pride, and serve as a model to others.

As you know, Development Principles serve as the highest order of importance in cases where individual standards appear to conflict and greater discretion on the part of the DRB is required.

We also considered the design standards of Article 6. The Standards are intended to provide specific guidance on how to achieve the Development Principles. Of particular relevance for this project is 6.2.2 (k), which calls for special attention to the "integration of accessible routes... ...and ramps for the disabled" in the same breath, which is precisely what the design achieves, in an inclusive, universal manner.

(k) Accessibility for the Handicapped: Special attention shall be given to the location and integration of accessible routes, parking spaces, and ramps for the disabled. Special attention shall also be given to identifying accessible access points between buildings and parking areas, public streets and sidewalks. The federal Americans with Disabilities Act Accessibility Guidelines(ADAAG) shall be used as a guide in determining the adequacy of the proposed development in addressing the needs of the disabled.

And of course, we reviewed the setback requirements and the exceptions to the setbacks under Section 5.2.5. Under "Exceptions to Yard Setbacks" at 5.2.5(b), we reviewed Item 2 below. We determined that these exceptions strongly suggested a design approach that improved accessibility across the entire building while integrating seamlessly with outdoor dining and activity spaces, thus meeting the criteria of the Principles and Standards of Article 6.

2. Building and Site Features. Eaves, sills, roof overhangs, cornices, steps to first floor entries, walkways, ramps for the disabled, fences, walls, and similar building and site features may project into a required yard setback.

We think that either Scheme R1 or R2 meets the criteria for an exception to the setback.

When Staff issued their report prior to the DAB meeting, there was no mention of setback requirements or exceptions. At the DAB review, neither Staff nor Board Members raised any concerns in regard to this section of the ordinance. We had no reason to believe there was any daylight between our understanding of 5.2.5(b)2 and Zoning Staff's understanding. I'm sure you can see how surprised and frustrated we were when Zoning Staff informed us at the eleventh hour that they would recommend denial of the application simply because the words "deck," or "accessible route" do not appear in 5.2.5(b)2.

The Zoning Staff's narrow interpretation of the exceptions is extreme, parsing language to the point of absurdity when the clause "...and similar building and site features..." exists precisely to overcome such problems of categorization. Walkways connect ramps and stairs with the interior and exterior levels they serve. When ramps are located some distance away from the building entry points they serve, they must be connected by an "accessible route," which could include other ramps, or level walkways. It's worth pointing out that "walkways," on their own, are also listed as allowable exceptions to the setback. It does not say the walkways must be at grade level.

Zoning Staff's incorrect application of the setback exceptions, when applied to this project, is in direct contradiction to the universal design concepts given priority by the Development Principles and Design Standards of Article 6 of the CDO. The access equity concept is critical here. We are trying to create an inviting and functional outdoor dining and activity space where everyone can move freely between inside and outside – with their group – without having to separate and

take an accessible detour. At the same time, we want to engage the street, while providing relief from traffic noise along this busy corridor. We think the intent of Section 5.2.5(b)2 is to help us accomplish that and make it seamlessly accessible and inclusive to everyone, rather than to reinforce the status quo.

Upholding the Zoning Staff's interpretation here will create a situation where the elevated deck level would be reduced to 7' +/- in width. After subtracting the required minimum egress width, this leaves 42 inches +/- for seating, thus limiting the seating to “two-tops” - effectively capping outdoor seating at about 20 seats on the elevated level – not enough to make the elevated walkway and seating make financial sense. It also complicates and reduces any service that may be contemplated between the deck and the property line at grade. Therefore, the alternative is effectively a new skin on the status quo: No improvements to existing accessibility, existing stairs and ramps remain as-is, all outdoor dining at grade, perhaps with a new paved surface, and a new, as-of-right fence at the property line. This is not something the applicant wishes to do, but there will be little choice.

Preference of Design Schemes under consideration

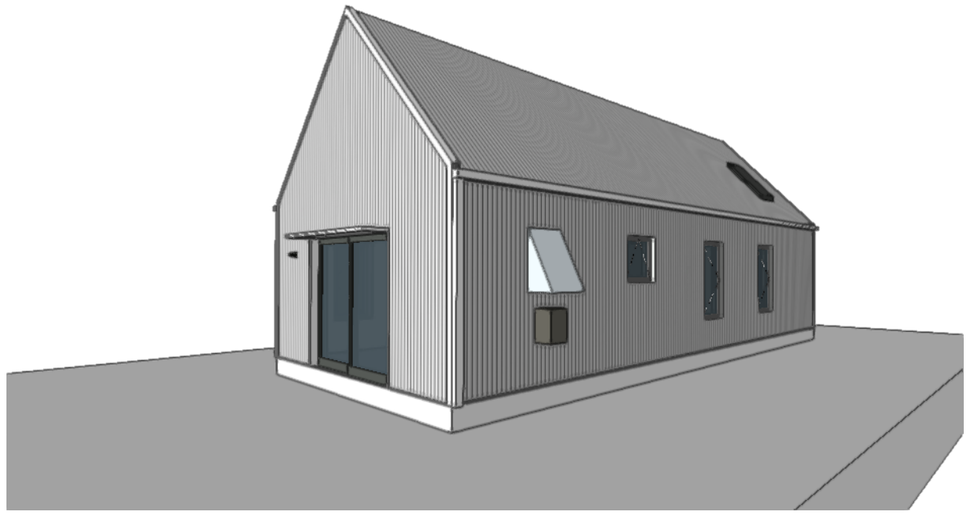
We request that the board consider not only Scheme R2, for which the DRB Staff report was written, but also Scheme R1, which reflects the status of the design proposal as it was unanimously approved by the DAB, including changes to address their conditions of approval. Our preference is for Scheme R1 because:

- It's what the DAB approved.
- It provides for more usable space for activities on the elevated level at the South end.
- It does not arbitrarily define fixed routes along the elevated platform – leaving flexibility for future tenancies.
- It creates better, more efficient, conditions for the possibility of connectivity to any future expansion of the elevated deck at Speeder and Earl's Coffee Shop, where any South end ramp is best located.

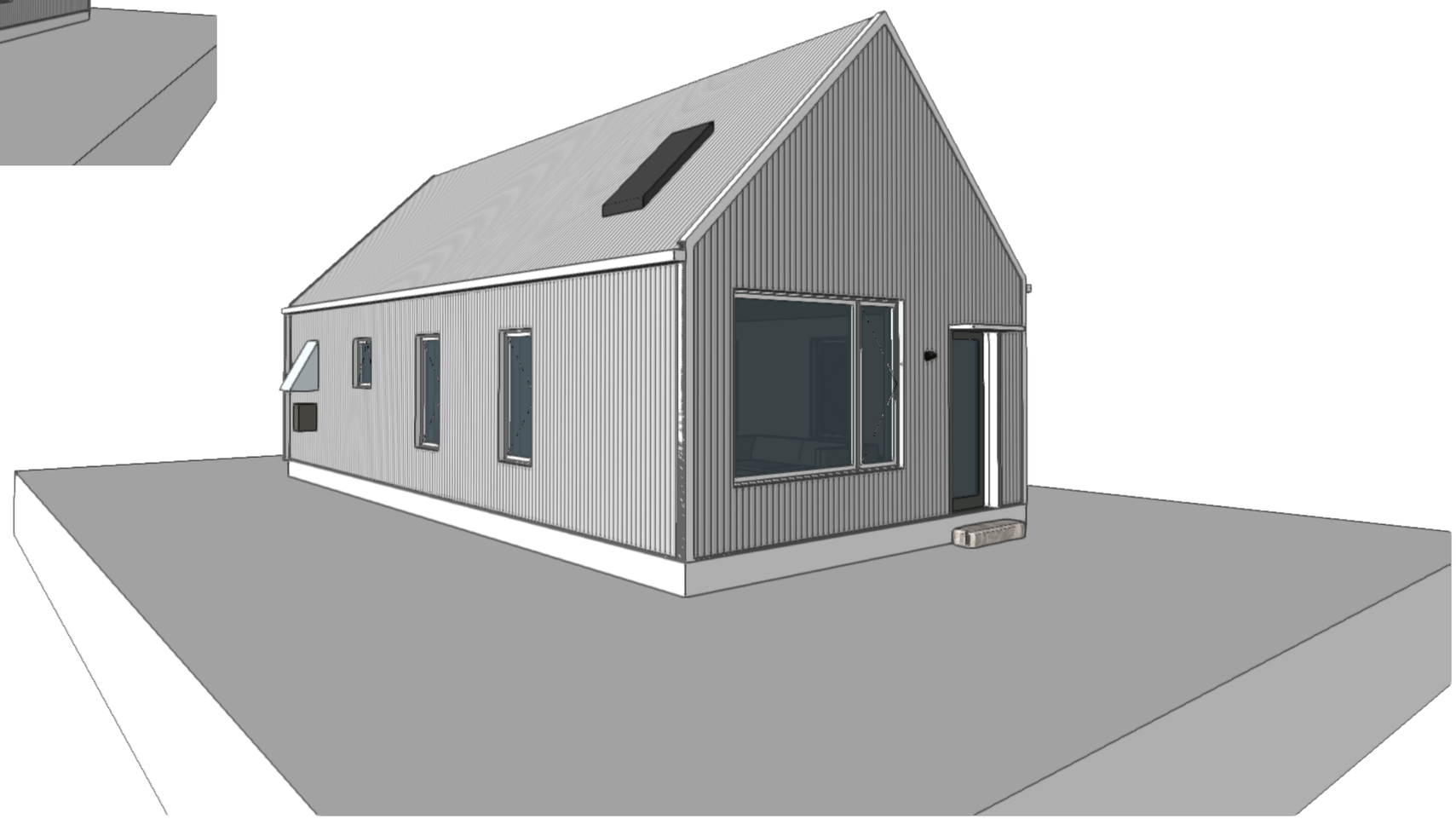
Thank you for your thoughtful consideration of this matter. I look forward to our hearing this evening.

Sincerely,

Israel D. Smith, AIA



VIEW FROM SOUTH



VIEW FROM NORTH

400 NORTH STREET

BURLINGTON VT

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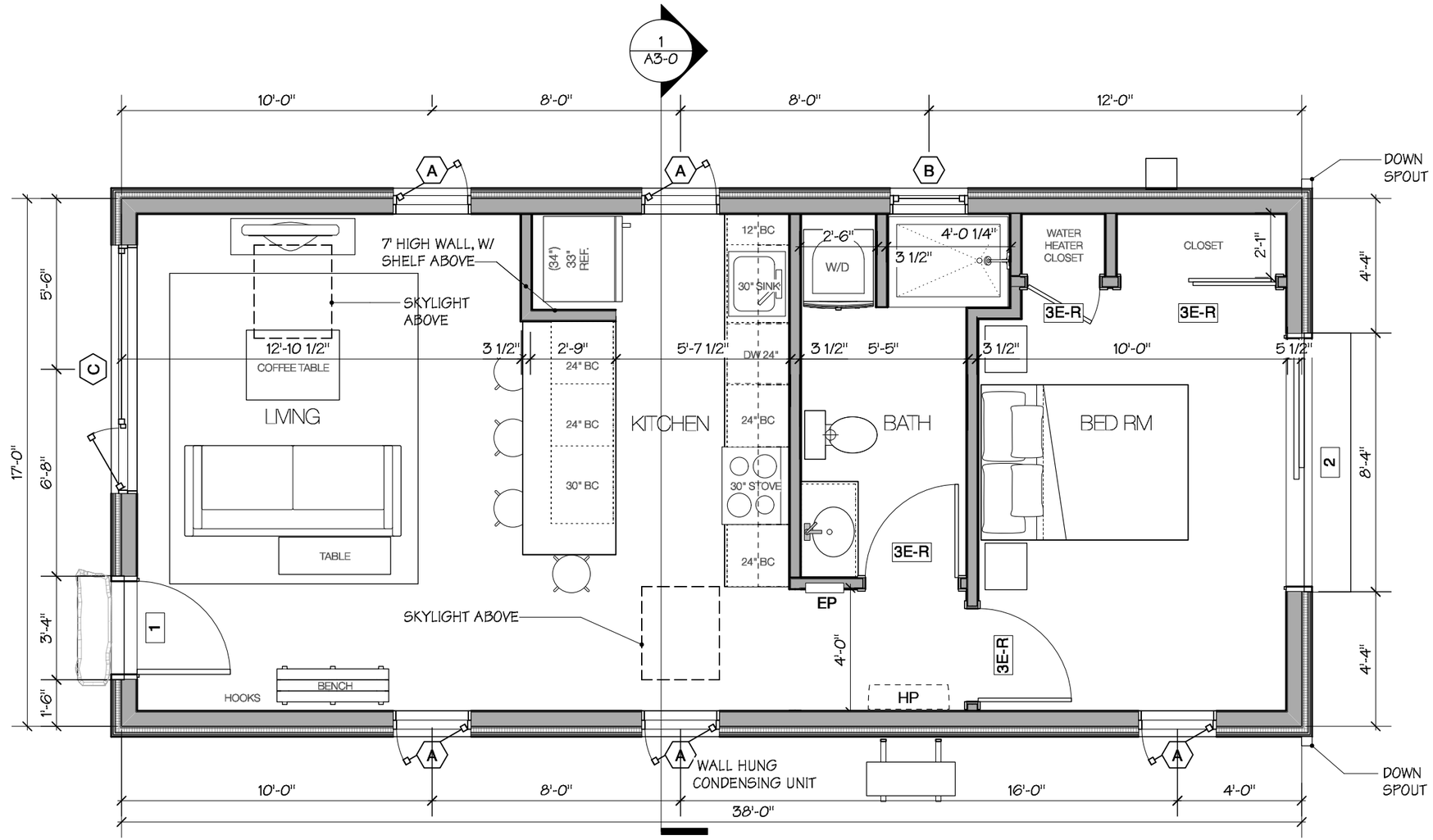
DUNCAN • WISNIEWSKI ARCHITECTURE
A Professional Corporation

DESIGN DEVELOPMENT

Duncan Wisniewski
ARCHITECTURE
255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

DATE: 11.25.2020
DRAWN: ABC

A0-0



N

FIRST FLOOR PLAN

Scale: 1/4" = 1'-0"

0 5 6 7 8 9 10 FT

400 NORTH STREET

BURLINGTON VT

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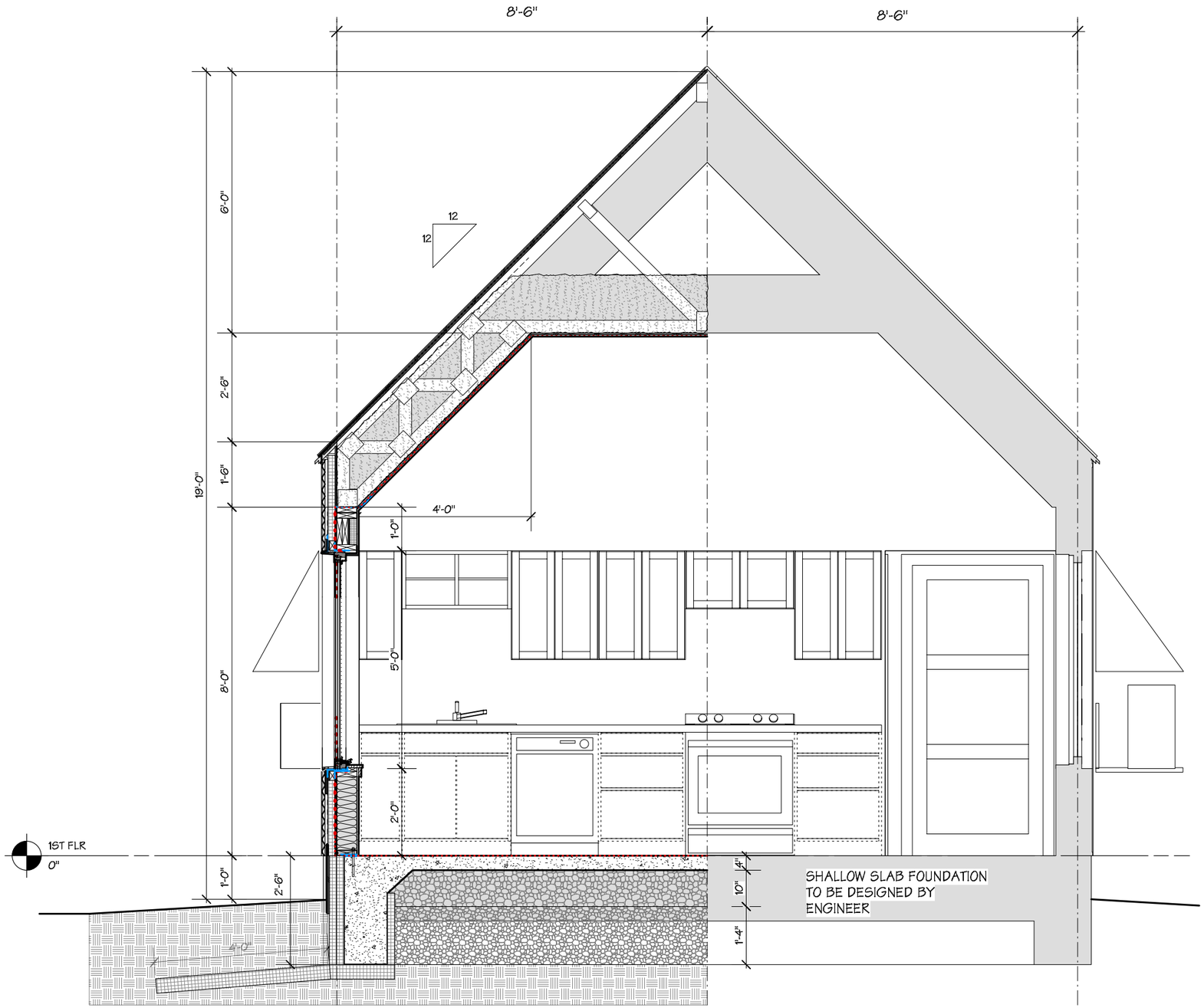
BURLINGTON, VERMONT 05401
T: 802.864.6693

DATE: 11.25.2020
DRAWN: ABC

A1-0



1 **SECTION A**
Scale: 3/8" = 1'-0"

ENVELOPE THERMAL SUMMARY:

ROOF:

-SEMI-DENSE PACK 16"X R-3.7/IN=	**R-59.2**
-CODE R-VALUE	R-49

WALLS:

-DENSE PACK 5 1/2" X R-3.5/IN=	R-19.25
-RIDGED POLYISO CONT. 2"X R-6/IN=	R-12
APROXIMATE TOTAL R-VALUE:	**R-31.25**
CODE R-VALUE	R-23

WINDOWS:

TRIPPLE GLAZED FIBERGLASS-	**U- 0.18 (R-5.57)**
CODE R-VALUE	U-.033 (R-3.0)

SLAB EDGE:

-EPS RIGID FOAM INSULATIO- 4" X R-4/IN=	**R-16**
CODE R-VALUE	R-15

BELLOW SLAB:

GLAVEL- 12"X R-2.2/IN =	**R-26.4**
CODE R-VALUE	NONE

400 NORTH STREET

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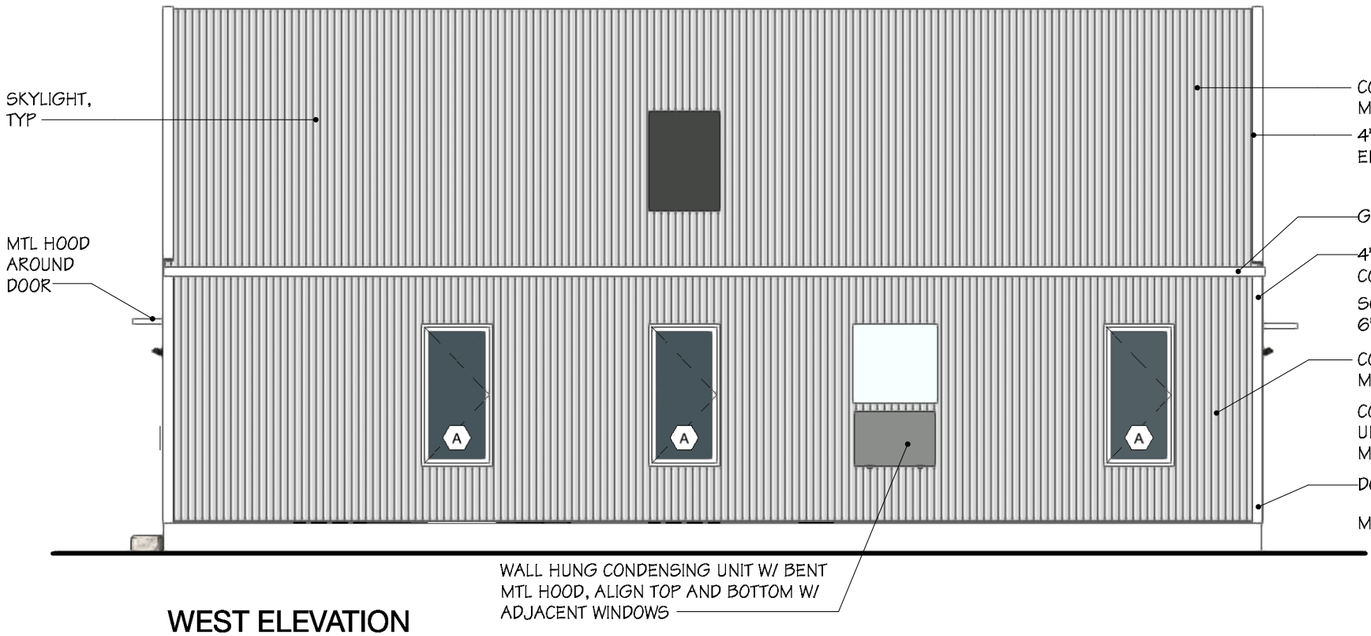
255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

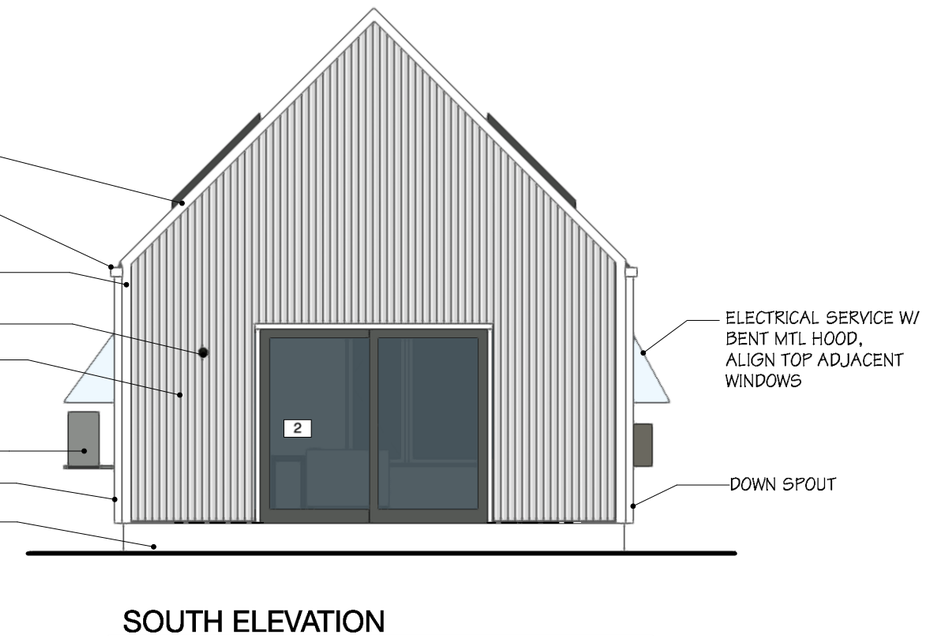
DATE: 11.25.2020
DRAWN: ABC

A3-0



WEST ELEVATION

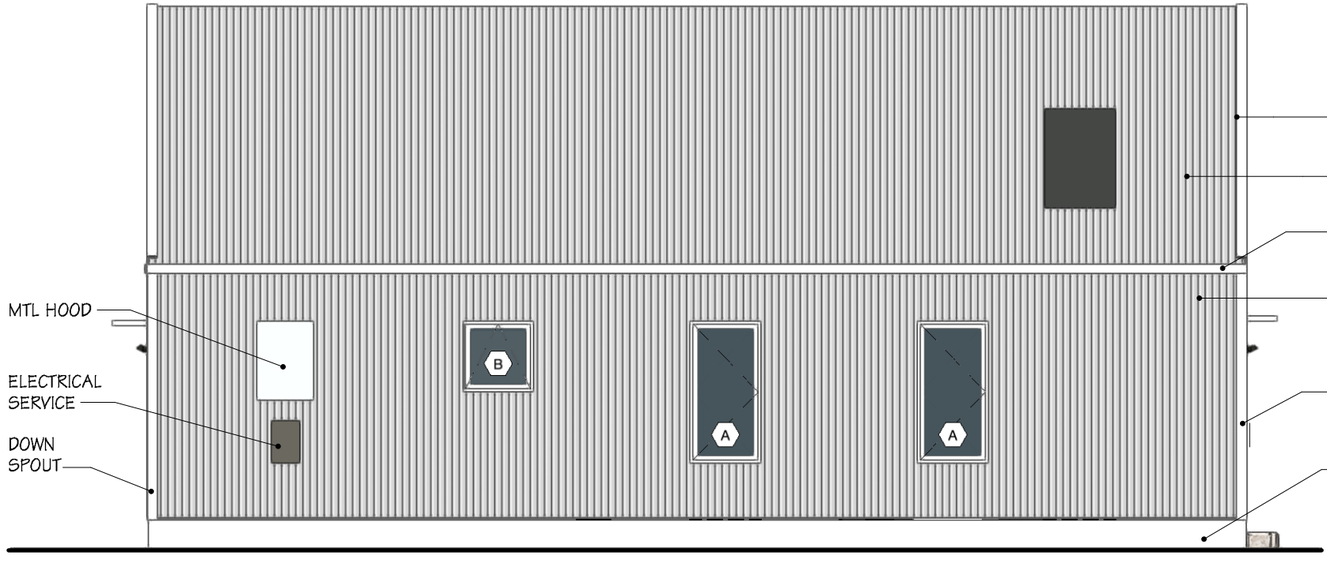
Scale: 3/16" = 1'-0"



SOUTH ELEVATION

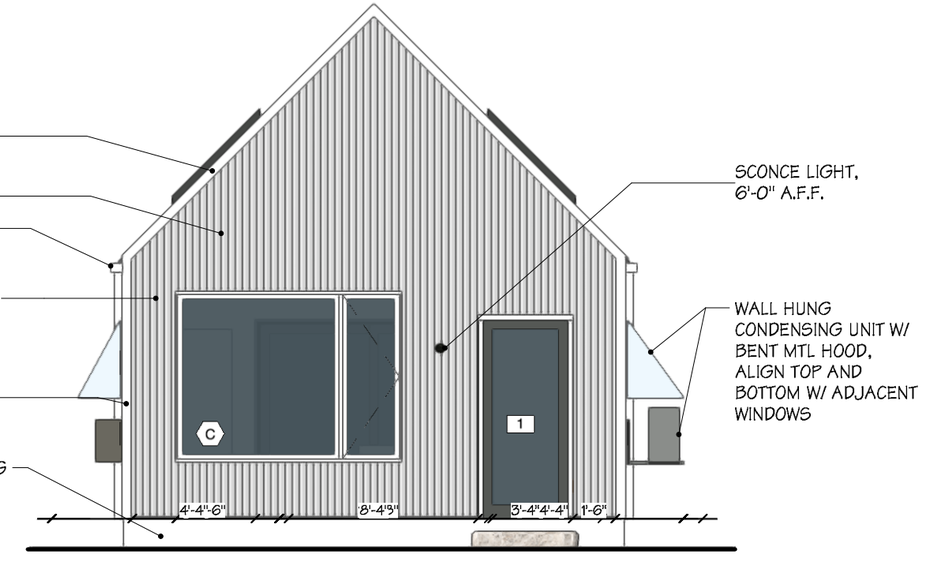
Scale: 3/16" = 1'-0"

0 5 6 7 8 9 10 FT



EAST ELEVATION

Scale: 3/16" = 1'-0"



NORTH ELEVATION

Scale: 3/16" = 1'-0"

400 NORTH STREET

BURLINGTON VT

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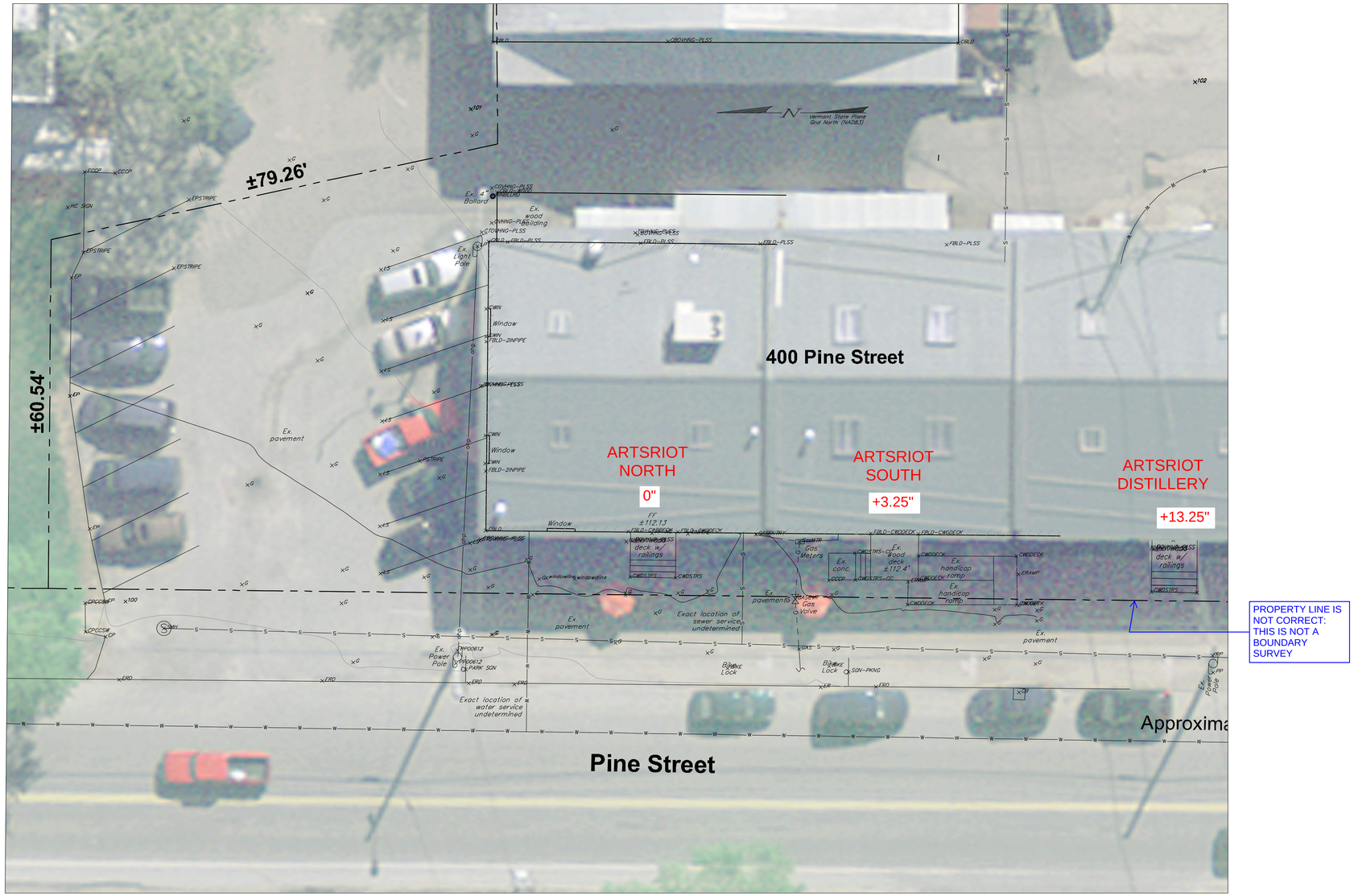
DATE: 11.25.2020
DRAWN: ABC

A4-0



PROPERTY LINE IS NOT CORRECT: THIS IS NOT A BOUNDARY SURVEY

PLAN

2014 Survey document by Krebs and Lansing annotated to highlight the three different floor levels of the building

0' 5' 10' 20' 30' 40' 50'

Bar Scale 1" = 10'

Legend

- Approx. Property Line
- Existing Sewer
- Existing Water

Notes:

1. This is not a boundary survey. The individual property lines shown are based on an City of Burlington GIS Tax Map information as downloaded from the VCGI website.
2. Underground utilities are not warranted to be exact or complete.
3. Existing sanitary and sewer lines are shown based on hand drawn plans supplied by the Owner's property maintenance supervisor.
4. Existing Permit # for 400 Pine Street is WW-4-0950.
5. Survey by Krebs & Lansing on February 24, 2014.

Date revised	Description	Checked	Date

Drawn SDG
Checked IAJ
Scale 1" = 10'
Date February 4, 2014
Project 131.34

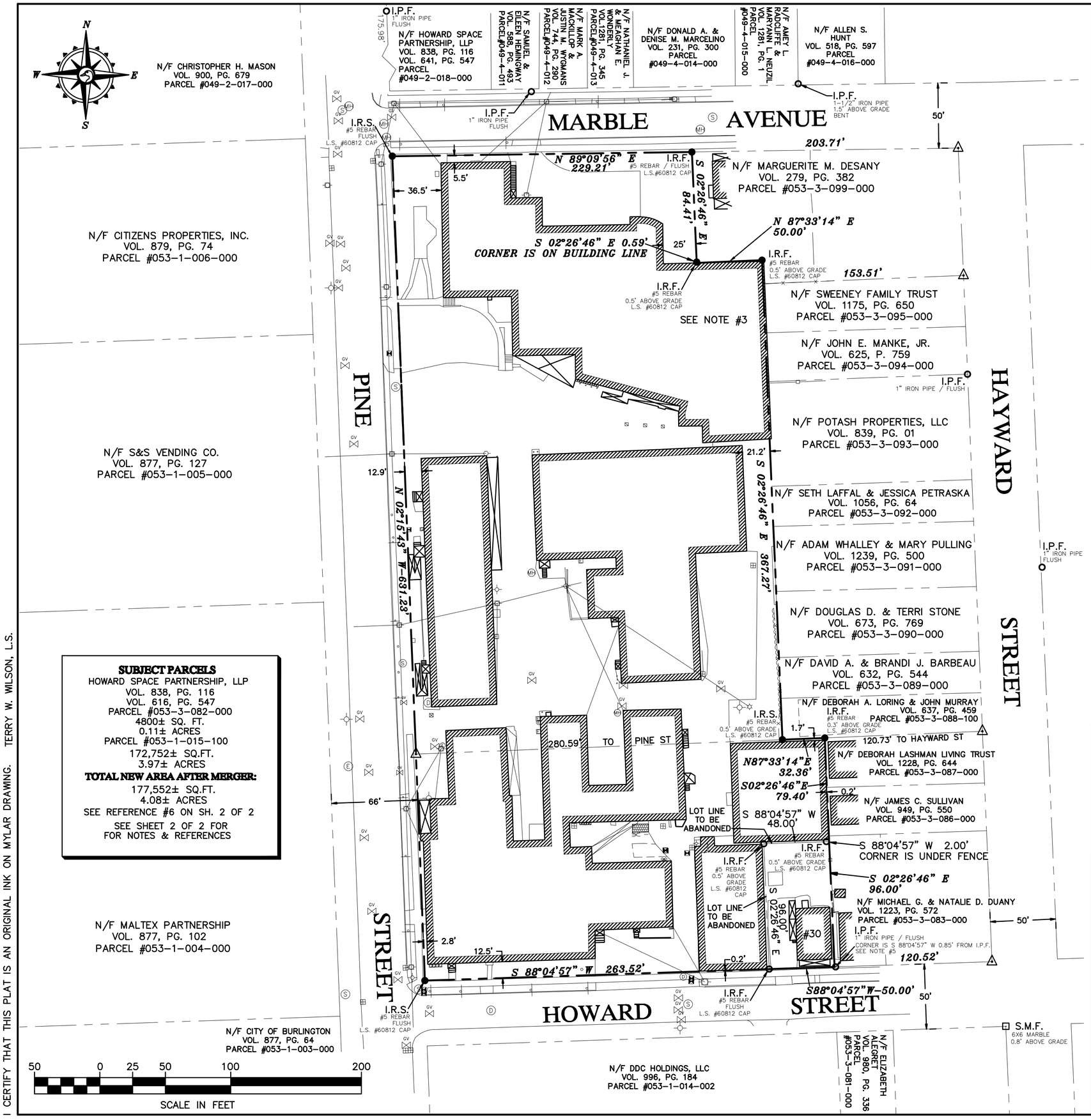
Site Plan

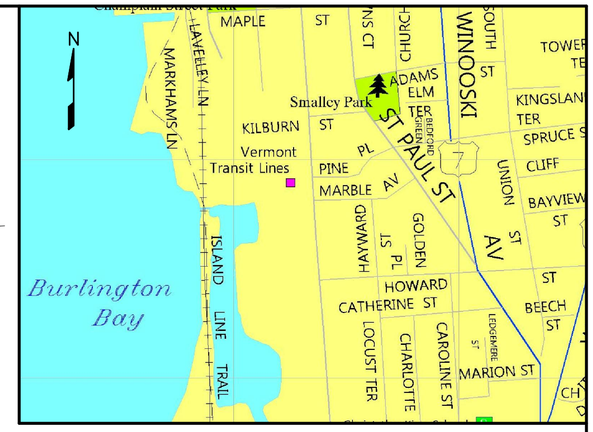
400 Pine Street

400 Pine Street — Burlington, Vermont

KREBS & LANSING Consulting Engineers, Inc.
164 Main Street, Colchester, Vermont 05446

1





LOCUS—NOT TO SCALE

LEGEND

	PROPERTY LINE
	RIGHT OF WAY OR PARCEL LINE
	WIRE FENCE
	WOOD FENCE
I.R.F.	IRON ROD FOUND
I.P.F.	IRON PIPE FOUND
	CALCULATED POINT
S.M.F.	STONE MONUMENT FOUND
	POLE
	HYDRANT
	LIGHT POLE
	GUY WIRE
CB RIM	CATCH BASIN
S RIM	SEWER MANHOLE
D RIM	DRAIN MANHOLE
GV	GATE VALVE
	SIGN
G	GAS METER
	GAS SHUT OFF
	WATER SHUT OFF
E	ELECTRIC METER
E	ELECTRIC MANHOLE
MH	MANHOLE
	COMBINATION POLE

CERTIFICATION

I CERTIFY THAT THE SUBJECT PARCEL BOUNDARIES SHOWN HEREON ARE TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID BOUNDARIES WERE DETERMINED FROM PERTINENT RECORDS AND RESOURCES AND EVIDENCE FOUND IN THE FIELD. THIS SURVEY WAS PERFORMED WITH AN ELECTRONIC TOTAL STATION WITH A POSITIONAL TOLERANCE LEVEL EXCEEDING 95%. I FURTHER CERTIFY THAT THIS PLAT MEETS ALL THE REQUIREMENTS OF TITLE 27 V.S.A. SECTION 1403.

DATED _____

PRELIMINARY

TERRY W. WILSON, L.S. #60812 VT

© COPYRIGHT 2017

PROJ. #17540	**MERGER OF LANDS OF HOWARD SPACE PARTNERSHIP, LLP 30 HOWARD ST & 400 PINE ST BURLINGTON, VERMONT**
DATE: MARCH, 2017	
SCALE: 1"=50'	
SURVEYED BY: TWW/JMD	
DRAWN BY: TWW/JMD	
CHECKED BY: TWW	SHEET 1 OF 2 DWG. # M-540

STATE OF VERMONT
TERRY W. WILSON
NO. 60812
LICENSED LAND SURVEYOR

Vermont Mapping & Survey Co., LLC
8 Essex Way, Suite 200B
Essex Jct., VT 05452
(802) 857-5207
www.vermontmapping.com

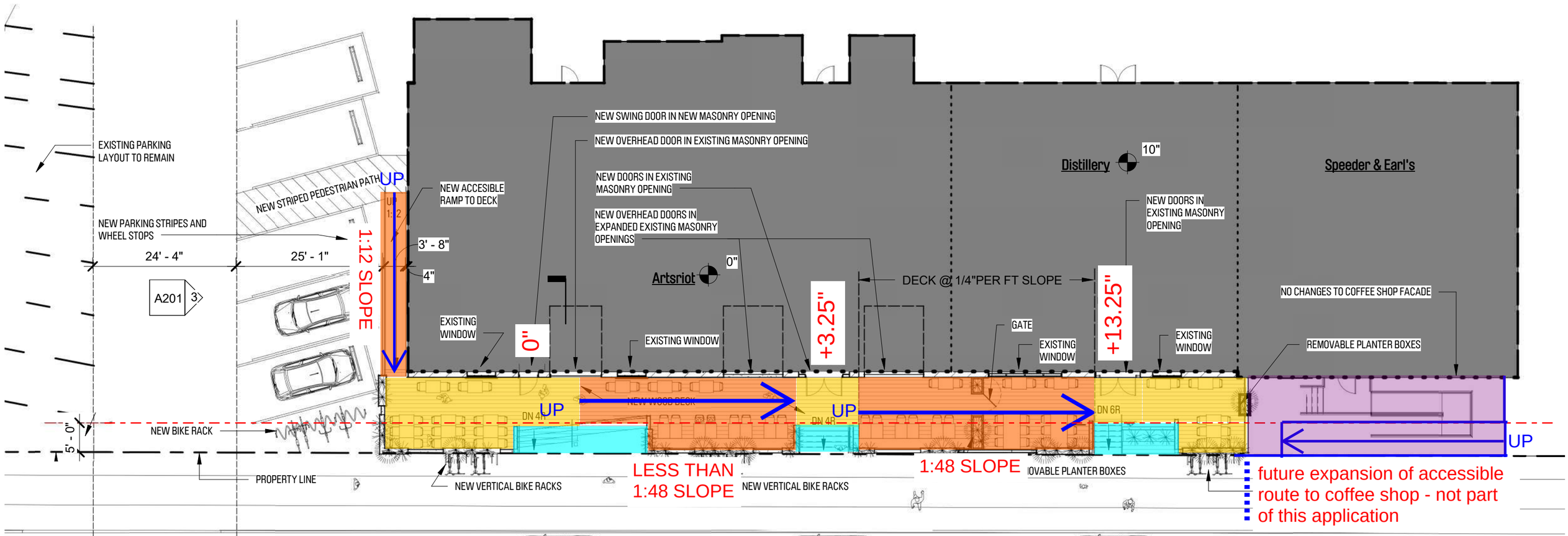
I CERTIFY THAT THIS PLAT IS AN ORIGINAL INK ON MYLAR DRAWING. TERRY W. WILSON, L.S.

ARTSRIOT
ART • DENIM
GLASS • YOGA
SPEEDER & EARL'S
COFFEE

ART+DENIM
GLASS+YOGA

ART DENIM
GLASS YOGA

ART DENIM
SPEEDER FARM
COFFEE



NOTE: Seating layout and configuration shown for illustration purposes only.
The applicant intends to utilize tables and chairs the first season to try out different layouts and seating types. Any built-in elements such as banquettes and booths, if constructed, would be built at a later date and may be configured differently than shown here.

SBA
SMITH BUCKLEY ARCHITECTS
431 PINE STREET, SUITE 210 BURLINGTON VT 05401
P 802 540 0323 www.SBAVT.com

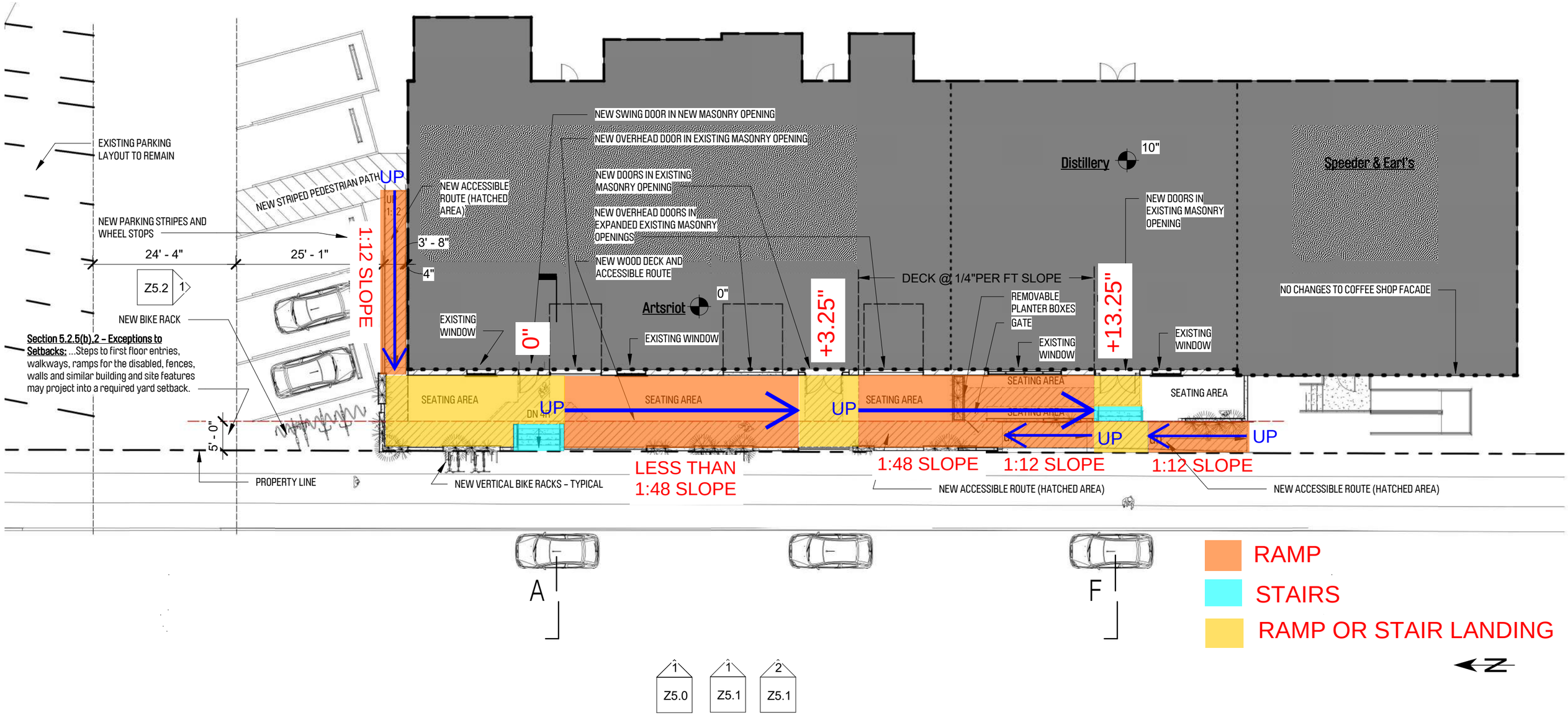
Exterior Improvements to 400-412 Pine Street

Burlington VT

Zoning Permit R1

DATE 12/01/2020
SCALE 1/16" = 1'-0"

RAMP / STAIR / LANDING DIAGRAM - R1



SBA
SMITH BUCKLEY ARCHITECTS
431 PINE STREET, SUITE 210 BURLINGTON VT 05401
P 802 540 0323 www.SBAVT.com

Exterior Improvements to 400-412 Pine Street

Burlington VT

Zoning Permit R2

DATE 12/01/2020

SCALE 1/16" = 1'-0"

RAMP / STAIR / LANDING DIAGRAM - R2

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
Springer Harris
Geoff Hand
Brooks McArthur
Kienan Christianson
Caitlin Halpert
Sean McKenzie, (Alternate)
Ravi Venkataraman, (Alternate)

BURLINGTON DEVELOPMENT REVIEW BOARD
Tuesday, December 1, 2020, 5:00 PM
REMOTE MEETING

Zoom: https://us02web.zoom.us/j/82028668953?pwd=RE5BdFhRMFQyaStNYlJhSTFlY1RDUT09
Webinar ID: 820 2866 8953
Password: 842557
Telephone: +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099 or +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833

Coverage link: https://www.cctv.org/watch-tv/programs/burlington-development-review-board-347

Minutes

I. Agenda
B. Rabinowitz: No changes to the agenda

II. Communications
B. Rabinowitz: Everything posted under meeting packet.

III. Minutes
B. Rabinowitz: November 17th meeting minutes posted online.

IV. Consent

1. **21-0413CA; 400 Pine Street (ELM, Ward 5S) Alan Newman SpeakEasy Arts LLC and Howard Space Partnership**
Exterior building renovations including new entries, canopies, and awnings. New front deck and related seating. (Project Manager: Mary O'Neil)
Moved to public hearing item

Israel Smith and Alan Newman appeared on behalf of application

B. Rabinowitz: Explained that this was originally on the consent agenda, but staff raised an issue about the five-foot setback, asks to explain the variance request.

A. Newman: Explains that local and businesses are currently struggling and there is a need for outdoor seating.

I. Smith: Shares screens and walks through the design and project plans. Explains additional communications that were submitted. Explains differences of revised plans. Explains ramp and decking area. Explains there are different levels of the building that they have to work with. There is new outdoor seating, ramps, stairs, and walkways. Enlarged masonry openings, Design Advisory Board recommended approval. Fully glazed garage doors. Some new building openings, shows building façade. Project repositions Arts Riot for the future. Conversion of this space to a distillery is part of this project, but is permitted separately. Wants to increase the outdoor space use whether for dining or for entertainment purposes. Wants to be inviting from the street at certain entry points. Fencing barrier combats the traffic noise along Pine Street. Shows vertical elevated bike

racks in the public right-of-way. Improved accessibility at three different levels of building. Explains the different designs that were considered and why the designs they chose, is the best approach.

B. Rabinowitz: Asks about ramps and accessibility for the two revised plans they have.

I. Smith: Yes, one entry ramp on north side in one plans and two accessible ramp entries at north and south side in second plan. Walks through why and what the differences are.

B. Rabinowitz: Asks if accessibility ramps can be exempt from lot coverage and setbacks

M. O'Neil: Confirms that there are exemptions to lot coverage and encroachment to required setbacks. Under Article 5.

I. Smith: Explains difference between two exceptions. With regards to setbacks, it includes accessible ramps along with other things, but in regards to lot coverage, the Ordinance limits the definition of accessible ramps to be at a minimum dimension per access codes. Ramps are basically for the sole purpose of providing access and have no more than the minimum dimensions of accessibility standards, saying you cannot use more than that for an exception to lot coverage. No distinction for exemptions for ramps from setbacks, interprets that as intentional. That tries to allow for some flexibility with regard to setback exception definition.

G. Hand: Asks about distance of existing ramp compared to what they are proposing.

I. Smith: Speeder's ramp is back from the property line, the Arts Riot ramp is right on the line. The new one would be the same distance out.

G. Hand: Asks about the allowable exceptions to the side yard setback. Asks about need for approval from Building Inspector.

M. O'Neil: ADA access is under the jurisdiction of the Building Inspector. The zoning language in this exception is specific to grants for the disabled, does not define accessible routes as the application is seeking. Building Inspector said that the ramp would have to meet code, but does not have an interpretation that is more distinct.

G. Hand: Asks if Mary O'Neil is she agrees with Israel Smith's distinction between the provision of the Ordinance that relates to lot coverage which specifically references those guidelines and the fact that the guidelines are not specifically referenced in the setback exception.

M. O'Neil: Finds the setback exception language so specific, that is what is followed in the Staff Report. Does not agree, that is why this is the recommended decision.

G. Hand: Asks if Mary O'Neil agrees with the lot coverage section. Interested in the distinction of the language

M. O'Neil: Referencing a section that was not brought up here because lot coverage is not changing. Lot coverage is remaining the same. Section 5.2.3, right before setback exceptions.

I. Smith: Difference of opinion for this matter. Explains how he interprets the setback exceptions. All things lead to the accessibility of a building.

G. Hand: The exceptions for lot coverage and setbacks seem to have different language. There is very specific language when talking about ramps for disabled. There is an intended difference between the application of the lot coverage exception and the setback exception.

C. Halpert: Asks question regarding setbacks to help clarify issue at hand. Asks what differentiates both designs from being a deck

I. Smith: Walks through the slope elevation plans and explains pathway flow through area. Walks through this property and options for the deck and seating area. Explains accessible routes through decking area.

A. Newman: Talks about experience with building public facilities and challenges to meet ADA code and provide accessibility. Challenging to create an accessible building that has three separate units at three different heights. The designs that were picked were because of the greater accessibility.

S. Harris: Asks about seating capacity difference between the two designs

I. Smith: Not enough of a difference that we were concerned with

B. Rabinowitz: Asks if there are any other questions from the Board for the applicant.

No other questions

2. 21-0374CA; 160 Bank Street (FD6, Ward 3C) HandySisters LLC, Catamount Hospitality LLC
Construct gallery seating area with canopy on south side – seeking alternative compliance as to gallery dimensions. (Project Manager: Scott Gustin)
Moved to public hearing item

Cleary Buckley and Jed Davis appeared on behalf of application
Deborah Miller (71 Church St) provided public testimony

B. Rabinowitz: Asks applicant to provide overview or respond to neighbor's questions

C. Buckley: Would like to respond to neighbor's questions. DAB was smooth review and item is simple, does not feel a need for overview.

S. Gustin: Few pieces to project. The only thing the DRB is reviewing tonight is the depth of the gallery.

B. Rabinowitz: Invites Deborah Miller to speak

D. Miller: There is a ten-foot right-of-way from the Farmhouse to property on Bank Street. Right of way space is included in the deed of building. We are supposed to be able to turn a car or truck around in that area. There is a shed proposed for back there, and that is a concern. Another concern would be the overhang on the side of the building. If it is past the property line, the right-of-way includes the air space up to 12 ft. Was worried about structure, sign and awning from blocking view of other businesses and Church Street Marketplace.

B. Rabinowitz: Things are within their property lines. Asks Cleary Buckley to confirm the height of lights

C. Buckley: The existing Farmhouse sign sits in a planter, and it sits lower than 12 feet. The lights are higher than the canopy.

G. Hand: Asks about shed in rear of site

C. Buckley: The shed is an existing shed that is located where it says walk-in cooler on plan. It is being relocated to what is now a parking spot

B. Rabinowitz: Asks about 12-foot gallery space vs 10-ft space. Asks if the fence along Bank Street is where the existing seating is today

Buckley: Yes, the existing fence is right along the edge of the property. The issue that we need relief on is for the frontage type. The columns that support the new roof can only be ten feet away from the existing building. The columns come down within the seating area. Ideally, would've liked to have these columns on the property line with the fencing. The two feet is helpful to get the seating correct and gives more usable room. The solution is consistent with the form based code.

J. Davis: The sign is being relocated by a few feet but is remaining on property and will not hang over property line.

S. Gustin: Clarifies that any changes to the sign will need to be a separate permit and the Board will not be reviewing the sign in this item.

B. Rabinowitz: Closes public hearing

V. Public Hearing

1. 21-0076CA/CU; 400 North Street (RL, Ward 1E) William McKenna

Continued hearing to remove garage; construct accessory dwelling unit in backyard; driveway and parking reconstruction. (Project Manager: Ryan Morrison)

Will McKenna appeared on behalf of item

B. Rabinowitz: Asks about issue with EPSC plans

R. Morrison: EPSC is still pending. Applicant is working with the Stormwater Manager on that item. There are new plans for the driveway and the applicant also submitted building drawings showing the gutters and down spouts.

B. Rabinowitz: Asks about plan for French drain.

W. McKenna: Has been working with Krebs and Lansing and they did not recommend that method. Talked to James Sherrard about making something similar to French drain except without perforated pipe, just need to put that onto paper and create a plan with engineer. There was not a good plan for the water to drain, but with a gravel barrier, excess water would soak into the gravel area like a drywell. Driveway will be permeable pavers and gentle grade, no curb cut.

B. Rabinowitz: Asks where the roof drains/gutters fall onto the property

W. McKenna: They are on the south side. One of the big concerns was that on the north side, there is an existing shed and they were concerned with excess water damaging their shed. With this plan, the water would be relocated.

S. Harris: Looking at memo, wondering if applicant has a preference for next steps. Without the EPSC plan, the Board would need to defer to January 19. If the plan was not in at that point, you would have to submit an application to extend further.

B. Rabinowitz: Asks to make motion

S. Harris: Motion to defer and continue public hearing to January 19th, 2021.

B. McArthur: Seconds motion

6-0-0

2. 21-0409CA/MA; 362 Riverside Ave (NAC-R, Ward 1E) Douglas Boyden and BlackRock Construction

64-Unit senior housing development and related site work. Lot line merger included. (Project Manager: Scott Gustin)

Cleary Buckley, Jeff Zweber, Ben Avery appeared on behalf of item
Paul Bierman, Sharon Bushor, Bob Butani provided public testimony

B. Avery: Provides brief background on project.

C. Buckley: Gives overview on building. Shows 3D model of building. Compliments the location for the project. Shows food component possibility location. Explains where entrances to building is, and shows location of parking.

J. Zweber: Walks through existing and proposed site plans. Explains traffic and parking plans. Walks through grading and drainage plan. Explains Stormwater mitigation plans. Currently, there is no existing Stormwater mitigation, proposed Stormwater infrastructure is much more improved than the current.

A. LaRosa: Asks about conversation with Fire Department and emergency access considering the underground parking.

J. Zweber: Fire Marshall was not concerned and will respond wherever the property address is located. Mentions bike parking and that it remained unaddressed. Explains plans for bike parking, shows example of racks. Explains locations of long term and short term bike parking.

B. Rabinowitz: Asks about design on back of building. Not much articulation of rear façade.

C. Buckley: Lots of vegetation on Hillside Terrace which the windows look onto. Economically, we have put our money where it would buy us the most, and in the back of the building, we are trying to be economical. There is parking back there, people will not view it much.

B. Rabinowitz: Asks about housing and neighbors who would be able to view the façade.

C. Buckley: A few will have views, but there are not people right across the street viewing the building.

B. Rabinowitz: Asks if tenants can enter the building from Riverside Ave. Asks about main entrance of building

C. Buckley: There would be two main entrances. The one on Riverside Ave would be a more ceremonial front door, but it does not lead to parking. The other door would be mainly used because of the location to parking. The entrances serve two different functions.

G. Hand: Asks about service entrance. Concerned about location and view from Riverside. Asks about different location options for service entrance. Asks about possibility of screening that entry.

C. Buckley: We do not expect vehicles to be parked there for long periods of time. As you move along Riverside Avenue, between the grade change and the vegetation, it would make it less prominent than it is in this rendering. Seemed like the best location for the options that they had.

G. Hand: Asks about screening on other side of building

J. Zweber: It screens trash, recycling, compost

G. Hand: Wonders if screening can also be used for the service entrance door. Asks about geotech work.

B. Avery: Worked with structural engineer to be evaluated to see what they are working with, and everything can be addressed structurally when they have that geotech data.

B. Rabinowitz: Asks for public comment

P. Bierman: Expresses concerns with landslides on Riverside Ave. Thanks staff for recommending geotechnical research. Walks through series of photographs that show landslides from 1955. Recommends putting building back 10-20 feet away from the sidewalk. Explains possibility of landslides.

S. Bushor: Expresses concerns for landslides and earth movement. Outstanding Stormwater issue. Concerns about Stormwater. Would like the possibility of screening.

B. Butani: Expresses concerns for landslide possibility and Stormwater output into Winooski river.

B. Avery: Responds to public testimony and adds details about structural design of building.

G. Hand: Asks about needing geotech analysis prior to approval of application as proposed condition and If the same condition was proposed in the 110 Riverside application

Continues discussion about geotechnical review and Stormwater mitigation. Conversation about using City Stormwater collection/drainage vs emptying into Winooski River.

B. Rabinowitz: Closes public hearing

VI. Other Business

1. Zoning Amendments

Moved to future meeting

2. Development Review Board 2021 Schedule

A. LaRosa: Move to adopt 2021 Board meeting schedule

C. Halpert: Seconds motion

6-0-0

VII. Adjournment

Meeting adjourned at 7:30 PM.

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Bradford L. Rabinowitz, Chair of Development Review Board Date

Alison Davis

_____

Alison Davis, Zoning Clerk Date

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.

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