



**LEBANON PLANNING BOARD
OCTOBER 10, 2022 - 6:30 PM
COUNCIL CHAMBERS, CITY HALL OR
REMOTE VIA VIRTUAL PLATFORM
LEBANONNH.GOV/LIVE**

-
- 1. Call to Order**
 - 2. Notice of Regional Impact**
 - 3. Public Hearing Items**
 - A. One Court Street Associates, 1 Court Street (Tax Map 91, Lot 244), zoned LD:** Applicant requests a Conditional Use Permit per Section 307.2 of the Zoning Ordinance to convert a portion of the existing building at 1 Court Street to a college/university educational facility use. PB2022-39-CUP
 - B. LWM Residential LLC, 1 Foundry Street (Tax Map 91, Lot 263) and 43 Mechanic Street (Tax Map 106, Lot 34), zoned LD:** Request for a Boundary Line Adjustment. PB2022-35-BLA
 - C. *REVISED* - LWM Residential LLC, 1 Foundry Street (Tax Map 91, Lot 263), 25 Mechanic Street (Tax Map 91, Lot 267), and 43 Mechanic Street (Tax Map 106, Lot 34), zoned LD:** Request for Site Plan Review of a phased, 196-unit multi-family development including a new 4-story, 27-unit multi-family building with a parking garage on the ground floor at 43 Mechanic Street; a new 4-story, 31-unit multi-family building with a lower-level parking garage at 25 Mechanic Street, to be merged with 1 Foundry Street; and, at 1 Foundry Street, the renovation of the existing Woolen Mill building into 49 dwelling units, the renovation of the existing commercial building and boiler building into amenity spaces, construction of a 2-story parking structure, and construction of a new 5-story, 89-unit multi-family building with a lower-level parking garage, together with associated site improvements. Applicant also requests a Conditional Use Permit pursuant to Section 307.8.A to allow an increase in the maximum permitted building height. PB2022-36-SPR - Continued from September 19, 2022 & October 6, 2022
 - 4. Other Business**
 - A. William Misha Rosoff, 387 N. Main Street (Tax Map 8, Lot 12), zoned R-3:** Conceptual review per Section 7.3 of the Subdivision Regulations for a proposed 7 lot major subdivision. PB2022-41-CON
 - 5. Approval of Minutes**
 - A. August 22, 2022**

B. September 19, 2022

6. Adjournment

The order of agenda items is subject to change.

Meetings are open for in-person and remote attendance. Members of the public that wish to attend remotely may do so by going to LebanonNH.gov/Live where you will find instructions on how to enter the meeting. Members of the public will be able to participate and ask questions through the City's virtual platform or by phone. Please note: Should technical difficulties occur during the meeting that disrupts virtual or phone connection(s), the meeting will continue without remote access capabilities.

**Agenda
Planning Board
October 10, 2022**

**Agenda Item #3A
Public Hearing Items**

**One Court Street Associates,
1 Court Street
(Tax Map 91, Lot 244),
zoned LD
PB2022-39-CUP**



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

October 10, 2022 Meeting

Staff Memorandum – PB2022-39-CUP

APPLICATION INFORMATION

Agenda Item: 3.A

Application Type: Conditional Use Permit per §307.2 of the Zoning Ordinance to permit a college/university educational facility use

Location:

1 Court Street (Tax Map 91, Lot 244)

Applicant/Property Owner:

One Court Street Associates

Zoning District:

Lebanon Downtown (LD)

Future Land Use Map:

Central Business District

Property Size: +/-0.21 acres (+/-9,148 sq. ft.), per the City's assessing records (the property is conforming to the min. 3,000 sq. ft. lot size required for lots in the LD District per Section 307.3 of the Zoning Ordinance)

Existing Improvements and Use:

+/-26,227 sq. ft. (finished) three-story multi-use commercial building constructed in 1988

Proposed Use:

A portion of the building is proposed to be converted to a college/university educational facility use

Overlay Districts: Historic District

Other Approvals Required:

Building & Zoning Permit

Attachments:

- Application (4 pgs)
- 9/3/19 ZBA mtg mins (excerpt)

LEGAL NOTICE

One Court Street Associates, 1 Court Street (Tax Map 91, Lot 244), zoned LD: Applicant requests a Conditional Use Permit per Section 307.2 of the Zoning Ordinance to convert a portion of the existing building at 1 Court Street to a college/university educational facility use. PB2022-39-CUP

COMPLETENESS REVIEW

In order to accept jurisdiction and commence review of the applicants' proposal, the Planning Board must first determine that the application is complete. NH RSA 676:4, I(c)(1). The Planning and Development Department has reviewed the application and recommends that the Board find that the application is complete enough to accept jurisdiction and to commence review.

SUMMARY OF REQUEST

The property is a +/-26,227 sq. ft. (finished) three-story multi-use commercial building constructed in 1988. The applicant proposes to use a portion of the building for a college/university educational facility. The scope and nature of the proposed use is more thoroughly described in the attached application materials.

The applicant received prior approval to convert a portion of the building to a college/university educational facility use by a Special Exception approved by the Zoning Board of Adjustment on September 3, 2019 (ZB2019-23-SE). The relevant portion of the Zoning Board's 9/3/19 meeting minutes are attached for reference. Note that since 2019, the Zoning Ordinance has been amended to allow "college/university educational facility" uses in the LD District by Conditional Use Permit from the Planning Board rather than by Special Exception from the Zoning Board.

ZONING ORDINANCE REQUIREMENTS

A "college/university educational facility" is defined in Appendix A of the Zoning Ordinance as, "an educational institution authorized by the state of New Hampshire to award associate, baccalaureate, or higher degrees," and, pursuant to Section 307.2 of the Zoning Ordinance, is allowed within the LD District by Conditional Use Permit from the Planning Board.

STAFF MEMORANDUM

PB2022-39-CUP
1 Court St (91-244)
October 10, 2022 PB Mtg
Agenda Item 3.A
Page 2 of 4

Figure 1. Street view of property.



©2019 Google, <https://lebanonnh.mapgeo.io/> (image date: September 2018)

Figure 2. Bird's eye view of subject property (looking west).



Image ©2018 Eagleview (image taken 5/1/2018)

Per Section 302.4.B of the Zoning Ordinance, the Planning Board may grant a Conditional Use Permit if it finds that the proposal meets the Enhanced Performance Standards set forth in Section 302.4.D as follows:

1. The site is suitable for the proposal. This includes:
 - a. Adequate vehicular and pedestrian access for the intended use.
 - b. The availability of adequate public services to serve the intended use including emergency services, pedestrian facilities, safe access, and other municipal services.
 - c. The absence of environmental constraints (floodplain, steep slope, etc.) proposed to be impacted by the intended use.
 - d. The availability of appropriate utilities to serve the intended use including water, sewage disposal, stormwater treatment, electricity, and similar utilities.
2. External impacts: The external impacts of the proposed use on abutting properties and the neighborhood shall be commensurate with the impacts of adjacent existing uses or other uses permitted in the zoning district. This shall include, but not be limited to, water runoff, drainage, traffic, noise, odors, vibrations, dust, fumes, hours of operation, and exterior lighting and glare. In addition, the location, nature, design, and height of the structure and its appurtenances, its scale with reference to its surroundings, and the nature and intensity of the use, shall not have an adverse effect on the surrounding environment nor discourage the appropriate and orderly development and use of land and buildings in the neighborhood. The proportion of the site proposed to be occupied by impervious surfaces shall be minimized to the extent necessary to preclude unreasonable risk of runoff, erosion, sedimentation, and other potentially adverse on-site or off-site effects.

NOTE: The criteria set forth in Section 302.4.D.3, 4 and 5 relate to new construction and, since no new construction is proposed, are inapplicable to the subject application.

The applicant has submitted testimony addressing the §302.4.D criteria in an application received by the Planning and Development Department on September 19, 2022 (see attached).

STAFF COMMENTS

- There are no minimum parking requirements applicable in the Lebanon Downtown District. See Section 607.4 of the Zoning Ordinance. Based on the materials submitted, the proposal appears to be consistent with the applicable criteria set forth in Section 302.4.D.
- Per Section 302.4.E of the Zoning Ordinance, the Planning Board “may impose conditions as it finds reasonably appropriate to safeguard the neighborhood and the general public or otherwise serve the purposes of this Ordinance, including such measures as set forth in Section 802.4 (“Special Conditions”).” Section 802.4.B of the Zoning Ordinance provides as follows:

[T]he Board may attach whatever conditions it deems necessary to the approval decision in order to assure compliance with the purposes of this Ordinance. Such conditions may include but are not necessarily limited to:

1. Increasing the required lot size or yard dimensions in order to protect the adjacent properties.
2. Limiting the coverage or height of building because of obstruction to view and

- reduction of light and air to adjacent properties.
3. Controlling the location and number of vehicular access points to the property.
 4. Increasing the street width adjacent to the property.
 5. Increasing the number of on-site off street parking or loading spaces required.
 6. Requiring suitable on-site landscaping and screening where necessary to reduce noise and glare and to maintain the property in character and keeping with the surrounding area.
 7. Specifying a time limit for initiation of construction, alteration, or enlargement of a structure to house an exception.
 8. Providing for specific layout of facilities on the property such as location of the building, parking areas, access to the building so as to minimize effect on adjoining property.
 9. Specifying standards for operation of this [conditional use] so that it will be no more objectionable to the neighborhood by reasons of noise, odors, vibrations, flashing lights or hours of operation than will be the operation of a permitted use at that site.
 10. Specifying the length of time of the [conditional use] and time of occupancy during the year, or hours of operation.

Attachments

cc: One Court Street Associates (via e-mail)
File

Sharon Cameron appeared in support of the application. She said the building was previously used for a large number of children in foster care. She referenced that there is ample parking on the property and the parking limitations would not be caused by this renovation to multi-family use.

Clifton Below appeared to speak in support of the application. He cited the City's Master Plan and how this renovation would meet the needs that the City has put forth in the Master Plan. The hardship related to this application is the extraordinary size related to the lot size and the context where it exists. It is not possible to maintain the house as it currently exists.

***Chair Koppenheffer MOVED to continue this hearing until October 7, 2019.
Seconded by Mr. Patterson.***

The Board would like to see a parking plan for 6 and 8 parking spaces.

****The MOTION passed (4-0-1). Mr. Peress abstained.***

- C. BRENDAN HICKEY & MANON PRICE, 0 POVERTY LANE (Tax Map 188, Lot 32), zoned RL-1:** Applicant requests a Special Exception pursuant to Article III, Section 312.2 and Article VI, Section 610 of the Zoning Ordinance to allow an accessory dwelling unit within a proposed one-family dwelling. **#ZB2019-22-SE**

Mr. Hickey appeared on behalf of the application. He purchased this property about a year ago. He plans to build a garage and would like to add an ADU with the garage. There was discussion that the notification did not state the correct lot number and property location. Due to the incorrect notification, neighbors may not understand that the hearing pertained to their property because it was not identified correctly in the application.

Mr. McDonough and Mr. Newlove were appointed voting privileges for this hearing.

Mr. Patterson MOVED to continue this hearing to the next meeting, upon proper notification to the abutters that includes a map of the property.

Seconded by Mr. McDonough.

****The MOTION passed (4-0-1). Mr. Peress abstained.***

A ten-minute break was taken by the Board.

- D. ONE COURT STREET ASSOCIATES, 1 COURT STREET (Tax Map 91, Lot 244), zoned CBD:** Applicant requests a Special Exception pursuant to Article III, Section 306.2 of the Zoning Ordinance to allow a portion of the existing building to be used as a college/university educational facility. **#ZB2019-23-SE**

Clifton Below appeared on behalf of the application. They are proposing using the space for Osher Classes, that are sponsored by Dartmouth College. The classes would not be for degree seeking courses, rather primarily for retirees and local residents.

Mr. Newlove and Mr. Katz were appointed voting privileges for this hearing.

The courses normally take place during the day. Some are offered once or twice and some extend for a number of weeks. The number of meetings varies at different times of the year. This space would be used for the majority of their courses, but they would also continue to occur at other locations.

Seeing no one in the room from the public, the Chair opened and closed the public hearing.

The Board said this would be a good use of this building and would be beneficial to Downtown Lebanon.

Mr. Peress MOVED On September 3, 2019, at a duly-noticed meeting of the Lebanon Zoning Board of Adjustment, there appeared Clifton Below on behalf of One Court Street Associates regarding 1 Court Street (Tax Map 91, Lot 244), zoned CBD. Applicant requests a Special Exception pursuant to Article III, Section 306.2 of the Zoning Ordinance to allow a portion of the existing building to be used as a college/university educational facility. #ZB2019-23-SE

I. FINDINGS OF FACT

Based on testimony given, application materials presented, and supporting documents submitted, the Lebanon Zoning Board of Adjustment makes the following findings of fact:

1. The property is a +/-26,227 sq. ft. (finished) three-story multi-use commercial building constructed in 1988. The applicant proposes to use a portion of the building for a college/university educational facility. The scope and nature of the proposed use is more thoroughly described in the attached application materials.
2. An “educational facility, college/university” is allowed by Special Exception within the CBD pursuant to §306.2 of the Zoning Ordinance, and is defined in Appendix A as: “An educational institution authorized by the state of New Hampshire to award associate, baccalaureate, or higher degrees.”
3. In order to grant a Special Exception for the proposed college/university educational facility, the applicant must demonstrate that the proposal meets the general Special Exception criteria, set forth in §801.3.
4. The applicant has submitted testimony addressing the §801.3 criteria in an application received by the Planning Department on August 19, 2019.
5. No testimony was provided by any member of the public.

6. II. CONCLUSIONS OF LAW

As a result of the above findings of fact and based on testimony given, application materials presented, and supporting documents submitted, the Board concludes the following with respect to the Special Exception criteria set forth in §801.3 of the Zoning Ordinance:

1. The Special Exception is specifically authorized by §306.2 of the Zoning Ordinance. (§801.3.A)
2. There are no special conditions/requirements applicable to the proposed use. (§801.3.B)
3. There **are no** existing violations of the Zoning Ordinance on the property that the granting of the Special Exception would not remedy. (§801.3.C) Staff is not aware of any Zoning Ordinance violations on the property.

4. The character of the area **will not** be adversely affected. (§801.3.D)
5. **No** hazard or nuisance will be created. (§801.3.E)
6. The capacity of existing or planned community facilities and services (including streets and highways) **will not** be adversely impacted. (§801.3.F)
7. The granting of the Special Exception **will not** result in undue municipal expense. (§801.3.G)
8. The proposed Special Exception **will** be developed in a manner compatible with the spirit and intent of the ordinance. (§801.3.H)
9. The general welfare of the City **will** be protected. (§801.3.I)

III. **DECISION**

Now therefore be it resolved, the Lebanon Zoning Board of Adjustment on this **3rd day of September, 2019**, hereby **GRANTS** the requested relief, subject to testimony, plans, and materials submitted, and per the following conditions:

1. The applicant shall obtain a building permit.

Seconded by Mr. Newlove.
****The MOTION Passed 5-0.***

4. **OTHER BUSINESS**

A. ZONING BOARD OF ADJUSTMENT BY-LAWS: Discussion of letter from Jeremy Katz dated January 22, 2019

Mr. Katz began the discussion. His letter addresses his concerns of the rule changes regarding administrative appeals and the inability to give a decision to applicants when the Board was not a full five-member Board. Chair Koppenheffer discussed the concerns of the Board and for the Applicants that were taken into consideration. At the time the Board changed the rules, the Board was not fully occupied; whereas now there is a full Board with alternates. They discussed the merits and disadvantages of rule changes. The Board will seek legal counsel and consider amending the rules on administrative appeals.

5. **STAFF COMMENTS**

No

7. **ADJOURNMENT**

Mr. Patterson MOVED to adjourn the meeting at 9:15 PM.
Seconded by Mr. Katz.
****The MOTION passed unanimously (5-0).***

Respectfully Submitted,

Linda Billings
Recording Secretary

**CITY OF LEBANON
APPLICATION FOR**

SPECIAL EXCEPTION	☐	SITE PLAN REVIEW
VARIANCE	☐	SUBDIVISION
MOTION FOR REHEARING	☐	LOT LINE ADJUSTMENT
APPEAL OF AN ADMIN. DECISION	☐	☒ CONDITIONAL USE PERMIT

☐ OTHER _____

PROPERTY OWNER (APPLICANT):

NAME: One Court Street Associates TEL.#: 603 448-5899

MAILING ADDRESS: 1 Court St., Suite 300, Lebanon, NH 03766

E-MAIL ADDRESS: onecourtstreet@gmail.com

CO-APPLICANT, AGENT, OR LESSEE:

NAME: TEL.#:

MAILING ADDRESS:

E-MAIL ADDRESS:

PROJECT LOCATION:

TAX MAP #: 91 LOT#: 244 PLOT #: ZONE: Lebanon Downtown Dist.

STREET ADDRESS OF PROJECT: 1 Court Street

IS THIS PROPERTY LOCATED IN THE: **WETLANDS** ☐ YES ☒ NO **HISTORIC DISTRICT** ☐ YES ☒ NO
FLOOD PLAIN ☐ YES ☒ NO

SCOPE OF PROJECT:

Convert existing office space on the 2nd floor, Suite 210, 1,518 sq. ft., to "educational facility, college/university" to use as 2 classrooms and supporting facilities for adult education.

TYPE OF OCCUPANCY:

EXISTING ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☐ MULTI-FAMILY ☒ COMMERCIAL ☐ INDUSTRIAL
PROPOSED ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☐ MULTI-FAMILY ☒ COMMERCIAL ☐ INDUSTRIAL
IF USE IS **COMMERCIAL** OR **INDUSTRIAL**, PLEASE NOTE **SPECIFIC**
USE: "Office" existing; "Educational Facility, college/university" proposed

SIGNATURE BLOCK:

FOR PLANNING BOARD APPLICATIONS ONLY: I, the undersigned, hereby submit this application on the date noted below with the knowledge and understanding that the Planning Board shall determine if the submitted application is complete according to its regulations at its next regularly scheduled meeting on October 10, 2022, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY OWNER: [Signature] DATE: 9/19/22

NOTE: IF, AS OWNER, YOU WISH TO DESIGNATE AN AGENT TO ACT ON YOUR BEHALF, PLEASE READ THE FOLLOWING AND SIGN BELOW: I hereby designate the person listed above as my agent for the purpose of procuring the necessary local permits for the proposed work as described herein. Representations made by my agent may be accepted as though made by me personally, and I understand that I am bound by any official decision made on the basis of such representation.

PROPERTY OWNER: _____ DATE: _____

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #			
9/19/2022	91-244	PB2022-			
		39-CLUP			

(Last Revised 4/04/18)



City of Lebanon, New Hampshire

APPLICATION FOR CONDITIONAL USE PERMIT

SUPPORT STATEMENT

Office Use Only Date Received: _____ Application No.: _____

I. APPLICATION CHECKLIST

- [Application form](#)
- [Public Hearing Notification List](#)
- [Filing fee](#)
- This form, including written responses to the Section 302.4.D requirements, outlined below
- A site plan
- Optional: photos and any other materials in support of your application

II. PROJECT DESCRIPTION

I (we) hereby request a Conditional Use Permit as provided for in Article(s) III, Section(s) 307.2 and 302.4, of the Lebanon Zoning Ordinance.

Please describe your proposed project with as much detail as possible. You can respond in the space provided below or on a separate sheet of paper.

The Osher Lifelong Learning Institute at Dartmouth, which is part of Dartmouth College, but operated by and for adult learners (mostly retirees), took space at 1 Court Street for their offices and 4 classroom spaces in late 2019. A special exception to allow for adult college level was granted by the ZBA in 9/19. Osher now desires to expand their space and convert some 1,518 sq. ft. of Suite 210 into 2 classroom spaces with supporting facilities (an additional restroom and a small kitchenette/break space.) This will primarily be for daytime classes.

III. CONDITIONAL USE PERMIT CRITERIA

In order to obtain a Conditional Use Permit, you must demonstrate to the Planning Board that the proposal satisfies the applicable criteria set forth in Sections A and B below. You must address each criteria in the space provided or on a separate sheet of paper.

A. Specific Criteria

The Conditional Use Permit is authorized by Article III, Section 302.4 of the Zoning Ordinance which requires the applicant to demonstrate that (*please address any criteria set forth in the Zoning Ordinance that specifically apply to your proposed use or project*):

See responses on next page.

B. General Criteria per Section 302.4.D

A conditional use permit shall be granted only if the Planning Board determines that the proposal conforms to all of the following standards:

1. The site is suitable for the proposal. This includes:

- a. Adequate vehicular and pedestrian access for the intended use.

The building is existing. The space was originally built-out, some 30 years ago, for Lebanon College. There is plenty of existing daytime parking in downtown Lebanon, and pedestrians can readily access the building, on accessible routes, via public sidewalks.

- b. The availability of adequate public services to serve the intended use including emergency services, pedestrian facilities, safe access, and other municipal services.

Adult learning starting in this space some 30 years ago. Osher has been operating 3 existing classrooms for over a year now, without any issues or call for public services beyond what is already provided.

- c. The absence of environmental constraints (floodplain, steep slope, etc.) proposed to be impacted by the intended use.

There are not environmental constraints. The space is existing office space, formerly college level educational space. The ICC building codes classifies both uses as "office."

- d. The availability of appropriate utilities to serve the intended use including water, sewage disposal, stormwater treatment, electricity, and similar utilities.

The building has adequate existing utilities of all sorts. For attendees convenience, one additional restroom (single use) is planned to be added on the 2nd floor, where there are currently 5 single person restrooms.

2. External impacts: The external impacts of the proposed use on abutting properties and the neighborhood shall be commensurate with the impacts of adjacent existing uses or other uses permitted in the zoning district. This shall include, but not be limited to, water runoff, drainage, traffic, noise, odors, vibrations, dust, fumes, hours of operation, and exterior lighting and glare. In addition, the location, nature, design, and height of the structure and its appurtenances, its scale with reference to its surroundings, and the nature and intensity of the use, shall not have an adverse effect on the surrounding environment nor discourage the appropriate and orderly development and use of land and buildings in the neighborhood. The proportion of the site proposed to be occupied by impervious surfaces shall be minimized to the extent necessary to preclude unreasonable risk of runoff, erosion, sedimentation, and other potentially adverse on-site or off-site effects.

There are no external impacts, as the space is existing, with no exterior changes.

CONDITIONAL USE PERMIT APPLICATION

Checklist and Support Statement

Last Revised 2/4/2020

Page 3 of 3

3. Character of the site development: The proposed layout and design of the site shall not be incompatible with the established character of the neighborhood and shall mitigate any external impacts on abutters, the neighborhood, and nearby public ways and infrastructure. This shall include, but not be limited to, the relationship of the building(s) to the street, the amount, location, and screening of off-street parking, the treatment of yards and setbacks, the buffering of adjacent properties, and provisions for vehicular and pedestrian access to and within the site.

Again, there are no changes external to the building planned. There is adequate existing parking and the use is compatible with existing uses, such as other office, food service, and retail, but including several educational facilities, e.g. UV Music school, Ledyard Charter School, Lebanon Ballet school, existing Osher operations, River Valley Community College, and the planned arts academy.

4. Character of the buildings and structures: The design of any new buildings or structures and the modification of existing buildings or structures on the site shall not be incompatible with the established character of the neighborhood. This shall include, but not be limited to, the scale, height, and massing of the building or structure, the roof line, locations of access, and visual compatibility with the area.

There is no change planned for the exterior of the building, so no impact.

5. Preservation of natural, cultural, historic, and scenic resources: The proposed use and layout of the site, including all related development activities, shall to the greatest extent practicable preserve identified natural, cultural, historic, and scenic resources on the site and shall not degrade such identified resources on abutting properties. This shall include, but not be limited to, identified wetlands, floodplains, significant wildlife habitat and documented wildlife corridors, stonewalls, mature tree lines, identified historic buildings or sites, scenic views, and viewsheds.

There is no change planned for the exterior of the building, so no impact.

**Agenda
Planning Board
October 10, 2022**

**Agenda Item #3B
Public Hearing Items**

**LWM Residential LLC,
1 Foundry Street
(Tax Map 91, Lot 263) and
43 Mechanic Street
(Tax Map 106, Lot 34),
zoned LD
PB2022-35-BLA**



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

October 10, 2022 Meeting

Staff Memorandum – PB2022-35-BLA

APPLICATION INFORMATION

Agenda Item: 3.B

Application ID: PB2022-35-BLA

Application Type:
Boundary Line Adjustment

Property Location & Tax Map:

- 1 Foundry Street (Tax Map 91, Lot 263)
- 43 Mechanic Street (Tax Map 106, Lot 34)

Property Owners/Applicants:
LWM Residential LLC

Property Sizes (existing):

- 1 Foundry Street (Tax Map 91, Lot 263): +/-3.67 acres *per boundary line adjustment plat*
- 43 Mechanic Street (Tax Map 106, Lot 34): +/-0.544 acres *per boundary line adjustment plat*

Property Sizes (proposed):

- 1 Foundry Street (Tax Map 91, Lot 263): +/-3.693 acres *per boundary line adjustment plat*
- 43 Mechanic Street (Tax Map 106, Lot 34): +/-0.521 acres *per boundary line adjustment plat*

Zoning District:
Lebanon Downtown (LD)

Zoning Overlay District(s):

- Floodplain District
- Riverbank Protection District
- Wetlands Conservation District

LEGAL NOTICE

LWM Residential LLC, 1 Foundry Street (Tax Map 91, Lot 263) and 43 Mechanic Street (Tax Map 106, Lot 34), zoned LD: Request for a Boundary Line Adjustment. PB2022-35-BLA

PLANS AND APPLICATION MATERIALS

- ▶ Application form (1 pages)
- ▶ Lebanon Woolen Mill Boundary Line Adjustment Narrative, dated August 23, 2022, prepared by Engineering Ventures, PC (1 page)
- ▶ Subdivision Regulations - Technical Checklist (3 pages)
- ▶ Plat titled "Lot line Adjustment Plan prepared for LWM Residential LLC", prepared by Vive Libre Geomatics, dated September 1, 2022, Drawing: 22028-bo.

COMPLETENESS REVIEW

This application has been reviewed in accordance with the Lebanon Subdivision Regulations. The Planning and Development Department recommends that the Board find that the application is complete enough to accept jurisdiction and to commence review.

APPLICATION OVERVIEW

This is a request for a Boundary Line Adjustment between lands located at 1 Foundry Street (Tax Map 91, Lot 263) and 43 Mechanic Street (Tax Map 106, Lot 34). As proposed, the changes resulting from the Boundary Line Adjustment are as follows:

- ▶ Map/Lot 91-263 will increase by a net of +/-0.023 acres, from +/-3.67 acres to +/-3.693 acres.
- ▶ Map/Lot 91-253 will decrease by a net of +/-0.023 acres, from +/-0.544 acres to +/-0.521 acres.

STAFF COMMENTS

ASSESSING

No comment.

BUILDING INSPECTION

No comment.

FIRE

No comment.

POLICE

No comment.

PUBLIC WORKS/CITY ENGINEER

No comment.

PLANNING & ZONING

Both lots currently conform to the applicable minimum lot sizes and dimensional requirements as set forth in the Zoning Ordinance and will continue to after reconfiguration.

STAFF RECOMMENDATIONS

If the Board moves to approve the application, then based on the information reviewed by City staff, the Planning and Development Department recommends that the Board approve with the following conditions to be satisfied prior to the signing and recording of the plat:

1. The applicant shall provide to the Planning and Development Department a digital record drawing (Cad .dwg Format using NH State Plane Coordinate system).

Attachments

cc: Jon Livadas, LWM Residential LLC (jon.livadas@outlook.com)
File

CITY OF LEBANON APPLICATION FOR

SPECIAL EXCEPTION	☐	☐	SITE PLAN REVIEW
VARIANCE	☐	☐	SUBDIVISION
MOTION FOR REHEARING	☐	☒	LOT LINE ADJUSTMENT
APPEAL OF AN ADMIN. DECISION	☐	☐	CONDITIONAL USE PERMIT

☐ OTHER _____

PROPERTY OWNER (APPLICANT):

NAME: LWM Residential LLC, Jon Livadas TEL.#: 302-598-3492

MAILING ADDRESS: 1 Guyenne Rd, Wilmington, DE 19807

E-MAIL ADDRESS: jon.livadas@outlook.com

CO-APPLICANT, AGENT, OR LESSEE:

NAME: _____ TEL.#: _____

MAILING ADDRESS: _____

E-MAIL ADDRESS: _____

PROJECT LOCATION:

TAX MAP #: 106 LOT#: 34 PLOT #: _____ ZONE: LD

STREET ADDRESS OF PROJECT: 43 Mechanic St, Lebanon, NH 03766

IS THIS PROPERTY LOCATED IN THE: **WETLANDS** ☐ YES ☒ NO **HISTORIC DISTRICT** ☐ YES ☒ NO
FLOOD PLAIN ☐ YES ☒ NO

SCOPE OF PROJECT:

Adjust the rear lot line of 43 Mechanic Street to accommodate improvements on 1 Foundry St.

TYPE OF OCCUPANCY:

EXISTING ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☒ MULTI-FAMILY ☐ COMMERCIAL ☐ INDUSTRIAL
 PROPOSED ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☒ MULTI-FAMILY ☐ COMMERCIAL ☐ INDUSTRIAL

IF USE IS **COMMERCIAL** OR **INDUSTRIAL**, PLEASE NOTE **SPECIFIC**

USE: _____

SIGNATURE BLOCK:

FOR PLANNING BOARD APPLICATIONS ONLY: I, the undersigned, hereby submit this application on the date noted below with the knowledge and understanding that the Planning Board shall determine if the submitted application is complete according to its regulations at its next regularly scheduled meeting on September 19, 2022, unless I personally writing, that the Board delay its determination of completeness to a later date.

PROPERTY OWNER:  DATE: 8/15/22

NOTE: IF, AS CURRENTLY, YOU WISH TO DESIGNATE AN AGENT TO ACT ON YOUR BEHALF, PLEASE READ THE FOLLOWING AND SIGN BELOW: I hereby designate the person listed above as my agent for the purpose of procuring the necessary local permits for the proposed work as described herein. Representations made by my agent may be accepted as though made by me personally, and I understand that I am bound by any official decision made on the basis of such representation.

PROPERTY OWNER: _____ DATE: _____

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #	FEE - \$ AMOUNT	DATE PAID	VOUCHER #

Lebanon Woolen Mill 1 Foundry Street, City of Lebanon, NH

Lot Line Adjustment Narrative August 23, 2022

I Introduction

The Lebanon Woolen Mill project will consist of construction of multi-family housing buildings and renovations to the existing Lebanon Woolen Mill complex to accommodate a total of 196 residential units in a mixture of studio, 1-bedroom, and 2-bedroom apartments. Some existing features, such as the boiler building, and smokestack are to remain in place. The development encompasses three parcels, all located in the Lebanon Downtown (LD) Zoning District (LD):

- Lot 91-263: located at 1 Foundry Street
- Lot 91-267: located at 25 Mechanic Street
- Lot 106-34: located at 43 Mechanic Street

The project will merge lots 91-263 and 91-237 and will adjust the boundary between 91-263 and 106-34. The project will require the following approval from the Lebanon Planning Board:

- Lot Line Adjustment between Lot 91-263 and Lot 106-34
- Lot Merger of Lot 91-263 and Lot 91-267
- Site Plan Review for the entire project

The following summarizes the Lot Line Adjustment.

II Existing Conditions

Lot 91-263 is currently 3.67± acres. It's bound by Foundry Street and residential and commercial lots to the north, Blacksmith Street and residential and commercial lots to the south, residential and commercial lots to the west, and by Mascoma River to the east.

Lot 106-34 is currently 0.54± acre. It is bound residential and commercial lots to the north, west, and south, and by Mechanic Street to the east.

The rear lot line of Lot 106-34 is the southern portion of the western lot line of Lot 91-263.

II Proposed Work

The Lot Line Adjustment will transfer 0.02 acres from Lot 106-34 to Lot 91-263. It will be a strip of land that spans the full width of the rear lot line of 106-34 and averages 6.27± feet deep.

The result will be Lot 91-263 at 3.69± acres and Lot 106-34 at 0.52± acres. Following the lot line adjustment and aforementioned lot merger, the resulting lot will be 4.22± acres.

CITY OF LEBANON, NH SUBDIVISION REGULATIONS – TECHNICAL CHECKLIST MINOR LOT LINE ADJUSTMENT / BOUNDARY LINE AGREEMENT	
PROJECT NAME: Lebanon Woolen Mill	
APPLICANT: LWM Residential LLC	DATE: 08/15/2022
GENERAL SUBMISSION REQUIREMENTS:	

All applications to the Planning Board for Subdivision Review must be submitted by 12:00 Noon on the day of the filing cutoff. [§7.7.C] Submissions must be accompanied by the following information or review of the application may be delayed:

- ☒ A properly completed and signed Application Form. [§7.7.A(1)]
- ☒ The appropriate filing fees. [§7.7.A(2)]
- ☒ A written project description. [§7.7.A(3)]
- ☒ A list of the names and mailing addresses of all persons to be notified, by certified mail, of the public hearing. [§7.7.A(4)]
- ☒ A completed and signed Technical Checklist. [§7.7.B]
[Applicants must complete the entire checklist to ensure that all necessary information and materials have been provided with the application or that written requests for waivers have been properly provided in accordance with Section 7.15 of the Subdivision Regulations, as appropriate.]
- ☒ Eight (8) sets of project plans to be distributed for Staff Review. [§8.2.A]
[A Staff Review meeting is held at City Hall one (1) week following the cutoff date. Staff Review meetings begin at 2:00PM, unless otherwise noted. All revised and/or additional information or materials must be submitted within one (1) week following the Staff Review meeting.] Two (2) copies provided per Tim Corwin email on 08/11/2022
- ☒ A digital copy of Subdivision plan in .PDF format. [§8.2.B]

NOTE: Applications shall contain sufficient information to enable the City Staff and the Planning Board to evaluate the proposed development for compliance with the Zoning Ordinance, the Planning Board's Regulations, and other applicable City Codes, and for the Planning Board to make an informed decision.

All required application materials shall be submitted as a single inclusive package, including any appropriate waiver requests as permitted by the Regulations. Submission of a complete application package ensures that the review process by City Staff is as efficient and effective as possible.

The purpose of the filing deadline is to provide adequate time for City review of the proposal. Submission of any altered, additional, or substitute application materials required by the Regulations, subsequent to the filing deadline, other than as directed by City Staff, shall cause the application to be deemed untimely filed, and such application shall not be heard until a subsequent month.

CITY OF LEBANON, NH
SUBDIVISION REGULATIONS - TECHNICAL CHECKLIST
MINOR LOT LINE ADJUSTMENT / BOUNDARY LINE AGREEMENT

PLAN SUBMITTAL TECHNICAL CHECKLIST:

NOTE: Minor Lot Line Adjustment / Boundary Line Agreement plans shall include the information described below pursuant to Section 8 of the Lebanon Subdivision Regulations. Plans shall be submitted on sheets no larger than 24" x 36". Plan sets with multiple sheets shall include sheets of uniform size and be bound on the left edge. When more than three (3) sheets are required, an additional cover sheet shall be attached including a table of contents. The scale of the plans shall be appropriate to the size of the overall development. All lettering shall be of a size and type that is legible.

In order to facilitate the use of the City's Geographic Information System (GIS) for planning purposes, all surveys and engineered plans submitted for Subdivision Review shall utilize the NH State Plane Coordinate system and shall reference the North American Vertical Datum of 1988 (NAVD 88), unless prior approval to use an alternate coordinate system and/or vertical datum is granted by the Planning Office.

A written request for waiver shall be required, pursuant to Section 7.15 of the Subdivision Regulations, for any submission requirement for which the information or data is not provided by the applicant. [§8.2.C]

Plan Requirements	Info. Provided	Waiver Sought
8.2.A(1) - - Name of the City and County in which the subdivision is proposed; - A Locus map; - North arrow; - Scale of the plat; - Date of the plat and of any revisions to the plat; (NOTE: The date on the plat at the time of initial submission for application review shall be included on all subsequent submissions to the City. Any subsequent change(s) to the plat shall include a revision date and description of the revision(s).)	    	☐ ☐ ☐ ☐ ☐
8.2.A(2) - Names and mailing addresses of Applicant(s); Owner(s) of Record of subject properties; Owners of abutting properties, including tax map and lot references; and Holders of any easements, rights-of-way, or other restrictions.		☐
8.2.A(3) - Names and business addresses of the surveyor, including license number and seal, and of every engineer, architect, soil scientist, or wetlands scientist whose professional seal appears on any plan or document submitted to the Board.		☐
8.2.A(4) - Zoning District in which the subject lots are located, including district boundaries if in more than one district.		☐
8.2.A(5) - Location of all existing structures on the subject lots.		☐
8.2.A(6) - Site location map showing the original boundaries of the subject lots and adjacent lots.		☐
8.2.A(7) - The new surveyed property line(s) as a result of the application, including bearings and distances, as determined by an actual field survey by a licensed land surveyor, including the date of the completion of the survey. All dimensions shall be shown in feet and decimals, and the area of the altered lots shall be shown in square feet and acres.		☐

CITY OF LEBANON, NH
SUBDIVISION REGULATIONS - TECHNICAL CHECKLIST
MINOR LOT LINE ADJUSTMENT / BOUNDARY LINE AGREEMENT

Plan Requirements (cont.)	Info. Provided	Waiver Sought
8.2.A(8) - The plat shall be titled to include the names of the owners of all lots altered by the application.	☒	☐
8.2.A(9) - A statement shall be placed on the plat as follows: "This plan shows Minor Lot Line Adjustments / Boundary Line Agreements and does not require the approval of the Lebanon Planning Board as a subdivision."	☒	☐

NOTE: THE APPLICANT IS RESPONSIBLE FOR PROVIDING THE REQUIRED INFORMATION PURSUANT TO SECTION 8 OF THE SUBDIVISION REGULATIONS. PLEASE BE AWARE THAT THIS CHECKLIST IS FOR INFORMATION AND GUIDANCE ONLY AND DOES NOT REPRESENT THE LAW DICTATING SUBMITTAL REQUIREMENTS NOR IS IT COMPLETE AND INCLUSIVE THEREOF.

Completed By: Engineering Ventures - Nicholas A. Fiore

Planning office Use Only:

Date Received ___/___/___ Checklist Complete YES or NO Checked by: _____

(Last Revised 05/22/13)

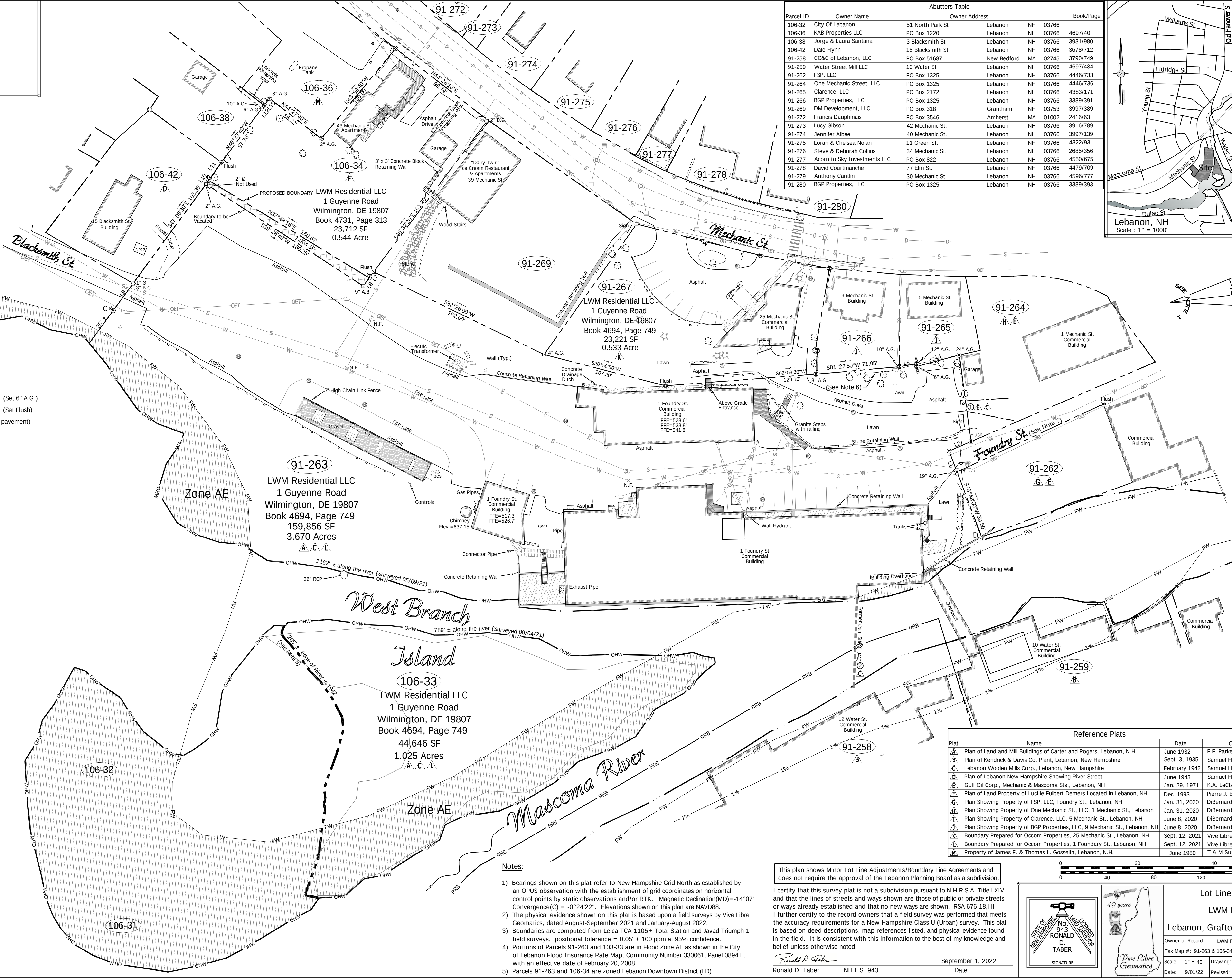
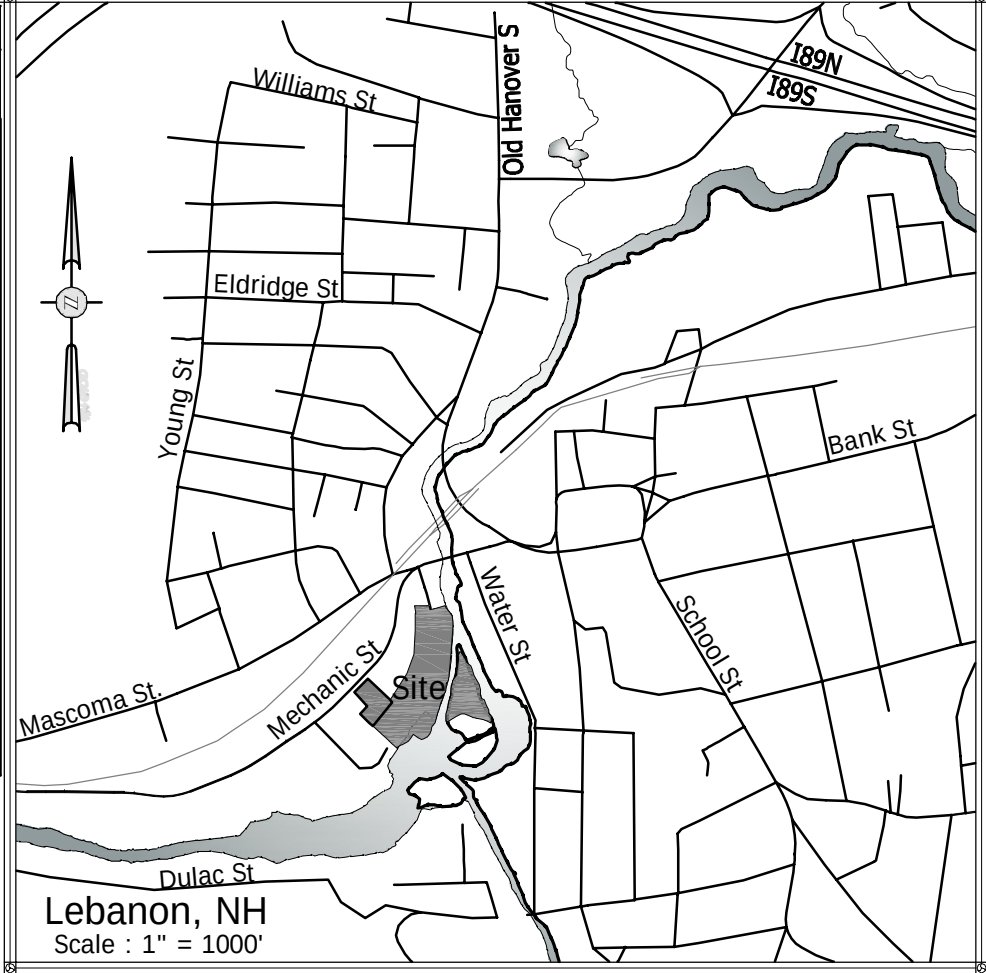
	Pre-adjustment Areas	Post adjustment Areas
Parcel 106-34	23,712 SF 0.544 Acres	22,708 SF 0.521 Acres
Parcel 91-263	159,856 SF 3.670 Acres	160,860 SF 3.693 Acres

Legend

- 3/4" Capped Rebar LLS 877 (Fnd)
- 3/4" Capped Rebar LLS 649 (Fnd)
- 3/4" Capped Rebar LLS 963 (Fnd)
- 1" Rebar (Fnd)
- 5/8" Capped Rebar LLS 256 (Fnd)
- 1/4" Drill Hole (Fnd in Retaining Wall)
- 5" X 7" Granite Bound (Fnd)
- 4" x 4" Concrete Bound (Fnd)
- Iron Pipe (Fnd)
- 3/4" Vive Libre Geomatics Capped Rebar (Set 6" A.G.)
- 3/4" Vive Libre Geomatics Capped Rebar (Set Flush)
- Vive Libre Brass Tag & Mag Spike (Set in pavement)
- 6" X 6" PT Post
- Water Gate Valve
- Fire Hydrant
- Wall Fire Hydrant
- Cleanout
- Sign
- Utility Pole with Yard Light
- Guy Wire
- Drain Manhole
- Sewer Manhole
- Manhole
- Catch Basin
- Monitoring Well
- Softwood Tree
- Hardwood Tree
- Bollard
- FW Floodway Line
- Ordinary High Water Line
- RRB Riparian Rights Boundary Line
- 1% 1% Annual Chance of Flood Line
- 0.2% 0.2% Annual Chance of Flood Line
- Chain Link Fence
- Guard Rail
- Sewer Line
- Water Line
- Drain Line
- OET Overhead Electric and Telephone Line
- OE Overhead Electric Line
- OT Overhead Telephone Line
- E Underground Electric Line
- Stone Wall
- Wire Fence

Line Table		
Line	Length	Bearing
L1	19.05'	S75°48'00"W
L2	20.45'	N16°59'30"W
L3	74.75'	S88°49'00"W
L4	37.65'	S08°37'20"E
A to B	2.30'	N87°01'30"W
L6	14.75'	S03°05'20"E
L7	6.43'	S46°58'50"E
L8	8.62'	S46°58'50"E
L9	28.70'	S47°10'30"E
L10	3.90'	N48°12'30"W
L11	18.85'	N48°12'30"W
L12	3.20'	N45°46'30"W
L13	7.50'	N47°10'00"W
C to D	767.75'	N21°09'30"E

Abutters Table					
Parcel ID	Owner Name	Owner Address			Book/Page
106-32	City Of Lebanon	51 North Park St	Lebanon	NH	03766
106-36	KAB Properties LLC	PO Box 1220	Lebanon	NH	03766
106-38	Jorge & Laura Santana	3 Blacksmith St	Lebanon	NH	03766
106-42	Dale Flynn	15 Blacksmith St	Lebanon	NH	03766
91-258	CC&C of Lebanon, LLC	PO Box 51687	New Bedford	MA	02745
91-259	Water Street Mill LLC	10 Water St	Lebanon	NH	03766
91-262	FSP, LLC	PO Box 1325	Lebanon	NH	03766
91-264	One Mechanic Street, LLC	PO Box 1325	Lebanon	NH	03766
91-265	Clarence, LLC	PO Box 2172	Lebanon	NH	03766
91-266	BGP Properties, LLC	PO Box 1325	Lebanon	NH	03766
91-269	DM Development, LLC	PO Box 318	Grantham	NH	03753
91-272	Francis Dauphinais	PO Box 3546	Amherst	MA	01002
91-273	Lucy Gibson	42 Mechanic St.	Lebanon	NH	03766
91-274	Jennifer Albee	40 Mechanic St.	Lebanon	NH	03766
91-275	Loran & Chelsea Nolan	11 Green St.	Lebanon	NH	03766
91-276	Steve & Deborah Collins	34 Mechanic St.	Lebanon	NH	03766
91-277	Acorn to Sky Investments LLC	PO Box 822	Lebanon	NH	03766
91-278	David Courtmanche	77 Elm St.	Lebanon	NH	03766
91-279	Anthony Cantlin	30 Mechanic St.	Lebanon	NH	03766
91-280	BGP Properties, LLC	PO Box 1325	Lebanon	NH	03766



**Agenda
Planning Board
October 10, 2022**

**Agenda Item #3C
Public Hearing Items**

**REVISED –
LWM Residential LLC,
1 Foundry Street
(Tax Map 91, Lot 263),
25 Mechanic Street
(Tax Map 91, Lot 267), and
43 Mechanic Street
(Tax Map 106, Lot 34),
zoned LD
PB2022-36-SPR**



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

October 10, 2022 Meeting

Staff Memorandum – PB2022-36-SPR – *con't from 9/19/22 & 10/6/22*

APPLICATION INFORMATION

Agenda Item: 3.C

Application ID: PB2022-36-SPR

Application Type:

Site Plan Review to construct a phased multi-building, multi-family development with a total of 196 dwelling units and associated public and private amenities, structured parking, and site improvements

Property Location & Tax Map:

- 1 Foundry St (Tax Map 91, Lot 263)
- 25 Mechanic St (Tax Map 91, Lot 267)
- 43 Mechanic St (Tax Map 106, Lot 34)

Applicant/Property Owner:

LWM Residential LLC

Zoning District: Lebanon Downtown (LD)

Existing Property Sizes:

- 1 Foundry Street: 3.67 acres
- 25 Mechanic Street: 0.533 acres
- 43 Mechanic Street: 0.544 acres

Existing Property Sizes:

Following approval of PB2022-34-VLM & PB2022-35-BLA:

- 1 Foundry St & 25 Mechanic: 4.226 acs
- 43 Mechanic Street: 0.521 acres

Overlay Districts:

- Floodplain District
- Riverbank Protection District
- Wetlands Conservation District

Future Land Use Map:

Central Business District

Existing Improvements and Use:

SEE "APPLICATION OVERVIEW"

Proposed Improvements and Use:

SEE "APPLICATION OVERVIEW"

Staff Attachments:

- Letter from Steve Keach, PE will be provided upon receipt

LEGAL NOTICE

REVISED - LWM Residential LLC, 1 Foundry Street (Tax Map 91, Lot 263), 25 Mechanic Street (Tax Map 91, Lot 267), and 43 Mechanic Street (Tax Map 106, Lot 34), zoned LD: Request for Site Plan Review of a phased, 196-unit multi-family development including a new 4-story, 27-unit multi-family building with a parking garage on the ground floor at 43 Mechanic Street; a new 4-story, 31-unit multi-family building with a lower-level parking garage at 25 Mechanic Street, to be merged with 1 Foundry Street; and, at 1 Foundry Street, the renovation of the existing Woolen Mill building into 49 dwelling units, the renovation of the existing commercial building and boiler building into amenity spaces, construction of a 2-story parking structure, and construction of a new 5-story, 89-unit multi-family building with a lower-level parking garage, together with associated site improvements. Applicant also requests a Conditional Use Permit pursuant to Section 307.8.A to allow an increase in the maximum permitted building height. PB2022-36-SPR

PLANS AND APPLICATION MATERIALS

- ▶ Application for Conditional Use Permit per Section 307.8.A of the Zoning Ordinance (increase in building height; 6 pages)
- ▶ Application form (1 page)
- ▶ Lebanon Woolen Mill – 1 Foundry Street Project Narrative, dated August 15, 2022, prepared by Engineering Ventures, PC (4 pages)
- ▶ Application for Waivers dated September 26, 2022 (2 pages plus exhibit)
- ▶ Site Plan Review Regulations Technical Checklist (10 pages)
- ▶ Memo dated September 26, 2022, from Nik Fiore, PE, of Engineering Ventures, PC (response to staff comments; 17 pages)
- ▶ Memo dated August 10, 2022, from Erica Wygonik, PE, of WCG (transportation impact study; 26 pages)
- ▶ Fiscal Impact Analysis for Lebanon Woolen Mill – 1 Foundry Street, dated August 8, 2022, prepared by Mark Fougere, AICP, of Fougere Planning & Development, Inc. (16 pages)
- ▶ Wetland Delineation Sketch Plan, dated September 1, 2021, prepared by ECO Environmental Solutions, LLC (1 page)
- ▶ Plan sheet titled, "Illustrative Site Plan", dated August 15, 2022, prepared by RODE Architects (1 sheet)
- ▶ Bicycle rack specifications by Dero (1 page)

- ▶ Lighting Fixture Schedule for Lebanon Woolen Mill, dated September 22, 2022, prepared by LAM Partners, Project #22066 (2 pages)
- ▶ Plan sheets titled, "Emergency Vehicle Turning Analysis", dated September 21, 2022, prepared by RODE Architects (3 sheets)
- ▶ Floor plans prepared by RODE Architects, dated August 17, 2022 (13 sheets)
- ▶ Architectural renderings prepared by RODE Architects, dated August 17, 2022 (7 sheets)
- ▶ Plan set titled "Lebanon Woolen Mill," dated August 17, 2022, prepared by RODE Architects, EV Project: 22122 (57 sheets)

On file at the Planning and Development Department and available for review upon request:

- ▶ Architectural Lighting Fixture Schedule and Architectural Lighting Cut Sheets for Lebanon Woolen Mill, dated August 30, 2022, prepared by LAM Partners, Project #22066 (125 pages)
- ▶ Drainage Analysis Report for Lebanon Woolen Mill, dated August 15, 2022, prepared by Engineering Ventures, PC, EV Project # 22122 (63 pages)
- ▶ Stormwater Appurtenance Inspection and Maintenance Manual (7 pages)
- ▶ Attachments to transportation impact study memo dated August 10, 2022, from Erica Wygonik, PE, of WCG (38 pages)

COMPLETENESS REVIEW

On September 19, 2022, the Planning Board found that the application is complete enough to accept jurisdiction and to commence review.

Figure 1. Bird's Eye View of subject properties (looking north).



Figure 2. Bird's Eye View of Subject Property (looking east).



APPLICATION OVERVIEW

The applicant proposes the “Lebanon Woolen Mill” project to redevelop 1 Foundry Street, 25 Mechanic Street, and 43 Mechanic Street. The properties are currently improved with a total of 5 buildings:

- +/-57,732 sq. ft. 3-story mill building at 1 Foundry Street (identified as the “Existing Mill” in the plan set)
- +/-7,989 sq. ft. 2-story commercial building at 1 Foundry Street (identified as “Building 2” in the plan set)
- +/-2,323 sq. ft. 2-story industrial building at 1 Foundry Street (identified as the “Boiler Building” in the plan set)
- +/-7,989 sq. ft. 1-story commercial building at 25 Mechanic Street (identified as “25 Mechanic” in the plan set), currently vacant and formerly used as a dry cleaners
- +/-6,034 sq. ft. 4-story multi-family dwelling at 43 Mechanic Street (identified as “43 Mechanic” in the plan set)

An application has been filed to voluntary merger 1 Foundry Street and 25 Mechanic Street (PB2022-34-VLM) and an application has been filed for a boundary line adjustment between 1 Foundry Street and 43 Mechanic Street (PB2022-35-BLA). Following approval of the voluntary merger and boundary line adjustment applications, the project will involve the following two properties:

- 1 Foundry Street/25 Mechanic Street which will be 4.226 acres in size; and
- 43 Mechanic Street which will be 0.521 acres in size.

The applicant proposes to replace the existing buildings at 25 Mechanic Street and 43 Mechanic Street, to renovate the three existing buildings at 1 Foundry Street, and two construct two new buildings at 1 Foundry Street. In total, the “Lebanon Woolen Mill” redevelopment will consist of the following 7 buildings with a total of 196 dwelling units:

1. Existing Mill – 49 dwelling units with a health club intended to be open to the public located on the first floor

2. Building 2 – to be renovated and used as amenity space for the complex
3. Parking Garage – new construction to accommodate 72 parking spaces
4. Boiler Building - to be renovated and used as amenity space for the complex
5. Building 3 – new construction to include 89 dwelling units with 48 below-building parking spaces
6. 25 Mechanic – new construction to include 31 dwelling units with 19 below-building parking spaces
7. 43 Mechanic – new construction to include 27 dwelling units with 17 below-building parking spaces

In addition to the 156 structured parking spaces that will be provided in the parking garage and below buildings, an additional 58 surface spaces will be provided (including 13 at 43 Mechanic) for a total of 214 spaces. Other site improvements include landscaping, utilities, lighting, and the construction of a central courtyard, as more fully described in the applicant's project narrative.

As discussed below, the applicant has requested several waivers from the Site Plan Review Regulations and a Conditional Use Permit application pursuant to Section 307.8.A of the Zoning Ordinance. As further noted below, the applicant will also need to apply for a Conditional Use Permit pursuant to Section 307.6.B.2 of the Zoning Ordinance. *Consequently, the application will need to be continued to a subsequent meeting so that it can be renoticed prior to the Board closing the public hearing.*

STAFF COMMENTS

Note that staff will continue to review the application materials and anticipates providing further comment and revised conditions of approval at or during the course of the public hearing.

PLANNING

I. SITE PLAN REVIEW REGULATIONS:

Jurisdiction

The proposed development constitutes a “major change” to the property (as that term is defined in Article II of the Site Plan Review Regulations) and, therefore, requires Site Plan Review by the Planning Board and demonstration of compliance with the Article V submission requirements and Article VI design requirements.

Phasing Request

As depicted on page 7 of the plan set (Sheet C-003), the applicant is proposing to phase the development per Section 4.9 of the Site Plan Review Regulations. The purpose of the phasing is to allow the buildings to be occupied as they are completed rather than waiting for completion of all site improvements, as is otherwise required by Section 8.1 of the Site Plan Review Regulations (“The Applicant shall construct and complete all design and construction requirements in accordance with Article VI and any other applicable section of these Regulations, as required in the Notice of Action, prior to the issuance of the Certificate of Occupancy.”) Phasing can also extend the timelines required for obtaining a building permit for each phase (Section 4.10) and for the project to vest against any future changes to the Zoning Ordinance and Site Plan Review Regulations (Section 8.4 and NH RSA 6784:39).

Pursuant to Section 4.9.C, a proposed phasing schedule shall include the following information for each phase:

- “1. A specification of all improvements, on-site or off-site, to be installed as part of that phase;
2. A deadline for the posting of any required security for that phase;
3. A deadline for the completion of such improvements subsequent to the posting of such security; and
4. A date by which a Building Permit must be obtained to prevent the approval for that phase from being considered void pursuant to Section 4.10 of these Regulations.”

Section 4.9.C further provides that, “The phasing schedule may also specify threshold levels of work and time lines which must be completed, in order for the project, as a whole, or particular phase(s) of the project, to be considered “vested” pursuant to RSA 674:39, and the New Hampshire common law of vested rights.”

Per Section 4.9.D, “[i]n determining whether to grant an applicant's request for phased development, or to approve a proposed phasing schedule, the Board may consider the totality of the circumstances, including but not limited to the following factors:

1. The extent to which review of the development in its totality is logical and reasonable due to the degree to which the proposed phases are well-integrated, both as to their use and development scheme, and as to common infrastructure and other improvements, by contrast with a series of superficially-related projects which could just as effectively be reviewed individually;
2. The degree to which the integration of the phases, as described above, would make private investment in such improvements unlikely without the predictability of a phased approval.
3. The extent to which phasing will benefit the City by mitigating and making more predictable the impacts of the complete development upon community facilities, services, utilities and other City goals as set forth in the Master Plan.
4. The extent to which the proposed phasing schedule represents a realistic timeline for active and substantial development progressing at a steady pace, in light of the type and complexity of the project as a whole, rather than an attempt to maintain “vesting” during significant periods of non-development.
5. The total length of time proposed, and the degree of unpredictability or Board uncertainty involved, with respect to whether a later phase or phases will continue to meet current regulations at the time of construction, and in light of potential changed conditions which might occur in the meantime within the neighborhood or the City as a whole.”

Waiver Requests

Pursuant to Section 7.1 (“Waiver of Regulations”), the applicant has requested partial waivers from certain provisions of the Site Plan Review Regulations, as set forth in the attached Application for Waivers and as listed below (in the order they appear on the Application for Waivers):

- **Section 6.2.B.4** – *requiring all trees to be planted a minimum of 8 ft. from any property line (as identified on the waiver exhibit prepared by OJB, dated August 10, 2022).*
- **Section 6.2.B** – *waiver from the perimeter landscaping requirements (as identified on the waiver exhibit prepared by OJB, dated August 10, 2022).*

- As a reminder, per Section 6.2.B.1.a, in the LD District, buildings and parking areas may occupy any portion of the required 15 ft. perimeter landscaping, but the perimeter landscaping requirements apply to all portions of the landscaping buffer *not* occupied by buildings or parking areas.
- Note that the applicant's request for a waiver from Section 6.2.B.4 is redundant to the request for a waiver from Section 6.2.B.
- **Section 6.2.D.1** – *landscaping around buildings requirements (with respect to Building 3, 43 Mechanic St, the Existing Mill, and Building 2).*
- **Section 6.2.E.4** – *requiring rows of parking longer than 100 feet to be dispersed every 100 feet or less by a landscaped bed.*
- **Section 6.7.B.2** – *requiring that the light intensity at adjoining streets or commercial property boundaries shall not exceed 0.5 foot-candles at grade level.*
- **Section 6.7.B.3** – *requiring that lighting installations shall utilize fully-shielded fixtures or full cut-off fixtures.*
- **Section 5.1.E.13** – *requiring the plan set to include a lighting schedule (the lighting schedule has been provided as a separate exhibit).*

Pursuant to Section 7.1 of the Site Plan Review Regulations, the Board may grant a waiver of any part of the Regulations if it finds, by majority vote, that either:

- A. Strict conformity would pose an unnecessary hardship to the Applicant and waiver would not be contrary to the spirit and intent of the regulations; or
- B. Specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations.

The applicant's basis for each waiver request is described in the attached Application for Waivers. Note that the granting of a waiver from a design requirement does not relieve an applicant from making the improvements that are depicted on the approved site plan, even if the depicted improvement would have been covered by the waiver had it not been included on the approved site plan.

SECTION 5 – SUBMISSION REQUIREMENTS

5.1 (Drawings and Other Submittals): The applicant has provided the attached materials pursuant to the submission requirements of Section 5.1 of the Site Plan Review Regulations. For a discussion of the project, please see the attached Lebanon Woolen Mill – 1 Foundry Street Project Narrative, dated August 15, 2022, prepared by Engineering Ventures, PC.

SECTION 6 – DESIGN AND CONSTRUCTION REQUIREMENTS

6.2 (Landscaping Standards): The applicant has submitted a landscaping plan in accordance with Section 5.1.E.15 of the Site Plan Review Regulations and the landscaping design standards set forth in Section 6.2. See Sheets 46-49 of the plan set. As noted above and in the attached Application for Waivers, the

applicant requests waivers from Section 6.2.B (and also specifically from Section 6.2.B.4), Section 6.2.D.1, and Section 6.2.E.4.

6.3 (Utilities & Fire Protection): The new buildings will be connected to the City's water and sewer systems and each building will have a sprinkler system.

6.4 (Fees and Assessments in Effect at time of Connection): The creation of new residential and commercial square footage will be subject to the City's Impact Fee Ordinance and fee schedule adopted by the Board on October 12, 2021.

6.5 (Coordination of Roads, Parking, Loading, Recreation, and Safety): As described in the attached memo dated August 10, 2022, from Erica Wygonik, PE, of Wall Consultant Group (WCG), the proposed redevelopment is expected to generate 19 net new vehicle trips in the AM peak hour, and 60 net new vehicle trips in the PM peak hour. The report concludes that "the proposed project will not cause or exacerbate any unreasonable congestion or unsafe conditions on the local roadway network and will not unnecessarily or unreasonably endanger the public's investment in any local roads, highways, or related infrastructure."

6.7 (Lighting): The applicant has submitted a lighting plan in accordance with Section 5.1.E.12 of the Site Plan Review Regulations and the lighting design standards set forth in Section 6.7. See Sheet 50 of the plan set. The type, quantity, and location of the proposed pole-mounted and building-mounted lighting fixtures are shown on the attached Lighting Fixture Schedule for Lebanon Woolen Mill, dated September 22, 2022, prepared by LAM Partners. As noted above and in the attached Application for Waivers, the applicant requests a waiver to allow the lighting schedule to be provided as a separate exhibit instead of as part of the site plan set. With respect to the requested waivers from Section 6.7.B.2 and 3, staff recommends that the applicant consider adjustments to the plan in order to demonstrate compliance and eliminate the need for a waiver from those sections.

6.8 (Off-Site Improvements): The applicant does not propose any off-site improvements.

6.9 (Premature and Scattered Development): Section 6.9 provides that the Planning Board "may disapprove a site plan application that proposes development that is scattered or premature, so as to involve danger or injury to health, safety, or prosperity of the community. For purposes of this section, a development shall be considered scattered or premature if it will cause, or poses an undue risk of causing, a substantial or appreciable adverse impact upon any of the factors or parameters set forth in the General or Specific Purposes of Site Plan Review, as outlined in Sections 1.4 and 1.5 of these Regulations, *or as set forth in Section 6.9.B if such information is required to be submitted per Section 5.1.G.4 or Section 5.2.D.*" (emphasis added)

Section 5.1.G.4 of the Site Plan Review Regulations requires that, "[f]or multi-family dwelling developments and mixed-use developments resulting in a net increase of 50 dwelling units or more, the application shall include the information and impact statements identified in Section 6.9.B." These include:

1. Statement of impact of the proposed development on natural resources and environmental quality including, but not limited to, water quality, air quality, wetlands, soil erosion and agricultural soils and a statement of pollution control and environmental impact mitigation measures.
2. Capacity of the school system; effect on school bus transportation and distance of the proposed subdivision from the nearest elementary school.

3. Adequacy of streets and/or sidewalks in the general area of the development including major intersections providing access, and such other areas as requested by the Board.
4. Sufficiency, availability and capacity of utility services to provide water, fire protection, and sewer, and further, the impact of the development on the municipal solid waste disposal facilities.
5. (If applicable) The impact of on-site subsurface sewage disposal systems as to adjacent wells, water supply systems, and any known aquifers so designated by the United States Geological Survey.
6. Any special fire, police and public safety problems due to location and/or special conditions related to the site's proposed type of use.
7. Impact of storm drainage from the development on abutting properties and potential storm drainage problems both on the site of the development and downstream from the development.
8. Fiscal impact statement analyzing the impact of the development on municipal, school and county revenues and expenditures, including estimated potential tax revenue and estimated number of school children.

The applicant has addressed several of the Section 6.9.B areas of study and information in the attached Fiscal Impact Analysis for Lebanon Woolen Mill – 1 Foundry Street, dated August 8, 2022, prepared by Mark Fougere, AICP, of Fougere Planning & Development, Inc. (16 pages).

6.10 (Additional Regulations for the Lebanon Downtown District): The Section 6.10 LD District design regulations apply to all projects in the LD District that require site plan review, including new buildings, additions to existing buildings, site changes, and changes of use. The LD District design requirements include building design requirements set forth in Section 6.10.B and site design requirements set forth in Section 6.10.C. *Staff will continue to review the application for compliance with Section 6.10 and will provide comment at or during the course of the public hearing.*

II. ZONING ORDINANCE:

Use: The proposed multi-family dwellings and the proposed commercial fitness use on the first floor of the Existing Mill (considered a “health club” per the Zoning Ordinance) are permitted uses in the LD District per Section 307.2 of the Zoning Ordinance.

Density: Pursuant to Section 307.5 of the Zoning Ordinance, the Planning Board determines the allowed density for multi-family dwellings during the course of Site Plan Review. The Board's density determination should be “based on site specific conditions and factors such as the availability of parking and/or the ability to provide required parking, the availability of adequate water and sewer, and the ability to provide required site improvements and to meet all other requirements of the Site Plan Review Regulations and all other applicable City regulations.” Here, the proposed density is as follows:

- 1 Foundry St/25 Mechanic St: 184,085 sq. ft. / 169 dwelling units = 1,089 sq. ft. of lot area per dwelling unit.
- 43 Mechanic St: 22,695 sq. ft. / 27 dwelling units = 840 sq. ft. of lot area per dwelling unit.

Parking: The applicant proposes a total of 214 parking spaces, including 156 structured spaces and 58 surface spaces. There is no minimum number of parking spaces required in the LD District. Rather, per Section 607.4 of the Zoning Ordinance, parking requirements are determined by the Planning Board through Site Plan Review.

Conditional Use Permits**A. Per Section 307.8.A to Allow Additional Building Height**

55 ft. is the maximum building height in the LD District. However, per Section 307.8.A of the Zoning Ordinance, the Planning Board may allow building height of up to 65 ft. by Conditional Use Permit per Section 302.4.D. Pursuant to Section 307.8.A, the applicant requests a Conditional Use Permit to allow Building 3 to have a height of 60 ft. 6 in. and has submitted the attached Application for Conditional Use Permit Support Statement addressing the Section 302.4.D and Section 307.8.A criteria.

In order to grant the requested Conditional Use Permit, the Board must find the applicant's proposal satisfies the Enhanced Performance Standards set forth in Section 302.4.D as well as the following specific requirements of Section 307.8.A:

1. The building front line of the top story is set back at least ten (10) feet from the building front line of the story below when built within thirty feet of the front lot line.
2. The proposal provides improvements to streetscapes, public ways, or public spaces that implement recommendations for downtown Lebanon in current plans, policies, or programs adopted by the City of Lebanon including but not limited to the Master Plan, Downtown Visioning Study, and the Capital Improvement Program.
3. The proposal includes a high-quality design with attention to architectural quality and detail, universal accessibility, and/or environmental sustainability.

B. Per Section 307.6.B.2 to Eliminate Street Level Story Non-Residential Use Requirement

Section 307.6.B.1 of the Zoning Ordinance provides as follows:

If a **building** equal to or greater in size than 20,000 gross square feet is located on a **lot** with **principal frontage**¹ on a secondary **street**, a minimum of 1,000 square feet or 1/3 of the **gross floor area**, whichever is less, of the **street level story**² of the **building**, shall be reserved for a non-residential use or uses, and such combined uses shall have both a depth and width of not less than 20 feet along the secondary **street**.

The street level stories of the new buildings at 25 Mechanic Street and 43 Mechanic Street need to provide non-residential space as required per Section 307.6.B.1 but are proposed to be entirely residential. Therefore, the applicant must apply for a Conditional Use Permit pursuant to Section 307.6.B.2 to "waive" the street level story non-residential requirement. At this time, the applicant has not yet submitted the required application for a Conditional Use Permit per Section 307.6.B.2. Moreover, the legal notice will need to be revised to include the Conditional Use Permit application. *Consequently, the application will need to be renoticed prior to the Board closing the public hearing and making a decision on the applicant's site plan application.*

¹ "Principal frontage" is defined in Appendix A as: "The side of the lot that abuts the street that generally functions as the primary orientation of residences, businesses, or other uses along the block. When a lot abuts more than one street, the principal frontage is situated along the street that carries the greatest volume of pedestrian and vehicle traffic."

² "Street level story" is defined in Appendix A as: "The story having its floor elevation closest to the elevation of the adjacent street or any story partially below the elevation of the adjacent street and having six (6) feet or more of its height above the elevation of the street."

Note that per Section 302.4.E of the Zoning Ordinance, for each requested Conditional Use Permit, the Planning Board “may impose conditions as it finds reasonably appropriate to safeguard the neighborhood and the general public or otherwise serve the purposes of this Ordinance, including such measures as set forth in Section 802.4 (“Special Conditions”).”

CITY ASSESSOR No comment at this time.

BUILDING INSPECTOR No comment at this time.

ENGINEERING/PUBLIC WORKS

The Reviewing Engineer’s comments on the applicant’s revised plans and materials will be provided to the Planning Board and to the applicant upon receipt.

FIRE DEPARTMENT

The Fire Department offers the following comment:

“Related to the proposed buildings at 25 and 43 Mechanic Street, the location of the overhead utility lines along the street make utilizing the street as the required aerial fire apparatus access road as required by the 2021 IFC Section D105 unlikely. This is due to the fact that it is not safe practice to extend an aerial device over the top of energized electrical lines due to the electrocution hazard. If these buildings are constructed of Type IA, IB, or IIA construction throughout and equipped with an automatic sprinkler system, and have an enclosed stairway with a Class I standpipe to all roof surfaces, the aerial fire apparatus access road is no longer required. If the developer is unable to meet the requirements of the published exception, a waiver request will need to be submitted to the Lebanon Fire Department.

Per the submitted revised materials that were submitted, a waiver request will be submitted to the Lebanon Fire Department for review. As of this time, no waiver has been received.”

Staff recommends that the applicant obtain the required waiver from the Fire Department as a condition of site plan approval.

POLICE DEPARTMENT

No comment at this time.

STAFF RECOMMENDATIONS

A. Decision-Making

Staff recommends that the Board proceed as follows:

1. Conduct the public hearing at the October 10, 2022 meeting, but keep the hearing open and continue to a subsequent meeting to permit the application to be noticed, as discussed above.
2. Prior to closing the public hearing, the Board should act on the following:
 - a. Request for waivers from the Site Plan Review Regulations.
 - b. The Conditional Use Permit application pursuant to Section 307.6.B.2 of the ZO.
 - c. The Conditional Use Permit application pursuant to Section 307.8.A of the ZO.
3. Once the public hearing has concluded, the Board should act on the Site Plan Review application, subject to the recommended conditions of approval below.

B. Conditions of Approval

If the Planning Board moves to approve this request, then based on the information reviewed by City staff, the Planning and Development Department recommends that the Planning Board approve the application with the conditions noted below:

Conditions to be Satisfied Prior to Application for a Building Permit and Prior to the Start of Any Construction Activities

1. The Boundary Line Adjustment plat approved by the Planning Board on [TBD] (PB2022-35-BLA) shall be recorded pursuant to and in conformance with the Notice of Action.
2. The applicant shall address any outstanding comments of the Reviewing Engineer, to the satisfaction of the City Engineer.
3. The applicant shall make the following revisions to the plan set to the satisfaction of the Planning and Development Department and the City Engineer:
 - a) Any changes made pursuant to Condition of Approval #2.
 - b) Amend the cover sheet to provide description of plan revisions (5.1.E.4.d).

The applicant shall provide the Planning and Development Department with one (1) full size copy of the revised plan set, and a digital copy of the revised plan set saved in a PDF-A format for archival purposes.

4. The applicant shall schedule and hold a pre-building permit application meeting with the Planning and Development Department, City Building Inspectors, City Engineer/Department of Public Works, and Fire Department, in order to help streamline the building permit review process and to review applicable code requirements.
5. The applicant shall obtain approval from the City Council or the City Manager's office for any additional water and/or sewer flows in accordance with the applicable Chapter 136 and 182 of the City Code.
6. All engineering review fees shall be paid in full as required by Section 4.7.E.1 of the Site Plan Review Regulations.
7. The applicant shall apply to the Lebanon Fire Department for a waiver from 2021 IFC Section D105, and shall obtain such waiver.

Conditions to be Satisfied Prior to the Issuance of a Building Permit

8. Prior to the start of any construction activities on the property for which construction inspection is required pursuant to this decision or any applicable ordinance or code, the City shall retain the services of an independent third-party inspector, for which the applicant shall be responsible for all inspection fees related to (a) on-site work related to sewer, water, temporary sedimentation and erosion control, and drainage improvements, and (b) all off-site work within the City's right-of-way (including but not limited to water, sewer, roadway, sidewalks, crosswalks, bus stops/shelters, driveways, drainage), in accordance with Chapters 136 and 182 of the City Code and Section 8.2 of the Site Plan Review Regulations. The applicant shall provide funding for inspection services in a form and amount acceptable to the City and shall sign a Water & Sewer Extension and Infrastructure Inspection Agreement in accordance with Chapters 136 and 182 of the City Code.

9. The development shall be subject to City of Lebanon Impact Fees, pursuant to Section 213 of the Zoning Ordinance. The Impact Fee shall be calculated at the time of Building Permit issuance based on the Impact Fee Schedule adopted on October 12, 2021. In accordance with RSA 674:39, the approved site plan shall be exempt from any future changes in impact fees and methodology for five years from the date of approval; however, any building permits which are issued after the end of that five-year period shall be fully subject to whatever impact fees and methodology are in effect at the time of building permit issuance.
10. All water and sewer fees shall be paid as set forth in City Code Chapter 68.
11. Prior to the start of any construction activities on the property, the applicant shall obtain or update (if appropriate) any required State approvals, including but not limited to:
 - a) NHDES Shoreland Permit
 - b) NHDES Alteration of Terrain Permit
 - c) NHDES Sewer Connection Permit

Conditions to be Satisfied Prior to the Issuance of a Certificate of Occupancy

12. The impact fee calculated pursuant to Condition of Approval #9 shall be paid.
13. Third-party engineer or design engineer inspection reports and as-built drawings provided by the applicants (PDF format and CAD .dwg format, using the NH State Plane Coordinate System), including tie sheets, shall be reviewed and approved by the City Engineer prior to acceptance of any utility improvements by the City.
14. All improvements depicted on the plan shall be completed, and shall be constructed as depicted on the approved plan, including any modifications to the plan as may be approved by the Planning Board in accordance with the Site Plan Review Regulations.

General Conditions

15. Pursuant to Section 4.9 of the Site Plan Review Regulation, the project may be constructed in phases per the phasing plan on page 7 of the approved plan set (Sheet C-003).
16. All required landscape plantings shall meet the minimum size requirements for such plantings set forth in Section 6.2.B of the Site Plan Review Regulations at the time of installation.
17. Edge-of-disturbance fencing shall be installed and maintained before and during any site work, to be verified by the City Engineer or City's third-party inspector on site.
18. The applicant shall obtain an Excavation Permit from the Department of Public Works for any site work in the public right-of-way prior to any work in the right-of-way, and construction or installation of any new driveway(s) shall also require a Driveway Permit from the Department of Public Works.
19. The property owner is responsible for the maintenance and operation of the stormwater management system in accordance with the O&M plan, and such responsibility shall run with the land. (Section 6.6.H.2.b of the Site Plan Review Regulations).

Attachments

cc: Jon Livadas, LWM Residential LLC (jon.livadas@outlook.com)
File

October 06, 2022

Mr. Brian A. Vincent, P.E.; City Engineer
City of Lebanon – Department of Public Works
193 Dartmouth College Highway
Lebanon, New Hampshire 03766

Subject: **Site Plan Review Application – Lebanon Woolen Mill Redevelopment
1 Foundry Street (Map 91 Lot 263); 25 Mechanic Street (Map 91 Lot 267);
and 43 Mechanic Street (Map 106 Lot 34); Lebanon, New Hampshire**
KNA Project No. 22-0819-1

Dear Mr. Vincent:

As you may recall, on September 13th we issued a letter report in response to the subject application. Within that report we offered a series of comments and recommendations generated upon consideration and review of project plans and application materials received through that date. On September 27th we received a subsequent submittal consisting of copies of the following documents:

- A cover letter, addressed to the Planning & Development Department, prepared by the applicant's consultant on September 26, 2022.
- A drainage report dated August 15, 2022.
- Site plan drawings (52 sheets) consisting of Sheets C000-C500 (Civil & Land Survey); L000-L701 (Landscape Architecture); and A100-A204 (Building Architecture).
- An illustrative site plan (one drawing) dated August 15, 2022.
- A catalogue cut of proposed bike rack equipment.
- A project narrative dated August 15, 2022.
- An Application for Site Plan Review, with attachments, dated August 15, 2022.
- A stormwater appurtenance inspection and maintenance manual, undated.
- A lighting photometrics plan (one drawing) dated September 22, 2022.
- A transportation impact study dated August 10, 2022.
- A wetland delineation sketch dated September 01, 2022.

Based upon our careful consideration and review of the cited information we are pleased to report that the applicant's consultant was able to satisfactorily address several of our earlier remarks. Our remaining comments and recommendations are as follows:

General Comments

1. As acknowledged above, the applicant seeks approval to permit a lot line adjustment between subject Lot 91-263 and adjacent Lot 106-34. As shown on the drawings, this proposed lot line adjustment contemplates the transfer of 0.023-acres of land from Lot 91-263 to Lot 91-263. In the event of site plan approval, we recommend such approval be conditional upon both the approval and recording of the proposed lot line adjustment plan, as well as the subsequent conveyance of land facilitated by the same.
2. Given proximity of the subject parcel to the Mascoma River it appears a NHDES Alteration of Terrain Permit will be required under this proposal. We recommend this required State Agency Permit be received prior to or as a condition of site plan approval.
3. The facility is proposed to be served by municipal water and sanitary sewer utilities. As such, we recommend the applicant apply for and receive: (a) local utility permits from the Department of Public Works; and (b) a NHDES Sewer Connection Permit prior to or as a condition of site plan approval.
4. We recommend the Planning Board rely on authority of §8.3 of the Site Plan Review Regulations (SPRR's) to require, as a condition of approval, the applicant provide a performance guarantee, in an amount and form acceptable to your Department, to serve as a financial surety for: restoration of the site in the event of abandonment; installation and maintenance of appropriate erosion and sedimentation controls throughout construction, as well as full and final completion of any proposed public improvements and/or work within a public right-of-way.

Planning/Design Matters

1. We continue to recommend the building height dimension for Building 3 specified in the Zoning Table provided on Sheet C-000 (55' – 8") be reconciled with updated architectural elevations (Sheet A-201), which suggest a building height of 60'-6".
2. The subject site is situated in an urban condition immediately adjacent to neighboring public and private improvements. Accordingly, we recommend the final site plan include specifications for logistics of construction sufficient to outline the applicant's approach to protection and maintenance of adjoining improvements, as well as public safety, during each phase of construction.
3. To fulfill the requirements of Site Plan Review Regulation §5.1.E.5, we recommend a Licensed Surveyor stamp and sign all final Boundary Survey Plans (Sheets 2-4).
4. To fulfill requirements of Site Plan Review Regulation §5.1.E.10, we continue to recommend all curb line and pavement radii dimensions be specified on the drawings.

5. We recommend the proposed Mechanic Street pavement interface, adjacent to 43 Mechanic Street, be flared to allow for the proper turning movements of an AASHTO Single Unit (SU) vehicle. Specifically, we recommend a SU vehicle be able to turn into and out of the site without crossing the centerline of Mechanic Street.
6. We recommend a MUTCD compliant stop sign, with corresponding painted stop bar, be installed at the 43 Mechanic Street building curb cut.
7. As acknowledged previously, we are in receipt of a drainage report and updated drainage analysis. Based upon our review of information received to date, we are satisfied the design engineer's approach to stormwater management is in general compliance with applicable requirements of both the City of Lebanon and NHDES Administrative Rules governing the NHDES Alteration of Terrain Permit Program. That said in order to facilitate final design review we recommend the design engineer prepare and submit the following information:
 - Site-Specific Soil Survey Mapping performed in accordance with the Society of Soil Scientist of Northern New England, Special Publication Number 3.
 - Test pit data indicating the depth to estimated seasonal high-water table (ESHWI).
 - In-situ infiltration testing should site-specific soil survey mapping prove inconclusive due to urban conditions.
 - Hydraulic analysis of the storm sewer system, per the requirements of §6.6.E.11.a.
 - Routing of stormsewer systems downstream of all ponds to point of discharge, including any tailwater conditions, which may exist due to influence of the adjacent Mascoma River.
 - We recommend the report be expanded to address qualitative aspects of stormwater management, including requirements of §6.6.E.14 – Water Quality Protection and §6.8.G – Design Standards for Redevelopment, of the Site Plan Review Regulations.
 - We recommend expansion of the report to address requirements of the NHDES Alteration of Terrain Program, including necessary summary charts and Best Management Practice (BMP) worksheets.
 - We recommend the design engineer revisit the delineation of the portion of tributary area PS1 to the north of the 25 Mechanic Street building, as the Post Development Drainage Map and drainage analysis indicate runoff is flowing towards Mechanic Street, whereas the grading plan suggests surface runoff is to flow away from Mechanic Street towards the project site.
8. Sheets C-203 & C-204 illustrate design accommodations of proposed on-site storm sewer system layout and construction. Based upon review of this information we continue to offer the following recommendations:
 - We recommend the final site plan be expanded to provide additional site-specific details and corresponding specifications for the construction of Rain Gardens RG01 & RG02, Stormwater Chamber Systems SC01 & SC02, Stormwater

Sediment Trap Tank FB01, and Outlet Structures OS01 & OS02 and DMH04 & DMH06.

- We recommend arrows be provided to define flow direction within each segment of storm sewer.
 - We recommend pipe material, diameter, and slope for the proposed segment of storm drain connecting structures TD01 and CB01 be specified.
 - In the event building roof drains or gutters are planned, we would recommend expansion of the final design plans to include design information for connection to stormwater facilities.
 - We recommend the design engineer review the need for a drainage conveyance system along the westerly façade of Building 2. As currently configured, it appears stormwater runoff from adjacent Parcels 91-266 and 91-265 will flow directly towards Building 2.
9. We continue to recommend Sheet C-204 specify top and bottom of wall elevations for the segment of planned retaining wall to be situated to the north of Building 2 parking garage.
10. The plans specify construction of retaining wall immediately adjacent to abutting Parcels 106-38 and 106-42 along the southerly site boundary; Parcel 91-269 along the westerly site boundary; Parcel 91-266 north of the 25 Mechanic Street building; and Parcel 91-264 along the northerly site boundary. We recommend:
- A note be added to the final site plan advising the contractor of the need to obtain building permits prior to wall installation.
 - Given overall wall height at several locations immediately adjacent to adjoining parcel boundaries, we recommend the design engineer confirm excavations needed for wall installation can either be contained on the subject property or if temporary construction easements/agreements must be obtained from abutting landowners.
 - The detail on sheet L303 be expanded to indicate how traffic and pedestrian safety will be maintained during construction.

We trust you will find remarks provided in the foregoing letter report useful in its continued consideration and review of the subject application. As always, please contact this writer in the event you should have specific questions or further instructions related to this matter.

Sincerely:

Steven B. Keach, P.E.
President
Keach-Nordstrom Associates, Inc.

**CITY OF LEBANON
APPLICATION FOR**

SPECIAL EXCEPTION	☐	☐	SITE PLAN REVIEW
VARIANCE	☐	☐	SUBDIVISION
MOTION FOR REHEARING	☐	☐	LOT LINE ADJUSTMENT
APPEAL OF AN ADMIN. DECISION	☐	☒	CONDITIONAL USE PERMIT

☐ OTHER _____

PROPERTY OWNER (APPLICANT):

NAME: LWM Residential LLC, Jon Livadas

TEL.#: 302-598-3492

MAILING ADDRESS: 1 Guyenne Rd, Wilmington, DE 19807

E-MAIL ADDRESS: jon.livadas@outlook.com

CO-APPLICANT, AGENT, OR LESSEE:

NAME: Engineering Ventures PC, Nicholas Fiore

TEL.#: 603-727-7029

MAILING ADDRESS: 85 Mechanic St, Suite E2-3, Lebanon, NH 03766

E-MAIL ADDRESS: nikf@engineeringventures.com

PROJECT LOCATION:

TAX MAP #: 91

LOT#: 263

PLOT #:

ZONE: LD

STREET ADDRESS OF PROJECT:

IS THIS PROPERTY LOCATED IN THE: **WETLANDS** ☒ YES ☐ NO **HISTORIC DISTRICT** ☐ YES ☒ NO
FLOOD PLAIN ☒ YES ☐ NO

SCOPE OF PROJECT:

As part of a larger, multi-building, multi-family residential development; construct an additional building on site with a height of 60'-6". The subject building is designated as Building 3 on the project plans.

TYPE OF OCCUPANCY:

EXISTING ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☐ MULTI-FAMILY ☒ COMMERCIAL ☐ INDUSTRIAL
PROPOSED ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☒ MULTI-FAMILY ☐ COMMERCIAL ☐ INDUSTRIAL

IF USE IS COMMERCIAL OR INDUSTRIAL, PLEASE NOTE SPECIFIC

USE: _____

SIGNATURE BLOCK:

FOR PLANNING BOARD APPLICATIONS ONLY: I, the undersigned, hereby submit this application on the date noted below with the knowledge and understanding that the Planning Board shall determine if the submitted application is complete according to its regulations at its next regularly scheduled meeting on October 10, 2010, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY

OWNER: _____ DATE: 9.23.22

NOTE: IF, AS OWNER, YOU WISH TO DESIGNATE AN AGENT TO ACT ON YOUR BEHALF, PLEASE READ THE FOLLOWING AND SIGN BELOW: I hereby designate the person listed above as my agent for the purpose of procuring the necessary local permits for the proposed work as described herein. Representations made by my agent may be accepted as though made by me personally, and I understand that I am bound by any official decision made on the basis of such representation.

PROPERTY

OWNER: _____ DATE: 9.23.22

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #	FEE - \$ AMOUNT	DATE PAID	VOUCHER #

Lebanon Woolen Mill

1 Foundry Street, City of Lebanon, NH

PB2022-36-SPR

Conditional Use Permit Criteria

September 26, 2022

Pursuant to City of Lebanon Zoning Ordinance 302.4, the following statements provide addition information in support of a Conditional Use permit for the above referenced project.

A. Specific Criteria

307.8 Building Height.

A. *Maximum Height. By conditional use permit per Section 302.4, the Planning Board may allow a maximum building height of 65 feet if the Planning Board determines that the proposal conforms to the following standards:*

1. *The building front line of the top story is set back at least ten (10) feet from the building front line of the story below when built within thirty feet of the front lot line.*

Planning Staff has noted that the Mechanic Street face of Building 3 will be considered the front of the building. The front line of Building 3 will be no closer the 64 feet from the lot lines on the Mechanic Street side of the lot.

2. *The proposal provides improvements to streetscapes, public ways, or public spaces that implement recommendations for downtown Lebanon in current plans, policies, or programs adopted by the City of Lebanon including but not limited to the Master Plan, Downtown Visioning Study, and the Capital Improvement Program.*

The project includes pedestrian access from Mechanic Street to a pedestrian plaza within the site and to the Mascoma River. While just outside the limits of the Downtown Visioning Study, this improved access is in line with that study's goals of promoting walkability, enhancing space for downtown area, and opening doors to greater public/private partnerships.

3. *The proposal includes a high-quality design with attention to architectural quality and detail, universal accessibility, and/or environmental sustainability.*

High quality design is paramount to the Applicant, as evidenced throughout the application materials. The pedestrian access from Mechanic Street promotes universal accessibility. Highly efficient buildings and stormwater treatment and attenuation are examples of environmental sustainability incorporated into the project.



City of Lebanon, New Hampshire

APPLICATION FOR CONDITIONAL USE PERMIT

SUPPORT STATEMENT

Office Use Only Date Received: _____ Application No.: _____

I. APPLICATION CHECKLIST

- [Application form](#)
- [Public Hearing Notification List](#)
- [Filing fee](#)
- This form, including written responses to the Section 302.4.D requirements, outlined below
- A site plan
- Optional: photos and any other materials in support of your application

II. PROJECT DESCRIPTION

I (we) hereby request a Conditional Use Permit as provided for in Article(s) III, Section(s) 307.3, of the Lebanon Zoning Ordinance.

Please describe your proposed project with as much detail as possible. You can respond in the space provided below or on a separate sheet of paper.

[The Lebanon Woolen Mill redevelopment project is a multi-lot, multi-building, multi-family residential project.](#)

[In total it consist of renovating 3 existing buildings and constructing 3 new building. Building 3, as it's designated in the application materials, will be a 5-story, 89-unit apartment building with a parking below. The proposed height for Building 3 is 60'-6". Because of the grade change from Mechanic St to Building 3's location, the top of Building 3 will be approximately 33'-6" higher than Mechanic St. Granting the conditional use permit will allow for the 5th story with 14 dwelling units in Building 3. This is only 7% of the total dwelling unit count.](#)

III. CONDITIONAL USE PERMIT CRITERIA

In order to obtain a Conditional Use Permit, you must demonstrate to the Planning Board that the proposal satisfies the applicable criteria set forth in Sections A and B below. You must address each criteria in the space provided or on a separate sheet of paper.

A. Specific Criteria

The Conditional Use Permit is authorized by Article III, Section [307.8, A](#) of the Zoning Ordinance which requires the applicant to demonstrate that (*please address any criteria set forth in the Zoning Ordinance that specifically apply to your proposed use or project*):

[Please see the attached supporting statements.](#)

B. General Criteria per Section 302.4.D

A conditional use permit shall be granted only if the Planning Board determines that the proposal conforms to all of the following standards:

1. The site is suitable for the proposal. This includes:

a. Adequate vehicular and pedestrian access for the intended use.

Vehicular and pedestrian access to the site and Building 3 will be the same whether or not the CUP is granted. The additional units resulting from the CUP will have no adverse impact on vehicular or pedestrian access.

b. The availability of adequate public services to serve the intended use including emergency services, pedestrian facilities, safe access, and other municipal services.

The additional height of Building 3 will require Lebanon Fire Dept to extend their ladder further if they need external access to the top floor, but this should not adversely affect their ability to serve the building.
Access to the site and Building 3 for all other public service will be the same whether or not the CUP is granted.

c. The absence of environmental constraints (floodplain, steep slope, etc.) proposed to be impacted by the intended use.

Building 3 is outside of any areas of environmental constraint.

d. The availability of appropriate utilities to serve the intended use including water, sewage disposal, stormwater treatment, electricity, and similar utilities.

A 7% increase in the total unit count is not large enough to adversely impact any utility's ability to serve the project.
The project expects to receive full water and sewer allocations from the City. The additional height does not alter the size of the stormwater treatment practices. Liberty Utilities has adequate capacity.

2. External impacts: The external impacts of the proposed use on abutting properties and the neighborhood shall be commensurate with the impacts of adjacent existing uses or other uses permitted in the zoning district. This shall include, but not be limited to, water runoff, drainage, traffic, noise, odors, vibrations, dust, fumes, hours of operation, and exterior lighting and glare. In addition, the location, nature, design, and height of the structure and its appurtenances, its scale with reference to its surroundings, and the nature and intensity of the use, shall not have an adverse effect on the surrounding environment nor discourage the appropriate and orderly development and use of land and buildings in the neighborhood. The proportion of the site proposed to be occupied by impervious surfaces shall be minimized to the extent necessary to preclude unreasonable risk of runoff, erosion, sedimentation, and other potentially adverse on-site or off-site effects.

The additional height of building 3 will not have an adverse effect on the surrounding environment. Building 3's average grade is significantly lower than the majority of its neighbors due to the natural grade of the site, meaning the additional 5.5' of height will not have an adverse effect in terms of scale, shadows, views, etc.

-
-
-
-
3. Character of the site development: The proposed layout and design of the site shall not be incompatible with the established character of the neighborhood and shall mitigate any external impacts on abutters, the neighborhood, and nearby public ways and infrastructure. This shall include, but not be limited to, the relationship of the building(s) to the street, the amount, location, and screening of off-street parking, the treatment of yards and setbacks, the buffering of adjacent properties, and provisions for vehicular and pedestrian access to and within the site.

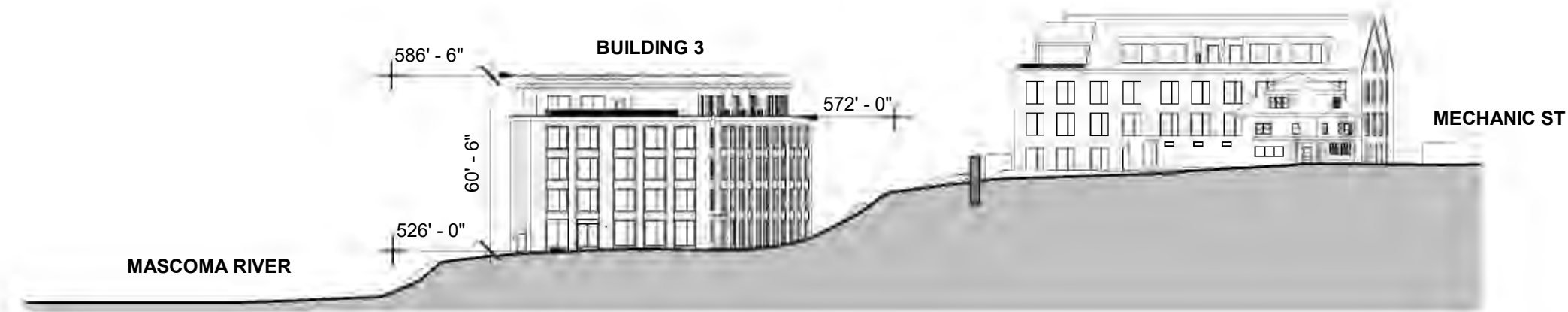
Granting the CUP will not result in a change to the character of the site development. During the design process the 5th floor was not added until after the site layout was settled and it showed adequate parking to support the 5th floor. Without the 5th floor the site would carry addition superfluous parking.

4. Character of the buildings and structures: The design of any new buildings or structures and the modification of existing buildings or structures on the site shall not be incompatible with the established character of the neighborhood. This shall include, but not be limited to, the scale, height, and massing of the building or structure, the roof line, locations of access, and visual compatibility with the area.

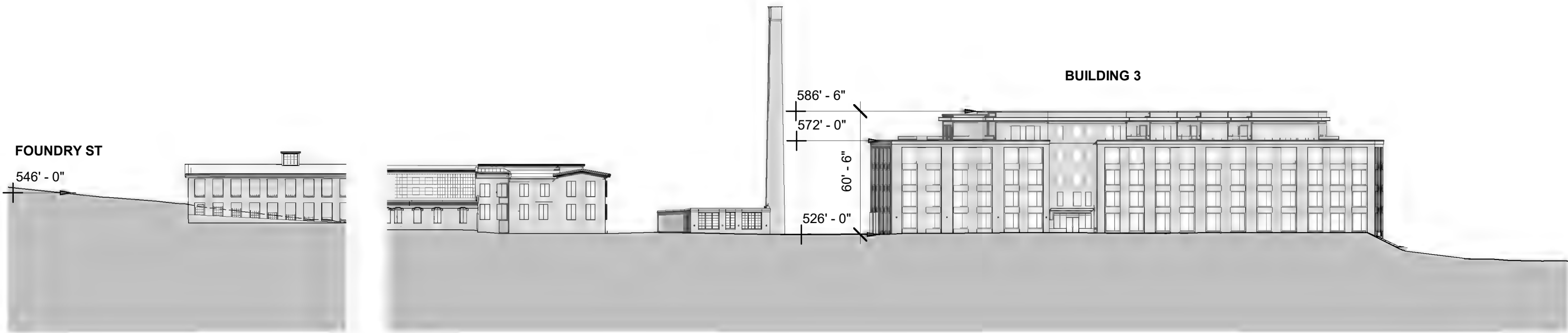
Building 3's design is a modern residential interpretation of a historic mill building. Using traditional mill vernacular such as masonry, large/repetitive windows, and brick detailing; building 3 is a nod to both the past and future of the site. The scale, height, and massing of the building are appropriate for the character of Foundry St. and will not have a negative impact on the character of the area.

5. Preservation of natural, cultural, historic, and scenic resources: The proposed use and layout of the site, including all related development activities, shall to the greatest extent practicable preserve identified natural, cultural, historic, and scenic resources on the site and shall not degrade such identified resources on abutting properties. This shall include, but not be limited to, identified wetlands, floodplains, significant wildlife habitat and documented wildlife corridors, stonewalls, mature tree lines, identified historic buildings or sites, scenic views, and viewsheds.

The proposed layout of the site and in particular building 3 is meant to preserve and celebrate both the natural and historic resources of the site. Building 3 is located outside any protected wetland or natural resource zones and a significant distance away from the existing mill building creating a new outdoor public space on the interior of the site and reinforcing the sites historic industrial history. Additionally, access and views of the Mascoma river will be improved through the site plan design.



1 MECHANIC ST SECTION
1" = 50'-0"



2 FOUNDRY ST AND BLACKSMITH ST SECTION
1" = 50'-0"

1" = 50'-0"

CITY OF LEBANON APPLICATION FOR

SPECIAL EXCEPTION ☐	☒ SITE PLAN REVIEW
VARIANCE ☐	☐ SUBDIVISION
MOTION FOR REHEARING ☐	☐ LOT LINE ADJUSTMENT
APPEAL OF AN ADMIN. DECISION ☐	☐ CONDITIONAL USE PERMIT

☐ OTHER _____

PROPERTY OWNER (APPLICANT):

NAME: LWM Residential LLC, Jon Livadas TEL.#: 302-598-3492

MAILING ADDRESS: 1 Guyenne Rd, Wilmington, DE 19807

E-MAIL ADDRESS: jon.livadas@outlook.com

CO-APPLICANT, AGENT, OR LESSEE:

NAME: Engineering Ventures PC, Nicholas Fiore TEL.#: 603-727-7029

MAILING ADDRESS: 85 Mechanic St, Suite E2-3, Lebanon, NH 03766

E-MAIL ADDRESS: nikf@engineeringventures.com

PROJECT LOCATION:

TAX MAP #: 91 and 106 LOT#: 263 & 267 and 34 PLOT #: _____ ZONE: LD

STREET ADDRESS OF PROJECT: 1 Foundry St, 25 Mechanic St, and 43 Mechanic St, Lebanon, NH 03766

IS THIS PROPERTY LOCATED IN THE: **WETLANDS** ☒ YES ☐ NO **HISTORIC DISTRICT** ☐ YES ☒ NO
FLOOD PLAIN ☒ YES ☐ NO

SCOPE OF PROJECT:

Conversion of the former Kleen commercial laundry facility, Kleen Dry Cleaner site, and a residential lot into a multi-building multi-family development to include 194 residential units in 4 buildings, two 2 buildings with amenity spaces, surface and structured parking, water and sewer line replacements, stormwater improvements, and pedestrian circulation and accommodations.

TYPE OF OCCUPANCY:

EXISTING ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☒ MULTI-FAMILY ☒ COMMERCIAL ☐ INDUSTRIAL
 PROPOSED ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☒ MULTI-FAMILY ☐ COMMERCIAL ☐ INDUSTRIAL
 IF USE IS **COMMERCIAL** OR **INDUSTRIAL**, PLEASE NOTE **SPECIFIC** USE: _____

SIGNATURE BLOCK:

FOR PLANNING BOARD APPLICATIONS ONLY: I, the undersigned, hereby submit this application on the date noted below with the knowledge and understanding that the Planning Board shall determine if the submitted application is complete according to its regulations at its next regularly scheduled meeting on September 19, 2022, unless I personally request the Board delay its determination of completeness to a later date.

PROPERTY OWNER: _____ DATE: 8/15/22

NOTE: IF, AS OWNER, YOU DESIGNATE AN AGENT TO ACT ON YOUR BEHALF, PLEASE READ THE FOLLOWING AND SIGN. _____ hereby designate the person listed above as my agent for the purpose of procuring the necessary local permits for the proposed work as described herein. Representations made by my agent may be accepted as though made by me personally, and I understand that I am bound by any official decision made on the basis of such representation.

PROPERTY OWNER: _____ DATE: 8/15/22

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #	FEE - \$ AMOUNT	DATE PAID	VOUCHER #

Lebanon Woolen Mill 1 Foundry Street, City of Lebanon, NH

Project Narrative August 15, 2022

I Introduction

The Lebanon Woolen Mill project will consist of construction of multi-family housing and renovations to the existing Lebanon Woolen Mill complex to accommodate a total of 196 residential units in a mixture of studio, 1-bedroom, and 2-bedroom apartments. Some existing features, such as the boiler building, and smokestack are to remain in place. The development encompasses three parcels, all located in the Lebanon Downtown (LD) Zoning District (LD):

- Lot 91-263: 3.67± acres located at 1 Foundry Street
- Lot 91-267: 0.53± acre located at 25 Mechanic Street
- Lot 106-34: 0.54± acre located at 43 Mechanic Street

The project will merge lots 91-263 and 91-237 and will adjust the boundary between 91-263 and 106-34. The project will require the following approval from the Lebanon Planning Board:

- Lot Merger for 1 Foundry Street and 25 Mechanic Street
- Lot Line Adjustment for the rear lot line of 43 Mechanic Street
- Site Plan Review for 1 Foundry Street/25 Mechanic Street
- Site Plan Review for 43 Mechanic Street

The site plans include a Phasing Plan to demonstrate the order in which the project will be built out.

II Existing Conditions

1 Foundry St. currently contains several existing structures including an approximately 23,000 sf commercial building that had been used as a woolen mill and later for Kleen Laundry operations, a 6,500-sf commercial building used by Kleen Laundry and an 1,800-sf boiler building and smokestack facility. All buildings are currently vacant. Municipal water and sewer main lines run through the existing site with utility service lines supplying each existing structure. An electrical transformer located to the northwest end of the parking area feeds the existing buildings. Overhead power is connected off Blacksmith St. to the south. The site also contains overhead lines which may still feed some facilities. The site is located adjacent to the Mascoma River to the south and abuts several commercial and residential properties to the north. The site contains a large, paved parking area, and in general the site slopes from north to south with steeper grades towards the north end and flatter areas in the southern parking lot. The entire lot drains to the Mascoma River either through a series of catch basins and trench

drains in the drive access or via sheet flow from the paved areas directly to the riverbank. There is an area of naturally vegetated land along the southeast end of the property that is along the Mascoma River and partially within the floodplain.

25 Mechanic St. is the site of the former Kleen Drycleaners. It contains a small parking lot and 2,200 sf commercial building that is also vacant it is assumed the existing building roof drains to Mechanic St. and may possibly be tied into the sewer system, the parking lot appears to sheet flow towards Mechanic St. and drains into the nearby municipally controlled catch basins. The remainder of the lot drains to 1 Foundry St. to the east.

43 Mechanic St. contains a small residential apartment building, parking area and a garage. This site slopes to the east and also discharges stormwater, uncontrolled, 1 Foundry St.

II Proposed Work

The exiting three story Woolen Mill building will be renovated to provide approximately 49 Apartments. The adjacent commercial building (Building 2) and the existing boiler building will be renovated provide amenity spaces, and a 2-story parking structure will be constructed next to Building 2. The new Building 3 will be constructed towards the south end of the site, contain 89 units, and have a parking garage on its lowest level. It will be approximately 73,347 sf and six stories, including the parking level. Additional parking and drive access from Blacksmith St. to the south will also be provided west of Building 3. A centrally located courtyard area will connect the two ends of the property for pedestrians and emergency vehicular access. Traffic flow will generally consist of two-way access from Foundry St. for parking facilities associated with Building 2, The Woolen Mill and 25 mechanic St. and the and two-way access from Blacksmith St. for Building 3 residents.

25 Mechanic St. will contain a new four-story, 31-unit, residential structure with a lower-level parking garage. The parking garage will be accessed from Building 2 via the 1 Foundry St. access point. Direct pedestrian access to Mechanic St will be included. The site will also include a pedestrian connection from Mechanic St to the central courtyard in 1 Foundry St.

43 Mechanic St. will contain a new four story, 27-unit, residential building with a parking garage on the ground floor. Surface parking will also be provided at 43 Mechanic St. behind the building. 43 Mechanic St. will have a dedicated two-way drive access from Mechanic St. Direct pedestrian access to Mechanic St. and 1 Foundry St. will be included.

III Utilities

Water and sewer utilities for the Woolen Mill and buildings 2 and 3 will connect to the main water and sewer lines that run down Foundry St. and through the 1 Foundry St. site. The main water system for the 1 Foundry St. site loops from Foundry St. to Blacksmith St. and the sewer main gravity flows through the site to a manhole in Blacksmith St. and from there continues south. Existing water and sewer mains will be realigned with this project to accommodate the new buildings. The parking garages will contain drainage systems that drain to dedicated oil and grit separators for each garage. The separators will connect into the sewer main that runs through the 1 Foundry St. site. 43 Mechanic St. will have a water service line connection to the

water main in Mechanic St. while its sewer service line will run downslope to the east and connect in to the 1 Foundry St. sewer main. 25 Mechanic St. will have sewer and water service line connections in Mechanic St. All buildings will have fire service line connections as required and up to four hydrants are proposed to be spaced out along the main water alignment.

Electrical utilities for 1 Foundry St. will be fed from a centrally located transformer to the west of the site in the approximate location of the existing transformer for the former Kleen buildings. Power is anticipated to be looped underground to new risers to be installed on existing power poles off Foundry St. to the north and Blacksmith St. to the south. The existing overhead power lines that run through the site will be moved underground. 43 Mechanic St. will connect to a new riser to be located at the power pole in Mechanic St. Power will be run underground to a new transformer at the rear of the site that will feed the new multifamily building. The new building at 25 Mechanic St. will connect via overhead power to the existing power pole in Mechanic St.

IV Stormwater

Stormwater management will be accomplished through construction of stormwater infiltration facilities adjacent to Building 3 with the one exception being that 25 Mechanic St. roof leaders will connect to the existing catch basin in Mechanic St. The proposed facilities will consist of a Cultec underground chamber system and an infiltration basin to the east of Building 3. Soils are anticipated to be in the hydrologic soils group A and therefore are expected to be well drained. Based on the USDA Web Soil Survey data, stormwater infiltration is expected to be feasible with this project. Test pit data and infiltration testing will be conducted later to confirm.

- WQv Calculation formula and criteria:
 - o $WQv = (P)(Rv)(A)$
 - o $P = 1''$ of rainfall (NHDES standard)
 - o $Rv = \text{Runoff Coefficient} = 0.05 + (0.9 * I)$
 - o $I = \% \text{ impervious draining to practice}$
 - o $A = \text{Area draining to practice}$
 - o $A_i = \text{Impervious area draining to practice}$
- WQv Calculations for area draining to Rain Garden 1P:
 - o $P = 1''$
 - o $A = 1.49 \text{ acres}$
 - o $A_i = 1.09 \text{ acres}$
 - o $I = 1.09/1.41 = 0.77$
 - o $Rv = 0.05 + (0.9 * 0.77) = 0.75 \text{ unitless}$
 - o $WQv = (1'') (0.75) (1.49) = 1.05 \text{ ac-in}$
 - o $WQv = 3,812 \text{ cf } (1.05 \text{ ac-in} * 43,560 \text{ sf/ac} * 1'/12'')$

For further details of existing and proposed drainage catchment please refer to the HydroCAD printout and the Existing and Proposed Drainage maps included at the end of this report.

Stormwater analysis was conducted using HydroCAD Version 10.0 to compute the post-construction conditions for the 1", 2-year, 10-year and 50-year 24-hour storms. This program uses the TR-20 stormwater calculation method.

The following table shows the results of the post-development HydroCAD analysis versus pre-development HydroCAD analysis.

Table 1 – HydroCAD Results

POI 1	2-yr Storm	2-yr Storm	10-yr Storm	10-yr Storm	25-yr Storm	25-yr Storm	50-yr Storm	50-yr Storm	100-yr Storm	100-yr Storm
	cfs	cf	cfs	cf	cfs	cf	cfs	cf	cfs	cf
Pre-Development (POI-1)	3.71	7,360	6.07	12,347	7.85	16,240	9.47	19,860	11.37	24,155
Post-Development (POI-1)	3.37	9,676	5.49	16,148	7.20	21,173	8.63	25,840	10.22	31,376
Δ (POI-1)	-0.34	2,316	-0.58	3,801	-0.65	4,933	-0.84	5,980	-1.15	7,221

POI 2	2-yr Storm	2-yr Storm	10-yr Storm	10-yr Storm	25-yr Storm	25-yr Storm	50-yr Storm	50-yr Storm	100-yr Storm	100-yr Storm
	cfs	cf	cfs	cf	cfs	cf	cfs	cf	cfs	cf
Pre-Development (POI-2)	0.66	1,340	1.03	2,154	1.30	2,781	1.56	3,359	1.85	4,042
Post-Development (POI-2)	0.66	1,340	1.03	2,154	1.30	2,781	1.56	3,359	1.85	4,042
Δ (POI-1)	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0

POI 3	2-yr Storm	2-yr Storm	10-yr Storm	10-yr Storm	25-yr Storm	25-yr Storm	50-yr Storm	50-yr Storm	100-yr Storm	100-yr Storm
	cfs	cf	cfs	cf	cfs	cf	cfs	cf	cfs	cf
Pre-Development (POI-3)	4.39	8,932	7.09	14,738	9.15	19,271	11.03	23,490	13.24	28,501
Post-Development (POI-3)	3.57	7,301	5.62	11,801	7.17	15,278	8.58	18,496	10.23	22,304
Δ (POI-1)	-0.82	-1,631	-1.47	-2,937	-1.98	-3,993	-2.45	-4,994	-3.01	-6,197

V Soil Erosion and Sedimentation Control

Standard erosion and sedimentation control measures will need to be implemented during construction of the project. Inlet protections will be required around existing culvert and catch basin inlets. Silt fencing is proposed, where indicated. A stone construction entrance will be implemented to prevent vehicles from transporting dirt and soil off the site. Once final grades are established, landscaping features will be installed for the project area.

This project will require that the developer and contractor are covered by and EPA Construction General Permit during construction activities. This includes developing and following a Stormwater Pollution Prevention Plan (SWPPP).



City of Lebanon, New Hampshire APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: LWM Residential LLC

Project Name: Lebanon Woolen Mill - 1 Foundry St

Project Address: 1 Foundry Street

WAIVER REGULATIONS

In order to grant a Waiver from a requirement of the City of Lebanon Site Plan Review or Subdivision Regulations, the Planning Board must find that the Waiver is justified under one of the following criteria (See Article VII of the Site Plan Review Regulations and Section 7.15 of the Subdivision Regulations):

Criteria A. Strict conformity would pose an unnecessary hardship to the Applicant and waiver would not be contrary to the spirit and intent of the regulations;

OR

Criteria B. Specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations.

WAIVER REQUEST(S)

I (we) hereby request a Waiver from:

[You can respond in the space provided, or attach a separate statement. Please be prepared to address each request during your public hearing. You must show that you have justified granting the Waiver(s).]

- 6.2, B, 4**
1. Section 6.2, B, 4 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

Seeking a waiver from the requirement that trees be 8 feet from the property line. Buildings and parking is as close as 10 feet from the property line. Trees at 8 feet would be in conflict with these features. Trees at reduced distances area shown on the plan.

- 6.2, B**
2. Section 6.2, B of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

Seeking a waiver from full compliance with the the perimeter landscaping requirements as indicated on the attached exhibit. Some locations are obstructed by site elements, some locations are too tight between buildings for healthy vegetation to grow.

3. Section 6.2, D of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

Seeking a waiver from providing a full 10' landscape buffer at the front of Building 3, the left and back sides of 43 Mechanic, the front of the Existing Mill, and the mill side of Building 2. Reduced buffers are provided and the remainder occupied by driveways, walkways to door, and accessible parking. Please note that the Existing Mill and Building 2 current have zero feet of landscaping where this waiver is being sought.

4. Section 6.2,E,4 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

Adding additional landscape beds to the parking lot near Building 3 will for the parking area to encroach on the mill yard, thereby reducing pedestrian gathering spaces. The site deign provides the required parking lot shading. The parking lot is screened from surrounding properties. A pedestrian route is provided through the parking lot to connect 43 Mechanic to the rest of the project.

5. Section 6.7,B,2 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

Lighting levels above 0.5 foot-candles is a result of providing adequate safe lighting levels at building entries, driveways, and parking.

6. Section 6.7,B,3 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

Light style YG4 points up into trees. The low wattage and the trees will prevent contributing to skyglow. Light style YG6 and YG7 are very focused on the site's smokestack. The narrow beams of light aimed at the structure will prevent contributing to skyglow.

7. Section 5.1,E,13 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

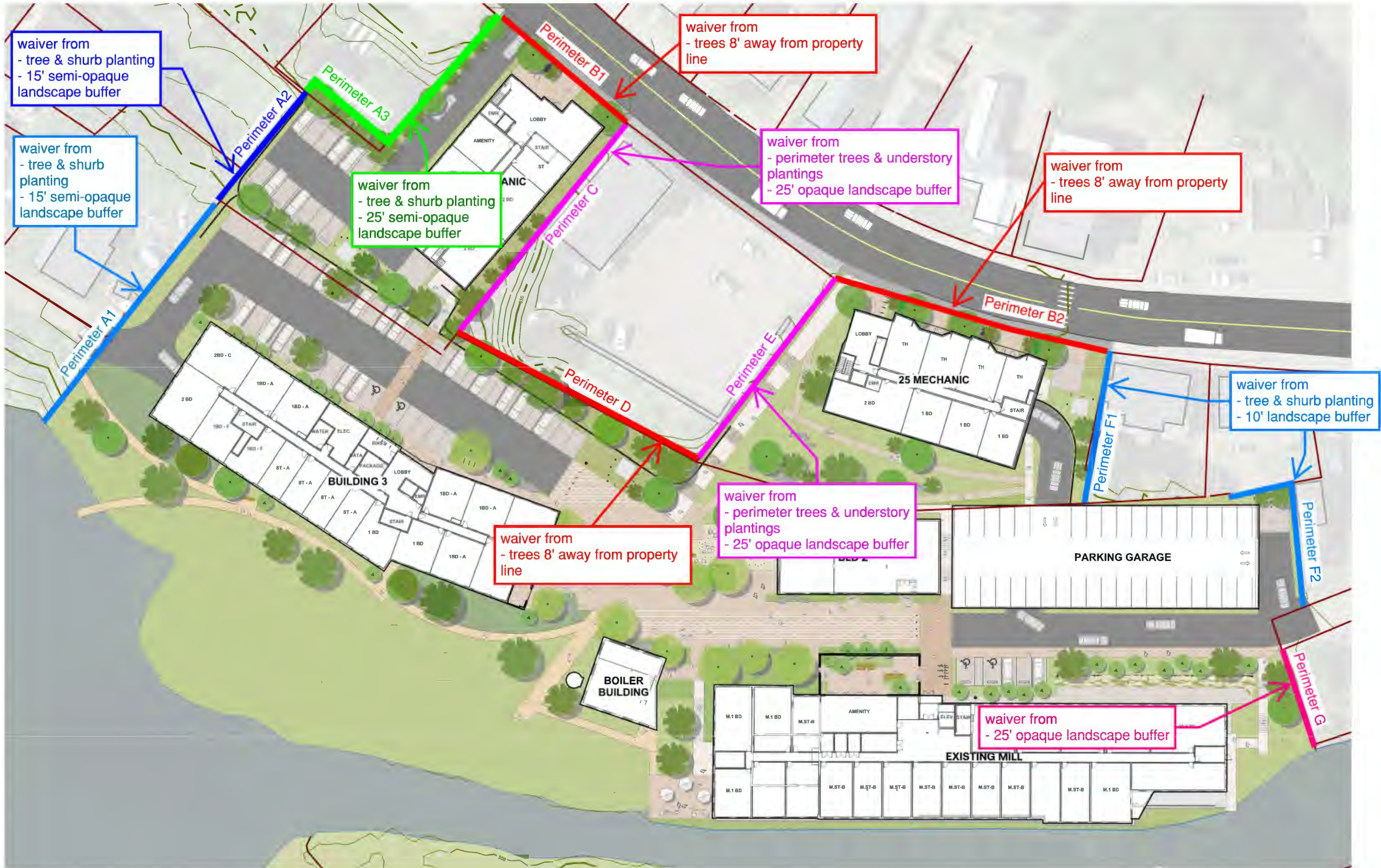
All of the information required by 5.1,E,13 is provided in a separate schedule and not on the lighting plan as stated in the regulation. Due to the number of light types it is difficult to get all of this information on the plan in a legible way.

8. Section ____ of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

SIGNATURE

I (we) hereby submit this application to the Planning Board and attest that to the best of my (our) knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As the applicant or as the agent of the applicant, I attest that I am duly authorized to act in this capacity.

Signature of Applicant:  Date: 09/26/2022



CITY OF LEBANON, NH SITE PLAN REVIEW REGULATIONS TECHNICAL CHECKLIST	
PROJECT NAME: Lebanon Woolen Mill - 1 Foundry Street	
APPLICANT: LWM Residential LLC	DATE: 09/26/2022
GENERAL SUBMISSION REQUIREMENTS:	

All applications to the Planning Board for Site Plan Review must be submitted by 12:00 Noon on the day of the filing cutoff. [§4.7.B] Submissions must be accompanied by the following information or review of the application may be delayed:

A properly completed and signed Application Form (*available at www.lebanonnh.gov*). [§5.1.A]

The appropriate filing fees. [§5.1.B]

A written project description. [§5.1.C]

A list of the names and mailing addresses of all persons to be notified, by certified mail, of the public hearing. [§5.1.D]

A completed and signed Application for Waivers (*available at www.lebanonnh.gov*) [§5.1.G.3]

A completed and signed Technical Checklist (*available at www.lebanonnh.gov*). [§4.7.B]
[Applicants must complete the entire checklist to ensure that all necessary information and materials have been provided with the application or that written requests for waivers have been properly provided in accordance with Article VII of the Site Plan Review Regulations, as appropriate.]

Two (2) full-size sets of the Site Plan set. [§5.1.E]

A digital copy of the Site Plan set in .PDF format. [§5.1.F]

NOTE: Applications shall contain sufficient information to enable the City Staff and the Planning Board to evaluate the proposed development for compliance with the Zoning Ordinance, the Planning Board's Regulations, and other applicable City Codes, and for the Planning Board to make an informed decision.

All required application materials shall be submitted as a single inclusive package, including any appropriate waiver requests as permitted by the Regulations. Submission of a complete application package ensures that the review process by City Staff is as efficient and effective as possible.

The purpose of the filing deadline is to provide adequate time for City review of the proposal. Submission of any altered, additional, or substitute application materials required by Article V of these Regulations, subsequent to the filing deadline, other than as directed by City Staff, shall cause the application to be deemed untimely filed, and such application shall not be heard until a subsequent month.

**CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST**

PLAN SUBMITTAL TECHNICAL CHECKLIST:

NOTE: Site plan drawings shall include the information described below pursuant to Article V of the Lebanon Site Plan Review Regulations. Plans shall be submitted on sheets no larger than 24" x 36". Plan sets with multiple sheets shall include sheets of uniform size and be bound on the left edge. When more than three (3) sheets are required, an additional cover sheet shall be attached including a table of contents. A scale of not smaller than one (1) inch equals 40 feet is suggested. All lettering shall be of a size and type that is legible.

In order to facilitate the use of the City's Geographic Information System (GIS) for planning purposes, all surveys and engineered plans submitted for Site Plan Review shall utilize the NH State Plane Coordinate system and shall reference the North American Vertical Datum of 1988 (NAVD 88), unless prior approval to use an alternate coordinate system and/or vertical datum is granted by the Planning & Development Department.

A written request for waiver shall be required, pursuant to Article VII of the Site Plan Review Regulations, for any submission requirement for which the information or data is not provided by the applicant. [§5.1.G(4)] **NOTE:** The submission requirements described in paragraphs 5.1.E(1) through 5.1.E(4) shall not be waivable under the procedures of Article VII of the Site Plan Review Regulations. [§5.1.E]

[Checklist begins on following page]

CITY OF LEBANON, NH

SITE PLAN REVIEW REGULATIONS

[illegible]

CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST

Plan Requirements (cont.)	Info. Provided	Waiver Sought
<u>5.1.E(6)</u> - Existing and proposed grades, including topographic contours, with spot elevations. Where the grade is less than 20%, the contours shall be at 2-foot intervals; otherwise they shall be at 5-foot intervals. All contours shall be referenced to USGS or FEMA Flood Insurance Rate Map (FIRM) datums, as appropriate. Existing topographic information shall be prepared by a professional engineer registered in New Hampshire or land surveyor licensed in New Hampshire.	☒	☐
<u>5.1.E(7)</u> - Shape, size, height, and location of all existing structures located on site and within 200 feet of site.	☒	☐
<u>5.1.E(7)</u> - Elevation views indicating shape, size, height, and location of all proposed structures, including expansions of or additions to existing buildings. Such elevation views shall provide sufficient detail to allow for review by the Board and City staff of the adequacy of proposed access and egress points, walkways, lighting, and other site-related improvements.	☒	☐
<u>5.1.E(8)</u> - Location of existing natural features such as streams, marshes, lakes, ponds, wetlands, rock outcrops, or wooded areas, and existing man-made features such as roads and structures. Indicate those natural and man-made features that are to be removed, retained, or altered.	☒	☐
<u>5.1.E(8)</u> - Wetlands on the property shall be delineated by a NH Certified Wetlands Scientist, whose seal and signature shall appear on the plan. Documentation in the form of U.S. Army Corps of Engineers New England District Wetlands Delineation Data Sheets and/or other field notes and materials concerning the delineation shall be submitted.	☒	☐
<u>5.1.E(9)</u> - Zoning District, Tax Map and Lot number, and use of abutting properties within 200 feet of property.	☒	☐
<u>5.1.E(9)</u> - Location of streets, pedestrian paths/trails, and bicycle routes within 200 feet of the site boundary; and the location of curb cuts and vehicle accesses within 200 feet of the site boundary.	☒	☐
<u>5.1.E(10)</u> - Proposed streets, driveways, emergency vehicle accesses, parking spaces, and sidewalks, with indication of dimensions and direction of travel. Show required sight distances at curb cuts and dimensions for the inside radii of all curves.	☒	☐
<u>5.1.E(10)</u> - Vehicle and bicycle parking spaces shall be numbered.	☒	☐
<u>5.1.E(10)</u> - Loading spaces and facilities used in connection with any structures on the site shall be shown	☒	☐
<u>5.1.E(10)</u> - Total square footage and percentage of the lot covered by impervious cover shall be shown.	☒	☐
<u>5.1.E(11)</u> - Parking area safety measures including raised crosswalks/speed tables, signage, walkway lighting, striping and similar markings such as dedicated pedestrian/bicycle crossings and lanes through parking areas, fire lanes, compact and/or electric vehicle parking/charging, parking wayfinding, ADA signage and access aisles.	☒	☐
<u>5.1.E(12)</u> - Size and location of all existing and proposed public and private utilities. <i>(Note: the applicant is encouraged to submit a Sewer Use Permit Application and obtain a Notice of Permitted Allocation, and to obtain a Water Use Permit prior to submission of the Site Plan Review application.)</i>	☒	☐

CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST

Plan Requirements (cont.)	Info. Provided	Waiver Sought
<u>5.1.E(13)</u> - Plan for outdoor lighting showing proposed location, mounting height, fixture type, lamp type, color correlated temperature (CCT), and wattage of all exterior free-standing lighting or building-mounted fixtures.	☒	☒
<u>5.1.E(13)</u> - Analyses and illuminance-level diagrams, to include average and minimum foot-candle measurements, showing that proposed installation conforms to the lighting-level standards in Site Plan Review Regulations.	☒	☒
<u>5.1.E(13)</u> - Manufacturer's specification information for each proposed light fixture and lamp (NOTE: This information may be provided on the plan or as a separate attachment).	☒	☐
<u>5.1.E(13)</u> - Drawings of all relevant building elevations showing location and height of all building-mounted fixtures, the portions of any walls or architectural features to be illuminated, illumination levels of walls or architectural features, and aiming points for any remote light fixtures.	☒	☐
<u>5.1.E(14)</u> - Plan for location of free-standing or building-mounted signs, including location, mounting, aiming, and shielding of any remote light fixtures for externally-lit signs.	☒	☐
<u>5.1.E(14)</u> - For internally-lit signs, relevant information concerning the method of illumination and the opacity of the sign background, showing that the proposed installation conforms to the requirements of the Regulations.	NA	☐
<u>5.1.E(15)</u> - The location and boundaries of any Overlay Districts established pursuant to Article IV of the Zoning Ordinance (including but not limited to the Wetlands Conservation District, Riverbank Protection District, Steep Slopes District, and Floodplain District) and, if applicable, protected shorelands pursuant to the Shoreland Water Quality Protection Act (NH RSA 483-B).	☒	☐
<u>5.1.E(15)</u> - For properties located within the Floodplain District, the 100-year flood elevation, floodway, shoreland protection zone, and flood plain limits shall be identified.	☒	☐
<u>5.1.E(16)</u> - Landscaping plan showing proposed new plantings to be installed and existing natural vegetation to be retained. Plan shall show in detail the number, size (height and/or caliper), and species (botanical and common names) of all proposed shrubs and trees.	☒	☒
<u>5.1.E(16)</u> - Existing trees over 12 inches in diameter (measured 4.5 feet above ground surface) within 25 feet of the disturbed area, must be counted and shown on the plan, if included towards fulfilling landscaping requirements.	NA	☐
<u>5.1.E(16)</u> - Calculations for square footage of perimeter landscaping.	☒	☐
<u>5.1.E(16)</u> - Parking lot shading calculations shall be provided by depicting new trees and shrubs at 10-year crown size.	☒	☐
<u>5.1.E(17)</u> - Existing and proposed surface and subsurface storm drainage facilities, including City storm drainage facilities located within 200' of site.	☒	☐
<u>5.1.E(17)</u> - Plans for retention, detention, slow release, and treatment of storm water shall be provided shall be provided in accordance with the requirements of Section 6.6.	☒	☐
<u>5.1.E(18)</u> - Section 6.6. Stormwater Management submission requirements.	See Stormwater Checklist	
<u>5.1.E(19)</u> - Plans for snow removal and storage.	☒	☐

CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST

Plan Requirements (cont.)	Info. Provided	Waiver Sought
5.1.E(20) - A plan for the development showing provisions for automobile, transit, bicyclist, and pedestrian access and circulation. Such plan shall show both existing and proposed means of access to the site including connections with, public streets, sidewalks, transit stops, and formal paths/trails. Plans shall include any traffic calming and traffic control devices necessary in conjunction with the site development, as well as the location of all existing transit routes and transit stops located or passing within 1/4 mile (1,320 feet) of the property.	☒	☐
5.1.E(21) - Construction detail drawings including, but not limited to, pavements, walks, steps, curbing, drainage structures, water and/or sewer utilities, ground-mounted signage (e.g., fire lanes, ADA parking, commercial), surface treatments, transit shelters, energy generation units (e.g., solar), bike rack style, electric vehicle charging, outdoor lighting, outdoor furniture, retaining walls, tree boxes and other site systems or structures. Accompanying specifications and cutsheets may be required.	☒	☐
5.1.E(21) - Where applicable, roadway, drainage, water and sewer utility profile drawings shall be provided at a scale of 1"=40 feet (horizontal) and 1"=4 feet (vertical) and typical cross-section drawings shall be provided at a scale of 1"=5 feet (horizontal and vertical), unless prior approval to use an alternate scale is granted by the Reviewing Engineer. (NOTE: Ordinarily, only two (2) sets of such construction drawings shall be provided to the Planning and Development Department with the application submission.)	☒	☐
5.1.E(22) - Depict any current and proposed easements, rights-of-way, and deed restrictions including those related to sewer, electrical utility, shared access, etc.	☒	☐
5.1.E(23) - For multi-family structures, plans for on-site recreational facilities.	☒	☐
5.1.E(24) - Where a fire, emergency equipment, or similar vehicle turnaround area is provided, it must have an adequate turn radius. Provide CAD Autoturn data or a similar basis of design for the turn radius, if requested by Lebanon Fire or Engineering staff. City staff may also ask for this information at any time.	☒	☐
Supporting Documents and Information, Where Applicable	Info. Provided	Not Applicable
5.1.G(1) - An estimated timetable, to include phasing schedules, for construction and completion of buildings, parking, facilities, landscaping, and other required improvements.	☒	☐
5.1.G(2) - Any development estimated to generate a net increase of 100 peak hour trips or 1,000 average daily trips (based upon the most current edition of the ITE Trip Generation Manual) shall prepare and submit a Traffic Impact Study in accordance with standard traffic analysis conventions as set forth by the NHDOT. The Board may, at its discretion, require the submission of a Traffic Impact Study for developments estimated to generate less than 100 peak hour trips or 1,000 average daily trips if the Board has reason to believe such development could adversely affect levels of service or have other adverse impacts.	☒	☐
5.1.G(3) - Written requests for waivers from all applicable provisions of these Regulations shall be provided pursuant to Article VII - "Waiver Procedure". (note: use <i>Application for Waivers form</i>).	☒	☐
5.1.G(4) - For multi-family dwelling developments and mixed-use developments resulting in a net increase of 50 dwelling units or more, the application shall include the information and impact statements identified in Section 6.9.B.	☒	☐

NOTE: THE APPLICANT IS RESPONSIBLE FOR PROVIDING THE REQUIRED INFORMATION PURSUANT TO ARTICLE V OF THE SITE PLAN REVIEW REGULATIONS. PLEASE BE AWARE THAT THIS CHECKLIST IS FOR INFORMATION AND GUIDANCE ONLY AND DOES NOT REPRESENT THE LAW DICTATING SUBMITTAL REQUIREMENTS NOR IS IT COMPLETE AND INCLUSIVE THEREOF.

Completed By: Engineering Ventures - Nicholas A. Fiore

**CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST**

CITY OF LEBANON, NH STORMWATER REVIEW REGULATIONS TECHNICAL CHECKLIST	
PROJECT NAME: Lebanon Woolen Mill - 1 Foundry Street	
APPLICANT: LWM Residential LLC	DATE: 08/15/2022

NOTE: Stormwater plans shall include the information described below pursuant to Article VI of the Lebanon Site Plan Review Regulations. Plans shall be submitted on sheets no larger than 24" x 36". Plan sets with multiple sheets shall include sheets of uniform size and be bound on the left edge. When more than three (3) sheets are required, an additional cover sheet shall be attached including a table of contents. A scale of not smaller than one (1) inch equals 40 feet is suggested. All lettering shall be of a size and type that is legible.

In order to facilitate the use of the City's Geographic Information System (GIS) for planning purposes, all surveys and engineered plans submitted shall utilize the NH State Plane Coordinate system and shall reference the North American Vertical Datum of 1988 (NAVD 88), unless prior approval to use an alternate coordinate system and/or vertical datum is granted by the Planning Office.

A written request for waiver shall be required, pursuant to Article VII of the Site Plan Review Regulations, for any submission requirement for which the information or data is not provided by the applicant. [§6.6.I]

[Stormwater checklist begins on following page]

[illegible]

CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST

Plan Requirements (cont.)	Info. Provided	Waiver Sought
g. Plan references and notes (including sequence of soil disturbance) h. Proposed and existing public and private utilities i. Proposed project components to become property of or the responsibility of the City shall be labeled as such j. Existing and proposed impervious cover, with areas used to calculate effective impervious cover (EIC, as defined herein) clearly identified and the square footage of each type identified and labeled. k. Test Pit(s) locations and data where stormwater practices are proposed, as appropriate. l. Details of individual design elements shown on separate plan sheets following the Proposed Conditions SMP. The Existing Conditions SMP & the Proposed Conditions SMP shall be provided on sheets no larger than 24" x 36", at a scale of one (1) inch = 20 feet for urban areas, and one (1) inch = 40 feet for non-urban areas. The City Engineer will make the final determination as to the appropriate scale, ensuring that all important site and hydrologic features are easily recognized. If plan shall encompass more than two (2) sheets, at the required 1:40 or 1:20 scale, a separate large scale representation plan sheet (e.g. 1:100) is required to be provided, so as to show entirety of site, as well as off-site contributing areas.	☒ ☒ ☒ ☒ ☒ ☒	☐ ☐ ☐ ☐ ☐ ☐
6.6.C.2 - In addition to the above described SMP plan sheets, the following SMP supplemental information is required: 1. A drainage analysis that includes calculations comparing pre- and post-development stormwater runoff rates (cubic feet per minute) and volumes (cubic feet) based on a 1-inch rainstorm, and the 2-year, 25-year, 50-year, and 100-year, 24-hour frequency storms. Calculations shall include, but not be limited to, the sizing of all structures and BMPs, including sizing of emergency overflow structures based on the 50-year 24-hour frequency storm discharge rate, with 1-foot of free-board. Storm rates shall be based on current design depths from the Northeast Regional Climate Center - http://precip.eas.cornell.edu. <i>Any site that was primarily wooded in the last five years shall be considered undisturbed woods Any site from which wooded vegetation has been removed within 5 years prior to the first submission to the planning board with respect to a proposed development, or upon which, at some earlier time, clearing has occurred in anticipation of development, shall be treated as undisturbed woodland for purposes of calculating pre-development runoff volumes. For purposes of this paragraph any tree cutting which occurred without leaving stands of healthy, growing trees within areas near waters and highways, as required by RSA 227-J:9, I, shall be presumed to have occurred in anticipation of development</i>	☒	☐

**CITY OF LEBANON, NH
SITE PLAN REVIEW REGULATIONS
TECHNICAL CHECKLIST & STORMWATER CHECKLIST**

Plan Requirements (cont.)	Info. Provided	Waiver Sought
2. A drainage analysis results summary tabulated (pre & post) for each proposed outfall or catchment outlet point including runoff rates and volumes for each storm event analyzed above.	☒	☐
3. An Erosion and Sediment Control Plan for all proposed construction activities in accordance with the NH Stormwater Management Manual Volume 3, (December 2008 or current revision; downloadable from the website)	☒	☐
4. A comprehensive Operation and Maintenance Plan for long-term maintenance of all proposed stormwater management elements and BMPs including the proposed schedule of inspections and anticipated maintenance (see section H.2 Operations & Maintenance Plan for detailed requirements).	☒	☐
<u>6.6.D</u> - Phased Development: For phased developments, the plans and calculation requirements under this section (6.6) shall apply as though the development of the entire parcel were being proposed in one single application. The review and approval process for phased development applications is provided in section 4.9 of the Lebanon Site Plan Regulations.	☒	☐

NOTE: THE APPLICANT IS RESPONSIBLE FOR PROVIDING THE REQUIRED INFORMATION PURSUANT TO ARTICLE VI OF THE SITE PLAN REVIEW REGULATIONS. PLEASE BE AWARE THAT THIS CHECKLIST IS FOR INFORMATION AND GUIDANCE ONLY AND DOES NOT REPRESENT THE LAW DICTATING SUBMITTAL REQUIREMENTS NOR IS IT COMPLETE AND INCLUSIVE THEREOF.

Completed By: Engineering Ventures - Nicholas A. Fiore

(Last Revised 9/20/2021)

Planning office Use Only:

Date Received ___/___/___ Checklist Complete YES or NO Checked by: _____

208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • Tel: 802-863-6225
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • Tel: 603-442-9333
414 Union Street, Schenectady, NY 12305 • Tel: 518-630-9614

Date: September 26, 2022

To: Tim Corwin, Senior Planner and Zoning Administrator
City of Lebanon Planning & Development Department

From: Nik Fiore

Re: PB2022-23-SPR
Site Plan Review Application
Lebanon Woolen Mill
Tax Map 91 Lots 263 & 267, Tax Map 106 Lot 34

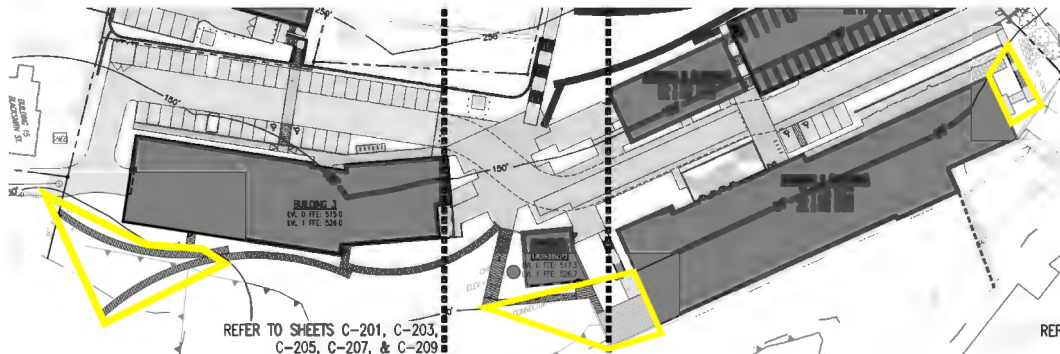
Dear Mr. Corwin,

On behalf of LWM Residential, LLC please find below written responses to comments on the above referenced Site Plans Review application provided by yourself via e-mail on September 13, 14, & 15, 2022. The comments are repeated below and the responses follow each: EV's in red, RODE Architects in blue, and OJB Landscape Architects in green.

From Tim Corwin via email 9/15/2022

General

1. Certain improvements (highlighted in yellow in the image below) are located in the Riverbank Protection District (Section 410 of the Zoning Ordinance). It appears these improvements will require a Variance from the Zoning Board. Per Section 4.4, "When approvals from the Zoning Board of Adjustment (ZBA) are required by the Lebanon Zoning Ordinance, such ZBA approvals shall be obtained before the Site Plan application will be deemed complete by the Planning Board." This is a potentially significant issue in that a) applying to the Zoning Board will delay by the Planning Board's review until at least November and b) Variances are, by their nature, difficult to obtain. Please call me to discuss.



- *EV: EV and Jon discussed this with you on 9/16/22. The left and center highlighted areas are permissible under Zoning Ordinance Section 410.5.I. The right highlighted area has been changed to be in compliance with the same section by minimizing the concrete outside the door and changing the stairs to be elevated and set on piers like the walks.*

2. Compliance with Section 307.6.B.1 of the Zoning Ordinance must be demonstrated. Section 307.6.B.1 requires that, "a minimum of 1,000 square feet or 1/3 of the gross floor area, whichever is less, of the street level story of the building, shall be reserved for a non-residential use or uses, and such combined uses shall have both a depth and width of not less than 20 feet along the secondary street."
 - *RODE: Buildings 25 and 43 Mechanic both have principal frontage along a secondary street and are compliant with the requirements for non-residential GFA in section 307.6.B.1. See sheets AS-1 & AS-3.*
 - a. Alternatively, submit an application for a Conditional Use Permit per Section 307.6.B.2 which provides that the Board may waive the requirements of Section 307.6.B.1 upon demonstration of compliance with the Enhanced Performance Standards set forth in Section 302.4 of the Zoning Ordinance and the criteria set forth in subsections a, b, and c of Section 307.6.B.2. Conditional Use Permit application materials can be found [on-line here](#).
3. The Zoning Table on the Cover Sheet of the plan set indicates that the Building 3's height will exceed the 55 ft. maximum. In order to exceed 55 ft., a Conditional Use Permit from the Planning Board is required per Section 307.8.A. To obtain a CUP, the applicant must demonstrate compliance with the Enhanced Performance Standards set forth in Section 302.4 of the Zoning Ordinance and the criteria set forth in subsections 1, 2, and 3 of Section 307.8.A. Conditional Use Permit application materials can be found [on-line here](#).
 - *EV: The zoning table was in error. Building 3 is 60'-6" tall. A Conditional Use Permit application is included with this response.*
4. Submission of a Conditional Use Permit application (or applications) will require a revision to the hearing notice. Please let us know by no later than **Tuesday, September 20th** how you intend to move forward so that we have time to prepare the revised hearing notice for publication in the Valley News and to mail to abutters. Please note that the applicant will be responsible for the additional notification fees.
 - *EV: Notice of the pending CUP application was provided to Tim Corwin via email on Tuesday, September 20.*
5. Phasing Plan - Sheet 7. The Phasing Plan needs to provide more specific information relative to the following, as set forth in Section 4.9.C.2-4:
 - a. A deadline for the posting of any required security for that phase;
 - b. A deadline for the completion of such improvements subsequent to the posting of such security, and;
 - c. A date by which a Building Permit must be obtained to prevent the approval for that phase from being considered void pursuant to Section 4.10 of these Regulations.
 - *EV: Sheet C-003 of the revised plan set includes this requested information.*
6. **EV** - It appears a waiver or partial waiver may be required from the following requirements of the Site Plan Review Regulations (*please note that the identification of necessary waivers below should not – unless otherwise indicated - be construed as staff's support or endorsement of such waiver requests*).
 - a. 6.2.B.6 – requiring a semi-opaque buffer where abutting a single family use and a 25 ft. wide opaque buffer where abutting a retail use.

- b. Partial waiver of 6.2.D - landscaping around buildings requirements (for example, in front of Building 3)
 - c. 6.2.E.4 – “Any single or double row of parking longer than 100 feet shall be dispersed every 100 feet or less by a landscaped bed that is at least 8 feet by 8 feet, exclusive of curbing
 - d. 6.7.B.2 – “The light intensity at adjoining streets or commercial property boundaries shall not exceed 0.5 foot-candles at grade level[.]”
 - e. Any other Site Plan Review Reg requirements identified in the comments below that remain unaddressed.
- *EV: This submittal package includes a revised Application for Waivers.*
7. Provide an updated Application for Waivers to incorporate any additional required or requested waivers.
- a. Note that the Board must find either Criteria A or Criteria B (as identified on the Application for Waivers) is satisfied in order to grant the waiver. Each waiver request, therefore, should demonstrate how the request meets either Criteria A or B. It is not clear to staff that all of the necessary requested waivers can be justified, and recommends that the applicant try as much as possible to provide as much of the missing information as possible.
- *EV: This submittal package includes a revised Application for Waivers.*
8. **EV** - Provide updated Technical Checklist, as needed, identifying waivers requested.
- *EV: This submittal package includes a revised Technical Checklist.*
9. Please identify how the project complies with Section 6.5.G of the Site Plan Review Regulations (groundwater protection).
- *EV:*
 - *During construction the project will protect groundwater by first developing, implementing, monitoring, and maintaining a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the EPA’s National Pollutant Discharge Elimination System and Construction General Permit (CGP) for stormwater discharges.*
 - *Once construction is complete the project will protect groundwater by routing runoff through the site’s stormwater management systems for treatment to prevent contaminants from leaving the site.*
 - *Domestic wastewater will be connected to the City’s sewer system.*
 - *Floor drains in the garages will be connected to the oil/grit separators and then to the City’s sewer system.*
 - *No domestic or non-domestic wastewater will be discharged to the ground.*
10. Were all holders of easements, rights of way, or other restrictions identified on the abutters list?
- *EV: Yes.*
11. The applicant is encouraged to apply for and obtain sewer and water approvals per Chapters 136 and 182 of the City Code, respectively, as soon as possible. (5.1.E.12)
- *EV: The applicant will submit applications for these approvals in the coming weeks.*

12. Provide a legend for the floor plans. For example, it's not clear what are the "TH" and "ST" abbreviations.

- *RODE: Legend has been provided on all relevant sheets.*

13. Section 6.10 building design standards. Staff is considered with the somewhat monolithic and repetitive window styles (for example, see image below of Building 3).

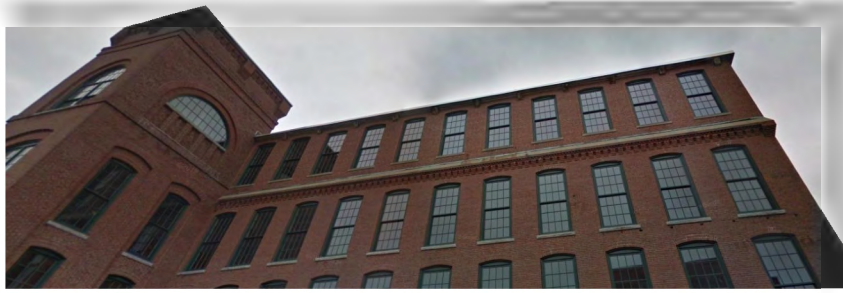
- *RODE: The facade design of Building 3 is a modern residential interpretation of a historic mill building. Using traditional mill vernacular such as masonry, large/repetitive windows, and brick detailing; Building 3 is a nod to both the past and future of the site. Each window has a metal profile surround and soldier brick coursing below it to add detail and break down the scale of the facades. In addition, the windows are grouped together through vertical brick reveals. The masonry facades are capped by a horizontal soldier course and parapet cap - similar to the examples provided below. Refer to the annotations on sheet A-200 Building 3 Elevations.*



- Some variation in the massing, materials, roofline, or similar would help—or detailing like the stone sills or lintels and arched frames around the windows in the mill building across the river or those at 18 and 22 Water St in Claremont; the latter is a great example. Or slightly offset center section like the one shown at 21 Water St., Leb, below.
- *RODE: See response to previous question.*



- With respect to Building 3, another suggestion would be to have a band below the top level like shown here (bands are a very common design element recommended for enhancing/reducing perceived building massing).
- *RODE: See response to previous question.*



Plan Set Comments

1.

General (note: due to a formatting difficulty, there is no Comment 23).

14. Sheet 6 ("Property Exhibit") should note that the remaining plan sheets show the lot lines per the boundary line adjustment and the VLM.

- *EV: Sheet C-002 of the revised plan set includes such a note.*

15. For clarity, the parking garage should be considered and labeled as its own building (which it in fact appears to be), separate from Building 2.

- *EV: The parking garage is now labeled "Parking Garage" throughout the revised plans and document.*

16. For clarify, identify the parking garage as "Building 5", 25 Mechanic Street as "Building 6", and 43 Mechanic Street as "Building 7".

- Update Zoning Tables and Building Programs chart on the Cover Sheet accordingly.
 - Update the Phasing Plan (Sheet 7) accordingly.
 - Update all other plan set labeling accordingly.
- *EV: The revised plans and documents include the following labels: Existing Mill, Building 2, Building 3, Boiler Building, Parking Garage, 25 Mechanic, and 43 Mechanic. This was done because the buildings are called out and referenced in many different places and settling on this convention minimized the required edits and potential of errors. We believe this convention is easy enough to understand and consistency is the key to keeping everything in order.*

17. Check for consistency in building labeling. For example, Building 4 is alternatively referred to as the "boiler building" and "amenity".

- *EV: The revised plans are consistent in this regard.*

18. Please check the plan set before submitting to the Planning Department. The hard copy of the plan set reviewed by staff was missing the 1 Foundry Street survey. And both the hard copy and PDF included two copies each of the site layout sheet. Moreover, there were slight differences between the copies of the site layout (for example, one included travel lane striping and the other didn't).

- *EV: We apologize for the inconvenience. We're not quite sure how that happened.*

19. The plan set is unusually large. Please consider reducing the number of plan sheets or consolidating sheets to eliminate unnecessary or redundant information. For example, please consider removing Sheets 32-37 (the orientation plan and construction plan).

- *OJB: Sheets 32-37 show valuable pedestrian hardscape information. To ensure legibility of both the hardscape and planting sheets, these sheets have been provided for a complete set of drawings.*

20. Notwithstanding the above comment, update plan set to incorporate additional plan sheets sent to staff on 9/2/22, i.e. the lighting plan (as revised per my comments below), updated building elevations (as revised per my comments below), and the sewer and water line plans and profiles (and add Sheet numbers and update the Table of Contents accordingly).

- *EV: The revised plan set includes these sheets.*

21. The plan set must include the following information per Section 5.1.E (or a waiver must be requested):

- d. 5.1.E.7 - requiring the plans to indicate the shape, size, height and location of all buildings within 200 ft of the site
- e. 5.1.E.9 - Requiring the plans to identify:
 - the Zoning District, Tax Map and Lot number, and use of abutting properties within 200 feet of the site boundary;
 - the locations of streets, pedestrian paths/trails, and bicycle routes within 200 feet of the site boundary; and
 - the location of curb cuts and vehicle accesses within 200 feet of the site boundary.
- f. 5.1.E.17 - requiring the plans to depict City storm drainage facilities within 200 ft of the property

Note: staff recommends that the required information is added to the plans in lieu of a waiver request. Notwithstanding staff's comment regarding the size of the plan set, an additional plan sheet may be appropriate to fully and helpfully address the 5.1.E.7, 9, and 17 requirements. For example, consider preparing something along the lines of, but not necessarily identical to, the attached plan sheet that I've labeled "Area Plan Example".

- *EV: Sheets C-002 and C-100 of the revised plan set includes this information.*

22. The plan set must include the following additional information per Section 5.1.E (or a waiver must be requested):

- a. The plan shall indicate those natural and man-made features that are to be removed, retained, or altered (5.1.E.8)
 - *EV: Sheets C-101 and C-102 show the Limits of Demolition. All natural and man-made features within these limits are to be removed.*
- b. Documentation in the form of the U.S. Army Corps of Engineers New England District Wetlands Delineation Data Sheets and/or other field notes and materials concerning the delineation shall be submitted to the Planning and Development Department (5.1.E.8)
 - *EV: The wetland scientist's field notes will be provided.*
- c. Show required sight distances at curb cuts and dimensions for the inside radii of all curves. (5.1.E.10)
- d. Vehicle and bicycle parking spaces shall be numbered (5.1.E.10)
 - *EV: Vehicle spaces are numbered on sheets C-205 and C-206. Bicycle spaces are numbered on sheets C-201 and C-202.*
- e. All information required by 5.1.E.13 for the lighting plan – see additional comments below
 - *EV: This submission includes an updated lighting plan and associated documentation.*

- f. The 100-year flood elevation. (5.1.E.15)
 - *EV: Sheets throughout the revised plan set include the 100-year flood elevation.*
 - g. Plans for snow removal and storage (5.1.E.19 & 6.5.F.2).
 - *Please note that staff recommends this information be provided.*
 - *EV: Some snow storage areas are shown on sheets C-205 and C-206. Snow storage will also occur in many other smaller areas throughout the site. The property will also implement a program to haul snow off site as needed.*
24. Coordinate with DPW to confirm whether the City will take ownership of the hydrants and the water and sewer lines, and clearly identify all improvements and/or utilities or portions thereof proposed to be conveyed to, owned by, and/or maintained by the City of Lebanon, and delineate all easement areas, if needed (5.1.E.22).
 - *EV: Coordination with DPW is ongoing.*
25. Identify more clearly the recreational facilities that have been provided to comply with Section 5.1.E.23 and 6.5.H.1.
Response:
 - *RODE: The proposed project provides extensive interior and exterior recreational facilities for residents. The outdoor plaza between building 3 and the mill is a large open space designed to serve residents recreation and leisure needs. The design of the space allows for a variety of uses. The project also includes two different indoor fitness facilities, a large fitness facility in the existing mill and a smaller fitness facility in the 43 Mechanic St. building. Labels were added to clearly identify recreational facilities in buildings.*
26. All curbing in the LD District must be granite. (6.5.F.1) Please update plan set accordingly and remove concrete curbing detail on Sheet 23 (Site Details).
 - *OJB: Noted and updated.*
 - *EV: Noted and updated.*
27. Demonstrate compliance with weather protections requirements of Section 6.10.B.10.b.
 - *EV: The buildings include canopies and vestibules as indicated in the floor plans and building elevations.*
28. Demonstrate compliance with Section 6.10.B.10.c ("Buildings with ground floor residential uses shall include raised landings, weather protection, stoops, porches, and/or decks, for each lobby or unit accessed from the exterior at the ground-floor level.")
 - *RODE: Street level story is a minimum of 12' floor to floor for all new buildings. See dimensions on sheets A-200, A-201, and A-202.*
29. In the Zoning Tables on the Cover Sheet and/or on the building elevations, identify the height of the street level story for each new building to demonstrate compliance with Section 307.8.C of the Zoning Ordinance which requires a minimum height of 12 feet as measured between finished floors.
 - *RODE: Building heights are identified on elevations. See sheets A-200, A-201, A-202, and A203*
30. Add building heights to all building elevation sheets to demonstrate compliance with the maximum 55 ft. building height requirement (Section 307.2).

- *RODE: Building heights are identified on elevations. See sheets A-200, A-201, A-202, and A203*

31. For the 43 Mechanic Street and 25 Mechanic Street building elevations, calculate the building façade transparency per the minimum transparency requirements set forth in Section 6.10.B.9.b and c.

- *RODE:*
25 Mechanic
 - Upper Stories/Residential: 26% (25% req.)
 - Street Level/Residential: 25% (25% req.)
 - Street level/Non-residential: 64% (50% req.)*43 Mechanic*
 - Upper Stories/Residential 25% (25% req.)
 - Street Level/Non-residential 57% (50% req.)

Cover Sheet

32. The sheet numbers in the table of contents occasionally mismatch the plan sheets. For example, the Site Circulation Plan (1 of 2) is identified as Sheet 16 in the Table of Contents but appears as Sheet 18 in the plan set.

33. Add Grafton County to the title block (5.1.E.4.a)

- *EV: Grafton County is provided on the Cover Sheet under Subject Parcel. This satisfies 5.1.E.4.a.*

34. Building Programs table: add a section for the parking garage (i.e. "Building 5").

- g. Note that the gross square footage of the parking garage is not currently reflected in the Building Programs Table (which is another reason to consider the parking garage its own building separate from the existing Building 2).
- *EV: The revised Building Programs Table now includes separate lines for the parking garage.*

35. Zoning Table for 43 Mechanic St:

- h. For the existing use, identify the number of existing dwelling units
- i. Identify proposed use as "multi-family residential"
- j. The existing height of the mill building (Building 1) is identified as "3"
- k. As required by Section 5.1.E.4.5 (SPR) and Section 607.4 of the Zoning Ordinance, identify the maximum number of permitted parking spaces (see Section 607.3 of the Zoning Ordinance).
- l. In the "Parking Spaces Required" line, change "0 per 607.4" to "Per 607.4" (the minimum isn't 0 – rather, it's determined by the Planning Board through Site Plan Review).
- m. Add Floodplain District and Riverbank Protection District to the City Overlay Districts line
- *EV: The Zoning Table for 43 Mechanic is updated accordingly. Comments j and m are not applicable to 43 Mechanic but are corrections made to the the Zoning Table for 1 Foundry and 25 Mechanic*

36. Zoning Table for 1 Foundry and 25 Mechanic St:

- n. Identify existing commercial uses of each property more specifically
- o. Identify proposed use as "multi-family residential"

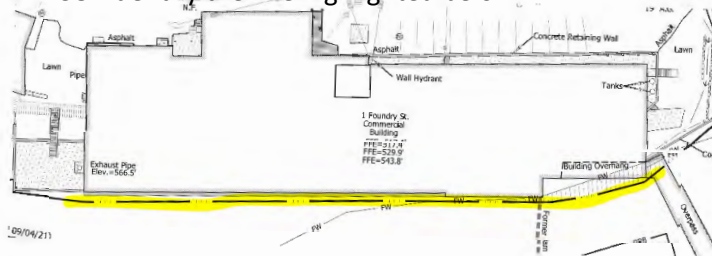
- p. For the proposed lot area, add a note that the properties will be (or have been?) merged and reference the Voluntary Lot Merger application that has been submitted (PB2022-34-VLM)
- q. As required by Section 5.1.E.4.5 (SPR) and Section 607.4 of the Zoning Ordinance, identify the maximum number of permitted parking spaces (see Section 607.3 of the Zoning Ordinance).
- *EV: The Zoning Table for 1 Foundry and 25 Mechanic is updated accordingly.*

37. Identify more specifically the proposed uses of Building 2 (i.e. the accessory building) and Building 4 (i.e. the boiler building or “amenity”).

- *RODE: The proposed use of Building 2 is a mix of tenant and management spaces. The amenity space is envisioned as a coworking/maker space for tenants, the office space is for building management, the back of house spaces is for building management/facilities and the storage is for tenants to store larger items like skis and snowboards. The Boiler Building has been envisioned as a tenant club room with a kitchen, dining area, lounge space, and bathrooms.*

Sheet 2 (1 Foundry Street survey)

38. Identify the line highlighted below:



- *EV: This is the edge of the river and is labeled throughout the revised plans.*

Sheets 8, 9 & 10 (Existing Conditions)

39. Identify location of Riverbank Protection District. (5.1.E.15)

- *EV: Sheets C-100 through C-202 of the revised plans include labels for the Riverbank Protection District.*

40. Identify all buildings/structures/features to be removed and identify pavement to be removed, retained, or altered. (5.1.E.8)

- *EV: Sheets C-101 and C-102 show the Limits of Demolition. All natural and man-made features within these limits are to be removed.*

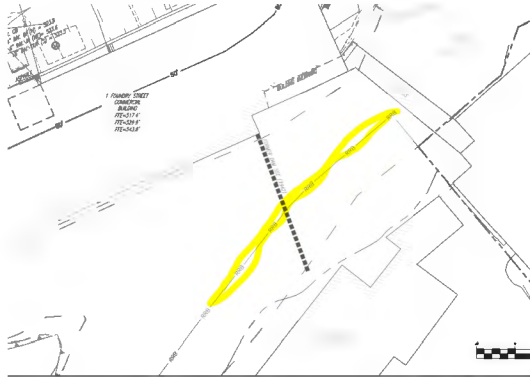
41. Identify the existing vegetation to be removed (5.1.E.8)

- *EV: Sheets C-101 and C-102 show the Limits of Demolition. All natural and man-made features within these limits are to be removed.*

42. Foundry Street is misspelled and is identified as being located on 1 Mechanic Street instead of within the Foundry Street right-of-way. Please correct on the existing conditions plan and throughout the plan set.

- *EV: This is corrected throughout the plan set.*

43. Ensure that all notations are properly identified in the legend or otherwise. For example, what is the line identified as “PRB”?



- *EV: “RRB” = Riparian Rights Boundary. The revised Linetype Legend on sheet C-001 includes this linetype.*

Sheet 12/13 (Site Layout Plan 1)

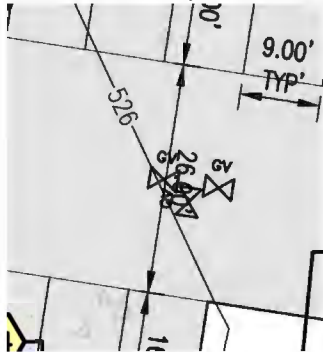
44. As noted above, curbing must be granite per 6.5.F.1. (for example, per the plan, concrete curbing is currently proposed along Mechanic Street)

- *EV: The revised plans call for granite curbing.*

45. Under Site Schedule, note C11 (bike rike) – add “see detail”

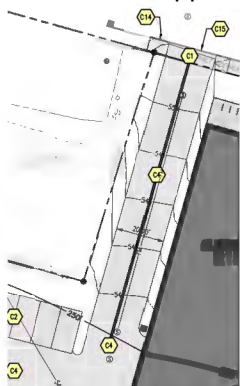
- *EV: Sheets C-201 and C-202 now include “see detail” with call out C11.*

46. It’s very difficult to read the plan in certain areas. For example:



- *EV: We have reviewed the plans and tried to make them easier to read.*

47. This appears to show an orphaned sewer force main at 43 Mechanic St?



- *EV: This line no longer appears on sheets C-201 and C-202.*

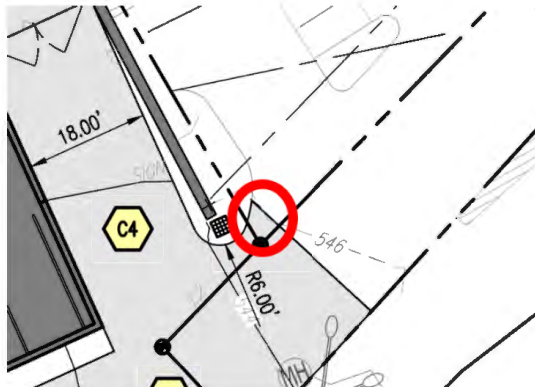
Sheet 14/15 (Site Layout Plan 2)

48. What do the lines highlighted in yellow represent (they are located across 1 Mechanic St)?



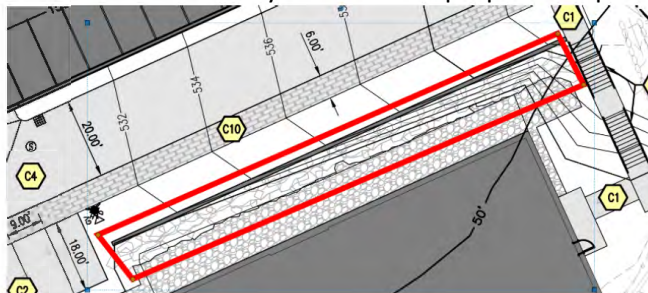
- *EV: The line parallel to the property line is an error and has been removed. The two shorter angled lines are ROW lines as indicated on the 1 Foundry Boundary Survey. The are labeled as ROW lines on EVs C-10# and C-20# sheets.*

49. It appears that a small encroachment into 1 Mechanic Street is proposed. This will require an easement from the 1 Mechanic Street property owner. Please confirm whether the property owner has been contacted to discuss.



- *EV: This encroachment has been removed from the plans.*

50. Please identify what are the proposed improvements for the area highlighted below:



- *OJB: It is proposed to be a stacked stone wall, with plantings integrated. Please refer to detail 02, 03 – L303.*

Sheet 41 (Planting Schedule and Notes)

51. Identify the total number of trees provided for each species.

- *OJB: Tree counts are included in the schedule on sheet L600.*

Sheets 42, 43 & 44 (Planting Plan)

52. Indicate whether the shade trees will meet the requirements of Section 6.2.E.6.b (“Trees at maturity must have a trunk diameter of at least 12 inches, measured 4 feet above the ground surface”)?

- *OJB: Yes, shade trees in the parking area will meet such requirements as seen by selected species shown on schedule sheet L600.*

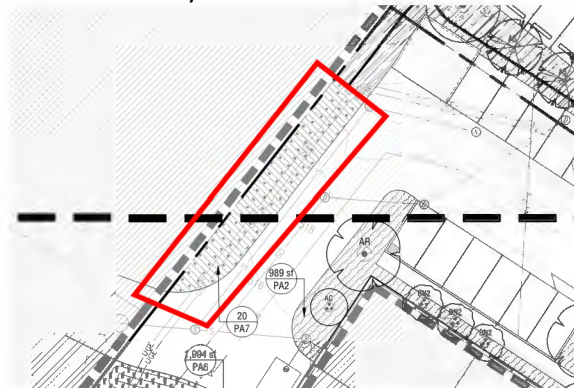
53. Indicate how above-ground utilities (transformers, propane tanks, etc.) will be screened as required by Section 6.2.B.8, and provide details. (“Screens at least 5 feet in width shall be provided for service areas and facilities (such as garbage and waste disposal containers, recycling bins, and loading areas; outside storage areas; and electrical and mechanical equipment, such as transformers and compressors.”)

- *OJB: The transformers are all located within planted areas, with at least 5’ planted buffer to adjacent roadway/walkway. The transformer for 25 Mechanic is pinched by the adjacent site wall and loading zone, and large shrubs are proposed behind the loading zone to provide additional screening. Garbage disposal containers are restricted by space to provide full 5’ on all sides, but will be screened with fences (see detail 9, C-401).*

54. Why are square footages not identified for areas planted with “PA4” and “PA7”?

- *OJB: The no. of proposed plants are indicated for PA4 and PA7, instead of square footages.*

55. Can any trees be added to the area bordering 15 Blacksmith Street?



- *OJB: There were proposed utilities under this area that conflicted with tree root balls. The utility lines have been relocated and trees are provided as shown in sheet L602.*

Sheet ____ (Photometric Plan)

56. The lighting plan must provide all information required by Section 5.1.E.13, i.e.:

- a. mounting height,
- b. fixture type,
- c. lamp type,
- d. color correlated temperature (CCT),
- e. wattage of all exterior free-standing or building-mounted light fixtures,
- f. analyses and illuminance-level diagrams, to include average and minimum foot-candle measurements.

- *RODE: All lighting information has been provided on the lighting plan and supporting documents.*

57. For the 43 Mechanic St and Building 3 surface parking lots, demonstrate compliance with Section 6.7.C.1 which requires parking lots to:
- a. be illuminated so that the average horizontal illuminance at grade level is no more than 5.0 foot-candles; and
 - b. have a uniformity ratio (ratio of average to minimum illuminance) no greater than 4:1.
- *RODE: The revised lighting plan demonstrates compliance.*

58. For the top level of the parking garage and for any unenclosed level of structured parking, demonstrate compliance with the Section 6.7.C.1 standards. (6.7.C.2).

- *RODE: See the lighting plan for the top level of the parking garage. The openings on lower levels of the garages are screened to limit light spill.*

Building Inspector comments:

1. Provide an approved location for the building underdrainage/foundation drainage to discharge.
 - *EV: Sheets C-203 and C-204 show routings for underdrains and footing drains.*
2. Request the sewer drainage from lower level of 1 Mechanic St be captured on the drawings.
 - *EV: We are still trying to find any documentation on this line and will add it to the plans once we have it.*
3. Request the accessible routes be identified on the drawings.
 - *EV: Sheets C-205 and C-206 show the accessible routes.*

DPW Comment:

1. It is requested that the applicant provide a proposed construction schedule, assuming a SPR approval in 2022, such that the City can evaluate and make recommendations as to managing this project construction with concurrent construction projects in the immediate vicinity.
 - *EV: Sheet C-003 shows the anticipated construction schedule.*

RO Comments

Parking

- As discussed during the initial review, lighting in interior spaces is not regulated, however as relates to parking structure lighting, the City's provisions for exterior lighting are encouraged for consideration, including avoidance of light spill, use of cutoff fixtures, appropriate light temperature, etc.
 - *RODE: The design team intends to study the buildings interior lighting for all spaces including parking garages. Lower levels of parking garages have screens to limit spillage.*
- **RODE/ JL** Are there any provisions for off-street parking for electric vehicle charging? The installation of EV charging infrastructure is four to six times less expensive when included during the initial construction phase as opposed to a retrofit. The additional retrofit costs typically include labor expenses for demolition, trenching and boring, balancing the circuits, and new permitting costs. Given the momentum toward widespread EV adoption, the cost to pre-wire new buildings with EV charging infrastructure should be compared to the cost of installing the

same equipment at a later date during a retrofit, rather than the cost of avoiding such equipment altogether (source). The City has draft development regulations with requirements for multifamily dwellings as copied below**. According to the requirements, and based on a review of comparable NH and national examples, this project would need

- o 5% of 207 spaces total = 10.35, rounded up = 11 EVCS (fully equipped) parking spaces min.
- o 20% of 207 spaces total = 41.4, rounded up = 42 EV Ready parking spaces min.
- o 40% of 207 spaces total = 82.8, rounded up = 83 EV Capable parking spaces min.
- o All parking spaces in parking structures would need to be made EV-Capable.

Pedestrian/Bike/Transit

- Could they enhance the sidewalks at 25 and 43 mechanic street by widening them and adding a planting strip between the sidewalk and the road?
 - *EV: There is not enough space to widen the sidewalks towards the building and provide the required street trees. Widening the sidewalk and/or adding a planting strip on the Mechanic St side of the sidewalk is inconsistent with the rest of Mechanic St and would create a hazard for anyone who might ride a bike on that street. The sidewalk design matches the design used by the City when they recently reconstructed the road.*
- Could the internal sidewalk network connect around the west side of building 3 to the riverfront trail that is depicted?
 - *OJB: Those connections are designed to be boardwalks over structure.*
- Can AT shelters be added to both sides of Mechanic St to serve the existing (very busy and soon to be busier) bus stops?
 - *EV: There is currently no space within the Mechanic St ROW for bus shelters.*
- Has carsharing (e.g., Zipcar) been considered as a way to reduce parking needs and traffic, especially given how walkable the location is?
- Bike storage for 196 units total (interior 30% = 60/interior 15% = 30)
 - 1 Foundry and 25 Mechanic: proposed 69/28;
 - 43 Mechanic: proposed 9/8; required
 - The total of 78 interior and 26 exterior bike spaces complies with the interior requirement but is 4 spaces short on the exterior requirement.
 - *EV: There are 36 exterior bike spaces.*
 - Interior Bike rack styles – The proposed product works well for traditional bikes and space efficiency, however the applicant may wish to consider the growing preponderance of e-bikes and their weight (i.e., most are quite heavy and difficult to hang up) and offer some other styles where both bike wheels are on the ground (don't require lifting). This would help reduce resident storage of bikes in apartments (and wear and tear on common facilities like hallway floors and elevators).
 - *RODE: Both wall mounted and floor mounted bike racks will be provided in the project to accommodate a variety of bike types.*
 - The exterior bike racks for 25 Mechanic St are pretty close to the sidewalk. If there is space to narrow that building entrance walkway and then wrap the surface around the

western corner of the building, so that it's still close to the/a main building door, but more out of the way, that might be more secure (that said, if it's too out of the way for visibility and there is not lighting in that spot, that could be a concern itself.)

■ *EV: The design team will further review the location of these racks.*

Heritage

- I appreciate the preservation and inclusion of the smokestack. Has there been assessment and development of a preservation plan, or will there be?
- How has the character of Mechanic Street and the existing structures been taken into consideration in the design of 25 and 43 Mechanic St? From the renderings, the scale and style seems out of sync with the environment.
 - *RODE: 25 & 43 Mechanic St. are a new building typology for this stretch of Mechanic St. Our intent was to design contemporary buildings that utilize familiar building elements found in the surrounding built environment. The inclusion of elements like dormers, pitched roofs, and wood siding on both buildings are referential to their context while still being used in a new contemporary way.*
- What is the plan for the pedestrian bridge connecting the main mill building and 10 Water St? (knowing its structural unsoundness, I assume it will be torn down)
- Will the proposed renovations preserve the exterior architectural and design character of the mill building?
 - *RODE: Yes, the exterior architectural design and character of the mill building will be preserved and celebrated. The existing masonry will be repaired as needed, the added vinyl siding will be removed and replaced with a clapboard siding. Existing windows are in poor condition and will be replaced with replacement windows that closely approximate the original fenestration.*
- Overall, I see the development plans as a positive change, but I do have some concerns about the impact on the Colburn Park historic district -- I believe it is important to keep the pedestrian focus of the district intact. Are any traffic updates or changes that may help mitigate the impact of the additional vehicles on the historic district being discussed?
 - *EV: The traffic analysis submitted for this project discusses the traffic impacts of this project.*

Other

- The renderings show a fence, with vertical landscaping, along the retaining wall for Building 2's surface parking). This is attractive as a way to soften the hardscape and screen parking (and meet related requirements) and hopefully included in the specifications
 - *RODE: Yes, the design intent is to have a metal screen with vertical plantings to soften and screen the garage.*
- The existing mill buildings (and many other examples beyond Lebanon, such as those just renovated in Claremont), have mullions on the windows that support a textured façade and break up space, especially otherwise "blank" looking fenestrations. Have such features been considered for this project's Mechanic St. buildings, or comparable architectural elements that contribute to the project's compatibility with its historic roots and proximity to the downtown historic district? Some of the renderings like on page 3 show mullions but it's not clear if they're proposed and on what buildings.

- *RODE: See building elevations for window design. All windows will have mullions - the mullion design will vary depending on building and use.*
- It does look like they windows are operable for some or most of the units, which would be desirable, though we don't have requirements for such.
 - *RODE: All units will have operable windows in both the living rooms and bedrooms.*
- I did not do the window transparency calcs
 - *RODE: The project is compliant with all transparency requirements. See below:*
 - 25 Mechanic*
 - *Upper Stories/Residential: 26% (25% req.)*
 - *Street Level/Residential: 25% (25% req.)*
 - *Street level/Non-residential: 64% (50% req.)*
 - 43 Mechanic*
 - *Upper Stories/Residential 25% (25% req.)*
 - *Street Level/Non-residential 57% (50% req.)*
- While this would be an extra amenity, since the plazas are public, perhaps it would be valued by residents and visitors to have a few signs explaining the mill history and showing a map of the site vicinity, past and present (including path and transit connections and key points of interest).

Lebanon Fire Department

- An AutoTURN or similar evaluation of the site access shall be conducted using the dimensions of Lebanon Ladder 1 to assist in determining if the proposed access is sufficient. Of particular concern is the southern access off from Blacksmith Street. It is also requested that the drive for Phase 3, 43 Mechanic Street be evaluated as well.
 - *EV: This submission includes AutoTURN exhibits using the Lebanon Ladder 1 truck.*
- Related to the proposed buildings at 25 and 43 Mechanic Street, the location of the overhead utility lines along the street make utilizing the street as the required aerial fire apparatus access road as required by the 2021 IFC Section D105 unlikely. This is due to the fact that it is not safe practice to extend an aerial device over the top of energized electrical lines due to the electrocution hazard. If these buildings are constructed of Type IA, IB, or IIA construction throughout and equipped with an automatic sprinkler system, and have an enclosed stairway with a Class I standpipe to all roof surfaces, the aerial fire apparatus access road is no longer required. If the developer is unable to meet the requirements of the published exception, a waiver request will need to be submitted to the Lebanon Fire Department.
 - *RODE: A waiver request will be submitted to the Lebanon Fire Department.*
- Please provide additional information on the use of the proposed collapsible bollard as shown on Sheet C-402, Detail 4. Due to the existing site constraints and proposed building locations, it does not appear to be feasible to turn around a fire truck. The safest way in and out of the site would be to drive through as it avoids needing to back up the fire truck. Depending on the operation of the proposed bollards, it would be unacceptable for the Lebanon Fire Department to have to get out of the apparatus to lower and raise 9 individual bollards. Per the 2021 IFC, Section 503.6 Security gates. The installation of security gates across a fire apparatus access

road shall be approved by the fire code official. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

- *OJB: The bollard layouts are updated as seen in sheets L101/L102 and reduced to only 2 on each entrance to the road. These bollards primarily serve as traffic control visual cues to other vehicles. The proposed bollards collapse quickly with a fire hydrant wrench for emergency vehicles. Only one bollard will need to be collapsed for a vehicle to pass.*
- The residential buildings proposed for the site will need to be connected to the municipal fire alarm system as they will have automatic fire sprinkler and alarm systems installed. A dedicated 2 inch conduit shall be provided from the utility pole to each residential building. The terminus of the conduit at the building shall be determined by the owner and the Lebanon Fire Department
 - *EV: The design team will incorporate connections to the municipal fire alarm system in the Construction Documents.*
- The Lebanon Fire Department recommends that the traffic calming dip near the northern property line on Foundry Street be removed as it is difficult for our newer fire apparatus to navigate.
 - *EV: This is a stormwater diversion ditch. This project will reconstruct it in a less severe manner.*

Date: 10 August 2022
To: Jon Livadas
From: Erica Wygonik, PhD, PE
Subject: Lebanon Woolen Mill Transportation Impact Study

WCG has prepared a transportation impact study (TIS) for the proposed Lebanon Woolen Mill residential development accessed from Foundry Place, Blacksmith Street, and Mechanic Street in Lebanon, New Hampshire. The proposed project consists of 196 apartments in a mix of studio, 1- and 2-bedroom units across 4 buildings. The project would replace a commercial laundry facility, a dry-cleaning plant and retail facility, and a 3-unit apartment building.

This TIS includes the following analysis:

1. Project Parameters, including a project description and trip generation estimate
2. Existing Roadway Conditions, describing the existing road network and crash history
3. Traffic Projections, including traffic adjustments, trip distribution, and other development volumes
4. Capacity and Warrant Analyses, documenting estimated operating conditions
5. Bicycle, Pedestrian, and Transit Access, evaluating non-motorized access to the site

SUMMARY OF FINDINGS AND RECOMMENDATIONS

- The project includes construction of 196 apartments with a mix of studio, 1- and 2-bedroom units across 4 buildings.
- The project would replace a commercial laundry facility, a dry-cleaning plant and retail facility, and a 3-unit apartment building.
- The proposed site is estimated to generate 19 net new vehicle trips in the AM peak hour and 60 net new vehicle trips in the PM peak hour.
- The planned roundabout at the Mechanic Street/Mascoma Street/High Street will improve safety at that location and at the Mascoma Street & Foundry Street intersection through the overall safety benefits of roundabouts, by clarifying the intersection operations, by improving sight distances at Foundry Street, and by restricting Foundry Street to right-turn in, right-turn out.
- With the roundabout project, all proposed access points meet or exceed required minimum sight distances for safe and efficient vehicle access.
- Traffic modeling scenarios predict that there will be no unreasonable congestion associated with the traffic generated from the proposed project. Minimal changes in delay are projected due to the project, and v/c ratios of not more than 0.80 are projected.

- No significant impacts to the transportation system have been identified, and no mitigation is warranted or recommended.

Based on the analysis conducted for this report, it is our professional judgement that the proposed project will not cause or exacerbate any unreasonable congestion or unsafe conditions on the local roadway network and will not unnecessarily or unreasonably endanger the public's investment in any local roads, highways, or related infrastructure.

1. PROJECT PARAMETERS

The proposed Lebanon Woolen Mill site is illustrated in Figure 1. As detailed in the proposed project schematic design package, the project is proposing 196 apartments in a mix of studio, 1-bedroom, and 2-bedroom units across 4 buildings. Building 1 (49 units) and 25 Mechanic Street (31 units) would access the road network via Foundry Street. Building 3 (89 units) would access the road network via Blacksmith Street, and 43 Mechanic Street (27 units) would access the road network directly onto Mechanic Street. In addition, 214 parking spaces would be provided throughout the development in a combination of garage and surface spaces.

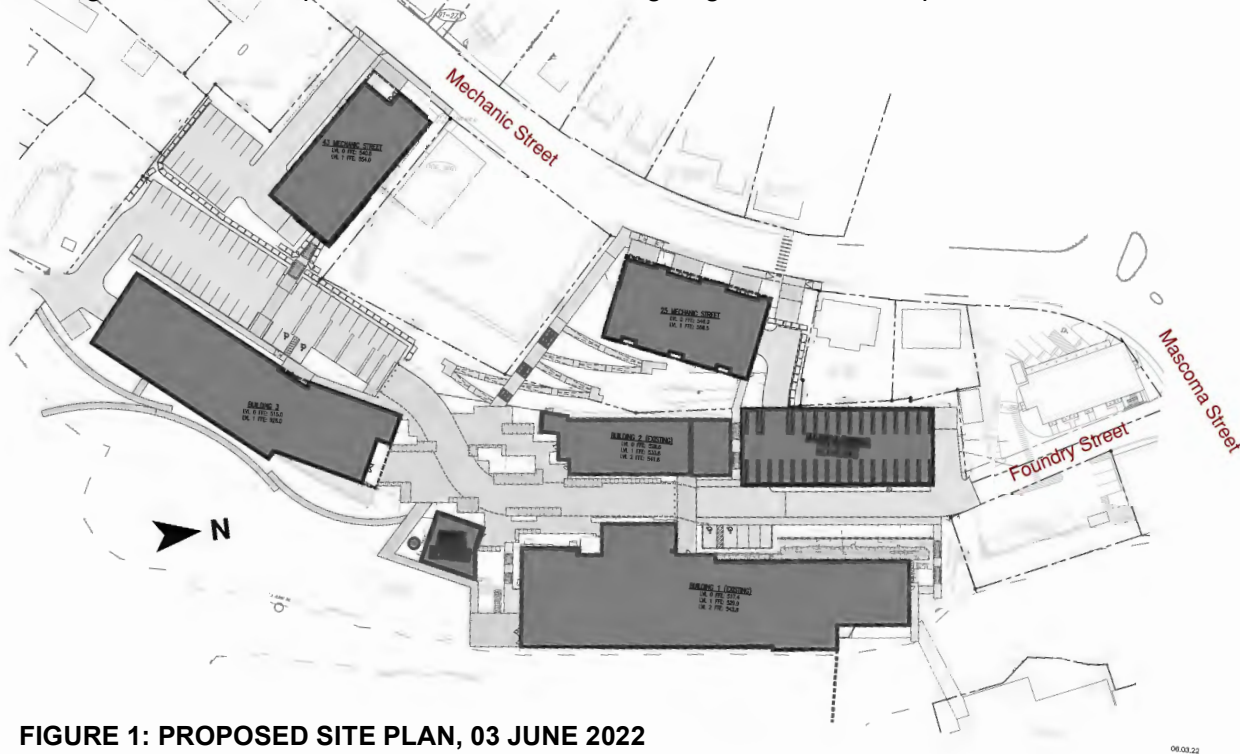


FIGURE 1: PROPOSED SITE PLAN, 03 JUNE 2022

A commercial laundry facility, a dry-cleaning plant and retail storefront, and a 3-unit apartment building are currently on the parcels where the proposed project would be located. The commercial laundry facility and the dry-cleaning plant and retail storefront have been vacant since July 2019. The commercial laundry has access to the road network via both Foundry Street and Blacksmith Street. This through connection would be modified to serve as a pedestrian and fire-access only with the proposed project. The dry-cleaning facility and 3-unit apartment building access directly on to Mechanic Street.

Estimated Trip Generation

Trip generation refers to the number of vehicle trips originating at or destined for a particular land use development. Often, data from the Institute of Transportation Engineers (ITE) can be applied to estimate base vehicle trip generation associated with the former and proposed land uses. Base vehicle trips are the total estimated vehicle trips prior to any reductions associated with internal capture, pass-by, or transportation demand management (TDM) practices.

The potential trip generation of a fully occupied site if the laundry facility and dry-cleaning facility were fully occupied has been estimated using ITE Land Use Code (LUC) 110 – General Light Industrial. LUC 110 is defined as:

A light industrial facility is a free-standing facility devoted to a single use. The facility has an emphasis on activities other than manufacturing and typically has minimal office space.

The ITE Trip Generation Manual, 11th Edition includes trip generation data for several types of multifamily buildings. Land use code (LUC) 220: Multifamily low-rise residential was the most similar to the existing building along Mechanic Street that would be replaced. LUC 220 is defined as:

Low-rise multifamily housing includes apartments, townhouse, and condominiums located with the same building with at least three other dwelling units and that have two or three floors (levels).

The estimated AM and PM peak hour base vehicle trip generation of the fully occupied existing site, including the commercial laundry facility and the dry-cleaning plant and retail establishment, are documented in Table 1.

TABLE 1: ESTIMATED VEHICLE TRIP GENERATION FOR THE FULLY OCCUPIED EXISTING SITE

			AM			PM			Daily
ITE LUC	Description	Size units	Enter	Exit	Total	Enter	Exit	Total	Total
110	General Light Industrial	70 KSF	45	6	51	4	27	31	341
110	General Light Industrial	10 KSF	6	1	7	1	6	7	49
220	Multifamily (low-rise)	3 Units	0	1	1	1	1	2	20
Total Existing			51	8	59	7	33	40	410

The ITE Trip Generation Manual, 11th Edition includes trip generation data for several types of multifamily buildings. Land use code (LUC) 220: Multifamily low-rise residential was the most similar to the buildings proposed for this project. LUC 220 is defined as:

Low-rise multifamily housing includes apartments, townhouse, and condominiums located with the same building with at least three other dwelling units and that have two or three floors (levels).

The resulting estimated AM peak hour, PM peak hour, and average weekday base trip generation of the proposed site is documented in Table 2.

TABLE 2: ESTIMATED BASE VEHICLE TRIP GENERATION OF THE PROPOSED WOOLEN MILL PROJECT

	ITE LUC	Description	Size units	AM			PM			Daily Total
				Enter	Exit	Total	Enter	Exit	Total	
<i>Building 1</i>	220	Multifamily (low-rise)	49 units	5	15	20	16	9	25	409
<i>25 Mechanic</i>	220	Multifamily (low-rise)	31 units	3	9	12	10	6	16	274
<i>Building 3</i>	220	Multifamily (low-rise)	89 units	9	27	36	29	17	45	518
<i>43 Mechanic</i>	220	Multifamily (low-rise)	27 units	3	8	11	9	5	14	236
New Housing Total				19	59	78	63	37	100	1437

The net trip generation of the site – the difference between the proposed new residential trip generation and the existing general industrial and residential trip generation - is summarized in Table 3.

TABLE 3: NET TRIP GENERATION FOR THE PROPOSED WOOLEN MILL PROJECT

	AM			PM			Daily Total
	Enter	Exit	Total	Enter	Exit	Total	
Total Existing	51	8	59	7	33	40	410
New Housing Total	19	59	78	63	37	100	1437
Net difference	-33	52	19	57	4	60	1027

While Table 3 outlines the projected net new external vehicle trips associated with the Woolen Mill project, vehicle trip generation for this location is likely to be reduced due to the proximity (~2,000 feet) of the project to the Lebanon downtown, its services and retail establishments, and its Blue and Red route Advance Transit stop. In addition, the Advance Transit Red Route stops along Mechanic Street within 1,000 feet of the project buildings. These locations are on the sidewalk network. Finally, the project is across Mechanic Street/Mascoma Street from the Mascoma River Greenway, providing protected bicycle and walking access to part of West Lebanon and to the Northern Rail Trail which extends to Boscawen, New Hampshire. All of these multimodal access options are likely to reduce the vehicle trips generated by the proposed project. However, to be conservative, no reduction was made for the values used to conduct the congestion analysis.

While typically 100 new vehicle trips is the threshold for conducting congestion analysis, consultation with City of Lebanon staff indicated a study area which included the site driveways along with key intersections proximate to the proposed project:

- Mechanic Street & Mascoma Street Connector/Slayton Hill Road
- Mechanic Street & Blacksmith Street
- Mechanic Street & Mascoma Street/High Street
- Mascoma Street & Foundry Street
- Mascoma Street & Hanover Street
- Hanover Street/Park Street/Church Street
- Hanover Street & High Street

These intersections relative to the project area are illustrated in Figure 2.

2. EXISTING ROADWAY CONDITIONS

The proposed project is located off Foundry Street, Blacksmith Street, and Mechanic Street in Lebanon, New Hampshire. Figure 2 illustrates the location of the proposed site relative to the local roadway network.



FIGURE 2: PROJECT SITE AND STUDY INTERSECTIONS RELATIVE TO LOCAL ROAD NETWORK

Existing Road Network

Foundry Street, Blacksmith Street, High Street, Slayton Hill Road, and Mascoma Street Extension are local roads with speed limits of 25 mph per city ordinance (City of Lebanon code §168-10). There are no centerline or edge line markings along Foundry Street and Blacksmith Street. Foundry Street is approximately 24 feet wide. Blacksmith Street varies between 24-feet and 30-feet wide. High Street varies in width and is generally at least 30-feet wide, with centerline markings. On-street parking is allowed in select locations along the west side of High

Street, and a sidewalk is present along the west side of the road. Small segments of sidewalk are available along the east side of the road. Slayton Hill Road is approximately 24-feet wide, with a sidewalk along the west side. It has faded centerline markings. Mascoma Street Extension varies in width, with centerline markings as it approaches intersections.

Mascoma Street (west of High Street) is a local road that is generally 26-feet wide with centerline markings and sharrows (shared lane markings for bicycles). It is signed at 30 mph. It has sidewalks on both sides of the road between Alice Peck Day hospital and the intersection with High Street.

Mechanic Street/Mascoma Street (US-4) is a Minor Arterial within the Urban Compact, and thus considered a Tier 5 – Local Road by NHDOT. US-4 is known as Mechanic Street southwest of the Mechanic Street/Mascoma Street/High Street intersection and known as Mascoma Street northeast of the intersection. The NHDOT road layer indicates the AADT is 7,625. Within the study area, US-4 has one 12-foot wide travel lane in each direction, with shoulder widths that vary from 2 feet to 12 feet. There is a sidewalk along the south side of the road from just east of Slayton Hill Road to Jake's Market. Sidewalks are available on the north and south side of the road from the Advance Transit stops at approximately 74 Mechanic Street to the intersection with Hanover Street. The speed limit along US-4 is 30 mph.

Hanover Street (NH-120) is a Minor Arterial within the Urban Compact and is considered a Tier 5 – Local Road by NHDOT. The NHDOT road layer indicates the AADT is 7,625. Within most of the study area, NH-120 has one 16- to 18-foot-wide travel lane in each direction, with shoulder widths that vary from 2 feet to 4 feet. Between its intersection with Mascoma Street (US-4) and Church Street, Hanover Street (NH-120) has two 14-foot travel lanes in each direction. There is a sidewalk along both sides of the road within the study area. The speed limit along Hanover Street (NH-120) is 25 mph.

The Mascoma River Greenway, an existing off-road shared use path, travels through the study area, with at-grade access at the Mascoma Street/Mechanic Street/High Street intersection.

Future Road Network

The City of Lebanon has been working with NHDOT to design and build a roundabout at the existing Mascoma Street/Mechanic Street/High Street intersection. The project is funded and is anticipated to go out to bid in September 2023, with construction during the 2024 season. As part of this project, Foundry Street will be limited to right-turn in/right-turn out access. Given its anticipated timeline, this roundabout project is included in the background of all study scenarios.

Study Intersections

The Study Intersections are illustrated in Figure 2 and include the following:

1. **Hanover Street & High Street.** High Street is stop-controlled at its approach to Hanover Street (NH-120). It has a two-lane approach, with a dedicated left-turn lane and a dedicated right-turn lane.

2. **Mascoma Street & Mascoma Street Extension.** Mascoma Street Extension intersects with Mascoma Street through a tradition 'porkchop' in which the road flares out in a Y shape. The eastbound approach on Mascoma Street is stop-controlled. While the other approaches are uncontrolled, the Mascoma Street Extension approaches function as though they are yield-controlled.
3. **Mechanic Street & Mascoma Street Extension/Slayton Hill Road.** Mascoma Street Extension and Slayton Hill Road are stop-controlled on their approach to Mechanic Street. They are offset by approximately 50 feet. Both approaches are technically one-lane approaches, but there is space for a single right-turning vehicle in the flare.
4. **Mechanic Street & Blacksmith Street.** Blacksmith Street is stop-controlled on its approach to Mechanic Street. It has a single approach lane shared by left- and right-turning vehicles.
5. **Mechanic Street/Mascoma Street/High Street.** Currently, this intersection has non-traditional geometry due to the historic nature of the road alignments. US-4 is uncontrolled. Mascoma Street and High Street are stop-controlled at the point where they intersect. A short segment of road connects these two roads to US-4. That connector (part of Mascoma Street) is controlled by a Yield sign on its approach to US-4. This non-traditional geometry will be replaced by a roundabout with the planned project at this location. The Mascoma River Greenway traverses the intersection.
6. **Mascoma Street & Foundry Street.** Foundry Street is stop-controlled on its approach to Mechanic Street. It has a single approach lane shared by left- and right-turning vehicles. Following the construction of the roundabout at Mechanic Street/Mascoma Street/High Street, Foundry Street will be restricted to right-turn in/right-turn out access.
7. **Mascoma Street & Hanover Street.** Mascoma Street is restricted to right-turn movements at the intersection with Hanover Street. Its approach is controlled by a Yield sign, and a second lane is added on Hanover Street after the intersection which the vehicles from Mascoma Street are received by. Vehicles are permitted to turn both left and right onto Mascoma Street from Hanover Street.
8. **Hanover Street/Park Street/Church Street.** Church Street is stop-controlled at its approach to US-4/NH-120 (Hanover Street to Park Street). Hanover Street has a 2-lane approach, Church Street has a one-lane approach restricted to right-turning vehicles, and Park Street has a 4-lane approach. The Park Street approach includes 2 right-turning slip lanes, one through lane, and one left-turn lane. This intersection has a secondary signalization used to stop vehicles for pedestrians and for emergency use by the firehouse.

Crash History

WCG reviewed reported crashes from January 1, 2017 through December 31, 2021 – the most recent 5 years of available data – within 500 feet of the project access points to the road network. One property-damage only crash was reported at the intersection of Mechanic Street &

Blacksmith Street in 2017. Ten crashes were reported at the intersection of Mechanic Street/Mascoma Street/High Street in the 5-year data set. One of those crashes involved an injury; the rest were property-damage only. The planned project to install a roundabout at the Mechanic Street/Mascoma Street/High Street intersection will improve safety at this location as roundabouts are proven to reduce crash severity, and the roundabout will clarify the intersection function. Table 4 summarizes the crash data.

TABLE 4: CRASH HISTORY

Date	Call Time	Description	Street Number	Street Name	Severity
3/16/2017	1742	MVA Roadway No PI	1	BLACKSMITH	PDO
6/22/2017	1612	MVA Roadway No PI	1	HIGH	PDO
1/20/2021	1611	MVA Roadway No PI	1	HIGH	PDO
8/10/2021	1310	MVA Roadway HitRun	1	HIGH	PDO
4/27/2017	1656	MVA Roadway No PI	1	MECHANIC	PDO
8/25/2017	1615	MVA Roadway No PI	1	MECHANIC	PDO
7/2/2018	1056	MVA Roadway No PI	1	MECHANIC	PDO
9/19/2019	1359	MVA Roadway No PI	1	MECHANIC	PDO
2/7/2020	1559	MVA Roadway No PI	1	MECHANIC	PDO
6/15/2020	1122	MVA Roadway HitRun	1	MECHANIC	PDO
9/14/2021	1156	MVA Roadway W/PI	1	MECHANIC	Injury

Sight Distance

As defined in the 2018 publication *A Policy on Geometric Design of Highways and Streets*, from the American Association of State Highway and Transportation Officials (AASHTO), sight distance is the “the length of roadway ahead that is visible to the driver.”¹ Sight distances of sufficient length are necessary at all points along a roadway to ensure vehicles can safely stop or avoid colliding with potential obstructions or other vehicles on the roadway.

Standard practice in assessing intersection safety and operations involves measuring two separate sight distances – **stopping sight distance** and **intersection sight distance**.

Stopping sight distance (SSD) is the visible distance along a roadway between an advancing motorist and a potential obstacle in the roadway. It is measured from a point representing the approaching driver’s eye and a point representing an obstacle in the roadway.² Stopping sight distances of adequate length are needed along all roadways, both at and away from

¹ American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*, Seventh Edition (Washington D.C.: American Association of State Highway and Transportation Officials, 2018). Page 3-2.

² As noted in the 2018 Policy on Geometric Design of Highways and Streets (page 3-15), the height of the driver’s eye is assumed to be 3.5’ above the road surface and the height of a potential obstacle is 2.0’ above the road surface.

intersections, so that drivers travelling at design speeds can react to potential obstacles and safely brake to avoid collisions. Design minimum stopping sight distances are calculated based on factors such as design speed, response times, and grades as reported in the *2018 Policy on Geometric Design of Highways and Streets*.³

Intersection sight distance (ISD) is the distance available along the major road travelled way corresponding with the maximum visibility between an advancing motorist on the major road and an entering motorist on an intersecting minor road. It is measured between a point representing the advancing driver's eye above the major road and a point representing the entering driver's eye above the intersecting road.⁴

The *2018 Policy on Geometric Design of Highways and Streets* states that the available intersection sight distance should be at least equal to the required stopping sight distance along the major road.

"Sight distance is also provided at intersections to allow the drivers of stopped vehicles a sufficient view of the intersecting highway to decide when to enter the intersecting highway or to cross it. If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions."

However, when possible, it is desirable to have intersection sight distances that exceed the design minimum stopping sight distances to offer improved operations, such that major road traffic need not decelerate to accommodate entering traffic.

"However, in some cases a major-road vehicle may need to stop or slow to accommodate the maneuver by a minor road vehicle. To enhance traffic operations, intersection sight distances that exceed stopping sight distances are desirable along the major road."

Based on an assumed 30-mph operating speed, the design target intersection sight distance for turning traffic along Mechanic Street at Blacksmith Street and at 43 Mechanic Street is 290 feet to the left and 335 feet to the right. The design minimum stopping sight distance is 200 feet.

While US-4 is posted at 30-mph, the roundabout design will include approach curves that limit travel speeds to less than 25 miles per hour (Figure 3). With 25 mph as the operating speed for the eastbound approach to the Foundry Street approach along Mascoma Street, the design target intersection sight distance for right-turning traffic at Foundry Street is 240 feet to the left.

³ American Association of State Highway and Transportation Officials, *A Policy on Geometric Design of Highways and Streets*, Seventh Edition (Washington D.C.: American Association of State Highway and Transportation Officials, 2018). Page 3-5 to 3-6.

⁴ As noted in the *2018 Policy on Geometric Design of Highways and Streets* (page 3-16), the height of the driver's eye of the approaching vehicle is assumed to be 3.5' above the road surface of the major road and the height of the driver's eye of the entering vehicle is assumed to be 3.5' above the minor road surface. The decision point offset from the travel way varies with sight conditions (page 9-38); in this case we assume the decision point is 15-feet from the travel way.

The design minimum stopping sight distance is 155 feet. As the westbound approach travel speed is unaffected by the roundabout design, a 30-mph operating speed applies, and the design minimum stopping sight distance is 200 feet.

Intersection and stopping sight distances were measured at the proposed site access points. These sight distances are shown in the following figures, and the measured intersection and stopping sight distances are presented in the accompanying tables.

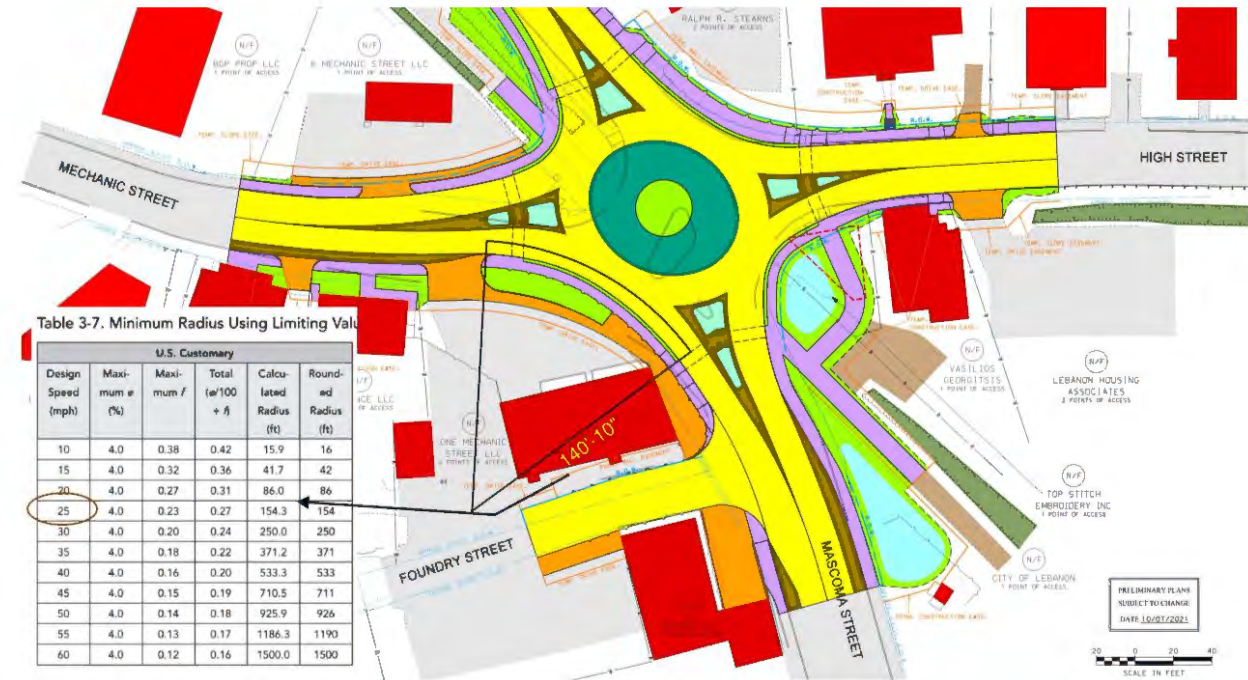


FIGURE 3: TRAVEL SPEED AT THE PLANNED ROUNDABOUT, BASED ON APPROACH RADIUS



FIGURE 4: DRIVER'S PERSPECTIVE 15-FOOT FROM THE EDGE OF TRAVEL WAY AT BLACKSMITH STREET TO THE WEST (LEFT) AND EAST (RIGHT)

TABLE 5: MEASURED SSD AND ISD AT THE BLACKSMITH STREET APPROACH

	<i>Stopping Sight Distance</i>		<i>Intersection Sight Distance</i>	
	Eastbound	Westbound	Left (to west)	Right (to east)
<i>Required Minimum</i>	200'	200'	200'	200'
<i>Design Target</i>	-	-	290'	335'
<i>Measured</i>	>400'	>400'	>400'	>400'



FIGURE 5: DRIVER'S PERSPECTIVE 15-FEET FROM THE EDGE OF TRAVEL WAY AT FOUNDRY STREET TO THE WEST (LEFT) AND EAST (RIGHT)

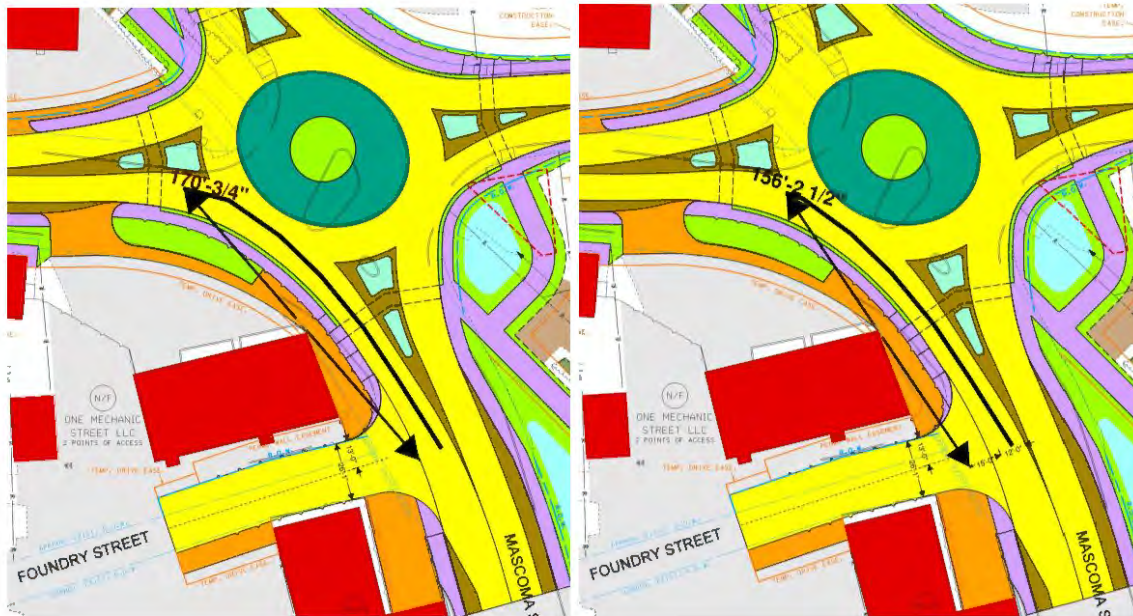


FIGURE 6: DESIGNED STOPPING SIGHT DISTANCE (LEFT) AND INTERSECTION SIGHT DISTANCE (RIGHT) TO/FROM THE WEST AT FOUNDRY STREET WITH THE PLANNED ROUNDABOUT

TABLE 6: MEASURED AND DESIGN SSD AND ISD AT THE FOUNDRY STREET APPROACH

	<i>Stopping Sight Distance</i>		<i>Intersection Sight Distance</i>
	Eastbound	Westbound	Left (to west)
<i>Required Minimum</i>	155'	200'	155'
<i>Design Target</i>	-	-	240'
Measured	135'	>400'	125'
Designed	170'		155'


FIGURE 7: DRIVER'S PERSPECTIVE LOOKING AT 43 MECHANIC STREET ALONG THE TRAVELED WAY FROM THE WEST (LEFT) AND EAST (RIGHT)
TABLE 7: MEASURED SSD AND ISD AT THE 43 MECHANIC STREET APPROACH

	<i>Stopping Sight Distance</i>		<i>Intersection Sight Distance</i>	
	Eastbound	Westbound	Left (to west)	Right (to east)
<i>Required Minimum</i>	200'	200'	200'	200'
<i>Design Target</i>	-	-	335'	390'
Measured	>400'	>400'	>400'	>400'

Sight distances for all measurements exceeded required minimums and design targets, except at the eastbound approach to Foundry Street and Foundry Street looking west. The existing geometry limits sight distances to below required minimums. However, the planned roundabout project will improve sight lines to meet the required minimums.

3. TRAFFIC PROJECTIONS

This study relies upon design standards and analysis procedures documented in the Highway Capacity Manual 6th Edition,⁵ Trip Generation,⁶ A Policy on Geometric Design of Highways and Streets,⁷ Manual on Uniform Traffic Control Devices (MUTCD),⁸ the NHDOT Driveway Policy,⁹ and the Synchro Inputs Checklist,¹⁰ which are the generally accepted traffic analysis references relied upon by traffic engineering professionals and NHDOT for projects of this type in New Hampshire.

Traffic Counts

Turning movement counts were conducted at each of the study intersections for the AM and PM peak hour. The Mascoma Street (US-4) & Hanover Street (NH-120) and Hanover Street/Park Street/Church Street counts were conducted on Thursday, 5 May 2022. The other counts were conducted on Tuesday, 3 May 2022. All counts were conducted during good weather when local schools were in session.

Adjustments to Observed Volumes

WCG applied the following adjustments to the observed traffic volumes:

1. **Seasonal Adjustment.** The seasonal adjustment is based on the continuous count data (CTC) for Group 4 – Urban Highways. NHDOT has provided monthly adjustment factors through 2019 for the group 4 counters. The seasonal adjustment to peak month conditions is 1.03 for counts in May.
2. **COVID Adjustment.** The Group 4 – Urban Highway counters were examined to determine what, if any, adjustments for COVID impacts should be applied. The data from the Group 4 CTCs for the dates of the counts and for corresponding dates in 2019 (7 May 2019; 9 May 2019) were gathered. The resulting adjustment for the Tuesday counts was 1.08%; the resulting adjustment for the Thursday counts was 1.03%. Details are available in the Attachments.

⁵ Transportation Research Board, National Research Council, *Highway Capacity Manual* (Washington, DC: National Academy of Sciences, 2016).

⁶ Institute of Transportation Engineers, *Trip Generation* 11th Edition (Washington, D.C.: Institute of Transportation Engineers, 2021).

⁷ American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 7th Edition (Washington DC: AASHTO, 2018).

⁸ American Traffic Safety Services Association (ATSSA), ITE, and AASHTO, *Manual on Uniform Traffic Control Devices*, 2009 Edition (Washington DC: FHWA, 2009).

⁹ New Hampshire Department of Transportation, Bureau of Highway Maintenance, *Driveway Policy* (1 March 2000).

¹⁰ New Hampshire Department of Transportation, Bureau of Traffic, *Synchro Inputs Checklist* (August 2021).

- 3. Annual Traffic Growth.** The annual background growth rate for Region C is estimated to be 0.73%. To be conservative, this value was rounded up to 1% per year. This annual growth rate was applied to the adjusted 2022 volumes to represent the 2025 build year and 2035 future year (build + 10 years) scenario volumes.

The total adjustments to 2025 COVID-adjusted peak month conditions was 1.11 for counts on Tuesday 7 May 2022 and 1.15 for counts on Thursday 9 May 2022. The adjusted traffic volumes were balanced.

Other Development Volumes

WCG consulted with the City of Lebanon to identify planned and permitted but not yet constructed projects that may generate trips through the study area. Three projects were identified:

- **Village Marketplace.** Construction of 152 residential units at the existing Village Marketplace is permitted but not yet under construction.
- **Bank Street Apartments.** A net increase of 26 residential units of housing along Bank Street just east of the Green have been permitted but not yet built.
- **Mechanic Street/Mascoma Street/High Street Roundabout.** Construction of a roundabout at this intersection is planned for 2024. No new trips are associated with the project, but the roundabout will change some travel patterns and cause rerouting for vehicles leaving Foundry Street who currently enter or exit via left turns.

In addition, the existing site of the proposed project is underutilized. To understand the impacts of a fully occupied site, the traffic from this facility was included in the background. The estimated trip generation from land use permitting documents were added and distributed through the study intersections. The total cumulative trip generation and distribution for these other development traffic volumes is illustrated in Figure 8.

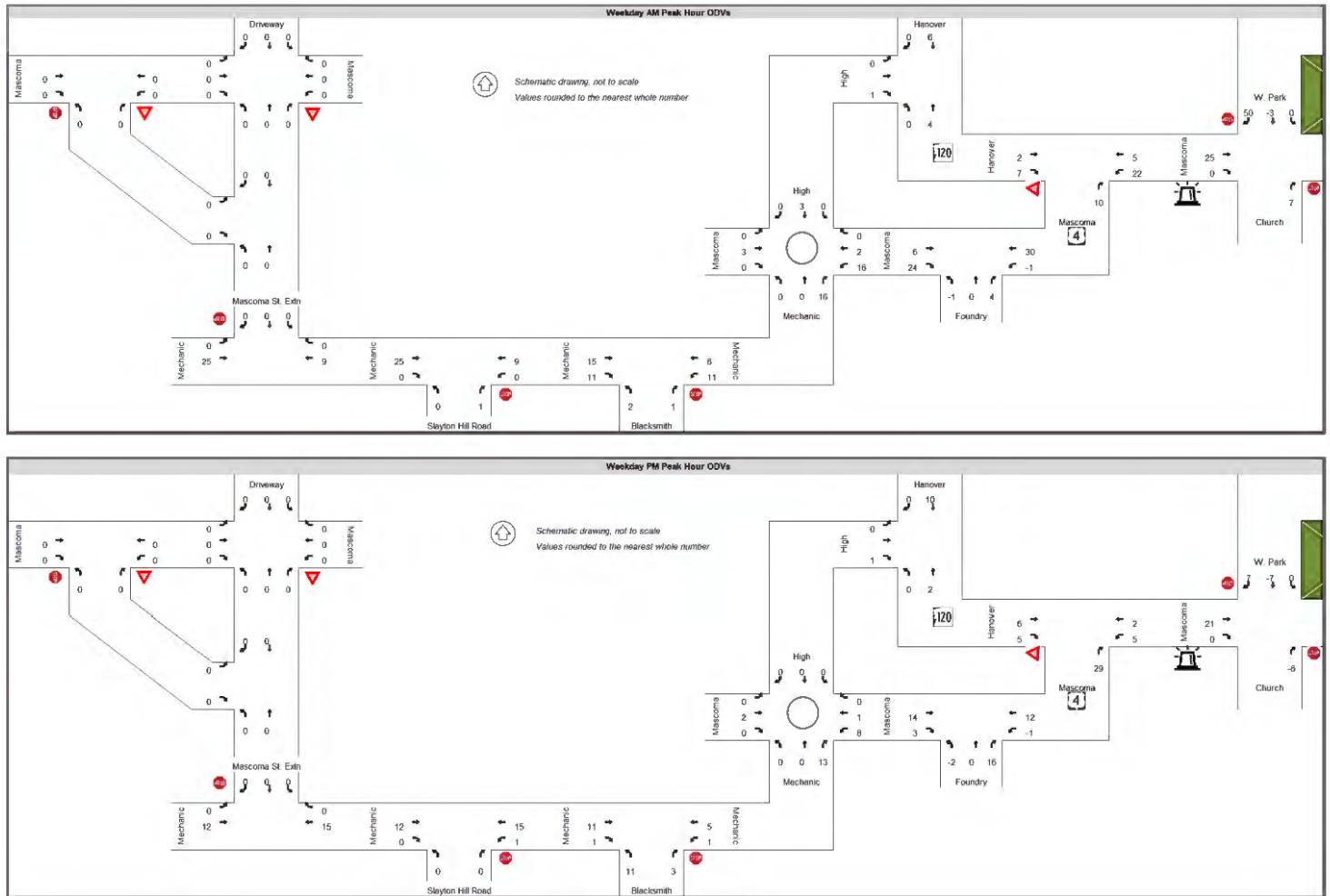


FIGURE 8: ESTIMATED TRIP GENERATION RESULTING FROM OTHER DEVELOPMENTS IN THE AM (TOP) AND PM (BOTTOM) PEAK HOURS

No Build Scenario Volumes

The 2025 and 2035 adjusted and balanced turning movement volumes, with other development volumes are presented in Figure 9 and Figure 10. These figures represent the No Build scenario volumes.

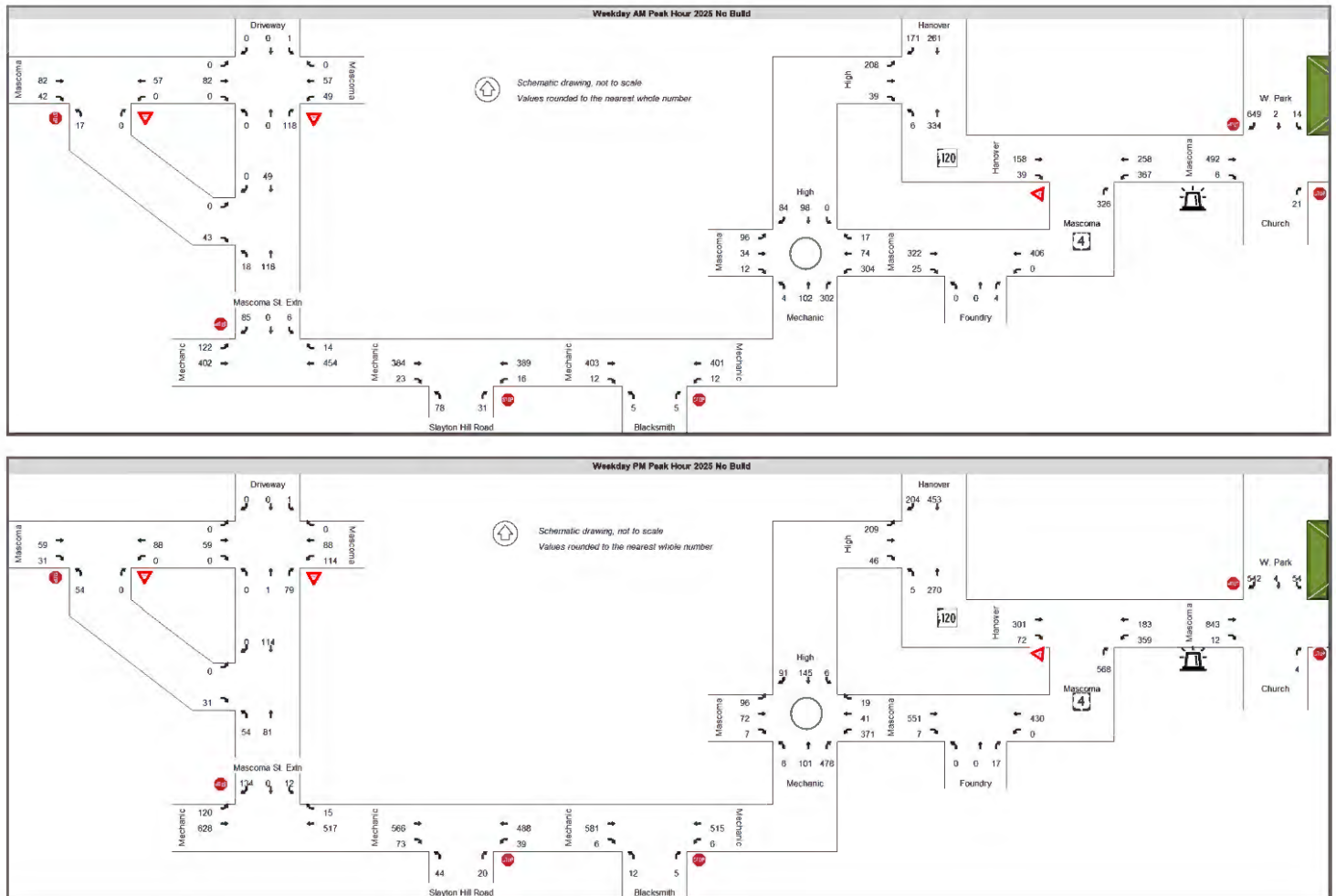


FIGURE 9: 2025 NO BUILD SCENARIO VOLUMES FOR THE AM (TOP) AND PM (BOTTOM) PEAK HOURS

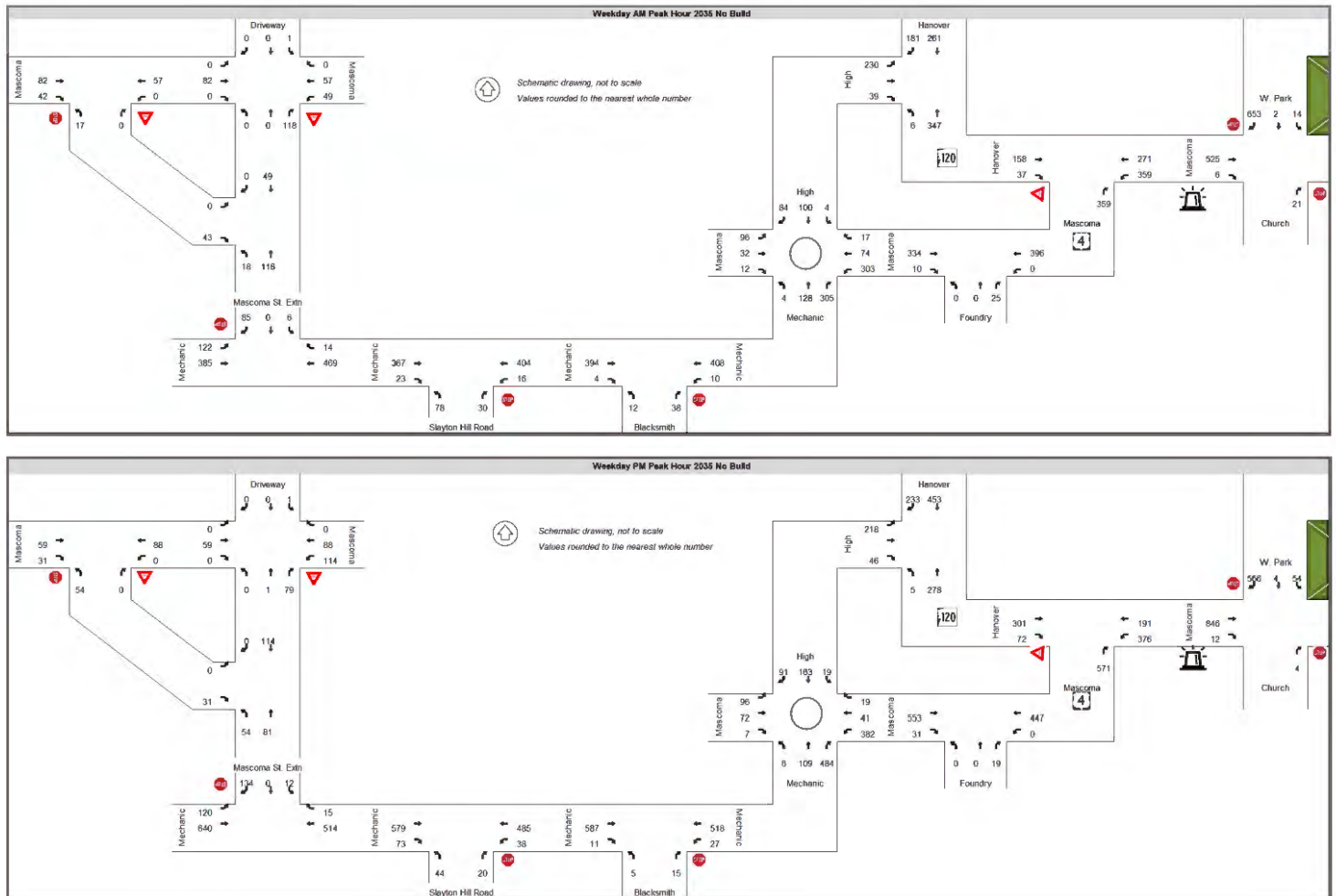


FIGURE 10: 2035 NO BUILD SCENARIO VOLUMES FOR THE AM (TOP) AND PM (BOTTOM) PEAK HOURS

Project Trip Generation and Distribution

WCG consulted the US Census Bureau OnTheMap (OTM) platform to analyze home-to-work census block data centered on the project site as a proxy for travel demand for the proposed apartments. Home-to-work analysis of the project site describes where people work who live within ¼ mile of the project site. This information is used to estimate the distance and direction of employment centers relative to the project site. The resulting analysis informs residential traffic demand distribution.

The OTM Distance / Direction Report indicates the relative location of jobs or homes from the project site in the eight cardinal and ordinal directions. The demand to each of these directions is applied to the following primary route:

- To / from the southwest and west is assumed to be served by US-4 / Mechanic Street to I-89 (23%),
- To / from the northwest and north, is assumed to be served by Hanover Street / NH-120 (52%),
- To / from the northeast, east, and southeast is assumed to be served by US-4 / Bank Street to I-89 (21%), and
- To / from the south is assumed to be served by School Street / NH-120 (3%).

These OnTheMap distributions were applied to the existing and proposed estimated trip generation, and the trips were routed appropriately through the network to estimate associated turning movement volumes for each. The total net site trip generation from Table 3 are distributed and illustrated in Figure 11. The OTM Distance / Direction Report for the home-to-work analysis is available in the Attachments.

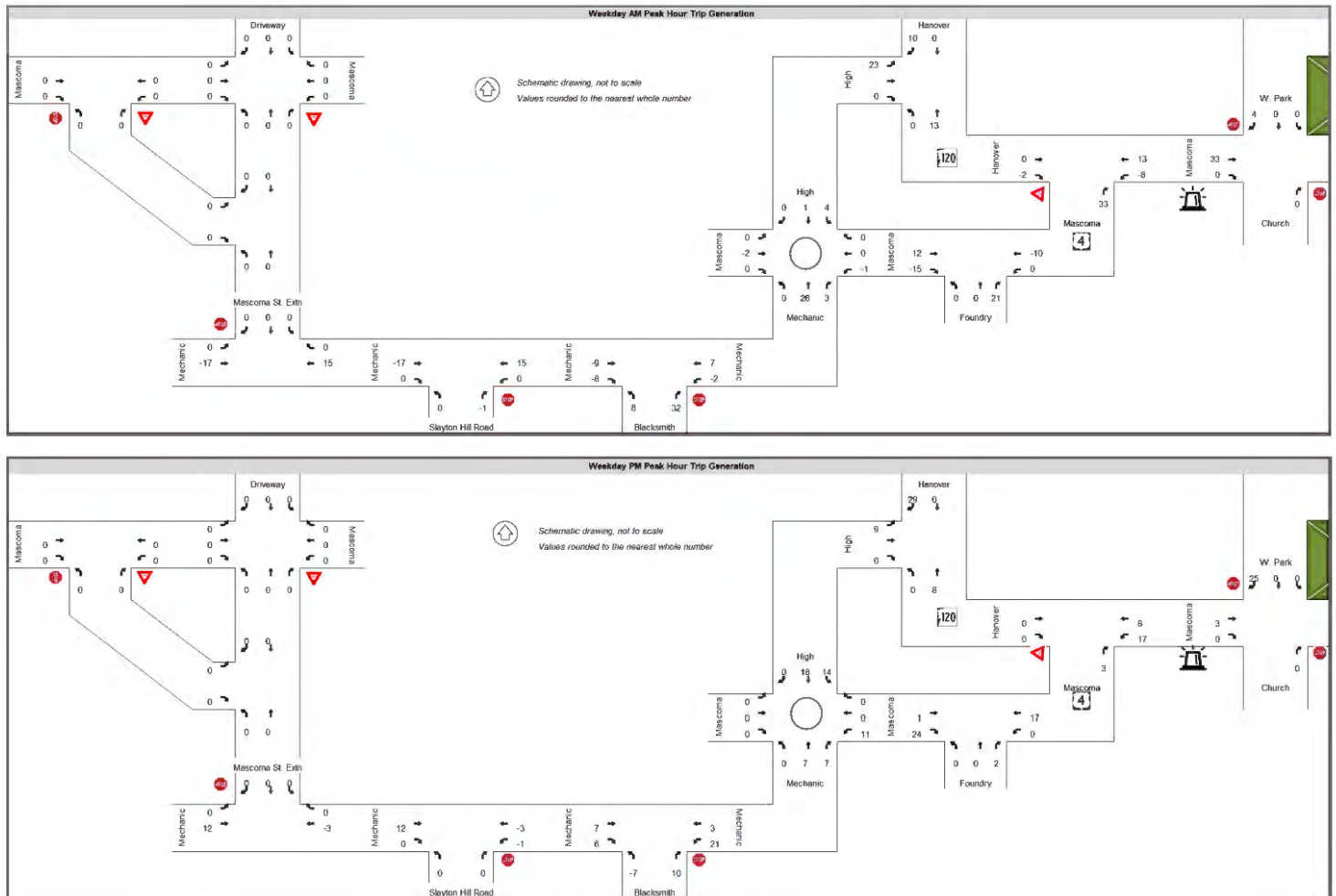


FIGURE 11: DISTRIBUTION OF THE ESTIMATED TRIP GENERATION FROM THE PROPOSED DEVELOPMENT IN THE AM (TOP) AND PM (BOTTOM) PEAK HOURS

Build Scenario Volumes

The 2025 and 2035 Build Scenario volumes were estimated by adding the trip generation and distribution figures to the No Build peak hour turning movement volumes. The resulting Build scenario volumes are illustrated in Figure 12 and Figure 13.

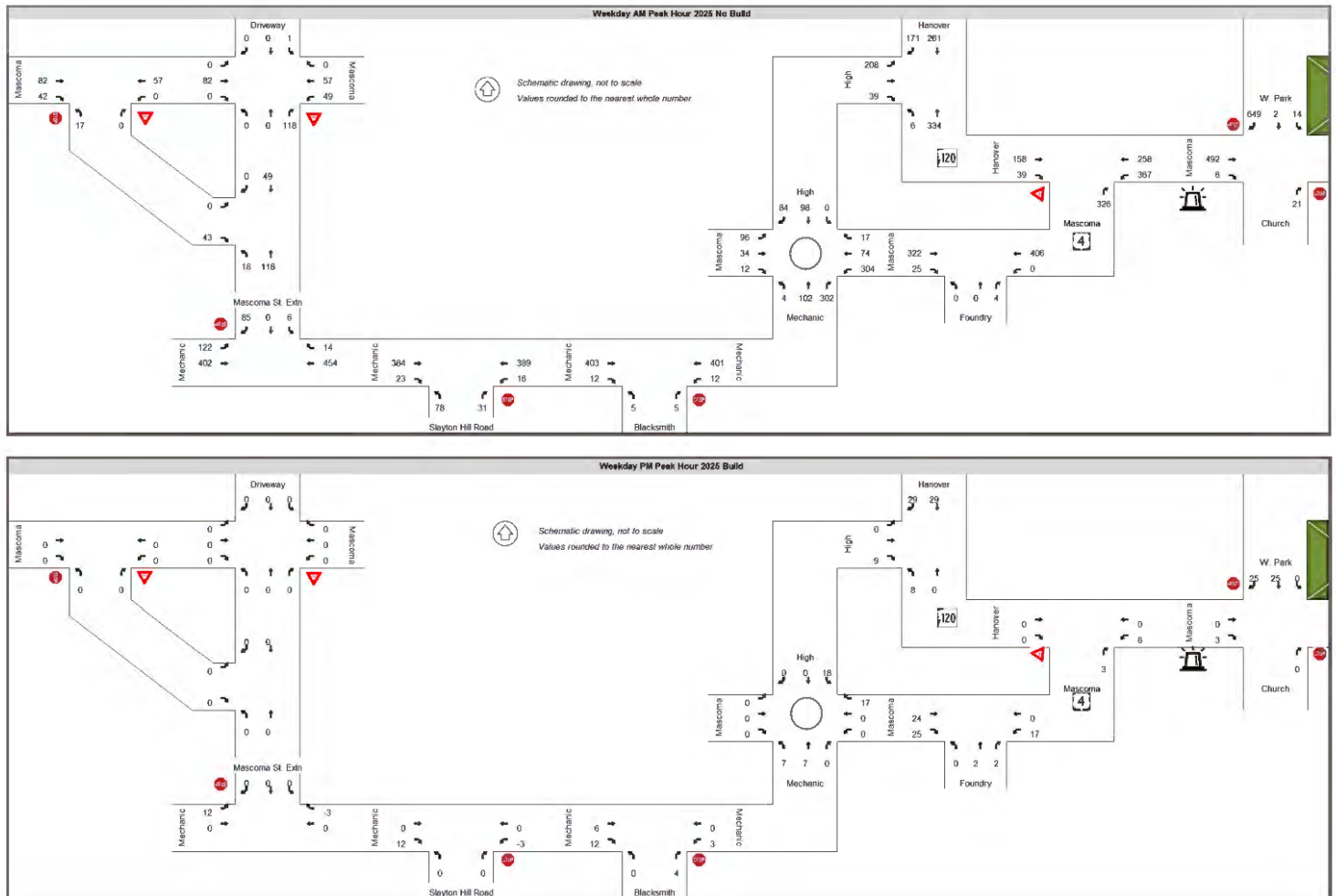


FIGURE 12: 2025 BUILD SCENARIO VOLUMES FOR THE AM (TOP) AND PM (BOTTOM) PEAK HOURS

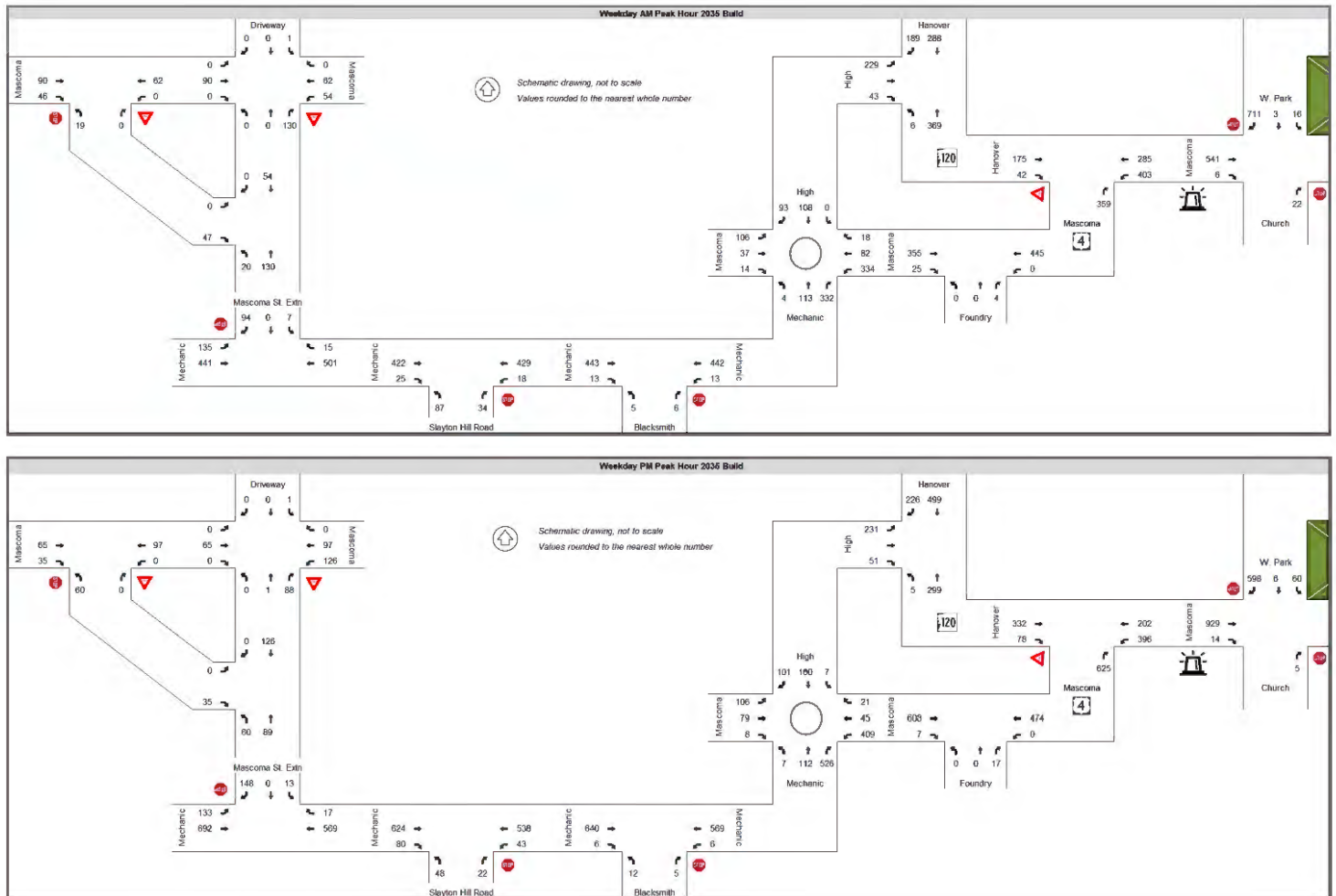


FIGURE 13: 2035 BUILD SCENARIO VOLUMES FOR THE AM (TOP) AND PM (BOTTOM) PEAK HOURS

4. CAPACITY AND WARRANT ANALYSES

Intersection capacity analyses were performed for the study area intersections. Analyses evaluated average control delay, Level-of-service (LOS), and volume to capacity (v/c) ratios, consistent with methodologies documented in the Highway Capacity Manual.

Level-of-Service Definition

Level-of-service (LOS) is a qualitative measure describing the operating conditions as perceived by motorists driving in a traffic stream. LOS is calculated using the procedures outlined in the Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis¹¹ (HCM6). In addition to traffic volumes, key inputs include the number of lanes at each intersection, traffic control type (signalized or unsignalized), and the traffic signal timing plans, if applicable.

The HCM6 defines six qualitative grades to describe the level of service at an intersection. Level-of-service is based on the average control delay per vehicle. Table 8 shows the various LOS grades and descriptions for unsignalized intersections.

TABLE 8: LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

LOS	CHARACTERISTICS	UNSIGNALIZED TOTAL DELAY (SEC)
A	Little or no delay	≤ 10.0
B	Short delays	10.1-15.0
C	Average delays	15.1-25.0
D	Long delays	25.1-35.0
E	Very long delays	35.1-50.0
F	Extreme delays	> 50.0

According to HCM procedures, an overall LOS cannot be calculated for two-way stop-controlled intersections because not all movements experience delay. In signalized, roundabouts, and all-way stop-controlled intersections, all movements experience delay and an overall LOS can be calculated.

¹¹ The HCM6 does not provide methodologies for calculating intersection delays at certain intersection types including signalized intersections with exclusive pedestrian phases and signalized intersections with non NEMA-standard phasing. Because of these limitations, HCM 2000 and HCM 2010 methodologies are employed where necessary and as noted.

Volume to Capacity Ratio Definition

The volume to capacity ratio (v/c) represents the sufficiency of an approach leg to accommodate the vehicular demand. According to FHWA:

“As the v/c ratio approaches 1.0, traffic flow may become unstable, and delay and queuing conditions may occur. Once the demand exceeds the capacity (a v/c ratio greater than 1.0), traffic flow is unstable and excessive delay and queuing is expected.”¹²

The v/c ratio is an alternative indicator of performance, with preferred values below 0.95.

Traffic Modeling Scenarios

WCG built a traffic model using Synchro version 11 for the 2025 and 2035 adjusted intersection volumes for the AM and PM peak hours in the No Build and Build scenarios. The resulting performance measures are presented in Table 9 and Table 10. Output reports are available in the Attachments.

The results of the traffic modeling scenarios indicate that the proposed development will not cause notable impacts at any location. Other than the High Street approach to Hanover Street and the Slayton Hill Road approach to Mechanic Street, all intersections and approaches operate at LOS C or better conditions. The High Street approach to Hanover Street is projected to have an increase in delay of not more than 7 seconds associated with the proposed project. The Slayton Hill Road approach to Mechanic Street is projected to have an increase in delay of not more than one second. Both of these locations have longer delays due to their background traffic levels. While these two approaches operate at LOS D or LOS E in some scenarios, the v/c ratios do not exceed 0.80, indicating that a reduced LOS can be acceptable in this downtown location.

All other intersections and individual approaches meet or exceed LOS standards and all volume to capacity ratios are well below 0.80, indicating the transportation network will continue to operate efficiently in the Build scenarios. The proposed project Build scenarios do not significantly increase delay or v/c performance measures compared to the No Build scenarios.

¹² Federal Highway Administration (FHWA), *Signalized Intersections: Informational Guide*, 2004

TABLE 9: AM PEAK HOUR TRAFFIC MODELING SCENARIO RESULTS

Intersections	AM Peak Hour											
	2025 No Build			2025 Build			2035 No Build			2035 Build		
	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c
 Hanover St & High St												
EB, High Street	C	23	0.58	D	27	0.65	D	31	0.70	E	38	0.78
NB, Hanover Street	A	<1	0.01	A	<1	0.01	A	<1	0.01	A	<1	0.01
SB, Hanover Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-
 Mascoma St & Mascoma St Ext *												
EB, Mascoma Street	A	5	-	A	5	-	A	5	-	A	5	-
WB, Mascoma Street	A	2	-	A	2	-	A	2	-	A	2	-
NB, Mascoma Street Extension	A	<1	-	A	<1	-	A	<1	-	A	<1	-
 Mechanic St & Mascoma St Ext/Slayton Hill Rd												
EB, Mechanic Street	A	2	0.12	A	2	0.12	A	2	0.14	A	2	0.14
WB, Mechanic Street	A	<1	0.02	A	<1	0.02	A	<1	0.02	A	<1	0.02
NB, Slayton Hill Road	C	18	0.26	C	18	0.26	C	21	0.33	C	20	0.33
SB, Mascoma Street Extension	B	13	0.16	B	13	0.16	B	14	0.18	B	14	0.19
 Mechanic St & Blacksmith St												
EB, Mechanic Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-
WB, Mechanic Street	A	<1	0.01	A	<1	0.01	A	<1	0.01	A	<1	0.01
NB, Blacksmith Street	B	14	0.03	B	13	0.10	B	15	0.03	B	14	0.12
 Mechanic St & Mascoma St & High St												
Overall	A	7	-	A	7	-	A	7	-	A	8	-
EB, Mascoma Street	A	7	0.38	A	7	0.40	A	7	0.42	A	8	0.44
WB, Mascoma Street	A	7	0.40	A	8	0.40	A	8	0.45	A	9	0.45
NB, Mechanic Street	A	6	0.16	A	6	0.16	A	6	0.19	A	6	0.18
SB, High Street	A	6	0.21	A	6	0.21	A	7	0.24	A	7	0.24
 Mascoma St & Foundry St												
EB, Mascoma Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-
WB, Mascoma Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-
NB, Foundry Street	B	10	0.01	B	11	0.04	B	11	0.01	B	11	0.04
 Hanover St & Mascoma St *												
EB, Hanover Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-
WB, Hanover Street	A	2	-	A	2	-	A	2	-	A	2	-
NB, Mascoma Street	A	2	-	A	2	-	A	2	-	A	2	-
 Hanover St/S Park Street & W Park St/Church St *												
EB, Hanover Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-
NB, Church Street	A	4	-	A	5	-	A	5	-	A	5	-
SB, West Park Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-

* Due to unorthodox intersection configuration the HCM was unable to provide delay results, thus SimTraffic was utilized.

TABLE 10: PM PEAK HOUR TRAFFIC MODELING SCENARIO RESULTS

Intersections	PM Peak Hour											
	2025 No Build			2025 Build			2035 No Build			2035 Build		
	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c
 Hanover St & High St												
EB, High Street	D	27	0.62	D	29	0.65	E	39	0.76	E	43	0.80
NB, Hanover Street	A	<1	0.01	A	<1	0.01	A	<1	0.01	A	<1	0.01
SB, Hanover Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-
 Mascoma St & Mascoma St Ext *												
EB, Mascoma Street	A	4	-	A	5	-	A	5	-	A	5	-
WB, Mascoma Street	A	3	-	A	3	-	A	3	-	A	3	-
NB, Mascoma Street Extension	A	<1	-	A	<1	-	A	<1	-	A	<1	-
 Mechanic St & Mascoma St Ext/Slayton Hill Rd												
EB, Mechanic Street	A	1	0.12	A	1	0.12	A	2	0.14	A	2	0.14
WB, Mechanic Street	A	<1	0.04	A	<1	0.04	A	<1	0.05	A	<1	0.05
NB, Slayton Hill Road	D	25	0.25	D	25	0.25	D	31	0.33	D	32	0.33
SB, Mascoma Street Extension	C	16	0.26	C	16	0.26	C	19	0.31	C	19	0.31
 Mechanic St & Blacksmith St												
EB, Mechanic Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-
WB, Mechanic Street	A	<1	0.01	A	<1	0.03	A	<1	0.01	A	<1	0.03
NB, Blacksmith Street	C	20	0.07	C	16	0.06	C	23	0.08	C	17	0.07
 Mechanic St & Mascoma St & High St												
Overall	A	8	-	A	9	-	A	10	-	B	10	-
EB, Mascoma Street	A	10	0.55	B	10	0.58	B	11	0.62	B	12	0.65
WB, Mascoma Street	A	8	0.42	A	8	0.44	A	9	0.48	A	9	0.50
NB, Mechanic Street	A	7	0.22	A	8	0.24	A	8	0.26	A	9	0.28
SB, High Street	A	7	0.28	A	8	0.32	A	8	0.33	A	9	0.37
 Mascoma St & Foundry St												
EB, Mascoma Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-
WB, Mascoma Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-
NB, Foundry Street	B	13	0.04	B	13	0.04	B	13	0.03	B	13	0.05
 Hanover St & Mascoma St *												
EB, Hanover Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-
WB, Hanover Street	A	3	-	A	3	-	A	4	-	A	4	-
NB, Mascoma Street	A	3	-	A	3	-	A	3	-	A	3	-
 Hanover St/S Park Street & W Park St/Church St *												
EB, Hanover Street	A	<1	-	A	<1	-	A	<1	-	A	<1	-
NB, Church Street	A	8	-	A	7	-	A	7	-	A	7	-
SB, West Park Street	A	<1	-	A	<1	-	A	1	-	A	1	-

* Due to unorthodox intersection configuration the HCM was unable to provide delay results, thus SimTraffic was utilized.

5. BICYCLE, PEDESTRIAN, AND TRANSIT ACCESS

The proposed site is located proximate (~2,000 feet) to the Lebanon downtown, its services and retail establishments, and its Blue and Red route Advance Transit stop. In addition, the Advance Transit Red Route stops along Mechanic Street within 1,000 feet of the project buildings. The project is located on the sidewalk network, and the transit stops and downtown can be accessed via sidewalk. Finally, the project is across Mechanic Street/Mascoma Street from the Mascoma River Greenway, providing protected bicycle and walking access down to part of West Lebanon and to the Northern Rail Trail which extends to Boscawen, New Hampshire.

6. SUMMARY OF FINDINGS AND RECOMMENDATIONS

- The project includes construction of 196 apartments with a mix of studio, 1- and 2-bedroom units across 4 buildings.
- The project would replace a commercial laundry facility, a dry-cleaning plant and retail facility, and a 3-unit apartment building.
- The proposed site is estimated to generate 19 net new vehicle trips in the AM peak hour and 60 net new vehicle trips in the PM peak hour.

- The planned roundabout at the Mechanic Street/Mascoma Street/High Street will improve safety at that location and at the Mascoma Street & Foundry Street intersection through the overall safety benefits of roundabouts, by clarifying the intersection operations, by improving sight distances at Foundry Street, and by restricting Foundry Street to right-turn in, right-turn out.
- With the roundabout project, all proposed access points meet or exceed required minimum sight distances for safe and efficient vehicle access.
- Traffic modeling scenarios predict that there will be no unreasonable congestion associated with the traffic generated from the proposed project. Minimal changes in delay are projected due to the project, and v/c ratios of not more than 0.80 are projected.
- No significant impacts to the transportation system have been identified, and no mitigation is warranted or recommended.

Based on the analysis conducted for this report, it is our professional judgement that the proposed project will not cause or exacerbate any unreasonable congestion or unsafe conditions on the local roadway network and will not unnecessarily or unreasonably endanger the public's investment in any local roads, highways, or related infrastructure.

Fiscal Impact Analysis

Lebanon Woolen Mill
Lebanon, NH
August 8, 2022



FOUGERE PLANNING & DEVELOPMENT, Inc.

Mark J. Fougere, AICP

253 Jennison Road Milford, New Hampshire 03055

phone: 603-315-1288 email: Fougereplanning@comcast.net

FISCAL IMPACT ANALYSIS

**Lebanon Woolen Mill – 1 Foundry Street
Lebanon, NH**

August 8, 2022

1. Introduction

Fougere Planning and Development has been engaged by LWM Residential LLC to undertake this Fiscal Impact Analysis to outline potential General Fund property taxes and revenue increases, as well as demand for service impacts to the City of Lebanon from the proposal to develop 196 market rate apartments units with a mixture of studio's, one and two bedroom units as outlined in Table One. The 4.67 acre project is located off of Foundry Street and will include renovating the old mill located on the property, as well as new structures. An existing 2,045 square foot retail building, as well as a four family home will be demolished as part of the development program. The proposed project will greatly assist addressing the ongoing critical housing need impacting the Upper Valley with a project located in a downtown environment. With an anticipated start of construction in June/2023 and 18-24 construction period, occupancy is estimated to be mid 2025, with full occupancy anticipated by 2026.

Table One
Apartment Unit Profile

	Units
Studios	57
One Bedroom	100
Two Bedroom	39
Total	196

All on site drives and trash pickup will be privately maintained by the project owner; public water and sewer will service the property.

This Report will address a number of municipal impacts as required in Lebanon's Subdivision Regulations Section 12.3, B. Areas of Study and Information:

2. Capacity of School System; effect on school bus transportation and distance of the proposed subdivision from the nearest elementary school.

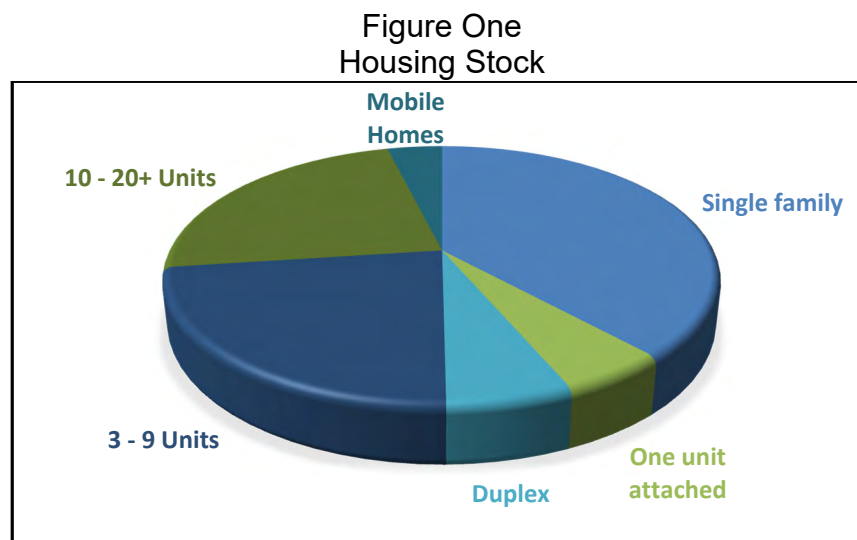
6. Any special fire, police, and public safety problems due to the location and/or special conditions relative to the type of use.

8. Fiscal impact statement analyzing the impact of the subdivision on municipal, school and county revenues and expenditures, including estimated potential tax revenue and estimated number of school children.

2. Regional and Local Trends

Census figures report that from 2000 to 2010 Lebanon's population increased from 12,568 to 13,151 over the 10 year period. The 2020 Census reports Lebanon's population to be 14,282, a 8.6% increase since 2010.

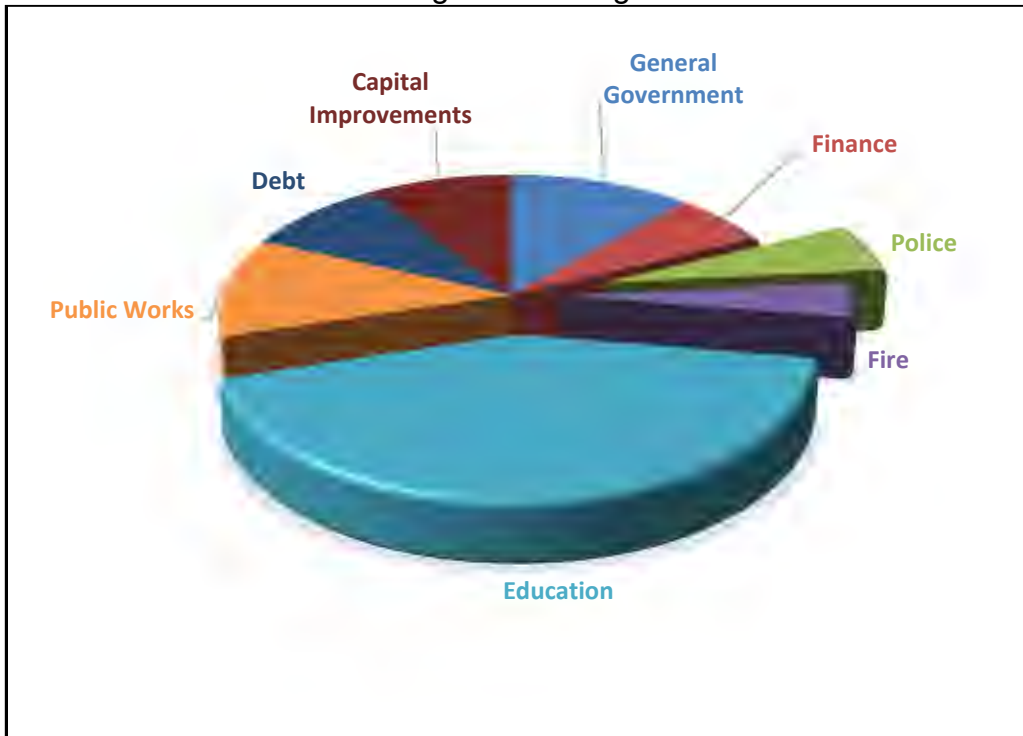
Approximately 38.1% of Lebanon's housing stock consists of single family homes, with the Census data reporting 2,552 single family homes out of a total housing stock of 6,689 units as outlined in Figure One.



3. Budgets

As outlined in Figure Two, education is the largest municipal budget line item, followed by the emergency service departments. Based on case studies of comparable properties, given the proposed use of the Project, cost impact considerations will be focused primarily on emergency service departments, along with the school department.

Figure Two
Budget Percentages



4. Fiscal Methodology Approach

Fiscal Impact Analyses can have many connotations, this analysis will follow the classic definition of fiscal impact as follows *“A projection of the direct, current public costs and revenues associated with residential or nonresidential growth to the local jurisdiction in which the growth is taking place¹.”*

¹ Burchell.

There are a number of methodologies that are used to estimate fiscal impacts of proposed development projects. The Per Capita/Unit Multiplier Method is the most often used analysis to determine municipal cost allocation. This method is the classic “average” costing method for projecting the impact of population growth on local spending patterns and is used to establish the costs of existing services for new development. The basic premise of this method is that current revenue/cost ratios per person and/or per unit is a potential indicator of future revenue/cost impacts occasioned by growth. The advantage of this approach is its simplicity of implementation; however, the downside of this approach is that the methodology calculates the “average” cost as being the expected cost, which is often not the case, and costs can be exaggerated—in some cases significantly. For most new land uses, many department budgets are not measurably impacted in any long term way.

The Marginal Cost Approach is an alternative methodology that can be used to estimate and measure developmental impacts based on actual costs that occur in the community. At this time, a “level of service” exists in Lebanon to serve the community. This existing service level, for the most part, addresses the needs of the community through existing tax collections. As new development occurs, pressures are placed on some departments to address increased demands, while other departments see little, if any measurable impacts. In reviewing the potential impacted departments specifically, a truer picture of anticipated costs impacts can be determined. For this analysis, we will apply both the Average Cost and Marginal Cost Approach methodologies to review municipal service demand cost increases.

Given the nature of the proposed Project, as will be seen by the analysis below, few significant impacts will be felt by most City departments. Solid waste generated by the project will be removed by a private hauler. Any water and sewer expenses will be offset through user fees. All onsite driveways will be private and all maintenance expense will be paid for by the project owner. This is not to infer that no increased expenditures will occur as a result of this project.

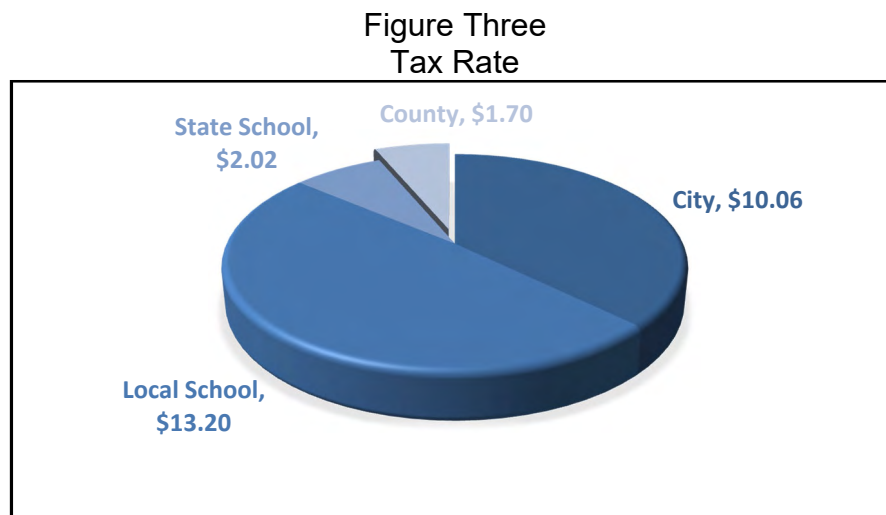
Measurable operational influences will be felt by a few departments, most noticeable the Police/Fire and School Departments.

The Report will outline General Fund revenues and municipal service costs. All data, tax rates and costs are assumed to be in FY2021. It should be noted the costs outlined are “estimates” and no actual costs will be realized without review and approval by appropriate department heads, administrators and elected City officials.

5. Local Revenues

A) Property Taxes

Local property taxes provide the bulk of municipal revenues for New Hampshire communities. The 2021 total Tax Rate for Lebanon is \$26.98. Figure Three outlines the breakdown of the various components of the tax rate.



Reviewing local market conditions and the assessments of similar apartment complexes in the community, it is estimated the the proposed project will have a value of \$26,460,000 once complete. Based upon this estimated assessment, as outlined in Table Two, we believe the development will generate \$760,196 in annual property tax payments, with \$266,188 being paid in local City property taxes and \$449,026 generated in school property taxes. The existing site

properties are assessed for \$2,018,400 and generates \$54,456 in total tax payments. With this redevelopment project, site property tax payments will increase by 1,295%.

Table Two
Estimated Property Tax Revenue

Units	Total Value	City Revenue	School Revenue	County Revenue	Total Taxes
196	\$26,460,000	\$266,188	\$449,026	\$44,982	\$760,196

Another source of revenue to the community is from vehicle registrations; Lebanon is anticipating \$2,500,500 in vehicle registrations in 2021. Table Three outlines the projected motor vehicle permit fee revenue stream for the proposed project.

Table Three
Motor Vehicle Permit Fees²

205 vehicles ³ x \$188	\$38,540
-----------------------------------	----------

Total estimated project revenues total \$798,736 as outlined in Table Four.

Table Four Total Estimated Revenues	
Local Property Taxes	\$760,196
Motor Vehicle Fees	\$38,540
Total	\$798,736

B) Downtown Tax Increment Financing District (TIFF)

At this time all future property tax monies collected from the proposed project, excluding property taxes presently being paid which total \$54,456, will be directed to the Downtown TIFF District to offset ongoing capital improvements. Based upon projected new tax resource, this new TIFF revenue stream is estimated to total \$705,740. Once the TIF District goals have been met, property

² Based upon data from the City Clerk, the average cost of vehicle registrations is \$188 on 14,534 vehicle registrations, including processing fees..

³ 1 vehicle per studio/one bed, 1.25 per 2 bedroom.

tax payments will be distributed to the City, School & County as typically dispersed.

C) Impact Fees

The City of Lebanon charges impact fees on new development projects. These Fees are related to school, recreation, police and fire capital projects. As outlined in Table Five, these one-time fees are estimated to total \$392,581 and are collected once the units are constructed.

Table Five Estimated Impact Fees		
Building Area	140,710	Fee
School	\$1.45	\$204,030
Recreation	\$0.69	\$97,090
Police	\$0.25	\$35,178
Fire	\$0.40	\$56,284
Total		\$392,581

6. Municipal Service Costs

Police & Fire

The Police and Fire Departments are projected to experience some measurable impact from the proposed project. For fiscal year 2022, the Police Department budget was \$6,893,010 and the Fire Department budget \$4,602,030. To assess the degree of impact this Project would have on these departments, emergency calls to similar apartment developments in Lebanon were analyzed. As emergency calls are a reliable metric that provides a more realistic measure of demand for service, we will use this average costing method to allocate costs to the proposed apartment use. Emergency call data was obtained for both police and fire department calls and averaged to determine the numbers of annual calls per unit. These ratios were then totaled to derive a total average call volume per unit, which was then used to generate projected emergency calls for each Department as outlined in Table Six.

Extrapolating from the comparable call data, increases in call volume are projected to the City's Police and Fire Departments. Annual Police calls are projected to increase by 25 new calls per year. The Department responds to approximately 25,000 annually (480 call per week).

Annual Fire Department calls are projected to increase by 24 new calls⁴ (8 fire/ 16 EMS) per year (.46 calls per week). In 2021, the Department responded to a total of 3,146 calls in the City, of which 2,173 were EMS related.

Table Six
Average Calls: Police-Fire-EMS

Project	Town	Units	Avg. Police Call Per Year	Avg. Call Per Unit	Projected Calls
Altaria	Lebanon	129	14	0.11	
Emerson Gardens	Lebanon	160	49	0.31	
Timberwood	Lebanon	252	6	0.02	
Totals		541	69	0.13	
Projected Calls	Woolen Mill	196			25
Project	Town	Units	Avg. Fire Call Per Year	Avg. Call Per Unit	Projected Calls
Altaria	Lebanon	129	11	0.085	
Emerson Gardens	Lebanon	160	7	0.044	
Timberwood	Lebanon	252	7.1	0.028	
Stone Farms	Lebanon	144	4.6	0.032	
Totals		685	30	0.043	
Proposed Apt.	Woolen Mill	196			8
Project	Town	Units	Avg. EMS Call Per Year	Avg. Call Per Unit	Projected Calls
Altaria	Lebanon	129	5	0.039	
Emerson Gardens	Lebanon	160	28	0.175	
Timberwood	Lebanon	252	7.3	0.029	
Stone Farms	Lebanon	144	3.1	0.022	
Totals		541	43	0.08	
Proposed	Woolen Mill	196			16

⁴ The Fire Chief requested calls to Stone Farms be added into the call data profile to expand the number of apartment units used in the data base.

Police Department

To obtain input relative to the proposed project, we discussed the apartment program with Captain Tim Cohen of the Lebanon Police Department. He did not believe the project would generate an undue burden on the Department and believed the estimated call data was reasonable. The Captain did note that traffic impacts would have to be examined during the planning review process given the site's downtown location.

The average cost of a police officer in Lebanon, with benefits, ranges from \$110,000 to \$120,000 a year. To assign some cost to the community from the proposed new land use, we have calculated an average cost per call of \$345 and when applied to the estimated 25 calls, as detailed in Table Seven, a cost of \$8,625 is derived. To be conservative, we will double this cost to **\$17,250** for this analysis.

Table Seven
Police Department Impact

Department	FY 2022 Budget	Yearly Calls ⁵	Cost/call	Est. Calls	Annual Cost
Police	\$6,893,010	20,000	\$345	25	\$8,625

This cost estimate is not inferring the Police Budget will increase as a result of the proposed development, but assigns a "cost" to account for this expanded land use in the community.

Fire Department

We reviewed the project program with Fire Chief Christopoulos and Fire Inspector Duane Egner. The Chief did not foresee an issue with the development and felt the estimated calls were responsible given the proposed use. The Chief and Inspector both pointed out that this project, when combined with other proposed and approved developments in the community (especially residential

⁵ Impact Fee Report, BCM Planning, 2020 calls for service, 25,000 calls discounted by 20% to address minor calls.

units) will increase demands on the Department over time. This impact from this increased demand for services on the Department will need to be addressed as the City continues to grow.

As noted above, a projected increase of 24 new calls (8 fire/16 EMS) are anticipated for the Fire Department. The average cost of a fire fighter with benefits is \$110,000. As with the police department, as outlined in Table Eight, we have used cost averaging to estimate a **\$35,112** impact on the Fire Department.

Table Eight
Fire Department Impact

Department	FY 2022 Budget	Yearly Calls	Cost/call	Est. Calls	Annual Cost
Fire	\$4,602,030	3,146	\$1,463	24	\$35,112

It should be noted that EMS services are a revenue generator for the City and in FY2022 Budget, an estimated \$830,000 in revenue is anticipated. This translates into an average of \$381 in revenue per EMS call (\$830,000 / 2,177 call). As such, costs associated with EMS calls to the subject site will be somewhat mitigated by the estimated EMS revenues of \$6,096 (\$381 x 16 EMS calls).

School Department

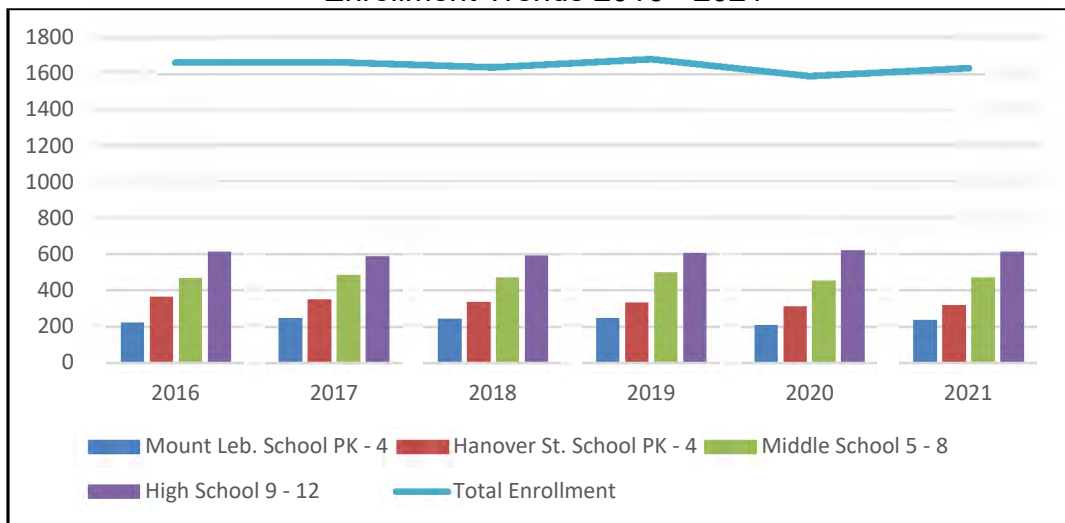
Table Nine and Figure Four outline enrollment trends within the Lebanon School District since 2016. Overall enrollments have remained flat over the last six years and all schools are well within their building capacity⁶. The Hanover Street School has seen the largest decline in enrollment of 13.1%, which will be the elementary school for the subject site's students.

⁶ City of Lebanon Impact Fee Update Oct. 2021.

Table Nine
School Enrollment 2016 - 2021

School	2016	2017	2018	2019	2020	2021	% Change	Capacity
Mount Leb. School PK - 4	221	246	243	245	208	236	6.79%	310
Hanover St. School PK - 4	364	351	334	331	310	316	-13.19%	383
Middle School 5 - 8	468	483	470	500	454	469	0.21%	600
High School 9 - 12	611	586	591	606	619	613	0.33%	720
Total Enrollment	1,664	1,666	1,638	1,682	1,591	1,634	-1.80%	2,013

Figure Four
Enrollment Trends 2016 - 2021



As noted above, the Project will involve the construction of 196 housing units, 157 (80%) of these units will consist of studios and one bedroom units as detail in Table One. Any elementary students who reside at the proposed complex will attend the Hanover Street Elementary School which is 1.7 miles from the site. To estimate the number of School Age Children (SAC) that may reside within the residential community, we relied upon the recently completed Impact Fee Update Report prepared by BCM Planning⁷ for the City. Based upon SAC ratios calculated per 1,000 square feet of living area for non-single family housing units, an estimated 17 SAC may reside with the proposed complex as summarized in Table Ten.

⁷ City of Lebanon Impact Fee Update 2021, August 20, 2021, BCM Planning, LLC.

Table Ten
School Age Children Ratios

	Units	Sq. Ft. / Unit	Total Sq. Ft.	Enrollment Per 1,000 Sq. Ft.	SAC
Studios	57	530	30,210		
One Bedroom	100	715	71,500		
Two Bedroom	39	1,000	39,000		
Total	196		140,710	0.12	17

Using these same SAC ratios, the anticipated grade breakdown of these 17 students is outlined in Table Eleven.

Table Eleven
Estimated Enrollment Breakdown

Elementary	125,419	0.05	7
Middle	125,419	0.04	6
High School	125,419	0.03	5

17

To supplement the estimated school age data outlined above, we reviewed our database of over 1,000 apartments located in former mill space as outlined in Table Twelve. Based on these enrollment profiles, it is estimated that only 2 school age children may reside within the apartment community. Given the industrial nature that is typically found at mill building sites, it is not surprising that these complexes are not attractive to young families. Typical occupancy in old mill space is young adults and empty nesters.

Table Twelve
Mill Space Estimated Enrollment

Property	Location	Units	SAC	SAC/Unit
Mill Place West	Concord	21	0	0.000
Emerson Mills	Pembroke	71	0	0.000
Newmarket Mills	Newmarket	112	0	0.000
Exeter Mills	Exeter	143	2	0.014
Canal Street	Somersworth	87	1	0.011
Colonel Mill	Keene	89	1	0.011
Lofts 34	Nashua	200	3	0.015
Lofts at Mill West	Manchester	290	3	0.010
Average		1,013	10	0.010
Proposed	Woolen Mill	196	2 (1.93)	

Based on this analysis, we estimate a range of 2 – 17 SAC, with the most likely outcome occurring on the lower end of this range.

To gain insight into the current state of Lebanon schools, we discussed the project with the School Superintendent. The Superintendent noted that the planned improvements to Hanover Street School have been approved by voters. The updated program involves a updating and modernization oriented improvement rather than expanding capacity. Classrooms are being proposed but they are geared towards addressing existing operational needs (special education) than capacity related issues. The Superintendent noted that the average cost of a teacher, with benefits, is estimated to be approximately \$120,000 annually. She also noted that the number of school children may be higher than City statistics project because of the severe lack of housig in the region. Estimating potential school impacts can be very challenging, with grade distribution playing a key role. If class sizes become too large in a grade level, another teacher may have to be hired, along with teacher aids. In addition, special education costs are also challenging to estimate. The Superintendent did note that ample capacity exists to accommodate the proposed students, including at the Hanover Elementary School which has seen a 48 student decline over the last six years. Although few new schools costs are anticipated, we will carry an expense of **\$120,000**, which would accommodate the cost of a teacher's salary. The Superintendent believed this was a reasonable allocation of potential costs.

The New Hampshire Department of Education distributes Adequacy Aid to communities, along with other qualified funding programs. For FY2023, it is estimated that Lebanon will recive \$6,880,000 in Aid⁸ through this program. Aid is distrubited based upon a communities Average Daily Membership (ADM) and Base Aid totals \$3,786 per student. If the high student enrollment estimate of 17 students is assumed, **\$64,362 in Aid funds** would be received. Other qualified Aid includes Free/reduced Differentiated Aid; \$1,893 per student, Special

⁸ NHDOE, FY2023 Estimate, November 15, 2022.

Education Aid; \$2,037 per student, English Language Aid; \$740 per student and 3rd Grade Reading Aid; \$740 per student.

Other Departments

As noted previously, all areas within the development will be private (maintenance & refuse) and water/sewer expenses will be addressed through connection and user fees. Any costs to the Building Department will be offset by an estimated \$400,000 building permit fees. No other measurable impacts are anticipated to other City departments. To be conservative, we will account for \$120 per unit, or **\$23,520** potential miscellaneous City related costs⁹.

County Impacts

As noted in Table One, we are estimating \$39,933 in County property tax revenue from this project. Grafton County oversees a number of services for the region including nursing homes, sheriff's department and the court system. Estimating new costs that may impact County services, with any confidence, would be extremely challenging and unreliable, therefore a estimated cost impact was not calculated in this analysis.

⁹ Estimated \$120 per unit.

SUMMARY

Table Thirteen
Fiscal Findings

Gross Local Property Taxes & Revenue	\$798,736
Municipal Costs	
Police	-\$17,250
Fire	-\$35,112
Schools	-\$120,000
Misl.	-\$23,520
Total Estimated Costs	-\$195,882
Net Negative Fiscal Impact	+\$602,854

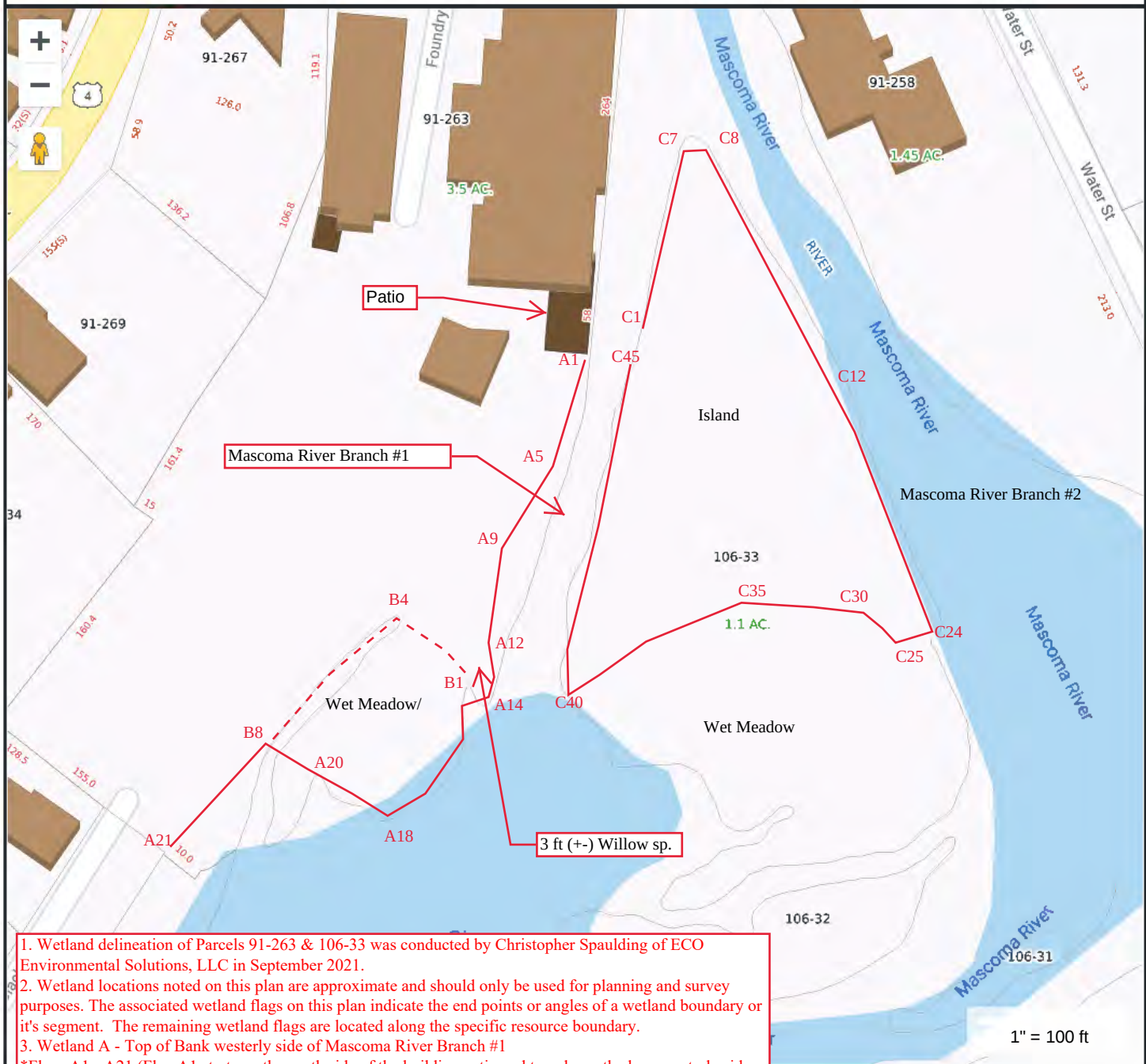
Based upon the report's findings, gross yearly local property taxes and revenues generated by the proposed project are estimated to total \$798,736. The anticipated fiscal impact to the City is estimated to be \$195,882, resulting with a positive fiscal impact from the proposed development of approximately \$602,854. Full property tax revenues will be realized once the Downtown TIFF District is closed. All anticipated costs are estimates and no definitive costs are reported.

Key findings supporting this conclusion include:

- Calls to the Police Department are projected to increase by less than 1%.
- Calls to the Fire Department will realize less than a 1% increase in call volume. EMS revenue is estimated to total \$6,096 annually.
- An estimated 2 -17 school age children may reside within the residential community, per student State Aid totals \$3,786 for FY2023.
- The proposed project will include private drives and trash collection.
- \$392,581 in impact fee payments will be made for fire, police, schools and recreation capital facilities.
- Full time jobs will be created managing the new apartment complex along with temporary construction jobs.

Wetland Delineation Sketch Plan
ECO Environmental Solutions, LLC

Lebanon, NH Parcels 91-263 & 106-33



1. Wetland delineation of Parcels 91-263 & 106-33 was conducted by Christopher Spaulding of ECO Environmental Solutions, LLC in September 2021.
2. Wetland locations noted on this plan are approximate and should only be used for planning and survey purposes. The associated wetland flags on this plan indicate the end points or angles of a wetland boundary or it's segment. The remaining wetland flags are located along the specific resource boundary.
3. Wetland A - Top of Bank westerly side of Mascoma River Branch #1
 - *Flags A1 - A21 (Flag A1 starts on the south side of the building patio and travels south along westerly side of the top of bank associated with Mascoma River Branch #1. Continue along the outer bank of the wet meadow and ends along the southern end of the property at the top of the bank in proximity to pavement.
 - *Flag A14 ties into Flag B1.
 - *Flag A20 ties into Flag B8.
4. Wetland B - Wet Meadow
 - *Flags B1 - B8 (Flag B1 ties into Flag A14 and travels westerly to the toe of slope of parking area and then continues south and ends at Flag B8 which ties into Flag A20).
5. Wetland C - Island (Top of Bank) & Wet Meadow
 - *Flags C1 - C45 (Flag C1 starts at on the westerly side of the island, across from the building patio, and travels north to Flags C7 & C8 at the northerly point of the island. The flags then continue south along the easterly side of the island along the top of bank from Mascoma River Branch #2 to Flag C24. The flags then travel westerly within the scrub shrub layer to Flag C40 located on the easterly side of Mascoma River Branch #1 where they continue north and end at Flag C45. Flag C45 ties into Flag C1.
 - *Flags C1 - C24 & C40 - C45 denote the Islands Top of Bank.
 - *Flags C24 through C40 denote edge of wet meadow area.

Print map scale is approximate.
Critical layout or measurement
activities should not be done using
this resource.

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY

Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

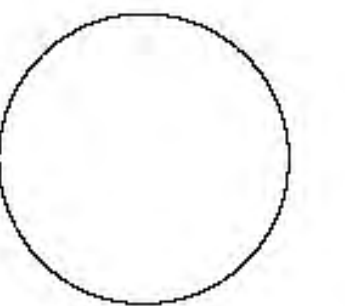
CIVIL

Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE

OJB Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

NOT FOR CONSTRUCTION



1 FOUNDRY ST.
LEBANON, NH

PROJECT: NH-LWM

[illegible]

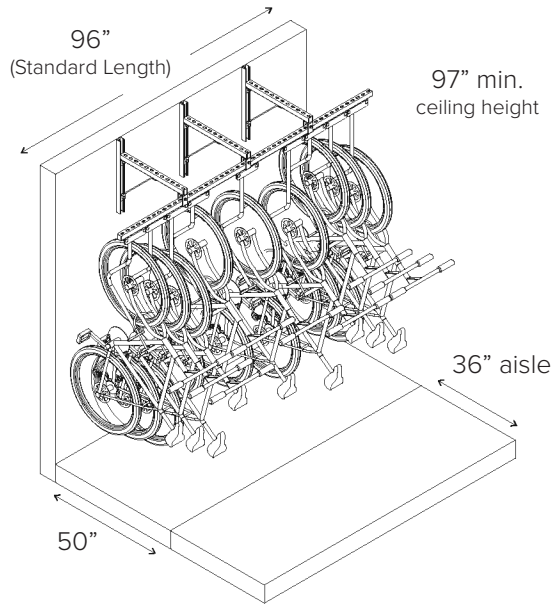
DATE: 08.15.22

SCALE: 1" = 30' - 0"

ILLUSTRATIVE SITE PLAN

L001





CAPACITY

9 bikes per 8 foot unit

MATERIALS

Trolley Track: 12 gauge galvanized steel

Trolley Assembly: Stainless steel

Arms: 1" 16g

MOUNT OPTIONS



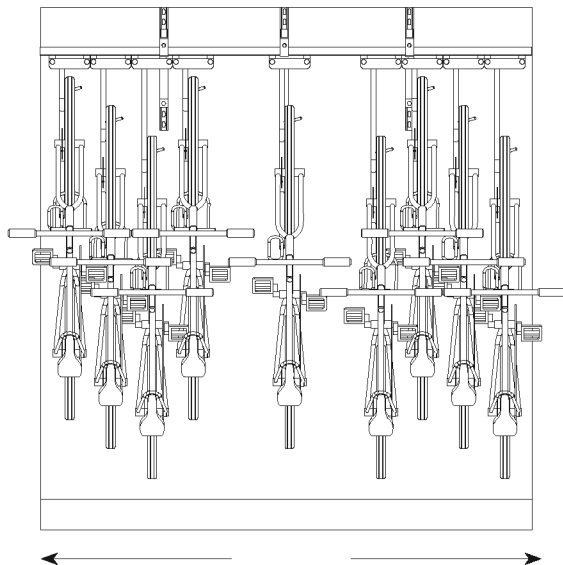
Wall

Track is mounted to wall mounted brackets.

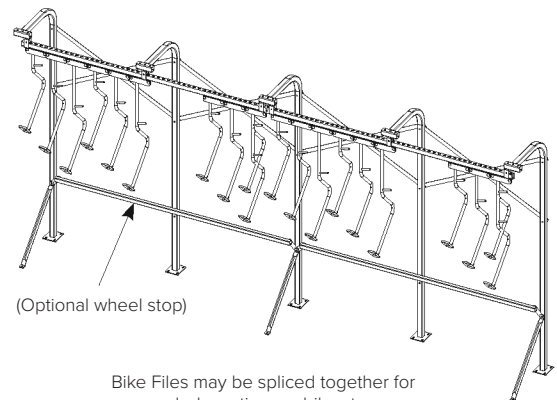


Floor

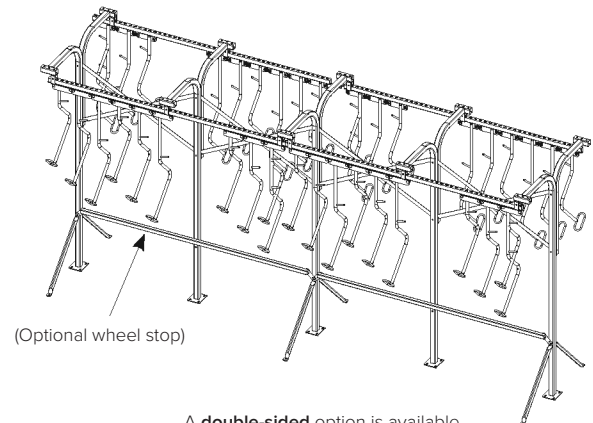
Track is suspended from floor mounted braces.



Trolleys allow you to push neighboring bikes apart when hanging or removing a bike



Bike Files may be spliced together for expanded, continuous bike storage.



A double-sided option is available



www.lampartners.com

LIGHTING FIXTURE SCHEDULE

Standard Fixture Nomenclature:
G = Ground surface or recessed
M = Media or mesh
P = Pendant
R = Recessed
S = Surface mounted (typically to ceiling)
T = Track (track-letters, heads-numbers)
W = Wall
Yxx = Exterior + Mount (i.e. YG1)

Fixture Schedule Guide:
1. The 'Driver Location' column indicates integral or remote, not where in the space it is.
2. The 'Control Intent' column identifies how we want this fixture to be controlled, but not the protocol.
3. The control protocol is to be selected by the Electrical Engineer or Contractor.
4. Fixture nomenclature is not absolute. Refer to individual descriptions and catalog numbers for each type.
5. All columns, including the 'Notes' column convey important information and are to be conveyed.

Project Name: Lebanon Woolen Mill

Lam Project #: 22066
Lam Issue Date: 22-Sep-2022

Project Phase: Landscape Design Review
Lam Team: SF / DW / WW

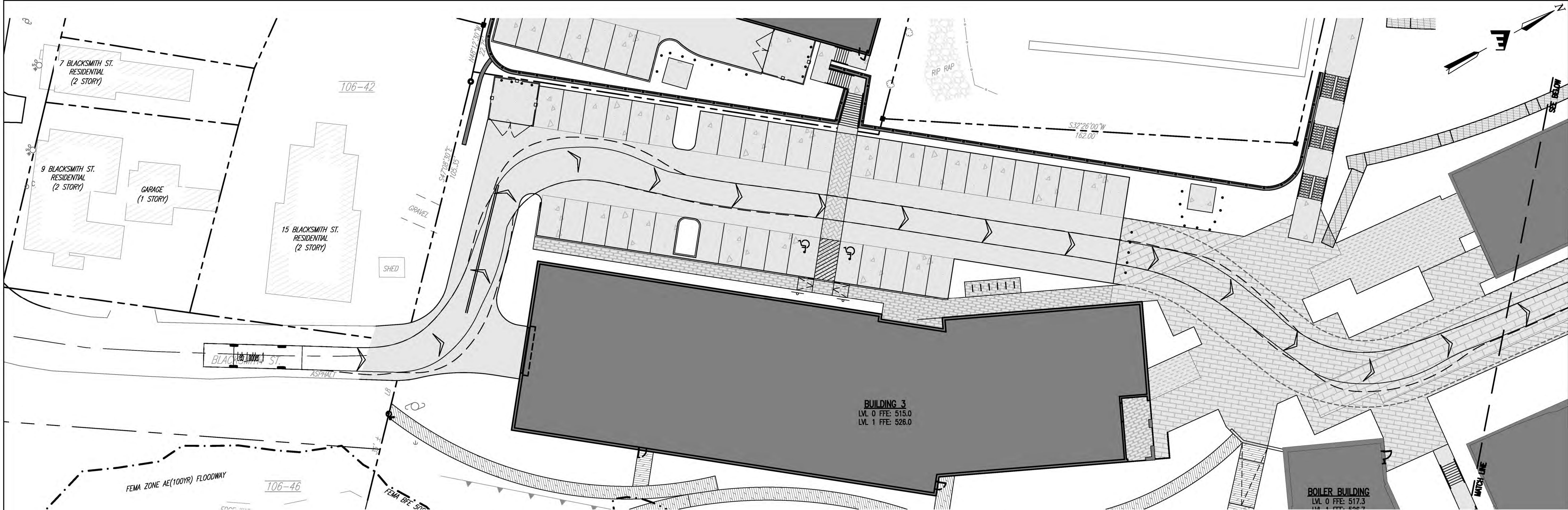
Type	Location / Use	Fixture Description	Manufacturer	Model / Catalog #	Light Source CCT CRI	Lumens (lm) (Delivered) (Unit)	Lumens (lm / LF) (Delivered) (Linear)	Control Intent	Driver Location	Fixture Load (W) (Unit)	Fixture Load (W/LF) (Linear)	Created / Modified	Notes
Landscape / Exterior													
YC1	Exterior/Interior Amenity	Catenay with incremental stringlights with 'HAT', remote drivers	Tivoli Lightsphere	#LSL2-B-24-S-19-C-12-SHADE-HT-BK-8	1900			SWITCH	integral			8/29/2022	Coordinate with structure
YG1	Mill yard and environs	Pedestrian Pole on wood pole, 10' height	Louis Poulsen	#TOPT/25W-LED[MOD REDUCED LUMENS]/3000K[MOD 2700K]/120-277V/[FINISH]-DIM 0-10V/CUSTOM ARM FOR WOODEN POLE	MOD 2400K	MOD 800LM-1000LM TBD\		SWITCH	integral		0.4 W/LF	8/10/2022	Confirm reduced lumen package, custom CCT
YG2	Driveways & surface parking	Pole mounted area light type 3 distribution with house-side shield,Square tapered Wooden pole(?), 20' tall	Hubbell head on Valmont Koli Pole	#RAR1-80L-25-MOD27K-3-UNV-ASQ-[color]-BC-DTS_F #VALMONT-KOLI	MOD 2700k?	2200 lm		switch with occ & photocell TBD	integral	25 W		9/22/2022	Confirm occupancy/daylight sensor
YG3	Riverwalk	Low Bollard, wood finish	Sistemalux Look	#S.I9206-MOD2400k	MOD 2400K	300 lm		SWITCH		12.5 W		8/10/2022	Confirm MOD CCT
YG4	trees	Ground stake mounded adjustable low voltage spotlight with snoot	BK Micro Nite Star	#MN-LED-e68-FL-[finish]-12-B-360SL-[transformer]	3000K	470 lm		SWITCH	remote	7 W		8/10/2022	
YG5	Top level parking lot	Pole mounted area light type 5 distribution, 18' tall (TBD)	Hubbell head on Valmont Pole	#RAR1-80L-25-MOD27K-5-UNV-ASQ-[color]-DTS_F #VALMONT-KOLI	2700K	2200 lm	25 W	switch with occ & photocell TBD	integral	25 W		8/10/2022	Product to be installed in handrail - coordinate with handrail manufacturer, or source handrail from lighting manufacturer for combined system. Coordinate remote drivers
YG6	tower uplight	Llinear uplight with narrow beam optics, blade baffles, mounting hardware, wet location	Lumenpulse Lumenfacade	#LOGN-2-48V-12-22K-[optic-lens]-[mounting]-[finish]-UCTL-ULLOGNRD-	2200K	900 lm		dim	remote		2 W/LF	8/10/2022	Optic, lensing, mounting TBD Finish per architect
YG7	tower Flood	Ultra-narrow-beam spotlight, exterior wet location, snoot	Lumenpulse Lumenbeam	#LBM-VOLT-CCT-XN-LSLV-FINISH-DIM-cable-SN	3000k							8/10/2022	
YS1	Benches	Linear encapsulated wet location tapelight, remote driver	Qtran	#LUME-01-SW-MOUNT-WET-24-SO-ENC/TL-wiring	2400K		74 lm/LF	SWITCH	remote		1.5 W/LF	8/10/2022	Coordinate remote drivers
YS2	Handrails	Handrail Pucklight	Wagner Lumenpod 28	#LULR-[railsize]-27K-A-3-								8/10/2022	
YS3	Window frames	Window frame light, remote driver	Iguzzini Trick									8/10/2022	
YR1	Building Entries	Recessed downlight, wet-location	DMF	DRDH-N-JD-7O-DRD2M-07-9-27-FL-O-DRD2T-R-JD-S-SW	2700K	750 lm		DIM	integral	7 W		8/10/2022	Architect to confirm trim type
												8/10/2022	
YW1	Exterior building facade walls	Wall surface mounted full cutoff downlight	Eureka Cliff Downlight	#3419-LED-LED-30-80-VOLT-DV-x-finish-FRO	3000K*	775 lm		DIM	integral	8.5 W		8/10/2022	EM per electrical egineer Ffinish per architect
YW2	Residential entries under over-hangs	Wall surface mounted direct-indirect fixture, same form-factor as YW1	Eureka Cliff Direct/Indirect	#3418-LED.LO-LED-30-80-VOLT-DV-x-finish-FRO	3000K*	904 lm		dim	integral	11.4 W		8/10/2022	
YW3-3'	Door entries at amenity spaces	Linear wall or mullion mounted downlight with separate driver for emergeny lighting provisions (EM to confirm)	Visa Passage	#OW2480-L30KL--MVOLT-[optic]-[finish]-DS	3000K*	900 lm		DIM	REMOTE	14 W		8/10/2022	
YW3-6'	Door entries at amenity spaces	Linear wall or mullion mounted downlight with separate driver for emergeny lighting provisions (EM to confirm)	Visa Passage	#OW2484-L30KL--MVOLT-[optic]-[finish]-DS	3000K*	1800 lm		DIM	REMOTE	27 W		8/10/2022	

YW4	Building 2	Wall mounted decorative downlight, full cut-off, similar head to YG1	Louis Poulsen	#TOPT-WALL/25W-LED[MOD REDUCED LUMENS]/[MOD 2700K]/120-277V/[FINISH]-DIM	2700K	MOD 800LM-1000LM TBD\		DIM	integral	13 W		8/10/2022	
YW5	Building 2	Wall mounted area light type 3 distribution with house-side shield, similar to YG2	Hubbell	#RAR1-80L-25-MOD27K-3-UNV-WB-[color]-BC-DTS_F	MOD 2700k?	2200 lm		switch with occ & photocell TBD	integral	25 W		8/30/2022	Mount at same height as YG5 Poles Confirm occupancy/daylight sensor

General Notes:

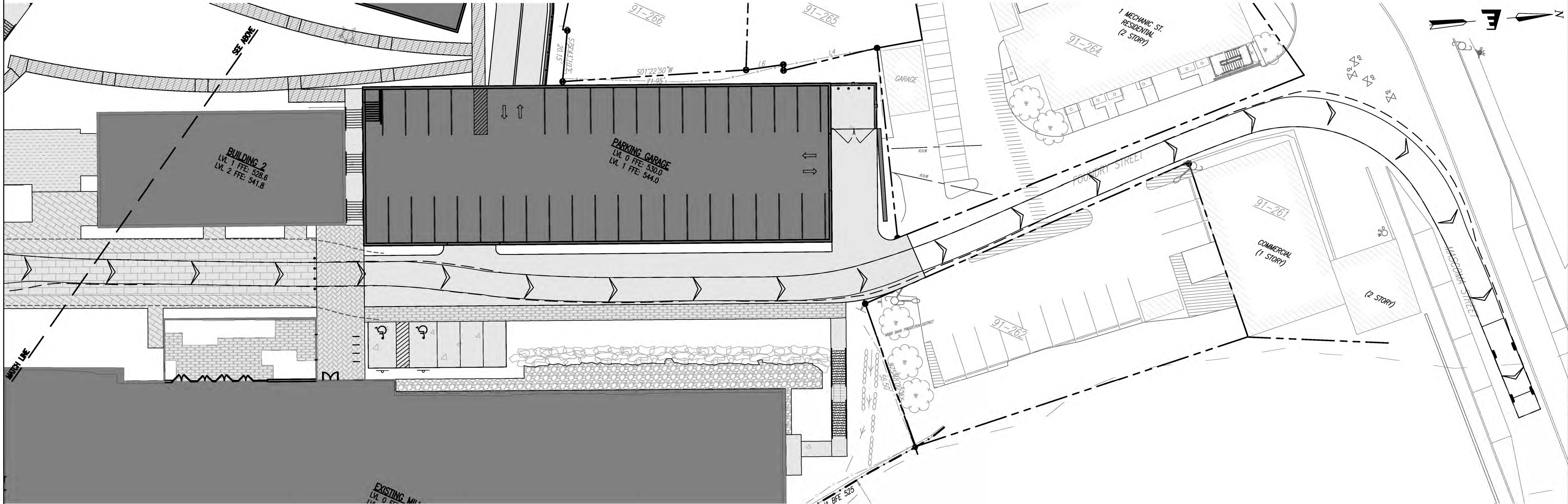
1. Not for bidding or construction unless fully incorporated into contract documents by the Architect and/or Engineer.
2. This schedule must be accompanied by the notes provided in the separate Lam Partners Master Notes List document or by CSI section 265010.
3. Fixture Loads are expressed as Watts or Watts / LF per the manufacturer's published data and represent the entire fixture load, not that of the light source.
4. The primary manufacturer and model number listed for each type shall serve as the basis of design. Suitability of "Alternates", "Equals" or "Equivalents" shall be determined solely by the Lighting Designer for any fixture types listed on this Lighting Fixture Schedule, unless otherwise noted.
5. Any "Alternates", "Equals" or "Equivalents" subsequently listed under each primary listing may be able to provide a suitable product that closely matches the primary listing, and may be required to modify their standard products to match the primary listing as best possible.

This information is provided for the use of the Architect and its consultants in the production of their detailed drawings and specifications. Assurances of code compliance, conformity with environmental conditions and other building systems, voltage selection, design of wiring, supports, switching, emergency and exit lighting, engineering calculations or details, and preparation of cost and power consumption estimates are the responsibility of others. Information provided by Lam Partners Inc may require coordination and development by others to a level of detail suitable for incorporation into construction documents. Lam Partners Inc's documents are not intended or represented to be suitable for reuse on extensions of the Project or on any other project, nor are they to be relied upon by anyone other than the Architect and the Architect's consultants for the Project. Lam Partners Inc is not responsible for construction means, methods, sequences, techniques, safety programs, or procedures, or the failure of any contractor to comply with the requirements of the construction documents. There are no warranties of merchantability or fitness for a particular purpose or any other warranties or guarantees whatsoever, express or implied, with respect to any materials, documents, or designs provided by Lam Partners Inc.



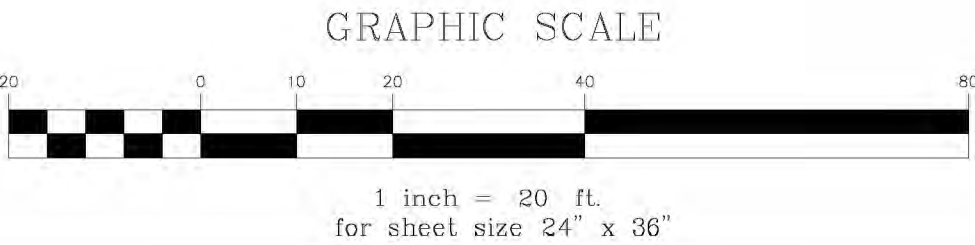
LEBANON ENGINE 1 – ENTERING FROM BLACKSMITH STREET AND EXITING ONTO MASCOMA STREET

SCALE: 1" = 20'



LEBANON ENGINE 1 – ENTERING FROM BLACKSMITH STREET AND EXITING ONTO MASCOMA STREET

SCALE: 1" = 20'



SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T

1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

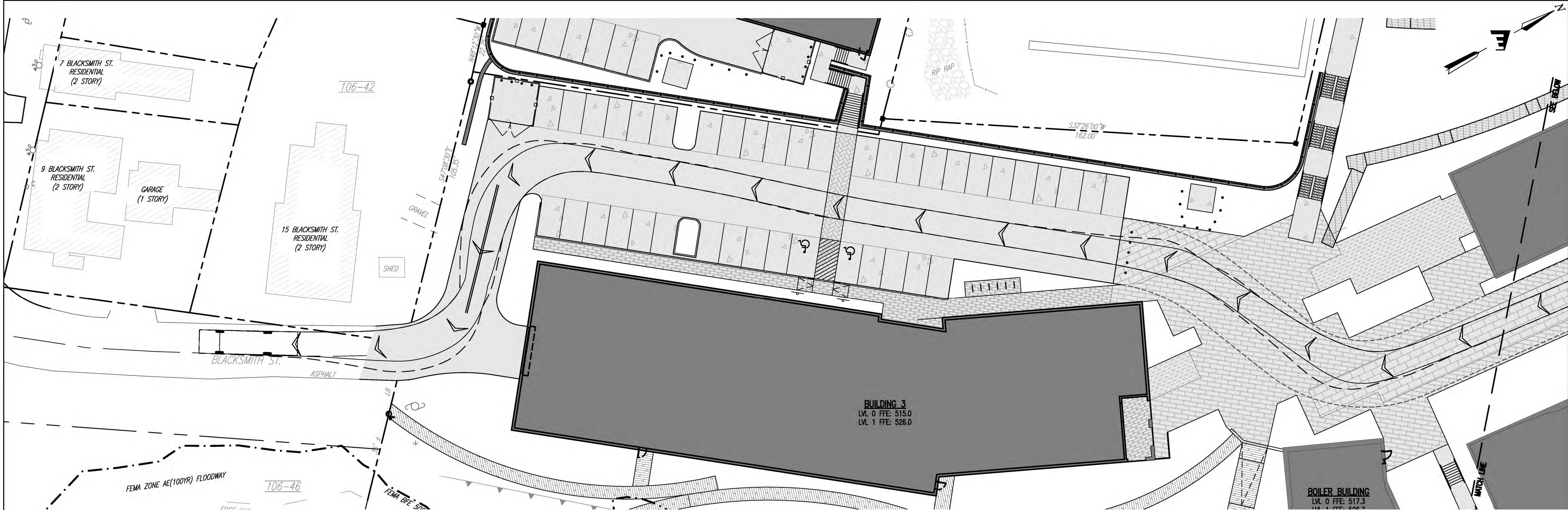
No.	Description	Date

DATE: 09.21.22

SCALE: 1"= 20'

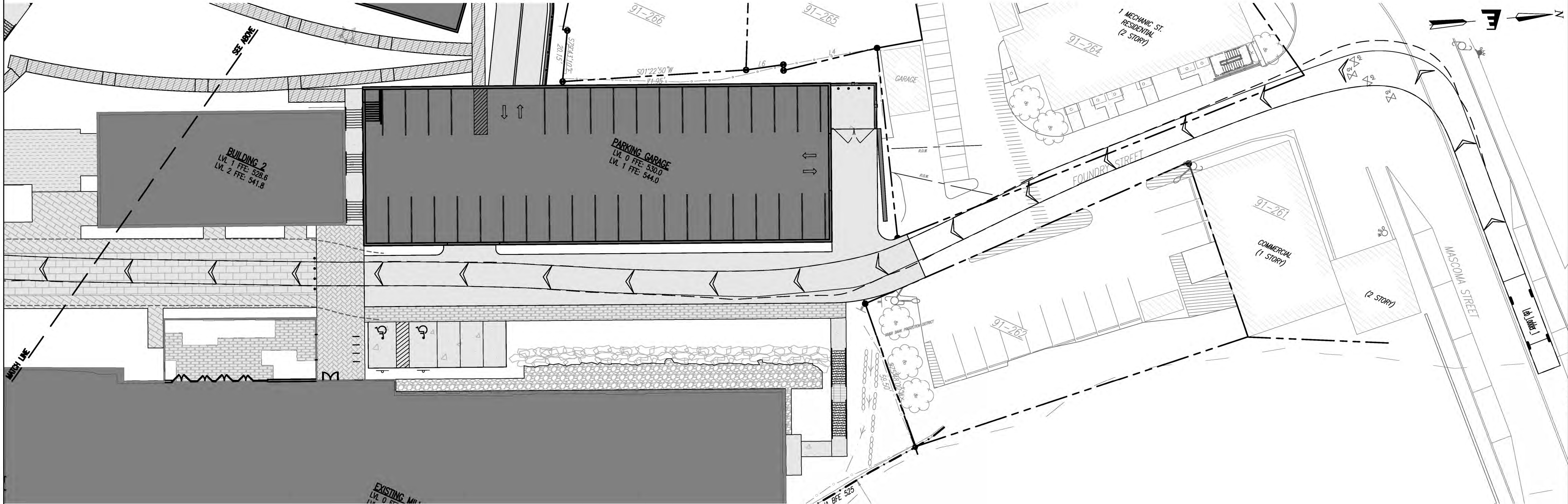
**EMERGENCY VEHICLE
TURNING ANALYSIS (1 of 3)**

VT-1



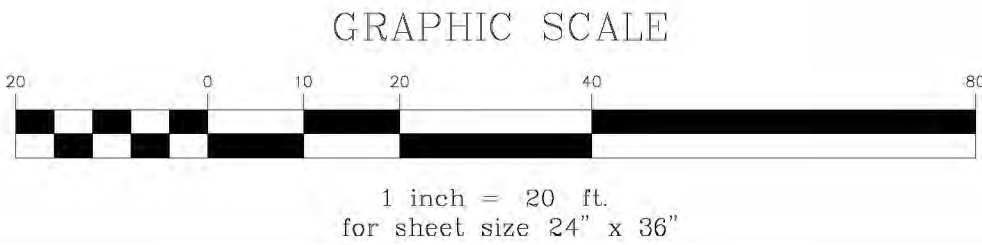
LEBANON ENGINE 1 – ENTERING FROM MASCOMA STREET AND EXITING ONTO BLACKSMITH STREET

SCALE: 1" = 20'



LEBANON ENGINE 1 – ENTERING FROM MASCOMA STREET AND EXITING ONTO BLACKSMITH STREET

SCALE: 1" = 20'



SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T

1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

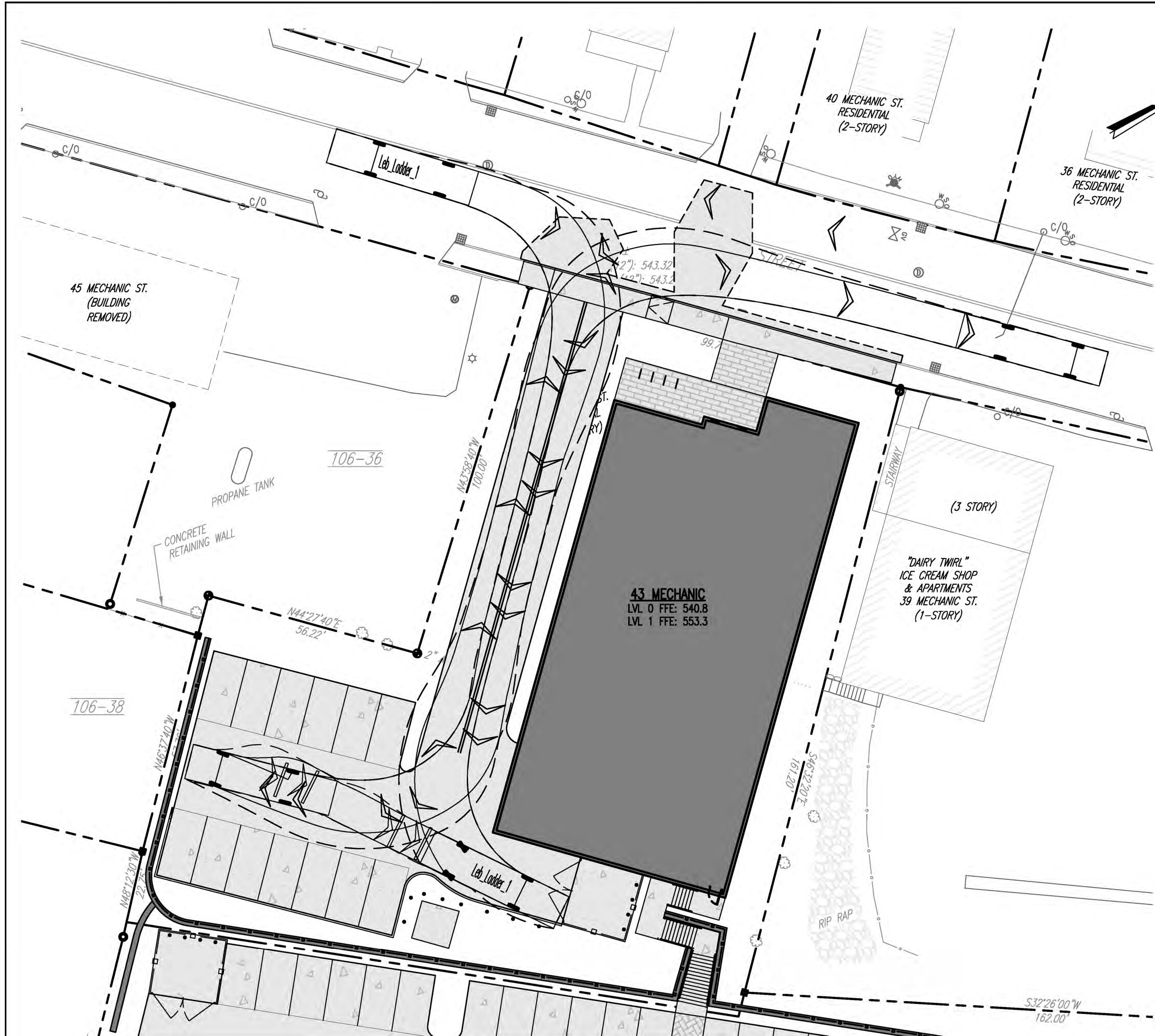
DATE: 09.21.22

SCALE: 1"= 20'

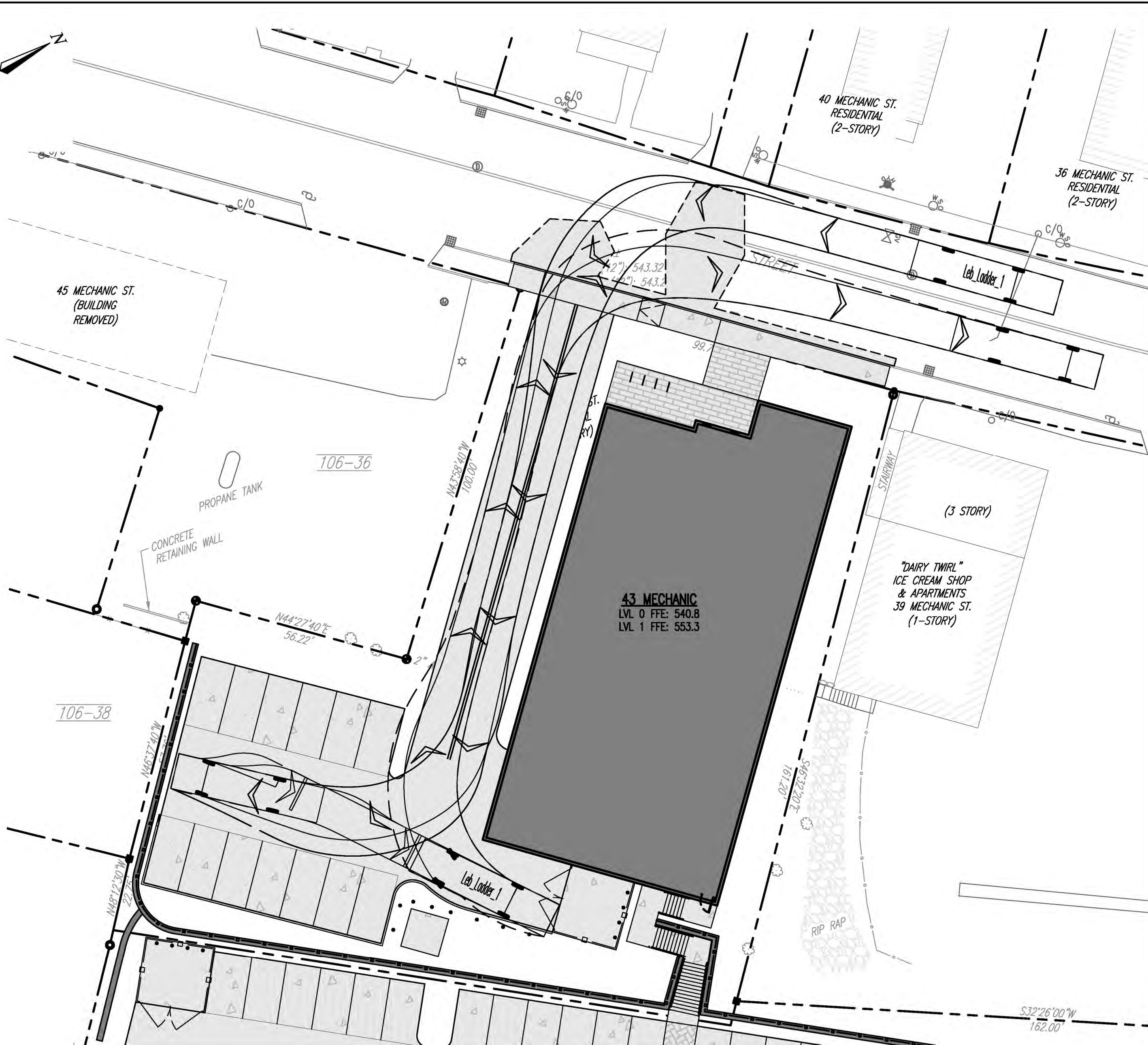
**EMERGENCY VEHICLE
TURNING ANALYSIS (2 OF 3)**

VT-3

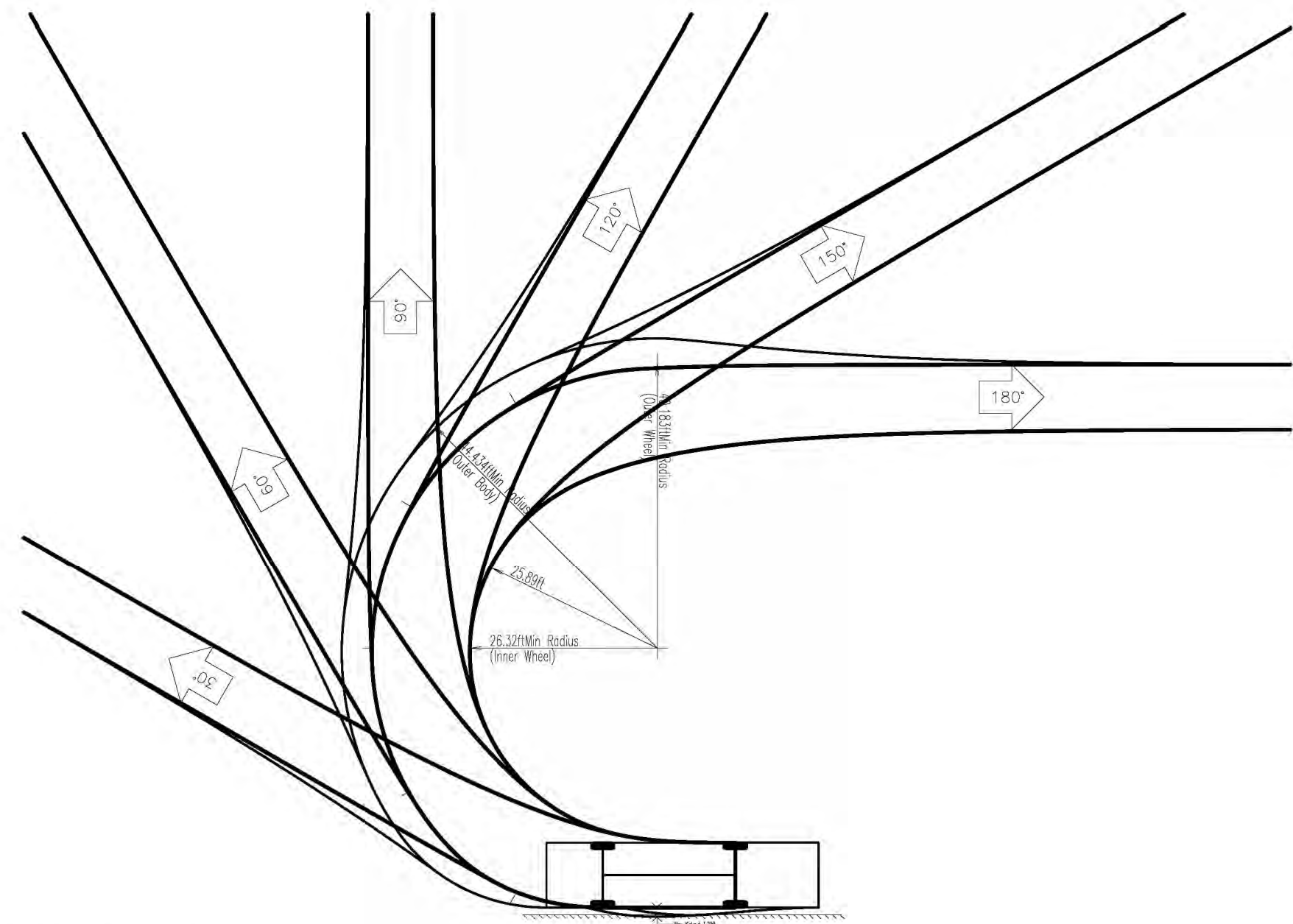
S:\PROJECTS\0-2022\2122 NH LEB WOOLEN MILL\DWGS\122 NH LEB WOOLEN MILL\DWGS\122 C-XXX EMERGENCY ACCESS TURNING.DWG -- PLOTTED: 9/24/2022 7:20 AM



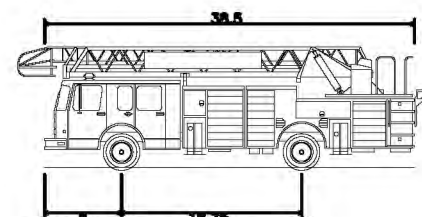
LEBANON ENGINE 1 – ENTERING 43 MECHANIC STREET FROM SOUTH AND EXITING NORTH
SCALE: 1" = 20'



LEBANON ENGINE 1 – ENTERING 43 MECHANIC STREET FROM NORTH AND EXITING NORTH
SCALE: 1" = 20'

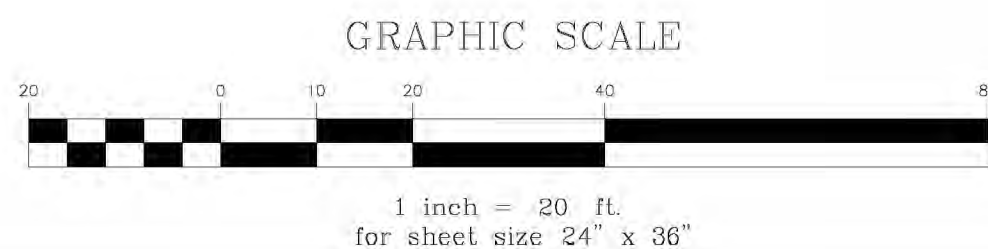


LEBANON ENGINE 1 – TURNING TEMPLATE
SCALE: 1" = 20'



Leb Ladder 1
Overall Length 38.500ft
Overall Width 9.180ft
Overall Body Height 12.550ft
Min Body Ground Clearance 7.031ft
Track Width 9.180ft
Lock-to-lock time 8.500s
Max Wheel Angle 35.00°

LEBANON ENGINE 1 – PROFILE
SCALE: 1" = 20'



SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T

1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

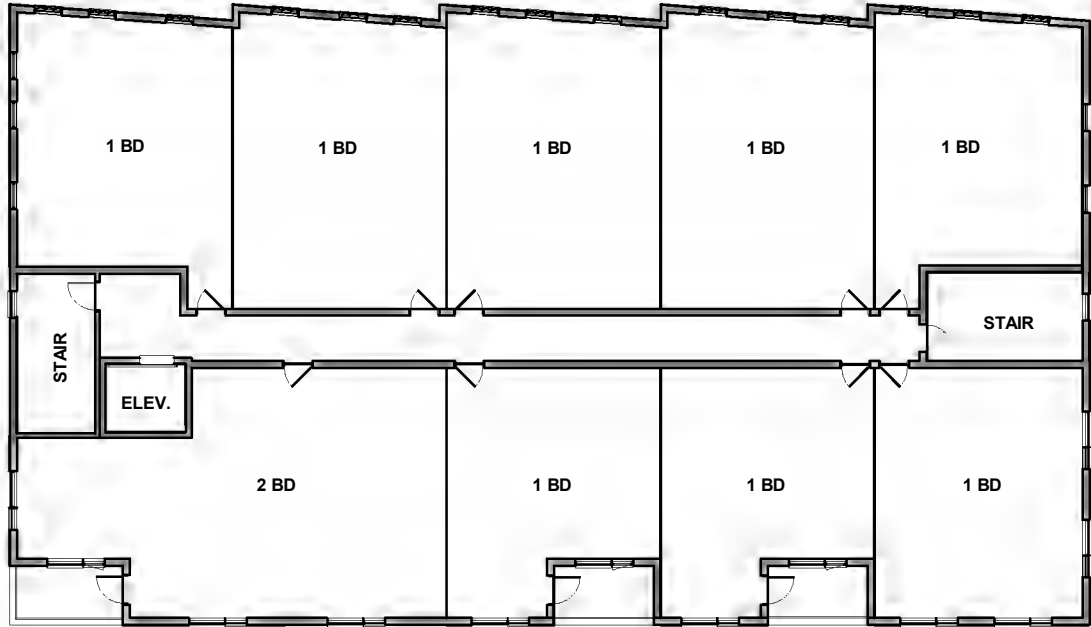
DATE: 09.21.22

SCALE: 1"= 20'

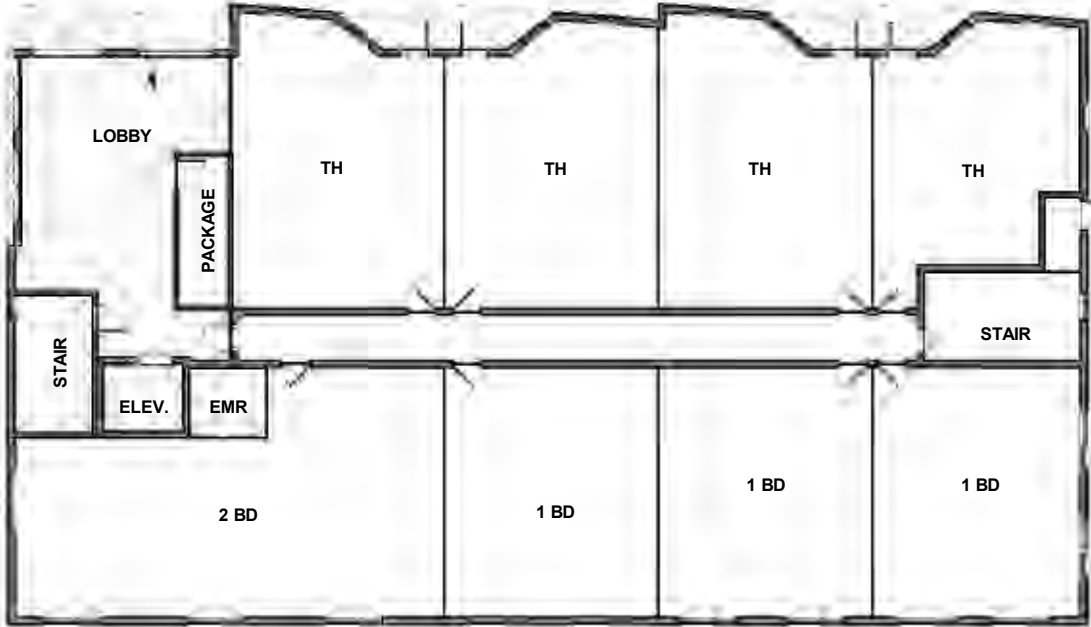
**EMERGENCY VEHICLE
TURNING ANALYSIS (3 OF 3)**

VT-3

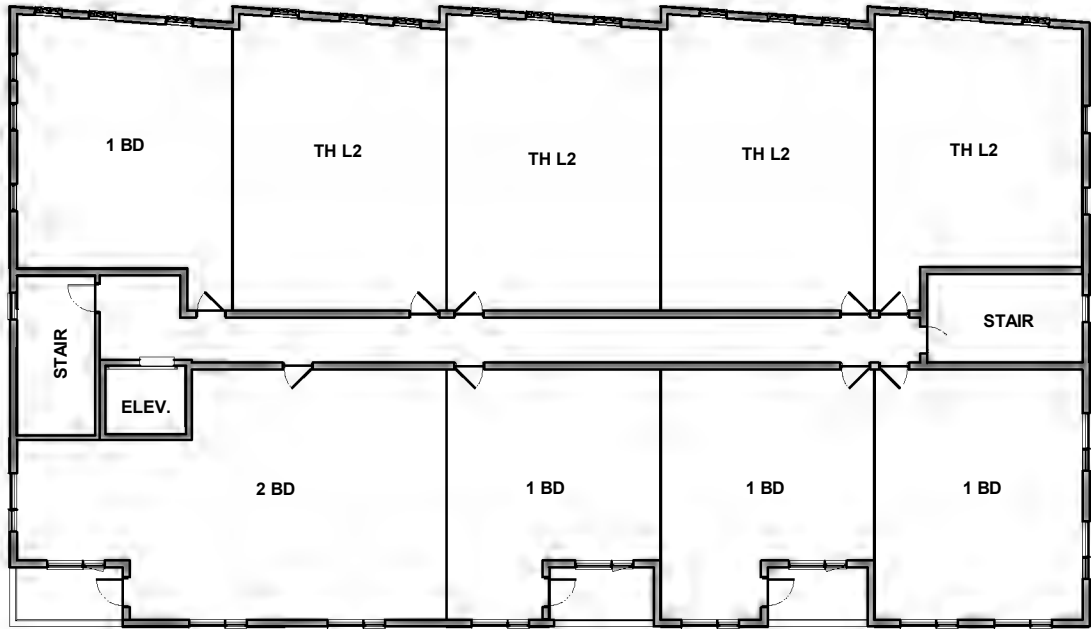
>1,000 SF NON-RESIDENTIAL USE



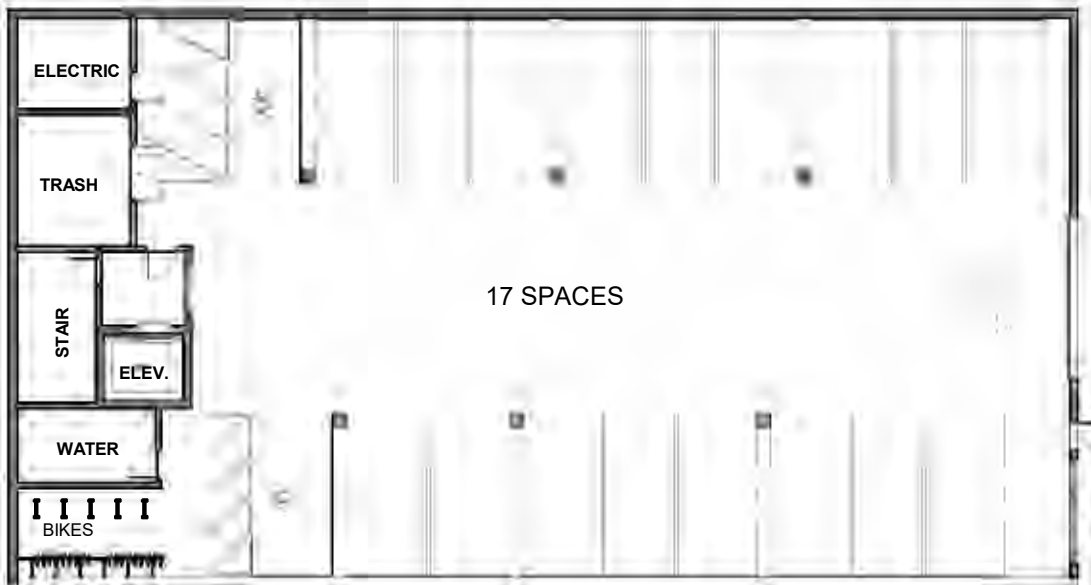
4 25 MECHANIC - LEVEL 3
3/64" = 1'-0"



2 25 MECHANIC - LEVEL 1
3/64" = 1'-0"



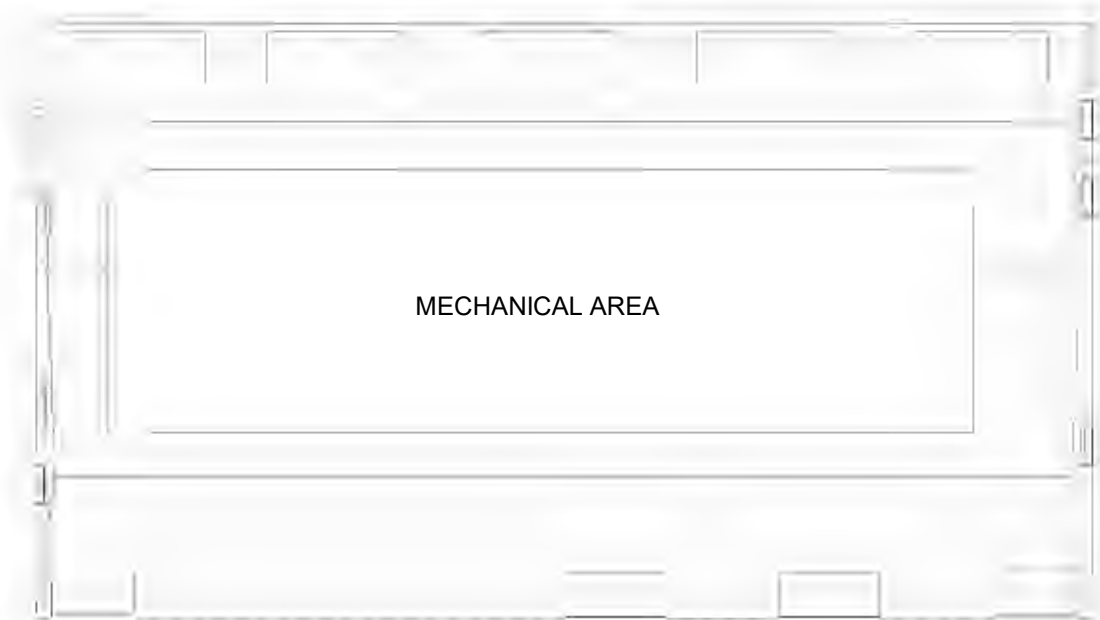
3 25 MECHANIC - LEVEL 2
3/64" = 1'-0"



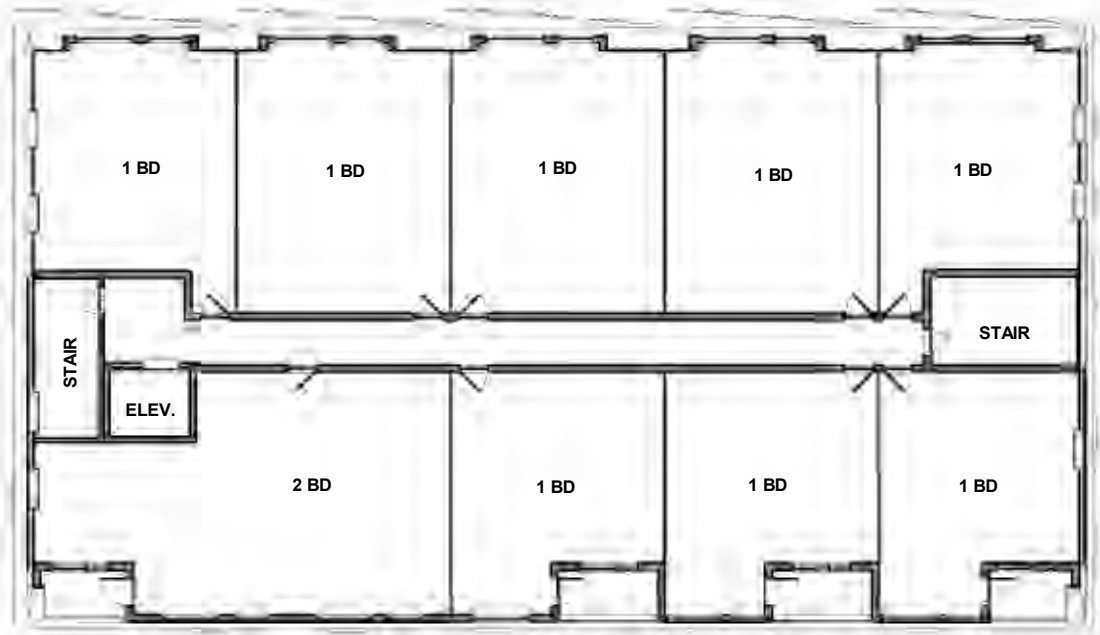
1 25 MECHANIC - LEVEL 0
3/64" = 1'-0"

- ST - STUDIO UNIT
- 1 BD - 1 BEDROOM UNIT
- 2 BD - 2 BEDROOM UNIT
- TH - TOWNHOUSE UNIT

3/64" = 1'-0"



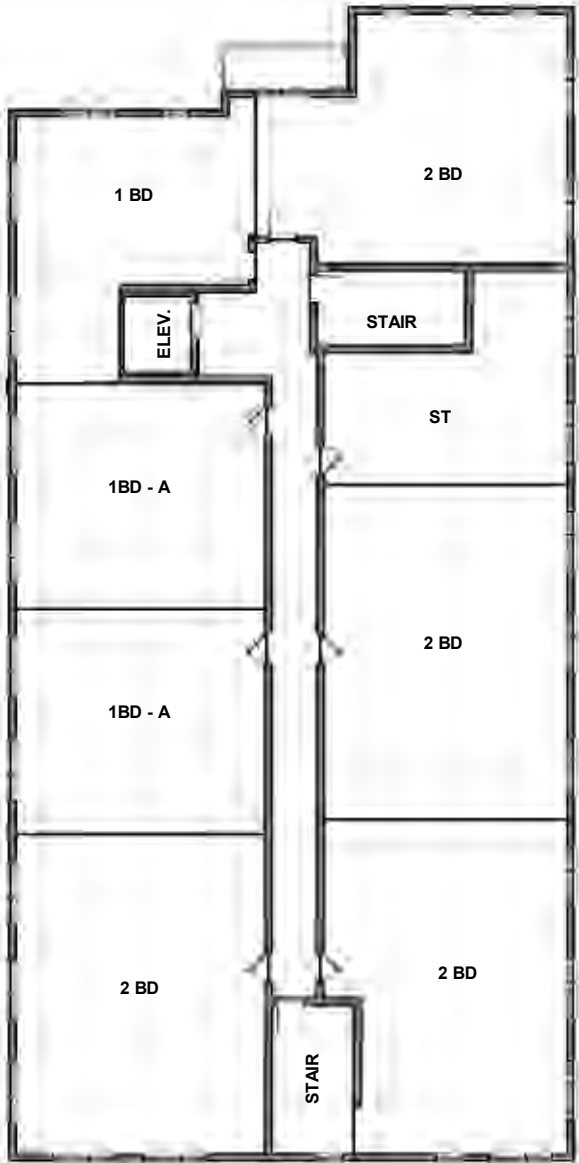
2 25 MECHANIC - ROOF_
3/64" = 1'-0"



1 25 MECHANIC - LEVEL 4_
3/64" = 1'-0"

- ST - STUDIO UNIT
- 1 BD - 1 BEDROOM UNIT
- 2 BD - 2 BEDROOM UNIT
- TH - TOWNHOUSE UNIT

3/64" = 1'-0"



3 43 MECHANIC - LEVEL 2_
3/64" = 1'-0"

- ST - STUDIO UNIT
- 1 BD - 1 BEDROOM UNIT
- 2 BD - 2 BEDROOM UNIT
- TH - TOWNHOUSE UNIT



2 43 MECHANIC - LEVEL 1_
3/64" = 1'-0"



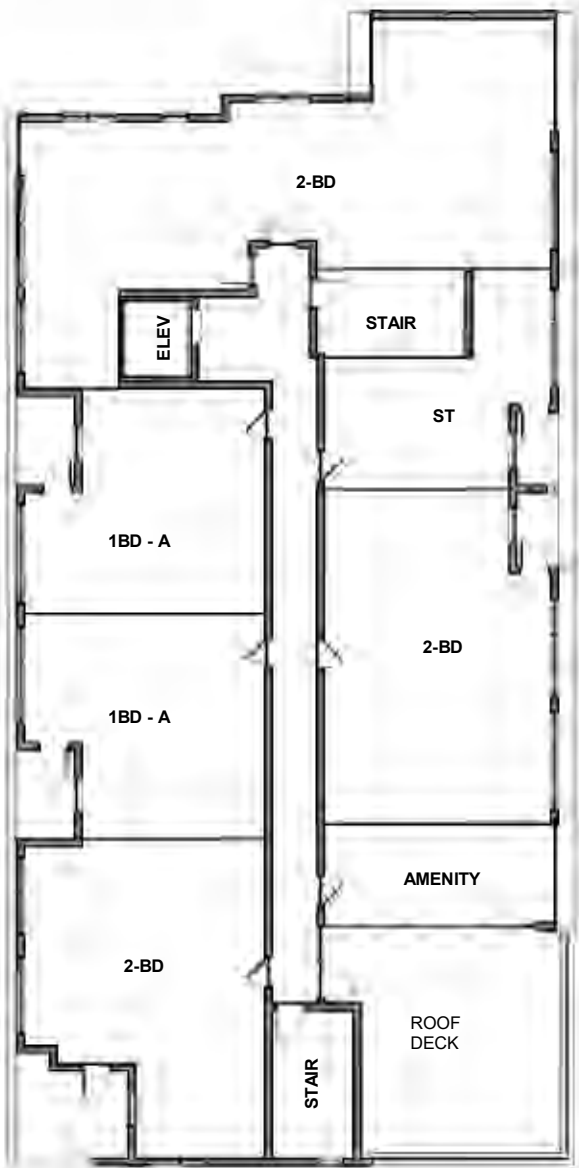
1 43 MECHANIC - LEVEL 0_
3/64" = 1'-0"

>1,000 SF NON-RESIDENTIAL USE

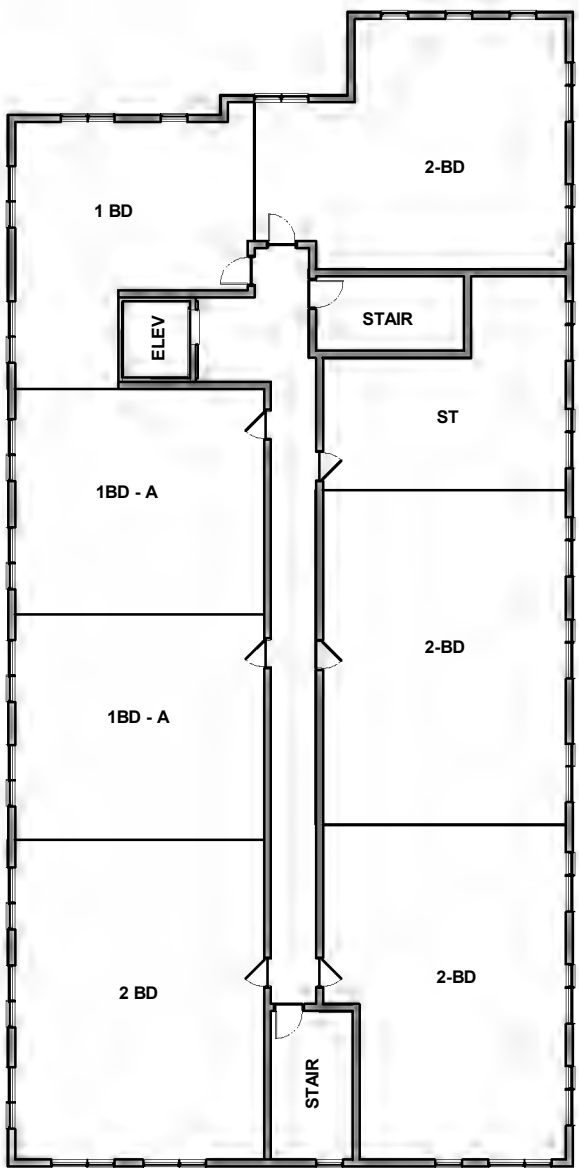
3/64" = 1'-0"



3 43 MECHANIC - ROOF
3/64" = 1'-0"



2 43 MECHANIC - LEVEL 4
3/64" = 1'-0"



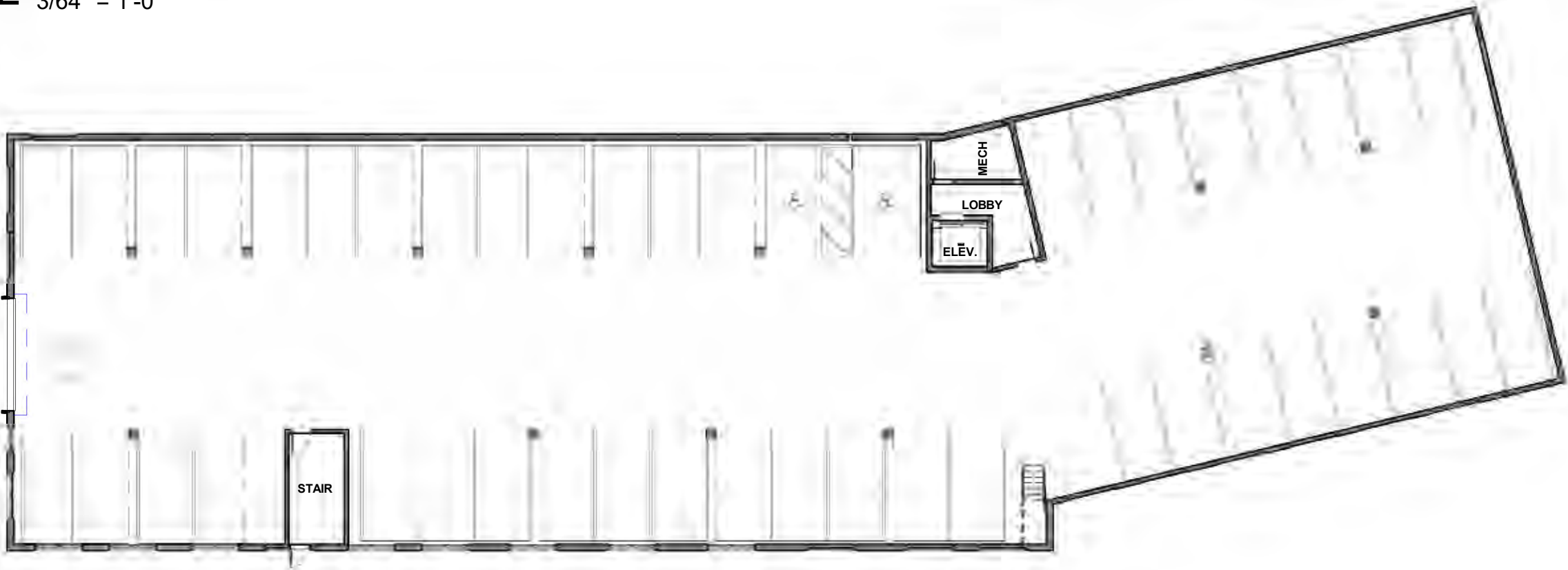
1 43 MECHANIC - LEVEL 3
3/64" = 1'-0"

- ST - STUDIO UNIT
- 1 BD - 1 BEDROOM UNIT
- 2 BD - 2 BEDROOM UNIT
- TH - TOWNHOUSE UNIT

3/64" = 1'-0"



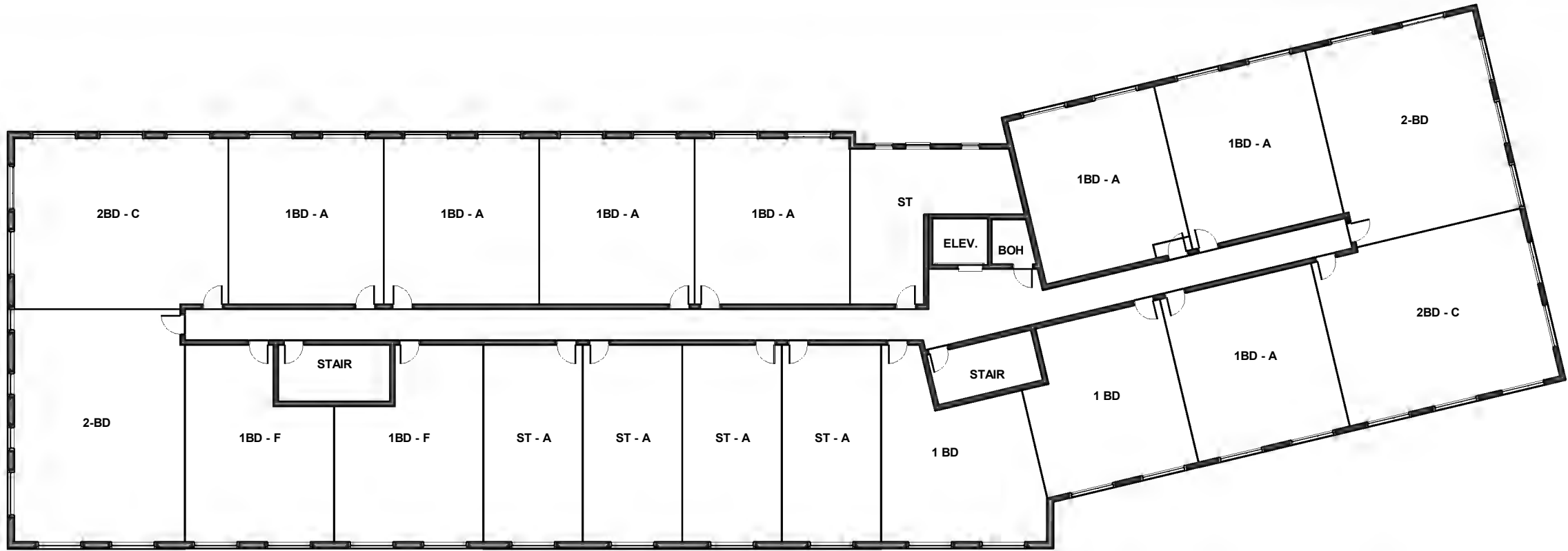
2 BLDG 3 - LEVEL 1
3/64" = 1'-0"



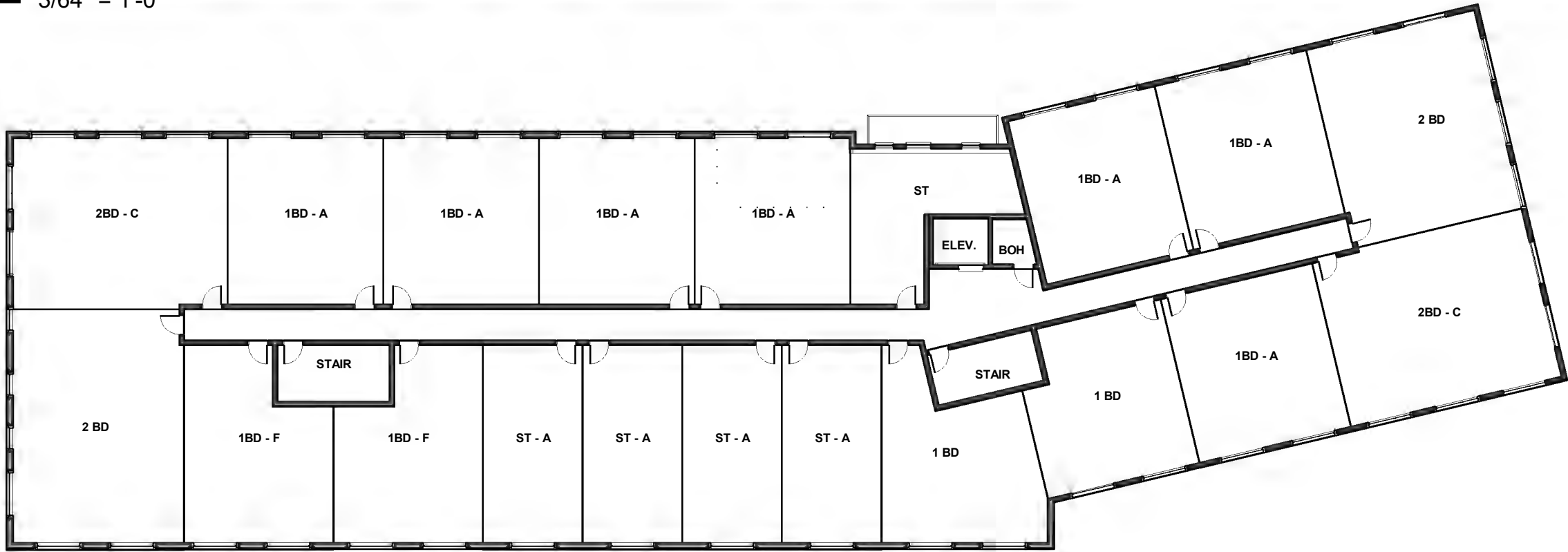
1 BLDG 3 - LEVEL 0
3/64" = 1'-0"

- ST - STUDIO UNIT
- 1 BD - 1 BEDROOM UNIT
- 2 BD - 2 BEDROOM UNIT
- TH - TOWNHOUSE UNIT

3/64" = 1'-0"



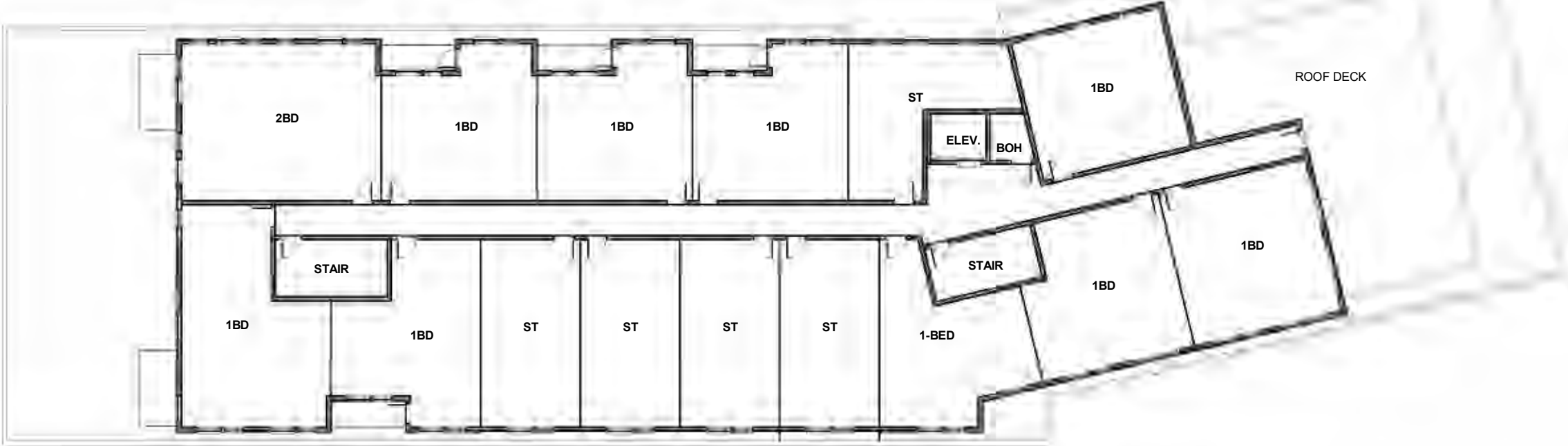
2 BLDG 3 - LEVEL 3
3/64" = 1'-0"



1 BLDG 3 - LEVEL 2
3/64" = 1'-0"

- ST - STUDIO UNIT
- 1 BD - 1 BEDROOM UNIT
- 2 BD - 2 BEDROOM UNIT
- TH - TOWNHOUSE UNIT

3/64" = 1'-0"



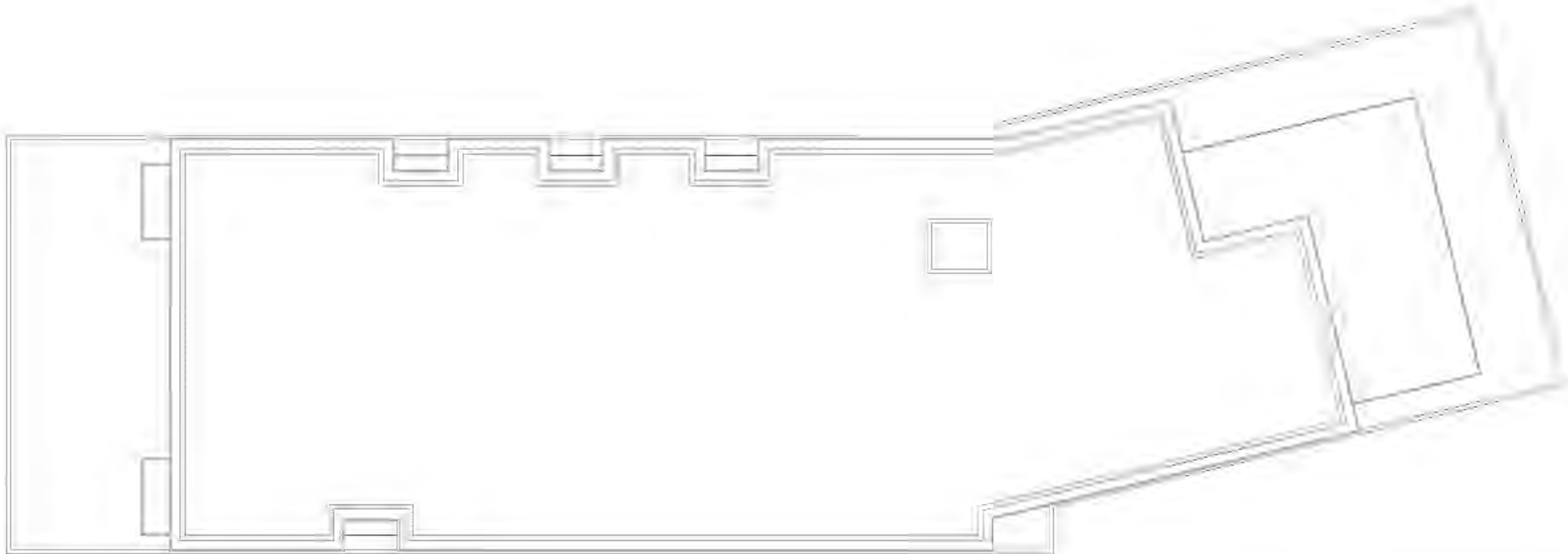
2 BLDG 3 - LEVEL 5_
3/64" = 1'-0"



1 BLDG 3 - LEVEL 4_
3/64" = 1'-0"

- ST - STUDIO UNIT
- 1 BD - 1 BEDROOM UNIT
- 2 BD - 2 BEDROOM UNIT
- TH - TOWNHOUSE UNIT

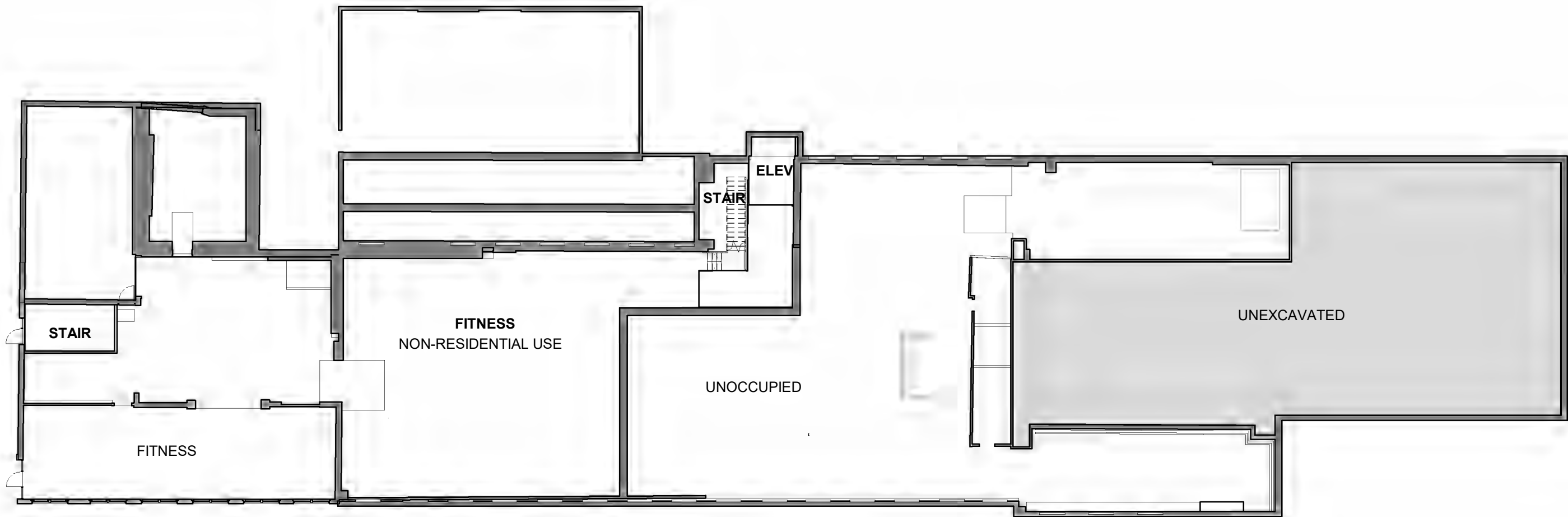
3/64" = 1'-0"



1 BLDG 3 - ROOF
3/64" = 1'-0"

- ST - STUDIO UNIT
- 1 BD - 1 BEDROOM UNIT
- 2 BD - 2 BEDROOM UNIT
- TH - TOWNHOUSE UNIT

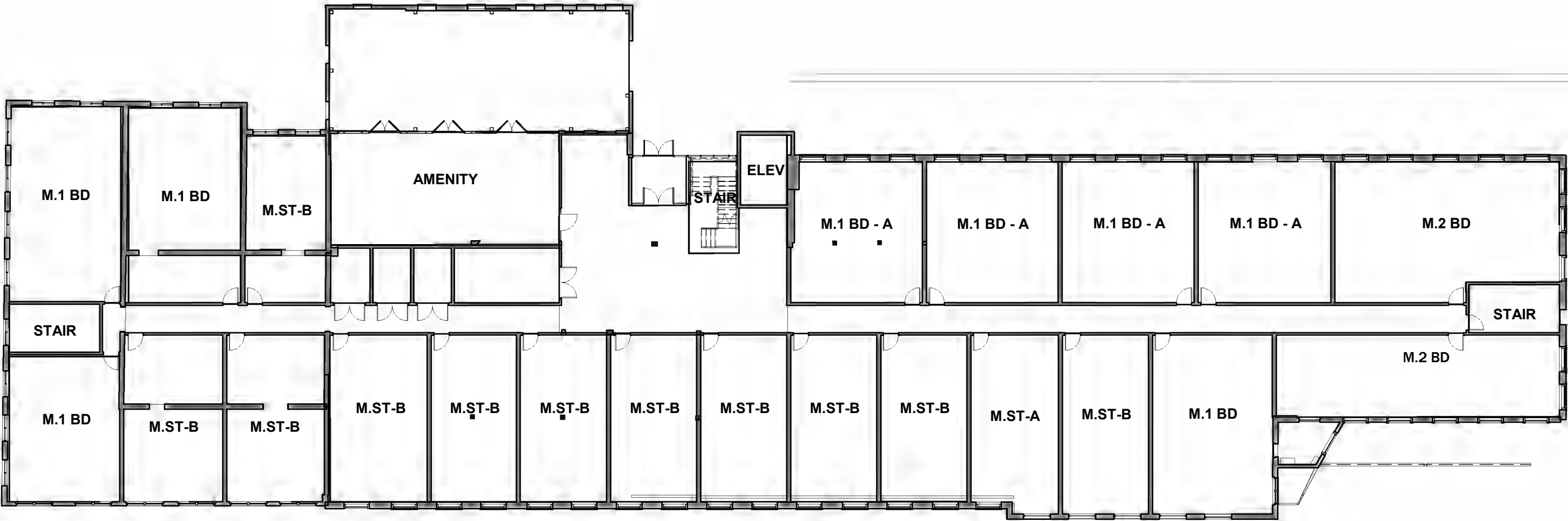
3/64" = 1'-0"



1 MILL - LEVEL 0 pres
3/64" = 1'-0"

- ST - STUDIO UNIT
- 1 BD - 1 BEDROOM UNIT
- 2 BD - 2 BEDROOM UNIT
- TH - TOWNHOUSE UNIT

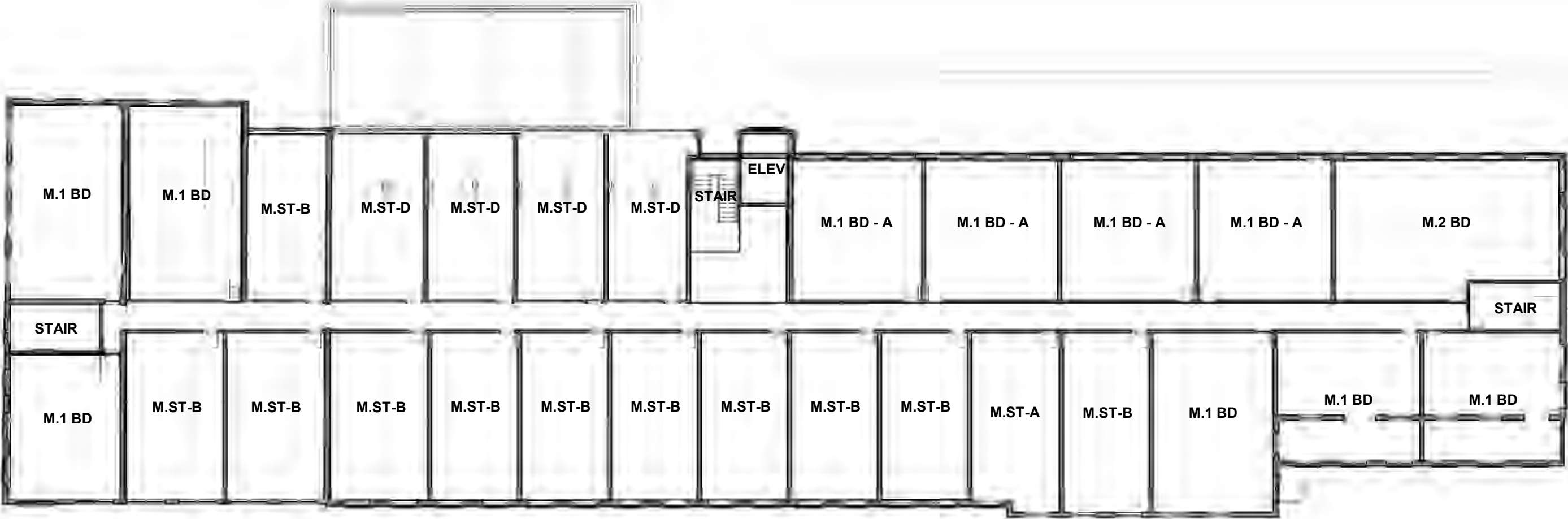
3/64" = 1'-0"



1 MILL - LEVEL 1 pres
3/64" = 1'-0"

- ST - STUDIO UNIT
- 1 BD - 1 BEDROOM UNIT
- 2 BD - 2 BEDROOM UNIT
- TH - TOWNHOUSE UNIT

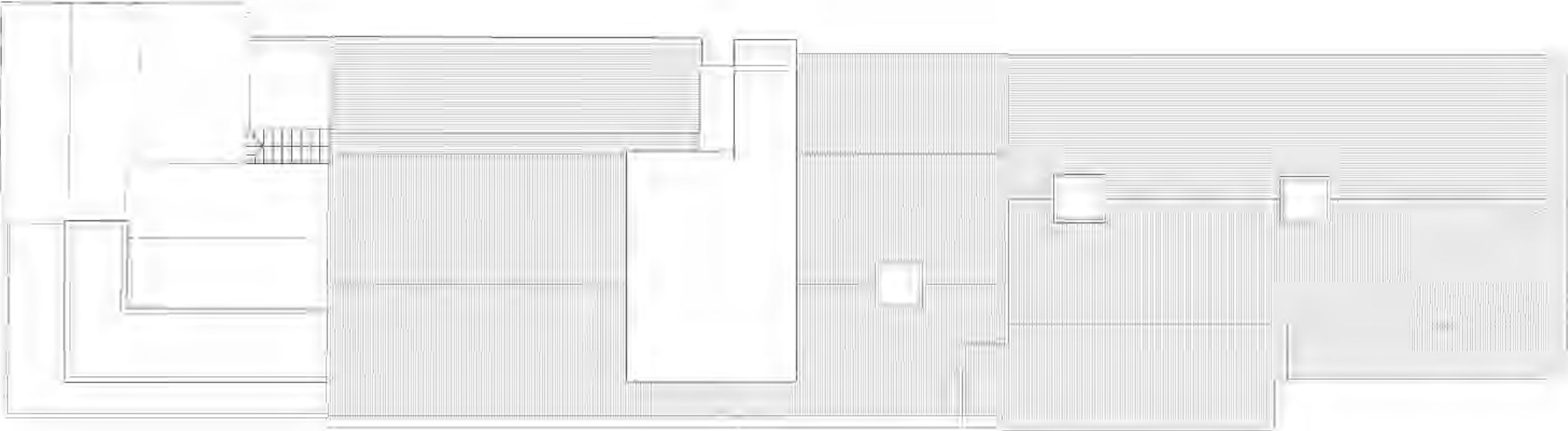
3/64" = 1'-0"



1 MILL - LEVEL 2 pres
3/64" = 1'-0"

- ST - STUDIO UNIT
- 1 BD - 1 BEDROOM UNIT
- 2 BD - 2 BEDROOM UNIT
- TH - TOWNHOUSE UNIT

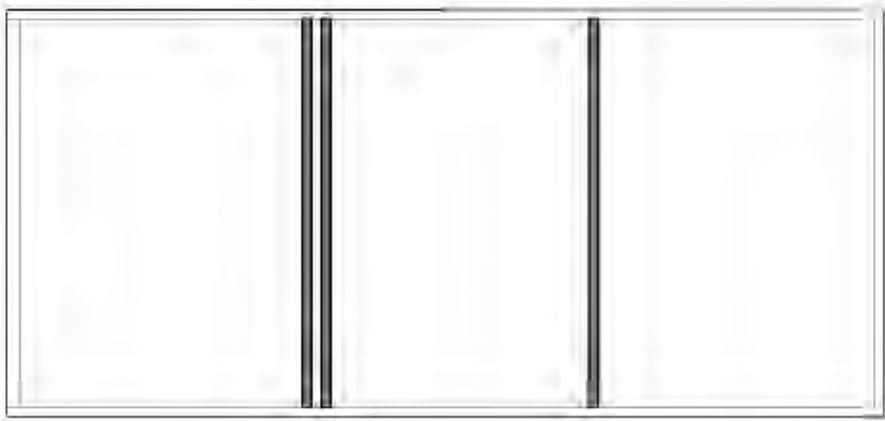
3/64" = 1'-0"



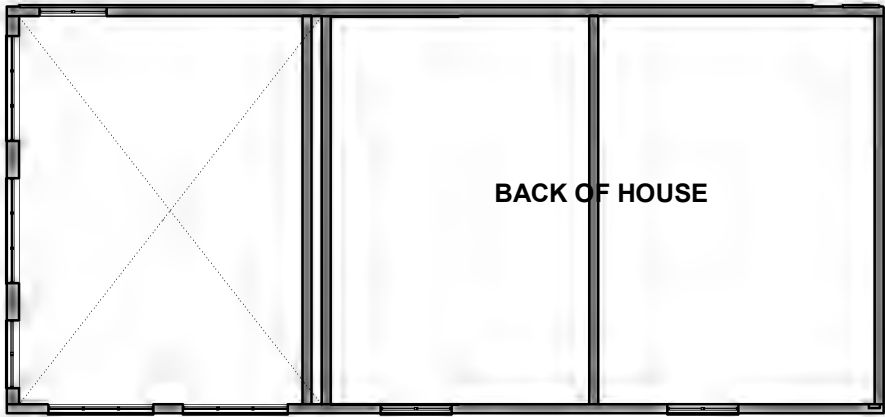
1 MILL - ROOF
3/64" = 1'-0"

- ST - STUDIO UNIT
- 1 BD - 1 BEDROOM UNIT
- 2 BD - 2 BEDROOM UNIT
- TH - TOWNHOUSE UNIT

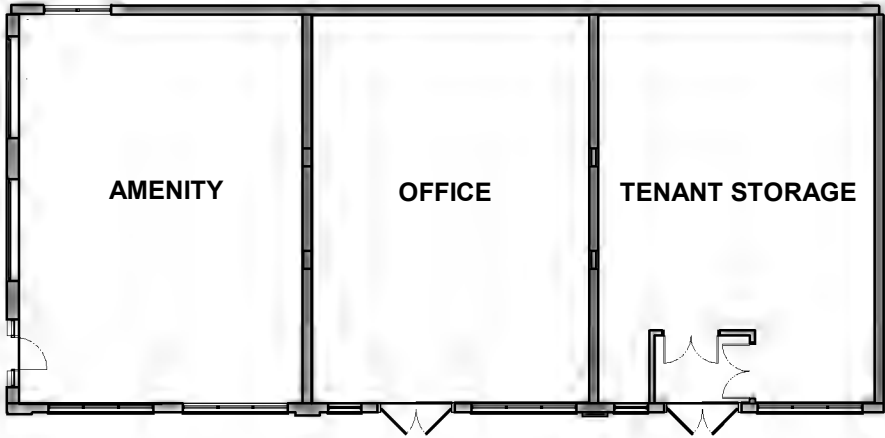
3/64" = 1'-0"



6 BUILDING 2 - ROOF
3/64" = 1'-0"



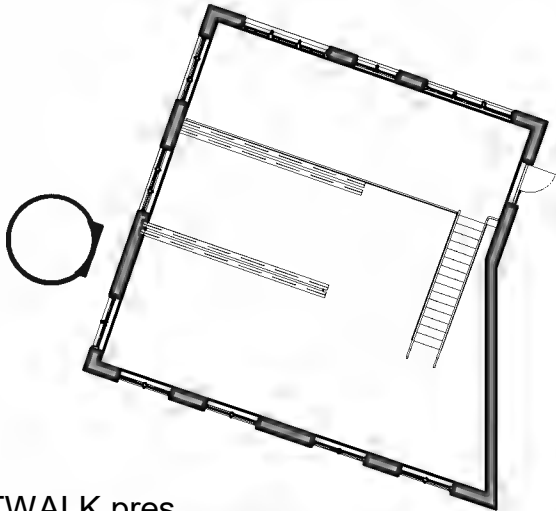
5 BUILDING 2 - LEVEL 2 pres
3/64" = 1'-0"



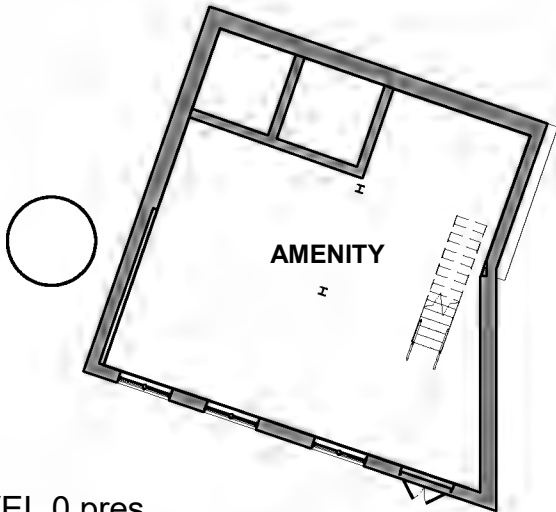
4 BUILDING 2 - LEVEL 1 pres
3/64" = 1'-0"



3 BOILER - ROOF
3/64" = 1'-0"



2 BOILER - CATWALK pres
3/64" = 1'-0"



1 BOILER - LEVEL 0 pres
3/64" = 1'-0"

3/64" = 1'-0"

LEBANON WOOLEN MILL

LEBANON, NEW HAMPSHIRE

09/02/2022

RODE

**ENGINEERING
VENTURES PC**

OJB















S:\PROJECTS\0-2022\2122 NH LEB WOOLEN MILL\DWGS\2122 C-000 COVER SHEET.DWG -- PLOTTED: 9/25/2022 1:09 AM

ZONING TABLE – 1 FOUNDRY & 25 MECHANIC

	Zoning Limit	Existing	Proposed Total	Notes
Zoning District		LDD	LDD	
Tax Map / Lot #		91-263 and 91-267	91-263	1
Use		Commercial	Multi-Family Res	
91-263		Industrial Laundry		
91-267		Dry Cleaner		
Area of Lot (acres)	3,000 s.f. min.	3.670 and 0.533	4.203	1
Building Footprint (s.f.)		34,030	53,452	
Existing Mill		23,425	23,425	
Building 2		6,411	4,353	
Building 3		NA	16,041	
Boiler Building		1,777	1,777	
25 Mechanic		2,417	7,856	
Building Coverage	No Limit	19.8% and 10.4%	29.2%	
Building Gross Floor Area (s.f.)		79,139	175,338	2
Existing Mill		57,753	57,753	
Building 2		14,364	7,989	
Building 3		NA	75,347	
Boiler Building		2,323	2,323	
25 Mechanic		4,699	31,926	
Building Height	55' max.			
Existing Mill		30	30	
Building 2		27	27	
Building 3		NA	55'-8"	
Boiler Building		13	13	
25 Mechanic		14	54'-6"	
Number of Stories				
Existing Mill		3	3	3
Building 2		3	2	
Building 3		NA	6	3
Boiler Building		2	2	3
25 Mechanic		1	5	3
Parking Spaces Provided				
91-263		45+/-	165	
91-267		7	19	
Parking Spaces Required	per 607.4	0	0	
Max Parking Spaces Allowed				
91-263			166	
91-267			37	
Loading Spaces		2	2	
Bicycle Parking Spaces (LT / ST)				
Existing Mill		0	15 / 8	
Building 2		0	0 / 0	
Building 3		NA	31 / 12	
Boiler Building		0	0 / 0	
25 Mechanic		0	23 / 8	
Impervious Area (s.f.)		102,500	114,618	
Impervious Area (% of lot)		55.99%	62.60%	
Setbacks				
Front	0'	20.1	10	
Rear	10'	NA	NA	
Side	0'	40.5	9.1	
City Overlay Districts		Wetlands	Wetlands	
		Floodplain	Floodplain	
		Riverbank Protection	Riverbank Protection	
NHDES Shoreland Jurisdiction		Shoreland	Shoreland	

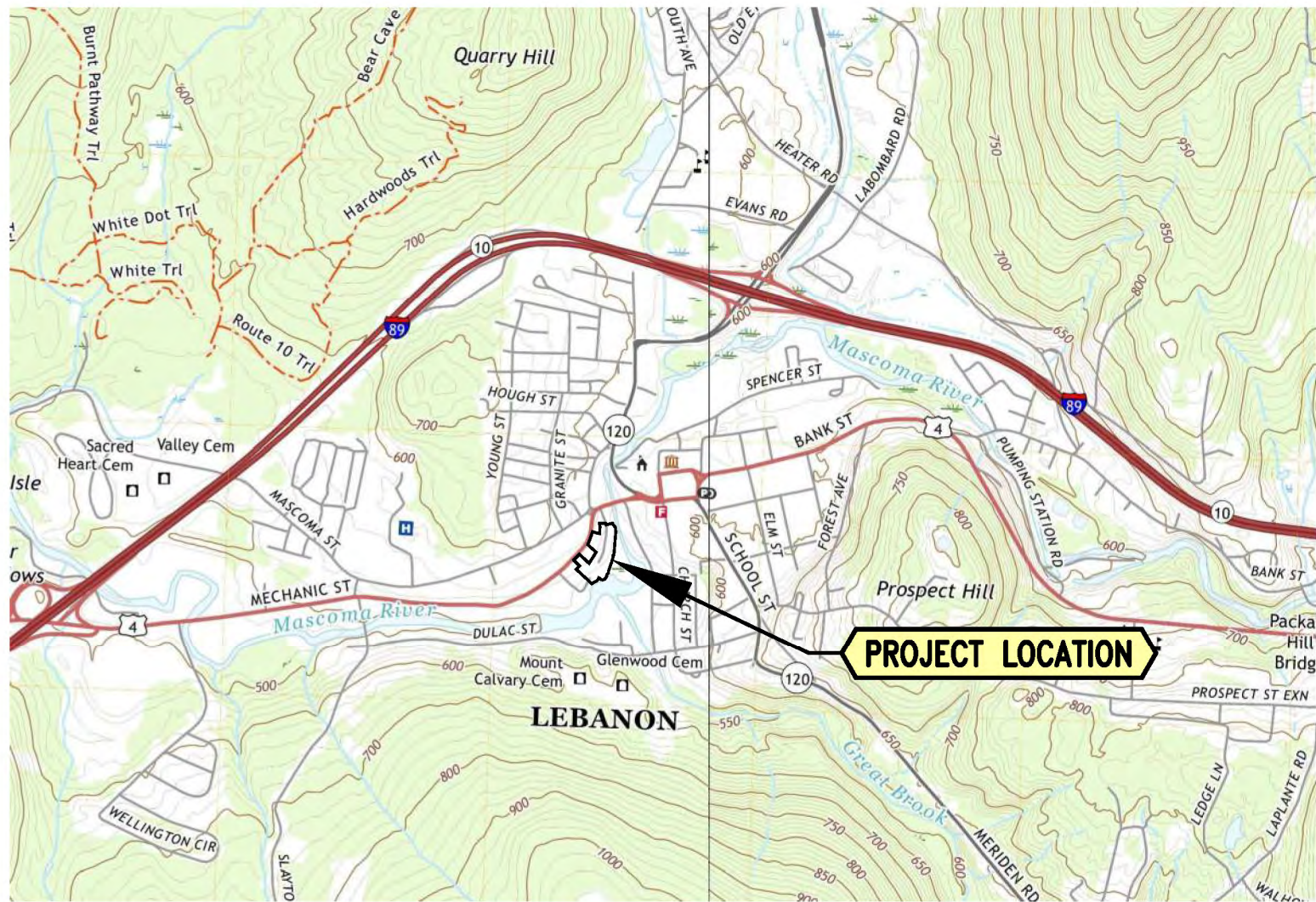
- Notes:
1. Lots will be merged following Site Plan Approval per application PB2022-34-VLM
 2. See Building Program schedule for square footage by floor
 3. Number of Stories includes below grade building space

ZONING TABLE – 43 MECHANIC

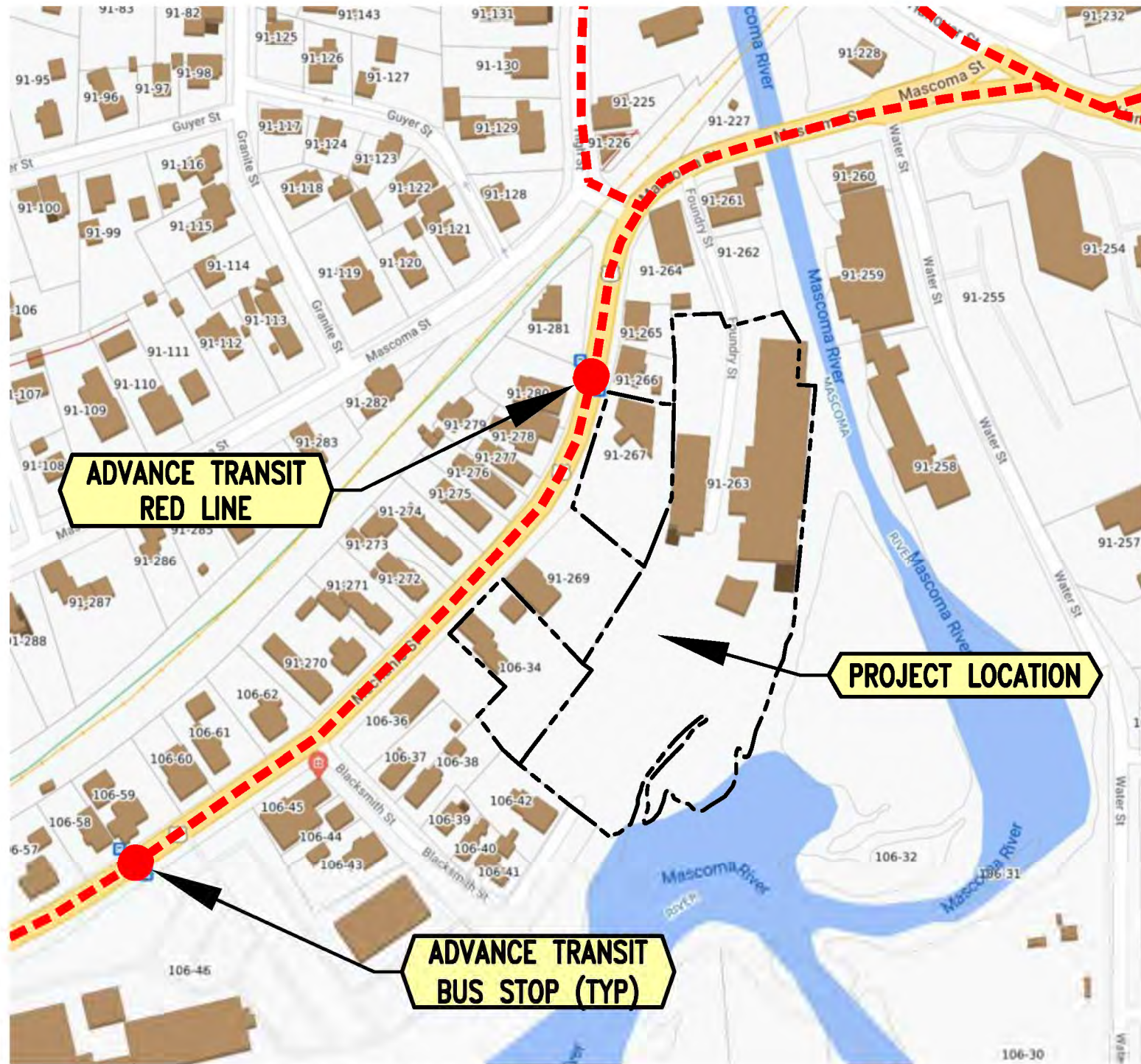
	Zoning Limit	Existing	Proposed Total	Notes
Zoning District		LDD	LDD	
Tax Map / Lot #		106-34	106-34	
Use		Multi-Family Res	Multi-Family Res	
Area of Lot (acres)	3,000 s.f. min.	0.544	0.524	
Building Footprint (s.f.)		2,635	8,021	
Building Coverage	No Limit	11.12%	35.14%	
Building Gross Floor Area (s.f.)		6,034	29,907	1
Building Height	55' max.	30+/-	54'-6"	
Number of Stories		4	5	2
Number of Dwelling Units		6	27	
Parking Spaces Provided		10+/-	30	
Parking Spaces Required	per 607.4	0	0	
Max Parking Spaces Allowed		9	41	
Loading Spaces		0	0	
Bicycle Parking Spaces (LT / ST)		0	9 / 8	
Impervious Area (s.f.)		9,160	15,897	
Impervious Area (% of lot)		38.65%	68.77%	
Setbacks				
Front	0'	5.7'	11.8'	
Rear	10'	94.4'	30'	
Side	0'	4.5'	8.2'	
City Overlay Districts		None	None	
NHDES Shoreland Jurisdiction		Shoreland	Shoreland	

- Notes:
1. See Building Program schedule for square footage by floor
 2. Number of Stories includes below grade building space

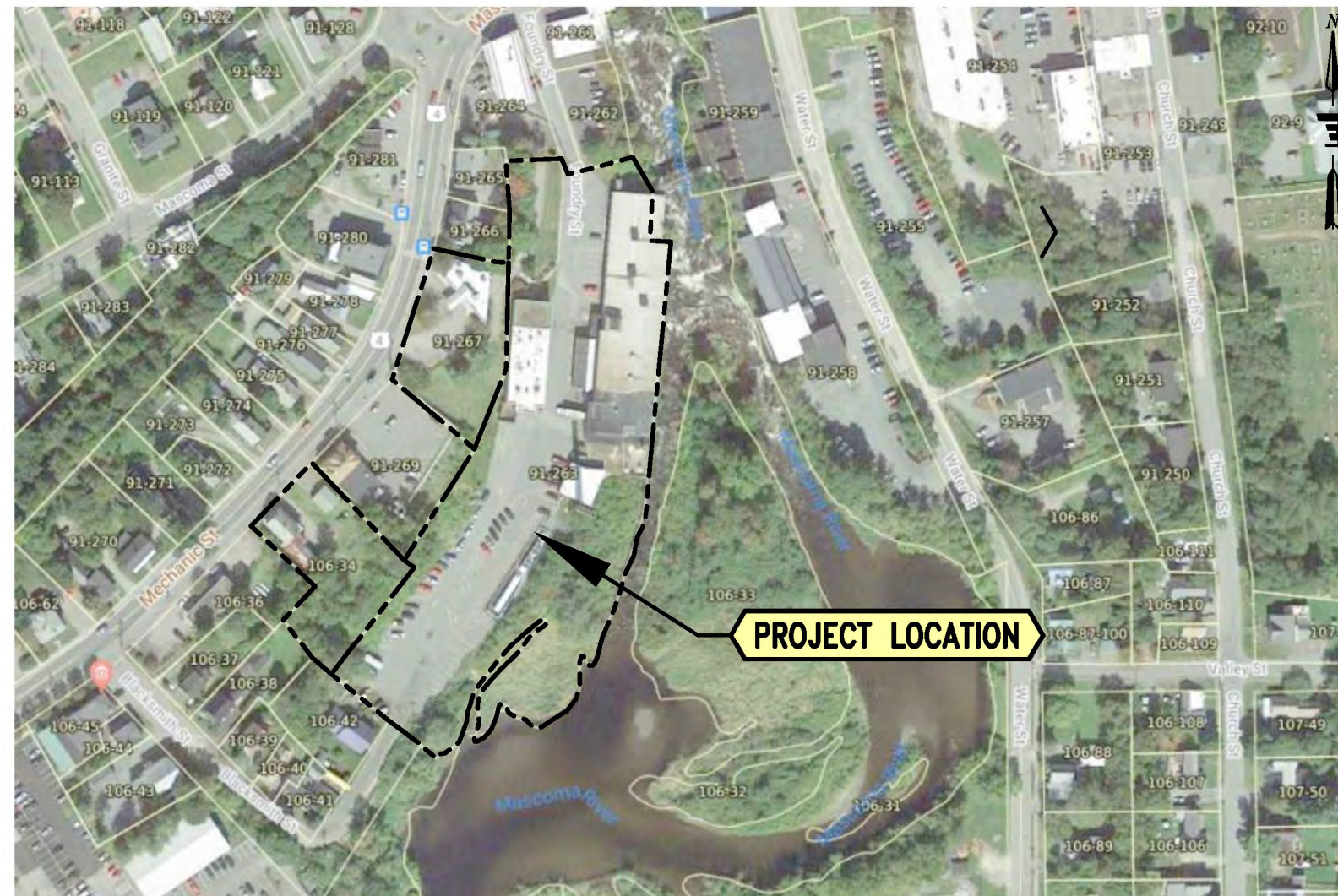
LEBANON WOOLEN MILL



USGS MAP
1"=2,000'



LEBANON GIS MAP
1"=200'



AERIAL PHOTOGRAPH
1"=250'

TABLE OF CONTENTS

SHEET	TITLE	CONSULTANT	PAGE
C-000	COVER SHEET	ENGINEERING VENTURES	1 OF 57
21019-b0	BOUNDARY SURVEY FOR 1 FOUNDRY STREET	VIVE LIBRE GEOMATICS	2 OF 57
21019-b0	BOUNDARY SURVEY FOR 25 MECHANIC STREET	VIVE LIBRE GEOMATICS	3 OF 57
21019-b0	BOUNDARY SURVEY FOR 43 MECHANIC STREET	VIVE LIBRE GEOMATICS	4 OF 57
C-001	SITE LEGEND AND NOTES	ENGINEERING VENTURES	5 OF 57
C-002	PROPERTY EXHIBIT	ENGINEERING VENTURES	6 OF 57
C-003	PHASING PLAN	ENGINEERING VENTURES	7 OF 57
C-100	EXISTING CONDITIONS OVERVIEW PLAN	ENGINEERING VENTURES	8 OF 57
C-101	EXISTING CONDITIONS PLAN (1 OF 2)	ENGINEERING VENTURES	9 OF 57
C-102	EXISTING CONDITIONS PLAN (2 OF 2)	ENGINEERING VENTURES	10 OF 57
C-200	SITE OVERVIEW PLAN	ENGINEERING VENTURES	11 OF 57
C-201	SITE LAYOUT PLAN (1 OF 2)	ENGINEERING VENTURES	12 OF 57
C-202	SITE LAYOUT PLAN (2 OF 2)	ENGINEERING VENTURES	13 OF 57
C-203	GRADING AND DRAINAGE PLAN (1 OF 2)	ENGINEERING VENTURES	14 OF 57
C-204	GRADING AND DRAINAGE PLAN (2 OF 2)	ENGINEERING VENTURES	15 OF 57
C-205	SITE CIRCULATION - SIGNAGE AND STRIPING (1 OF 2)	ENGINEERING VENTURES	16 OF 57
C-206	SITE CIRCULATION - SIGNAGE AND STRIPING (1 OF 2)	ENGINEERING VENTURES	17 OF 57
C-207	UTILITIES PLAN (1 OF 2)	ENGINEERING VENTURES	18 OF 57
C-208	UTILITIES PLAN (1 OF 2)	ENGINEERING VENTURES	19 OF 57
C-209	EROSION PREVENTION AND SEDIMENT CONTROL PLAN (1 OF 2)	ENGINEERING VENTURES	20 OF 57
C-210	EROSION PREVENTION AND SEDIMENT CONTROL PLAN (1 OF 2)	ENGINEERING VENTURES	21 OF 57
C-301	ROADWAY PLAN AND PROFILES	ENGINEERING VENTURES	22 OF 57
C-302	NOT USED	ENGINEERING VENTURES	- OF -
C-303	SEWER PLAN AND PROFILE (1 OF 3)	ENGINEERING VENTURES	23 OF 57
C-304	SEWER PLAN AND PROFILE (2 OF 3)	ENGINEERING VENTURES	24 OF 57
C-305	WATER LINE PLAN AND PROFILE (1 OF 3)	ENGINEERING VENTURES	25 OF 57
C-306	WATER LINE PLAN AND PROFILE (2 OF 3)	ENGINEERING VENTURES	26 OF 57
C-307	WATER LINE PLAN AND PROFILE (3 OF 3)	ENGINEERING VENTURES	27 OF 57
C-401	SITE DETAILS (1 OF 2)	ENGINEERING VENTURES	28 OF 57
C-402	SITE DETAILS (2 OF 2)	ENGINEERING VENTURES	29 OF 57
C-403	STORMWATER DETAILS (1 OF 3)	ENGINEERING VENTURES	30 OF 57
C-404	STORMWATER DETAILS (2 OF 3)	ENGINEERING VENTURES	31 OF 57
C-405	STORMWATER DETAILS (3 OF 3)	ENGINEERING VENTURES	32 OF 57
C-406	SEWER DETAILS	ENGINEERING VENTURES	33 OF 57
C-407	WATER DETAILS	ENGINEERING VENTURES	34 OF 57
C-408	EROSION PREVENTION AND SEDIMENT CONTROL DETAILS	ENGINEERING VENTURES	35 OF 57
C-600	SHADE CALCULATIONS	ENGINEERING VENTURES	36 OF 57
L-000	ORIENTATION PLAN AND GENERAL NOTES	OJB LANDSCAPE ARCHITECTS	37 OF 57
L-100	CONSTRUCTION SCHEDULE	OJB LANDSCAPE ARCHITECTS	38 OF 57
L-101	CONSTRUCTION PLANS	OJB LANDSCAPE ARCHITECTS	39 OF 57
L-102	CONSTRUCTION PLANS	OJB LANDSCAPE ARCHITECTS	40 OF 57
L-103	CONSTRUCTION PLANS	OJB LANDSCAPE ARCHITECTS	41 OF 57
L-301	CONSTRUCTION DETAILS	OJB LANDSCAPE ARCHITECTS	42 OF 57
L-302	CONSTRUCTION DETAILS	OJB LANDSCAPE ARCHITECTS	43 OF 57
L-303	CONSTRUCTION DETAILS	OJB LANDSCAPE ARCHITECTS	44 OF 57
L-600	PLANTING SCHEDULE AND NOTES	OJB LANDSCAPE ARCHITECTS	45 OF 57
L-601	PLANTING PLAN	OJB LANDSCAPE ARCHITECTS	46 OF 57
L-602	PLANTING PLAN	OJB LANDSCAPE ARCHITECTS	47 OF 57
L-603	PLANTING PLAN	OJB LANDSCAPE ARCHITECTS	48 OF 57
L-701	PLANTING DETAILS	OJB LANDSCAPE ARCHITECTS	49 OF 57
SL-101	PHOTOMETRIC PLAN	LAM PARTNERS	50 OF 57
A-100	43 & 25 MECHANIC AND BUILDING 3 PARKING PLANS	RODE ARCHITECTS	51 OF 57
A-101	PARKING GARAGE PLANS	RODE ARCHITECTS	52 OF 57
A-200	BUILDING ELEVATIONS - BUILDING 3	RODE ARCHITECTS	53 OF 57
A-201	BUILDING ELEVATIONS - 25 MECHANIC	RODE ARCHITECTS	54 OF 57
A-202	BUILDING ELEVATIONS - 43 MECHANIC & PARKING GARAGE	RODE ARCHITECTS	55 OF 57
A-203	EXISTING MILL ELEVATIONS	RODE ARCHITECTS	56 OF 57
A-204	BUILDING 2 & BOILER BLDG. ELEVATIONS	RODE ARCHITECTS	57 OF 57

OWNER\APPLICANTS:

LWM RESIDENTIAL LLC
1 GUYENNE ROAD
WILMINGTON, DELEWARE 19807

SUBJECT PARCELS:

TAX MAP 91 LOTS 263 AND 267
TAX MAP 106 LOT 34
CITY OF LEBANON
GRAFTON COUNTY
NEW HAMPSHIRE, 03766

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T

1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

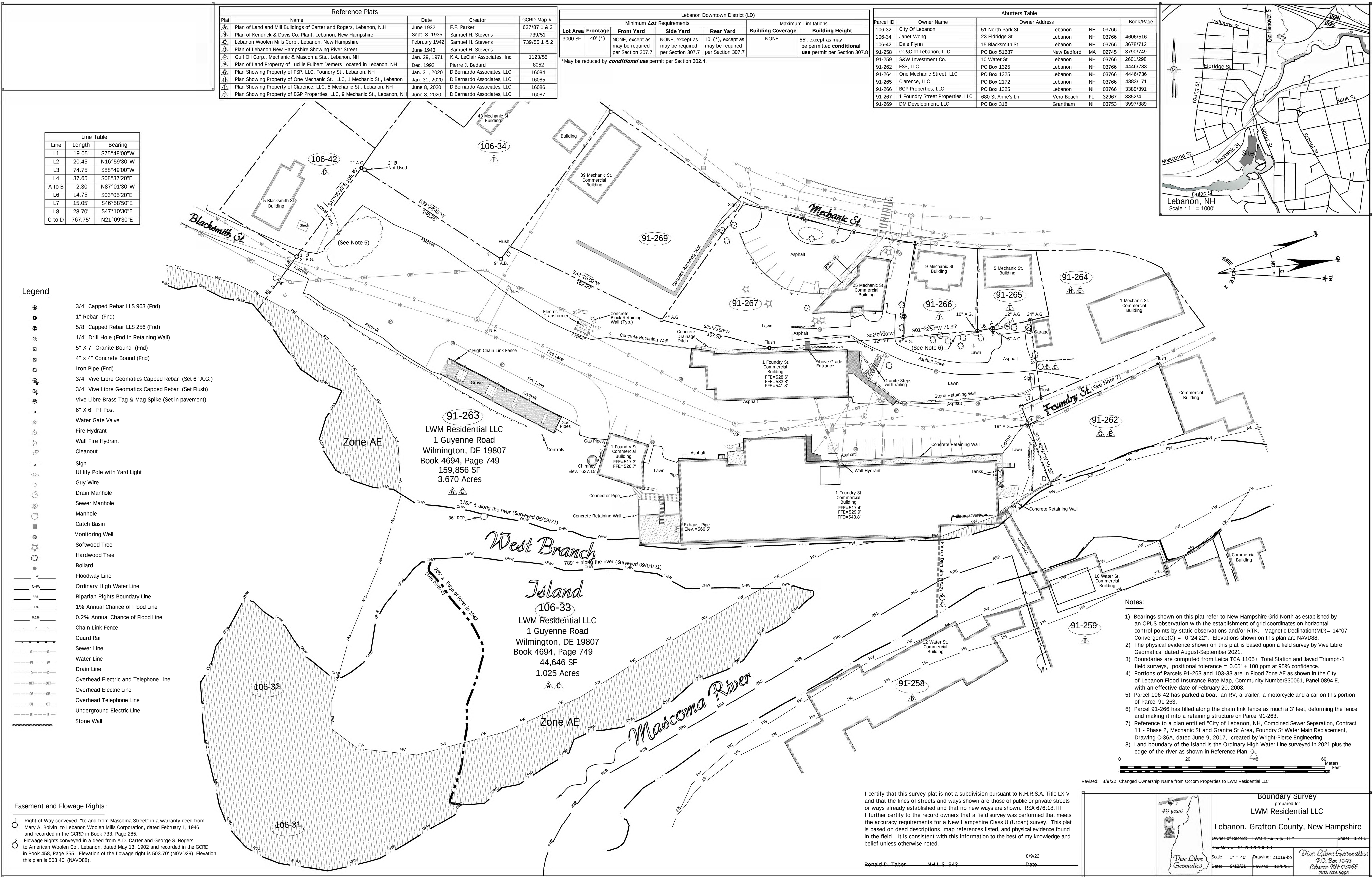
No.	Description	Date

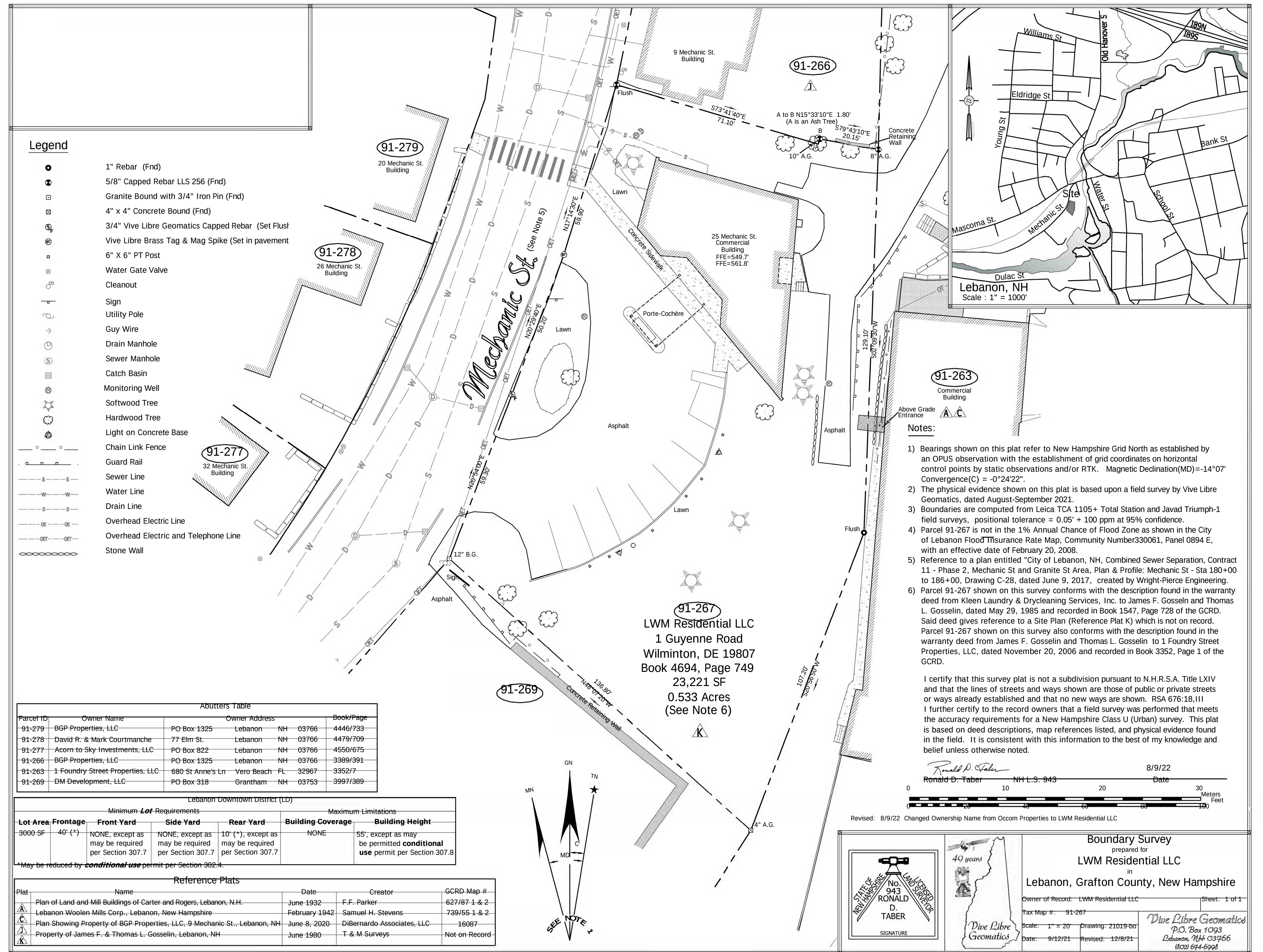
DATE: 08.15.22

SCALE: AS NOTED

COVER SHEET

C-000
Page 1 of 57





STANDARD ABBREVIATIONS

BENCHMARK	BM	END OF VERTICAL CURVE ELEVATION	EVCE	LIMITS OF CONSTRUCTION	LOC	REINFORCED CONCRETE PIPE	RCP
BEGINNING OF VERTICAL CURVE ELEVATION	BMCE	END OF VERTICAL CURVE STATION	EVCS	LIMITS OF DISTURBANCE	LOD	RIGHT-OF-WAY	ROW
BEGINNING OF VERTICAL CURVE STATION	BMCS	EXISTING	EX	MAXIMUM	MAX	SANITARY	SAN
CAST-IN-PLACE	CIP	EXISTING GRADE/GROUND	EG	MINIMUM	MIN	SANITARY MANHOLE	SMH
CAST IRON	CI	FINISHED FLOOR	FF	MANUAL OR UNIFORM TRAFFIC CONTROL DEVICES	MUTCD	SEPTIC TANK	ST
CATCH BASIN	CB	FINISHED GRADE/GROUND	FG	MONITORING WELL	MW	SILT FENCE	SF
CENTERLINE	CL	FIELD INLET	FI	MONUMENT	MON	SLOPE	S=
CLEAN OUT	C/O	FLARED END SECTION	FES	NOT IN CONTRACT	NIC	STATION	STA
CORRUGATED METAL PIPE	CMP	FOOT, FEET	FT	NOT TO SCALE	NTS	STORM MANHOLE	DMH
CUBIC FEET	CF	FOOTING	FTG	POINT OF CURVATURE	PC	TANGENT	TAN
CUBIC FEET PER SECOND	CFS	FOUNDATION	FND	POINT OF INTERSECTION	PI	TANGENT TO CURVE	TC
CUBIC YARD	CY	GALLONS PER MINUTE	GPM	POLYETHYLENE, PROFESSIONAL ENGINEER	PE	TAPPING SLEEVE AND VALVE	TS&V
DIAMETER	DA	GATE VALVE	GV	PROPERTY LINE	PL	TEMPORARY BENCHMARK	TBM
DISTRIBUTION BOX	D-BOX	HEADWALL	HW	PERC TEST, POINT OF TANGENCY	PT	TEST PIT	TP
DUCTILE IRON	DI	HIGH DENSITY POLYETHYLENE	HDPE	POLYVINYL CHLORIDE	PVC	TOP OF BANK	TOB
EDGE OF CONCRETE	EOC	HYDRANT	HYD	POINT OF VERTICAL INTERSECTION	PVI	TOP OF CURB	TOC
EDGE OF GRAVEL	EOG	INTERSECTION	INT	POND	PND	TOP OF WALL	TOW
EDGE OF PAVEMENT	EOP	INVERT	INV	QUANTITY	QTY	TYPICAL	TYP
ELECTRIC	ELEC	IRON PIN	IP	QUALITY ASSURANCE	QA	VERIFY IN FIELD	VF
ELECTRIC MANHOLE	EMH	IRON PIPE SIZE	IPS	QUALITY CONTROL	QC	WATER VALVE	WV
ELEVATION	ELEV	LENGTH	L=	RADIUS	R=		

GENERAL NOTES

1. EXACT OBJECT LOCATIONS MAY DIFFER FROM THAT AS SHOWN, AND ADDITIONAL SUB-SURFACE AND SURFACE UTILITIES AND STRUCTURES MAY EXIST. THE CONTRACTOR IS TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK AND TO CALL DIG SAFE 72 HOURS PRIOR TO ANY DIGGING, DRILLING OR BLASTING.
2. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL FROM THE ENGINEER.
3. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
4. THE CONTRACTOR SHALL RESTORE LAWNS, DRIVEWAYS, CULVERTS, SIGNS AND OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO EXISTING CONDITIONS OR BETTER AS DETERMINED BY THE ENGINEER. ANY DAMAGED TREES, SHRUBS AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, UNLESS NOTED OTHERWISE.
5. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
6. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING, AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, AND CERTIFICATES.
7. THE CONTRACTOR WILL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A NEW HAMPSHIRE STATE LICENSED LAND SURVEYOR.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS, AND COORDINATE WORK WITH ALL CONTRACTS FOR THE SITE.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT EXPLORATORY TEST PITS AS MAY BE REQUIRED TO DETERMINE UNDERGROUND CONDITIONS.
10. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS FOR CONSTRUCTION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
12. MAINTAIN FLOW FOR ALL EXISTING UTILITIES, UNLESS NOTED OTHERWISE.
13. ALL SITE FILL SHALL MEET SELECTED FILL STANDARDS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
14. CONTRACTOR TO GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND IMPERVIOUS SURFACES.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT. THE CONTRACTOR SHALL PROVIDE MARKED-UP AS-BUILT PLANS FOR ALL UTILITIES SHOWING CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES AND INVERTS. AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND HIS REPRESENTATIVES BEFORE UTILITIES WILL BE ACCEPTED.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION, MONITORING, MAINTENANCE AND REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES AND TAKING PRECAUTIONARY STEPS TO AVOID ANY SEDIMENT TRANSFER TO NEIGHBORING SITES OR WATERS OF THE STATE.
17. FOLLOWING ANY WARRANTY PERIOD, THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING, TO INCLUDE GRASS AND MULCH, IN GOOD, HEALTHY CONDITION SO AS TO PRESENT A NEAT AND ORDERLY APPEARANCE.
18. AFTER THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE STORAGE, DISPLAY, OR PARKING OF MOTOR VEHICLES, BOATS, MOBILE HOMES, TRAILERS, OR CONSTRUCTION EQUIPMENT WITHIN LANDSCAPED AREAS, BUFFERS, OR SCREENS, SHOWN AS SUCH ON THE APPROVED LANDSCAPE PLAN, IS EXPRESSLY PROHIBITED AND A VIOLATION OF THE NOTICE OF ACTION.

SYMBOL LEGEND

PROPOSED FEATURES	EXISTING FEATURES
	BOUND
	BENCHMARK
	DRILL HOLE
	SURVEY POINT
	IRON PIN
	TP1
	B1
	P1
	PERC TEST
	CATCH BASIN (SQUARE)
	CATCH BASIN (ROUND)
	HEADWALL
	FLARED END SECTION
	STONE APRON
	DRAIN MANHOLE (DMH)
	DRAINAGE CLEAN OUT
	SANITARY SEWER MANHOLE (SMH)
	SANITARY CLEAN OUT
	HYDRANT
	WATER SHUTOFF
	TAPPING SLEEVE & VALVE
	GATE VALVE
	WELL
	UTILITY POLE
	GUY POLE
	ELECTRICAL MANHOLE
	BUILDING MOUNTED LIGHT
	LIGHT POST
	TELEPHONE MANHOLE
	NATURAL GAS MANHOLE
	COMMUNICATION MANHOLE
	BOLLARD
	SINGLE POLE SIGN
	DOUBLE POLE SIGN
	SPOT ELEVATION
	ACCESSIBLE PARKING STALL
	DRAINAGE FLOW
	DECIDUOUS TREE
	CONIFEROUS TREE
	ACCESSIBLE CURB RAMP

LINETYPE LEGEND

PROPOSED FEATURES	EXISTING FEATURES
	MAJOR CONTOUR
	MINOR CONTOUR
	EDGE OF RIVER
	EDGE OF POND
	FLOOD PLAN BASED ON B.F.E.
	FEMA FLOOD PLAIN LIMITS
	50' SETBACK FROM ORDINARY HIGH WATER LINE
	150' SETBACK FROM ORDINARY HIGH WATER LINE
	250' SETBACK FROM ORDINARY HIGH WATER LINE
	RIPARIAN RIGHTS BOUNDARY LINE
	PROPERTY LINE
	RIGHT OF WAY
	SETBACK
	EASEMENT
	LIMIT OF CONSTRUCTION
	LIMIT OF DISTURBANCE
	SILT FENCE
	DEMOLITION WORK
	CENTERLINE
	EDGE OF PAVEMENT
	EDGE OF GRAVEL
	EDGE OF CONCRETE
	CURB
	FENCE (BARBED WIRE)
	FENCE (CHAIN LINK)
	FENCE (WOODEN)
	GUARD RAIL
	TREE LINE
	STONE WALL
	SANITARY SEWER
	SEWER FORCEMAIN
	SEWER SERVICE
	DISPOSAL AREA LATERAL
	STORM LINE
	UNDER DRAIN
	FOUNDATION DRAIN
	ROOF DRAIN
	DITCH/SWALE
	TELECOMM
	UNDERGROUND TELECOMM
	OVERHEAD TELECOMM
	ELECTRIC LINE
	UNDERGROUND ELECTRIC
	OVERHEAD ELECTRIC
	ELECTRICAL SITE LIGHTING
	WATER LINE
	WATER SERVICE
	GAS LINE
	CABLE TV
	UNDERGROUND CABLE TV
	OVERHEAD CABLE TV
	STEAM LINE
	LOW PRESSURE STEAM
	HIGH PRESSURE STEAM
	HOT WATER
	CHILLED WATER

SITE PLAN REVIEW

RODE

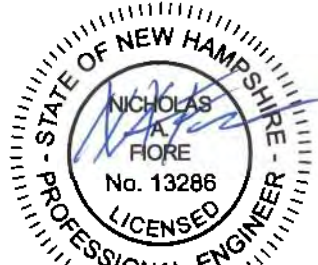
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

DATE: 08.15.22

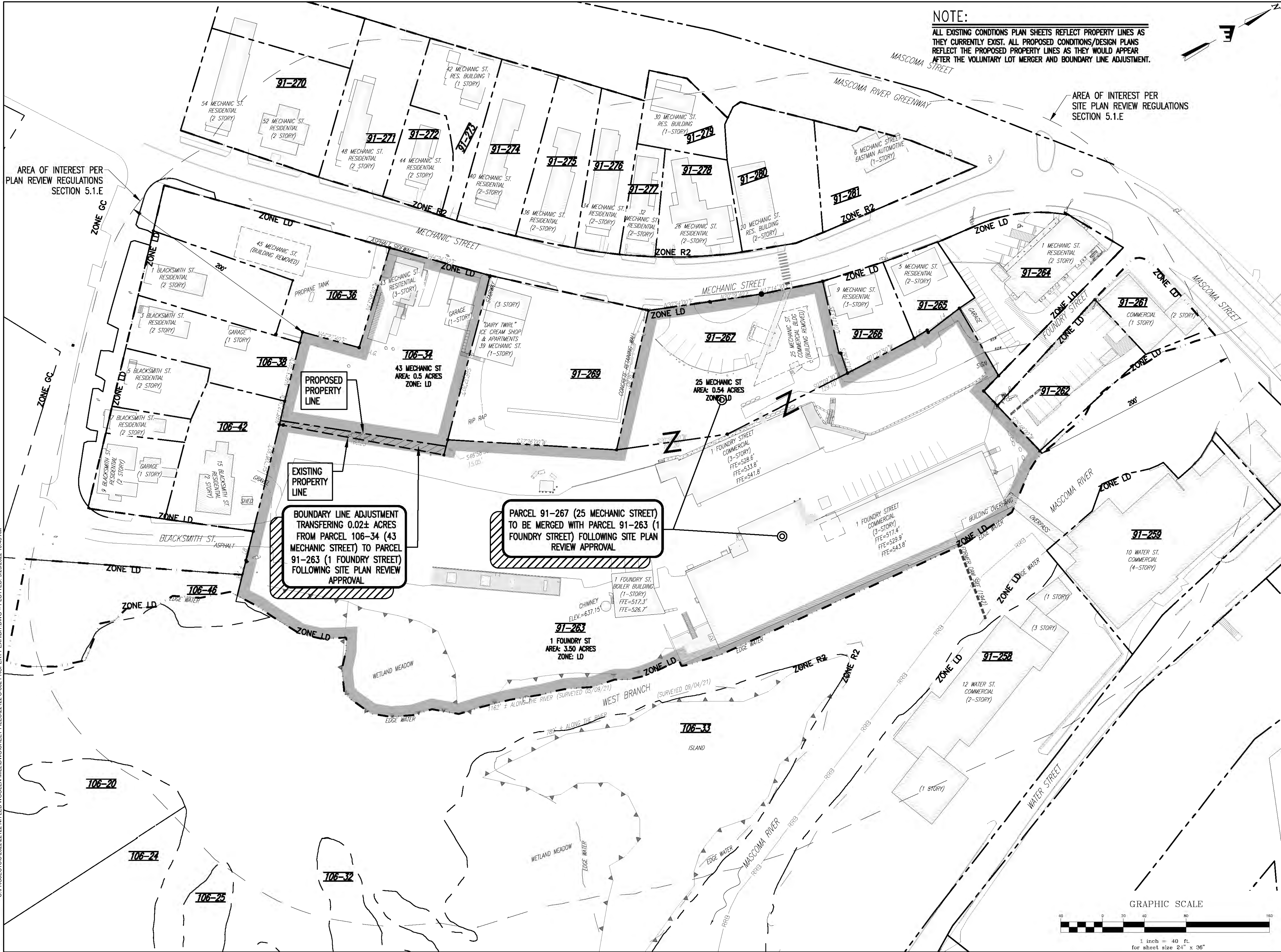
SCALE: NOT TO SCALE

SITE LEGEND AND NOTES

C-001

Page 5 of 57

S:\PROJECTS\0-2022\2122 NH LEB WOOLEN MILL\DWGSHEET FILES\2122 C-002 PROPERTY EXHIBIT DWG - PLOTTED: 9/25/2022 10:45 AM



SITE PLAN REVIEW

RODE

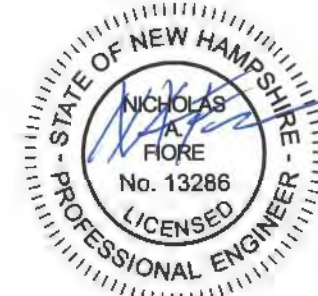
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

DATE: 08.15.22

SCALE: 1"= 40'

PROPERTY EXHIBIT

C-002

Page 6 of 57

PROJECT PHASING

ALL BUILDING PERMIT SHALL BE OBTAINED WITHIN TWO (2) YEARS OF ORIGINAL SITE PLAN APPROVAL OR ELSE APPROVAL SHALL BECOME VOID.

PHASE 1

- ANTICIPATED CONSTRUCTION SCHEDULE
 - BEGIN SITE WORK: APRIL 3, 2023
 - BEGIN BUILDING WORK: JUNE 28, 2023
 - COMPLETE CONSTRUCTION: NOVEMBER 8, 2023
 - DEADLINE FOR POSTING OF AND REQUIRED SECURITY: NOVEMBER 8, 2023
 - DEADLINE FOR THE COMPLETION OF SUCH IMPROVEMENTS SUBSEQUENT TO THE POSTING OF SUCH SECURITY: DECEMBER 8, 2023
- MOBILIZE ON SITE, INSTALL CONSTRUCTION ENTRANCE
- INSTALL EROSION CONTROL MEASURES
- CLEAR AND GRUB WOODED AREAS
- FOUNDATION EXCAVATION
- BEGIN BUILDING CONSTRUCTION
- INSTALL UTILITY INFRASTRUCTURE FOR SEWER, WATER, STORM DRAINAGE AND UNDERGROUND PHONE/CABLE/ELECTRIC AND GAS
- INSTALL SITE LIGHTING
- RETAINING WALL CONSTRUCTION
- INSTALL SELECTED ROADWAY/PARKING GRAVELS
- BASE COAT PAVING
- COMPLETE ASSOCIATED SIDEWALKS, DUMPSTER PAD/ENCLOSURE, FENCING, MISC. CONCRETE PADS, PAVING AND PAVEMENT STRIPING
- INSTALL HARDSCAPE FINISHES AND LANDSCAPING
- COMPLETE BUILDINGS

PHASE 2

- ANTICIPATED CONSTRUCTION SCHEDULE
 - BEGIN SITE WORK: JUNE 26, 2023
 - BEGIN BUILDING WORK: SEPTEMBER 4, 2023
 - COMPLETE CONSTRUCTION: SEPTEMBER 27, 2024
 - DEADLINE FOR POSTING OF AND REQUIRED SECURITY: SEPTEMBER 27, 2024
 - DEADLINE FOR THE COMPLETION OF SUCH IMPROVEMENTS SUBSEQUENT TO THE POSTING OF SUCH SECURITY: OCTOBER 27, 2024
- INSTALL EROSION CONTROL MEASURES
- CLEAR AND GRUB WOODED AREAS
- PARTIAL DEMOLITION OF BUILDING 2
- EXCAVATION FOR PARKING GARAGE
- BEGIN PARKING GARAGE CONSTRUCTION
- BEGIN BUILDING 2 RENOVATIONS
- INSTALL UTILITY INFRASTRUCTURE FOR SEWER, WATER, STORM DRAINAGE AND UNDERGROUND PHONE/CABLE/ELECTRIC AND GAS
- INSTALL SITE LIGHTING
- RETAINING WALL CONSTRUCTION
- INSTALL SELECTED ROADWAY/PARKING GRAVELS
- BASE COAT PAVING
- CONSTRUCT BUILDING 2 PARKING
- COMPLETE ASSOCIATED SIDEWALKS, DUMPSTER PAD/ENCLOSURE, FENCING, MISC. CONCRETE PADS, PAVING AND PAVEMENT STRIPING
- CONSTRUCT PEDESTRIAN ACCESS TO 1 FOUNDRY
- INSTALL HARDSCAPE FINISHES AND LANDSCAPING
- COMPLETE PARKING GARAGE
- COMPLETE BUILDING 2

PHASE 3

- ANTICIPATED CONSTRUCTION SCHEDULE
 - BEGIN SITE WORK: OCTOBER 2, 2023
 - BEGIN BUILDING WORK: OCTOBER 2, 2023
 - COMPLETE CONSTRUCTION: AUGUST 30, 2024
 - DEADLINE FOR POSTING OF AND REQUIRED SECURITY: AUGUST 30, 2024
 - DEADLINE FOR THE COMPLETION OF SUCH IMPROVEMENTS SUBSEQUENT TO THE POSTING OF SUCH SECURITY: SEPTEMBER 30, 2024
- INSTALL EROSION CONTROL MEASURES
- CLEAR AND GRUB WOODED AREAS
- BEGIN BUILDING RENOVATIONS
- INSTALL UTILITY INFRASTRUCTURE FOR SEWER, WATER, STORM DRAINAGE AND UNDERGROUND PHONE/CABLE/ELECTRIC AND GAS
- INSTALL SITE LIGHTING
- RETAINING WALL CONSTRUCTION
- INSTALL SELECTED ROADWAY/PARKING GRAVELS
- BASE COAT PAVING
- COMPLETE ASSOCIATED SIDEWALKS, DUMPSTER PAD/ENCLOSURE, FENCING, MISC. CONCRETE PADS, PAVING AND PAVEMENT STRIPING
- CONSTRUCT PEDESTRIAN ACCESS TO 1 FOUNDRY
- INSTALL HARDSCAPE FINISHES AND LANDSCAPING
- COMPLETE BUILDINGS

PHASE 4

- ANTICIPATED CONSTRUCTION SCHEDULE
 - BEGIN SITE WORK: APRIL 8, 2024
 - BEGIN BUILDING WORK: JUNE 17, 2024
 - COMPLETE CONSTRUCTION: MAY 16, 2025
 - DEADLINE FOR POSTING OF AND REQUIRED SECURITY: MAY 16, 2025
 - DEADLINE FOR THE COMPLETION OF SUCH IMPROVEMENTS SUBSEQUENT TO THE POSTING OF SUCH SECURITY: JUNE 16, 2025
- INSTALL EROSION CONTROL MEASURES
- CLEAR AND GRUB WOODED AREAS
- EXISTING STRUCTURE DEMOLITION
- FOUNDATION EXCAVATION
- BEGIN BUILDING CONSTRUCTION
- INSTALL UTILITY INFRASTRUCTURE FOR SEWER, WATER, STORM DRAINAGE AND UNDERGROUND PHONE/CABLE/ELECTRIC AND GAS
- INSTALL SITE LIGHTING
- RETAINING WALL CONSTRUCTION
- INSTALL SELECTED ROADWAY/PARKING GRAVELS
- BASE COAT PAVING
- COMPLETE ASSOCIATED SIDEWALKS, DUMPSTER PAD/ENCLOSURE, FENCING, MISC. CONCRETE PADS, PAVING AND PAVEMENT STRIPING
- INSTALL HARDSCAPE FINISHES AND LANDSCAPING
- COMPLETE BUILDING

PHASE 5

- ANTICIPATED CONSTRUCTION SCHEDULE
 - BEGIN SITE WORK: JULY 1, 2024
 - BEGIN BUILDING WORK: JULY 29, 2024
 - COMPLETE CONSTRUCTION: JUNE 27, 2025
 - DEADLINE FOR POSTING OF AND REQUIRED SECURITY: JUNE 27, 2025
 - DEADLINE FOR THE COMPLETION OF SUCH IMPROVEMENTS SUBSEQUENT TO THE POSTING OF SUCH SECURITY: JULY 27, 2025
- INSTALL EROSION CONTROL MEASURES
- CLEAR AND GRUB WOODED AREAS
- EXISTING STRUCTURE DEMOLITION
- FOUNDATION EXCAVATION
- BEGIN BUILDING CONSTRUCTION
- INSTALL UTILITY INFRASTRUCTURE FOR SEWER, WATER, STORM DRAINAGE AND UNDERGROUND PHONE/CABLE/ELECTRIC AND GAS
- INSTALL SITE LIGHTING
- RETAINING WALL CONSTRUCTION
- INSTALL SELECTED ROADWAY/PARKING GRAVELS
- BASE COAT PAVING
- COMPLETE ASSOCIATED SIDEWALKS, DUMPSTER PAD/ENCLOSURE, FENCING, MISC. CONCRETE PADS, PAVING AND PAVEMENT STRIPING
- INSTALL HARDSCAPE FINISHES AND LANDSCAPING
- COMPLETE BUILDING



SITE PLAN REVIEW

RODE

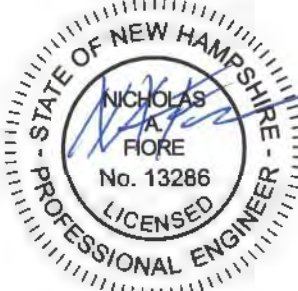
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

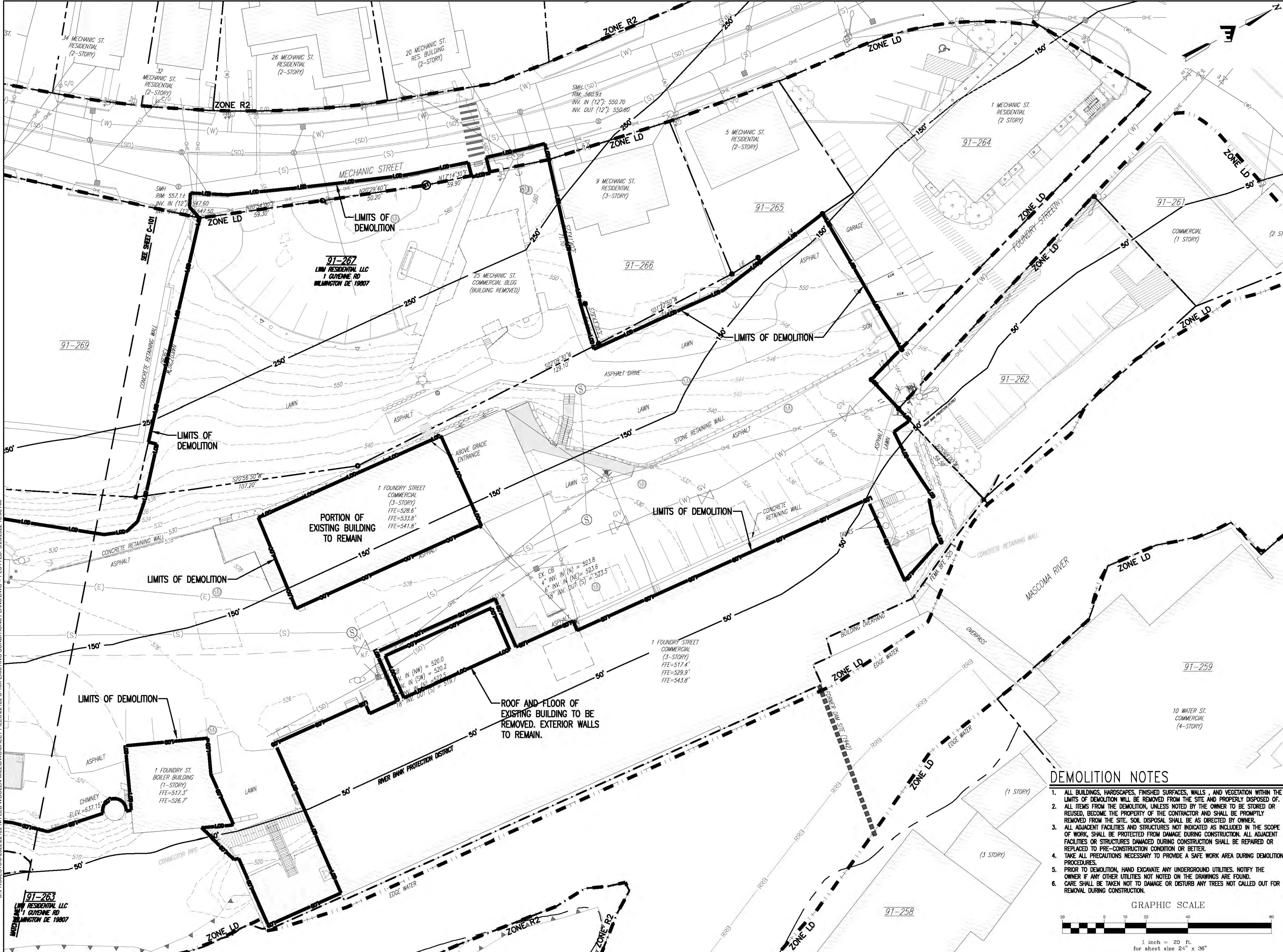
DATE: 08.15.22

SCALE: 1"= 40'

PHASING PLAN

C-003

Page 7 of 57



SITE PLAN REVIEW

RODE

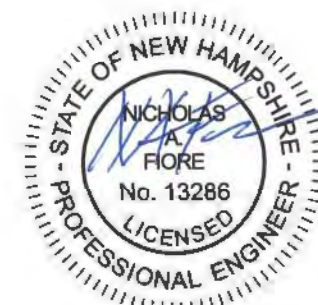
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

DATE: 08.15.22

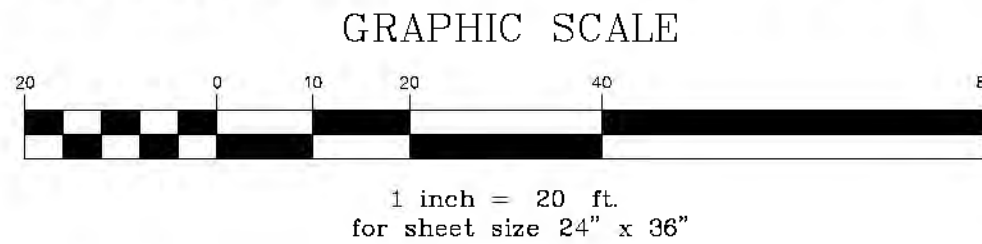
SCALE: 1"= 20'

**EXISTING CONDITIONS
PLAN (2 OF 2)**

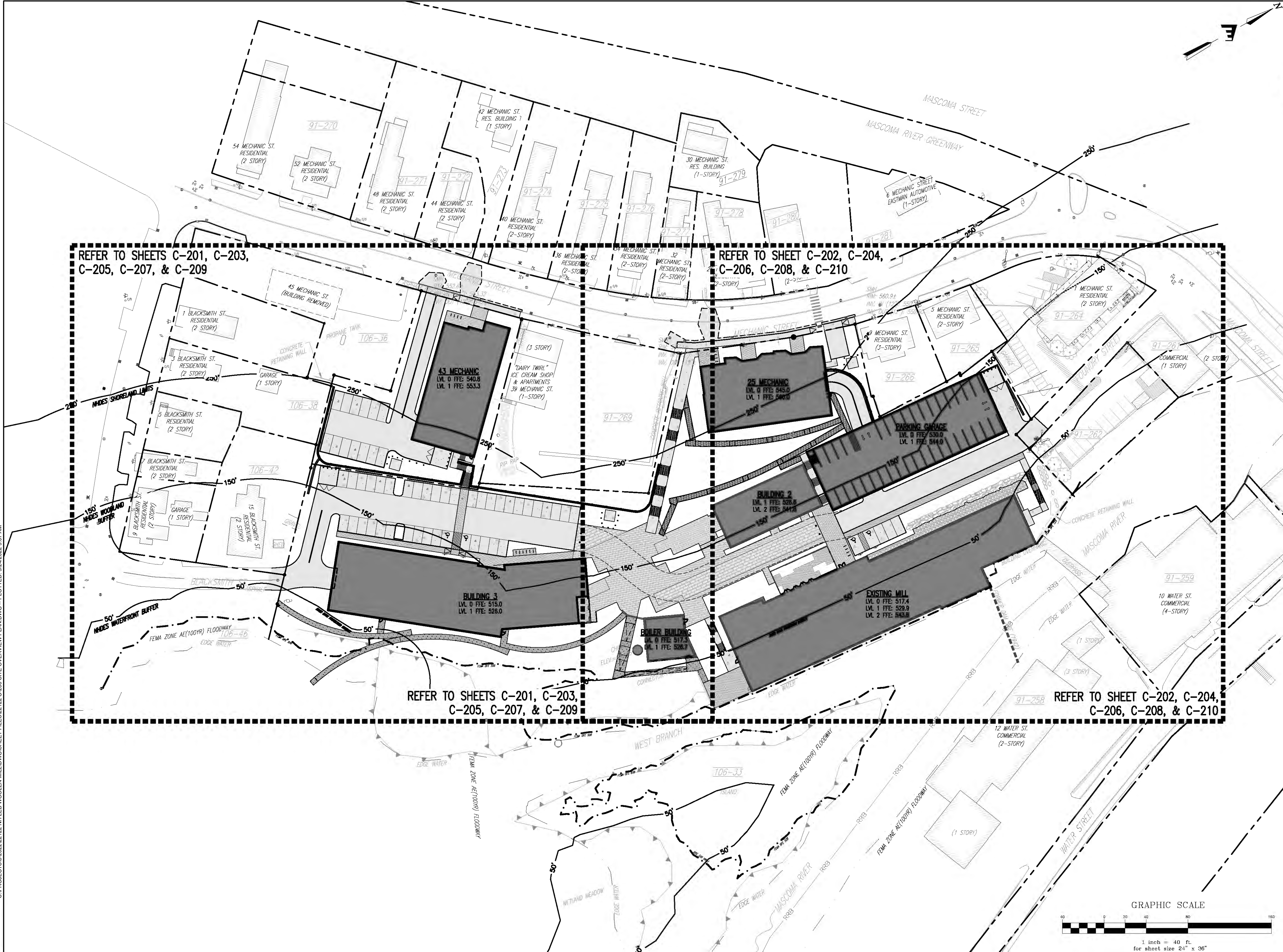
C-102
Page 10 of 57

DEMOLITION NOTES

1. ALL BUILDINGS, HARDSCAPES, FINISHED SURFACES, WALLS , AND VEGETATION WITHIN THE LIMITS OF DEMOLITION WILL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
2. ALL ITEMS FROM THE DEMOLITION, UNLESS NOTED BY THE OWNER TO BE STORED OR REUSED, BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM THE SITE. SOIL DISPOSAL SHALL BE AS DIRECTED BY OWNER.
3. ALL ADJACENT FACILITIES AND STRUCTURES NOT INDICATED AS INCLUDED IN THE SCOPE OF WORK, SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. ALL ADJACENT FACILITIES OR STRUCTURES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO PRE-CONSTRUCTION CONDITION OR BETTER.
4. TAKE ALL PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK AREA DURING DEMOLITION PROCEDURES.
5. PRIOR TO DEMOLITION, HAND EXCAVATE ANY UNDERGROUND UTILITIES. NOTIFY THE OWNER IF ANY OTHER UTILITIES NOT NOTED ON THE DRAWINGS ARE FOUND.
6. CARE SHALL BE TAKEN NOT TO DAMAGE OR DISTURB ANY TREES NOT CALLED OUT FOR REMOVAL DURING CONSTRUCTION.



S:\PROJECTS\20-2022\2122 NH LEB WOOLEN MILL\DWGSHEET FILES\2122 C-200 SITE OVERVIEW PLAN.DWG - PLOTTED: 9/24/2022 9:07 AM



SITE PLAN REVIEW

RODE

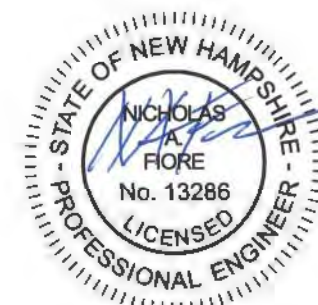
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

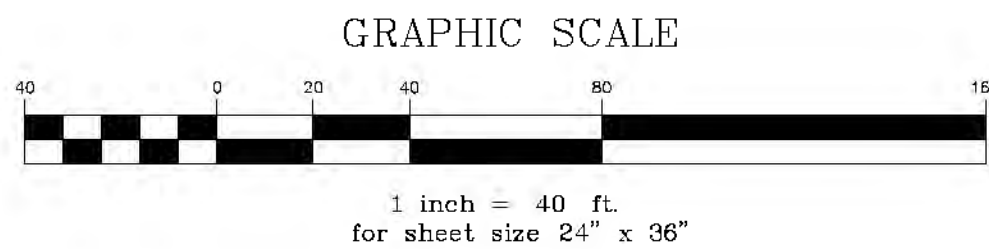
DATE: 08.15.22

SCALE: 1"= 40'

SITE OVERVIEW PLAN

C-200

Page 11 of 57



SITE SCHEDULE

- C1 CONCRETE PAVING - TYPE 1, (PEDESTRIAN RATED), SEE LANDSCAPE PLANS AND DETAILS
- C2 CONCRETE PAVING - TYPE 2, (VEHICLE RATED), SEE LANDSCAPE PLANS AND DETAILS
- C3 STAIRS - TYPE 1, CAST-IN-PLACE CONCRETE STAIRS, SEE LANDSCAPE PLANS AND DETAILS
- C4 ASPHALT PAVING
- C5 UNIT PAVES - TYPE 2, CLAY, PERMEABLE, BRICK PAVERS (VEHICLE RATED), SEE LANDSCAPE PLANS AND DETAILS
- C6 UNIT PAVES - TYPE 3, CLAY BRICK PAVES (VEHICLE RATED), SEE LANDSCAPE PLANS AND DETAILS
- C7 ADA ACCESSIBLE ROUTE CONSISTING OF ELEVATED STEEL GRATE RAMPS AND LANDINGS WITH HANDRAILS
- C8 CONCRETE DUMPSTER PAD WITH FENCES/SCREENED ENCLOSURE
- C9 UNIT PAVES - TYPE 1B, CLAY BRICK PAVES (VEHICLE RATED), SEE LANDSCAPE PLANS AND DETAILS
- C10 UNIT PAVES - TYPE 1A, CLAY BRICK PAVES (PEDESTRIAN RATED), SEE LANDSCAPE PLANS AND DETAILS
- C11 BIKE RACK
- C12 ELEVATED BOARDWALK AND ADA RAMP, WOOD DECKING - TYPE 1, SEE LANDSCAPE PLANS AND DETAILS
- C13 SITE WALL - TYPE 1, CAST-IN-PLACE CONCRETE RETAINING WALL
- C14 GRANITE CURB
- C15 GRANITE CURB, FLUSH
- C16 CONCRETE FILLED, STEEL PIPE BOLLARD, TYP.
- C17 DECORATIVE GRAVEL - TYPE 1, STABILIZED PEA STONE, SEE LANDSCAPE PLANS AND DETAILS
- C18 STAIRS - TYPE 2, METAL GRATING STAIRS, SEE LANDSCAPE PLANS AND DETAILS
- C19 COLLAPSIBLE OR REMOVABLE BOLLARD
- C20 ACCESSIBLE CURB RAMP, TYP.
- C21 PERMANENT ASPHALT TRENCH PATCH, TYP.
- C22 GRANITE CURB, EVALUATE AND RE-USE EXISTING GRANITE CURBING TO GREATEST EXTENT POSSIBLE
- C23 STACKED STONE WALL, REFER TO LANDSCAPE PLANS AND DETAILS
- C24 EXISTING GRAVEL DRIVE TO BE DISCONTINUED

NOTE:

ALL WORKMANSHIP AND MATERIALS SHALL CONFORM WITH NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS PUBLISHED AND AMENDED BY THE NHDOT.



SITE PLAN REVIEW

RODE

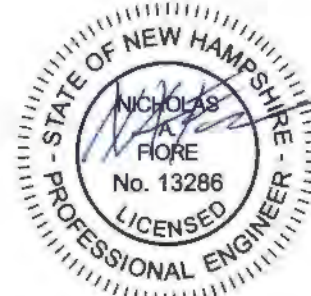
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

DATE: 08.15.22

SCALE: 1"= 20'

**SITE LAYOUT
PLAN (1 OF 2)**

C-201

Page 12 of 57



SITE SCHEDULE

- C1 CONCRETE PAVING - TYPE 1, (PEDESTRIAN RATED), SEE LANDSCAPE PLANS AND DETAILS
- C2 CONCRETE PAVING - TYPE 2, (VEHICLE RATED), SEE LANDSCAPE PLANS AND DETAILS
- C3 STAIRS - TYPE 1, CAST-IN-PLACE CONCRETE STAIRS, SEE LANDSCAPE PLANS AND DETAILS
- C4 ASPHALT PAVING
- C5 UNIT PAVES - TYPE 2, CLAY, PERMEABLE, BRICK PAVES (VEHICLE RATED), SEE LANDSCAPE PLANS AND DETAILS
- C6 UNIT PAVES - TYPE 3, CLAY BRICK PAVES (VEHICLE RATED), SEE LANDSCAPE PLANS AND DETAILS
- C7 ADA ACCESSIBLE ROUTE CONSISTING OF ELEVATED STEEL GRATE RAMPS AND LANDINGS WITH HANDRAILS
- C8 CONCRETE DUMPSTER PAD WITH FENCES/SCREENED ENCLOSURE
- C9 UNIT PAVES - TYPE 1B, CLAY BRICK PAVES (VEHICLE RATED), SEE LANDSCAPE PLANS AND DETAILS
- C10 UNIT PAVES - TYPE 1A, CLAY BRICK PAVES (PEDESTRIAN RATED), SEE LANDSCAPE PLANS AND DETAILS
- C11 BIKE RACK
- C12 ELEVATED BOARDWALK AND ADA RAMP, WOOD DECKING - TYPE 1, SEE LANDSCAPE PLANS AND DETAILS
- C13 SITE WALL - TYPE 1, CAST-IN-PLACE CONCRETE RETAINING WALL
- C14 GRANITE CURB
- C15 GRANITE CURB, FLUSH
- C16 CONCRETE FILLED, STEEL PIPE BOLLARD, TYP.
- C17 DECORATIVE GRAVEL - TYPE 1, STABILIZED PEA STONE, SEE LANDSCAPE PLANS AND DETAILS
- C18 STAIRS - TYPE 2, METAL GRATING STAIRS, SEE LANDSCAPE PLANS AND DETAILS
- C19 COLLAPSIBLE OR REMOVABLE BOLLARD
- C20 ACCESSIBLE CURB RAMP, TYP.
- C21 PERMANENT ASPHALT TRENCH PATCH, TYP.
- C22 GRANITE CURB, EVALUATE AND RE-USE EXISTING GRANITE CURBING TO GREATEST EXTENT POSSIBLE
- C23 STACKED STONE WALL, REFER TO LANDSCAPE PLANS AND DETAILS
- C24 EXISTING GRAVEL DRIVE TO BE DISCONTINUED

NOTE:

ALL WORKMANSHIP AND MATERIALS SHALL CONFORM WITH NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS PUBLISHED AND AMENDED BY THE NHDOT.

SITE PLAN REVIEW

RODE

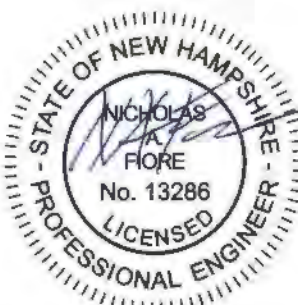
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

DATE: 08.15.22

SCALE: 1"= 20'

**SITE LAYOUT
PLAN (2 OF 2)**

C-202
Page 13 of 57

STORMWATER SCHEDULE

CATCH BASINS

4" I.D. CONCRETE CB
RM: 529.82
INV. IN: 525.82 (12" DIA. HDPE PIPE)
SUMP: 523.82

4" I.D. CONCRETE CB
RM: 528.75
INV. IN: 524.75 (12" DIA. HDPE PIPE)
SUMP: 522.50

4" I.D. CONCRETE CB
RM: 528.38
INV. IN: 524.38 (12" DIA. HDPE PIPE)
SUMP: 522.38

4" I.D. CONCRETE CB
RM: 528.30
INV. IN: 524.10 (12" DIA. HDPE PIPE)
SUMP: 521.85

4" I.D. CONCRETE CB
RM: 528.50
INV. IN: 523.15 (12" DIA. HDPE PIPE)
SUMP: 521.15

4" I.D. CONCRETE CB
RM: 525.14
INV. IN: 514.55 (12" DIA. HDPE PIPE)
SUMP: 512.55

4" I.D. CONCRETE CB
RM: 520.56
INV. IN: 514.63 (12" DIA. HDPE PIPE)
SUMP: 512.63

4" I.D. CONCRETE CB
RM: 540.92
INV. IN: 535.81 (12" DIA. HDPE PIPE)
SUMP: 533.81

4" I.D. CONCRETE CB
RM: 540.28
INV. IN: 534.26 (12" DIA. HDPE PIPE)
SUMP: 532.26

4" I.D. CONCRETE CB
RM: 537.81
INV. IN: 533.00 (12" DIA. HDPE PIPE)
SUMP: 531.00

4" I.D. CONCRETE CB
RM: 543.50
INV. IN: 539.50 (12" DIA. HDPE PIPE)
SUMP: 537.50

4" I.D. CONCRETE CB
RM: 543.08
INV. IN: 525.60 (6" PVC PIPE)
SUMP: 523.34

4" I.D. CONCRETE CB
RM: 525.34 (12" DIA. HDPE PIPE)
SUMP: 523.34

OUTLET STRUCTURES

OUTLET STRUCTURE
RM: 519.00
INV. IN: 513.87 (12" DIA. HDPE PIPE)
SUMP: 513.87

OUTLET STRUCTURE
RM: 511.00
INV. IN: 507.41 (12" DIA. HDPE PIPE)
SUMP: 507.41

RAIN GARDENS

3,500 GAL. STORMWATER FOREBAY TANK
RM ELEV: 525.80
12" DIA. INV. IN: 521.72
12" DIA. INV. OUT: 521.47
TOP OF TANK: 524.47
BOTTOM OF TANK: 516.47

RAIN GARDEN
TOP OF BERM ELEV: 520.00
BOTTOM ELEV: 516.00

RAIN GARDEN
TOP OF BERM ELEV: 515.00
BOTTOM ELEV: 510.00

DRAINAGE MANHOLES

4" I.D. CONCRETE MH
RM: 528.65
INV. IN: 523.74 (12" DIA. HDPE PIPE)
INV. OUT: 523.64 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 527.67
INV. IN: 522.82 (12" DIA. HDPE PIPE)
INV. OUT: 522.72 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 540.68
INV. IN: 533.02 (12" DIA. HDPE PIPE)
INV. OUT: 532.92 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 539.58
INV. IN: 530.63 (12" DIA. HDPE PIPE)
INV. OUT: 523.63 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 522.37
INV. IN: 518.37 (12" DIA. HDPE PIPE)
INV. OUT: 518.27 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 518.94
INV. IN: 513.50 (12" DIA. HDPE PIPE)
INV. OUT: 513.16 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 514.00
INV. IN: 508.13 (12" DIA. HDPE PIPE)
INV. OUT: 508.03 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

4" I.D. CONCRETE MH
RM: 542.64
INV. IN: 538.64 (12" DIA. HDPE PIPE)
INV. OUT: 538.54 (12" DIA. HDPE PIPE)

STORMWATER CHAMBER SYSTEMS

CULTEC STORAGE CHAMBER SYSTEM
105 R-902-HD CHAMBERS IN 3 ROWS OF 35 EACH
INV. IN & OUT: 514.47
TOP OF STONE: 519.47
BOTTOM OF CHAMBER: 514.47
BOTTOM OF STONE ELEV: 513.72

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

CULTEC STORAGE CHAMBER SYSTEM
30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH
INV. IN & OUT: 530.75
TOP OF STONE: 535.75
TOP OF CHAMBER: 534.75
BOTTOM OF CHAMBER: 530.75
BOTTOM OF STONE ELEV: 530.00

HEADWALLS

CONCRETE HEADWALL
TOP OF WALL ELEV: 524.00
INV. OUT ELEV: 521.5

CONCRETE HEADWALL
TOP OF WALL ELEV: 516.00
INV. OUT ELEV: 513.50

CONCRETE HEADWALL
TOP OF WALL ELEV: 511.00
INV. OUT ELEV: 508.50

CONCRETE HEADWALL
TOP OF WALL ELEV: 511.00
INV. OUT ELEV: 508.50

CONCRETE HEADWALL
TOP OF WALL ELEV: 511.00
INV. OUT ELEV: 508.50

CONCRETE HEADWALL
TOP OF WALL ELEV: 511.00
INV. OUT ELEV: 508.50

CONCRETE HEADWALL
TOP OF WALL ELEV: 511.00
INV. OUT ELEV: 508.50

CONCRETE HEADWALL
TOP OF WALL ELEV: 511.00
INV. OUT ELEV: 508.50

CONCRETE HEADWALL
TOP OF WALL ELEV: 511.00
INV. OUT ELEV: 508.50

CONCRETE HEADWALL
TOP OF WALL ELEV: 511.00
INV. OUT ELEV: 508.50

CONCRETE HEADWALL
TOP OF WALL ELEV: 511.00
INV. OUT ELEV: 508.50

CONCRETE HEADWALL
TOP OF WALL ELEV: 511.00
INV. OUT ELEV: 508.50

CONCRETE HEADWALL
TOP OF WALL ELEV: 511.00
INV. OUT ELEV: 508.50

TRENCH DRAIN

TRENCH DRAIN
RM ELEV: 543.90

TRENCH DRAIN
RM ELEV: 543.90

TRENCH DRAIN
RM ELEV: 543.90

TRENCH DRAIN
RM ELEV: 543.90

TRENCH DRAIN
RM ELEV: 543.90

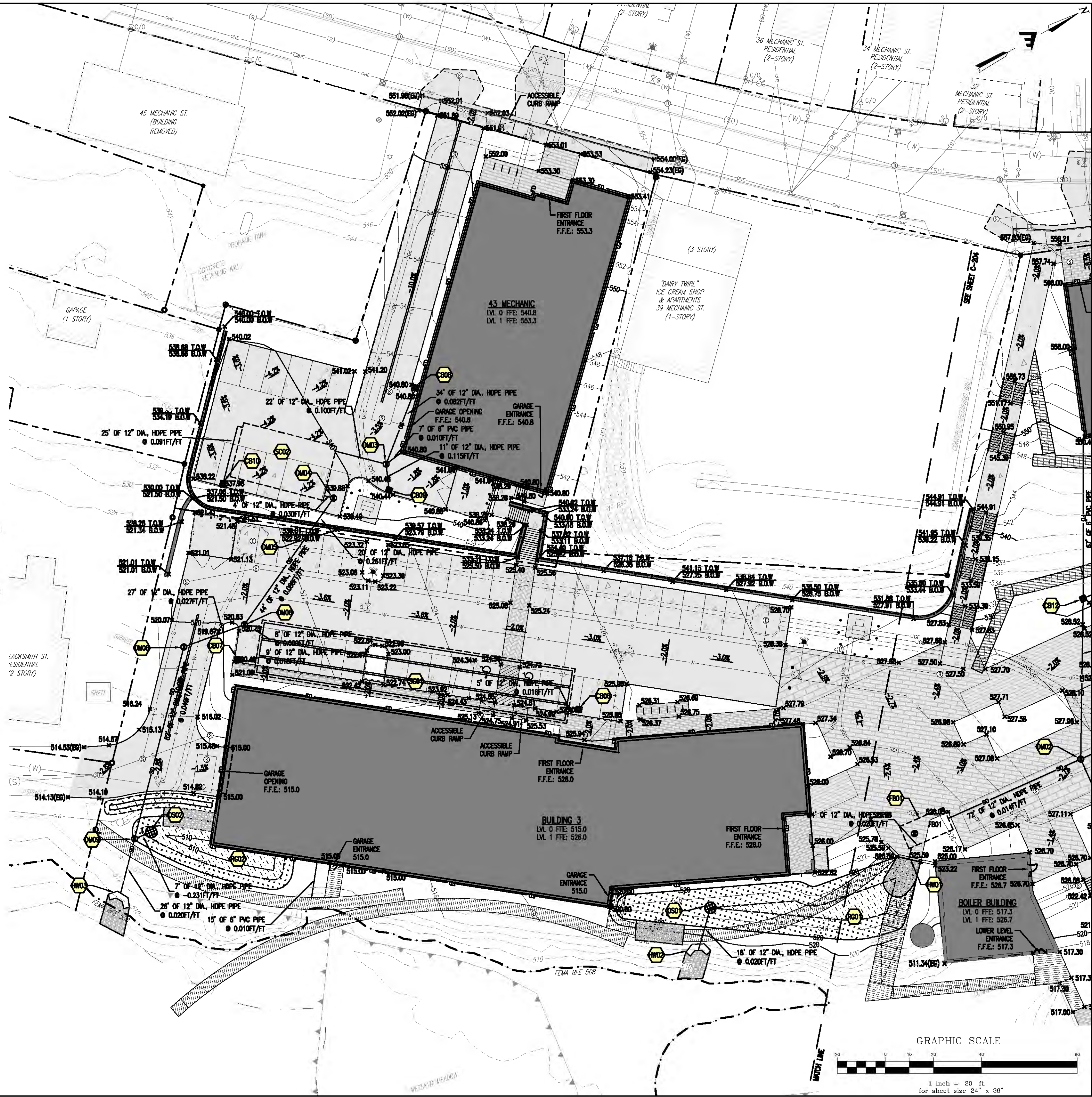
TRENCH DRAIN
RM ELEV: 543.90

TRENCH DRAIN
RM ELEV: 543.90

TRENCH DRAIN
RM ELEV: 543.90

TRENCH DRAIN
RM ELEV: 543.90

TRENCH DRAIN
RM ELEV: 543.90



SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY

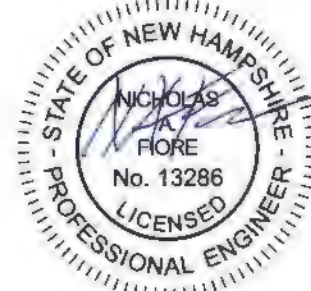
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL

Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE

OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

DATE: 08.15.22

SCALE: 1"= 20'

GRADING AND
DRAINAGE PLAN (1 OF 2)

C-203

Page 14 of 57



STORMWATER SCHEDULE

CATCHBASINS		DRAINAGE MANHOLES	
4' I.D. CONCRETE CB	RM: 529.82	4' I.D. CONCRETE MH	RM: 528.85
(C801)	INV. OUT: 525.82 (12" DA, HDPE PIPE)	(DM01)	INV. IN: 523.74 (12" DA, HDPE PIPE)
	SUMP: 523.82		INV. IN: 523.74 (12" DA, HDPE PIPE)
4' I.D. CONCRETE CB	RM: 528.75	4' I.D. CONCRETE MH	RM: 527.67
(C802)	INV. IN: 524.75 (12" DA, HDPE PIPE)	(DM02)	INV. IN: 522.82 (12" DA, HDPE PIPE)
	INV. OUT: 524.50 (12" DA, HDPE PIPE)		INV. IN: 522.82 (12" DA, HDPE PIPE)
	SUMP: 522.50		INV. IN: 524.00 (12" DA, HDPE PIPE)
4' I.D. CONCRETE CB	RM: 528.38	4' I.D. CONCRETE MH	RM: 522.72
(C803)	INV. OUT: 524.38 (12" DA, HDPE PIPE)		INV. OUT: 522.72 (12" DA, HDPE PIPE)
	SUMP: 522.38		
4' I.D. CONCRETE CB	RM: 528.30	4' I.D. CONCRETE MH	RM: 540.66
(C804)	INV. IN: 524.10 (12" DA, HDPE PIPE)	(DM03)	INV. IN: 533.02 (12" DA, HDPE PIPE)
	INV. OUT: 523.85 (12" DA, HDPE PIPE)		INV. IN: 533.02 (12" DA, HDPE PIPE)
	SUMP: 521.85		INV. OUT: 535.43 (6" PVC PIPE)
4' I.D. CONCRETE CB	RM: 526.50	4' I.D. CONCRETE MH	RM: 532.82
(C805)	INV. OUT: 523.15 (12" DA, HDPE PIPE)		INV. OUT: 532.82 (12" DA, HDPE PIPE)
	SUMP: 521.15		
4' I.D. CONCRETE CB	RM: 525.14	4' I.D. CONCRETE MH	RM: 520.57
(C806)	INV. OUT: 514.55 (12" DA, HDPE PIPE)	(DM04)	RM: 522.37
	SUMP: 512.55		INV. IN: 518.37 (12" DA, HDPE PIPE)
4' I.D. CONCRETE CB	RM: 520.56	4' I.D. CONCRETE MH	RM: 514.47
(C807)	INV. OUT: 514.63 (12" DA, HDPE PIPE)	(DM05)	INV. IN: 514.47 (12" DA, HDPE PIPE)
	SUMP: 512.63		INV. IN: 514.47 (12" DA, HDPE PIPE)
4' I.D. CONCRETE CB	RM: 540.92	4' I.D. CONCRETE MH	RM: 518.94
(C808)	INV. OUT: 535.81 (12" DA, HDPE PIPE)	(DM06)	RM: 518.94
	SUMP: 533.81		INV. IN: 513.50 (12" DA, HDPE PIPE)
4' I.D. CONCRETE CB	RM: 540.26	4' I.D. CONCRETE MH	RM: 514.00
(C809)	INV. OUT: 534.26 (12" DA, HDPE PIPE)	(DM07)	RM: 514.00
	SUMP: 532.26		INV. IN: 508.13 (12" DA, HDPE PIPE)
4' I.D. CONCRETE CB	RM: 537.81	4' I.D. CONCRETE MH	RM: 508.03
(C810)	INV. OUT: 533.00 (12" DA, HDPE PIPE)	(DM08)	INV. IN: 508.03 (12" DA, HDPE PIPE)
	SUMP: 531.00		INV. OUT: 508.03 (12" DA, HDPE PIPE)
4' I.D. CONCRETE CB	RM: 543.50	4' I.D. CONCRETE MH	RM: 542.84
(C811)	INV. OUT: 539.50 (12" DA, HDPE PIPE)	(DM09)	RM: 542.84
	SUMP: 537.50		INV. IN: 538.64 (12" DA, HDPE PIPE)
4' I.D. CONCRETE CB	RM: 543.08	4' I.D. CONCRETE MH	RM: 538.64
(C812)	INV. IN: 525.60 (6" PVC PIPE)	(DM10)	INV. IN: 538.64 (12" DA, HDPE PIPE)
	INV. OUT: 525.34 (12" DA, HDPE PIPE)		INV. OUT: 538.54 (12" DA, HDPE PIPE)
	SUMP: 523.34		
OUTLET STRUCTURES		STORMWATER CHAMBER SYSTEMS	
OUTLET STRUCTURE	RM: 519.00	CULTED STORAGE CHAMBER SYSTEM	
(OS01)	INV. OUT: 513.87 (12" DA, HDPE PIPE)	105 R-902-HD CHAMBERS IN 3 ROWS OF 35 EACH	
	SUMP: 513.87	INV. IN & OUT: 514.47	
OUTLET STRUCTURE	RM: 511.00	TOP OF STONE: 519.47	
(OS02)	INV. OUT: 507.41 (12" DA, HDPE PIPE)	TOP OF CHAMBER: 518.47	
	SUMP: 507.41	BOTTOM OF CHAMBER: 514.47	
		BOTTOM OF STONE ELEV: 513.72	
RAIN GARDENS		CULTED STORAGE CHAMBER SYSTEM	
(RG01)	3,500 GAL. STORMWATER FOREBAY TANK	30 R-902-HD CHAMBERS IN 3 ROWS OF 10 EACH	
	RM ELEV: 525.80	INV. IN & OUT: 530.75	
(RG02)	12" DA. INV. IN: 521.72	TOP OF STONE: 535.75	
	12" DA. INV. OUT: 521.47	TOP OF CHAMBER: 534.75	
(RG03)	TOP OF TANK: 524.47	BOTTOM OF CHAMBER: 530.75	
	BOTTOM OF TANK: 516.47	BOTTOM OF STONE ELEV: 530.00	
RAIN GARDEN		HEADWALLS	
(RG04)	TOP OF BERM ELEV: 520.00	CONCRETE HEADWALL	
	BOTTOM ELEV: 516.00	(HW01)	TOP OF WALL ELEV: 524.00
RAIN GARDEN			INV. OUT ELEV: 521.5
(RG05)	TOP OF BERM ELEV: 515.00	CONCRETE HEADWALL	
	BOTTOM ELEV: 510.00	(HW02)	TOP OF WALL ELEV: 516.00
			INV. OUT ELEV: 513.50
		CONCRETE HEADWALL	
		(HW03)	TOP OF WALL ELEV: 511.00
			INV. OUT ELEV: 508.50
TRENCHDRAIN		TRENCHDRAIN	
(TD01)	TRENCH DRAIN	(TD01)	TRENCH DRAIN
	RM ELEV: 543.90		RM ELEV: 543.90

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T

STATE OF NEW HAMPSHIRE
NO. 13286
MICHAEL J. FLORE
PROFESSIONAL ENGINEER

1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

DATE: 08.15.22

SCALE: 1"= 20'

GRADING AND DRAINAGE
PLAN (2 OF 2)

C-204

Page 15 of 57

S:\PROJECTS\2022\22122 NH LEB WOOLEN MILL\DWGS\22122 C-20X GRADING AND DRAINAGE PLANS\DWG - PLOTTED 9/24/2022 9:23 AM

Page 166 of 227

PAVEMENT MARKINGS

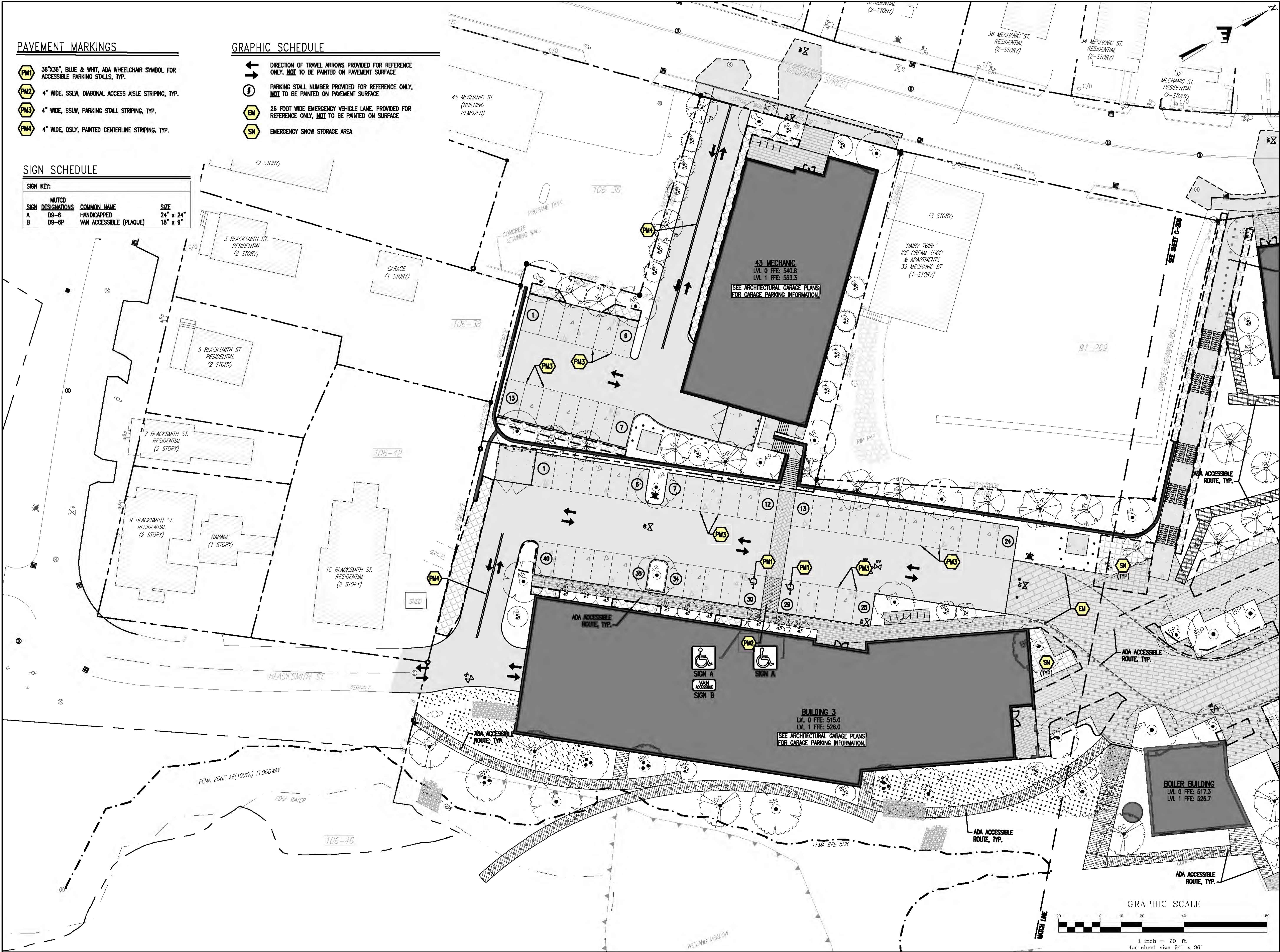
- PM1 36"x36", BLUE & WHITE, ADA WHEELCHAIR SYMBOL FOR ACCESSIBLE PARKING STALLS, TYP.
- PM2 4" WIDE, SSLW, DIAGONAL ACCESS AISLE STRIPING, TYP.
- PM3 4" WIDE, SSLW, PARKING STALL STRIPING, TYP.
- PM4 4" WIDE, DSLY, PAINTED CENTERLINE STRIPING, TYP.

SIGN SCHEDULE

SIGN KEY:			
SIGN	MUTCD DESIGNATIONS	COMMON NAME	SIZE
A	D9-6	HANDICAPPED	24" x 24"
B	D9-6P	VAN ACCESSIBLE (PLAQUE)	18" x 9"

GRAPHIC SCHEDULE

- Direction of travel arrows provided for reference only, NOT TO BE PAINTED ON PAVEMENT SURFACE
- Parking stall number provided for reference only, NOT TO BE PAINTED ON PAVEMENT SURFACE
- EM 26 FOOT WIDE EMERGENCY VEHICLE LANE, PROVIDED FOR REFERENCE ONLY, NOT TO BE PAINTED ON SURFACE
- SN EMERGENCY SNOW STORAGE AREA



SITE PLAN REVIEW

RODE

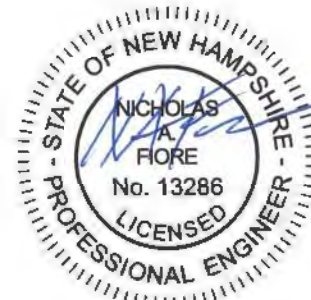
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

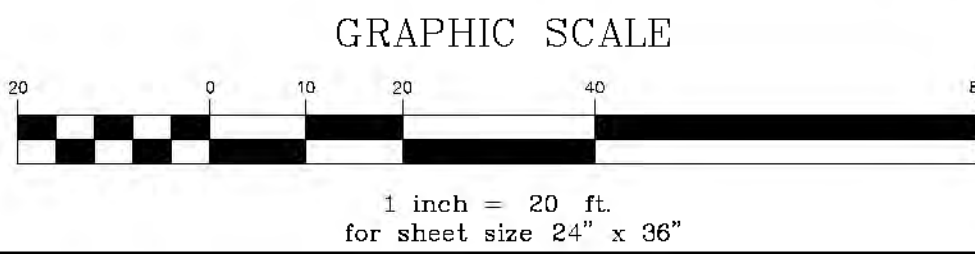
DATE: 06.03.22

SCALE: 1"= 20'

**SITE CIRCULATION AND
SIGNAGE PLAN (1 OF 2)**

C-205

Page 16 of 57



PAVEMENT MARKINGS

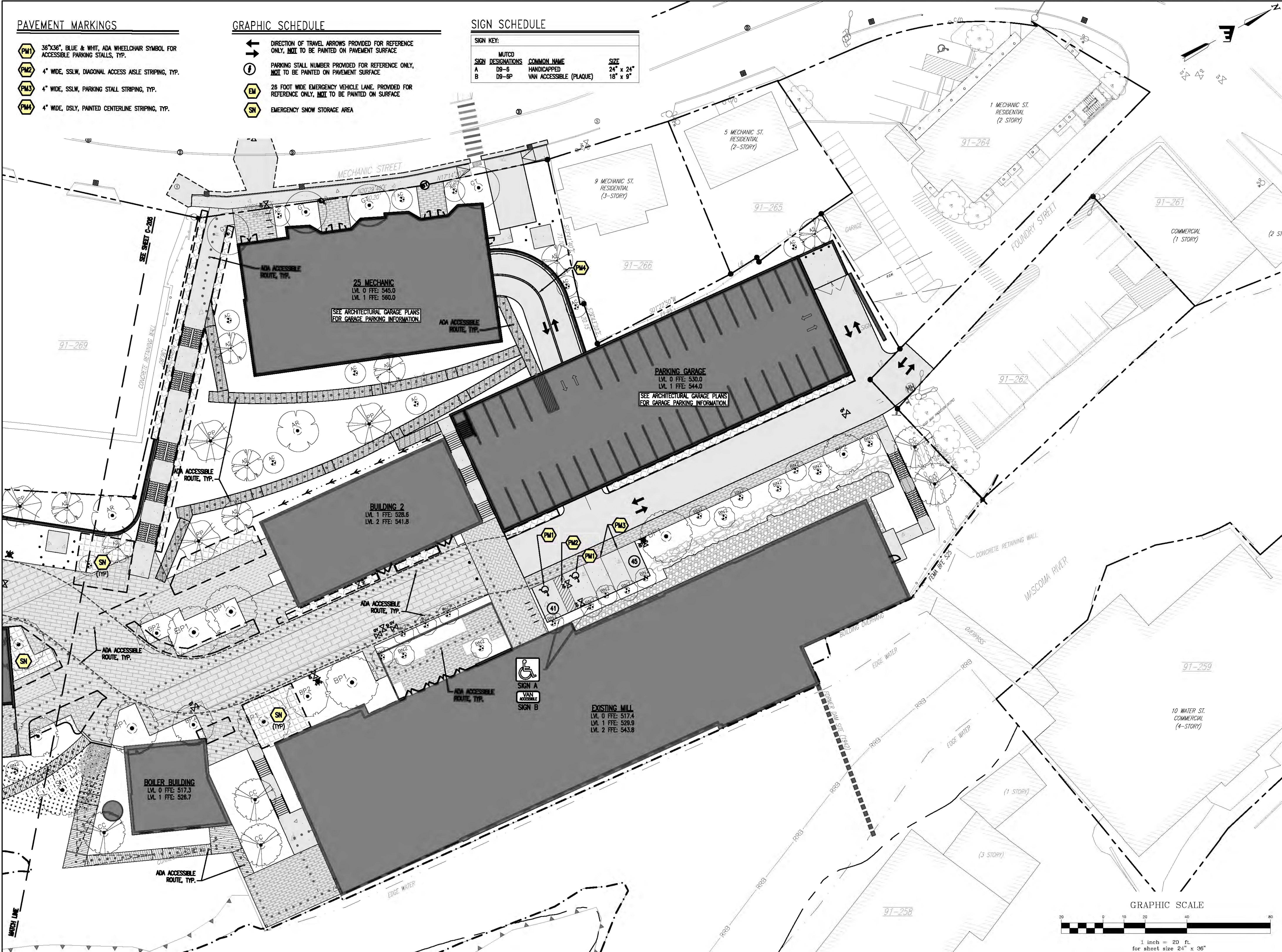
- PM1 36"x36", BLUE & WHITE, ADA WHEELCHAIR SYMBOL FOR ACCESSIBLE PARKING STALLS, TYP.
- PM2 4" WIDE, SSLW, DIAGONAL ACCESS AISLE STRIPING, TYP.
- PM3 4" WIDE, SSLW, PARKING STALL STRIPING, TYP.
- PM4 4" WIDE, DSLY, PAINTED CENTERLINE STRIPING, TYP.

GRAPHIC SCHEDULE

- DIRECTION OF TRAVEL ARROWS PROVIDED FOR REFERENCE ONLY, NOT TO BE PAINTED ON PAVEMENT SURFACE
- PARKING STALL NUMBER PROVIDED FOR REFERENCE ONLY, NOT TO BE PAINTED ON PAVEMENT SURFACE
- 28 FOOT WIDE EMERGENCY VEHICLE LANE. PROVIDED FOR REFERENCE ONLY, NOT TO BE PAINTED ON SURFACE
- EMERGENCY SNOW STORAGE AREA

SIGN SCHEDULE

SIGN KEY:			
SIGN	MUTCD DESIGNATIONS	COMMON NAME	SIZE
A	D8-6	HANDICAPPED	24" x 24"
B	D8-6P	VAN ACCESSIBLE (PLAQUE)	18" x 9"



SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

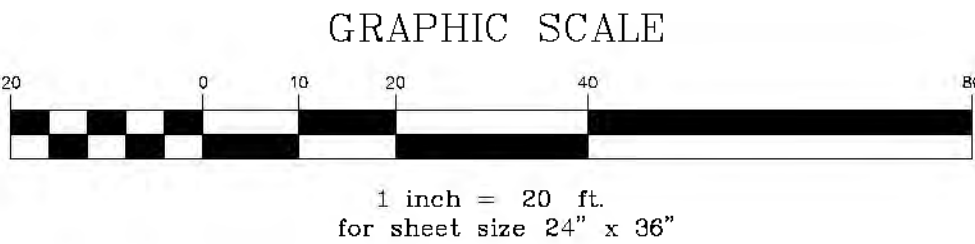
DATE: 08.15.22

SCALE: 1"= 20'

**SITE CIRCULATION AND
SIGNAGE PLAN (2 OF 2)**

C-206

Page 17 of 57



S:\PROJECTS\0-2022\22122 NH LEB WOOLEN MILL\DWGS\0-2022\22122 C-206 SITE CIRCULATION PLANS.DWG - PLOTTED: 9/25/2022 8:00 PM

WATER NOTES

SEE SHEETS C-305, C-306, AND C-307 FOR WATER SYSTEM PLAN AND PROFILES. SEE SHEET C-407 FOR WATER DETAILS AND NOTES.

SEWER NOTES

SEE SHEETS C-303 AND C-304 FOR GRAVITY COLLECTION SYSTEM PLAN AND PROFILES. SEE SHEET C-406 FOR SEWER DETAILS AND NOTES.

FIRE ALARM NOTES

THE PROPOSED MUNICIPAL FIRE ALARM LOOP SHALL BE PROVIDED IN A DEDICATED 2" CONDUIT, SAME TRENCH AS THE TELECOMM UTILITIES, WITH NO POWER, AND MUNICIPAL FIRE ALARM BOXES SHALL BE LOCATED ON EACH BUILDING TO THE SATISFACTION OF THE LEBANON FIRE DEPARTMENT.

ELECTRICAL SCHEDULE

SEE ELECTRICAL SITE PLAN AND ELECTRICAL DETAILS PREPARED BY MEP.

- E1 PROPOSED ELECTRICAL TRANSFORMER
- E2 PROPOSED ELECTRICAL VAULT
- E3 PROPOSED PRIMARY ELECTRICAL DUCT BANK (6") 2X2
- E4 PROPOSED SECONDARY ELECTRICAL DUCT BANK (4") 2X1
- E5 SERVICE RISER MOUNTED TO EXISTING POLE AND WIRING TIED INTO EXISTING OVERHEAD ELECTRICAL WIRES
- E6 EXACT LOCATION AND ELEVATION OF SERVICE ENTRANCE TO BE DETERMINED BY ELECTRICAL ENGINEER. REFER TO MEP PLANS AND DETAILS.

SITE PLAN REVIEW

RODE

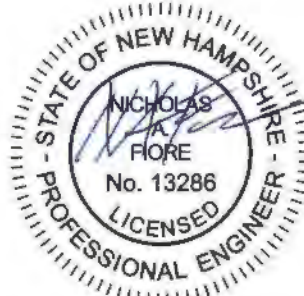
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

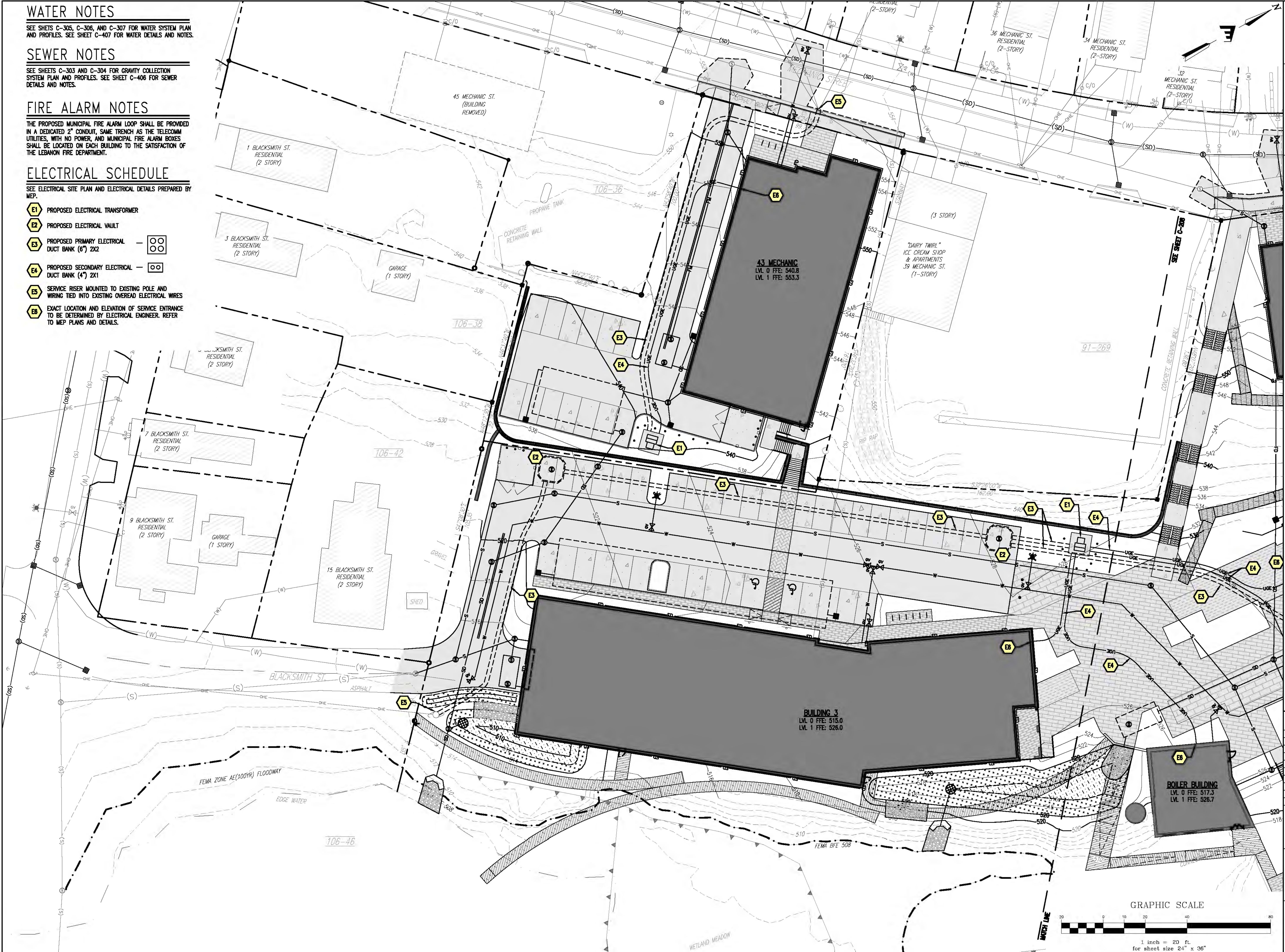
DATE: 08.15.22

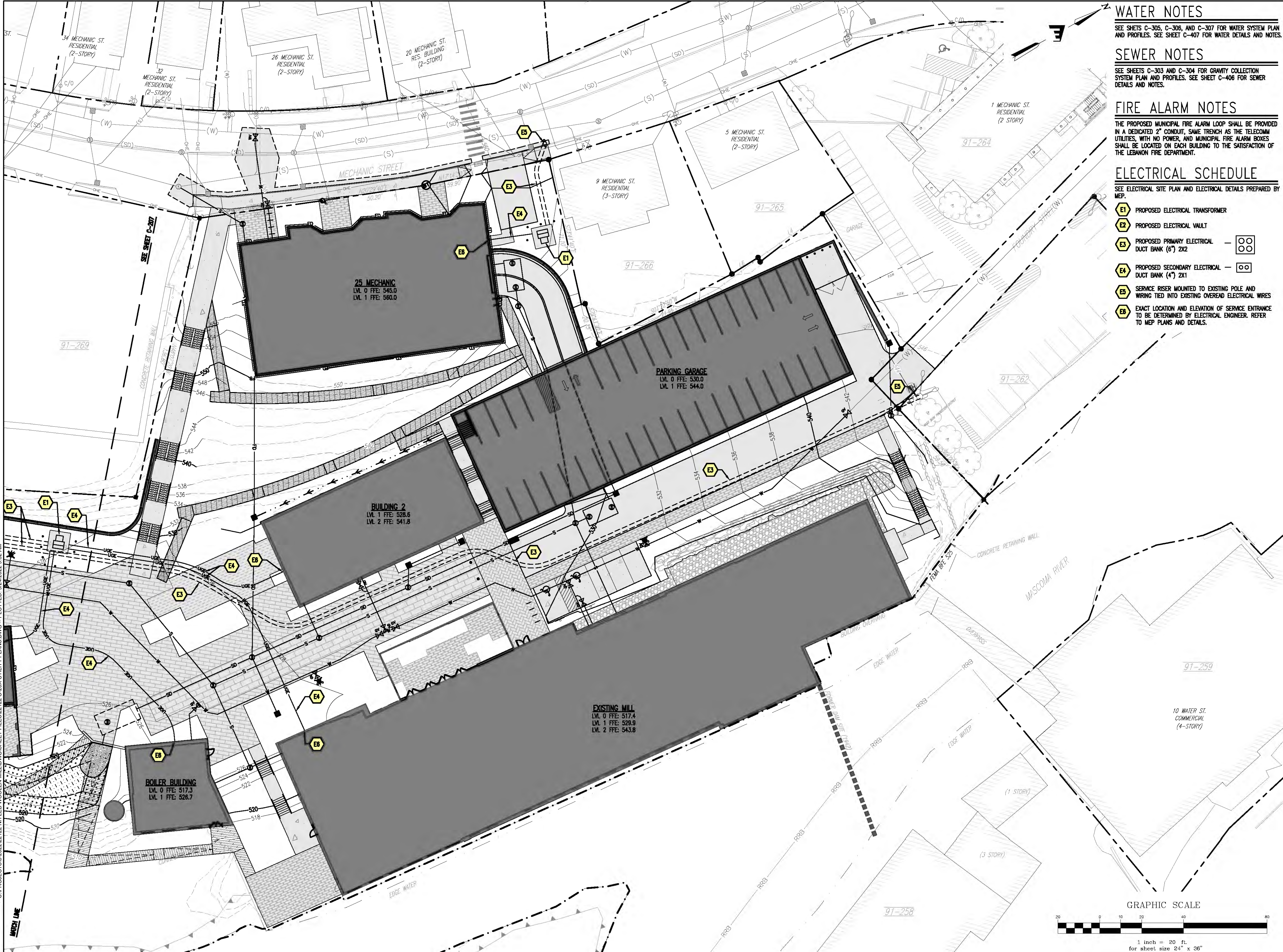
SCALE: 1"= 20'

UTILITY PLAN (1 OF 2)

C-207

Page 18 of 57





WATER NOTES

SEE SHEETS C-305, C-306, AND C-307 FOR WATER SYSTEM PLAN AND PROFILES. SEE SHEET C-407 FOR WATER DETAILS AND NOTES.

SEWER NOTES

SEE SHEETS C-303 AND C-304 FOR GRAVITY COLLECTION SYSTEM PLAN AND PROFILES. SEE SHEET C-406 FOR SEWER DETAILS AND NOTES.

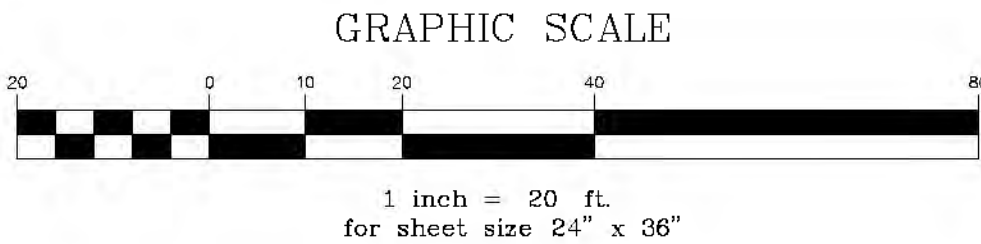
FIRE ALARM NOTES

THE PROPOSED MUNICIPAL FIRE ALARM LOOP SHALL BE PROVIDED IN A DEDICATED 2" CONDUIT, SAME TRENCH AS THE TELECOMM UTILITIES, WITH NO POWER, AND MUNICIPAL FIRE ALARM BOXES SHALL BE LOCATED ON EACH BUILDING TO THE SATISFACTION OF THE LEBANON FIRE DEPARTMENT.

ELECTRICAL SCHEDULE

SEE ELECTRICAL SITE PLAN AND ELECTRICAL DETAILS PREPARED BY MEP.

- E1 PROPOSED ELECTRICAL TRANSFORMER
- E2 PROPOSED ELECTRICAL VAULT
- E3 PROPOSED PRIMARY ELECTRICAL DUCT BANK (6") 2X2
- E4 PROPOSED SECONDARY ELECTRICAL DUCT BANK (4") 2X1
- E5 SERVICE RISER MOUNTED TO EXISTING POLE AND WIRING TIED INTO EXISTING OVERHEAD ELECTRICAL WIRES
- E6 EXACT LOCATION AND ELEVATION OF SERVICE ENTRANCE TO BE DETERMINED BY ELECTRICAL ENGINEER. REFER TO MEP PLANS AND DETAILS.



SITE PLAN REVIEW



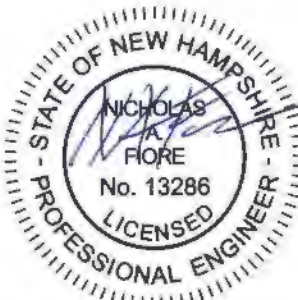
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

DATE: 08.15.22

SCALE: 1"= 20'

UTILITY PLAN (2 OF 2)

C-208

Page 19 of 57

EROSION CONTROL LEGEND

EROSION PREVENTION AND SEDIMENT CONTROL STRATEGY
THE FOLLOWING TECHNIQUES WILL BE UTILIZED AS PART OF A SEDIMENT AND EROSION CONTROL PROGRAM. THE SEDIMENT AND EROSION CONTROL PROGRAM WILL BE IMPLEMENTED IN STAGES. CERTAIN ITEMS FROM ONE STAGE WILL LIKELY OVERLAP OR TAKE PLACE CONCURRENTLY WITH ITEMS FROM OTHER STAGES. HWY PRODUCTS SHALL NOT BE USED.

TEMPORARY INLET PROTECTION - STONE COLLARS AND/OR INLET SOCKS. INSTALL AS INDICATED ON PLANS. STONE TO BE REMOVED AND REPLACED WITH CLEAN STONE WHEN SEDIMENT IS $\leq 1/2$ DEPTH OF STONE. REMOVE ALL SEDIMENT COLLECTED IN STRUCTURE OR SOCK AS SOON AS POSSIBLE.

STONE CHECK DAM
THIS STRUCTURAL MEASURE IS ALONG DITCHES/ SWALES AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO SLOW STORMWATER RUNOFF AND TRAP SEDIMENT PARTICLES. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

PERMANENT EROSION CONTROL NETTING
THIS STRUCTURAL MEASURE IS INSTALLED IN AREAS THAT HAVE SLOPES ≥ 1 AND GREATER AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO STABILIZE THE SLOPE AND REDUCE THE EROSION POTENTIAL. THE NETTING IS TYPICALLY IMPREGNATED WITH GRASS SEED AND SOMETIMES STAPLED TO THE EXPOSED SOIL. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
THIS STRUCTURAL MEASURE IS A STABILIZED PAD OF AGGREGATE UNDERLAIN WITH FILTER FABRIC LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, OR PARKING AREA. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OR STREETS. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE REMOVED, THE IMPACTED AREA SHALL BE SEEDED AND MULCHED.

TEMPORARY SEDIMENT BASIN
THIS STRUCTURAL MEASURE INVOLVES CONSTRUCTING TEMPORARY SEDIMENT BASINS IN THE LOCATION OF PROPOSED STORMWATER PONDS. GENERALLY THE STORMWATER PONDS CAN BE CONSTRUCTED AS SHOWN ON THE PLANS HOWEVER ORFICE ON THE OUTLET STRUCTURES SHALL BE OMITTED UNTIL THE SITE IS STABILIZED TO IMPROVE RUNOFF AND ALLOW FOR SETTLING OF SUSPENDED FINES. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE THE SITE IS STABILIZED, SEDIMENT SHALL BE REMOVED FROM THE BASINS AND THE OUTLET ORFICE SHALL BE DRILLED INTO THE OUTLET STRUCTURE AS NOTED ON THE PLANS.

TEMPORARY STAGING AND WASTE AREAS (APPROXIMATE)
THESE ARE APPROVED LOCATIONS WHERE NON-ERODIBLE MATERIALS MAY BE STORED. SOILS SHALL NOT BE STORED IN THESE AREAS.

TEMPORARY SOIL STOCKPILE AREAS (APPROXIMATE)
THESE ARE APPROVED LOCATIONS WHERE TOPSOIL AND OTHER SOIL MATERIALS MAY BE STORED. THESE STOCKPILES WILL BE PROTECTED FROM EROSION BY A NUMBER OF METHODS, INCLUDING INSTALLING SILT FENCING AROUND THE DOWN GRADIENT PERIMETER OF THE STOCKPILE AND SEEDING AND MULCHING THE STOCKPILE WHEN NOT IN USE FOR MORE THAN FIVE DAYS.

TEMPORARY STRAW FIBER ROLL
STRAW FIBER ROLLS ARE FLEXIBLE, CYLINDRICAL SEDIMENT RETENTION FIBER ROLLS (SRFRs) COMPRISED OF VARIOUS TYPES OF COMPRESSED MATRICES, DESIGNED TO REDUCE HYDRAULIC ENERGY AND FILTER SEDIMENT-LADEN STORMWATER RUNOFF ON SLOPES AND IN CHANNELS. SRFRs ARE DESIGNED TO BE USED AS PERIMETER CONTROLS, SLOPE INTERCEPTOR DEVICES, CHECK DAMS, AROUND TEMPORARY SOIL STOCKPILES, AT CURB CUTS AND DRAIN INLETS. SRFRs SHOULD BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND SECURED WITH WOODEN STAKES. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

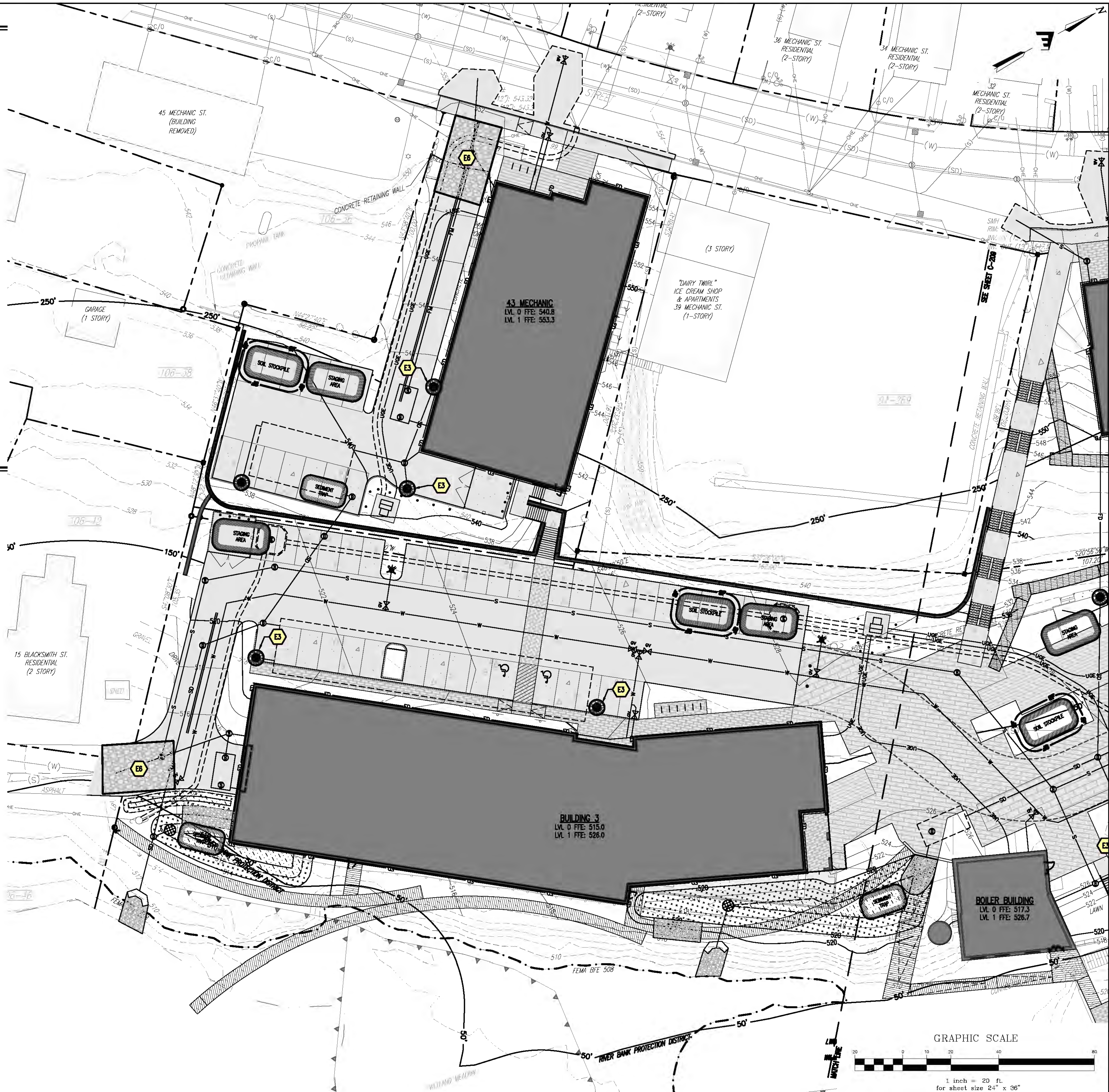
LIMITS OF DISTURBANCE
THE CONTRACTOR SHALL CONTAIN ANY EARTH MOVING ACTIVITIES WITHIN THE DESIGNATED LIMITS SHOWN ON THIS PLAN. THE ENGINEER SHALL REVIEW THE SITE TO MAKE ANY ADJUSTMENTS TO ACCOUNT FOR ENVIRONMENTALLY SENSITIVE AREAS, SPECIMEN TREES AND SPECIAL AREAS OF CONCERN.

CONSTRUCTION SEQUENCE

1. CONTRACTOR TO COORDINATE STOCKPILE AND STAGING AREAS WITH THE OWNER.
2. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL HOST A PRECONSTRUCTION MEETING WITH OWNER, ENGINEER, CITY PLANNING, POLICE, FIRE, AND PUBLIC WORKS STAFF.
3. PRIOR TO ANY OTHER WORK, DOUBLE ROW OF STRAW WATTLES BE INSTALLED UPSLOPE OF THE WETLANDS DOWNGRADIENT OF SEGMENTED BLOCK WALL. THESE SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE WATTLES WHEN IT BECOMES 3 INCHES DEEP. THE WATTLES WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
4. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT.
5. INSTALL INLET PROTECTION ON EXISTING CATCH BASINS AFFECTED DURING CONSTRUCTION.
6. ROUGH GRADE AND STOCKPILE TOPSOIL SURROUNDED BY SILT FENCE.
7. DEMO EXISTING STRUCTURES AS REQUIRED.
8. CLEAR AND GRUB, REMOVE LOOSE PAVING/DEMO PAVING AS REQUIRED AND HAUL OFF SITE USING EXISTING PARKING AREA AS STAGING.
9. GRADE DRIVE ENTRANCE AND EXCAVATE BUILDING PADS.
10. BEGIN VERTICAL CONSTRUCTION OF BUILDING FOUNDATIONS CONCURRENT WITH WATER AND SEWER UTILITIES.
11. INSTALL STORMWATER PIPING AND STRUCTURES.
12. EXCAVATE AND PREP FOR INFILTRATION SYSTEM, IMPORT BASE SUBGRADE MATERIALS AS NECESSARY.
13. EXCAVATE AND PREP FOR GRAVEL WETLAND, INSTALL PIPING AND APPURTENANCES, APPLY FABRIC AS INDICATED, IMPORT WASHED STONES AND FEA GRAVEL, WETLAND MUCK, COMPLETE WETLAND CONSTRUCTION BACKFILL AND SUBGRADE PREP FOR NEW PARKING AND SIDEWALK AREAS.
14. COMPLETE FINAL GRADING OF SITE. PLACE TOPSOIL AND PERMANENTLY VEGETATE, LANDSCAPE, AND MULCH.
15. INSTALL LIGHT POLES.
16. PAVE BASE COURSE.
17. STABILIZE EXPOSED SLOPES AND SOILS AS SOON AS GRADED, REPAIR AND REESTABLISH ALL DISTURBED VEGETATED/LAWN AREAS, AND MAINTAIN UNTIL ADEQUATELY VEGETATED.
18. PAVE WEARING COURSE.
19. AFTER THE SITE IS APPROVED BY THE ENGINEER AS ADEQUATELY STABILIZED, REMOVE ALL TEMPORARY BMPS.
20. ANTICIPATED FINAL COMPLETION DATE SUMMER/FALL 2024.

STORMWATER POLUTION PREVENTION NOTES

- E1 LIMIT OF DISTURBANCE
- E2 PORTABLE SANITATION FACILITIES, TO BE STAKED DOWN AND SECURED
- E3 INLET PROTECTION (TYP.)
- E4 DOUBLE ROW OF STRAW FIBER ROLL (TYP.)
- E5 CONCRETE WASHOUT
- E6 STABILIZED CONSTRUCTION ENTRANCE
- E7 CHECK DAM
- E8 EROSION CONTROL NETTING



SITE PLAN REVIEW

RODE

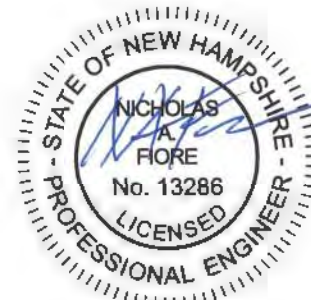
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

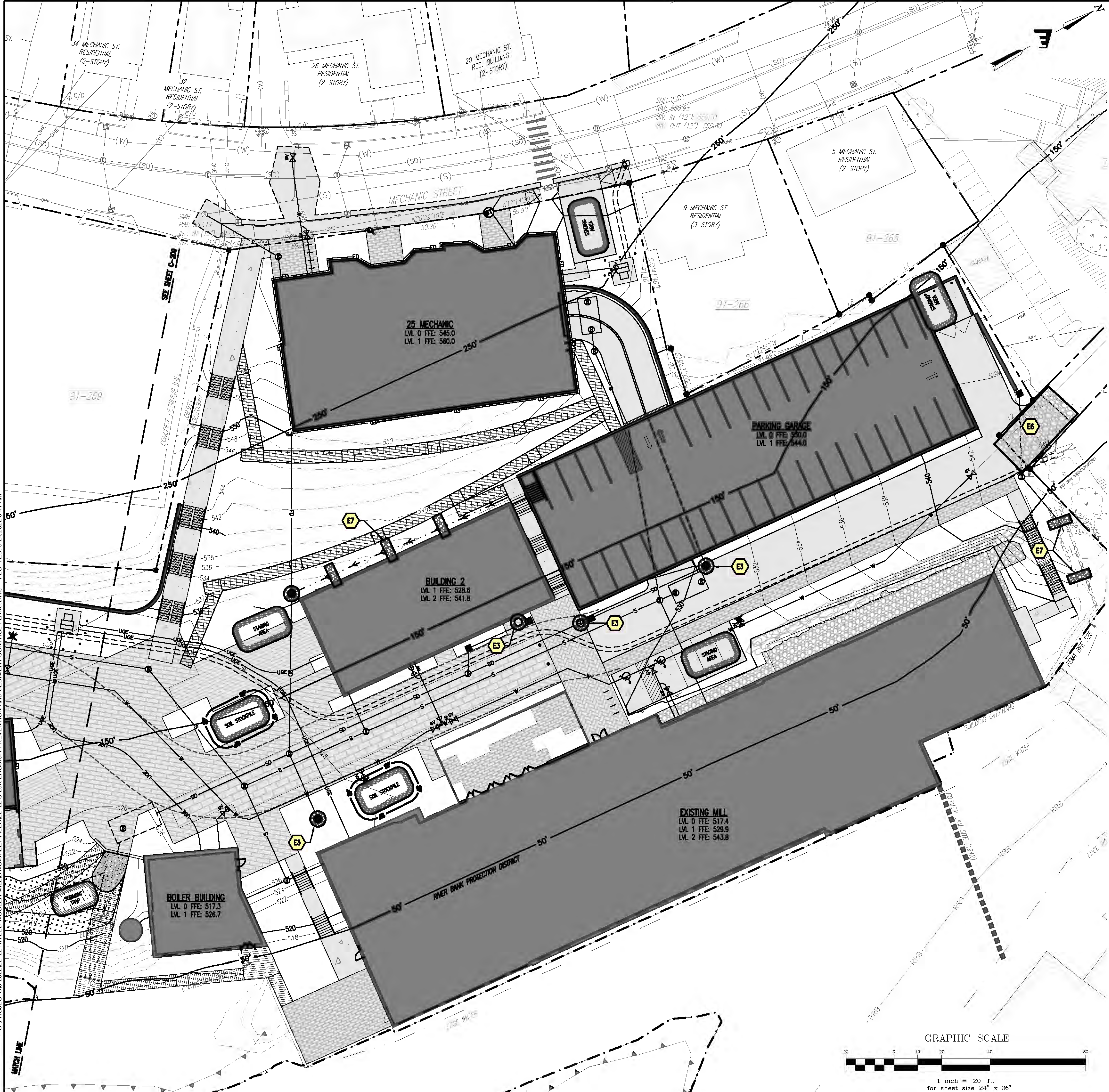
DATE: 08.15.22

SCALE: 1"= 20'

**EROSION PREVENTION
AND SEDIMENT CONTROL
PLAN (1 OF 2)**

C-209

Page 20 of 57



EROSION CONTROL LEGEND

- EROSION PREVENTION AND SEDIMENT CONTROL STRATEGY**
THE FOLLOWING TECHNIQUES WILL BE UTILIZED AS PART OF A SEDIMENT AND EROSION CONTROL PROGRAM. THE SEDIMENT AND EROSION CONTROL PROGRAM WILL BE IMPLEMENTED IN STAGES. CERTAIN ITEMS FROM ONE STAGE WILL LIKELY OVERLAP OR TAKE PLACE CONCURRENTLY WITH ITEMS FROM OTHER STAGES. HAY PRODUCTS SHALL NOT BE USED.
- TEMPORARY INLET PROTECTION** - STONE COLLARS AND/OR INLET SOCKS. INSTALL AS INDICATED ON PLANS. STONE TO BE REMOVED AND REPLACED WITH CLEAN STONE WHEN SEDIMENT IS $\leq 1/2$ DEPTH OF STONE. REMOVE ALL SEDIMENT COLLECTED IN STRUCTURE OR SOCK AS SOON AS POSSIBLE.
- STONE CHECK DAM**
THIS STRUCTURAL MEASURE IS ALONG DITCHES/ SWALES AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO SLOW STORMWATER RUNOFF AND TRAP SEDIMENT PARTICLES. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.
- PERMANENT EROSION CONTROL NETTING**
THIS STRUCTURAL MEASURE IS INSTALLED IN AREAS THAT HAVE SLOPES 3:1 AND GREATER AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO STABILIZE THE SLOPE AND REDUCE THE EROSION POTENTIAL. THE NETTING IS TYPICALLY IMPREGNATED WITH GRASS SEED AND SOMETIMES STAPLED TO THE EXPOSED SOIL. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.
- TEMPORARY STABILIZED CONSTRUCTION ENTRANCE**
THIS STRUCTURAL MEASURE IS A STABILIZED PAD OF AGGREGATE UNDERLAIN WITH FILTER FABRIC LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, OR PARKING AREA. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OR STREETS. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE REMOVED, THE IMPACTED AREA SHALL BE SEED AND MULCHED.
- TEMPORARY SEDIMENT BASIN**
THIS STRUCTURAL MEASURE INVOLVES CONSTRUCTING TEMPORARY SEDIMENT BASINS IN THE LOCATION OF PROPOSED STORMWATER PONDS. GENERALLY THE STORMWATER PONDS CAN BE CONSTRUCTED AS SHOWN ON THE PLANS HOWEVER ORFICE ON THE OUTLET STRUCTURES SHALL BE OMITTED UNTIL THE SITE IS STABILIZED TO IMPROVE RUNOFF AND ALLOW FOR SETTLING OF SUSPENDED FINES. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE THE SITE IS STABILIZED, SEDIMENT SHALL BE REMOVED FROM THE BASINS AND THE OUTLET ORFICE SHALL BE WELLED INTO THE OUTLET STRUCTURE AS NOTED ON THE PLANS.
- TEMPORARY STAGING AND WASTE AREAS (APPROXIMATE)**
THESE ARE APPROVED LOCATIONS WHERE NON-SOIL, NON-ERODIBLE MATERIALS MAY BE STORED. SOILS SHALL NOT BE STORED IN THESE AREAS.
- TEMPORARY SOIL STOCKPILE AREAS (APPROXIMATE)**
THESE ARE APPROVED LOCATIONS WHERE TOPSOIL AND OTHER SOIL MATERIALS MAY BE STORED. THESE STOCKPILES WILL BE PROTECTED FROM EROSION BY A NUMBER OF METHODS, INCLUDING INSTALLING SALT FENCING AROUND STOCKPILE PERIMETER TO PREVENT GRADIENT PERIMETER OF THE STOCKPILE AND SEEDING AND MULCHING THE STOCKPILE WHEN NOT IN USE FOR MORE THAN FIVE DAYS.
- TEMPORARY STRAW FIBER ROLL**
STRAW FIBER ROLLS ARE FLEXIBLE, CYLINDRICAL SEDIMENT RETENTION FIBER ROLLS (SRFRS) COMPRISED OF VARIOUS TYPES OF COMPRESSED WATTLES, DESIGNED TO REDUCE HYDRAULIC ENERGY AND FILTER SEDIMENT-LADEN STORMWATER RUNOFF ON SLOPES AND IN CHANNELS. SRFRS ARE DESIGNED TO BE USED AS PERIMETER CONTROLS, SLOPE INTERCEPTOR DEVICES, CHECK DAMS, AROUND TEMPORARY SOIL STOCKPILES, AT CURB CUTS AND DRAIN INLETS. SRFRS SHOULD BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND SECURED WITH WOODEN STAKES. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.
- LIMITS OF DISTURBANCE**
THE CONTRACTOR SHALL CONTAIN ANY EARTH MOVING ACTIVITIES WITHIN THE DESIGNATED LIMITS SHOWN ON THIS PLAN. THE ENGINEER SHALL REVIEW THE SITE TO MAKE ANY ADJUSTMENTS TO ACCOUNT FOR ENVIRONMENTALLY SENSITIVE AREAS, SPECIMEN TREES AND SPECIAL AREAS OF CONCERN.

CONSTRUCTION SEQUENCE

1. CONTRACTOR TO COORDINATE STOCKPILE AND STAGING AREAS WITH THE OWNER.
2. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL HOST A PRECONSTRUCTION MEETING WITH OWNER, ENGINEER, CITY PLANNING, POLICE, FIRE, AND PUBLIC WORKS STAFF.
3. PRIOR TO ANY OTHER WORK, DOUBLE ROW OF STRAW WATTLES BE INSTALLED UPSLOPE OF THE WETLANDS DOWNGRADIENT OF SEGMENTED BLOCK WALL. THESE SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE WATTLES WHEN IT BECOMES 3 INCHES DEEP. THE WATTLES WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
4. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT.
5. INSTALL INLET PROTECTION ON EXISTING CATCH BASINS AFFECTED DURING CONSTRUCTION.
6. ROUGH GRADE AND STOCKPILE TOPSOIL SURROUNDED BY SALT FENCE.
7. DEMO EXISTING STRUCTURES AS REQUIRED.
8. CLEAR AND GRUB, REMOVE LOOSE PAVING/DEMO PAVING AS REQUIRED AND HAUL OFF SITE USING EXISTING PARKING AREA AS STAGING.
9. GRADE DRIVE ENTRANCE AND EXCAVATE BUILDING PADS.
10. BEGIN VERTICAL CONSTRUCTION OF BUILDING FOUNDATIONS CONCURRENT WITH WATER AND SEWER UTILITIES.
11. INSTALL STORMWATER PIPING AND STRUCTURES.
12. EXCAVATE AND PREP FOR INFILTRATION SYSTEM, IMPORT BASE SUBGRADE MATERIALS AS NECESSARY.
13. EXCAVATE AND PREP FOR GRAVEL WETLAND, INSTALL PIPING AND APPURTENANCES, APPLY FABRIC AS INDICATED.
14. IMPORT WASHED STONES AND PEA GRAVEL, WETLAND MUCK, COMPLETE WETLAND CONSTRUCTION.
15. BACKFILL AND SUBGRADE PREP FOR NEW PARKING AND SIDEWALK AREAS.
16. COMPLETE FINAL GRADING OF SITE. PLACE TOPSOIL AND PERMANENTLY VEGETATE, LANDSCAPE, AND MULCH.
17. INSTALL LIGHT POLES.
18. PAVE BASE COURSE.
19. STABILIZE EXPOSED SLOPES AND SOILS AS SOON AS GRADED, REPAIR AND REESTABLISH ALL DISTURBED VEGETATED/LAWN AREAS, AND MAINTAIN UNTIL ADEQUATELY VEGETATED.
20. PAVE WEARING COURSE.
21. AFTER THE SITE IS APPROVED BY THE ENGINEER AS ADEQUATELY STABILIZED, REMOVE ALL TEMPORARY BMPs.
22. ANTICIPATED FINAL COMPLETION DATE SUMMER/FALL 2024.

STORMWATER POLLUTION PREVENTION NOTES

- E1 LIMIT OF DISTURBANCE
- E2 PORTABLE SANITATION FACILITIES, TO BE STAKED DOWN AND SECURED
- E3 INLET PROTECTION (TYP.)
- E4 DOUBLE ROW OF STRAW FIBER ROLL (TYP.)
- E5 CONCRETE WASHOUT
- E6 STABILIZED CONSTRUCTION ENTRANCE
- E7 CHECK DAM
- E8 EROSION CONTROL NETTING

SITE PLAN REVIEW

RODE

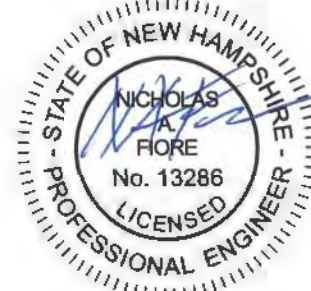
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

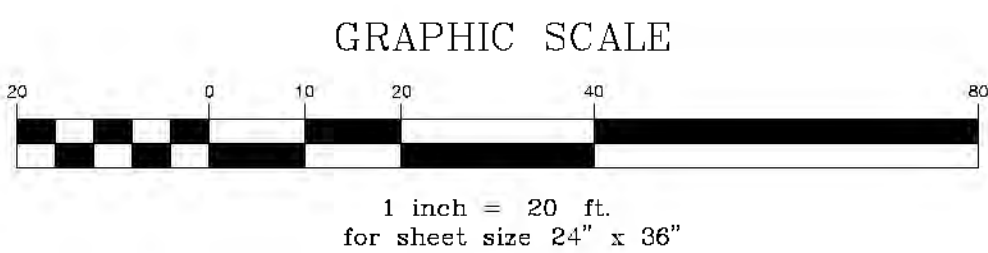
No.	Description	Date

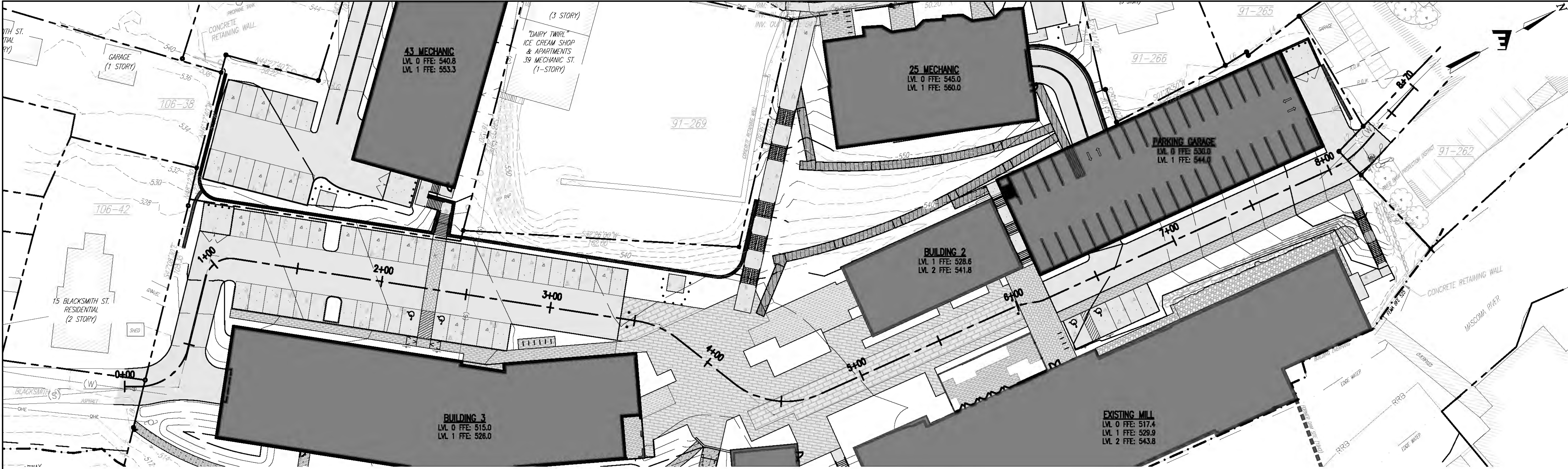
DATE: 08.15.22

SCALE: 1"= 20'

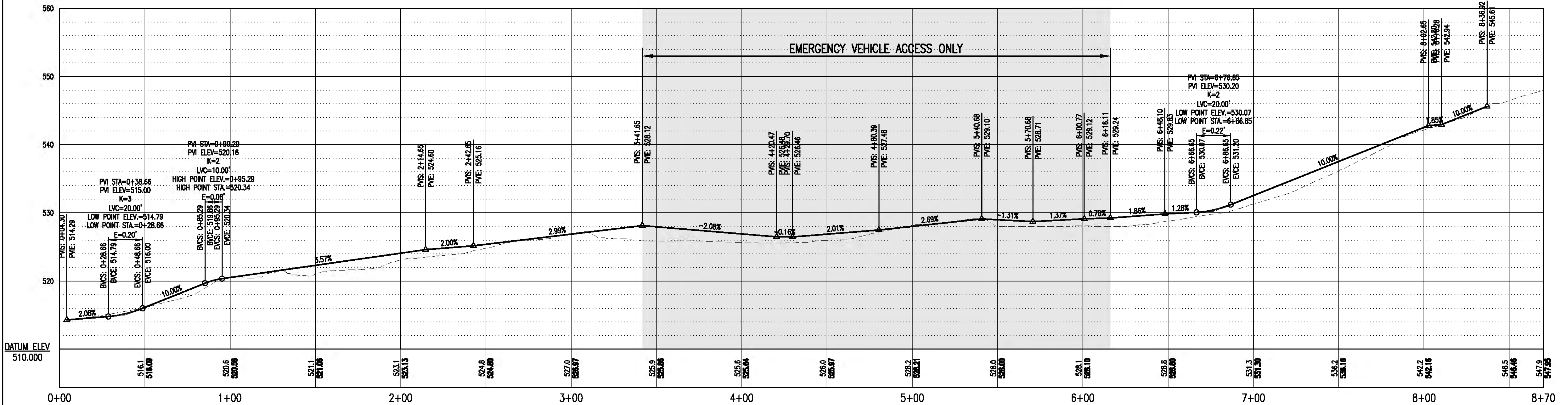
**EROSION PREVENTION
AND SEDIMENT CONTROL
PLAN (2 OF 2)**

C-210
Page 21 of 57

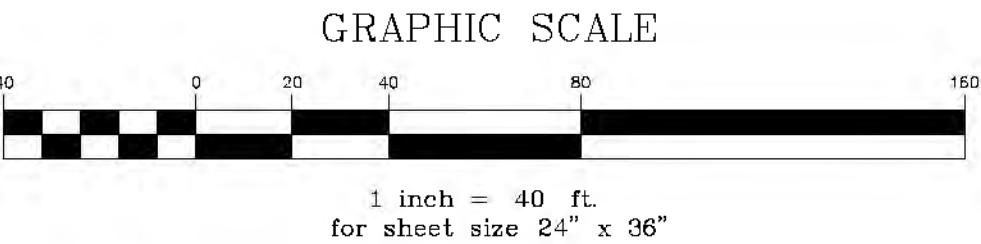




ROADWAY PLAN VIEW, STA. 0+00 - 8+70
SCALE: 1" = 30'



ROADWAY PROFILE, STA. 0+00 - 8+70
SCALE: HORIZ. 1" = 40'
VERT. 1" = 10'



SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

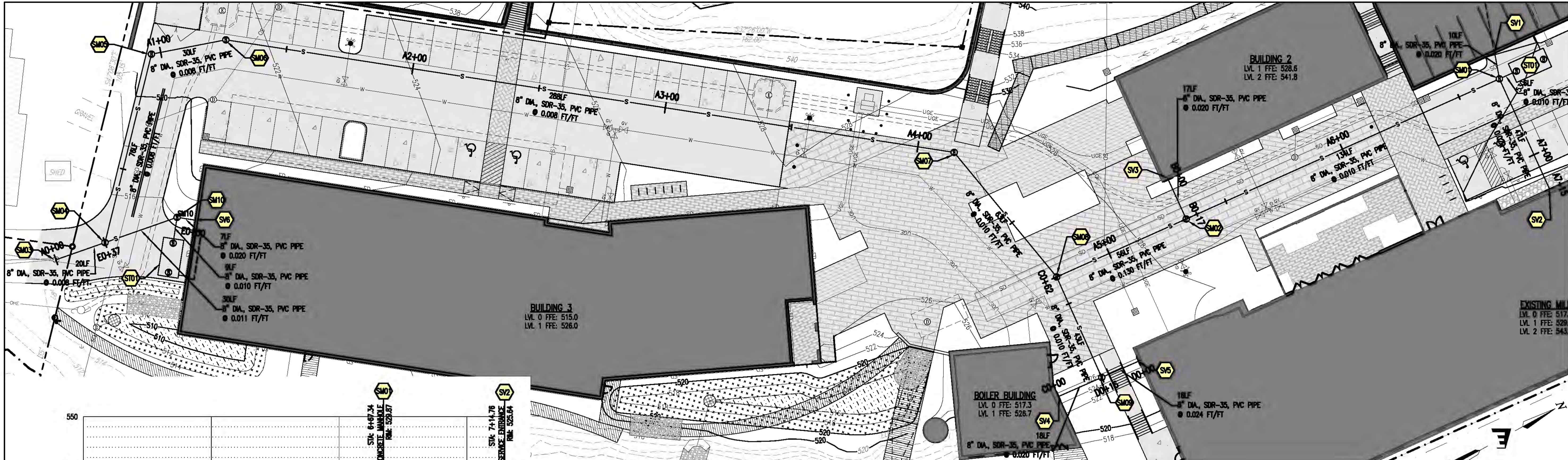
DATE: 08.15.22

SCALE: 1"= 40'

ROADWAY PLAN
AND PROFILE

C-301
Page 22 of 57

S:\PROJECTS\2022\22122 NH LEB WOOLEN MILL\DWGS\22122 C-303 SEWER PLAN AND PROFILE.DWG - PLOTTED: 9/25/2022 10:21 AM



SEWER ALIGNMENT "A", STA. 0+00 - 7+14.76

SCALE: HORIZ. 1" = 20'

SEWER SCHEDULE

SEWER MANHOLES

- SM01**
4' ID, PRECAST CONCRETE MANHOLE
RIM: 529.87
INV. IN: 523.97 (8" DIA., SDR-35, PVC PIPE)
INV. IN: 523.97 (8" DIA., SDR-35, PVC PIPE)
INV. IN: 523.97 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 523.87 (8" DIA., SDR-35, PVC PIPE)
- SM02**
4' ID, PRECAST CONCRETE MANHOLE
RIM: 528.52
INV. IN: 522.53 (8" DIA., SDR-35, PVC PIPE)
INV. IN: 522.53 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 522.43 (8" DIA., SDR-35, PVC PIPE)
- SM03**
EXISTING CONCRETE MANHOLE
RIM: 514.29
INV. IN: 510.50 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 510.40 (8" DIA., SDR-35, PVC PIPE)
- SM04**
4' ID, PRECAST CONCRETE MANHOLE
RIM: 514.74
INV. IN: 510.76 (8" DIA., SDR-35, PVC PIPE)
INV. IN: 510.76 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 510.66 (8" DIA., SDR-35, PVC PIPE)

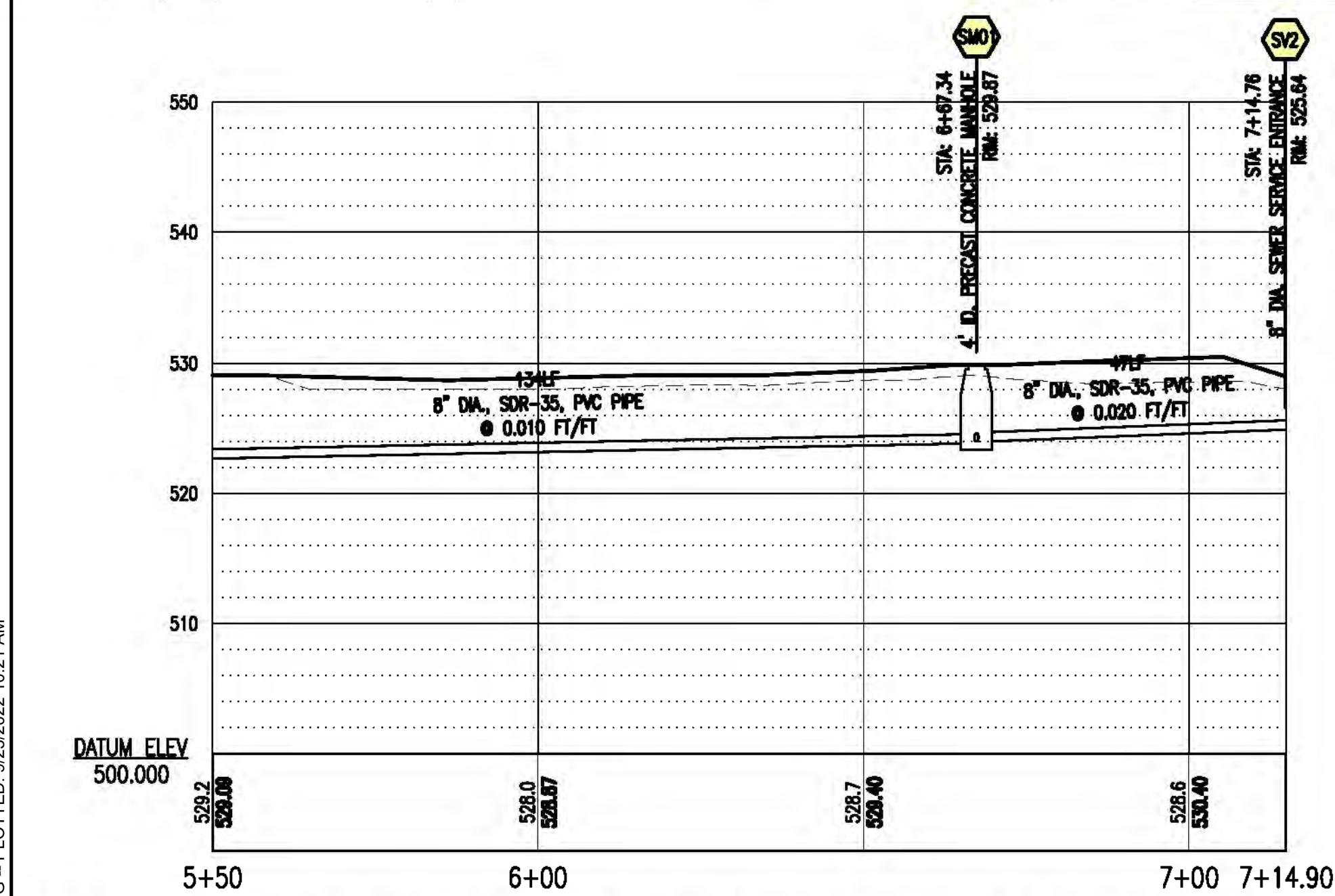
SEWER MANHOLES

- SM05**
4' ID, PRECAST CONCRETE MANHOLE
RIM: 520.70
INV. IN: 511.50 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 511.40 (8" DIA., SDR-35, PVC PIPE)
- SM06**
4' ID, PRECAST CONCRETE MANHOLE
RIM: 521.39
INV. IN: 511.85 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 511.75 (8" DIA., SDR-35, PVC PIPE)
- SM07**
4' ID, PRECAST CONCRETE MANHOLE
RIM: 527.40
INV. IN: 514.37 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 514.27 (8" DIA., SDR-35, PVC PIPE)
- SM08**
4' ID, PRECAST CONCRETE MANHOLE
RIM: 527.07
INV. IN: 515.20 (8" DIA., SDR-35, PVC PIPE)
INV. IN: 515.10 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 515.00 (8" DIA., SDR-35, PVC PIPE)

SEWER SERVICES

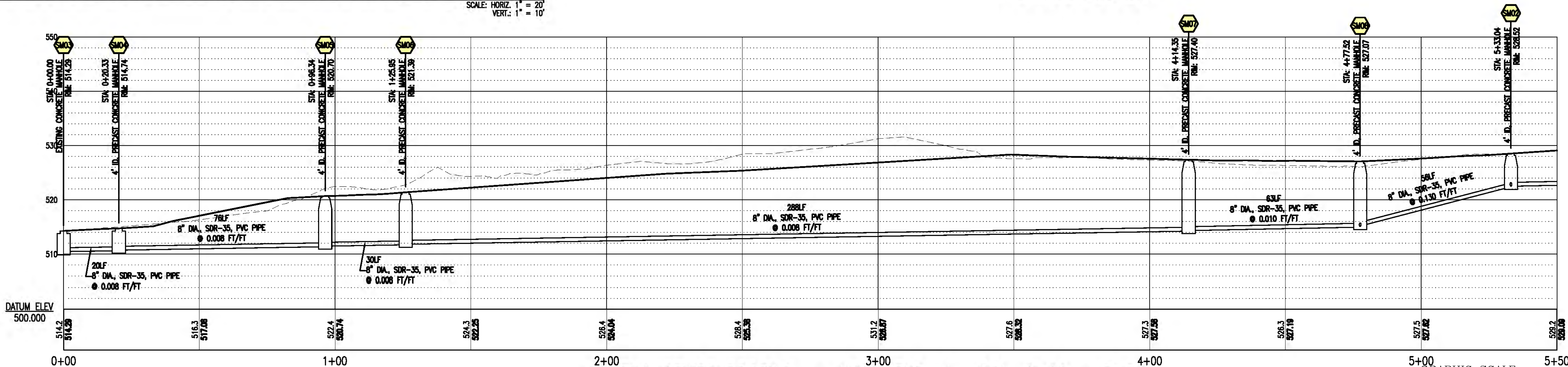
- SV2** 8" DIA. SEWER SERVICE ENTRANCE
INV. ELEV.: 524.92 (8" DIA., SDR-35, PVC PIPE)
- ST01** 1,500 GAL. SAND/OIL SEPARATOR

SEWER MISC.



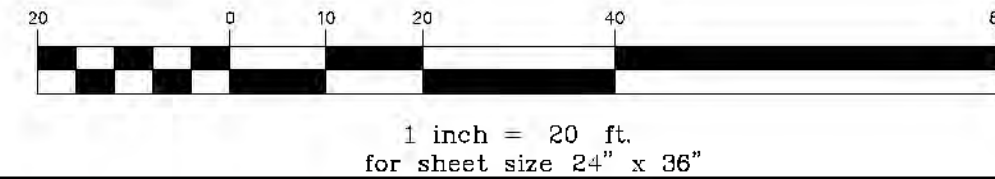
PARTIAL SEWER PROFILE - ALIGNMENT "A", STA. 5+50 - 7+14.76

SCALE: HORIZ. 1" = 20'
VERT.: 1" = 10'



PARTIAL SEWER PROFILE - ALIGNMENT "A", STA. 0+00 - 5+50

SCALE: HORIZ. 1" = 20'
VERT.: 1" = 10'



SITE PLAN REVIEW

RODE

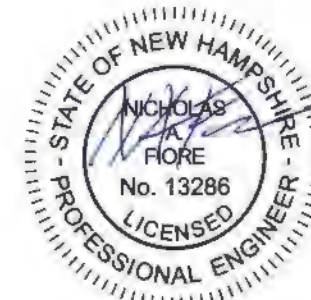
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

DATE: 08.15.22

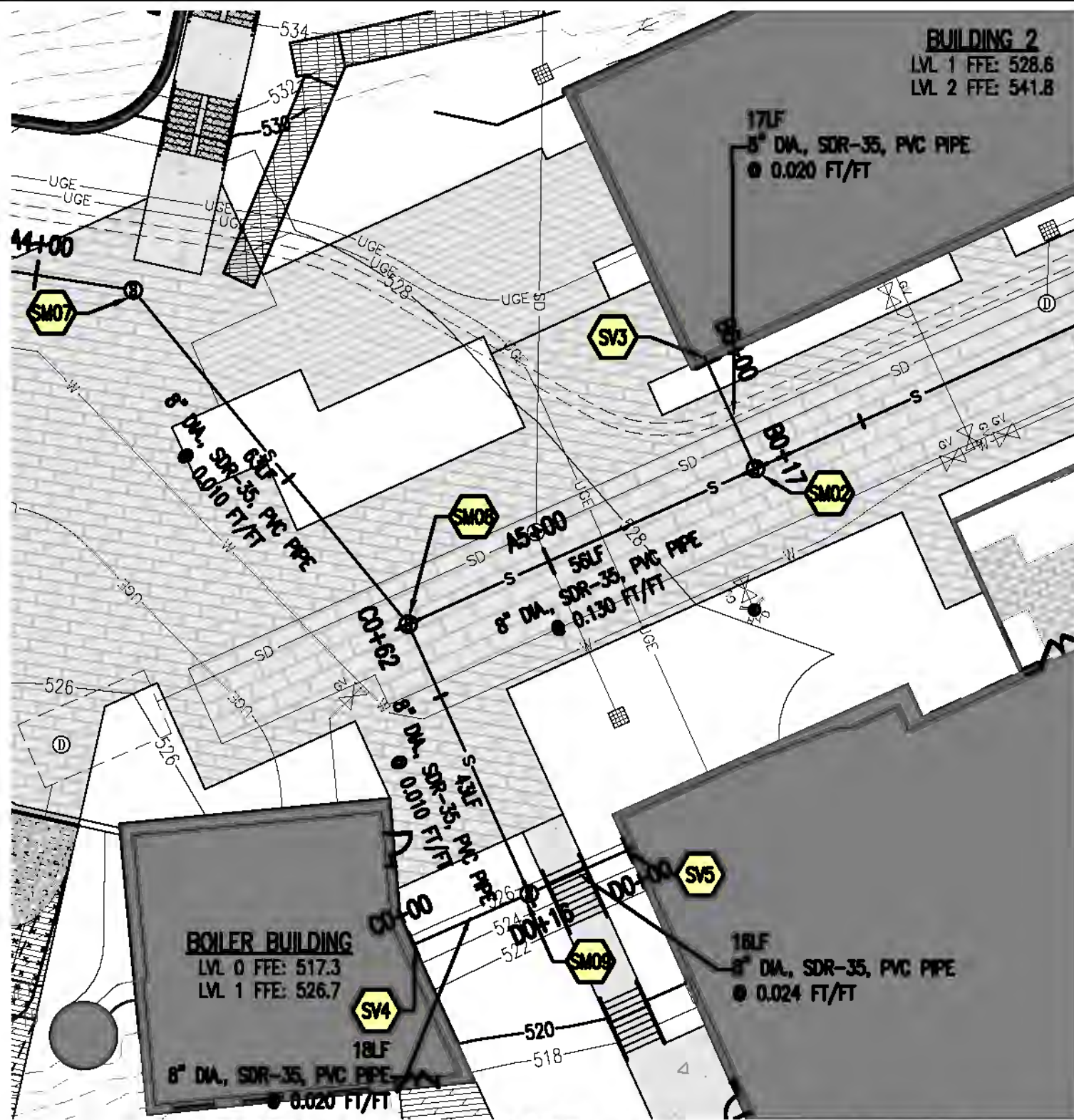
SCALE: 1" = 20'

**SEWER PLAN AND
PROFILE (1 OF 2)**

C-303

Page 23 of 57

S:\PROJECTS\2022\22122 NH LEB WOOLEN MILL\DWGS\22122 C-303 SEWER PLAN AND PROFILE.DWG - PLOTTED: 9/25/2022 10:06 AM

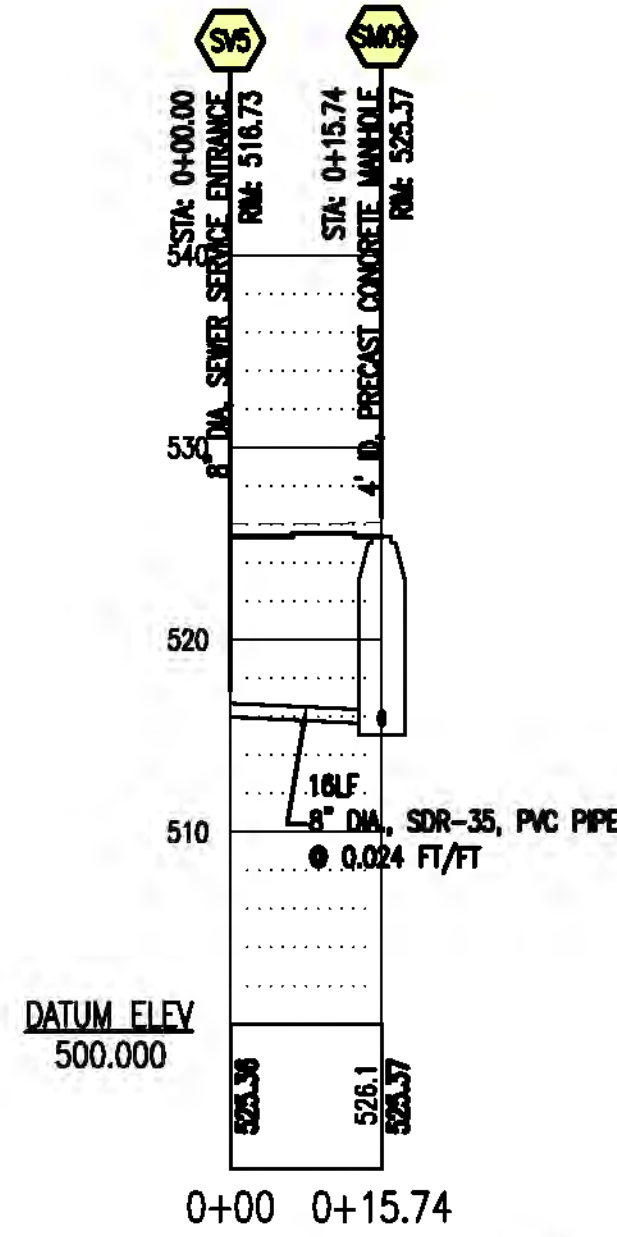


SEWER ALIGNMENTS "B", "C", & "D"

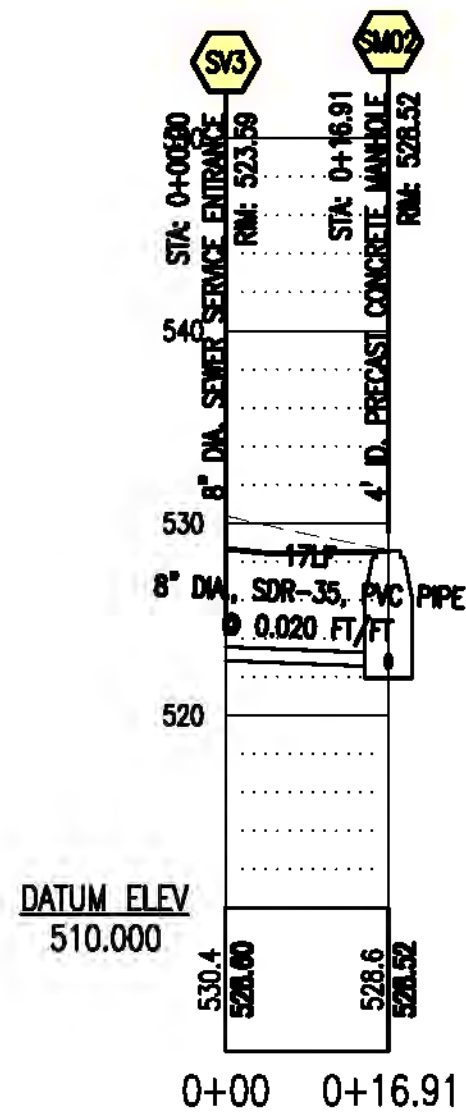
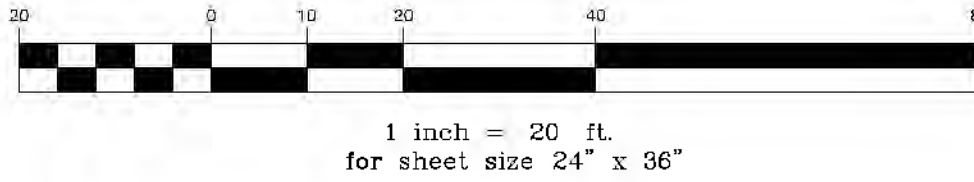
SCALE: HORIZ. 1" = 20'

SEWER PROFILE - ALIGNMENT "D",
STA. 0+00 - 0+15.74

SCALE: HORIZ. 1" = 20'
VERT.: 1" = 10'

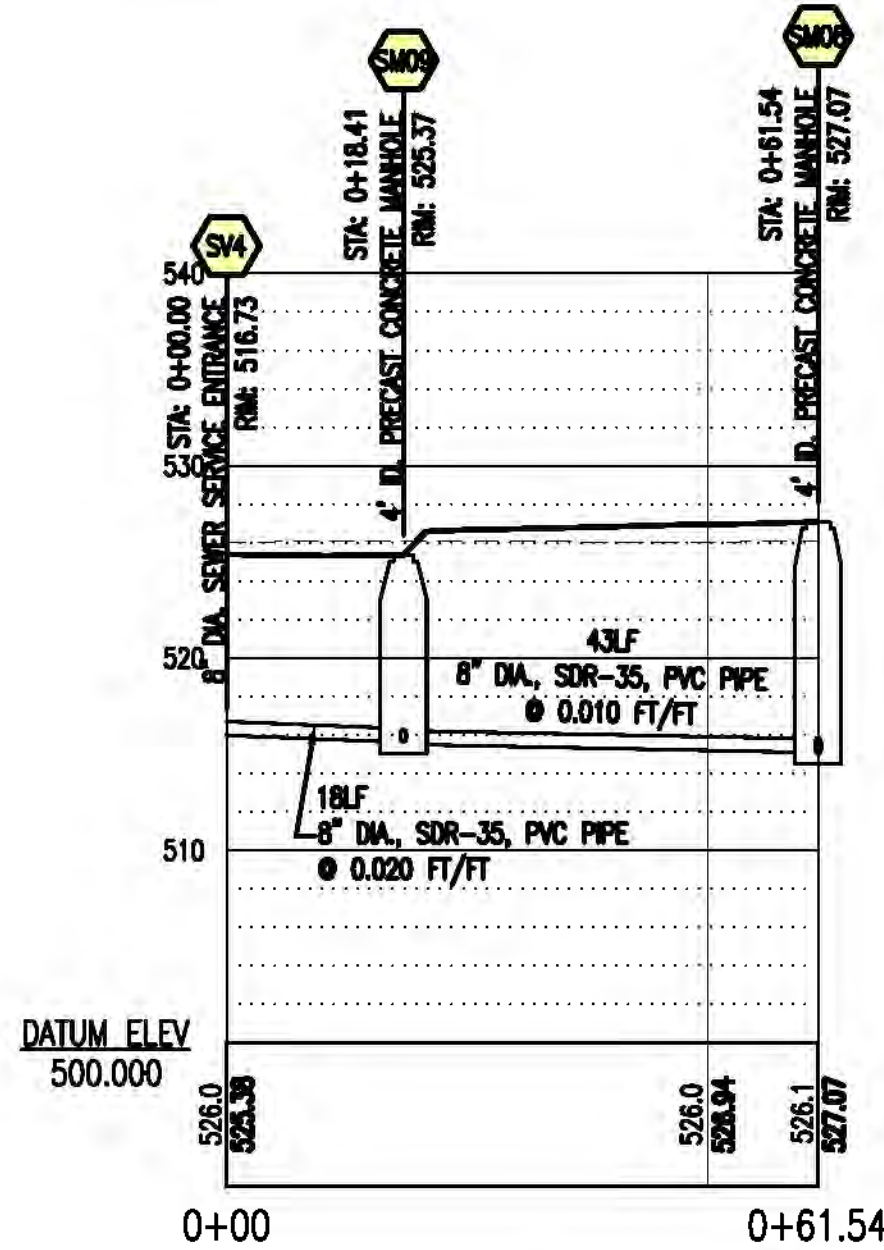


GRAPHIC SCALE



SEWER PROFILE - ALIGNMENT "B",
STA. 0+00 - 0+16.91

SCALE: HORIZ. 1" = 20'
VERT.: 1" = 10'



SEWER PROFILE - ALIGNMENT "C",
STA. 0+00 - 0+61.54

SCALE: HORIZ. 1" = 20'
VERT.: 1" = 10'

SEWER SCHEDULE

SEWER MANHOLES

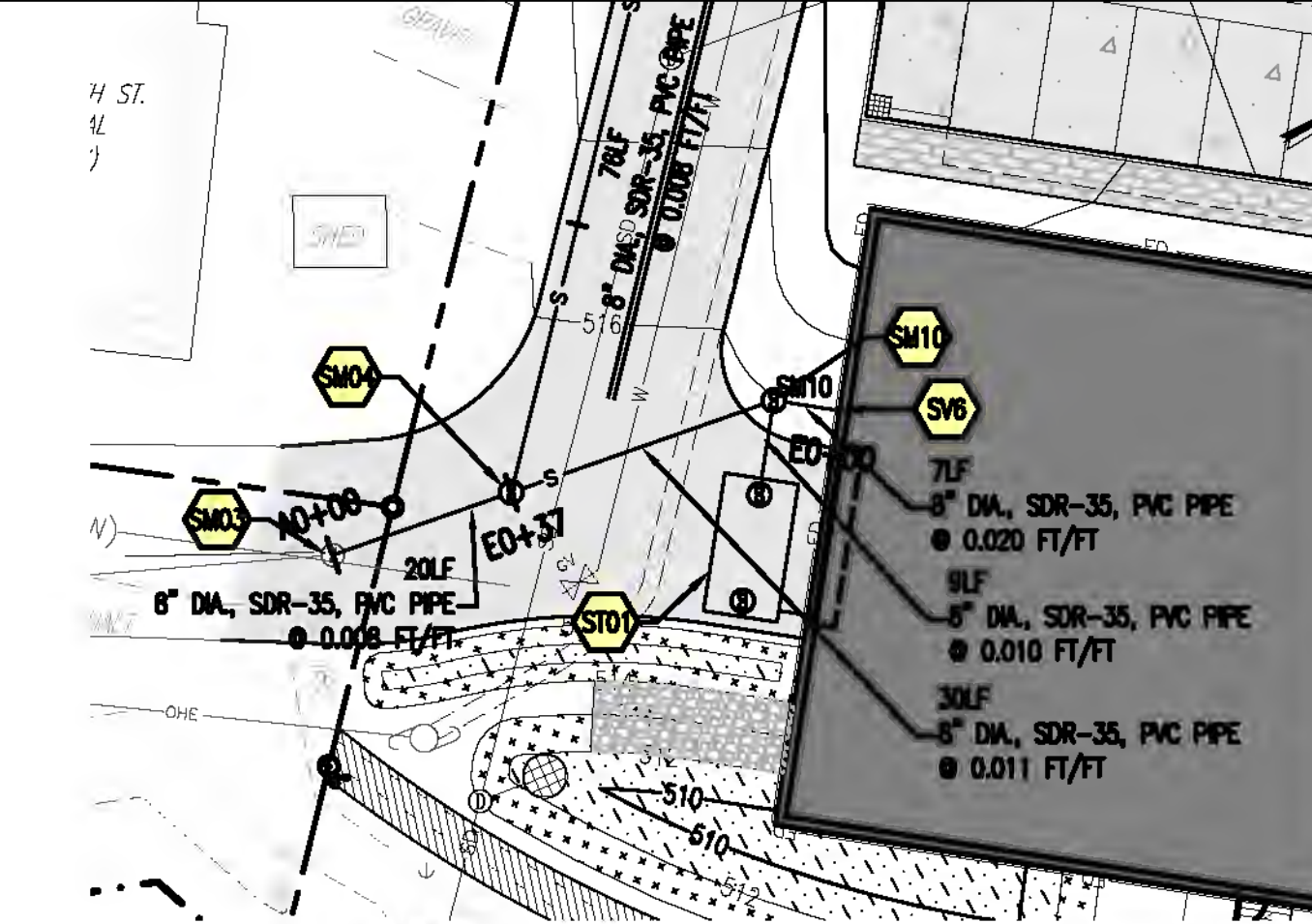
- SM02 4' ID, PRECAST CONCRETE MANHOLE
RIM: 528.52
INV. IN: 522.53 (8" DIA., SDR-35, PVC PIPE)
INV. IN: 522.53 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 522.43 (8" DIA., SDR-35, PVC PIPE)
- SM04 4' ID, PRECAST CONCRETE MANHOLE
RIM: 514.74
INV. IN: 510.78 (8" DIA., SDR-35, PVC PIPE)
INV. IN: 510.78 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 510.68 (8" DIA., SDR-35, PVC PIPE)
- SM09 4' ID, PRECAST CONCRETE MANHOLE
RIM: 527.07
INV. IN: 515.20 (8" DIA., SDR-35, PVC PIPE)
INV. IN: 515.10 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 515.00 (8" DIA., SDR-35, PVC PIPE)
- SM09 4' ID, PRECAST CONCRETE MANHOLE
RIM: 525.37
INV. IN: 515.63 (8" DIA., SDR-35, PVC PIPE)
INV. IN: 515.63 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 515.53 (8" DIA., SDR-35, PVC PIPE)

SEWER MANHOLES

- SM10 4' ID, PRECAST CONCRETE MANHOLE
RIM: 515.94
INV. IN: 511.20 (8" DIA., SDR-35, PVC PIPE)
INV. IN: 511.20 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 511.10 (8" DIA., SDR-35, PVC PIPE)
- SM11 EXISTING CONCRETE MANHOLE
RIM: 557.33
INV. IN: 551.66 (8" DIA., SDR-35, PVC PIPE)
- SM12 4' ID, PRECAST CONCRETE MANHOLE
RIM: 559.28
INV. IN: 554.14 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 554.04 (8" DIA., SDR-35, PVC PIPE)
- SM14 4' ID, PRECAST CONCRETE MANHOLE
RIM: 550.58
INV. IN: 544.93 (8" DIA., PVC FORCE MAIN)
INV. IN: 544.93 (8" DIA., SDR-35, PVC PIPE)
INV. OUT: 544.83 (8" DIA., SDR-35, PVC PIPE)
- SM15 EXISTING CONCRETE MANHOLE
RIM: 552.43
INV. IN: 544.50 (8" DIA., SDR-35, PVC PIPE)

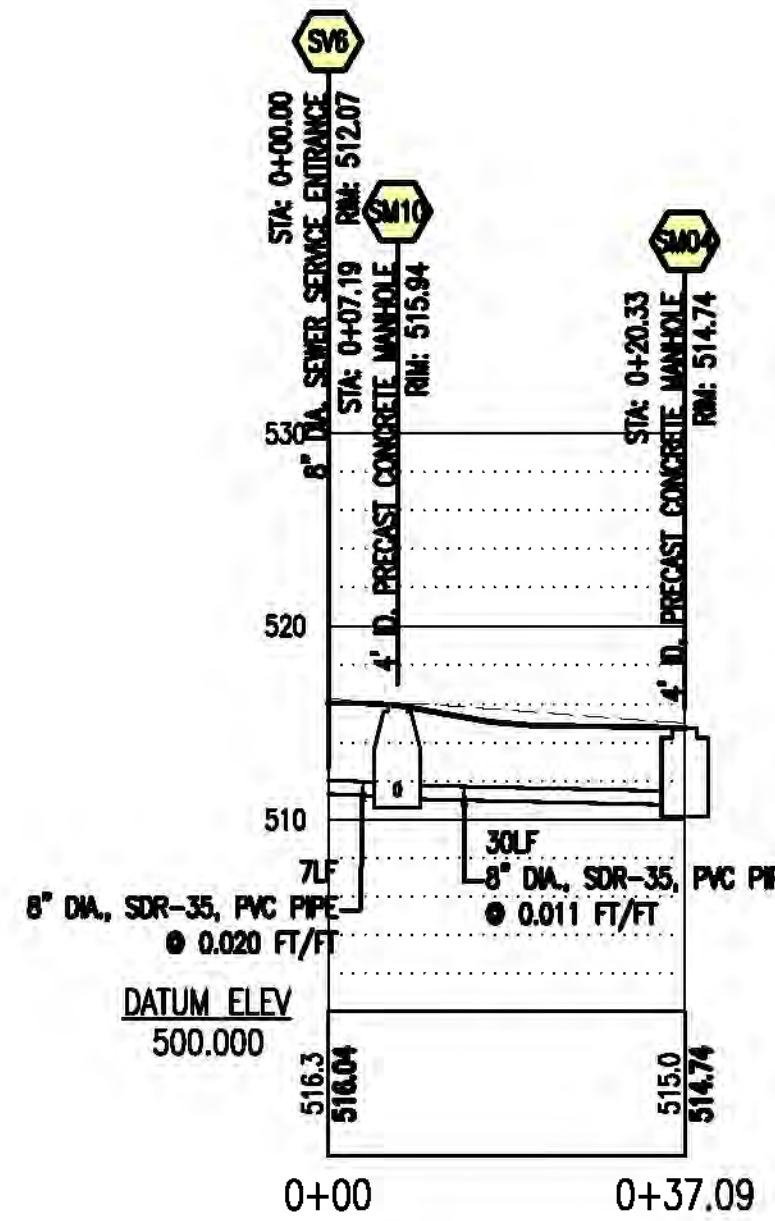
SEWER SERVICES

- SVE 8" DIA. SEWER SERVICE ENTRANCE
INV. ELEV.: 522.87 (8" DIA., SDR-35, PVC PIPE)
- SVE 8" DIA. SEWER SERVICE ENTRANCE
INV. ELEV.: 516.00 (8" DIA., SDR-35, PVC PIPE)
- SVE 8" DIA. SEWER SERVICE ENTRANCE
INV. ELEV.: 516.00 (8" DIA., SDR-35, PVC PIPE)
- SVE 8" DIA. SEWER SERVICE ENTRANCE
INV. ELEV.: 511.34 (8" DIA., SDR-35, PVC PIPE)
- SVE 8" DIA. SEWER SERVICE ENTRANCE
INV. ELEV.: 554.33 (8" DIA., SDR-35, PVC PIPE)
- SVE 8" DIA. SEWER SERVICE ENTRANCE
INV. ELEV.: 545.27 (8" DIA., SDR-35, PVC PIPE)
- SVE 1,500 GAL. SAND/OIL SEPARATOR



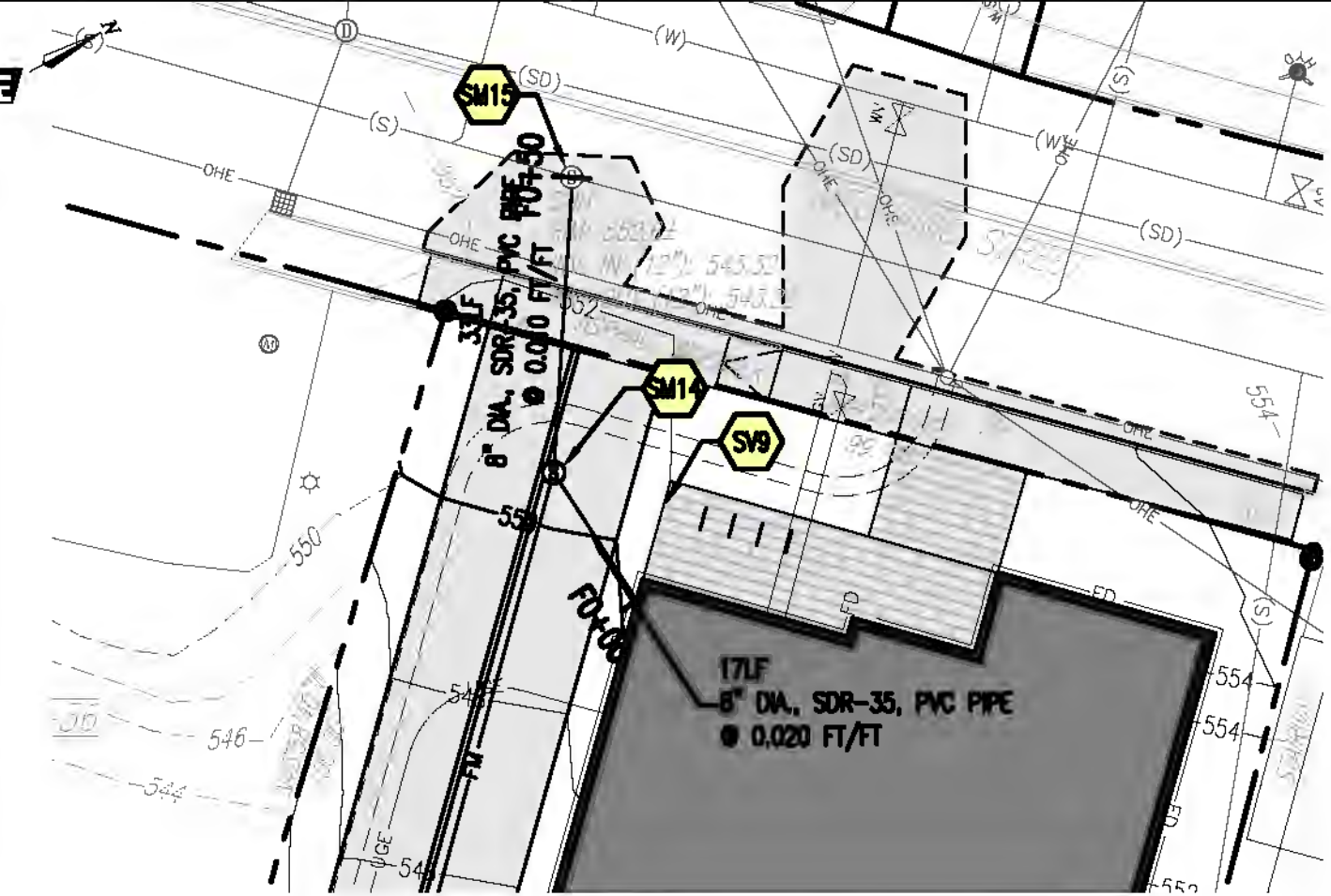
SEWER ALIGNMENT "E", STA 0+00 - 0+37.09

SCALE: HORIZ. 1" = 20'



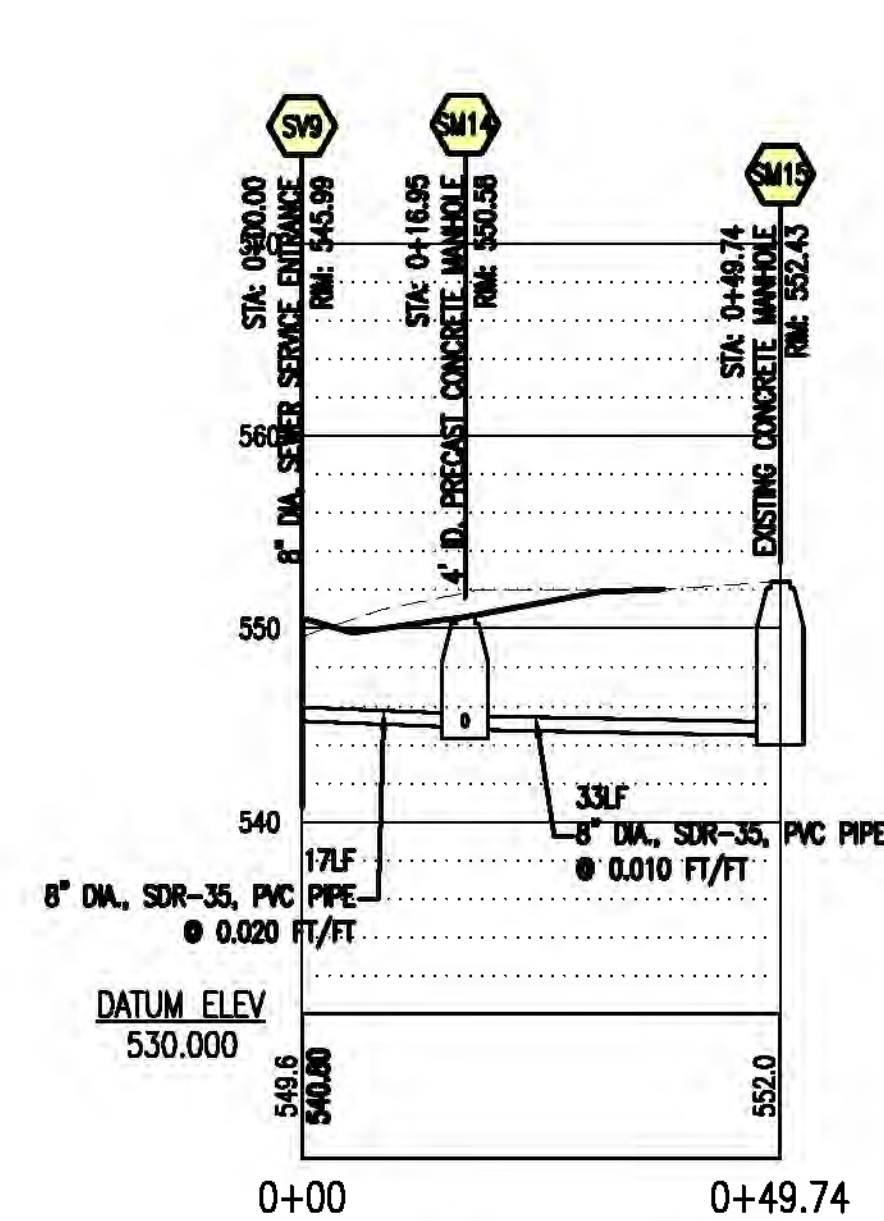
SEWER PROFILE - ALIGNMENT "E",
STA. 0+00 - 0+37.09

SCALE: HORIZ. 1" = 20'
VERT.: 1" = 10'



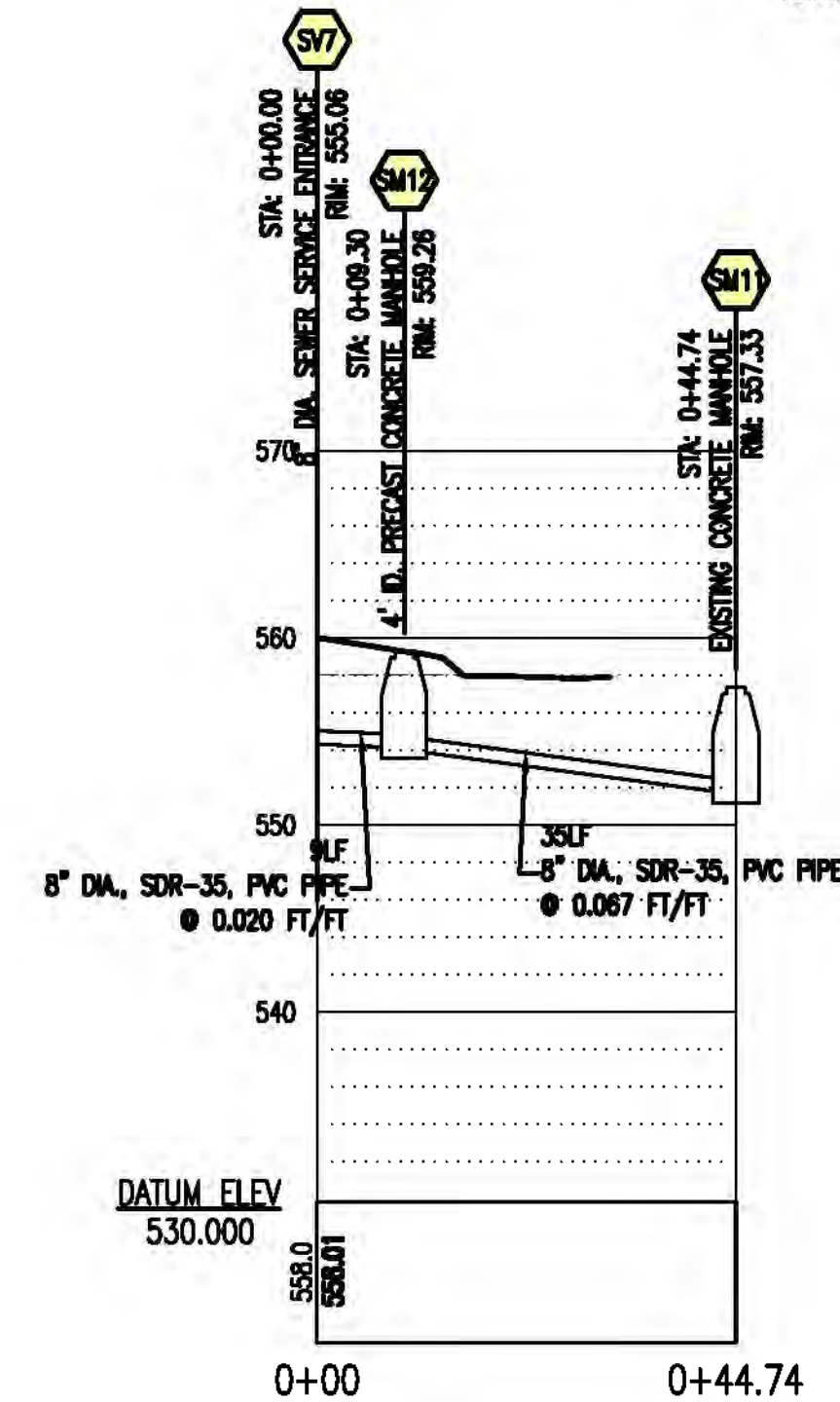
SEWER ALIGNMENT "F", STA 0+00 - 0+49.74

SCALE: HORIZ. 1" = 20'



SEWER PROFILE - ALIGNMENT "F",
STA. 0+00 - 0+49.74

SCALE: HORIZ. 1" = 20'
VERT.: 1" = 10'



SEWER PROFILE - ALIGNMENT "G",
STA. 0+00 - 0+44.74

SCALE: HORIZ. 1" = 20'
VERT.: 1" = 10'



SEWER ALIGNMENT "G", STA 0+00 - 0+44.74

SCALE: HORIZ. 1" = 20'

SITE PLAN REVIEW

RODE

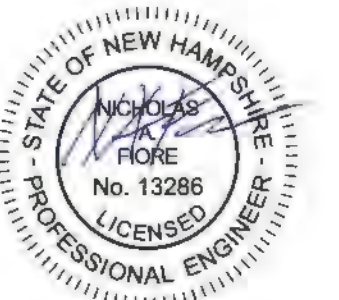
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

DATE: 08.15.22

SCALE: 1" = 20'

SEWER PLAN AND
PROFILE (2 OF 2)

C-304

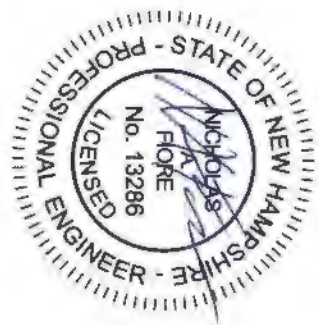
Page 24 of 57

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.

LEBANON, NH

EV PROJECT: 22122		
No.	Description	Date

DATE: 08.15.22

SCALE: 1"= 20'

WATER LINE PLAN
AND PROFILE (1 OF 3)

C-305

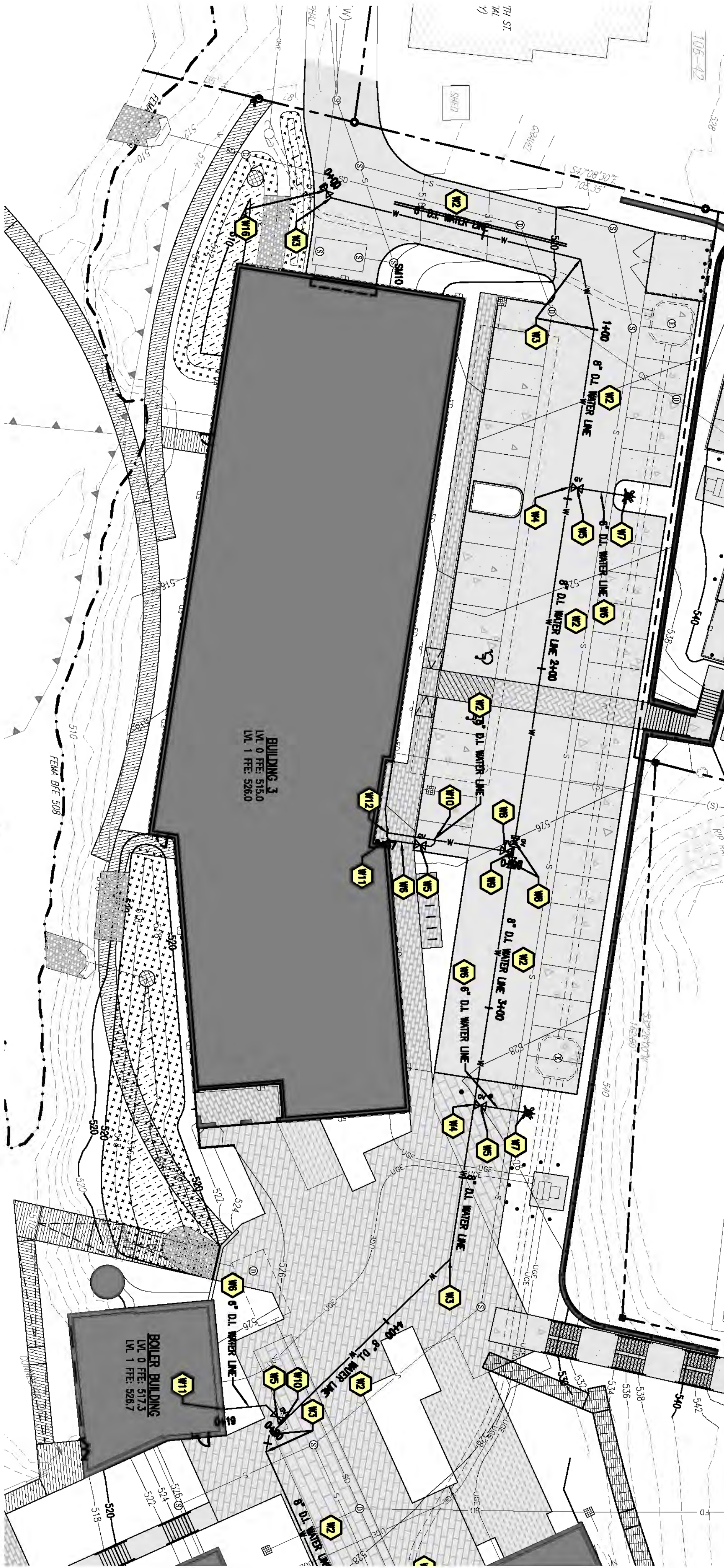
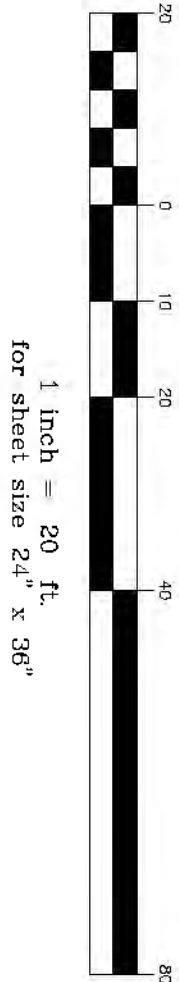


WATER SCHEDULE

UNDERGROUND UTILITIES, ELECTRIC, TELEPHONE AND CABLE, MUST MAINTAIN A MINIMUM CLEARANCE OF 10 FT. FROM ALL PROPOSED WATER LINES.

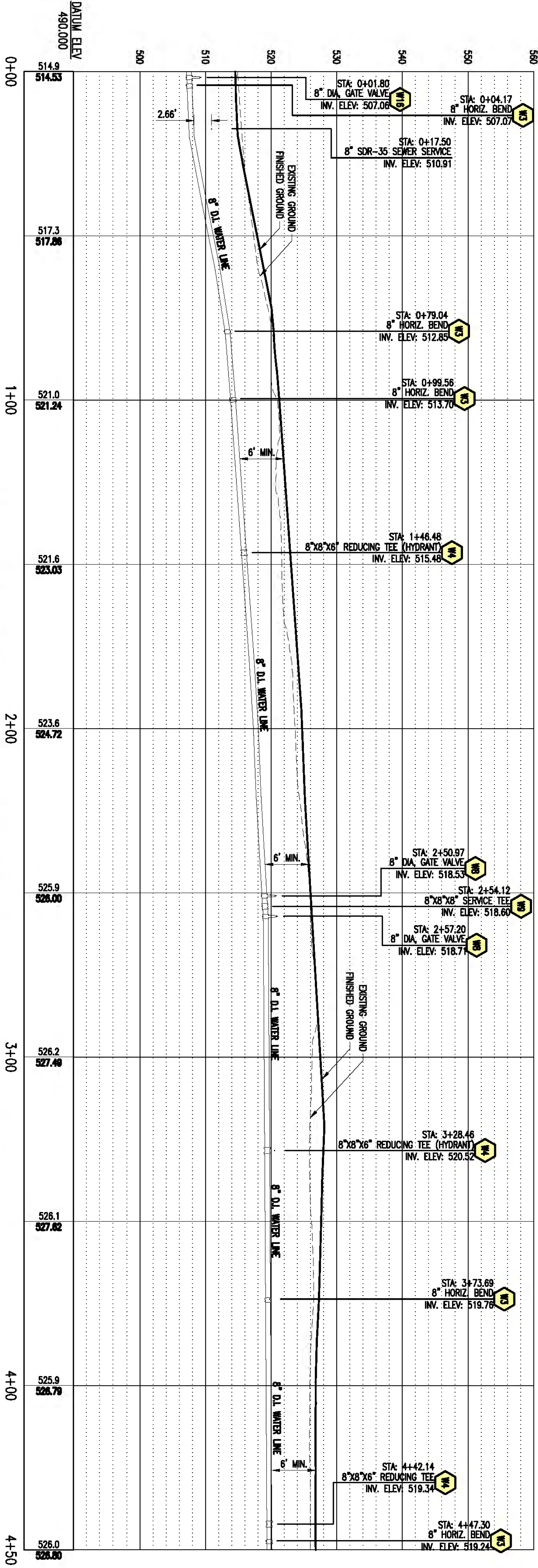
- W1 12" TAPPING SLEEVE AND VALVE WITH 12"x6" REDUCER FOR CONNECTION TO EXISTING 12" WATERMAIN, COORDINATE WORK WITH LEBANON DEPARTMENT OF PUBLIC WORKS.
- W2 8" DIA. DUCTILE IRON WATER LINE
- W3 8" DIA. HORIZONTAL BEND FITTING AS NEEDED TO MATCH ALIGNMENT SHOWN, TYP.
- W4 8"x6"x6" REDUCING INCHENT TEE, TYP.
- W5 6" DIA. GATE VALVE, MANDAY WITH MECHANICAL RESTRAINTS, TYP.
- W6 6" DIA. DUCTILE IRON WATER LINE, TYP.
- W7 FIRE HYDRANT, TYP.
- W8 6" DIA. GATE VALVE, MANDAY WITH MECHANICAL RESTRAINTS, TYP.
- W9 8"x6"x6" TEE FOR BUILDING SERVICE, TYP.
- W10 8"x6"x6" REDUCING TEE FOR DOMESTIC WATER SERVICE, TYP.
- W11 6" DOMESTIC WATER SERVICE ENTRANCE, TYP.
- W12 8" FIRE SERVICE ENTRANCE, TYP.
- W13 8"x6"x6" HYDRANT TEE
- W14 30" WIDE WATER ESSENTIAL CENTERED ON AS-BUILT WATER LINE AND SHALL INCLUDE HYDRANTS AND HYDRANT SERVICE LINES
- W15 FIRE DEPARTMENT CONNECTION, REFER TO MEP PLANS FOR EXACT LOCATION AND DETAILS.
- W16 6" DIA. GATE VALVE, MANDAY WITH MECHANICAL RESTRAINTS, TYP. ON EXISTING WATER LINE

GRAPHIC SCALE



WATER LINE PLAN VIEW – ALIGNMENT “A”, STA. 0+00 – 4+50

SCALE: HORIZ. 1" = 20'



S:\PROJECTS\10-2022\2122 NH LEB WOOLEN MILL\DWGS\2122 C-30X WATER PLAN AND PROFILE DWG - PLOTTED: 9/24/2022 9:02 AM



WATER LINE PLAN VIEW – ALIGNMENT "A", STA. 4+00 – 7+95

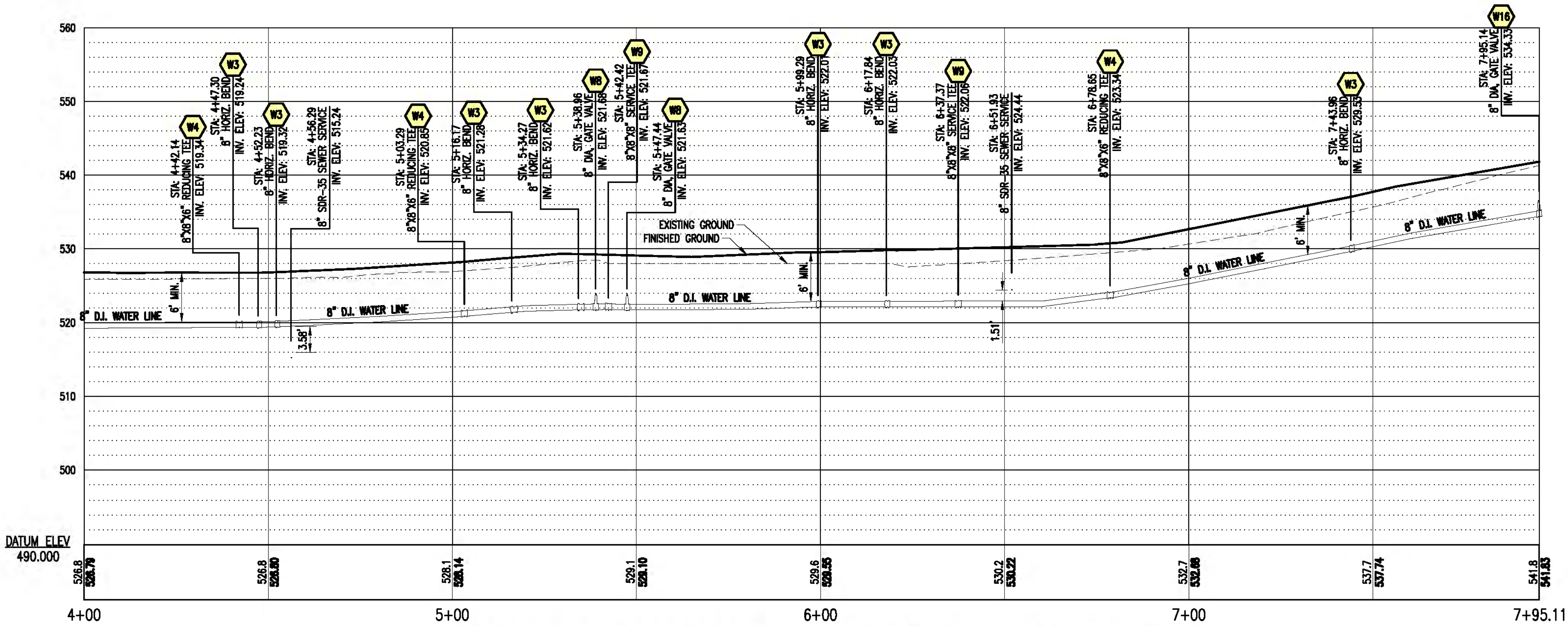
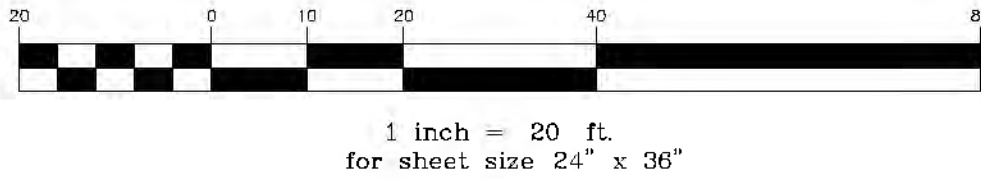
SCALE: HORIZ. 1" = 20'

WATER SCHEDULE

UNDERGROUND UTILITIES, ELECTRIC, TELEPHONE AND CABLE, MUST MAINTAIN A MINIMUM CLEARANCE OF 10 FT. FROM ALL PROPOSED WATER LINES.

- W1 12" TAPPING SLEEVE AND VALVE WITH 12"x8" REDUCER FOR CONNECTION TO EXISTING 12" WATERMAIN, COORDINATE WORK WITH LEBANON DEPARTMENT OF PUBLIC WORKS.
- W2 8" DIA. DUCTILE IRON WATER LINE
- W3 8" DIA. HORIZONTAL BEND FITTING AS NEEDED TO MATCH ALIGNMENT SHOWN, TYP.
- W4 8"x8"x6" REDUCING HYDRANT TEE, TYP.
- W5 6" DIA. GATE VALVE, MAXIM WITH MECHANICAL RESTRAINTS, TYP.
- W6 6" DIA. DUCTILE IRON WATER LINE, TYP.
- W7 FIRE HYDRANT, TYP.
- W8 8" DIA. GATE VALVE, MAXIM WITH MECHANICAL RESTRAINTS, TYP.
- W9 8"x8"x8" TEE FOR BUILDING SERVICE, TYP.
- W10 8"x8"x6" REDUCING TEE FOR DOMESTIC WATER SERVICE, TYP.
- W11 6" DOMESTIC WATER SERVICE ENTRANCE, TYP.
- W12 8" FIRE SERVICE ENTRANCE, TYP.
- W13 8"x8"x8" HYDRANT TEE
- W14 30" WIDE WATER EASEMENT CENTERED ON AS-BUILT WATER LINE AND SHALL INCLUDE HYDRANTS AND HYDRANT SERVICE LINES
- W15 FIRE DEPARTMENT CONNECTION. REFER TO MFP PLANS FOR EXACT LOCATION AND DETAILS.
- W16 8" DIA. GATE VALVE, MAXIM WITH MECHANICAL RESTRAINTS, TYP. ON EXISTING WATER LINE.

GRAPHIC SCALE



WATER LINE PROFILE VIEW – ALIGNMENT "A", STA. 4+00 – 7+95

SCALE: HORIZ. 1" = 20'

SITE PLAN REVIEW

RODE

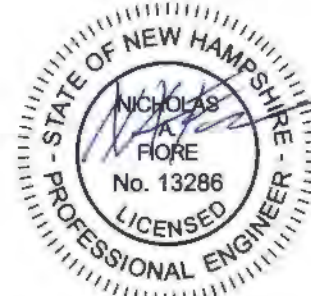
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

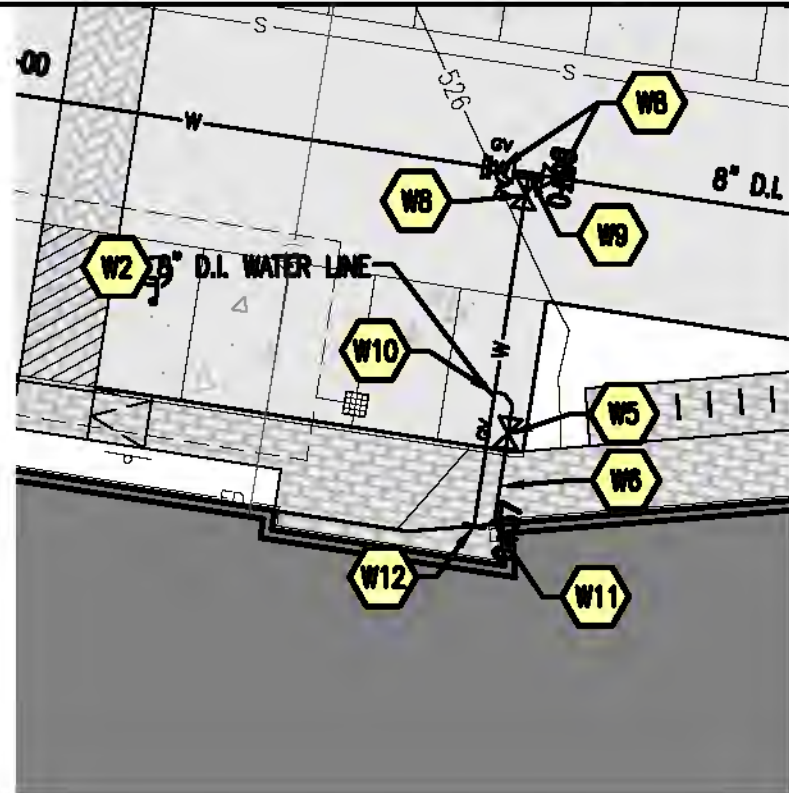
DATE: 08.15.22

SCALE: 1"= 20'

WATER LINE PLAN
AND PROFILE (2 OF 3)

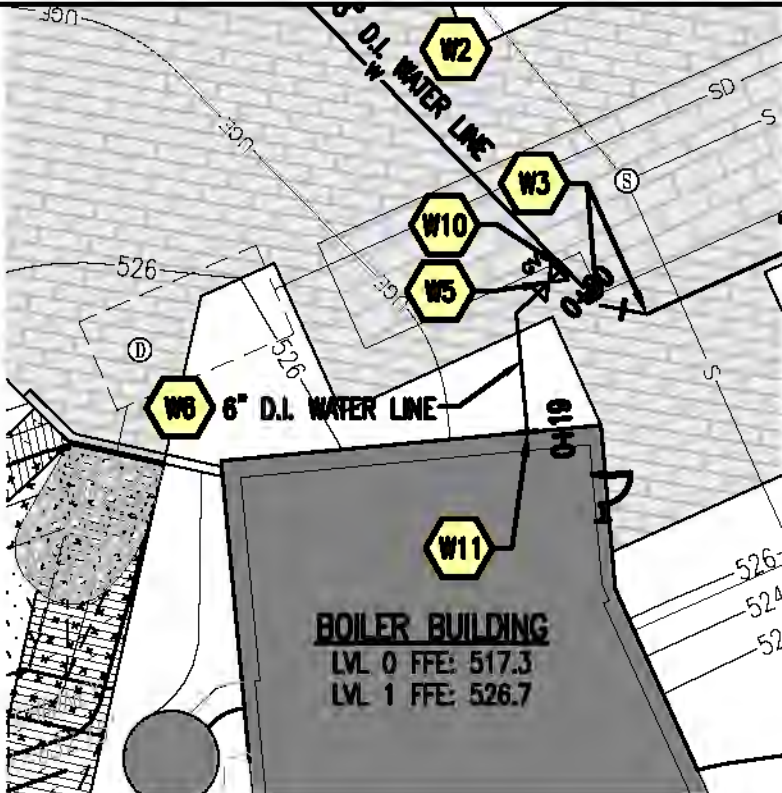
C-306

Page 26 of 57



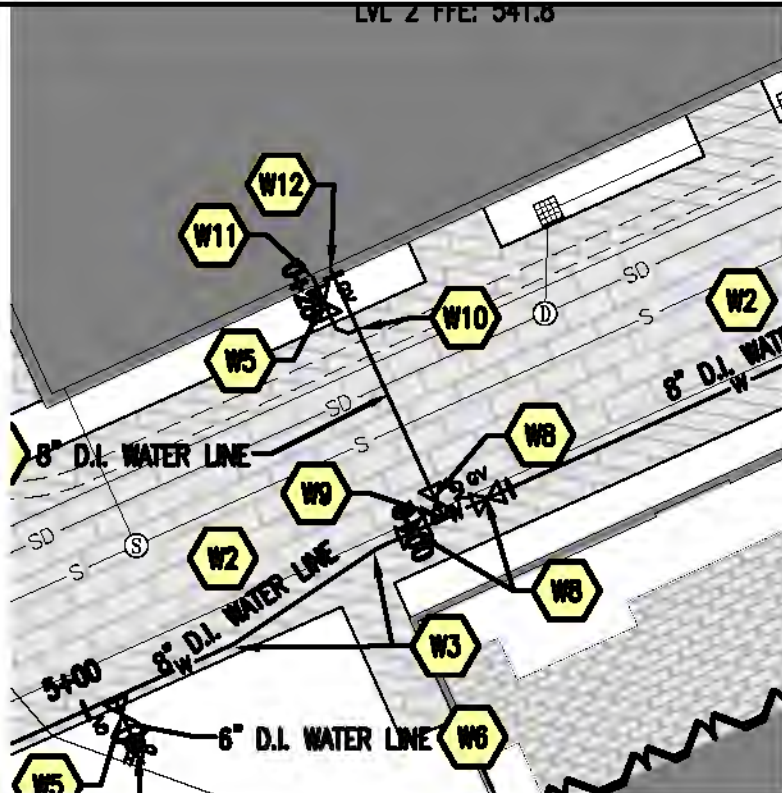
WATER LINE PLAN VIEW
BUILDING 3 SERVICE

SCALE: HORIZ. 1" = 20'



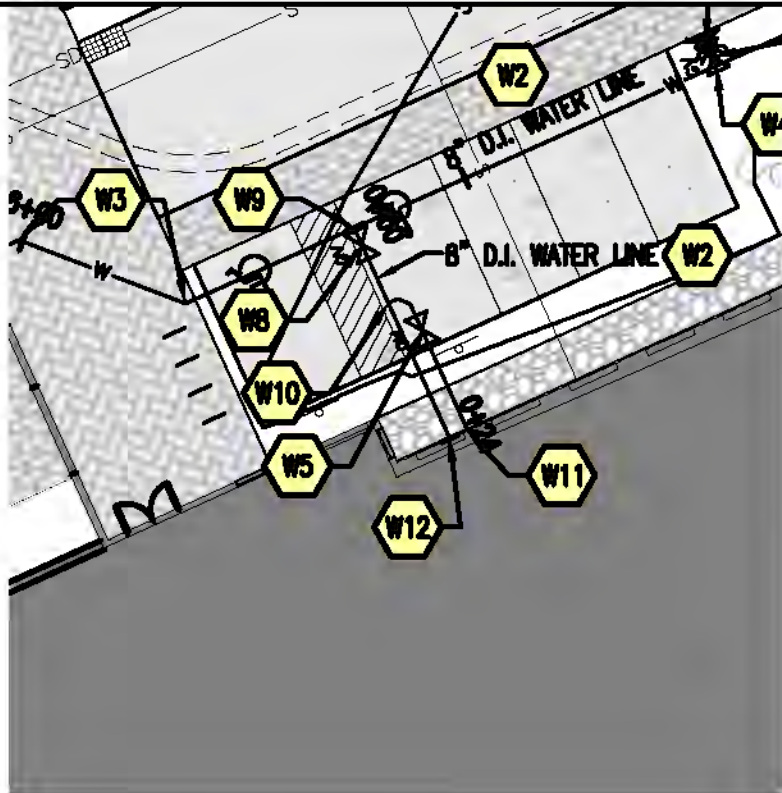
WATER LINE PLAN VIEW
AMMENITY SERVICE

SCALE: HORIZ. 1" = 20'



WATER LINE PLAN VIEW
BUILDING 2 SERVICE

SCALE: HORIZ. 1" = 20'



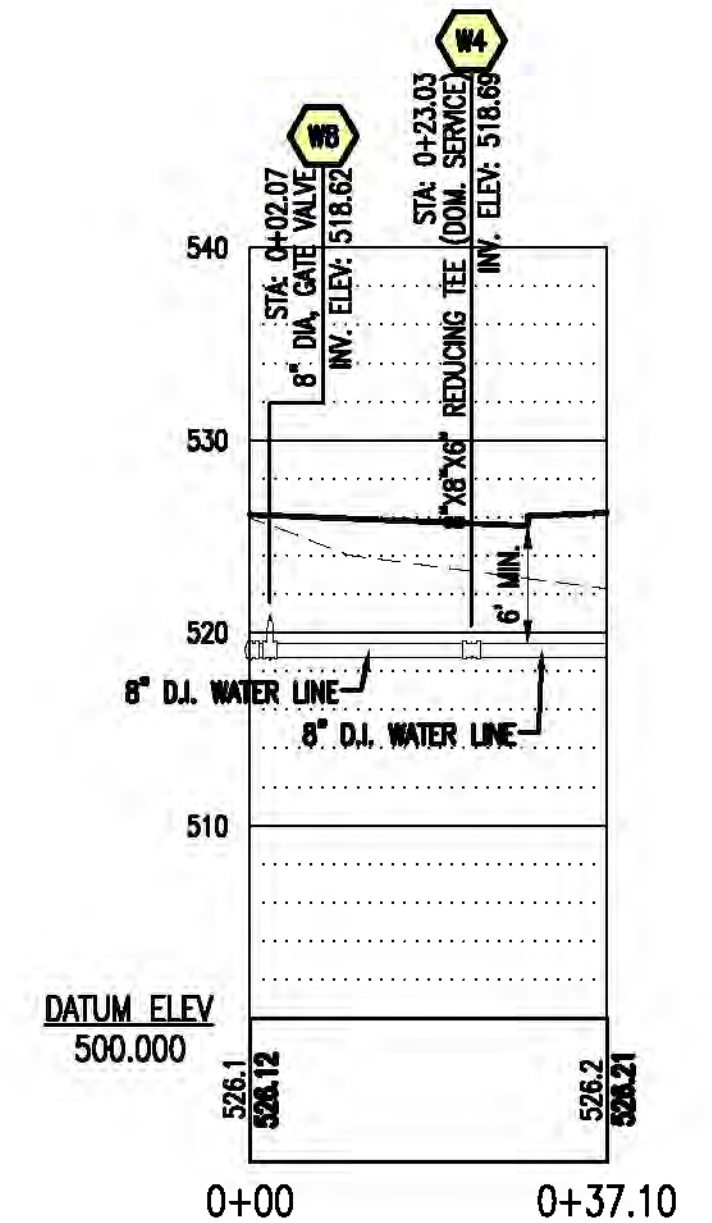
WATER LINE PLAN VIEW
BUILDING 1 SERVICE

SCALE: HORIZ. 1" = 20'



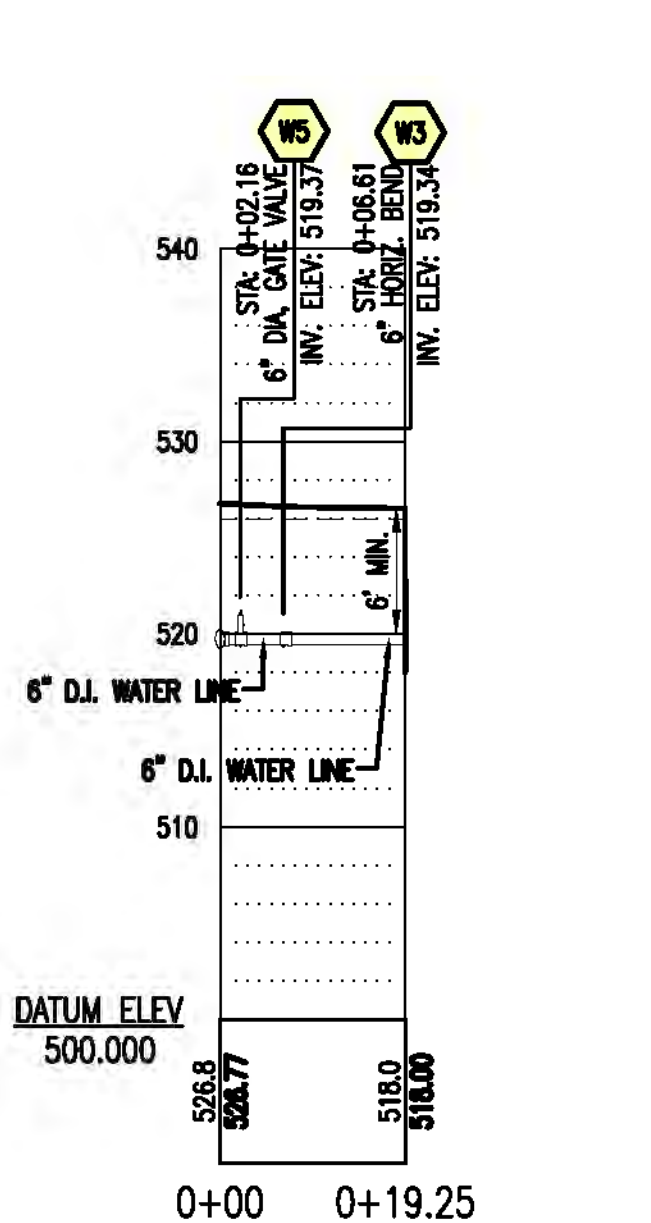
WATER LINE PLAN VIEW
43 MECH. SERVICE

SCALE: HORIZ. 1" = 20'



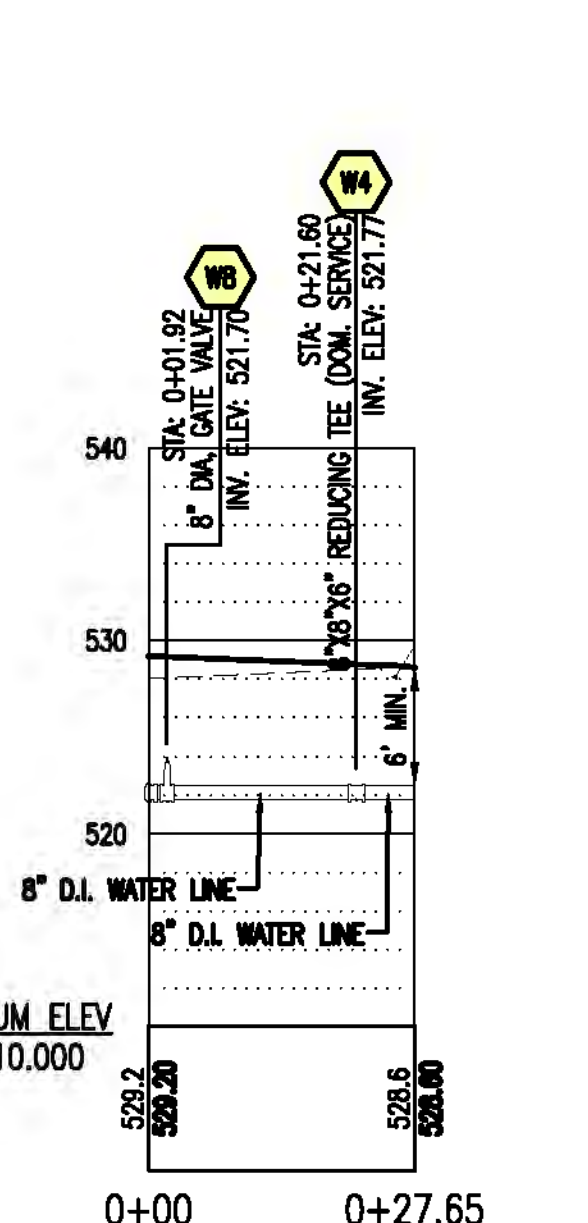
WATER LINE PROFILE VIEW
BUILDING 3 SERVICE

SCALE: HORIZ. 1" = 20'



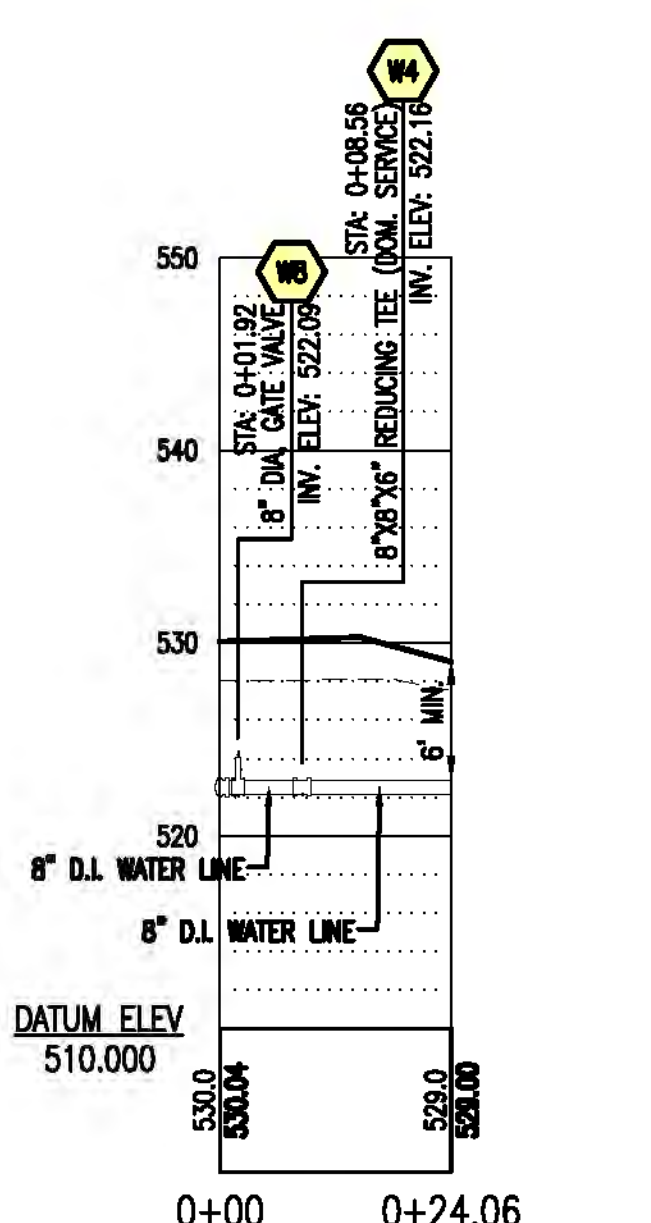
WATER LINE PROFILE VIEW
AMMENITY SERVICE

SCALE: HORIZ. 1" = 20'



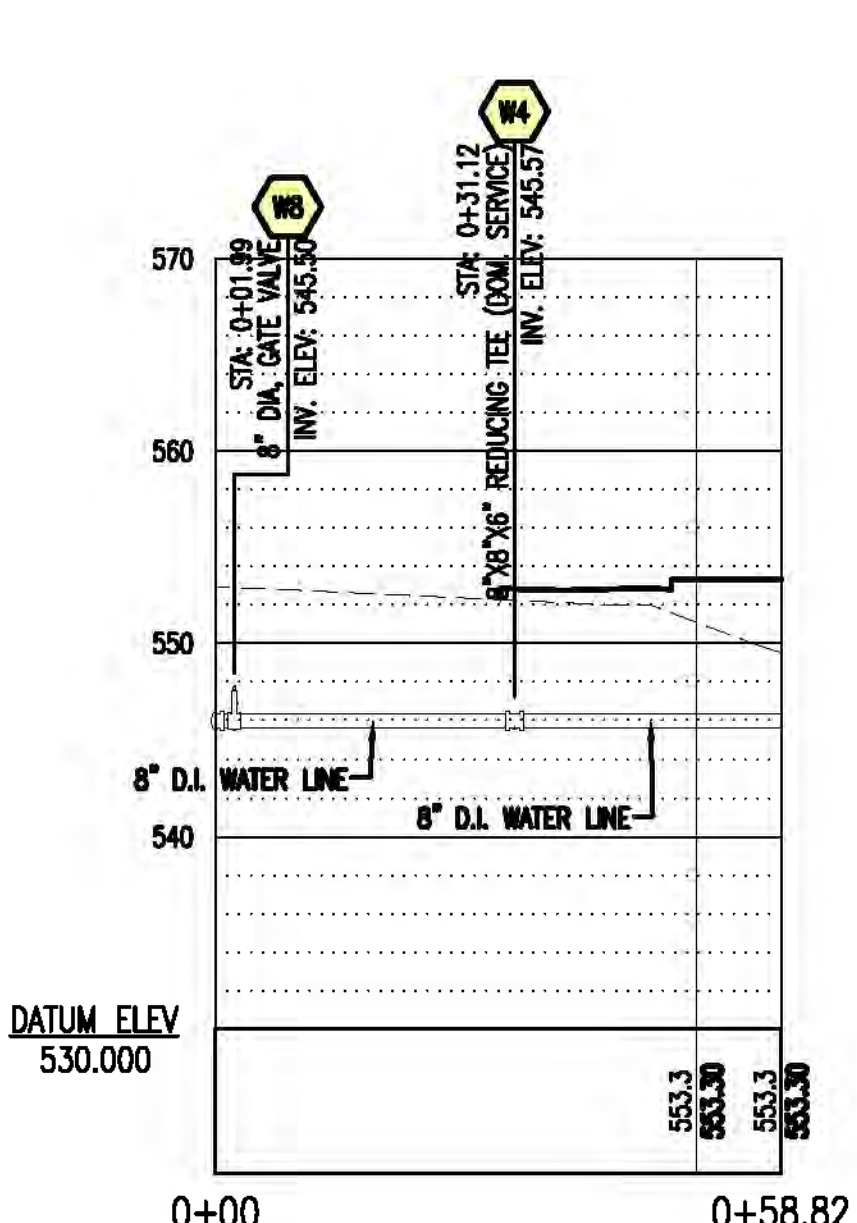
WATER LINE PROFILE VIEW
BUILDING 2 SERVICE

SCALE: HORIZ. 1" = 20'



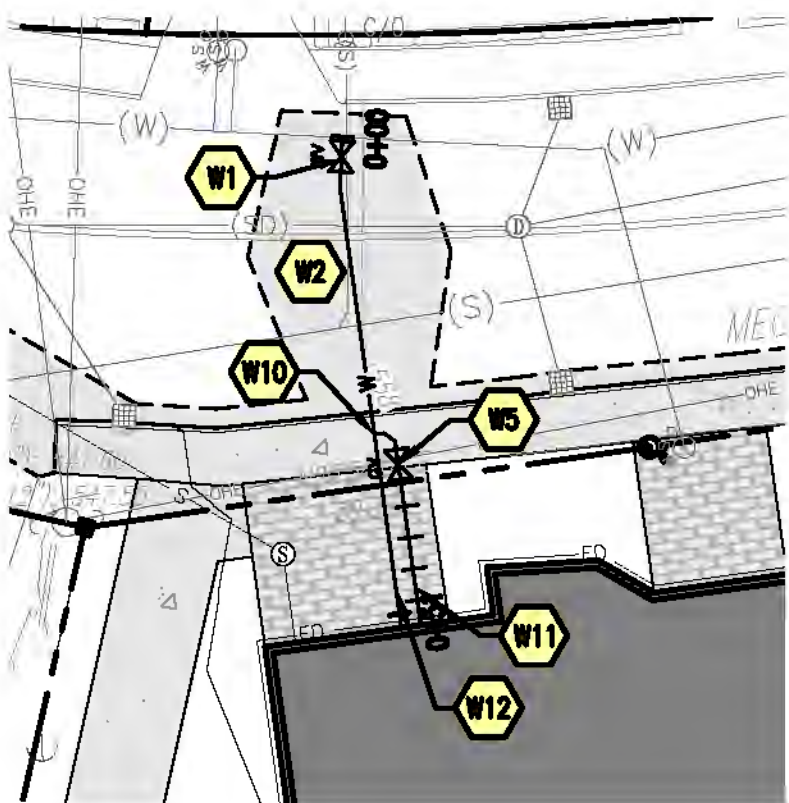
WATER LINE PROFILE VIEW
BUILDING 1 SERVICE

SCALE: HORIZ. 1" = 20'



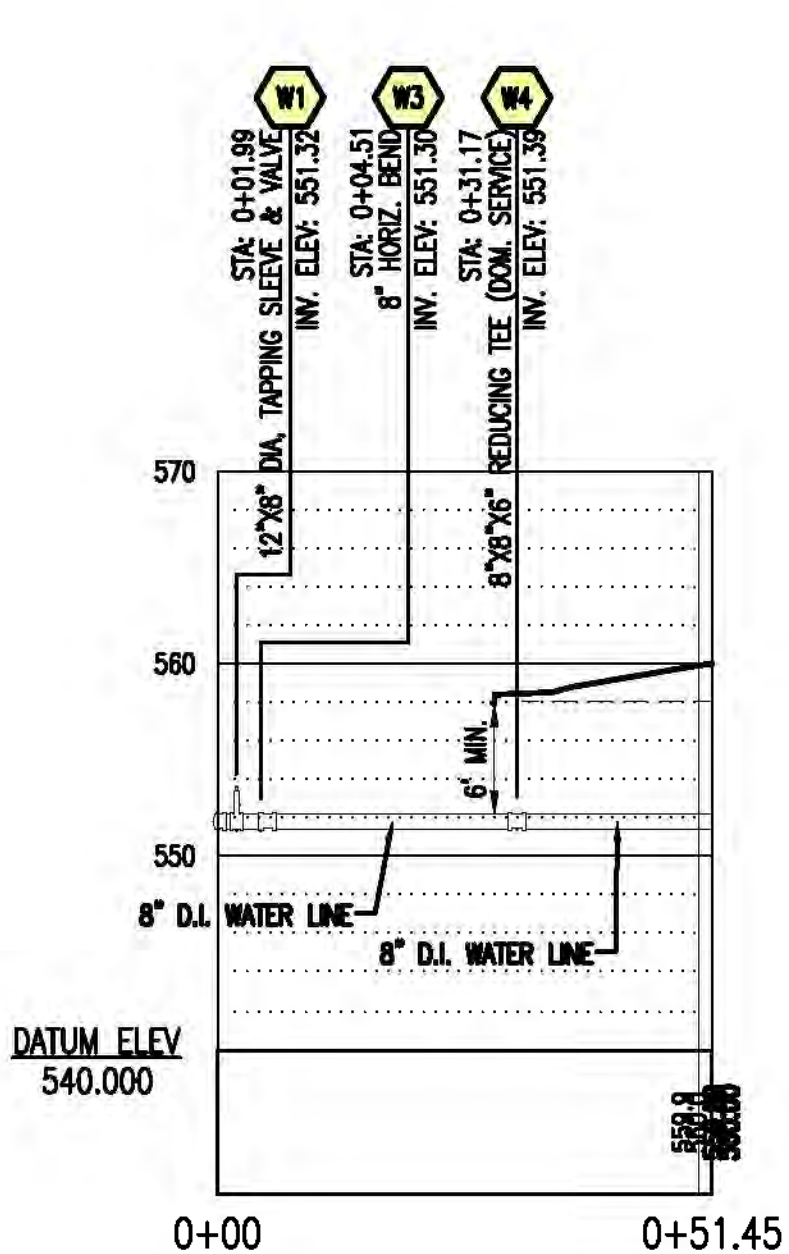
WATER LINE PROFILE VIEW
43 MECH. SERVICE

SCALE: HORIZ. 1" = 20'



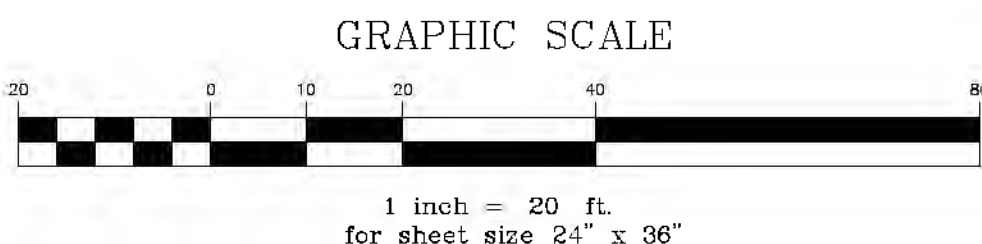
WATER LINE PLAN VIEW
25 MECH. SERVICE

SCALE: HORIZ. 1" = 20'



WATER LINE PROFILE VIEW
25 MECH. SERVICE

SCALE: HORIZ. 1" = 20'



WATER SCHEDULE

UNDERGROUND UTILITIES, ELECTRIC, TELEPHONE AND CABLE, MUST MAINTAIN A MINIMUM CLEARANCE OF 10 FT. FROM ALL PROPOSED WATER LINES.

- W1 12" TAPPING SLEEVE AND VALVE WITH 12"x8" REDUCER FOR CONNECTION TO EXISTING 12" WATERMAIN, COORDINATE WORK WITH LEBANON DEPARTMENT OF PUBLIC WORKS.
- W2 8" DIA. DUCTILE IRON WATER LINE
- W3 8" DIA. HORIZONTAL BEND FITTING AS NEEDED TO MATCH ALIGNMENT SHOWN, TYP.
- W4 8"x8"x6" REDUCING HYDRANT TEE, TYP.
- W5 6" DIA. GATE VALVE, MAXIM WITH MECHANICAL RESTRAINTS, TYP.
- W6 6" DIA. DUCTILE IRON WATER LINE, TYP.
- W7 FIRE HYDRANT, TYP.
- W8 8" DIA. GATE VALVE, MAXIM WITH MECHANICAL RESTRAINTS, TYP.
- W9 8"x8"x8" TEE FOR BUILDING SERVICE, TYP.
- W10 8"x8"x6" REDUCING TEE FOR DOMESTIC WATER SERVICE, TYP.
- W11 6" DOMESTIC WATER SERVICE ENTRANCE, TYP.
- W12 8" FIRE SERVICE ENTRANCE, TYP.
- W13 8"x8"x8" HYDRANT TEE
- W14 30" WIDE WATER EASEMENT CENTERED ON AS-BUILT WATER LINE AND SHALL INCLUDE HYDRANTS AND HYDRANT SERVICE LINES
- W15 FIRE DEPARTMENT CONNECTION, REFER TO MEP PLANS FOR EXACT LOCATION AND DETAILS.
- W16 8" DIA. GATE VALVE, MAXIM WITH MECHANICAL RESTRAINTS, TYP. ON EXISTING WATER LINE

SITE PLAN REVIEW

RODE

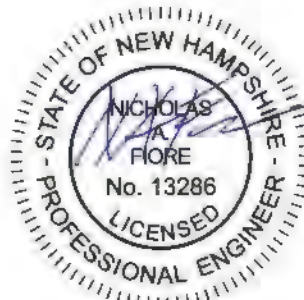
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

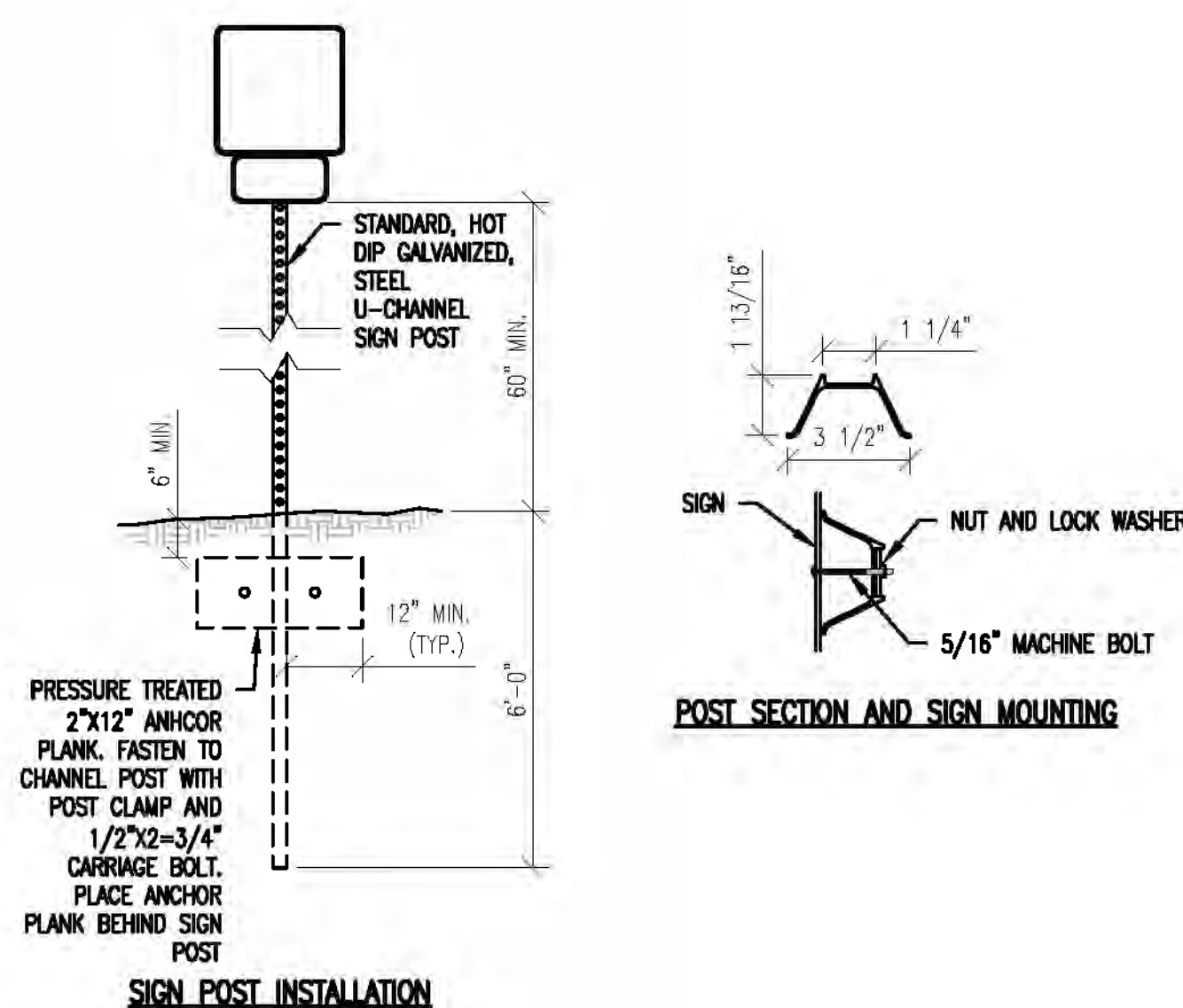
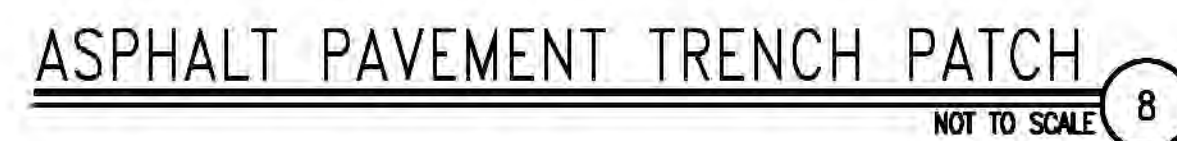
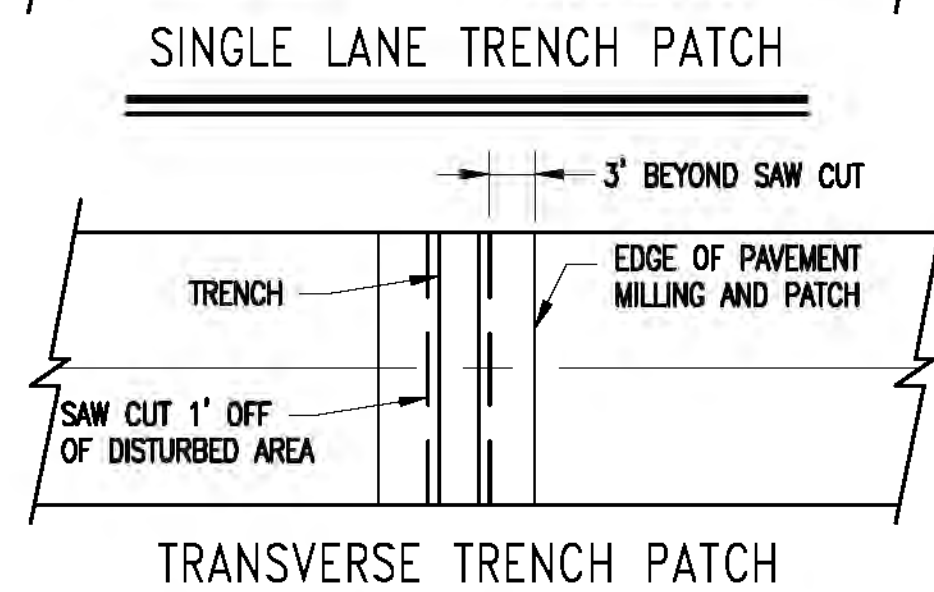
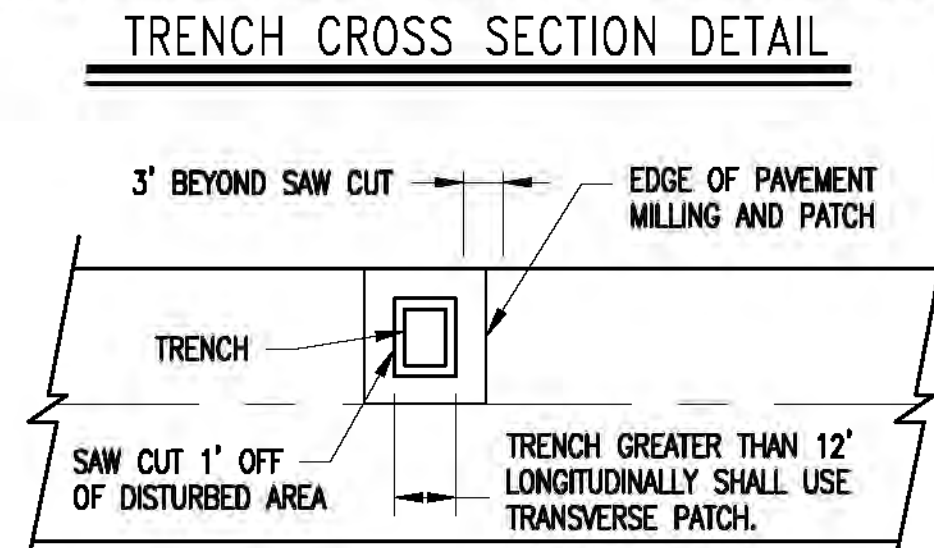
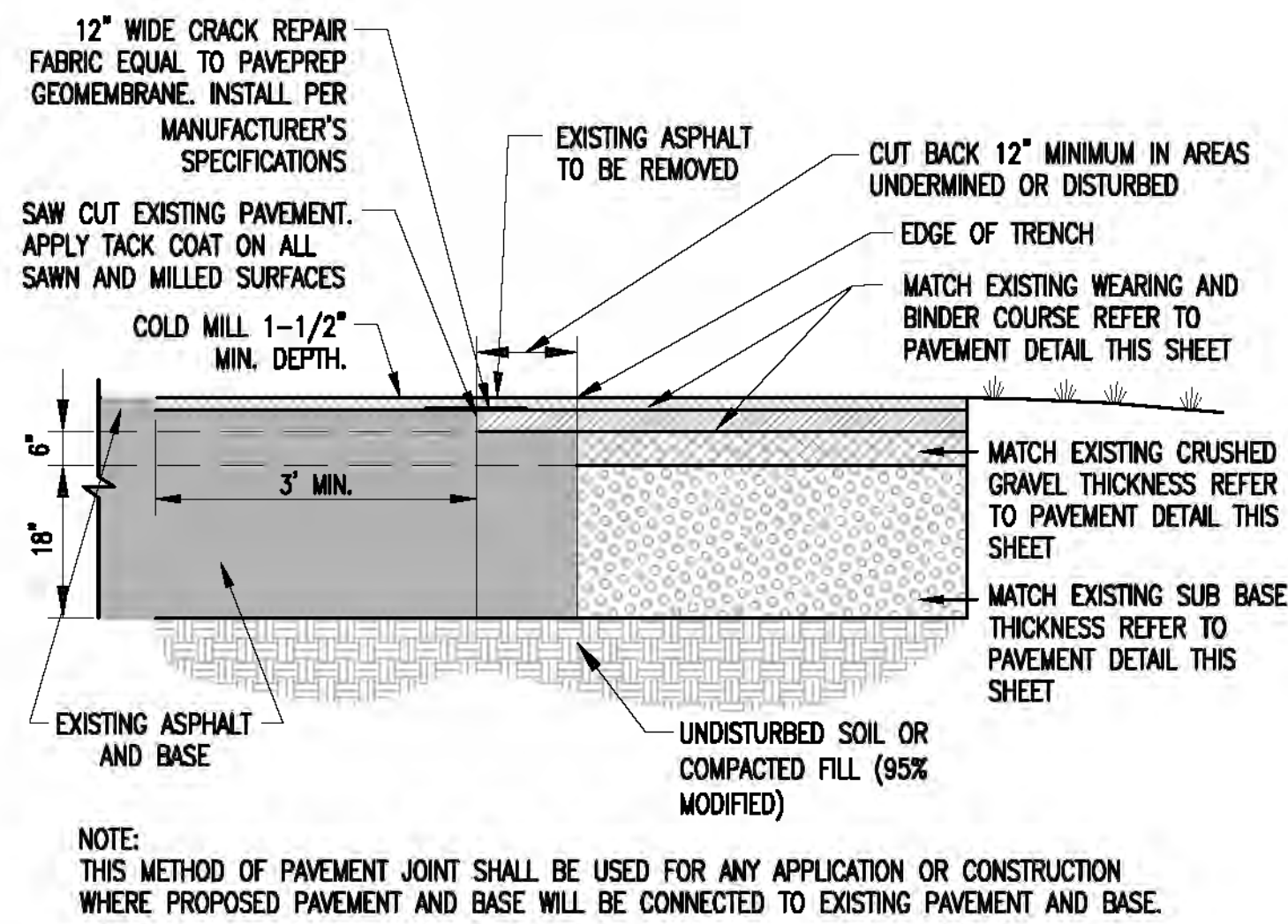
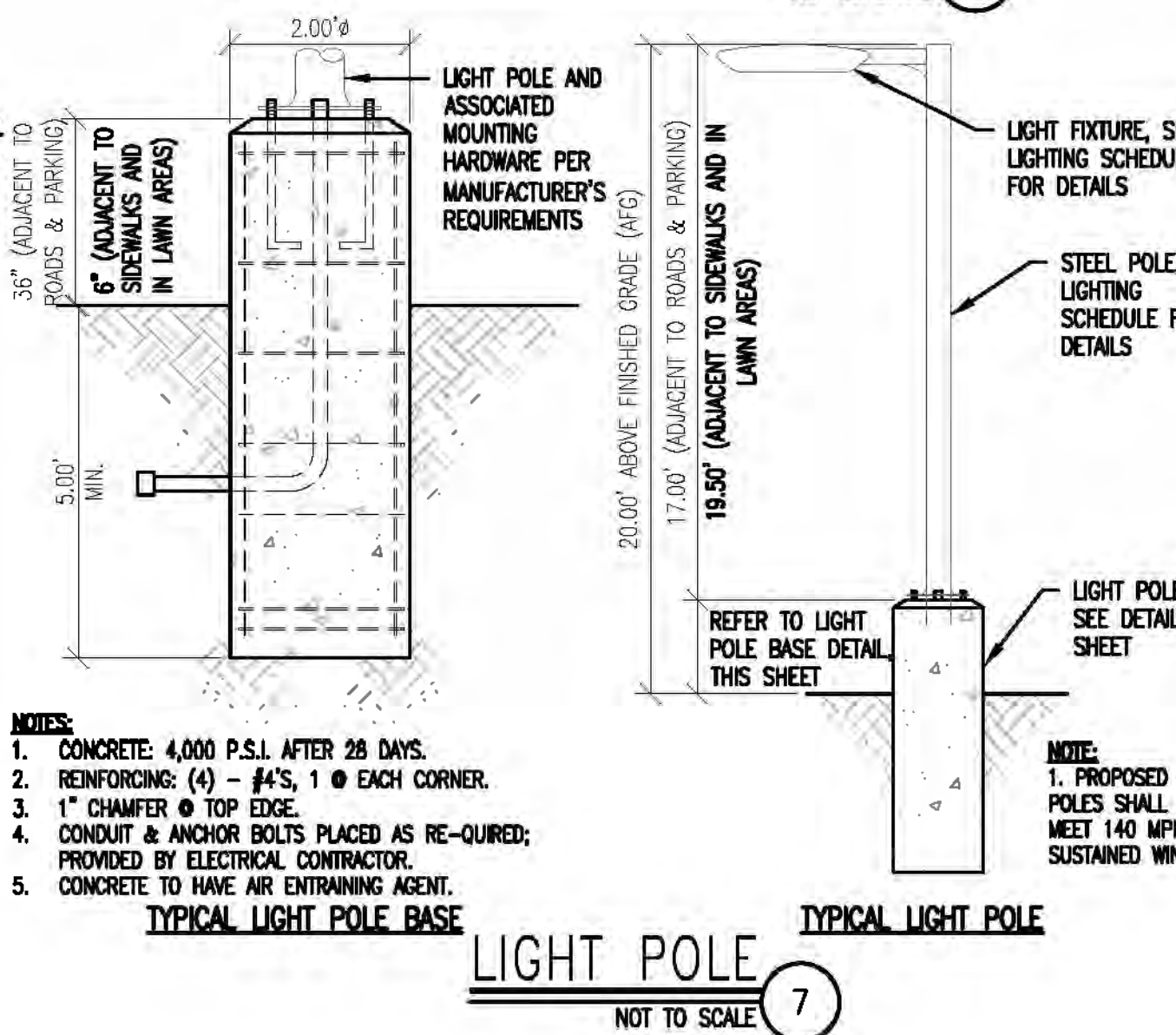
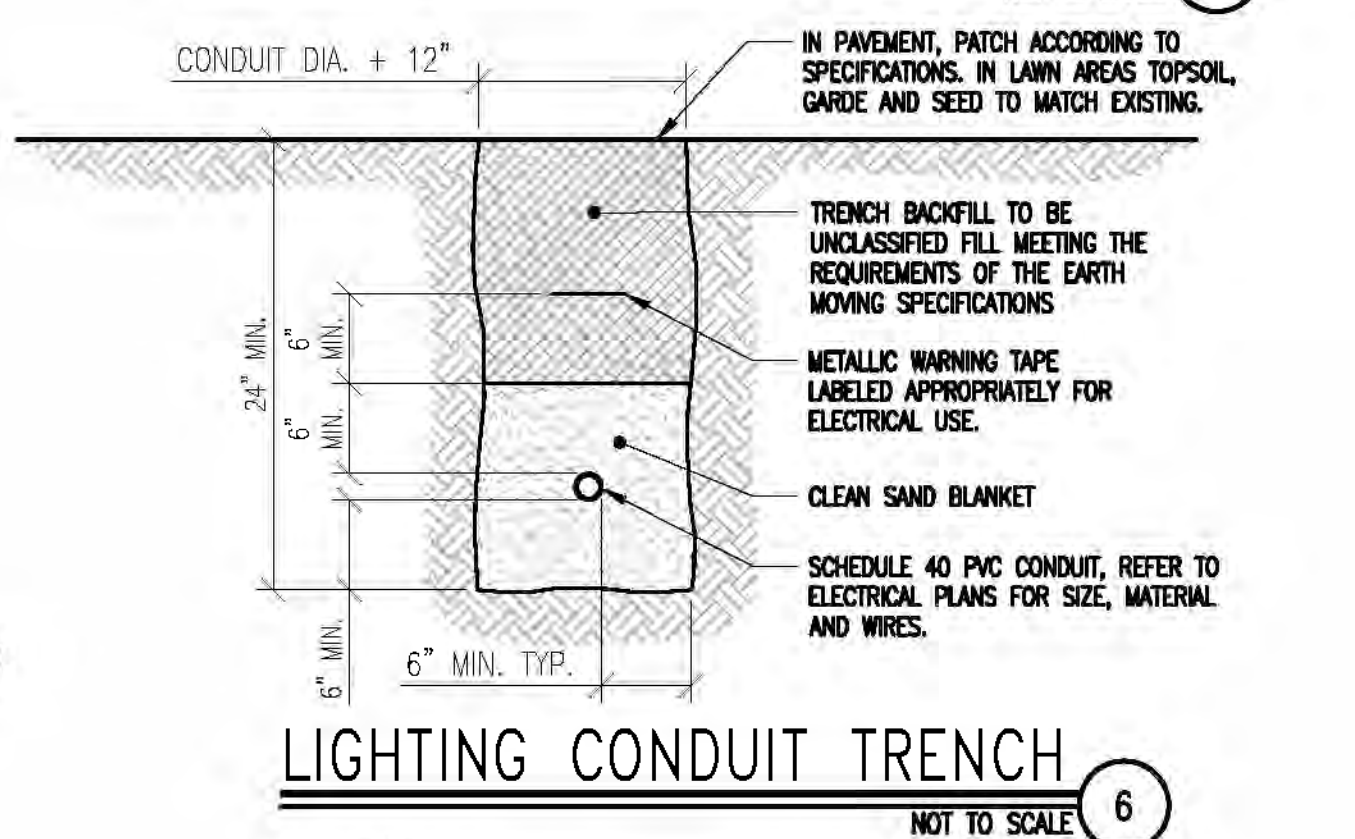
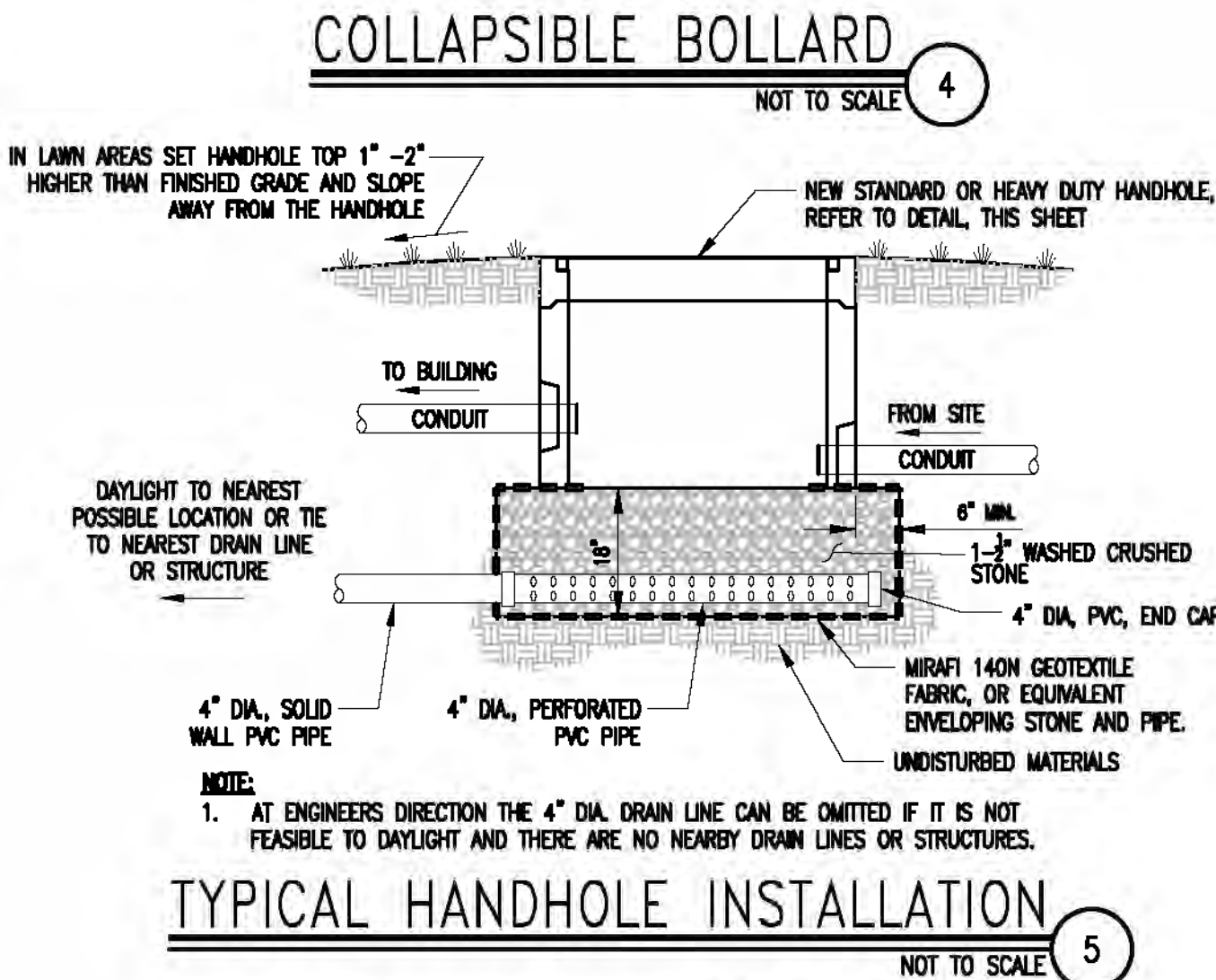
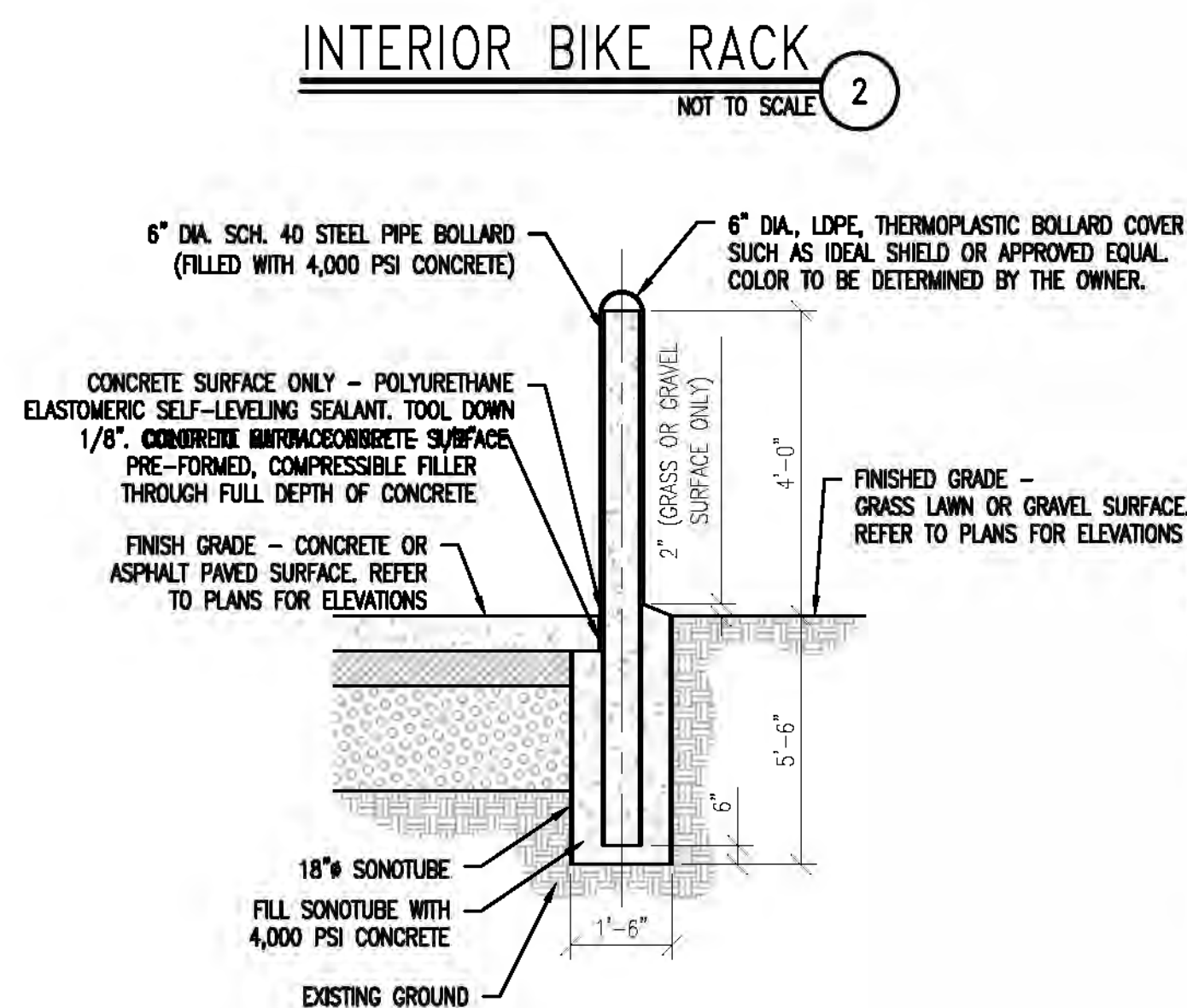
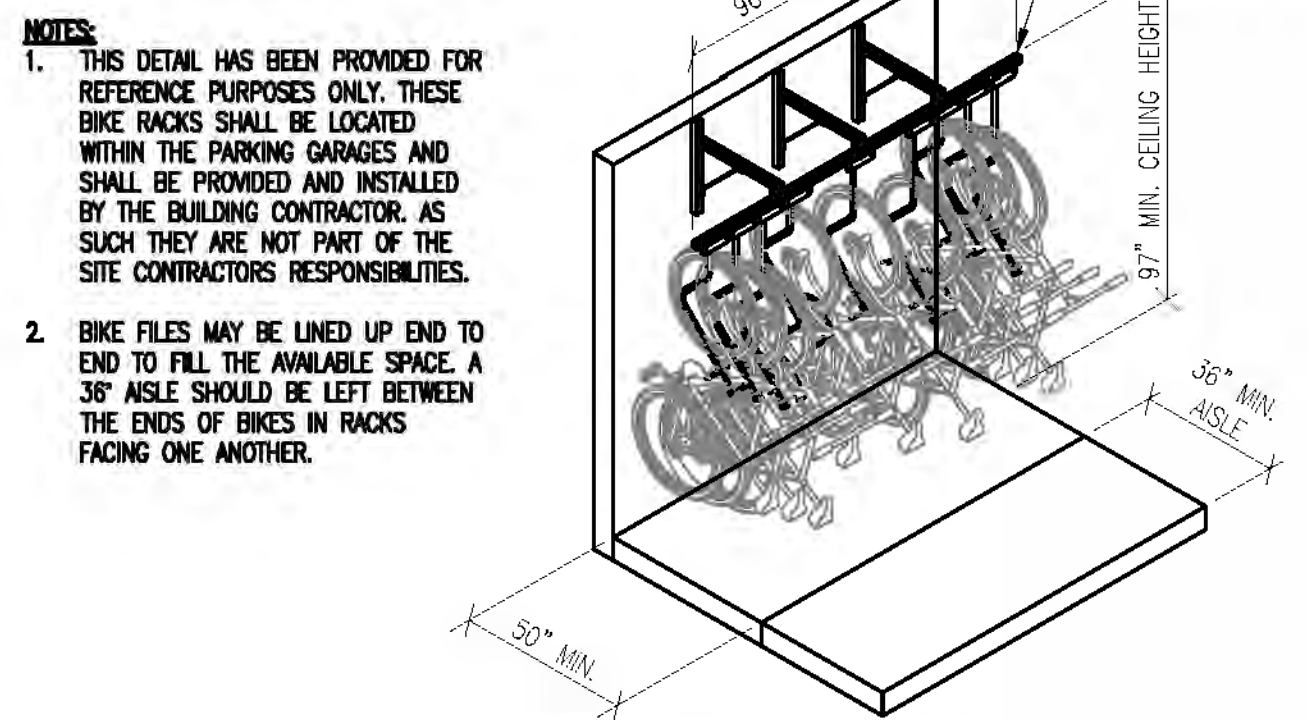
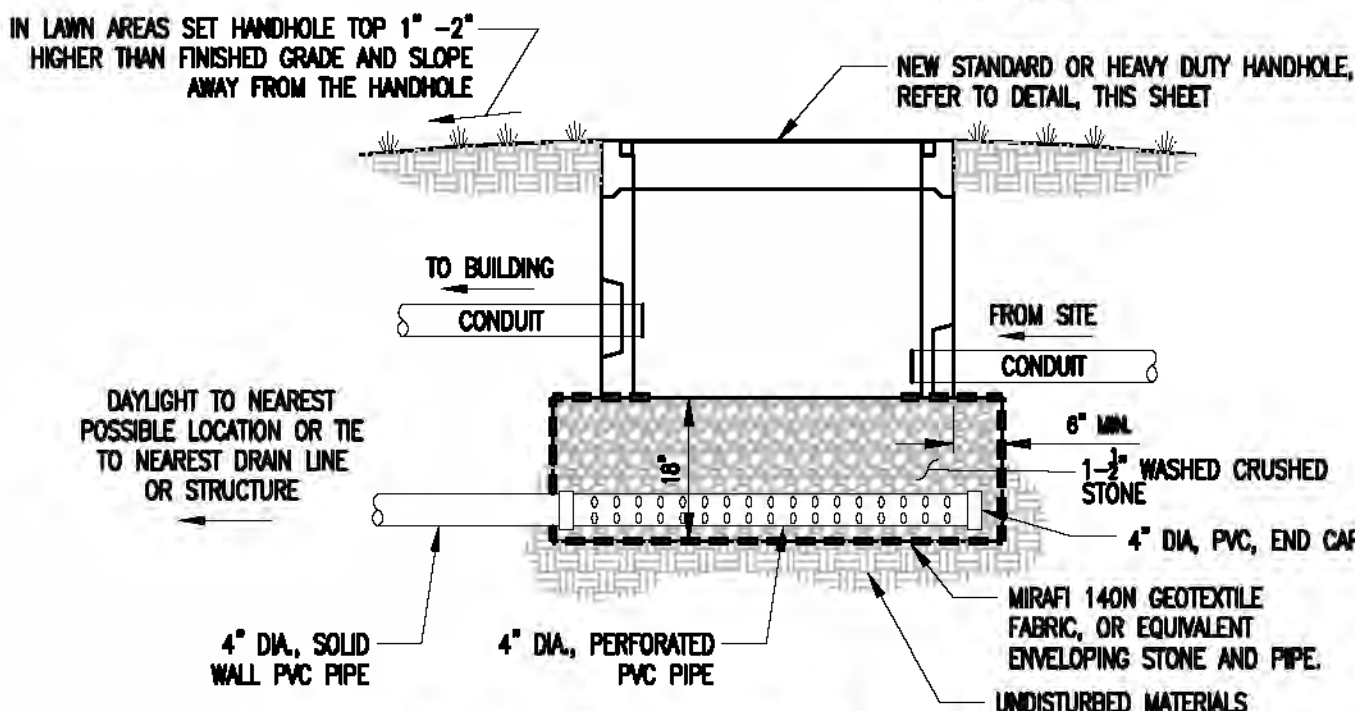
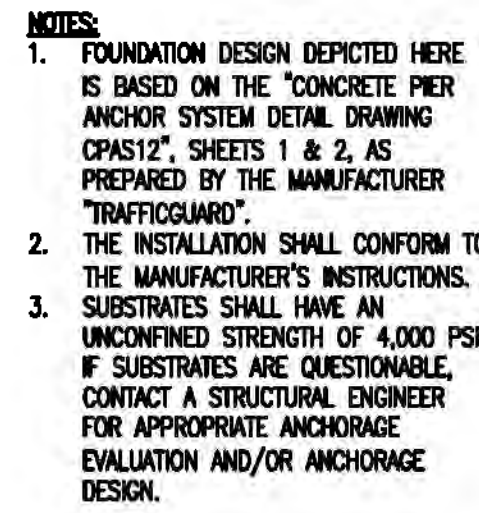
DATE: 08.15.22

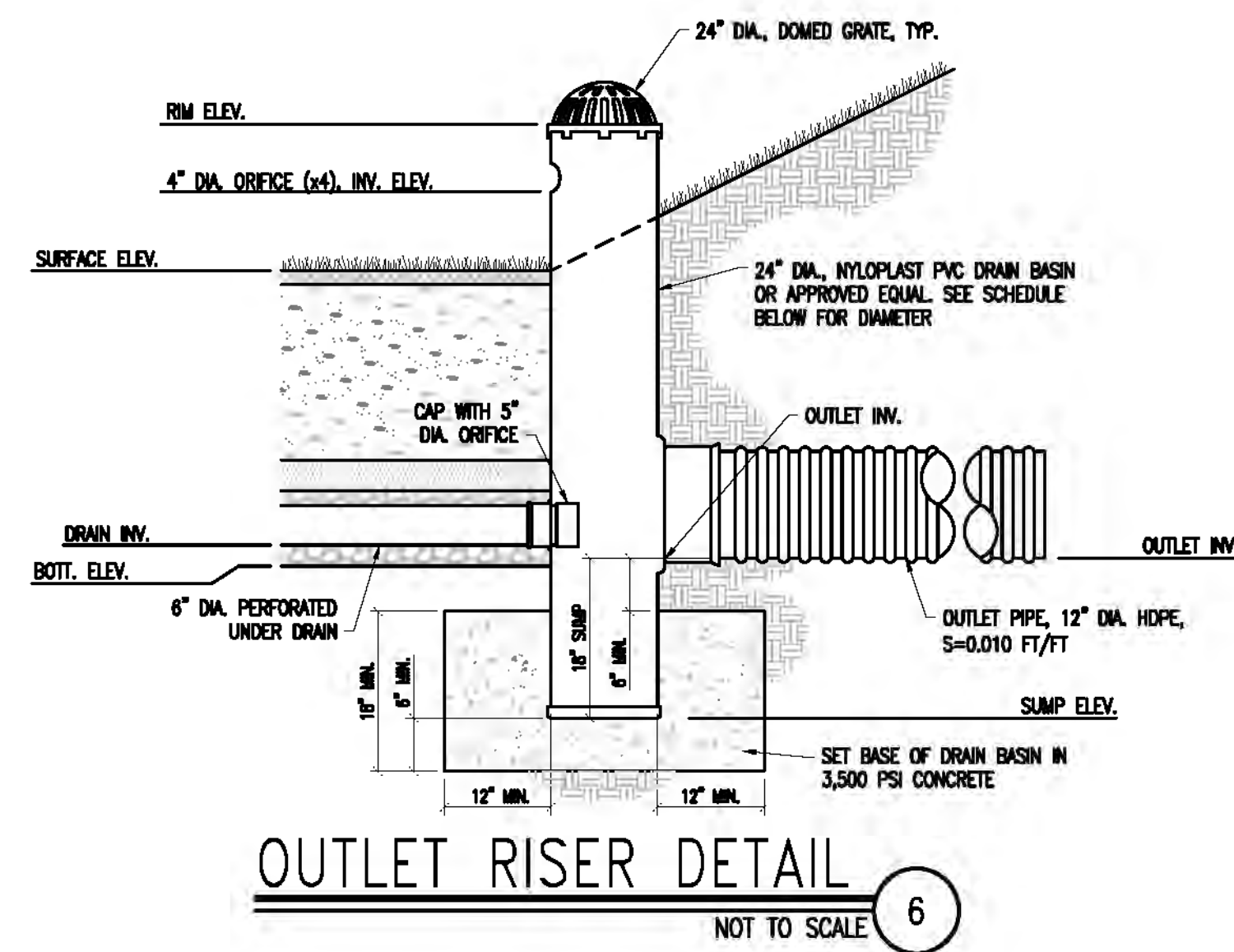
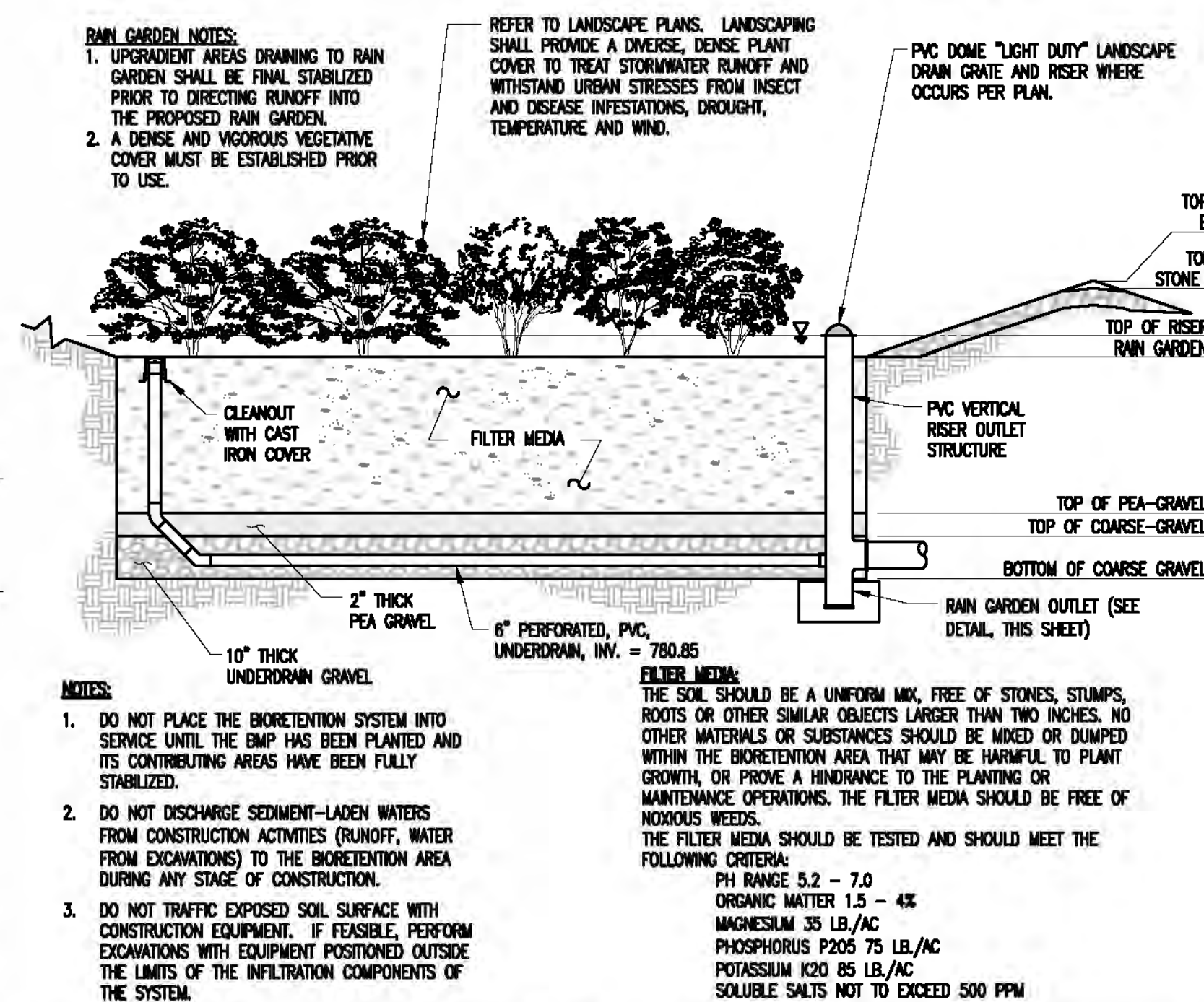
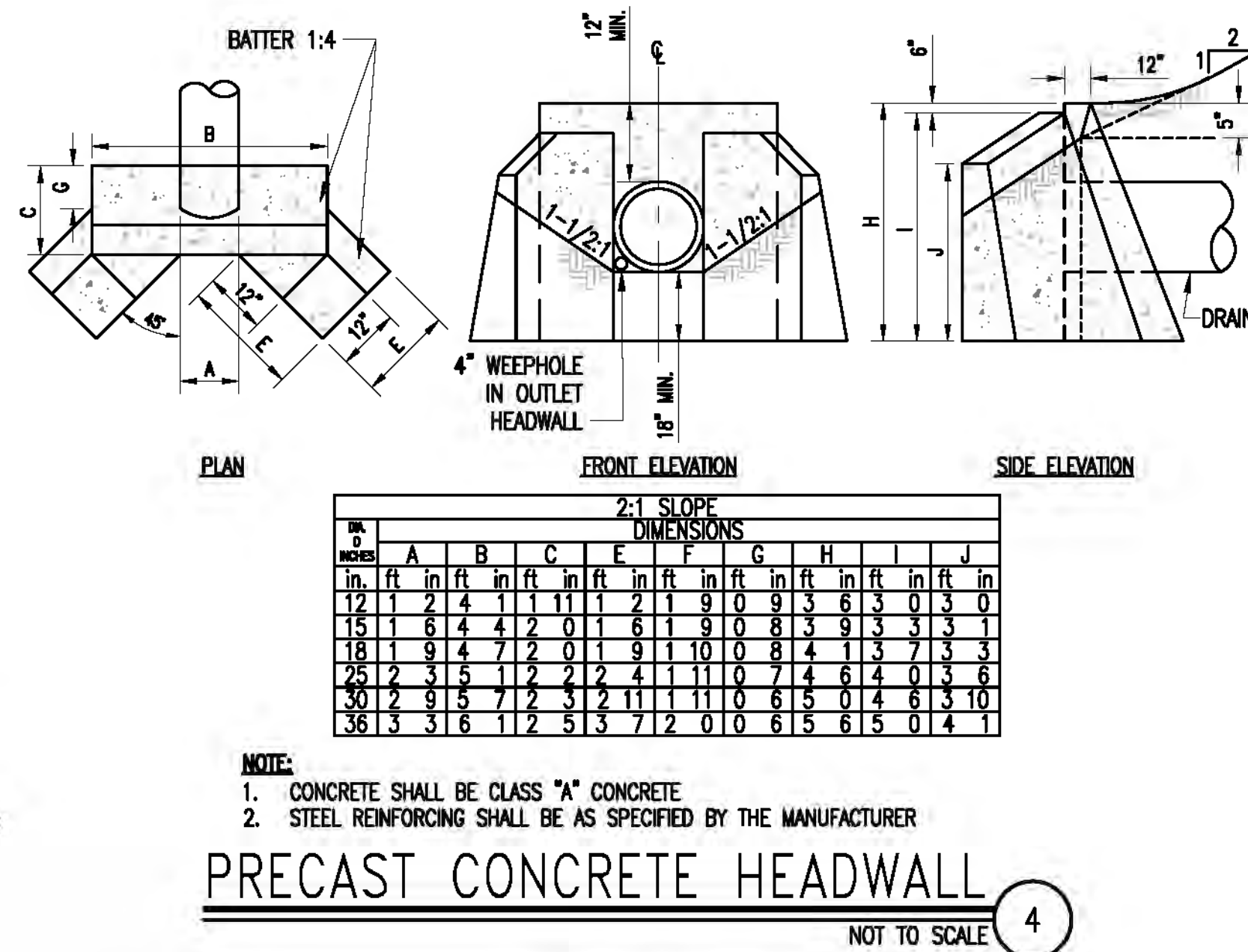
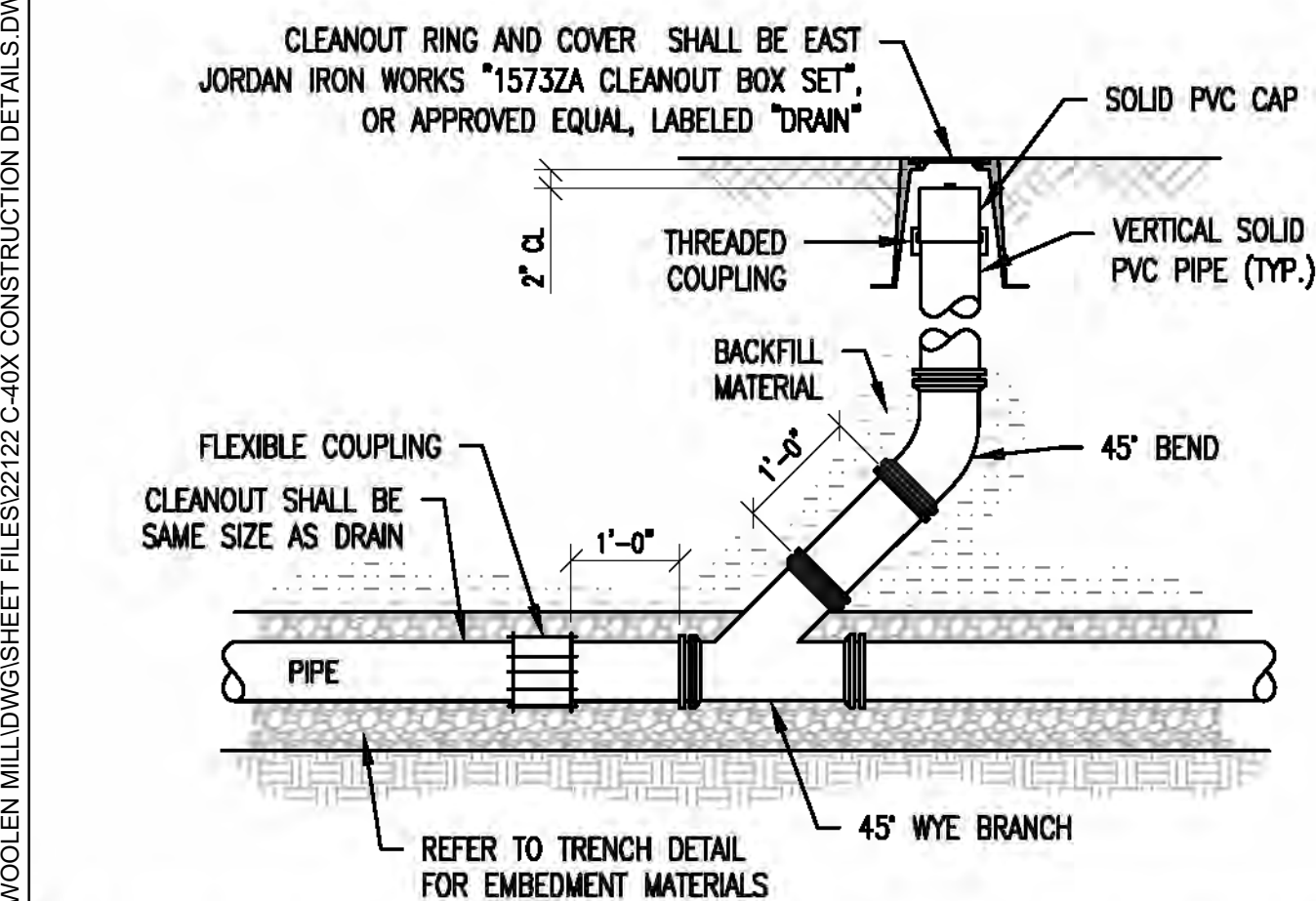
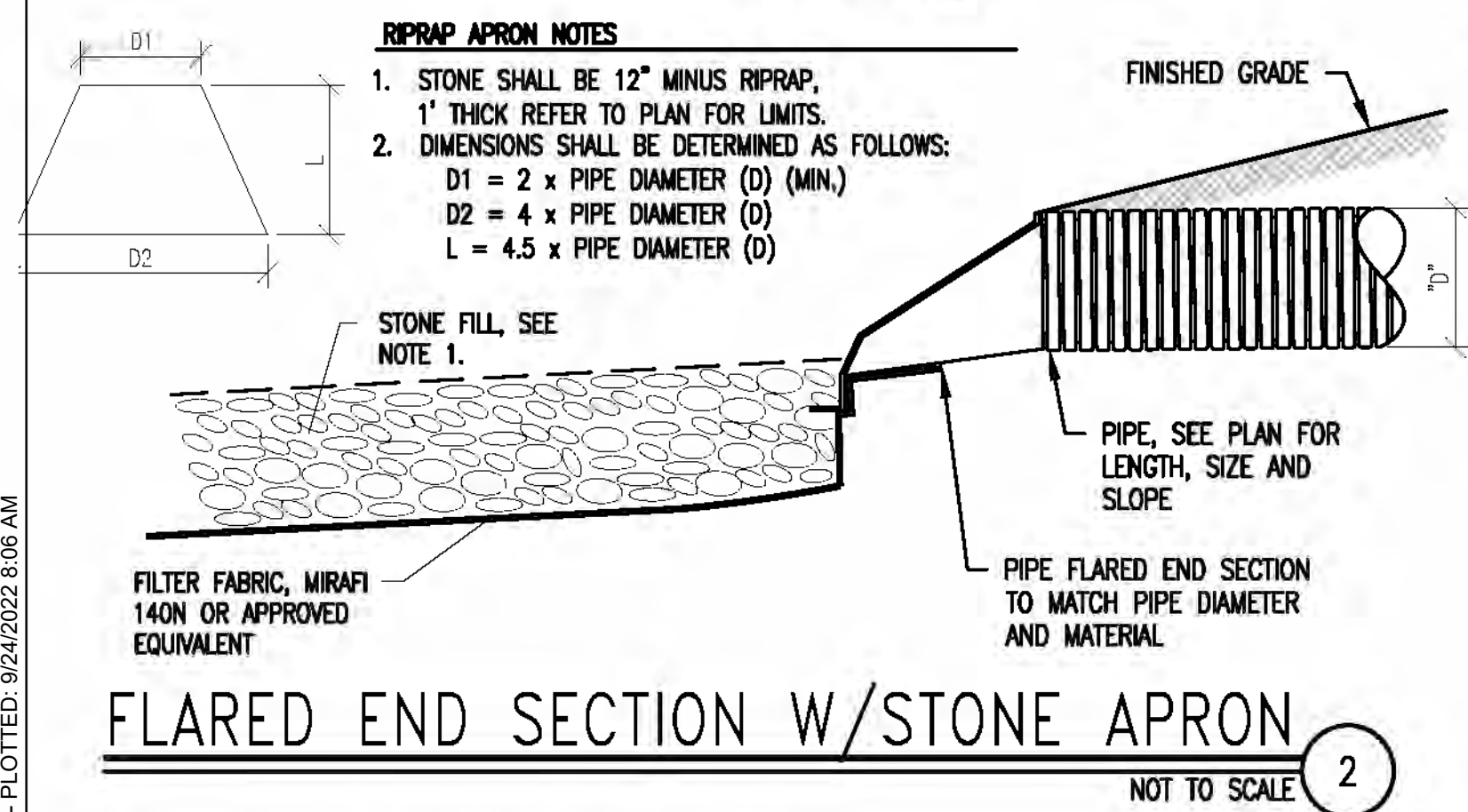
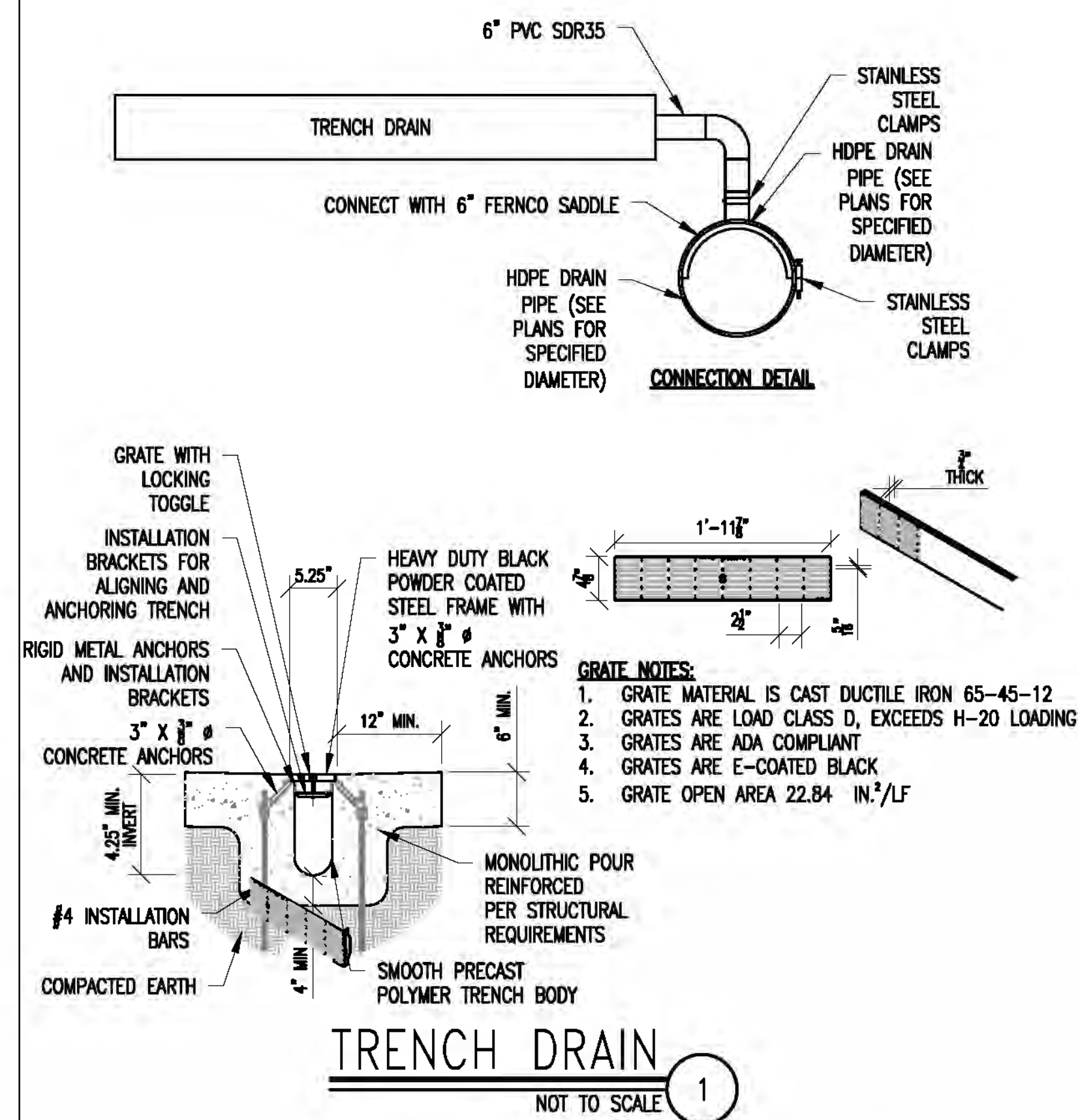
SCALE: 1"= 20'

WATER LINE PLAN
AND PROFILE (3 OF 3)

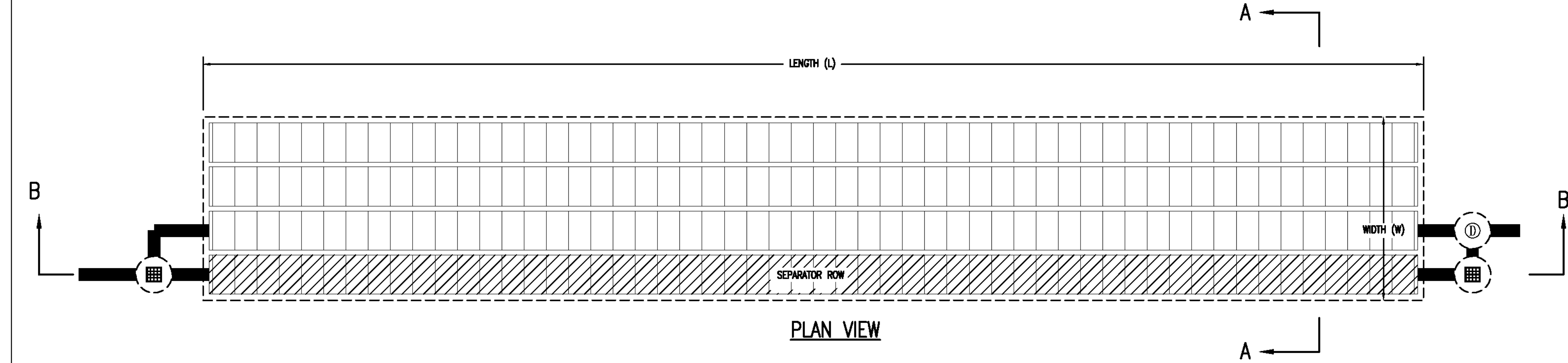
C-307

Page 27 of 57

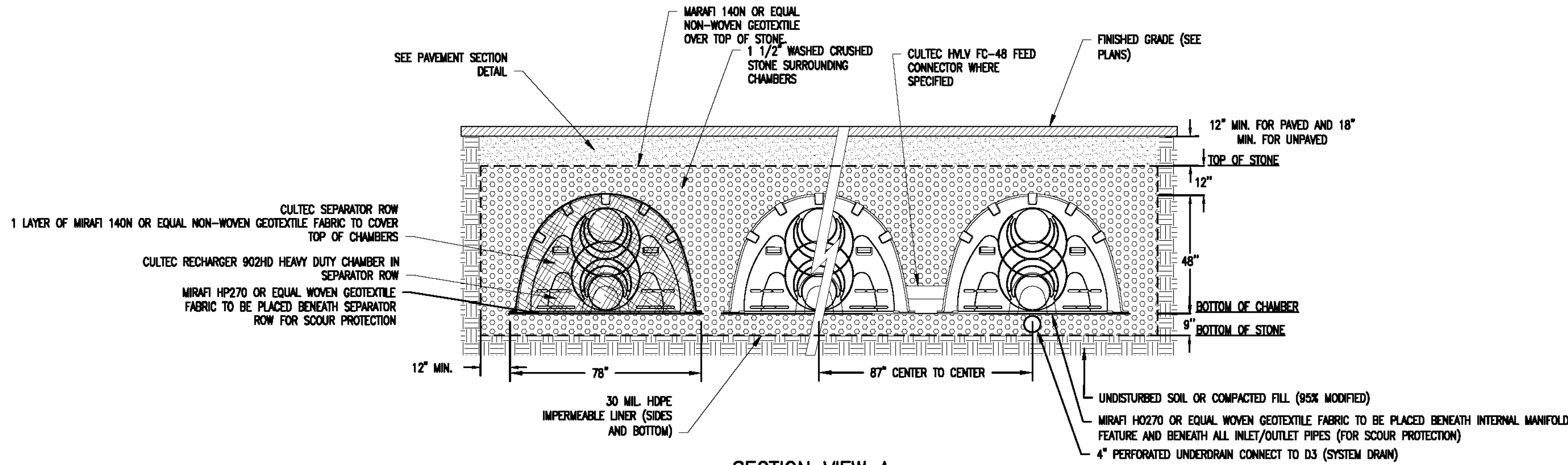




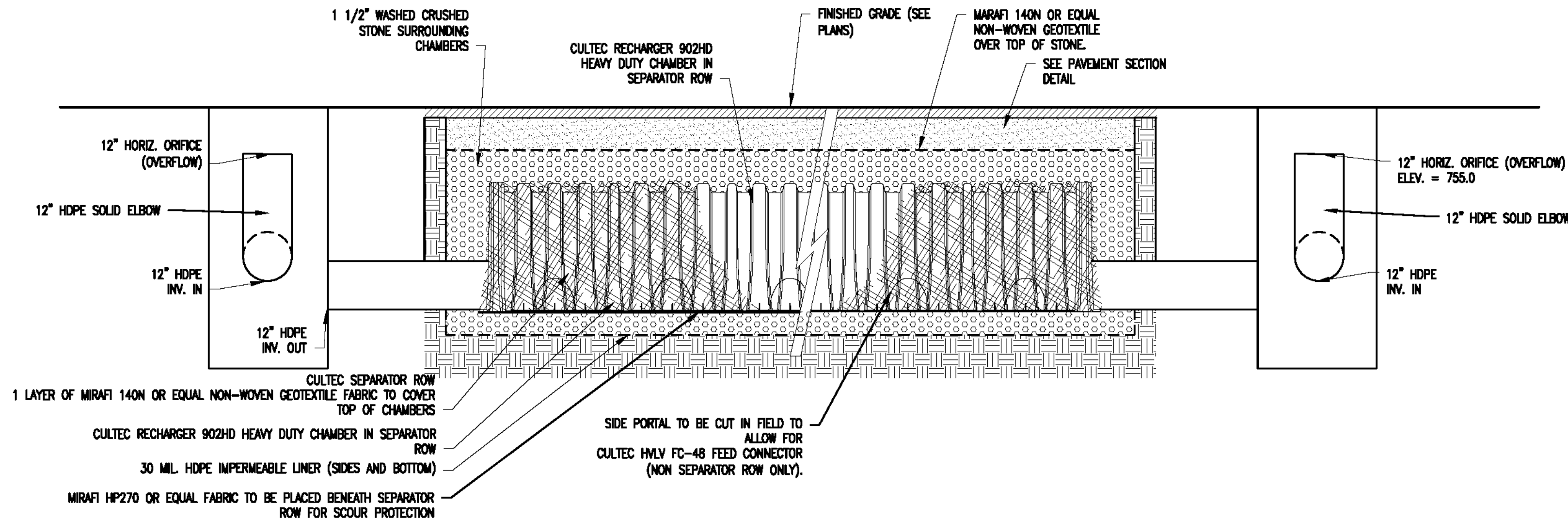
S:\PROJECTS\0-2022\22122 NH LEB WOOLEN MILL\DWGS\122 C-405 CONSTRUCTION DETAILS.DWG - PLOTTED: 9/24/2022 8:05 AM



PLAN VIEW

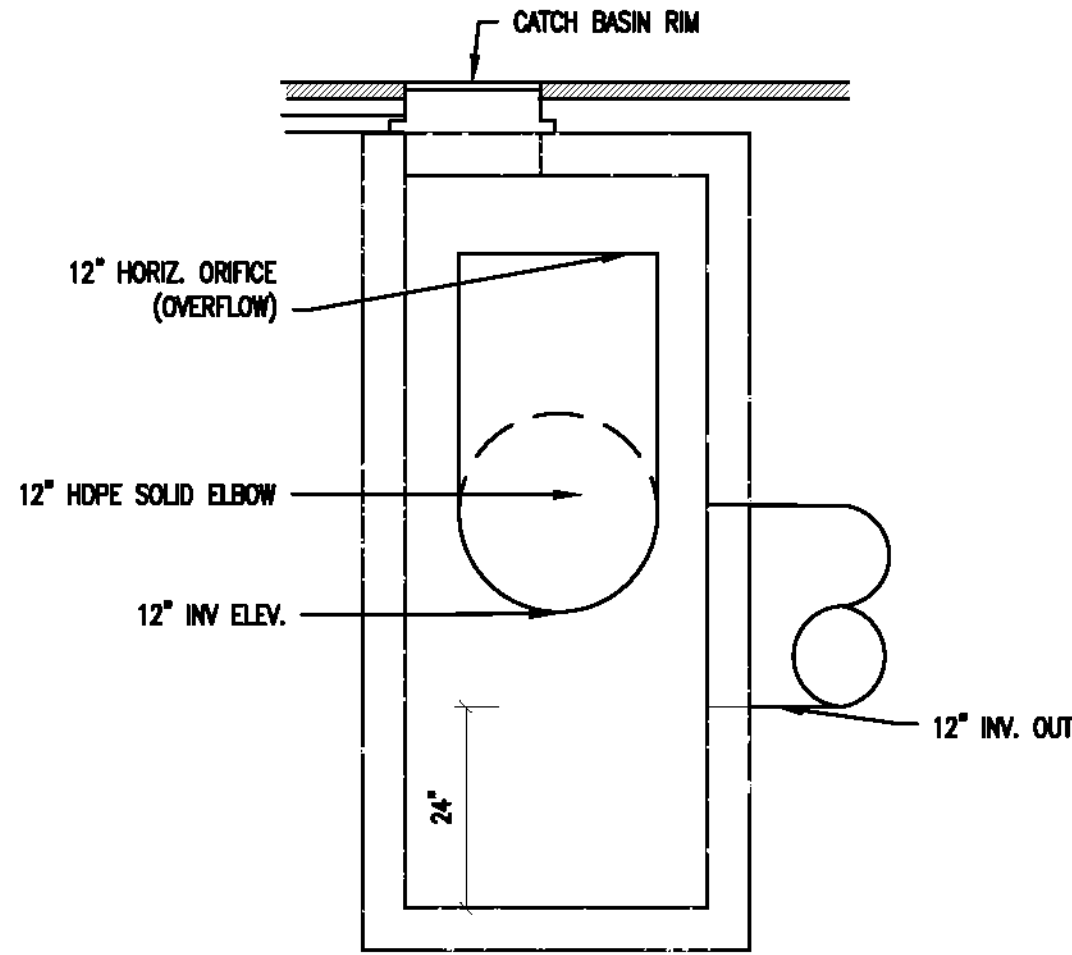


SECTION VIEW A



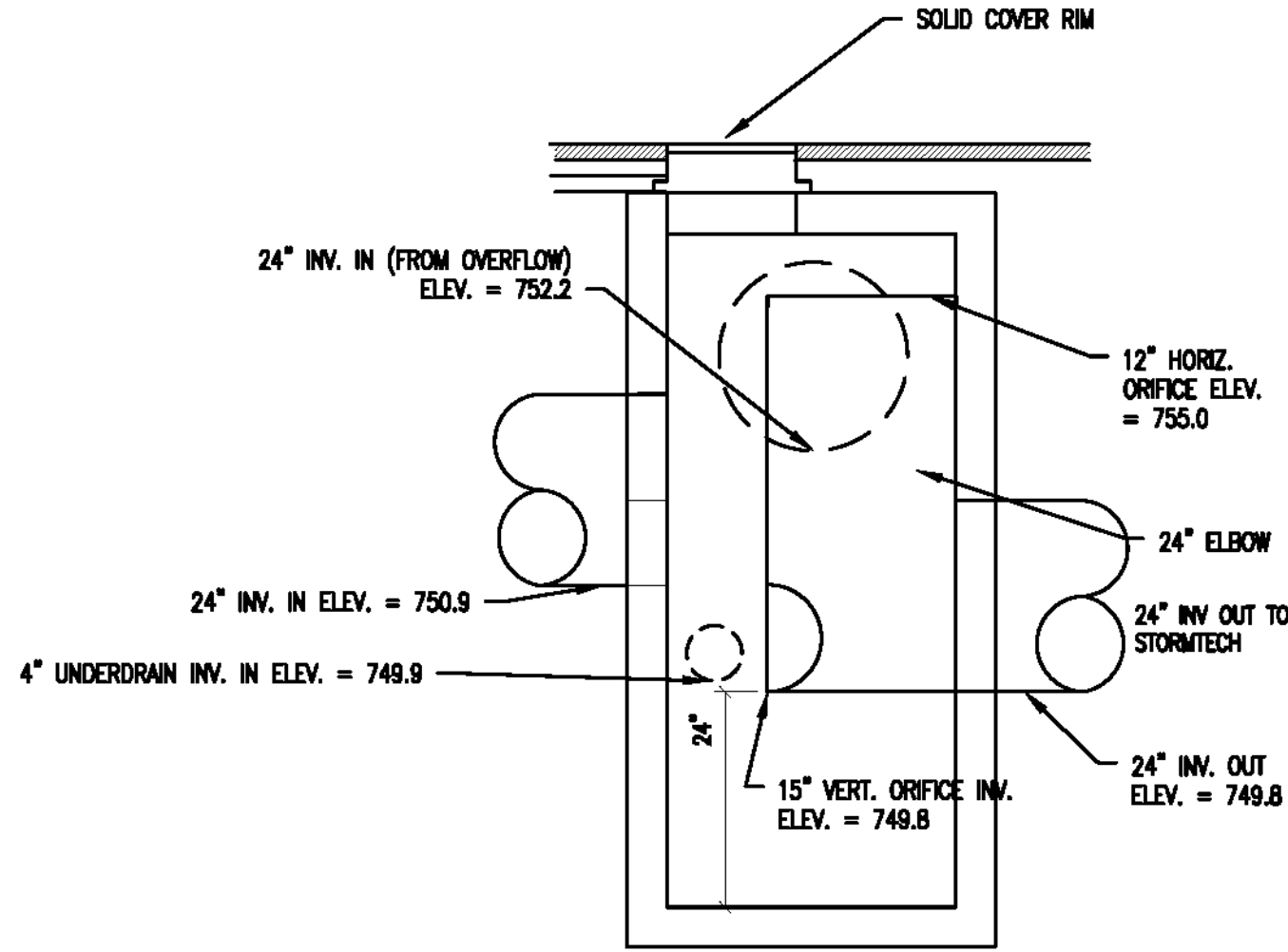
CULTEC CHAMBER SYSTEM

SECTION VIEW B



CULTEC SEPARATOR ROW INLET TYP.

NOT TO SCALE 4



CULTEC OUTLET CONTROL STRUCTURE(D3)

NOT TO SCALE 3

SITE PLAN REVIEW

RODE

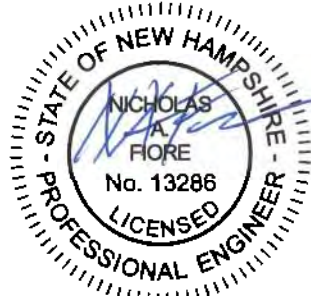
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

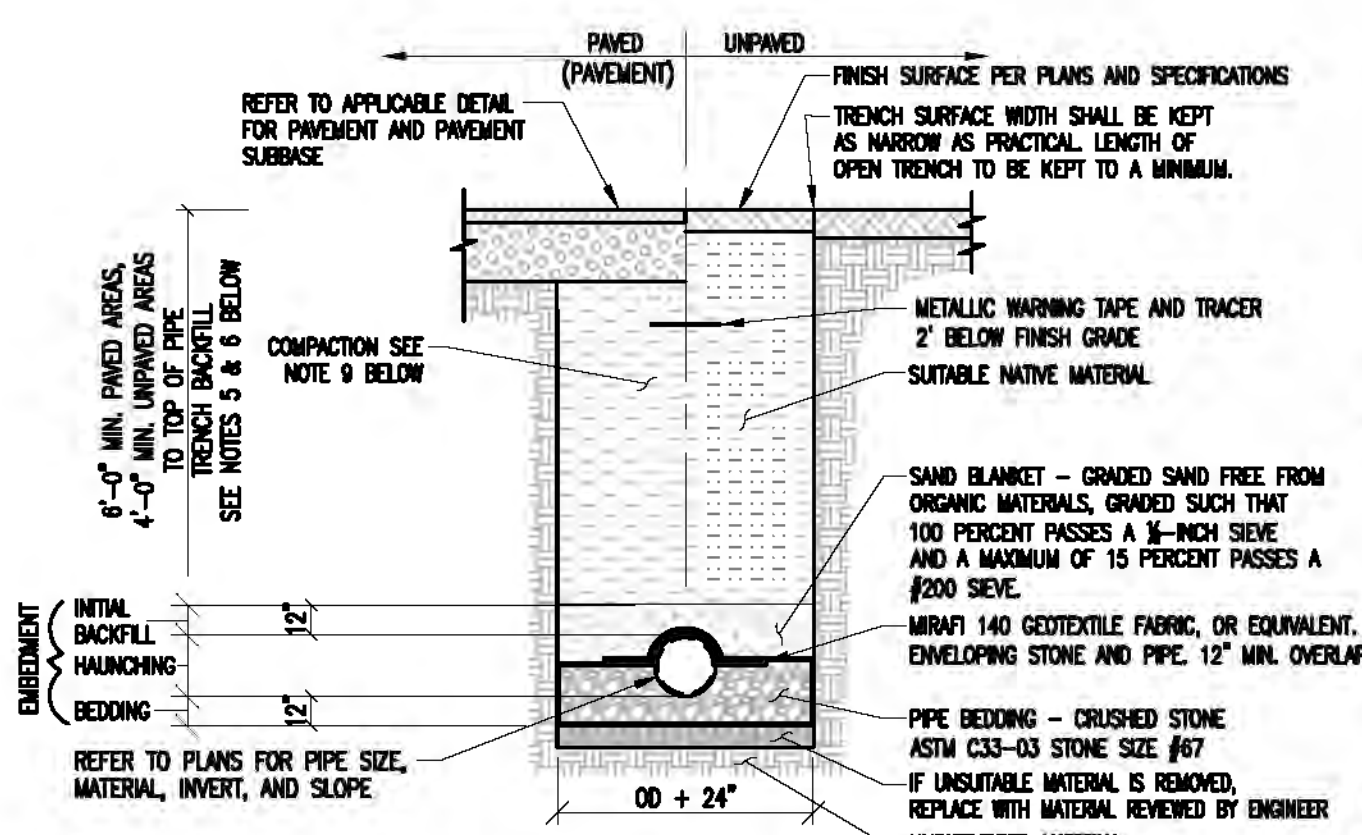
No.	Description	Date

DATE: 08.15.22

SCALE: NOT TO SCALE

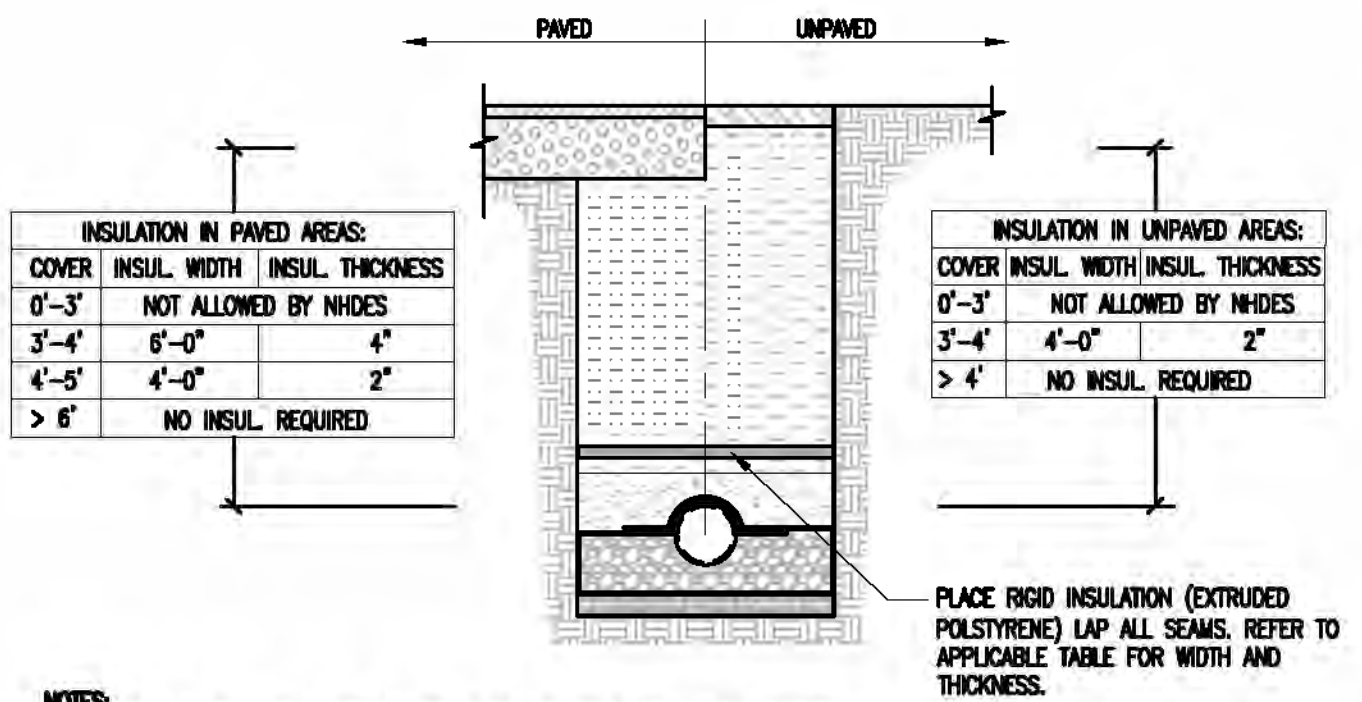
STORMWATER DETAILS
(3 OF 3)

C-405
Page 32 of 57



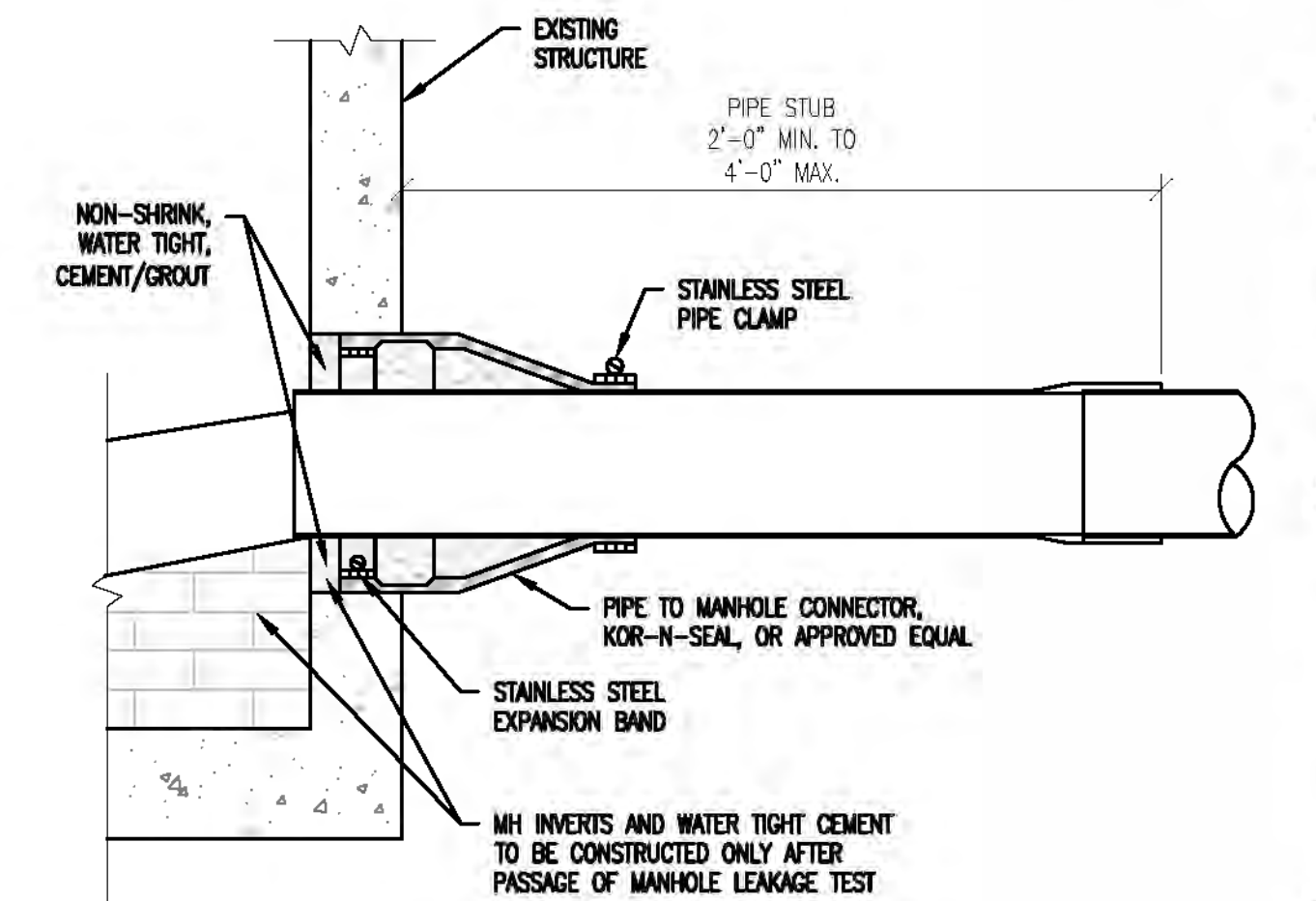
- NOTES:**
1. UNLESS OTHERWISE NOTED, ASSUME CLASS "C" SOILS. PERFORM ALL EXCAVATIONS TO OSHA REQUIREMENTS.
 2. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR THE FULL LENGTH OF PIPE.
 3. FOR SEWER LINES THE MINIMUM DEPTH TO THE TOP OF THE PIPE SHALL BE 6'-0" IN PAVED AREAS AND 4'-0" IN UNPAVED AREAS. SHALLOWER DEPTHS REQUIRE APPROVAL FROM THE ENGINEER. REFER TO INSULATION OVER SHALLOW SEWER LINE DETAIL.
 4. LEDGE, ROCK, BOULDERS AND LARGE STONES SHALL BE REMOVED TO PROVIDE A MINIMUM CLEARANCE OF SIX INCHES BELOW AND ON EACH SIDE OF ALL PIPES.
 5. TRENCH BACKFILL MATERIAL, INCLUDING ROADWAY LOCATIONS, SHALL BE NATURAL MATERIALS EXCAVATED FROM THE TRENCH. DURING CONSTRUCTION AND FREE OF UNSUITABLE MATERIALS AS DEFINED IN THE EXISTING WORK SPECIFICATIONS INCLUDED ON THESE PLANS.
 6. WHEN APPLICABLE INSTALL PIPE WITH BELL ENDS DOWN SLOPE. PREVENT SEDIMENT FROM ENTERING NEW SEWER SYSTEM DURING CONSTRUCTION.
 7. ALLOWABLE TRENCH WIDTH AT A PLANE 12 INCHES ABOVE THE PIPE SHALL BE NO MORE THAN 36 INCHES FOR SEWER PIPE LESS THAN 15 INCHES IN DIAMETER.
 8. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER PIPE TO INSURE PIPE IS NOT DAMAGED.
 9. BACKFILL MATERIALS SHALL BE COMPACTED, IN 12" LAYERS, TO 92% OF MODIFIED PROCTOR (ASTM 1557) TO WITHIN 3 FEET OF FINISHED GRADE. IN AREAS UNDER ROADWAYS, DRIVES, AND PARKING THE UPPER 3 FEET SHALL BE COMPACTED, IN 6" LAYERS, TO 95% MODIFIED PROCTOR (ASTM 1557) AND IN LAWN OR OTHER UNDEVELOPED SPACE THE UPPER 3 FEET SHALL BE COMPACTED TO 92% MODIFIED PROCTOR.

GRAVITY SEWER TRENCH DETAIL 1
NOT TO SCALE



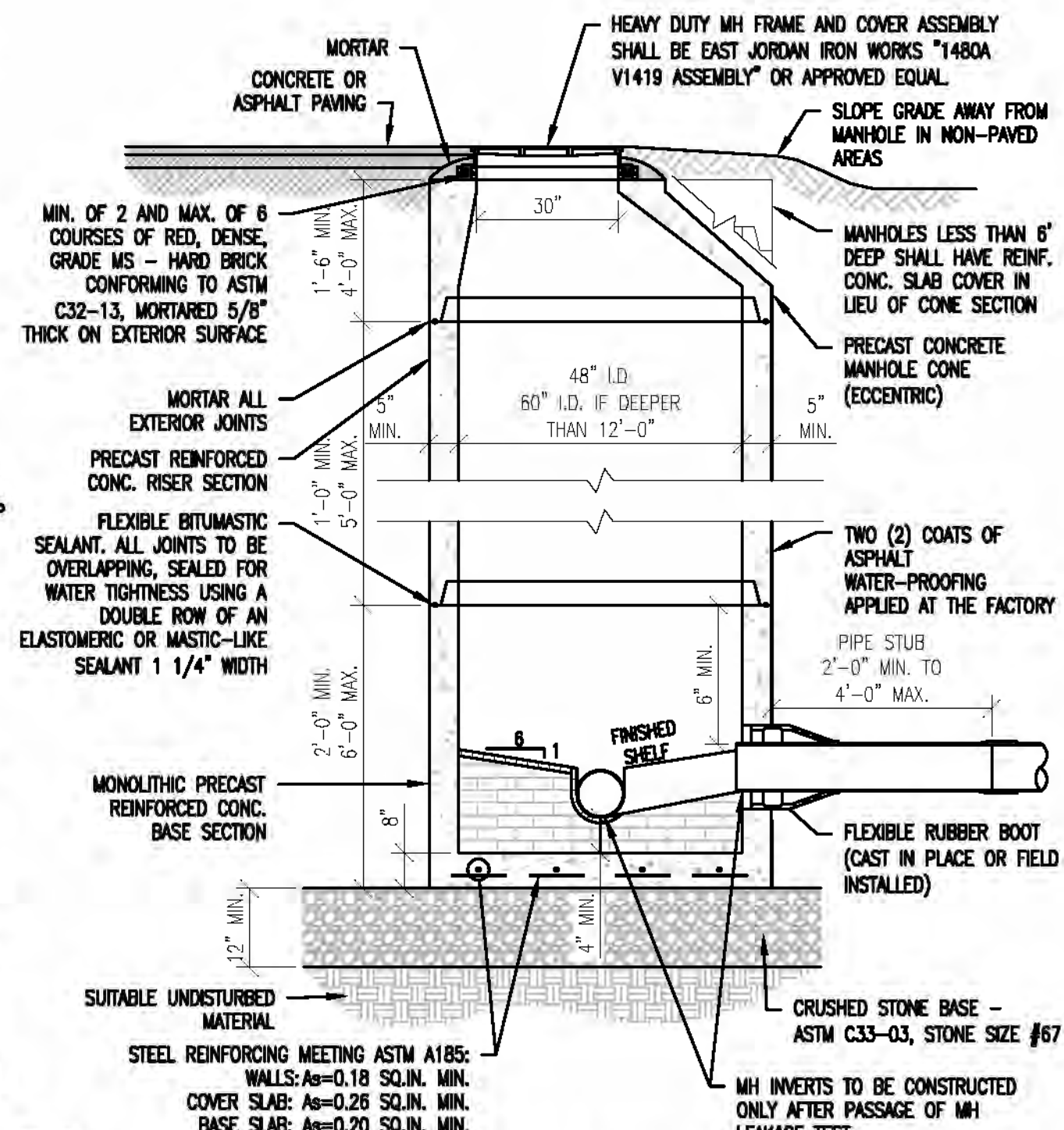
- NOTES:**
1. REFER TO APPLICABLE TRENCH DETAIL FOR SPECIFIC BACKFILL INFORMATION.
 2. NOTIFY DEPARTMENT OF PUBLIC WORKS TO REVIEW INSTALLATION AND BACKFILL.
 3. ALL SHALLOW SEWER INSTALLATIONS MUST BE APPROVED BY ENGINEER.
 4. THE MINIMUM DEPTH TO THE TOP OF THE PIPE SHALL BE 6'-0" IN PAVED AREAS AND 4'-0" IN UNPAVED AREAS. SHALLOWER DEPTHS REQUIRE APPROVAL FROM THE ENGINEER. REFER TO INSULATION OVER SHALLOW SEWER LINE DETAIL.

SHALLOW SEWER LINE INSULATION DETAIL 2
NOT TO SCALE



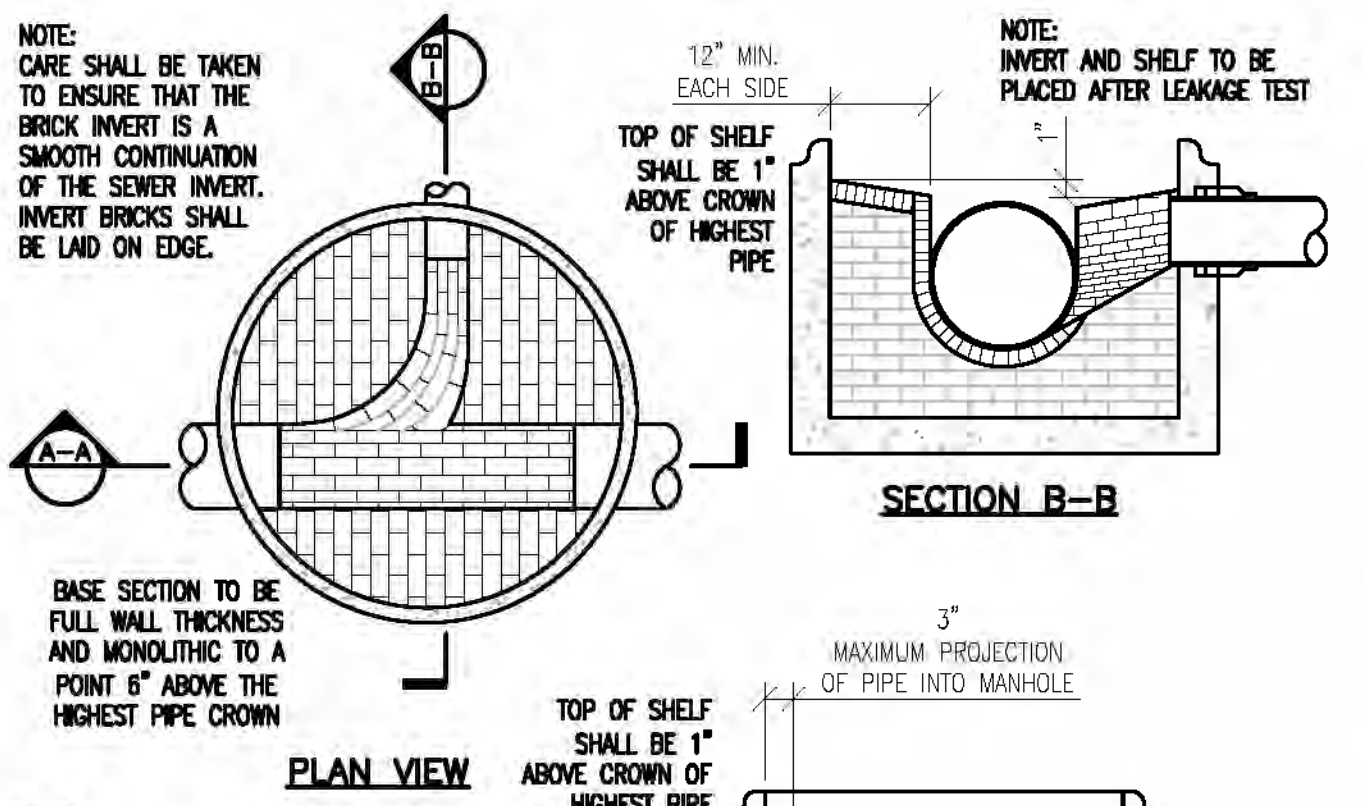
- NOTES:**
1. CORE HOLE SHALL BE SMOOTH, SYMMETRICAL, AND APPROPRIATELY SIZED FOR SEWER PIPE INSTALLATION.
 2. WHEN APPLICABLE CONTRACTOR SHALL RECONSTRUCT EXISTING SHELF IN MANHOLES TO PROVIDE POSITIVE FLOW TO INVERT OUT.

MANHOLE CONNECTION 3
NOT TO SCALE



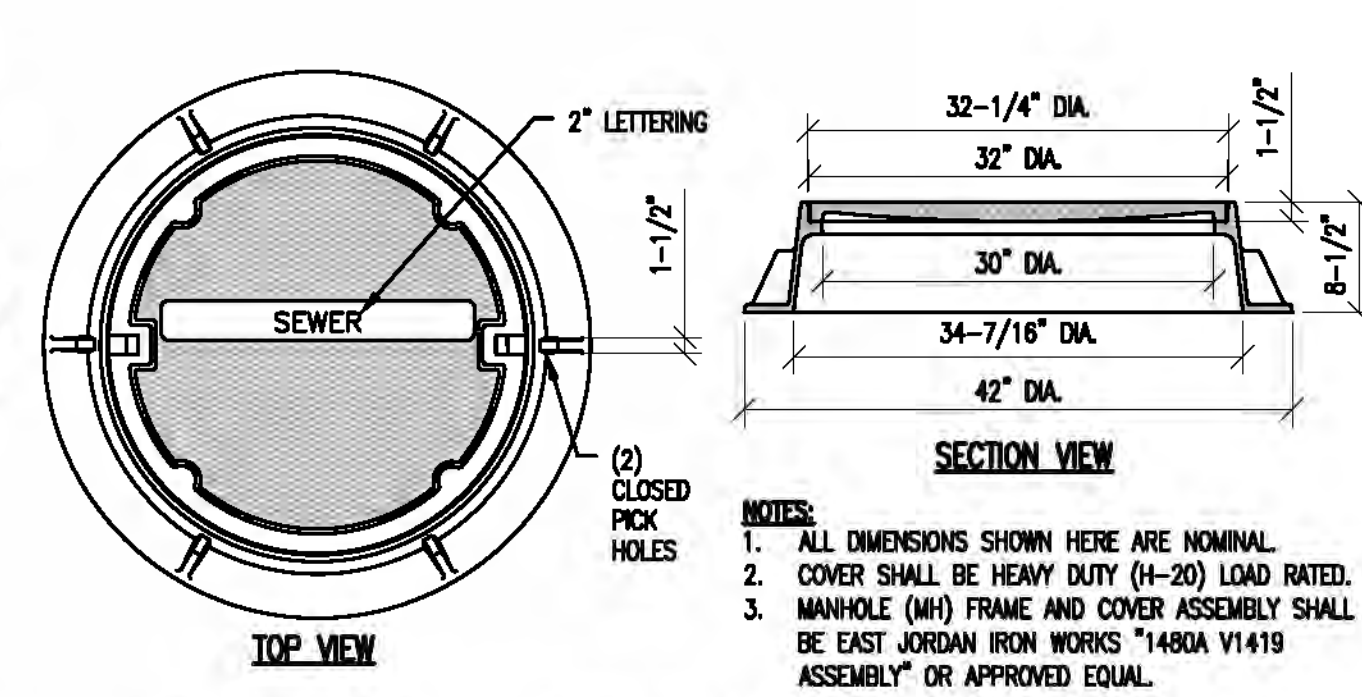
- NOTES:**
1. INVERTS OF MANHOLES SHALL BE FORMED WITH GRADE SS - HARD BRICK CONFORMING TO ASTM C32-13.
 2. PROVIDE SMOOTH SWEEPING TRANSITIONS BETWEEN INVERTS OF INTERSECTING PIPE.
 3. IF DEPTH OF MANHOLE IS 6 FT. OR LESS FROM RIM TO CENTERLINE INVERT, THEN A FLAT TOP MAY BE INSTALLED. IF DEPTH OF MANHOLE FROM RIM TO CENTERLINE INVERT IS MORE THAN 6 FT., THEN AN ECCENTRIC CONICAL TOP SHALL BE INSTALLED.
 4. MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF THE INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.
 5. MANHOLE AND COVER SHALL BE DESIGNED FOR H2O LOADING.
 6. MANHOLE SHALL CONFORM TO ASTM C478 SPECIFICATIONS FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
 7. CONCRETE SHALL BE 4,000 PSI @ 28 DAYS MINIMUM.
 8. BASE SECTION SHALL BE A ONE POUR MONOLITHIC SECTION.

SEWER MANHOLE DETAIL 4
NOT TO SCALE

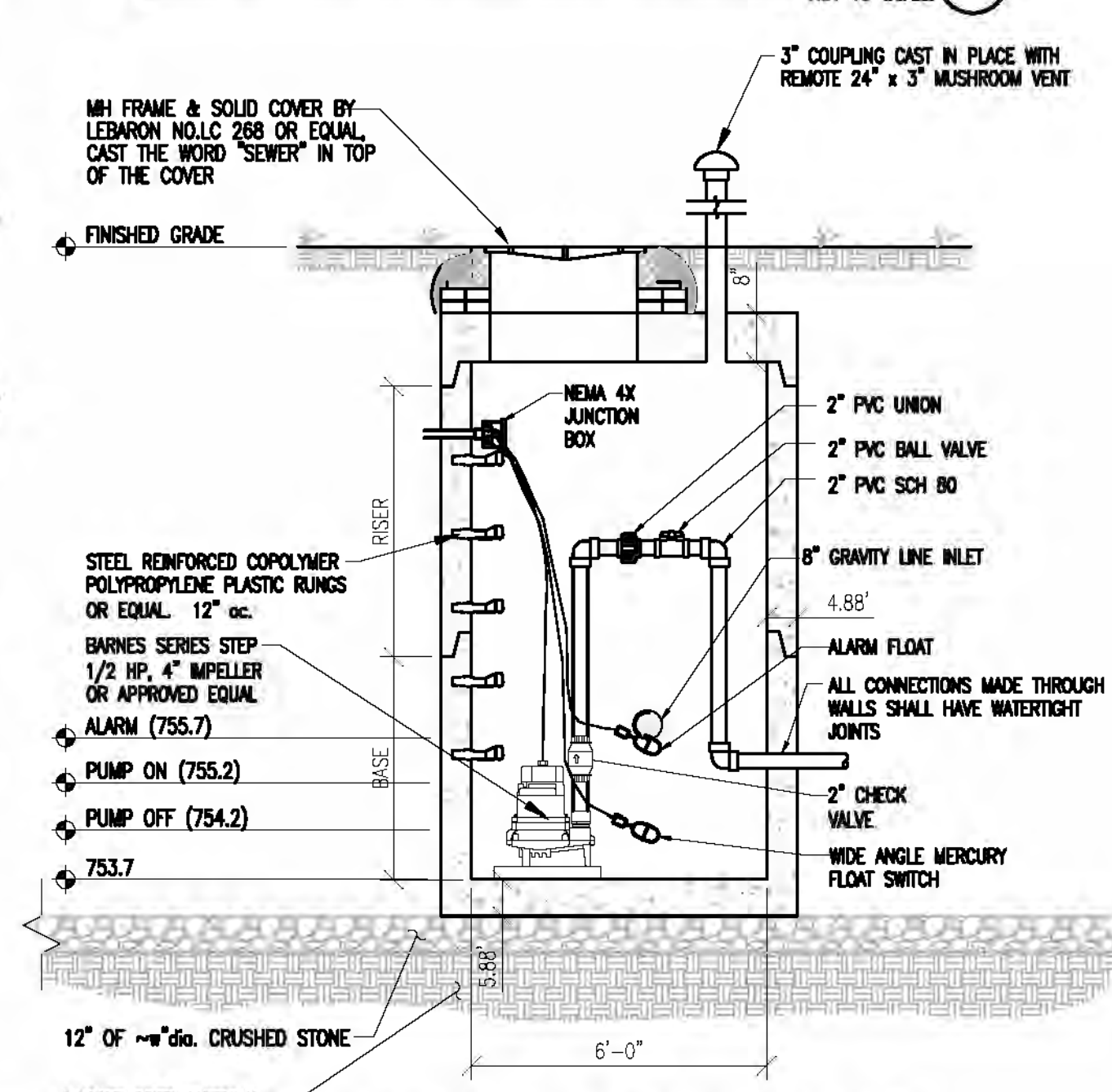


- NOTES:**
1. MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW AT CHANGES IN DIRECTION.
 2. INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES.
 3. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL.
 4. UNDERLAYMENT OF INVERT SHELF SHALL CONSIST OF BRICK MASONRY.

SEWER MANHOLE INVERT AND SHELF DETAIL 5
NOT TO SCALE



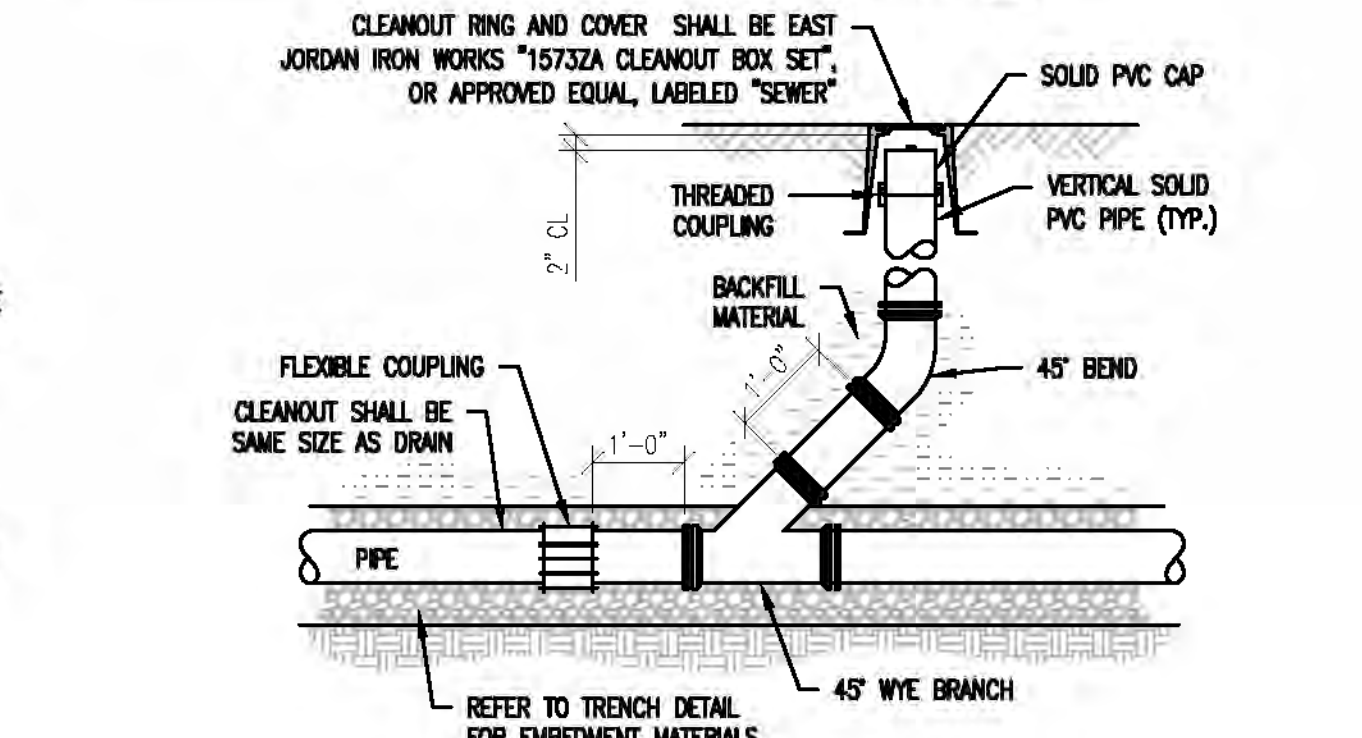
SEWER MANHOLE FRAME & COVER 6
NOT TO SCALE



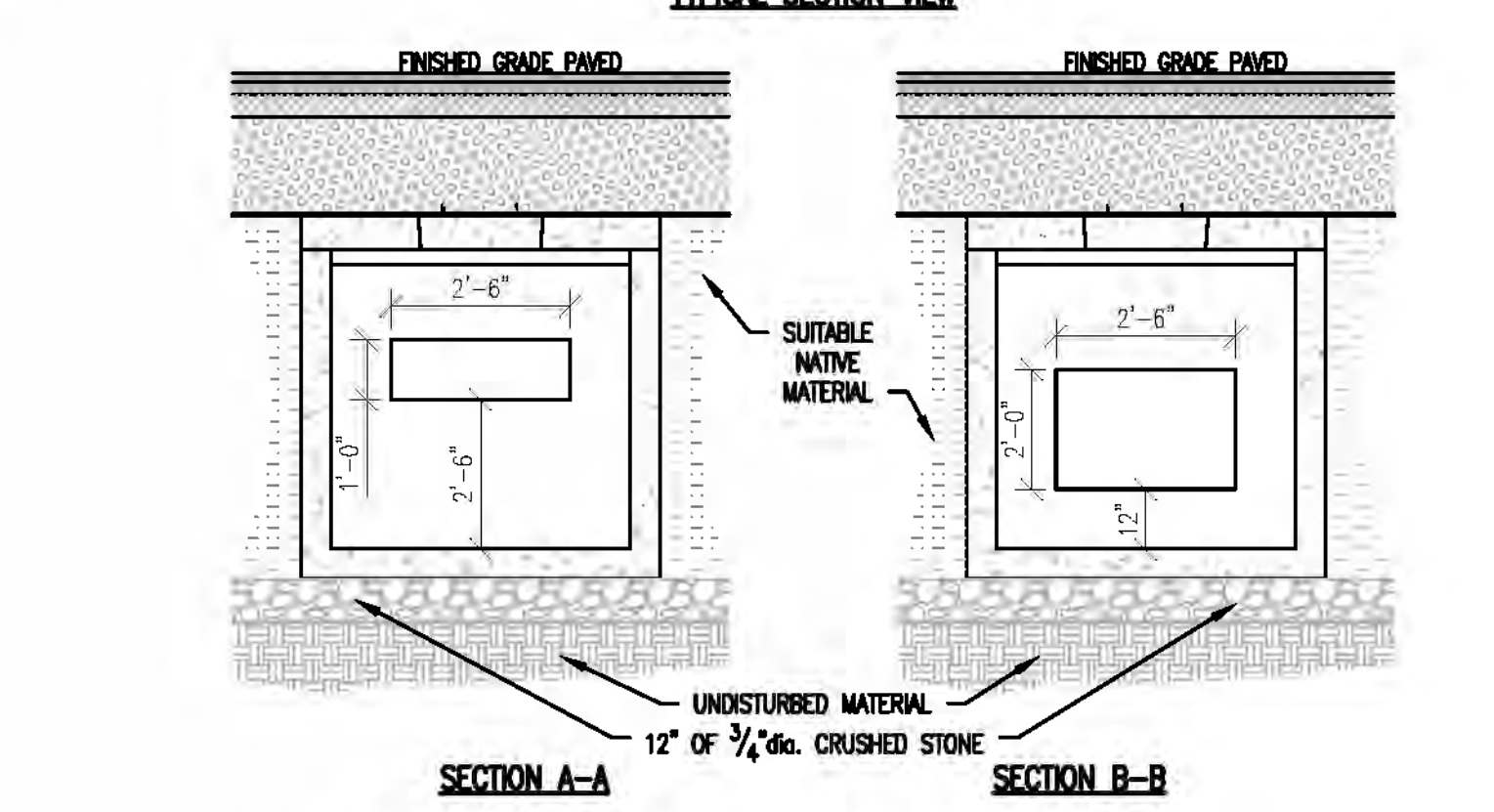
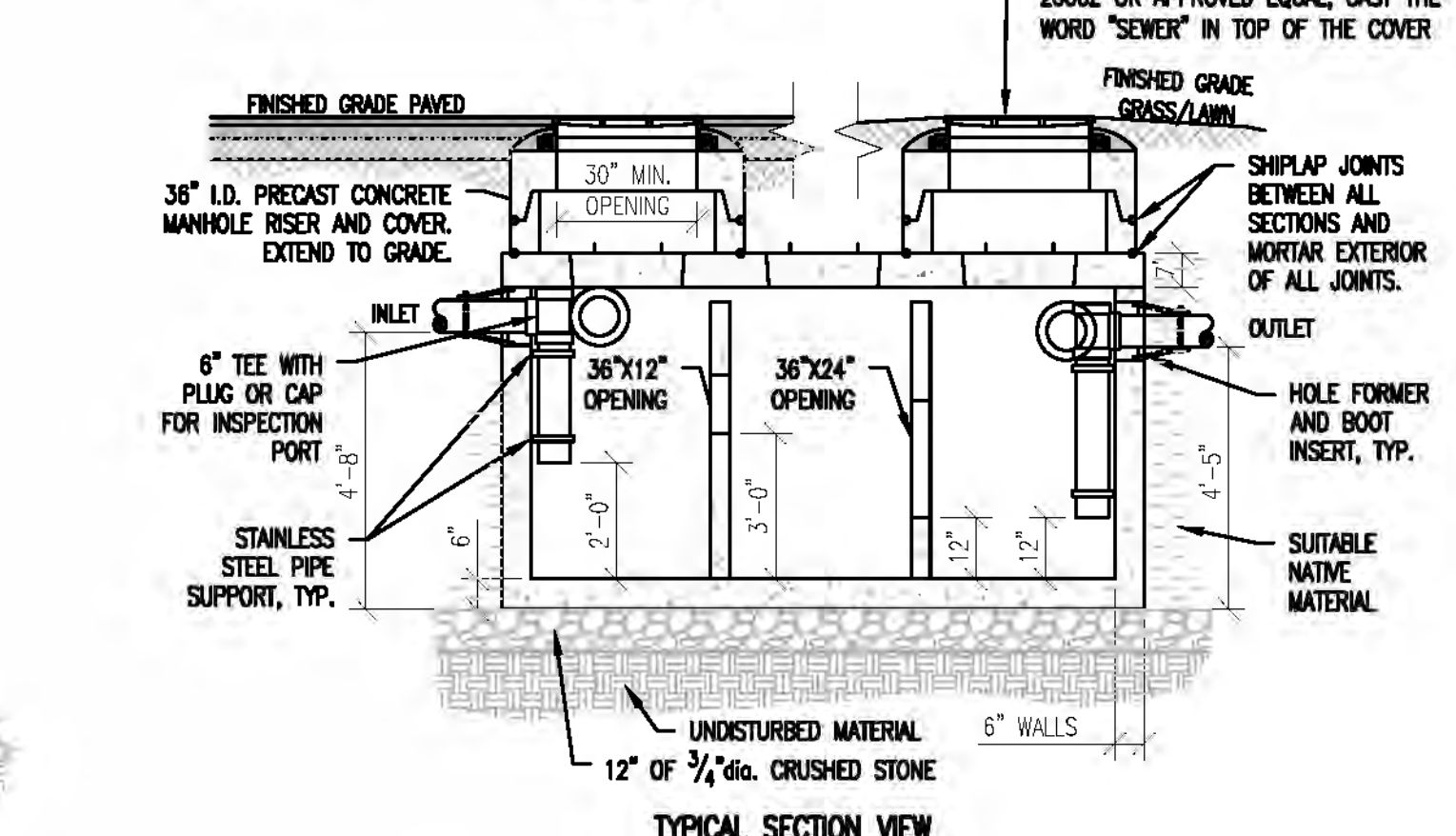
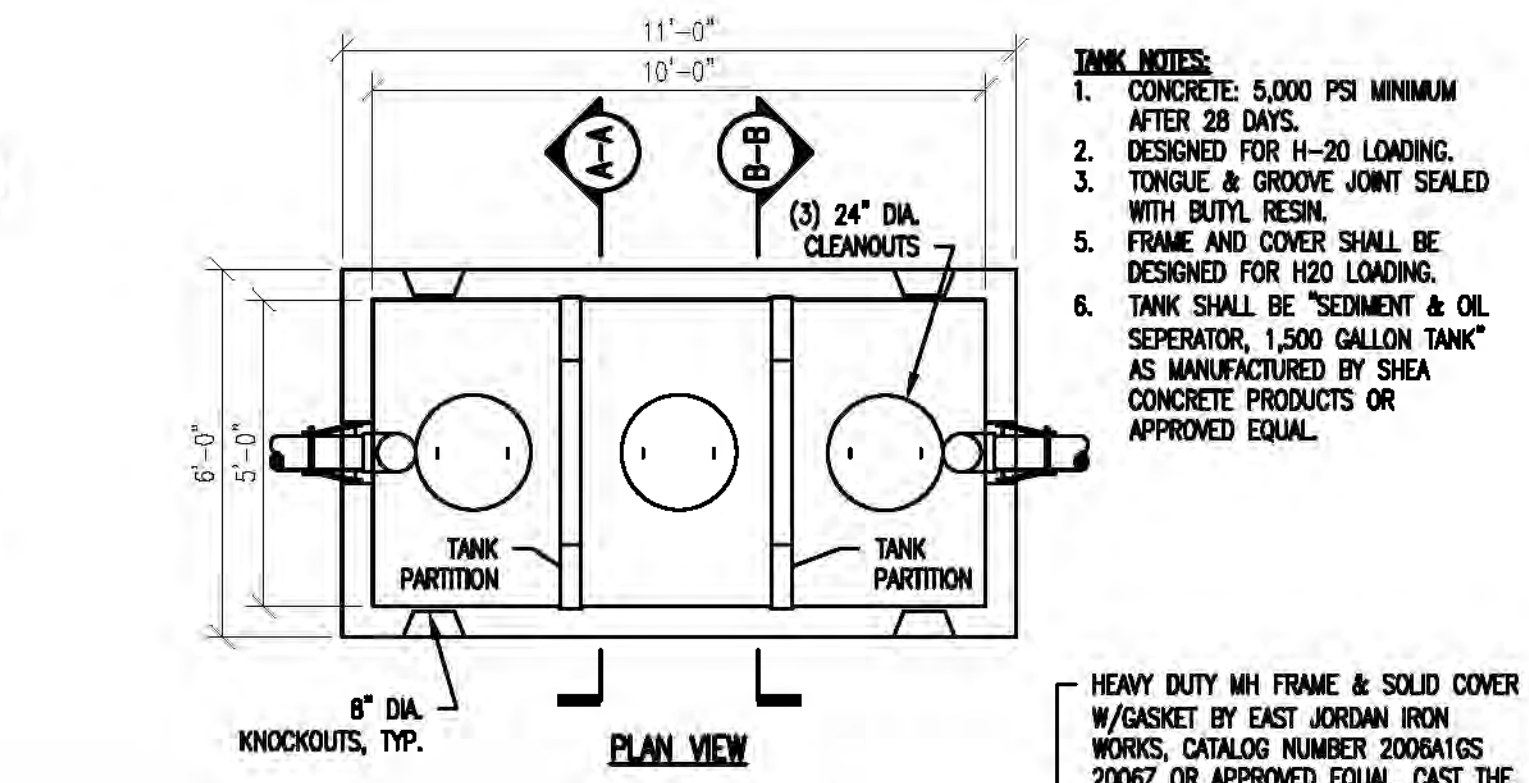
ELEVATION VIEW PUMP STATION

- PUMP STATION NOTES:**
1. WATER PROOF, SEAMLESS PUMP STATION SUPPLIED BY CAMP PRECAST, OR EQUIVALENT.
 2. CONTROL PANEL TO BE LOCATED IN THE PROPOSED BUILDING. AND SHALL CONTAIN:
A. RUN LIGHTS
B. MANUAL ON/OFF AUTOMATIC CONTROL
C. ALARM SILENCE BUTTON
D. AUDIO AND VISUAL ALARM TO BE MOUNTED ON THE CONTROL PANEL BOX.
E. PUMP TIMER AND COUNTER.
 3. SPARE PARTS TO BE SUPPLIED TO INCLUDE:
A. EXTRA FLOAT SWITCH
B. TWO EXTRA RESET BLOCKS IN CONTROL PANEL.
C. TWO ORIGINAL SETS OF MANUALS FOR BOTH THE PUMPS AND CONTROL PANELS.
 4. ALL ELECTRICAL COMPONENTS TO BE UNDERWRITERS LABORATORY APPROVED, INSTALLED BY A LICENSED ELECTRICIAN IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
 5. PUMP TO BE BARNES SERIES STEP, 1/2 HP, SINGLE PHASE SUBMERSIBLE PUMP WITH 4.00" IMPELLER.
 6. ALL PIPE AND FITTINGS IN PUMP STATION SHALL BE FLANGED SCHEDULE 80 PVC.
 7. TANK SHALL BE INSTALLED LEVEL ON A COMPACTED 12" GRAVEL BASE.
 8. STEPS TO BE COPOLYMER POLYPROPYLENE PLASTIC WITH ~6" GRADE 60 REBAR CONTINUOUS THROUGHOUT.

SIMPLEX PUMP STATION (ROUND) 7
NOT TO SCALE



SEWER CLEANOUT DETAIL 8
NOT TO SCALE



- GENERAL NOTES:**
1. ITEMS OF WORK SHALL INCLUDE ALL NECESSARY MATERIALS AND THEIR INSTALLATION AS REQUIRED TO OPERATE THE GRIT/OIL SEPARATOR.
 2. THE PRECAST STRUCTURE SHALL BE "SEDIMENT & OIL SEPARATOR, 1,500 GALLON TANK" AS MANUFACTURED BY SHEA CONCRETE PRODUCTS OR APPROVED EQUAL. THE PRE-CAST CONCRETE STRUCTURE AND RISERS SHALL BE CAPABLE OF WITHSTANDING H-20 LOADING AS CONFIGURED. THE EXTERIOR OF THE PRE-CAST CONCRETE STRUCTURE SHALL RECEIVE TWO COATS OF ASPHALT SEAL COATING AT THE FACTORY.
 3. JOINTS BETWEEN THE CONCRETE SECTIONS SHALL BE SEALED BY BUTYL MASTIC (MSHTD M-198).
 4. PIPE PENETRATIONS SHALL BE SEALED BY FLEXIBLE WATERPROOF BOOTS WITH STAINLESS STEEL BANDS.
 5. THE OIL-GRIT SEPARATOR AND RISERS SHALL BE FILLED WITH WATER AND SUBJECTED TO A 24 HOUR HYDROSTATIC LEAKAGE TEST. NO LEAKAGE WILL BE ALLOWED DURING THE TEST PERIOD.
 6. AN ALTERNATE VACUUM LEAKAGE TEST PRIOR TO BACKFILLING IS ALSO ACCEPTABLE. THE VACUUM TEST WILL REQUIRE THE INSTALLED VAULT AND RISERS TO HOLD A VACUUM PRESSURE OF NEGATIVE 5 INCHES MERCURY FOR 10 MINUTES WITH NO LOSS/GAIN.
 7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE A WATERTIGHT STRUCTURE.
 8. VENT OIL-GRIT SEPARATOR IN CONFORMANCE WITH VERMONT AND INTERNATIONAL PLUMBING CODES.
 9. SHOP DRAWINGS OF THE OIL-GRIT SEPARATOR AND COMPONENTS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
 10. BACKFILL MATERIALS SHALL BE COMPACTED, IN 12" LAYERS, TO 92% OF MODIFIED PROCTOR (ASTM 1557) TO WITHIN 3 FEET OF FINISHED GRADE. IN AREAS UNDER ROADWAYS, DRIVES, AND PARKING THE UPPER 3 FEET SHALL BE COMPACTED, IN 6" LAYERS, TO 95% MODIFIED PROCTOR (ASTM 1557) AND IN LAWN OR OTHER UNDEVELOPED SPACE THE UPPER 3 FEET SHALL BE COMPACTED TO 92% MODIFIED PROCTOR.

1,500 GALLON OIL-GRIT SEPARATOR 9
NOT TO SCALE

SITE PLAN REVIEW

RODE

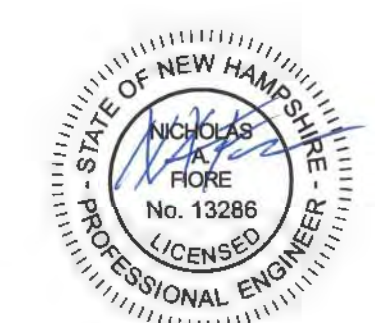
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

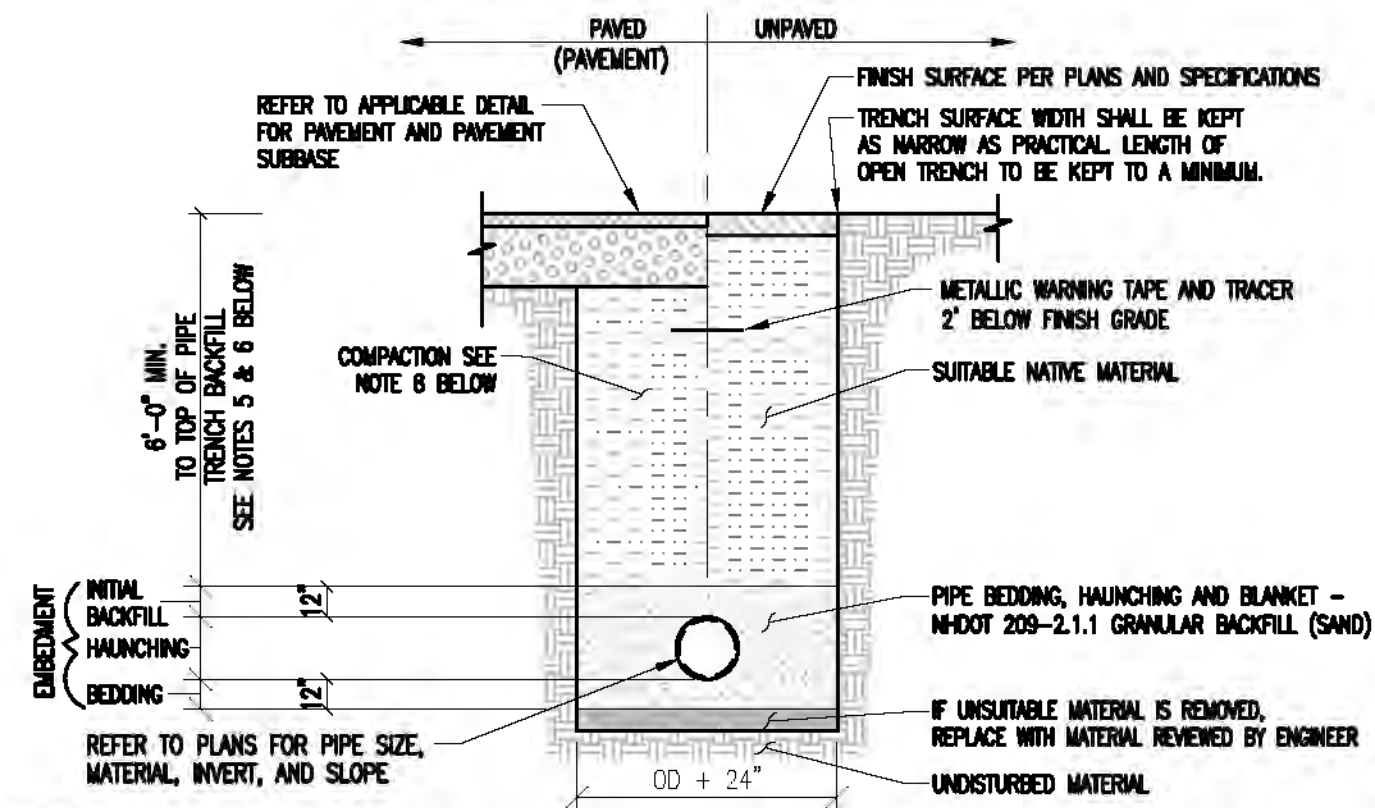
DATE: 08.15.22

SCALE: NOT TO SCALE

SANITARY SEWER DETAILS

C-406
Page 33 of 57

S:\PROJECTS\2022\22122 NH LEB WOOLEN MILL\DWGS\22122 C-407 CONSTRUCTION DETAILS.DWG - PLOTTED: 9/24/2022 8:09 AM



- NOTES:**
1. UNLESS OTHERWISE NOTED, ASSUME CLASS "C" SOILS. PERFORM ALL EXCAVATIONS TO OSHA REQUIREMENTS.
 2. BEDDING TO PROVIDE A FIRM, STABLE, CONTINUOUS AND UNIFORM SUPPORT FOR FULL LENGTH OF PIPE.
 3. PROVIDE 6"-0" MINIMUM COVER OVER WATER PIPE. OTHERWISE, REFER TO INSULATION OVER SHALLOW WATER LINE DETAIL.
 4. INSTALL WATER PIPE IN ACCORDANCE WITH AWWA STANDARD C300.
 5. LEDGE, ROCK, BOULDERS AND LARGE STONES SHALL BE REMOVED TO PROVIDE A MINIMUM CLEARANCE OF SIX INCHES BELOW AND ON EACH SIDE OF ALL PIPES.
 6. TRENCH BACKFILL MATERIAL, INCLUDING ROADWAY LOCATIONS, SHALL BE NATURAL MATERIALS EXCAVATED FROM THE TRENCH DURING CONSTRUCTION AND FREE OF UNSUITABLE MATERIALS AS DEFINED IN THE EARTHWORK SPECIFICATIONS INCLUDED ON THESE PLANS.
 7. NO MECHANICAL TAMPERS SHALL BE USED DIRECTLY OVER PIPE TO INSURE PIPE IS NOT DAMAGED.
 8. BACKFILL MATERIALS SHALL BE COMPACTED, IN 12" LAYERS, TO 92% OF MODIFIED PROCTOR (ASTM 1557) TO WITHIN 3 FEET OF FINISHED GRADE. IN AREAS UNDER ROADWAYS, DRIVES, AND PARKING THE UPPER 3 FEET SHALL BE COMPACTED, TO 95% MODIFIED PROCTOR (ASTM 1557) AND IN LAWN OR OTHER UNDEVELOPED SPACE THE UPPER 3 FEET SHALL BE COMPACTED TO 92% MODIFIED PROCTOR.

WATER TRENCH

NOT TO SCALE

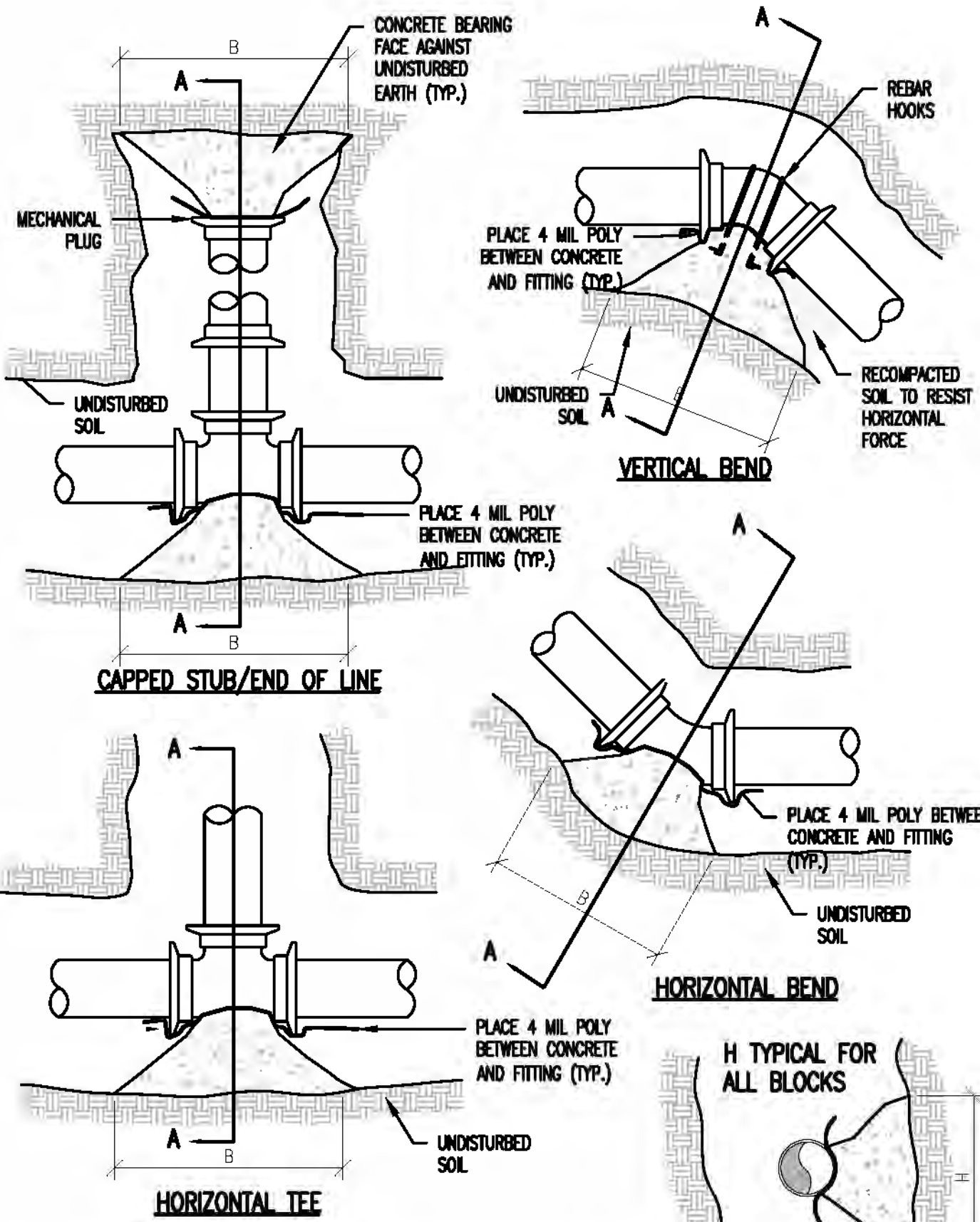


TABLE 2 - THRUST DEVELOPED PER 100psi PRESSURE (lbs force)					
PIPE DIAMETER IN.	VALVES AND DEAD ENDS, TEES	90° BENDS	45° BENDS	22 1/2° BENDS	11 1/4° BENDS
4	1810	2560	1390	635	320
6	3740	5290	2860	1370	690
8	6430	9100	4920	2320	1170
10	9680	13680	7410	3610	1820
12	13690	19350	10470	5090	2550
14	18390	25690	14100	6100	3090
16	23780	33630	18290	7990	4020

SECTION A-A

- NOTES:**
1. PERFORM HYDROSTATIC AND LEAKAGE TEST PRESSURE PER SPECIFICATIONS.
 2. PLACE 4 MIL POLYETHYLENE BETWEEN FITTINGS AND THRUST BLOCKS.
 3. CONCRETE SHALL BE CLASS B. ON ALL THRUST BLOCKS, B SHALL BE THE GREATER DIMENSION, USE 1.5:1 TO 2:1 FOR B.H.

TABLE 1 - BEARING STRENGTH OF UNDISTURBED SOIL	
SOIL TYPE	BEARING STRENGTH
PEAT, ETC.	0 lb/ft ²
SOFT CLAY	500 lb/ft ²
SAND	1000 lb/ft ²
SAND AND GRAVEL	1500 lb/ft ²
SAND AND GRAVEL WITH CLAY	2000 lb/ft ²
SAND AND GRAVEL CEMENTED WITH CLAY	4000 lb/ft ²
HARD PAN	5000 lb/ft ²

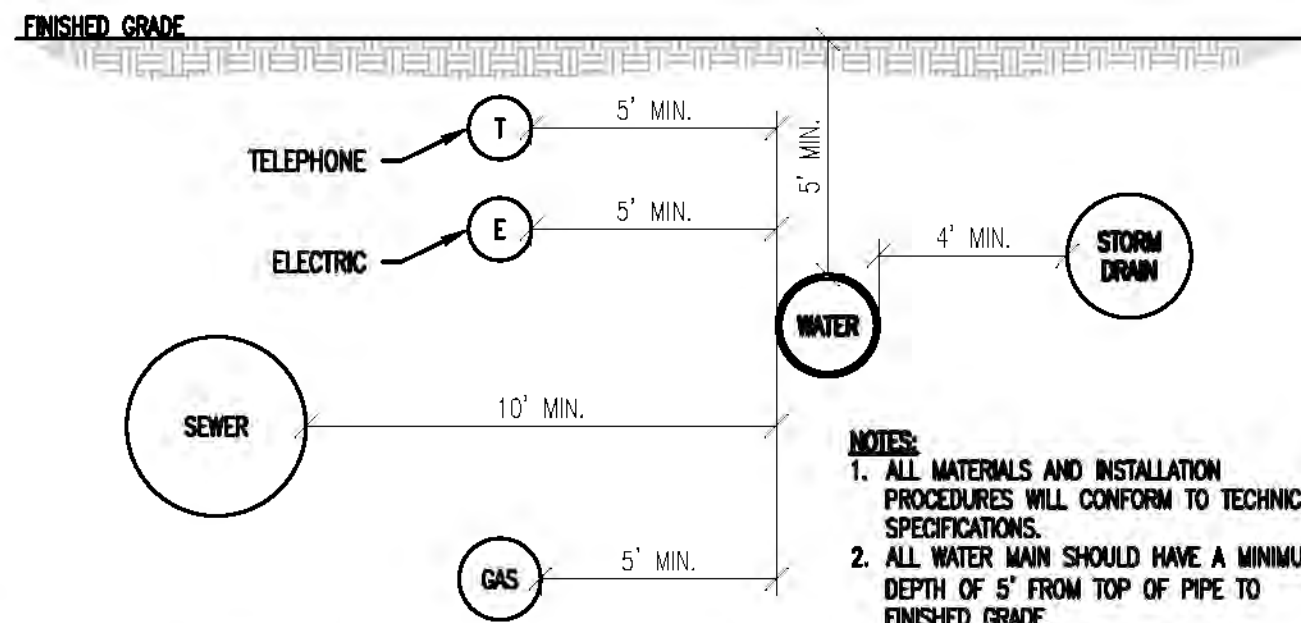
DETERMINING MINIMUM BEARING FACE AREA:

THE AREA (ft²) SHALL BE CALCULATED BY DETERMINING THE TOTAL THRUST GENERATED AT THE FITTING. DIVIDE THE THRUST DEVELOPED (lbs force) (FROM TABLE 2) BY THE BEARING STRENGTH OF THE SOIL (FROM TABLE 1). THE RESULT IS THE AREA OF THE SOIL REQUIRED TO RESIST THE THRUST (A). THE AREA CALCULATED WILL BE FOR THE AREA OF CONCRETE UP AGAINST THE TRENCH WALL (i.e. THE BACK SIDE OF THE BLOCKS). USE THE TEST PRESSURE TO DETERMINE THE TOTAL THRUST.

$$AREA = \frac{THRUST DEVELOPED (lbs force)}{BEARING STRENGTH OF SOIL}$$

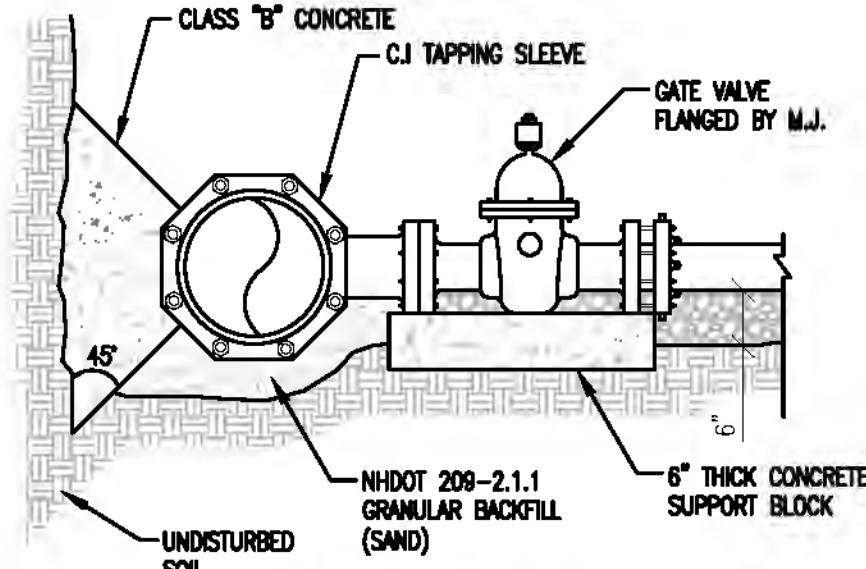
TYPICAL BEARING THRUST BLOCK

NOT TO SCALE



WATER MAIN UTILITY SEPARATIONS

NOT TO SCALE

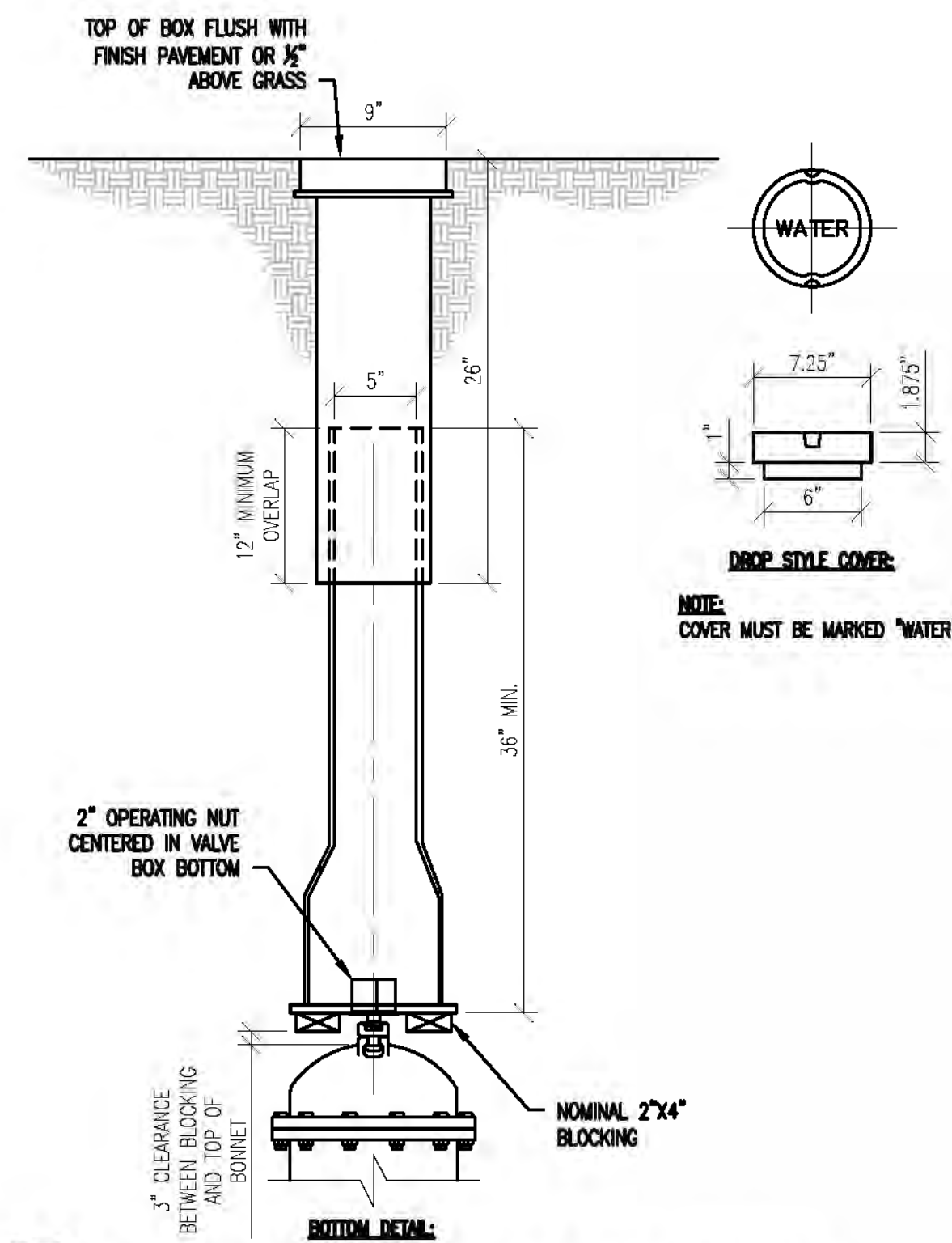


SECTION VIEW

- NOTES:**
1. AREA OF THRUST BLOCK BEARING AGAINST UNDISTURBED SOIL SHALL BE THE SAME AS FOR 1/4" BEND (90°) BEND.
 2. UTILIZE MEGALUG MECHANICAL JOINT RESTRAINT ON M.J. END.
 3. SEE TYPICAL GATE VALVE DETAIL FOR VALVE BOX INFORMATION.
 4. SEE TYPICAL WATER TRENCH DETAIL FOR PIPE BEDDING REQUIREMENTS.

TAPPING SLEEVE AND VALVE

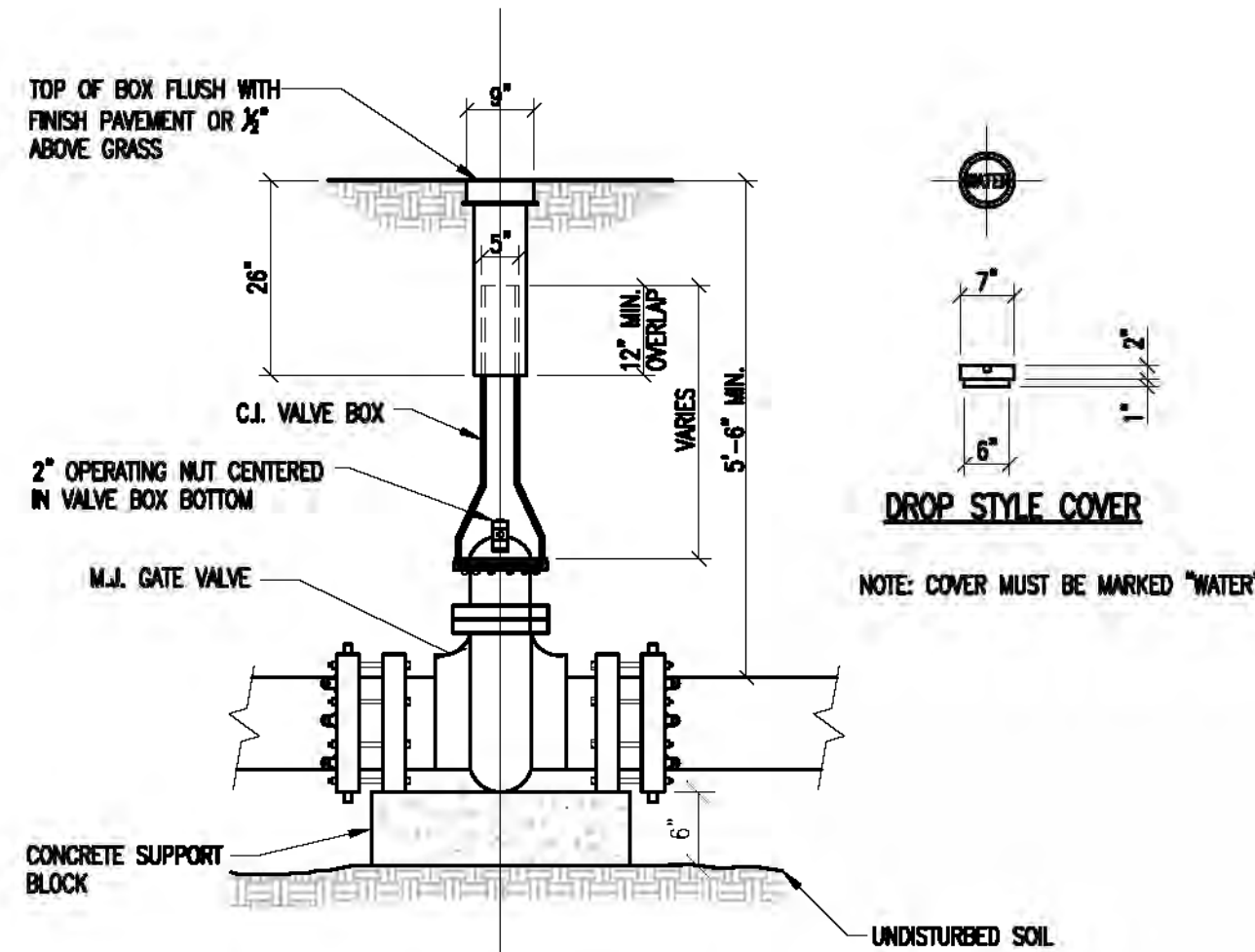
NOT TO SCALE



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISHED GRADE.

TYPICAL VALVE BOX

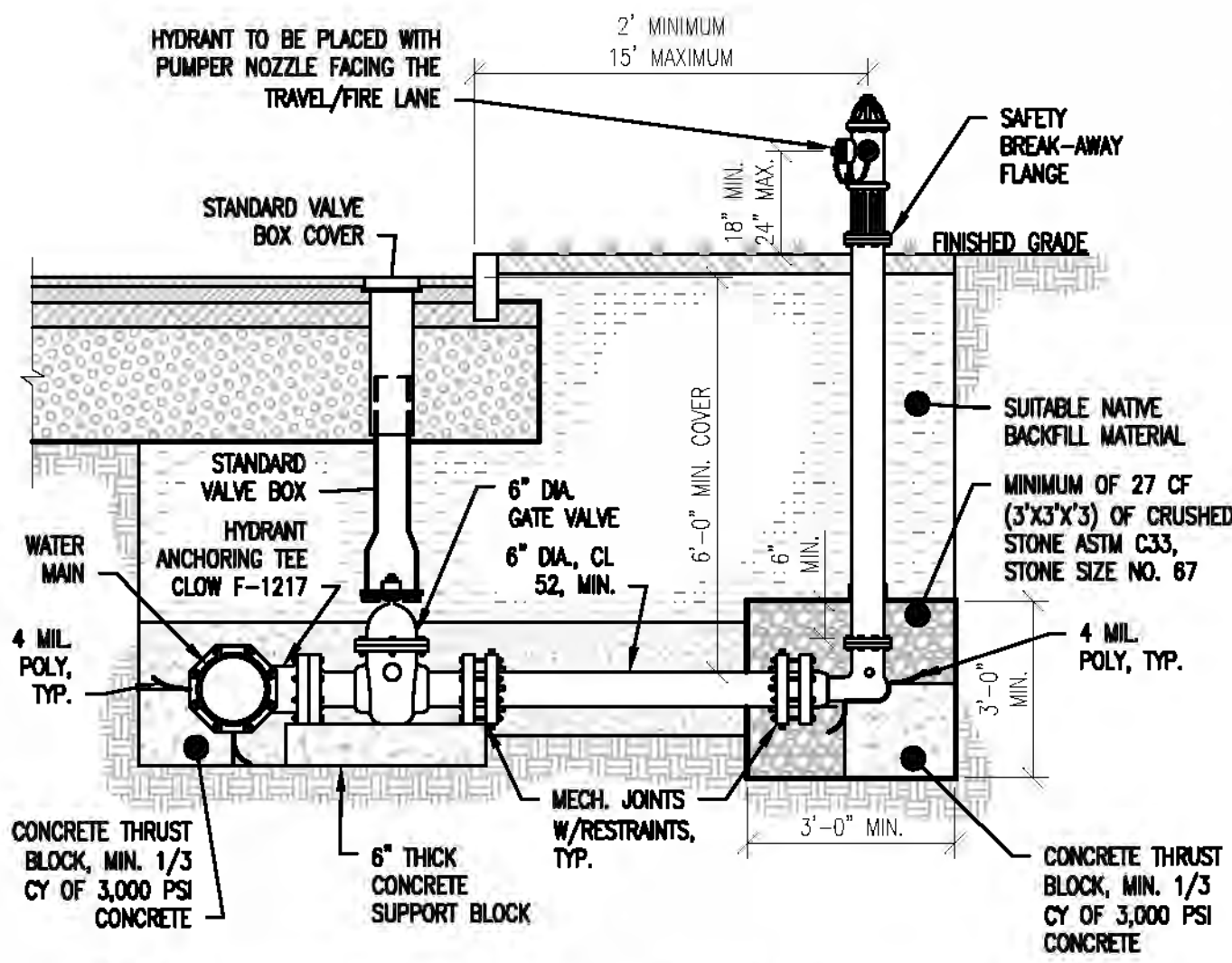
NOT TO SCALE



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO TECHNICAL SPECIFICATIONS.
 2. UTILIZE MEGALUG MECHANICAL JOINT RESTRAINT ON ALL M.J. GATE VALVES.
 3. SEE TYPICAL WATER TRENCH DETAIL FOR PIPE BEDDING REQUIREMENTS.
 4. IF DEPTH FROM GRADE TO TOP OF VALVE OPERATING NUT IS GREATER THAN 6'-0", A VALVE STEM RISER MADE OF HIGH STRENGTH STEEL SHALL BE PROVIDED. DEPTH FROM VALVE STEM RISER NUT TO GRADE WILL BE 4 TO 6 FEET.

GATE VALVE

NOT TO SCALE

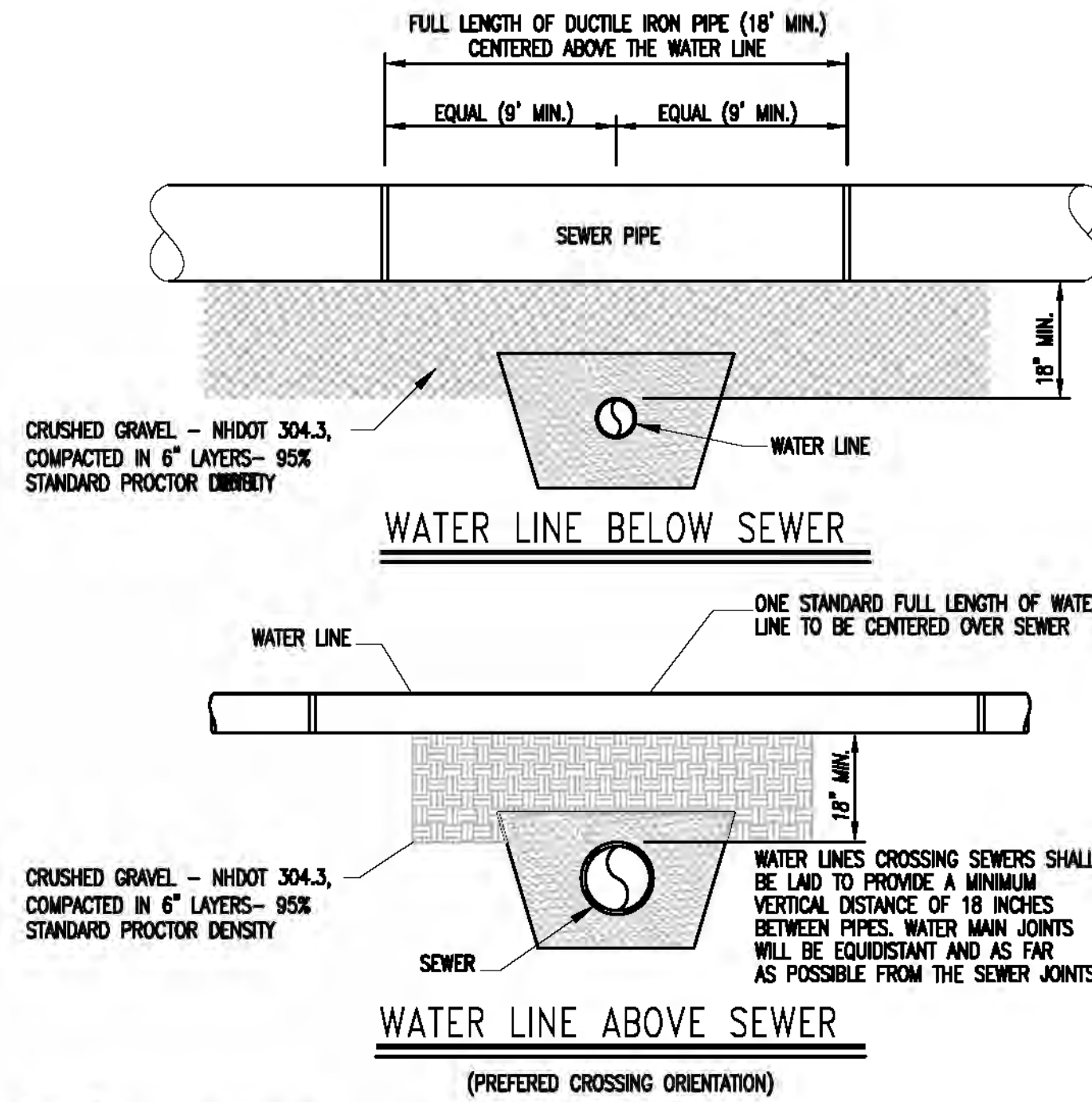


- NOTES:**
1. HYDRANT DRAIN SHALL BE PLUGGED.
 2. ACCEPTABLE HYDRANT MAKE AND MODEL: MUELLER SUPER CENTURION 250 MODEL A-423 (NO HYDRANT DRAIN).
 3. HYDRANT SHALL MEET OR EXCEED AWWA C502.
 4. 5/8" VALVE OPENING.
 5. ONE (1) 1/2" NST PUMPER NOZZLE.
 6. TWO (2) 2 1/2" NST HOSE NOZZLE.

7. OPERATING NUT AND NOZZLE CAPS - NS#7 PENTAGON
8. SIX (6) INCH MECHANICAL JOINT CONNECTION WITH ACCESSORIES FOR 6.90 O.D. DI PIPE.
9. OPERATION: OPEN COUNTERCLOCKWISE (LEFT).
10. DEPTH AS REQUIRED.
11. CONTRACTOR TO SUPPLY AND INSTALL HYDRANT
12. TOP OF BLOCKING TO BE 2 INCHES FROM HYDRANT WEEP HOLES.

FIRE HYDRANT

NOT TO SCALE



PROTECTION OF WATER SUPPLIES

- a. THERE SHALL BE NO PHYSICAL CONNECTION BETWEEN A PUBLIC OR PRIVATE POTABLE WATER SUPPLY SYSTEM AND A SEWER OR SEWER APPURTENANCE WHICH WOULD PERMIT THE PASSAGE OF SEWAGE OR POLLUTED WATER INTO THE POTABLE SUPPLY. NO WATER PIPE SHALL PASS THROUGH OR COME IN ANY CONTACT WITH ANY PART OF A SEWER OR SEWER MANHOLE.
- b. NO SEWER SHALL BE LOCATED WITHIN THE WELL PROTECTIVE RADI ESTABLISHED IN ENV-W3 300 FOR ANY PUBLIC WATER SUPPLY WELL OR WITHIN 100 FEET OF ANY PRIVATE WATER SUPPLY WELL.
- c. SEWERS SHALL BE LOCATED AT LEAST TEN FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN.
- d. A DEVIATION FROM THE SEPARATION REQUIREMENTS OF (b) OR (c) ABOVE SHALL BE ALLOWED WHERE NECESSARY TO AVOID CONFLICT WITH SUBSURFACE STRUCTURES, UTILITY CHAMBERS, AND BUILDING FOUNDATIONS PROVIDED THAT THE SEWER IS CONSTRUCTED IN ACCORDANCE WITH THE FORCE MAIN CONSTRUCTION REQUIREMENTS SPECIFIED IN ENV-W4 704.06.
- e. WHENEVER SEWERS MUST CROSS WATER MAINS, THE SEWER SHALL BE CONSTRUCTED AS FOLLOWS:
 - 1.) VERTICAL SEPARATION OF THE SEWER AND WATER MAIN SHALL BE NOT LESS THAN 18 INCHES, WITH WATER ABOVE SEWER; AND
 - 2.) SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 9 FEET HORIZONTALLY FROM THE WATER MAIN.
- f. WATER-SEWER SEPARATION SHALL COMPLY WITH ENV-W4 704.19 OR A WAIVER MUST BE REQUESTED FROM THE NH DEPARTMENT OF ENVIRONMENTAL SERVICES.

TYPICAL SEWER/WATER SEPARATION DETAILS

NOT TO SCALE

SITE PLAN REVIEW

RODE

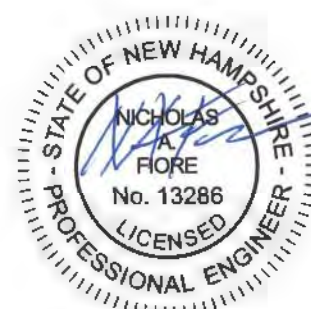
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

DATE: 08.15.22

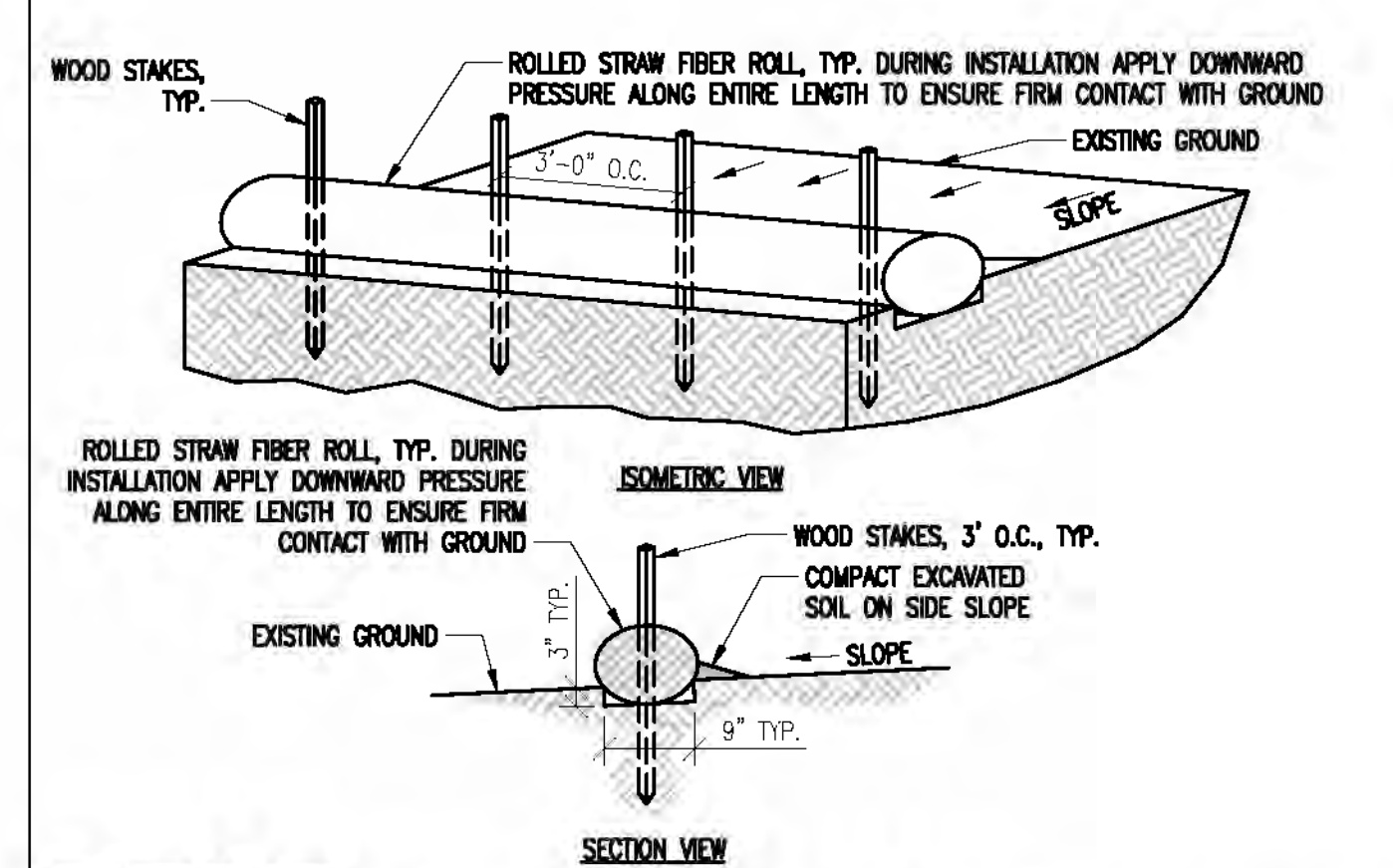
SCALE: NOT TO SCALE

WATER DETAILS

C-407

Page 34 of 57

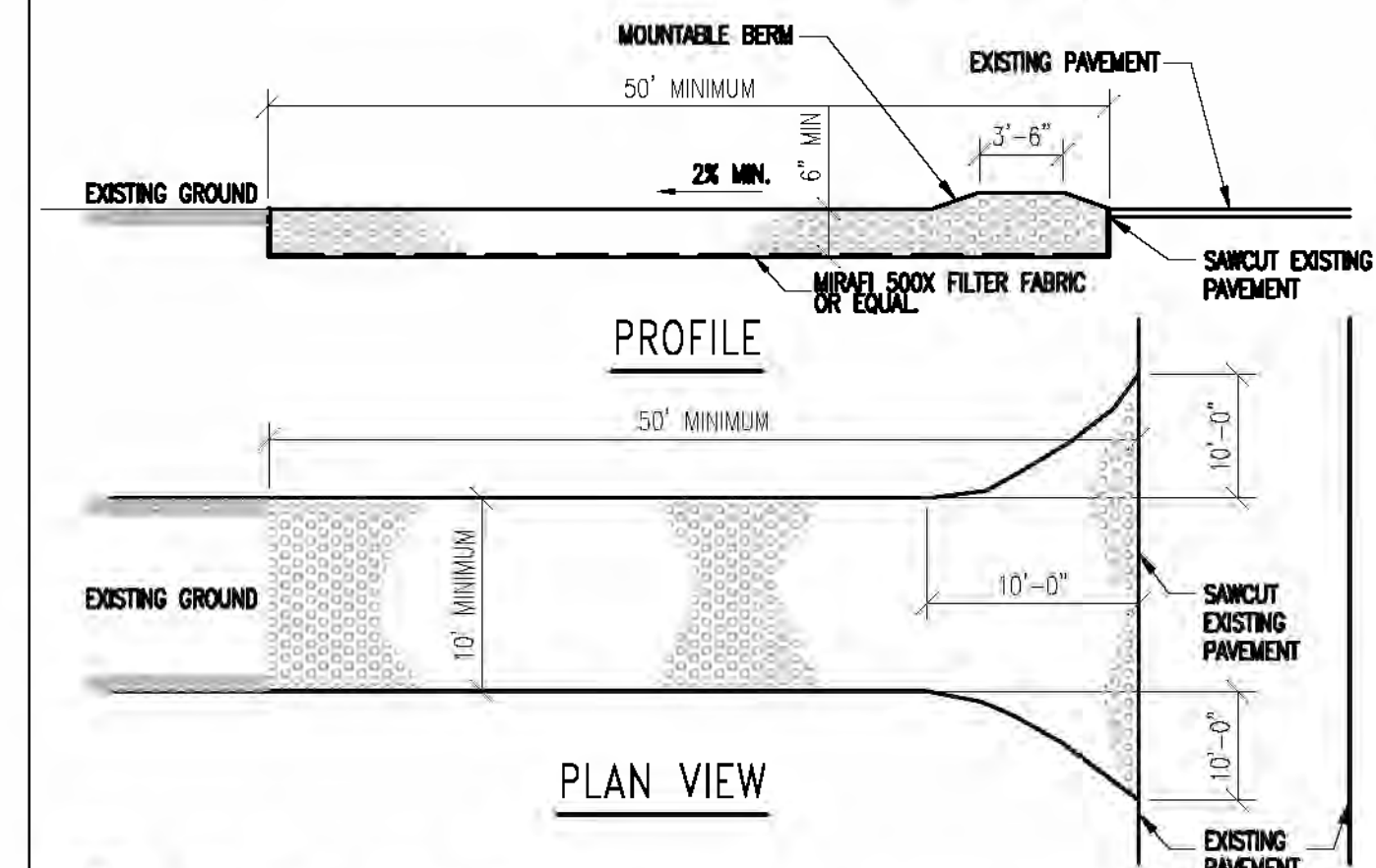
S:\PROJECTS\2022\22122 NH LIB WOOLEN MILL\DWGS\22122 C-408 CONSTRUCTION DETAILS.DWG -- PLOTTED: 9/25/2022 10:19 AM



- STRAW FIBER ROLL NOTES**
1. INSTALL ROLLED STRAW FIBER ROLL PARALLEL ALONG THE CONTOUR OF THE SLOPE.
 2. WHERE PROJECT ACTIVITIES ARE WITHIN 50 FEET OF A WETLAND, A DOUBLE ROW OF FIBER ROLLS SHALL BE USED.
 3. TO MAXIMIZE SEDIMENT CONTAINMENT WITH THE STRAW FIBER ROLL, PLACE THE INITIAL STRUCTURE AT THE TOP/CREST OF THE SLOPE IF SIGNIFICANT RUNOFF IS EXPECTED FROM ABOVE. IF NO RUNOFF FROM ABOVE IS EXPECTED, THE INITIAL STRAW WATTLE CAN BE INSTALLED AT THE APPROPRIATE DISTANCE DOWNHILL FROM THE TOP/CREST OF THE SLOPE. THE FINAL STRUCTURE SHOULD BE INSTALLED AT OR JUST BEYOND THE BOTTOM/TOE OF THE SLOPE. WATTLES SHOULD BE INSTALLED PERPENDICULAR TO THE PRIMARY DIRECTION OF OVERLAND FLOW.

STRAW FIBER ROLL - SOIL

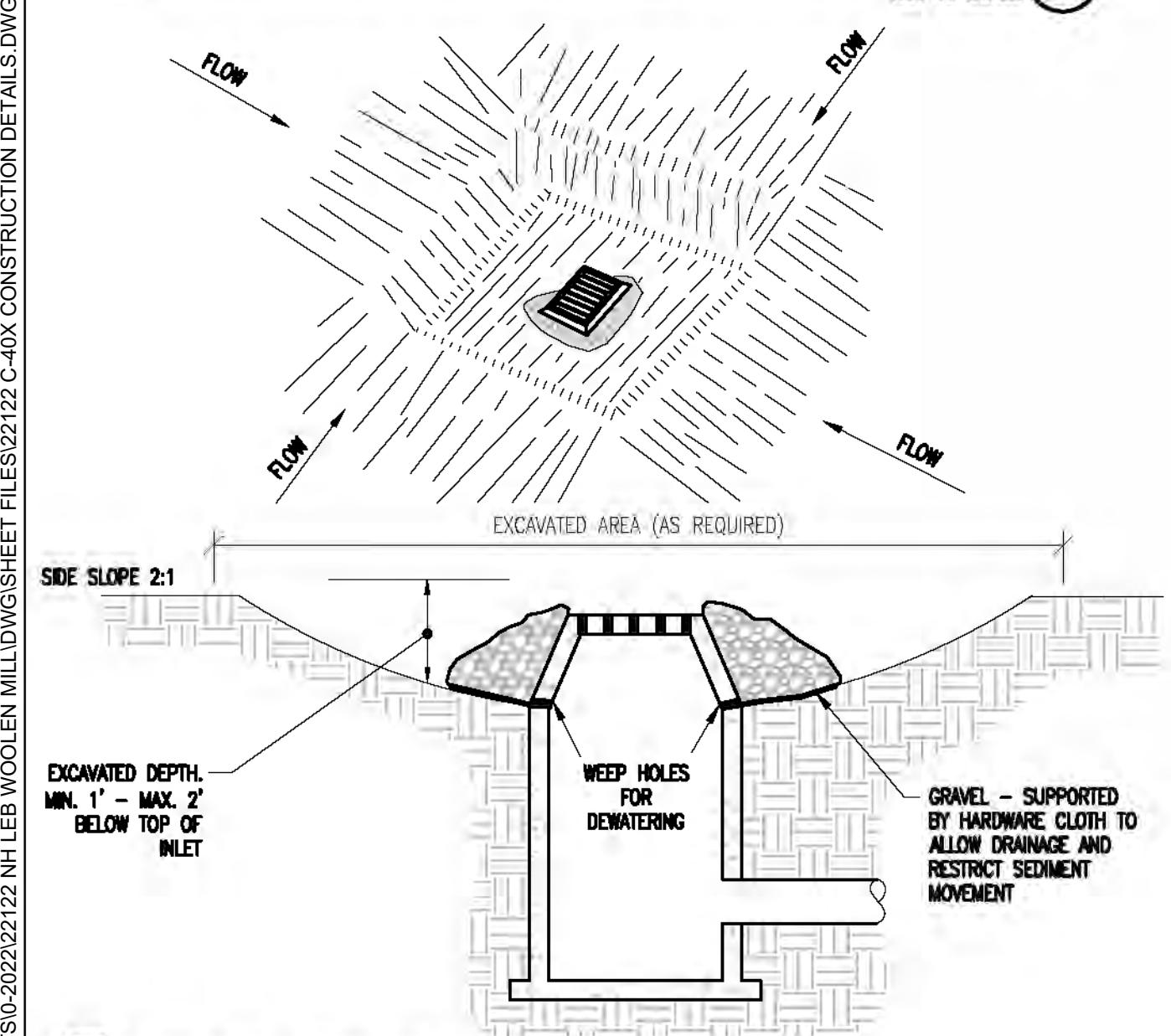
NOT TO SCALE



- NOTES:**
1. STONE SIZE: USE 3" (MIN) CRUSHED STONE.
 2. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED ACROSS THE ENTRANCE.
 3. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TRAP SEDIMENT, TRACKING ONTO PUBLIC RIGHT-OF-WAYS SHALL NOT BE ALLOWED. ALL SEDIMENT SPILLED, DROPPED, OR WASHED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY AND ANY WASH WATER MUST BE CONTAINED AND PROPERLY DISPOSED OF.
 4. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
 5. WHEELS SHALL BE CLEARED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

STABILIZED CONSTRUCTION ENTRANCE

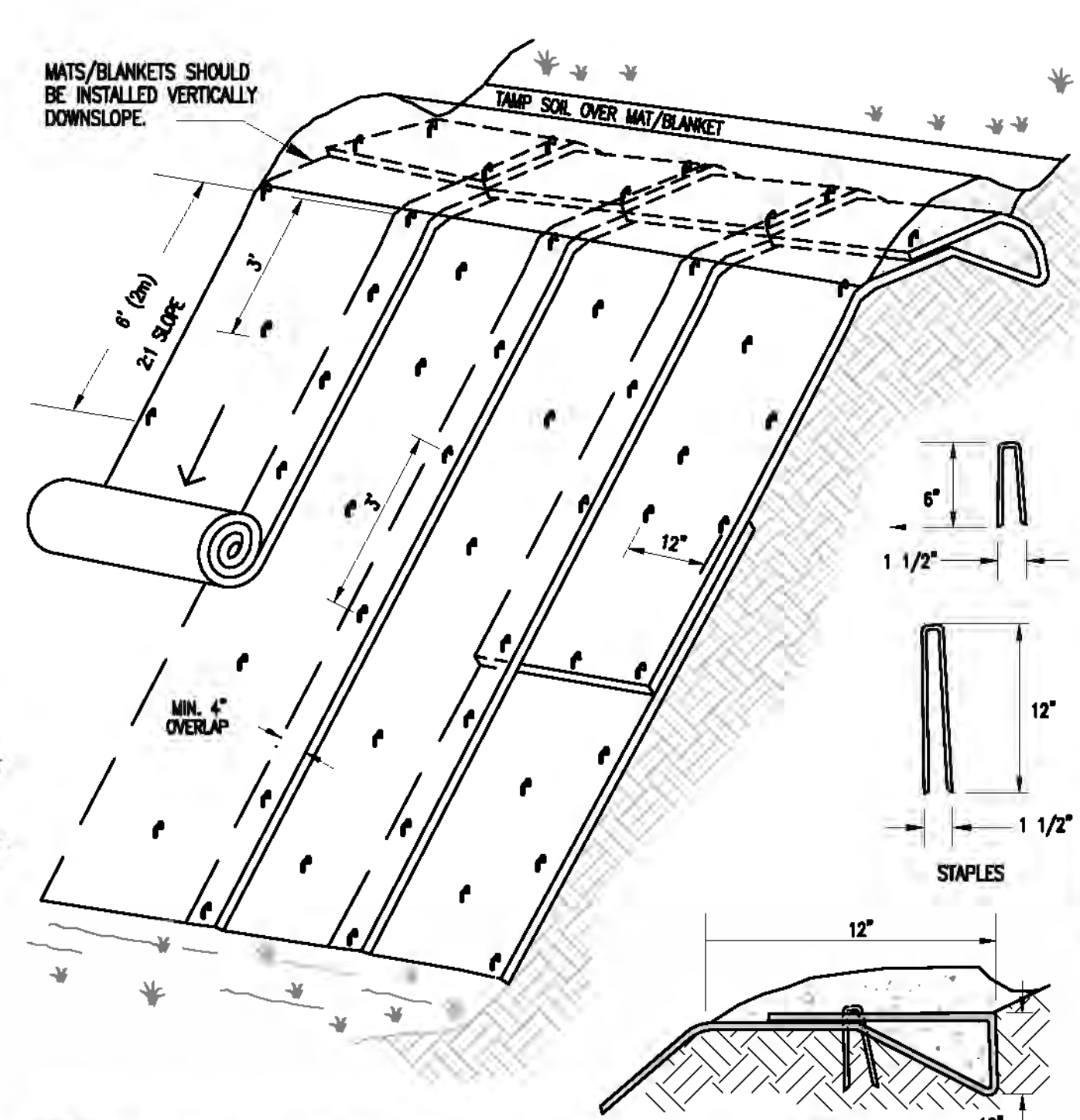
NOT TO SCALE



- NOTES:**
1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
 2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
 3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
 4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.

INLET PROTECTION

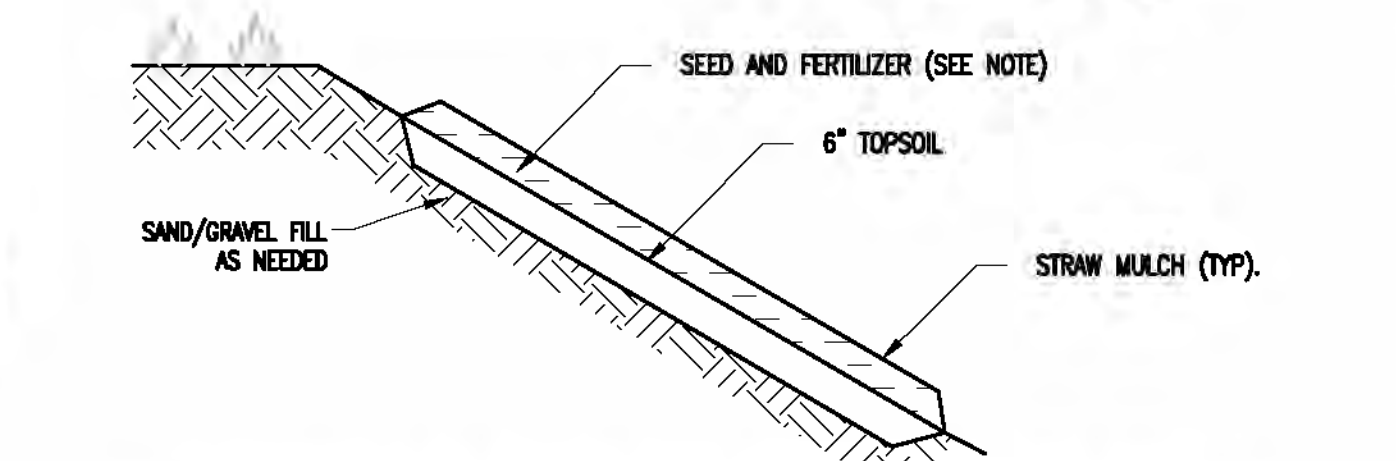
NOT TO SCALE



- NOTES:**
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
 2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
 3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
 4. THERE SHALL BE NO PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES MATERIAL UTILIZED (NOT APPLICABLE TO TURF REINFORCEMENT MATS).
 5. TURF REINFORCEMENT MATS SHALL BE COVERED WITH SOIL TO PREVENT EXPOSURE OF THE MATS TO THE SURFACE.
 6. EROSION FABRIC SHALL BE EC-4Y 100% BIODEGRADABLE COIR MAT AVAILABLE THROUGH EAST COAST EROSION CONTROL OR EQUAL.

EROSION CONTROL BLANKET

NOT TO SCALE



- NOTES:**
1. SEEDING AND MULCHING OF DISTURBED AREAS SHALL TAKE PLACE WITHIN 48 HOURS OF FINAL GRADING.
 2. MULCH: HAY SHALL NOT BE USED. STRAW MULCH SHALL BE UTILIZED AND SHALL BE APPLIED AT A RATE OF 90-1,000 LBS/1,000 SF. MULCH SHALL NOT BE PLACED ON SLOPES OF GREATER THAN 3:1. SEED IMPREGNATED EROSION CONTROL NETTING SHALL BE USED IN ITS PLACE.
 3. SEED: SEEDING SHALL OCCUR AFTER APRIL 15 AND PRIOR TO SEPTEMBER 15TH IN ORDER TO ESTABLISH A STAND OF GRASS PRIOR TO DRAINAGE FREEZING. SEED SHALL BE IN ACCORDANCE WITH SEED SPECIFICATION ON THIS SHEET.
 4. COVER SEED WITH 1/2 INCH SOIL UNLESS A HYDROSEEDER IS USED.
 5. MULCH ANCHORING: SHALL BE ACCOMPLISHED BY DEGRADABLE MULCH NETTING. USE WHEN SLOPES ARE GREATER THAN 10%.
 6. TOPSOIL AND MULCHING NOT TO BE APPLIED IN AREAS OF TRAVEL WAYS.

SEEDED AND MULCHED AREAS DETAIL

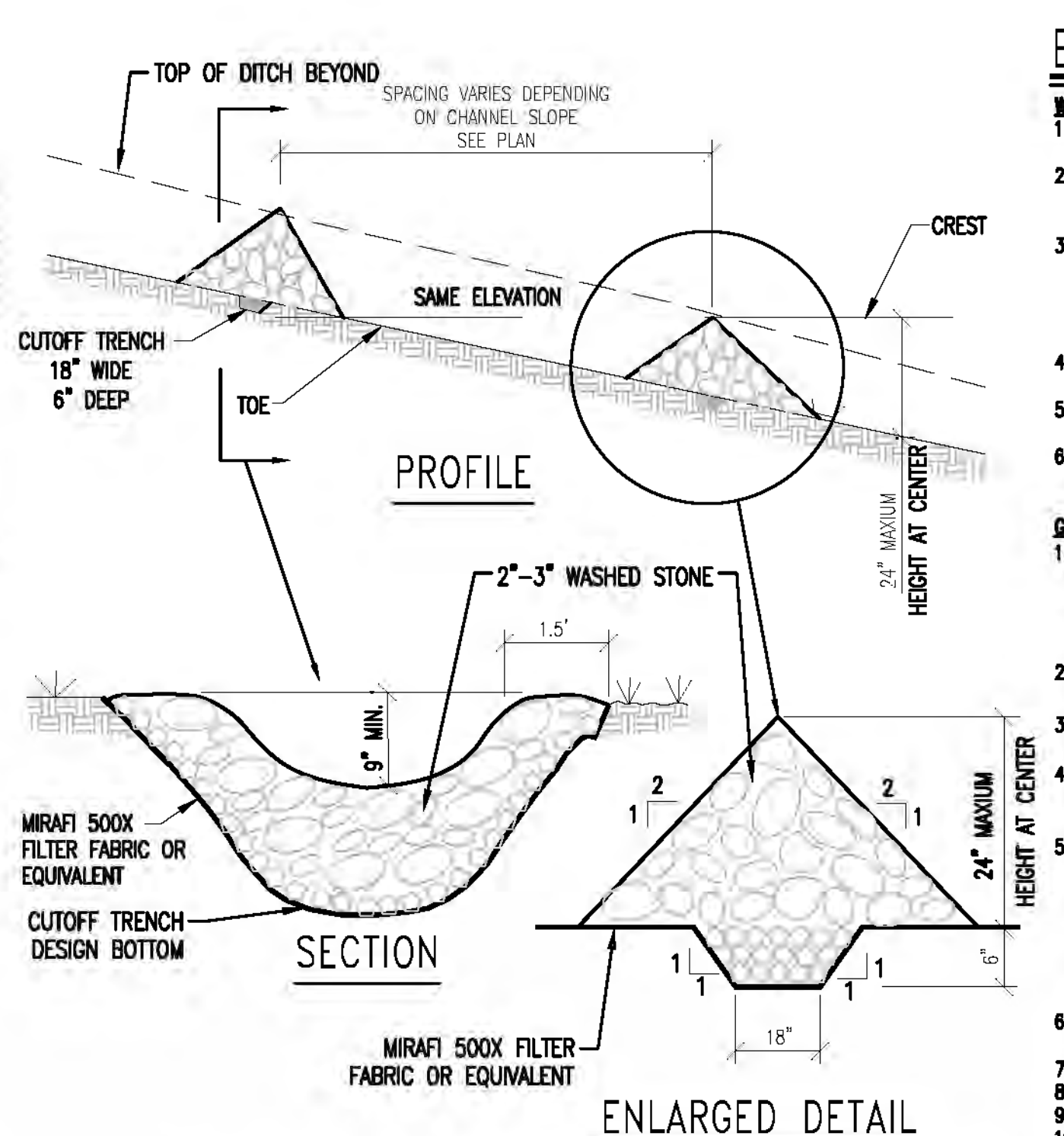
NOT TO SCALE

SEEDING SPECIFICATION:			
URBAN MIX GRASS SEED - FOR USE IN GRASSSED LAWN AREAS AROUND BUILDING AND PARKING - TEMPORARY AND PERMANENT APPLICATIONS			
% BY WEIGHT	LBS. LIVE SEED BY ACRE	TYPE OF SEED	
66.0	40.0	CREEPING RED FESCUE	
33.0	20.0	KENTUCKY BLUEGRASS	
100	60.0 # LIVE SEED /ACRE		
CONSERVATION MIX GRASS SEED - FOR USE IN ALL OTHER AREAS			
% BY WEIGHT	LBS. LIVE SEED PER ACRE	TYPE OF SEED	
50	15.0	SMOOTH BROMEGRASS	
17	5.0	RYEGRASS	
33	10.0	BIRDFOOT TREFOIL	
100	30.0 # LIVE SEED/ACRE		

FERTILIZER - 10 LBS. PER 1000S.F.	
SPRING SEEDING	
FALL SEEDING	
LIME - 80 LBS. PER 1000S.F.	
DOLOMITIC GROUND LIMESTONE	
NOT LESS THAN 85% OF THE TOTAL CARBONATE	
TOP SOIL	
4" MINIMUM APPROVED TOPSOIL	
STRAW MULCH - 2 BALES PER 1000S.F.	
APPLY BINDER OR NETTING AS NEEDED	

SEED SPECIFICATION

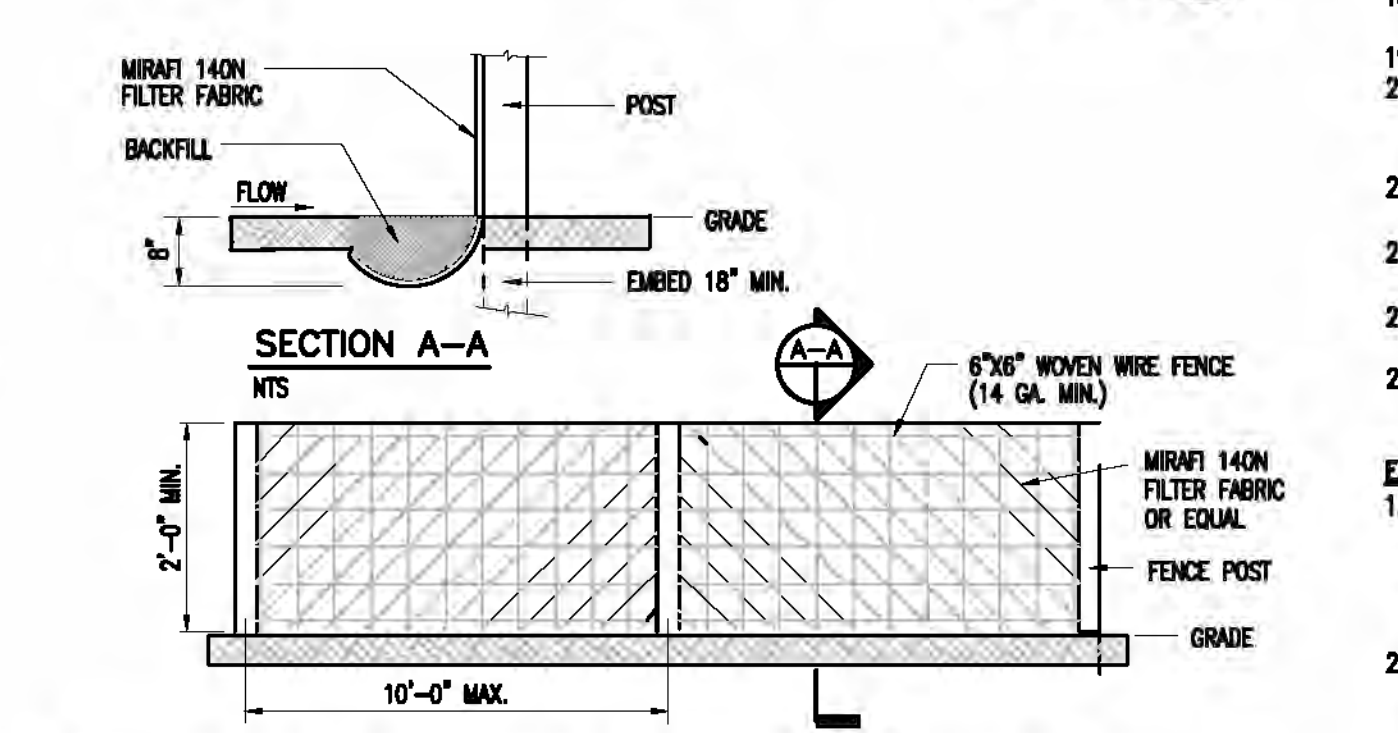
NOT TO SCALE



- NOTES:**
1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN PLANS.
 2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
 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 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 STONES.
 6. REMOVE ACCUMULATED SEDIMENT BEHIND CHECK DAM WHEN 1/2 THE HEIGHT OF THE DAM. REPLACE STONES AS NECESSARY.

STONE CHECK DAM DETAIL

NOT TO SCALE



- NOTES:**
1. WHERE SPACE ALLOWS OR AS NOTED ON THE EPSC PLAN SILT FENCE SHALL BE SUBSTITUTED WITH A WOOD MULCH BERM. REFER TO DETAIL ON THIS SHEET.
 2. SILT FENCE SHALL BE PRE-FABRICATED EROSION CONTROL FENCE BY MIRAFIL OR EQUAL, OR CONSTRUCTED IN PLACE AS SPECIFIED HEREIN.
 3. CONSTRUCTED IN PLACE SILT FENCE:
 - A. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
 - B. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE TIES SPACED EVERY 24" AT TOP OF MID SECTION.
 - C. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6", FOLDED AND STAPLED.
 3. INSPECTION SHALL BE FREQUENT (MINIMUM ONCE A WEEK AND AFTER EVERY RAINFALL). MAINTENANCE SHALL BE PERFORMED AS NEEDED, AND SEDIMENT REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE.

SILT FENCE

NOT TO SCALE

EROSION CONTROL NOTES

- WINTER EROSION CONTROL NOTES**
1. TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE ADDITIONAL STABILIZATION TECHNIQUES SPECIFIED IN THIS SECTION SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 1.
 2. THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE LIMITED TO ONE ACRE AND SHALL BE PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENTS. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR CPESC SPECIALIST, IS REVIEWED AND APPROVED BY NHDES.
 3. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
 4. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
 5. AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHOT ITEM 304.3.
 6. ALL PROPOSED STABILIZATION IN ACCORDANCE WITH THE ABOVE SHALL BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.

- GENERAL EROSION CONTROL NOTES**
1. THE "ON-SITE EROSION CONTROL PLAN COORDINATOR" SHALL BE THE GENERAL CONTRACTOR, THIS INDIVIDUAL SHALL BE PRESENT ON-SITE FROM DAY-TO-DAY, AND SHALL BE RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL MEASURES REQUIRED BY THE EROSION CONTROL PLAN, DETAILS AND NOTES, ARE PROPERLY INSTALLED AND MAINTAINED. THE ONSITE EROSION CONTROL PLAN COORDINATOR SHALL KEEP A WRITTEN RECORD OF INSPECTIONS AND MAINTENANCE OF EROSION CONTROL FEATURES. A COPY OF THESE PLANS AND INSPECTION/MAINTENANCE RECORDS SHALL BE KEPT ONSITE AT ALL TIMES.
 2. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE DISTURBED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS DISTURBED, THE DISTURBANCE SHALL BE KEPT TO THE SHORTEST PRACTICAL DURATION AS APPROVED BY THE OWNER'S REP.
 3. DUST SHALL BE CONTROLLED WITH WATER DISTRIBUTED BY A TRUCK MOUNTED SPRAY BAR. CALCIUM CHLORIDE(MSHTO M 144) OR SODIUM CHLORIDE(MSHTO M 143) SHALL BE USED AS DIRECTED BY THE OWNER'S REP.
 4. ALL EROSION AND STORMWATER CONTROL SYSTEMS SHALL BE INSPECTED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE OCCURRENCE OF A STORM EVENT OF 0.5" OR GREATER. NEEDED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED AS THEY ACCUMULATE AND PLACED IN AREAS WHERE FURTHER EROSION IS UNLIKELY.
 5. A WRITTEN REPORT, STAMPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, SHALL BE SUBMITTED TO THE NHDES WITHIN 24 HOURS OF EACH INSPECTION THAT:
 - A) DESCRIBES THE PROGRESS OF THE PROJECT, INCLUDING WHETHER ALL CONDITIONS OF THE PERMIT ARE BEING MET AND, IF NOT, WHICH REQUIREMENTS ARE NOT BEING MET;
 - B) IF ANY REQUIREMENTS ARE NOT BEING MET, AN EXPLANATION OF THE CORRECTIVE ACTION(S) THAT WILL BE OR ARE BEING TAKEN TO BRING THE PROJECT INTO COMPLIANCE WITH APPLICABLE REQUIREMENTS AND THE DEADLINE BY WHICH SUCH ACTIONS WILL BE COMPLETED; AND
 - C) INCLUDES PHOTOGRAPHS OF THE SITE THAT ARE REPRESENTATIVE OF THE PROJECT; ANDREMAIN A COPY OF THE REPORT PREPARED PURSUANT TO (5), ABOVE, ON-SITE FOR REVIEW DURING SITE INSPECTIONS BY FEDERAL, STATE, AND LOCAL OFFICIALS.
 7. ALL PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
 8. DETENTION BASINS AND SWALES SHALL BE INSTALLED PRIOR TO ROUGH GRADING THE SITE.
 9. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
 10. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
 11. ALL CUT AND FILL SLOPES SHALL BE SEED/ED/LOADED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
 12. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - A) BASE COURSE GRADING HAS BEEN INSTALLED IN AREAS TO BE PLACED;
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
 13. LOT DISTURBANCE OTHER THAN THAT SHOWN ON THE APPROVED PLANS SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.
 14. APPROPRIATE SILTATION/EROSION/TURBIDITY CONTROLS SHALL BE IN PLACE PRIOR TO CONSTRUCTION, SHALL BE MAINTAINED DURING CONSTRUCTION, AND REMAIN IN PLACE UNTIL THE AREA IS STABILIZED. SILT FENCE(S) MUST BE REMOVED ONCE THE AREA IS STABILIZED.
 15. DISCHARGE FROM DEWATERING OF WORK AREAS SHALL BE TO SEDIMENT BASINS THAT ARE:
 - A) LOCATED IN UPLANDS;
 - B) LINED WITH HAY BALES OR OTHER ACCEPTABLE SEDIMENT TRAPPING LINERS;
 - C) SET BACK AS FAR AS POSSIBLE FROM WETLANDS AND SURFACE WATERS, IN ALL CASES WITH A MINIMUM OF 20 FEET OF UNDISTURBED VEGETATED BUFFER.
 16. WITHIN THREE DAYS OF FINAL GRADING, ALL EXPOSED SOIL AREAS SHALL BE STABILIZED BY SEEDING AND MULCHING DURING THE GROWING SEASON, OR IF NOT WITHIN THE GROWING SEASON, BY MULCHING WITH TACK OR NETTING AND PINNING ON SLOPES STEEPER THAN 3:1.
 17. WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY SUSPENDED WITHIN THE GROWING SEASON, ALL EXPOSED SOIL AREAS SHALL BE STABILIZED WITHIN 14 DAYS BY SEEDING AND MULCHING.
 18. WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY SUSPENDED OUTSIDE THE GROWING SEASON, ALL EXPOSED AREAS SHALL BE STABILIZED WITHIN 14 DAYS BY MULCHING AND TACK. SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED BY MATTING AND PINNING.
 19. PROPER HEADWALLS SHALL BE CONSTRUCTED WITHIN SEVEN DAYS OF CULVERT INSTALLATION.
 20. CULVERT OUTLETS SHALL BE PROTECTED IN ACCORDANCE WITH THE DES BEST MANAGEMENT PRACTICES FOR URBAN STORMWATER RUNOFF MANUAL (JANUARY 1996) AND THE STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE (AUGUST 1992).
 21. THE CONTRACTOR RESPONSIBLE FOR COMPLETION OF THE WORK SHALL UTILIZE TECHNIQUES DESCRIBED IN THE NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION (DECEMBER 2008).
 22. DO NOT PLACE THE BIORETENTION SYSTEM INTO SERVICE UNTIL ALL BMPs HAVE BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
 23. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM THE CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
 24. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

- PERMANENT EROSION CONTROL MEASURES:**
1. THE "ON-SITE EROSION CONTROL PLAN COORDINATOR" SHALL BE THE GENERAL CONTRACTOR, THIS INDIVIDUAL SHALL BE PRESENT ON SITE FROM DAY TO DAY, AND SHALL BE RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL MEASURES REQUIRED BY THE EROSION CONTROL PLAN, DETAILS AND NOTES, ARE PROPERLY INSTALLED AND MAINTAINED. THE ONSITE EROSION CONTROL PLAN COORDINATOR SHALL KEEP A WRITTEN RECORD OF INSPECTIONS AND MAINTENANCE OF EROSION CONTROL FEATURES. A COPY OF THESE PLANS AND INSPECTION/MAINTENANCE RECORDS SHALL BE KEPT ONSITE AT ALL TIMES.
 2. HOLD PRE-CONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION, WITH THE CONTRACTOR, OWNER, AND ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING ALL EROSION CONTROL MEASURES DELINEATED ON THE PLANS AND ANY ADDITIONAL MEASURES THAT ARE NECESSARY TO MINIMIZE EROSION. THE CONTRACTOR SHALL HAVE EROSION CONTROL MATERIALS AND INSTALLATION EQUIPMENT ON SITE AT ALL TIMES.
 3. IF POSSIBLE, ALL TEMPORARY EROSION CONTROL MEASURES REQUIRED FOR WORK PROPOSED DURING THE WINTER (BETWEEN OCTOBER 15 AND MAY 1), SHALL BE INSTALLED PRIOR TO OCTOBER 1.
 4. PRIOR TO ANY OTHER WORK, SILT FENCES SHALL BE INSTALLED GENERALLY 10 FEET FROM THE BASE OF THE FILL SLOPES, OR AS SHOWN ON THE EROSION CONTROL PLAN. THESE SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES 6 INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
 5. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT.
 6. INSTALL INLET PROTECTION ON EXISTING AND NEW CATCH BASINS.
 7. ROUGH GRADE AND STOCKPILE TOPSOIL SURROUNDED BY SILT FENCE.
 8. STABILIZE EXPOSED SLOPES AND SOILS AS SOON AS GRADED, AND MAINTAIN UNTIL ADEQUATELY VEGETATED.
 9. COMPLETE FINAL GRADING OF SITE, PLACE TOPSOIL AND PERMANENTLY VEGETATE, LANDSCAPE, AND MULCH.
 10. AFTER THE SITE IS APPROVED BY THE ENGINEER AS ADEQUATELY STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.

- TEMPORARY/CONSTRUCTION EROSION CONTROL MEASURES:**
1. LIMIT LENGTH OF EXPOSURE OF UNSTABILIZED SOIL TO 45 DAYS OR LESS.
 2. HAY SHALL NOT BE USED.
 3. DOUBLE ROW OF STRAW WATTLES SHALL BE INSTALLED ALONG THE WETLAND BOUNDARY. THESE SHALL REMAIN IN PLACE UNTIL THE PROJECT SITE HAS BEEN STABILIZED. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRAW WATTLES WHEN IT BECOMES 6 INCHES DEEP. THE PERIMETER CONTROL WILL BE REPAIRED AS NECESSARY TO MAINTAIN A PROPER SEDIMENT BARRIER.
 4. INSTALL STONE CHECK DAMS IN GRASS-LINED SWALES 50 FEET ON CENTER TO PREVENT SILT FROM WASHING INTO THE DRAINAGE SYSTEM DURING CONSTRUCTION. SEDIMENT SHALL BE REMOVED FROM BEHIND THE DAMS WHEN IT BECOMES 6 INCHES DEEP. STONE CHECK DAMS SHALL BE REMOVED WHEN VEGETATION IS ESTABLISHED.
 5. DROP INLET PROTECTION SHALL BE PROVIDED AROUND ALL EXISTING AND PROPOSED CATCH BASINS. PROTECTION SHALL REMAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED. SEDIMENT SHALL BE REMOVED FROM DROP INLET PROTECTION WHEN THE STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED. GRAVEL WILL BE CLEARED OR REPLACED WHEN IT NO LONGER DRAINS PROPERLY.
 6. EXCAVATED MATERIAL FROM EARTH EXCAVATION AND DITCH DIGGING SHALL BE DISPOSED OF OFFSITE OR USED FOR PROJECT FILL MATERIAL IF DETERMINED SUITABLE BY THE OWNER'S REPRESENTATIVE.
 7. STOCKPILED MATERIAL (TOPSOIL, BORROW, ETC) SHALL HAVE SILT FENCE CONSTRUCTED AROUND THE PERIMETER. THE STOCKPILED MATERIAL SHALL BE SEED/ED AND MULCHED AS SOON AS POSSIBLE TO PREVENT SOIL EROSION AND SEDIMENTATION OFF SITE. LOCATE STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, IF POSSIBLE. DURING WINDY CONDITIONS, STOCKPILED MATERIAL SHALL BE COVERED OR WATERED APPROPRIATELY TO PREVENT WIND EROSION.

- PERMANENT EROSION CONTROL MEASURES:**
1. GRASS LINED SWALES SHALL BE TOP SOILED, SODDED AND FERTILIZED AREAS WHICH EXHIBIT SIGNS OF EROSION SHALL BE RE-SODDED IMMEDIATELY AND MAINTAINED UNTIL SOD HAS PERMANENT HOLD AND IS HEALTHY.
 2. WHEN CONSTRUCTION IS COMPLETED IN AN AREA, IT SHALL BE IMMEDIATELY TOP SOILED, SEED/ED, FERTILIZED AND MULCHED.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUED MAINTENANCE OF ALL DISTURBED AREAS, INCLUDING WATERING, UNTIL THE AREA IS INSPECTED AND ACCEPTED BY THE OWNER OR ENGINEER.
 4. AFTER THE SITE IS STABILIZED, REMOVE ALL TEMPORARY EROSION MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.
 5. RE-SEEDING SHALL BE DONE UNTIL ALL AREAS ARE COMPLETELY COVERED WITH A MATURE STRAND OF GRASS. AN AREA SHALL BE CONSIDERED COVERED WHEN THE ENTIRE SURFACE CONTAINS A VERDOROUS STAND OF GRASS. AREAS THAT, IN THE OPINION OF THE ENGINEER, ARE PREDOMINATELY WEEDS SHALL BE PLOWED UP, FINE GRADED, FERTILIZED AND RE-SEED/ED IN THE MANNER SPECIFIED PREVIOUSLY, EXERCISING CAUTION NOT TO CAUSE DAMAGE TO NEW OR EXISTING PLANT MATERIAL.

SITE PLAN REVIEW

RODE

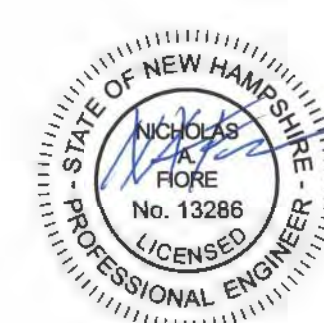
535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

DATE: 08.15.22

SCALE: NOT TO SCALE

EPSC DETAILS

C-408

Page 35 of 57

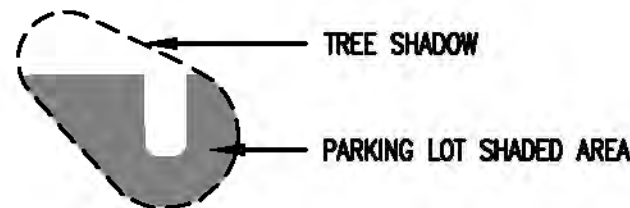
S:\PROJECTS\10-2022\22122 NH LEB WOOLEN MILL\DWGS\10-2022\22122 C-500 SHADE CALCULATIONS.DWG -- PLOTTED: 9/24/2022 6:08 PM

SHADE CALCULATIONS

LOT	PARKING AREA	SHADED AREA	% SHADE
1 FOUNDRY	11,798 SF	3,641 SF	30.8%
43 MECHANIC	3,495 SF	1,153 SF	45.9%

NOTE: SEE LANDSCAPE PLANS FOR PLANTING SCHEDULES AND SPECIFICATIONS

SHADE LEGEND



GRAPHIC SCALE



1 inch = 40 ft.
for sheet size 24" x 36"

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY

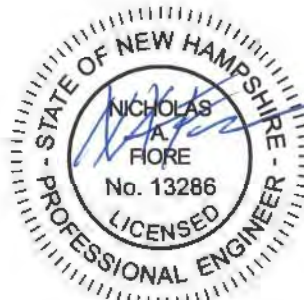
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL

Engineering Ventures, PC
85 Mechanic St Suite E2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE

OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

EV PROJECT: 22122

No.	Description	Date

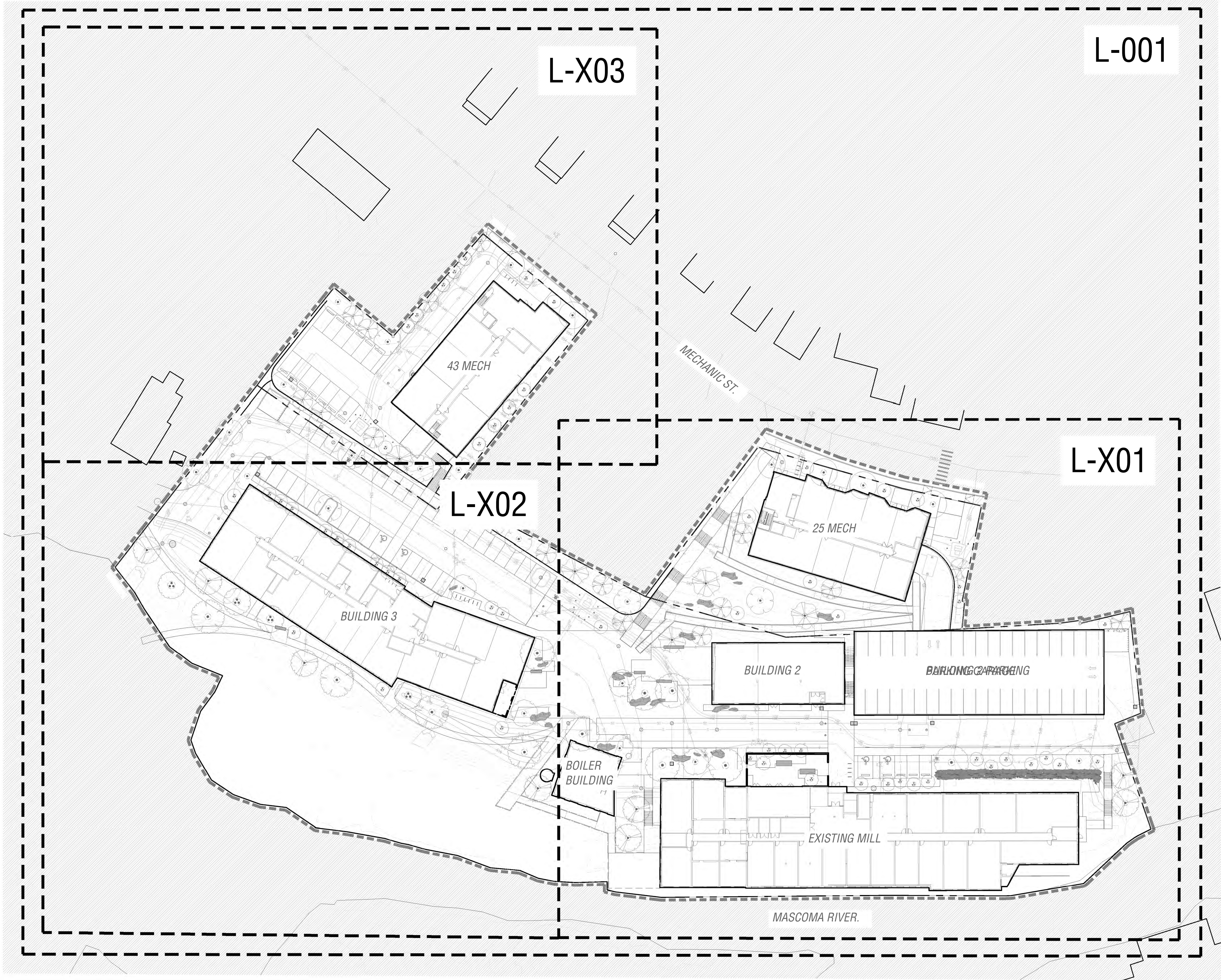
DATE: 08.15.22

SCALE: 1"= 40'

SHADE CALCULATIONS

C-500
Page 36 of 57

Plotted By: Shaina Wong Sheet Set: NH-LWM PERMIT SET Layout: L000 Version: September 23, 2022 10:53:26am Stored: T:\NH-LWM-Lebanon Woolen Mill\NH-LWM-SHEETS\NH-LWM-LO-ORIENTATION PLANS.dwg 5/18/2022 5:23:22 PM



SHEET INDEX

L-000	ORIENTATION PLAN AND GENERAL NOTES
L-001	ILLUSTRATIVE SITE PLAN
L-100	CONSTRUCTION SCHEDULE AND NOTES
L-101	CONSTRUCTION PLAN
L-102	CONSTRUCTION PLAN
L-103	CONSTRUCTION PLAN
L-301	CONSTRUCTION DETAILS
L-302	CONSTRUCTION DETAILS
L-303	CONSTRUCTION DETAILS
L-600	PLANTING SCHEDULE AND NOTES
L-601	PLANTING PLAN
L-602	PLANTING PLAN
L-603	PLANTING PLAN
L-701	PLANTING DETAILS

GENERAL NOTES

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH AND TO LOCATE ALL EXISTING SITE CONDITIONS AND UNDERGROUND UTILITIES, PIPES, AND OTHER SUBSTRUCTURES, AND TO PROTECT THEM FROM DAMAGE. THE EXPENSE OF REPAIR, BODILY INJURY OR REPLACEMENT OF SAID SUBSTRUCTURES INCLUDING DAMAGE OF THE OWNER'S PROPERTY SHALL BE BORN BY THE CONTRACTOR. THE CONTRACTOR SHALL HAND DIG FOOTINGS, TREE WELLS, PLANTING BEDS, ETC. AS REQUIRED. CONTRACTOR IS RESPONSIBLE FOR CONTACTING UTILITY COMPANIES PRIOR TO ANY EXCAVATION.
- LOCATION AND ELEVATION OF ALL EXISTING IMPROVEMENTS WITH AND ADJACENT TO THE AREA OF WORK SHALL BE CONFIRMED BY FIELD MEASUREMENT PRIOR TO EXCAVATION AND CONSTRUCTION OF NEW WORK. EXTREME CARE SHALL BE EXERCISED IN EXCAVATION AND WORKING NEAR EXISTING UTILITIES. REFER TO CIVIL DRAWING FOR GENERAL REFERENCE. CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES, PIPES AND OTHER SUBSTRUCTURES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS, DETAILS AND SPECIFICATIONS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION IN THE FIELD. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE IMMEDIATELY REPORTED TO THE OWNER'S AUTHORIZED REPRESENTATIVE.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, LANDSCAPING, AND FEATURES TO REMAIN ON AND/OR ADJACENT TO THE PROJECT SITE DURING CONSTRUCTION. CONTRACTOR SHALL REPAIR, AT HIS OWN EXPENSE, ALL DAMAGE RESULTING FROM HIS OPERATIONS OR NEGLIGENCE.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO ENFORCE SAFETY MEASURES OR REGULATIONS.
- IN AN EMERGENCY THREATENING THE SAFETY OF LIFE, WORK OR ADJOINING PROPERTY, THE CONTRACTOR IS HEREBY INSTRUCTED TO ACT AT HIS DISCRETION TO PREVENT SUCH LOSS OR INJURY.
- ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND OWNER OR THE OWNER'S AUTHORIZED REPRESENTATIVE AND OWNER SHALL ASSUME THAT THE CONTRACTOR HAS INCORPORATED THE SPECIFIED ITEM.
- DO NOT WILLFULLY PROCEED WITH CONSTRUCTION OF DESIGN WHEN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT CONFLICT WITH THE INFORMATION SHOWN ON THE EXISTING CONDITIONS AND PROPOSED SITE PLANS. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE AND OWNER. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF THE SUBCONTRACTOR'S ACCOMPLISHMENT OF SCOPE OF WORK. CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH OTHER TRADES WORKING ON THE SITE.
- CONTRACTOR SHALL NOTIFY OWNER'S AUTHORIZED REPRESENTATIVE 72 HOURS PRIOR TO COMMENCEMENT OF WORK TO COORDINATE PROJECT INSPECTION SCHEDULES. CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY TO PROVIDE ALL WORK. WORK TO BE COMPLETE IN PLACE AS SPECIFIED.
- CONTRACTOR IS RESPONSIBLE FOR SETTING GRADES ON ALL HARD AND SOFT SURFACES. CONTRACTOR SHALL BE RESPONSIBLE FOR POSITIVE DRAINAGE.
- ALL MATERIALS SHALL BE OF STANDARD, APPROVED AND FIRST GRADE QUALITY AND SHALL BE IN PRIME CONDITION WHEN INSTALLED AND ACCEPTED. ANY COMMERCIAL PROCESSED OR PACKAGED MATERIAL SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL UNOPENED PACKAGING BEARING THE MANUFACTURER'S GUARANTEED ANALYSIS.
- THE CONTRACTOR AGREES TO HOLD THE CITY AND THE A/E HARMLESS FROM ANY CLAIMS ARISING OUT OF HIS OPERATIONS OR THE OPERATIONS OF ANY OF HIS SUBCONTRACTORS, MATERIALS SUPPLIERS, OR AGENTS.
- THE CONTRACT DRAWINGS REPRESENT THE FINISHED CONSTRUCTION AND DO NOT INDICATE METHODS, PROCEDURES, OR SEQUENCE OF CONSTRUCTION. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO MAINTAIN THE INTEGRITY OF STRUCTURES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, CONSTRUCTION, AND MAINTENANCE OF ALL SAFETY DEVICES, INCLUDING SHORING AND BRACING.
- ALL LOCAL, MUNICIPAL, AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THE PROJECT SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR THE ENFORCEMENT OF FEDERAL, AND STATE OCCUPATIONAL SAFETY AND HEALTH REGULATIONS AND REQUIREMENTS.
- THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING A BID. PERMITS FOR ANY CONSTRUCTION DEPICTED IN THESE PLANS SHALL BE OBTAINED BY THE CONTRACTOR.
- DO NOT SCALE ANY DRAWINGS IN THIS SET. ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER THE SCALE SHOWN ON THE PLANS, SECTIONS, AND DETAILS. IN THE EVENT OF DISCREPANCIES, THE CONTRACTOR SHALL REQUEST CLARIFICATIONS FROM THE OWNER'S AUTHORIZED REPRESENTATIVE.
- CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SIDEWALKS, RAMPS, STAIRS AND HANDRAILS COMPLY WITH THE ADA STANDARD REQUIREMENTS. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OR THE OWNER'S AUTHORIZED REPRESENTATIVE OF ANY DISCREPANCIES BETWEEN DESIGN INFORMATION ADA REQUIREMENTS PRIOR TO CONSTRUCTION.

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

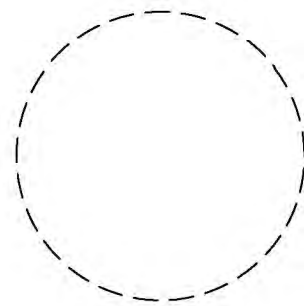
Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

NOT FOR CONSTRUCTION



1 FOUNDRY ST.
LEBANON, NH



PROJECT: NH-LWM

No.	Description	Date

DATE: 08.15.22

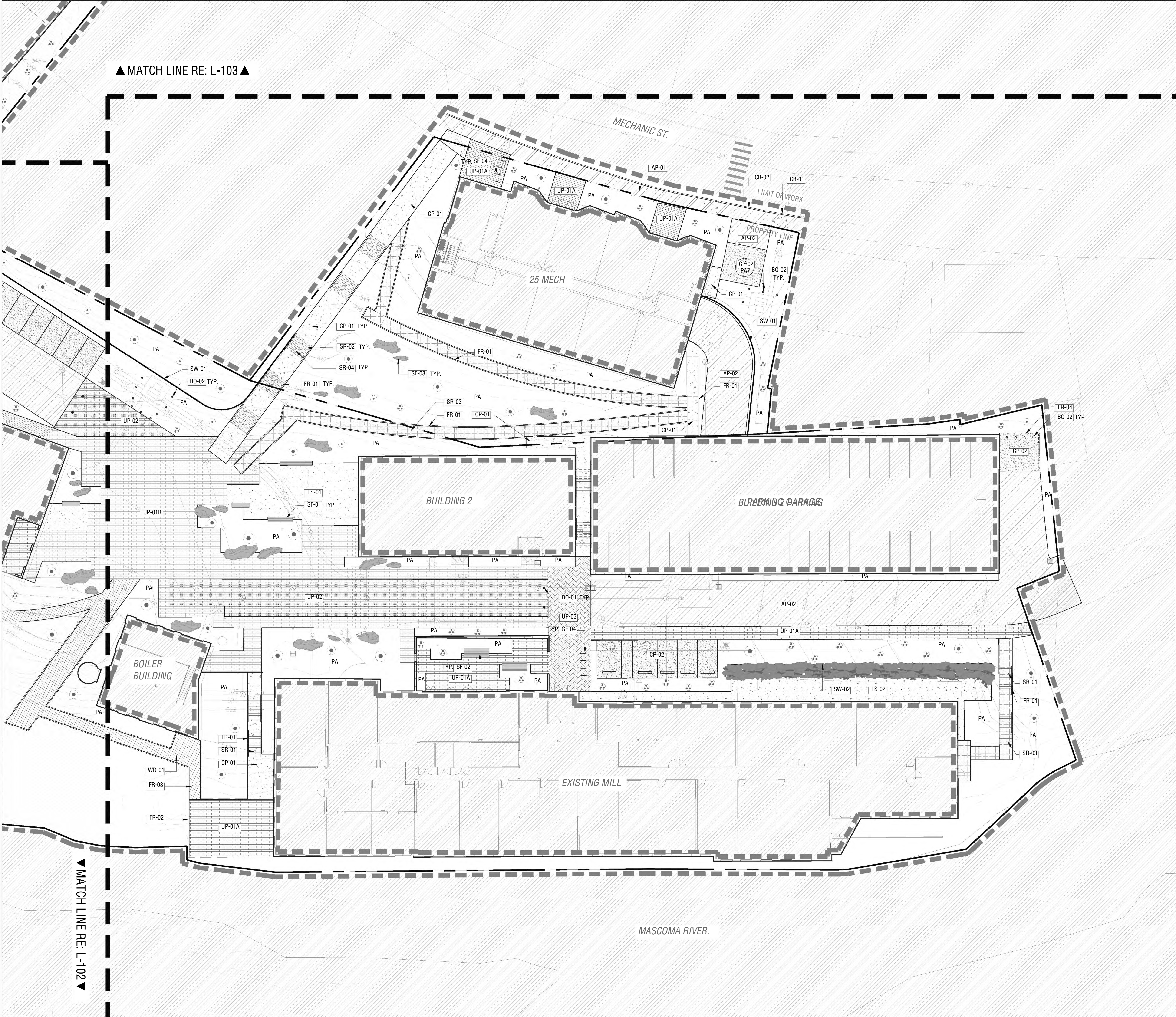
SCALE: 1" = 40'-0"

ORIENTATION PLAN AND GENERAL NOTES

L000

Page 37 of 57

Plotted By: Shaine Wong Sheet Set: NH-LWM PERMIT SET Version: September 23, 2022 10:53:53am Stored: T:\NH-LWM-Lebanon Wooden Mill\NH-LWM-L1-CONSTRUCTION PLANS.dwg 5/18/2022 5:23:22 PM



QUICK REFERENCE LEGEND

REFERENCE L1.00 FOR FULL CONSTRUCTION SCHEDULE

KEY SYM DESCRIPTION

ASPHALT PAVING

AP-01 ASPHALT PAVING - TYPE 1
AP-02 ASPHALT PAVING - TYPE 2

CURBING

CB-01 CURB - TYPE 1
CB-02 CURB - TYPE 2

CONCRETE PAVING

CP-01 CONCRETE PAVING - TYPE 1
CP-02 CONCRETE PAVING - TYPE 2

UNIT PAVING

UP-01A UNIT PAVER - TYPE 1A
UP-01B UNIT PAVER - TYPE 1B
UP-02 UNIT PAVER - TYPE 2
UP-03 UNIT PAVER - TYPE 3

WOOD DECKING

WD-01 WOOD DECKING - TYPE 1

FENCING AND RAILING

FR-01 HANDRAIL - TYPE 1
FR-02 TERRACE GUARD RAIL
FR-03 DECK RAILING
FR-04 SCREENING FENCE (FOR DUMPSTER)

LANDSCAPE MATERIALS

LS-01 DECORATIVE GRAVEL TYPE 1
LS-02 DECORATIVE GRAVEL TYPE 2

STAIRS AND RAMPS

SR-01 STAIRS - TYPE 1
SR-02 STAIRS - TYPE 2
SR-03 RAMP
SR-04 BIKE WHEEL RAMP

SITE WALLS

SW-01 SITE WALL - TYPE 1
SW-02 SITE WALL - TYPE 2

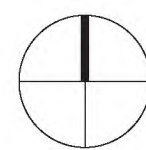
SITE FEATURES

SF-01 BENCH - TYPE 1
SF-02 BENCH - TYPE 2
SF-03 STONE BOULDER
SF-04 BIKE RACK
SF-05 BOLLARD - TYPE 1
SF-06 BOLLARD - TYPE 2

ABBREVIATIONS AND SYMBOLS

PA PLANTING AREA
Tree Locations

0 10 20 40
SCALE: 1"=20'-0"



SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

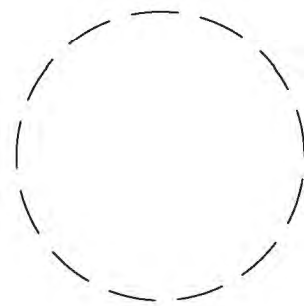
Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

NOT FOR CONSTRUCTION



1 FOUNDRY ST.
LEBANON, NH

PROJECT: NH-LWM

No.	Description	Date

DATE: 08.15.22

SCALE: 1" = 20'-0"

CONSTRUCTION PLANS

L101

Page 39 of 57

Plotted By: Shaine Wong Sheet Set: NH-LWM PERMIT SET Layout: L102 Version: September 23, 2022 10:54:05am Stored: T:\NH-LWM-Lebanon Woolen Mill\NH-LWM-SHEETS\NH-LWM-L1-CONSTRUCTION PLANS.dwg 5/18/2022 5:23:22 PM



QUICK REFERENCE LEGEND

REFERENCE L1.00 FOR FULL CONSTRUCTION SCHEDULE

KEY SYM DESCRIPTION

ASPHALT PAVING

AP-01 ASPHALT PAVING - TYPE 1
AP-02 ASPHALT PAVING - TYPE 2

CURBING

CB-01 CURB - TYPE 1
CB-02 CURB - TYPE 2

CONCRETE PAVING

CP-01 CONCRETE PAVING - TYPE 1
CP-02 CONCRETE PAVING - TYPE 2

UNIT PAVING

UP-01A UNIT PAVER - TYPE 1A
UP-01B UNIT PAVER - TYPE 1B
UP-02 UNIT PAVER - TYPE 2
UP-03 UNIT PAVER - TYPE 3

WOOD DECKING

WD-01 WOOD DECKING - TYPE 1

FENCING AND RAILING

FR-01 HANDRAIL - TYPE 1
FR-02 TERRACE GUARD RAIL
FR-03 DECK RAILING
FR-04 SCREENING FENCE (FOR DUMPSTER)

LANDSCAPE MATERIALS

LS-01 DECORATIVE GRAVEL TYPE 1
LS-02 DECORATIVE GRAVEL TYPE 2

STAIRS AND RAMPS

SR-01 STAIRS - TYPE 1
SR-02 STAIRS - TYPE 2
SR-03 RAMP
SR-04 BIKE WHEEL RAMP

SITE WALLS

SW-01 SITE WALL - TYPE 1
SW-02 SITE WALL - TYPE 2

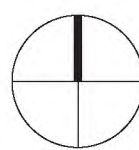
SITE FEATURES

SF-01 BENCH - TYPE 1
SF-02 BENCH - TYPE 2
SF-03 STONE BOULDER
SF-04 BIKE RACK
SF-05 BOLLARD - TYPE 1
SF-06 BOLLARD - TYPE 2

ABBREVIATIONS AND SYMBOLS

PA PLANTING AREA
Tree Locations

0 10 20 40
SCALE: 1"=20'-0"



SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

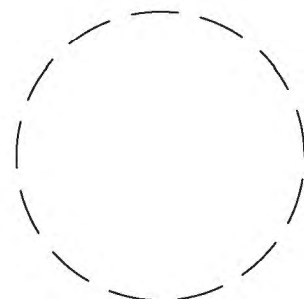
Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

NOT FOR CONSTRUCTION



1 FOUNDRY ST.
LEBANON, NH



PROJECT: NH-LWM

No.	Description	Date

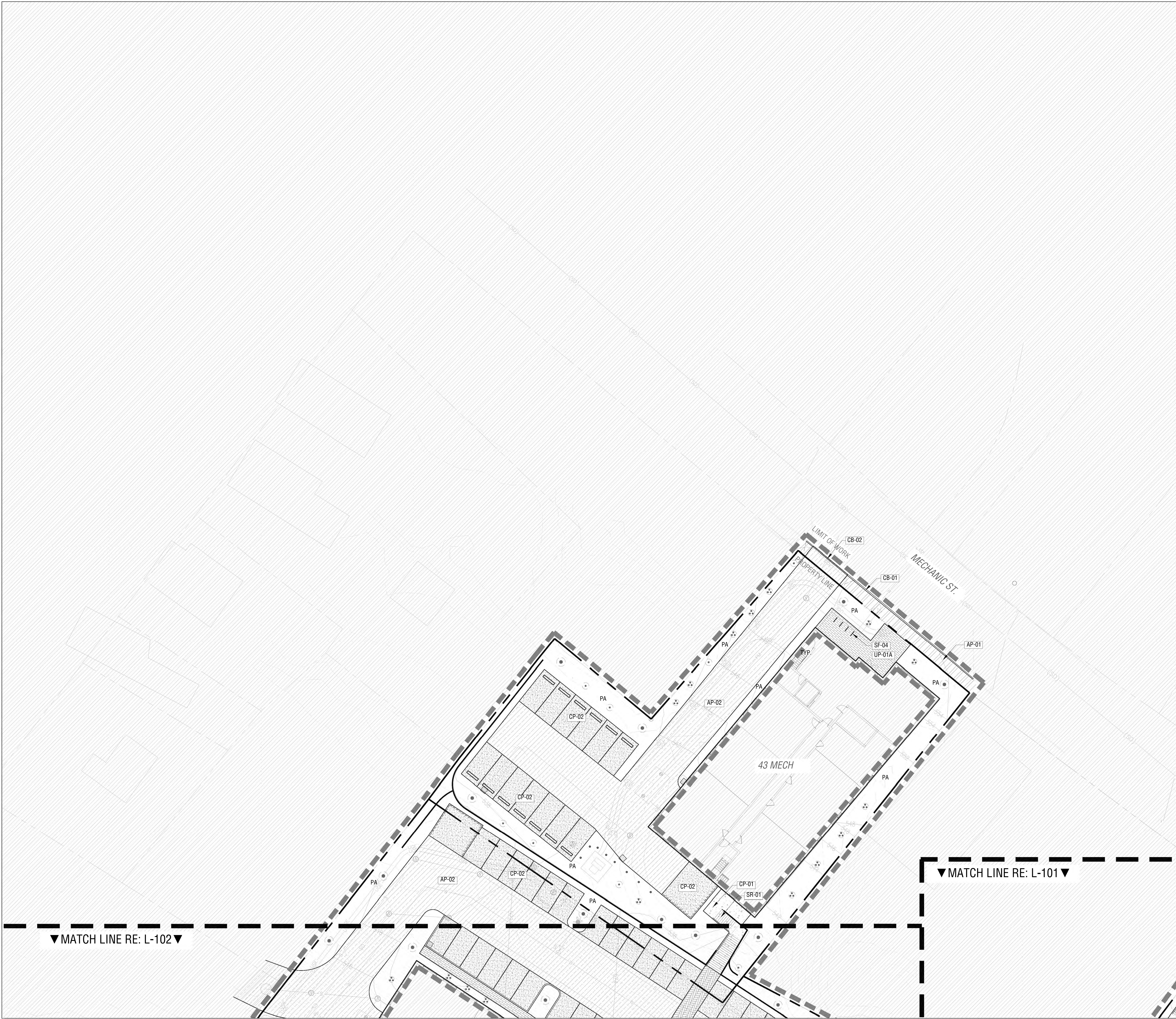
DATE: 08.15.22

SCALE: 1" = 20'-0"

CONSTRUCTION PLANS

L102

Page 40 of 57



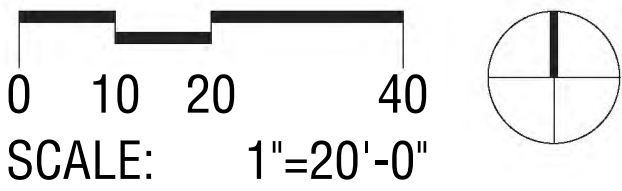
QUICK REFERENCE LEGEND

REFERENCE L1.00 FOR FULL CONSTRUCTION SCHEDULE

KEY	SYM	DESCRIPTION
ASPHALT PAVING		
AP-01		ASPHALT PAVING - TYPE 1
AP-02		ASPHALT PAVING - TYPE 2
CURBING		
CB-01		CURB - TYPE 1
CB-02		CURB - TYPE 2
CONCRETE PAVING		
CP-01		CONCRETE PAVING - TYPE 1
CP-02		CONCRETE PAVING - TYPE 2
UNIT PAVING		
UP-01A		UNIT PAVER - TYPE 1A
UP-01B		UNIT PAVER - TYPE 1B
UP-02		UNIT PAVER - TYPE 2
UP-03		UNIT PAVER - TYPE 3
WOOD DECKING		
WD-01		WOOD DECKING - TYPE 1
FENCING AND RAILING		
FR-01		HANDRAIL - TYPE 1
FR-02		TERRACE GUARD RAIL
FR-03		DECK RAILING
FR-04		SCREENING FENCE (FOR DUMPSTER)
LANDSCAPE MATERIALS		
LS-01		DECORATIVE GRAVEL TYPE 1
LS-02		DECORATIVE GRAVEL TYPE 2
STAIRS AND RAMPS		
SR-01		STAIRS - TYPE 1
SR-02		STAIRS - TYPE 2
SR-03		RAMP
SR-04		BIKE WHEEL RAMP
SITE WALLS		
SW-01		SITE WALL - TYPE 1
SW-02		SITE WALL - TYPE 2
SITE FEATURES		
SF-01		BENCH - TYPE 1
SF-02		BENCH - TYPE 2
SF-03		STONE BOULDER
SF-04		BIKE RACK
SF-05		BOLLARD - TYPE 1
SF-06		BOLLARD - TYPE 2

ABBREVIATIONS AND SYMBOLS

PA	PLANTING AREA
	TREE LOCATIONS



SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

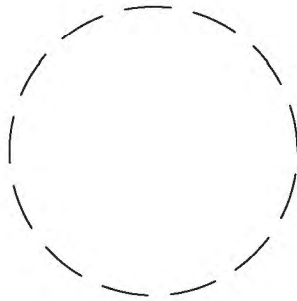
Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

NOT FOR CONSTRUCTION



1 FOUNDRY ST.
LEBANON, NH



PROJECT: NH-LWM

No.	Description	Date

DATE: 08.15.22

SCALE: 1" = 20'-0"

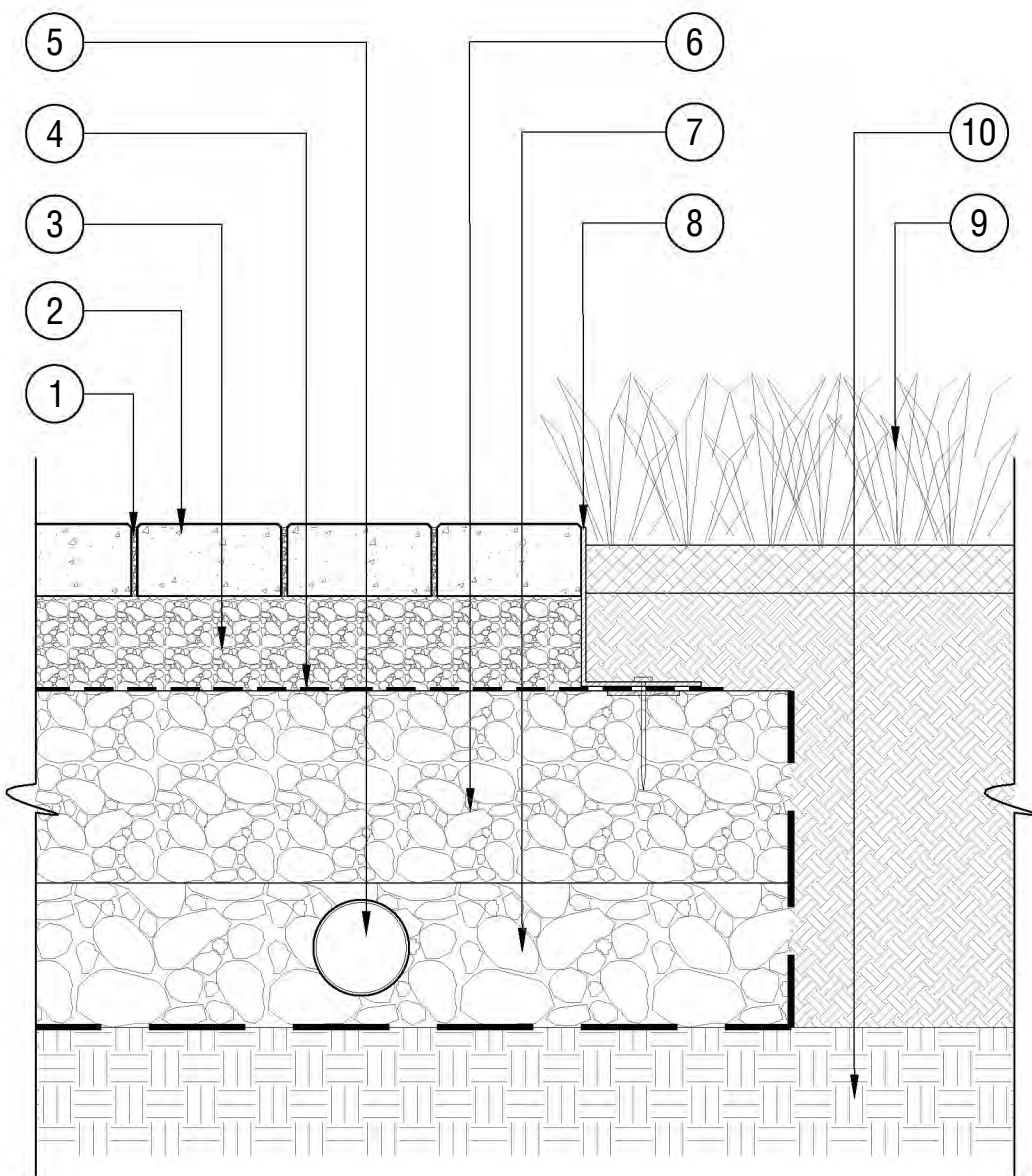
CONSTRUCTION PLANS

L103

Page 41 of 57

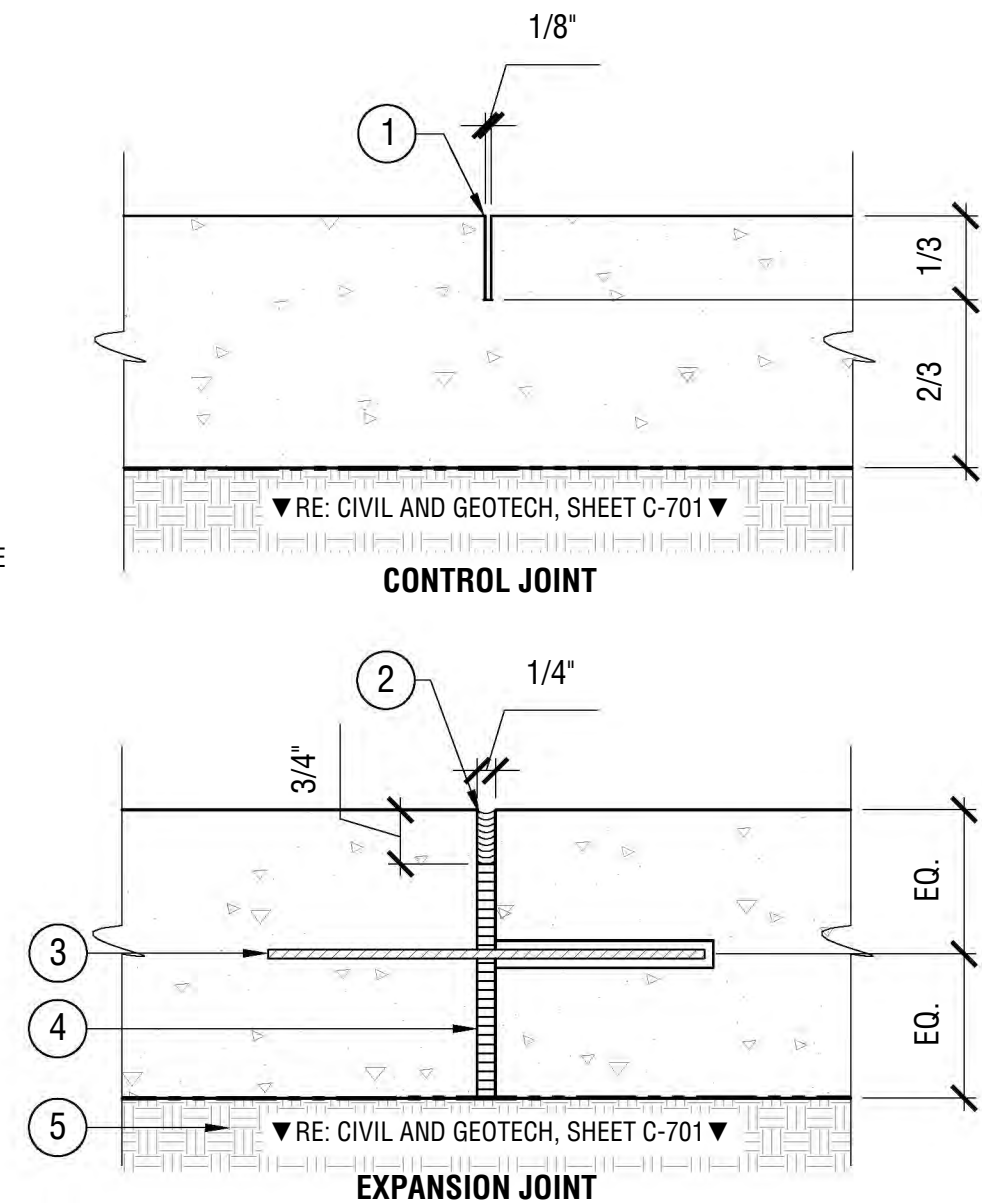
Plotted By: Shaina Wong Sheet Set: NH-LWM PERMIT SET Layout: L301 Version: September 23, 2022 10:54:24am Stored: T:\NH-LWM\Lebanon Wroden\MI\NH-LWM-SHEETS\NH-LWM-L3 CONSTRUCTION DETAILS.dwg 5/18/2022 5:23:22 PM

- 1/4 JOINT FILLED WITH OPEN GRADED STONE (AASHTO #8)
 - BRICK UNIT PAVER; RE: CONSTRUCTION SCHEDULE FOR SIZE, FINISH, AND COLOR, RE: CONSTRUCTION PLANS FOR PAVING LAYOUT
 - CHOKER COURSE; 4" DEPTH 3/4" CRUSHED STONE
 - GEOGRID; EXTEND MIN. 3' UNDER PAVERS AND 6'-12" TO OUTSIDE OF PAVER INSTALLATION
 - 4" CPP PERFORATED UNDERDRAIN AT TOP OF RESERVOIR COURSE; RE: CIVIL
 - FILTER COURSE; 4" DEPTH BACK RUN GRAVEL
 - RESERVOIR COURSE; 6" DEPTH 3/4" CRUSHED STONE
 - METAL EDGE RESTRAINT ATTACHED TO GEOGRID SYSTEM; RE: SPECIFICATIONS
 - ADJACENT PLANTING; RE: PLANTING AND SOIL PLANS
 - COMPACTED SUBGRADE OR INFILTRATION SYSTEM BELOW; RE: CIVIL
- NOTE:
1. REFER TO CIVIL FOR STORMWATER CALCULATIONS AND REQUIREMENTS



- SAW CUT TO BE 1/3 OVERALL DEPTH OF PAVEMENT WHEN NO EXPANSION JOINT IS PRESENT, TYP.
- 1/4" JOINT WITH ELASTOMERIC JOINT SEALANT
- #4 9" STEEL DOWEL SPACED AT 36" O.C. WITH GREASED SLEEVE ON ONE END, TYP.
- 1/4" THICK FOAM EXPANSION JOINT WITH SNAP CAP, TYP.
- PREPARED SUBGRADE; RE: GEOTECH

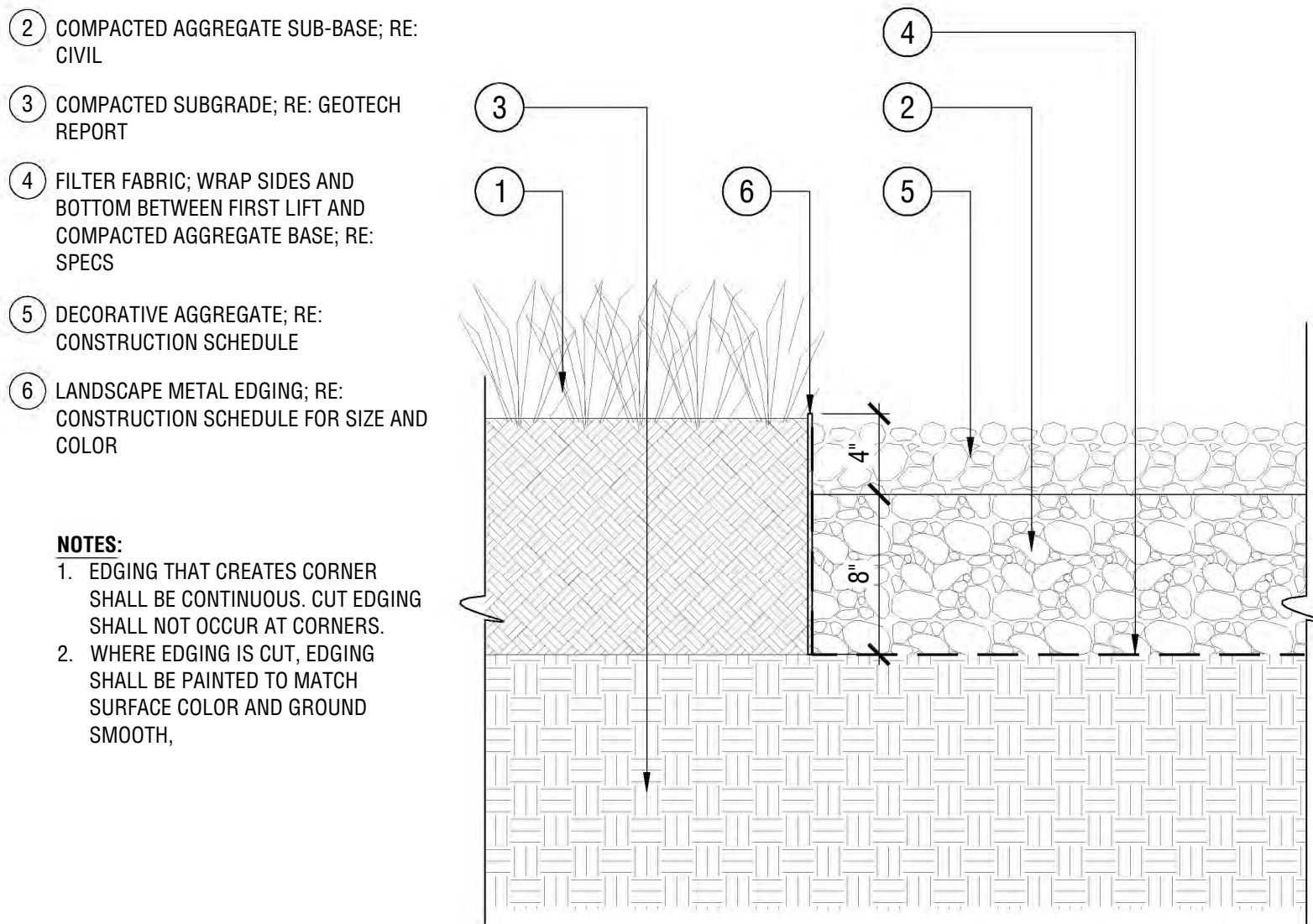
NOTES:
1. CONTRACTOR SHALL REFERENCE HARDSCAPE PLANS FOR JOINT TYPE AND LAYOUT.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF CONCRETE POURS, JOINT TYPE, AND LAYOUT FOR APPROVAL BY LANDSCAPE ARCHITECT.



SECTION - CONTROL JOINT AND EXPANSION JOINT TYPES 03

- ADJACENT LANDSCAPE PLANTING AREA; SEE PLANTING PLANS
- COMPACTED AGGREGATE SUB-BASE; RE: CIVIL
- COMPACTED SUBGRADE; RE: GEOTECH REPORT
- FILTER FABRIC; WRAP SIDES AND BOTTOM BETWEEN FIRST LIFT AND COMPACTED AGGREGATE BASE; RE: SPECS
- DECORATIVE AGGREGATE; RE: CONSTRUCTION SCHEDULE
- LANDSCAPE METAL EDGING; RE: CONSTRUCTION SCHEDULE FOR SIZE AND COLOR

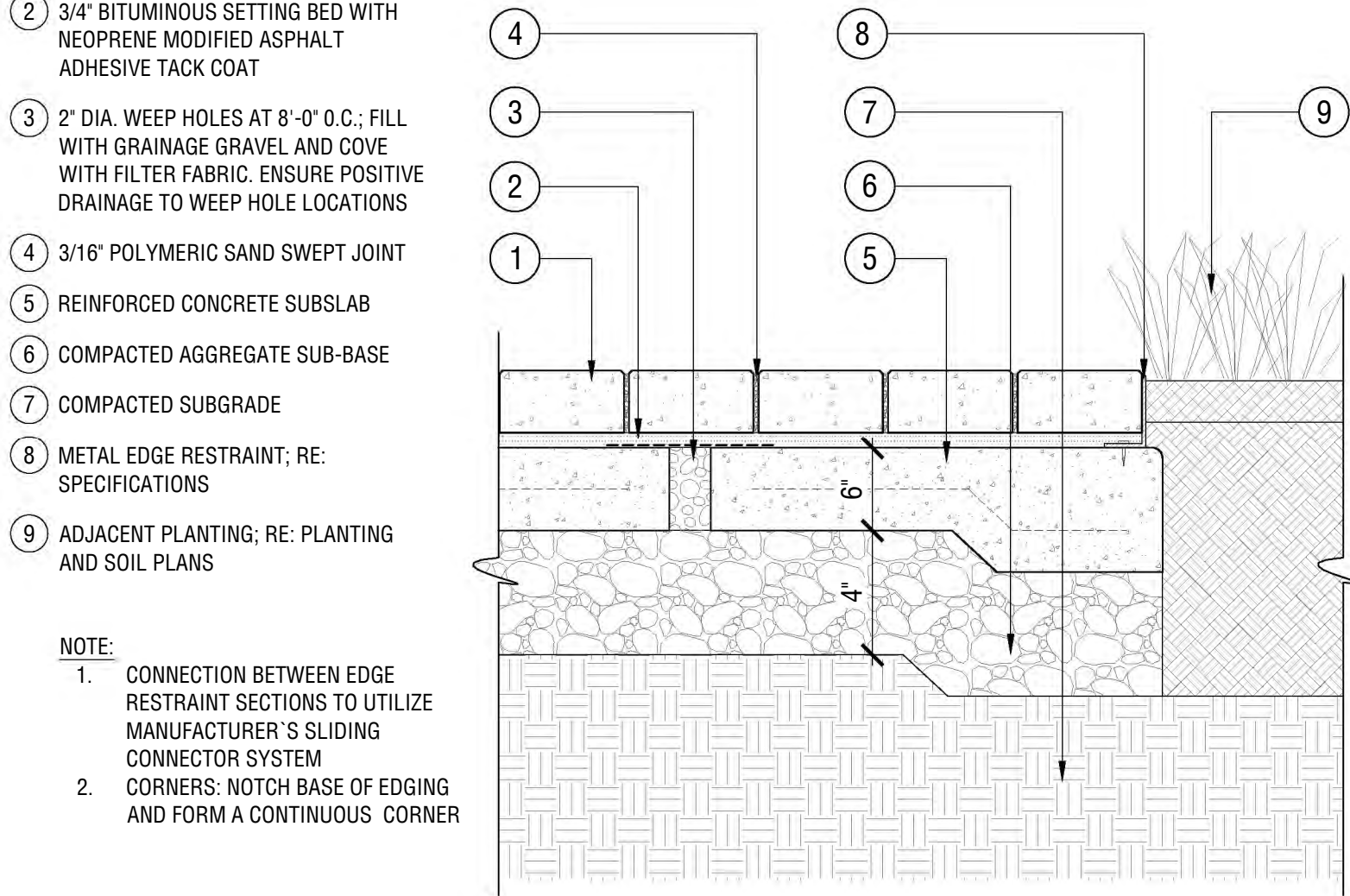
NOTES:
1. EDGING THAT CREATES CORNER SHALL BE CONTINUOUS. CUT EDGING SHALL NOT OCCUR AT CORNERS.
2. WHERE EDGING IS CUT, EDGING SHALL BE PAINTED TO MATCH SURFACE COLOR AND GROUND SMOOTH.



SECTION - DECORATIVE GRAVEL TYPE 2 AT PLANTING 08

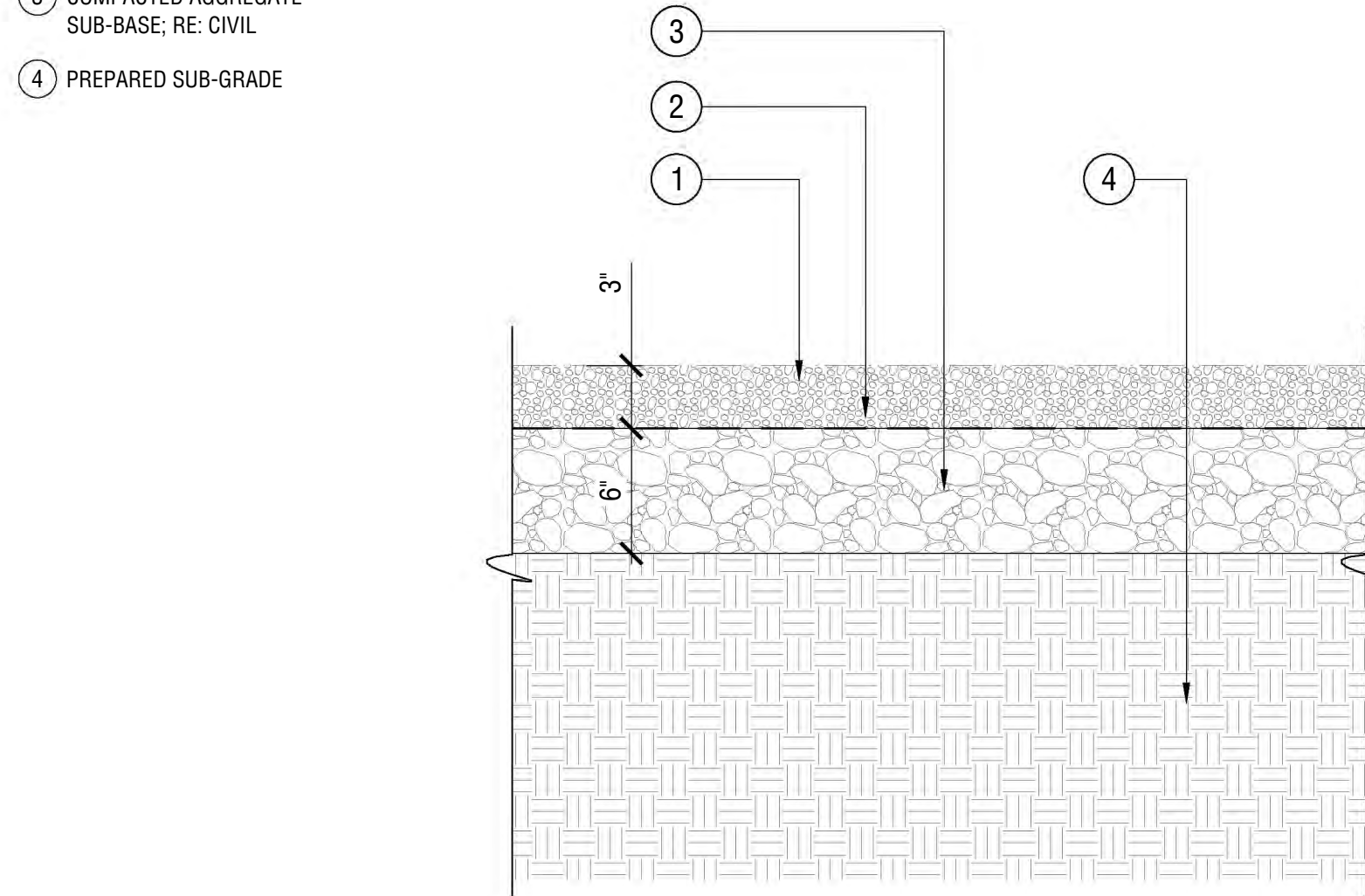
- BRICK UNIT PAVER RE: CONSTRUCTION SCHEDULE FOR SIZE, FINISH, AND COLOR, RE: CONSTRUCTION PLANS FOR PAVING LAYOUT
- 3/4" BITUMINOUS SETTING BED WITH NEOPRENE MODIFIED ASPHALT ADHESIVE TACK COAT
- 2" DIA. WEEP HOLES AT 8'-0" O.C.; FILL WITH GRAINAGE GRAVEL AND COVE WITH FILTER FABRIC. ENSURE POSITIVE DRAINAGE TO WEEP HOLE LOCATIONS
- 3/16" POLYMERIC SAND SWEEP JOINT
- REINFORCED CONCRETE SUBSLAB
- COMPACTED AGGREGATE SUB-BASE
- COMPACTED SUBGRADE
- METAL EDGE RESTRAINT; RE: SPECIFICATIONS
- ADJACENT PLANTING; RE: PLANTING AND SOIL PLANS

NOTE:
1. CONNECTION BETWEEN EDGE RESTRAINT SECTIONS TO UTILIZE MANUFACTURER'S SLIDING CONNECTOR SYSTEM
2. CORNERS: NOTCH BASE OF EDGING AND FORM A CONTINUOUS CORNER



SECTION - UNIT PAVING TYPE 1B & 3 05

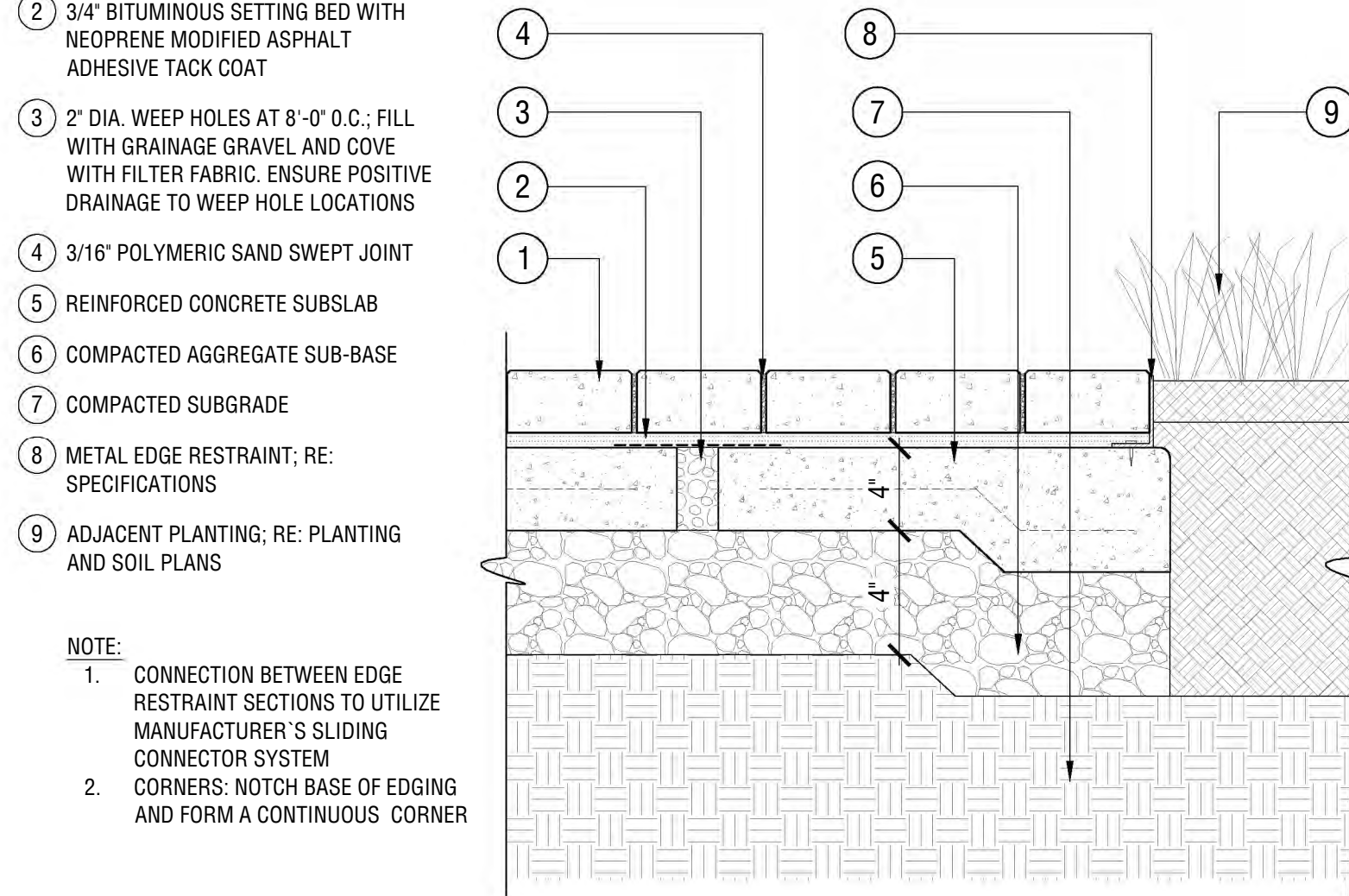
- PERMEABLE DECORATIVE GRAVEL WITH LIQUID STABILIZER
- CONTINUOUS FILTER FABRIC
- COMPACTED AGGREGATE SUB-BASE; RE: CIVIL
- PREPARED SUB-GRADE



SECTION - DECORATIVE GRAVEL TYPE 1 07

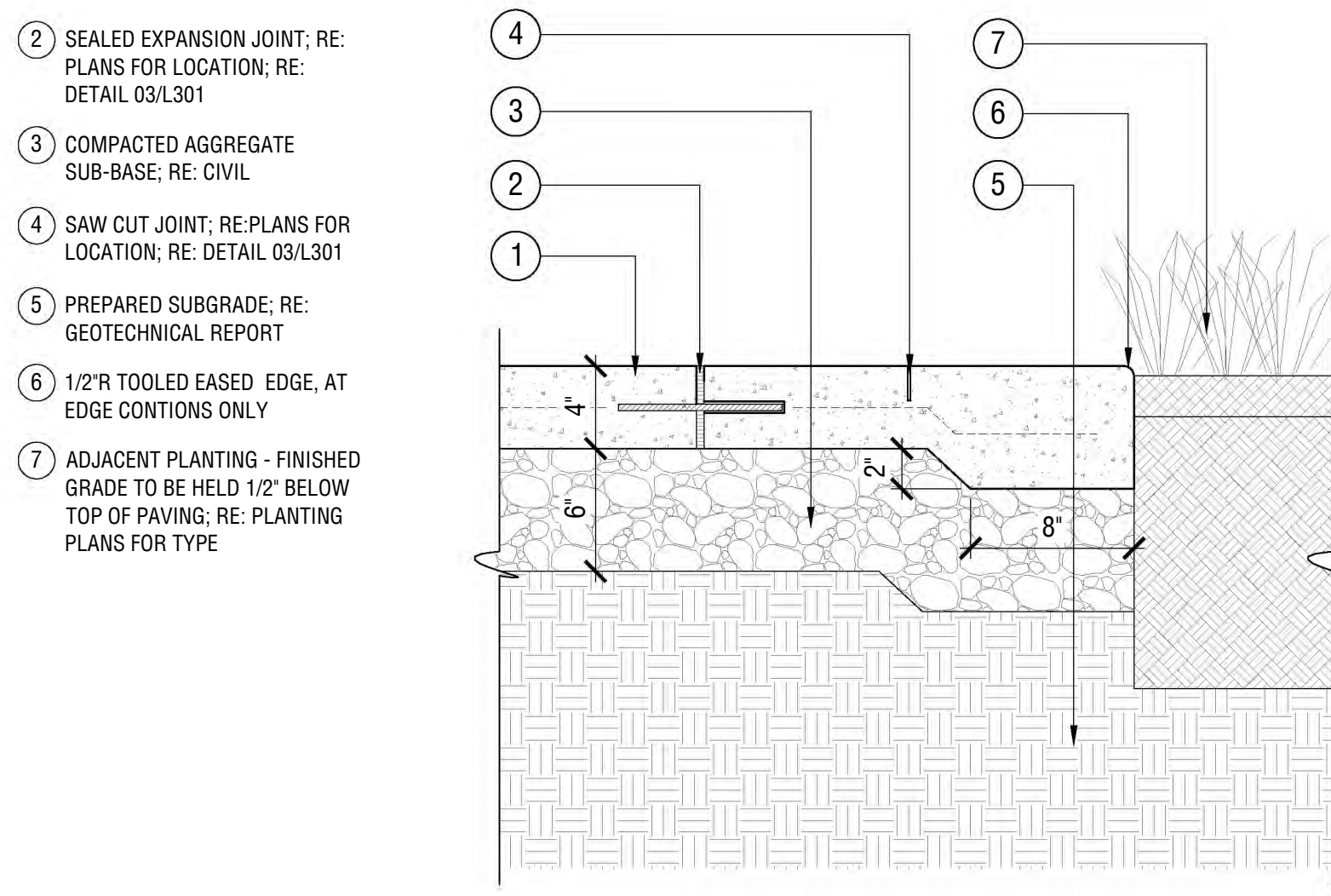
- BRICK UNIT PAVER RE: CONSTRUCTION SCHEDULE FOR SIZE, FINISH, AND COLOR, RE: CONSTRUCTION PLANS FOR PAVING LAYOUT
- 3/4" BITUMINOUS SETTING BED WITH NEOPRENE MODIFIED ASPHALT ADHESIVE TACK COAT
- 2" DIA. WEEP HOLES AT 8'-0" O.C.; FILL WITH GRAINAGE GRAVEL AND COVE WITH FILTER FABRIC. ENSURE POSITIVE DRAINAGE TO WEEP HOLE LOCATIONS
- 3/16" POLYMERIC SAND SWEEP JOINT
- REINFORCED CONCRETE SUBSLAB
- COMPACTED AGGREGATE SUB-BASE
- COMPACTED SUBGRADE
- METAL EDGE RESTRAINT; RE: SPECIFICATIONS
- ADJACENT PLANTING; RE: PLANTING AND SOIL PLANS

NOTE:
1. CONNECTION BETWEEN EDGE RESTRAINT SECTIONS TO UTILIZE MANUFACTURER'S SLIDING CONNECTOR SYSTEM
2. CORNERS: NOTCH BASE OF EDGING AND FORM A CONTINUOUS CORNER



SECTION - UNIT PAVING TYPE 1A 04

- PEDESTRIAN RATED CONCRETE PAVING REINFORCED WITH #4 REBAR AT 18" OC; RE: CONSTRUCTION SCHEDULE FOR COLOR AND FINISH PER TYPE
- SEALED EXPANSION JOINT; RE: PLANS FOR LOCATION; RE: DETAIL 03/L301
- COMPACTED AGGREGATE SUB-BASE; RE: CIVIL
- SAW CUT JOINT; RE: PLANS FOR LOCATION; RE: DETAIL 03/L301
- PREPARED SUBGRADE; RE: GEOTECHNICAL REPORT
- 1/2"R TOOLED EASED EDGE, AT EDGE CONTIONS ONLY
- ADJACENT PLANTING - FINISHED GRADE TO BE HELD 1/2" BELOW TOP OF PAVING; RE: PLANTING PLANS FOR TYPE



SECTION - CONCRETE PAVING TYPE 1 01

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

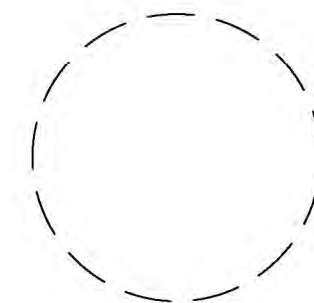
Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OBJ Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

NOT FOR CONSTRUCTION



1 FOUNDRY ST.
LEBANON, NH

PROJECT: NH-LWM

No.	Description	Date

DATE: 08.15.22

SCALE: AS SHOWN

CONSTRUCTION DETAILS

L301

Page 42 of 57

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

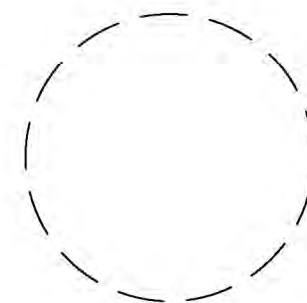
Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OBJ Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

NOT FOR CONSTRUCTION



1 FOUNDRY ST.
LEBANON, NH

SECTION - STAIR TYPE 1
BP-NH.LWM-HS-31

BP-NH.LWM-HS-31

PROJECT: NH-LWM

[illegible]

DATE: 08.15.22

SCALE: AS SHOWN

CONSTRUCTION DETAILS

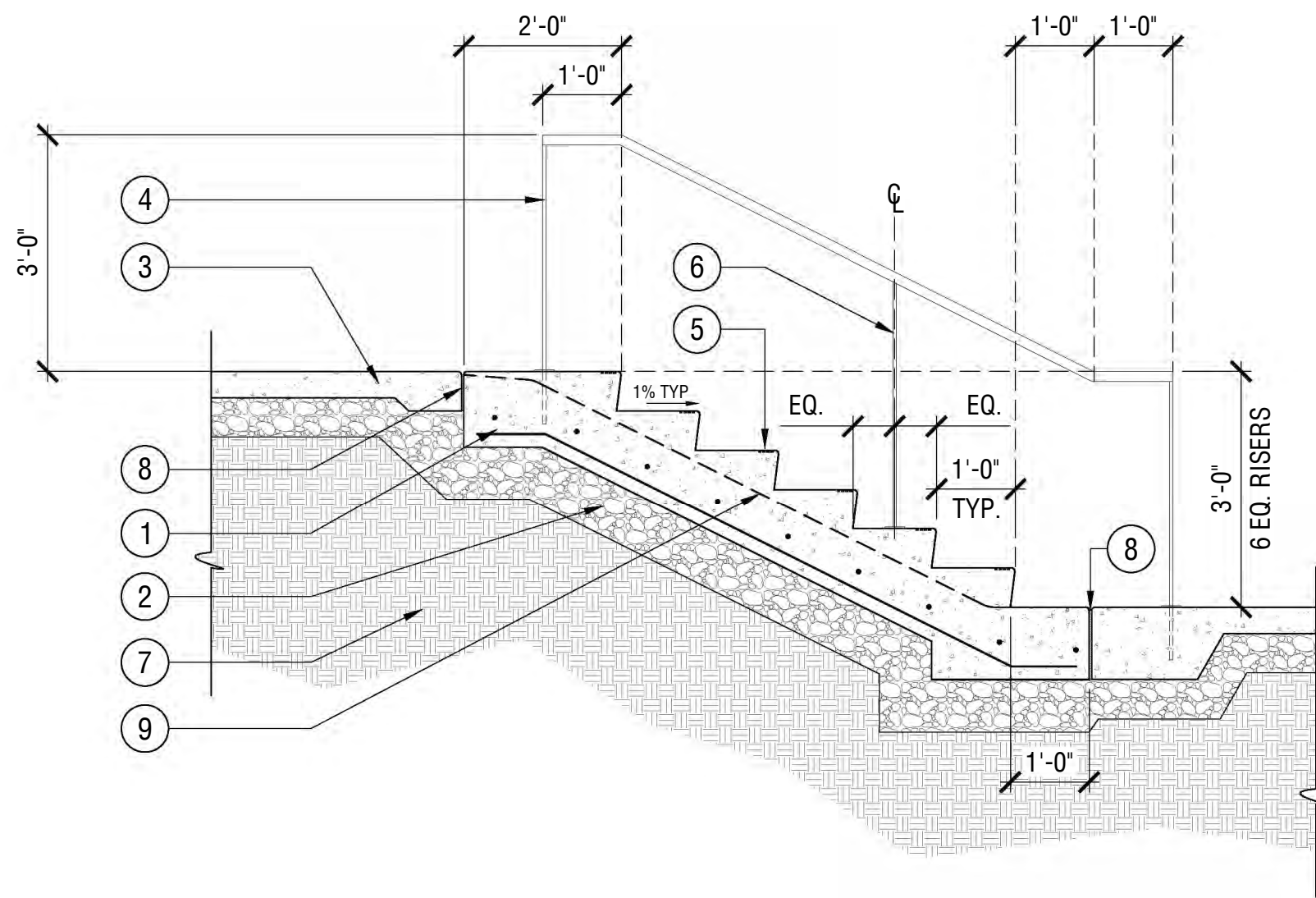
L302

Page 43 of 57

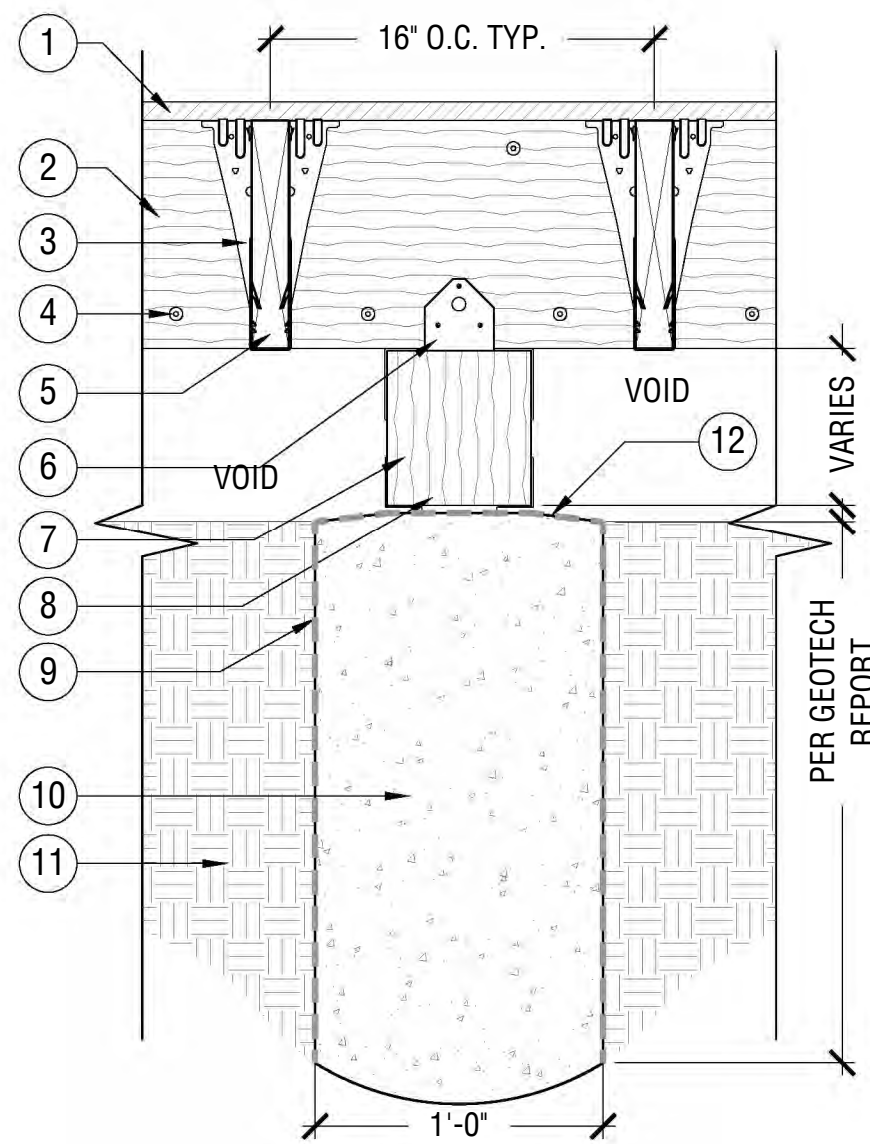
- ① CAST-IN-PLACE REINFORCED CONCRETE STEPS. RISER HEIGHT PER CIVIL GRADING PLANS. CONTRACTOR TO VERIFY IN FIELD. RISER HEIGHT TO BE EQUAL FOR ALL TREADS, AND MIN. 5" TO MAX. 7"
- ② COMPACTED AGGREGATE SUB-BASE, RE: CIVIL
- ③ ADJACENT CONCRETE PAVING, RE: CONSTRUCTION PLANS AND SCHEDULE
- ④ HANDRAIL TYPE 1 (FR-01), RE: CONSTRUCTION SCHEDULE AND TYP. DETAIL
- ⑤ 1/8" SAW CUT STAIN NOISING, TYP. REFER TO TYPICAL ENLIGHTENMENT DETAIL (01/1-302)
- ⑥ INTERMEDIATE HANDRAIL STANCHION
- ⑦ PREPARED SUBGRADE
- ⑧ 1/4" EXPANSION JOINT
- ⑨ FINISH GRADE BEYOND

NOTE:

1. DETAIL FOR DESIGN INTENT ONLY. REFER TO CIVIL FOR SIZING, REINFORCING, AND SUBGRADE CONDITION
2. REFER TO CIVIL DRAWINGS FOR ALL GRADING AND DRAINAGE CONDITIONS. NOTIFY CIVIL ENGINEER AND LA WITH ANY DISCREPANCIES
3. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR LA AND STRUCTURAL REVIEW
4. REFER TO CONSTRUCTION PLAN FOR STAIR LAYOUT AND QUANTITY



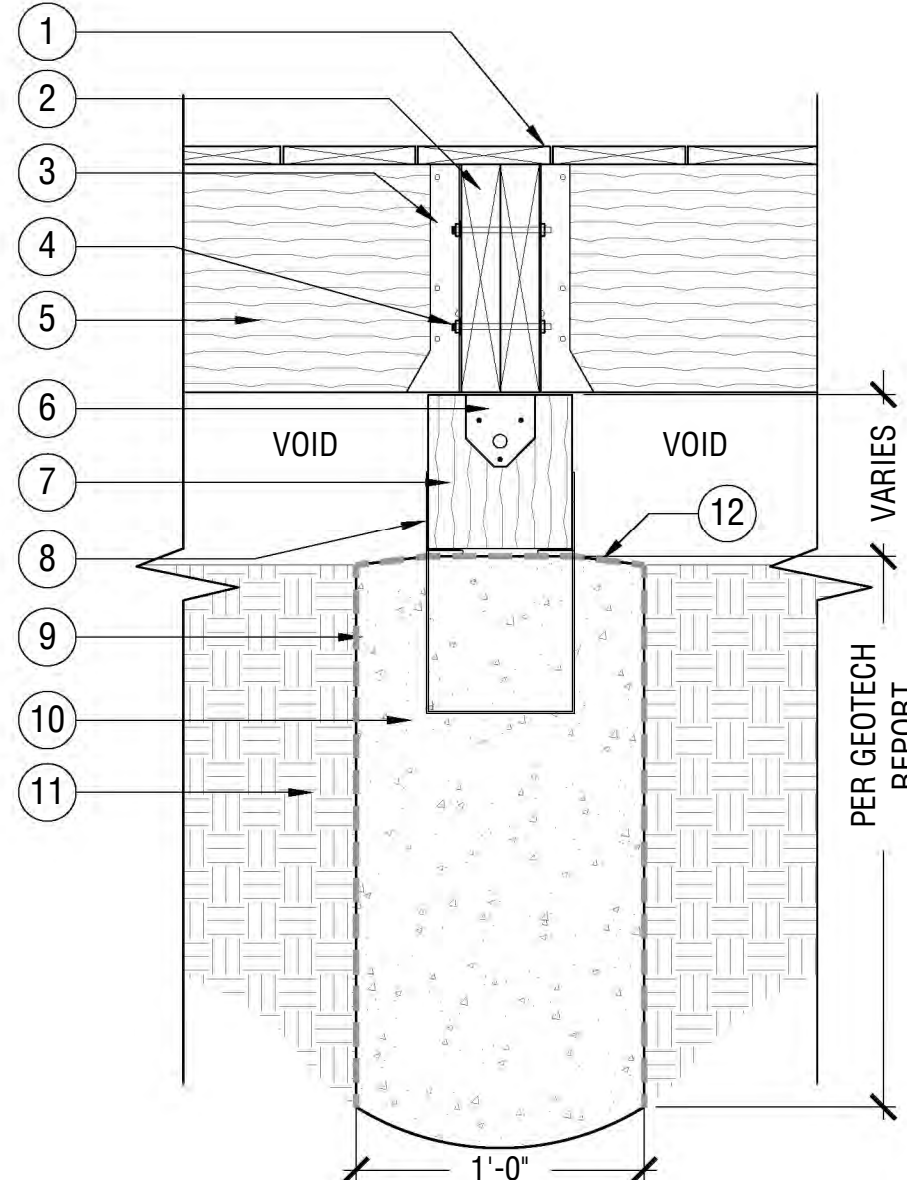
- ① 5/4" X 6 KEROBY DECKING, INSTALL USING TOP-DOWN SMART-BIT SCREWS, ENSURE SCREWS ARE COUNTERSUNK
- ② (2) 2 X 12 PRESSURE TREATED SISTERED BEAM
- ③ LU28 FACE MOUNT HANGER
- ④ GALVANIZED BOLT ASSEMBLY
- ⑤ 2 X 10 PRESSURE TREATED JOIST
- ⑥ BCS 2-2/4 POST CAPS
- ⑦ 4 X 4 PRESSURE TREATED WOOD POST SPACED PER PLANS
- ⑧ MPB442 MOMENT POST BASE EMBEDDED IN CONCRETE PIER
- ⑨ SELF ADHERING ICE AND WATER MEMBRANE, RE: SPECS
- ⑩ REINFORCED CONCRETE PIER
- ⑪ COMPACTED SUB-GRADE
- ⑫ PROVIDE POSITIVE SLOPE AT TOP OF FOOTING Aways FROM POST



SECTION - TYPICAL SISTER JOIST AT CONCRETE PIER

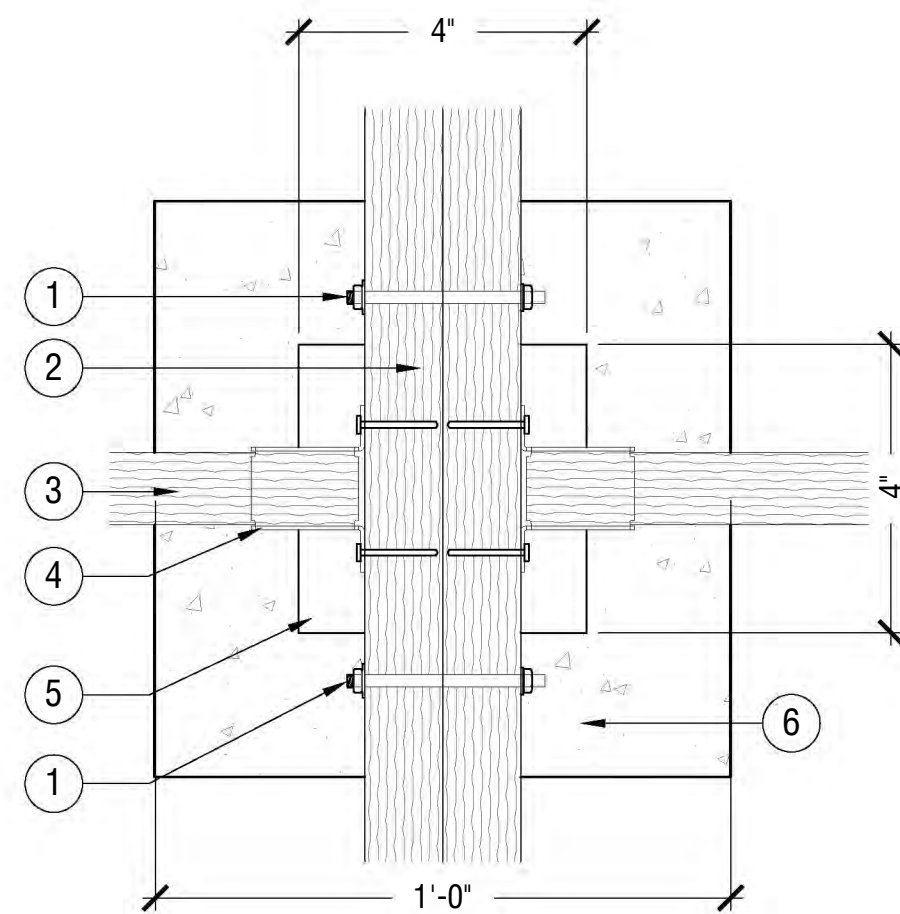
BP-NH.LWM-HS-43

- ① 5/4" x 6" KEROBY DECKING, INSTALL USING TOP-DOWN SMART-BIT SCREWS, ENSURE SCREWS ARE COUNTERSUNK
- ② (2) 2 X 12 PRESSURE TREATED SISTERED BEAM
- ③ LU28 JOIST HANGER
- ④ 3/8" GALVANIZED BOLT ALLEGY WITH FLAT WASHER
- ⑤ 2 X 10 PRESSURE TREATED JOIST
- ⑥ BCS 2-2/4 POST TO BEAM ANCHOR; RE: SPECS
- ⑦ 4 X 4 PRESSURE TREATED WOOD POST SPACED PER PLANS
- ⑧ MPB442 MOMENT POST BASE EMBEDDED IN CONCRETE PIER
- ⑨ SELF ADHERING ICE AND WATER MEMBRANE; RE: SPECS
- ⑩ REINFORCED CONCRETE PIER
- ⑪ COMPACTED SUB-GRADE
- ⑫ PROVIDE POSITIVE SLOPE AT TOP OF FOOTING AWAY FROM POST

SECTION - TYPICAL SISTER JOIST AT CONCRETE PIER 02
RD.NH | WM.HS.41

BP-NH.LVM-HS-41

- 1 3/8" GALVANIZED BOLT ASSEMBLY WITH FLAT WASHER
- 2 2 X 10 PRESSURE TREATED SISTER JOIST OR BEAM
- 3 PRESSURE TREATED JOIST
- 4 GALVANIZED JOIST HANGER
- 5 4 X 4 PRESSURE TREATED POST
- 6 REINFORCED CONCRETE PIER

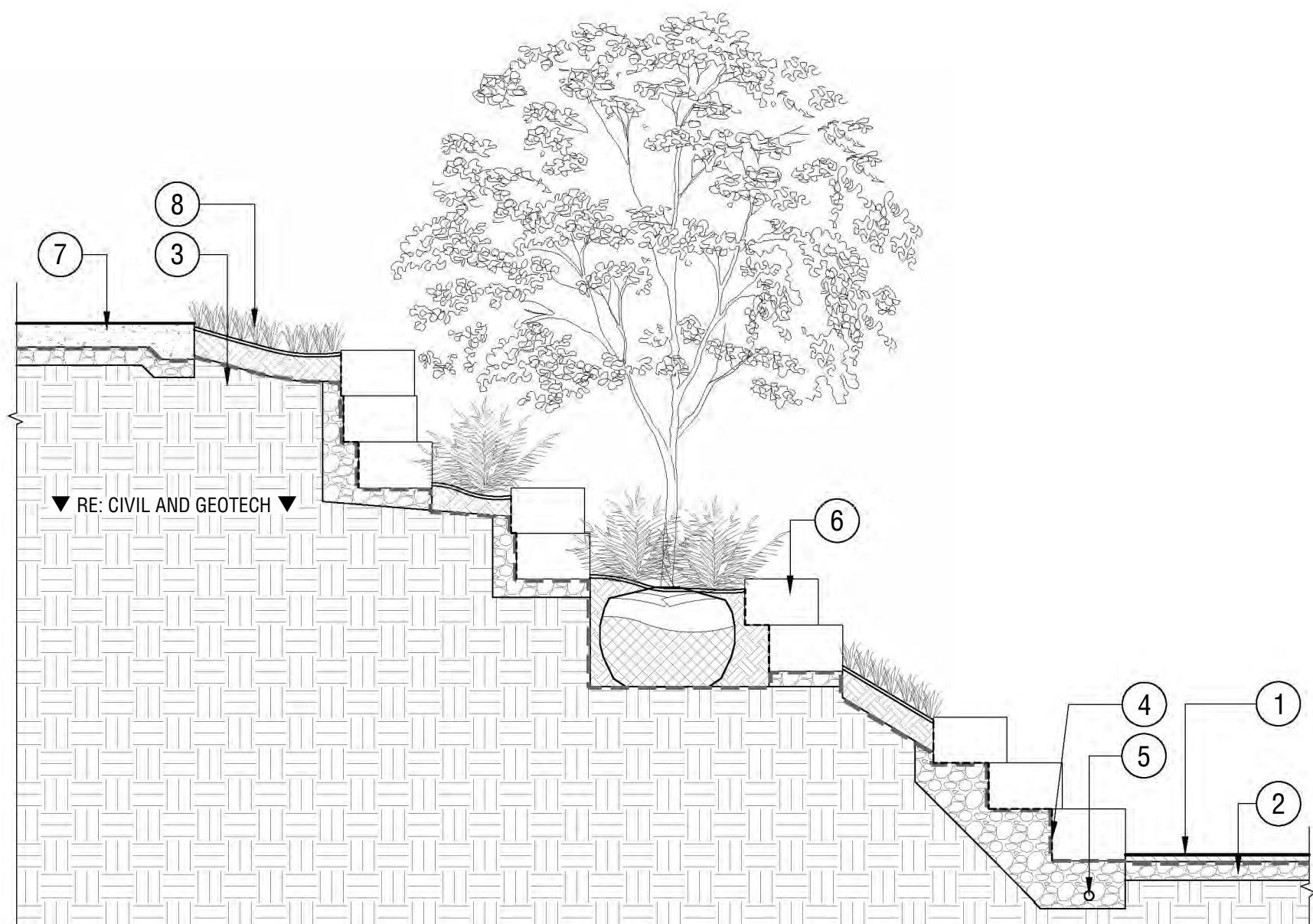


PLAN - TYPICAL POST AND BEAM AT CONCRETE PIER

BP-NH.LWM-HS-42

Plotted By: Shanie Wong Sheet Set: NH-LWM PERMIT SET Layout: L303 Version: September 23, 2022 10:54:30am Stored: T:\NH-LWM\Lebanon Woolen Mill\NH-LWM\SHEETS\NH-LWM-L3 CONSTRUCTION DETAILS.dwg 5/18/2022 5:23:22 PM

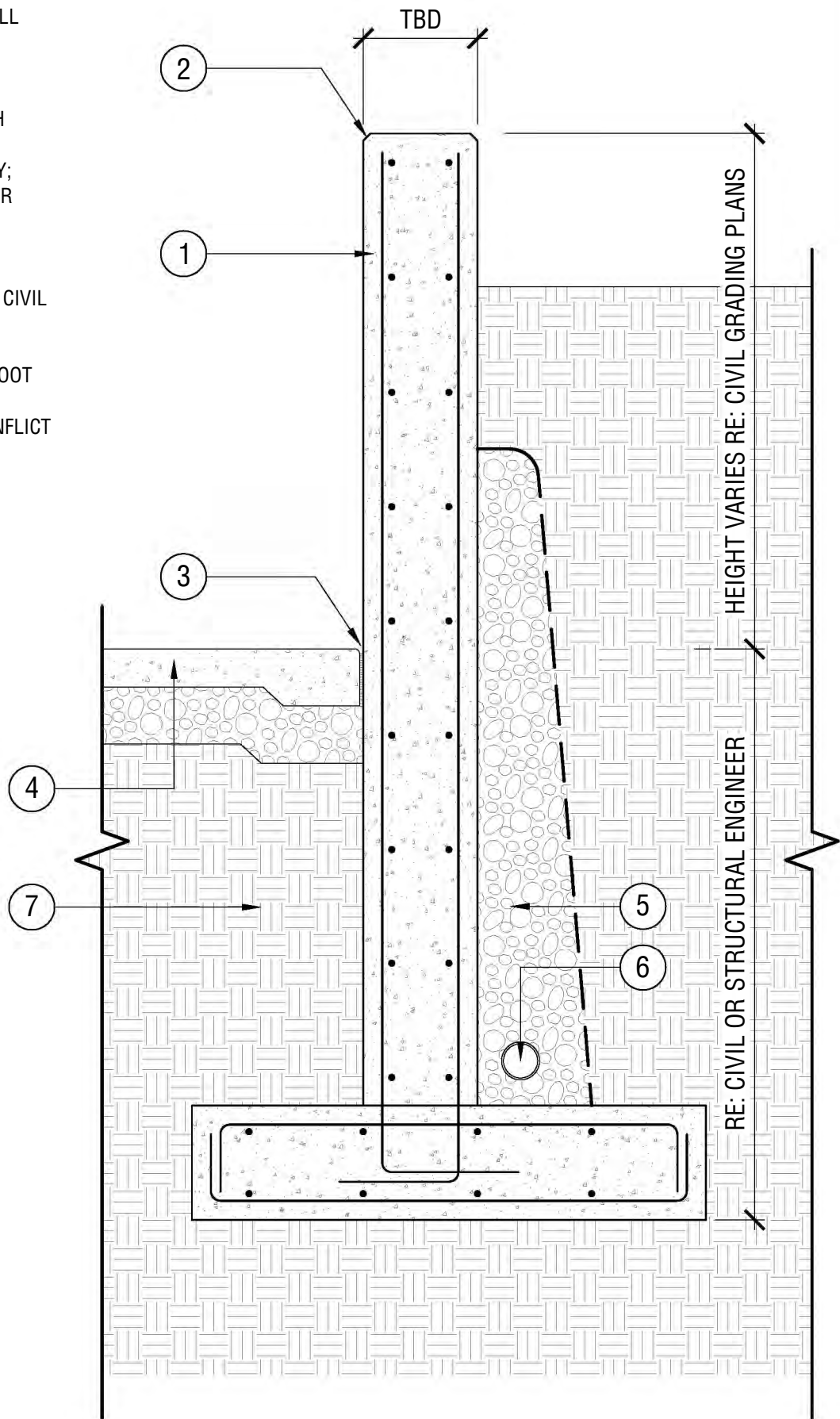
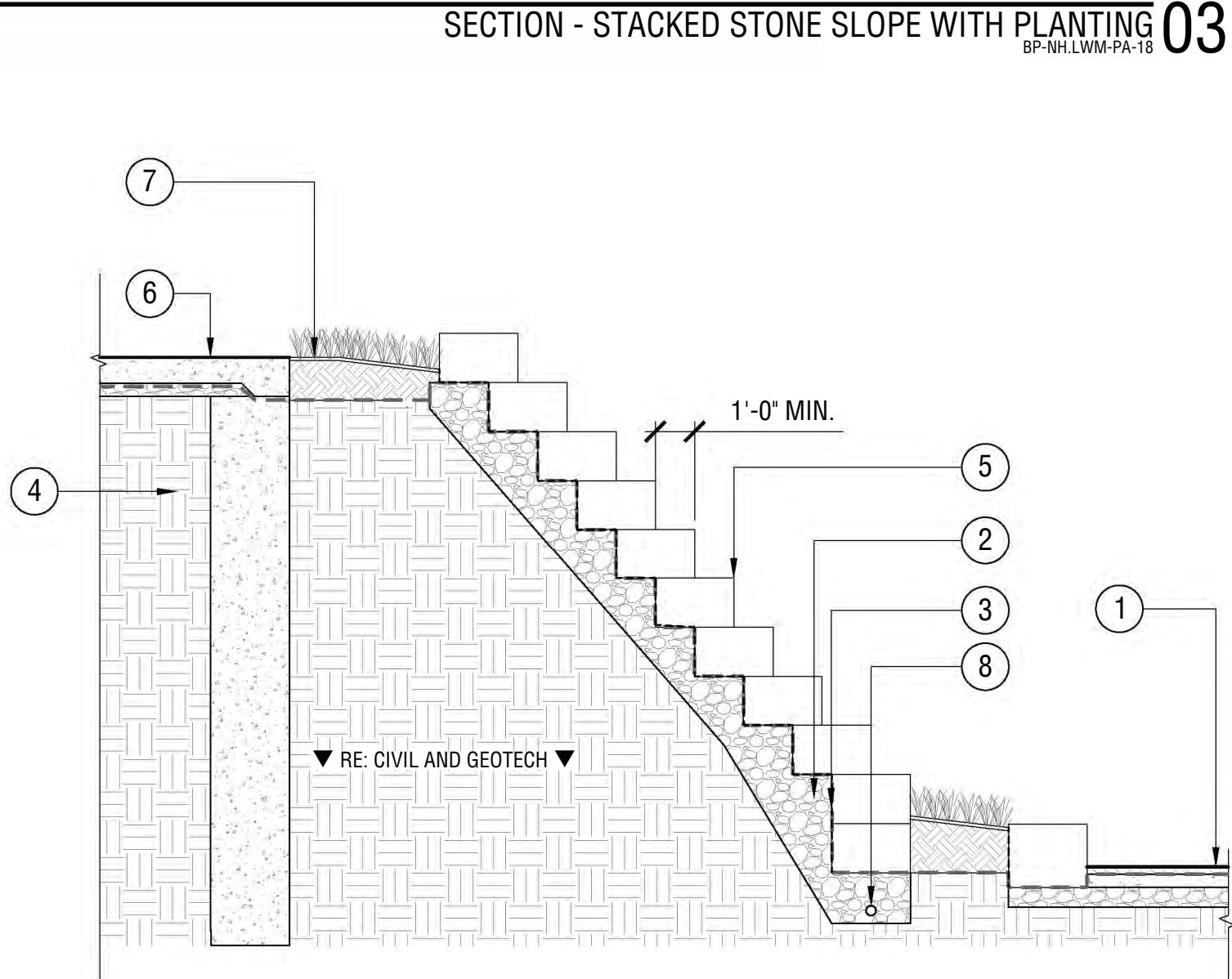
- 1 ADJACENT PAVING, RE: CONSTRUCTION PLANS
- 2 COMPACTED AGGREGATE SUB-BASE, RE: CIVIL
- 3 COMPACTED SUBGRADE, RE: GEOTECH
- 4 FILTER FABRIC, PROVIDE ALONG ENTIRE VERTICAL FACE OF BLOCKS
- 5 PERFORATED DRAIN PIPE
- 6 NATURAL STONE
- 7 ADJACENT PAVING, RE: CONSTRUCTION PLANS
- 8 PLANTING, RE: PLANTING PLANS



- 1 REINFORCED CAST-IN-PLACE CONCRETE RETAINING WALL
- 2 ALL EXPOSED EDGES TO BE CHAMFERED, 1" TYP.
- 3 EXPANSION JOINT BETWEEN RETAINING WALL AND ADJACENT PAVEMENT
- 4 ADJACENT PAVING, REFER TO CONSTRUCTION PLANS
- 5 CRUSHED AGGREGATE, WRAP WITH FILTER FABRIC
- 6 4" PERFORATED DRAIN PIPE; CONNECT TO LANDSCAPE DRAINAGE SYSTEM, RE: CIVIL
- 7 PREPARED SUBGRADE OR STRUCTURAL BACKFILL

NOTES:
1. REFER TO CONSTRUCTION PLAN FOR OVERALL WALL LAYOUT
2. REFER TO CONSTRUCTION SCHEDULE AND SPECIFICATIONS FOR CONCRETE COLOR/FINISH
3. REINFORCING SHOWN FOR REFERENCE ONLY; CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL BY LA AND STRUCTURAL ENGINEER
4. WALL TO BE DESIGNED BY STRUCTURAL OR CIVIL ENGINEER.
5. CONSTRUCTION SHALL NOT DAMAGE ANY ROOT SYSTEMS ADJACENT TO PROTECTED TREES. LANDSCAPE ARCHITECT TO BE NOTIFIED IF CONFLICT WITH WALL LAYOUT AND EXISTING TREES.

- 1 ADJACENT PAVING, RE: CONSTRUCTION PLANS
- 2 COMPACTED AGGREGATE SUB-BASE, RE: CIVIL
- 3 FILTER FABRIC, PROVIDE ALONG ENTIRE VERTICAL FACE OF BLOCKS
- 4 COMPACTED SUBGRADE, RE: GEOTECH
- 5 NATURAL STONE
- 6 ADJACENT PAVING, RE: CONSTRUCTION PLANS
- 7 ADJACENT PLANTING, RE: PLANTING PLANS
- 8 PERFORATED DRAIN PIPE



SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

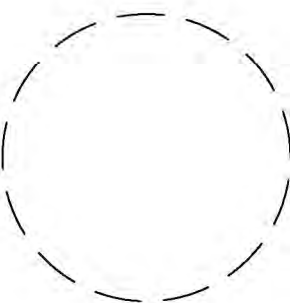
Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OBJ Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

NOT FOR CONSTRUCTION



1 FOUNDRY ST.
LEBANON, NH



PROJECT: NH-LWM

No.	Description	Date

DATE: 08.15.22

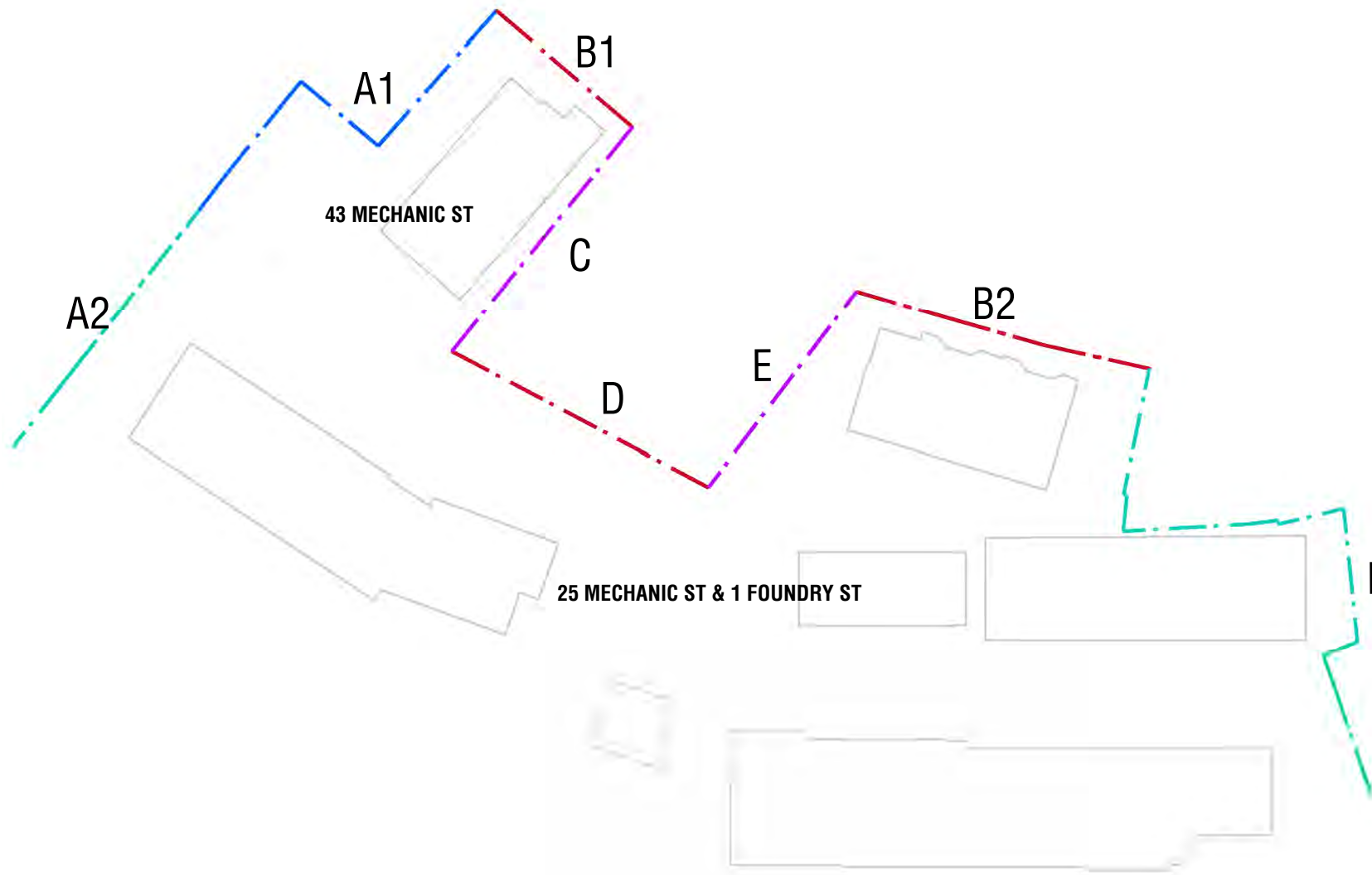
SCALE: AS SHOWN

CONSTRUCTION DETAILS

L303

Page 44 of 57

PERIMETER LANDSCAPING



43 MECHANIC ST

Perimeter A1 <i>(applied for waiver) *</i>	
Area of Planted Frontage	1750 sf

<i>Shade Trees</i>	
Required: 1750/300SF	6
Provided:	6
<i>Understories Trees (applied for waiver)</i>	
Provided:	5

Perimeter B1 (Mechanic St. Frontage)	
Length of Frontage	100'

<i>Shade Trees</i>	
Required: 100' x 15'/600SF	3
Provided:	3
<i>Understories Trees & Shrubs</i>	
Required: (100' x 15'/600SF) x 5	13
Provided:	13

Perimeter C <i>(applied for waiver) *</i>	
Area of Planted Frontage	1451 sf

<i>Shade Trees (applied for waiver)</i>	
Provided:	2
<i>Understories Trees (applied for waiver)</i>	
Provided:	4

25 MECHANIC ST & 1 FOUNDRY ST

Perimeter A2 <i>(applied for waiver) *</i>	
Area of Planted Frontage	968 sf

Perimeter B2 (Mechanic St. Frontage)	
Length of Frontage	170'

<i>Shade Trees</i>	
Required: 170' x 15'/600SF	4
Provided:	4
<i>Understories Trees & Shrubs</i>	
Required: (170' x 15'/600SF) x 5	21
Provided:	21

Perimeter D <i>(applied for waiver) *</i>	
Length of Frontage	158'

<i>Shade Trees</i>	
Required: 158' x 15'/300SF	8
Provided:	8
<i>Understories Trees (applied for waiver)</i>	
Provided:	1

Perimeter E <i>(applied for waiver) *</i>	
Area of Planted Frontage	667 sf

Perimeter F <i>(applied for waiver) *</i>	
Area of Planted Frontage	2501 sf

<i>Shade Trees (applied for waiver)</i>	
Provided:	2
<i>Understories Trees (applied for waiver)</i>	
Provided:	3

PLANTING SCHEDULE

TREES/UNDERSTORIES	CODE	BOTANICAL / COMMON NAME	CALIPER	FORM	COUNT	REMARKS
	AR	ACER RUBRUM / RED MAPLE	2.5" - 3" MIN.	STANDARD	11	MATCHED SPECIMENS, CROWN AND BRANCHES TYPICAL OF SPECIES. PROVIDE BELOW GRADE FREE ANCHOR SYSTEM. AT MATURITY MUST HAVE A TRUNK DIAMETER OF AT LEAST 12 INCHES, MEASURED 4 FEET ABOVE THE GROUND SURFACE.
	AS	ACER SPICATUM / MOUNTAIN MAPLE	2.5" - 3" MIN.	MULTISTEM, STANDARD	18	MATCHED SPECIMENS, CROWN AND BRANCHES TYPICAL OF SPECIES. PROVIDE BELOW GRADE FREE ANCHOR SYSTEM.
	BN1	BETULA NIGRA / RIVER BIRCH	2.5" - 3" MIN.	MULTISTEM	4	MATCHED SPECIMENS, CROWN AND BRANCHES TYPICAL OF SPECIES. PROVIDE BELOW GRADE FREE ANCHOR SYSTEM.
	BP1	BETULA PAPPYRIFERA / PAPER BIRCH	2.5" - 3" MIN.	STANDARD	7	MATCHED SPECIMENS, CROWN AND BRANCHES TYPICAL OF SPECIES. PROVIDE BELOW GRADE FREE ANCHOR SYSTEM.
	BP2	BETULA POPULIFOLIA / GRAY BIRCH	2.5" - 3" MIN.	MULTISTEM, STANDARD	6	MATCHED SPECIMENS, CROWN AND BRANCHES TYPICAL OF SPECIES. PROVIDE BELOW GRADE FREE ANCHOR SYSTEM.
	CC	CARPINUS CAROLINIANA / AMERICAN HORNBEEAM	2.5" - 3" MIN.	STANDARD	8	MATCHED SPECIMENS, CROWN AND BRANCHES TYPICAL OF SPECIES. PROVIDE BELOW GRADE FREE ANCHOR SYSTEM.
	GT	GLEDTISIA TRIACANTHS INERMIS / THORNLESS HONEY LOCUST	2.5" - 3" MIN.	STANDARD	8	MATCHED SPECIMENS, CROWN AND BRANCHES TYPICAL OF SPECIES. PROVIDE BELOW GRADE FREE ANCHOR SYSTEM. AT MATURITY MUST HAVE A TRUNK DIAMETER OF AT LEAST 12 INCHES, MEASURED 4 FEET ABOVE THE GROUND SURFACE.
	PP	PRUNUS PENNSYLVANICA / PIN CHERRY	2.5" - 3" MIN.	STANDARD	6	MATCHED SPECIMENS, CROWN AND BRANCHES TYPICAL OF SPECIES. PROVIDE BELOW GRADE FREE ANCHOR SYSTEM.
	SN	SALIX NIGRA / BLACK WILLOW	2.5" - 3" MIN.	STANDARD	4	MATCHED SPECIMENS, CROWN AND BRANCHES TYPICAL OF SPECIES. PROVIDE BELOW GRADE FREE ANCHOR SYSTEM.
UNDERSTORIES	CODE	BOTANICAL / COMMON NAME	CALIPER	FORM	COUNT	REMARKS
	AC	AMELANCHIER CANADENSIS / SHADOW SERVICEBERRY	1" - 2"	MULTISTEM	15	MATCHED SPECIMEN
	BN2	BETULA NIGRA / RIVER BIRCH	1" - 2"	MULTISTEM	32	MATCHED SPECIMEN
	CE	CORNUS X EDDIE'S WHITE WONDER / WHITE WONDER DOGWOOD	1" - 2"	MULTISTEM	9	MATCHED SPECIMEN
GROUND COVERS	CODE	PLANTING MIX	SPACING	FORM		REMARKS
	PA 1	PLANTING MIX 1 - WILDLIFE SEED MIX	PER SUPPLIER			NEW ENGLAND "CONSERVATION/WILDLIFE" SEED MIX, MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC. APPLY SEED MIX AT A RATE OF 25LBS/ACRE
	PA 2	PLANTING MIX 2 - NO-MOW SEED MIX	PER SUPPLIER			PRAIRIE NURSERY STANDARD NO-MOW SEED MIX PRODUCT, MANUFACTURED BY PRAIRIE NURSERY, INC. APPLY SEED MIX AT A RATE OF 300LBS/ACRE
	PA 3	PLANTING MIX 3 - MILL YARD	18" - 24" O.C.			SPECIES INCLUDE: <i>Carex pensylvanica</i> , <i>Limonium carolinianum</i> , <i>Solidago bicolor</i> , <i>Carex stricta</i> , <i>Schizachyrium-scoparium</i> , <i>Calamagrostis canadensis</i> , <i>Baptisia australis</i> , <i>Panicum-virgatum</i> ; OR SIMILAR NATIVES IN 1-2 GAL.
	PA 4	PLANTING MIX 4 - FRONTAGE	18" - 24" O.C.			60% FLOWERING PLANTS, 40% EVERGREEN. SPECIES INCLUDE: <i>Aster novae-angliae</i> , <i>Kalmia angustifolia</i> , <i>Rosa virginiana</i> , <i>Juniperus communis</i> , <i>Taxus canadensis</i> ; OR SIMILAR NATIVES. ALL SHRUBS TO BE 24"-30" MIN IN HEIGHT AND/OR 18" - 24" INCHES IN SPREAD AT INSTALLATION.
	PA 5	PLANTING MIX 5 - BIOSWALE SEED MIX	PER SUPPLIER			PRAIRIE NURSERY BIOSWALE SEED MIX PRODUCT, MANUFACTURED BY PRAIRIE NURSERY, INC. APPLY SEED MIX AT A RATE OF 10LBS/ACRE
	PA 6	PLANTING MIX 6 - WETLAND SEED MIX	PER SUPPLIER			NEW ENGLAND WETMIX "WETLAND" SEED MIX PRODUCT, MANUFACTURED BY NEW ENGLAND WETLAND PLANTS, INC. APPLY SEED MIX AT A RATE OF 18LBS/ACRE
	PA 7	PLANTING MIX 7 - SCREENING SHRUB	72" O.C.			SPECIES INCLUDE: <i>Rhododendron macrophyllum</i> ; OR SIMILAR NATIVES IN 5 GAL. ALL SHRUBS TO BE 4' IN HEIGHT AND/OR 4' IN SPREAD AT INSTALLATION.

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

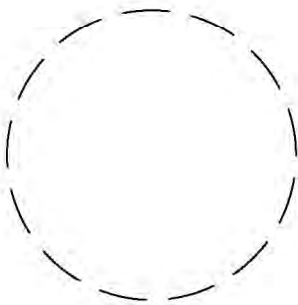
Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OBJ Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

NOT FOR CONSTRUCTION



1 FOUNDRY ST.
LEBANON, NH

PROJECT: NH-LWM

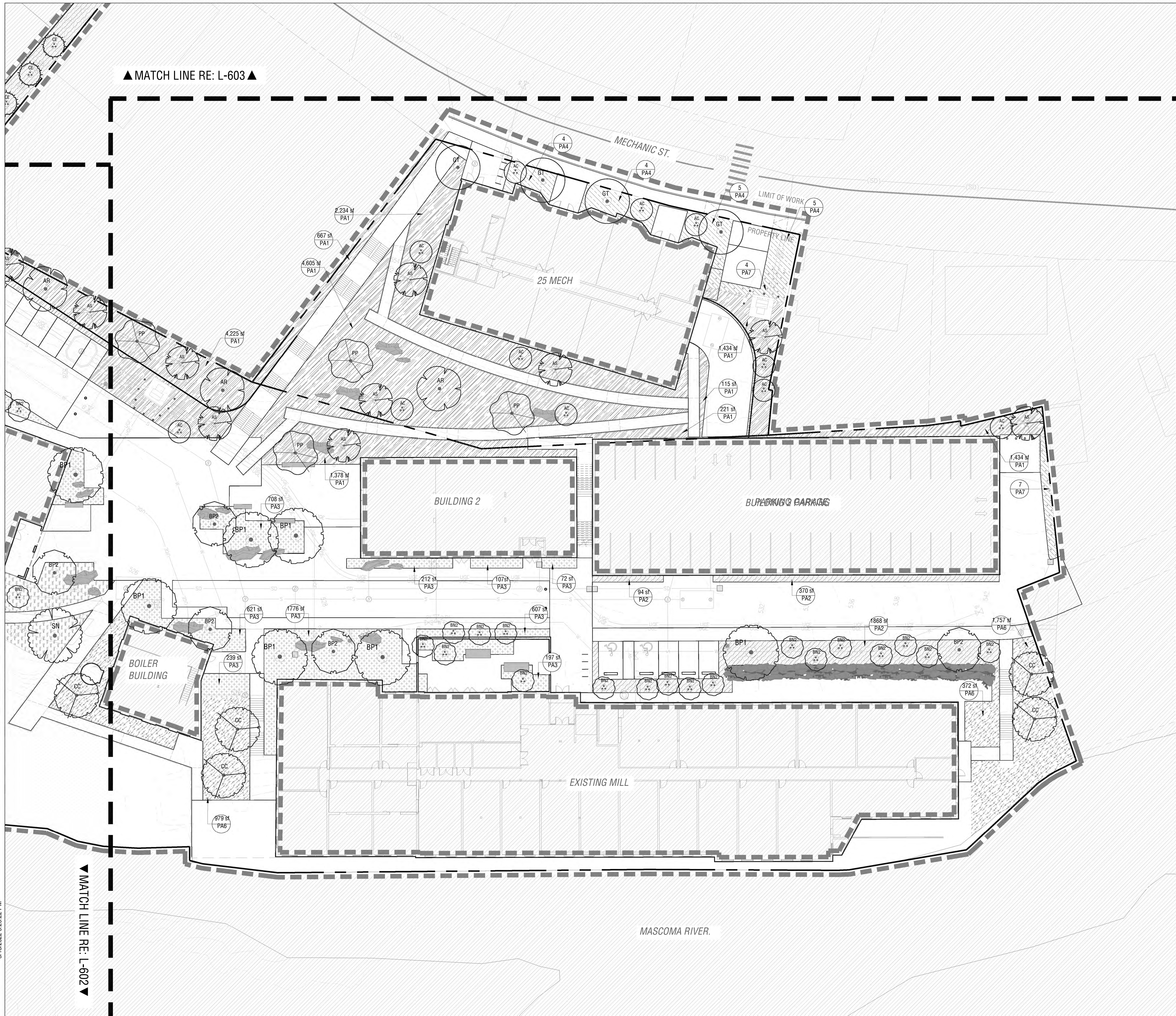
No.	Description	Date

DATE: 08.15.22

SCALE:

PLANTING SCHEDULE
AND NOTES

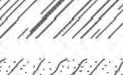
L600



QUICK REFERENCE LEGEND

TREES	CODE	BOTANICAL / COMMON NAME	CONTAINER
	AR	ACER RUBRUM / RED MAPLE	2.5' - 3' MIN.
	AS	ACER SPICATUM / MOUNTAIN MAPLE	2.5' - 3' MIN.
	BN	BETULA NIGRA / RIVER BIRCH	2.5' - 3' MIN.
	BP1	BETULA PAPYRIFERA / PAPER BIRCH	2.5' - 3' MIN.
	BP2	BETULA POPULIFOLIA / GRAY BIRCH	2.5' - 3' MIN.
	CC	CARPINUS CAROLINIANA / AMERICAN HORNBEAM	2.5' - 3' MIN.
	GT	GLEDTISIA TRIACANTHOS / THORNLESS HONEY LOCUST	2.5' - 3' MIN.
	PP	PRUNUS PENSYLVANICA / PIN CHERRY	2.5' - 3' MIN.
	SN	SALIX NIGRA / BLACK WILLOW	2.5' - 3' MIN.
<u>UNDERSTORIES</u>	<u>CODE</u>	<u>BOTANICAL / COMMON NAME</u>	<u>CONTAINER</u>
	AC	AMELANCHIER CANADENSIS / SHADOW SERVICEBERRY	1' - 2"
	BN2	BETULA NIGRA / RIVER BIRCH	1' - 2"
	CE	CORNUS X EDDIE'S WHITE WONDER / WHITE WONDER DOGWOOD	1' - 2"

SHRUB/GROUNDC
OVER AREAS

	PA 1 PLANTING MIX 1	PER SUPPLIER
	PA 2 PLANTING MIX 2	PER SUPPLIER
	PA 3 PLANTING MIX 3	18" - 24" O.C.
	PA 4 PLANTING MIX 4	18" - 24" O.C.
	PA 5 PLANTING MIX 5	PER SUPPLIER
	PA 6 PLANTING MIX 6	PER SUPPLIER
	PA 7 PLANTING MIX 7	72" O.C.

SITE PLAN REVIEW



535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

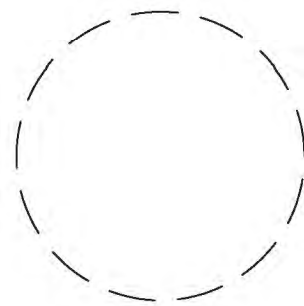
SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE

OJB Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

NOT FOR CONSTRUCTION



1 FOUNDRY ST.
LEBANON, NH



PROJECT: NH-LWM

[illegible]

DATE: 08.15.22

SCALE: 1" = 20'-0"

PLANTING PLAN

L601

Page 46 of 57



QUICK REFERENCE LEGEND

TREES	CODE	BOTANICAL / COMMON NAME	CONTAINER
	AR	ACER RUBRUM / RED MAPLE	2.5" - 3" MIN.
	AS	ACER SPICATUM / MOUNTAIN MAPLE	2.5" - 3" MIN.
	BN	BETULA NIGRA / RIVER BIRCH	2.5" - 3" MIN.
	BP1	BETULA PAPYRIFERA / PAPER BIRCH	2.5" - 3" MIN.
	BP2	BETULA POPULIFOLIA / GRAY BIRCH	2.5" - 3" MIN.
	CC	CARPINUS CAROLINIANA / AMERICAN HORNBEAM	2.5" - 3" MIN.
	GT	GLEDTISIA TRIACANTHS INERMIS / THORNLESS HONEY LOCUST	2.5" - 3" MIN.
	PP	PRUNUS PENNSYLVANICA / PIN CHERRY	2.5" - 3" MIN.
	SN	SALIX NIGRA / BLACK WILLOW	2.5" - 3" MIN.
UNDERSTORIES	CODE	BOTANICAL / COMMON NAME	CONTAINER
	AC	AMELANCHIER CANADENSIS / SHADOW SERVICEBERRY	1" - 2"
	BN2	BETULA NIGRA / RIVER BIRCH	1" - 2"
	CE	CORNUS X EDDIE'S WHITE WONDER / WHITE WONDER DOGWOOD	1" - 2"
SHRUB/GROUND COVER AREAS	CODE	BOTANICAL / COMMON NAME	CONTAINER
	PA 1	PLANTING MIX 1	PER SUPPLIER
	PA 2	PLANTING MIX 2	PER SUPPLIER
	PA 3	PLANTING MIX 3	18" - 24" O.C.
	PA 4	PLANTING MIX 4	18" - 24" O.C.
	PA 5	PLANTING MIX 5	PER SUPPLIER
	PA 6	PLANTING MIX 6	PER SUPPLIER
	PA 7	PLANTING MIX 7	72" O.C.

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

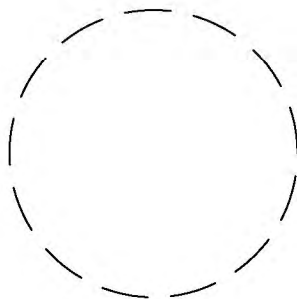
Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

NOT FOR CONSTRUCTION



1 FOUNDRY ST.
LEBANON, NH

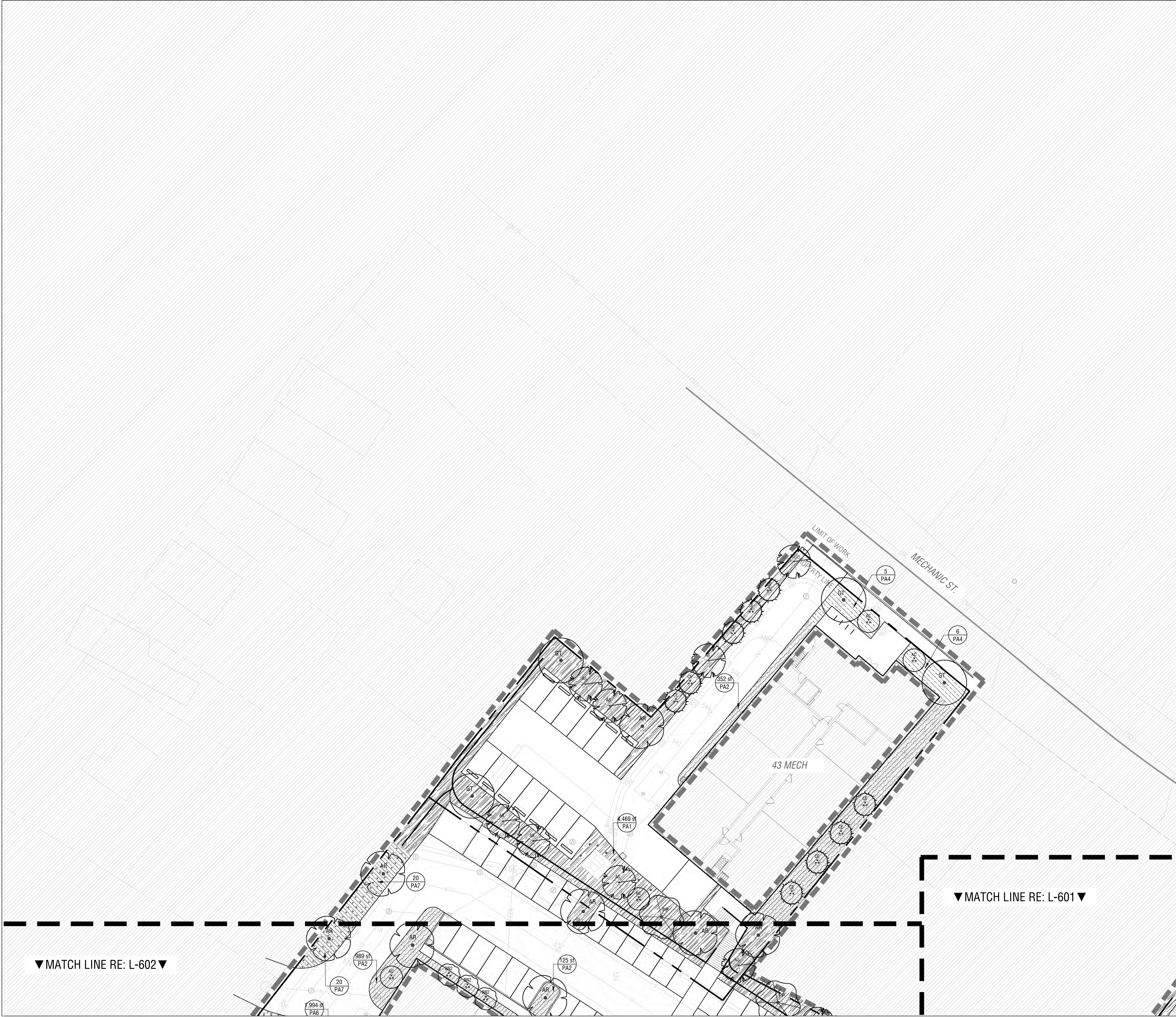
PROJECT: NH-LWM		
No.	Description	Date

DATE: 08.15.22

SCALE: 1" = 20'-0"

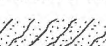
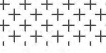
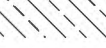
PLANTING PLAN

L602



QUICK REFERENCE LEGEND

TREES	CODE	BOTANICAL / COMMON NAME	CONTAINER
	AR	ACER RUBRUM / RED MAPLE	2.5" - 3" MIN.
	AS	ACER SPICATUM / MOUNTAIN MAPLE	2.5" - 3" MIN.
	BN	BETULA NIGRA / RIVER BIRCH	2.5" - 3" MIN.
	BP1	BETULA PAPYRIFERA / PAPER BIRCH	2.5" - 3" MIN.
	BP2	BETULA POPULIFOLIA / GRAY BIRCH	2.5" - 3" MIN.
	CC	CARPINUS CAROLINIANA / AMERICAN HORNBEAM	2.5" - 3" MIN.
	GT	GLEDTISIA TRIACANTHOS INERMIS / THORNLESS HONEY LOCUST	2.5" - 3" MIN.
	PP	PRUNUS PENNSYLVANICA / PIN CHERRY	2.5" - 3" MIN.
	SN	SALIX NIGRA / BLACK WILLOW	2.5" - 3" MIN.
UNDERSTORIES	CODE	BOTANICAL / COMMON NAME	CONTAINER
	AC	AMELANCHIER CANADENSIS / SHADOW SERVICEBERRY	1" - 2"
	BN2	BETULA NIGRA / RIVER BIRCH	1" - 2"
	CE	CORNUS X EDDIE'S WHITE WONDER / WHITE WONDER DOGWOOD	1" - 2"

SHRUB/GROUND COVER AREAS	CODE	BOTANICAL / COMMON NAME	CONTAINER
	PA 1	PLANTING MIX 1	PER SUPPLIER
	PA 2	PLANTING MIX 2	PER SUPPLIER
	PA 3	PLANTING MIX 3	18" - 24" O.C.
	PA 4	PLANTING MIX 4	18" - 24" O.C.
	PA 5	PLANTING MIX 5	PER SUPPLIER
	PA 6	PLANTING MIX 6	PER SUPPLIER
	PA 7	PLANTING MIX 7	72" O.C.

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

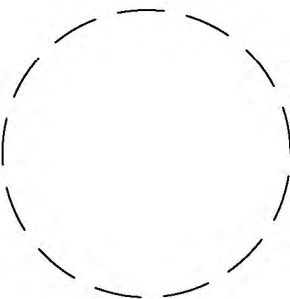
Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

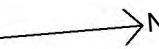
CIVIL
Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OBJ Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

NOT FOR CONSTRUCTION



1 FOUNDRY ST
LEBANON, NH



PROJECT: NH-LWM

[illegible]

DATE: 08.15.22

SCALE: 1" = 20'-0"

PLANTING PLAN

L603

Page 48 of 51

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

PLANTING DETAILS

SCALE: 1" = 20'-0"

Page 49 of 57

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY

Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL

Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE

OJB Landscape Architecture
One Bowdoin Square, Suite 801
Boston, MA 02114
857.233.5171 | T

LIGHTING

LAM Partners
84 Sherman Street
Cambridge, MA 02140
617.354.4502 | T

1 FOUNDRY ST.

LEBANON, NH



PROJECT: 2125

[illegible]

DATE: 09.22.22

SCALE: 1" = 25'

Photometric Plan

L101

Page 30 of 57

Refer to Lighting Fixture Schedule
dated 9-22-2022 For all fixture types,
manufacturer data, CCT, lumen
output, and fixture loads.

5/18/2022 5:23:22 PM

Not for bidding or construction unless fully incorporated into contract documents by Architect and/or Engineer.

Page 201 of 227

Design Team

SURVEY

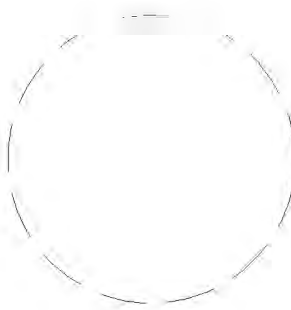
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL

Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE

OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

LWM RESIDENTIAL LLC

PROJECT: 2125

No.	Description	Date

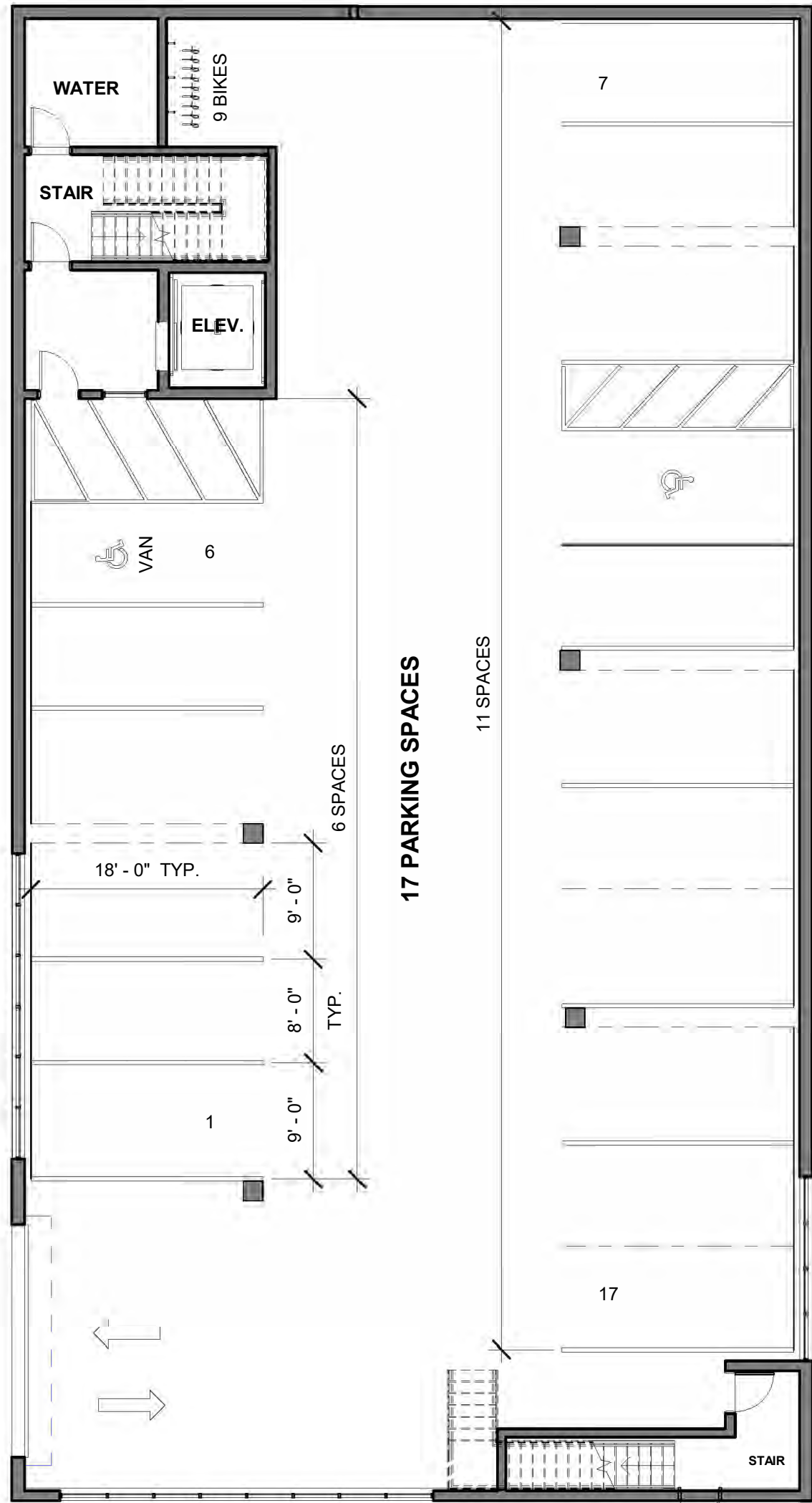
DATE: 08.15.22

SCALE: 3/32" = 1'-0"

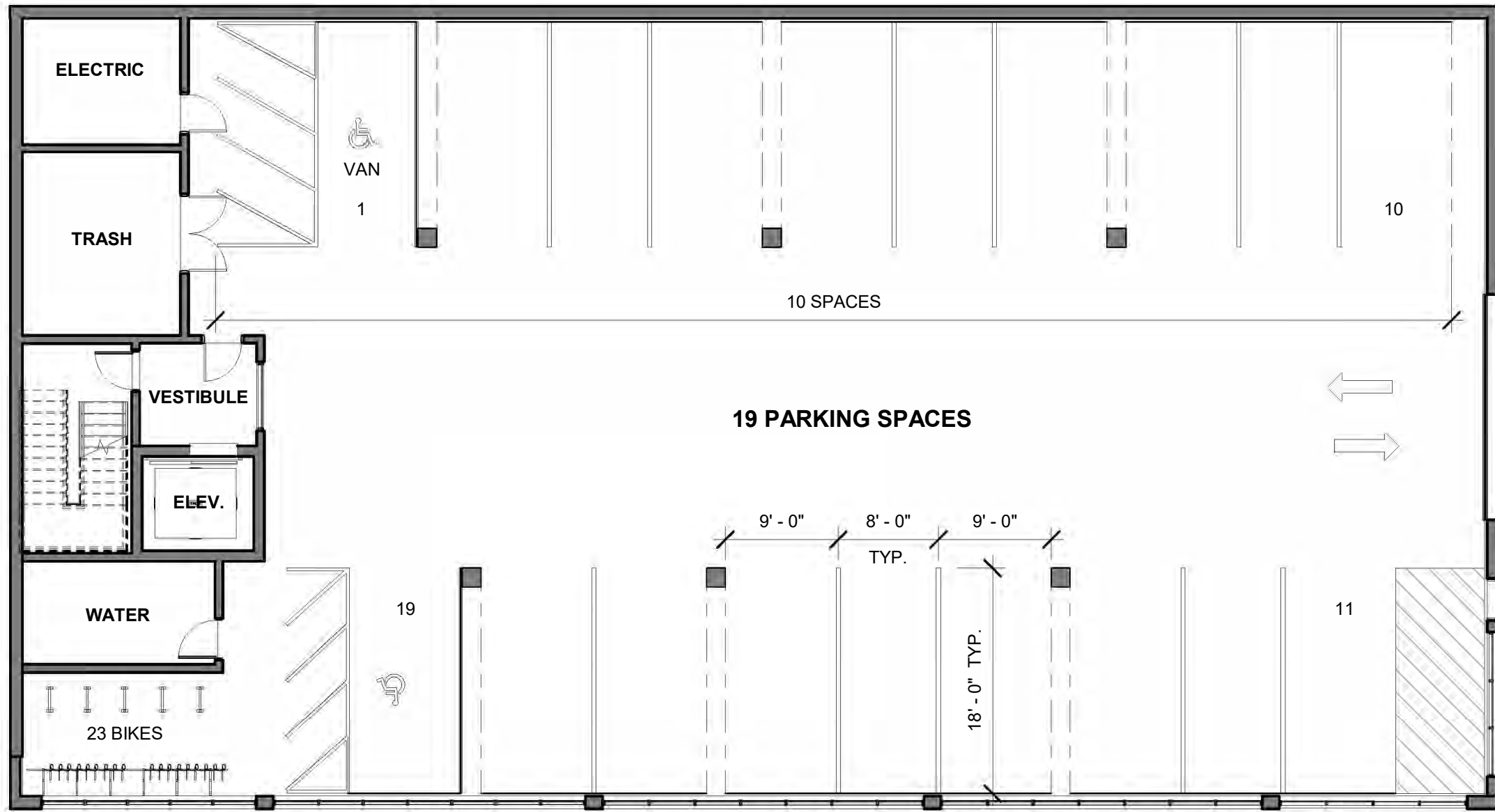
43 & 25 MECHANIC AND
BUILDING 3 PARKING
PLANS

A-100

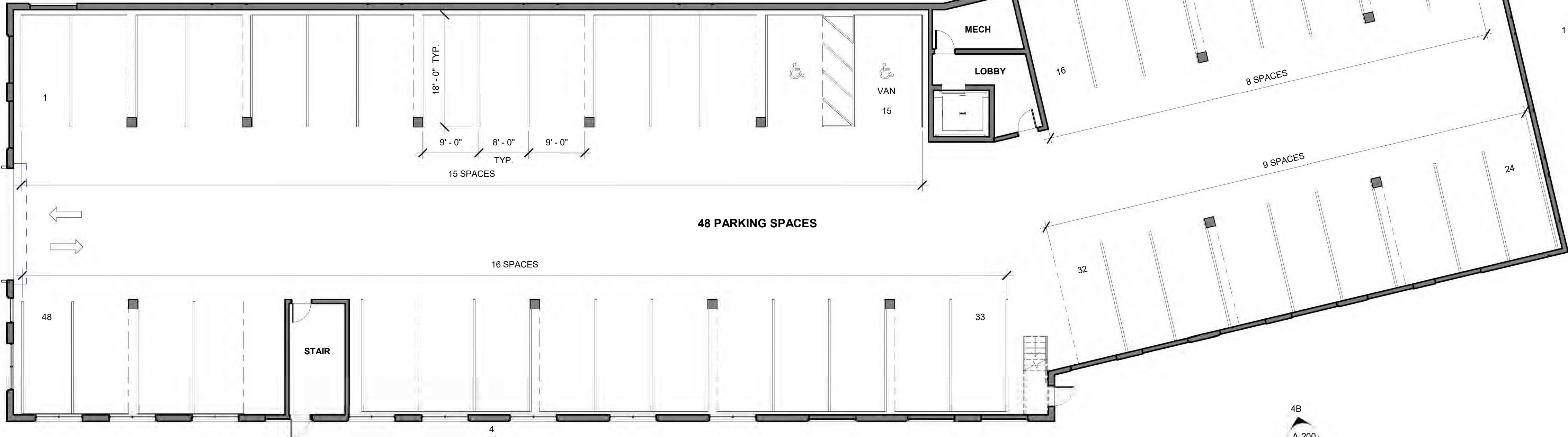
Page 51 of 57



3 43 MECHANIC - LEVEL 0
3/32" = 1'-0"

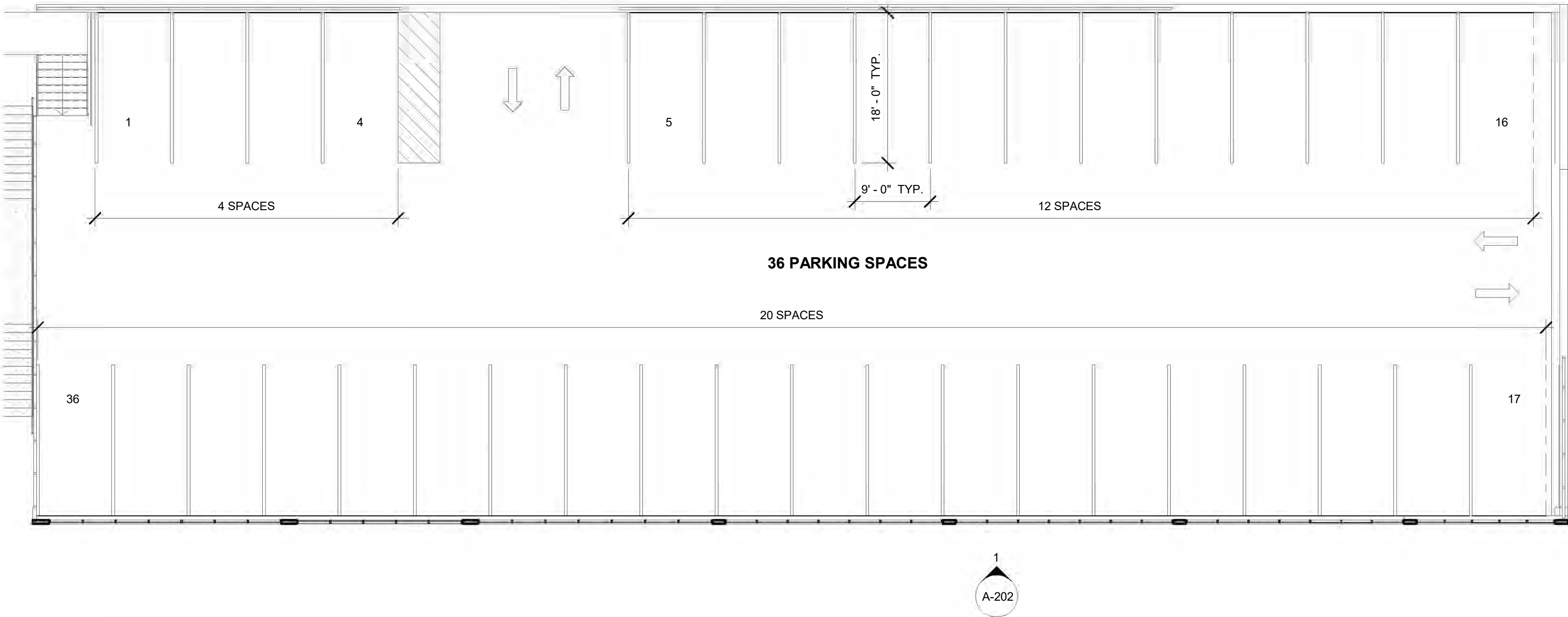


2 25 MECHANIC - Level 0
3/32" = 1'-0"

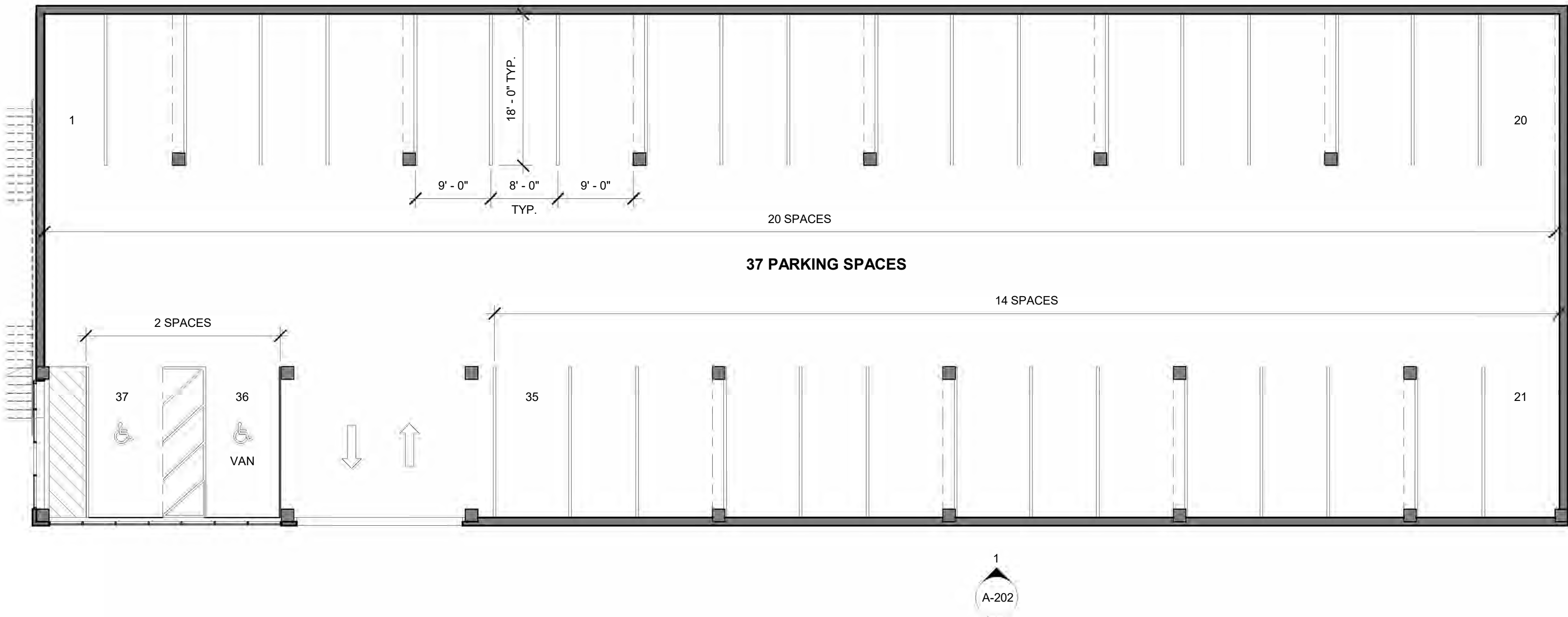


1 BUILDING 3 - LEVEL 0
3/32" = 1'-0"

8/11/2022 4:43:43 PM



2 PARKING GARAGE - LEVEL 2
3/32" = 1'-0"



1 PARKING GARAGE - LEVEL 1
3/32" = 1'-0"

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY

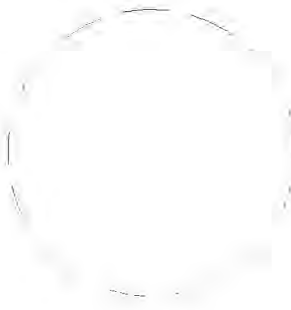
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL

Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE

OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

LWM RESIDENTIAL LLC



PROJECT: 2125

No.	Description	Date

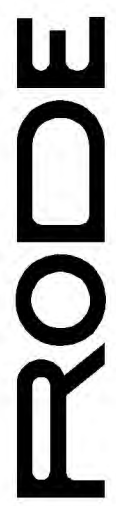
DATE: 08.15.22

SCALE: 3/32" = 1'-0"

PARKING GARAGE PLANS

A-101

Page 52 of 57



535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL
Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE
OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T

1 FOUNDRY ST.
LEBANON, NH

LWM RESIDENTIAL LLC

[illegible]

DATE: 08.15.22

SCALE: $3/32" = 1'-0"$

BUILDING ELEVATIONS - BUILDING 3

A-200

Page 53 of 57





4 25 MECHANIC - SOUTH ELEVATION
3/32" = 1'-0"



2 25 MECHANIC - NORTH ELEVATION
3/32" = 1'-0"



3 25 MECHANIC - EAST ELEVATION
3/32" = 1'-0"



1 25 MECHANIC - WEST ELEVATION
3/32" = 1'-0"

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY

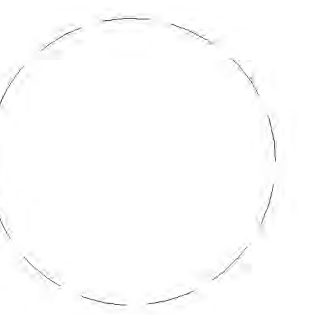
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL

Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE

OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

LWM RESIDENTIAL LLC

PROJECT: 2125

No.	Description	Date

DATE: 08.15.22

SCALE: 3/32" = 1'-0"

**BUILDING ELEVATIONS -
25 MECHANIC**

A-201

Page 54 of 57



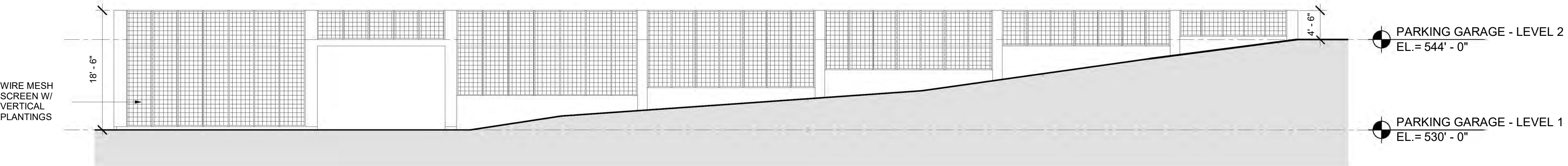
5 43 MECHANIC - SOUTH ELEVATION
3/32" = 1'-0"

3 43 MECHANIC - EAST ELEVATION
3/32" = 1'-0"



4 43 MECHANIC - NORTH ELEVATION
3/32" = 1'-0"

2 43 MECHANIC - WEST ELEVATION
3/32" = 1'-0"



1 PARKING GARAGE ELEVATION
3/32" = 1'-0"

SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY

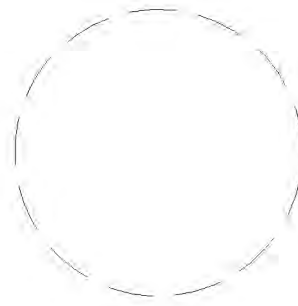
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL

Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE

OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

LWM RESIDENTIAL LLC

PROJECT: 2125

No.	Description	Date

DATE: 08.15.22

SCALE: 3/32" = 1'-0"

**BUILDING ELEVATIONS -
43 MECHANIC &
PARKING GARAGE**

A-202

Page 55 of 57

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY

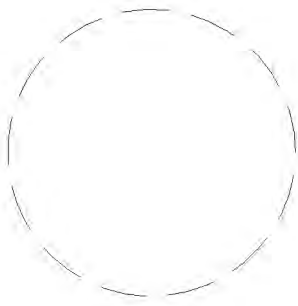
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL

Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE

OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

LWM RESIDENTIAL LLC

PROJECT:

No.	Description	Date

DATE: 08/15/2022

SCALE: As indicated

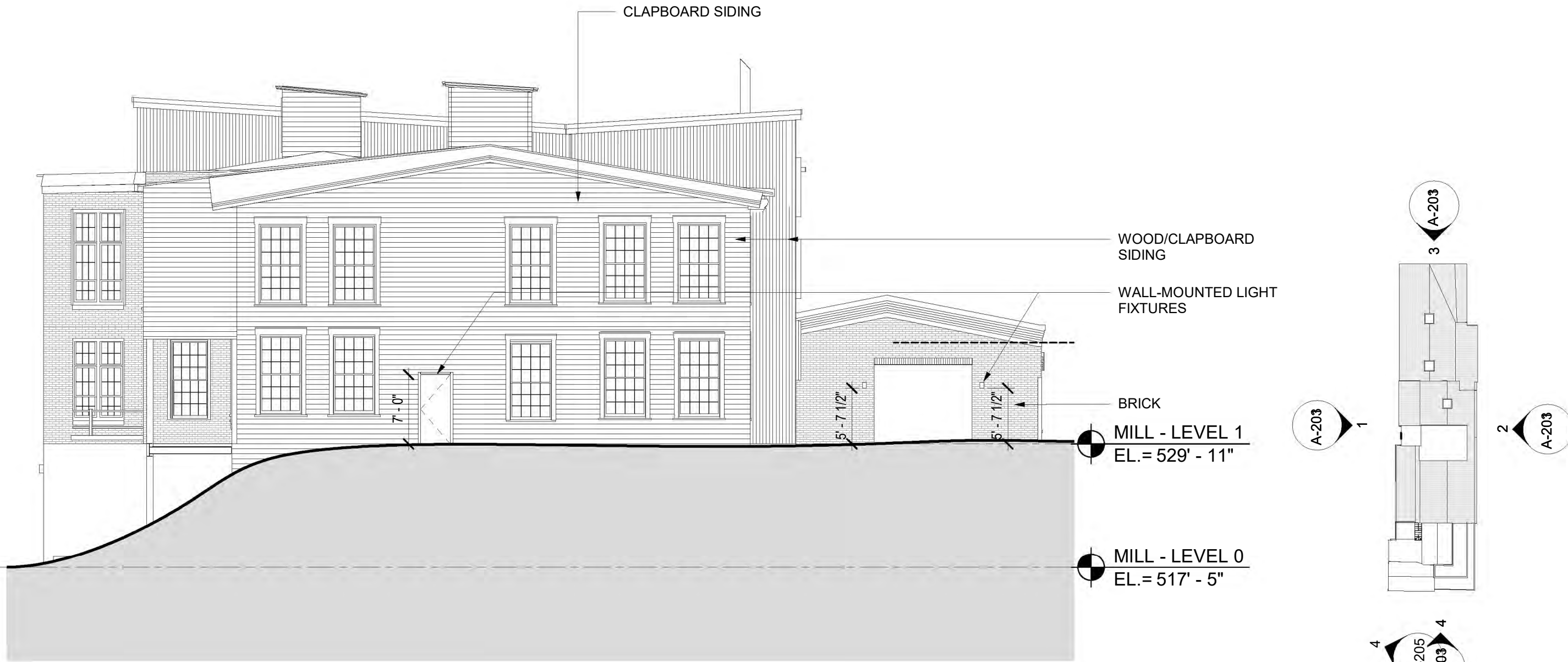
EXISTING MILL
ELEVATIONS

A-203

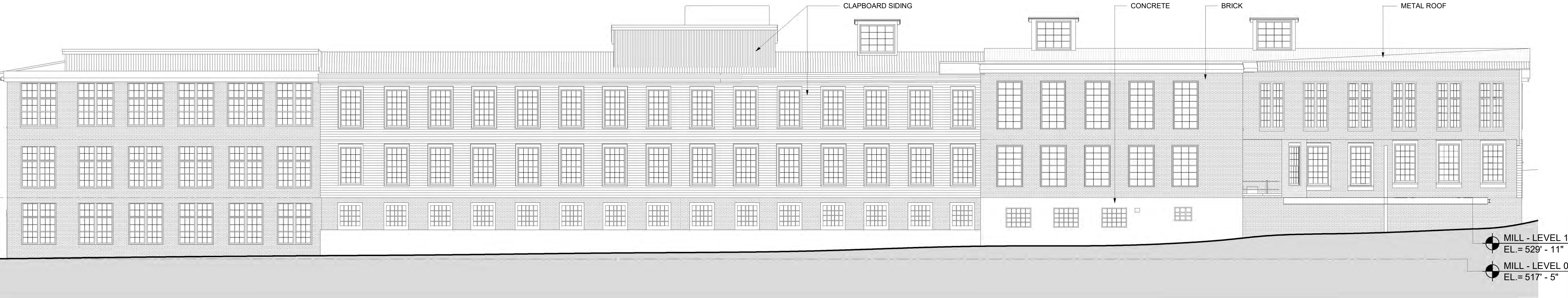
Page 56 of 57



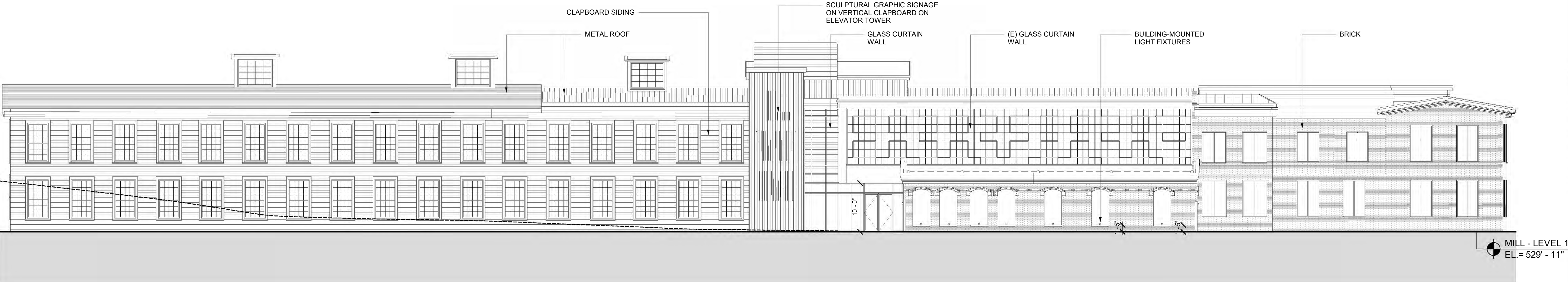
4 MILL - SOUTH ELEVATION
3/32" = 1'-0"



3 MILL - NORTH ELEVATION
3/32" = 1'-0"

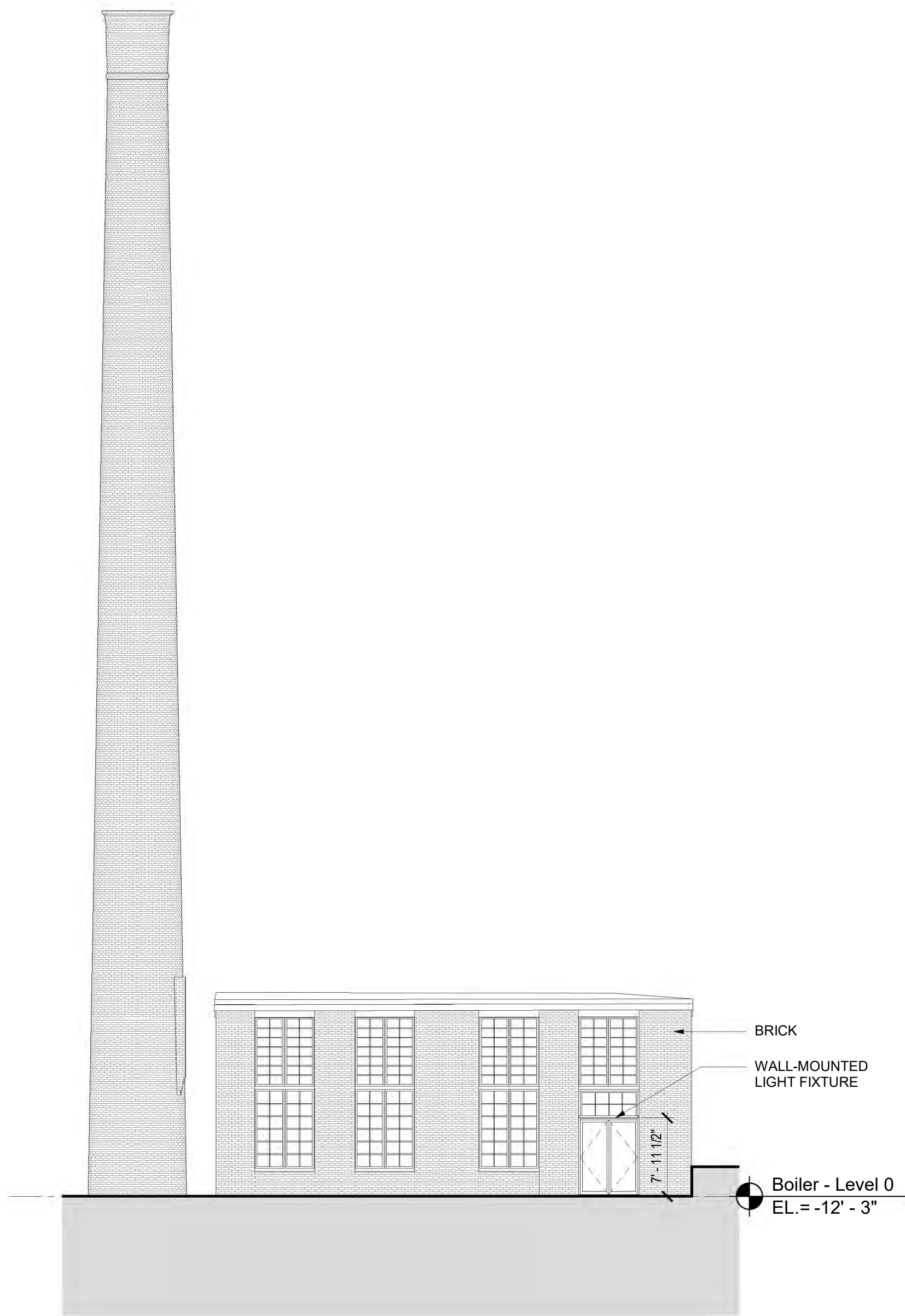


2 MILL - EAST ELEVATION
3/32" = 1'-0"

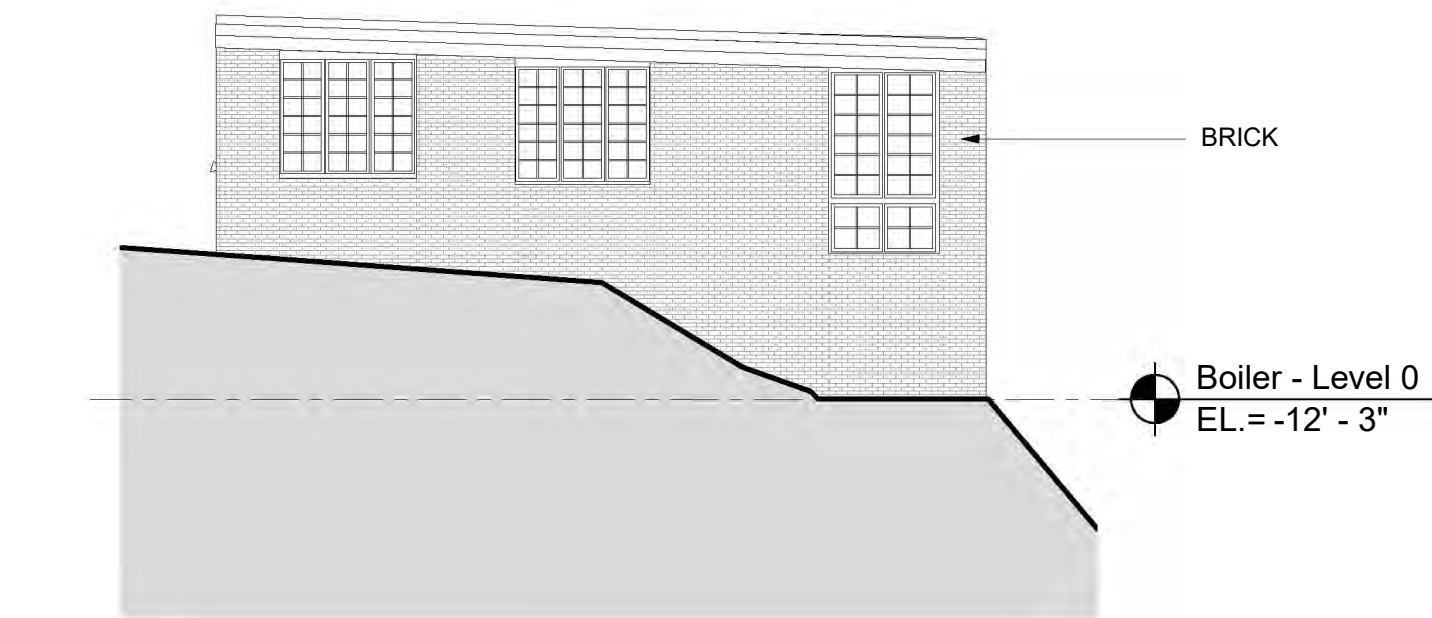


1 MILL - WEST ELEVATION
3/32" = 1'-0"

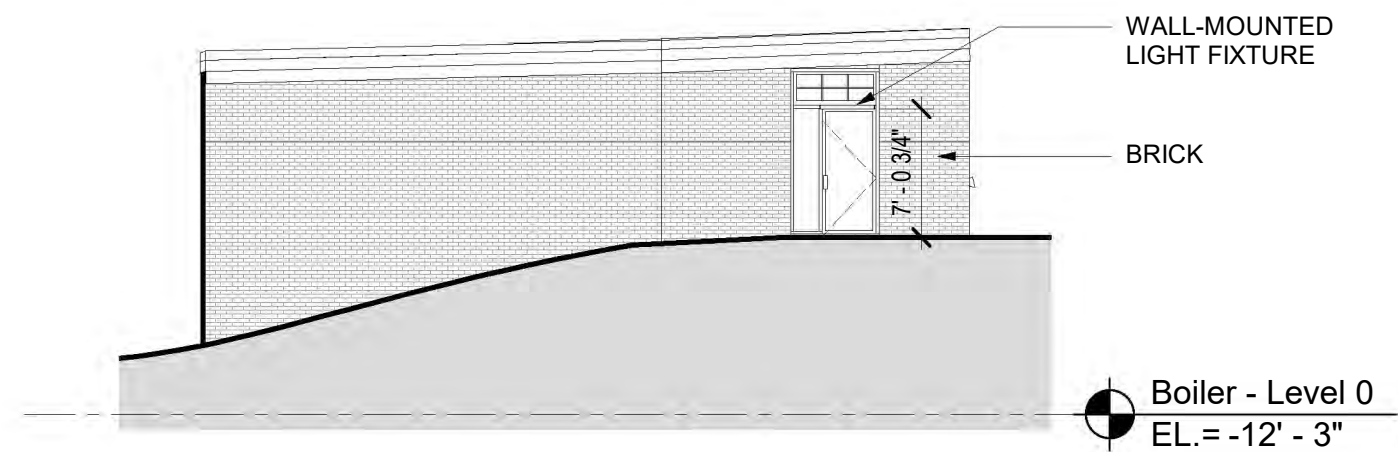
9/23/2022 6:10:40 PM



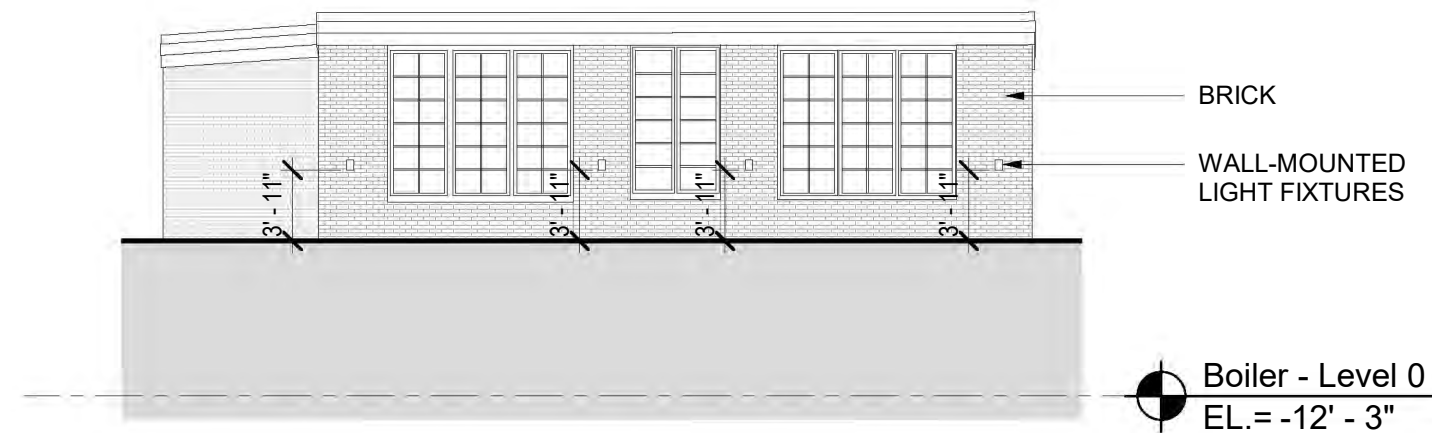
8 BOILER BUILDING - EAST ELEVATION
3/32" = 1'-0"



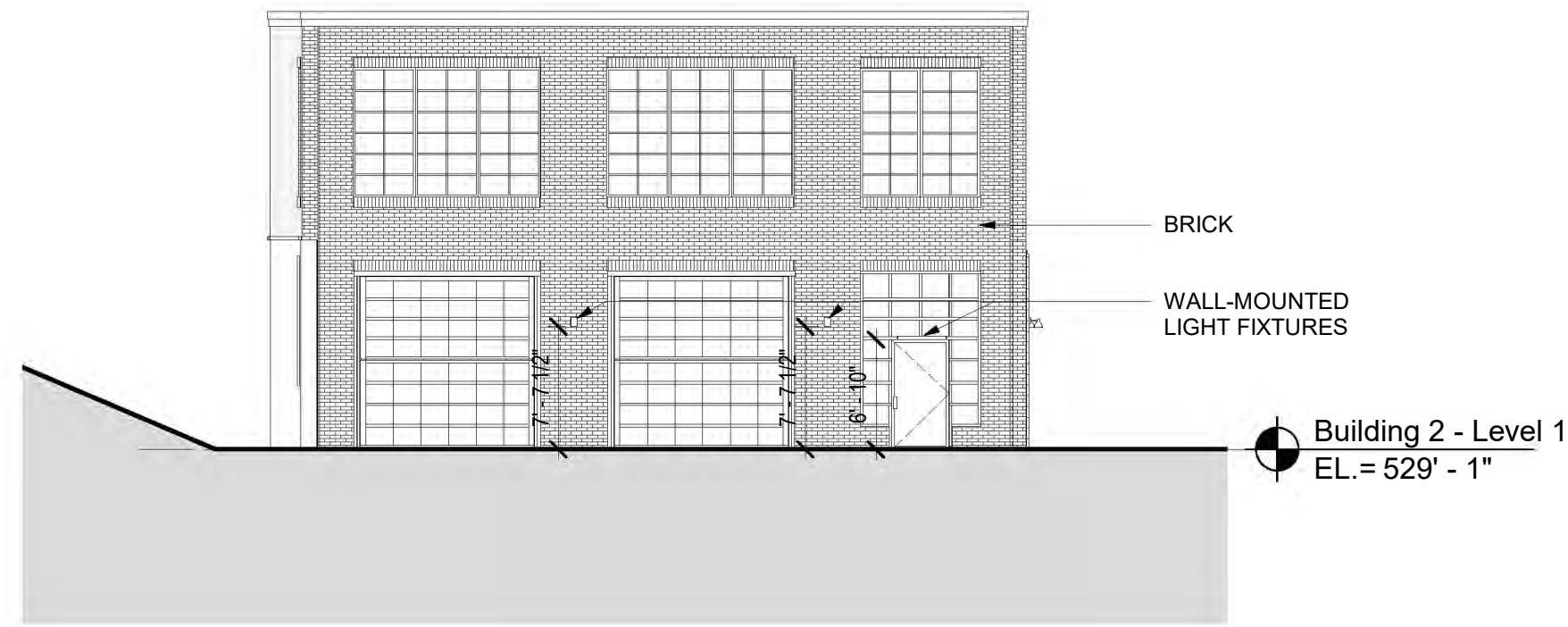
5 BOILER BUILDING - SOUTH ELEVATION
3/32" = 1'-0"



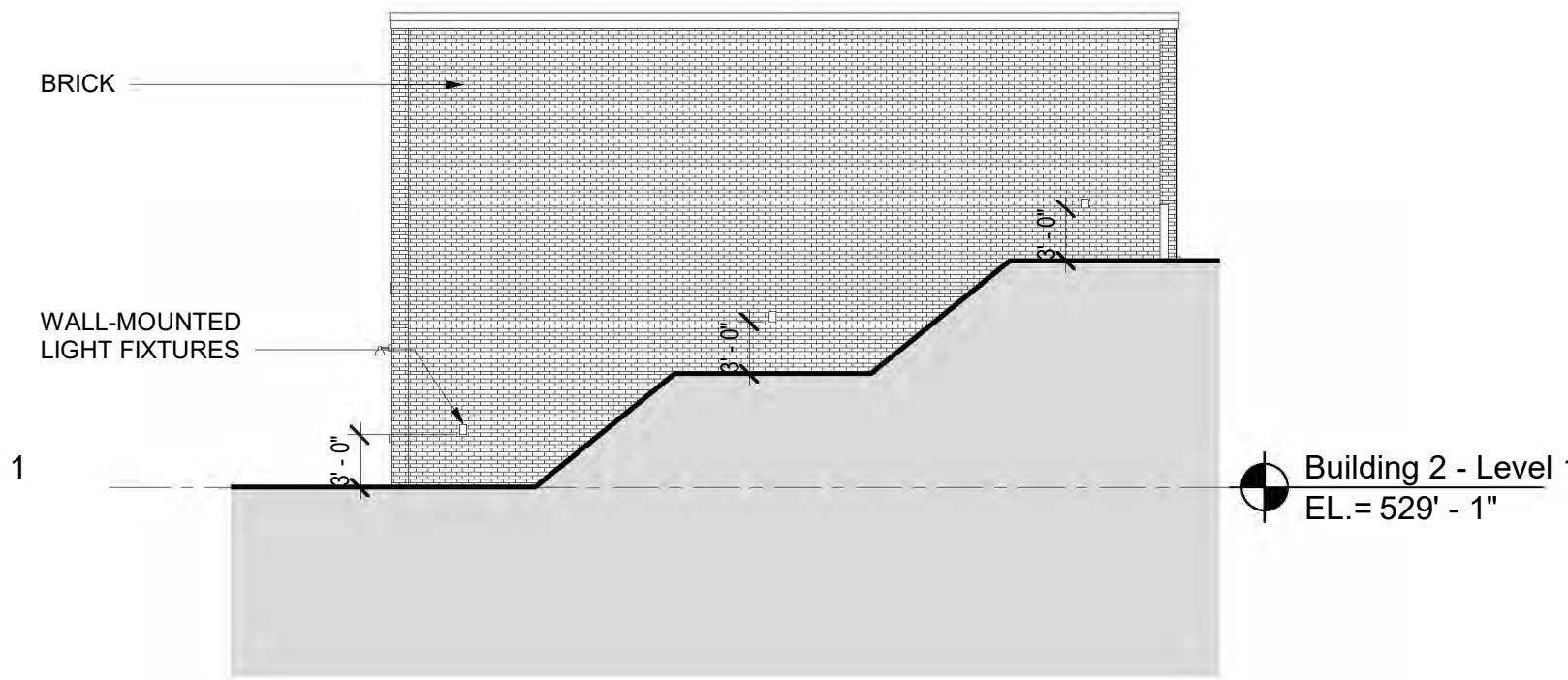
6 BOILER BUILDING - NORTH ELEVATION
3/32" = 1'-0"



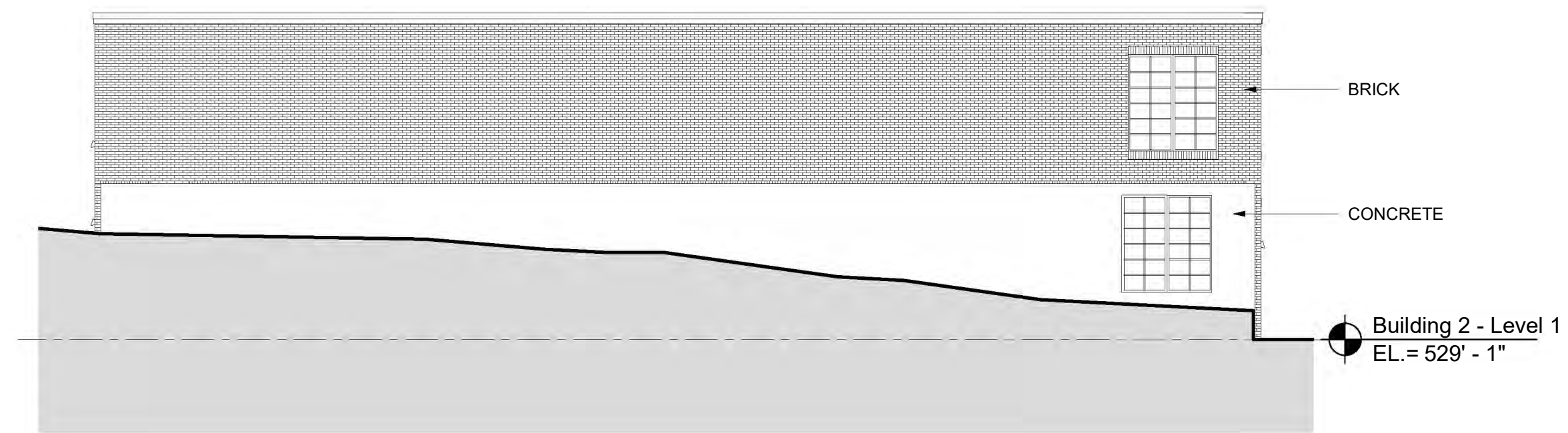
7 BOILER BUILDING - WEST ELEVATION
3/32" = 1'-0"



4 BUILDING 2 - SOUTH ELEVATION
3/32" = 1'-0"



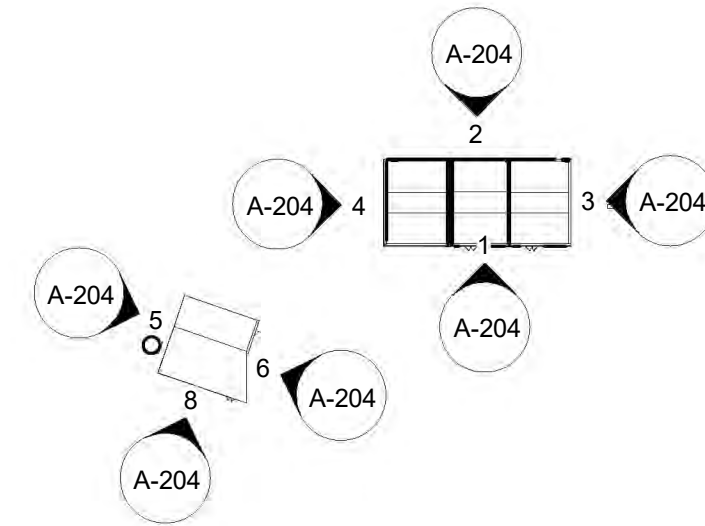
3 BUILDING 2 - NORTH ELEVATION
3/32" = 1'-0"



2 BUILDING 2 - WEST ELEVATION
3/32" = 1'-0"



1 BUILDING 2 - EAST ELEVATION
3/32" = 1'-0"



SITE PLAN REVIEW

RODE

535 Albany Street | 405
Boston, MA 02118
617.422.0090 | T
rodearchitects.com

Design Team

SURVEY

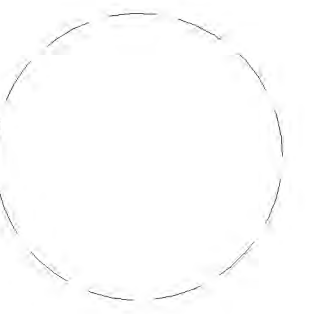
Vive Libre Geomatics
P.O. Box 1093
Lebanon, NH 03766
802.674.6998 | T

CIVIL

Engineering Ventures, PC
85 Mechanic St Suite e2-3
Lebanon, NH 03766
603.442.9333 | T

LANDSCAPE

OJB Landscape Architects
One Bowdoin Square, Suite 801
Boston, MA 02114
857.444.8675 | T



1 FOUNDRY ST.
LEBANON, NH

LWM RESIDENTIAL LLC

PROJECT:

No.	Description	Date

DATE: 08/15/2022

SCALE: As indicated

BUILDING 2 & BOILER BUILDING ELEVATIONS

A-204

Page 57 of 57

**Agenda
Planning Board
October 10, 2022**

**Agenda Item #4A
Other Business**

**William Misha Rosoff,
387 N. Main Street
(Tax Map 8, Lot 12),
zoned R-3
PB2022-41-CON**

**CITY OF LEBANON
APPLICATION FOR**

SPECIAL EXCEPTION	☐	☐ SITE PLAN REVIEW
VARIANCE	☐	☒ SUBDIVISION, Conceptual Review
MOTION FOR REHEARING	☐	☐ LOT LINE ADJUSTMENT
APPEAL OF AN ADMIN. DECISION	☐	☐ CONDITIONAL USE PERMIT
☐ OTHER _____		

PROPERTY OWNER (APPLICANT):

NAME: William Misha Rosoff TEL.#: 646-535 6915
 MAILING ADDRESS: 400 Porter Rd, Plainfield NJ 03781
 E-MAIL ADDRESS: WM ROSOFF@YAHOO.COM

CO-APPLICANT, AGENT, OR LESSEE:

NAME: _____ TEL.#: _____
 MAILING ADDRESS: _____
 E-MAIL ADDRESS: _____

PROJECT LOCATION:

TAX MAP #: 8 LOT#: 12 PLOT #: _____ ZONE: R3
 STREET ADDRESS OF PROJECT: 387 1/2 Main St.
 IS THIS PROPERTY LOCATED IN THE: **WETLANDS** ☐ YES ☒ NO **HISTORIC DISTRICT** ☐ YES ☒ NO
FLOOD PLAIN ☐ YES ☒ NO

SCOPE OF PROJECT:

7 lot Major Subdivision in R3 Zone
Conceptual Review

TYPE OF OCCUPANCY:

EXISTING ☒ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☐ MULTI-FAMILY ☐ COMMERCIAL ☐ INDUSTRIAL
 PROPOSED ☐ VACANT ☒ ONE FAMILY ☐ TWO FAMILY ☐ MULTI-FAMILY ☐ COMMERCIAL ☐ INDUSTRIAL
 IF USE IS COMMERCIAL OR INDUSTRIAL, PLEASE NOTE SPECIFIC
 USE: _____

SIGNATURE BLOCK:

FOR PLANNING BOARD APPLICATIONS ONLY: I, the undersigned, hereby submit this application on the date noted below with the knowledge and understanding that the Planning Board shall determine if the submitted application is complete according to its regulations at its next regularly scheduled meeting on Oct. 10, 2022, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY OWNER: [Signature] DATE: Sept 26, 2022

NOTE: IF, AS OWNER, YOU WISH TO DESIGNATE AN AGENT TO ACT ON YOUR BEHALF, PLEASE READ THE FOLLOWING AND SIGN BELOW: I hereby designate the person listed above as my agent for the purpose of procuring the necessary local permits for the proposed work as described herein. Representations made by my agent may be accepted as though made by me personally, and I understand that I am bound by any official decision made on the basis of such representation.

PROPERTY OWNER: _____ DATE: _____

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #		
9-26-2022	8-12	PB2022-41-CON		

(Last Revised 4/04/18)

Support Statement for Conceptual Review

Project: 7 Lot Major Subdivision for Single-family homes

Property Owner: William Misha Rosoff

Location: 387 North Main Street, Lebanon

Property ID: Map 8, lot 12

Property Size: ≈82,000 Sq Ft

Project description:

Presented here for Planning Board review is the conceptual sketch plan for a 7-lot subdivision on North Main Street and Richardson Place. Proposed is a traditional grid subdivision in an area of existing single-family homes. The site topography is nearly flat and there are no wetlands, ledges, or other construction challenges. Municipal water and sewer mains are located adjacent to the property on North Main Street, and all lots would be connected to the City water and sewer systems. All lots will utilize the existing street frontage (175 feet of frontage on North Main Street and 290 feet on Richardson Place) so no new street construction will be necessary. All lots would equal or exceed 10,000 square feet in size as required in the R-3 Zoning District. Lot #3 and lot #7 are conforming flag lots, with the required minimum 20 feet of frontage on city-maintained streets and exceeding 75 feet in width across the future building line. Open space for resident use would be provided in a functional area roughly in the center of the property.

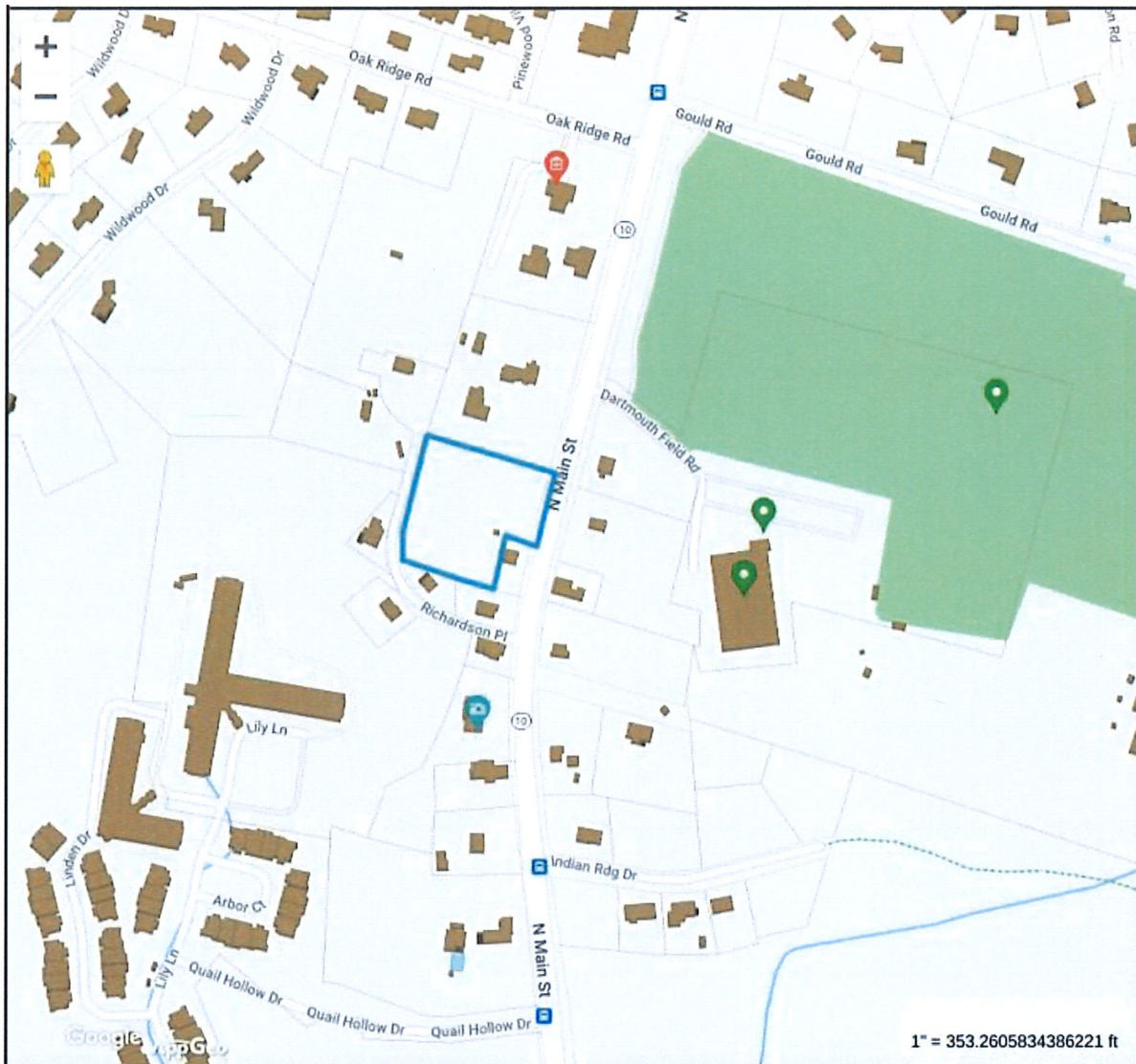
Conformity with the Master Plan:

Proposed project is an in-fill subdivision in an area of existing single-family homes on small individual lots. The 2030 Future Land Use Map (2018 Edition) designates this area (and many other parts of the R-3 Zoning District) as “Low Density Residential.” As such, the proposed subdivision conforms with both the current and future land use designations in the Master Plan.

Proposed topics for discussion:

- Feedback regarding general concept and overall layout would be appreciated
- Open Space and Recreation Area:
Layout provides an Open Space area of approximately 10,500 square feet which equals 13% of the overall tract, not 15% as called for in Section 12.2 of the Subdivision regulations. As there are numerous other recreation opportunities nearby in addition to residents’ own backyards, would the Board consider a slight deviation from the Open Space standard as provided for in Section 12.2-C?

Location Map



Property Information

Property ID 8-12
Location 387 N MAIN ST
Owner ROSOFF, WILLIAM MISHA

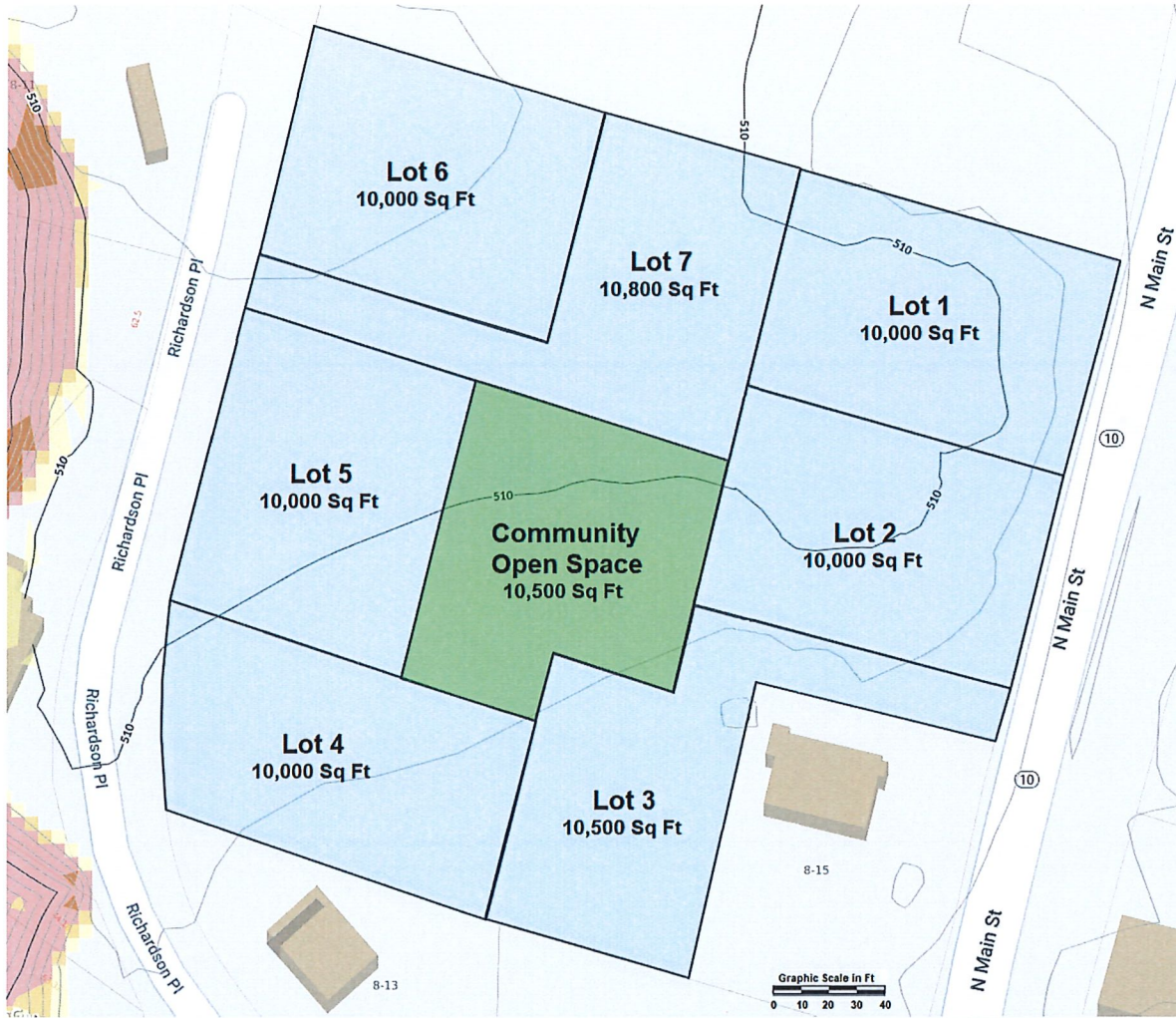
MAP FOR REFERENCE ONLY NOT A LEGAL DOCUMENT

City of Lebanon, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 12/29/2021
Data updated 11/18/2018

Print map scale is approximate.
Critical layout or measurement
activities should not be done using
this resource.

Proposed Lot Layout



**Agenda
Planning Board
October 10, 2022**

**Agenda Item #5A
Approval of Minutes**

August 22, 2022

DRAFT

LEBANON PLANNING BOARD
Regular Session
Monday, August 22, 2022, 6:30 PM
City Council Chambers, City Hall
or Remote Via Microsoft Teams
LebanonNH.gov/Live

MEMBERS PRESENT: Bruce Garland (Chair), Matthew Hall (Vice-Chair), Karen Zook (City Council Rep) , Tom Martz, Kathie Romano, Jeremy Rutter, Laurel Stavis, Thomas Jasinski (Alternate), Cori Hirai (Alternate)

MEMBERS ABSENT: Gregorio Amaro, Kim Chewning

STAFF PRESENT: David Brooks (Planning Director), Tim Corwin (Senior Planner)

1. Call to Order

Chair Garland called the meeting to order at 6:30 PM.

Tom Jasinski and Cori Hirai were appointed in place of Mr. Amaro and Ms. Chewning.

2. Notice of Regional Impact

Mr. Brooks stated that the following applications were received by the Planning and Development Department on or before August 15, 2022:

City of Lebanon, Lebanon Municipal Airport, 5 Airpark Road (Tax Map 105-1) and 0 Airpark Road (Tax Map 159, Lot 4), zoned IND-L: Request for a Boundary Line Adjustment. PB2022-32-BLA

City of Lebanon, 36 Poverty Lane (Tax Map 117, Lot 1), zoned IND-L: Request for Site Plan Review to reconstruct and expand the Police Station parking lot. PB2022-33-SPR (NOTE: This application will be reviewed as a Governmental Land Use pursuant to RSA 674:54)

LWM Residential LLC, 1 Foundry Street (Tax Map 91, Lot 263) and 43 Mechanic Street (Tax Map 106, Lot 34), zoned LD: Request for a Boundary Line Adjustment. PB2022-35-BLA

LWM Residential LLC, 1 Foundry Street (Tax Map 91, Lot 263), 25 Mechanic Street (Tax Map 91, Lot 267), and 43 Mechanic Street (Tax Map 106, Lot 34), zoned LD: Request for Site Plan Review of a phased, 196-unit multi-family development including a new 4-story, 27-unit multi-family building with a parking garage on the ground floor at 43 Mechanic Street; a new 4-story, 31-unit multi-family building with a lower-level parking garage at 25 Mechanic Street, to be merged with 1 Foundry Street; and, at 1 Foundry Street, the renovation of the existing Woolen Mill building into 49 dwelling units, the renovation of the existing commercial building and boiler building into amenity spaces, construction of a 2-story parking structure, and construction of a new 5-story, 89-unit multi-family building with a lower-level parking garage, together with associated site improvements. PB2022-36-SPR

1 Mr. Brooks stated that staff recommends the application of LWM Residential LLC, 1 Foundry Street (Tax
2 Map 91, Lot 263), 25 Mechanic Street (Tax Map 91, Lot 267), and 43 Mechanic Street (Tax Map 106,
3 Lot 34), zoned LD, has the potential for regional impact.

4
5 ***A MOTION by Matthew Hall that LWM Residential LLC, 1 Foundry Street (Tax Map 91, Lot 263),***
6 ***25 Mechanic Street (Tax Map 91, Lot 267), and 43 Mechanic Street (Tax Map 106, Lot 34), zoned***
7 ***LD: has the potential for regional impact.***

8 ***The motion was seconded by Jeremy Rutter.***

9 ****The MOTION was approved (9-0).***

10 11 **3. Public Hearing Items**

12
13 **A. Upper Valley Mountain Bike Association (applicant), Dartmouth College Trustees**
14 **(property owner), 00 Mascoma Street (Tax Map 74, Lot 8, Plot 200), zoned RL-3: Request**
15 **for Site Plan Review to construct an open-air pavilion, parking, and associated site**
16 **improvements in connection with the existing biking trail outdoor recreational use operated by**
17 **the applicant. PB2022-30-SPR - Continued from August 8, 2022**

18
19 Matthew Hall recused himself from this hearing.

20
21 At the request of Ms. Stavis, Chair Garland reviewed the details of the public comment at the previous
22 meeting.

23
24 Jon Criswell, an Upper Valley Mountain Bike Association (UVMBA) board member, appeared in support
25 of the application.

26
27 Mr. Criswell described several changes to the site plan. The original plan located the pavilion on a slope,
28 which necessitated a shift in the location and a change to the location of the parking spaces. There may be
29 another small kiosk for the suggested signage. Mr. Criswell also commented on several of the proposed
30 conditions discussed at the last meeting as well as aspects of the lighting plan.

31
32 Ms. Stavis inquired about the proximity to the Jewish cemetery and stated that the pavilion activities
33 would have a negative impact on visits to the cemetery.

34
35 Ms. Hirai inquired about the solar power for lighting. Mr. Criswell stated that the battery would allow
36 twelve hours of operation. Mr. Jasinski inquired about a timer function for the lights. Mr. Criswell stated
37 that there were several options for continuous or motion-triggered lighting. Ms. Romano noted that most
38 motion lights can impose a limit to the operation. Mr. Criswell stated that there are a few evening events.
39 Mr. Martz noted that the area is already being used by groups without the benefit of a structure, and it is
40 difficult to determine any increased activity with the on-site pavilion. Ms. Hirai inquired about the need
41 for overnight lighting. Mr. Criswell noted that it was a suggestion of the Police Department. Mr. Jasinski
42 inquired if there were other similar locations for comparison. Mr. Criswell stated that motion lights could
43 be a solution to overnight lighting.

44
45 Chair Garland inquired about limiting late night usage of the facility. Mr. Criswell suggested the Police
46 could take notice.

47
48 The members discussed issues of usage and safety. Mr. Jasinski suggested a six-month review of the
49 operation of the facility. Mr. Corwin stated that the Board must do its best to mitigate future issues during
50 the approval process. The Planning Board cannot monitor future usage. Mr. Rutter stated that hours and
51 rules should be posted with oversight by the appropriate City department. Mr. Criswell stated that signs

like those on the trail would be posted relating to issues like trash, open fires, and prohibition of motorized vehicles.

Chair Garland invited public comment. There was none.

Ms. Romano inquired of the need for a specific condition of approval regarding signage. Mr. Corwin suggested that the general topics be identified for the signage and not specific details.

The Board members discussed the issues around contact in the event of misuse of the pavilion.

Dan Justynski, Dartmouth College Director of Real Estate, spoke regarding the hours of operation for the pavilion and not the trails. He noted that the trails are open anytime, but safety and security would be supported by specified hours of pavilion operation. Having the pavilion closed from 10 PM to 5 AM would be preferable.

Chair Garland closed the Public Hearing.

A MOTION by Jeremy Rutter that the Lebanon Planning Board **APPROVE** the application of Upper Valley Mountain Bike Association and Dartmouth College Trustees for Site Plan Review to construct an open-air pavilion, parking, and associated site improvements in connection with the existing biking trail outdoor recreational use at 0 Mascoma Street (Tax Map 74, Lot 8, Plot 200), zoned RL-3, PB2022-30-SPR, as shown on a plan set titled “Nature Walk Trailhead – Proposed Pavilion – Preliminary Site Plan – Site Plan Review,” prepared by Jon Criswell, dated July 11, 2022, revised July 25, 2022, including any and all submissions and testimony provided for and during the public hearing, subject to the following conditions:

Conditions to be Satisfied Prior to Application for a Building Permit

1. The applicant shall make the following revisions to the plan set to the satisfaction of the Planning and Development Department and the City Engineer:
 - a. Update the site layout per the plan submitted by the applicant at the meeting of the Planning Board on August 22, 2022.
 - b. Identify mailing address of the applicant and names and mailing addresses of all abutters. (5.1.E.2).
 - c. Identify name and of the City and County (5.1.E.4.a).
 - d. Identify zoning district, tax map and lot number, and use of abutting properties within 200 ft of the development site (5.1.E.9).
 - e. Provide description of plan revisions (5.1.E.4.d).
 - f. Provide written project description (5.1.C).
 - g. Confirm ADA design requirements for handicap-accessible parking space and update plan as needed.
 - h. Identify roof drip edge system on west side of the pavilion and provide a construction detail.
 - i. Provide a sign attached to the pavilion as may be permitted by the Zoning Ordinance, containing the following information, at a minimum:
 - i. Trash removal policy;
 - ii. Prohibiting discharge of firearms;
 - iii. Prohibiting open flame food preparation; and
 - iv. Prohibiting use of the pavilion between the hours of 10 pm and 5 am.

1 The applicant shall provide the Planning and Development Department with one (1) full size copy
2 of the revised plan set, and a digital copy of the revised plan set saved in a PDF-A format for
3 archival purposes.
4

- 5 2. All engineering review fees shall be paid in full as required by Section 4.7.E.1 of the Site Plan
6 Review Regulations.
7

8 **Conditions to be Satisfied Prior to the Issuance of a Certificate of Occupancy**
9

- 10 3. All improvements depicted on the plan shall be completed and shall be constructed as depicted on
11 the approved plan, including any modifications to the plan as may be approved by the Planning
12 Board in accordance with the Site Plan Review Regulations.
13

14 **General Conditions**
15

- 16 4. The applicant shall implement and maintain NHDES Site Specific Best Management Practices
17 before, during, and after construction.
18
19 5. The applicant shall be responsible for keeping the parking areas and the vicinity of the pavilion
20 free of trash.
21
22 6. Lighting fixtures in the pavilion shall be recessed under the roof and shall not be visible from
23 adjacent properties and shall be operated on timers.
24

25 ***The motion was seconded by Tom Martz.***
26

27 Ms. Romano inquired about timers on lighting versus motion sensors. Mr. Corwin stated that timers are
28 preferable.
29

30 ****The MOTION was approved (7-1).***
31

32 Mr. Hall returned to the Board.
33

34 **4. Other Business**
35

36 **A. Continued Discussion of the Draft Strategic Plan**
37

38 Mr. Brooks stated that the City Manager introduced the Draft Strategic Plan. There has been no public
39 input in the work sessions at the Board/Committee level or the City Council. This plan would impact the
40 beginning of the budget process, and the brainstorming spreadsheet is already online for public viewing.
41 The Boards and Committees would be asked to provide input.
42

43 The Board members and Staff discussed the parameters of the process. Mr. Brooks clarified that the goal
44 would be to define a list of goals that can be budgeted over a one to three-year period. Mr. Hall expressed
45 concern over the history of similar processes around the country. Mr. Brooks explained the goals of the
46 proposed process. Ms. Stavis commented on strategic plans, which often don't get used, and she shared
47 Mr. Hall's concerns and does not believe the proposal will solve the communication problem. Mr. Martz

1 agreed with Mr. Hall and Ms. Stavis. Ms. Romano suggested a limited number of projects. Mr. Jasinski
2 stated that instituting one more board would not be helpful.

3
4 Ms. Zook asked for clarification of the overall process. Mr. Brooks noted that the Strategic Plan would be
5 more specific and be shorter in term to address achievable goals or projects. The Board members
6 continued to discuss the possibilities for the new process. Mr. Brooks explained that the Planning Board
7 or its individual members may contribute ideas to the on-line Miro Board. Mr. Rutter commented that the
8 maintenance items are routine and not needed in the plan. Ms. Zook stated that the staff and volunteer
9 comments would be very useful.

10
11 B. Review of CIP Subcommittee discussions; adopt CIP and submit final recommendation for the
12 2022 capital budget

13
14 Mr. Corwin stated that the subcommittee members Kim Chewning, Cori Hirai, Jeremy Rutter, and Tom
15 Jasinski met on July 28th and August 4th. The members were charged with prioritizing the projects and
16 ranking them, and that information was provided to the Board members. Mr. Brooks explained that the
17 CIP looks at a six-year period and ranks projects to verify that the project would achieve City goals.

18
19 Mr. Jasinski noted that the subcommittee did not specifically address the 2023 funding year. He also
20 inquired if the City Council uses the information. Ms. Zook affirmed that the information is useful, but
21 there are other considerations that the City Council incorporates. Ms. Stavis inquired about the origin of
22 the statute requiring the CIP process. Mr. Corwin stated that he doesn't know the details of HR674:6, and
23 the CIP document is important as approved by the Planning Board. Mr. Rutter suggested that a discussion
24 is needed among the Board members to make the CIP process more meaningful. Mr. Hall agreed with Mr.
25 Rutter, who suggested that the new members of the CIP committee report on their experience to the full
26 Board. Ms. Zook noted that it would be very useful for the Planning Board to make a presentation to the
27 City Council based upon the experience of the CIP review and provide strategic information.

28
29 ***A MOTION by Matthew Hall that the Lebanon Planning Board APPROVES the Capital Improvement***
30 ***Program for the six-year period (2023-2028) as presented in the August 22, 2022 agenda packet, and***
31 ***hereby SUBMITS Year 1 (2023) of the CIP as the Board's recommendation to the City Council for***
32 ***capital budget funding for 2023.***

33
34 ***The motion was seconded by Tom Martz.***

35 ****The MOTION was approved (9-0).***

36
37
38 C. Legislative update: HB 1021, HB1661

39
40 Mr. Corwin stated that HB 1661 requires findings of fact to be provided by the Board regarding both
41 denials and approvals. The findings of fact must be provided based upon the new statute in all cases.
42 Guidance will be provided in the fall for the approvals. It is already being done for denials. The 65-day
43 review period is also impacted by the new statute. There are new requirements for elderly housing,
44 making them equal to workforce or low-income housing.

45
46 Mr. Jasinski inquired about the requirements for the Planning Board related to religious groups and the
47 Site Plan Regulations. Mr. Corwin noted HB 2021 states that they do not have to provide a site plan.

48
49 Mr. Rutter inquired about projects that are denied and later reapply and whether they must pay duplicate
50 fees. Mr. Corwin stated that it could be a future topic for the Board.

1
2 D. Adopt new fee schedule
3

4 Mr. Corwin stated that there was just one change regarding the application fee for a boundary line
5 adjustment be specified as \$100.
6

7 ***A MOTION by Kathie Romano to approve the adoption of the new fee schedule.***

8 ***The motion was seconded by Matthew Hall.***

9 ****The MOTION was approved (8-1).*** Matthew Hall voted against.
10

11 **5. Committee Reports**
12

13 **A. Planning Board Subcommittees:**

14 --Planning Board Capital Improvement Program (K. Chewning, C. Hirai, T. Jasinski, J. Rutter)

15 --Planning Board Development Regulations Update (M. Hall, K. Romano, T. Jasinski, C. Hirai)

16 Mr. Jasinski inquired about the role of a member of the committee. Mr. Hall stated that the
17 committee will meet when there is enough to consider. Ms. Romano stated that in previous years, the
18 committee met regularly to review individual sections of the regulations. Mr. Corwin stated that Mr.
19 Hall is working on an update to the landscape regulations. Mr. Jasinski suggested that the procedures
20 need to be written to accommodate the priority of specific items.
21

22 **B. City Council Subcommittees:**

23 --Class VI Roads Advisory Committee (VACANT)

24 --Lebanon Energy Advisory Committee (VACANT)
25

26 **C. Other Subcommittees:**

27 --City Council Representative (K. Zook, D. Whittlesey)

28 --Heritage Commission (J. Rutter)

29 --Pedestrian & Bicyclist Advisory Committee (G. Amaro)

30 --Upper Valley Lake Sunapee Regional Planning Commission (B. Garland)

31 --UV Subcommittee of the Connecticut River Joint Commissions (B. Garland)

32 --Upper Valley Transportation Management Association (VACANT)

33 --Mascoma River Local Advisory Committee (K. Romano)

34 --West Lebanon Revitalization Advisory Committee (L. Stavis)

35 --Planning & Development Department – Task Status (T. Corwin, M. Goodwin, R. Owens)
36

37 **6. Approval of Minutes**
38

39 **A. July 25, 2022**
40
41
42

43 ***A MOTION by Matthew Hall to approve the Planning Board Minutes of July 25, 2022, as presented.***

44 ***The motion was seconded by Jeremy Rutter.***

45 ****The MOTION was approved 9(-0).***
46

47 **B. July 28, 2022 – CIP**

48 Change the arrival of Cori Hirai to before the voting, not after.
49

50 ***A MOTION by Matthew Hall to approve the Planning Board CIP Subcommittee Minutes of July 28,***
51 ***2022, as amended.***

1 ***The motion was seconded by Jeremy Rutter.***

2 ****The MOTION was approved (9-0)***

3
4 C. August 4, 2022 – CIP

5
6 Page 4, line 47, to remove the fragmented sentence

7
8 Reflect that Cori Hirai and Jeremy Rutter made and seconded the Motion to Adjourn.

9
10 ***A MOTION by Hall to approve the Planning Board Minutes of August 4, 2022, as amended.***

11 ***The motion was seconded by Hirai.***

12 ****The MOTION was approved (9-0)***

13
14 Chair Garland noted that this would be David Brooks' last scheduled meeting and expressed the Board's
15 Appreciation for his many years of service to the Board and wished him well in his new position. A round
16 of applause followed.

17
18
19 **7. Adjournment**

20
21 ***A MOTION by Matthew Hall to adjourn the meeting.***

22 ***The motion was seconded by Jeremy Rutter.***

23 ****The MOTION was approved (9-0).***

24
25 The meeting was adjourned at 9:22 PM.

26
27 Respectfully Submitted,

28
29 Holly Howes

30 Recording Secretary

**Agenda
Planning Board
October 10, 2022**

**Agenda Item #5B
Approval of Minutes**

September 19, 2022

DRAFT

LEBANON PLANNING BOARD
Regular Session
Monday, September 19, 2022, 6:30 PM
City Council Chambers, City Hall
or Remote Via Microsoft Teams
LebanonNH.gov/Live

MEMBERS PRESENT: Bruce Garland (Chair), Matthew Hall (Vice-Chair), Gregorio Amaro, Kim Chewning, Kathie Romano, Laurel Stavis, Cori Hirai (Alternate)

MEMBERS ABSENT: Karen Zook (City Council Rep), Tom Martz, Jeremy Rutter, Thomas Jasinski (Alternate)

STAFF PRESENT: Tim Corwin (Interim Planning Director), Brian Vincent (City Engineer)

1. Call to Order

Chair Garland called the meeting to order at 6:31 PM.

2. Notice of Regional Impact

The following applications were received by the Planning and Development Department on or before September 12, 2022:

CP Centerra LLC, 12 Centerra Parkway (Tax Map 10, Lot 11, Plot 100), zoned IND-L: A Conditional Use Permit was approved on January 11, 1993, designating the Bayson Co/Centerra Development as a Planned Business Park. The applicant requests an amendment to the Conditional Use Permit to allow a health club at 12 Centerra Parkway which is located in the commercial sector of Centerra, whereas health clubs are only allowed in the industrial sector of Centerra pursuant to the Zoning Ordinance dated September 2, 1992, which is the Zoning Ordinance in effect at the time the Conditional Use Permit was approved. PB2022-38-MACU

One Court Street Associates, 1 Court Street (Tax Map 91, Lot 244), zoned LD: Applicant requests a Conditional Use Permit to convert a portion of the existing building at 1 Court Street to a college/university educational facility use. PB2022-39-CUP

Mr. Corwin stated that Staff recommends that the applications above do not have the potential for regional impact.

A MOTION by Matthew Hall that the applications above do not have the potential for regional impact. The motion was seconded by Laurel Stavis.

**The MOTION was approved (7-0).*

3. Public Hearing Items

A. LWM Residential LLC, 1 Foundry Street (Tax Map 91, Lot 263), 25 Mechanic Street (Tax Map 91, Lot 267), and 43 Mechanic Street (Tax Map 106, Lot 34), zoned LD: Request for Site Plan Review of a phased, 196-unit multi-family development including a new 4-story, 27-unit multi-family building with a parking garage on the ground floor at 43 Mechanic Street; a new 4-

1 story, 31-unit multi-family building with a lower-level parking garage at 25 Mechanic Street, to be
2 merged with 1 Foundry Street; and, at 1 Foundry Street, the renovation of the existing Woolen Mill
3 building into 49 dwelling units, the renovation of the existing commercial building and boiler
4 building into amenity spaces, construction of a 2-story parking structure, and construction of a new
5 5-story, 89-unit multi-family building with a lower-level parking garage, together with associated
6 site improvements. PB2022-36-SPR - ***Completeness review only on 09/19/2022, public hearing to
7 commence on 10/10/2022***
8

9 Mr. Corwin stated that Staff has reviewed the above application and recommends that it is complete
10 enough for the Planning Board to accept jurisdiction and commence review.
11

12 ***A MOTION by Cori Hirai that the application of LWM Residential LLC, 1 Foundry Street (Tax Map
13 91, Lot 263), 25 Mechanic Street (Tax Map 91, Lot 267), and 43 Mechanic Street (Tax Map 106, Lot
14 34), zoned LD, is complete enough for the Planning Board to accept jurisdiction and commence
15 review.***

16 ***The motion was seconded by Gregorio Amaro.***

17 ****The MOTION was approved (7-0).***
18

19 Chair Garland opened the Public Hearing and noted that a site visit would be in order for this application.
20

21 Mr. Corwin suggested that the site visit could be Thursday, October 6, 2022, at 5:00 PM. The applicant,
22 Jon Livadas, stated that he would be available. He suggested that the tour should start at 1 Foundry Street
23 where there is sufficient parking.
24

25 ***A MOTION by Matthew Hall to schedule a site visit of the properties on Thursday, October 6, 2022, at
26 5:00 PM.***

27 ***The motion was seconded by Kim Chewing.***

28 ****The MOTION was approved (7-0).***
29
30

31 **B. City of Lebanon, Lebanon Municipal Airport, 5 Airpark Road (Tax Map 131, Lot 1)
32 and 0 Airpark Road (Tax Map 159, Lot 4), zoned IND-L: Request for a Boundary Line
33 Adjustment. PB2022-32-BLA**
34

35 Mr. Corwin stated that Staff recommends the above application is complete enough for the Planning
36 Board to accept jurisdiction and commence review.
37

38 ***A MOTION by Matthew Hall that the Lebanon Planning Board finds the Boundary Line Adjustment
39 application of the City of Lebanon (PB2022-32-BLA) IS complete enough to accept jurisdiction and
40 commence review.***

41 ***The motion was seconded by Cori Hirai.***

42 ****The MOTION was approved (7-0).***
43
44

45 Carl Gross, Lebanon Airport Manager, appeared in support of the application.
46

47 Mr. Gross described the need for and scope of the request.
48

49 Mr. Corwin stated that a waiver was requested, and Staff has no objection to the request.
50

51 Ms. Hirai inquired if the adjustment effects any future development. Mr. Gross stated that it does not.

Ms. Stavis inquired about the term “protecting the perimeter”. Mr. Gross stated that it is to keep the property from being developed.

Ms. Romano inquired if there are any structures currently on the property. Mr. Gross stated that there are no structures on the property, which is very steep.

Sarah Riley, Conservation Commission from Ward 2, stated that it is hard to read the map. She inquired if the change would affect the use of the road and public access to the trails.

A MOTION by Matthew Hall that the Lebanon Planning Board **APPROVE** a waiver for the Boundary Line Adjustment application of the City of Lebanon (PB2022-32-BLA) from Section 8.2.A.5 of the Subdivision Regulations, requiring the plat to depict the location of all existing structures on the subject lots.

The motion was seconded by Laurel Stavis.

***The MOTION was approved (7-0).**

A MOTION by Matthew Hall that the Lebanon Planning Board **APPROVE** the application of the City of Lebanon for a proposed Boundary Line Adjustment between lands located at 5 Airpark Road (Tax Map 131, Lot 1) and 0 Airpark Road (Tax Map 159, Lot 4), PB2022-32-BLA, as shown on a plat titled “Annexation Plan of Land – City of Lebanon,” prepared by Paton Land Surveying, LLC, dated July 25, 2022, Proj. No. 2019-281-17, including any and all supplemental submissions and testimony provided during the public hearing, with the following conditions to be satisfied prior to the recording of the plat:

1. The applicant shall provide a revised plat depicting the following change to the satisfaction of the Planning and Development Department:
 - a. In the title block:
 - i. Change “Annexation” in plat title to “Boundary Line Adjustment”
 - ii. Remove reference to Hall School Road and identify address as 5 Airpark Road and 0 Airpark Road.
 - b. Identify name and mailing address of all easement holders. (8.2.A.2)
 - c. Identify all abutters (8.2.A.2)
 - i. Provide mailing addresses for all abutters. (8.2.A.2)
 - ii. Provide tax map and lot for all abutting properties. (8.2.A.2)
 - d. Provide surveyor’s license number and seal. (8.2.A.3)
 - e. Provide a site location map showing the original boundaries of the subject lots and adjacent lots (8.2.A.6).
 - f. Provide the areas of the altered lots both in acres and in square feet. (8.2.A.7)
 - g. Identify the date of the completion of the field survey. (8.2.A.7)
 - h. Provide date and description of any revisions made. (8.2.A.1)
 - i. Remove the word “PRELIMINARY” from the bottom of the plat.

2. The applicant shall provide to the Planning and Development Department a digital record drawing of the revised plat (Cad .dwg Format using NH State Plane Coordinate system).

The motion was seconded by Cori Hirai.

***The vote on the motion was (7-0).**

1
2 ***A MOTION by Matthew Hall that the Lebanon Planning Board authorize the Chair to sign the***
3 ***Boundary Line Adjustment plat for the City of Lebanon, PB2022-32-BLA.***
4 ***The motion was seconded by Laurel Stavis.***
5 ****The MOTION was approved (7-0).***
6
7

8 **C. City of Lebanon, 36 Poverty Lane (Tax Map 117, Lot 1), zoned IND-L:** Request for Site
9 Plan Review to reconstruct and expand the Police Station parking lot. PB2022-33-SPR (NOTE:
10 This application will be reviewed as a Governmental Land Use pursuant to RSA 674:54)
11

12 Assistant Director of Public Works Everett Hammond and Deputy Police Chief Matthew Isham appeared
13 in support of the request.
14

15 Mr. Hammond described the site plan for the parking expansion, which would provide visitor and
16 employee parking. He explained that the parking surface is degraded after thirty years, and additional
17 spaces are needed. The sidewalk as originally installed is too high and would be adjusted. Several other
18 adjustments are needed for safety and security.
19

20 Mr. Corwin noted that the Planning Board's role is advisory only.
21

22 Ms. Hirai inquired if the gravel is considered impervious surface. Mr. Hammond stated that it is. Ms.
23 Hirai added that EV charging would be desirable and asked if it was being considered. Mr. Hammond
24 stated that they are looking into installing conduit under the pavement to make charging stations possible
25 in the future. Mr. Isham explained the location of the conduit and noted that there is solar being installed
26 on the property.
27

28 Ms. Stavis inquired about the light fixtures being removed from one area of the parking lot. Mr.
29 Hammond noted that the lot will all be striped and well lit.
30

31 Chair Garland invited public comment.
32

33 Sarah Riley, Conservation Commission member from Ward 2, noted that parking lots create heat and
34 removing trees would decrease the heat mitigation. Mr. Hammond stated that there were no plans to
35 replace them. Chair Garland suggested adding shade trees. Mr. Isham stated that only the evergreens
36 would be removed, and there would still be shade on that side of the parking area.
37

38 Mr. Vincent stated that the west side has a lot of trees, the east side does as well, so only the south side
39 has fewer trees.
40

41 **4. Other Business** 42

43 Ms. Hirai's research on digital signage was shared and discussed.
44

45 Mr. Corwin commented on the suggestions.
46

47 Ms. Hirai stated that she researched the references to digital signage and found two statements, which
48 were very similar. Flashing and scrolling images are distracting to drivers and would ideally be avoided.
49 The rules for illuminated signs would also apply to digital signs.
50

51 Ms. Romano shared information on previous discussions regarding flashing signs.

1
2 The Board members discussed the various considerations involved.

3
4 Mr. Corwin asked that the changes the Board would prefer should be decided now. Chair Garland asked
5 Mr. Corwin to draft a motion regarding digital signs that would only change once a day.

6
7 Chair Garland read a letter from Tom Martz in which he resigned from the Planning Board. He provided
8 personal insights regarding the need for affordable housing in Lebanon. He also invited other members of
9 the public to consider serving on the City's boards or committees, and he thanked the Board members for
10 their service.

11
12 Mr. Corwin stated that the New Hampshire Municipal Association workshop would be held virtually on
13 Saturday, October 15, 2022, from 9am to 3pm NHMA, and he would encourage everyone to attend. There
14 is always something new being shared.

15
16 Mr. Corwin stated that the Lebanon Housing Authority issued an invitation for the Planning Board
17 members to tour their new facility at 250 Heater Road. Anyone interested should contact Mr. Corwin to
18 sign up.

19
20 Mr. Hall congratulated Mr. Corwin for being appointed Interim Planning Director.

21
22 Mr. Corwin stated that the zoning amendment review would occur in one week, and the information
23 would be shared as soon as possible. He noted that the changes are more substantive than in recent years.

24
25 Ms. Hirai inquired about feedback on the Strategic Plan.

26
27 Ms. Stavis noted that new EV considerations are being proposed in the State legislature.

28
29
30 **5. Approval of Minutes**

31
32 A. August 8, 2022

33
34 *A MOTION by Laurel Stavis to approve the Planning Board Minutes of August 8, 2022, as amended.*

35 *The motion was seconded by Gregorio Amaro.*

36 **The MOTION was approved (7-0).*

37
38 **6. Adjournment**

39
40 *A MOTION by Matthew Hall to adjourn the meeting.*

41 *The motion was seconded by Kathie Romano.*

42 **The MOTION was approved (7-0).*

43
44 The meeting was adjourned at 7:59 PM.

45
46 Respectfully submitted,

47
48 Holly Howes

49 Recording Secretary