



**LEBANON PLANNING BOARD
APRIL 14, 2025 - 6:30 PM
COUNCIL CHAMBERS, CITY HALL OR
REMOTE VIA VIRTUAL PLATFORM
LEBANONNH.GOV/LIVE**

1. Call to Order

- A. To participate in this meeting, please [join live via Microsoft Teams](#) or call 929-229-5356 (access code: 832 701 958#). If you have trouble accessing this meeting, please email [Tim Corwin](#).

2. Notice of Regional Impact

3. Public Hearing Items

- A. **Cicotte Holdings, LLC, 51 Evans Drive (Tax Map 78, Lot 40, Plot 200), zoned R-O-1:** Request for a Conditional Use Permit pursuant to Section 311A.2 of the Lebanon Zoning Ordinance and for Site Plan Review per Section 3.1.D of the Site Plan Review Regulations to expand the outdoor vehicular storage area for an existing vehicular sales use together with associated site improvements including landscaping and lighting. **PB2024-48-SPRCUP -Continued from March 10, 2025**
- B. **Occom Path, Inc., 5 & 11 Oak Ridge Road (Tax Map 4, Lot 5 & 6), zoned R-3:** The 21-dwelling unit Occom Path Planned Unit Residential Development (PURD) was approved on May 17, 2021 (PB2020-31-FMAJ) and was extended on March 20, 2023 (PB2023-10-EXT). The applicant now requests a waiver from Section 14.4.C of the Subdivision Regulations which provides that no building permits shall be issued for the final fifty percent (50%) of dwelling units until all required site improvements have been constructed. **PB2025-14-SUBA**
- C. **Walker Family Trust, 169 Slayton Hill Road (Tax Map 163, Lot 9), zoned RL-2:** Applicant requests approval of a proposed two (2)-lot Minor Subdivision. **PB2025-15-MIN**
- D. **Upper Valley Music Center, Inc., 8 South Park Street (Tax Map 92, Lot 10), zoned PB:** Applicant requests Site Plan Review for a proposed +/- 920 sq. ft., 2-story addition to the existing building, together with associated site improvements. **PB2025-16-SPR**
- E. **Recreo, LLC, 2 Mascoma Street (Tax Map 91, Lot 254), zoned LD:** Applicant received Site Plan approval on July 11, 2022 (PB2022-17-SPR) for a phased redevelopment of the property including construction of two (2) multi-family dwellings containing a total of 152 units together with associated site improvements, which was extended on July 8, 2024 (PB2024-25-EXT). Applicant now requests (1) a waiver from Section 4.10.C of the Site Plan Review Regulations providing that the Planning Board shall grant no more than one extension for any site plan, and (2) an additional extension of the timelines associated with obtaining a building permit and for constructing required site improvements. **PB2025-13-EXT**
- F. **Families Flourish North East (applicant), Mary Hitchcock Memorial Hospital (property owner), 424 Mount Support Road (Tax Map 24, Lot 6), zoned R-1:** Applicant requests Site Plan Review for a proposed +/-19,661 sq. ft., 3-story treatment and recovery center/group residence with 12 residential rooms, together

with associated site improvements including access, parking, utilities, landscaping, and lighting. **PB2025-17-SPR**

- G. **Michael Davidson, 3 Campbell Street (Tax Map 92, Lot 65), zoned LD:** The property is improved with a main building utilized as a mixed use office and multi-family dwelling, and a carriage house utilized as a multi-family dwelling. The Applicant requests Site Plan Review to add additional dwelling units to the property for a total of twelve (12) dwelling units, and to convert the use of the main house to a multi-family dwelling only. **PB2025-18-SPR**

4. Other Business

5. Approval of Minutes

- A. March 17, 2025

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](https://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.



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

April 14, 2025 Meeting

Staff Memorandum – PB2024-48-SPRCUP – *con't from 3/17/25*

APPLICATION INFORMATION

Agenda Item:

3.A

Application ID:

PB2024-48-SPRCUP

Application Type:

Site Plan Review and Conditional Use Permit** for expanded vehicular storage area for existing vehicular sales use

Property Location & Tax Map

51 Evans Drive (Tax Map 78, Lot 40, Plot 200)

Applicant/Property Owner:

Cicotte Holdings, LLC

Zoning District:

Residential Office One

Future Land Use Map:

Mixed Use

Property Size:

+/-3.32 acres (*per applicant's site plan*)

Overlay Districts:

- Wetlands Conservation District
- Floodplain District

LEGAL NOTICE

Cicotte Holdings, LLC, 51 Evans Drive (Tax Map 78, Lot 40, Plot 200), zoned R-O-1: Request for a Conditional Use Permit pursuant to Section 311A.2 of the Lebanon Zoning Ordinance** and for Site Plan Review per Section 3.1.D of the Site Plan Review Regulations to expand the outdoor vehicular storage area for an existing vehicular sales use together with associated site improvements including landscaping and lighting. PB2024-48-SPRCUP

***Conditional Use Permit approved by the Planning Board on 2/10/25*

PLANS AND APPLICATION MATERIALS

New:

- Application for Waivers dated January 27, 2025, last revised March 17, 2025 (2 pages)
- Plan sheet titled, "Detailed Grading Plan for Lebanon Nissan," prepared by Advanced Geomatics & Design, dated November 12, 2025, last revised March 19, 2025, PN: 23-006

INCLUDED IN [3/17/25 AGENDA PACKET](#)

- Letter dated March 3, 2025, from Daniel A. Nash, PE, of Advanced Geomatics & Design (description of revisions; 2 pages)
- Letter dated March 12, 2025, from Daniel A. Nash, PE, of Advanced Geomatics & Design (description of additional revisions and application package update; 1 page)
- Application for Waivers dated January 27, 2025, last revised March 12, 2025 (2 pages)
- Document titled, "Perimeter Landscape Exhibit," prepared by AGD, dated February 14, 2025 (1 page)
- Plan set titled, "Lebanon Nissan – Site Plan Amendment," prepared by Advanced Geomatics & Design, dated November 12, 2025, last revised March 12, 2025, PN: 23-006 (12 sheets)
- Lighting specifications by RAB (14 pages)

*Plans and application materials submitted for the February 10, 2025 Planning Board meeting were included in the February 10th meeting agenda packet posted [on-line here](#).
(<https://lebanonnh.portal.civicclerk.com/event/2225/files/attachment/4466>)*

STAFF COMMENTS

- The attached Application for Waivers with a revision date of March 17, 2025, adds a request to waive Section 6.2.E.2 which requires that, "The end of each row of parking shall have a landscape bed to protect any vehicle parked next to a travel lane. End beds shall be at least 8 feet in width, except for corner radii, shall be long enough to protect tree roots and vehicles parked in the adjacent parking spaces, and shall be planted with deciduous trees for shade." (see waiver request #7 on page 2 of the Application for Waivers.) The need for a waiver from Section 6.2.E.2 was noted in the staff memo prepared for the March 17th Planning Board meeting.
- As depicted on the attached "Detailed Grading Plan for Lebanon Nissan," with a revision date of March 19, 2025, the applicant has again reconfigured the site layout. See Figure 3 below. In adding parking spaces and aisles, the latest proposed layout obviates the potential need for waivers from Section 6.5.E.3 ("Parking spaces shall measure a minimum of 9 x 18 feet") and Section 6.5.E.4 ("Aisles between parallel rows of spaces shall be a minimum of 24 feet wide.") as had been suggested in the staff memo prepared for the March 17th Planning Board meeting. Note that all other requested waivers (as set forth in the attached Application for Waivers) are still needed.

For direct comparison, below are the various iterations of the site layout as presented for the February 10th Planning Board meeting (Figure 1), for the March 17th Planning Board meeting (Figure 2), and now for the April 14th Planning Board meeting (Figure 3).

Figure 1. Proposed site layout per materials submitted for 2/10/25 Planning Board meeting.



STAFF MEMORANDUM

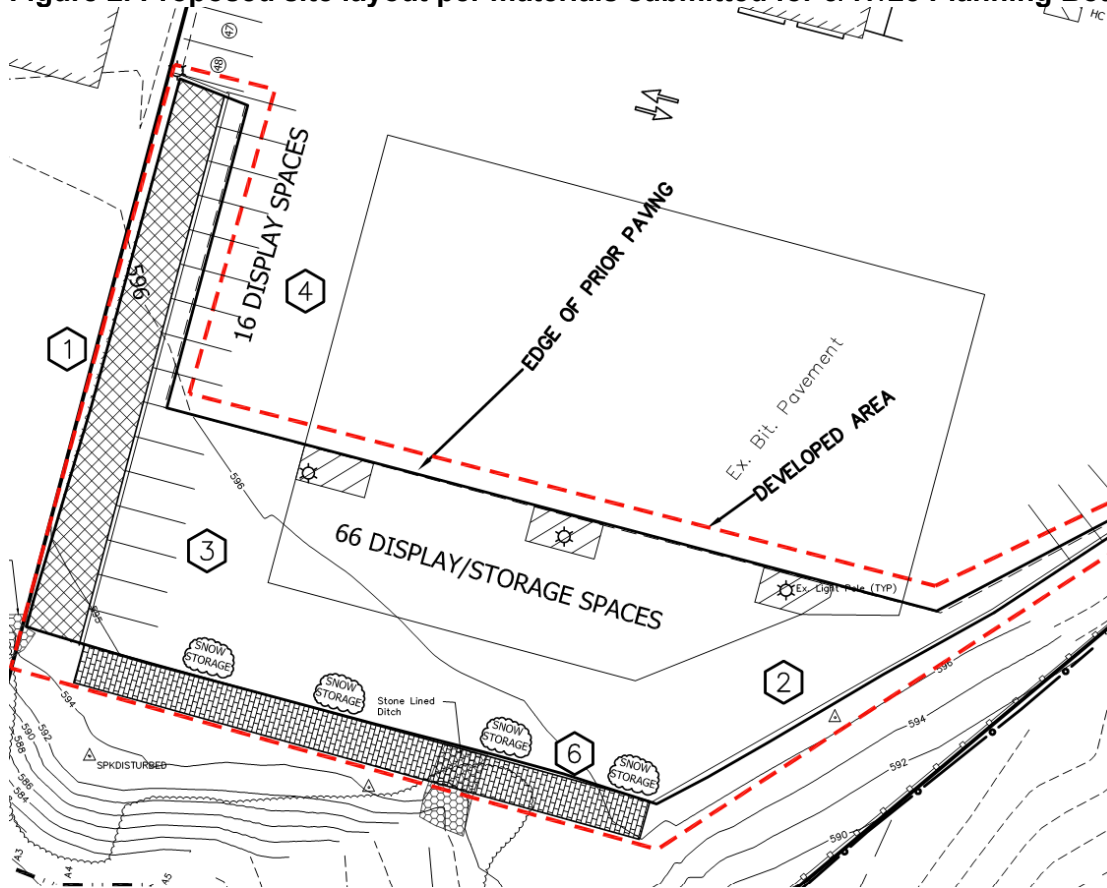
PB2024-48-SPRCUP

51 Evans Dr (78-40-200)

Agenda Item 3.A

April 14, 2025 PB Mtg

Page 3 of 4

Figure 2. Proposed site layout per materials submitted for 3/17/25 Planning Board meeting.**Figure 3. Proposed site layout per materials submitted for 4/14/25 Planning Board meeting.**

STAFF MEMORANDUM

PB2024-48-SPRCUP
51 Evans Dr (78-40-200)
Agenda Item 3.A
April 14, 2025 PB Mtg
Page 4 of 4

- The revised layout also adds 7-ft. wide “raised islands” with “sloped granite” at the southern end of two of the three proposed double-parking rows. The plan sheet does not identify what is proposed to be placed or planted within the raised islands.
- Ideally, the applicant would have provided an updated plan set that reflects the proposed site layout (i.e. the site plan and landscaping sheets included within the plan set submitted for the March 17th plan set depict the prior layout without striping, aisles, and landscaping aisles). At a minimum, updating the plan set to reflect the proposed layout (if approved by the Planning Board) will need to be made a condition of site plan approval.

Attachments

cc: Cicotte Holdings, LLC
Dan Nash, PE, Advanced Geomatics & Design
File



City of Lebanon, New Hampshire APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: Cicotte Holdings, LLC
Project Name: Nissan Auto Sales & Service
Project Address: 51 Evans Drive

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).]

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

We request a general waiver for having to satisfy the Site Plan regs for the portion of the site outside of the area proposed for development. The proposed improvement add a mere 21 spaces of vehicle display storage.

2. Section 5.1.E.16 (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

We request a waiver from having to measure and count trees in the existing vegetative buffer. The existing southern portion of the site has a substantial amount of natural, undisturbed vegetation, well in excess of the 15' requirement.

3. Section **6.5.D.5** (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

We request a general waiver for having to provide sidewalks along the property frontage. This property has two very long frontages and does not generate any pedestrian traffic. There are sidewalks on the opposite side of Evans Drive and Route 120 that appear to adequately serve pedestrian traffic.

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

Normally, light spill is a concern in residential areas. However, in commercial and industrial areas, public safety prefers light spill to provide better illumination for areas they have to observe to prevent unwanted activity.

5. Section **6.2.E.3** (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

There are no double rows of parking. The large display/storage area is not striped. Vehicle arrangement varies with inventory needs.

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

The long single rows along the property line are adjacent to a 15' landscape strip. The regulations allow the board to exclude the requirement for separate islands in this case.

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

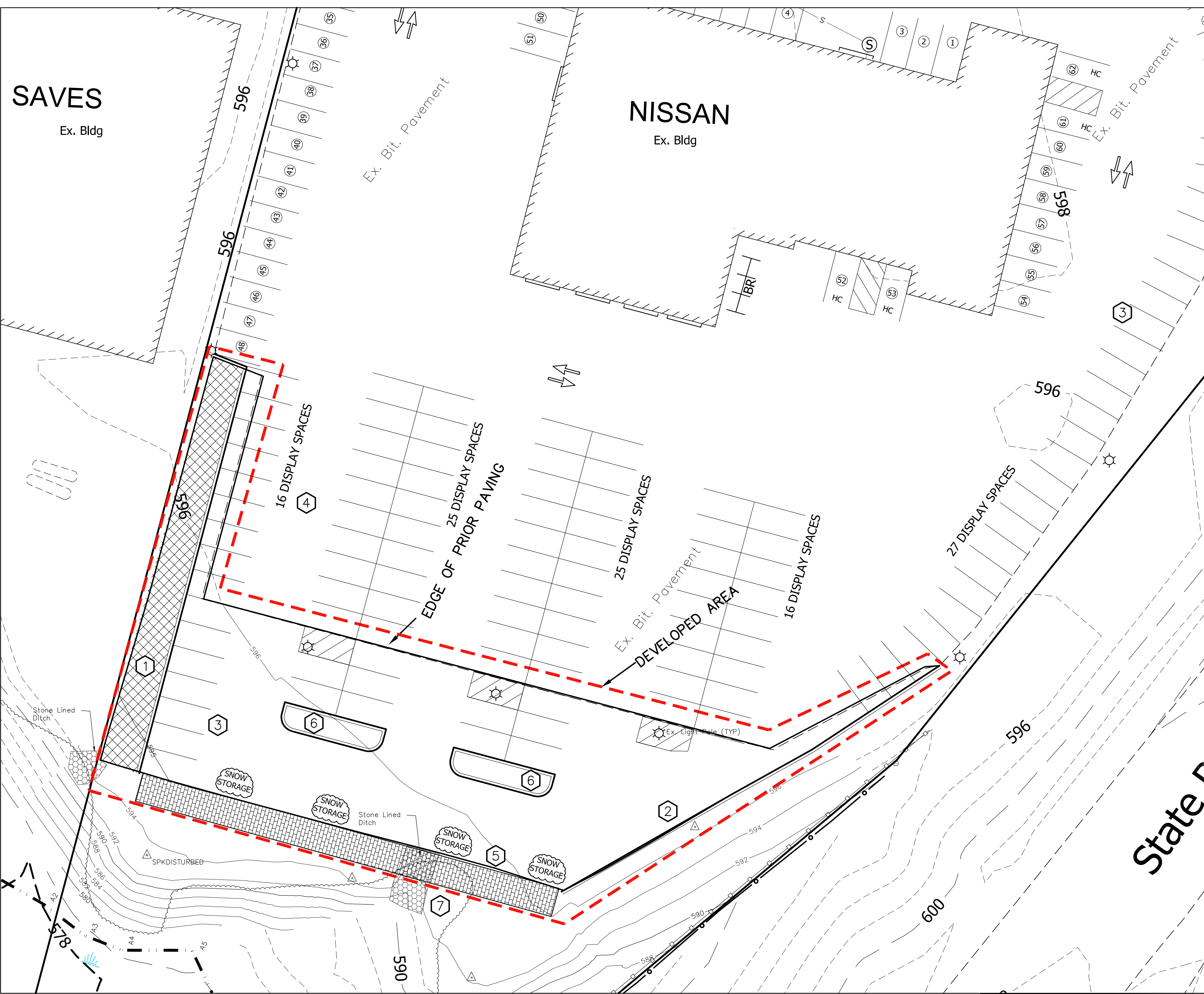
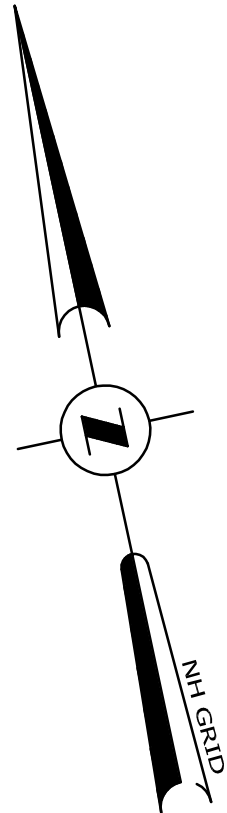
The large display/storage area is not striped. Vehicle arrangement varies with inventory needs.

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

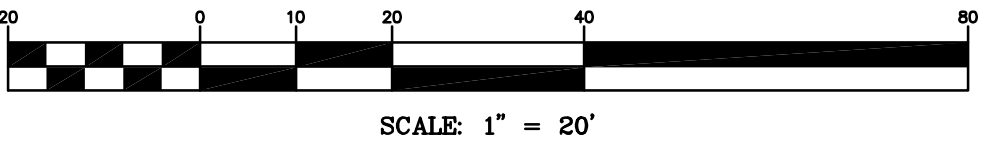
I (we) hereby submit this application to the Planning Board and attest that to the best of my (our) knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As the applicant or as the agent of the applicant, I attest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

Signature of Applicant: for owner (D. A.) Date: _____



KEY:
→ -TRAFFIC ARROW
BR -BIKE RACK

DETAILED GRADING PLAN



- NOTES:**
- 1 LANDSCAPE AREA. PAVEMENT TO BE REMOVED.
 - 2 AREA OF PAVEMENT PLACED BEFORE PERMIT=14,416sf+/-.
PAVEMENT TO BE REMOVED=1,865sf+/-.
NET NEW PAVEMENT=12,551sf+/-.
 - 3 VEHICLE PARKING/DISPLAY SPACES 9X18 TYPICAL.
REQUIRED SPACES (RETAIL SALES, SERVICE ARE NUMBERED)
 - 4 24' AISLE
 - 5 PAVEMENT PAVERS
 - 6 RAISED ISLAND, SLOPED GRANITE CURB.
 - 7 PORTION OF EXISTING STONE LINED DITCH UNDER PAVERS
TO BE REMOVED.

ADVANCED GEOMATICS & DESIGN		FOR		LEBANON NISSAN		IN		LEBANON, NH		DATE	
105 BANK STREET - PO BOX 512 LEBANON, NEW HAMPSHIRE 03766 PHONE: (603) 448 6295 E-MAIL: advancedgeomatics@comcast.net		ADVANCED GEOMATICS & DESIGN		C-2		SHEET 7 OF 12		DWG: M:\23006-PL.DWG		REVISIONS	
SURVEYED: PATON		DESIGNED: DAN		DRAWN: DAN		CHECKED: DAN		DATE: 12NOV2024		1	
2		3		4		5		6		7	
19MAR25		12MAR2025		27JAN25							
3		2		1							
ADD ISLANDS, STRIPING		STAFF COMMENTS		STAFF COMMENTS							



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

April 14, 2025 Meeting

Staff Memorandum – PB2025-14-SUBA

APPLICATION INFORMATION

Agenda Item: 3.B

Application ID#: PB2025-14-SUBA

Application Type: Request for waiver from limitation on issuance of building permits for an approved 21-unit Planned Unit Residential Development

Property Location & Tax Map:

5 & 11 Oak Ridge Road
(Tax Map 4, Lots 5 & 6)

Applicant/Property Owner:

Occom Path, Inc.

Property Size (per City Assessor):

- 5 Oak Ridge Road: +/-4.33 acres (+/-183,210 sq. ft.)
- 11 Oak Ridge Road: +/-0.75 acres (+/-32,977 sq. ft.)

Zoning District: R-3

Overlay Districts: none

Existing Improvements & Use:

- 5 Oak Ridge Road: commercial radio tower; *a nonconforming use*
- 11 Oak Ridge Road: +/-1,296 sq. ft. (finished) single-story one-family dwelling constructed in 1978 (*per the City Assessor's records*); *a conforming use per §310.2*

Proposed Improvements & Use:

21-unit Planned Unit Residential Development (PURD) per §501.1 & §501.2 of the Zoning Ordinance

Staff Exhibits:

- 5/17/21 Notice of Action
- 3/20/23 Notice of Action
- Approved PURD Subdivision Plat

LEGAL NOTICE

Occom Path, Inc., 5 & 11 Oak Ridge Road (Tax Map 4, Lot 5 & 6), zoned R-3: The 21-dwelling unit Occom Path Planned Unit Residential Development (PURD) was approved on May 17, 2021 (PB2020-31-FMAJ) and was extended on March 20, 2023 (PB2023-10-EXT). The applicant now requests a waiver from Section 14.4.C of the Subdivision Regulations which provides that no building permits shall be issued for the final fifty percent (50%) of dwelling units until all required site improvements have been constructed. PB2025-14-SUBA

APPLICATION DOCUMENTS

- ▶ Application form
- ▶ Undated letter from Tim Estes, of Estes & Gallup, LLC (application narrative; 1 page)
- ▶ Application for Waivers dated March 6, 2025 (2 pages)
- ▶ Document titled, "Occom Path – Subdivision Regulations Waiver Request – Exhibit A" (addressing waiver criteria 7.15.A; 1 page)
- ▶ Document titled, "Occom Path – Subdivision Regulations Waiver Request – Exhibit B" (addressing waiver criteria 7.15.B; 1 page)
- ▶ Certified Notification List (2 pages)
- ▶ Fee Schedule (2 pages)

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.

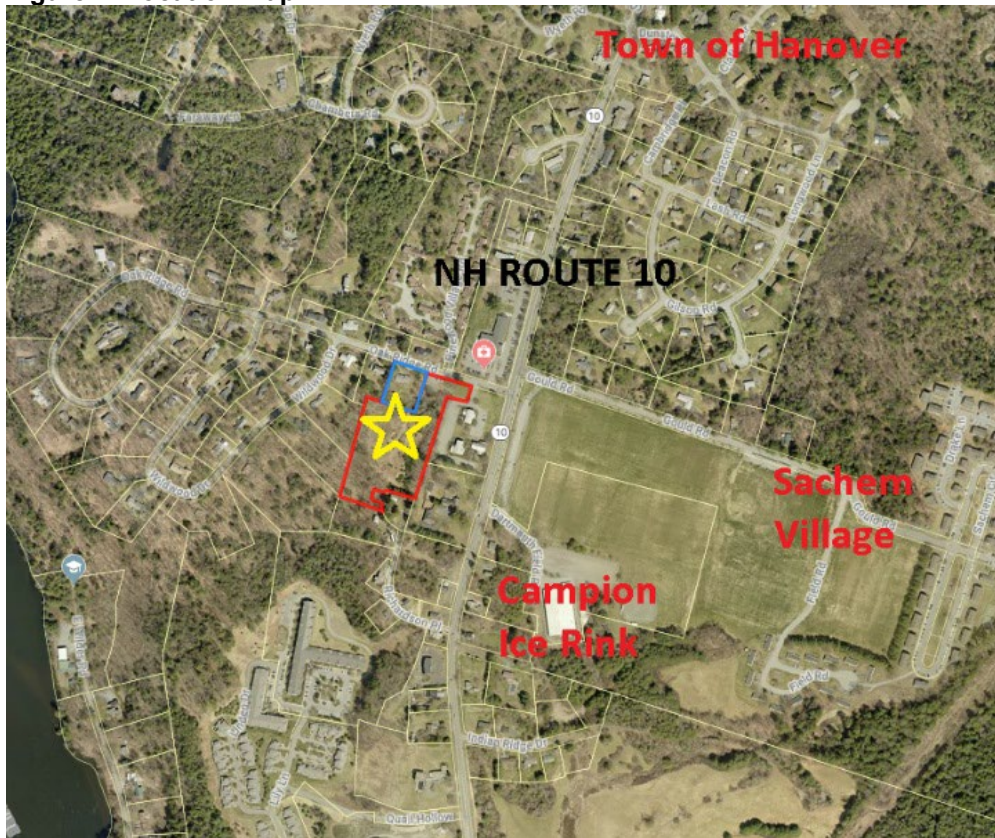
BACKGROUND

The subject properties include 5 Oak Ridge Road, a +/-4.33 acre property currently improved with a commercial radio tower, and 11 Oak Ridge, a +/-0.75 acre lot currently improved with a one-family dwelling. An application to merge the lots is pending (PB2025-11-VLM).

Pursuant to a Major Subdivision, Site Plan, and Conditional Use Permit approved by the Planning Board on May 17, 2021 (PB2020-31-FMAJ), the merged parcel will be redeveloped as a Planned Unit Residential

Development (PURD), containing 21 dwelling units together with related site improvements and amenities ("Occom Path"). The development consists of a mix of detached one- and two-family dwellings which will be clustered around and along a looped driveway accessed from Oak Ridge Road (see attached PURD plat). Parking will be provided in front of each unit, and the applicant proposes to extend and connect to the City's water and sewer systems to serve the development. On March 20, 2023, the Planning Board approved an extension of the May 17, 2021 approval pursuant to which the approved plat must now be recorded by June 28, 2025. To record the plat, the applicant must either complete the required site improvements or provide security for the construction and installation of the required improvements. Copies of the 2021 and 2023 Notices of Action are attached for reference.

Figure 1. Location Map.



©2018 Google

APPLICATION OVERVIEW

As a subdivision, the development is subject to Section 14.4.C of the Subdivision Regulations which provides as follows:

No building permit(s) shall be issued for the final fifty percent (50%) of lots or units in the subdivision, until all improvements required by the Board including, but not limited to, wastewater, water, power, streets and sidewalks have been fully completed by the Applicant and inspected and approved by the City.

As described in the attached letter from Tim Estes of Estes & Gallup, LLC, the applicant requests a waiver from Section 14.4.C of the Subdivision Regulations to allow the issuance of building permits for all 21 dwelling units prior to completion of the required site improvements.

Section 7.15 ("Waiver Request") provides as follows:

Upon written request from the Applicant, the Planning Board may, at its discretion, waive or modify any part of these Regulations, other than those regulations required by State law. The basis for any such waiver or modification granted by the Board shall be recorded in the minutes of the Board. The Board may only grant a waiver or modification of these Regulations if the Board finds, by majority vote, that:

- 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 subdivision, or conditions of the land in such subdivision, indicate that the waiver will properly carry out the spirit and intent of the regulations.

All written requests for waiver or modifications of these Regulations shall address items A and/or B above, depending on which criteria are being relied upon to justify the request.

In support of the requested waiver from Section 14.4.C, the applicant has provided written justification with respect to both criteria A and B. See attached "Exhibit A" and "Exhibit B," respectively.

STAFF COMMENTS

- Staff has no objection to the requested waiver. The rationale behind Section 14.4.C may be similar to the rationale behind Sections 7.11 and 7.12.A of the Subdivision Regulations which provide that no lots or units within a subdivision may be transferred until the subdivision plat is recorded, and further, that the plat can only be recorded when all improvements are constructed or when security for the cost of construction is provided. The purpose of requiring performance security to record a plat is to ensure that purchasers of lots or units within the subdivision have some measure of assurance that the required subdivision improvements will be completed in the event the developer fails to do so for any reason. Requiring either completion of the required improvements or the posting of security prior to the recording of a plat and the sale of lots/units also helps to protect the municipality. In such cases where the developer leaves a development half-finished, the municipality is not usually legally responsible for completing the improvements. But the issue is one of good planning and being mindful of the public interest. While the municipality might not be legally obligated to complete subdivision improvements, it may be compelled to complete the improvements as a political matter and/or as a moral obligation or duty to its property owners.

Presumably, the requirements of Section 14.4.C limiting the number of building permits that can be issued serves a similar public purpose in providing leverage for the completion of required improvements, thereby limiting the municipality's potential exposure as well as that of potential purchasers. Here however, because the approved PURD is located on a single property in single ownership with the units to be rented and not sold, the presumed rationale behind the limitation of Section 14.4.C does not apply.

- Since Occom Path was approved in 2021, the Subdivision Regulations have been amended to exclude "developments consisting of more than one (1) building erected on a lot in single ownership including, but not limited to, residential developments involving rental units under single ownership (e.g. an apartment complex), a shopping mall, or industrial park." See Section 6.2.A.

Consequently, if Occom Path were approved under the City's current land use regulations, subdivision approval would not be required and the development would not be subject to the building permit limitation set forth in Section 14.4.C.

- Although there is no statute and no case law that specifically grants the Planning Board the authority to amend a subdivision approval, the City's legal counsel has previously opined that a Planning Board has the inherent authority to do so. Nevertheless, staff recommends that the Board consider amending the Subdivision Regulation in the future to specifically address amendments to approved subdivisions (with respect to which the Subdivision Regulations are currently silent).

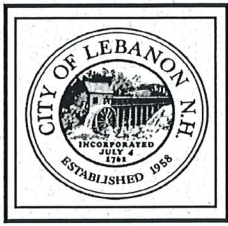
STAFF RECOMMENDATIONS

If the Planning Board moves to approve the waiver 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 following condition:

1. Except as modified by this approval, the applicant shall comply with (a) the Planning Board Notice of Action for PB2020-31-FMAJ, dated May 17, 2021, and all conditions of approval thereof; and (b) the Planning Board Notice of Action for PB2023-10-EXT, dated March 20, 2023, and all conditions of approval thereof.

Attachments

cc: Occom Path, Inc. (via e-mail)
Tim Estes, Estes & Gallup, LLC (via e-mail)
File



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

NOTICE OF ACTION LEBANON PLANNING BOARD

Notice is hereby given that on **March 8, 2021**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that the Lebanon Planning Board finds the application of Basic Holdings, LLC for a Final Major Subdivision, Site Plan Review and a Conditional Use Permit (PB2020-31-FMAJ) is complete enough to accept jurisdiction and commence review.

The motion was seconded by Joan Monroe. The vote on the motion was unanimous in favor, 9-0.

Notice is hereby given that on **May 17, 2021**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that the Lebanon Planning **Approve** a density bonus of one (1) unit to allow a project of twenty-one (21) units for Occom Path. PB2020-31-FMAJ.

The motion was seconded by Jeremy Rutter. The vote on the motion was approved, 5-2.

Notice is hereby given that on May 17, 2021, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that the Lebanon Planning Board **Approve** the application of Basic Holdings, LLC for a Conditional Use Permit per Sections 501.1 & 501.2 of the Zoning Ordinance, Final Major Subdivision approval, and Site Plan Review approval of a proposed Planned Unit Residential Development (PURD) at 5 & 11 Oak Ridge Road (Tax Map 4, Lots 5 & 6), zoned R-3, PB2020-31-FMAJ, as shown on a plan set titled "Occom Path PURD, Basic Holdings, LLC" prepared by Pathways Consulting, LLC, dated October 13, 2020, last revised May 3, 2021, Project No. 11465-01 (17 Sheets), including any and all submissions and testimony provided for and during the public hearing, with the following conditions:

Conditions to be Satisfied Prior to the Signing and Recording of the Plat (or prior to application for a building permit if the improvements are constructed prior to the recording of the plat)

(These conditions shall be satisfied within 2 years of the date of the Notice of Action.)

1. 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 applicant shall sign a Subdivision Agreement in accordance with Section 7.9.B of the Subdivision Regulations.

2. 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 applicant shall sign a Water Main Extension and Infrastructure Inspection Agreement in accordance with Chapters 136 and 182 of the City Code and Section 14.2 of the Subdivision Regulations.
3. Pursuant to Section 14.5 of the Subdivision Regulations, the applicant shall provide a Performance Bond for all required improvements, both on and off-site, including but not limited to: roadway and parking improvements, landscaping, lighting, utilities, bike lane/shoulder improvements, stormwater improvements, and sidewalks in an amount considered adequate by the Department of Public Works, and in a form satisfactory to the City Attorney. The Performance Bond shall be secured by a surety bond, a letter of credit, or an escrow account. *This requirement shall not apply if the required improvements are constructed prior to the recording of the plat.*
4. Street names and numbering shall be approved by the Police Department. The sole purpose of such review and approval shall be to assure that such names do not create confusion under the State's Enhanced 911 system.
5. The applicant shall submit final designs, including construction drawings, of all infrastructure features, including the proposed on- and off-site roadway and parking areas, sidewalks, water and sewer utilities, and storm drainage systems, to the City Engineer for approval. All such designs shall meet the required design standards set forth in Chapters 136 ("Sewer Service") and 182 ("Water Service") of the Code of the City of Lebanon.
6. The applicant shall coordinate the final design of the Oak Ridge Road pedestrian crossing and sidewalk with the Planning and Development Department, the Department of Public Works, and the New Hampshire Department of Transportation.
7. 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 applicant shall provide two (2) revised plan sets depicting the following revisions to the satisfaction of the Planning and Development Department, the Fire Department, and the City Engineer, as follows:
 - a) Any changes made pursuant to Conditions of Approval #5 and #6.
 - b) On Sheet 1, in the "Site Information" table:
 - i. Identify existing use of properties.
 - ii. Change "duplex" to "two-family dwelling"; and
 - iii. Identify the unit mix (i.e. provide the total number of one-family dwellings and total number of two-family dwellings).
 - c) Identify the proposed name of the access drive. (SUB Section 10.4.C.1.d)
 - d) On Sheet 5 (layout plan):
 - i. Rename "Layout and Open Space Plan";
 - ii. Add open space calculations;
 - iii. Add a note indicating how the open space will be owned, protected, and managed;
 - iv. Add the following as plan notes: "Per Section 13.14 of the Subdivision Regulations, there shall be no depositing, dumping, or storage of waste, or other natural or man-made material, supplies or equipment, on any subdivision land designated as open space," and, "Per Section

- 13.14 of the Subdivision Regulations, no work, or removal, or filling shall be done, nor shall the existing natural characteristics of open space land be altered from the original condition, until a site plan shall have been approved by the Board;" and
- v. Add any other information necessary to prepare the sheet for recording.
 - e) On Sheet 7 (grading, drainage, & erosion control plan), add a project-specific pipe schedule identifying pipe length, diameter, slope and invert values for each proposed segment of storm sewer.
 - f) Add a plan note to Sheet 8 (utilities plan) indicating that underground utilities, electric, telephone and cable, must maintain a minimum clearance of 10 ft. from all proposed water lines.
 - g) On Sheet 10 (landscape & lighting plan):
 - i. Identify correct percentage of evergreen trees proposed (SPR Section 6.2.B.4);
 - ii. Label all plantings and update the Plant List to accurately reflect the numbers of plantings depicted;
 - iii. Provide that all exterior lighting shall be 3,000K or warmer in CCT;
 - iv. Identify wattage for the three pole lights (SPR Section 5.1.E.12); and
 - v. Add the following requirements of the Site Plan Review Regulations as plan notes: Section 6.2.B.3 ("All new plant material shall be nursery-grown stock;"); Section 6.2.B.4 (first sentence only); Section 6.2.B.5; and Section 6.2.H.1.
 - h) On sheet 17 (the sidewalk extension plan):
 - i. Identify all easements necessary for the construction and maintenance of the sidewalk;
 - ii. Relocate sidewalk so that it is parallel with and immediately adjacent to the existing edge of pavement and provide a granite vertical curb; and
 - iii. Provide updated sidewalk construction details.
8. The applicant shall provide a digital copy of the revised plan set and/or revised application materials depicting any changes made pursuant to Condition of Approval #7, to the satisfaction of the Planning and Development Department and the City Engineer. The digital copy shall use a PDF-A format for archival purposes.

Conditions to be Satisfied Prior to Application for a Building Permit

- 9. 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.
- 10. 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 Chapters 136 and 182 of the City Code.
- 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, the following:
 - a) NHDES Sewer Connection Permit

b) NHDES Alteration of Terrain Permit

12. All outstanding engineering review fees shall be paid in full as required by Section 4.7.E.1 of the Site Plan Review Regulations.

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

(These conditions shall be satisfied within 2 years of the date of the Notice of Action)

13. The development shall be subject to City of Lebanon Impact Fees, pursuant to Section 213 of the Zoning Ordinance, except to the extent that the applicant obtains a waiver of such fees as may be permitted under applicable law. The Impact Fee shall be calculated at the time of Building Permit issuance based on the Impact Fee Schedule adopted on August 13, 2018. 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.
14. 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 the construction and installation of on- and off-site roadways, parking, sidewalks, water and sewer utilities, storm drainage, and erosion control, in accordance with Chapters 136 and 182 of the City Code, Section 8.2 of the Site Plan Review Regulations and Section 14.2 of the Subdivision Regulations. The applicant shall provide funding for inspection services in a form and amount acceptable to the City.
15. 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.
16. All water and sewer fees shall be paid as set forth in City Code Chapter 68.

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

(These conditions shall be satisfied within 5 years of the date of the Notice of Action)

17. Sheet 5 of the approved plan set shall be recorded at the Grafton County Registry of Deeds. Prior to recording, the plat shall be revised as necessary for recording purposes, in consultation with the Planning and Development Department, and shall be signed by the Planning Board Chair.
18. The applicant shall dedicate the completed water mains and hydrants within the complex, excluding service connections beyond the curb shut-off valves, to the City for ownership and maintenance, subject to appropriate easements. Said conveyance and easements shall be approved by the City Attorney and the Department of Public Works and recorded in the Grafton County Registry of Deeds prior to the issuance of a final Certificate of Occupancy for the project and prior to the acceptance of the utility improvements.

19. The applicant shall submit to the Planning and Development Department and the NH Department of Transportation (NHDOT) a traffic study, prepared by a Professional Engineer, evaluating whether the additional traffic from the Occom Path development meets any warrants at the Oak Ridge Road/NH Route 10 intersection (turn lanes, etc). The applicant shall be obligated to contribute its fair share to the cost of any improvements that are warranted by the traffic study and which the City and/or NHDOT choose to undertake. In determining the applicant's fair share, the cost of the traffic study shall be taken into account. The applicant's financial contribution, timing of payment, the City's and/or NHDOT's obligations, and other details shall be set forth in an agreement entered into by and between the applicant and the City and/or NHDOT, subject to review by the City's legal counsel. Any dispute between the applicant and the City arising under this condition may be appealed by the applicant to the Planning Board.
20. The applicant shall prepare and record an open space covenant or deed restriction in accordance with Section 501.1.F.5, 6 & 7 of the Zoning Ordinance, and shall be in form and content acceptable to the Planning and Development Department and the City Attorney.
21. The applicant shall obtain all necessary easements to construct and maintain the sidewalk along Oak Ridge Road to NH Route 10, and shall convey all such easements to the City, subject to review and approval by the Department of Public Works and the City Attorney.
22. Third-party engineer or design engineer inspection reports and as-built drawings provided by the applicant (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.
23. The impact fee calculated pursuant to Condition of Approval #13 shall be paid.
24. 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 Subdivision Regulations and Site Plan Review Regulations.
25. Screens at least 5 feet in width shall be provided for all electrical and mechanical equipment, such as transformers and compressors. (Section 6.2.B.8 of the Site Plan Review Regulations).
26. The applicant shall, by hand or with hand tools, remove the garbage and debris from the steep slope at the southwestern corner of the property.

General Conditions

27. 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.

-
28. 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.
 29. The applicant shall implement and maintain NHDES Site Specific Best Management Practices before, during, and after construction.
 30. The property owner is responsible for the maintenance and operation of the stormwater management system in accord 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).

The motion was seconded by Jeremy Rutter. The vote on the motion was unanimous in favor, 7-0.

Matthew Hall moved that the Lebanon Planning Board authorizes the Chair to sign the plat for Basic Holdings, LLC, PB2020-31-FMAJ, titled "Final Major Subdivision Plan for Occum Path Basic Holdings, LLC" prepared by Pathways Consulting, LLC, dated October 13, 2020, last revised May 3, 2021, Project No. 11465-01 (17 Sheets), as such plan may be amended in accordance with the Board's approval dated May 17, 2021.

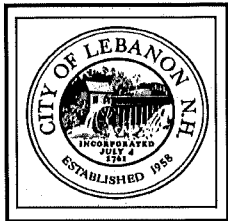
The motion was seconded by Joan Monroe. The vote on the motion was unanimous in favor, 7-0.

Kathie Romano moved that the title of the plan be changed to, "Final Major Subdivision Plan for Occum Path Basic Holdings, LLC".

The motion was seconded by Joan Monroe. The vote on the motion was unanimous in favor, 7-0.

THE CITY OF LEBANON

By:  DATE: 6/28/21
Planning Board Chair



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

NOTICE OF ACTION LEBANON PLANNING BOARD PB2023-10-EXT

Notice is hereby given that on **March 20, 2023**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

“Jeremy Rutter moved that the Lebanon Planning Board finds the application of Basic Holdings, LLC, PB2023-10-EXT, is complete enough to accept jurisdiction and commence review.

The motion was seconded by Bruce Garland. The vote on the motion was unanimous in favor, 7-0.”

Notice is hereby given that on **March 20, 2023**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

“Jeremy Rutter moved that the Lebanon Planning Board **APPROVE** the application of Basic Holdings, LLC for an extension of time per Section 7.12.C of the Subdivision Regulations to satisfy conditions of approval and to record the approved plat for a proposed Planned Unit Residential Development (PURD) at 5 & 11 Oak Ridge Road (Tax Map 4, Lots 5 & 6), originally approved by the Planning Board on May 17, 2021, PB2020-31-FMAJ, including any and all submissions and testimony provided for and during the public hearing.

In support of its decision, the Board finds that:

1. The applicant **HAS** submitted a complete and timely request for an extension pursuant to Section 7.12.C of the Subdivision Regulations; and
2. Considering the totality of the circumstances, including the extent and complexity of the conditions precedent, the extent of the progress made by the Applicant toward satisfying the conditions-precedent and/or starting construction, and whether the need for more time is attributable to unusual circumstances beyond the control of the Applicant rather than to the Applicant's neglect or failure to proceed with reasonable promptness, the applicant **HAS** demonstrated that the extension is warranted.

This approval is subject to the following conditions:

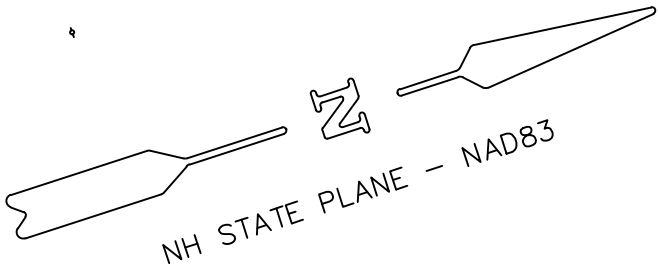
1. It shall be the applicant's responsibility to be familiar with and aware of these conditions of approval, and it shall be the applicant's responsibility to satisfy these conditions of approval and to satisfy them within the relevant timeframes outlined below.

2. The approved plat shall be recorded in the Grafton County Registry of Deeds by no later than **June 28, 2025**, subject to Section 7.11 of the Subdivision Regulations requiring completion of the required improvements or acceptance of security for the construction and installation of such required improvements prior to the recording of the plat, and subject to all conditions precedent set forth in the Planning Board Notice of Action (PB2020-31-FAMJ).
3. "Active and substantial development," as defined in Section 14.1.B.1.a of the Subdivision Regulations, shall be achieved within two (2) years from the date of the recording of the plat (14.1.B.1.b), subject to an extension if applied for by the applicant and if approved by the Planning Board per Section 14.1.B.1.b. If active and substantial development is not achieved within two (2) years from the date of the recording of the plat, the plat may be revoked pursuant to Section 14.1.C ("Default of the Applicant").
4. "Substantial completion," as defined in Section 14.1.B.2.a of the Subdivision Regulations, shall be achieved within five (5) years from the date of the recording of the plat. If substantial completion is not achieved within five (5) years from the date of the recording of the plat, the plat may be revoked pursuant to Section 14.1.C ("Default of the Applicant").
5. The applicant shall update all Subdivision Agreements, Security Agreements, and other documents, as necessary, to reflect the dates of the extended approval (per Section 14.1.B.1.c of the Subdivision Regulations).
6. Except as modified by this approval, the applicant shall satisfy and comply with the Planning Board Notice of Action for PB2020-31-FMAJ, and all conditions of approval thereof.

The motion was seconded by Bruce Garland. The vote on the motion was approved, 7-0."

THE CITY OF LEBANON

By: Math Hall DATE: 4-24-23
Planning Board Chair



NOTE:

"PRIOR TO ANY WORK WITHIN THE RIGHT-OF-WAY, DEVELOPER OR DESIGNEE SHALL OBTAIN ALL REQUIRED APPROVALS FROM THE CITY INCLUDING WITHOUT LIMITATION ANY SUCH APPROVALS AS MAY BE REQUIRED THROUGH THE PLANNING & DEVELOPMENT DEPARTMENT, DEPARTMENT OF PUBLIC WORKS, POLICE DEPARTMENT, AND FIRE DEPARTMENT."

UNIT TYPES:

SINGLE FAMILY TWO STORY: 1-7, 16, & 17-22 (14 UNITS)
SINGLE FAMILY ONE STORY: 13 (1 UNIT)
TWO FAMILY: 8, 9, 11, 12, 14 & 15 (6 UNITS)

0 30 60 90 120 150
IN FEET

REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY
	05/03/21	21 UNIT LAYOUT REVISIONS	PAB	RJF	RJF
	11/20/20	STAFF REVIEW COMMENTS	PAB	RJF	RJF

LAYOUT PLAN FOR
OCCOM PATH - BASIC HOLDINGS, LLC
OAK RIDGE ROAD, CITY OF LEBANON, GRAFTON COUNTY, NH

PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

SCALE: 1"=30'
DESIGNED BY: PAB
DRAWN BY: PAB
CHECKED BY: RJF
DATE: 10/13/20
PROJ. NO. 11465-01

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 Subdivision Waiver

PROPERTY OWNER (APPLICANT):

NAME: Occom Path, Inc.

MAILING ADDRESS:

E-MAIL ADDRESS: je

CO-APPLICANT, AGENT, OR LESSEE:

NAME: Tim Estes - Estes & Gallup, LLC

MAILING ADDRESS:

E-MAIL ADDRESS:

PROJECT LOCATION:

TAX MAP #: 4

LOT#: 5

PLOT #:

ZONE: R-3

STREET ADDRESS OF PROJECT: 5 Oak Ridge Road

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

SCOPE OF PROJECT:

Waiver request on Section 14.4.C of the Subdivision Regulations

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 April 15, 2025, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY

OWNER: _____

Jeffrey D Shapiro

DATE: 03/06/2025

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: _____

Jeffrey D Shapiro

DATE: 03/06/2025

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #			
2025-03-06	4-5	PB2025-14-SUBA			

City of Lebanon, NH
Planning Board
51 Park Street
Lebanon, NH 03766

**RE: Subdivision Regulations Waiver
5 Oak Ridge Road
West Lebanon, NH 03784**

Planning Board Members,

On May 17, 2021 the Planning Board approved a Planned Unit Residential Development to Basic Holdings, LLC for (21) new housing units off 5 Oak Ridge Road in West Lebanon, NH. Over the last few years, the project moved slowly to the point where construction began in January, 2025 with a scheduled completion in late summer, 2026.

The site construction is currently at a point where most of the water, sewer and drainage systems are in place, the first foundations will start being installed in early April with the first modular home arriving on May 12th.

We are requesting a waiver on the Subdivision Requirement which prevents the issuance of greater than 50% of the building permits prior to the site work being 100% complete. We completely understand the intent of the Regulation but in this particular subdivision, given the density of the housing and site infrastructure, it is essentially impossible to complete the site work in full without having the foundations in place for all buildings. With homes being not much more than 35' between them it is impractical to grade, provide services to each foundation, backfill the foundations to allow for driveways to be completed, and paving to be put into place.

We have devised a plan with our structural engineer to allow for all foundations to be installed, and then shoring put in place which would allow for the site work to be completed around each home. As the homes are modular and arrive at a rate of approximately 1 per month, the impact to the new community would be greatly lessened as each delivery would be made on a paved surface and the construction impact to the surrounding homes would be minimal.

Again, we see this as a unique situation given the density of the housing. If we are able to construct all foundations over the course of this summer we could have the site development involving heavy equipment, and all the dust and noise surrounding that activity, completed by early Fall, 2025 instead of having it continue through the fall and potentially the early part of 2026. This would benefit everyone on and around the site.

Thank you for your consideration.

Tim Estes, Estes & Gallup, LLC



City of Lebanon, New Hampshire

APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: Tim Estes, Estes & Gallup, Inc.

Project Name: Occom Path

Project Address: 5 Oak Ridge Road

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).]

1. Section 14.4 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
See Attached Exhibit A

2. Section 14.4 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
See Attached Exhibit B

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

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

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

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

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

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: March 06, 2025

Occom Path – Subdivision Regulations Waiver Request

Exhibit A

Section 14.4.C of the Subdivision Regulations. A Waiver of this Section meets Criteria A because:

Site work and foundation installation for this particular project must work concurrently in order to substantially complete the sitework, site infrastructure and landscaping for the project in total. The requirement that the site work be substantially complete prior to the issuance of greater than 50% of the Building Permits would cause Hardship as follows:

- It is not possible to achieve substantial completion of the site work without having all building foundations in place.
- Site utilities such as water, sewer and communications cannot be brought into the new homes without having the foundations in place.
- The need to work over and around semi-completed utilities and sidewalks would add substantial time to the overall project and disruption to the completed homes.
- The density of the home locations does not allow for substantial completion of the site work prior to the installation of the home foundations for the entire project.

The approval of this waiver would not be contrary to the spirit and intent of the regulations as:

- The density of this approved site plan is relatively unique, and as such, requires that all foundations must be completed for the entire site plan to be substantially completed. The clustered nature of the homes in this project, that contracts have been issued for each home construction, leave little chance that the project will not be completely built out. Again, this is much different than a subdivision that has larger, individual lots that could be left abandoned for some time.

Occom Path – Subdivision Regulations Waiver Request

Exhibit B

Section 14.4.C of the Subdivision Regulations. A Waiver of this Section meets Criteria B because:

Site work and foundation installation for this particular project must work concurrently in order to substantially complete the sitework, site infrastructure and landscaping for the project in total. The requirement that the site work be substantially complete prior to the issuance of greater than 50% of the Building Permits is not possible given the specific conditions of the Site Plan, particularly in regards to the density and location of the home next to each other. Additionally:

- It is not possible to achieve substantial completion of the site work without having all building foundations in place.
- Site utilities such as water, sewer and communications cannot be brought into the new homes without having the foundations in place.
- It would be essentially impossible to complete all the storm water detention areas along the Eastern side of the project without foundations in place..
- The density of the home locations does not allow for substantial completion of the site work prior to the installation of the home foundations for the entire project.

The approval of this waiver would not be contrary to the spirit and intent of the regulations as:

- The density of this approved site plan is relatively unique, and as such, requires that all foundations must be completed for the entire site plan to be substantially completed. The clustered nature of the homes in this project, that contracts have been issued for each home construction, leave little chance that the project will not be completely built out. Again, this is much different than a subdivision that has larger, individual lots that could be left abandoned for some time.

CERTIFIED NOTIFICATION LIST

Notice shall be sent by certified mail to the Owner; Applicant, if different from Owner; Abutters; Holders of conservation, preservation, or agricultural preservation restrictions (as defined under RSA 477:45) on the subject property; the holders of easements, rights-of-way, and other restrictions; and every engineer, architect, land surveyor, or soil or wetlands scientist whose seal appears on any plan submitted to the Board; and any other persons required by RSA 676:4, I(d). The names and mailing addresses shall be furnished by the Applicant.

672:3 Abutter. – "Abutter" means any person whose property is located in New Hampshire and adjoins or is directly across the street or stream from the land under consideration by the local land use board. For purposes of receiving testimony only, and not for purposes of notification, the term "abutter" shall include any person who is able to demonstrate that his land will be directly affected by the proposal under consideration. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a condominium or other collective form of ownership, the term abutter means the officers of the collective or association, as defined in RSA 356-B:3, XXIII. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a manufactured housing park form of ownership as defined in RSA 205-A:1, II, the term "abutter" includes the manufactured housing park owner and the tenants who own manufactured housing which adjoins or is directly across the street or stream from the land under consideration by the local land use board.

Source. 1983, 447:1. 1986, 33:2. 2002, 216:1, eff. July 15, 2002.

PLEASE PROVIDE NAMES & MAILING ADDRESSES FOR ALL PERSONS LISTED ABOVE.

Map & Lot Number: 4-5	Map & Lot Number:
Property Owner: OCCOM PATH, INC 106 NORTH MAIN ST WEST LEBANON, NH 03784	Applicant, Co-Applicant, Agent, or Lessee: ESTES & GALLUP, LLC P.O. BOX 240 LYME, NH 03768 TIM ESTES
Map & Lot Number: 3-2	Map & Lot Number: 4-1
ANDERSON, PHILIP & MCCUE, MARIAMY 15 WILDWOOD DR WEST LEBANON, NH 03784	SCHEIDT-HOOPES, LLC 6 MONTVIEW DR HANOVER, NH 03755
Map & Lot Number: 4-2	Map & Lot Number: 4-4
COFFEY, ELEANOR D TTEE 17 RICHARDSON PL WEST LEBANON, NH 03784	WHEELER OFFICE PARK LLC PO BOX 1325 LEBANON, NH 03766

Map & Lot Number:	Map & Lot Number: 4-7
HILLVIEW DESIGN COLLABORATIVE 65 HUNTINGTON ROAD SUITE 101 RICHMOND, VT 05477	SWENSON, RAND & MARDREY 15 OAK RIDGE RD WEST LEBANON, NH 03784
Map & Lot Number: 4-24	Map & Lot Number:4-9
WELLSPRING WORSHIP CTR OF LEBANON 407 NORTH MAIN ST WEST LEBANON, NH 03784	DIGILIO, MAFELDA A TTEE 5 WILDWOOD DR WEST LEBANON, NH 03784
Map & Lot Number: 4-10	Map & Lot Number:
FRIEDMAN, JEFFREY H 9 WILDWOOD DR WEST LEBANON, NH 03784	PATHWAYS CONSULTING, LLC 240 MECHANIC STREET SUITE 100 LEBANON, NH 03766
Map & Lot Number: 8-11	Map & Lot Number: 4-23
DENNIS, ALBERT LUCIAN PO BOX 79 NORWICH, VT 05055	PINEWOOD VILLAGE CONDO ASSOCIATION C/O MOSELEY ASSOCIATES PO BOX 706 WHITE RIVER JUNCTION, VT 05001
Map & Lot Number:	Map & Lot Number: 4-22
	FOREE MICHAEL D 2338 ANGEL FALLS FRISCO, TX 75036
Map & Lot Number:	Map & Lot Number:
Map & Lot Number:	Map & Lot Number:

(Revised 2/8/2024)

FEE SCHEDULE LEBANON PLANNING BOARD

Adopted January 24, 2022

LOT LINE ADJUSTMENT (Boundary Line Adjustment)		
		TOTALS
FILING FEE	\$25.00	\$25.00
ADVERTISING FEE	\$100	\$100
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE		\$ _____

MINOR SUBDIVISION		
		TOTALS
FILING FEE	\$150.00	\$150.00
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$ _____

**Engineering Review fees may also be required. See note on page 2.

PRELIMINARY REVIEW OF A MAJOR SUBDIVISION		
		TOTALS
FILING FEE	\$200.00	\$200.00
NUMBER OF LOTS* _____	\$30.00 per lot*	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$ _____

*Or units when the subdivision does not create individual lots.
**Engineering Review fees will also be required. See note on page 2.

FINAL REVIEW OF A MAJOR SUBDIVISION		
		TOTALS
FILING FEE	\$500.00	\$500.00
FIRST FIVE (5) LOTS*	\$75.00 per lot*	
NUMBER OF LOTS 6+*	\$150.00 per lot*	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE TIME OF FILING		\$ _____

*Or units when the subdivision does not create individual lots.
**Engineering Review fees will also be required. See note on page 2.

SITE PLAN REVIEW		
		TOTALS
FILING FEE	\$250.00	\$250.00
SQUARE FOOTAGE	\$75.00 per 1,000 sq. ft. (gross floor area)	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)

SITE PLAN REVIEW		
TOTAL DUE AT TIME OF FILING		\$
**Engineering Review fees will also be required. See note on page 2.		

SITE PLAN REVIEW AMENDMENT (WITH STRUCTURAL CHANGES)		
		TOTALS
FILING FEE	\$250.00	\$250.00
SQUARE FOOTAGE	\$75.00 per 1,000 sq. ft. (gross floor area)	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note below)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$
**Engineering Review fees may also be required. See note below.		

OTHER

- SITE PLAN REVIEW AMENDMENT (WITH NO STRUCTURAL CHANGES)
- EXTENSION REQUESTS
- CONDITIONAL USE PERMITS

		TOTALS
FILING FEE	\$250.00	\$250.00
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note below)	\$5.00 + Current USPS rate per certified notice (see below) X 15 notices	\$5.00 Notification Sign \$ 83.10 (abutter certified)
TOTAL DUE AT TIME OF FILING		\$ 438.10
**Engineering Review fees may also be required. See note below.		

MINOR SITE PLAN REVIEW		
		TOTALS
FILING FEE	\$150.00	\$150.00
NOTIFICATION FEE (see note below)	Current USPS rate per certified notice (see below) X _____ notices	\$ _____ (abutter certified)
TOTAL DUE		\$

ENGINEERING REVIEW FEES:

After an application to the Planning Board is submitted and the filing fees identified above have been paid, the Planning & Development Department will determine the scope of required engineering review and will obtain an estimated cost from the reviewing engineer. A cost estimate of the review fees will usually be generated within two (2) – three (3) business days. Once conveyed to the applicant, the estimated review fees shall be paid by the applicant within five (5) business days, and an escrow account shall be established by the Planning & Development Department. No plans will be reviewed unless and until the review fee estimate is paid, if required.

Please note that escrow fees are only an estimate of what services will cost and actual costs of review may be less or more than the amount initially estimated. Any unused portion of the escrow will be returned to the applicant at the end of the approval process if such a surplus remains. Additionally, in the event the escrow amount does not cover the full cost of services the Applicant shall pay any remaining costs as a condition of approval. See also Section 4.7 of the Site Plan Review Regulations and Section 7.7 of the Subdivision Regulations.

NOTIFICATION FEE: CURRENT FEE as of July 2024 is \$5.54 per certified notice

THE CERTIFIED NOTIFICATION FEE IN ALL SECTIONS ABOVE INCLUDES THE FOLLOWING: ALL ABUTTERS, THE APPLICANT, PROPERTY OWNER, HOLDER OF CONSERVATION, PRESERVATION, OR AGRICULTURAL PRESERVATION RESTRICTION(S); AND EVERY ENGINEER, ARCHITECT, LAND SURVEYOR OR SOIL SCIENTIST WHOSE PROFESSIONAL SEAL APPEARS ON ANY PLAT SUBMITTED TO THE BOARD AND ANY OTHER PERSONS REQUIRED BY RSA 676:4, I(d).



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

April 14, 2025 Meeting

Staff Memorandum – PB2025-15-MIN

APPLICATION INFORMATION

Agenda Item: 3.C

Application ID:
PB2025-15-MIN

Application Type:
Minor Subdivision

Property Location:
169 Slayton Hill Road

Map/Lot #:
163-9

Property Owner & Applicant:
Walker Family Trust

Zoning District:
Rural Lands Two (RL-2)

Property Size (existing):
+/-10.17 acres (*per subdivision plat*)

Overlay District(s):
None

Staff Attachments:
E-mail to applicant with Planning staff comments sent on 3/19/25 (4 pages; *provided for reference – comments have been adequately addressed*)

LEGAL NOTICE

Walker Family Trust, 169 Slayton Hill Road (Tax Map 163, Lot 9), zoned RL-2: Applicant requests approval of a proposed two (2)-lot Minor Subdivision. PB2025-15-MIN

PLANS AND APPLICATION MATERIALS

- ▶ Application form (1 page)
- ▶ Project description from Greg & Toni Walker, dated March 24, 2025 (1 page)
- ▶ Application for Waivers dated March 24, 2025 (2 pages)
- ▶ Subdivision Regulations - Technical Checklist – Minor Subdivision (3 pages)*
- ▶ Certified Notification List (2 pages)
- ▶ Fee Schedule (1 page)
- ▶ Aerial photograph (showing actual location of shared lot line with 171 Slayton Hill Rd, compared with location of lot line as depicted on the City's GIS; 1 page)
- ▶ Plat titled, "Subdivision Plan – Walker Family Trust," prepared by Paton Land Surveying, dated March 6, 2025, last revised March 21, 2025

**In reviewing the technical checklist in preparation of this memo, staff discovered that the form contains multiple scrivener's errors including duplicative submission requirements. The form will be corrected and reposted to the City's website.*

COMPLETENESS REVIEW

The Planning and Development Department has reviewed the application in accordance with Section 7.7.C.3.a of the Lebanon Subdivision Regulations and recommends that the Board find that the application is complete enough to accept jurisdiction and to commence review.

APPLICATION OVERVIEW

The subject property is a +/-10.17 acre parcel owned by the applicant and located in the Rural Lands Two (RL-2) District with approximately 341 ft. of frontage on Slayton Hill Road to the east and approximately 209 ft. of

frontage on Hetzel Road to the west (see Figure 1 below). The property is currently improved with a one-family dwelling constructed in 1977 (according to the City's assessing records) with access via a private driveway to Slayton Hill Road.

The applicant proposes to subdivide the property into two (2) lots as follows:

- Proposed Tax Map 163, Lot 9: +/-5.06 acres (improved with the existing one-family dwelling)
- Proposed Tax Map 163, Lot 9, Plot 100: +/-5.11 acres (vacant)

The new +/-5.11 acre lot will have frontage on both Slayton Hill Road and on Hetzel Road. In case the new lot is accessed in the future via Slayton Hill Road, the applicant has provided an easement over a portion of the "parent" lot to help locate a driveway that might otherwise conflict with an existing telephone pole and guardrail. The applicant has requested a waiver from Section 9.5.C.1 which requires a copy of the driveway easement to be provided to the Planning Board. Any new driveway for the lot will require a Driveway Permit from the Department of Public Works.

Any new construction on the new lot will need to be serviced by a well and septic system, both of which will require approval from NHDES prior to issuance of any building permit.

Figure 1. Bird's eye view of subject property (looking south).



WAIVER REQUESTS

As set forth on the attached Application for Waivers, the applicant requests waivers from the following applicable requirements of the Subdivision Regulations:

1. **Section 9.5.C.1:** "[Minor subdivision applications shall include] [s]uch proposed covenants or deed restrictions as may be intended to apply to the property in whole or in part to be recorded in the Registry of Deeds." The applicant requests a waiver from having to provide the proposed driveway easement at this time. In the event that the waiver is granted, staff has included a related recommended condition of approval (see condition 1.a under "Staff Recommendations").

To grant the waiver request, the Board must find that the applicant has satisfied least one of the two waiver criteria set forth in Section 7.15 of the Subdivision Regulations as follows:

- 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 subdivision, or conditions of the land in such subdivision, indicate that the waiver will properly carry out the spirit and intent of the regulations.
2. **Section 13.8.A.1:** “In any subdivision requiring on-lot water source, the subdivider shall demonstrate to the satisfaction of the Board that each lot can be served by an on-lot water source in sufficient quality and quantity.” To grant the waiver request, the Board must find that the applicant has satisfied at least one of the two waiver criteria set forth in Section 7.15 of the Subdivision Regulations (as set forth above).
3. **Sections 9.5.C.2 & 13.4.A:**
- **Section 9.5.C.2:** “Where private individual wastewater systems are proposed, the Applicant shall perform soil tests complying with requirements of Section 13.4 of these Regulations.”
 - **Section 13.4.A:**
 - “1. For each lot in the proposed subdivision requiring a subsurface sewage disposal system, soil data shall be provided using Site Specific Soil Maps for New Hampshire and Vermont SSSNNE Special Publication No. 3, June, 1997.
 - 2. The tests and soil mapping for required soil information shall be performed by a certified soil scientist.
 - 3. The report of the certified soil scientist shall establish that there is at least 4,000 square feet of contiguous area suitable for the placement of an individual sewage disposal system on each lot.”

The applicant requests a waiver of the Section 13.4.A requirements pursuant to Section 13.8 (“Modifications or Waivers of Design Standards”) which provides as follows: “A subdivider may request the modification or waiver of a design standard contained in Section 13. The Board may grant such request if it determines that compliance is not required to meet the purpose and intent of these Regulations and that the public good will not be adversely affected.”¹

STAFF COMMENTS

ASSESSING

No comment at this time.

BUILDING INSPECTION

No comment at this time.

¹ See also Section 13.4.A.4: “In the case of a subdivision resulting in the creation of lots in excess of five (5) acres, the subdivider may request a waiver under Section 13.19 from the requirements of the investigation and report as to soil data”).

ENGINEERING / PUBLIC WORKS

No comment at this time.

FIRE

No comment at this time.

PLANNING & ZONING:

The proposed lots comply with the minimum lot frontage and lot area requirements for Class 3 lots in the RL-2 District, as set forth in Section 313.3 of the Zoning Ordinance, and the existing home will continue meet all required setbacks.

POLICE

No comment at this time.

STAFF RECOMMENDATIONS

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

Conditions to be Satisfied Prior to the Signing and Recording of the Plat

1. The applicant shall provide a revised plat depicting the following changes to the satisfaction of the Planning and Development Department:
 - a. Add a note to indicate that the driveway access easement shall be recorded at the time of transfer of ownership of either parcel.
 - b. Provide the date and description of the plat revisions. (9.5.A.1)
2. The applicant shall provide a digital record drawing of the revised plat (Cad .dwg format using NH State Plane Coordinate system or an alternative approved by the City's GIS Coordinator).

General Conditions

3. This approval shall be considered void unless all conditions precedent have been met, and the plat has been recorded in the Registry of Deeds, within two (2) years from the date of the Notice of Action (Section 7.12.B). The plat shall be recorded in accordance with Planning & Development Department procedures.
4. Future development on the new lots 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 May 20, 2024, and such fees shall be due and payable at the time of issuance of a Certificate of Occupancy. In accordance with RSA 674:39, development 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.
5. All future construction shall substantially conform with and shall be subject to the requirements and specifications of the recorded plat (Section 7.9.A.2).

Attachments

cc: Walker Family Trust

Tim Corwin

From: Tim Corwin
Sent: Wednesday, March 19, 2025 9:32 PM
To: gagawalk50@gmail.com
Cc: Crystal Taplin; Brian Vincent
Subject: 169 Slayton Hill Rd _PB2025-14-MIN_Staff Comments

Dear Mr. Walker -

Below are staff's comments on the proposed 2-lot minor subdivision of 169 Slayton Hill Road (Tax Map 163, Lot 9), which was submitted for a public hearing at the Planning Board's 4/14/25 meeting. Pursuant to Section 7.7.C.3.b of the Lebanon Subdivision Regulations, please address staff's comments and send digital copies of all revised plans and materials by the end of the day on **Wednesday, 3/26/25**, as follows (note that per Section 7.7.C.3.b, the deadline would normally be Monday 3/24; however, I'm extending the deadline by two days since my comments should have been provided to you by this past Monday (3/17)):

- Your digital resubmission can be submitted electronically via e-mail to planning@lebanonnh.gov.
 - Please submit two electronic copies of each document in your application, as follows:
 - One saved as a PDF; and
 - One saved as a PDF-A.
- *PLEASE CONTACT CRYSTAL TAPLIN TO CONFIRM THE NUMBER OF HARD COPIES OF YOUR COMPLETE APPLICATION THAT NEED TO BE SUBMITTED. (Crystal is cc'd on this e-mail)*
- Please submit **all** materials that you would like included as part of your application and presented to the Planning Board (including the application form, abutters list, checklist, etc).
- So that we can expeditiously upload documents to our on-line public portal, please name all electronic documents using the following convention: **"year-month-day_(description of document)"**. So, for example, if you resubmit on 3/26, the PDF of your revised plat would be titled, **"2025-03-26_revised plat"**.
- For tracking purposes and clarity, please provide a cover letter or transmittal memo with your resubmission identifying each document that is included with the submission.
- We would also appreciate, if possible, a written reply to each of the comments below if your response is not otherwise evident from your revised materials.

Please note that Section 7.7.C.3.b of the Subdivision Regulations provides that, "Missing submission requirements, including any necessary waiver requests, shall be delivered to the Planning & Development Department by close of business on the fourth Monday of the month[...]" and that, pursuant to Section 7.7.C.3.c, **"[i]f the applicant elects not to complete the missing requirements [or] fails to deliver all missing submission requirements prior to the deadline [...], the Planning & Development Department shall recommend that the Board deem the application incomplete."**

If you have any questions, please do not hesitate to ask. I'm available by e-mail, phone, or to meet on-line or in person at your convenience. To schedule a time to meet, please feel free to use the "book a time to meet with me" link below my e-mail signature to find a time that works for both of us (you can also call the Planning & Development Department to schedule a meeting). -Tim

STAFF COMMENTS for PB2025-14-MIN - note that parenthetical references are to Section numbers of the Lebanon Subdivision Regulations.

1. Provide a written project description (7.7.A.3). As part of your written project description, I would recommend addressing the proposed access easement – why it’s needed and why the lot lines weren’t drawn to avoid the need for an easement.
2. A copy of the proposed driveway easement is required to be provided (9.5.C.1). Alternatively, you may apply for a waiver from Section 9.5.C.1. If you choose to apply for a waiver, please complete an Application for Waivers form, available [on-line here](#).
3. Please address Section 13.8.A.1: “In any subdivision requiring on-lot water source, the subdivider shall demonstrate to the satisfaction of the Board that each lot can be served by an on-lot water source in sufficient quality and quantity.”
4. Please address Section 9.5.C.2 which requires compliance with Section 13.4.A of the Subdivision Regulations. I’ve pasted Section 13.4.A below for quick reference. Note that the reference to Section 13.19 in subsection A.4 below is a typographical error and is intended to reference Section 13.18. I’ve pasted Section 13.18 below.

13.4 Lots/Lot Area/On-Site Septic System Requirements

- A. Lot Sizes and Areas. The minimum lot size for each lot shall be in conformity with the Zoning Ordinance. In addition, where there is to be an on-site subsurface sewage disposal system, additional area may be required based on the following:
 1. For each lot in the proposed subdivision requiring a subsurface sewage disposal system, soil data shall be provided using Site Specific Soil Maps for New Hampshire and Vermont SSSNNE Special Publication No. 3, June, 1997.
 2. The tests and soil mapping for required soil information shall be performed by a certified soil scientist.
 3. The report of the certified soil scientist shall establish that there is at least 4,000 square feet of contiguous area suitable for the placement of an individual sewage disposal system on each lot.
 4. In the case of a subdivision resulting in the creation of lots in excess of five (5) acres, the subdivider may request a waiver under Section 13.19 from the requirements of the investigation and report as to soil data.

13.18 Modifications or Waivers of Design Standards

A subdivider may request the modification or waiver of a design standard contained in Section 13. The Board may grant such request if it determines that compliance is not required to meet the purpose and intent of these Regulations and that the public good will not be adversely affected.

5. Amend the plat to:
 - a. Add the statement required by Section 9.4, i.e. “A parcel of land which has been reviewed and approved as part of a minor subdivision shall not be eligible for further subdivision under the Minor Subdivision procedures for a period of three (3) years from the date of the minor subdivision approval.”

- b. Add a note on the plat to address Section 7.7.A.4.e (“All persons holding conservation, preservation, or agricultural preservation restrictions (as defined under RSA 477:45) on the subject property. (NOTE: When there are no such restrictions on the subject property, the Applicant shall provide a definitive statement to that effect.)”)
 - c. Identify the date of the survey was completed (9.5.A.5). Please note that this refers to the date the actual field survey was performed, which is distinct from the date of the plat.
 - d. Correct the typographical error in the label for Lot 163-09: “Proposed Lot 1163-09”
 - e. Remove the “PRELIMINARY” notation above the title block.
 - f. Add the Planning Board application number (PB2025-14-MIN).
 - g. Provide date and description of revisions made (9.5.A.1)
6. Why are GRCD book and page references provided for some but not all of the abutters? Please note that GRCD book and page references for abutters are a welcome addition to the plat, but are not required to be provided.
7. When converting the acreages of the exiting and proposed lots to square feet, I’m arriving at slightly different numbers (see below). I assume this is because the acreages have been rounded, but please confirm.
 - a. Existing acreage is identified as 10.17 acres and 443,030 sq. ft. whereas converting 10.17 acres = 443,005 sq. ft.
 - b. Proposed acreage of 163-09 is identified as 5.06 acres and 220,393 sq. ft. whereas converting 5.06 acres = 220,413 sq. ft.
 - c. Proposed acreage of 163-09-100 is identified as 5.11 acres and 222,667 sq. ft. whereas converting 5.11 acres = 222,591 sq. ft.
8. Contact the Assessing Department to confirm the proposed tax map/lot number for the new lot (163-09-100) is acceptable.
9. The City’s GIS shows structures on the property that do not appear on the plat (see image below). Please confirm that these structures are in fact located on the abutting property at 171 Slayton Hill Rd (or add to the plat if located on the subject property) (9.5.A.7)



TIM CORWIN, AICP

DEPUTY PLANNING AND DEVELOPMENT DIRECTOR
CITY OF LEBANON
51 NORTH PARK STREET
LEBANON, NH 03766
(603) 448-1524 (OFFICE)
(603) 442-6127 (DIRECT)
TIM.CORWIN@LEBANONNH.GOV
WWW.LEBANONNH.GOV
[BOOK A TIME TO MEET WITH ME](#)



CITY HALL HOURS:

MONDAY-THURSDAY, 7AM — 5PM (NO FRIDAY HOURS)

NOTICE: THIS E-MAIL AND ANY REPLY TO THIS E-MAIL MAY BE CONSIDERED A "GOVERNMENTAL RECORD" PER NH RSA 91-A:1-A. THE CITY OF LEBANON IS REQUIRED TO MAKE GOVERNMENTAL RECORDS AVAILABLE TO THE PUBLIC UPON REQUEST, IN ACCORDANCE WITH NH RSA 91-A:4. THE CITY IS ALSO REQUIRED TO RETAIN GOVERNMENTAL RECORDS FOR MINIMUM PERIODS OF TIME AS SET FORTH IN NH RSA 33-A:3-A.

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: GREGORY WALKER TEL.#: [REDACTED]
MAILING ADDRESS: [REDACTED]
E-MAIL ADDRESS: [REDACTED]

CO-APPLICANT, AGENT, OR LESSEE:

NAME: Chris Payton [REDACTED]
MAILING ADDRESS: _____
E-MAIL ADDRESS: _____

PROJECT LOCATION:

TAX MAP #: 163 LOT#: 9 PLOT #: _____ ZONE: RL2
STREET ADDRESS OF PROJECT: 169 SLAYTON HILL RD.
IS THIS PROPERTY LOCATED IN THE: **WETLANDS** ☐ YES ☒ NO **HISTORIC DISTRICT** ☐ YES ☒ NO
FLOOD PLAIN ☐ YES ☒ NO

SCOPE OF PROJECT:

SUBDIVIDE LOT 163-9 INTO TWO LOTS

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 _____, 20____, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY OWNER: Gregory A. Walker DATE: 3-10/25

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 #			
2025-03-10	163-9	PB2025-15-MIN			

3/24/25

Reason for subdivision:

We are subdividing our 10 acre property into 2 five acre lots. We hope to sell 5 acres to help us pay for our taxes in the future. This lot #163-09-100 has access to Hetzel Rd. and Slayton Hill Rd. The Slayton Hill access has a telephone pole and guardrails for the culvert that was put in in 2015. If the guardrails can't be redesigned to go up the new driveway then I've offered the access easement for a option.

Greg & Tomi Walker
Keeping Lot #163-09



City of Lebanon, New Hampshire APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: Greg Walker

Project Name: Minor Subdivision Tax Map 163-08 / 163-09-100

Project Address: 169 Slayton Hill Rd. Lebanon, NH. 03766

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).]

9.5.C.1

1. Section 2 of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because Options: Access Easement.
If the city won't allow relocation of some guardrails for the
culvert on Slayton Hill Rd,

13.8.A.1

2. Section 3 of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because Water Source? On
The 5 acres we are keeping is a well with great water. The
source for Lot #63-09-100, I assume will be from a well also
that will tap into the same source. Without drilling no one could
tell.

3. Section 4 of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because I am not selling this lot with a septic system designed. The previous owners did have an approved system designed. I showed the house location the system on one side of the house and a well location the other side.
4. Section ____ of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because _____
5. Section ____ of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because _____
6. Section ____ of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because _____
7. Section ____ of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because _____
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: Gregory A. Walker Date: March 24, 2025

802-374-4142

802-885-6679

CITY OF LEBANON, NH SUBDIVISION REGULATIONS – TECHNICAL CHECKLIST MINOR SUBDIVISION	
PROJECT NAME: WALKER SUBDIVISION	
APPLICANT: GREGORY WALKER	DATE: MARCH 6, 2025
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)] Will let know
- ☐ 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.]
- ☒ One (1) set of project plans to be distributed for Staff Review. [§9.5.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.]
- ☐ A digital copy of Subdivision plan in .PDF format. [§9.5.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.

PLAN SUBMITTAL TECHNICAL CHECKLIST:

NOTE: Minor Subdivision plans shall include the information described below pursuant to Section 9 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. [§9.5.C(5)]

Plan Requirements	Info. Provided	Waiver Sought
9.5.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 shall be shown on the first page or cover page, if applicable; (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).)	☒ ☒ ☒ ☒ ☒	☐ ☐ ☐ ☐ ☐
9.5.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.	☒	☐
9.5.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.	☒	☐
9.5.A(4) - Zoning District in which the subdivision is located, including district boundaries if in more than one district.	☒	☐
9.5.A(5) - Boundary lines of the overall tract, and each of the proposed lots, 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. Monuments shall be referenced on the plat as required under Section 13.5(A) of the Regulations.	☒	☐
9.5.A(6) - The area of all proposed lots shall be shown in square feet and acres.	☒	☐

Plan Requirements	Info. Provided	Waiver Sought
9.5.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 shall be shown on the first page or cover page, if applicable; (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).)	☒ ☒ ☒ ☒ ☒	☐ ☐ ☐ ☐ ☐
9.5.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.	☒	☐
9.5.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.	☒	☐
9.5.A(4) - Zoning District in which the subdivision is located, including district boundaries if in more than one district.	☒	☐
Plan Requirements (cont.)	Info. Provided	Waiver Sought
9.5.A(7) - Location of all existing structures, easements, permanent and intermittent watercourses, flood plains and wetlands, rock outcrops, wooded areas, and other significant existing features on the property. Indicate those natural and man-made features to be removed, retained, or altered. Wetlands on the property, if any, shall be delineated by a NH Certified Wetlands Scientist, whose seal and signature shall appear on the plat.	☒	☐
9.5.A(8) - If the application covers only a part of the applicant's entire holding, a map of the entire tract shall be drawn at a scale of not smaller than 1" = 400', showing all existing streets and an outline of the platted area.	☒	☐
9.4 - A statement shall be placed on the plat as follows: "A parcel of land which has been reviewed and approved as part of a minor subdivision shall not be eligible for further subdivision review under the Minor Subdivision procedures for a period of three (3) years from the date of the minor subdivision approval."	☒	☐
Supporting Documents and Information, Where Applicable	Info. Provided	Not Applicable
9.5.C(1) - Proposed covenants or deed restrictions as may be intended to apply to the property in whole or in part to be recorded in the Registry of Deeds.	☒	☐

Waiver Requested

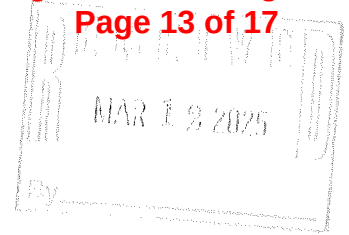
Plan Requirements	Info. Provided	Waiver Sought
9.5.A(1) - - Name of the City and County in which the subdivision is proposed; - A Locus map; - North arrow; - Scale of the plat; - Date of the plat and of any revisions to the plat shall be shown on the first page or cover page, if applicable; (NOTE: The 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).)	☒ ☒ ☒ ☒ ☒	☐ ☐ ☐ ☐ ☐
9.5.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.	☒	☐
9.5.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.	☒	☐
9.5.A(4) - Zoning District in which the subdivision is located, including district boundaries if in more than one district.	☒	☐
9.5.C(2) - Where private individual wastewater systems are proposed, the applicant shall perform soil tests complying with requirements of Section 13.4 of the Regulations. For all proposed lots less than 5 acres in size, the applicant shall have a soil investigation made and a report prepared to establish the existence of at least 4,000 square feet of contiguous area meeting NHDES requirements. NHDES approval of all subdivision lots less than 5 acres in size shall be obtained and provided to the Board prior to the recording of the approved plat. Soil maps and information shall be in accordance with the most current USDA Natural Resource Conservation Service County Soil Maps. Maps prepared by field investigation shall be stamped and signed by a Certified Soil Scientist.	☐	☒
9.5.C(3) - Any access driveway to a State highway shall be approved by the NHDOT and provided to the Board prior to the recording of the approved plat.	☒	☐
9.5.C(4) - Approvals, as prescribed by law, from any other City agency which may have jurisdiction, including but not limited to, wetland permits.	☒	☐

NOTE: THE APPLICANT IS RESPONSIBLE FOR PROVIDING THE REQUIRED INFORMATION PURSUANT TO SECTION 9 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: Chris Peterson

Planning office Use Only:

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



CERTIFIED NOTIFICATION LIST

Notice shall be sent by certified mail to the Owner; Applicant, if different from Owner; Abutters; Holders of conservation, preservation, or agricultural preservation restrictions (as defined under RSA 477:45) on the subject property; the holders of easements, rights-of-way, and other restrictions; and every engineer, architect, land surveyor, or soil or wetlands scientist whose seal appears on any plan submitted to the Board; and any other persons required by RSA 676:4, I(d). The names and mailing addresses shall be furnished by the Applicant.

672:3 Abutter. – "Abutter" means any person whose property is located in New Hampshire and adjoins or is directly across the street or stream from the land under consideration by the local land use board. For purposes of receiving testimony only, and not for purposes of notification, the term "abutter" shall include any person who is able to demonstrate that his land will be directly affected by the proposal under consideration. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a condominium or other collective form of ownership, the term abutter means the officers of the collective or association, as defined in RSA 356-B:3, XXIII. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a manufactured housing park form of ownership as defined in RSA 205-A:1, II, the term "abutter" includes the manufactured housing park owner and the tenants who own manufactured housing which adjoins or is directly across the street or stream from the land under consideration by the local land use board.

Source. 1983, 447:1. 1986, 33:2. 2002, 216:1, eff. July 15, 2002.

PLEASE PROVIDE NAMES & MAILING ADDRESSES FOR ALL PERSONS LISTED ABOVE.

Map & Lot Number: MAP 134 Lot 1	Map & Lot Number: MAP 134 Lot 22
Property Owner: Gregory Walker 168 Slayton Hill Rd. Lebanon, NH 03766	Applicant, Co-Applicant, Agent, or Lessee: Surveyor: Paton Land Surveying 150 Southridge St. Springfield, VT. 05156
Map & Lot Number: MAP 134 Lot 2	Map & Lot Number: MAP 134 Lot 31
Geoffrey A. Rizkade 158 Slayton Hill Rd. Lebanon, NH 03766	Str, Jessica M. Trustee 32 Hetzel Rd. Lebanon, NH 03766
Map & Lot Number: MAP 134 Lot 21	Map & Lot Number: MAP 134 Lot 33
Connor & Tamara Rockwell 17 Hetzel Rd. Lebanon, NH. 03766	Daniel J. Micka 16 Hetzel Rd. Lebanon, NH 03766

Map & Lot Number: MAP 134 Lot 40	Map & Lot Number:
Austin & Kendra L. Holt 153 Slayton Hill Rd. Lebanon, NH 03766	Brian D & Lyne A. Goodwin 168 Slayton Hill Rd. Lebanon, N.H. 03766
Map & Lot Number: MAP 134 - Lot 42	Map & Lot Number:
Jeremy & Anja I. Duquette 159 Slayton Hill Rd. Lebanon, NH 03766	Keith M & Kathleen Estes 11 Stagecoach Rd. Lebanon, N.H.
Map & Lot Number: MAP 163 Lot 14	Map & Lot Number:
Peter L & Susan H. Daler 1 Stagecoach Rd. Lebanon, NH 03766	
Map & Lot Number: MAP 163 Lot 8	Map & Lot Number:
Jeffrey Harold & Beth Horstmann 6 MARIES Way Lebanon, NH 03766	
Map & Lot Number: Map 163 Lot 10	Map & Lot Number:
Timothy & Beth White 171 Slayton Hill Rd. Lebanon, NH 03766	
Map & Lot Number:	Map & Lot Number:
SURVEYOR: PATON Land Surveying 150 Southridge St. Springfield, VT 05156	
Map & Lot Number:	Map & Lot Number:

(Revised 2/8/2024)

FEE SCHEDULE
LEBANON PLANNING BOARD
Adopted January 24, 2022

LOT LINE ADJUSTMENT (Boundary Line Adjustment)		
		TOTALS
FILING FEE	\$25.00	\$25.00
ADVERTISING FEE	\$100	\$100
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X <u>13</u> notices	\$5.00 \$ <u>72.02</u> (abutter certified)
TOTAL DUE		\$ <u>202.02</u>

MINOR SUBDIVISION		
		TOTALS
FILING FEE	\$150.00	\$150.00
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$ _____

**Engineering Review fees may also be required. See note on page 2.

PRELIMINARY REVIEW OF A MAJOR SUBDIVISION		
		TOTALS
FILING FEE	\$200.00	\$200.00
NUMBER OF LOTS* _____	\$30.00 per lot*	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$ _____

*Or units when the subdivision does not create individual lots.
**Engineering Review fees will also be required. See note on page 2.

FINAL REVIEW OF A MAJOR SUBDIVISION		
		TOTALS
FILING FEE	\$500.00	\$500.00
FIRST FIVE (5) LOTS*	\$75.00 per lot*	
NUMBER OF LOTS 6+*	\$150.00 per lot*	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE TIME OF FILING		\$ _____

*Or units when the subdivision does not create individual lots.
**Engineering Review fees will also be required. See note on page 2.

SITE PLAN REVIEW		
		TOTALS
FILING FEE	\$250.00	\$250.00
SQUARE FOOTAGE	\$75.00 per 1,000 sq. ft. (gross floor area)	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)

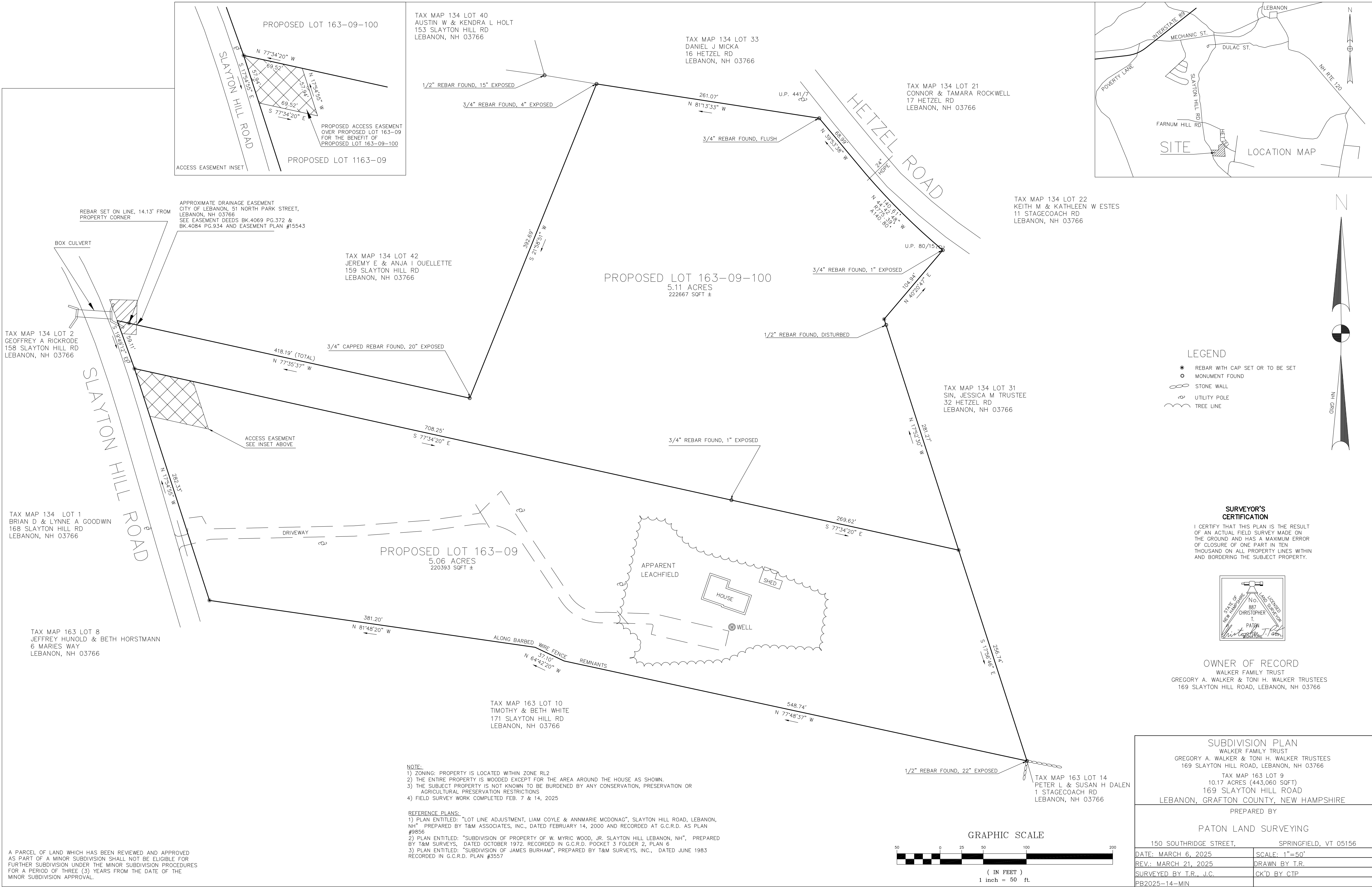
163-9

163



approximate

163-8





CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

April 14, 2025 Meeting

Staff Memorandum – PB2025-16-SPR

APPLICATION INFORMATION

Agenda Item: 3.D

Application ID: PB2025-16-SPR

Application Type:

Site Plan Review for a proposed +/- 920 sq. ft., 2-story addition to the existing building, together with associated site improvements

Property Location & Tax Map:

8 South Park St (Tax Map 92, Lot 10)

Applicant & Property Owner:

Upper Valley Music Center, Inc.

Property Size:

+/-0.51 acres (+/-22,300 sq. ft.)

Zoning District:

Professional Business (PB) District

Overlay District(s):

Historic District

Future Land Use Map:

Mixed Use

Existing Use & Improvements:

+/-11,106 sq. ft. (gross) two-story building constructed in 1810, occupied by the Upper Valley Music Center

Proposed Improvements:

+/- 920 sq. ft., 2-story addition to the existing building, together with associated site improvements

Staff Attachments:

- e-mail from Planning staff to Scott Williams, PE, sent April 10, 2025
- May 14, 1984 Notice of Action (site plan approval)
- May 14, 1984 Notice of Action (subdivision approval)

LEGAL NOTICE

Upper Valley Music Center, Inc., 8 South Park Street (Tax Map 92, Lot 10), zoned PB: Applicant requests Site Plan Review for a proposed +/- 920 sq. ft., 2-story addition to the existing building, together with associated site improvements. PB2025-16-SPR

APPLICATION MATERIALS

Available on-line only:

- ▶ Colored rendering of the proposed site plan, prepared by Pathways Consulting, LLC, with photos (plan sheet with 4 pages of photos)
- ▶ Subdivision and site plan prepared by K.A. LeClair Associates, Project #4184, dated January 12, 1984, approved by the Planning Board on May 14, 1984 (1 sheet)

Available on-line and included with hard copies of agenda packet:

- ▶ Application form (1 page)
- ▶ Project description by Mayor + Kennedy Architects (1 page)
- ▶ Letter dated March 24, 2025, from Scott Williams, PE (application resubmission cover letter; 2 pages)
- ▶ Application for Waivers (2 pages)
- ▶ Site Plan Review Regulations Technical Checklist dated August 12, 2024 (10 pages)
- ▶ Certified Notification List (2 pages)
- ▶ Fee Schedule (2 pages)
- ▶ Plan set titled, "Addition to Upper Valley Music Center," prepared by Mayor + Kennedy Architects, dated March 7, 2025, Project No. 24110 (architectural plans; 8 sheets)
- ▶ Plan set titled, "Site Plan Review Application Plans for the Upper Valley Music Center Building Addition and Site Improvements Project," prepared by Pathways Consulting, LLC, dated March 24, 2025, Project No. 13444 (7 sheets including lighting plan and boundary survey)

Available on-line only:

- ▶ Lighting specifications by LSI Industries, Inc. for Mirada Small Silicone Outdoor Wall Sconce (7 pages)
- ▶ Memo from Scott Williams, PE, of Pathways Consulting, LLC re: Drainage Calculations for Site Plan Review, Upper Valley Music Center, Building Addition and Site Improvements Project, dated March 24, 2025, Project No. 13444 (4 pages plus 135-page attachment)

COMPLETENESS REVIEW

In order to accept jurisdiction and commence review of the applicant's proposal, the Planning Board must first determine that the application is complete. See NH RSA 676:4, I(c)(1) and Section 4.7.C.3 ("Initial Completeness Determination") of the Site Plan Review Regulations. The Planning and Development Department has reviewed the application for compliance with the Site Plan Review Regulations and, per Section 4.7.C.3.b, has requested additional information from the applicant relative to the submission requirements set forth in Section 5.1. See attached e-mail from staff to Scott Williams, PE, sent April 10, 2025, comments #2 & #3. Provided that the applicant either provides the required information or submits a written waiver request prior to the public hearing, staff will recommend that the Board find that the application is complete enough to accept jurisdiction and to commence review.

BACKGROUND

The property is improved with a two-story historic brick building constructed in 1810, according to the City's assessing records, and is currently occupied by the Upper Valley Music Center. In 1984, the Planning Board approved a site plan for the conversion of the single-family use of the building to an office use. At the same time, the Board also approved a subdivision creating the separate lot to the rear, 6 South Park Street (Tax Map 92, Lot 9) which is improved with a former carriage house. Pursuant to the 1984 Planning Board approvals, the lots are accessed by a shared driveway and share a common 22-space parking area located on the 6 South Main Street property. See attached site plan prepared by K.A. LeClair Associates, Project #4184, dated January 12, 1984. The 1984 Planning Board approvals were conditioned on the recording of 99-year cross easements to secure each property's continued use of the shared driveway and parking area.

Since that time, the parking area has expanded into the 8 South Park Street property such that the west side of the property is now a "gravel parking lot" (as shown on the survey included with the attached plan set). However, the gravel parking lot never received site plan approval as far as staff can determine. Rather, this area should be covered with grass pursuant to the 1984 site plan approval.

APPLICATION OVERVIEW

The applicant proposes to construct a +/-920 sq. ft., 2-story addition on the west side the existing building, and to install a small underground stormwater basin to help manage the additional drainage from the addition, with an underground stormwater pipe extending to the City's stormwater system within South Park Street. The addition will replace an existing +/-220 sq. ft. concrete pad, which would have been installed sometime after the 1984 site plan approval. Other than grading associated with the stormwater management design and the relocation of an existing bike rack, it appears that no other site improvements are proposed.

STAFF COMMENTS**PLANNING**

The "gravel parking lot" currently located on the subject property never obtained site plan approval. Consequently, the proposed site plan review is not just for the proposed building addition, but also for the gravel parking lot and for the site in general to the extent that the existing conditions differ from the 1984 approved site plan. That the gravel parking lot was created without site plan approval should be taken into account by the Planning Board when evaluating the proposed site plan and the appropriateness of the proposed waiver requests.

STAFF MEMORANDUM

PB2025-16-SPR
8 South Park St (92-10)
April 14, 2025 PB Mtg
Agenda Item 3.D
Page 3 of 10

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



Image ©2021 Eagleview (image taken 4/4/2021)

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



Image ©2021 Eagleview (image taken 4/4/2021)

I. SITE PLAN REVIEW REGULATIONS:**Jurisdiction**

The proposed building addition would ordinarily qualify for Minor Site Plan Review per Section 3.1.C.1 of the Site Plan Review Regulations, except that the Minor Site Plan Committee is not authorized to grant waivers from applicable design requirements. Because the applicant is requesting multiple waivers from the Article VI design requirements, the application must be reviewed by the Planning Board. Moreover, the creation of a gravel 13-space parking lot combined with the proposed building addition 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.

Waiver Requests

Pursuant to Section 7.1 (“Waiver of Regulations”), the applicant has requested waivers or partial waivers from certain provisions of Article V (“Submission Requirements”) of the Site Plan Review Regulations, as set forth in the attached Application for Waivers. 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.

Based on the site plan set dated March 24, 2025 (attached), the applicant also requires waivers from certain provisions of Article VI (“Design and Construction Requirements”), including:

- **Section 6.2.B** – *perimeter landscaping requirements*
- **Section 6.2.D** – *landscaping around buildings requirements*
- **Section 6.2.E** – *parking area landscaping requirements*
- **Section 6.5.E.2** – *requiring parking areas to be finished with improved materials*
- **Section 6.5.E.3** – *parking space dimensional requirements*

Staff has asked the applicant to either provide the required information prior to the hearing, and/or to submit an updated Application for Waivers.

ARTICLE VI – DESIGN AND CONSTRUCTION REQUIREMENTS

6.2 (Landscaping Standards): The construction of the underground stormwater basin will result in the loss of an apple tree. Otherwise, as a result of discrepancies between the proposed plan set, the colored rendering provided by the applicant, and the approved 1984 site plan, it is not clear what landscaping currently exists on the property and whether any new landscaping is proposed.

A waiver has been requested from the landscaping plan submission requirement and additional waivers are needed from the Section 6.2.B, D, and E landscaping design requirements. Staff recommends that the Board consider requiring the installation of a tree at the northeast corner of the property to help offset the impacts of the landscaping waivers.

6.3 (Utilities & Fire Protection): The building is now and will continue to be served by City water and sewer.

6.4 (Fees and Assessments in Effect at time of Connection): The creation of new non-residential square footage will be subject to the City's Impact Fee Ordinance and fee schedule adopted by the Board on May 20, 2024. Section 213.7.A of the Zoning Ordinance requires that the amount of the impact fee is calculated at the time of the Planning Board's approval. Pursuant to Section 213.7.A, staff has determined that the proposed addition will require payment of impact fees in the amount of \$1,067.20.

6.5 (Coordination of Roads, Parking, Loading, Recreation, and Safety): Although not indicated within the applicant's site plan set, 22 parking spaces are available for use on the abutting property at 6 South Park Street pursuant to cross easements recorded as a condition of the Planning Board's 1984 site plan and subdivision approvals. The applicant requires retroactive site plan approval for a gravel parking lot that is now located on the subject property, as well as a waiver from Section 6.5.E.2 which requires that parking areas be finished with improved materials.

The applicant's site plan indicates that the gravel parking lot includes 13 spaces (including 2 handicap spaces), however the spaces are not marked on the plan set. Consequently, it is not possible to verify the number of spaces provided nor is it possible to verify that the parking space dimensional requirements of Section 6.5.E.3 or the applicable handicap accessible design requirements have been met.

A noted above, per Section 6.5.E.2 of the Site Plan Review Regulations, parking areas are required to be finished with improved materials – typically pavement or porous pavement (the use which is highly encouraged in the Site Plan Review Regulations). Ordinarily, to deviate from a requirement of the Regulations, a waiver per Section 7.1 must be requested in writing and granted. However, Section 6.5.E.5 provides as follows:

5. Alternative parking designs may be considered as recommended by the Reviewing Engineer. The Board may modify the requirements contained herein when it is appropriate to use a substitute for paving because of water quality, drainage, and/or aesthetic considerations, so long as the safety of pedestrian and vehicular traffic is assured.

Therefore, as an alternative to a waiver from Section 6.5.E.2, the Board could evaluate the applicant's proposal in light of Section 6.5.E.5. Specifically, the Board may allow a gravel surface instead of paving if it finds that the gravel surface is "*appropriate [...] because of water quality, drainage and/or aesthetic considerations,*" and provided that "*safety of pedestrian and vehicular traffic is assured.*"

6.6 (Stormwater Management): As noted above and as further described in the March 24, 2025 memo to the City Engineer from Scott Williams, PE, the applicant proposes to install a small underground stormwater basin to help manage the additional drainage from the addition, with an underground stormwater pipe extending to the City's stormwater system within South Park Street. As noted below, the applicant's response to the City Engineer's stormwater-related comments and questions was received on April 10th and is under review.

6.7 (Lighting): Two wall-mounted lights are proposed for the west side of the building, although it is not clear whether one of the two lights is already existing or is already existing and is proposed to be replaced. It appears the only other outdoor lighting on the property are two ground-mounted light poles lighting the walkway on the east side of the building. Note that the lighting plan accounts for the two building-mounted lighting fixtures, but not the walkway lighting fixtures.

6.8 (Off-Site Improvements): *Not applicable.*

6.9 (Premature and Scattered Development): This section 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." Staff does not recommend a finding that the proposed development is scattered and premature as such a finding would appear to be without basis.

6.10 (Additional Regulations for the Lebanon Downtown District): *Not applicable.*

II. ZONING ORDINANCE:

Historic District: The property is located in the Historic District and is therefore subject to the Historic District regulations set forth in Section 408 of the Zoning Ordinance. Pursuant to Section 408.4, the applicant applied to the Heritage Commission for a Certificate of Approval for the proposed addition, which the Heritage Commission granted on February 12, 2025 (HC2025-01).

Parking: Per Section 607.4 of the Zoning Ordinance, uses in the PB District are subject to the maximum off-street parking requirements of Section 607.3, but are exempt from the minimum off-street parking requirements of Section 607.1 because of the availability of public parking. Rather, minimum parking requirements in the PB District "**shall be as required by the Planning Board through its Site Plan Review of new uses or changes or expansion of use.**"

As of the writing of this memo, the maximum number of parking spaces has not been determined, nor is it clear whether the 22 off-site parking spaces should be factored into that calculation.

Pursuant to the Zoning Ordinance definition of "off-street parking space" in Appendix A, all required parking spaces must be marked:

PARKING SPACES, OFF-STREET: For the purpose of these regulations, an off-street parking space shall consist of a space adequate for parking an automobile with room for opening doors on both sides, together with properly related access to a public street or alley and maneuvering room. [...] **[R]equired off-street parking areas for three or more automobiles shall have individual spaces marked,** and shall be so designed,

maintained, and regulated that no parking or maneuvering incidental to parking shall be on any public street, walk, or alley, and so that any automobile may be parked without moving another. (emphasis added)

The applicant will need to demonstrate how the spaces within the gravel parking lot will be individually marked as required by the Zoning Ordinance.

CITY ASSESSOR

No comment at this time.

BUILDING INSPECTOR

No comment at this time.

ENGINEERING/PUBLIC WORKS

The City Engineer provided the following comments to the applicant regarding the drainage analysis and proposed stormwater management system:

1. Please provide the engineering basis of decision to proposed 6" drainage pipe. Typically, 12" is the minimum for stormwater conveyance.
2. It appears that stormwater structures should be installed at stormwater pipe bends. Please address.
3. Please provide data that supports the assertion, made in the drainage report, that the estimated seasonal high water table should be low.
4. The drainage report (page 3) discusses a sedimentation/parking lot changes ,etc. However, the plans do not appear to show these changes or design elements. Please address.

The applicant's response was received on April 10, 2025, and is under review.

FIRE DEPARTMENT

No comment as of the writing of this memo.

POLICE DEPARTMENT

No comment at this time.

OTHER COMMENTS

The following comment on the application were provided by the Lebanon Tree Advisory Board (TAB) as set forth in an e-mail from the TAB Chair to Planning & Development Department staff sent on March 24, 2025: "The TAB thinks there is room on the site for new trees to help shade the paving."

STAFF RECOMMENDATIONS

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:

General Conditions

1. It shall be the applicant's responsibility to be familiar with and aware of these conditions of approval, and it shall be the applicant's responsibility to satisfy these conditions of approval and to satisfy them within the relevant timeframes outlined below.
2. The development is subject to the Site Plan Review Regulations adopted May 13, 1991, last revised January 23, 2023, and the Zoning Ordinance adopted January 16, 2013, last amended March 6, 2025, which are the regulations in effect at the time the application was submitted.
3. A building permit must be applied for *and issued* within two (2) years of the date of this approval (4.10.A), subject to an extension if applied for by the applicant and if approved by the Planning Board per Section 4.10.B.
4. "Active and substantial development," as defined in Section 8.4.A.1 of the Site Plan Review Regulations, shall be achieved within two (2) years of the date of this approval (8.4.A.2), subject to an extension if applied for by the applicant and if approved by the Planning Board per Section 8.4.A.3. If active and substantial development is not achieved within two (2) years of the date of the Planning Board's approval, the development shall be subject to any changes in the City's land use regulations.
5. "Substantial completion," as defined in Section 8.4.B.1 of the Site Plan Review Regulations, shall be achieved within five (5) years of the date of this approval. If substantial completion is not achieved within five (5) years of the date of the Planning Board's approval, the development shall be subject to any changes in the City's land use regulations.
6. 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.
7. The applicant shall implement and maintain NHDES Site Specific Best Management Practices before, during, and after construction.
8. Prior to the start of any construction activities on the property, erosion control measures, including edge-of-disturbance fencing if applicable, 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.
9. The property owner is responsible for the maintenance and operation of the stormwater management system in accord 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).
10. All service areas and facilities including garbage and waste disposal containers, recycling bins, electrical and mechanical equipment such as transformers and compressors, meter clusters, and other utility elements must be screened in accordance with Section 6.2.B.8 and Section 6.10.B.5 of the Site Plan Review Regulations.

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

11. Within 45 days of the Planning Board's approval, the applicant shall address the comments of the City Engineer as set forth in the staff memo prepared for the April 14, 2025 public hearing, to the satisfaction of the City Engineer.
12. Within 45 days of the Planning Board's approval, the applicant shall address the comments of the Planning & Development Department as set forth in an e-mail sent by the Planning & Development Department to Scott Williams, PE, on April 10, 2025, to the satisfaction of the Planning & Development Department.
13. Within 45 days of the Planning Board's approval, 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 #11 above.
 - b) Any changes made pursuant to Condition of Approval #12 above.
 - c) The gross floor area of the proposed addition shall be corrected to +/-920 sq. ft.
 - d) 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.

14. The applicant shall provide a letter or certification from the engineer or record or other qualified design professional confirming that the approved plan set meets the accessibility standards of the State of New Hampshire Building Code.
15. 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.
16. All engineering review fees shall be paid in full as required by Section 4.7.E.1 of the Site Plan Review Regulations. (*Note: applicant can request an invoice from the Department of Public Works*).
17. If required by the Department of Public Works, the applicant shall apply for and obtain an Excavation Permit, Driveway Permit, and Stormwater Permit.

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

18. Prior to the start of any construction activities on the property, the applicant shall record in the Grafton County Registry of Deeds notice of the stormwater management and erosion and sediment control plans as required per Section 6.6.H.2.d of the Site Plan Review Regulations. Such notice shall be reviewed by the Planning & Development Department prior to recording.
19. 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, driveways, drainage), in accordance with 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 an Infrastructure Inspection Agreement.

20. Pursuant to Section 213 of the Zoning Ordinance and the Impact Fee Schedule adopted on May 20, 2024, the development shall be subject to City of Lebanon impact fees in the amount of \$1,067.20.
21. All water and sewer fees shall be paid as set forth in City Code Chapter 68.
22. If required by the Department of Public Works, the applicant shall obtain an Excavation Permit, Driveway Permit, and Stormwater Permit.
23. Prior to the start of any construction activities on the property, the applicant shall obtain or update (if appropriate) any required Federal or State approvals.

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

24. The impact fee calculated pursuant to Condition of Approval #20 shall be paid.
25. 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.
26. 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.

Attachments

cc: Upper Valley Music Center (via e-mail)
File

Tim Corwin

From: Tim Corwin
Sent: Thursday, April 10, 2025 8:13 PM
To: Scott Williams
Cc: Nicholas Joelli; H. Sloane Mayor; Matt Smith; Ben Van Vliet; Brian Vincent
Subject: 8 South Park St_PB2025-16-SPR_Planning Comments

Hi Scott,

I've completed my review of the 8 South Park Street plan set dated March 24, 2025 and have the following comments (parenthetical references are to the Site Plan Review Regulations):

1. As you know, a site plan for the property was approved in 1984 following a minor subdivision that created the subject lot and the lot to the rear (6 South Park Street) (a copy of the site plan was included with your application materials). A shared driveway and shared parking lot was approved for both properties with 99-year cross easements. The "gravel parking lot" for 8 South Street never obtained site plan approval – instead this area should be covered in grass pursuant to the approved site plan. Consequently, the proposed site plan review is not just for the proposed building addition, but also the gravel parking lot. That the gravel parking lot apparently developed over time without site plan approval should be taken into account by the Planning Board when evaluating the applicant's waiver requests and stormwater management proposal.
2. The information required by Section 5.1.E.4.e of the Site Plan Review Regulations is missing from the cover sheet. Some of this information appears on the site plan sheet, and can be relocated to the cover sheet. Please note that all information required by Section 5.1.E.4.e must be provided including **but not limited to:**
 - a. Gross floor area of existing building (5.1.E.4.e.4)
 - b. Maximum number of parking spaces per Section 607.3.A of the Zoning Ordinance, and related calculation (5.1.E.4.e.5)
 - c. Number of existing & proposed short- & long-term bicycle storage spaces (5.1.E.4.e.6)
 - d. Height of existing building (5.1.E.4.e.8)
 - e. Height of proposed addition (5.1.E.4.e.8)
 - f. Gross square footage of each story of the building (5.1.E.4.e.9)
 - g. Existing and proposed front, side, and rear setbacks (5.1.E.4.e.11)
 - h. Existing lot coverage in sq. ft. and as a percentage (5.1.E.4.e.12 & 5.1.E.10)
 - i. Identify overlay districts (i.e. Historic District) (5.1.E.4.e.13)
3. The plan set does not comply with the following submission requirements set forth in Section 5.1.E of the Site Plan Review Regulations:
 - a. Vehicle and bicycle parking spaces shall be numbered. (5.1.E.10)
 - b. The size and location of all existing and proposed public and private utilities shall be shown. (5.1.E.12)
 - c. The lighting plan must identify the color correlated temperature (CCT) for the proposed lighting fixtures. (5.1.E.13)
 - d. City storm drainage facilities located within 200 feet of the site shall be shown. (5.1.E.17)
 - e. Plans for snow removal and storage. (5.1.E.19)
 - f. Current easements and deed restrictions shall be shown. (5.1.E.22)

Please update the plan set and/or request waivers for any of the above requirements that cannot be satisfied.

4. The plan set does not comply with the following design requirements of the Site Plan Review Regulations.
 - a. 6.2.B – perimeter landscaping requirements
 - b. 6.2.D – landscaping around buildings requirements
 - c. 6.2.E – parking area landscaping requirements
 - d. 6.5.E.2 – requiring parking areas to be finished with improved materials

Please update the plan set and/or request waivers for any of the above requirements that cannot be satisfied.

5. Comments on the Application for Waivers
 - a. A waiver from 5.1.E.14 is not needed if no new signage is proposed
 - b. As noted, Section 5.1.E.23 is not applicable – this can be removed from the application for waivers
 - c. Likewise, the reference to Section 5.1.G.2 can also be removed from the application for waivers
6. Other plan set comments:
 - a. Parking spaces.
 - i. The plan should identify the off-site parking spaces at 6 South Park Street that are available to 8 South Park Street by virtue of a 99-year easement.
 - ii. Sheet 3 indicates that 13 on-site parking spaces are provided, but it's not possible to verify since the parking spaces aren't shown.
 - iii. Likewise, it's not possible to verify that the spaces meet the dimensional requirements set forth in Section 6.5.E.3.
 - iv. At a minimum the 2 handicap spaces should be shown and signage provided.
 - b. Are dumpsters located on the property? If so, the plans should depict these and screening should be provided.
 - c. The survey and lighting plan should be added to the plan set and the table of contents updated accordingly.
 - d. Please add the date and application number of the Heritage Commission approval to the cover sheet.
 - e. How many new lighting fixtures are proposed? The lighting plan indicates that two new fixtures are provided, but the elevations only depict one new fixture.
 - f. Given the substantial waivers needed from the landscaping requirements are needed, can the applicant consider adding a tree to the northeast corner of the lot?
 - g. On Sheets 2 and 3, please remove the zoning requirements for class 2 and 3 lots,
 - h. In the Site Information table on Sheet 3, what is a "developed music center"?

I will be out of the office tomorrow but will be able to review e-mails in the afternoon should you have any questions. I'm also free all day Monday – just let me know.

Thank you, Tim

TIM CORWIN, AICP

DEPUTY PLANNING AND DEVELOPMENT DIRECTOR

CITY OF LEBANON

51 NORTH PARK STREET

LEBANON, NH 03766

(603) 448-1524 (OFFICE)

(603) 442-6127 (DIRECT)

TIM.CORWIN@LEBANONNH.GOV

WWW.LEBANONNH.GOV

[BOOK A TIME TO MEET WITH ME](#)



NOTICE OF DECISION

**CITY OF LEBANON, NEW HAMPSHIRE
PLANNING BOARD**

NOTICE IS HEREBY GIVEN THAT THE REQUEST OF:

Roger S. Wood

FOR site plan review for the conversion of a single family dwelling and
barn into offices, 8 South Park St., Lebanon, in the R-2 zone

AS REVIEWED BY THE PLANNING BOARD IN ACCORDANCE WITH THE:

City of Lebanon Site Plan Review Regulations

ON May 14, 1984 **HAS BEEN** APPROVED

AFTER THE FOLLOWING MOTION WAS PASSED BY A MAJORITY MEMBERS OF THE

PLANNING BOARD: Mr. Murray moved that the Planning Board approve

the application of Roger S. Wood for site plan review, for the conversion
of a single family dwelling and barn into offices, 8 South Park Street,
Lebanon, NH, in the R-2 zone. Plan drawn by K. A. LeClair Associates,
Project #4184, dated January 12, 1984, with the following conditions:

1. That the driveway be widened to 20 feet up to where they separate.
2. That the catch basin be moved.
3. That all construction be done in accordance with State of New
Hampshire specifications.

The motion was seconded by Mrs. kimball.

The vote on the motion was unanimous in favor.

SIGNED:

Carmela Hennessey

DATED:

5/14/84



NOTICE OF DECISION

CITY OF LEBANON, NEW HAMPSHIRE
PLANNING BOARD

NOTICE IS HEREBY GIVEN THAT THE REQUEST OF:

Roger S. Wood

FOR a minor subdivision of land, 8 South Park St., Lebanon, NH, in the
R-2 zone.

AS REVIEWED BY THE PLANNING BOARD IN ACCORDANCE WITH THE:

City of Lebanon Subdivision Regulations

ON May 14, 1984 HAS BEEN APPROVED

AFTER THE FOLLOWING MOTION WAS PASSED BY A MAJORITY MEMBERS OF THE

PLANNING BOARD: Mr. Murray moved that the Planning Board approve the

request of Roger Wood, for a minor subdivision of land, 8 South Park St.,

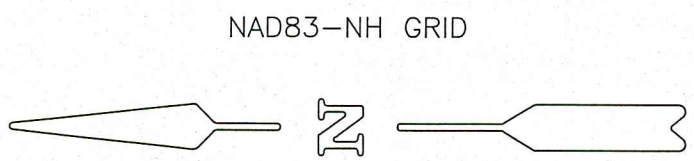
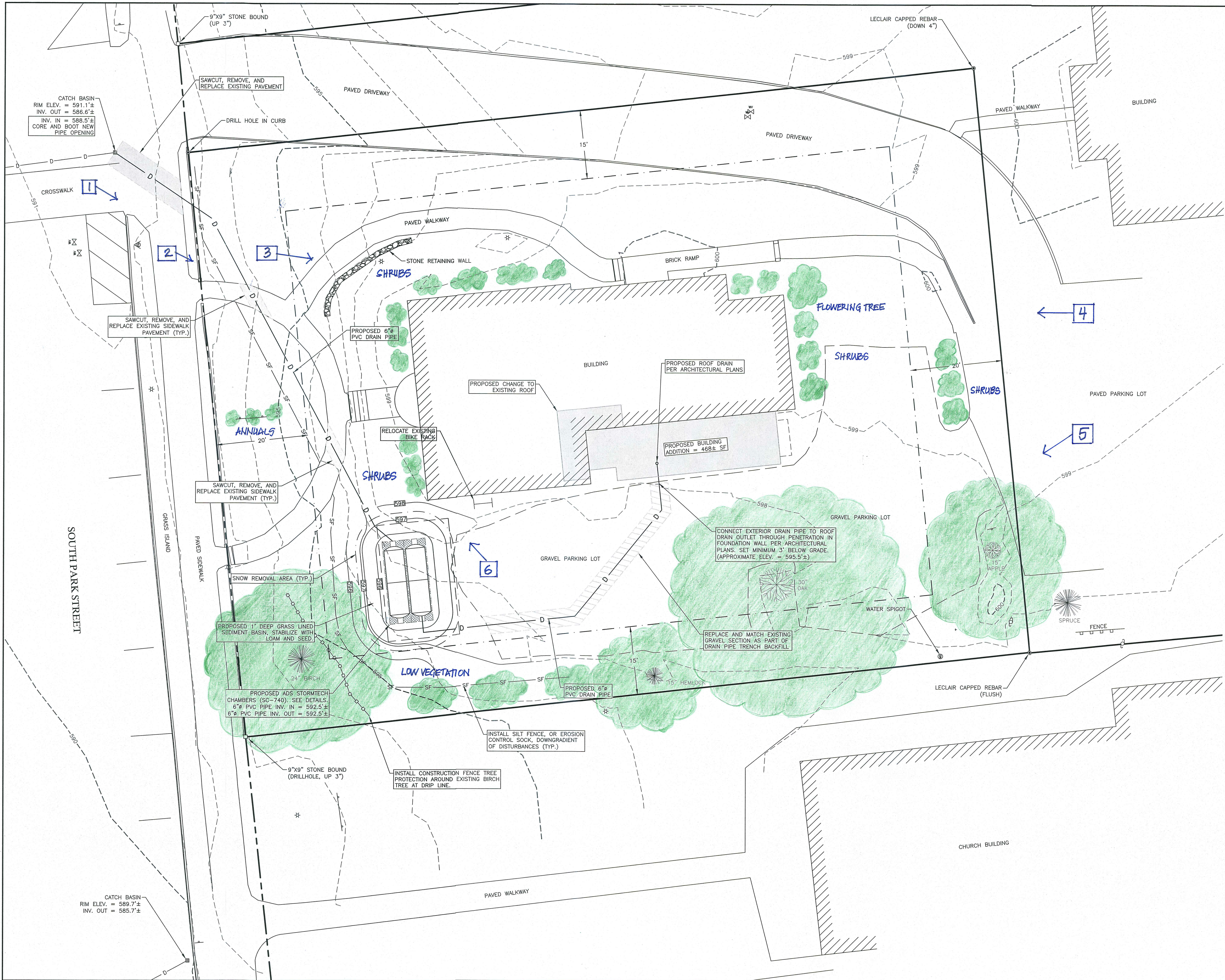
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1. Right of ways be shown on the plat.
2. That sample of deed covenant be presented to the Board for review and
approval. (Guarantee the right of way and parking.)
3. Driveway be widened to 20 feet in width up to the point where the drive-
way splits.
4. Design and construction to be in conformity with State of New Hampshire
specifications.
5. That the plat not be signed until conditions are met.

SIGNED: *Chuck Hennessy*

DATED: 5/14/84



SITE INFORMATION

TAX MAP AND LOT NUMBER: 92-10
ADDRESS: 8 SOUTH PARK STREET
ZONING DISTRICT: PB (PROFESSIONAL BUSINESS DISTRICT)
EXISTING USE: DEVELOPED MUSIC CENTER
PROPOSED USE: BUILDING ADDITION TO EXISTING MUSIC CENTER
GROSS AREA OF PROPOSED BUILDING: 468± SQ. FT. (SEE INFORMATION PROVIDED)
AREA OF LOT: 0.51± ACRES (22,300± SQ. FT.)
PARKING SPACES: 13 (2 HANDICAP ACCESSIBLE SPACES)
LOADING SPACES: 0
NUMBER OF STORIES: 2

LOT SIZE/DIMENSION:	AREA (SQ. FT.)	WIDTH	MAX. HEIGHT
CLASS			
1	10,000	75'	45'±
2	15,000	75'	45'±
3	40,000	100'	45'±

BUILDING SETBACKS:	FRONT	SIDE	REAR
CLASS			
1	20'	15'	20'
2	20'	15'	20'
3	25'	25'	30'

LOT COVERAGE (BUILDINGS):	ALLOWED	EXISTING	PROPOSED
	20%	13.2%	15.3%

IMPERVIOUS AREA: 11,615± SQ. FT. (52.1%)
WETLANDS CONSERVATION DISTRICT/FLOODPLAIN DISTRICT, SHORELAND WATER QUALITY PROTECTION JURISDICTION: THE SITE IS NOT WITHIN THE WETLANDS CONSERVATION DISTRICT/FLOODPLAIN DISTRICT OR WITHIN THE SHORELAND WATER QUALITY PROTECTION JURISDICTION.

LEGEND - EXISTING

EXISTING IRON PIPE OR REBAR	● AS NOTED
STONE/CONCRETE BOUNDARY MARK	□ AS NOTED
BOUNDARY LINE	---
RIGHT-OF-WAY	----
BUILDING SETBACK LINE	----
CONTOUR	----- 500 -----
FENCE-STOCKADE	=====
EDGE PAVEMENT	=====
EDGE GRAVEL	=====
UTILITY POLE/GUY WIRE	○
LIGHT POLE	+
CATCH BASIN	⊕
DRAIN MANHOLE	⊙
STORMWATER PIPE	—D—D—D—D—
SANITARY MANHOLE	⊙
SIGN	⊙
HYDRANT	⊙
GATE VALVE	⊙
WATER SPIGOT	⊙
HARDWOOD TREE	⊙
SOFTWOOD TREE	⊙
DEED REFERENCE	⊙
TAX MAP/LOT NO.	12-122

GENERAL SURVEY NOTES:
1. HORIZONTAL DATUM: NH STATE PLANE GRID NAD83 (SURVEY FEET) FROM GIS OBSERVATION.
2. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) FROM GIS OBSERVATION.
3. STRUCTURES FOR UNDERGROUND UTILITIES ARE SHOWN AS OBSERVED. THE SURVEYOR DOES NOT CERTIFY THAT OTHER UNDERGROUND UTILITIES DO NOT EXIST. UNDERGROUND UTILITIES ARE NOT WARRANTED TO BE EXACT OR COMPLETE AND ARE TO BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR SITE MODIFICATIONS.



REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY

PROPOSED SITE PLAN FOR
UPPER VALLEY MUSIC CENTER
BUILDING ADDITION AND SITE IMPROVEMENTS
SOUTH PARK STREET, LEBANON, NEW HAMPSHIRE

PATHWAYS CONSULTING, LLC

240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

SCALE: AS SHOWN
DESIGNED BY: SAW
DRAWN BY: DAS
CHECKED BY: SAW
DATE: 03-24-25
PROJ. NO. 13444

3
SHEET 3 OF 5



1. UPPER VALLEY MUSIC CENTER FROM SOUTH PARK STREET – LOOKING SOUTHWEST



2. LOOKING SOUTHWEST FROM SOUTH PARK STREET



3. LOOKING SOUTH FROM ALONG EAST SIDE OF STRUCTURE



4. LOOKING NORTH FROM REAR OF BUILDING

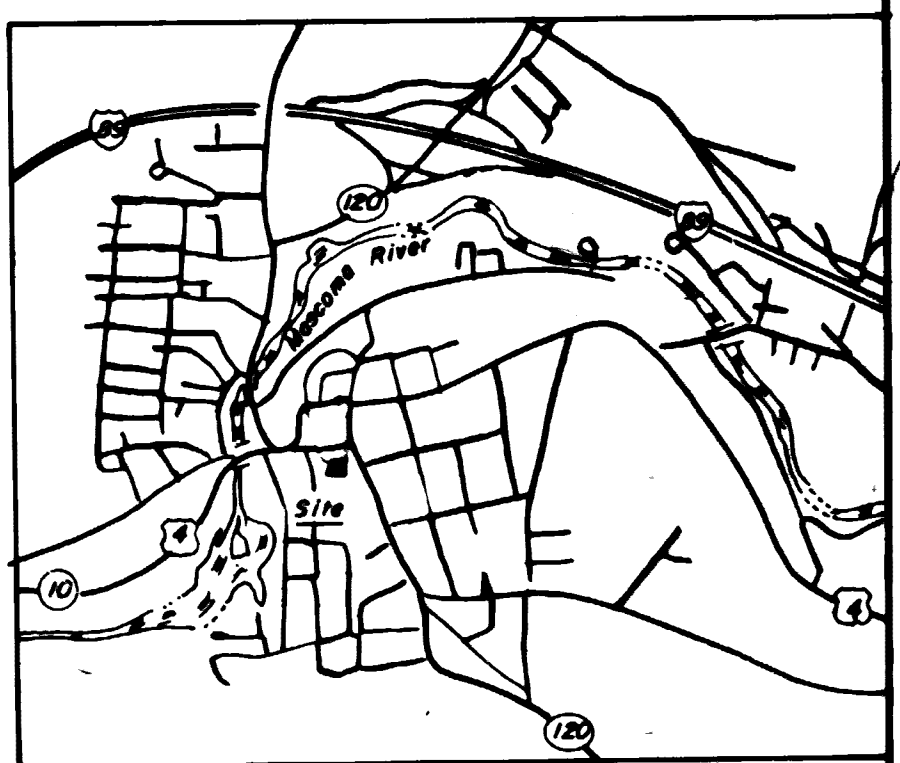
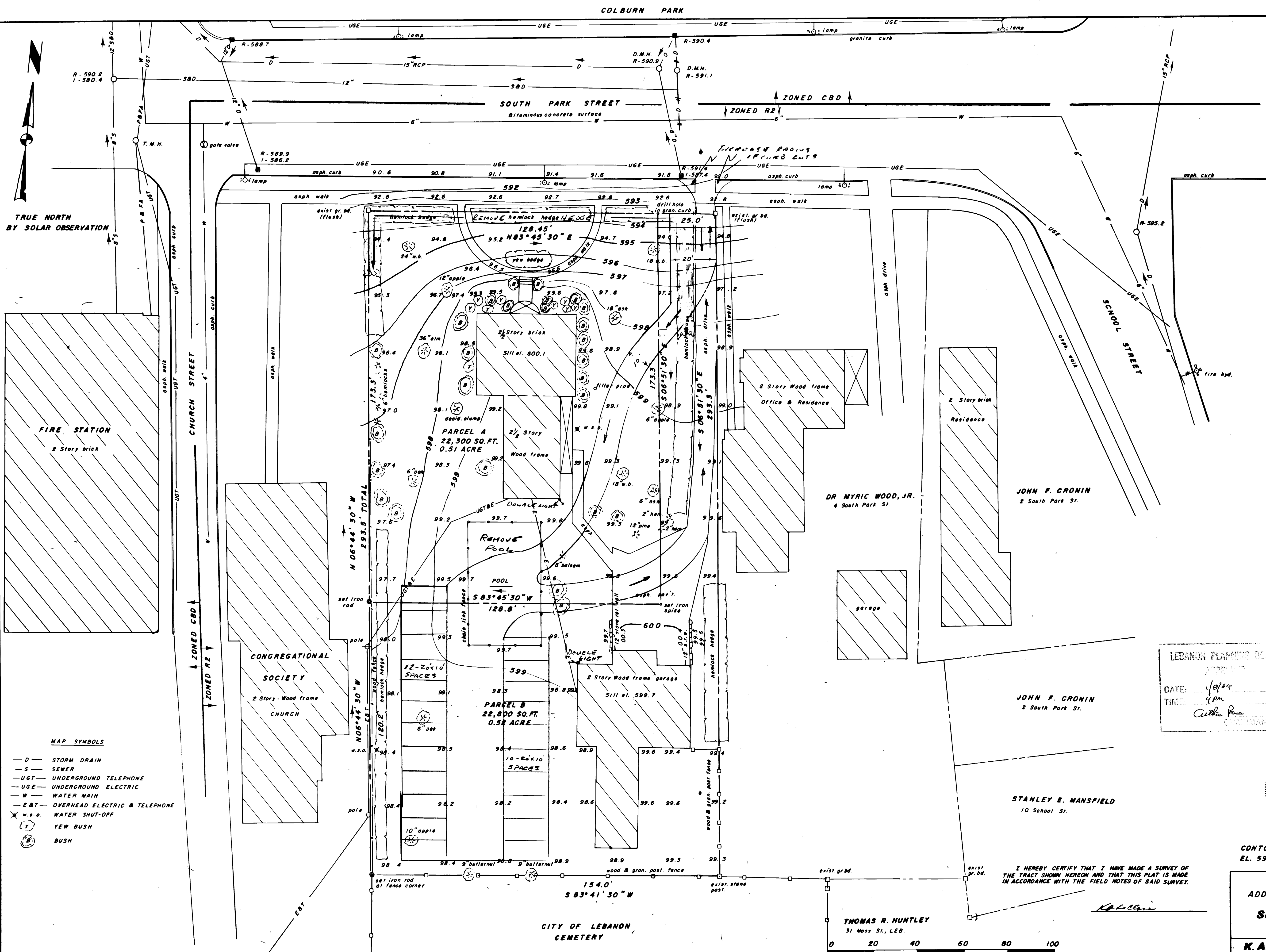


5. LOOKING NORTH FROM GRAVEL PARKING AREA



6. LOOKING NORTHEAST FROM GRAVEL PARKING AREA

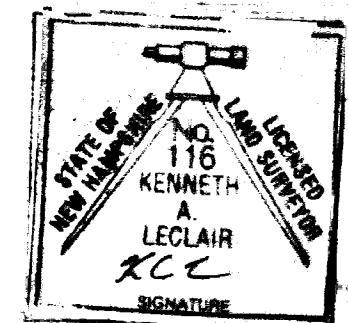
Plan #2529
FILED JAN 11 1985
RECORDED: LIBER 1531 FOLIO 926
WITNESSES: ATTEST



VICINITY MAP

ZONING INFORMATION		
	EXISTING	PROPOSED
AREA OF LOT	45,100 SQ. FT.	
AREA OF BUILDINGS		
HOUSE	2700 SQ. FT.	
GARAGE	2750 SQ. FT.	
AREA OF USABLE SPACE		
PARKING SPACES	4	22
LOADING SPACES		
HEIGHT OF BUILDINGS	25'	
NUMBER OF STORES	2-2 1/2	
FLOOR AREA RATIO		
PROPOSED USE		
EXISTING ZONING DISTRICT	R2	
SET BACKS		
FRONT	20'	
SIDE	15'	
BACK	20'	

LEBANON PLANNING BOARD
DATE: 1/9/84
TIME: 4 PM
Catherine P. [Signature]



SITE PLAN

CONTOURS ON USGS DATUM - BM DISC AT CITY HALL
EL. 595.04

OWNER - ROGER S. WOOD
ADDRESS - 8 SOUTH PARK STREET,
LEBANON, NEW HAMPSHIRE
Scale 1" = 20' Date JAN. 12, 1984
Proj. No 4184
K.A. LECLAIR ASSOC., Inc. Civil Engineers
HANOVER, N.H.

THOMAS R. HUNTLEY
31 Moss St., LEB.
0 20 40 60 80 100

I HEREBY CERTIFY THAT I HAVE MADE A SURVEY OF
THE TRACT SHOWN HEREON AND THAT THIS PLAT IS MADE
IN ACCORDANCE WITH THE FIELD NOTES OF SAID SURVEY.

- MAP SYMBOLS
- D - STORM DRAIN
 - S - SEWER
 - UGT - UNDERGROUND TELEPHONE
 - UGE - UNDERGROUND ELECTRIC
 - W - WATER MAIN
 - E&T - OVERHEAD ELECTRIC & TELEPHONE
 - W.S.O. - WATER SHUT-OFF
 - Y.B. - YEW BUSH
 - B. - BUSH

Tim Corwin

From: Tim Corwin
Sent: Thursday, April 10, 2025 8:13 PM
To: Scott Williams
Cc: Nicholas Joelli; H. Sloane Mayor; Matt Smith; Ben Van Vliet; Brian Vincent
Subject: 8 South Park St_PB2025-16-SPR_Planning Comments

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4. The plan set does not comply with the following design requirements of the Site Plan Review Regulations.
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Thank you, Tim

TIM CORWIN, AICP

DEPUTY PLANNING AND DEVELOPMENT DIRECTOR

CITY OF LEBANON

51 NORTH PARK STREET

LEBANON, NH 03766

(603) 448-1524 (OFFICE)

(603) 442-6127 (DIRECT)

TIM.CORWIN@LEBANONNH.GOV

WWW.LEBANONNH.GOV

[BOOK A TIME TO MEET WITH ME](#)



NOTICE OF DECISION

**CITY OF LEBANON, NEW HAMPSHIRE
PLANNING BOARD**

NOTICE IS HEREBY GIVEN THAT THE REQUEST OF:

Roger S. Wood

FOR site plan review for the conversion of a single family dwelling and
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City of Lebanon Site Plan Review Regulations

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1. That the driveway be widened to 20 feet up to where they separate.
2. That the catch basin be moved.
3. That all construction be done in accordance with State of New
Hampshire specifications.

The motion was seconded by Mrs. kimball.

The vote on the motion was unanimous in favor.

SIGNED:

Carmela Hennessey

DATED:

5/14/84



NOTICE OF DECISION

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NOTICE IS HEREBY GIVEN THAT THE REQUEST OF:

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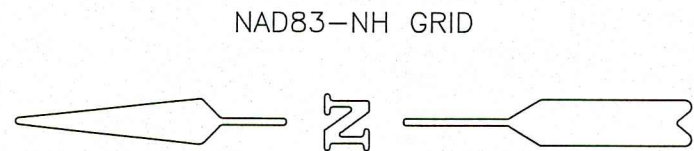
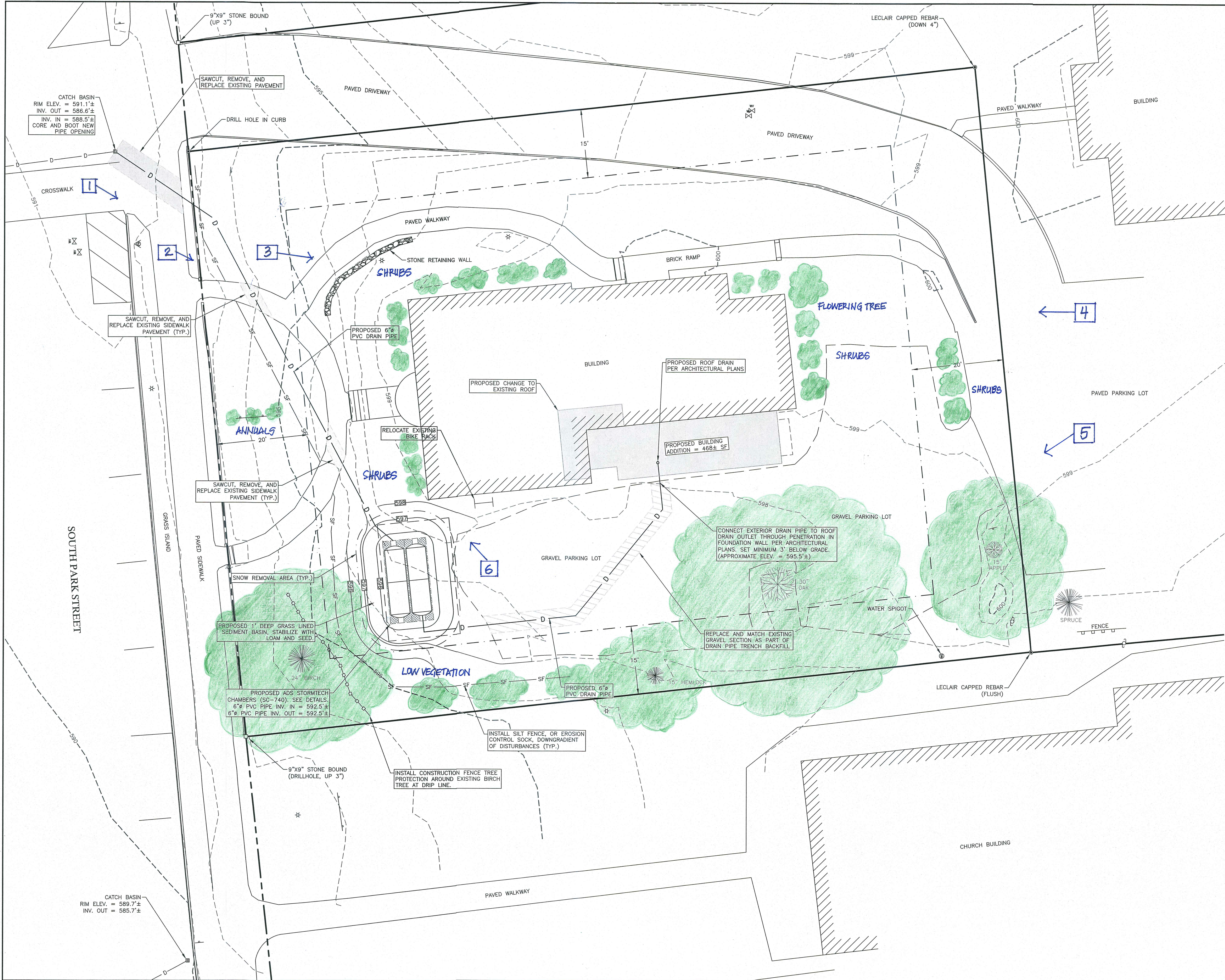
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4. Design and construction to be in conformity with State of New Hampshire
specifications.
5. That the plat not be signed until conditions are met.

SIGNED: *Frank Hennessy*

DATED: 5/14/84



SITE INFORMATION

TAX MAP AND LOT NUMBER: 92-10
ADDRESS: 8 SOUTH PARK STREET
ZONING DISTRICT: PB (PROFESSIONAL BUSINESS DISTRICT)
EXISTING USE: DEVELOPED MUSIC CENTER
PROPOSED USE: BUILDING ADDITION TO EXISTING MUSIC CENTER
GROSS AREA OF PROPOSED BUILDING: 468± SQ. FT. (SEE INFORMATION PROVIDED)
AREA OF LOT: 0.51± ACRES (22,300± SQ. FT.)
PARKING SPACES: 13 (2 HANDICAP ACCESSIBLE SPACES)
LOADING SPACES: 0
NUMBER OF STORIES: 2

LOT SIZE/DIMENSION:	AREA (SQ. FT.)	WIDTH	MAX. HEIGHT
CLASS			
1	10,000	75'	45'±
2	15,000	75'	45'±
3	40,000	100'	45'±

BUILDING SETBACKS:	FRONT	SIDE	REAR
CLASS			
1	20'	15'	20'
2	20'	15'	20'
3	25'	25'	30'

LOT COVERAGE (BUILDINGS):	ALLOWED	EXISTING	PROPOSED
	20%	13.2%	15.3%

IMPERVIOUS AREA: 11,615± SQ. FT. (52.1%)
WETLANDS CONSERVATION DISTRICT/FLOODPLAIN DISTRICT, SHORELAND WATER QUALITY PROTECTION JURISDICTION: THE SITE IS NOT WITHIN THE WETLANDS CONSERVATION DISTRICT/FLOODPLAIN DISTRICT OR WITHIN THE SHORELAND WATER QUALITY PROTECTION JURISDICTION.

LEGEND - EXISTING

EXISTING IRON PIPE OR REBAR	● AS NOTED
STONE/CONCRETE BOUNDARY MARK	□ AS NOTED
BOUNDARY LINE	---
RIGHT-OF-WAY	----
BUILDING SETBACK LINE	----
CONTOUR	----- 500 -----
FENCE-STOCKADE	=====
EDGE PAVEMENT	=====
EDGE GRAVEL	=====
UTILITY POLE/GUY WIRE	○
LIGHT POLE	⊕
CATCH BASIN	⊕
DRAIN MANHOLE	⊕
STORMWATER PIPE	⊕
SANITARY MANHOLE	⊕
SIGN	⊕
HYDRANT	⊕
GATE VALVE	⊕
WATER SPIGOT	⊕
HARDWOOD TREE	⊕
SOFTWOOD TREE	⊕
DEED REFERENCE	⊕
TAX MAP/LOT NO.	⊕

GENERAL SURVEY NOTES:
1. HORIZONTAL DATUM: NH STATE PLANE GRID NAD83 (SURVEY FEET) FROM GIS OBSERVATION.
2. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) FROM GIS OBSERVATION.
3. STRUCTURES FOR UNDERGROUND UTILITIES ARE SHOWN AS OBSERVED. THE SURVEYOR DOES NOT CERTIFY THAT OTHER UNDERGROUND UTILITIES DO NOT EXIST. UNDERGROUND UTILITIES ARE NOT WARRANTED TO BE EXACT OR COMPLETE AND ARE TO BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR SITE MODIFICATIONS.



REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY

PROPOSED SITE PLAN FOR
UPPER VALLEY MUSIC CENTER
BUILDING ADDITION AND SITE IMPROVEMENTS
SOUTH PARK STREET, LEBANON, NEW HAMPSHIRE

PATHWAYS CONSULTING, LLC

240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

SCALE: AS SHOWN
DESIGNED BY: SAW
DRAWN BY: DAS
CHECKED BY: SAW
DATE: 03-24-25
PROJ. NO. 13444

3
SHEET 3 OF 5



1. UPPER VALLEY MUSIC CENTER FROM SOUTH PARK STREET – LOOKING SOUTHWEST



2. LOOKING SOUTHWEST FROM SOUTH PARK STREET



3. LOOKING SOUTH FROM ALONG EAST SIDE OF STRUCTURE



4. LOOKING NORTH FROM REAR OF BUILDING

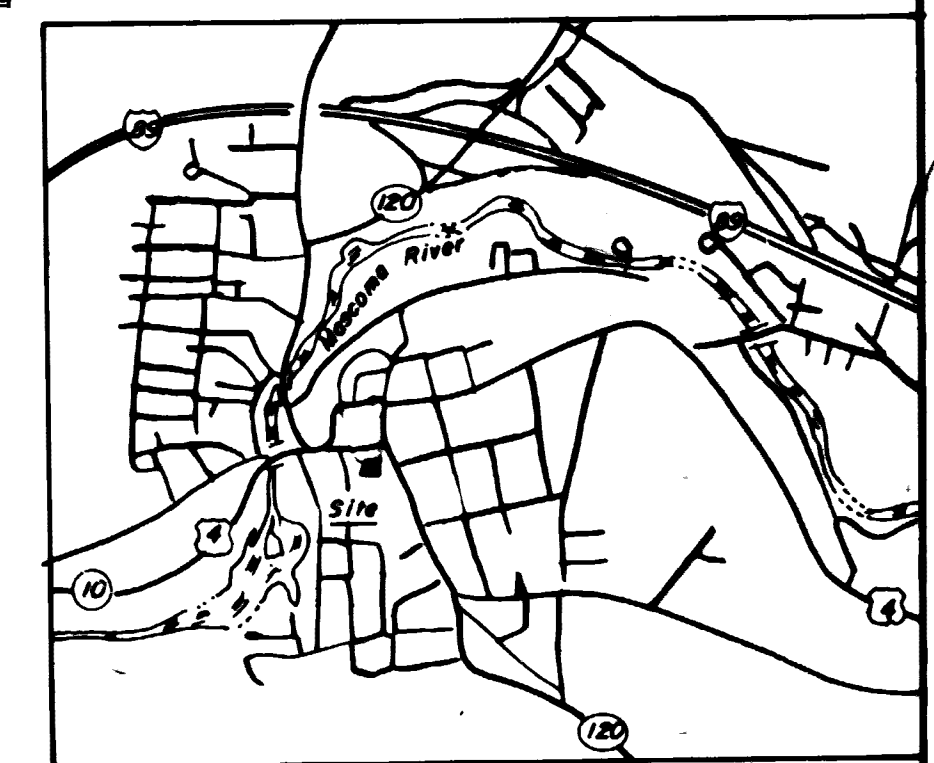
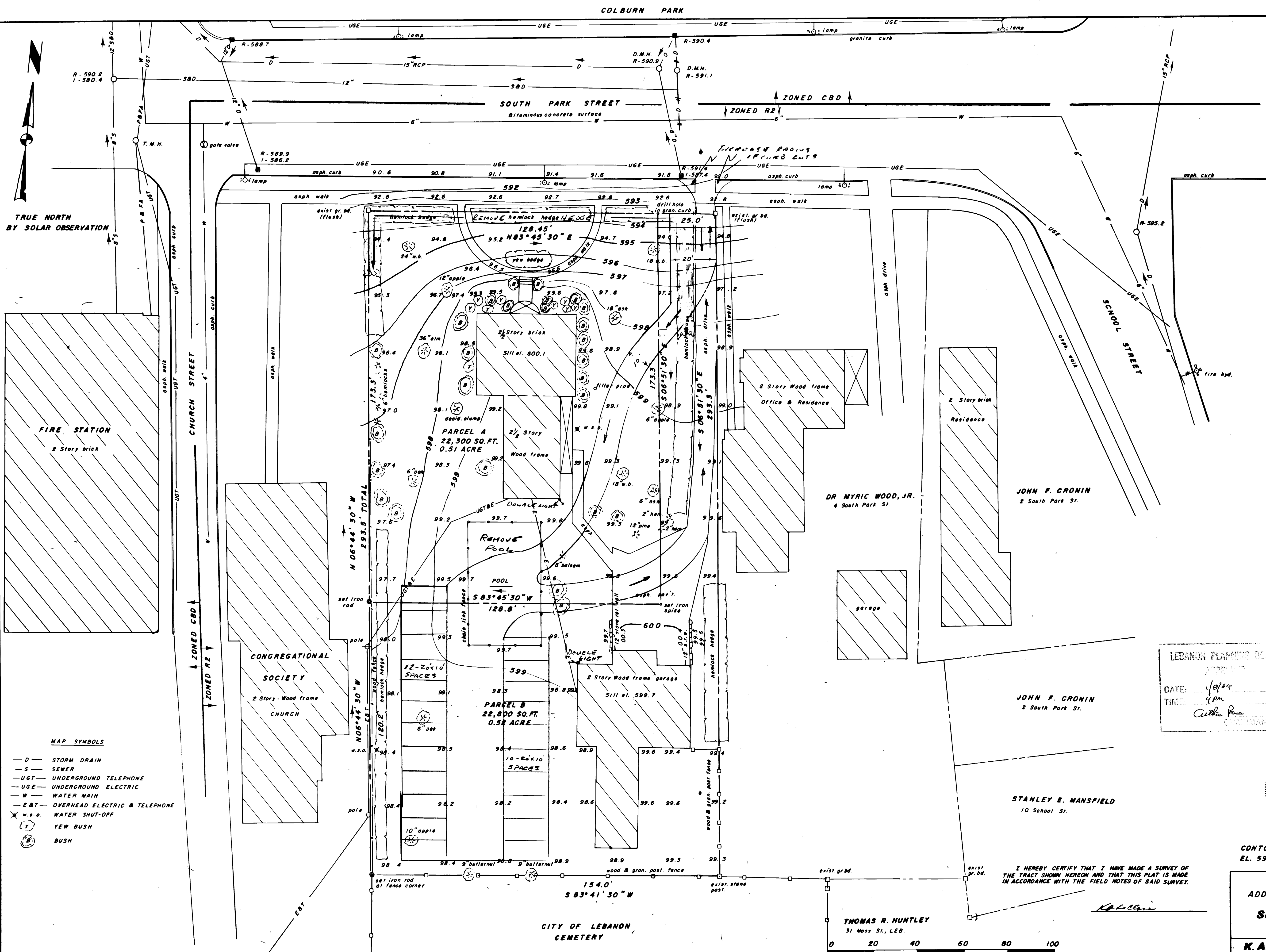


5. LOOKING NORTH FROM GRAVEL PARKING AREA



6. LOOKING NORTHEAST FROM GRAVEL PARKING AREA

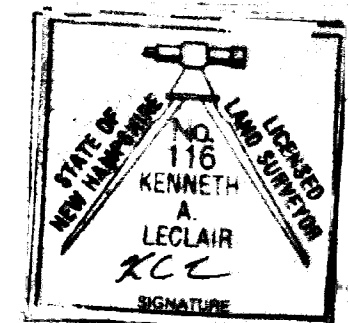
Plan # 2529
 CITY OF LEBANON
 DEPT. OF PUBLIC WORKS
 RECEIVED 12:40 PM JAN. 11, 1985
 RECORDED: LIBER 1531 FOLIO 92C
 EXAMINED: ATTEST [Signature] RECORDING



ZONING INFORMATION

	EXISTING	PROPOSED
AREA OF LOT	45,100 SQ. FT.	
AREA OF BUILDINGS		
HOUSE	2700 SQ. FT.	
GARAGE	2750 SQ. FT.	
AREA OF USABLE SPACE		
PARKING SPACES	4	22
LOADING SPACES		
HEIGHT OF BUILDINGS	25'	
NUMBER OF STORES	2-2 1/2	
FLOOR AREA RATIO		
PROPOSED USE		
EXISTING ZONING DISTRICT	R2	
SET BACKS		
FRONT	20'	
SIDE	15'	
BACK	20'	

LEBANON PLANNING BOARD
 DATE: 1/9/85
 TIME: 4 PM
 [Signature]
 CITY CLERK



SITE PLAN
 CONTOURS ON USGS DATUM - BM DISC AT CITY HALL
 EL. 595.04

OWNER - ROGER S. WOOD
 ADDRESS - 8 SOUTH PARK STREET,
 LEBANON, NEW HAMPSHIRE
 Scale 1" = 20' Date JAN. 12, 1984
 Proj. No 4184
 K.A. LECLAIR ASSOC., Inc. Civil Engineers
 HANOVER, N.H.

THOMAS R. HUNTLEY
 31 Moss St., LEB.
 0 20 40 60 80 100

I HEREBY CERTIFY THAT I HAVE MADE A SURVEY OF THE TRACT SHOWN HEREON AND THAT THIS PLAT IS MADE IN ACCORDANCE WITH THE FIELD NOTES OF SAID SURVEY.

- MAP SYMBOLS**
- D - STORM DRAIN
 - S - SEWER
 - UGT - UNDERGROUND TELEPHONE
 - UGE - UNDERGROUND ELECTRIC
 - W - WATER MAIN
 - E&T - OVERHEAD ELECTRIC & TELEPHONE
 - W.S.O. - WATER SHUT-OFF
 - Y.B. - YEW BUSH
 - B. - BUSH

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: UPPER VALLEY MUSIC CTR. INC.

MAILING ADDRESS:

E-MAIL ADDRESS:

CO-APPLICANT, AGENT, OR LESSEE:

NAME:

TEL.#:

MAILING ADDRESS:

E-MAIL ADDRESS:

PROJECT LOCATION:

TAX MAP #: Mblu: 92-10

LOT#:

PLOT #:

ZONE: PBD

STREET ADDRESS OF PROJECT: 8 S. PARK ST

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

SCOPE OF PROJECT:

±920 SF two-story addition with two new studios and an elevator. Second-floor renovations for improved accessibility, including widening openings and a new accessible restroom.

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: 501(c)(3) Non-Profit Community Music School

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 April 14, 2025, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY

OWNER: UPPER VALLEY MUSIC CTR. INC. Matthew Smith DATE: Mar. 10, 2025 **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 #	
2025-03-10	92-10	PB2025-16-SPR	

Addition to the Upper Valley Music Center

8 South Park Street, Lebanon NH

Project Description

This project will add two studio spaces and an elevator to a historic two-story building that houses a non-profit music school. The expansion of approximately 800sf aims to enhance the school's ability to serve its growing community of students and improve accessibility throughout the building, ensuring that all students, staff, and visitors can easily navigate the space. The addition will be designed with sensitivity to the building's historic elements, following the Secretary of the Interior's Standards for the Treatment of Historic Properties. A large piece of these standards is ensuring the addition matches the original building, but is visually distinct, and all work is reversible. The site outside of the additions footprint will remain unaltered. Currently in the area of the proposed addition, there is a concrete pad with HVAC Equipment and a shrub. The addition will not extend closer to any property boundaries than the current building already does, and two building mounted lights for the parking area will be replaced on the new addition.

PATHWAYS CONSULTING, LLC

Planning • Civil & Environmental Engineering • Surveying • Construction Assistance
240 Mechanic Street • Suite 100
Lebanon, New Hampshire 03766
(603) 448-2200 • Fax: (603) 448-1221

March 24, 2025

Tim Corwin, Deputy Planning and Development Director
City of Lebanon, Planning and Development
51 North Park Street
Lebanon, NH 03766

RE: SITE PLAN REVIEW APPLICATION RESUBMISSION, UPPER VALLEY MUSIC
CENTER, BUILDING ADDITION AND SITE IMPROVEMENTS PROJECT, 8
SOUTH PARK STREET, LEBANON, NH (Project No. 13444)

Dear Tim:

Please accept this letter and additional supporting information provided on behalf of the Upper Valley Music Center (Applicant and Owner) for the Site Plan Review (SPR) resubmission for the referenced project. We are providing two (2) hard copies and a digital (.pdf) version of the following enclosures related to the project:

- Site Plan Review Application Plans, dated March 24, 2025;
- Drainage Calculations for SPR Memorandum (with attachments), dated March 24, 2025; and
- Boundary Plan (draft), dated March 17, 2025.

As you are aware, the Applicant submitted a SPR application on March 10, 2025 for the referenced project. The intent of this submission is to provide additional supporting information for the application, in response to comments provided by City Staff during the virtual Staff Review meeting held on March 17, 2024.

The enclosed Site Plan set addresses many of the outstanding issues discussed during the Staff Review meeting, including property details, area calculations, and building setbacks, site layout and details for the proposed building addition, and project details related to other site improvements (outside the building addition footprint), such as the proposed drainage design and temporary erosion and sediment controls. A topographic and boundary survey was recently completed for the property, and this field information has been incorporated into the Site Plan set and the separate Boundary Plan. Lastly, the Drainage Calculations have been prepared in accordance with the requirements of the City's "Stormwater Checklist" that is part of the overall SPR checklist.

Please let us know if you have additional questions or comments.

Sincerely,

PATHWAYS CONSULTING, LLC



Scott A. Williams, P.E.
Project Manager

SAW:meb

Enclosures

cc: UVMC with enclosures
MA-KE Architects with enclosures



City of Lebanon, New Hampshire

APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: UPPER VALLEY MUSIC CTR. INC.

Project Name: ADDITION TO UPPER VALLEY MUSIC CENTER

Project Address: 8 S. PARK ST. LEBANON, NH 03766

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).]

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

The proposed addition is well within the site setbacks, and will not encroach any closer to any site boundary line than the existing building already is.

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

The proposed addition is shorter than the existing building and located in the rear which is not highly visible to the public. This means the proposed addition will not have a substantial effect on the surrounding building fabric.

3. Section 9 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
The use of the existing building is not being changed with the proposed addition, so
will have no new effect on the surrounding area.
4. Section 14 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
There is not new signage proposed with this addition.
5. Section 16 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
No major landscaping is planned for this project. Based on the size and layout of
the site the required landscaping buffer is not feasible.
6. Section 20 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
No site access or circulation changes are proposed with this project.
7. Section 23 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
Not applicable, No multi-family structures
8. Section G(2) of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
Not applicable

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: _____

CITY OF LEBANON, NH SITE PLAN REVIEW REGULATIONS TECHNICAL CHECKLIST	
PROJECT NAME: ADDITION TO THE UPPER VALLEY MUSIC CENTER	
APPLICANT: UPPER VALLEY MUSIC CENTER. INC.	DATE: MARCH 10, 2025
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
TECHNICAL CHECKLIST & STORMWATER CHECKLIST**

[illegible]

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

Plan Requirements (cont.)	Info. Provided	Waiver Sought
5.1.E(6) - 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.	☒	☐
5.1.E(7) - Shape, size, height, and location of all existing structures located on site and within 200 feet of site.	☐	☒
5.1.E(7) - 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.	☒	☐
5.1.E(8) - 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.	☒	☐
5.1.E(8) - 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.	☒	☐
5.1.E(9) - Zoning District, Tax Map and Lot number, and use of abutting properties within 200 feet of property.	☐	☒
5.1.E(9) - 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.	☒	☐
5.1.E(10) - 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.	☒	☐
5.1.E(10) - Vehicle and bicycle parking spaces shall be numbered.	☒	☐
5.1.E(10) - Loading spaces and facilities used in connection with any structures on the site shall be shown	☒	☐
5.1.E(10) - Total square footage and percentage of the lot covered by impervious cover shall be shown.	☒	☐
5.1.E(11) - 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.	☒	☐
5.1.E(12) - 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
5.1.E(13) - 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.	☒	☐
5.1.E(13) - 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.	☒	☐
5.1.E(13) - 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).	☒	☐
5.1.E(13) - 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.	☒	☐
5.1.E(14) - 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.	☐	☒
5.1.E(14) - 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.	☐	☒
5.1.E(15) - 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).	☒	☐
5.1.E(15) - For properties located within the Floodplain District, the 100-year flood elevation, floodway, shoreland protection zone, and flood plain limits shall be identified.	☒	☐
5.1.E(16) - 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.	☐	☒
5.1.E(16) - 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.	☐	☒
5.1.E(16) - Calculations for square footage of perimeter landscaping.	☐	☒
5.1.E(16) - Parking lot shading calculations shall be provided by depicting new trees and shrubs at 10-year crown size.	☐	☒
5.1.E(17) - Existing and proposed surface and subsurface storm drainage facilities, including City storm drainage facilities located within 200' of site.	☒	☐
5.1.E(17) - 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.	☒	☐
5.1.E(18) - Section 6.6. Stormwater Management submission requirements.	See Stormwater Checklist	
5.1.E(19) - 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 Application for Waivers form).	☐	☒
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: Nicholas Joelli, MA+KE Architecture

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

CITY OF LEBANON, NH STORMWATER REVIEW REGULATIONS TECHNICAL CHECKLIST	
PROJECT NAME: ADDITION TO THE UPPER VALLEY MUSIC CENTER	
APPLICANT: UPPER VALLEY MUSIC CENTER. INC.	DATE: MARCH 10, 2025

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]

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

Plan Requirements	Info. Provided	Waiver Sought
<u>6.6.C.1 (1)</u> - An Existing Conditions S.M.P showing all pre-development: a. Surface water bodies and wetlands b. Drainage patterns c. Flood plains and floodways (with elevations) d. Watershed boundaries e. Buffer zones f. Topographic contours with minimum 2-foot intervals g. Buildings / structures h. Pavement i. Utilities j. Soils information with coding as HSG-A, B, C, or D (High Intensity Soil Survey (HISS) mapping may be required per request of the City Engineer). 1. The plan shall also include the following elements: a. scale bar b. north arrow c. title block with project name d. applicant's name e. map and parcel number f. designer's stamp g. soil and/or wetland scientist's stamp (if applicable) h. legend i. locus plan j. benchmarks k. notes with datum and other plan references l. instructions m. detail descriptions	                                                         	

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: Nicholas Joelli, MA+KE Architecture

(Last Revised 9/20/2021)

Planning office Use Only:

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

CERTIFIED NOTIFICATION LIST

Notice shall be sent by certified mail to the Owner; Applicant, if different from Owner; Abutters; Holders of conservation, preservation, or agricultural preservation restrictions (as defined under RSA 477:45) on the subject property; the holders of easements, rights-of-way, and other restrictions; and every engineer, architect, land surveyor, or soil or wetlands scientist whose seal appears on any plan submitted to the Board; and any other persons required by RSA 676:4, I(d). The names and mailing addresses shall be furnished by the Applicant.

672:3 Abutter. – "Abutter" means any person whose property is located in New Hampshire and adjoins or is directly across the street or stream from the land under consideration by the local land use board. For purposes of receiving testimony only, and not for purposes of notification, the term "abutter" shall include any person who is able to demonstrate that his land will be directly affected by the proposal under consideration. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a condominium or other collective form of ownership, the term abutter means the officers of the collective or association, as defined in RSA 356-B:3, XXIII. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a manufactured housing park form of ownership as defined in RSA 205-A:1, II, the term "abutter" includes the manufactured housing park owner and the tenants who own manufactured housing which adjoins or is directly across the street or stream from the land under consideration by the local land use board.

Source. 1983, 447:1. 1986, 33:2. 2002, 216:1, eff. July 15, 2002.

PLEASE PROVIDE NAMES & MAILING ADDRESSES FOR ALL PERSONS LISTED ABOVE.

Map & Lot Number: 92-10	Map & Lot Number:
Property Owner: UPPER VALLEY MUSIC CENTER PO BOX 826 LEBANON, NH 03766	Applicant, Co-Applicant, Agent, or Lessee:
Map & Lot Number: 91-249	Map & Lot Number: 92-9
FIRST CONG CHURCH OF LEBANON PO BOX 230 LEBANON, NH 03766	CARRIAGE HOUSE 5 LLC 6 SOUTH PARK ST LEBANON, NH 03766
Map & Lot Number: 92-8	Map & Lot Number: 92-11
NOLAN, LORCAN F & CHELSEA P 10 ABBOTT ST LEBANON, NH 03766	CITY OF LEBANON 51 NORTH PARK STREET LEBANON, NH 03766

Map & Lot Number: STATE HISTORIC	Map & Lot Number: STRUCTURAL ENGINEER
LCHIP, C.O. GEORGE BORN 3 N. SPRING STREET, SUITE 100 CONCORD, NH 03301	TEAM ENGINEERING 82 PALOMINO LANE, SUITE 503 BEDFORD, NH 03110
Map & Lot Number: GC	Map & Lot Number: CIVIL ENGINEER
ESTES & GALLUP 13 ORFORD ROAD LYME, NH 03768	PATHWAYS CONSULTING, LLC 240 MECHANIC STREET, SUITE 100 LEBANON, NH 03766
Map & Lot Number: ARCHITECT	Map & Lot Number:
MA+KE ARCHITECTS 53 S. MAIN STREET #204 HANOVER, NH 03755	
Map & Lot Number:	Map & Lot Number:
Map & Lot Number:	Map & Lot Number:
Map & Lot Number:	Map & Lot Number:
Map & Lot Number:	Map & Lot Number:

(Revised 2/8/2024)

FEE SCHEDULE LEBANON PLANNING BOARD

Adopted January 24, 2022

LOT LINE ADJUSTMENT (Boundary Line Adjustment)		
	TOTALS	
FILING FEE	\$25.00	\$25.00
ADVERTISING FEE	\$100	\$100
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE		\$

MINOR SUBDIVISION		
	TOTALS	
FILING FEE	\$150.00	\$150.00
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$

**Engineering Review fees may also be required. See note on page 2.

PRELIMINARY REVIEW OF A MAJOR SUBDIVISION		
	TOTALS	
FILING FEE	\$200.00	\$200.00
NUMBER OF LOTS* _____	\$30.00 per lot*	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$

*Or units when the subdivision does not create individual lots.
**Engineering Review fees will also be required. See note on page 2.

FINAL REVIEW OF A MAJOR SUBDIVISION		
	TOTALS	
FILING FEE	\$500.00	\$500.00
FIRST FIVE (5) LOTS*	\$75.00 per lot*	
NUMBER OF LOTS 6+*	\$150.00 per lot*	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE TIME OF FILING		\$

*Or units when the subdivision does not create individual lots.
**Engineering Review fees will also be required. See note on page 2.

SITE PLAN REVIEW		
	TOTALS	
FILING FEE	\$250.00	\$250.00
SQUARE FOOTAGE	\$75.00 per 1,000 sq. ft. (gross floor area)	\$75
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$49.86 (abutter certified)

SITE PLAN REVIEW		
TOTAL DUE AT TIME OF FILING		\$ 473.86
**Engineering Review fees will also be required. See note on page 2.		

SITE PLAN REVIEW AMENDMENT (WITH STRUCTURAL CHANGES)		
		TOTALS
FILING FEE	\$250.00	\$250.00
SQUARE FOOTAGE	\$75.00 per 1,000 sq. ft. (gross floor area)	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note below)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$
**Engineering Review fees may also be required. See note below.		

OTHER		
-SITE PLAN REVIEW AMENDMENT (WITH NO STRUCTURAL CHANGES)		
-EXTENSION REQUESTS		
-CONDITIONAL USE PERMITS		
		TOTALS
FILING FEE	\$250.00	\$250.00
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note below)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$
**Engineering Review fees may also be required. See note below.		

MINOR SITE PLAN REVIEW		
		TOTALS
FILING FEE	\$150.00	\$150.00
NOTIFICATION FEE (see note below)	Current USPS rate per certified notice (see below) X _____ notices	\$ _____ (abutter certified)
TOTAL DUE		\$

ENGINEERING REVIEW FEES:

After an application to the Planning Board is submitted and the filing fees identified above have been paid, the Planning & Development Department will determine the scope of required engineering review and will obtain an estimated cost from the reviewing engineer. A cost estimate of the review fees will usually be generated within two (2) – three (3) business days. Once conveyed to the applicant, the estimated review fees shall be paid by the applicant within five (5) business days, and an escrow account shall be established by the Planning & Development Department. No plans will be reviewed unless and until the review fee estimate is paid, if required.

Please note that escrow fees are only an estimate of what services will cost and actual costs of review may be less or more than the amount initially estimated. Any unused portion of the escrow will be returned to the applicant at the end of the approval process if such a surplus remains. Additionally, in the event the escrow amount does not cover the full cost of services the Applicant shall pay any remaining costs as a condition of approval. See also Section 4.7 of the Site Plan Review Regulations and Section 7.7 of the Subdivision Regulations.

NOTIFICATION FEE: CURRENT FEE as of July 2024 is \$5.54 per certified notice

THE CERTIFIED NOTIFICATION FEE IN ALL SECTIONS ABOVE INCLUDES THE FOLLOWING: ALL ABUTTERS, THE APPLICANT, PROPERTY OWNER, HOLDER OF CONSERVATION, PRESERVATION, OR AGRICULTURAL PRESERVATION RESTRICTION(S); AND EVERY ENGINEER, ARCHITECT, LAND SURVEYOR OR SOIL SCIENTIST WHOSE PROFESSIONAL SEAL APPEARS ON ANY PLAT SUBMITTED TO THE BOARD AND ANY OTHER PERSONS REQUIRED BY RSA 676:4, I(d).

ADDITION TO

UPPER VALLEY MUSIC CENTER



DRAWING LIST

- A0-00

COVER SHEET
- D-01

DEMOLITION PLANS
- D-02

DEMOLITION PLANS
- A1-01

BASEMENT PLAN
- A1-02

FIRST FLOOR PLAN
- A1-03

SECOND FLOOR PLAN
- A1-04

ROOF PLAN
- A2-01

EXTERIOR ELEVATIONS

8 S. Park St. Lebanon NH 03766 USA

PROJECT DESCRIPTION

ELEVATOR & NEW STUDIO SPACE ADDITION TO EXISTING BUILDING.

PROJECT TEAM

- ACOUSTIC DESIGNER:

SONIC-SPACE
PORTSMOUTH, NH 03801
603 828 3983
office@sonic-space.com
- CIVIL ENGINEER:

PATHWAYS CONSULTING, LLC
240 MECHANIC STREET
LEBANON, NH 03766
603 448 2200
pathways@pathwaysconsult.com
- STRUCTURAL ENGINEER:

TEAM ENGINEERING
82 PALOMINO LANE, SUITE 503
BEDFORD, NH 03110-6448
603 497 3137
contact@MyTeamEngineering.com
- GENERAL CONTRACTOR:

ESTES & GALLUP, LLC.
13 ORFORD ROAD
LYME, NH 03768
603 795 4400
INFO@ESTES-GALLUP.COM
- ARCHITECT:

MA+KE ARCHITECTS
53 S MAIN ST, SUITE 204
P.O. BOX 231
HANOVER, NH 03755
603 643 8868
- OWNER:

UPPER VALLEY MUSIC CENTER
8 S. Park St.
Lebanon, NH 03766
603 448 1642 x3

MA+KE
YOR
KENNEDY
ARCHITECTS

53 S MAIN STREET, SUITE 204
P.O. BOX 231
HANOVER NH 03755
P: 603 643 8868
www.ma-ke-arch.com

PROGRESS,
NOT FOR
CONSTRUCTION

Issued

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3/7/25

SITE PLAN REVIEW

MARK	DATE	DESCRIPTION
------	------	-------------

PROJECT

UPPER VALLEY MUSIC
CENTER

PROJECT No.: 24110
SHEET TITLE

COVER SHEET

A0-00

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3/7/25

SITE PLAN REVIEW

MARK	DATE	DESCRIPTION

Project

UPPER VALLEY MUSIC CENTER

8 S. Park St. Lebanon NH 03766 USA

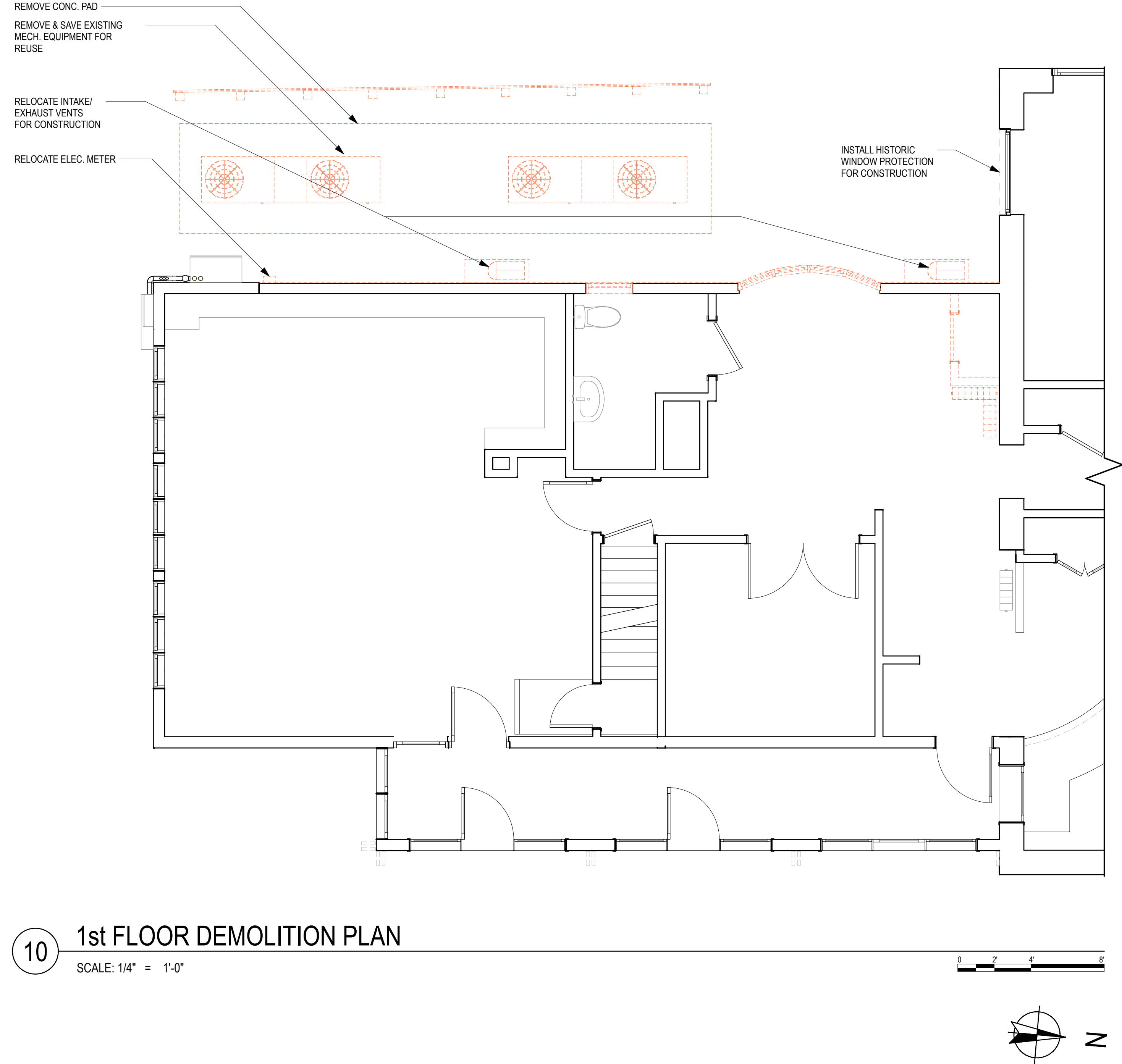
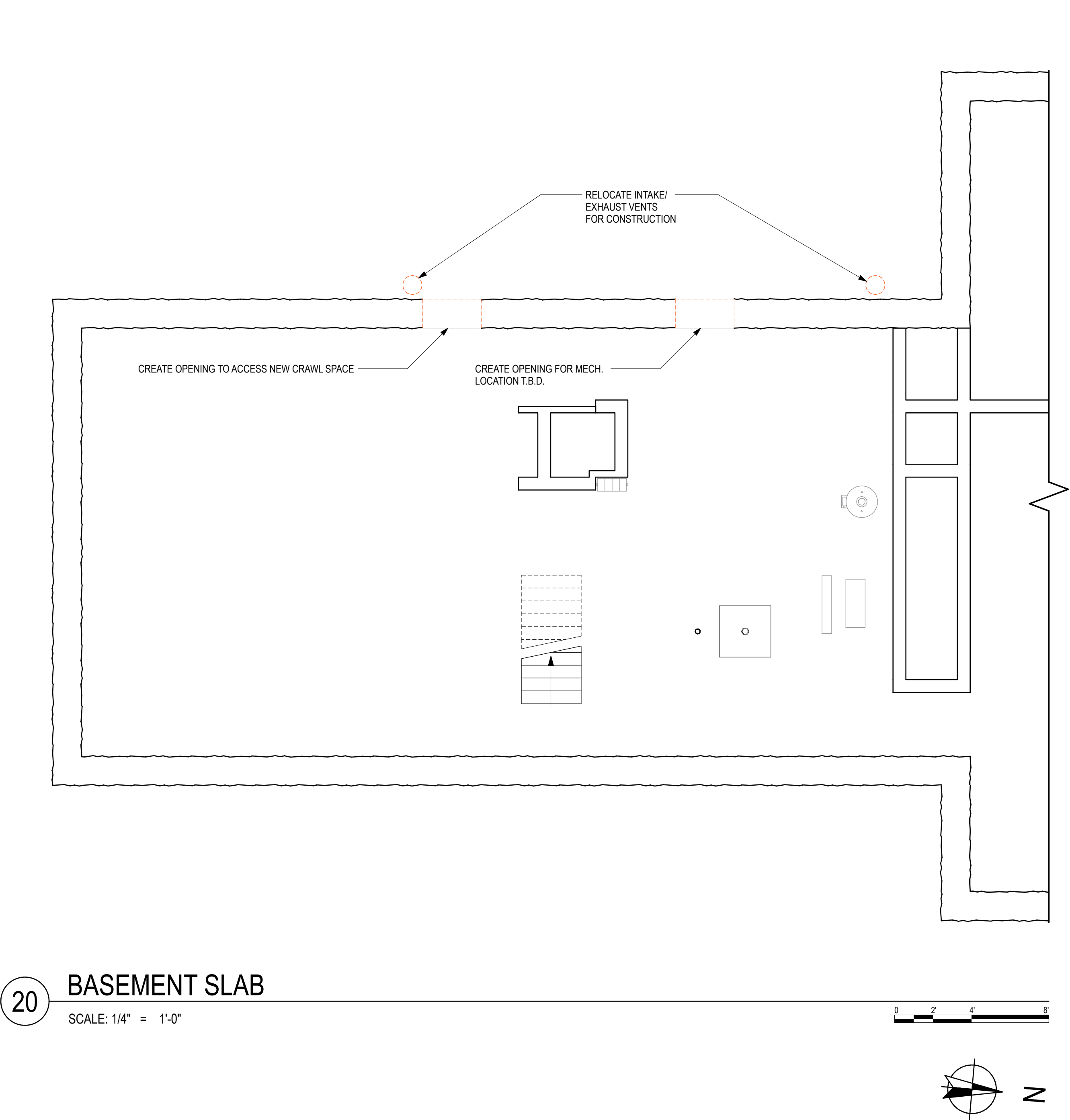
Project No.: 24110

Sheet Title

DEMOLITION PLANS

D-01

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3/7/25

SITE PLAN REVIEW

MARK	DATE	DESCRIPTION

Project

UPPER VALLEY MUSIC
CENTER

8 S. Park St. Lebanon NH 03766 USA

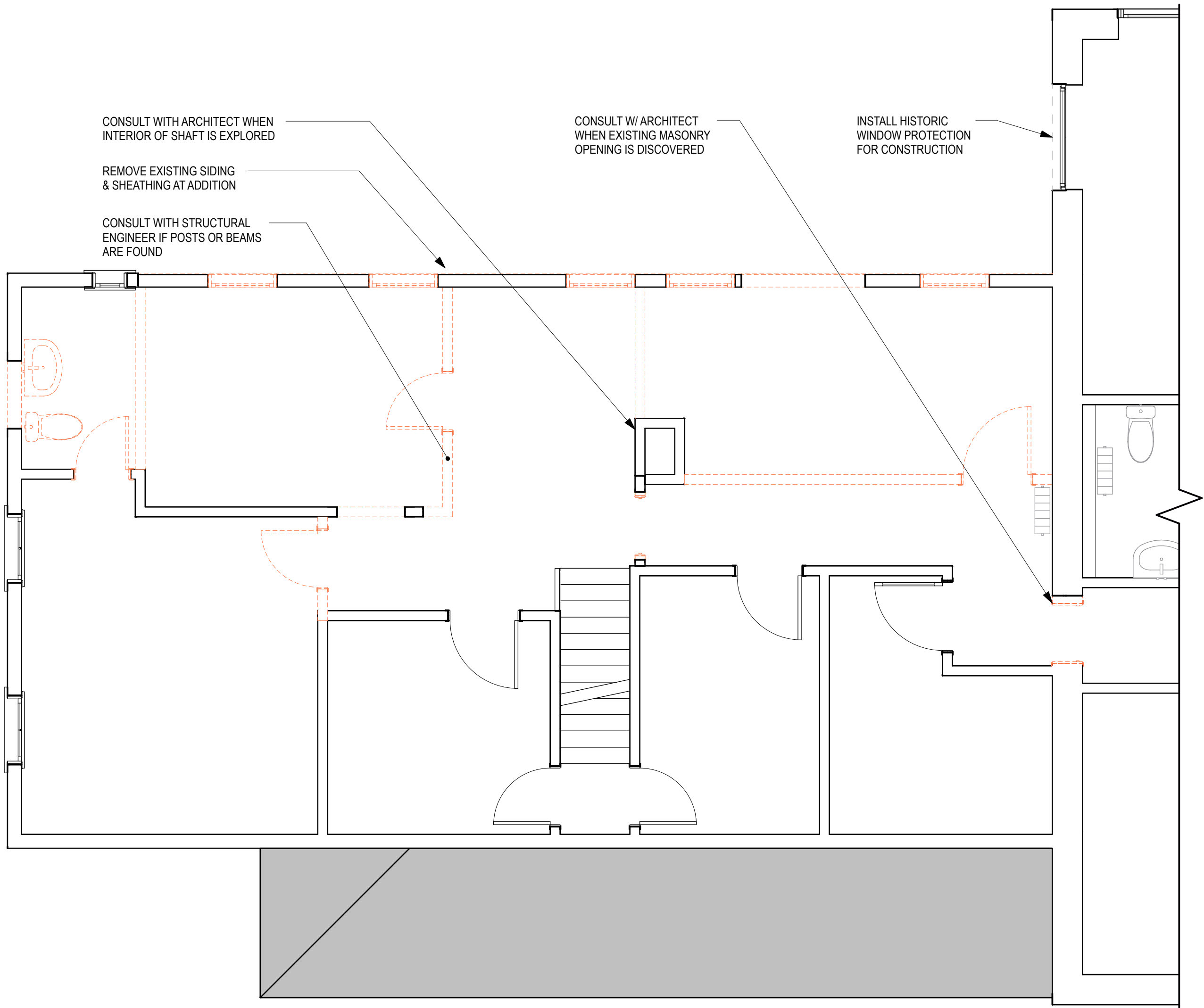
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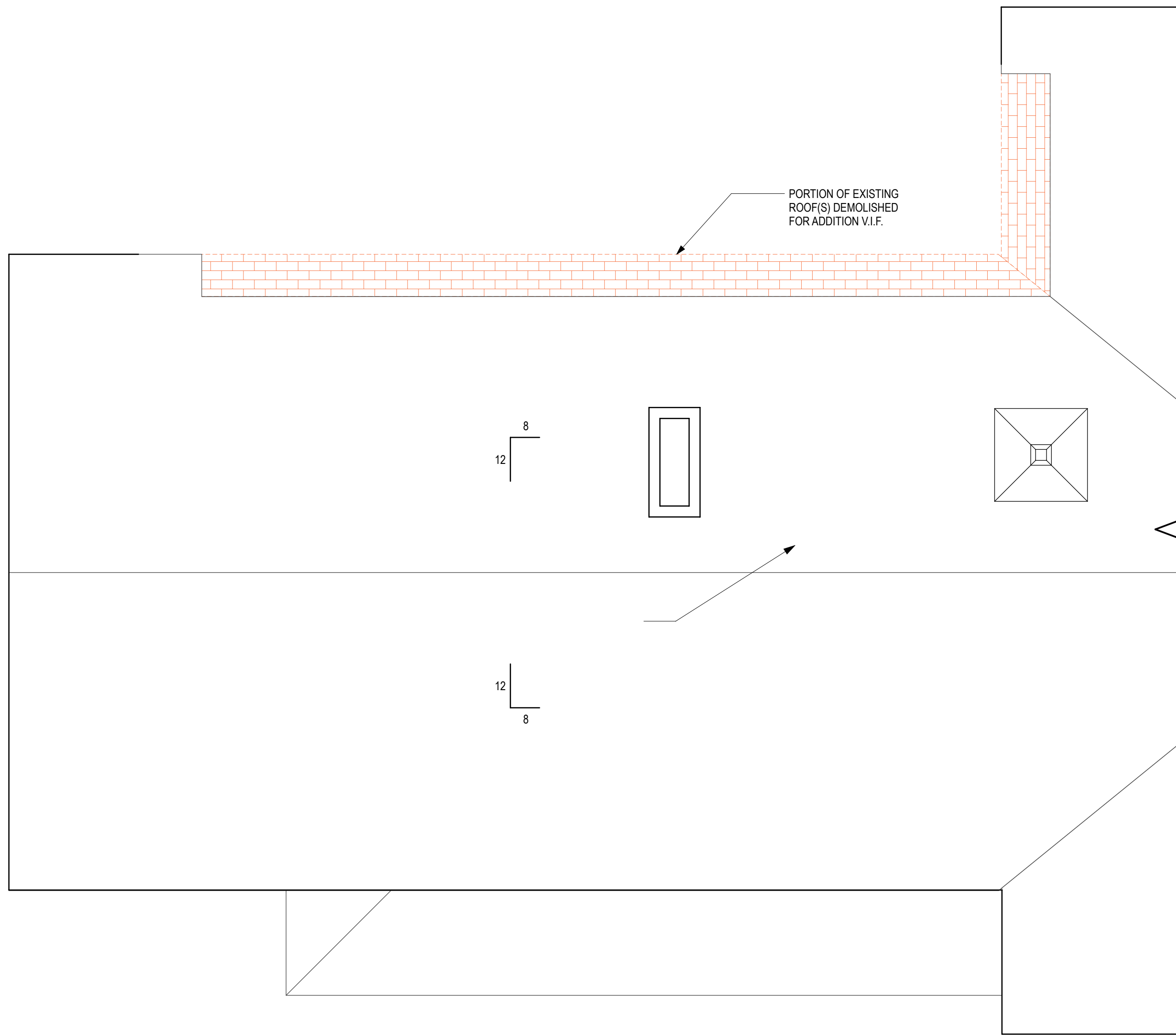
DEMOLITION PLANS

D-02

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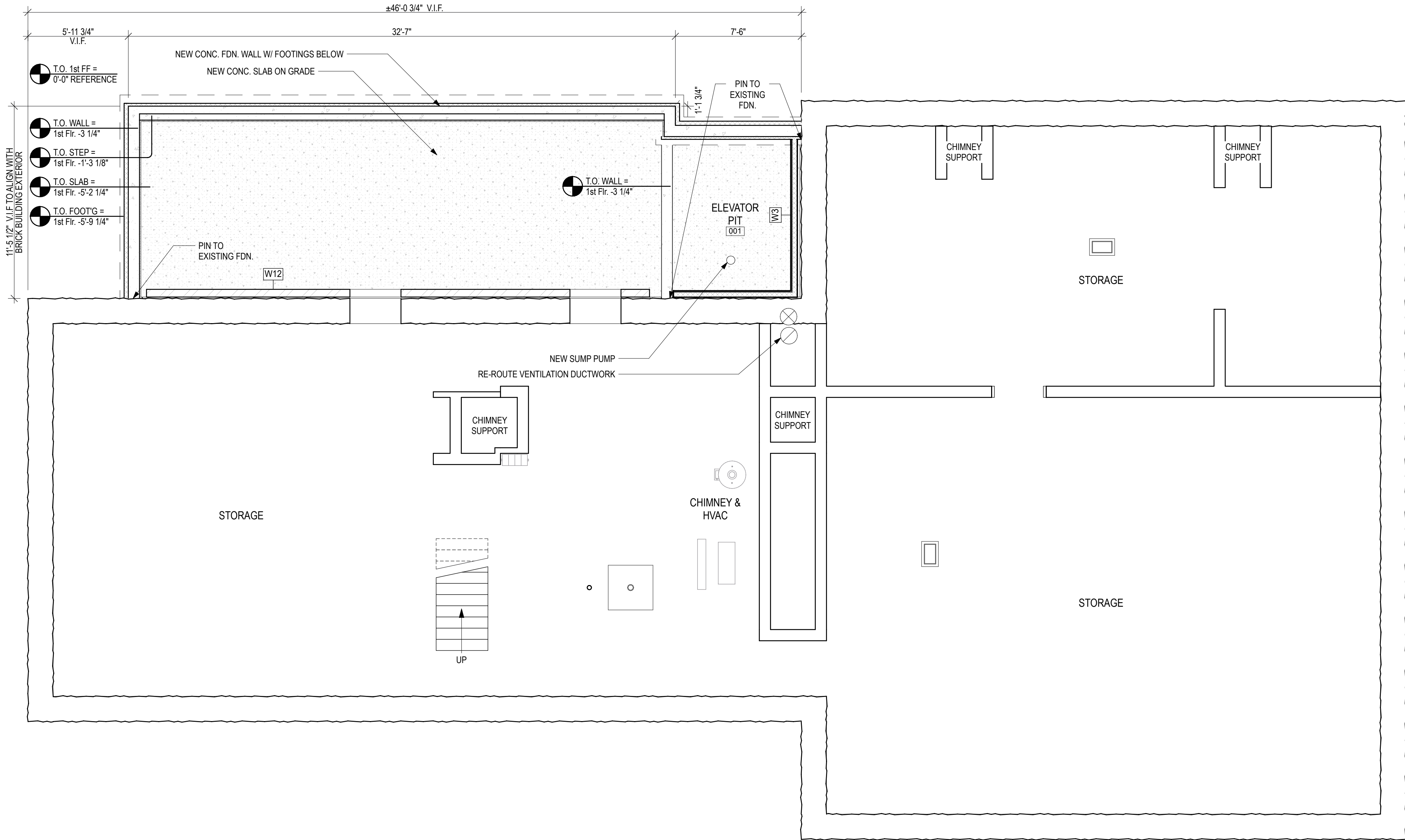
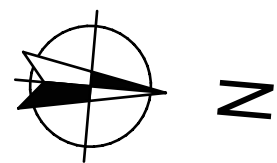
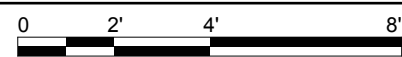
20 2nd FLOOR DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



10 ROOF DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

10 BASEMENT PLAN

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



FLOOR PLAN LEGEND

- 2'-0" FRAMING DIMENSION
- 2'-0" FINISH DIMENSION
- EXISTING WALL
- NEW WALL
- NEW CONC. WALL
- NEW CONCRETE SLAB

MAYOR
KENNEDY
ARCHITECTS

53 S Main Street, Suite 204
P.O. Box 231
Hanover NH 03755
p: 603 643 8868
www.ma-ke-arch.com

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3/7/25

SITE PLAN REVIEW

MARK DATE DESCRIPTION

Project

UPPER VALLEY MUSIC
CENTER

8 S. Park St. Lebanon NH 03766 USA

Project No.: 24110

Sheet Title

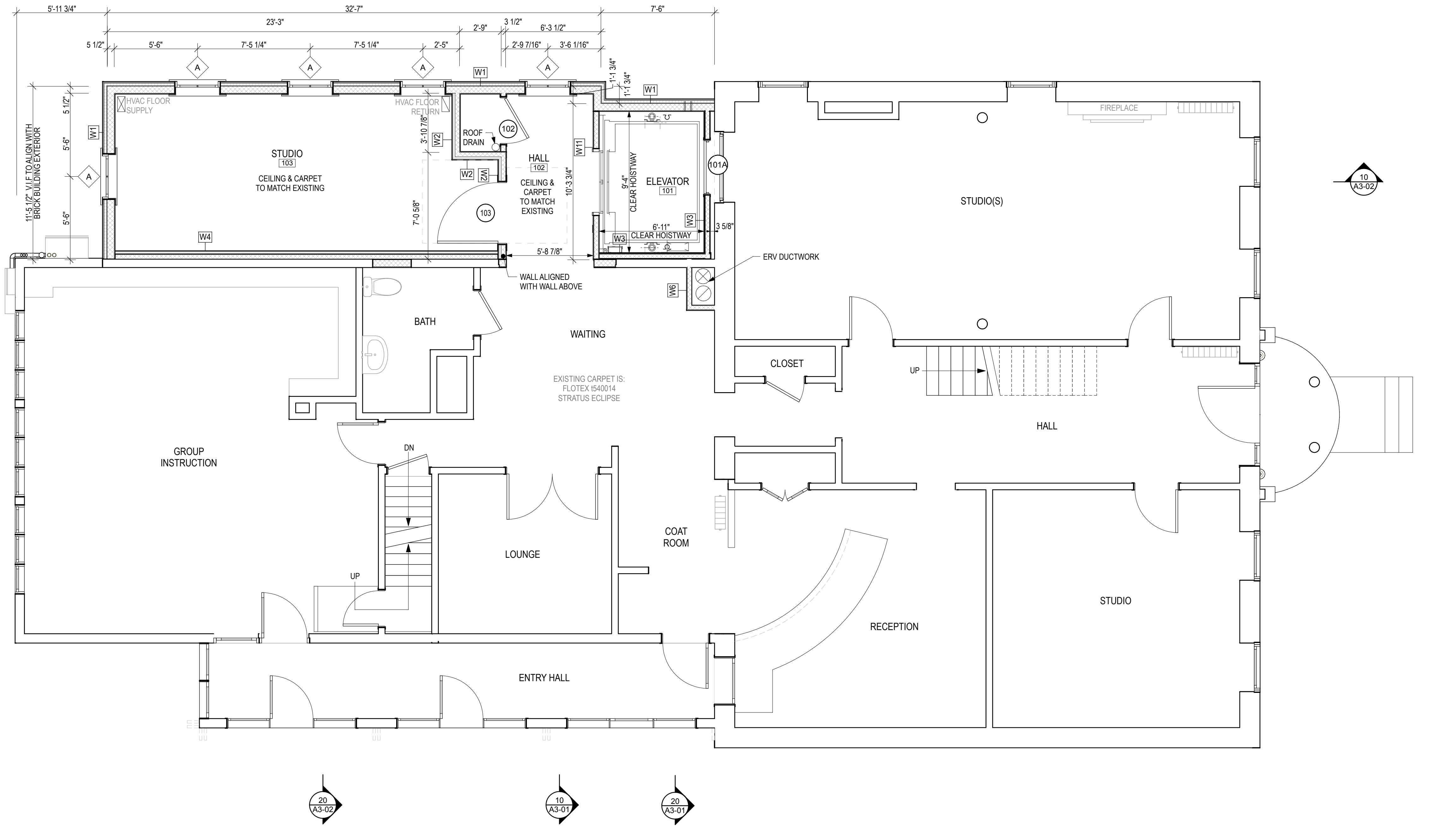
BASEMENT PLAN

A1-01

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10 FIRST FLOOR PLAN

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



FLOOR PLAN LEGEND

- 2'-0" FRAMING DIMENSION
- 2'-0" FINISH DIMENSION
- EXISTING WALL
- NEW WALL
- NEW CONC. WALL
- NEW CONCRETE SLAB

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SITE PLAN REVIEW

MARK DATE DESCRIPTION

Project

UPPER VALLEY MUSIC
CENTER

8 S. Park St. Lebanon NH 03766 USA

Project No.: 24110

Sheet Title

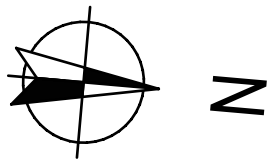
FIRST FLOOR PLAN

A1-02

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10 SECOND FLOOR PLAN

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



FLOOR PLAN LEGEND

- 2'-0" FRAMING DIMENSION
- 2'-0" FINISH DIMENSION
- EXISTING WALL
- NEW WALL
- NEW CONC. WALL
- NEW CONCRETE SLAB

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3/7/25

SITE PLAN REVIEW

MARK	DATE	DESCRIPTION
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Project

UPPER VALLEY MUSIC
CENTER

8 S. Park St. Lebanon NH 03766 USA

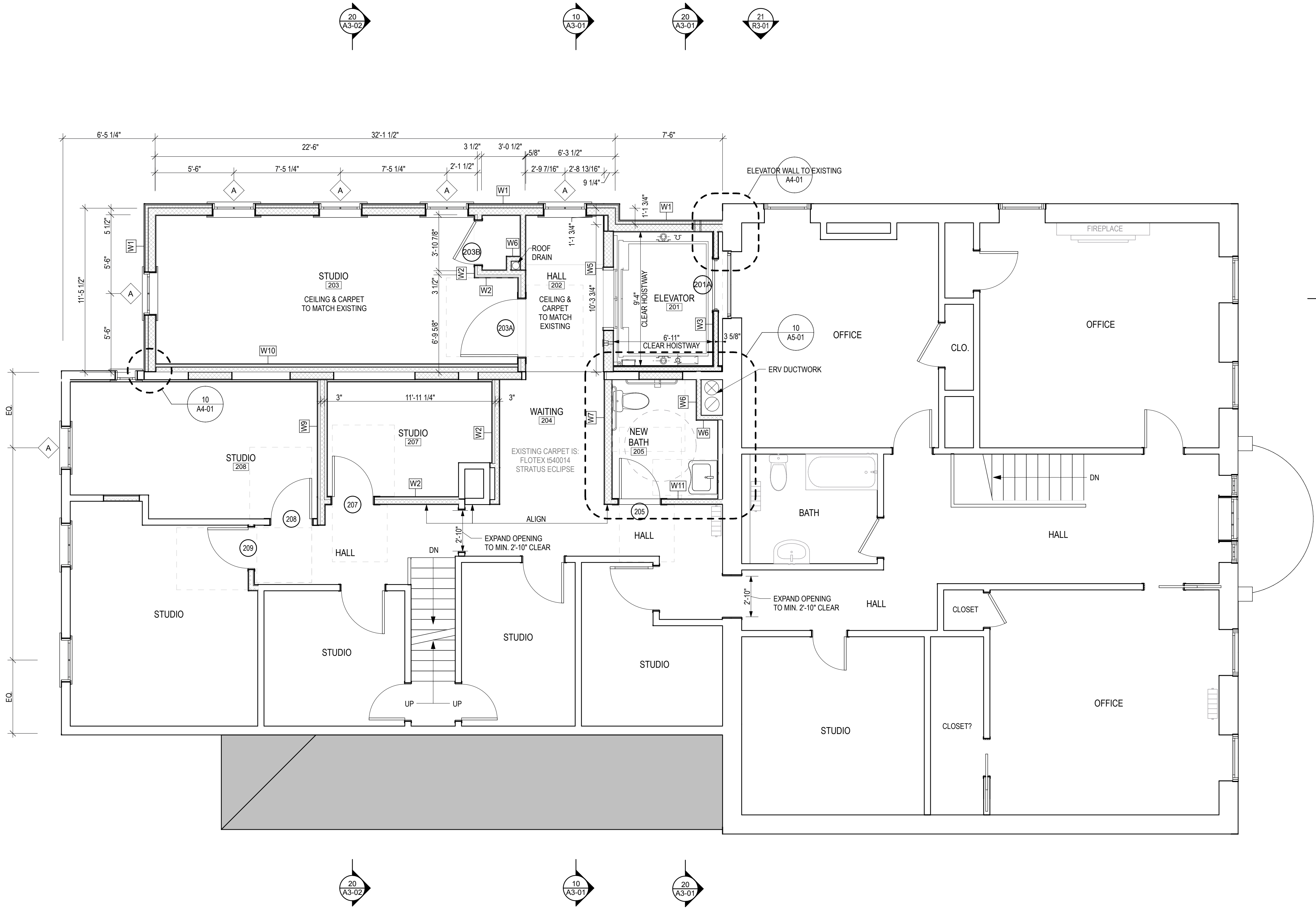
Project No.: 24110

Sheet Title

SECOND FLOOR PLAN

A1-03

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SITE PLAN REVIEW

MARK	DATE	DESCRIPTION

Project

UPPER VALLEY MUSIC
CENTER

8 S. Park St. Lebanon NH 03766 USA

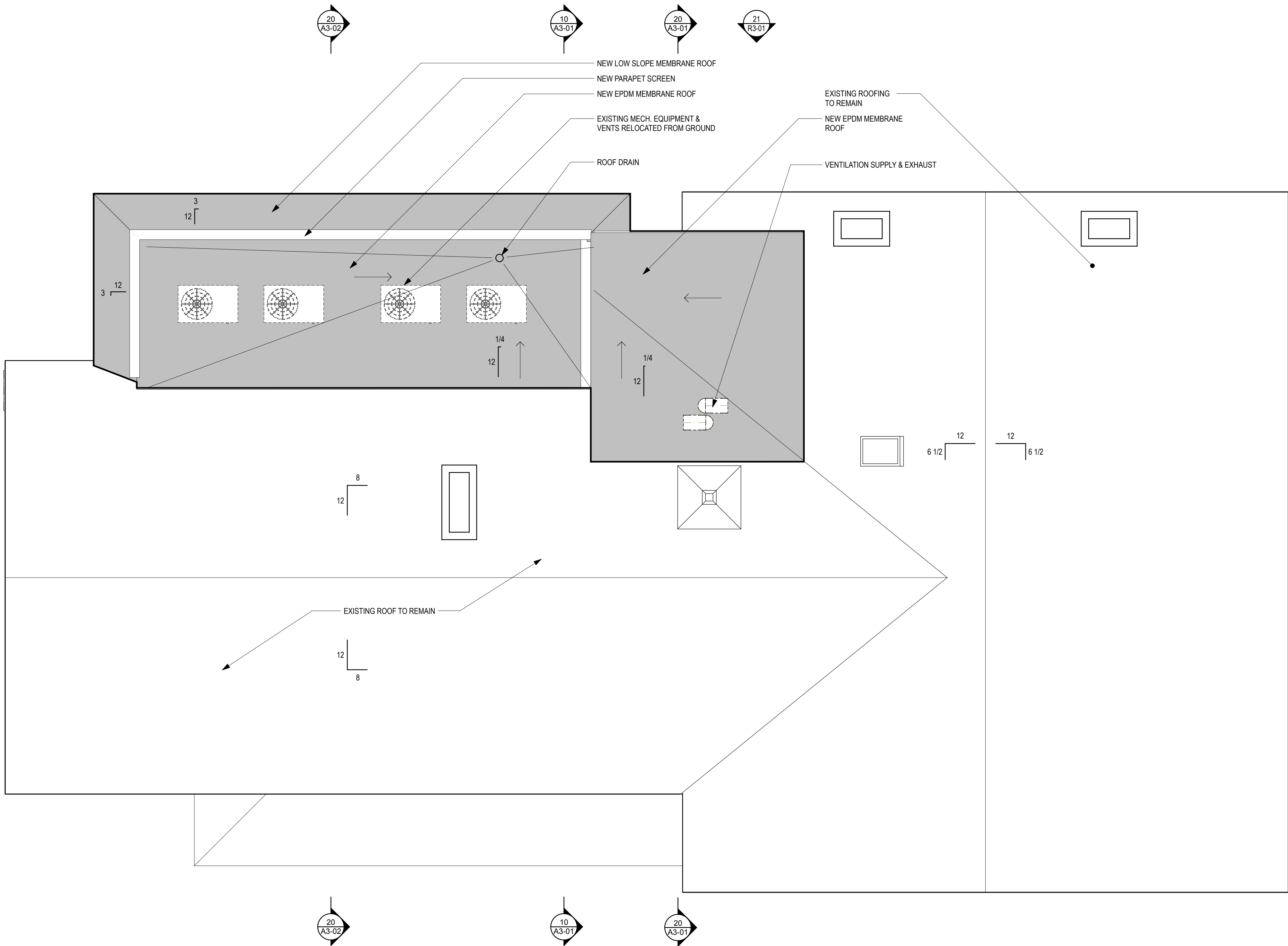
Project No.:	24110
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Sheet Title

ROOF PLAN

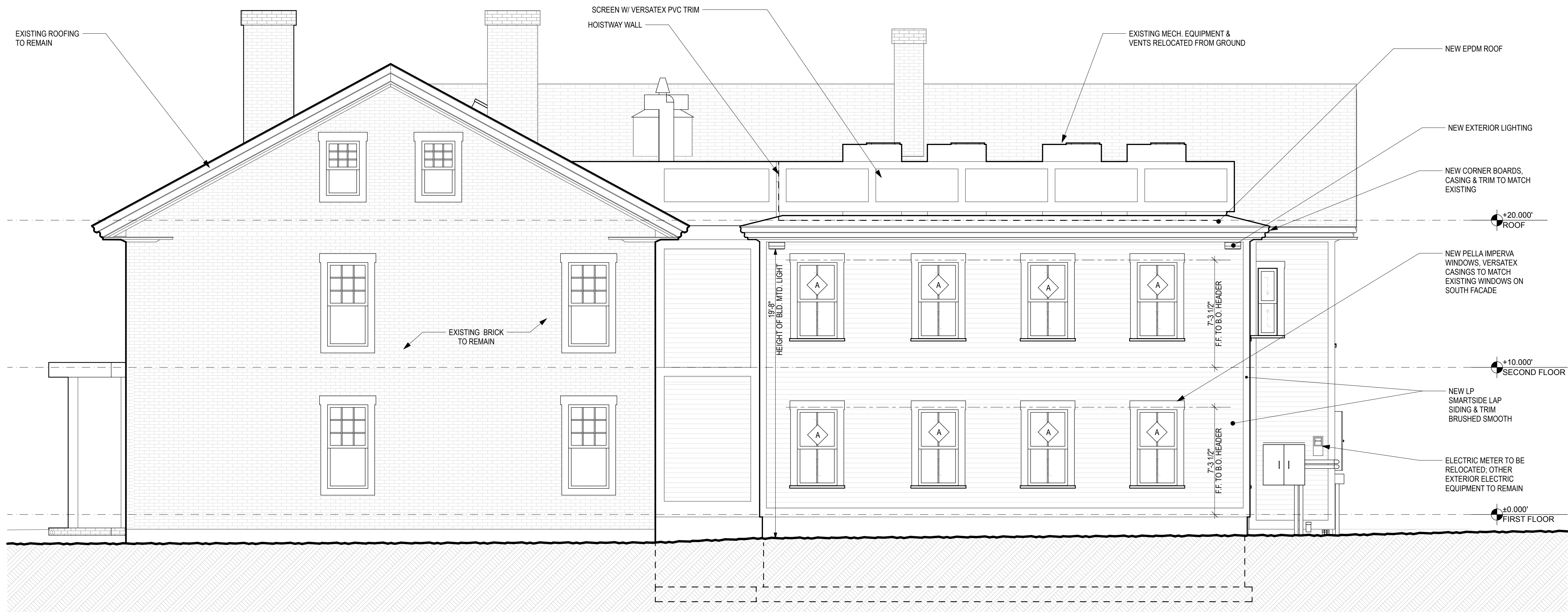
A1-04

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10 ROOF PLAN

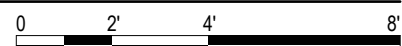
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11

WEST ELEVATION

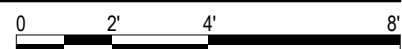
SCALE: 1/4" = 1'-0"



10

SOUTH ELEVATION

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



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CONSTRUCTION

Issued

3/7/25

SITE PLAN REVIEW

MARK DATE DESCRIPTION

Project

UPPER VALLEY MUSIC
CENTER

8 S. Park St. Lebanon NH 03766 USA

Project No.: 24110

Sheet Title

EXTERIOR ELEVATIONS

A2-01

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SITE PLAN REVIEW APPLICATION PLANS
FOR
THE UPPER VALLEY MUSIC CENTER
BUILDING ADDITION AND SITE
IMPROVEMENTS PROJECT
8 SOUTH STREET
LEBANON, NEW HAMPSHIRE
PROJECT NO. 13444

INDEX OF SHEETS		
SHEET	1	COVER, INDEX OF SHEETS & LOCATION MAP
SHEET	2	EXISTING CONDITIONS PLAN
SHEET	3	PROPOSED SITE PLAN
SHEET	4	SITE & DRAINAGE DETAILS
SHEET	5	EROSION AND SEDIMENT CONTROL DETAILS

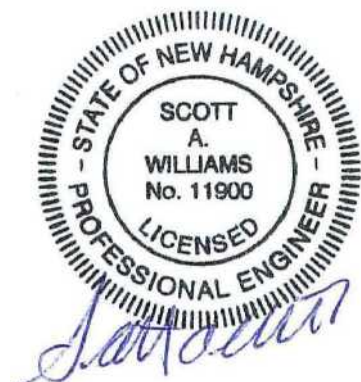
FOR PERMITTING ONLY
NOT FOR CONSTRUCTION

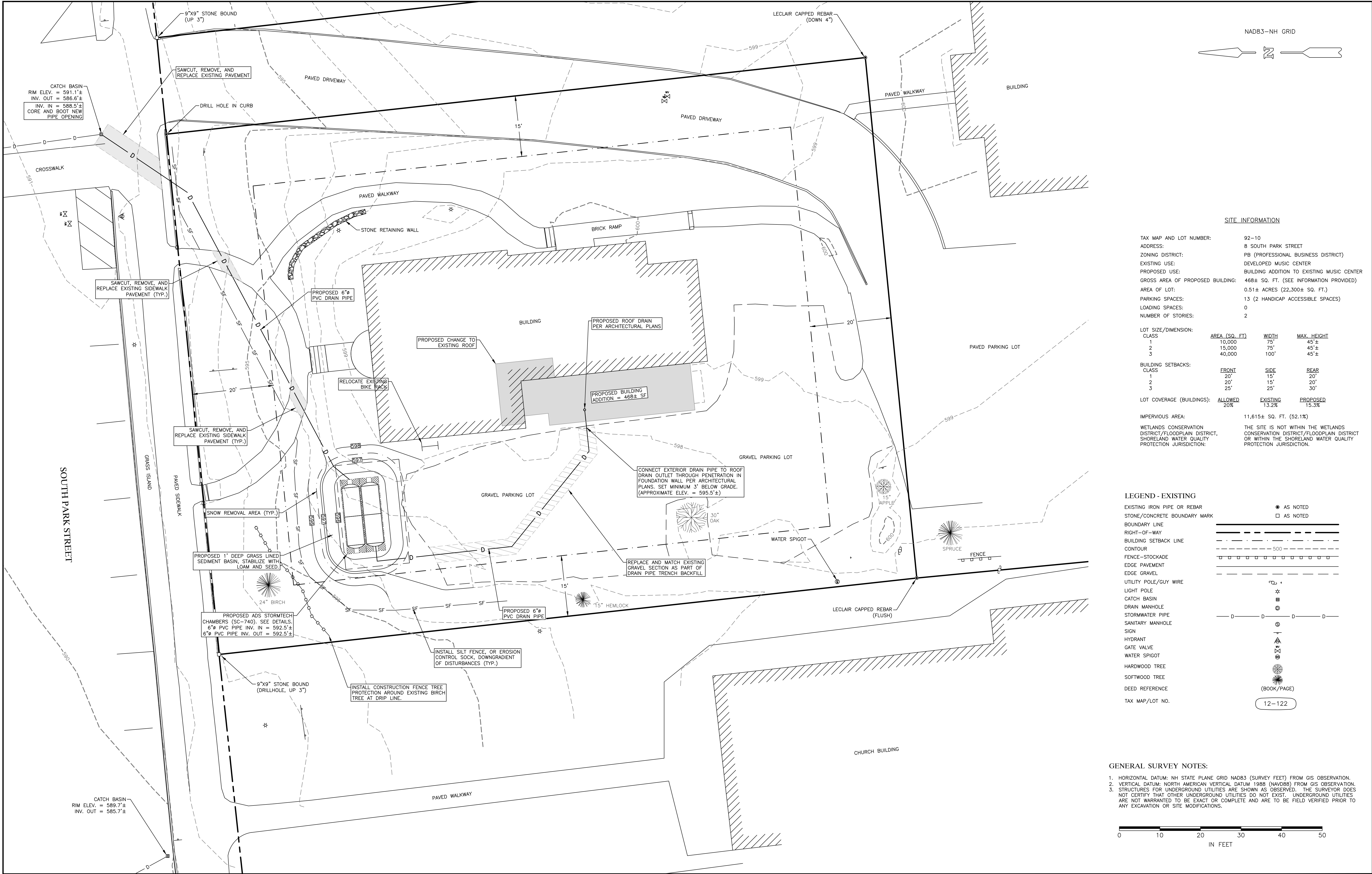


CIVIL ENGINEER
PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

RECORD OWNER & APPLICANT:
UPPER VALLEY MUSIC CENTER, INC.
P.O. BOX 826
LEBANON, NEW HAMPSHIRE 03766

ARCHITECT:
MAYOR KENNEDY ARCHITECTS
53 SOUTH MAIN STREET, SUITE 204
P.O. BOX 231
HANOVER, NEW HAMPSHIRE 03755





REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY

PROPOSED SITE PLAN FOR
UPPER VALLEY MUSIC CENTER
BUILDING ADDITION AND SITE IMPROVEMENTS
SOUTH PARK STREET, LEBANON, NEW HAMPSHIRE

PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

SCALE: AS SHOWN
DESIGNED BY: SAW
DRAWN BY: DAS
CHECKED BY: SAW
DATE: 03-24-25
PROJ. NO. 13444

3
SHEET 3 OF 5

SC-740 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-740.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

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

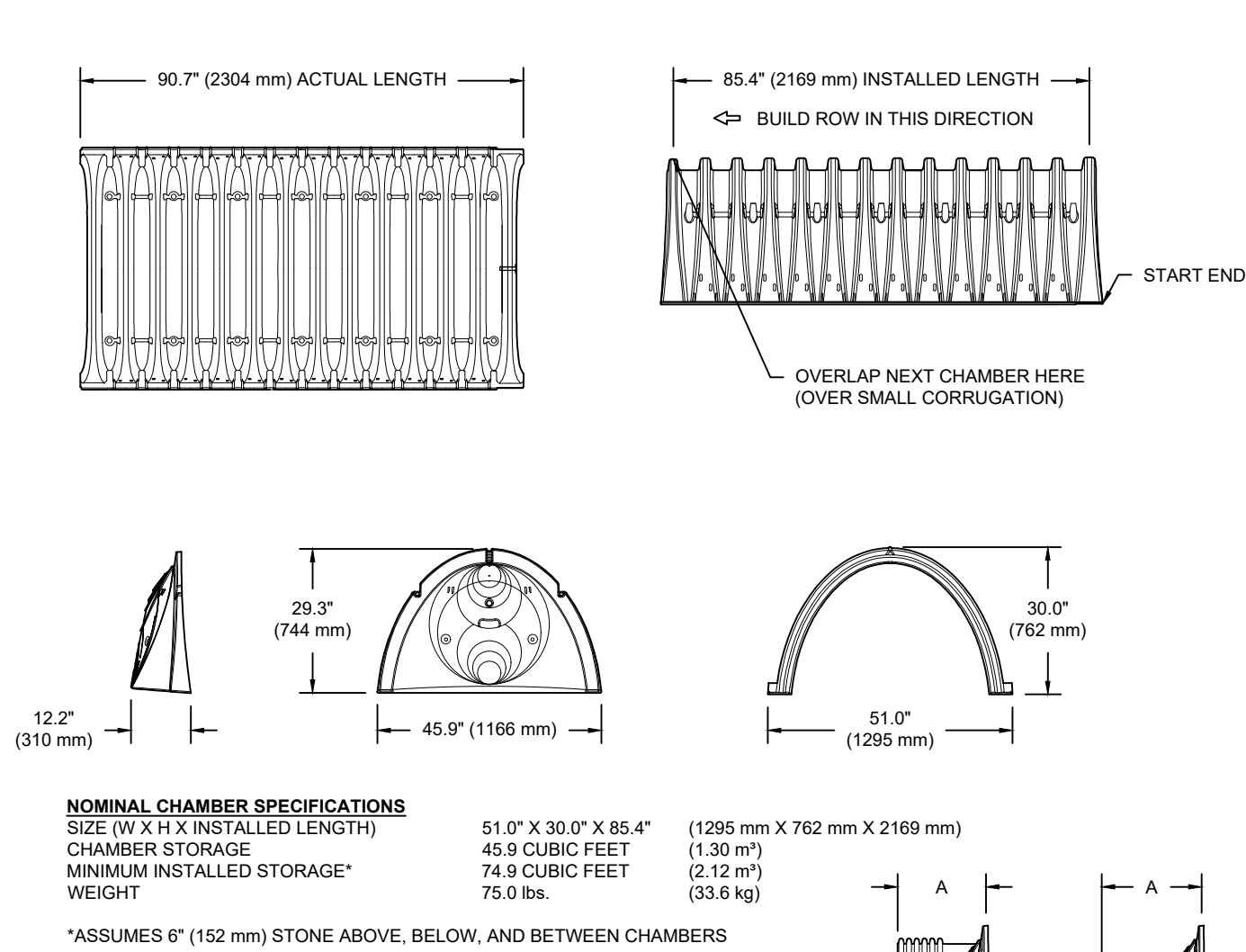
- STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE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

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER-TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
- USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-992-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

SC-740 TECHNICAL SPECIFICATION



PART #	STUB	A	B	C
SC740EPE08T / SC740EPE08TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE08B / SC740EPE08BPC	---	---	---	0.5" (13 mm)
SC740EPE08T / SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC	---	---	---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC	---	---	---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC	---	---	---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC	---	---	---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC	---	---	---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)
SC740EPE24BR*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B/SC740EPE24BR ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-992-2694.

* FOR THE SC740EPE24B/SC740EPE24BR THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

SPECIFICATIONS FOR STORMWATER BIORETENTION AREAS

- COMPACTION:
 - IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF THE BIORETENTION AREA AND THE REQUIRED BACKFILL. IF POSSIBLE, USE EXCAVATION HOES TO REMOVE ORIGINAL SOIL. IF BIORETENTION AREA IS EXCAVATED USING A LOADER, THE CONTRACTOR SHOULD USE WIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TURF TYPE TIRES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS, OR HIGH PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND STORAGE VOLUMES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE.
 - COMPACTION CAN BE ALLEVIATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS A CHISEL PLOW, RIPPER, OR SUBSOILER. THESE TILLING OPERATIONS ARE TO REFRACATURE THE SOIL PROFILE THROUGH THE 12-INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST BE APPROVED BY THE ENGINEER. ROTOTILLERS TYPICALLY DO NOT TILL DEEP ENOUGH TO REDUCE THE EFFECTS OF COMPACTION FROM HEAVY EQUIPMENT.
 - ROTOTILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE BACK FILLING THE REQUIRED SAND LAYER. PUMP ANY PONDED WATER BEFORE PREPARING (ROTOTILLING) BASE.
 - WHEN BACK FILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL TO CREATE A GRADATION ZONE. BACKFILL THE REMAINDER OF THE TOPSOIL TO FINAL GRADE.
 - WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" OR GREATER. DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS.
- PLANT INSTALLATION
 - MULCH AROUND INDIVIDUAL PLANTS ONLY. SHREDDED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS WILL FLOAT AND MOVE TO THE PERIMETER OF THE BIORETENTION AREA DURING A STORM EVENT AND ARE NOT ACCEPTABLE. SHREDDED MULCH MUST BE WELL AGED (6 TO 12 MONTHS) FOR ACCEPTANCE. (SOURCE: KAMPS WOOD PRODUCTS, CONCORD, NH OR APPROVED EQUAL)
 - THE PLANT ROOT BALL SHOULD BE PLANTED SO 1/8TH OF THE BALL IS ABOVE FINAL GRADE SURFACE. ROOT STOCK OF THE PLANT MATERIAL SHOULD BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE. THE DIAMETER OF THE PLANTING PIT SHOULD BE AT LEAST SIX INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL. SET AND MAINTAIN THE PLANT STRAIGHT DURING THE ENTIRE PLANTING PROCESS. THOROUGHLY WATER GROUND BED COVER AFTER INSTALLATION.
 - TREES SHOULD BE BRACED USING 2" X 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL.
 - GRASSES AND LEGUME SEED SHOULD BE TILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLUGS SHOULD BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS.
 - THE TOPSOIL SPECIFICATIONS PROVIDE ENOUGH ORGANIC MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIORETENTION STRUCTURE IS TO IMPROVE WATER QUALITY. ADDING FERTILIZERS DEFATS, OR AT A MINIMUM, IMPEDES THIS CYCLE. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH IS USED TO AMEND THE SOIL. ROTOTILL UREA FERTILIZER AT A RATE OF 2 POUNDS PER 1,000 SQUARE FEET.
- MISCELLANEOUS
 - THE BIORETENTION FACILITY MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
 - A DENSE AND VIGOROUS VEGETATIVE COVER SHALL BE ESTABLISHED OVER THE CONTRIBUTING PERVIOUS DRAINAGE AREAS BEFORE RUNOFF CAN BE ACCEPTED INTO THE FACILITY.

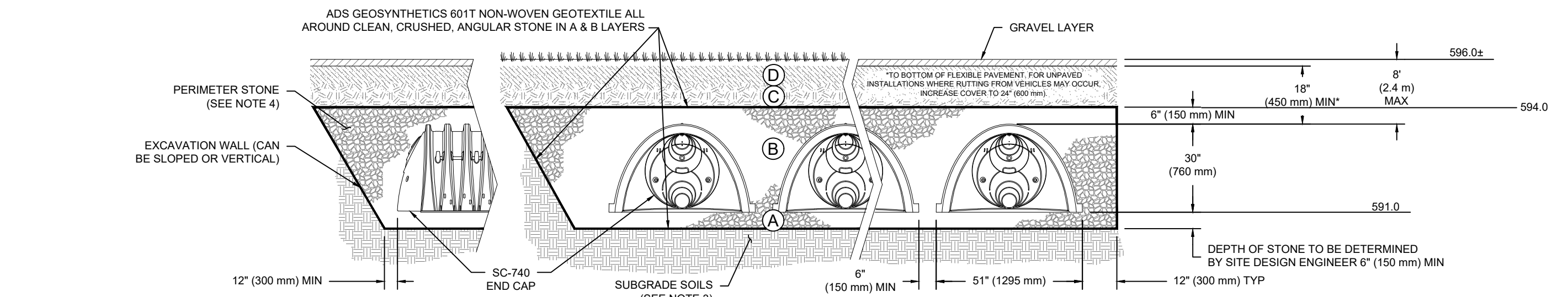
BIORETENTION MAINTENANCE AND PERIODIC INSPECTION

- SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EVENT EXCEEDING 2.5 INCHES IN A 24 HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS WARRANTED BY SUCH INSPECTION.
- PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.
- TRASH AND DEBRIS SHOULD BE REMOVED AT EACH INSPECTION.
- AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.
- VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING PRUNING, REMOVAL AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR A) LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

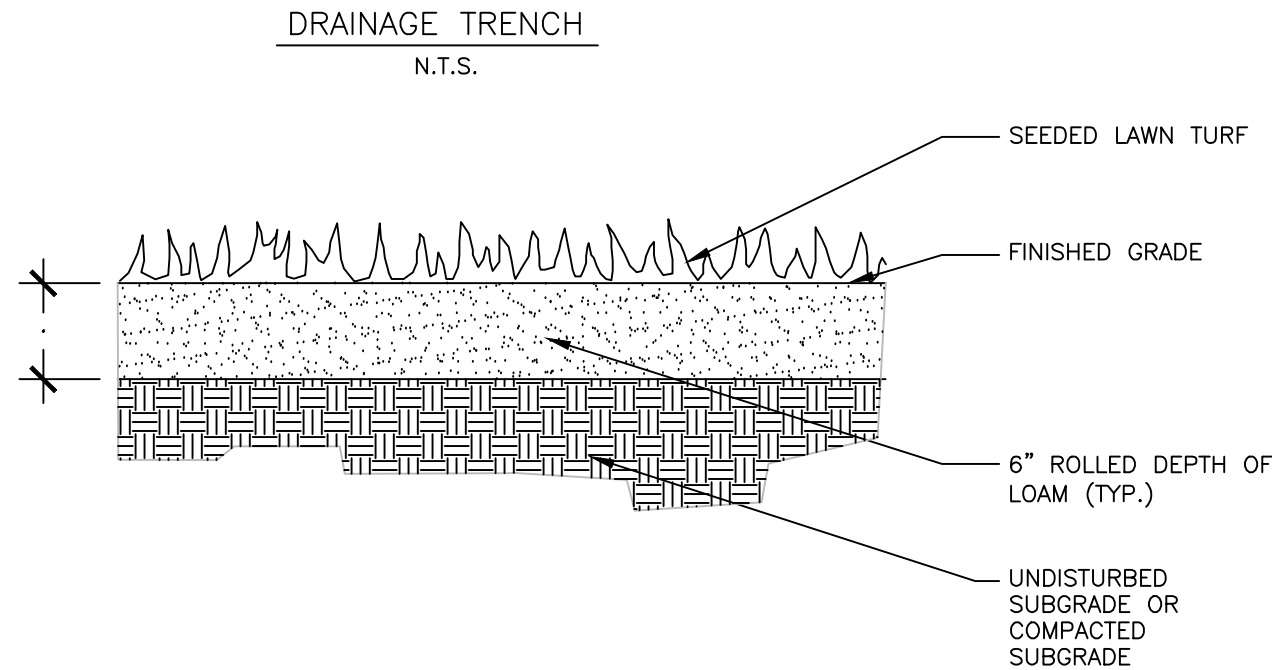
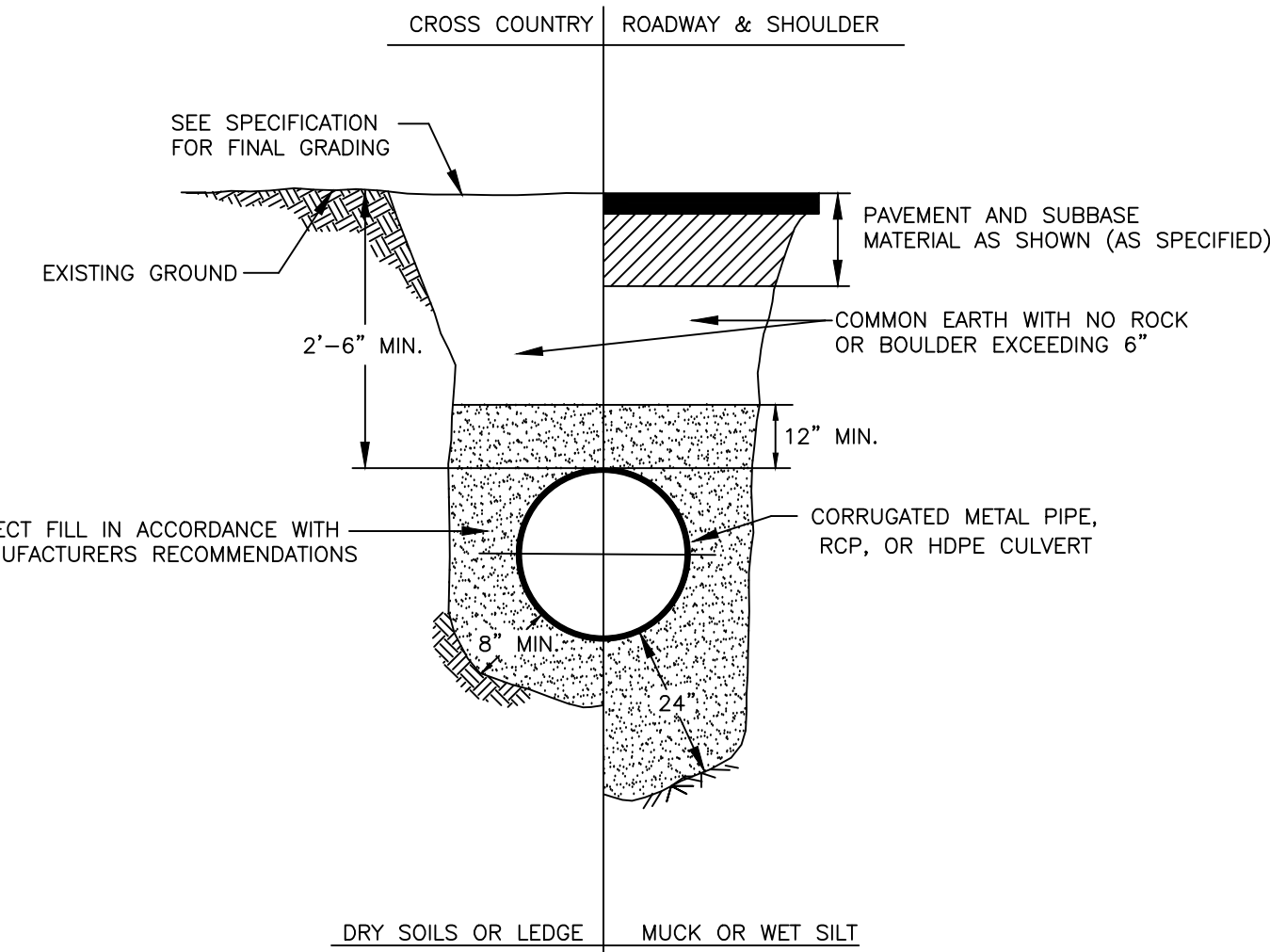
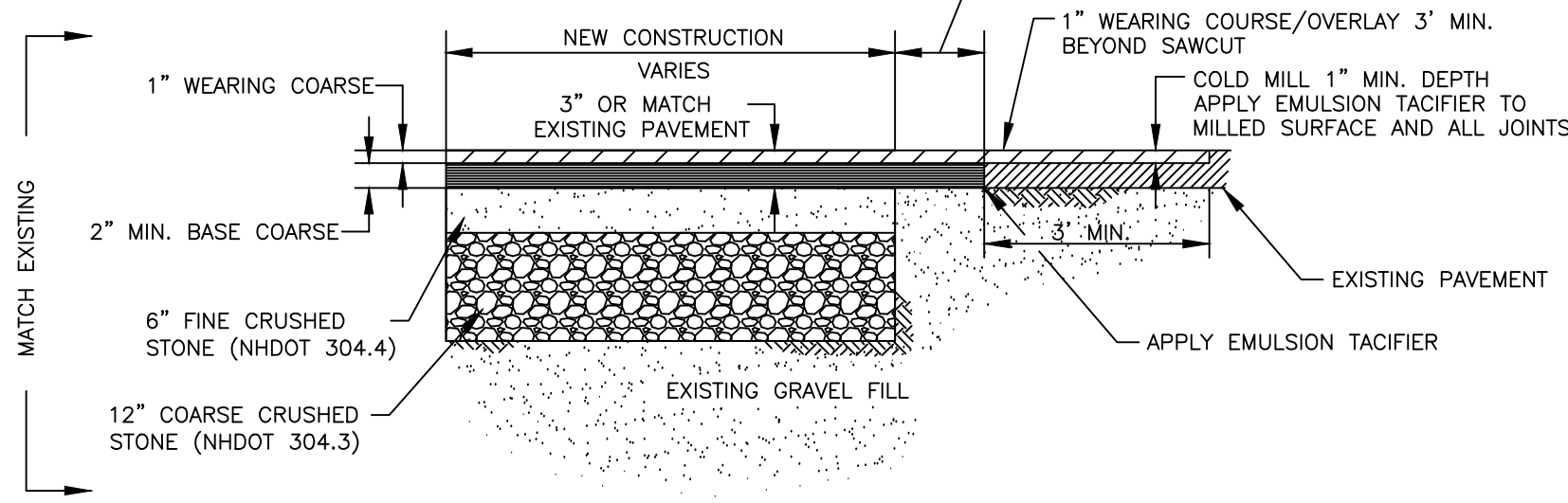
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

INSPECTION & MAINTENANCE

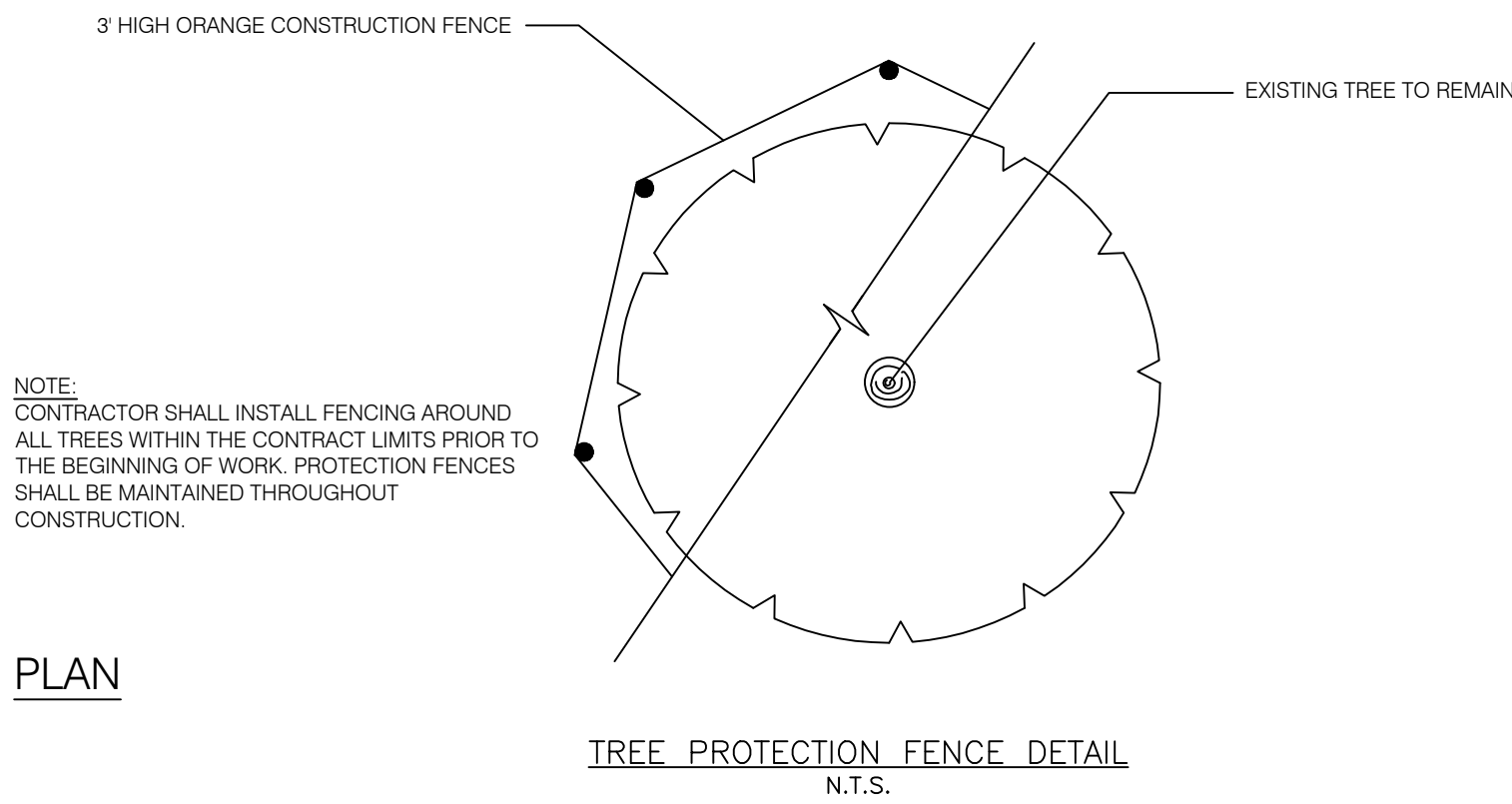
- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
 - REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
 - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - LOWER A CAMERA INTO ISOLATOR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

NOTES

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



SECTION



SITE AND DRAINAGE DETAILS FOR
UPPER VALLEY MUSIC CENTER
BUILDING ADDITION AND SITE IMPROVEMENTS
SOUTH PARK STREET, LEBANON, NEW HAMPSHIRE

PATHWAYS CONSULTING, LLC

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4
SHEET 4 OF 5

EROSION CONTROL SPECIFICATIONS

1. SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH "STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS OF NEW HAMPSHIRE", AUGUST 1992. THE CONTRACTOR SHALL HAVE REFERENCE TO THIS PUBLICATION.
2. IMMEDIATE ATTENTION TO EROSION CONTROL PRACTICES DRAMATICALLY IMPROVES SOIL AND MOISTURE CONSERVATION AND REDUCES NEGATIVE IMPACTS ON WATER QUALITY. THE CONTRACTOR SHALL GIVE PRIORITY TO THE TIMELY INSTALLATION OF BOTH TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES.
3. THE EROSION AND SEDIMENT CONTROL PRACTICES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIRED FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE PRACTICES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS.
4. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THE PLANS SHALL BE CLEARLY FLAGGED BY SURVEY TAPE OR FENCING, IF REQUIRED, PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION.
5. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT SHALL NOT EXCEED 5 ACRES AT ANY ONE TIME BEFORE STABILIZATION. A CONSTRUCTION SEQUENCE HAS BEEN DEVELOPED TO FACILITATE INSTALLATION OF EROSION CONTROL MEASURES AND THE COMPLETION OF GRADING, SEEDING, AND LANDSCAPING AS SOON AS POSSIBLE WITHIN A DISTURBED AREA.
6. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS CONSTRUCTED WHEEL WASH SYSTEMS OR WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN AND TRACK OUT TO ROAD RIGHT OF WAY DOES NOT OCCUR FOR THE DURATION OF THE PROJECT.
7. EARTH STOCKPILES SHALL BE SEEDED AND MULCHED AND HAVE A SILT FENCE INSTALLED ON THE DOWNSLOPE SIDE.
8. INSTALL EROSION CONTROL MEASURES AS SHOWN. CLEAN ACCUMULATED SEDIMENT AS NECESSARY. LEAVE IN PLACE UNTIL DISTURBED AREAS HAVE BEEN ADEQUATELY STABILIZED. DISTURBED AREAS RESULTING FROM SILT FENCE REMOVAL SHALL BE PERMANENTLY SEEDED, CUT AND FILL SLOPES CALL FOR INTENSIVE EROSION CONTROL MEASURES. INSTALL MULCH NETTING AS SHOWN ON ALL SLOPES 3:1 (1 RISE ON 3 RUN) AND STEEPER. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF THEIR CONSTRUCTION.
10. ALL DISTURBED AREAS SHALL HAVE TOPSOIL SPREAD (4" MINIMUM) AND BE LIMED, FERTILIZED, TILLED, SEEDED AND MULCHED (WITH ANCHORED NETTING IF REQUIRED) WITHIN 72 HOURS OF WHEN PERMANENT SEEDING CANNOT BE INSTALLED BY SEPTEMBER 15. TEMPORARY SEEDING AND MULCHING OF ALL DISTURBED AREAS SHALL BE INSTALLED IMMEDIATELY AND MAINTAINED IN THAT CONDITION UNTIL PERMANENT MEASURES CAN BE INSTALLED IN THE FOLLOWING PLANTING SEASON.
11. PERMANENT STABILIZATION OF DISTURBED AREAS:

SEED BED PREPARATION: TOPSOIL (SANDY LOAM, LOAM, OR SILT LOAM), FRIABLE, FREE OF STUMPS, WOOD, AND ROOTS. STONES MORE THAN 1-½ INCHES IN DIAMETER OR LENGTH SHALL BE PLACED OVER ALL DISTURBED AREAS IN A 4" (MINIMUM) THICK LAYER. TOPSOIL SHALL BE FREE OF HERBICIDES AND TOXIC MATERIALS. TILL THREE INCHES DEEP, MIXING IN THE FERTILIZER AND LIME.

FERTILIZE: UNIFORMLY APPLY NOT LESS THAN 500#/ACRE (12#/1,000 SQ. FT.) OF 10-20-20 OR EQUIVALENT.

SEEDING: SPREAD SEED UNIFORMLY. FIRM SOIL BY ROLLING OR PACKING; IF NOT FEASIBLE, THEN RAKE LIGHTLY TO COVER SEEDS.

MULCHING: MULCH ALL DISTURBED AREAS WITH 1-½ TO 2 TONS OF HAY OR STRAW PER ACRE (70-90#/1,000 SQ. FT.). ANCHOR ON ALL SLOPES 3:1 OR STEEPER AND ON SLOPES SUBJECT TO WASH OR WIND BLOWN CONDITIONS. JUTE OR OTHER BIODEGRADABLE NETTING, STAKING AND STABLING MAY BE REQUIRED.

GRASS MATERIALS (GENERAL SUN/SHADE LAWN MIXES)

GRASS SEED SHALL BE FRESH, CLEAN, NEW-CROP SEED AND SHALL MEET THE PROVISIONS OF THE NEW HAMPSHIRE AGRICULTURAL AND VEGETABLE SEEDS LAW. SEED SPECIFIED IN THIS SECTION SHALL MEET THE FOLLOWING ANALYSIS AT 130 LBS/ACRE:

SUN: LOFT STANDARD GENERAL PURPOSE MIX OR OWNER APPROVED EQUIVALENT.

PROPORTION	NAME
40 PCT	BARON OR NASSAU KENTUCKY BLUEGRASS
35 PCT	FINE TEXTURED PERENNIAL RYE
25 PCT	BOREAL CREEPING RED FESCUE

SHADE: LOFT STANDARD GENERAL PURPOSE SHADE MIX OR DARTMOUTH COLLEGE EQUIVALENT.

PROPORTION	NAME
10 PCT	KENTUCKY BLUEGRASS BLEND OF:
10 PCT	ECLIPSE
10 PCT	BENSUN (A34)
10 PCT	GLADE
60 PCT	FINE FESCUE VAR. JAMESTOWN OR BANNER
10 PCT	PERENNIAL RYE VAR. PALMER OR PRELUDE

OTHER SEED MIXTURES AND SEEDING RATES AS RECOMMENDED BY THE USDA - SOIL CONSERVATION SERVICE AND APPROVED BY OWNER MAY BE UTILIZED ONLY UPON PRIOR WRITTEN PERMISSION FROM THE ENGINEER.

12. SEEDING MIXTURES FOR GRASSED TREATMENT SWALES AS SPECIFIED BY THE USDA SOIL CONSERVATION SERVICE, WOODSVILLE, N.H. ARE:

TABLE 0 SEEDING RATES		
MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 SQ.FT.
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
RED TOP	2	0.05
TOTAL	42	0.95

SITE PREPARATION, LIME, FERTILIZER, SEED AND MULCH SHALL BE AS IN ITEM 11 ABOVE.

13. MAINTENANCE: DURING THE CONSTRUCTION PERIOD UNTIL SUCH TIME AS LONG TERM VEGETATION IS ESTABLISHED.
- A. DISTURBED AREAS WILL BE FERTILIZED AND RESEEDED.
- B. CATCH BASINS WILL BE CHECKED AND CLEANED AS NECESSARY.
- C. DRAINAGE AND GRASS TREATMENT SWALES SHALL BE CHECKED FREQUENTLY AND CLEANED AS REQUIRED.
- D. THE SILT FENCES AND HAYBALE DIKES WILL BE CHECKED ON A REGULAR BASIS AND REPAIRED AS NECESSARY TO CORRECT ANY DAMAGE, DETERIORATION, AND SHORT CIRCUITING.
- E. THE BOTTOM OF SEDIMENT BASINS SHALL BE PERIODICALLY CLEANED, WITH THE SEDIMENT REMOVED TO A SECURE LOCATION.
14. SITE VISITS: THE ENGINEER SHALL BE CONTACTED ON A REGULAR BASIS TO OBSERVE THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL PRACTICES. REFER TO CONSTRUCTION SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. EROSION CONTROL PRACTICES SHALL BE IN STRICT ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
15. ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION AND SEDIMENTATION BASINS TO BE STABILIZED USING THE VEGETATIVE AND NON-STRUCTURAL BMPs SHALL BE STABILIZED PRIOR TO DIRECTION RUNOFF TO THEM.
16. TEMPORARY STORMWATER POND, INFILTRATION BASINS AND SWALES MUST BE INSTALLED BEFORE ROUGH GRADING THE SITE.
17. RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMPs ARE STABILIZED.
18. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROLS WEEKLY AND AFTER EVERY 0.5" RAINFALL. ALL DAMAGED SILT FENCES SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL BE REMOVED AS NECESSARY.
19. STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY CEASED.
20. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
- A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
- B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
- C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
- D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

21. FUGITIVE DUST: FUGITIVE DUST SHALL BE CONTROLLED IN ACCORDANCE WITH ENV-A 1002.

SOURCES OF FUGITIVE DUST MAY INCLUDE (1) CONSTRUCTION OR RENOVATION OF BUILDINGS, BRIDGES OR OTHER STRUCTURES, INCLUDING PAVING, SWEEPING, TRENCHING, EXCAVATING, FILLING, OR OTHER ACTIVITY ASSOCIATED WITH THE BUILDING OF STREETS, ROADS, HIGHWAYS, PARKING LOTS, PUBLIC WALKWAYS, SHOPPING CENTERS, HOUSING DEVELOPMENTS, OR OTHER CENTERS OF BUSINESS OR RESIDENTIAL DEVELOPMENT; (2) DEMOLITION, INCLUDING THE TEARING DOWN OF BUILDINGS, BRIDGES, OR OTHER STRUCTURES; AND (3) OUTDOOR STORAGE AND MATERIAL STOCKPILES, INCLUDING THE UNLOADING, REDISTRIBUTION, AND MAINTENANCE OF MATERIALS.

THE CONTRACTOR SHALL TAKE PRECAUTIONS THROUGHOUT THE DURATION OF CONSTRUCTION TO PREVENT, ABATE, AND CONTROL THE EMISSION OF FUGITIVE DUST. THIS SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

A. THE USE OF WATER OR HYDROPHILIC MATERIAL ON OPERATIONS OR SURFACES, OR BOTH;

B. THE APPLICATION OF ASPHALT, WATER OR HYDROPHILIC MATERIAL, OR TARPS OR OTHER SUCH COVERS TO MATERIAL STOCKPILES;

C. THE USE OF HOODS, FANS, FABRIC FILTERS, OR OTHER DEVICES TO ENCLOSE AND VENT AREAS WHERE MATERIALS PRONE TO PRODUCING FUGITIVE DUST ARE HANDLED;

D. THE USE OF CONTAINMENT METHODS FOR SANDBLASTING OR SIMILAR OPERATIONS; AND

E. THE USE OF VACUUMS OR OTHER SUCTION DEVICES TO COLLECT AIRBORNE PARTICULATE MATTER.

22. INVASIVE SPECIES: THE PROJECT SHALL BE MANAGED TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES INCLUDING THE FOLLOWING REQUIREMENTS:

NO PERSON SHALL COLLECT, TRANSPORT, IMPORT, EXPORT, MOVE, BUY, SELL, DISTRIBUTE, PROPAGATE OR TRANSPLANT ANY LIVING AND VIABLE PORTION OF ANY PLANT SPECIES, WHICH INCLUDES ALL OF THEIR CULTIVARS AND VARIETIES, LISTED IN TABLE 3800.1 OF AGR 3800, NEW HAMPSHIRE PROHIBITED INVASIVE SPECIES LIST.

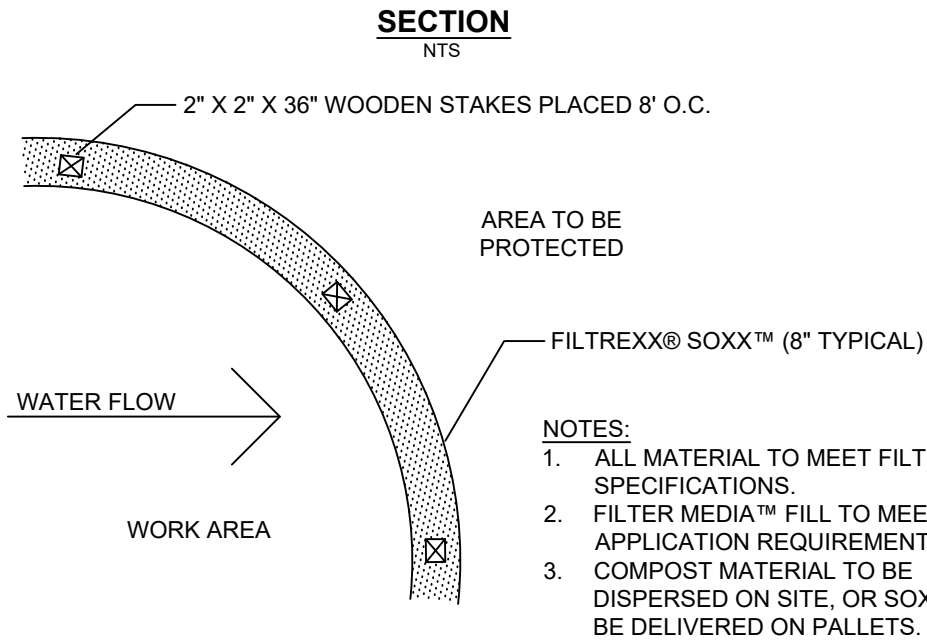
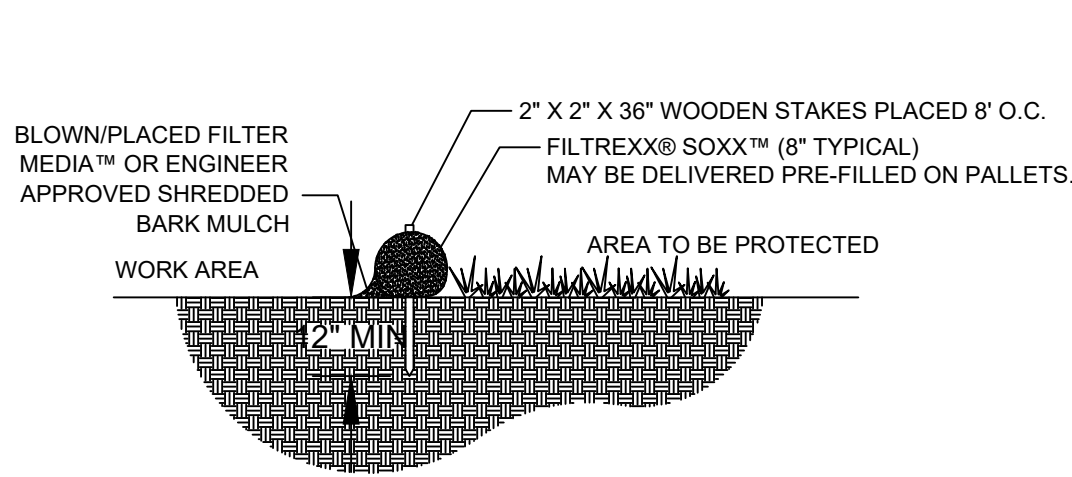
NO PERSON SHALL COLLECT, TRANSPORT, IMPORT, EXPORT, MOVE, BUY, SELL, DISTRIBUTE, PROPAGATE OR RELEASE ANY LIVING INSECT SPECIES LISTED IN TABLE 3800.1, NEW HAMPSHIRE PROHIBITED INVASIVE SPECIES LIST.

WINTER CONSTRUCTION NOTES

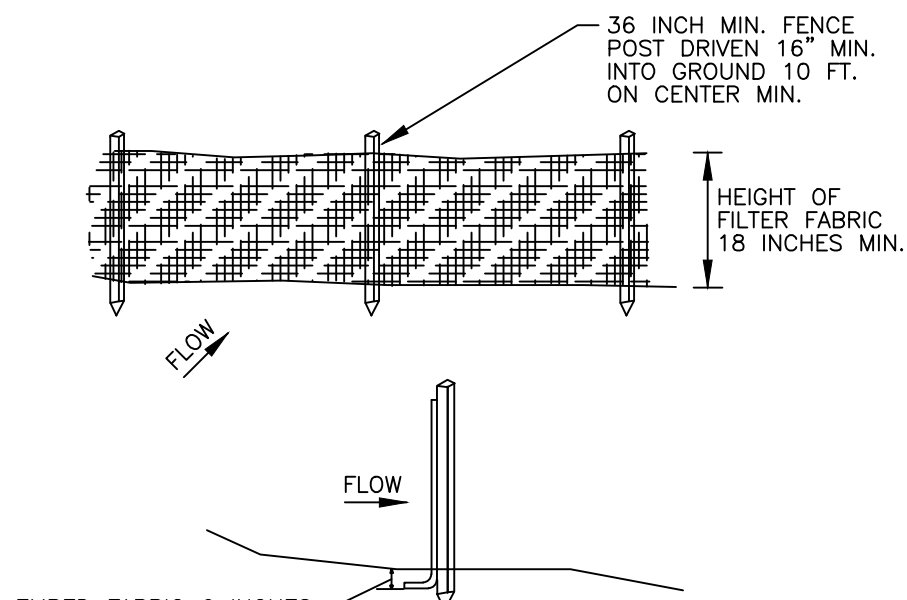
FOR SITE WORK CONSTRUCTION BETWEEN OCTOBER 15TH AND MAY 15 THE CONTRACTOR SHALL FOLLOW WINTER CONSTRUCTION EROSION PROTECTION METHODS AS DESCRIBED BELOW:

1. CHECK ALL PERIMETER EROSION CONTROL MEASURES AND COMPLETE ANY REQUIRED MAINTENANCE AND REPAIR BEFORE THE GROUND FREEZES.
2. PUT IN PLACE ANY ADDITIONALLY NECESSARY EROSION CONTROL MEASURES; DIVERSION DIKES, HAY BALES, SILT FENCE, SEDIMENT TRAPS AND/OR BASINS, ETC. TO PROTECT DOWNSTREAM WATER QUALITY FROM ANTICIPATED WINTER WORK PRIOR TO GROUND FREEZING.
3. THE AREA OF EXPOSED, UNSTABILIZED SOIL SHOULD BE LIMITED TO ONE ACRE. GENERALLY, THE EXPOSED AREA SHOULD BE LIMITED TO ONLY THOSE AREAS IN WHICH WORK WILL OCCUR DURING THE FOLLOWING 15 DAYS AND SHOULD BE PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY SNOW, RAINFALL, THAW OR SPRING MELT EVENT. SUBJECT TO APPLICABLE REGULATIONS, THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF ACTIVITIES ARE CONFINED TO A WINTER CONSTRUCTION PLAN, DEVELOPED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF NEW HAMPSHIRE OR A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL AS CERTIFIED BY THE CSPESC COUNCIL OF ENVIROCERT INTERNATIONAL, INC.
4. SUBSEQUENT WORK AREAS SHOULD NOT BE EXPOSED UNTIL THE PREVIOUSLY EXPOSED WORK ARE HAS BEEN FULLY STABILIZED.
5. STABILIZATION AS FOLLOWS SHOULD BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS:
- ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHOULD BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING, OR 2 INCHES OF EROSION CONTROL MIX.
 - ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHOULD BE SEEDED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET OR WITH A MINIMUM 4 INCH THICKNESS OF EROSION CONTROL MIX, UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. NOTE THAT COMPOST BLANKETS SHOULD NOT EXCEED 2 INCHES IN THICKNESS OR THEY MAY OVERHEAT.
6. ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
7. INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX SHOULD NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH.
8. ALL MULCH APPLIED DURING WINTER SHOULD BE ANCHORED (E.G., BY NETTING, TRACKING, WOOD CELLULOSE FIBER).
9. STOCKPILES OF SOIL MATERIALS SHOULD BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A FOUR-INCH LAYER OF EROSION CONTROL MIX. MULCHING SHOULD BE DONE WITHIN 24 HOURS OF STOCKING, AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. NO SOIL STOCKPILE SHOULD BE PLACED (EVEN COVERED WITH MULCH) WITHIN 100 FEET FROM ANY WETLAND OR OTHER WATER RESOURCE AREA.
10. FROZEN MATERIALS, (E.G., FROST LAYER THAT IS REMOVED DURING WINTER CONSTRUCTION), SHOULD BE STOCKPILED SEPARATELY AND IN A LOCATION THAT IS AWAY FROM ANY AREA NEEDING TO BE PROTECTED. STOCKPILES OF FROZEN MATERIAL CAN MELT IN THE SPRING AND BECOME UNWORKABLE AND DIFFICULT TO TRANSPORT DUE TO THE HIGH MOISTURE CONTENT IN THE SOIL.
11. INSTALLATION OF EROSION CONTROL BLANKETS SHOULD NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
12. ALL GRASS-LINED DITCHES AND CHANNELS SHOULD BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHOULD BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY A QUALIFIED PROFESSIONAL ENGINEER OR A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL AS CERTIFIED BY THE CSPESC COUNCIL OF ENVIROCERT INTERNATIONAL, INC. IF A STONE LINING IS NECESSARY, THE CONTRACTOR MAY NEED TO RE-GRADE THE DITCH AS REQUIRED TO PROVIDE ADEQUATE CROSS-SECTION AFTER ALLOWING FOR PLACEMENT OF THE STONE.

13. ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
14. AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS STOPPED FOR THE WINTER SEASON SHOULD BE PROTECTED WITH A MINIMUM 3 INCH LAYER OF SAND AND GRAVEL WITH A GRADATION SUCH THAT LESS THAN 12% OF THE SAND PORTION, OR MATERIAL PASSING THE NUMBER 4 SIEVE, BY WEIGHT, PASSES THE NUMBER 200 SIEVE.
15. SEDIMENT BARRIERS THAT ARE INSTALLED DURING FROZEN CONDITIONS SHOULD CONSIST OF COMPOST SOCKS, EROSION CONTROL MIX BERM, OR CONTINUOUS CONTAINED BERMS. SILT FENCES SHOULD NOT BE INSTALLED WHEN FROZEN CONDITIONS PREVENT PROPER EMBEDMENT OF THESE BARRIERS.
16. INSPECT THE EROSION AND SEDIMENT CONTROL MEASURES MORE FREQUENTLY THAN IS SPECIFIED IN THE EROSION CONTROL INSPECTION, MONITORING, AND MAINTENANCE SPECIFICATIONS FOUND ON THIS SHEET DURING THE WINTER AND SPRING THAW MONTHS TO PREVENT FAILURE AND/OR OVERLOADING.
17. BEFORE PREDICTED THAWS AND/OR HEAVY RAIN EVENTS CHECK ALL MEASURES TO ENSURE THAT THEY WILL BE ABLE TO HANDLE POTENTIALLY HEAVY AND INTENSE RUNOFF AND SEDIMENTATION.
18. CONTRACTOR SHALL BE PREPARED TO INSTALL A SECOND LINE OF DEFENSE IF PROBLEMS WITH IN-PLACE EROSION CONTROL MEASURES OCCUR DURING WINTER THAW AND SPRING RAIN EVENTS.
19. AS EARLY AS PRACTICAL AT THE BEGINNING OF THE NEXT GROWING SEASON, CONTRACTOR SHALL STABILIZE COMPLETED AREAS WITH PERMANENT VEGETATIVE CONTROLS AS SPECIFIED ON THESE DRAWINGS.



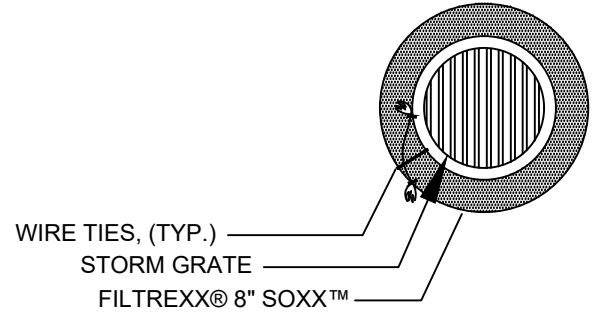
FILTREXX® EROSION CONTROL SOCK SEDIMENT CONTROL
NTS



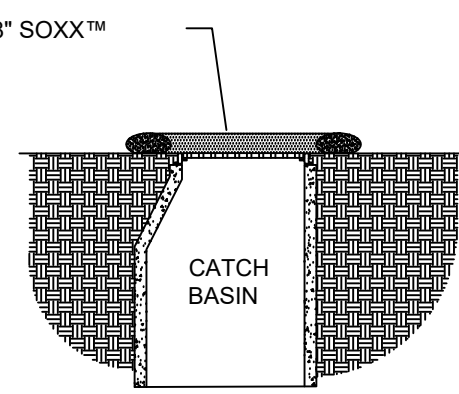
CONSTRUCTION SPECIFICATIONS

1. SILT FENCE MAY BE EITHER PREMANUFACTURED OR PREPARED ON SITE. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. SILT FENCE SHALL BE LOCATED AS SHOWN ON THE PLAN AND WHEREVER CONSTRUCTION ACTIVITIES MAY RESULT IN A TEMPORARY RUNOFF TO A STREAM OR WETLAND WHICH MAY CARRY SILT OR SEDIMENT.
3. THE TRENCH SHALL BE TOED IN PLACE BY PLACEMENT IN A 6 INCH TRENCH AND BACKFILLING WITH A SUITABLE MATERIAL.
4. WHEN A TRENCH CANNOT BE CONSTRUCTED, THE FABRIC MAY BE FOLDED AT THE BASE IN A MANNER SUCH THAT A MINIMUM OF 6 INCHES OF FABRIC LIES ON THE GROUND TOWARD THE DIRECTION OF FLOW. THE FOLDED FABRIC SHALL BE COVERED TO A DEPTH OF 6 INCHES WITH SUITABLE MATERIAL EXTENDING A MINIMUM OF 4 INCHES BEYOND THE FABRIC.
5. SUPPORTING STAKES SHALL BE PLACED NO MORE THAN 10 FEET APART.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED. FENCING SHALL BE REPLACED WHEN TORN, WHEN TRENCHING IS DISTURBED, WHEN THE FENCE DISPLAYS PLUGGING AS EVIDENCED BY SILT-LADEN APPEARANCE, WHEN WATER IS EXCESSIVELY RETARDED BY THE FENCE, OR WHENEVER "BULGES" APPEAR.

SILT FENCE
N.T.S.



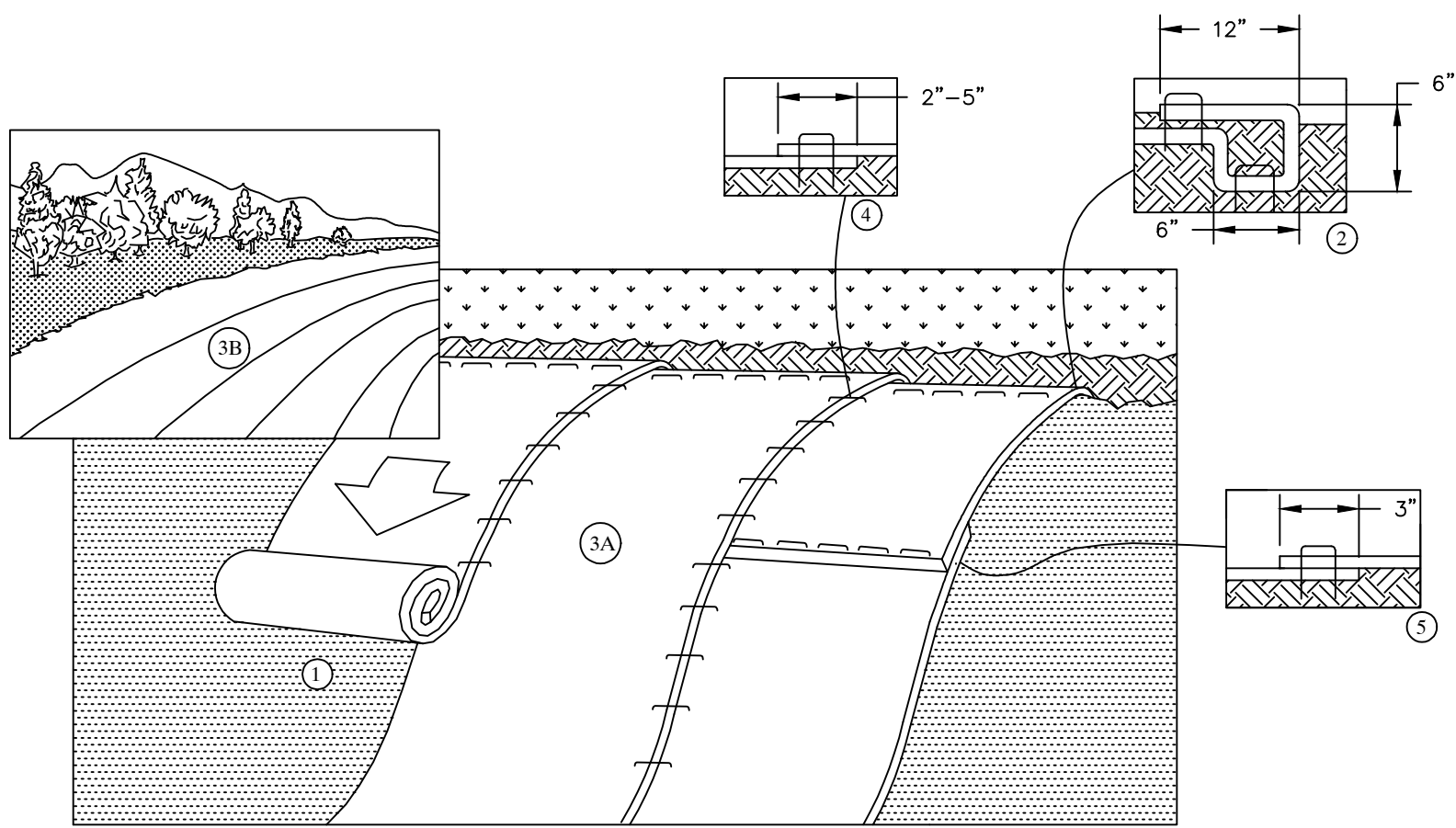
DRAIN INLET PLAN



DRAIN INLET SECTION

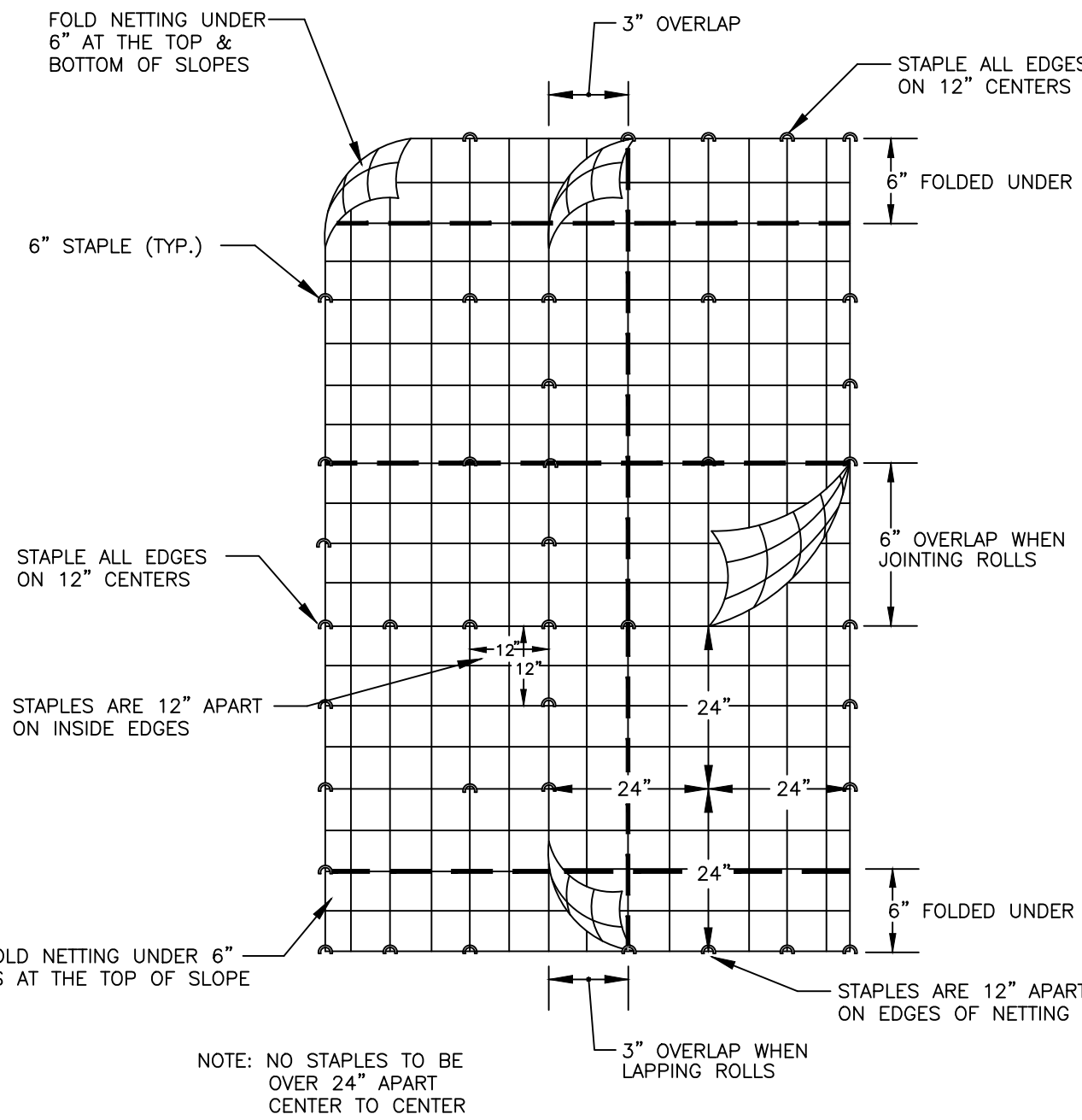
- NOTES:
1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
2. FILTER MEDIA™ FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER, OR PRE-FILLED AND DELIVERED ON PALLETS.

FILTREXX® INLET PROTECTION
NTS



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECPS WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECPS BACK OVER SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECPS.
3. ROLL THE RECPS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE/PER THE MANUFACTURER'S GUIDELINES. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECPS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON RECPS TYPE.
5. CONSECUTIVE RECPS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECPS WIDTH.
- NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECPS.

SLOPE INSTALLATION OF TURF REINFORCEMENT MATTING (TRM)
N.T.S.



MULCH NETTING INSTALLATION
N.T.S.

EROSION AND SEDIMENT CONTROL DETAILS FOR
UPPER VALLEY MUSIC CENTER
BUILDING ADDITION AND SITE IMPROVEMENTS
SOUTH PARK STREET, LEBANON, NEW HAMPSHIRE

PATHWAYS CONSULTING, LLC

240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

SCALE: AS SHOWN

DESIGNED BY: SAW

DRAWN BY: DAS

CHECKED BY: SAW

DATE: 03-24-25

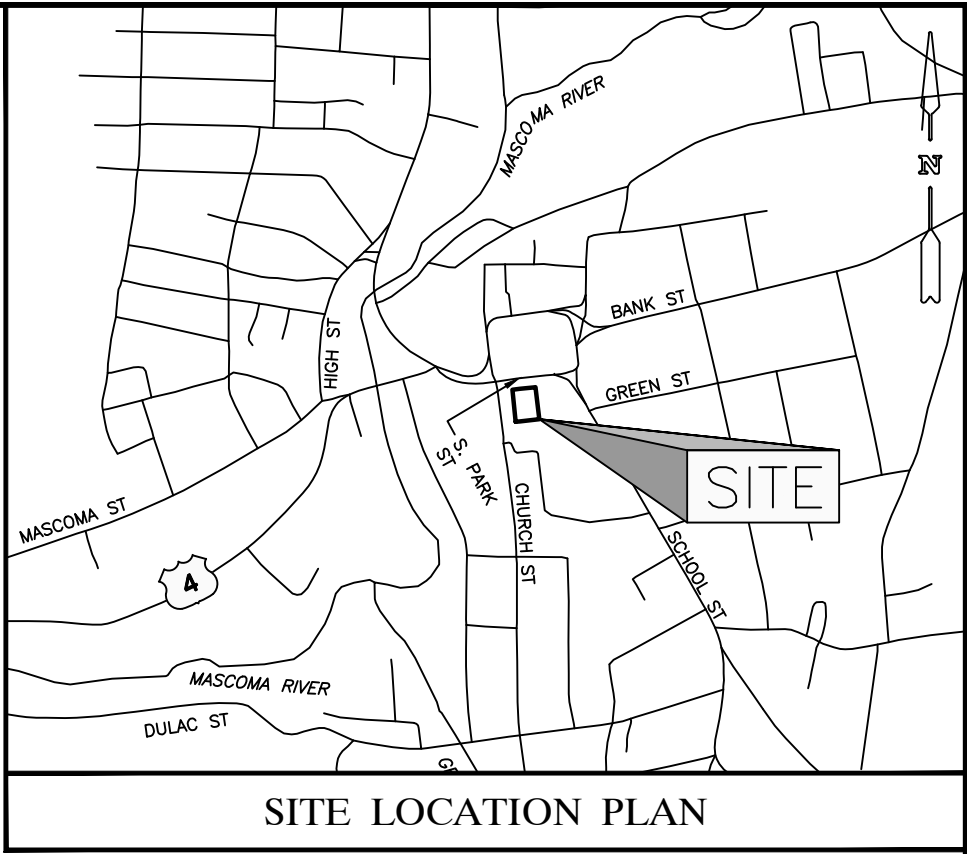
PROJ. NO. 13444

5

SHEET 5 OF 5

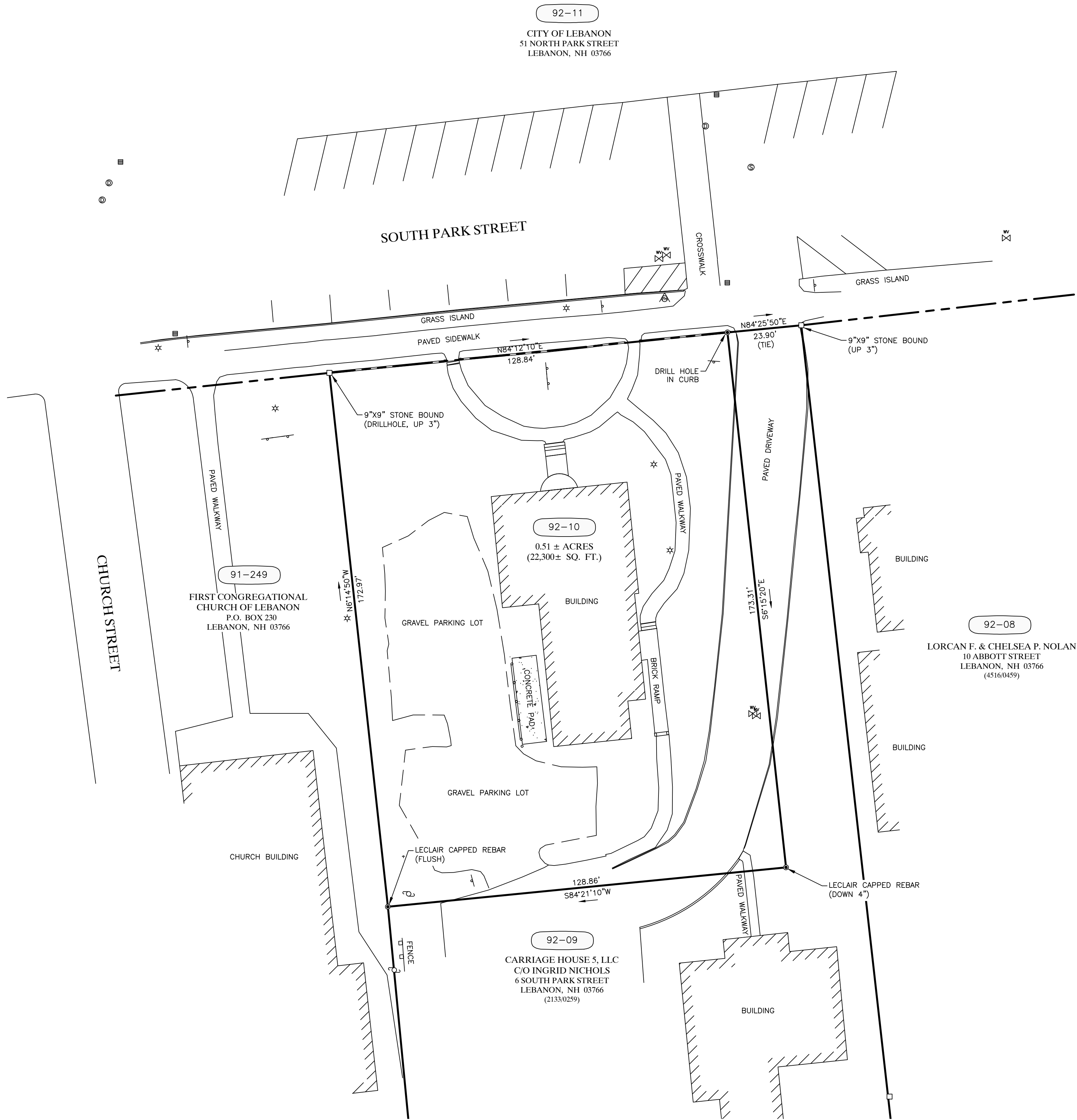


NAD83-NH GRID



PLANS OF REFERENCE:

- REFERENCE IS MADE TO THE FOLLOWING PLAN RECORDED AT THE GRAFTON COUNTY REGISTRY OF DEEDS:
 - PLAN 2529, SLIDE C-6-84, PLAN ENTITLED "OWNER - ROGER S. WOODS, ADDRESS - 8 SOUTH PARK STREET, LEBANON, NEW HAMPSHIRE," PREPARED BY K.A. LECLAIR ASSOC., INC., DATED JANUARY 12, 1984, PROJECT NO. 4184.



I HEREBY CERTIFY TO THE BEST OF MY BELIEF AND KNOWLEDGE THAT A NEW HAMPSHIRE RURAL CLASS SURVEY WAS PERFORMED ON PARCEL A ONLY SHOWN HEREON. BOUNDARY LINES ARE CONSISTENT WITH EXISTING MONUMENTATION AND THE REFERENCED DEEDS AND PLANS UNLESS NOTED OTHERWISE.

PURSUANT TO RSA 676:18,III AND RSA 672:14, I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

DATE

GARDNER P. KELLOGG, LLS 662

DRAFT

GARDNER P. KELLOGG, LLS 662

GENERAL SURVEY NOTES:

- HORIZONTAL DATUM IS NEW HAMPSHIRE STATE PLANE GRID NAD83 (SURVEY FEET) FROM GPS OBSERVATION.
- STRUCTURES FOR UNDERGROUND UTILITIES ARE SHOWN AS OBSERVED. THE SURVEYOR DOES NOT CERTIFY THAT OTHER UNDERGROUND UTILITIES DO NOT EXIST. UNDERGROUND UTILITIES ARE NOT WARRANTED TO BE EXACT OR COMPLETE AND ARE TO BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR SITE MODIFICATIONS.
- REFER TO THE DEED RECORDED AS (2133/259) FOR EASEMENTS AND AGREEMENTS THAT BENEFIT AND BURDEN LOT 92-10.

RECORD OWNER: UPPER VALLEY MUSIC CENTER, INC.
MAP 92, LOT 10 P.O. BOX 926
LEBANON, NH, 03766

DEED REFERENCE: BOOK 4273, PAGE 317

Date	Revision	By

BOUNDARY PLAN FOR

UPPER VALLEY MUSIC CENTER

8 SOUTH PARK STREET, LEBANON, GRAFTON CO., NEW HAMPSHIRE

0 20 40 60 80 100

03-17-25 SCALE: 1"= 20' PROJ. NO. 13444

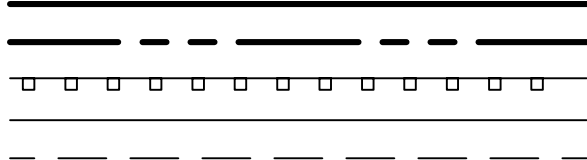
PATHWAYS CONSULTING, LLC

240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766

LEGEND

EXISTING IRON PIPE OR REBAR
STONE/CONCRETE BOUNDARY MARK
BOUNDARY LINE
RIGHT-OF-WAY
FENCE-STOCKADE
EDGE PAVEMENT
EDGE GRAVEL
UTILITY POLE/GUY WIRE
LIGHT POLE
CATCH BASIN
DRAIN MANHOLE
SANITARY MANHOLE
SIGN
HYDRANT
GATE VALVE
DEED REFERENCE
TAX MAP/LOT NO.

● AS NOTED
□ AS NOTED



(BOOK/PAGE)

12-122



Mirada Small Silicone (XWS SIL)

Outdoor Wall Sconce



OVERVIEW

Lumen Package (lm)	1,000 - 8,000
Wattage Range (W)	10 - 61
Efficacy Range (LPW)	126 - 162
Weight lbs (kg)	10 (4.5)
Control Options	IMSBT, ALB, ALS, PCI

QUICK LINKS

[Ordering Guide](#)[Performance](#)[Photometrics](#)[Dimensions](#)

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Extended housing available with 1/2" threaded hubs for surface conduit and rated wire.
- Standard luminaire shipping weight: TBD lbs in carton.
- Max luminaire shipping weight: 12 lbs in carton (20 lbs w/EH option)

Optical System

- State-of-the-Art one piece silicone optic provides industry leading optical control while also acting as an integrated gasket reducing system complexity and improving fixture reliability.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in distribution types 2, 3, and FT.
- Silicone optical material does not yellow or crack with age and provides a typical light transmittance of 93%.
- **Zero uplight.**
- Available in 5000K, 4000K, and 3000K color temperatures per ANSI C78.377. Also available in Phosphor Converted Amber with peak intensity at 610nm.
- Minimum CRI of 70

Electrical

- High-performance programmable driver features over-voltage, under-voltage, short circuit and over temperature protection. Custom lumen and wattage packages available.
- 0-10V dimming (10% - 100%) standard.

- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- L80 Calculated Life: >100k Hours
- Total harmonic distortion (THD): <20%
- 3L to 12L operating temperature: -40°C to +50°C (-40°F to +122°F)
- 15L operating temperature: -40°C to +45°C (-40°F to +113°F).
- 18L operating temperature: -40°C to +40°C (-40°F to +104°F).
- 21L operating temperature: -40°C to +35°C (-40°F to + 95°F).
- Power factor (PF): >.90
- Input power stays constant over life.
- Optional 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation
- Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed via hinged door.
- Optional integral emergency battery pack provides 90-minutes of constant power to the LED system, ensuring code compliance. A test switch/indicator button is installed on the housing for ease of maintenance. The fixture delivers 1500 lumens during emergency mode.

Controls

- Integral passive infrared Bluetooth™ motion sensor options. Fixtures operate independently and can be commissioned via an iOS or Android configuration app. Updates and modifications to the control strategy are easily implemented via an intuitive app.
- LSI's AirLink™ Blue lighting control system is a simple feature rich wireless Bluetooth

mesh network. The integrated fixture sensor module provides wireless control of grouped fixtures based on motion sensors, daylight or a fully customizable schedule.

Installation

- Universal wall mounting plate easily mounts directly to 4" octagonal or square junction box.
- 2 fasteners secure the hinged door underneath the housing and provide quick & easy access to the electrical compartment for installing/servicing.
- Optional terminal block accepts up to 12 ga wire.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to <https://www.lsicorp.com/resources/terms-conditions-warranty/> for more information.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- **IDA compliant; with 3000K color temperature selection.**
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP65 rated luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications when pole mounted (using optional XPMa bracket) or wall mounted.
- IK08 rated luminaire per IEC 66262 mechanical impact code.
- DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Mirada Small Silicone (XWS SIL)

Type : _____

Have questions? Call us at (800) 436-7800

ORDERING GUIDE

[Back to Quick Links](#)

TYPICAL ORDER EXAMPLE: XWS LED 6L SIL FT UNV DIM 40 70CRI ALBCS1 BLK CWBB						
Prefix	Light Source	Lumen Package	Lens	Distribution	Voltage	Driver
XWS - Mirada Small Wall Sconce	LED	1L - 1,000 (10w) UNV Only 2L - 2,000 (15w) 3L - 3,000 (26w) 5L - 5,000 (39w) 6L - 6,000 (52w) 8L - 8,000 (63w) Custom Lumen Packages ¹	SIL - Silicone	2 - Type 2 3 - Type 3 FT - Forward Throw	UNV - Universal Voltage (120-277V) HV - High Voltage (347-480V)	DIM - 0-10v Dimming (0-10%)
Color Temperature	Color Rendering	Controls			Finish	Options
50 - 5000K 40 - 4000K 30 - 3000K	70CRI - 70 CRI	Blank - None <u>Wireless Controls</u> ALBMR1LR - AirLink Blue Multi Range Wireless Motion & Photo Sensor Controller (8-15' mounting height) ² ALBMR2LR - AirLink Blue Multi Range Wireless Motion & Photo Sensor Controller (16-40' mounting height) ² <u>Standalone Controls</u> EXT - 0-10v Dimming leads extended to housing exterior IMSBT1L - Integral Bluetooth™ Motion Sensor 8-24' MH ^{2,3} <u>Button Type Photocells</u> PCI120 - 120V PCI208-277 - 208 - 277V PCI347 - 347V			BLK - Black BRZ - Dark Bronze GMG - Gun Metal Gray GPT - Graphite MSV - Metallic Silver PLP - Platinum Plus SVG - Satin Verde Green WHT - White	Blank - None BB - 10w Battery Back-up (0°C) ⁴ CWBB - 10w Cold Weather Battery Backup (-20°C) ⁴ BB20 - 20W Battery Back-up (0°C) ⁴ EH - Extended Housing ⁵ SP1 - 10kV Surge Protection Device



Need more information?
[Click here for our glossary](#)

Have additional questions?
Call us at (800) 436-7800



ACCESSORY ORDERING INFORMATION*

Part Number	Description
758274CLR	XWS Extended Housing/Surface Conduit Wiring Box
760159CLR	XWS Spacer Plate/Wiring Box

*Accessories are shipped separately and field installed.

Battery Backup

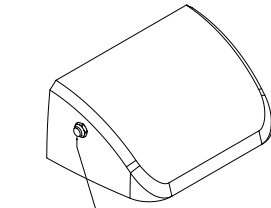
- Emergency battery system provides 90-minutes of constant power to the LED system, ensuring code compliance.
- A test switch/indicator button is installed on the housing for ease of maintenance.
- 10w battery delivers ~1,500 lumens during emergency mode.
- 20w battery delivers ~3,000 lumens during emergency mode.



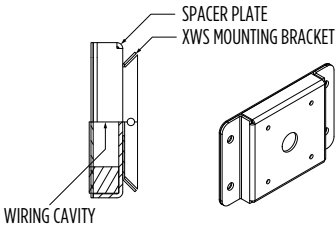
Luminaire shown with battery backup



AirLink Wireless Control Luminaire shown with ALBMR1LR



BUTTON PHOTOCELL LUMINAIRE SHOWN WITH PCI



1 Custom lumen and wattage packages available, consult factory. Values are within industry standard tolerances but not DLC listed.
2 When high voltage (HV) is specified, IMSBT, ALBCS ALBMRxLR control options are limited to 6L and 8L lumen packages.
3 IMSBTxL is field configurable via the LSI app that can be downloaded from your smartphone's native app store.
4 Universal Voltage Only (120-277V). 20W Battery Backup only available 1L - 6L.
5 For applications with surface conduit.

PERFORMANCE

[Back to Quick Links](#)

Delivered Lumens ¹												
Lumen Package	Distribution	CRI	3000K CCT			4000K CCT			5000K CCT			Wattage
			Delivered Lumens	Efficacy	Bug Rating	Delivered Lumens	Efficacy	Bug Rating	Delivered Lumens	Efficacy	Bug Rating	
1L	2	70	1,429	143	B1-U0-G1	1,524	152	B1-U0-G1	1,526	153	B1-U0-G1	10
	3		1,491	149	B0-U0-G1	1,590	159	B0-U0-G1	1,592	159	B0-U0-G1	
	FT		1,459	146	B0-U0-G1	1,556	156	B1-U0-G1	1,557	156	B1-U0-G1	
2L	2	70	1,851	142	B1-U0-G1	1,974	152	B1-U0-G1	1,976	152	B1-U0-G1	13
	3		1,930	148	B1-U0-G1	2,058	158	B1-U0-G1	2,060	158	B1-U0-G1	
	FT		1,889	145	B1-U0-G1	2,015	155	B1-U0-G1	2,017	155	B1-U0-G1	
3L	2	70	2,765	146	B1-U0-G1	2,950	155	B1-U0-G1	2,953	155	B1-U0-G1	19
	3		2,884	152	B1-U0-G1	3,077	162	B1-U0-G1	3,079	162	B1-U0-G1	
	FT		2,822	149	B1-U0-G1	3,010	158	B1-U0-G1	3,012	159	B1-U0-G1	
5L	2	70	4,655	133	B2-U0-G1	4,965	142	B2-U0-G1	4,970	142	B2-U0-G1	35
	3		4,855	139	B1-U0-G1	5,179	148	B1-U0-G1	5,184	148	B1-U0-G1	
	FT		4,750	136	B1-U0-G2	5,067	145	B1-U0-G2	5,072	145	B1-U0-G2	
6L	2	70	5,578	130	B2-U0-G1	5,950	138	B2-U0-G2	5,956	139	B2-U0-G2	43
	3		5,819	135	B1-U0-G2	6,207	144	B1-U0-G2	6,214	145	B1-U0-G2	
	FT		5,693	132	B1-U0-G2	6,073	141	B1-U0-G2	6,079	141	B1-U0-G2	
8L	2	70	7,531	123	B2-U0-G2	8,034	132	B2-U0-G2	8,041	132	B2-U0-G2	61
	3		7,856	129	B2-U0-G2	8,380	137	B2-U0-G2	8,388	138	B2-U0-G2	
	FT		7,687	126	B2-U0-G2	8,199	134	B2-U0-G2	8,207	135	B2-U0-G2	

Electrical Data - Current Draw AMPS ²						
Lumen Package	120V	208V	240V	277V	347V	480V
1L	0.08	0.05	0.04	0.04	0.03	0.02
2L	0.11	0.06	0.05	0.05	0.04	0.03
3L	0.16	0.09	0.08	0.07	0.05	0.04
5L	0.29	0.17	0.15	0.13	0.10	0.07
6L	0.36	0.21	0.18	0.16	0.12	0.09
8L	0.51	0.29	0.25	0.22	0.18	0.13

Recommended Lumen Maintenance - XWS ³					
Ambient Temperature C°	Initial ⁴	25K hrs. ⁴	50K hrs. ⁴	75K hrs. ⁵	100K hrs. ⁵
25	100%	95%	90%	85%	80%
40	100%	91%	82%	73%	65%

1 1L not available in HV
2 1L not available with controls.
3 Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.
4 In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).
5 In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times NA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).

Mirada Small Silicone (XWS SIL)

Type : _____

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PHOTOMETRICS

[Back to Quick Links](#)

Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

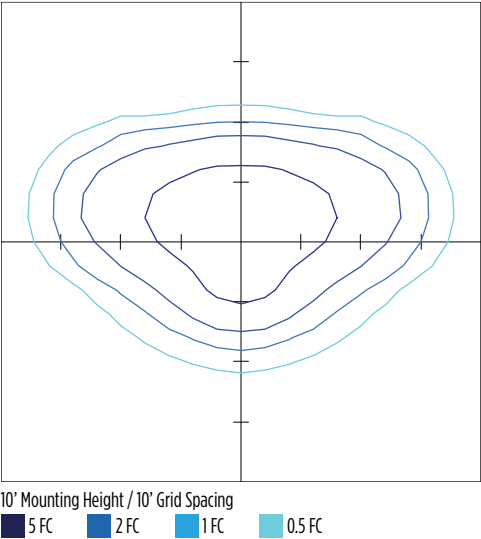
See the individual product page on <https://www.lsicorp.com/> for detailed photometric data.

XWS-LED-6L-SIL-2-40-70CRI

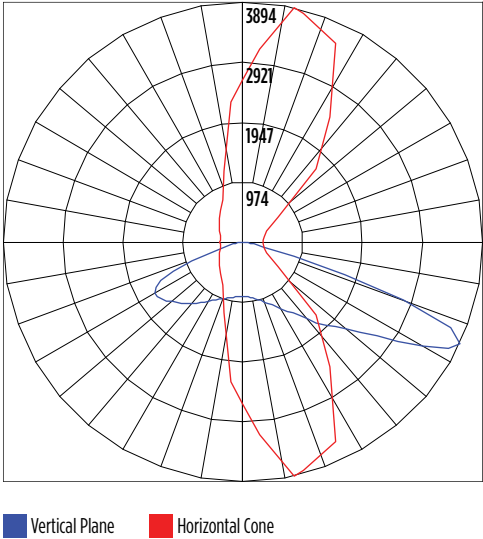
Luminaire Data	
Type 2 Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	5,951
Watts	42.5
Efficacy	138
IES Type	Type II - Short
BUG Rating	B1-U0-G1

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30°)	834	20%
Medium (30-60°)	3,379	50%
High (60-80°)	1,647	28%
Very High (80-90°)	91	1%
Uplight (90-180°)	0	0%
Total Flux	5,951	100%

ISO Footcandle



Polar Curve

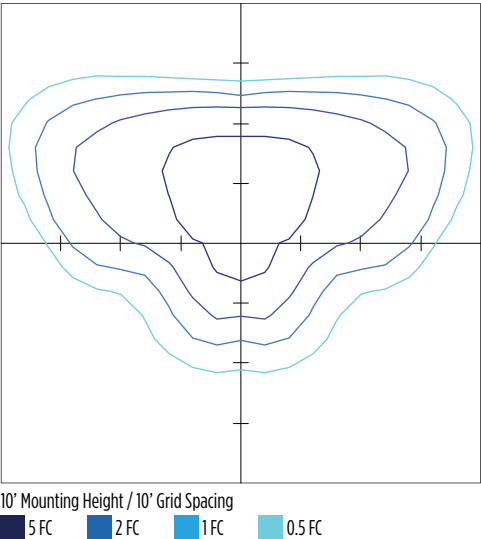


XWS-LED-6L-SIL-3-40-70CRI

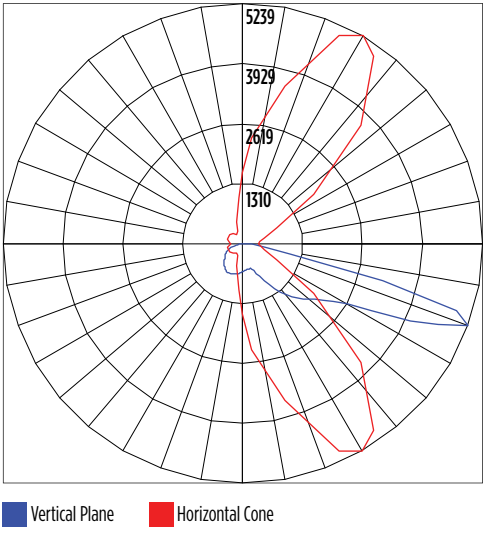
Luminaire Data	
Type 3 Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	6,208
Watts	42.5
Efficacy	146
IES Type	Type III - Medium
BUG Rating	B1-U0-G2

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30°)	582	9%
Medium (30-60°)	2,997	48%
High (60-80°)	2,506	40%
Very High (80-90°)	124	2%
Uplight (90-180°)	0	0%
Total Flux	6,208	100%

ISO Footcandle



Polar Curve



PHOTOMETRICS

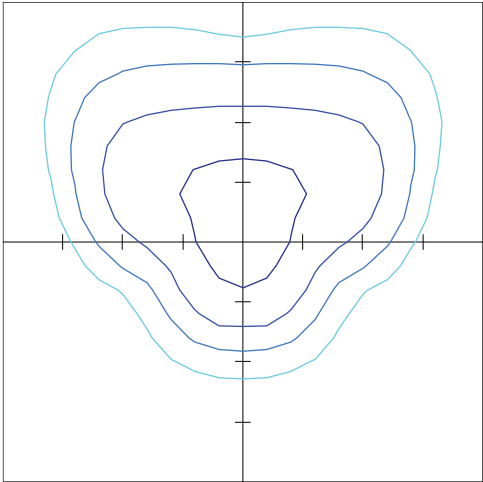
[Back to Quick Links](#)

XWS-LED-6L-SIL-FT-40-70CRI

Luminaire Data	
Type FT Distribution	
Description	4000 Kelvin, 70 CRI
Delivered Lumens	6,073
Watts	42.5
Efficacy	143
IES Type	Type IV - Short
BUG Rating	B1-U0-G2

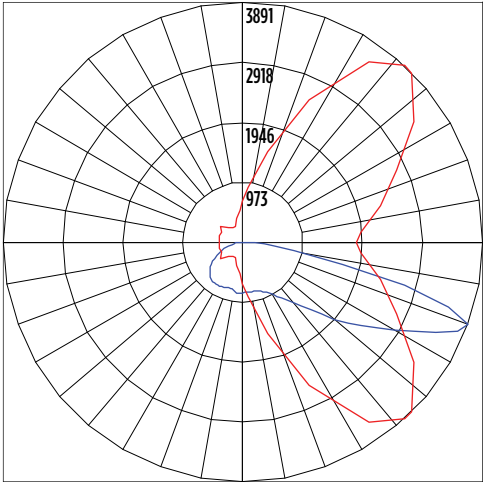
Zonal Lumen Summary		
Zone	Lumens	% Luminaire
Low (0-30°)	708.3	12%
Medium (30-60°)	2,715.5	45%
High (60-80°)	2,475.4	41%
Very High (80-90°)	173.6	3%
Uplight (90-180°)	0	0%
Total Flux	6,073	100%

ISO Footcandle



10' Mounting Height / 10' Grid Spacing
5 FC 2 FC 1 FC 0.5 FC

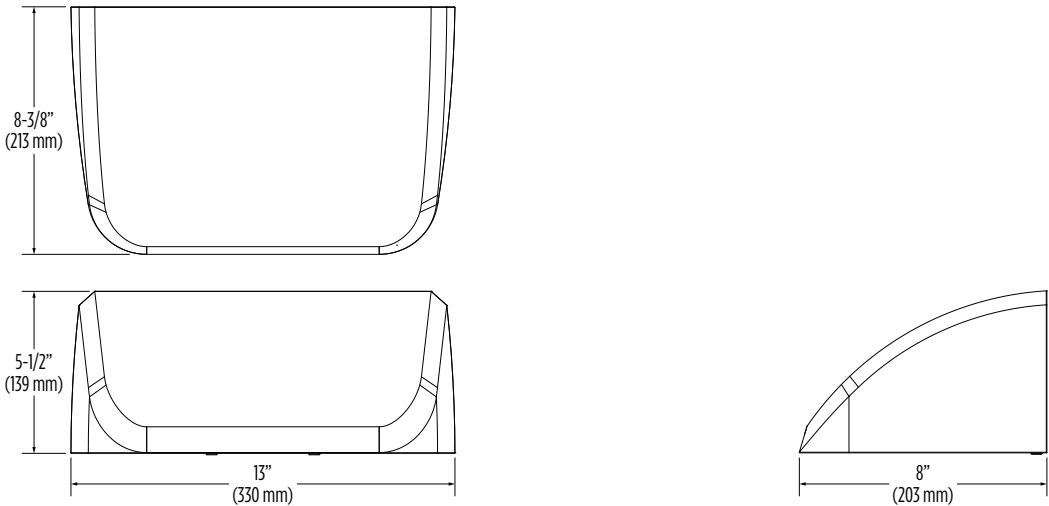
Polar Curve



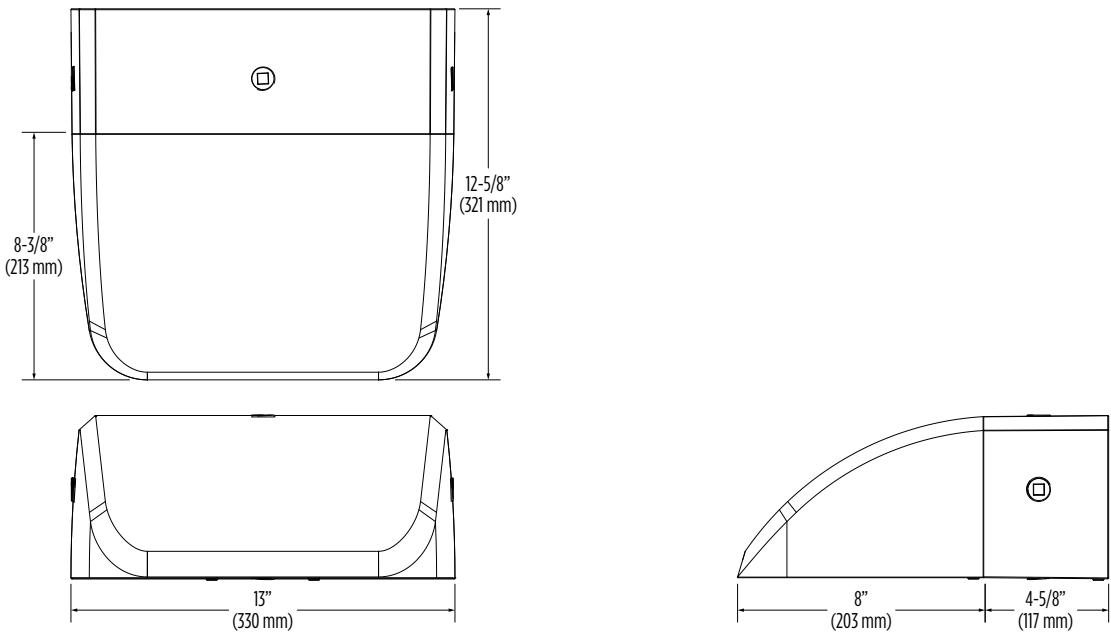
Vertical Plane Horizontal Cone

PRODUCT DIMENSIONS

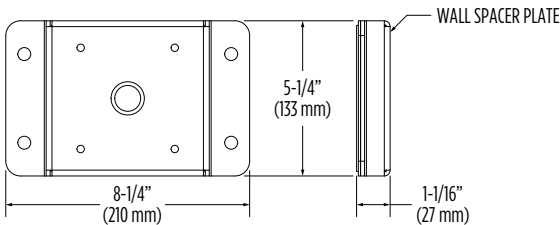
STANDARD HOUSING
(XWS)



SCWB EXTENDED HOUSING
(XWS 758274CLR)



XWS SPACER PLATE/WIRING BOX
(XWS 760159CLR)



NOTE: Wall spacer plate allows the luminaire to float off the wall and provides space for securing wires (8.25" X 5.25" X 1.07").

CONTROLS

[Back to Quick Links](#)

Integral Bluetooth™ Motion and Photocell Sensor (IMSBTxL)

Slim low profile sensor provides multi-level control based on motion and/or daylight. Sensor controls 0-10 VDC LED drivers and is IP66 rated for cold and wet locations (-40°F to 167°F). Two unique PIR lenses are available and used based on fixture mounting height. All control parameters are adjustable via an iOS or Android App capable of storing and transmitting sensor profiles.

[Click here to learn more details about IMSBT](#)



LEVITON App



Apple



Android

AirLink Wireless Lighting Controller (ALSC, ALSCS)

The AirLink integrated controller is a California Title 24 compliant lighting controller that provides real-time light monitoring and control with utility-grade power monitoring. It includes a 24V sensor input and power supply to connect a sensor into the outdoor AirLink wireless lighting system. The wireless integrated controller is compatible with this fixture.

[Click here to learn more details about AirLink](#)

AirLink Blue (ALBMRxLR, ALBCSx)

Wireless Bluetooth Mesh Outdoor Lighting Control System that provides energy savings, code compliance and enhanced safety/security for parking lots and parking garages. Three key components; Bluetooth wireless radio/sensor controller, Time Keeper and an iOS App. Capable of grouping multiple fixtures and sensors as well as scheduling time-based events by zone. Radio/Sensor Controller is factory integrated into Area/ Site, Wall Mounted, Parking Garage and Canopy luminaires.

[Click here to learn more details about AirLink Blue](#)



AirLink Blue App



Apple

Sensor Sequence of Operations

Standard Programming	On Event	Off Event	On Light Level	Dim Light Level	Daylight Harvesting	Delay To Off	Sensitivity
IMSBTxL	Motion	No Motion	100%	N/A	On; Auto Calibration	20 minutes	High

Operation	Description
On Event	Trigger that activates lights to turn on; either automatic via motion detected or manually activated via push of button.
Off Event	Trigger that activates lights to turn off; either automatic via no motion detected or manually activated via push of button.
On Light Level	The light level that the fixtures will turn on to when ON EVENT occurs.
Dim Light Level	The light level that the fixtures will dim down to when no motion is detected.
Delay to Dim	The amount of time after which no motion is detected that the fixtures will be triggered to dim down. This sequence is optional, and sensor can be programmed to only trigger the fixture to turn off by entering 100% in this field.
Delay to Off	The amount of time after which no motion is detected that the fixtures will be triggered to turn off. If delay to dim is part of the programmed functionality, this is the amount of time after which no motion is detected after the fixture have already dimmed down.
Sensitivity	The sensitivity can be set to high, medium, low, or auto where applicable. High will detect smaller, simple motions. Low will only detect larger more complex motions. Auto temperature calibration adjusts the PIR sensitivity as ambient temperature rises to increase detection of heat movement through the field of view.

PATHWAYS CONSULTING, LLC

Planning • Civil & Environmental Engineering • Surveying • Construction Assistance
240 Mechanic Street • Suite 100
Lebanon, New Hampshire 03766
(603) 448-2200 • Fax: (603) 448-1221

MEMORANDUM

TO: BRIAN VINCENT, P.E., CITY OF LEBANON CITY ENGINEER

FROM: SCOTT A. WILLIAMS, P.E., PROJECT MANAGER

RE: DRAINAGE CALCULATIONS FOR SITE PLAN REVIEW, UPPER VALLEY
MUSIC CENTER, BUILDING ADDITION AND SITE IMPROVEMENTS
PROJECT, 8 SOUTH PARK STREET, LEBANON, NEW HAMPSHIRE (Project No.
13444)

DATE: MARCH 24, 2025

PROJECT DESCRIPTION

The subject property is located off of South Park Street in Lebanon and encompasses approximately 0.51 acres of land consisting of an existing building, paved access drive, and gravel parking lot. The proposed project includes the construction of a 468 square foot (SF) building addition on the west side of the existing building and related drainage improvements within the project limits. The project design includes approximately 3,000 SF of site disturbance related to the building addition and drainage work.

WATERSHED DESCRIPTION

The project is part of the Mascoma River watershed. The entire site drains towards the north into the existing closed drain stormwater system located within South Park Street that conveys runoff to the west along Park Street and Mascoma Street to a discharge point into the Mascoma River approximately 800 feet west of the site. The east side of the site drains by sheet flow off the east side of the existing building, grass areas, and paved drive to the north toward an existing catch basin located in South Park Street near the northeast corner of the property. The west side of the site drains by sheet flow off the west side of the existing building, grass areas, and gravel parking lot toward an existing catch basin located in South Park Street just west of the northwest corner of the property. Both of the Park Street catch basins are connected to the City stormwater system that runs west along South Park Street and Mascoma Street to a drainage outfall on the bank of the Mascoma River. Watershed plans for the pre-development (existing) and post-development (proposed) conditions are attached depicting the various watershed subcatchment areas in relation to the project site.

SOIL MAPPING

NRCS soil maps and ratings for hydrologic soil groups and saturated hydraulic conductivity (Ksat) were obtained from the WebSoil Survey website, utilized in the drainage modeling, and are attached for reference. According to the WebSoil Survey, the entire site is mapped as Windsor loamy sand soils within the Hydrologic Soil Group A, and this data was used for the preliminary stormwater design and modeling.

In general, the soils on the site are very well-drained loamy sands with hydraulic soil rating of A, very high infiltration rates (Ksat of 100 micrometers per second or 14 inches per hour). We do

not expect to find shallow ledge or seasonal high groundwater close to the ground surface, particularly within the proposed drainage area.

EXISTING CONDITIONS

The terrain within the project area is entirely disturbed and developed, and the cover consists of predominantly maintained grass areas, paved or gravel surfaces, and the existing building footprint. The entire site slopes from south to north from a high point in the paved access drive along the south side of the property, to South Park Street on the north side. The slopes on the southern portion of the site generally range from 3% to 5%, while the slopes on the northern portion of the site generally range from 10% to 30%. The eastern portion of the site drains toward the existing paved access drive, then to South Park Street. The western portion of the site drains toward the western property and onto the abutting property, then to South Park Street. Due to the well-drained soils, there is only a moderate amount of runoff flowing from the site to the abutting properties and the City right-of-way along South Park Street for the design storms considered. In the current condition, all runoff from the site ultimately drains to the two existing catch basins in South Park Street.

The existing and proposed conditions models include the on-site and off-site areas within the drainage subcatchments that contribute flow to the existing drainage system within South Park Street. The attached Figure A – Pre-Development (Existing Conditions) Watershed Plan depicts the current drainage subcatchment areas for the existing condition within the project site. As previously noted, all runoff collected by the catch basins in South Park Street adjacent to the site ultimately convey stormwater to the west toward the Mascoma River, but this is clearly depicted on the City GIS system, so we did not believe it was warranted to provide a larger scale watershed map to depict this, since our improvements will not have a significant impact on the off-site drainage system.

PROPOSED CONDITIONS

Please see attached Figure B – Post-Development (Proposed Conditions) Watershed Plan that depicts the modifications to the drainage subcatchment areas as a result of the proposed site improvements within the project site. The proposed project will involve the construction of a small (468 SF) addition on the west side of the existing building. While this will slightly increase the impervious area on the site, the building addition will require the removal of an existing concrete pad in the same location, so the net increase in impervious area on the site will only be approximately 248 SF. The total area of disturbance on the site will be approximately 3,000 SF, but the remaining disturbances, excluding the proposed building addition, will involve only temporary impacts to grass or pavement areas. Since these areas will be restored to the previously existing condition, they will not result in any change to the existing surface cover.

The drainage improvements proposed to accommodate the new building addition will include the installation of a small underground stormwater basin comprised of four prefabricated ADS StormTech chambers surrounded by crushed stone. Runoff from the proposed building addition will be collected from a roof drain and conveyed through a new 6-inch drain pipe that will connect directly into the southwest side of the underground chamber system. The underground chamber system will also have a 6-inch drain pipe outlet extending from the northeast side

extending across the grass lawn area north of the existing building to the existing catch basin in South Park Street, northeast of the site. The underground chamber system is designed to provide a minimum volume of runoff detention/storage exceeding the amount of runoff generated from the proposed building addition during a 25-year design storm event. The porous stone bottom of the underground storage system will also encourage infiltration of stormwater into the subsoils that are anticipated to be well-drained soils with low groundwater levels. This underground system will be installed below a one-foot deep graded sediment basin located on the north end of the existing gravel parking lot (near the northwest corner of the existing building). The site grading will direct the majority of the current runoff from the existing gravel parking lot to the sediment basin and into the underground chamber system, and the system has been designed to accommodate this increase volume of runoff. The sediment basin will also provide pretreatment for the underground chamber system by collecting and containing any sediment from the gravel parking lot. The underground chamber system accounts for a minimal amount of infiltration in the bottom of the system, and the infiltration rate utilized for this purpose was assumed from the hydraulic conductivity of the mapped soils on the site, and reduced using a typical safety factor (i.e., clogging factor) of 50%, according to NHDES Best Management Practices (BMP) recommended for this type of stormwater practice.

The proposed drainage design will shift some of the site area that previously drained to the catch basin in South Park Street northwest of the site, to the catch basin in South Park Street northeast of the site (see subcatchment areas depicted on the attached watershed plans), but this change will have a minimal impact on the post-development runoff to the off-site areas, since both of the catch basins ultimately drain to the same downstream point northwest of the project site. The proposed underground chamber system has been designed according to the New Hampshire Stormwater Manual, and will maintain post-development peak flows at or below the pre-development peak flows, as discussed further below.

HYDROLOGIC CALCULATIONS

We used the HydroCAD computer software program and the TR-55 Methodology to determine pre-development and post-development runoff rates for the 2-year, 10-year, 25-year, 50-year, and 100-year frequency storms. The HydroCAD reports and the associated drainage area maps for the existing and proposed conditions are attached. The model established a link or point of interest at the off-site discharge point in South Park Street north of the site (Link 1L, as shown on the attached watershed exhibits), representing the two existing catch basins (Nodes 1P and 2P) in the City's stormwater system that capture all runoff from the project site, to compare the pre-development and post-development peak flow rates and volumes for the proposed project. The post-development model also includes the aforementioned changes to subcatchments (2S, 3S, 4S) resulting from the proposed underground chamber system (modeled as Node 3P). The following tables summarize the peak flows and volumes. Note that the post-development model shows that there will be a reduction in runoff peak flow and volume from the subject property toward the City drainage system (via Link 1L) for all storm events reviewed.

Summary Table: Pre-Development Vs Post-Development Peak Flows, 2-yr, 10-yr, 25-yr, 50-yr and 100-yr Storm Events

Discharge Point No.	2-Year Storm		10-Year Storm		25-Year Storm		50-Year Storm		100-Year Storm	
	Pre-Const. Q (cfs)	Post-Const. Q (cfs)	Pre-Const. Q (cfs)	Post-Const. Q (cfs)	Pre-Const. Q (cfs)	Post-Const. Q (cfs)	Pre-Const. Q (cfs)	Post-Const. Q (cfs)	Pre-Const. Q (cfs)	Post-Const. Q (cfs)
Link 1L, (City Drainage System)	0.39	0.31	0.96	0.63	1.47	1.34	1.98	1.90	2.59	2.50

Summary Table: Pre-Development Vs Post-Development Peak Volumes, 2-yr, 10-yr, 25-yr, 50-yr and 100-yr Storm Events

Discharge Point No.	2-Year Storm		10-Year Storm		25-Year Storm		50-Year Storm		100-Year Storm	
	Pre-Const. Vol. (CF)	Post-Const. Vol. (CF)	Pre-Const. Vol. (CF)	Post-Const. Vol. (CF)	Pre-Const. Vol. (CF)	Post-Const. Vol. (CF)	Pre-Const. Vol. (CF)	Post-Const. Vol. (CF)	Pre-Const. Vol. (CF)	Post-Const. Vol. (CF)
Link 1L, to Road	895	658	2,003	1,410	3,009	2,240	4,017	3,082	5,265	4,138

GROUNDWATER RECHARGE

Since the net change in impervious area on the site is minimal (248 SF), we did not prepare formal Groundwater Recharge Volume (GRV) calculations for this project. However, the amount of infiltration provided by the underground chamber system amounts to approximately 1,070 cubic feet (CF) of infiltration into the subsurface, according to the 25-year design storm event results for Node 3P provided in the attached HydroCAD report, which is substantially more than the GRV calculations would require based on the minimal change in impervious area for the site. Therefore, we believe the GRV is clearly being met.

The following supporting documents are attached:

- Extreme Precipitation Table
- WebSoil Survey Soil Map and Report
- WebSoil Survey Map with Hydraulic Conductivity
- Pre-Development HydroCAD Report
- Figure A: Pre-Development (Existing Conditions) Watershed Plan
- Post-Development HydroCAD Report
- Figure B: Post-Development (Proposed Conditions) Watershed Plan
- Stormwater Facilities Inspection and Maintenance Manual

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Metadata for Point

Smoothing	Yes
State	New Hampshire
Location	New Hampshire, United States
Latitude	43.642 degrees North
Longitude	72.252 degrees West
Elevation	170 feet
Date/Time	Mon Mar 17 2025 11:02:11 GMT-0400 (Eastern Daylight Time)

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.66	0.82	1.02	1yr	0.71	0.93	1.17	1.43	1.76	2.15	2.42	1yr	1.90	2.32	2.69	3.30	3.79	1yr
2yr	0.31	0.47	0.59	0.78	0.98	1.22	2yr	0.84	1.11	1.39	1.70	2.07	2.50	2.81	2yr	2.21	2.70	3.15	3.76	4.30	2yr
5yr	0.37	0.57	0.71	0.96	1.22	1.53	5yr	1.06	1.40	1.75	2.13	2.57	3.07	3.47	5yr	2.71	3.34	3.86	4.55	5.17	5yr
10yr	0.41	0.65	0.82	1.11	1.45	1.83	10yr	1.25	1.67	2.09	2.54	3.03	3.58	4.08	10yr	3.17	3.92	4.52	5.25	5.95	10yr
25yr	0.49	0.78	0.99	1.37	1.82	2.30	25yr	1.57	2.11	2.63	3.18	3.77	4.40	5.05	25yr	3.90	4.85	5.55	6.35	7.16	25yr
50yr	0.56	0.90	1.15	1.61	2.16	2.74	50yr	1.86	2.51	3.14	3.78	4.45	5.15	5.93	50yr	4.56	5.71	6.49	7.34	8.23	50yr
100yr	0.63	1.03	1.33	1.88	2.56	3.27	100yr	2.21	3.00	3.75	4.49	5.24	6.02	6.98	100yr	5.33	6.71	7.59	8.49	9.47	100yr
200yr	0.73	1.20	1.55	2.21	3.05	3.90	200yr	2.63	3.58	4.46	5.32	6.18	7.05	8.21	200yr	6.24	7.89	8.89	9.82	10.90	200yr
500yr	0.88	1.45	1.89	2.74	3.84	4.91	500yr	3.31	4.54	5.62	6.66	7.68	8.68	10.18	500yr	7.68	9.79	10.95	11.91	13.14	500yr

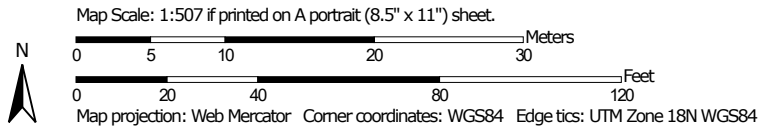
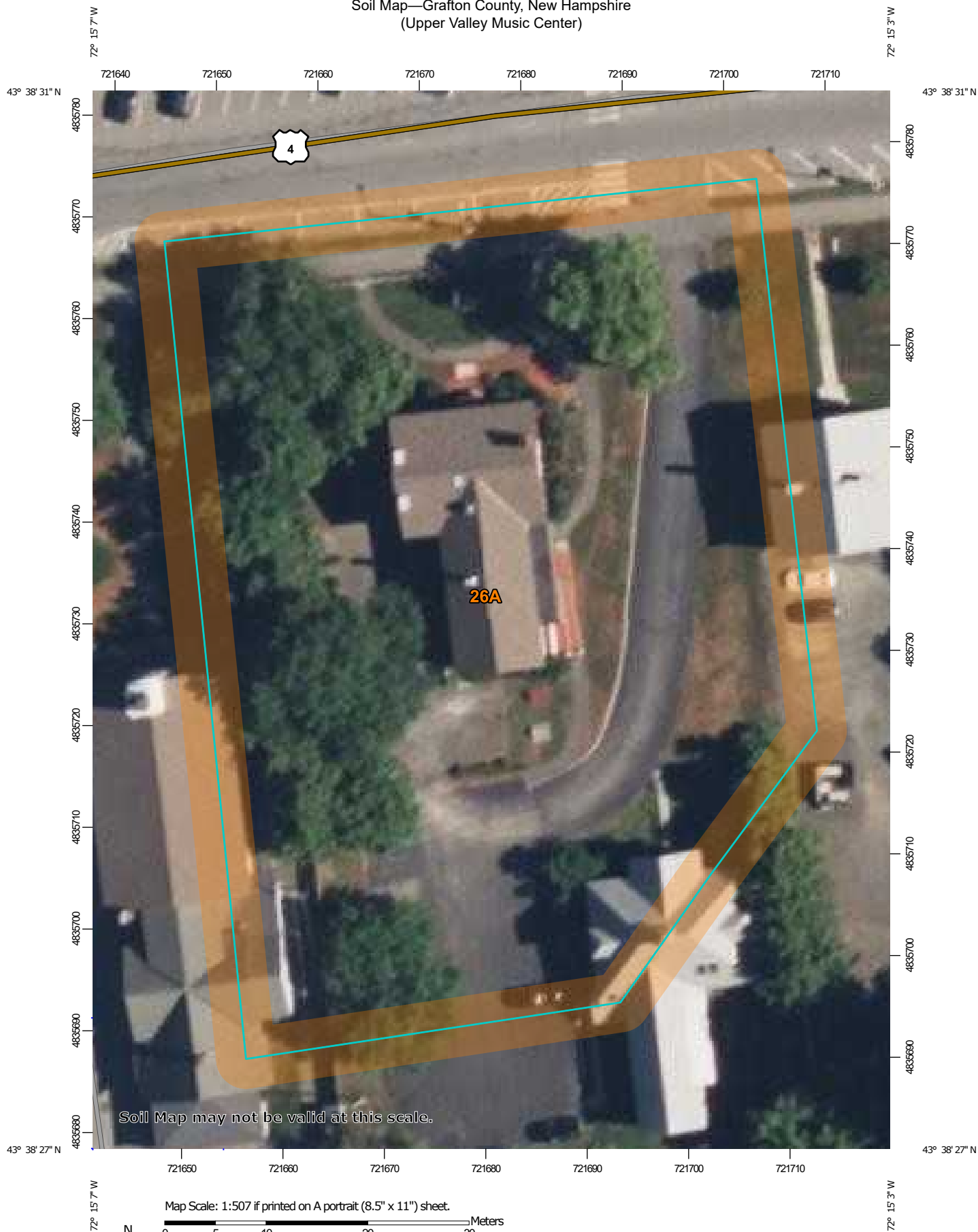
Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.24	0.36	0.44	0.60	0.73	0.82	1yr	0.63	0.80	0.99	1.19	1.59	1.92	2.17	1yr	1.70	2.09	2.44	2.90	3.47	1yr
2yr	0.30	0.46	0.56	0.76	0.94	1.10	2yr	0.81	1.08	1.24	1.62	2.06	2.45	2.75	2yr	2.17	2.65	3.09	3.70	4.22	2yr
5yr	0.34	0.52	0.65	0.89	1.13	1.32	5yr	0.98	1.29	1.49	1.90	2.41	2.90	3.27	5yr	2.57	3.15	3.65	4.29	4.90	5yr
10yr	0.37	0.57	0.71	1.00	1.29	1.49	10yr	1.11	1.46	1.68	2.16	2.70	3.29	3.74	10yr	2.92	3.60	4.14	4.79	5.49	10yr
25yr	0.43	0.65	0.81	1.16	1.53	1.76	25yr	1.32	1.72	1.97	2.52	3.13	3.90	4.46	25yr	3.45	4.29	4.90	5.54	6.35	25yr
50yr	0.47	0.71	0.89	1.27	1.71	1.99	50yr	1.48	1.95	2.20	2.85	3.51	4.43	5.09	50yr	3.92	4.90	5.56	6.16	7.10	50yr
100yr	0.52	0.78	0.98	1.41	1.94	2.24	100yr	1.67	2.19	2.47	3.19	3.94	5.02	5.81	100yr	4.45	5.59	6.31	6.86	7.90	100yr
200yr	0.57	0.85	1.08	1.57	2.19	2.53	200yr	1.89	2.47	2.76	3.60	4.46	5.70	6.64	200yr	5.04	6.38	7.19	7.64	8.81	200yr
500yr	0.65	0.97	1.24	1.80	2.57	2.94	500yr	2.21	2.88	3.18	4.19	5.23	6.75	7.93	500yr	5.98	7.63	8.54	8.77	10.17	500yr

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.29	0.45	0.54	0.73	0.90	1.03	1yr	0.78	1.01	1.19	1.52	1.89	2.32	2.63	1yr	2.05	2.53	2.88	3.52	4.02	1yr
2yr	0.32	0.49	0.61	0.82	1.01	1.19	2yr	0.88	1.17	1.36	1.73	2.18	2.57	2.87	2yr	2.27	2.76	3.23	3.86	4.40	2yr
5yr	0.40	0.61	0.76	1.04	1.33	1.56	5yr	1.15	1.53	1.73	2.16	2.72	3.24	3.66	5yr	2.87	3.52	4.08	4.79	5.45	5yr
10yr	0.48	0.73	0.91	1.27	1.64	1.94	10yr	1.42	1.90	2.14	2.61	3.22	3.88	4.41	10yr	3.43	4.24	4.89	5.65	6.42	10yr
25yr	0.61	0.93	1.16	1.65	2.17	2.60	25yr	1.87	2.55	2.84	3.34	4.05	4.94	5.66	25yr	4.37	5.45	6.20	7.07	7.98	25yr
50yr	0.73	1.12	1.39	2.00	2.69	3.25	50yr	2.32	3.18	3.54	4.02	4.82	5.91	6.84	50yr	5.23	6.57	7.43	8.38	9.44	50yr
100yr	0.89	1.34	1.68	2.43	3.34	4.08	100yr	2.88	3.99	4.42	4.85	5.75	7.09	8.26	100yr	6.28	7.95	8.91	9.94	11.16	100yr
200yr	1.08	1.62	2.05	2.97	4.15	5.11	200yr	3.58	4.99	5.52	5.86	6.86	8.50	9.98	200yr	7.53	9.59	10.69	11.82	13.20	200yr
500yr	1.40	2.08	2.67	3.89	5.52	6.91	500yr	4.77	6.76	7.42	7.52	8.62	10.84	12.82	500yr	9.59	12.33	13.59	14.89	16.51	500yr

Soil Map—Grafton County, New Hampshire
(Upper Valley Music Center)



Soil Map—Grafton County, New Hampshire
(Upper Valley Music Center)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Grafton County, New Hampshire

Survey Area Data: Version 28, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 27, 2020—Sep 16, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
26A	Windsor loamy sand, 0 to 3 percent slopes	1.1	100.0%
Totals for Area of Interest		1.1	100.0%

Saturated Hydraulic Conductivity (Ksat), Standard Classes—Grafton County, New Hampshire
(Upper Valley Music Center)



Saturated Hydraulic Conductivity (Ksat), Standard Classes—Grafton County, New Hampshire
(Upper Valley Music Center)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Very Low (0.0 - 0.01)
-  Low (0.01 - 0.1)
-  Moderately Low (0.1 - 1)
-  Moderately High (1 - 10)
-  High (10 - 100)
-  Very High (100 - 705)
-  Not rated or not available

Soil Rating Lines

-  Very Low (0.0 - 0.01)
-  Low (0.01 - 0.1)
-  Moderately Low (0.1 - 1)
-  Moderately High (1 - 10)
-  High (10 - 100)
-  Very High (100 - 705)
-  Not rated or not available

Soil Rating Points

-  Very Low (0.0 - 0.01)
-  Low (0.01 - 0.1)
-  Moderately Low (0.1 - 1)
-  Moderately High (1 - 10)
-  High (10 - 100)
-  Very High (100 - 705)

 Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Grafton County, New Hampshire
Survey Area Data: Version 28, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 27, 2020—Sep 16, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Saturated Hydraulic Conductivity (Ksat), Standard Classes

Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
26A	Windsor loamy sand, 0 to 3 percent slopes	100.0000	0.9	100.0%
Totals for Area of Interest			0.9	100.0%

Description

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits. The classes are:

Very low: 0.00 to 0.01

Low: 0.01 to 0.1

Moderately low: 0.1 to 1.0

Moderately high: 1 to 10

High: 10 to 100

Very high: 100 to 705

Rating Options

Units of Measure: micrometers per second

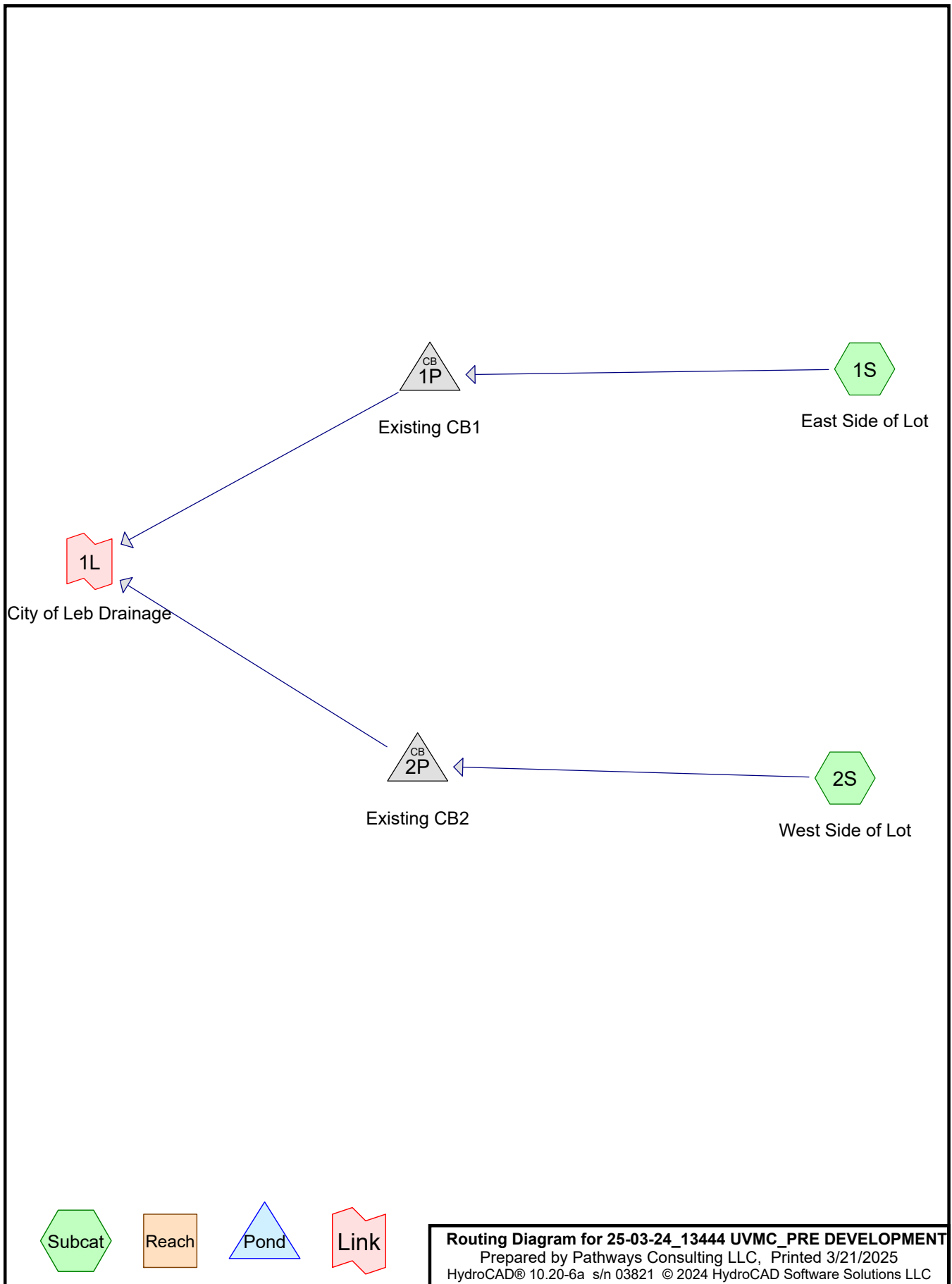
Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Fastest

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): All Layers (Weighted Average)



25-03-24_13444 UVMC_PRE DEVELOPMENT

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Page 2

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2 YR	Type II 24-hr		Default	24.00	1	2.50	2
2	10 YR	Type II 24-hr		Default	24.00	1	3.58	2
3	25 YR	Type II 24-hr		Default	24.00	1	4.40	2
4	50 YR	Type II 24-hr		Default	24.00	1	5.15	2
5	100 YR	Type II 24-hr		Default	24.00	1	6.02	2

25-03-24_13444 UVMC_PRE DEVELOPMENT

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Page 3

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
11,278	39	>75% Grass cover, Good, HSG A (1S, 2S)
220	98	Concrete Pad (2S)
882	98	Existing Roof (2S)
4,500	96	Gravel surface, HSG A (2S)
1,272	98	Roofs, HSG A (1S)
4,910	98	Unconnected pavement, HSG A (1S)
23,062	69	TOTAL AREA

25-03-24_13444 UVMC_PRE DEVELOPMENT

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Page 4

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
21,960	HSG A	1S, 2S
0	HSG B	
0	HSG C	
0	HSG D	
1,102	Other	2S
23,062		TOTAL AREA

25-03-24_13444 UVMC_PRE DEVELOPMENT

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Page 5

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Sub Num
11,278	0	0	0	0	11,278	>75% Grass cover, Good	
0	0	0	0	220	220	Concrete Pad	
0	0	0	0	882	882	Existing Roof	
4,500	0	0	0	0	4,500	Gravel surface	
1,272	0	0	0	0	1,272	Roofs	
4,910	0	0	0	0	4,910	Unconnected pavement	
21,960	0	0	0	1,102	23,062	TOTAL AREA	

25-03-24_13444 UVMC_PRE DEVELOPMENT*Type II 24-hr 2 YR Rainfall=2.50"*

Prepared by Pathways Consulting LLC

Printed 3/21/2025

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Page 6

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: East Side of LotRunoff Area=9,200 sf 67.20% Impervious Runoff Depth=0.84"
Flow Length=123' Tc=6.6 min CN=79 Runoff=0.31 cfs 642 cf**Subcatchment 2S: West Side of Lot**Runoff Area=13,862 sf 7.95% Impervious Runoff Depth=0.22"
Flow Length=227' Tc=4.0 min CN=62 Runoff=0.08 cfs 253 cf**Pond 1P: Existing CB1**Peak Elev=586.89' Inflow=0.31 cfs 642 cf
18.0" Round Culvert n=0.020 L=50.0' S=0.0100 '/' Outflow=0.31 cfs 642 cf**Pond 2P: Existing CB2**Peak Elev=585.86' Inflow=0.08 cfs 253 cf
12.0" Round Culvert n=0.020 L=50.0' S=0.0200 '/' Outflow=0.08 cfs 253 cf**Link 1L: City of Leb Drainage**Inflow=0.39 cfs 895 cf
Primary=0.39 cfs 895 cf**Total Runoff Area = 23,062 sf Runoff Volume = 895 cf Average Runoff Depth = 0.47"**
68.42% Pervious = 15,778 sf 31.58% Impervious = 7,284 sf

Summary for Subcatchment 1S: East Side of Lot

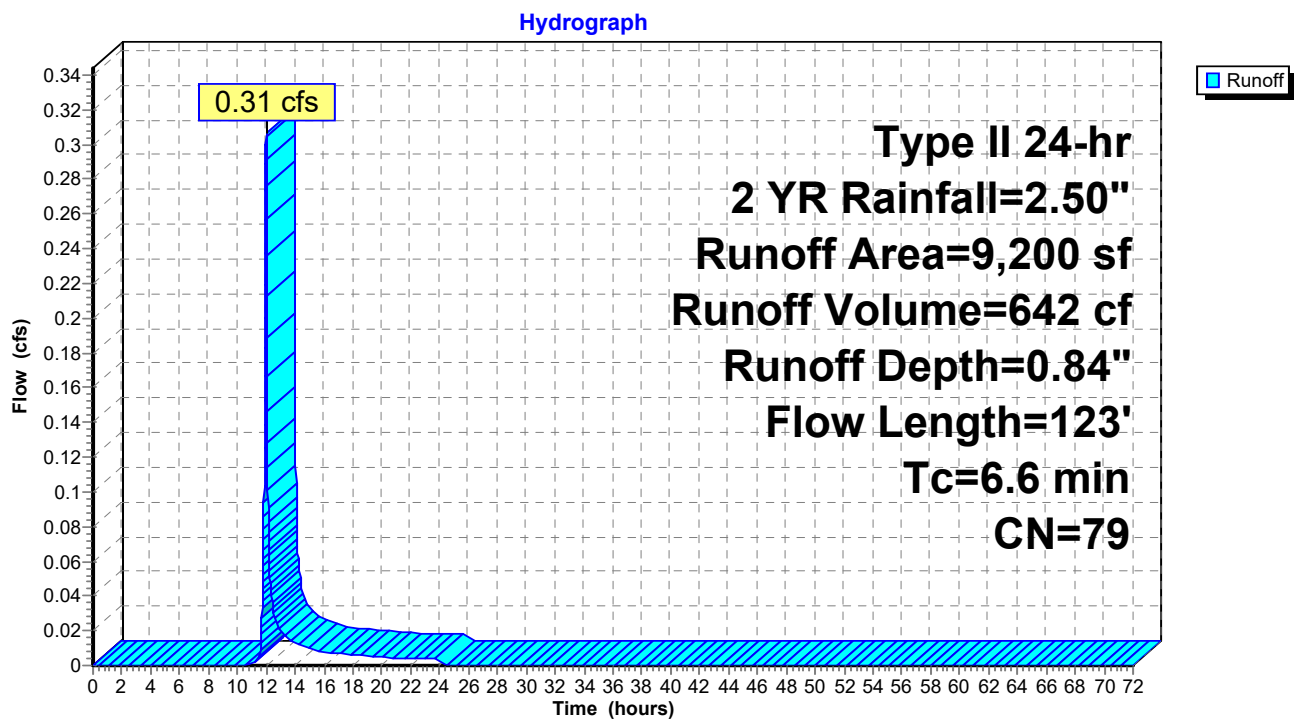
Runoff = 0.31 cfs @ 11.99 hrs, Volume= 642 cf, Depth= 0.84"
 Routed to Pond 1P : Existing CB1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 2 YR Rainfall=2.50"

Area (sf)	CN	Description
4,910	98	Unconnected pavement, HSG A
3,018	39	>75% Grass cover, Good, HSG A
1,272	98	Roofs, HSG A
9,200	79	Weighted Average
3,018		32.80% Pervious Area
6,182		67.20% Impervious Area
4,910		79.42% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0800	1.21		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
6.5	94	0.0680	0.24		Sheet Flow, B-C Grass: Short n= 0.150 P2= 2.50"
0.0	7	0.1300	2.52		Shallow Concentrated Flow, C-D Short Grass Pasture Kv= 7.0 fps
0.0	16	0.1000	6.42		Shallow Concentrated Flow, D-E Paved Kv= 20.3 fps
6.6	123	Total			

Subcatchment 1S: East Side of Lot



Summary for Subcatchment 2S: West Side of Lot

Runoff = 0.08 cfs @ 11.99 hrs, Volume= 253 cf, Depth= 0.22"
Routed to Pond 2P : Existing CB2

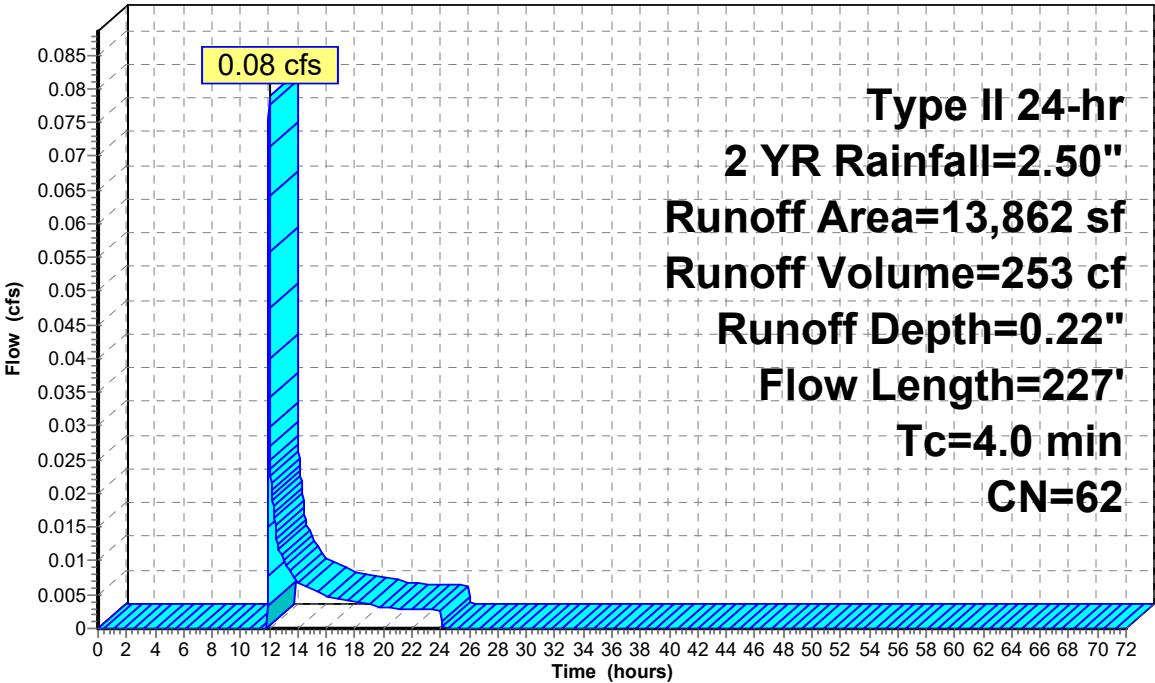
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 2 YR Rainfall=2.50"

	Area (sf)	CN	Description
	4,500	96	Gravel surface, HSG A
*	882	98	Existing Roof
	8,260	39	>75% Grass cover, Good, HSG A
*	220	98	Concrete Pad
	13,862	62	Weighted Average
	12,760		92.05% Pervious Area
	1,102		7.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	125	0.0250	1.39		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
0.9	102	0.0680	1.83		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
2.4	227	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 2S: West Side of Lot

Hydrograph



Runoff

Summary for Pond 1P: Existing CB1

Inflow Area = 9,200 sf, 67.20% Impervious, Inflow Depth = 0.84" for 2 YR event
 Inflow = 0.31 cfs @ 11.99 hrs, Volume= 642 cf
 Outflow = 0.31 cfs @ 11.99 hrs, Volume= 642 cf, Atten= 0%, Lag= 0.0 min
 Primary = 0.31 cfs @ 11.99 hrs, Volume= 642 cf
 Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 586.89' @ 11.99 hrs

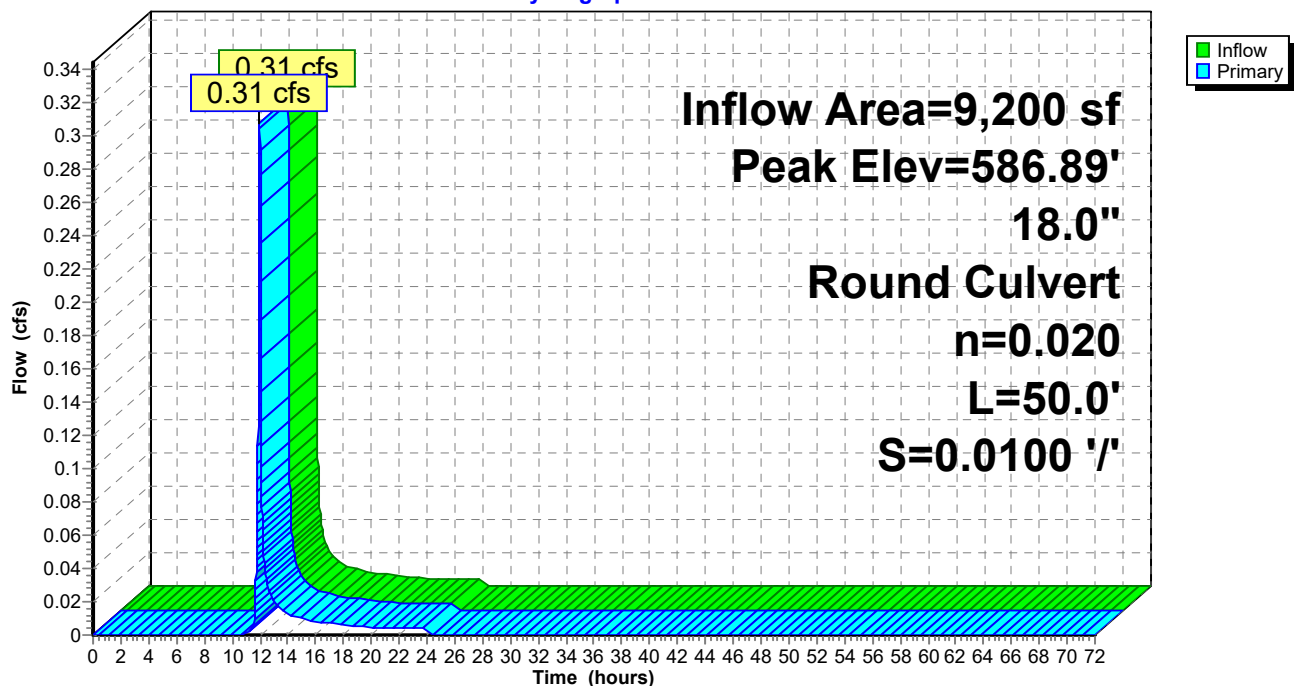
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.60'	18.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 586.60' / 586.10' S= 0.0100 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 1.77 sf

Primary OutFlow Max=0.31 cfs @ 11.99 hrs HW=586.89' TW=0.00' (Dynamic Tailwater)
 ↑ **1=Culvert** (Barrel Controls 0.31 cfs @ 1.89 fps)

Pond 1P: Existing CB1

Hydrograph



Summary for Pond 2P: Existing CB2

Inflow Area = 13,862 sf, 7.95% Impervious, Inflow Depth = 0.22" for 2 YR event
Inflow = 0.08 cfs @ 11.99 hrs, Volume= 253 cf
Outflow = 0.08 cfs @ 11.99 hrs, Volume= 253 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.08 cfs @ 11.99 hrs, Volume= 253 cf
Routed to Link 1L : City of Leb Drainage

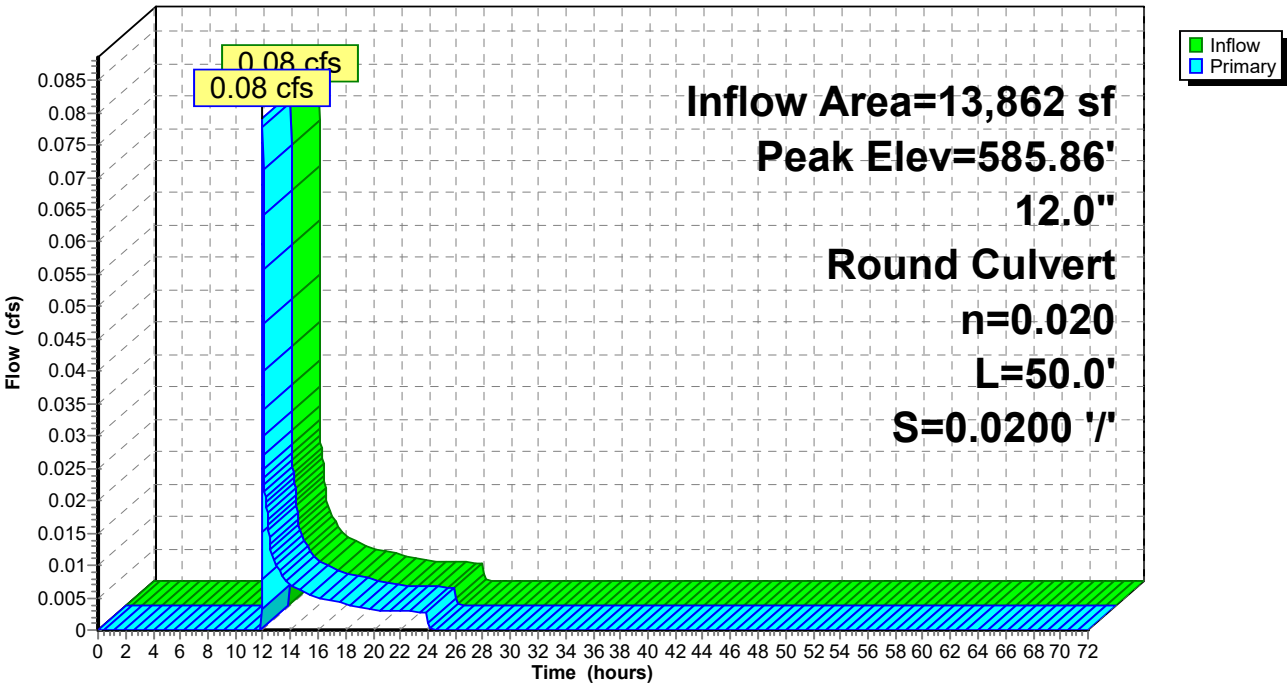
Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 585.86' @ 11.99 hrs
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	585.70'	12.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 585.70' / 584.70' S= 0.0200 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.08 cfs @ 11.99 hrs HW=585.86' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 0.08 cfs @ 1.01 fps)

Pond 2P: Existing CB2

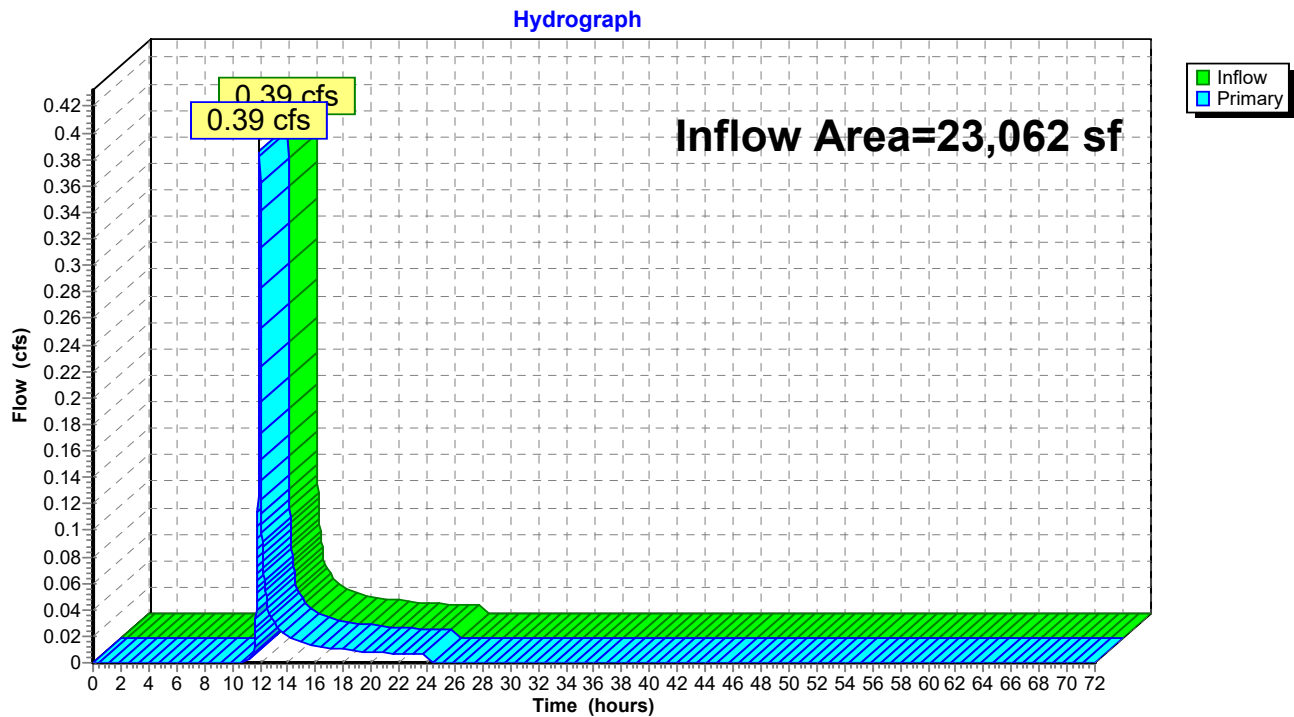
Hydrograph



Summary for Link 1L: City of Leb Drainage

Inflow Area = 23,062 sf, 31.58% Impervious, Inflow Depth = 0.47" for 2 YR event
Inflow = 0.39 cfs @ 11.99 hrs, Volume= 895 cf
Primary = 0.39 cfs @ 11.99 hrs, Volume= 895 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link 1L: City of Leb Drainage

25-03-24_13444 UVMC_PRE DEVELOPMENT*Type II 24-hr 10 YR Rainfall=3.58"*

Prepared by Pathways Consulting LLC

Printed 3/21/2025

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Page 13

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: East Side of LotRunoff Area=9,200 sf 67.20% Impervious Runoff Depth=1.63"
Flow Length=123' Tc=6.6 min CN=79 Runoff=0.60 cfs 1,248 cf**Subcatchment 2S: West Side of Lot**Runoff Area=13,862 sf 7.95% Impervious Runoff Depth=0.65"
Flow Length=227' Tc=4.0 min CN=62 Runoff=0.36 cfs 755 cf**Pond 1P: Existing CB1**Peak Elev=587.01' Inflow=0.60 cfs 1,248 cf
18.0" Round Culvert n=0.020 L=50.0' S=0.0100 '/' Outflow=0.60 cfs 1,248 cf**Pond 2P: Existing CB2**Peak Elev=586.05' Inflow=0.36 cfs 755 cf
12.0" Round Culvert n=0.020 L=50.0' S=0.0200 '/' Outflow=0.36 cfs 755 cf**Link 1L: City of Leb Drainage**Inflow=0.96 cfs 2,003 cf
Primary=0.96 cfs 2,003 cf**Total Runoff Area = 23,062 sf Runoff Volume = 2,003 cf Average Runoff Depth = 1.04"**
68.42% Pervious = 15,778 sf 31.58% Impervious = 7,284 sf

Summary for Subcatchment 1S: East Side of Lot

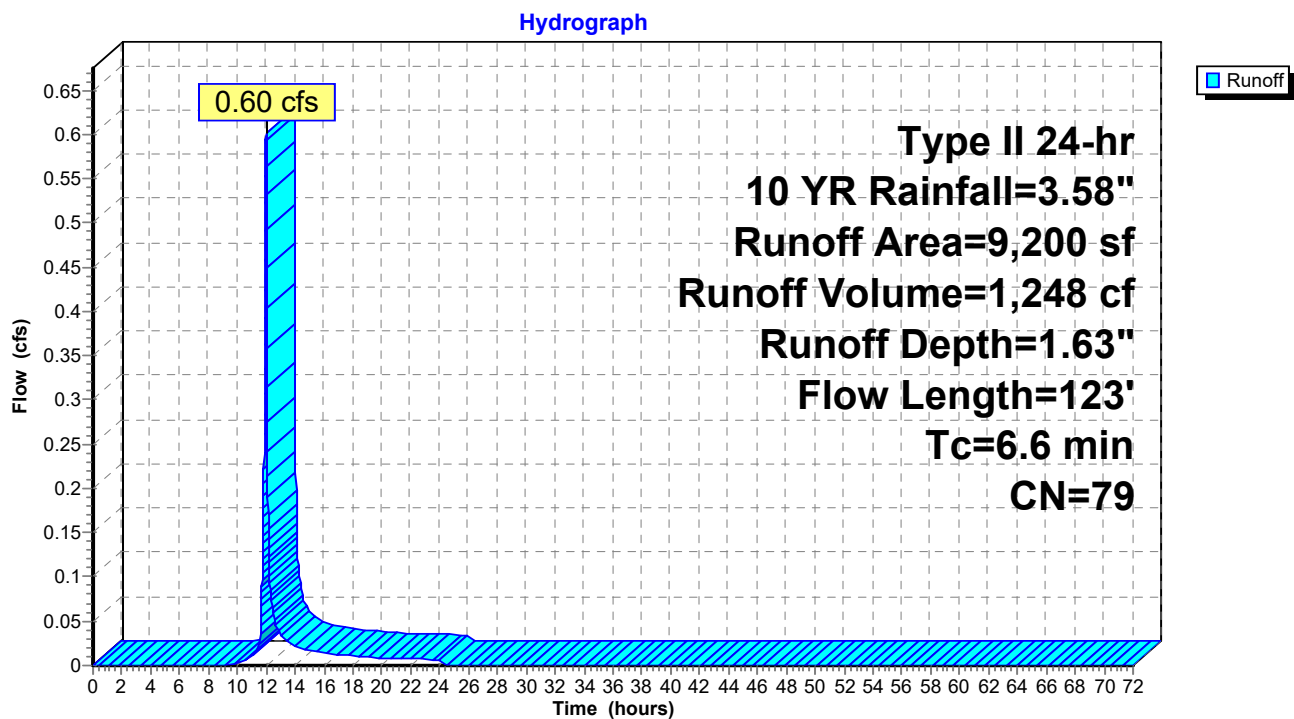
Runoff = 0.60 cfs @ 11.98 hrs, Volume= 1,248 cf, Depth= 1.63"
 Routed to Pond 1P : Existing CB1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 10 YR Rainfall=3.58"

Area (sf)	CN	Description
4,910	98	Unconnected pavement, HSG A
3,018	39	>75% Grass cover, Good, HSG A
1,272	98	Roofs, HSG A
9,200	79	Weighted Average
3,018		32.80% Pervious Area
6,182		67.20% Impervious Area
4,910		79.42% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0800	1.21		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
6.5	94	0.0680	0.24		Sheet Flow, B-C Grass: Short n= 0.150 P2= 2.50"
0.0	7	0.1300	2.52		Shallow Concentrated Flow, C-D Short Grass Pasture Kv= 7.0 fps
0.0	16	0.1000	6.42		Shallow Concentrated Flow, D-E Paved Kv= 20.3 fps
6.6	123	Total			

Subcatchment 1S: East Side of Lot



Summary for Subcatchment 2S: West Side of Lot

Runoff = 0.36 cfs @ 11.96 hrs, Volume= 755 cf, Depth= 0.65"
 Routed to Pond 2P : Existing CB2

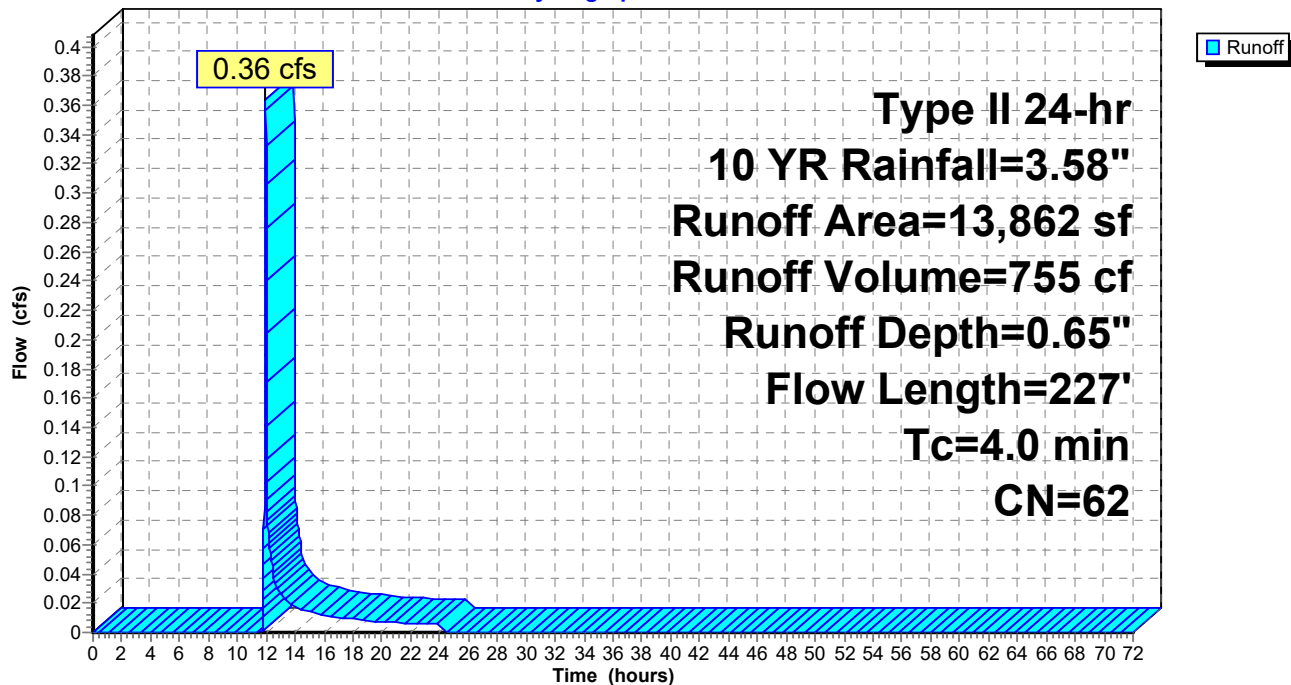
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 10 YR Rainfall=3.58"

Area (sf)	CN	Description
4,500	96	Gravel surface, HSG A
* 882	98	Existing Roof
8,260	39	>75% Grass cover, Good, HSG A
* 220	98	Concrete Pad
13,862	62	Weighted Average
12,760		92.05% Pervious Area
1,102		7.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	125	0.0250	1.39		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
0.9	102	0.0680	1.83		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
2.4	227	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 2S: West Side of Lot

Hydrograph



Summary for Pond 1P: Existing CB1

Inflow Area = 9,200 sf, 67.20% Impervious, Inflow Depth = 1.63" for 10 YR event
 Inflow = 0.60 cfs @ 11.98 hrs, Volume= 1,248 cf
 Outflow = 0.60 cfs @ 11.98 hrs, Volume= 1,248 cf, Atten= 0%, Lag= 0.0 min
 Primary = 0.60 cfs @ 11.98 hrs, Volume= 1,248 cf
 Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 587.01' @ 11.98 hrs

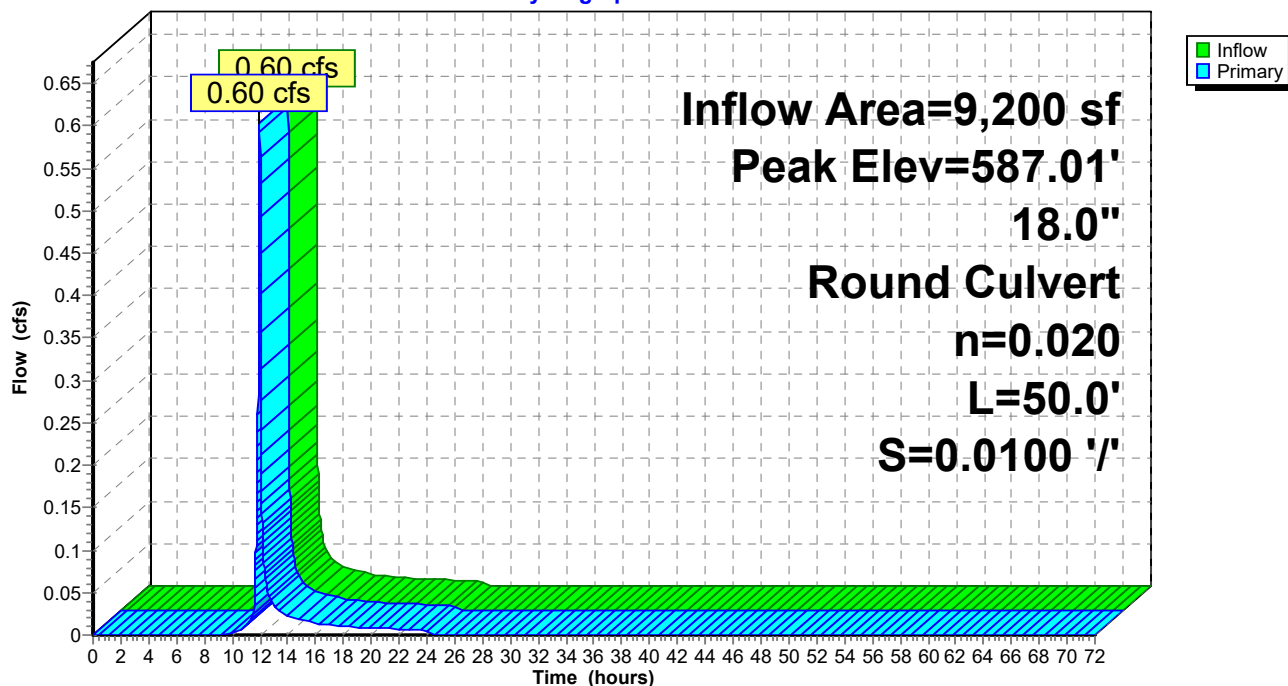
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.60'	18.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 586.60' / 586.10' S= 0.0100 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 1.77 sf

Primary OutFlow Max=0.60 cfs @ 11.98 hrs HW=587.01' TW=0.00' (Dynamic Tailwater)
 1=Culvert (Barrel Controls 0.60 cfs @ 2.28 fps)

Pond 1P: Existing CB1

Hydrograph



Summary for Pond 2P: Existing CB2

Inflow Area = 13,862 sf, 7.95% Impervious, Inflow Depth = 0.65" for 10 YR event
 Inflow = 0.36 cfs @ 11.96 hrs, Volume= 755 cf
 Outflow = 0.36 cfs @ 11.96 hrs, Volume= 755 cf, Atten= 0%, Lag= 0.0 min
 Primary = 0.36 cfs @ 11.96 hrs, Volume= 755 cf
 Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 586.05' @ 11.96 hrs

Flood Elev= 591.10'

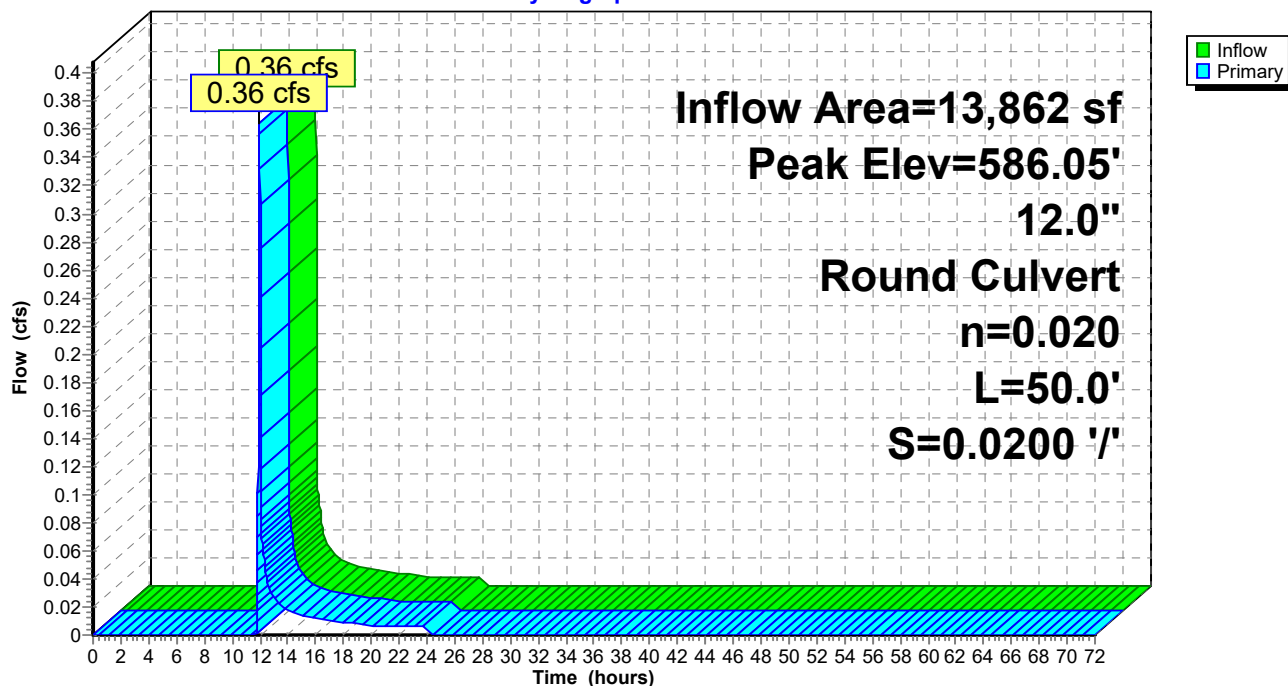
Device	Routing	Invert	Outlet Devices
#1	Primary	585.70'	12.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 585.70' / 584.70' S= 0.0200 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.36 cfs @ 11.96 hrs HW=586.05' TW=0.00' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 0.36 cfs @ 1.50 fps)

Pond 2P: Existing CB2

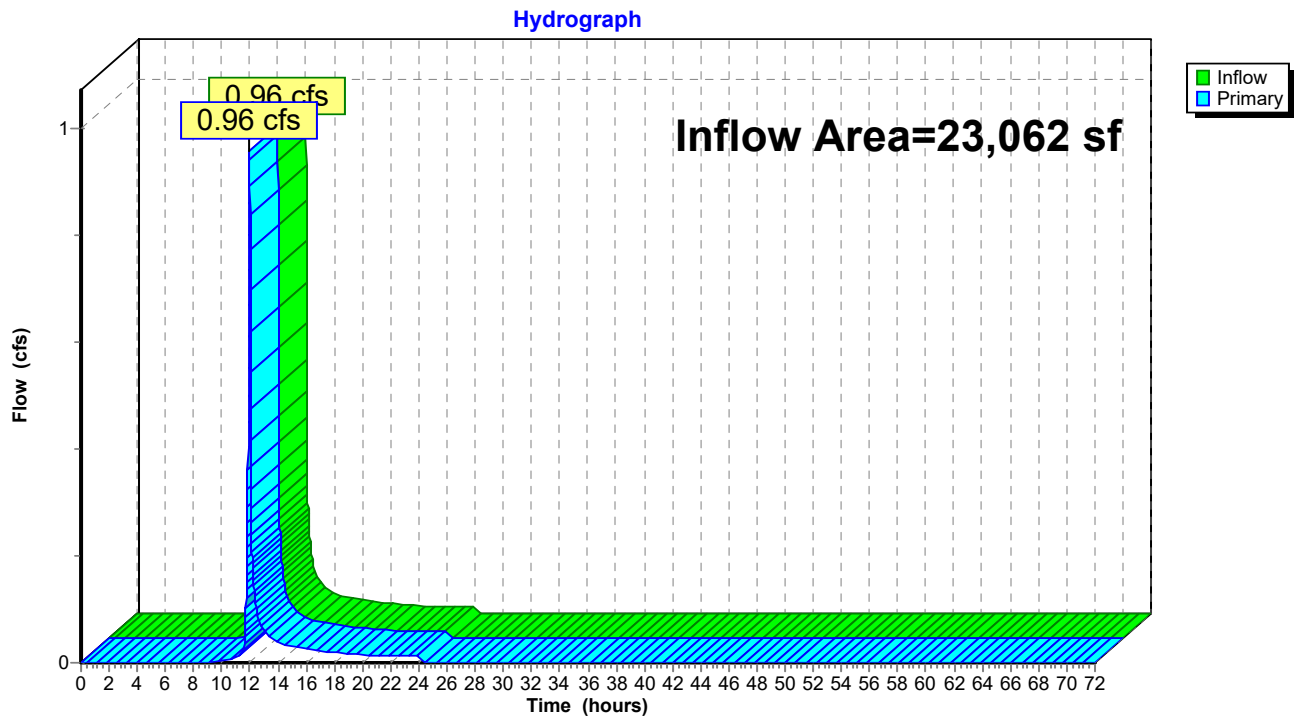
Hydrograph



Summary for Link 1L: City of Leb Drainage

Inflow Area = 23,062 sf, 31.58% Impervious, Inflow Depth = 1.04" for 10 YR event
Inflow = 0.96 cfs @ 11.97 hrs, Volume= 2,003 cf
Primary = 0.96 cfs @ 11.97 hrs, Volume= 2,003 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link 1L: City of Leb Drainage

25-03-24_13444 UVMC_PRE DEVELOPMENT*Type II 24-hr 25 YR Rainfall=4.40"*

Prepared by Pathways Consulting LLC

Printed 3/21/2025

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Page 20

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: East Side of LotRunoff Area=9,200 sf 67.20% Impervious Runoff Depth=2.29"
Flow Length=123' Tc=6.6 min CN=79 Runoff=0.84 cfs 1,758 cf**Subcatchment 2S: West Side of Lot**Runoff Area=13,862 sf 7.95% Impervious Runoff Depth=1.08"
Flow Length=227' Tc=4.0 min CN=62 Runoff=0.64 cfs 1,251 cf**Pond 1P: Existing CB1**Peak Elev=587.09' Inflow=0.84 cfs 1,758 cf
18.0" Round Culvert n=0.020 L=50.0' S=0.0100 '/' Outflow=0.84 cfs 1,758 cf**Pond 2P: Existing CB2**Peak Elev=586.17' Inflow=0.64 cfs 1,251 cf
12.0" Round Culvert n=0.020 L=50.0' S=0.0200 '/' Outflow=0.64 cfs 1,251 cf**Link 1L: City of Leb Drainage**Inflow=1.47 cfs 3,009 cf
Primary=1.47 cfs 3,009 cf**Total Runoff Area = 23,062 sf Runoff Volume = 3,009 cf Average Runoff Depth = 1.57"**
68.42% Pervious = 15,778 sf 31.58% Impervious = 7,284 sf

Summary for Subcatchment 1S: East Side of Lot

Runoff = 0.84 cfs @ 11.98 hrs, Volume= 1,758 cf, Depth= 2.29"
 Routed to Pond 1P : Existing CB1

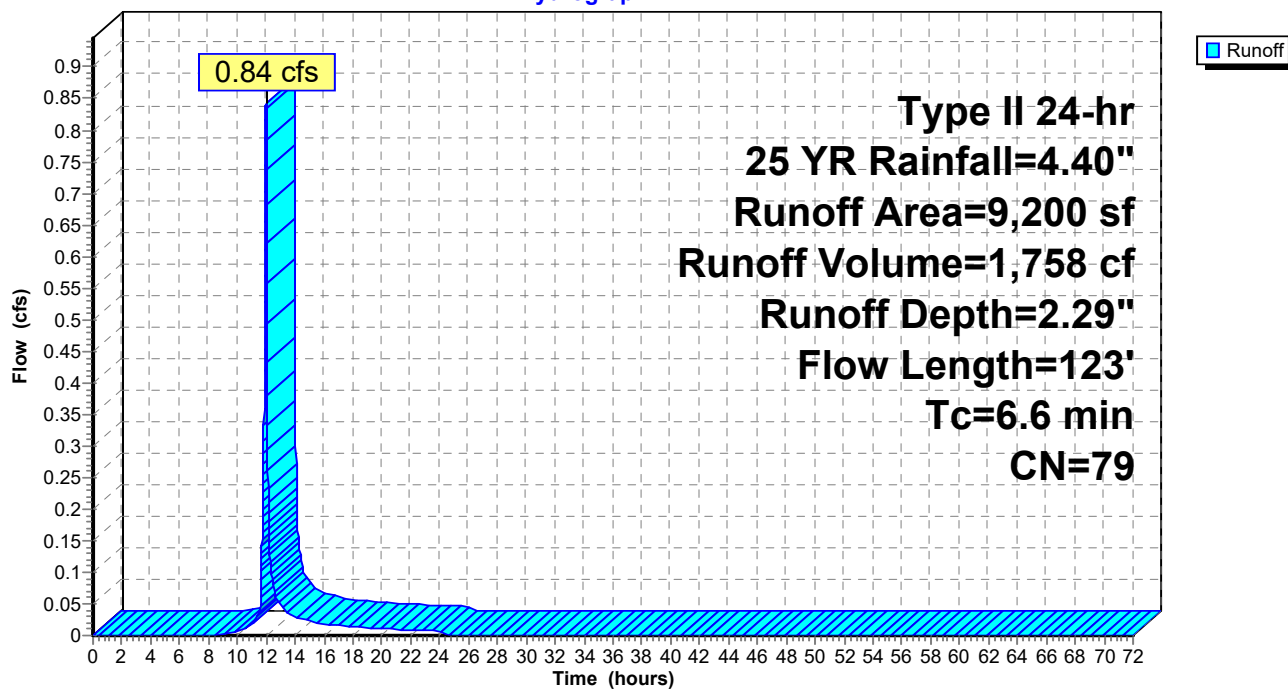
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 25 YR Rainfall=4.40"

Area (sf)	CN	Description
4,910	98	Unconnected pavement, HSG A
3,018	39	>75% Grass cover, Good, HSG A
1,272	98	Roofs, HSG A
9,200	79	Weighted Average
3,018		32.80% Pervious Area
6,182		67.20% Impervious Area
4,910		79.42% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0800	1.21		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
6.5	94	0.0680	0.24		Sheet Flow, B-C Grass: Short n= 0.150 P2= 2.50"
0.0	7	0.1300	2.52		Shallow Concentrated Flow, C-D Short Grass Pasture Kv= 7.0 fps
0.0	16	0.1000	6.42		Shallow Concentrated Flow, D-E Paved Kv= 20.3 fps
6.6	123	Total			

Subcatchment 1S: East Side of Lot

Hydrograph



Summary for Subcatchment 2S: West Side of Lot

Runoff = 0.64 cfs @ 11.96 hrs, Volume= 1,251 cf, Depth= 1.08"
 Routed to Pond 2P : Existing CB2

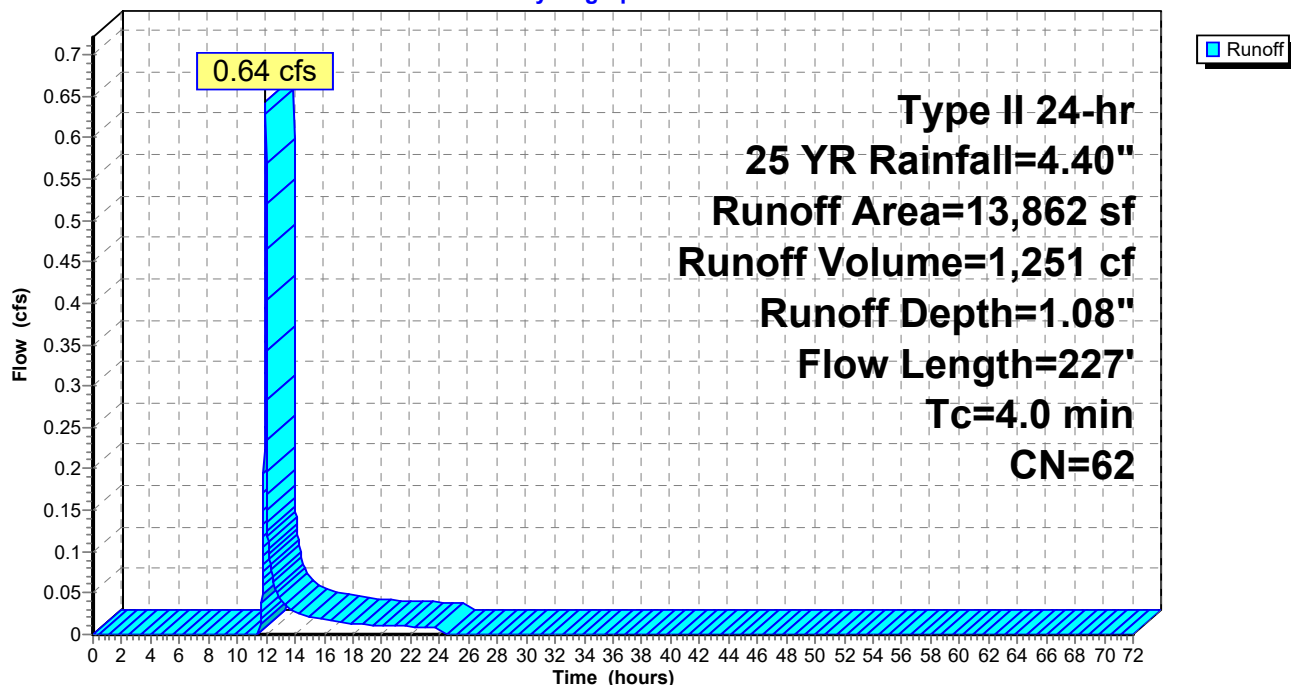
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 25 YR Rainfall=4.40"

Area (sf)	CN	Description
4,500	96	Gravel surface, HSG A
* 882	98	Existing Roof
8,260	39	>75% Grass cover, Good, HSG A
* 220	98	Concrete Pad
13,862	62	Weighted Average
12,760		92.05% Pervious Area
1,102		7.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	125	0.0250	1.39		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
0.9	102	0.0680	1.83		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
2.4	227	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 2S: West Side of Lot

Hydrograph



Summary for Pond 1P: Existing CB1

Inflow Area = 9,200 sf, 67.20% Impervious, Inflow Depth = 2.29" for 25 YR event
 Inflow = 0.84 cfs @ 11.98 hrs, Volume= 1,758 cf
 Outflow = 0.84 cfs @ 11.98 hrs, Volume= 1,758 cf, Atten= 0%, Lag= 0.0 min
 Primary = 0.84 cfs @ 11.98 hrs, Volume= 1,758 cf
 Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 587.09' @ 11.98 hrs

Flood Elev= 591.10'

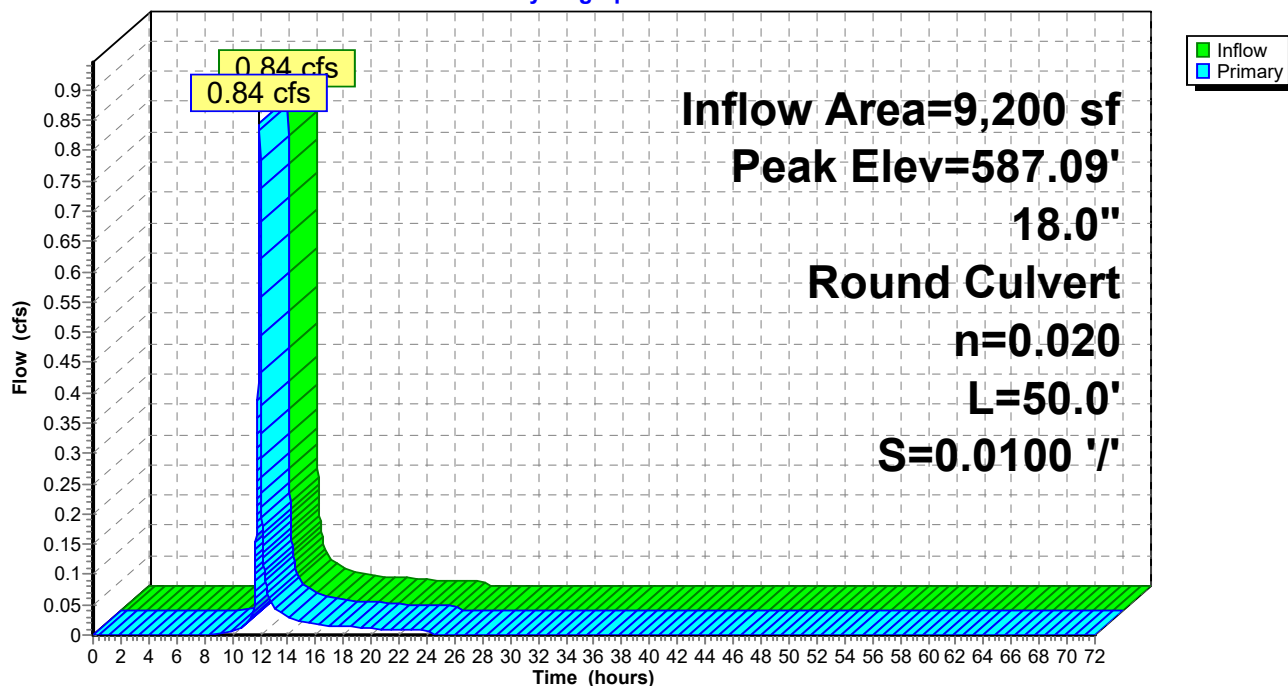
Device	Routing	Invert	Outlet Devices
#1	Primary	586.60'	18.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 586.60' / 586.10' S= 0.0100 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 1.77 sf

Primary OutFlow Max=0.84 cfs @ 11.98 hrs HW=587.09' TW=0.00' (Dynamic Tailwater)

↑1=Culvert (Barrel Controls 0.84 cfs @ 2.49 fps)

Pond 1P: Existing CB1

Hydrograph



Summary for Pond 2P: Existing CB2

Inflow Area = 13,862 sf, 7.95% Impervious, Inflow Depth = 1.08" for 25 YR event
 Inflow = 0.64 cfs @ 11.96 hrs, Volume= 1,251 cf
 Outflow = 0.64 cfs @ 11.96 hrs, Volume= 1,251 cf, Atten= 0%, Lag= 0.0 min
 Primary = 0.64 cfs @ 11.96 hrs, Volume= 1,251 cf
 Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 586.17' @ 11.96 hrs

Flood Elev= 591.10'

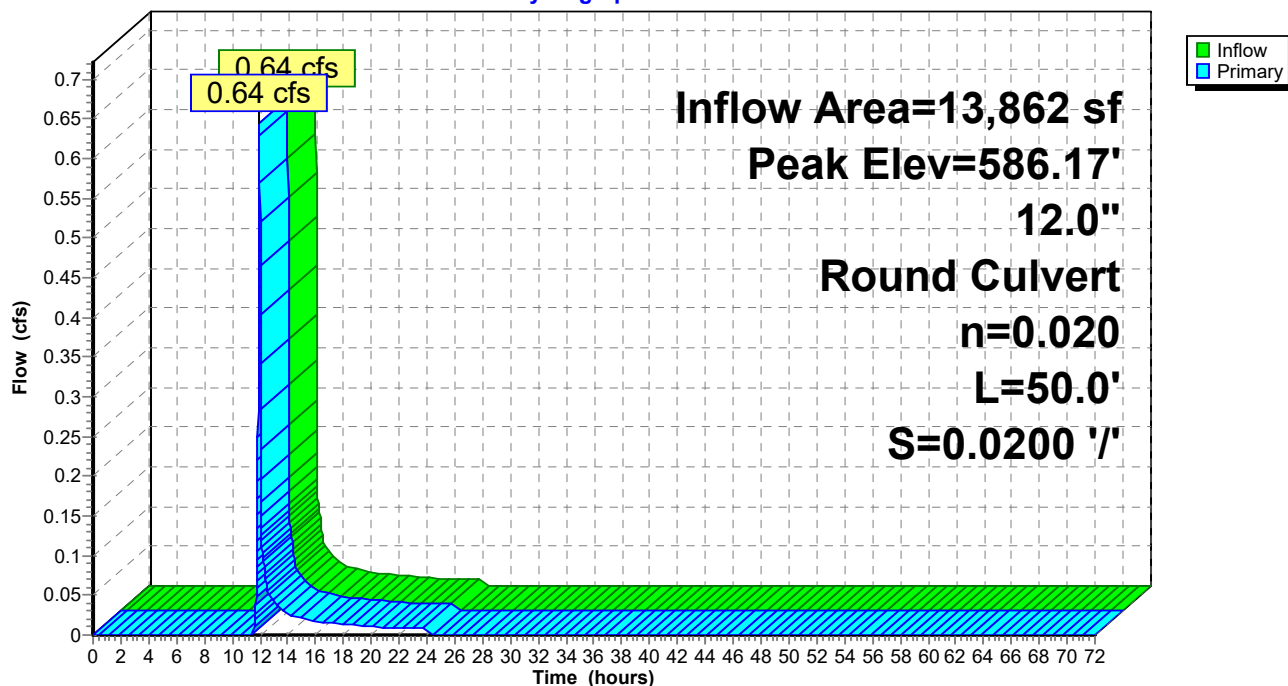
Device	Routing	Invert	Outlet Devices
#1	Primary	585.70'	12.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 585.70' / 584.70' S= 0.0200 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.64 cfs @ 11.96 hrs HW=586.17' TW=0.00' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 0.64 cfs @ 1.76 fps)

Pond 2P: Existing CB2

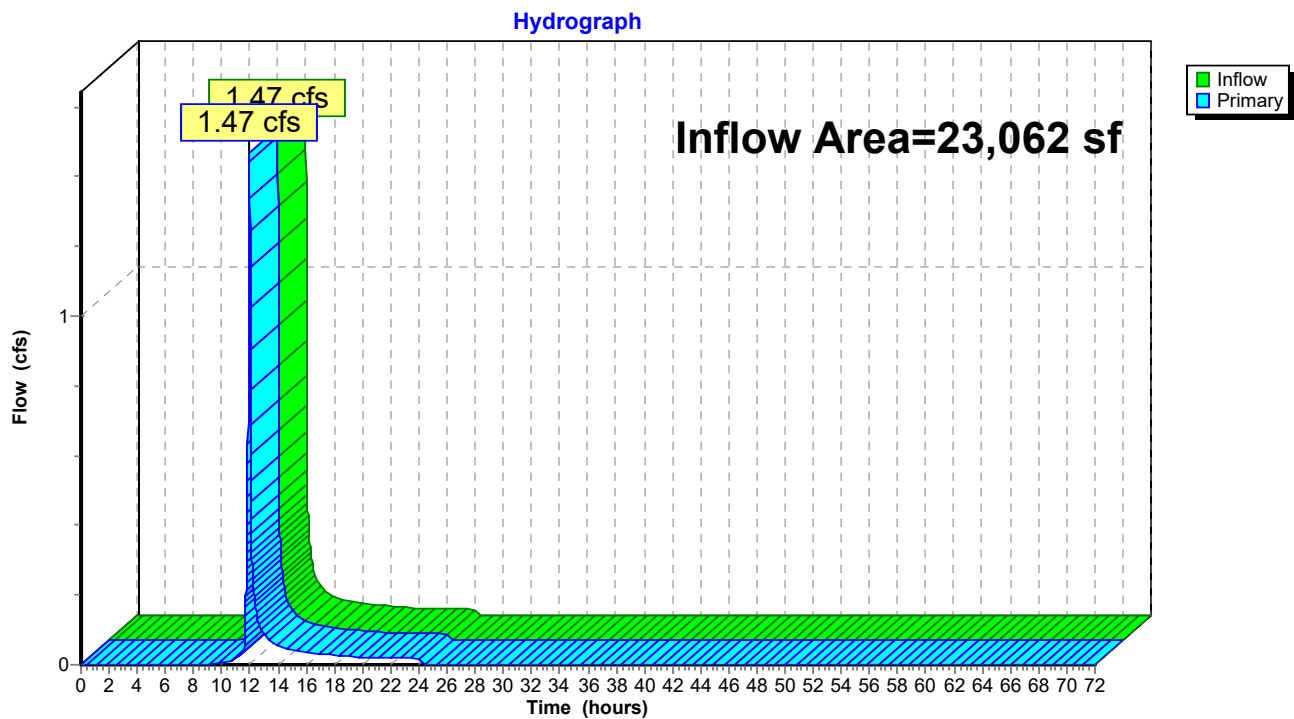
Hydrograph



Summary for Link 1L: City of Leb Drainage

Inflow Area = 23,062 sf, 31.58% Impervious, Inflow Depth = 1.57" for 25 YR event
Inflow = 1.47 cfs @ 11.97 hrs, Volume= 3,009 cf
Primary = 1.47 cfs @ 11.97 hrs, Volume= 3,009 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link 1L: City of Leb Drainage

25-03-24_13444 UVMC_PRE DEVELOPMENT*Type II 24-hr 50 YR Rainfall=5.15"*

Prepared by Pathways Consulting LLC

Printed 3/21/2025

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Page 27

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: East Side of LotRunoff Area=9,200 sf 67.20% Impervious Runoff Depth=2.93"
Flow Length=123' Tc=6.6 min CN=79 Runoff=1.07 cfs 2,247 cf**Subcatchment 2S: West Side of Lot**Runoff Area=13,862 sf 7.95% Impervious Runoff Depth=1.53"
Flow Length=227' Tc=4.0 min CN=62 Runoff=0.93 cfs 1,769 cf**Pond 1P: Existing CB1**Peak Elev=587.16' Inflow=1.07 cfs 2,247 cf
18.0" Round Culvert n=0.020 L=50.0' S=0.0100 '/' Outflow=1.07 cfs 2,247 cf**Pond 2P: Existing CB2**Peak Elev=586.28' Inflow=0.93 cfs 1,769 cf
12.0" Round Culvert n=0.020 L=50.0' S=0.0200 '/' Outflow=0.93 cfs 1,769 cf**Link 1L: City of Leb Drainage**Inflow=1.98 cfs 4,017 cf
Primary=1.98 cfs 4,017 cf**Total Runoff Area = 23,062 sf Runoff Volume = 4,017 cf Average Runoff Depth = 2.09"**
68.42% Pervious = 15,778 sf 31.58% Impervious = 7,284 sf

Summary for Subcatchment 1S: East Side of Lot

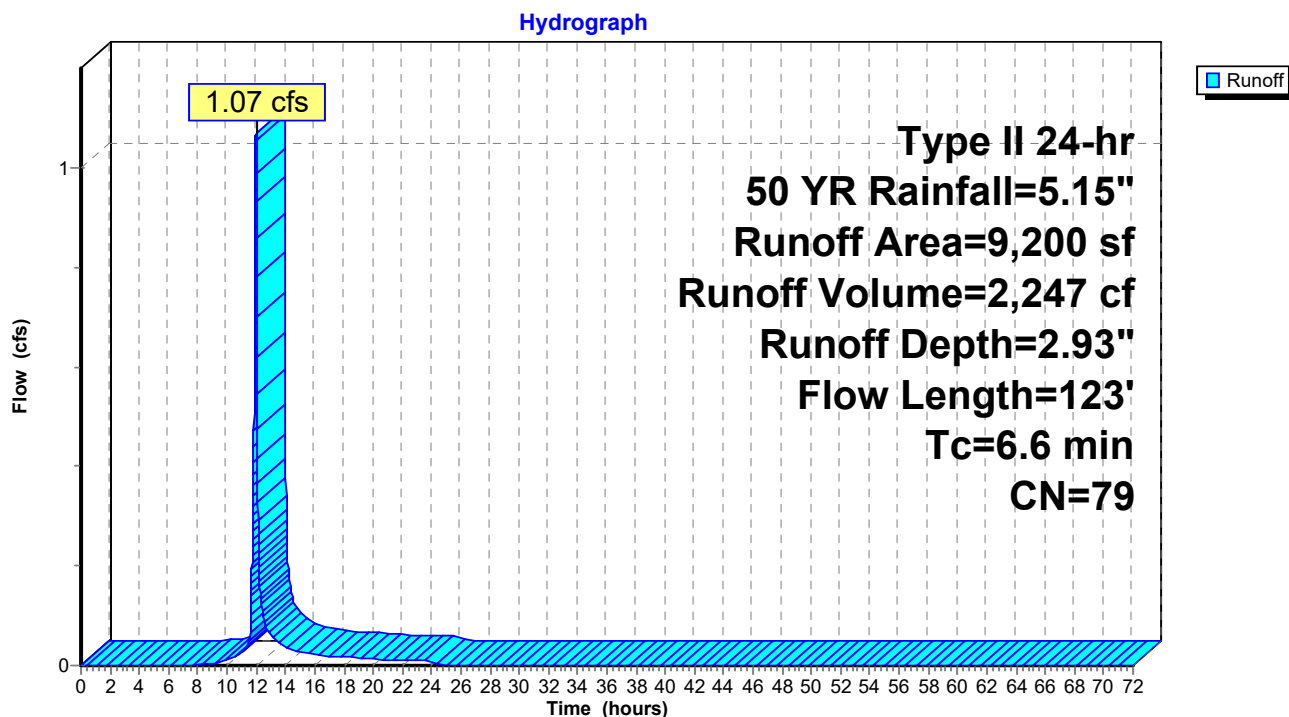
Runoff = 1.07 cfs @ 11.98 hrs, Volume= 2,247 cf, Depth= 2.93"
 Routed to Pond 1P : Existing CB1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 50 YR Rainfall=5.15"

Area (sf)	CN	Description
4,910	98	Unconnected pavement, HSG A
3,018	39	>75% Grass cover, Good, HSG A
1,272	98	Roofs, HSG A
9,200	79	Weighted Average
3,018		32.80% Pervious Area
6,182		67.20% Impervious Area
4,910		79.42% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0800	1.21		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
6.5	94	0.0680	0.24		Sheet Flow, B-C Grass: Short n= 0.150 P2= 2.50"
0.0	7	0.1300	2.52		Shallow Concentrated Flow, C-D Short Grass Pasture Kv= 7.0 fps
0.0	16	0.1000	6.42		Shallow Concentrated Flow, D-E Paved Kv= 20.3 fps
6.6	123	Total			

Subcatchment 1S: East Side of Lot



Summary for Subcatchment 2S: West Side of Lot

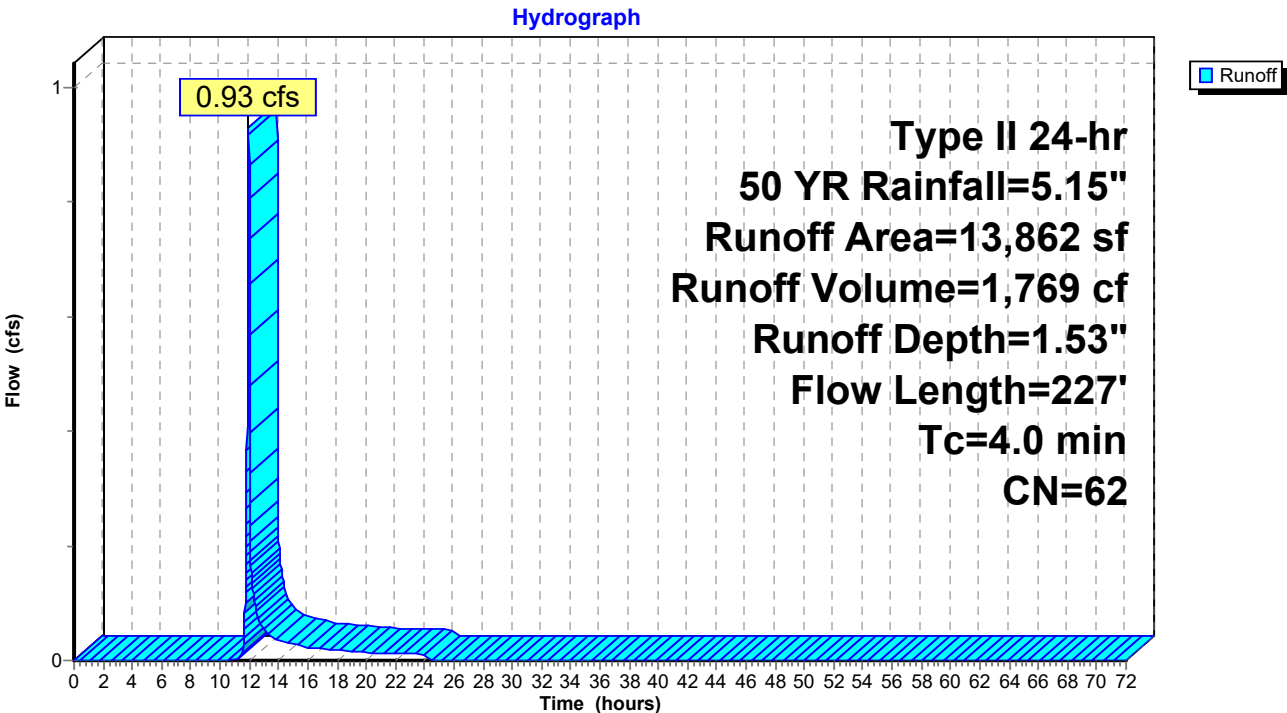
Runoff = 0.93 cfs @ 11.96 hrs, Volume= 1,769 cf, Depth= 1.53"
Routed to Pond 2P : Existing CB2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 50 YR Rainfall=5.15"

Area (sf)	CN	Description
4,500	96	Gravel surface, HSG A
* 882	98	Existing Roof
8,260	39	>75% Grass cover, Good, HSG A
* 220	98	Concrete Pad
13,862	62	Weighted Average
12,760		92.05% Pervious Area
1,102		7.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	125	0.0250	1.39		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
0.9	102	0.0680	1.83		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
2.4	227	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 2S: West Side of Lot



Summary for Pond 1P: Existing CB1

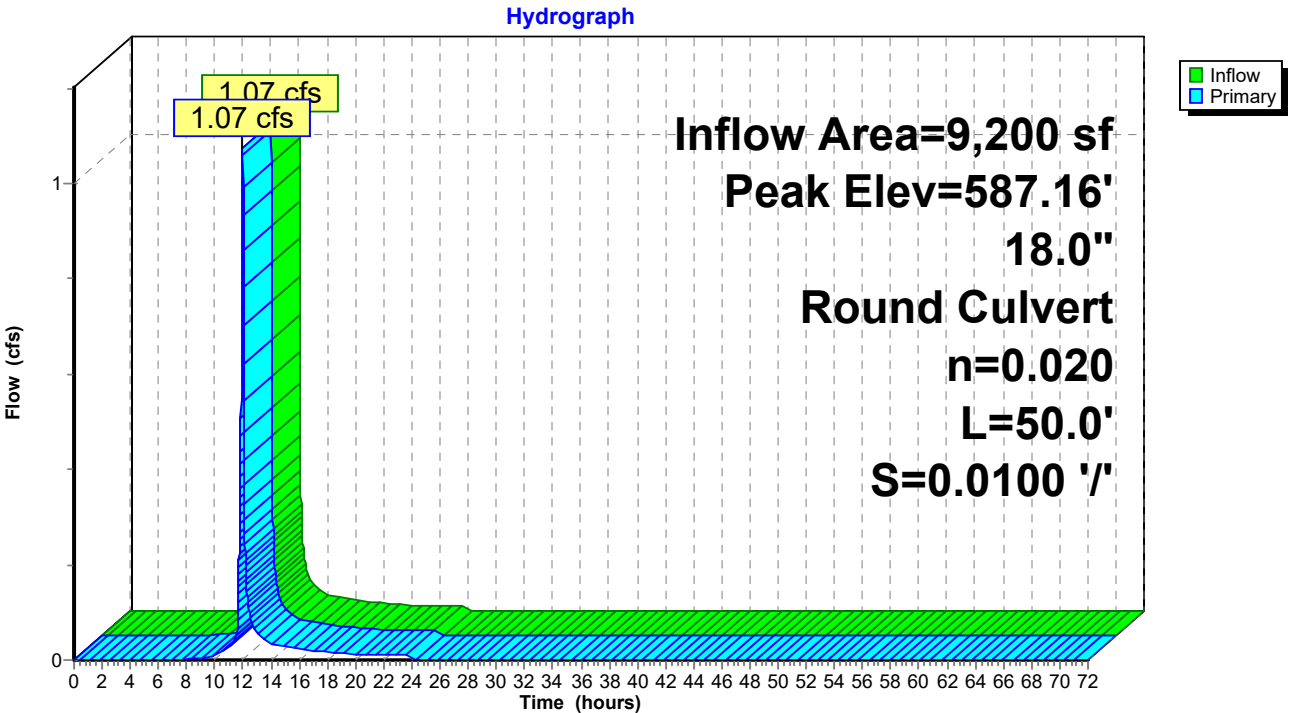
Inflow Area = 9,200 sf, 67.20% Impervious, Inflow Depth = 2.93" for 50 YR event
Inflow = 1.07 cfs @ 11.98 hrs, Volume= 2,247 cf
Outflow = 1.07 cfs @ 11.98 hrs, Volume= 2,247 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.07 cfs @ 11.98 hrs, Volume= 2,247 cf
Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 587.16' @ 11.98 hrs
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.60'	18.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 586.60' / 586.10' S= 0.0100 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 1.77 sf

Primary OutFlow Max=1.07 cfs @ 11.98 hrs HW=587.16' TW=0.00' (Dynamic Tailwater)
1=Culvert (Barrel Controls 1.07 cfs @ 2.65 fps)

Pond 1P: Existing CB1



Summary for Pond 2P: Existing CB2

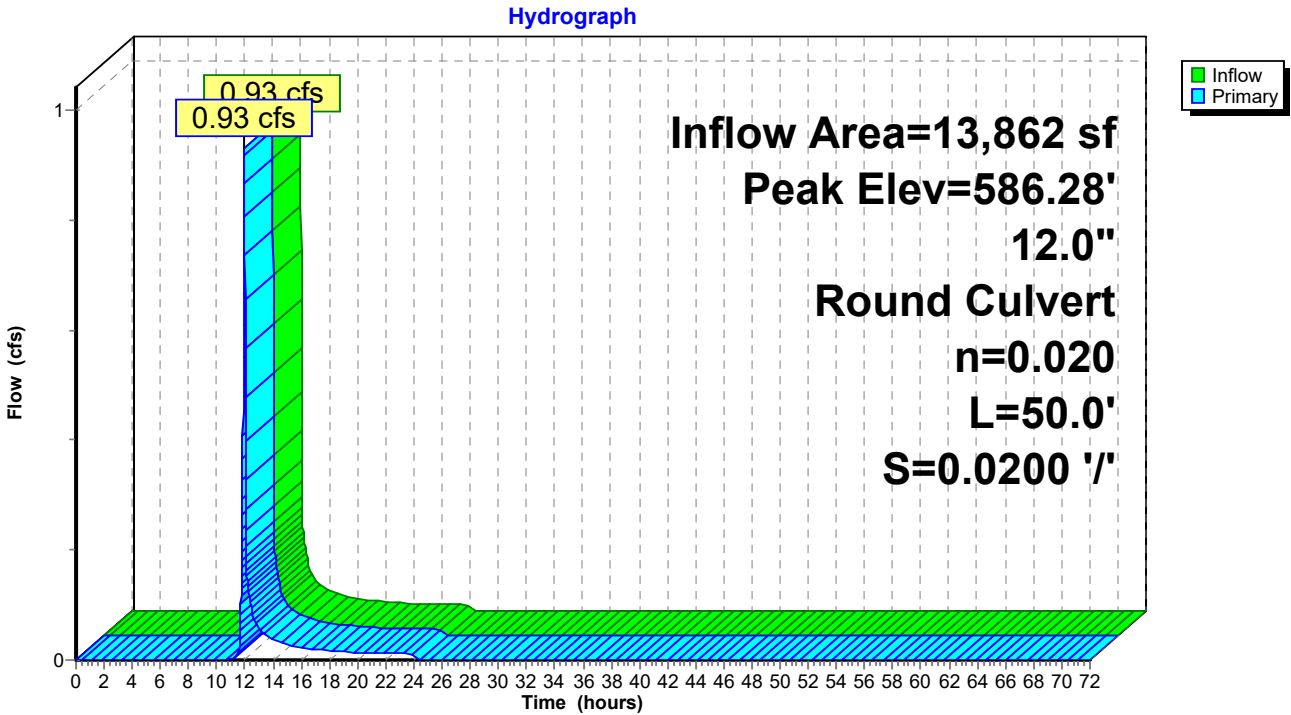
Inflow Area = 13,862 sf, 7.95% Impervious, Inflow Depth = 1.53" for 50 YR event
Inflow = 0.93 cfs @ 11.96 hrs, Volume= 1,769 cf
Outflow = 0.93 cfs @ 11.96 hrs, Volume= 1,769 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.93 cfs @ 11.96 hrs, Volume= 1,769 cf
Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 586.28' @ 11.96 hrs
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	585.70'	12.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 585.70' / 584.70' S= 0.0200 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.93 cfs @ 11.96 hrs HW=586.28' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 0.93 cfs @ 1.95 fps)

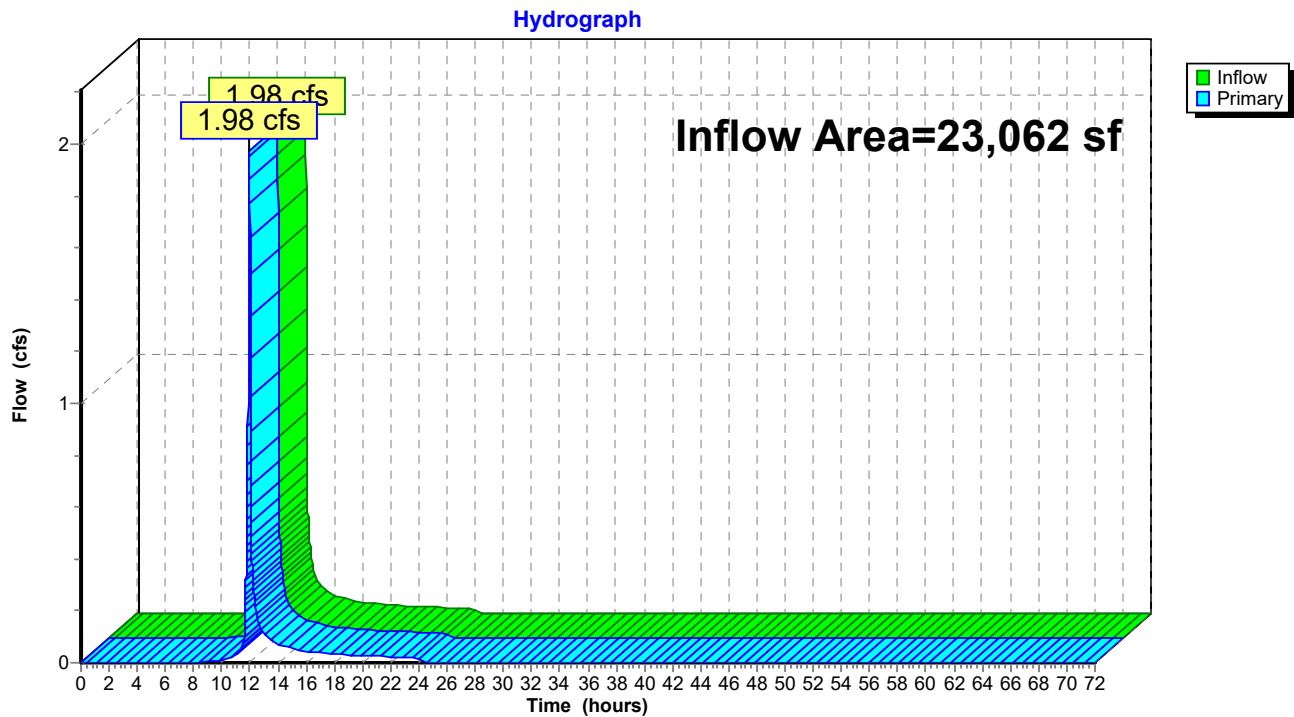
Pond 2P: Existing CB2



Summary for Link 1L: City of Leb Drainage

Inflow Area = 23,062 sf, 31.58% Impervious, Inflow Depth = 2.09" for 50 YR event
Inflow = 1.98 cfs @ 11.97 hrs, Volume= 4,017 cf
Primary = 1.98 cfs @ 11.97 hrs, Volume= 4,017 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link 1L: City of Leb Drainage

25-03-24_13444 UVMC_PRE DEVELOPMENT*Type II 24-hr 100 YR Rainfall=6.02"*

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Page 34

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: East Side of LotRunoff Area=9,200 sf 67.20% Impervious Runoff Depth=3.70"
Flow Length=123' Tc=6.6 min CN=79 Runoff=1.34 cfs 2,835 cf**Subcatchment 2S: West Side of Lot**Runoff Area=13,862 sf 7.95% Impervious Runoff Depth=2.10"
Flow Length=227' Tc=4.0 min CN=62 Runoff=1.29 cfs 2,431 cf**Pond 1P: Existing CB1**Peak Elev=587.23' Inflow=1.34 cfs 2,835 cf
18.0" Round Culvert n=0.020 L=50.0' S=0.0100 '/' Outflow=1.34 cfs 2,835 cf**Pond 2P: Existing CB2**Peak Elev=586.41' Inflow=1.29 cfs 2,431 cf
12.0" Round Culvert n=0.020 L=50.0' S=0.0200 '/' Outflow=1.29 cfs 2,431 cf**Link 1L: City of Leb Drainage**Inflow=2.59 cfs 5,265 cf
Primary=2.59 cfs 5,265 cf**Total Runoff Area = 23,062 sf Runoff Volume = 5,265 cf Average Runoff Depth = 2.74"**
68.42% Pervious = 15,778 sf 31.58% Impervious = 7,284 sf

Summary for Subcatchment 1S: East Side of Lot

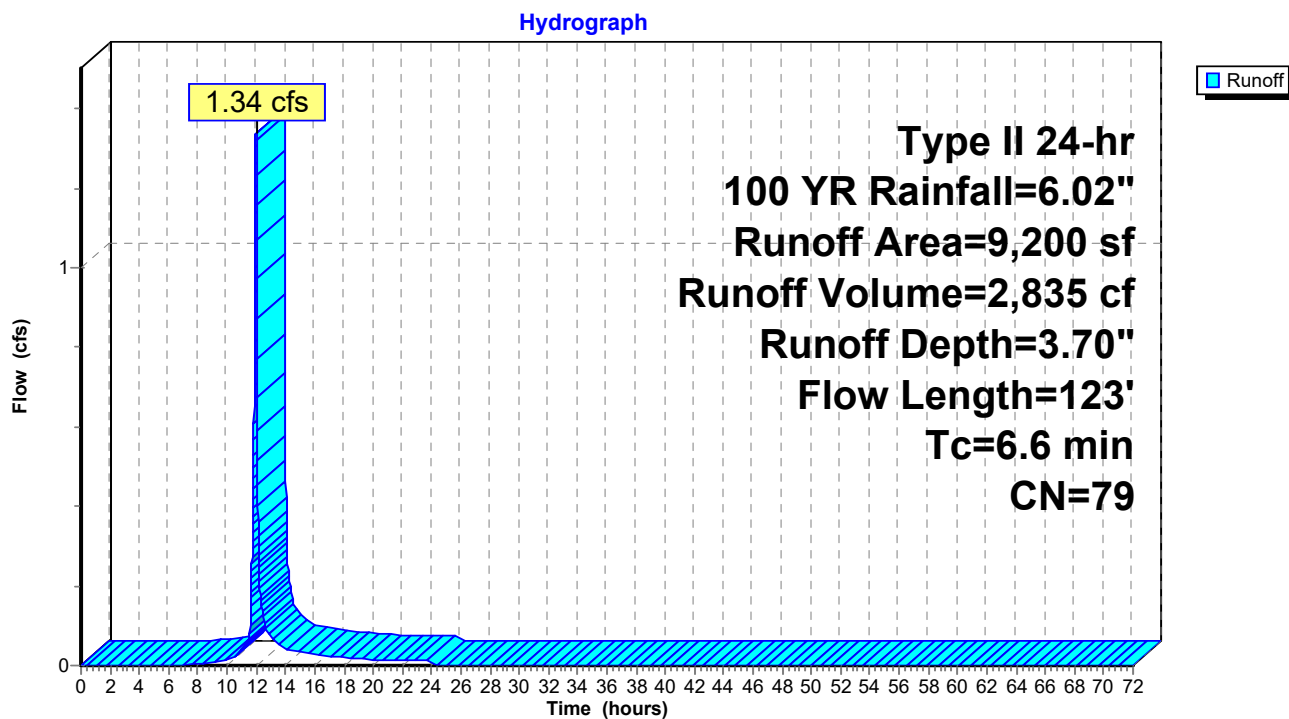
Runoff = 1.34 cfs @ 11.98 hrs, Volume= 2,835 cf, Depth= 3.70"
 Routed to Pond 1P : Existing CB1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 100 YR Rainfall=6.02"

Area (sf)	CN	Description
4,910	98	Unconnected pavement, HSG A
3,018	39	>75% Grass cover, Good, HSG A
1,272	98	Roofs, HSG A
9,200	79	Weighted Average
3,018		32.80% Pervious Area
6,182		67.20% Impervious Area
4,910		79.42% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0800	1.21		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
6.5	94	0.0680	0.24		Sheet Flow, B-C Grass: Short n= 0.150 P2= 2.50"
0.0	7	0.1300	2.52		Shallow Concentrated Flow, C-D Short Grass Pasture Kv= 7.0 fps
0.0	16	0.1000	6.42		Shallow Concentrated Flow, D-E Paved Kv= 20.3 fps
6.6	123	Total			

Subcatchment 1S: East Side of Lot



Summary for Subcatchment 2S: West Side of Lot

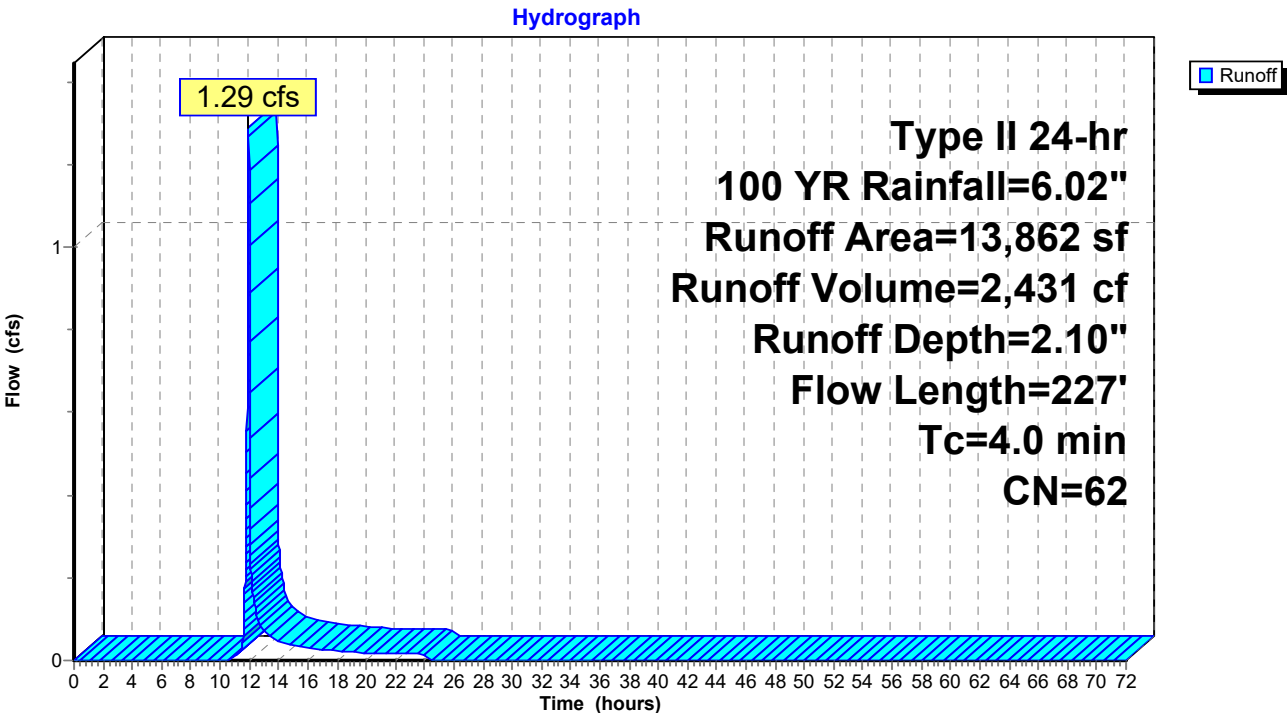
Runoff = 1.29 cfs @ 11.95 hrs, Volume= 2,431 cf, Depth= 2.10"
Routed to Pond 2P : Existing CB2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 YR Rainfall=6.02"

Area (sf)	CN	Description
4,500	96	Gravel surface, HSG A
* 882	98	Existing Roof
8,260	39	>75% Grass cover, Good, HSG A
* 220	98	Concrete Pad
13,862	62	Weighted Average
12,760		92.05% Pervious Area
1,102		7.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	125	0.0250	1.39		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
0.9	102	0.0680	1.83		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
2.4	227	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 2S: West Side of Lot



Summary for Pond 1P: Existing CB1

Inflow Area = 9,200 sf, 67.20% Impervious, Inflow Depth = 3.70" for 100 YR event
 Inflow = 1.34 cfs @ 11.98 hrs, Volume= 2,835 cf
 Outflow = 1.34 cfs @ 11.98 hrs, Volume= 2,835 cf, Atten= 0%, Lag= 0.0 min
 Primary = 1.34 cfs @ 11.98 hrs, Volume= 2,835 cf
 Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 587.23' @ 11.98 hrs

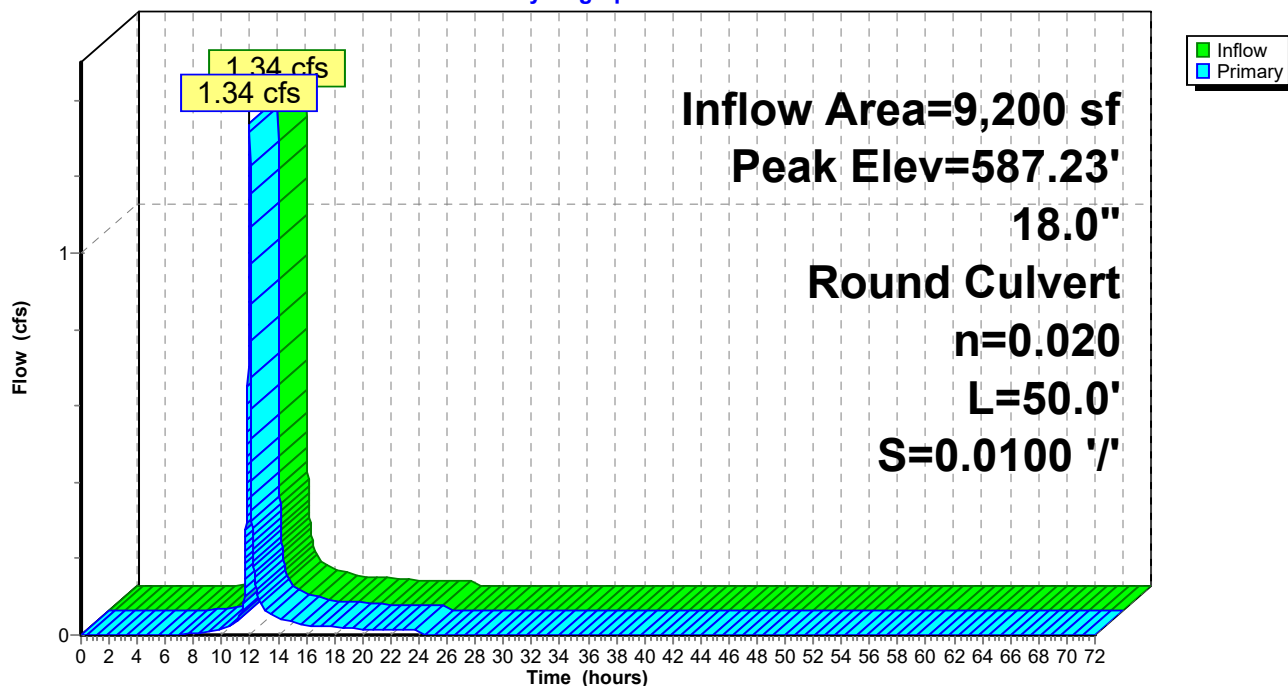
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.60'	18.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 586.60' / 586.10' S= 0.0100 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 1.77 sf

Primary OutFlow Max=1.34 cfs @ 11.98 hrs HW=587.23' TW=0.00' (Dynamic Tailwater)
 1=Culvert (Barrel Controls 1.34 cfs @ 2.80 fps)

Pond 1P: Existing CB1

Hydrograph



Summary for Pond 2P: Existing CB2

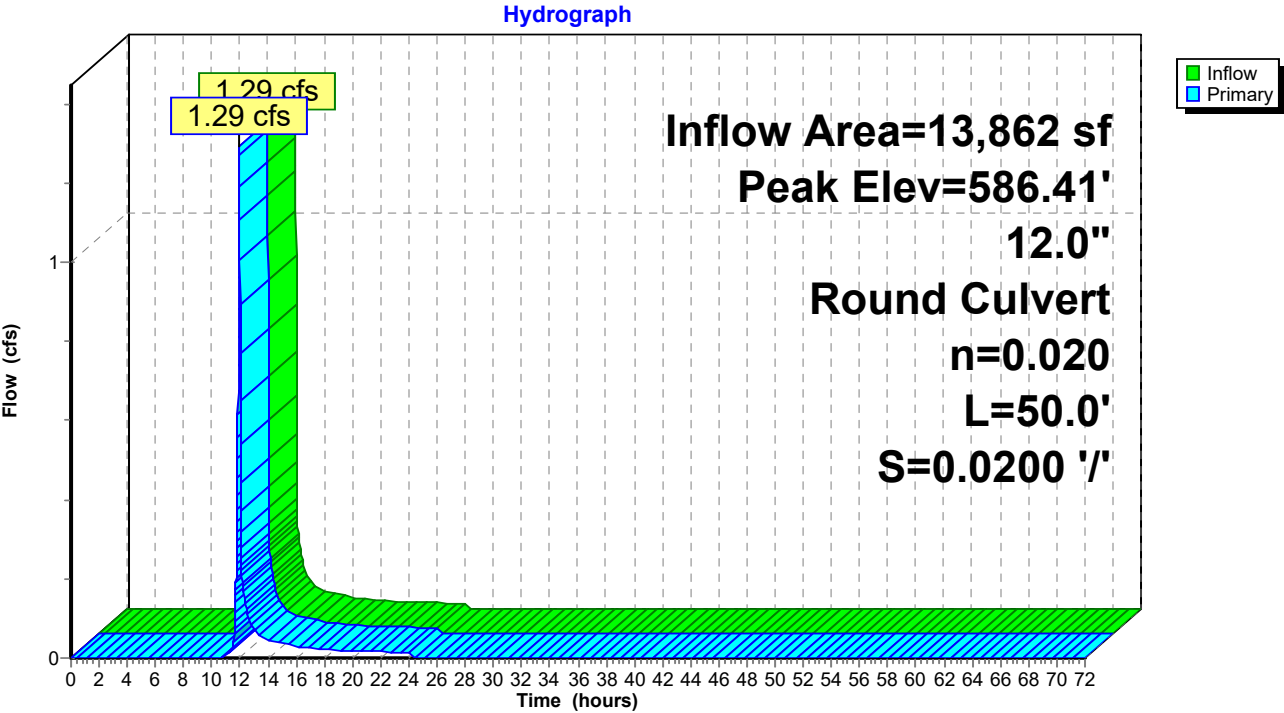
Inflow Area = 13,862 sf, 7.95% Impervious, Inflow Depth = 2.10" for 100 YR event
Inflow = 1.29 cfs @ 11.95 hrs, Volume= 2,431 cf
Outflow = 1.29 cfs @ 11.95 hrs, Volume= 2,431 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.29 cfs @ 11.95 hrs, Volume= 2,431 cf
Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 586.41' @ 11.95 hrs
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	585.70'	12.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 585.70' / 584.70' S= 0.0200 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.29 cfs @ 11.95 hrs HW=586.41' TW=0.00' (Dynamic Tailwater)
↑1=Culvert (Inlet Controls 1.29 cfs @ 2.15 fps)

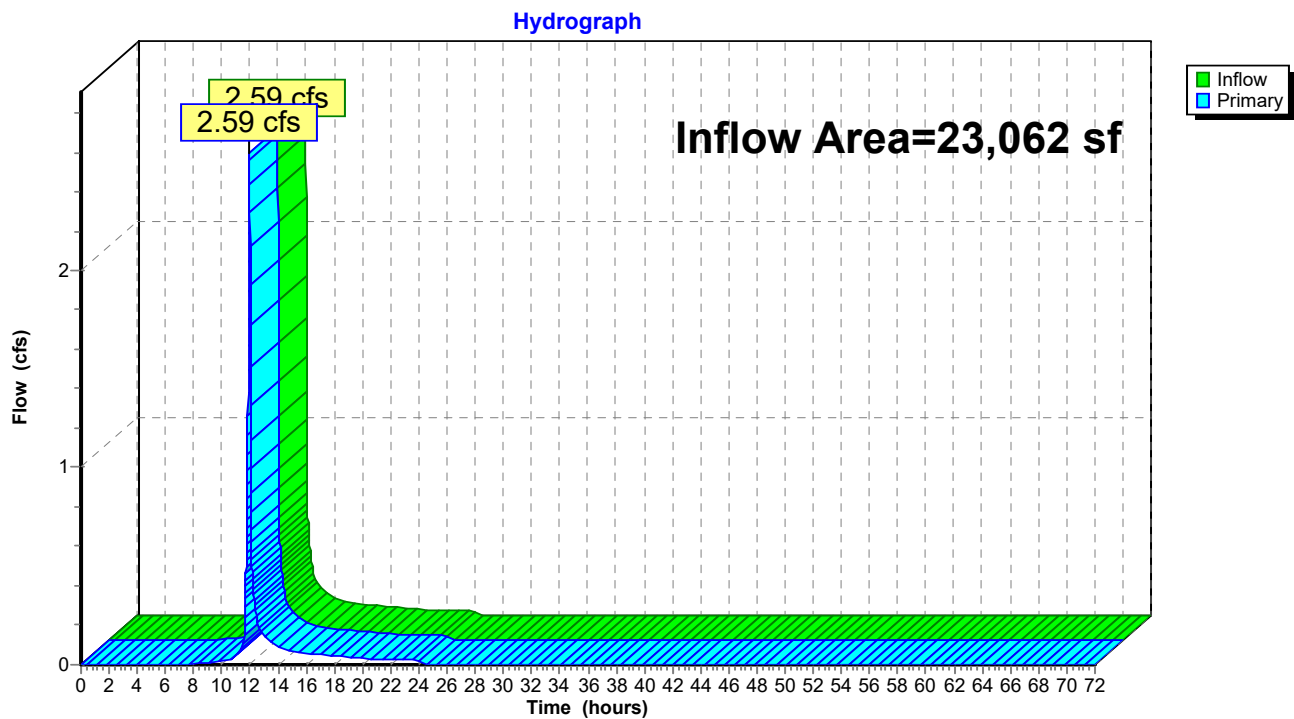
Pond 2P: Existing CB2

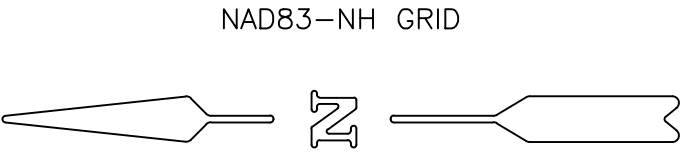
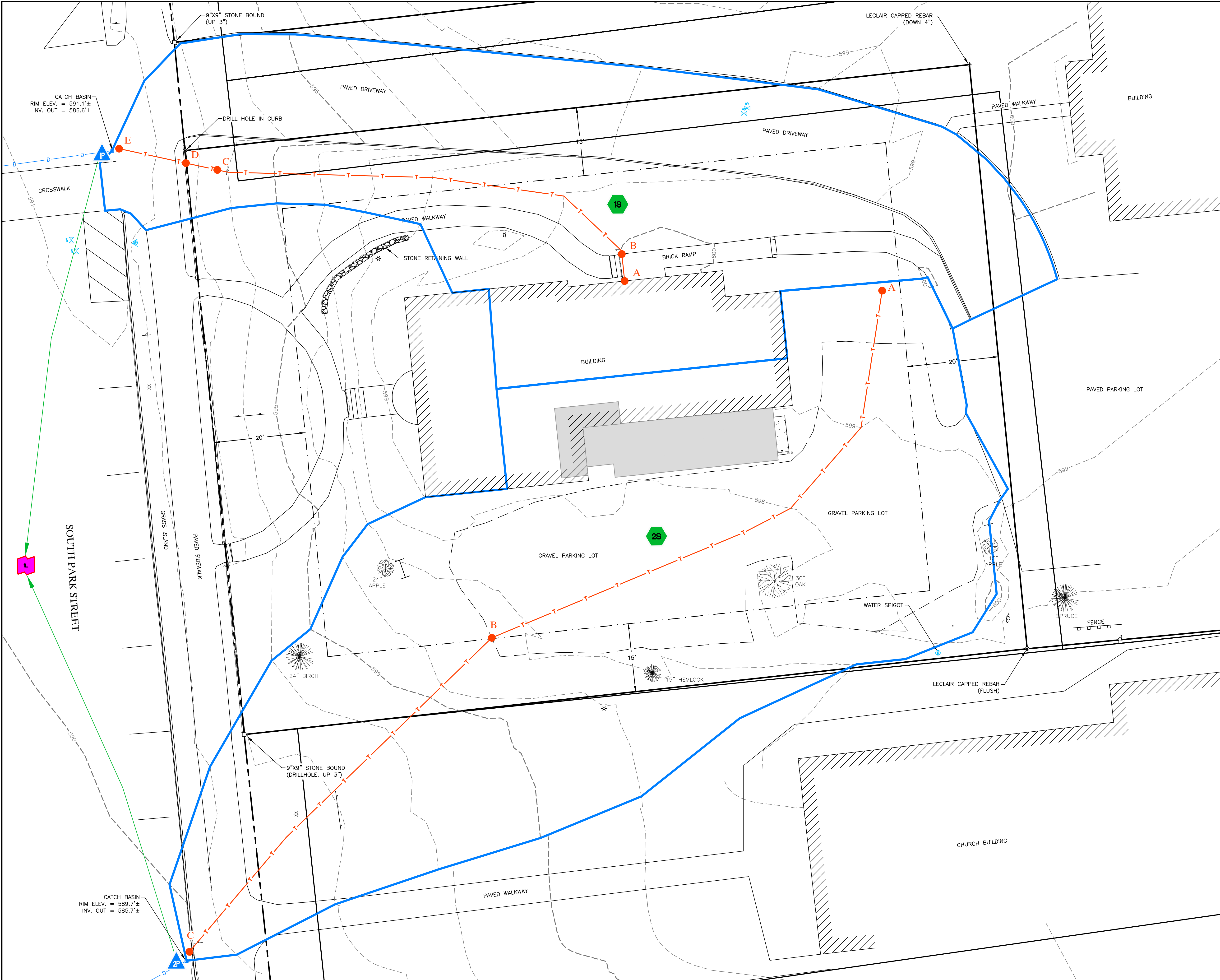


Summary for Link 1L: City of Leb Drainage

Inflow Area = 23,062 sf, 31.58% Impervious, Inflow Depth = 2.74" for 100 YR event
Inflow = 2.59 cfs @ 11.96 hrs, Volume= 5,265 cf
Primary = 2.59 cfs @ 11.96 hrs, Volume= 5,265 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link 1L: City of Leb Drainage



LEGEND - EXISTING

EXISTING IRON PIPE OR REBAR	● AS NOTED
STONE/CONCRETE BOUNDARY MARK	□ AS NOTED
BOUNDARY LINE	—————
RIGHT-OF-WAY	—————
BUILDING SETBACK LINE	—————
CONTOUR	————— 500 —————
FENCE-STOCKADE	—————
EDGE PAVEMENT	—————
EDGE GRAVEL	—————
UTILITY POLE/GUY WIRE	⊕
LIGHT POLE	★
CATCH BASIN	▲
DRAIN MANHOLE	●
STORMWATER PIPE	———
SANITARY MANHOLE	⊙
SIGN	⊙
HYDRANT	⊕
GATE VALVE	⊕
WATER SPIGOT	⊕
HARDWOOD TREE	⊕
SOFTWOOD TREE	⊕
DEED REFERENCE	⊕
TAX MAP/LOT NO.	12-122

LEGEND: WATERSHED MODELING

HYDROCAD DRAINAGE AREA	1B
HYDROCAD POND	P
HYDROCAD DISCHARGE POINT	L
HYDROCAD LINK	—
TIME OF CONCENTRATION PATH	A — B
DRAINAGE AREA	1B

- GENERAL SURVEY NOTES:
1. HORIZONTAL DATUM: NH STATE PLANE GRID NAD83 (SURVEY FEET) FROM GIS OBSERVATION.
 2. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) FROM GIS OBSERVATION.
 3. STRUCTURES FOR UNDERGROUND UTILITIES ARE SHOWN AS OBSERVED. THE SURVEYOR DOES NOT CERTIFY THAT OTHER UNDERGROUND UTILITIES DO NOT EXIST. UNDERGROUND UTILITIES ARE NOT WARRANTED TO BE EXACT OR COMPLETE AND ARE TO BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR SITE MODIFICATIONS.

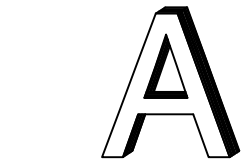


REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY

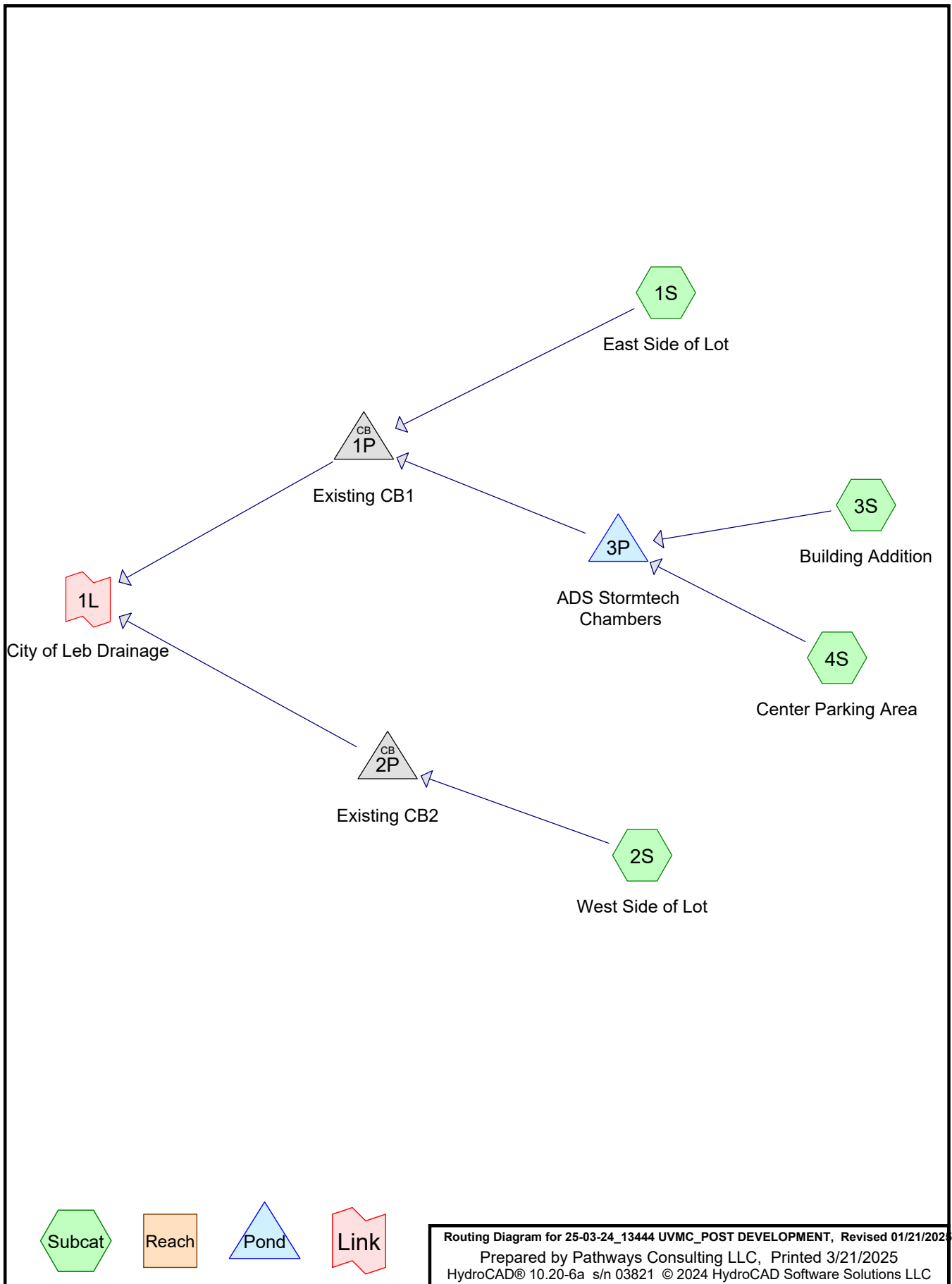
PRE-DEVELOPMENT (EXISTING CONDITIONS) WATERSHED PLAN FOR
UPPER VALLEY MUSIC CENTER
BUILDING ADDITION AND SITE IMPROVEMENTS
SOUTH PARK STREET, LEBANON, NEW HAMPSHIRE

PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

SCALE: AS SHOWN
DESIGNED BY: SAW
DRAWN BY: DAS
CHECKED BY: SAW
DATE: 03-24-25
PROJ. NO. 13444



SHEET 1 OF 1



25-03-24_13444 UVMC_POST DEVELOPMENT

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Page 2

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2 YR	Type II 24-hr		Default	24.00	1	2.50	2
2	10 YR	Type II 24-hr		Default	24.00	1	3.58	2
3	25 YR	Type II 24-hr		Default	24.00	1	4.40	2
4	50 YR	Type II 24-hr		Default	24.00	1	5.15	2
5	100 YR	Type II 24-hr		Default	24.00	1	6.02	2

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Page 3

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
10,971	39	>75% Grass cover, Good, HSG A (1S, 2S, 4S)
468	98	Building Addition - Roof (3S)
882	98	Existing Roof (3S)
4,559	96	Gravel surface, HSG A (2S, 4S)
1,272	98	Roofs, HSG A (1S)
4,910	98	Unconnected pavement, HSG A (1S)
23,062	70	TOTAL AREA

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Page 4

Soil Listing (selected nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
21,712	HSG A	1S, 2S, 4S
0	HSG B	
0	HSG C	
0	HSG D	
1,350	Other	3S
23,062		TOTAL AREA

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Page 5

Ground Covers (selected nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Sub Num
10,971	0	0	0	0	10,971	>75% Grass cover, Good	
0	0	0	0	468	468	Building Addition - Roof	
0	0	0	0	882	882	Existing Roof	
4,559	0	0	0	0	4,559	Gravel surface	
1,272	0	0	0	0	1,272	Roofs	
4,910	0	0	0	0	4,910	Unconnected pavement	
21,712	0	0	0	1,350	23,062	TOTAL AREA	

25-03-24_13444 UVMC_POST DEVELOPMENT*Type II 24-hr 2 YR Rainfall=2.50"*

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Page 6

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: East Side of LotRunoff Area=9,200 sf 67.20% Impervious Runoff Depth=0.84"
Flow Length=123' Tc=6.6 min CN=79 Runoff=0.31 cfs 642 cf**Subcatchment 2S: West Side of Lot**Runoff Area=7,971 sf 0.00% Impervious Runoff Depth=0.02"
Flow Length=215' Tc=4.0 min CN=50 Runoff=0.00 cfs 16 cf**Subcatchment 3S: Building Addition**Runoff Area=1,350 sf 100.00% Impervious Runoff Depth=2.27"
Tc=4.0 min CN=98 Runoff=0.12 cfs 255 cf**Subcatchment 4S: Center Parking Area**Runoff Area=4,541 sf 0.00% Impervious Runoff Depth=0.69"
Flow Length=140' Slope=0.0210 '/' Tc=4.0 min CN=76 Runoff=0.14 cfs 263 cf**Pond 1P: Existing CB1**Peak Elev=586.89' Inflow=0.31 cfs 642 cf
18.0" Round Culvert n=0.020 L=50.0' S=0.0100 '/' Outflow=0.31 cfs 642 cf**Pond 2P: Existing CB2**Peak Elev=585.71' Inflow=0.00 cfs 16 cf
12.0" Round Culvert n=0.020 L=50.0' S=0.0200 '/' Outflow=0.00 cfs 16 cf**Pond 3P: ADS Stormtech Chambers**Peak Elev=591.43' Storage=137 cf Inflow=0.25 cfs 518 cf
Discarded=0.04 cfs 518 cf Primary=0.00 cfs 0 cf Outflow=0.04 cfs 518 cf**Link 1L: City of Leb Drainage**Inflow=0.31 cfs 658 cf
Primary=0.31 cfs 658 cf**Total Runoff Area = 23,062 sf Runoff Volume = 1,176 cf Average Runoff Depth = 0.61"**
67.34% Pervious = 15,530 sf 32.66% Impervious = 7,532 sf

25-03-24_13444 UVMC_POST DEVELOPMENT

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Type II 24-hr 2 YR Rainfall=2.50"

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Page 7

Summary for Subcatchment 1S: East Side of Lot

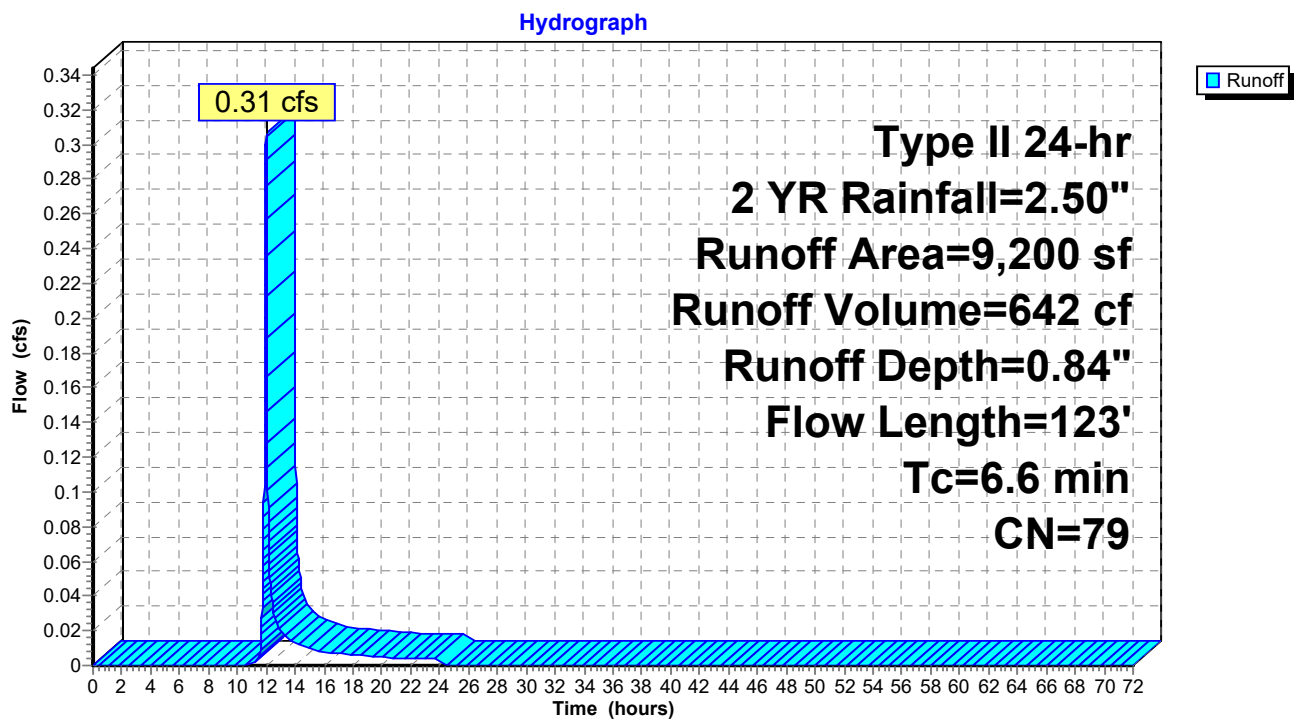
Runoff = 0.31 cfs @ 11.99 hrs, Volume= 642 cf, Depth= 0.84"
 Routed to Pond 1P : Existing CB1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 2 YR Rainfall=2.50"

Area (sf)	CN	Description
4,910	98	Unconnected pavement, HSG A
3,018	39	>75% Grass cover, Good, HSG A
1,272	98	Roofs, HSG A
9,200	79	Weighted Average
3,018		32.80% Pervious Area
6,182		67.20% Impervious Area
4,910		79.42% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0800	1.21		Sheet Flow, A - B Smooth surfaces n= 0.011 P2= 2.50"
6.5	94	0.0680	0.24		Sheet Flow, B-C Grass: Short n= 0.150 P2= 2.50"
0.0	7	0.1300	2.52		Shallow Concentrated Flow, C-D Short Grass Pasture Kv= 7.0 fps
0.0	16	0.1000	6.42		Shallow Concentrated Flow, D-E Paved Kv= 20.3 fps
6.6	123	Total			

Subcatchment 1S: East Side of Lot



Summary for Subcatchment 2S: West Side of Lot

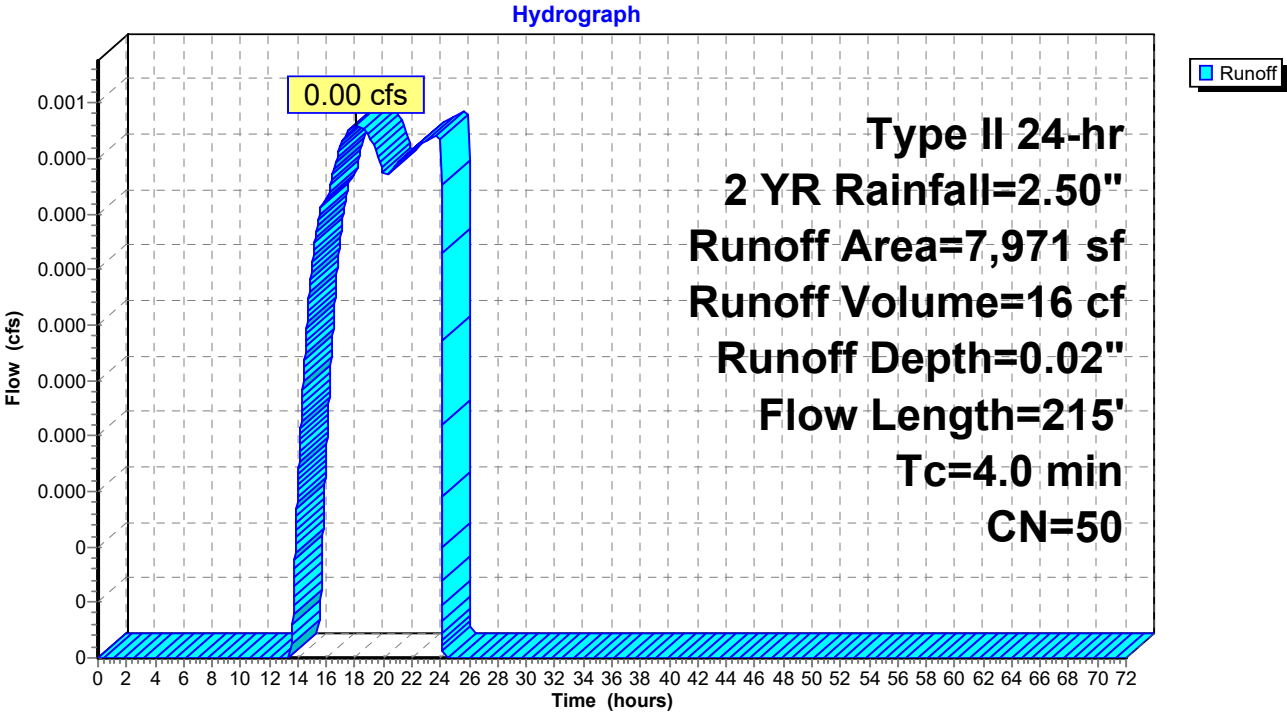
Runoff = 0.00 cfs @ 18.08 hrs, Volume= 16 cf, Depth= 0.02"
Routed to Pond 2P : Existing CB2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 2 YR Rainfall=2.50"

Area (sf)	CN	Description
6,363	39	>75% Grass cover, Good, HSG A
1,608	96	Gravel surface, HSG A
7,971	50	Weighted Average
7,971		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	120	0.0210	1.29		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 2.50"
0.8	95	0.0730	1.89		Shallow Concentrated Flow, B-C
					Short Grass Pasture Kv= 7.0 fps
2.4	215	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 2S: West Side of Lot



Summary for Subcatchment 3S: Building Addition

Runoff = 0.12 cfs @ 11.95 hrs, Volume= 255 cf, Depth= 2.27"
Routed to Pond 3P : ADS Stormtech Chambers

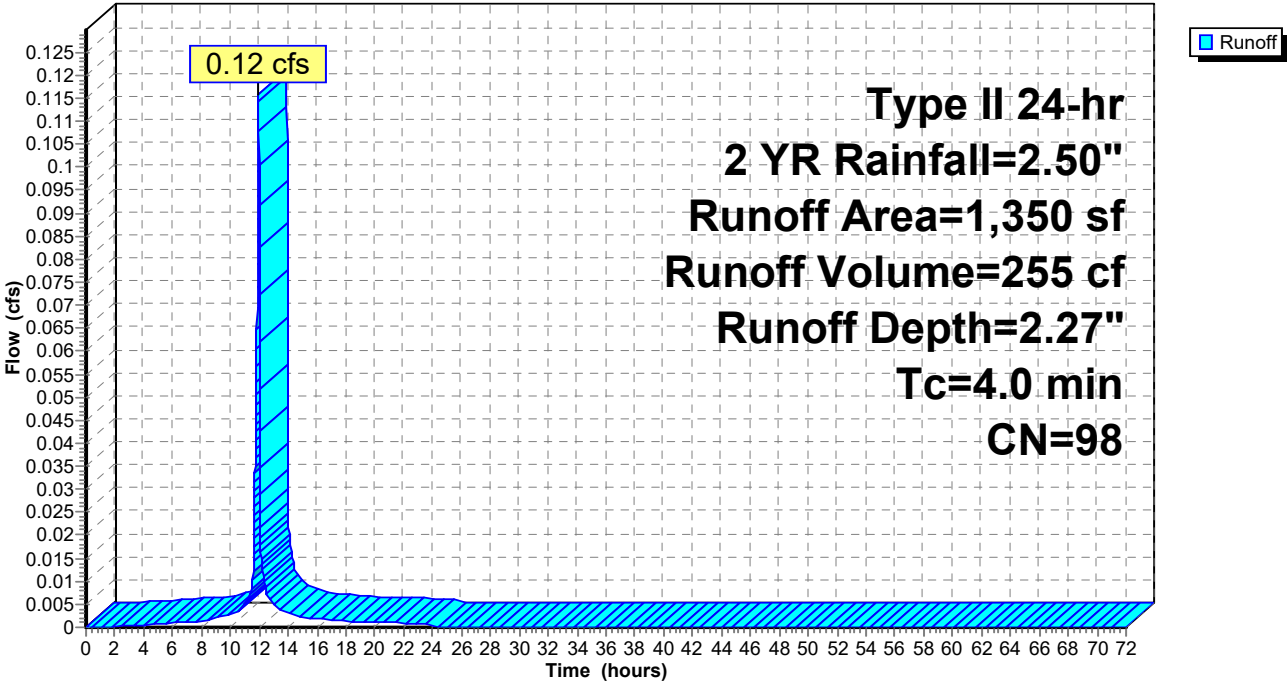
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 2 YR Rainfall=2.50"

	Area (sf)	CN	Description
*	468	98	Building Addition - Roof
*	882	98	Existing Roof
	1,350	98	Weighted Average
	1,350		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0					Direct Entry, Min tc
1.0	0				Total, Increased to minimum Tc = 4.0 min

Subcatchment 3S: Building Addition

Hydrograph



Summary for Subcatchment 4S: Center Parking Area

Runoff = 0.14 cfs @ 11.96 hrs, Volume= 263 cf, Depth= 0.69"
Routed to Pond 3P : ADS Stormtech Chambers

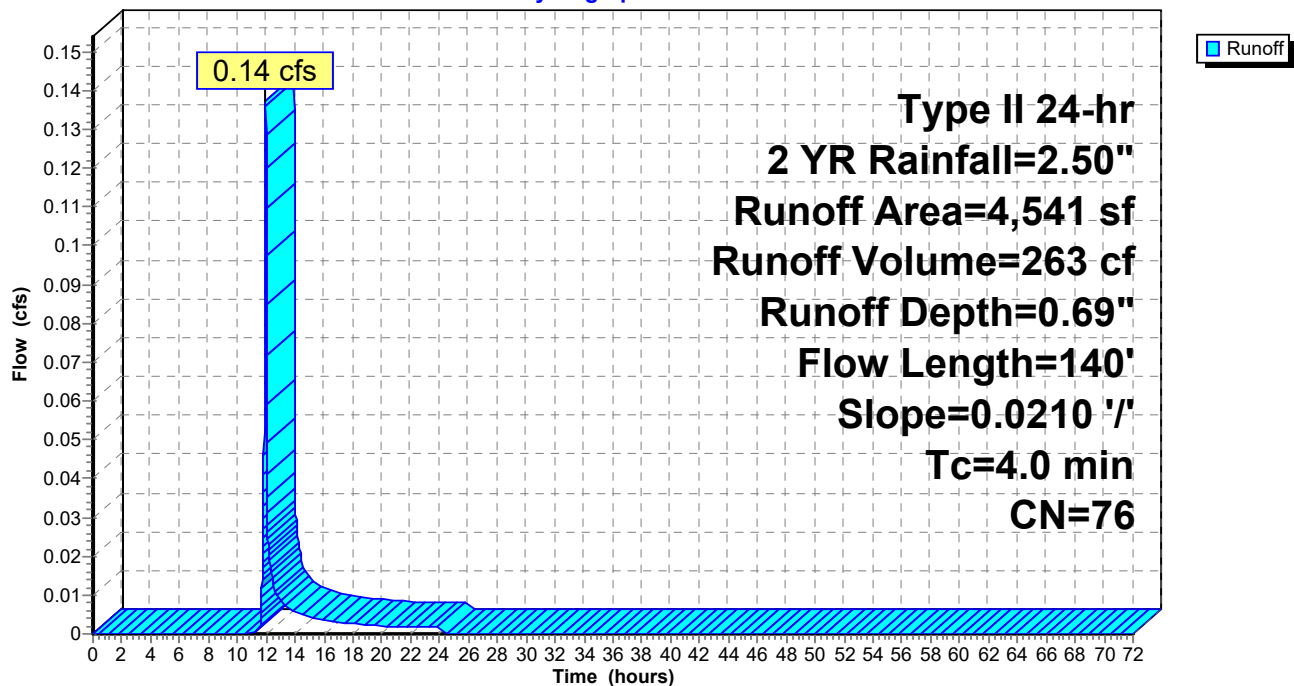
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 2 YR Rainfall=2.50"

Area (sf)	CN	Description
2,951	96	Gravel surface, HSG A
1,590	39	>75% Grass cover, Good, HSG A
4,541	76	Weighted Average
4,541		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	140	0.0210	1.33		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 2.50"
1.8	140	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 4S: Center Parking Area

Hydrograph



Summary for Pond 1P: Existing CB1

Inflow Area = 15,091 sf, 49.91% Impervious, Inflow Depth = 0.51" for 2 YR event
 Inflow = 0.31 cfs @ 11.99 hrs, Volume= 642 cf
 Outflow = 0.31 cfs @ 11.99 hrs, Volume= 642 cf, Atten= 0%, Lag= 0.0 min
 Primary = 0.31 cfs @ 11.99 hrs, Volume= 642 cf
 Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 586.89' @ 11.99 hrs

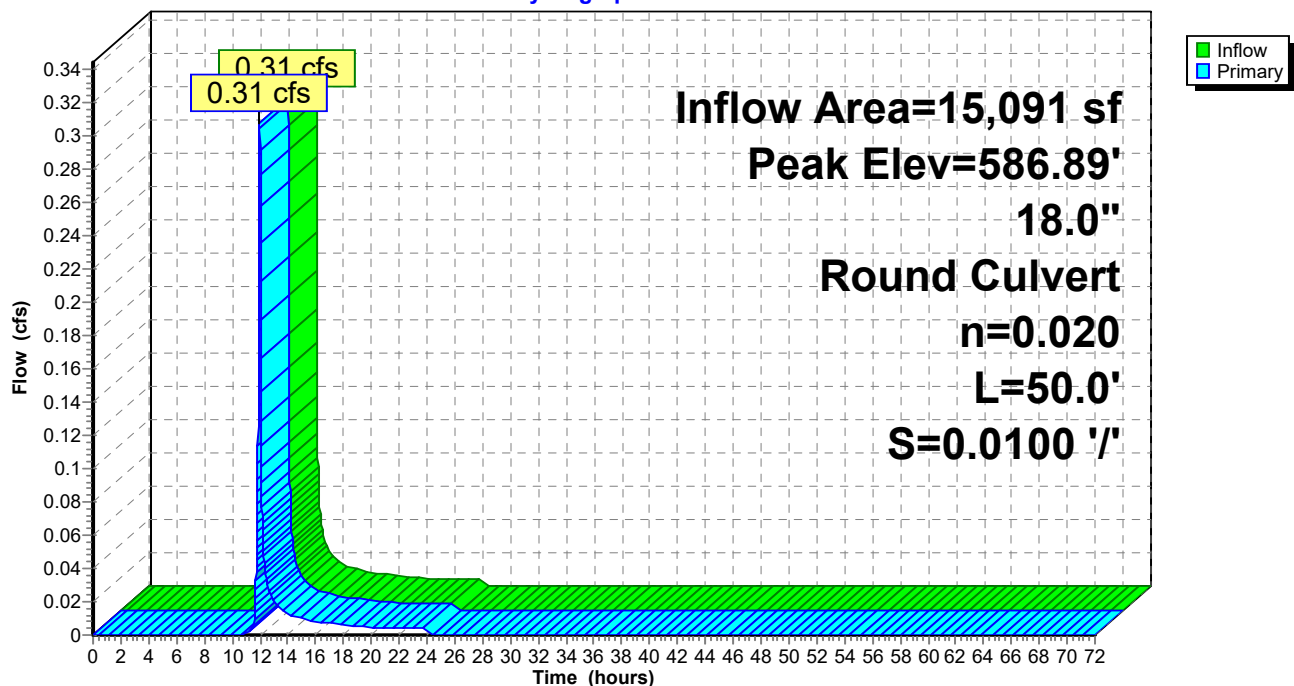
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.60'	18.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 586.60' / 586.10' S= 0.0100 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 1.77 sf

Primary OutFlow Max=0.31 cfs @ 11.99 hrs HW=586.89' TW=0.00' (Dynamic Tailwater)
 1=Culvert (Barrel Controls 0.31 cfs @ 1.89 fps)

Pond 1P: Existing CB1

Hydrograph



Summary for Pond 2P: Existing CB2

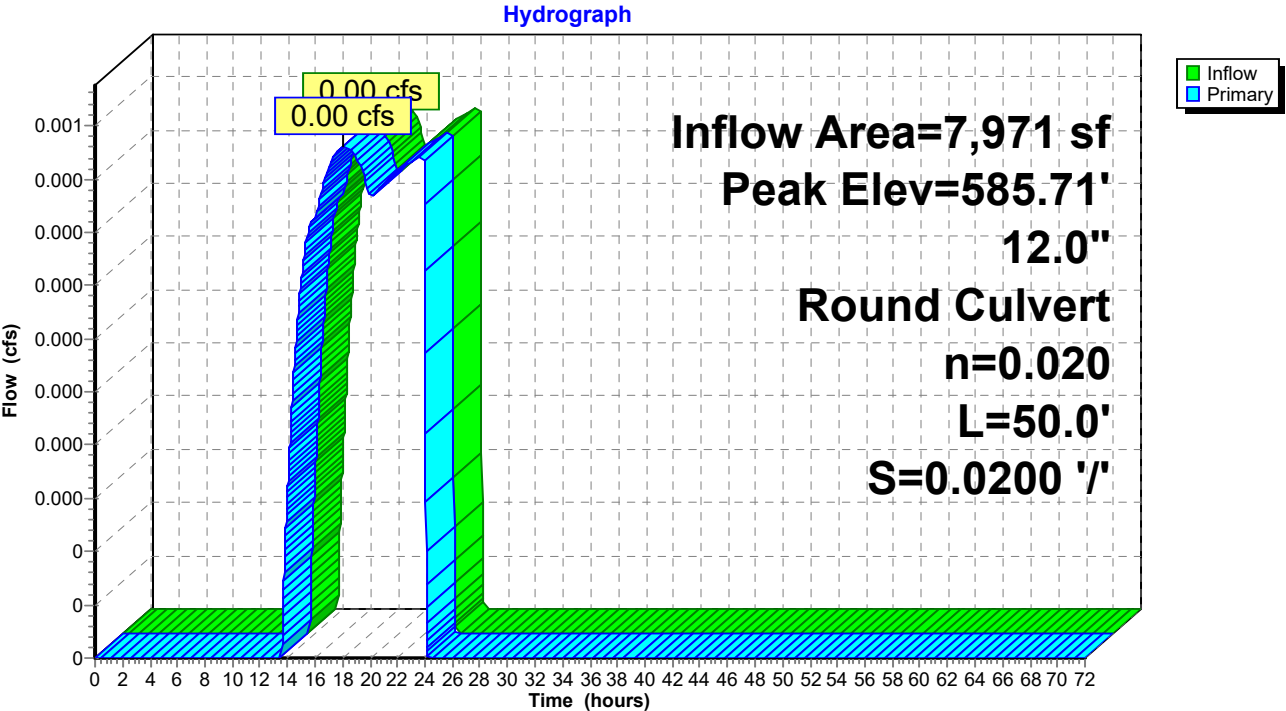
Inflow Area = 7,971 sf, 0.00% Impervious, Inflow Depth = 0.02" for 2 YR event
Inflow = 0.00 cfs @ 18.08 hrs, Volume= 16 cf
Outflow = 0.00 cfs @ 18.08 hrs, Volume= 16 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 18.08 hrs, Volume= 16 cf
Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 585.71' @ 18.08 hrs
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	585.70'	12.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 585.70' / 584.70' S= 0.0200 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.00 cfs @ 18.08 hrs HW=585.71' TW=0.00' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.00 cfs @ 0.37 fps)

Pond 2P: Existing CB2



25-03-24_13444 UVMC_POST DEVELOPMENT

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Type II 24-hr 2 YR Rainfall=2.50"

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Page 14

Summary for Pond 3P: ADS Stormtech Chambers

Typical safety factor of 50% applied to exfiltration value to account for clogging

Inflow Area = 5,891 sf, 22.92% Impervious, Inflow Depth = 1.06" for 2 YR event
 Inflow = 0.25 cfs @ 11.95 hrs, Volume= 518 cf
 Outflow = 0.04 cfs @ 12.10 hrs, Volume= 518 cf, Atten= 83%, Lag= 8.9 min
 Discarded = 0.04 cfs @ 12.10 hrs, Volume= 518 cf
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
 Routed to Pond 1P : Existing CB1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 591.43' @ 12.10 hrs Surf.Area= 192 sf Storage= 137 cf

Plug-Flow detention time= 17.8 min calculated for 518 cf (100% of inflow)
 Center-of-Mass det. time= 17.8 min (829.9 - 812.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	590.00'	231 cf	11.50'W x 16.68'L x 4.00'H Field A 767 cf Overall - 189 cf Embedded = 578 cf x 40.0% Voids
#2A	591.00'	189 cf	ADS_StormTech SC-740 x 4 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 2 rows
		421 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	592.50'	6.0" Round Culvert L= 108.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.50' / 588.50' S= 0.0370 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Discarded	590.00'	14.000 in/hr Exfiltration X 0.50 over Wetted area Phase-In= 0.01'

Discarded OutFlow Max=0.04 cfs @ 12.10 hrs HW=591.43' (Free Discharge)↑**2=Exfiltration** (Exfiltration Controls 0.04 cfs)**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=590.00' TW=586.60' (Dynamic Tailwater)↑**1=Culvert** (Controls 0.00 cfs)

Pond 3P: ADS Stormtech Chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Row Length Adjustment= +0.44' x 6.45 sf x 2 rows

51.0" Wide + 12.0" Spacing = 63.0" C-C Row Spacing

2 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 14.68' Row Length +12.0" End Stone x 2 = 16.68' Base Length

2 Rows x 51.0" Wide + 12.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.50' Base Width

12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

4 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 2 Rows = 189.4 cf Chamber Storage

767.3 cf Field - 189.4 cf Chambers = 577.8 cf Stone x 40.0% Voids = 231.1 cf Stone Storage

Chamber Storage + Stone Storage = 420.6 cf = 0.010 af

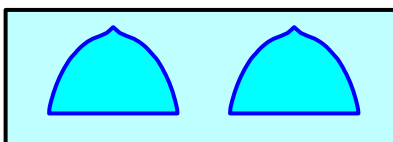
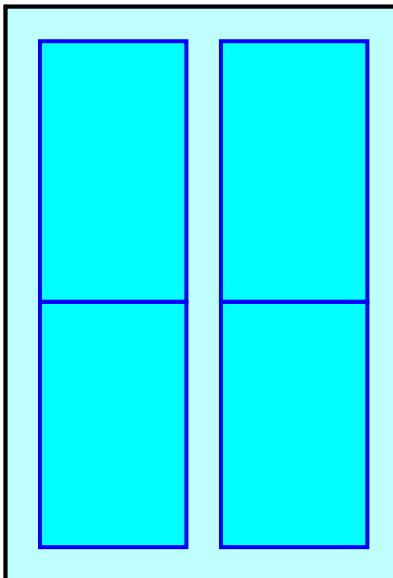
Overall Storage Efficiency = 54.8%

Overall System Size = 16.68' x 11.50' x 4.00'

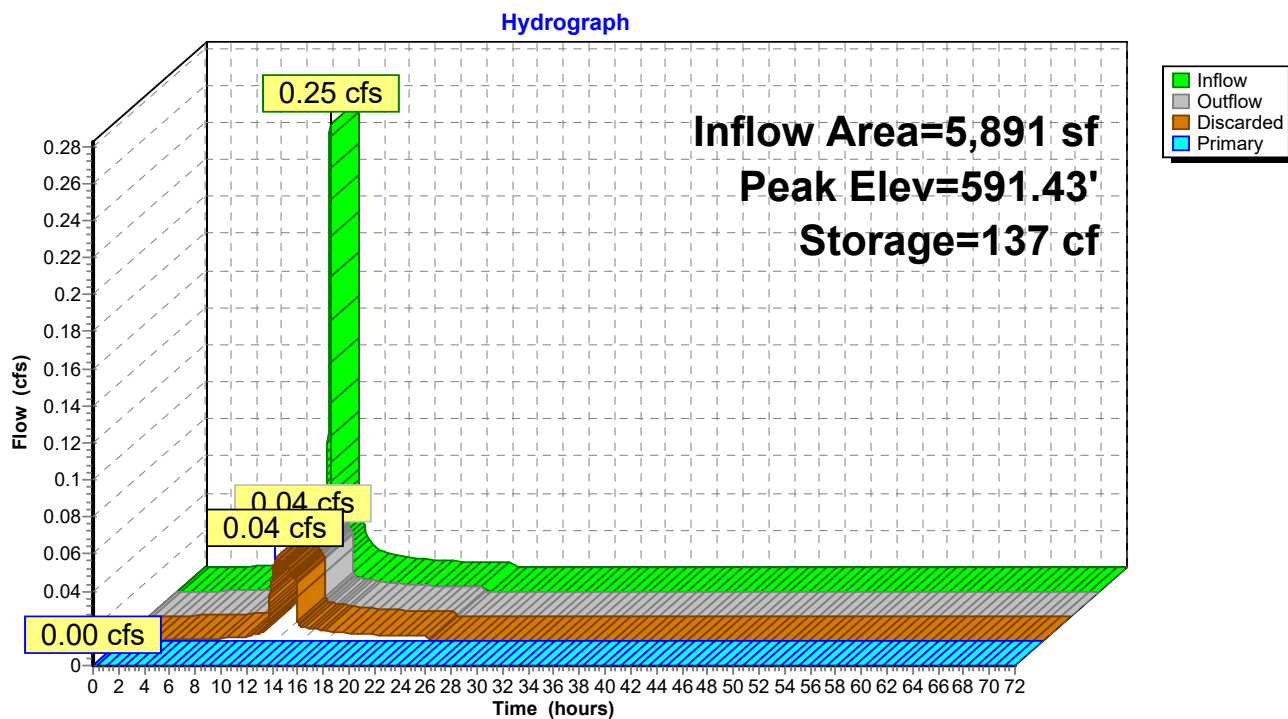
4 Chambers

28.4 cy Field

21.4 cy Stone



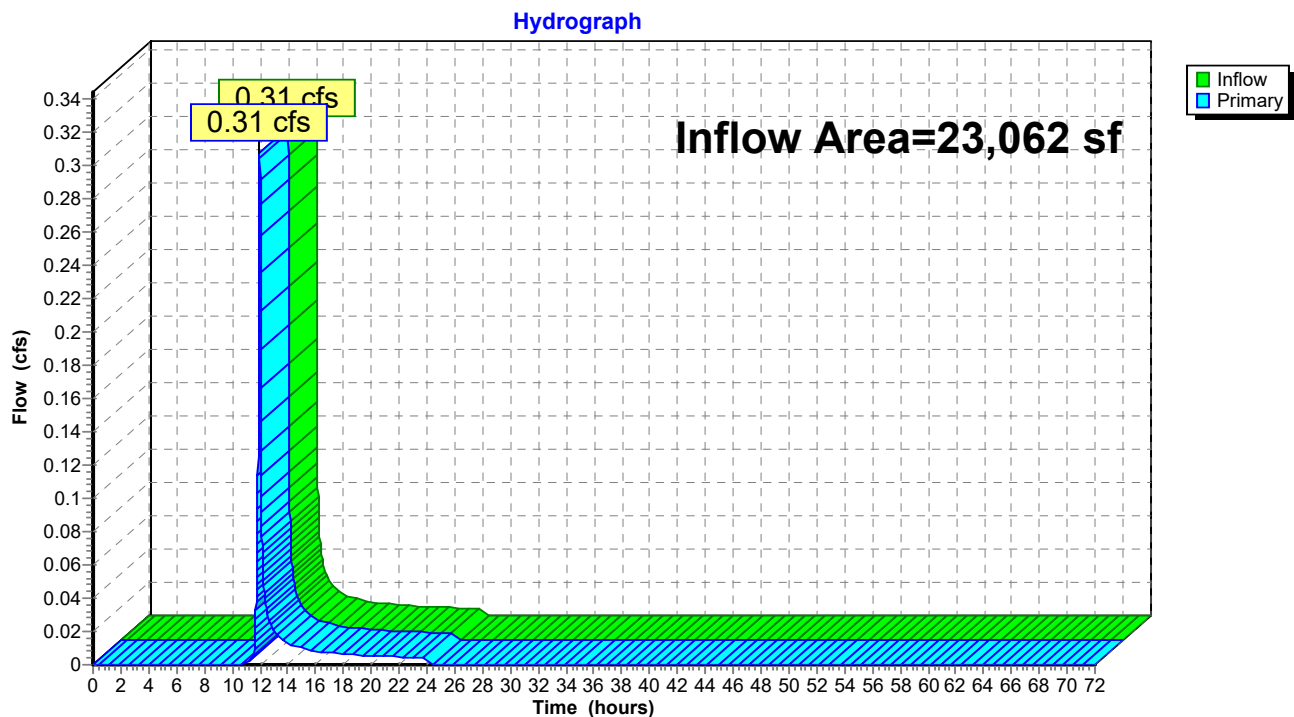
Pond 3P: ADS Stormtech Chambers



Summary for Link 1L: City of Leb Drainage

Inflow Area = 23,062 sf, 32.66% Impervious, Inflow Depth = 0.34" for 2 YR event
Inflow = 0.31 cfs @ 11.99 hrs, Volume= 658 cf
Primary = 0.31 cfs @ 11.99 hrs, Volume= 658 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link 1L: City of Leb Drainage

25-03-24_13444 UVMC_POST DEVELOPMENT

Type II 24-hr 10 YR Rainfall=3.58"

Prepared by Pathways Consulting LLC

Revised 01/21/2025 Printed 3/21/2025

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Page 18

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: East Side of LotRunoff Area=9,200 sf 67.20% Impervious Runoff Depth=1.63"
Flow Length=123' Tc=6.6 min CN=79 Runoff=0.60 cfs 1,248 cf**Subcatchment 2S: West Side of Lot**Runoff Area=7,971 sf 0.00% Impervious Runoff Depth=0.22"
Flow Length=215' Tc=4.0 min CN=50 Runoff=0.03 cfs 143 cf**Subcatchment 3S: Building Addition**Runoff Area=1,350 sf 100.00% Impervious Runoff Depth=3.35"
Tc=4.0 min CN=98 Runoff=0.17 cfs 376 cf**Subcatchment 4S: Center Parking Area**Runoff Area=4,541 sf 0.00% Impervious Runoff Depth=1.42"
Flow Length=140' Slope=0.0210 '/' Tc=4.0 min CN=76 Runoff=0.29 cfs 539 cf**Pond 1P: Existing CB1**Peak Elev=587.01' Inflow=0.60 cfs 1,267 cf
18.0" Round Culvert n=0.020 L=50.0' S=0.0100 '/' Outflow=0.60 cfs 1,267 cf**Pond 2P: Existing CB2**Peak Elev=585.79' Inflow=0.03 cfs 143 cf
12.0" Round Culvert n=0.020 L=50.0' S=0.0200 '/' Outflow=0.03 cfs 143 cf**Pond 3P: ADS Stormtech Chambers**Peak Elev=592.61' Storage=292 cf Inflow=0.45 cfs 915 cf
Discarded=0.05 cfs 896 cf Primary=0.04 cfs 19 cf Outflow=0.09 cfs 915 cf**Link 1L: City of Leb Drainage**Inflow=0.63 cfs 1,410 cf
Primary=0.63 cfs 1,410 cf**Total Runoff Area = 23,062 sf Runoff Volume = 2,307 cf Average Runoff Depth = 1.20"**
67.34% Pervious = 15,530 sf 32.66% Impervious = 7,532 sf

25-03-24_13444 UVMC_POST DEVELOPMENT

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Type II 24-hr 10 YR Rainfall=3.58"

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Page 19

Summary for Subcatchment 1S: East Side of Lot

Runoff = 0.60 cfs @ 11.98 hrs, Volume= 1,248 cf, Depth= 1.63"
 Routed to Pond 1P : Existing CB1

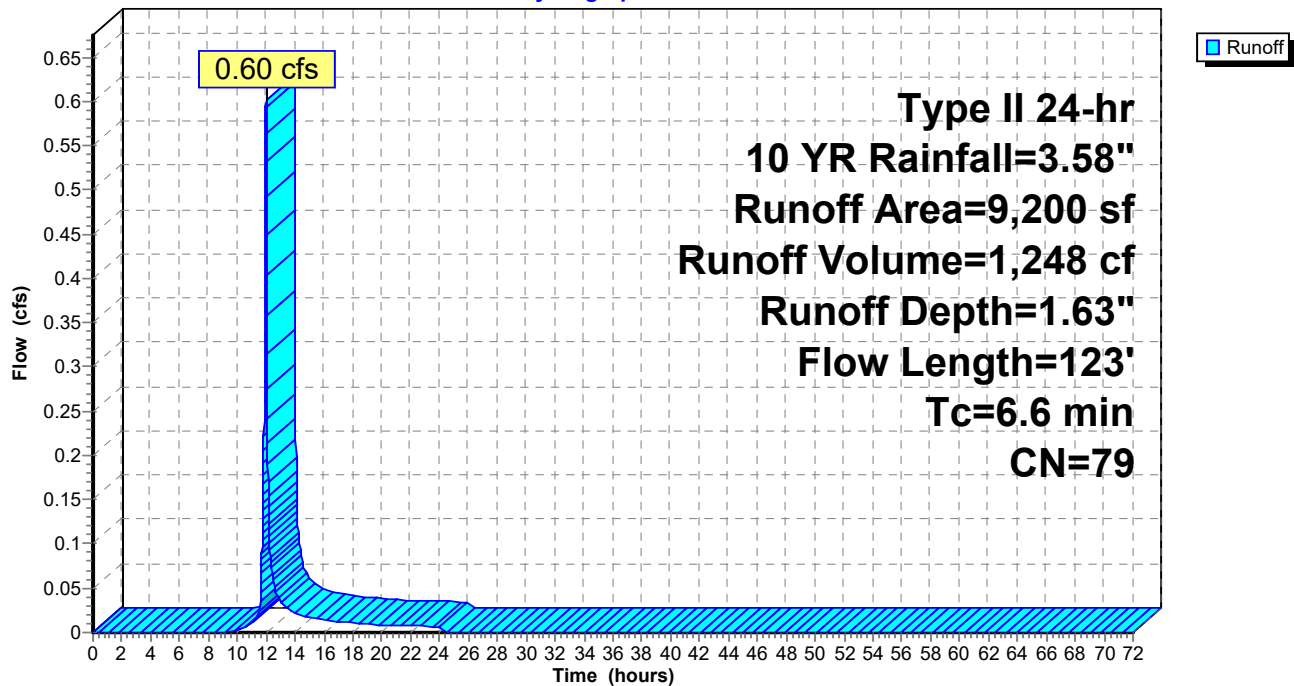
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 10 YR Rainfall=3.58"

Area (sf)	CN	Description
4,910	98	Unconnected pavement, HSG A
3,018	39	>75% Grass cover, Good, HSG A
1,272	98	Roofs, HSG A
9,200	79	Weighted Average
3,018		32.80% Pervious Area
6,182		67.20% Impervious Area
4,910		79.42% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0800	1.21		Sheet Flow, A - B Smooth surfaces n= 0.011 P2= 2.50"
6.5	94	0.0680	0.24		Sheet Flow, B-C Grass: Short n= 0.150 P2= 2.50"
0.0	7	0.1300	2.52		Shallow Concentrated Flow, C-D Short Grass Pasture Kv= 7.0 fps
0.0	16	0.1000	6.42		Shallow Concentrated Flow, D-E Paved Kv= 20.3 fps
6.6	123	Total			

Subcatchment 1S: East Side of Lot

Hydrograph



Summary for Subcatchment 2S: West Side of Lot

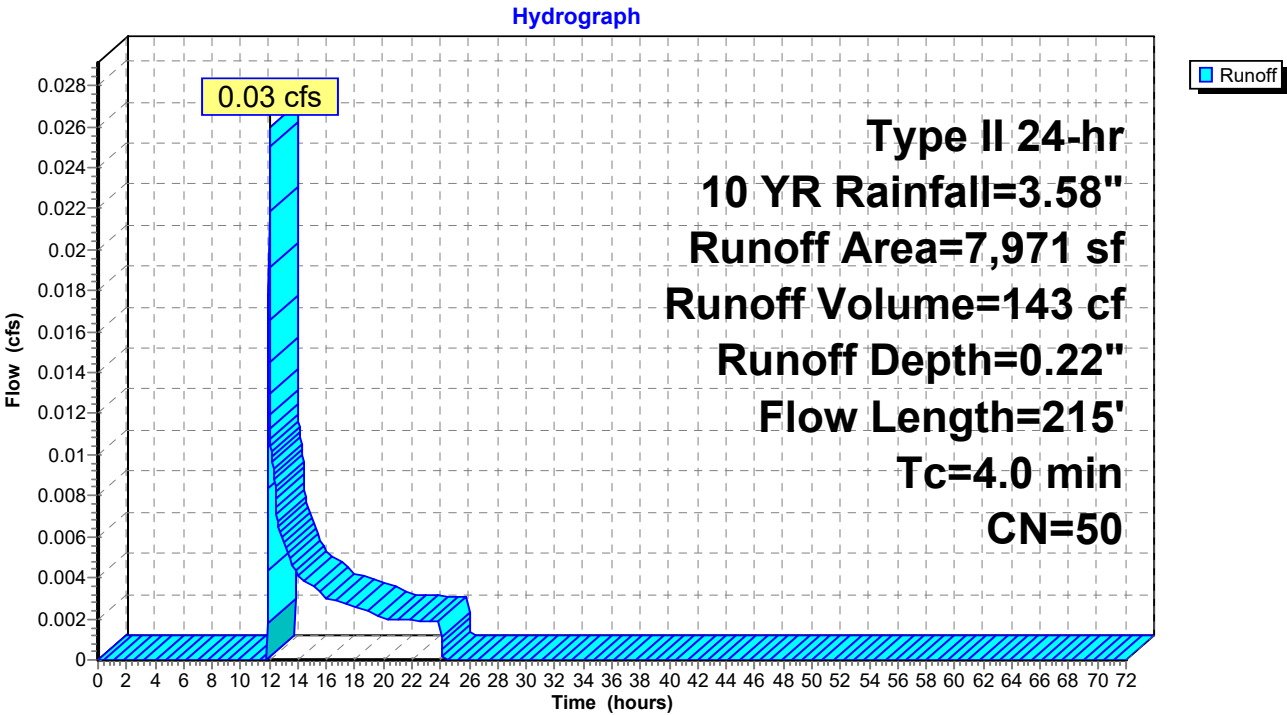
Runoff = 0.03 cfs @ 12.00 hrs, Volume= 143 cf, Depth= 0.22"
Routed to Pond 2P : Existing CB2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 YR Rainfall=3.58"

Area (sf)	CN	Description
6,363	39	>75% Grass cover, Good, HSG A
1,608	96	Gravel surface, HSG A
7,971	50	Weighted Average
7,971		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	120	0.0210	1.29		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
0.8	95	0.0730	1.89		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
2.4	215	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 2S: West Side of Lot



Summary for Subcatchment 3S: Building Addition

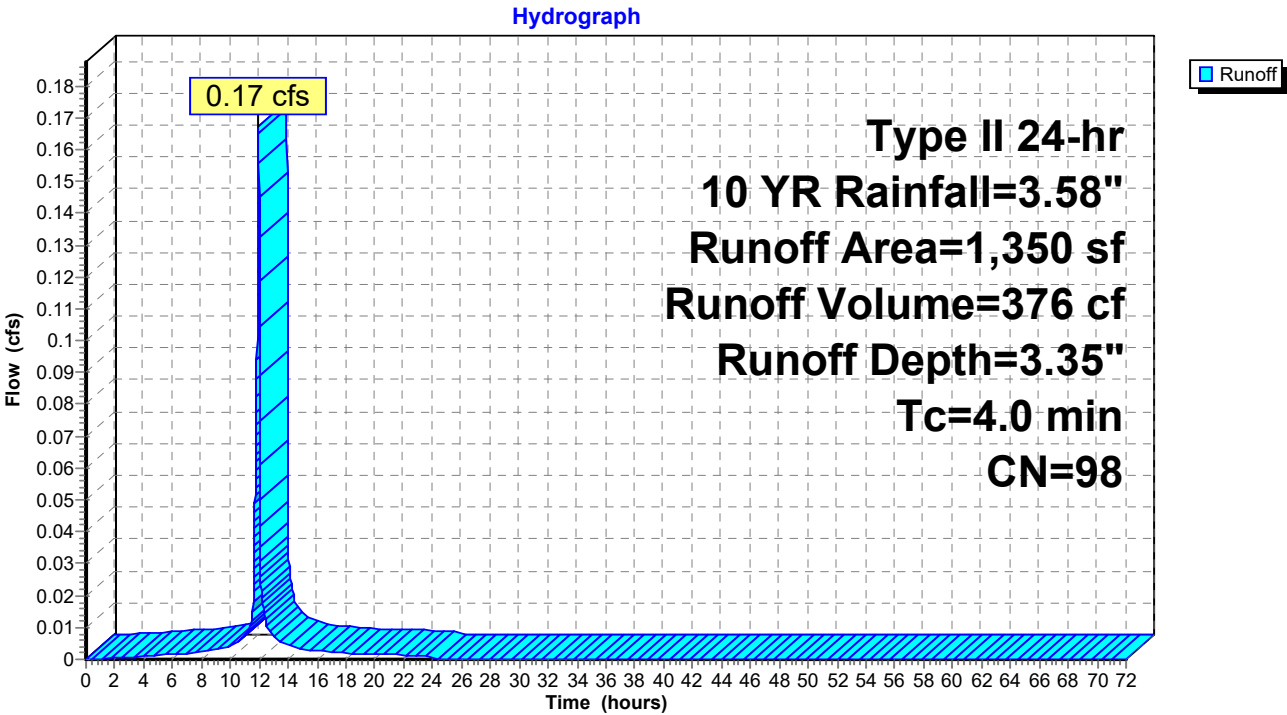
Runoff = 0.17 cfs @ 11.94 hrs, Volume= 376 cf, Depth= 3.35"
Routed to Pond 3P : ADS Stormtech Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 YR Rainfall=3.58"

	Area (sf)	CN	Description
*	468	98	Building Addition - Roof
*	882	98	Existing Roof
	1,350	98	Weighted Average
	1,350		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0					Direct Entry, Min tc
1.0	0				Total, Increased to minimum Tc = 4.0 min

Subcatchment 3S: Building Addition



Summary for Subcatchment 4S: Center Parking Area

Runoff = 0.29 cfs @ 11.95 hrs, Volume= 539 cf, Depth= 1.42"
Routed to Pond 3P : ADS Stormtech Chambers

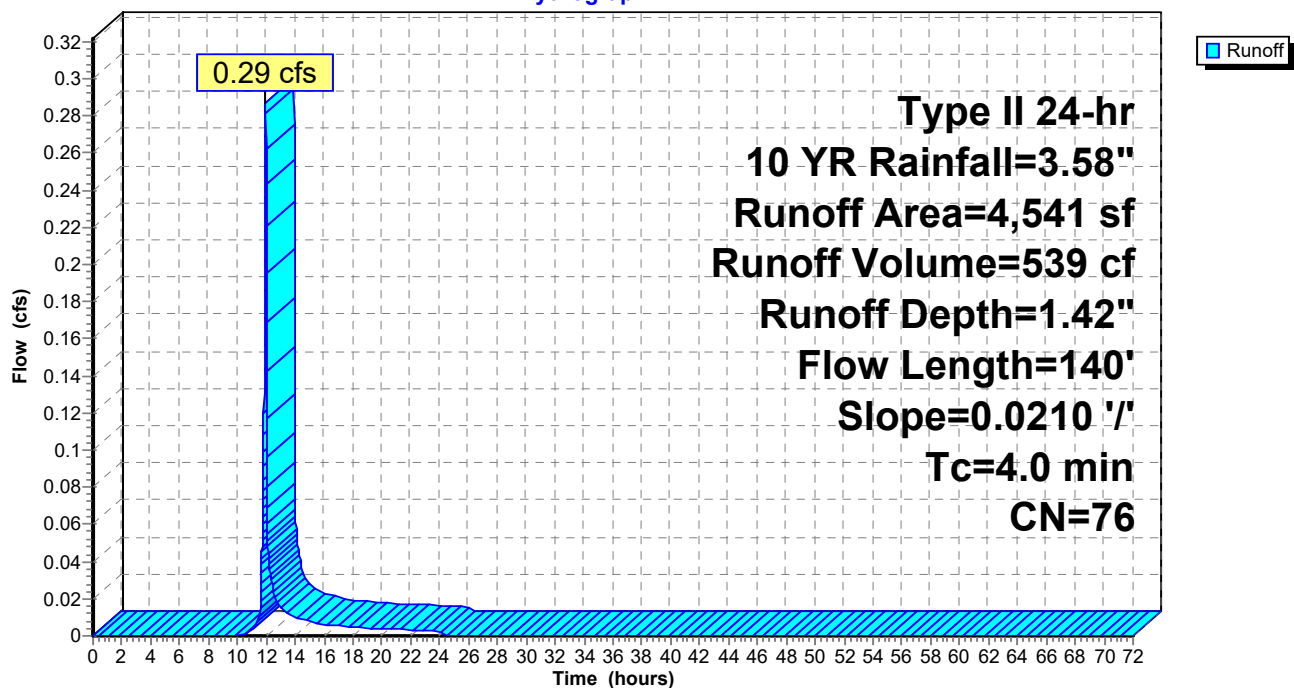
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 10 YR Rainfall=3.58"

Area (sf)	CN	Description
2,951	96	Gravel surface, HSG A
1,590	39	>75% Grass cover, Good, HSG A
4,541	76	Weighted Average
4,541		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	140	0.0210	1.33		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 2.50"
1.8	140	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 4S: Center Parking Area

Hydrograph



Summary for Pond 1P: Existing CB1

Inflow Area = 15,091 sf, 49.91% Impervious, Inflow Depth = 1.01" for 10 YR event
 Inflow = 0.60 cfs @ 11.98 hrs, Volume= 1,267 cf
 Outflow = 0.60 cfs @ 11.98 hrs, Volume= 1,267 cf, Atten= 0%, Lag= 0.0 min
 Primary = 0.60 cfs @ 11.98 hrs, Volume= 1,267 cf
 Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 587.01' @ 11.98 hrs

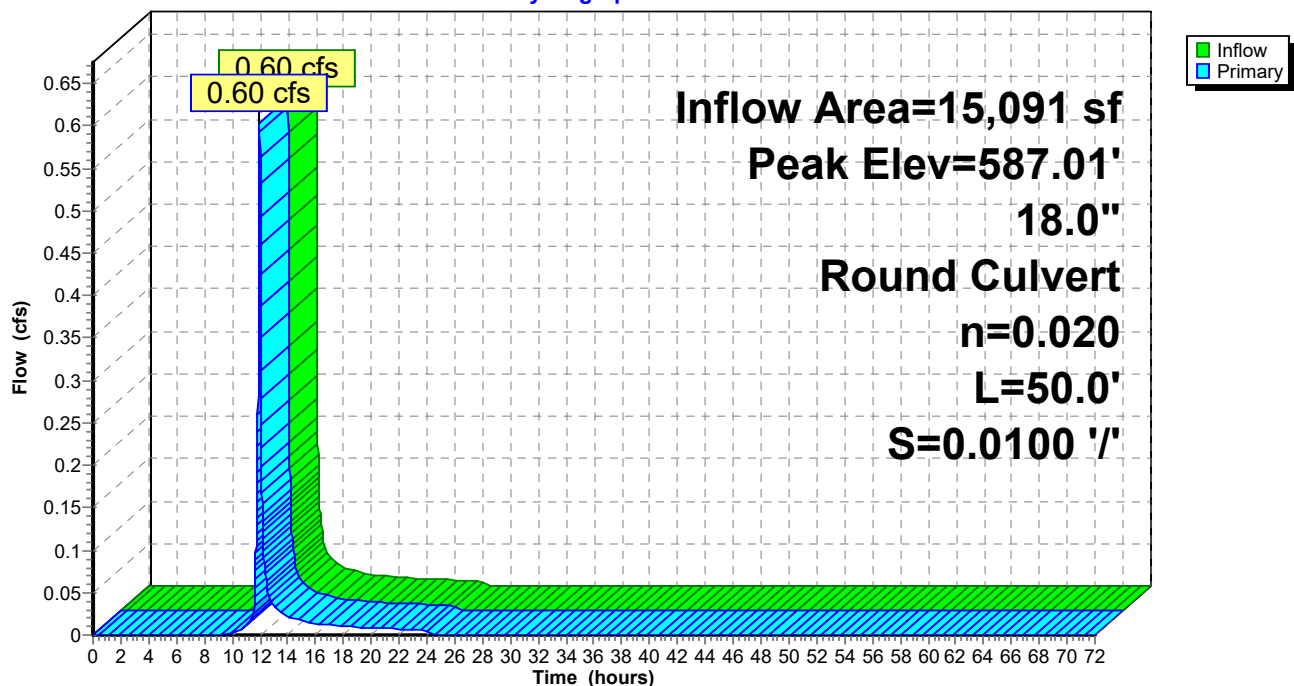
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.60'	18.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 586.60' / 586.10' S= 0.0100 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 1.77 sf

Primary OutFlow Max=0.60 cfs @ 11.98 hrs HW=587.01' TW=0.00' (Dynamic Tailwater)
 ↑ **1=Culvert** (Barrel Controls 0.60 cfs @ 2.28 fps)

Pond 1P: Existing CB1

Hydrograph



Summary for Pond 2P: Existing CB2

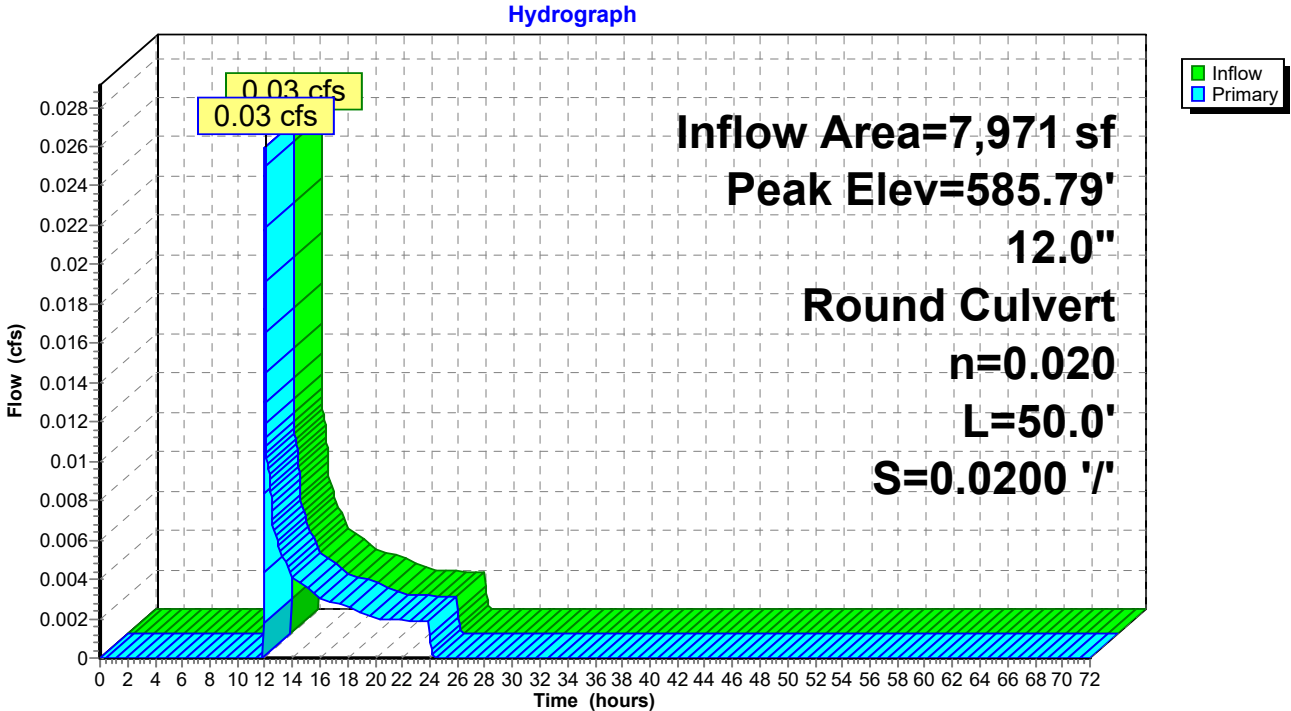
Inflow Area = 7,971 sf, 0.00% Impervious, Inflow Depth = 0.22" for 10 YR event
Inflow = 0.03 cfs @ 12.00 hrs, Volume= 143 cf
Outflow = 0.03 cfs @ 12.00 hrs, Volume= 143 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.03 cfs @ 12.00 hrs, Volume= 143 cf
Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 585.79' @ 12.00 hrs
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	585.70'	12.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 585.70' / 584.70' S= 0.0200 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.03 cfs @ 12.00 hrs HW=585.79' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.03 cfs @ 0.76 fps)

Pond 2P: Existing CB2



Summary for Pond 3P: ADS Stormtech Chambers

Typical safety factor of 50% applied to exfiltration value to account for clogging

Inflow Area = 5,891 sf, 22.92% Impervious, Inflow Depth = 1.86" for 10 YR event
 Inflow = 0.45 cfs @ 11.95 hrs, Volume= 915 cf
 Outflow = 0.09 cfs @ 12.08 hrs, Volume= 915 cf, Atten= 80%, Lag= 7.9 min
 Discarded = 0.05 cfs @ 12.08 hrs, Volume= 896 cf
 Primary = 0.04 cfs @ 12.08 hrs, Volume= 19 cf
 Routed to Pond 1P : Existing CB1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 592.61' @ 12.08 hrs Surf.Area= 192 sf Storage= 292 cf

Plug-Flow detention time= 36.6 min calculated for 915 cf (100% of inflow)
 Center-of-Mass det. time= 36.6 min (841.3 - 804.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	590.00'	231 cf	11.50'W x 16.68'L x 4.00'H Field A 767 cf Overall - 189 cf Embedded = 578 cf x 40.0% Voids
#2A	591.00'	189 cf	ADS_StormTech SC-740 x 4 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 2 rows
		421 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	592.50'	6.0" Round Culvert L= 108.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.50' / 588.50' S= 0.0370 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Discarded	590.00'	14.000 in/hr Exfiltration X 0.50 over Wetted area Phase-In= 0.01'

Discarded OutFlow Max=0.05 cfs @ 12.08 hrs HW=592.61' (Free Discharge)

↑**2=Exfiltration** (Exfiltration Controls 0.05 cfs)

Primary OutFlow Max=0.04 cfs @ 12.08 hrs HW=592.61' TW=586.89' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 0.04 cfs @ 1.13 fps)

Pond 3P: ADS Stormtech Chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Row Length Adjustment= +0.44' x 6.45 sf x 2 rows

51.0" Wide + 12.0" Spacing = 63.0" C-C Row Spacing

2 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 14.68' Row Length +12.0" End Stone x 2 = 16.68' Base Length

2 Rows x 51.0" Wide + 12.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.50' Base Width

12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

4 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 2 Rows = 189.4 cf Chamber Storage

767.3 cf Field - 189.4 cf Chambers = 577.8 cf Stone x 40.0% Voids = 231.1 cf Stone Storage

Chamber Storage + Stone Storage = 420.6 cf = 0.010 af

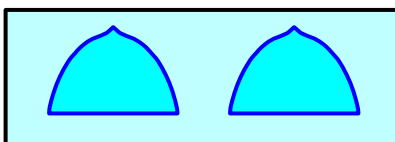
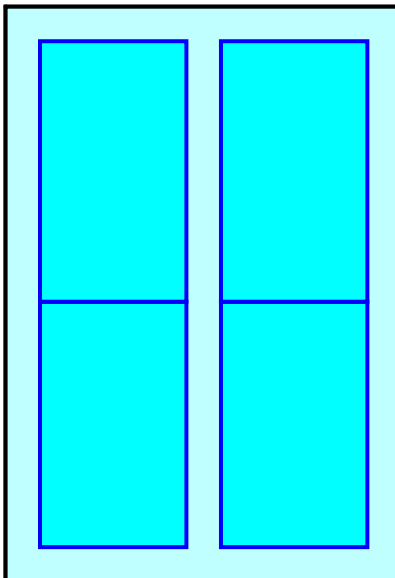
Overall Storage Efficiency = 54.8%

Overall System Size = 16.68' x 11.50' x 4.00'

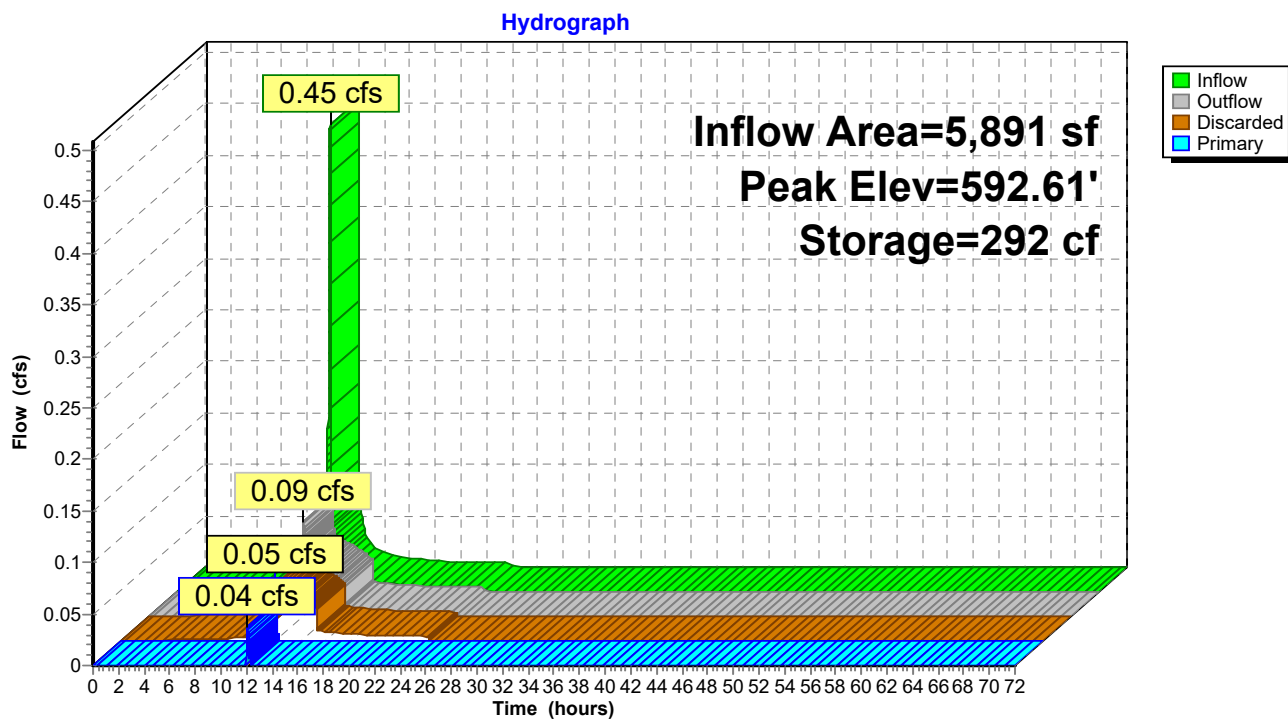
4 Chambers

28.4 cy Field

21.4 cy Stone



Pond 3P: ADS Stormtech Chambers

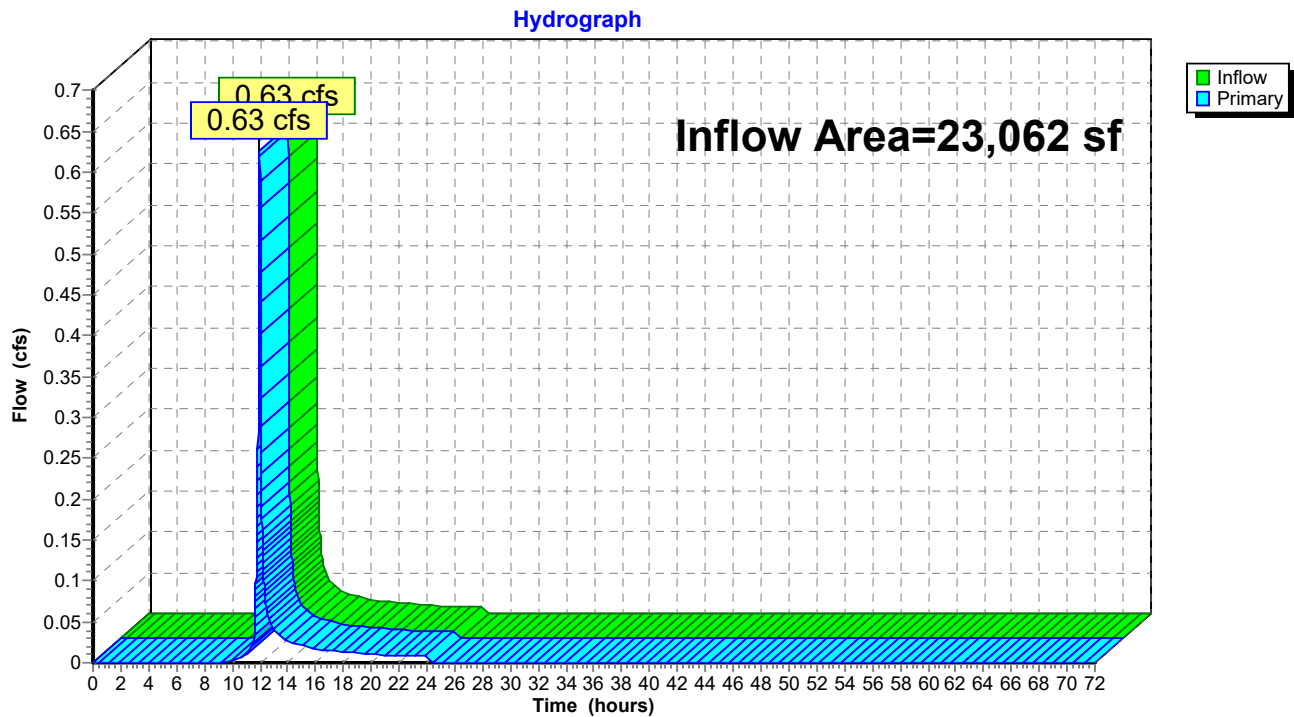


Summary for Link 1L: City of Leb Drainage

Inflow Area = 23,062 sf, 32.66% Impervious, Inflow Depth = 0.73" for 10 YR event
 Inflow = 0.63 cfs @ 11.99 hrs, Volume= 1,410 cf
 Primary = 0.63 cfs @ 11.99 hrs, Volume= 1,410 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link 1L: City of Leb Drainage



25-03-24_13444 UVMC_POST DEVELOPMENT

Type II 24-hr 25 YR Rainfall=4.40"

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Page 30

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: East Side of LotRunoff Area=9,200 sf 67.20% Impervious Runoff Depth=2.29"
Flow Length=123' Tc=6.6 min CN=79 Runoff=0.84 cfs 1,758 cf**Subcatchment2S: West Side of Lot**Runoff Area=7,971 sf 0.00% Impervious Runoff Depth=0.46"
Flow Length=215' Tc=4.0 min CN=50 Runoff=0.11 cfs 309 cf**Subcatchment3S: Building Addition**Runoff Area=1,350 sf 100.00% Impervious Runoff Depth=4.16"
Tc=4.0 min CN=98 Runoff=0.21 cfs 468 cf**Subcatchment4S: Center Parking Area**Runoff Area=4,541 sf 0.00% Impervious Runoff Depth=2.05"
Flow Length=140' Slope=0.0210 '/' Tc=4.0 min CN=76 Runoff=0.41 cfs 776 cf**Pond 1P: Existing CB1**Peak Elev=587.20' Inflow=1.23 cfs 1,932 cf
18.0" Round Culvert n=0.020 L=50.0' S=0.0100 '/' Outflow=1.23 cfs 1,932 cf**Pond 2P: Existing CB2**Peak Elev=585.89' Inflow=0.11 cfs 309 cf
12.0" Round Culvert n=0.020 L=50.0' S=0.0200 '/' Outflow=0.11 cfs 309 cf**Pond 3P: ADS Stormtech Chambers**Peak Elev=592.93' Storage=329 cf Inflow=0.62 cfs 1,244 cf
Discarded=0.06 cfs 1,070 cf Primary=0.40 cfs 174 cf Outflow=0.46 cfs 1,244 cf**Link 1L: City of Leb Drainage**Inflow=1.34 cfs 2,240 cf
Primary=1.34 cfs 2,240 cf**Total Runoff Area = 23,062 sf Runoff Volume = 3,311 cf Average Runoff Depth = 1.72"**
67.34% Pervious = 15,530 sf 32.66% Impervious = 7,532 sf

25-03-24_13444 UVMC_POST DEVELOPMENT

Prepared by Pathways Consulting LLC

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Type II 24-hr 25 YR Rainfall=4.40"

Revised 01/21/2025 Printed 3/21/2025

Page 31

Summary for Subcatchment 1S: East Side of Lot

Runoff = 0.84 cfs @ 11.98 hrs, Volume= 1,758 cf, Depth= 2.29"
 Routed to Pond 1P : Existing CB1

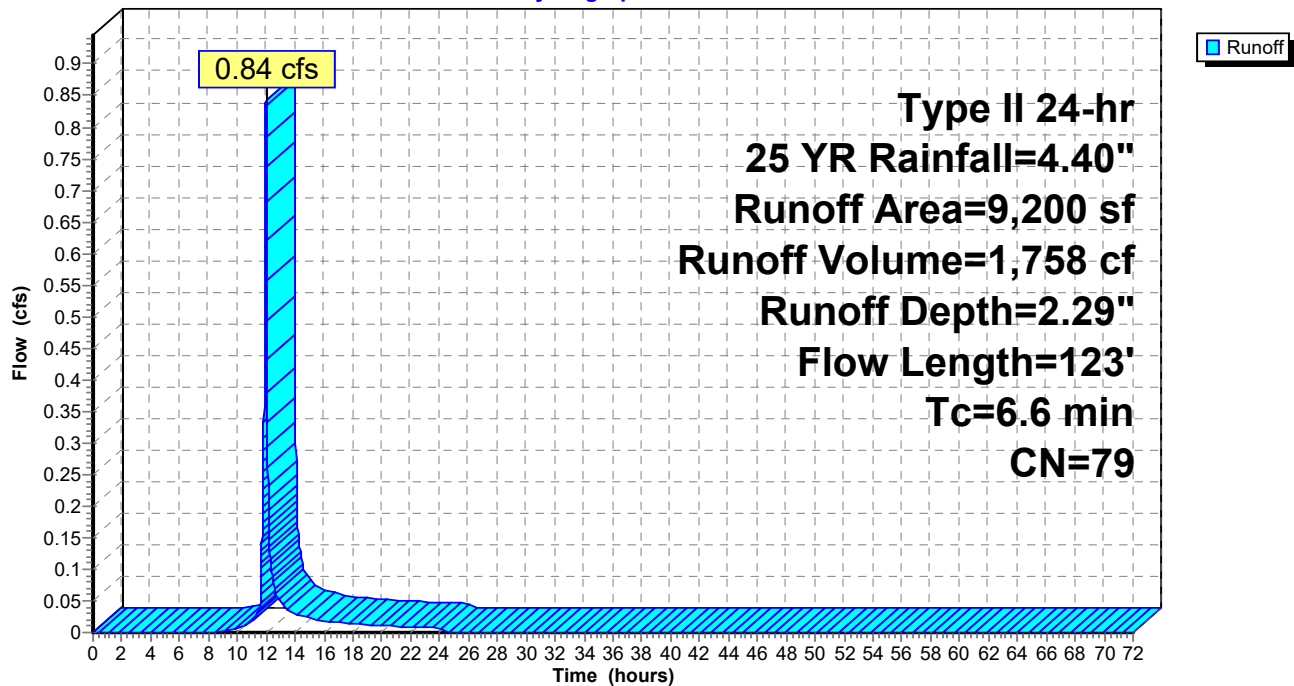
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 25 YR Rainfall=4.40"

Area (sf)	CN	Description
4,910	98	Unconnected pavement, HSG A
3,018	39	>75% Grass cover, Good, HSG A
1,272	98	Roofs, HSG A
9,200	79	Weighted Average
3,018		32.80% Pervious Area
6,182		67.20% Impervious Area
4,910		79.42% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0800	1.21		Sheet Flow, A - B Smooth surfaces n= 0.011 P2= 2.50"
6.5	94	0.0680	0.24		Sheet Flow, B-C Grass: Short n= 0.150 P2= 2.50"
0.0	7	0.1300	2.52		Shallow Concentrated Flow, C-D Short Grass Pasture Kv= 7.0 fps
0.0	16	0.1000	6.42		Shallow Concentrated Flow, D-E Paved Kv= 20.3 fps
6.6	123	Total			

Subcatchment 1S: East Side of Lot

Hydrograph



Summary for Subcatchment 2S: West Side of Lot

Runoff = 0.11 cfs @ 11.98 hrs, Volume= 309 cf, Depth= 0.46"
 Routed to Pond 2P : Existing CB2

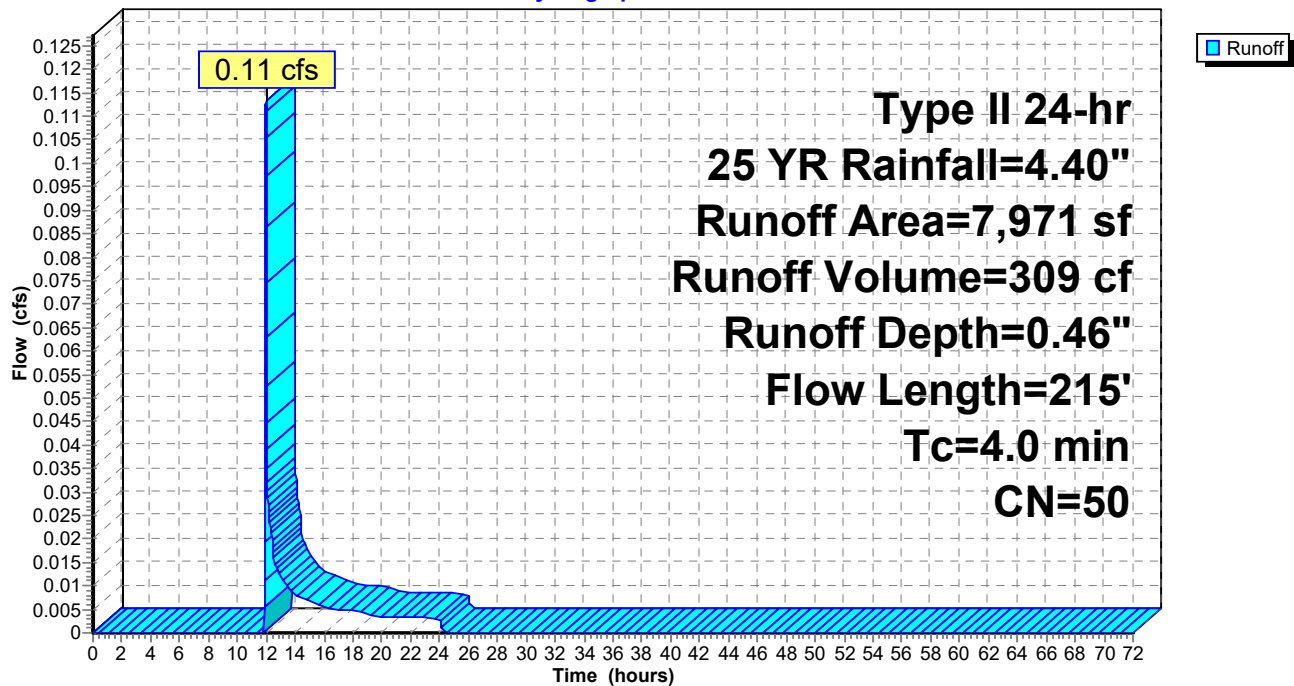
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 25 YR Rainfall=4.40"

Area (sf)	CN	Description
6,363	39	>75% Grass cover, Good, HSG A
1,608	96	Gravel surface, HSG A
7,971	50	Weighted Average
7,971		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	120	0.0210	1.29		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 2.50"
0.8	95	0.0730	1.89		Shallow Concentrated Flow, B-C
					Short Grass Pasture Kv= 7.0 fps
2.4	215	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 2S: West Side of Lot

Hydrograph



Summary for Subcatchment 3S: Building Addition

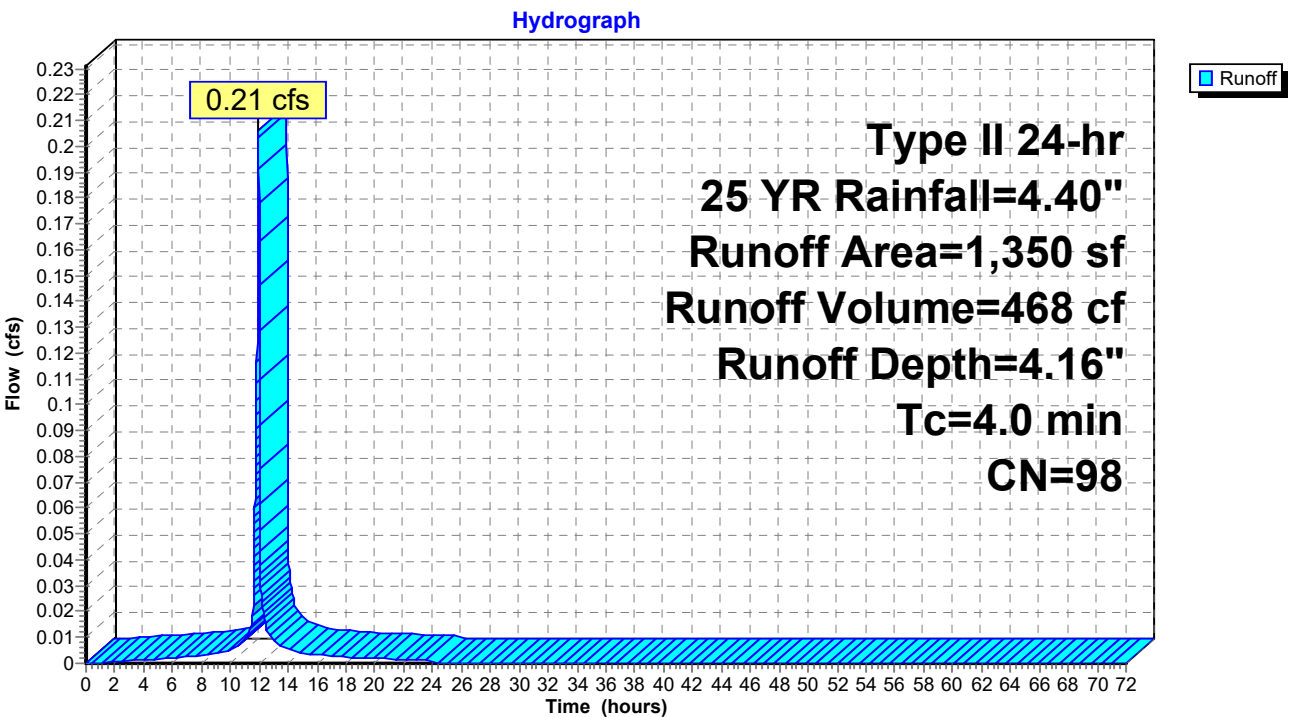
Runoff = 0.21 cfs @ 11.94 hrs, Volume= 468 cf, Depth= 4.16"
Routed to Pond 3P : ADS Stormtech Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 25 YR Rainfall=4.40"

	Area (sf)	CN	Description
*	468	98	Building Addition - Roof
*	882	98	Existing Roof
	1,350	98	Weighted Average
	1,350		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0					Direct Entry, Min tc
1.0	0				Total, Increased to minimum Tc = 4.0 min

Subcatchment 3S: Building Addition



Summary for Subcatchment 4S: Center Parking Area

Runoff = 0.41 cfs @ 11.95 hrs, Volume= 776 cf, Depth= 2.05"
Routed to Pond 3P : ADS Stormtech Chambers

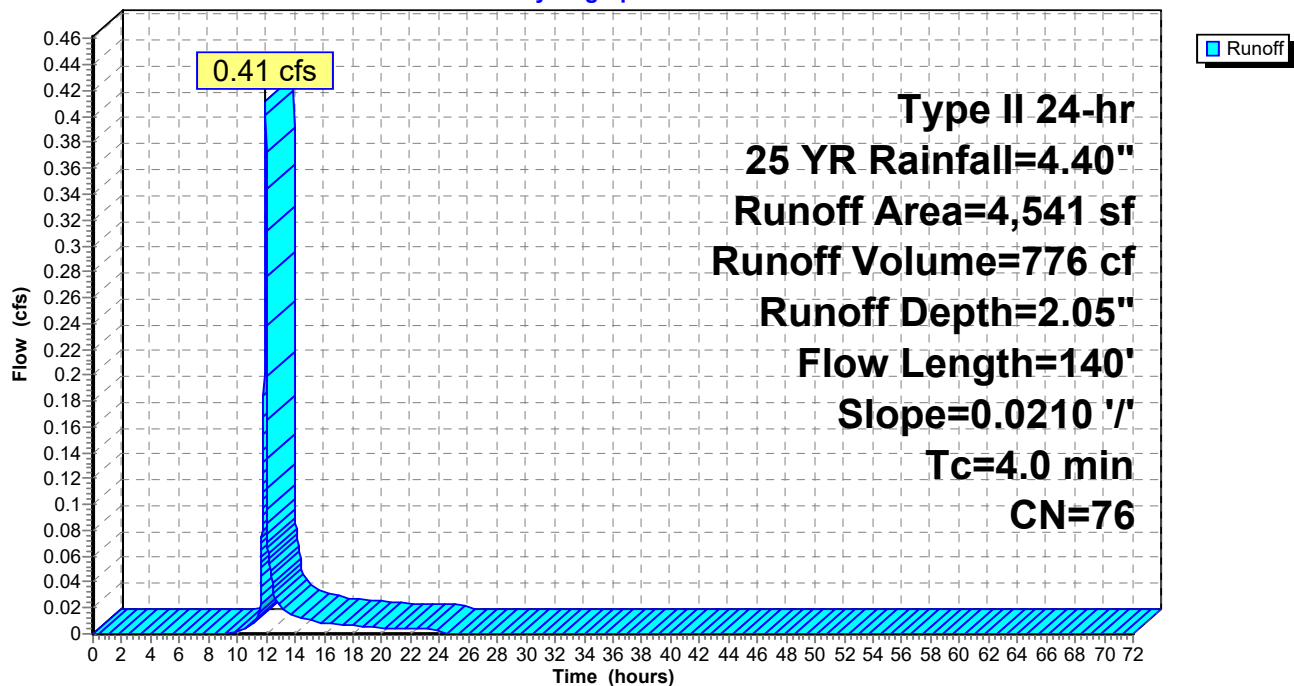
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 25 YR Rainfall=4.40"

Area (sf)	CN	Description
2,951	96	Gravel surface, HSG A
1,590	39	>75% Grass cover, Good, HSG A
4,541	76	Weighted Average
4,541		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	140	0.0210	1.33		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 2.50"
1.8	140	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 4S: Center Parking Area

Hydrograph



Summary for Pond 1P: Existing CB1

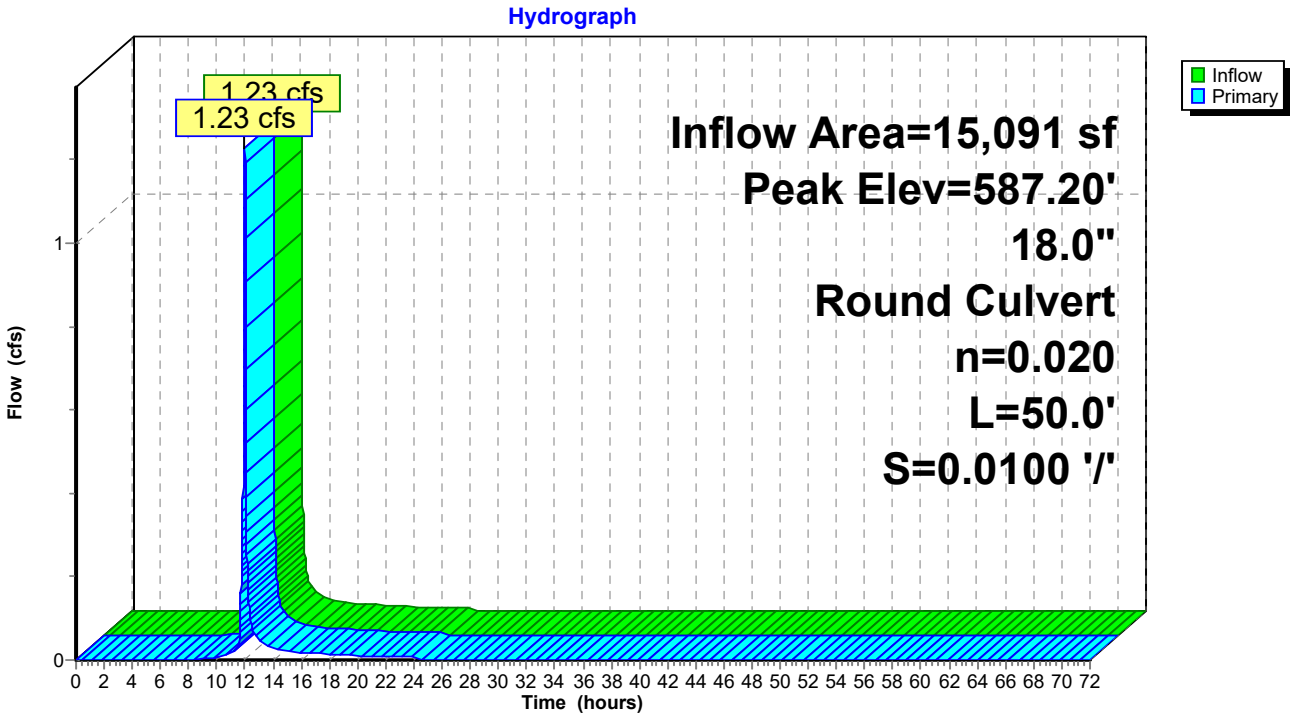
Inflow Area = 15,091 sf, 49.91% Impervious, Inflow Depth = 1.54" for 25 YR event
Inflow = 1.23 cfs @ 11.99 hrs, Volume= 1,932 cf
Outflow = 1.23 cfs @ 11.99 hrs, Volume= 1,932 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.23 cfs @ 11.99 hrs, Volume= 1,932 cf
Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 587.20' @ 11.99 hrs
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.60'	18.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 586.60' / 586.10' S= 0.0100 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 1.77 sf

Primary OutFlow Max=1.22 cfs @ 11.99 hrs HW=587.20' TW=0.00' (Dynamic Tailwater)
1=Culvert (Barrel Controls 1.22 cfs @ 2.74 fps)

Pond 1P: Existing CB1



Summary for Pond 2P: Existing CB2

Inflow Area = 7,971 sf, 0.00% Impervious, Inflow Depth = 0.46" for 25 YR event
 Inflow = 0.11 cfs @ 11.98 hrs, Volume= 309 cf
 Outflow = 0.11 cfs @ 11.98 hrs, Volume= 309 cf, Atten= 0%, Lag= 0.0 min
 Primary = 0.11 cfs @ 11.98 hrs, Volume= 309 cf
 Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 585.89' @ 11.98 hrs

Flood Elev= 591.10'

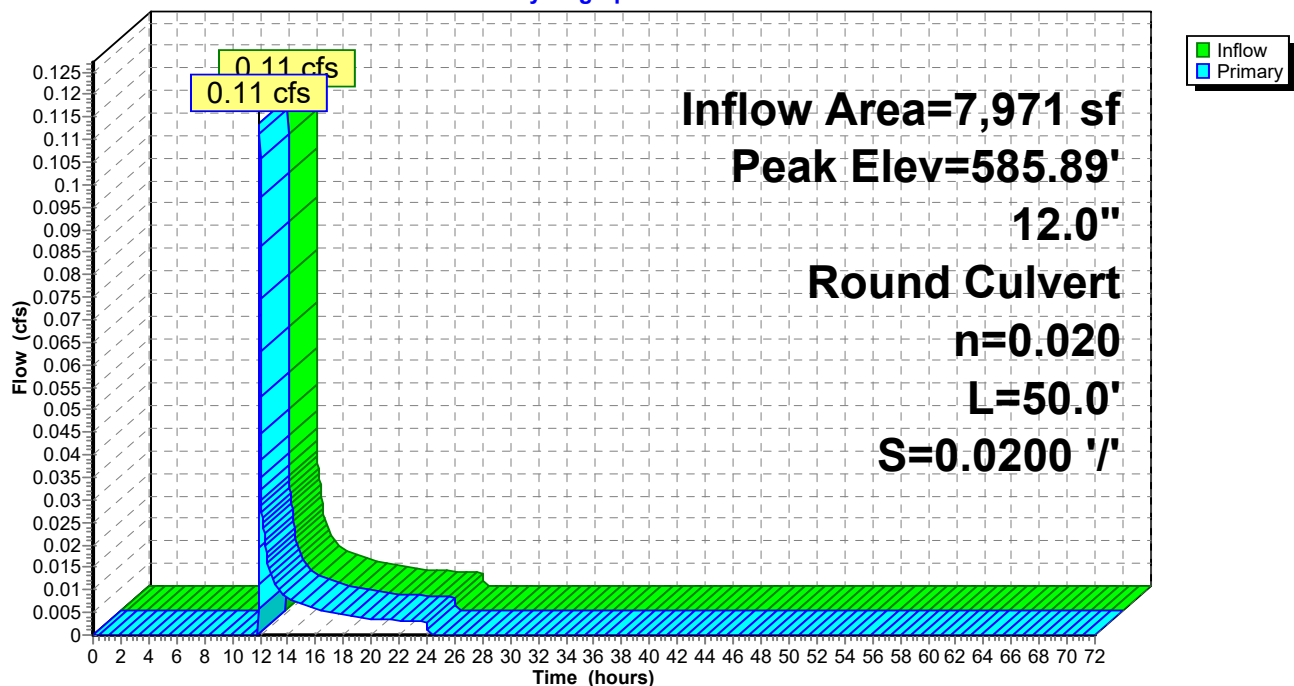
Device	Routing	Invert	Outlet Devices
#1	Primary	585.70'	12.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 585.70' / 584.70' S= 0.0200 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.11 cfs @ 11.98 hrs HW=585.89' TW=0.00' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 0.11 cfs @ 1.11 fps)

Pond 2P: Existing CB2

Hydrograph



Summary for Pond 3P: ADS Stormtech Chambers

Typical safety factor of 50% applied to exfiltration value to account for clogging

Inflow Area = 5,891 sf, 22.92% Impervious, Inflow Depth = 2.53" for 25 YR event
 Inflow = 0.62 cfs @ 11.95 hrs, Volume= 1,244 cf
 Outflow = 0.46 cfs @ 12.00 hrs, Volume= 1,244 cf, Atten= 26%, Lag= 3.1 min
 Discarded = 0.06 cfs @ 12.00 hrs, Volume= 1,070 cf
 Primary = 0.40 cfs @ 12.00 hrs, Volume= 174 cf
 Routed to Pond 1P : Existing CB1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 592.93' @ 12.00 hrs Surf.Area= 192 sf Storage= 329 cf

Plug-Flow detention time= 32.7 min calculated for 1,244 cf (100% of inflow)
 Center-of-Mass det. time= 32.7 min (832.5 - 799.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	590.00'	231 cf	11.50'W x 16.68'L x 4.00'H Field A 767 cf Overall - 189 cf Embedded = 578 cf x 40.0% Voids
#2A	591.00'	189 cf	ADS_StormTech SC-740 x 4 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 2 rows
		421 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	592.50'	6.0" Round Culvert L= 108.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.50' / 588.50' S= 0.0370 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Discarded	590.00'	14.000 in/hr Exfiltration X 0.50 over Wetted area Phase-In= 0.01'

Discarded OutFlow Max=0.06 cfs @ 12.00 hrs HW=592.93' (Free Discharge)

↑ **2=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.40 cfs @ 12.00 hrs HW=592.93' TW=587.20' (Dynamic Tailwater)

↑ **1=Culvert** (Inlet Controls 0.40 cfs @ 2.23 fps)

Pond 3P: ADS Stormtech Chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Row Length Adjustment= +0.44' x 6.45 sf x 2 rows

51.0" Wide + 12.0" Spacing = 63.0" C-C Row Spacing

2 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 14.68' Row Length +12.0" End Stone x 2 = 16.68' Base Length

2 Rows x 51.0" Wide + 12.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.50' Base Width

12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

4 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 2 Rows = 189.4 cf Chamber Storage

767.3 cf Field - 189.4 cf Chambers = 577.8 cf Stone x 40.0% Voids = 231.1 cf Stone Storage

Chamber Storage + Stone Storage = 420.6 cf = 0.010 af

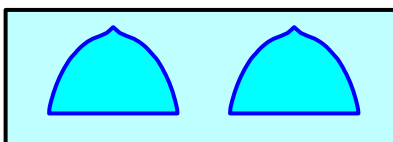
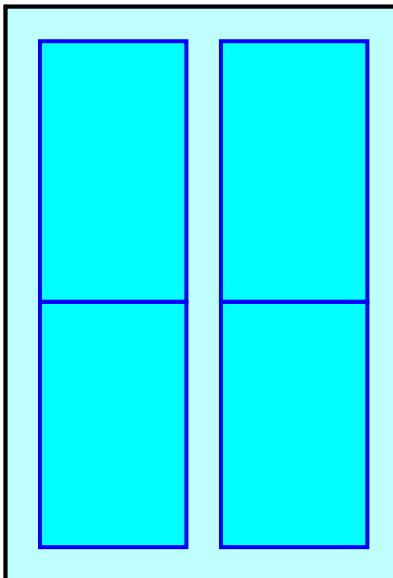
Overall Storage Efficiency = 54.8%

Overall System Size = 16.68' x 11.50' x 4.00'

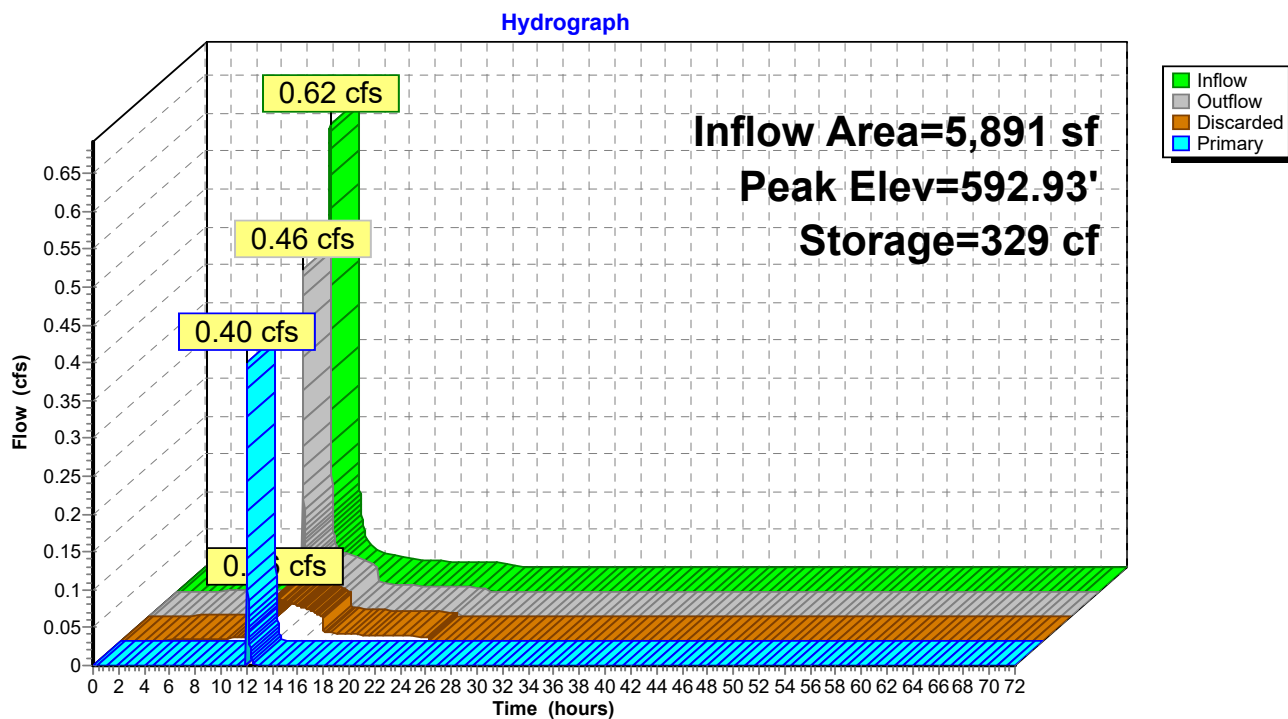
4 Chambers

28.4 cy Field

21.4 cy Stone



Pond 3P: ADS Stormtech Chambers

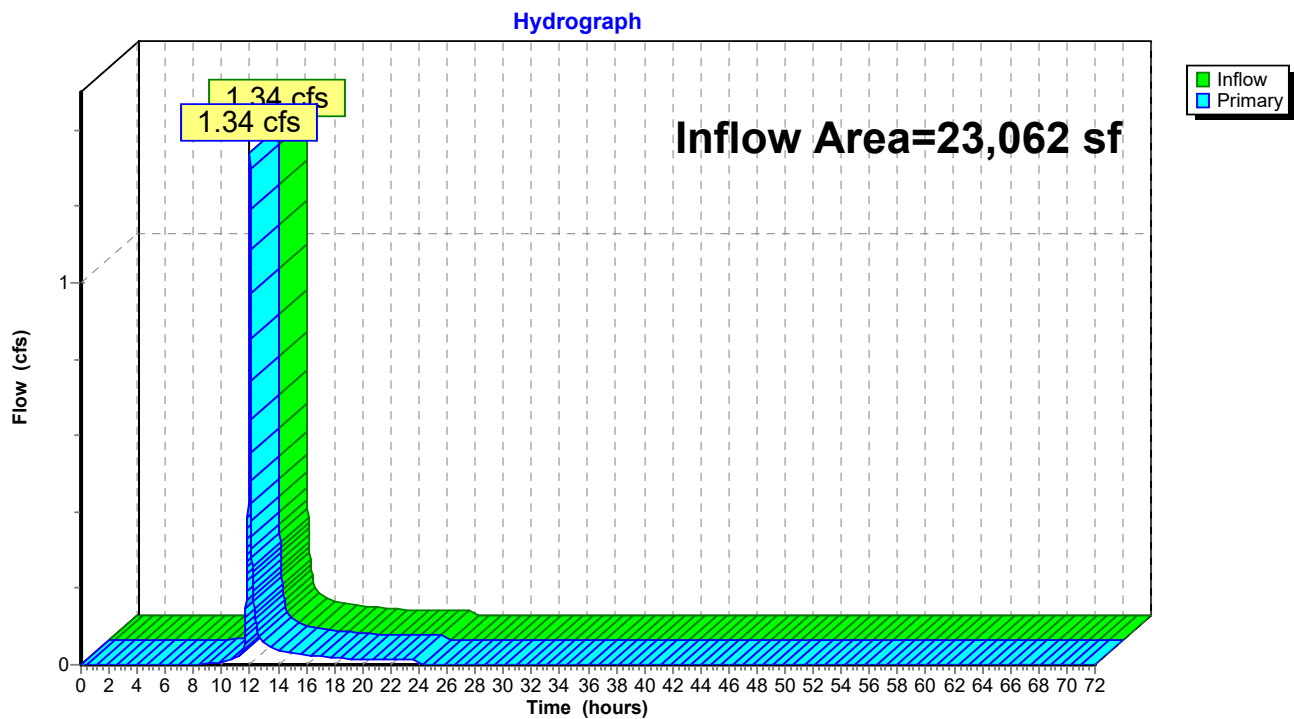


Summary for Link 1L: City of Leb Drainage

Inflow Area = 23,062 sf, 32.66% Impervious, Inflow Depth = 1.17" for 25 YR event
 Inflow = 1.34 cfs @ 11.99 hrs, Volume= 2,240 cf
 Primary = 1.34 cfs @ 11.99 hrs, Volume= 2,240 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link 1L: City of Leb Drainage



25-03-24_13444 UVMC_POST DEVELOPMENT

Prepared by Pathways Consulting LLC

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Type II 24-hr 50 YR Rainfall=5.15"

Revised 01/21/2025 Printed 3/21/2025

Page 42

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: East Side of LotRunoff Area=9,200 sf 67.20% Impervious Runoff Depth=2.93"
Flow Length=123' Tc=6.6 min CN=79 Runoff=1.07 cfs 2,247 cf**Subcatchment2S: West Side of Lot**Runoff Area=7,971 sf 0.00% Impervious Runoff Depth=0.75"
Flow Length=215' Tc=4.0 min CN=50 Runoff=0.22 cfs 501 cf**Subcatchment3S: Building Addition**Runoff Area=1,350 sf 100.00% Impervious Runoff Depth=4.91"
Tc=4.0 min CN=98 Runoff=0.24 cfs 553 cf**Subcatchment4S: Center Parking Area**Runoff Area=4,541 sf 0.00% Impervious Runoff Depth=2.66"
Flow Length=140' Slope=0.0210 '/' Tc=4.0 min CN=76 Runoff=0.53 cfs 1,006 cf**Pond 1P: Existing CB1**Peak Elev=587.31' Inflow=1.68 cfs 2,581 cf
18.0" Round Culvert n=0.020 L=50.0' S=0.0100 '/' Outflow=1.68 cfs 2,581 cf**Pond 2P: Existing CB2**Peak Elev=585.97' Inflow=0.22 cfs 501 cf
12.0" Round Culvert n=0.020 L=50.0' S=0.0200 '/' Outflow=0.22 cfs 501 cf**Pond 3P: ADS Stormtech Chambers**Peak Elev=593.16' Storage=353 cf Inflow=0.77 cfs 1,559 cf
Discarded=0.06 cfs 1,225 cf Primary=0.61 cfs 334 cf Outflow=0.67 cfs 1,559 cf**Link 1L: City of Leb Drainage**Inflow=1.90 cfs 3,082 cf
Primary=1.90 cfs 3,082 cf**Total Runoff Area = 23,062 sf Runoff Volume = 4,308 cf Average Runoff Depth = 2.24"**
67.34% Pervious = 15,530 sf 32.66% Impervious = 7,532 sf

25-03-24_13444 UVMC_POST DEVELOPMENT

Prepared by Pathways Consulting LLC

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Type II 24-hr 50 YR Rainfall=5.15"

Revised 01/21/2025 Printed 3/21/2025

Page 43

Summary for Subcatchment 1S: East Side of Lot

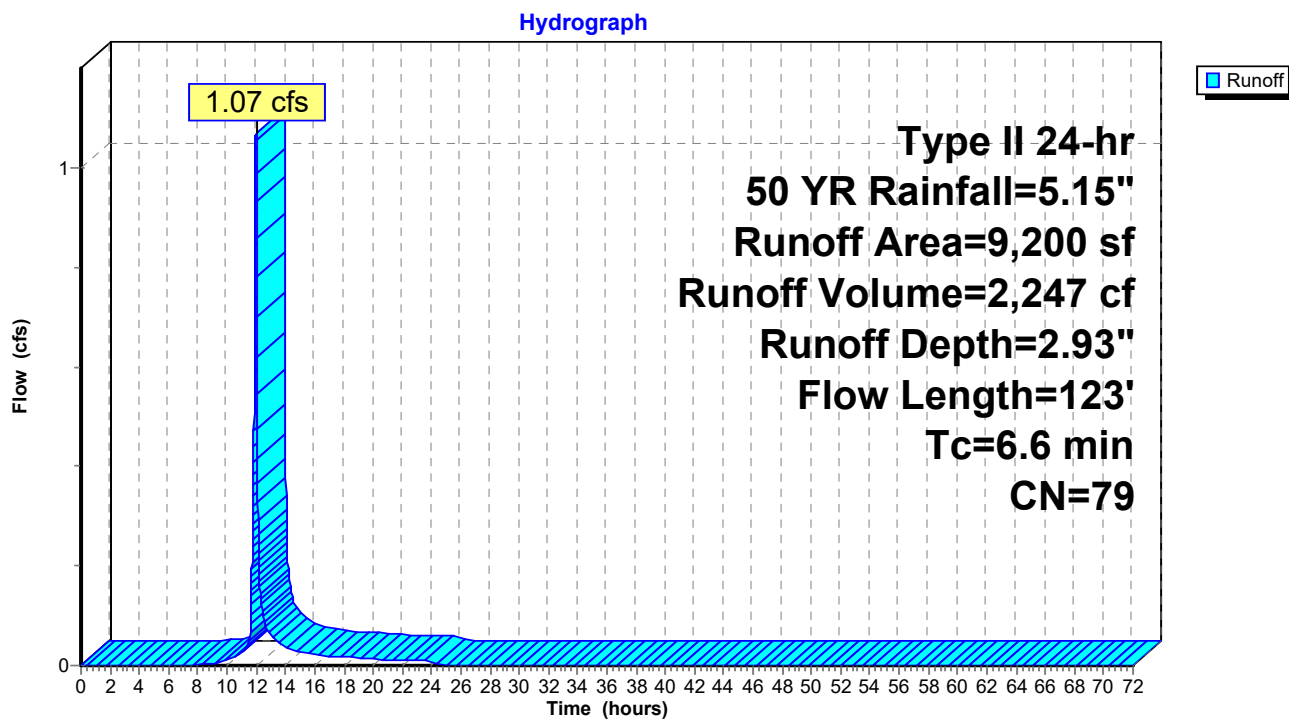
Runoff = 1.07 cfs @ 11.98 hrs, Volume= 2,247 cf, Depth= 2.93"
 Routed to Pond 1P : Existing CB1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 50 YR Rainfall=5.15"

Area (sf)	CN	Description
4,910	98	Unconnected pavement, HSG A
3,018	39	>75% Grass cover, Good, HSG A
1,272	98	Roofs, HSG A
9,200	79	Weighted Average
3,018		32.80% Pervious Area
6,182		67.20% Impervious Area
4,910		79.42% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0800	1.21		Sheet Flow, A - B Smooth surfaces n= 0.011 P2= 2.50"
6.5	94	0.0680	0.24		Sheet Flow, B-C Grass: Short n= 0.150 P2= 2.50"
0.0	7	0.1300	2.52		Shallow Concentrated Flow, C-D Short Grass Pasture Kv= 7.0 fps
0.0	16	0.1000	6.42		Shallow Concentrated Flow, D-E Paved Kv= 20.3 fps
6.6	123	Total			

Subcatchment 1S: East Side of Lot



Summary for Subcatchment 2S: West Side of Lot

Runoff = 0.22 cfs @ 11.97 hrs, Volume= 501 cf, Depth= 0.75"
Routed to Pond 2P : Existing CB2

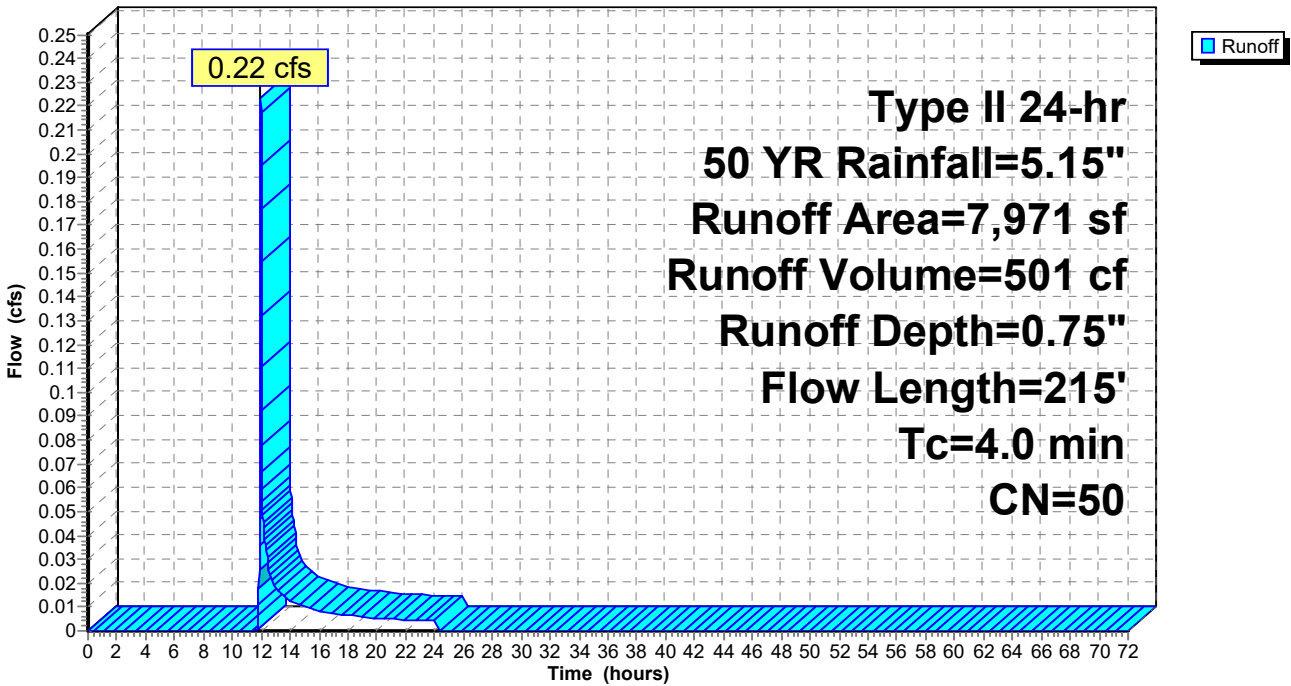
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 50 YR Rainfall=5.15"

Area (sf)	CN	Description
6,363	39	>75% Grass cover, Good, HSG A
1,608	96	Gravel surface, HSG A
7,971	50	Weighted Average
7,971		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	120	0.0210	1.29		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
0.8	95	0.0730	1.89		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
2.4	215	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 2S: West Side of Lot

Hydrograph



Summary for Subcatchment 3S: Building Addition

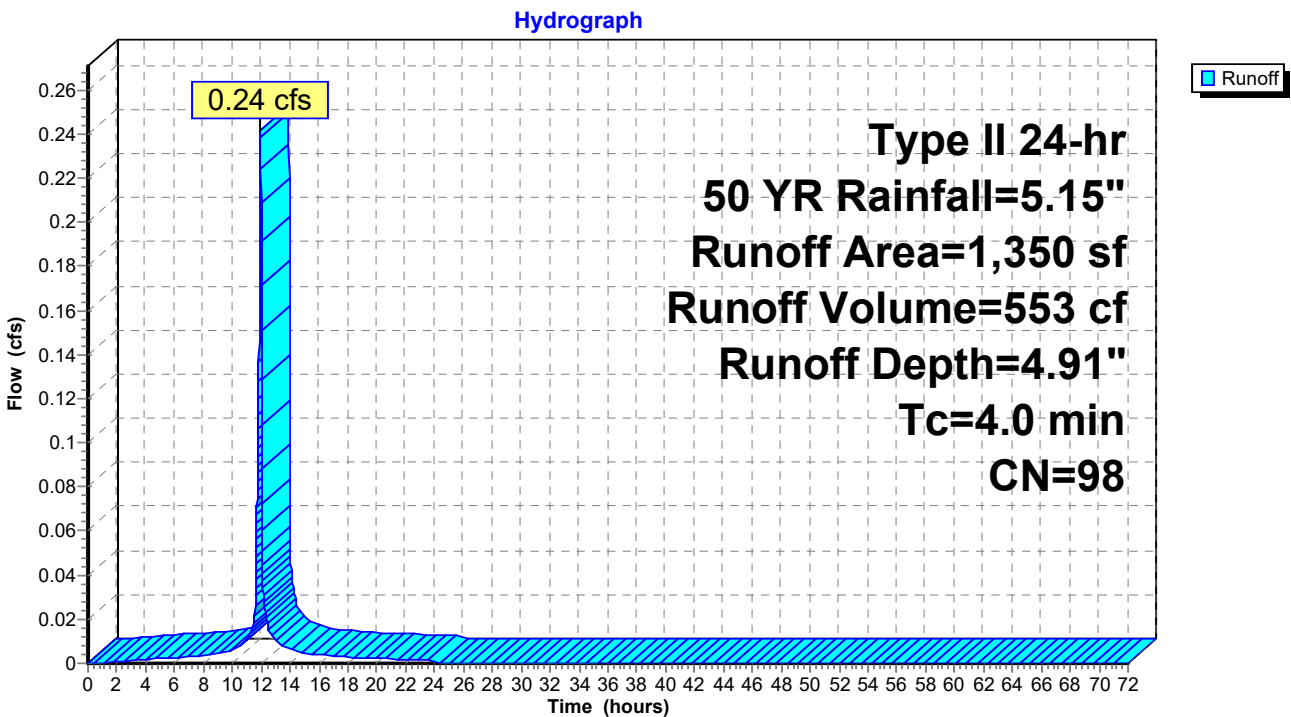
Runoff = 0.24 cfs @ 11.94 hrs, Volume= 553 cf, Depth= 4.91"
Routed to Pond 3P : ADS Stormtech Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 50 YR Rainfall=5.15"

	Area (sf)	CN	Description
*	468	98	Building Addition - Roof
*	882	98	Existing Roof
	1,350	98	Weighted Average
	1,350		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0					Direct Entry, Min tc
1.0	0				Total, Increased to minimum Tc = 4.0 min

Subcatchment 3S: Building Addition



Summary for Subcatchment 4S: Center Parking Area

Runoff = 0.53 cfs @ 11.95 hrs, Volume= 1,006 cf, Depth= 2.66"
Routed to Pond 3P : ADS Stormtech Chambers

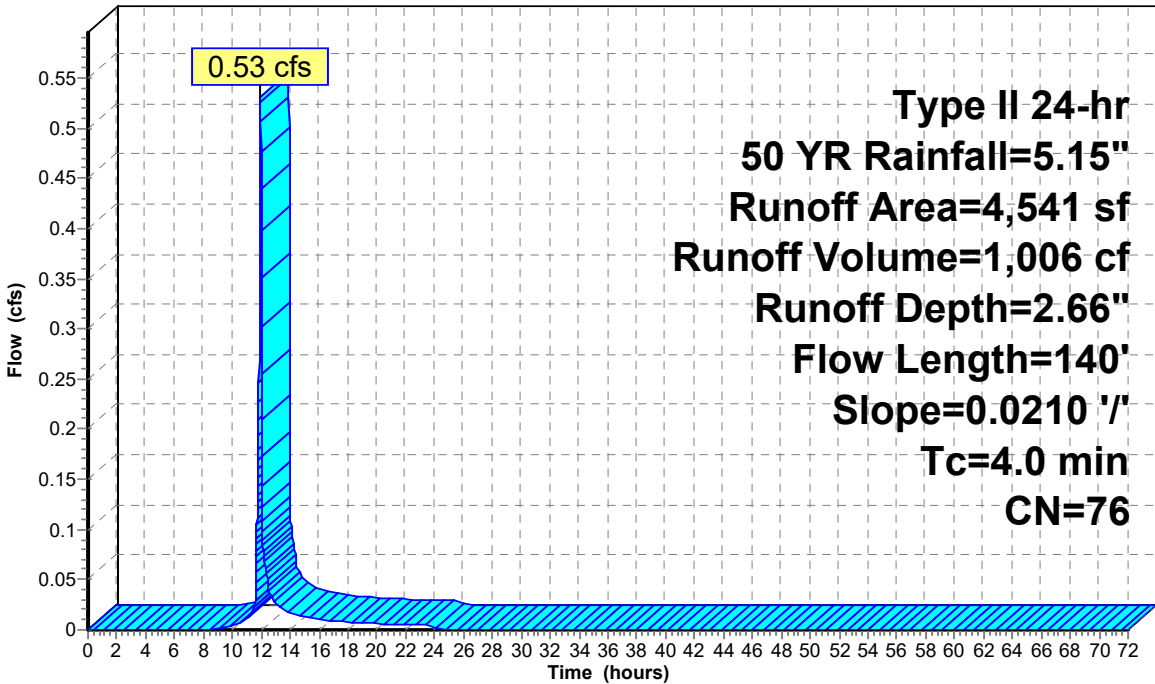
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 50 YR Rainfall=5.15"

Area (sf)	CN	Description
2,951	96	Gravel surface, HSG A
1,590	39	>75% Grass cover, Good, HSG A
4,541	76	Weighted Average
4,541		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	140	0.0210	1.33		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 2.50"
1.8	140	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 4S: Center Parking Area

Hydrograph



Summary for Pond 1P: Existing CB1

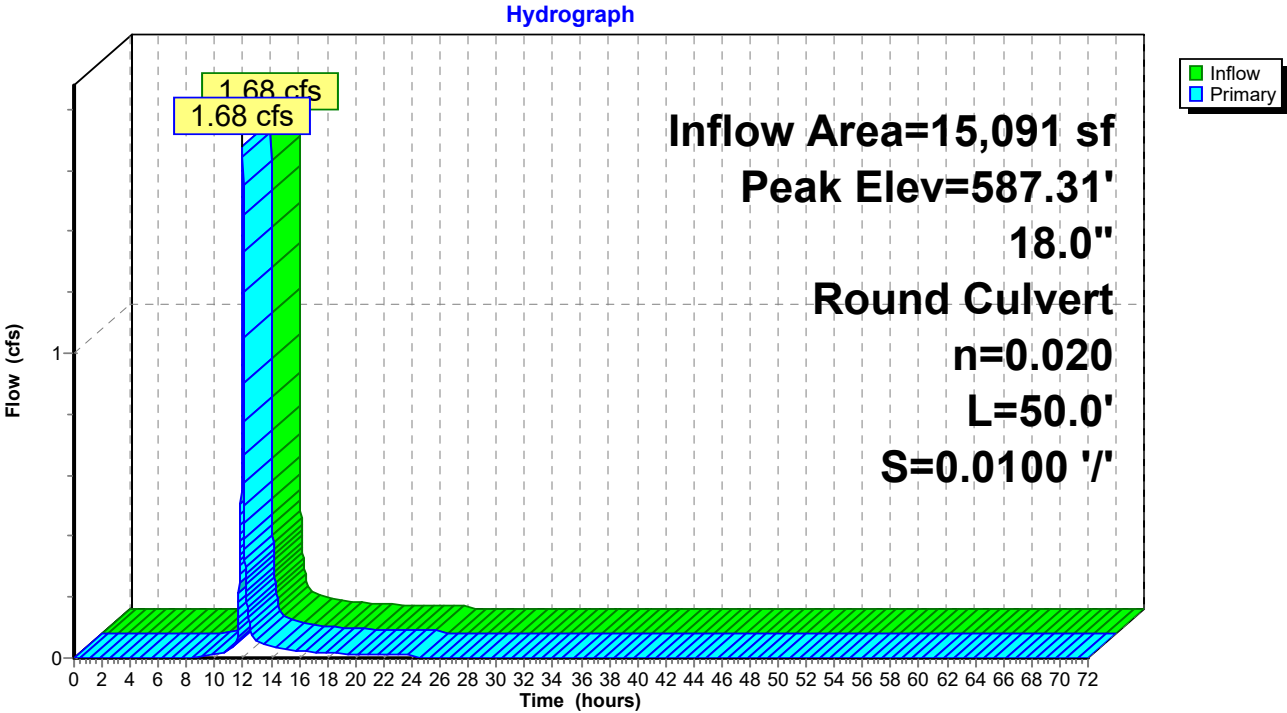
Inflow Area = 15,091 sf, 49.91% Impervious, Inflow Depth = 2.05" for 50 YR event
Inflow = 1.68 cfs @ 11.98 hrs, Volume= 2,581 cf
Outflow = 1.68 cfs @ 11.98 hrs, Volume= 2,581 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.68 cfs @ 11.98 hrs, Volume= 2,581 cf
Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 587.31' @ 11.98 hrs
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.60'	18.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 586.60' / 586.10' S= 0.0100 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 1.77 sf

Primary OutFlow Max=1.67 cfs @ 11.98 hrs HW=587.31' TW=0.00' (Dynamic Tailwater)
1=Culvert (Barrel Controls 1.67 cfs @ 2.96 fps)

Pond 1P: Existing CB1



Summary for Pond 2P: Existing CB2

Inflow Area = 7,971 sf, 0.00% Impervious, Inflow Depth = 0.75" for 50 YR event
Inflow = 0.22 cfs @ 11.97 hrs, Volume= 501 cf
Outflow = 0.22 cfs @ 11.97 hrs, Volume= 501 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.22 cfs @ 11.97 hrs, Volume= 501 cf
Routed to Link 1L : City of Leb Drainage

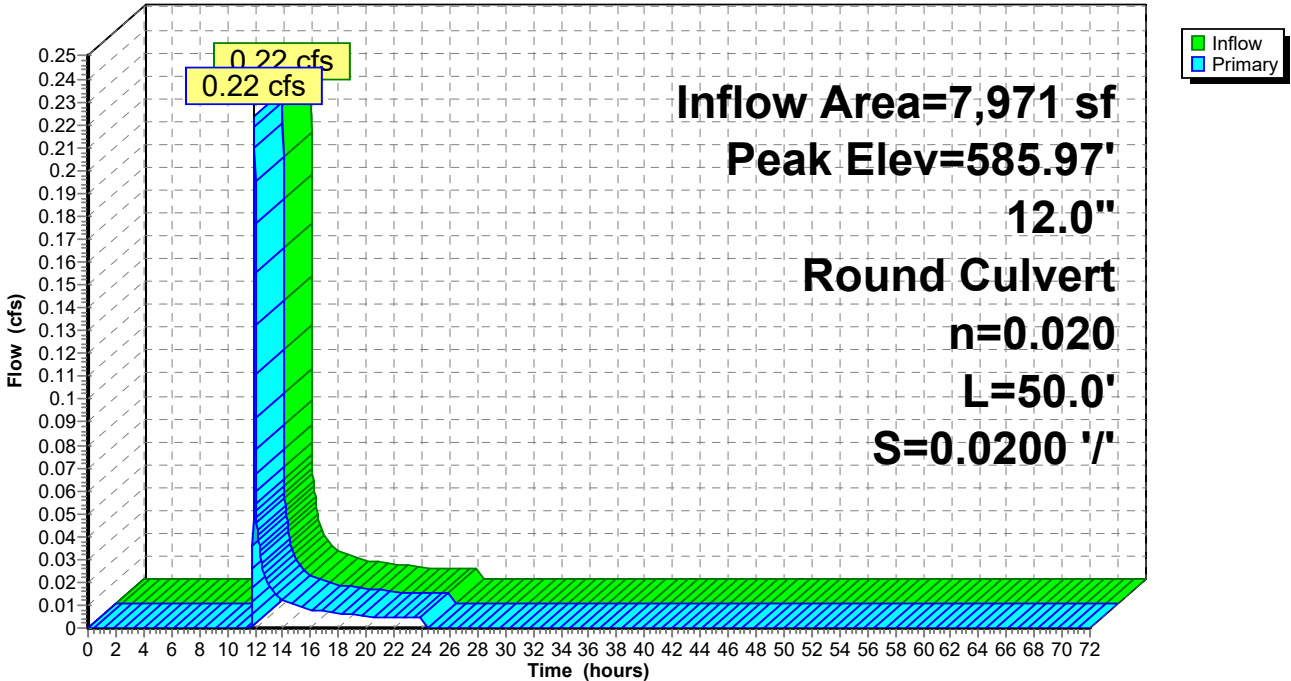
Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 585.97' @ 11.97 hrs
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	585.70'	12.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 585.70' / 584.70' S= 0.0200 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.22 cfs @ 11.97 hrs HW=585.97' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.22 cfs @ 1.32 fps)

Pond 2P: Existing CB2

Hydrograph



Summary for Pond 3P: ADS Stormtech Chambers

Typical safety factor of 50% applied to exfiltration value to account for clogging

Inflow Area = 5,891 sf, 22.92% Impervious, Inflow Depth = 3.18" for 50 YR event
 Inflow = 0.77 cfs @ 11.95 hrs, Volume= 1,559 cf
 Outflow = 0.67 cfs @ 11.98 hrs, Volume= 1,559 cf, Atten= 14%, Lag= 2.1 min
 Discarded = 0.06 cfs @ 11.98 hrs, Volume= 1,225 cf
 Primary = 0.61 cfs @ 11.98 hrs, Volume= 334 cf
 Routed to Pond 1P : Existing CB1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 593.16' @ 11.98 hrs Surf.Area= 192 sf Storage= 353 cf

Plug-Flow detention time= 30.3 min calculated for 1,559 cf (100% of inflow)
 Center-of-Mass det. time= 30.3 min (826.3 - 796.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	590.00'	231 cf	11.50'W x 16.68'L x 4.00'H Field A 767 cf Overall - 189 cf Embedded = 578 cf x 40.0% Voids
#2A	591.00'	189 cf	ADS_StormTech SC-740 x 4 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 2 rows
		421 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	592.50'	6.0" Round Culvert L= 108.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.50' / 588.50' S= 0.0370 ' / ' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Discarded	590.00'	14.000 in/hr Exfiltration X 0.50 over Wetted area Phase-In= 0.01'

Discarded OutFlow Max=0.06 cfs @ 11.98 hrs HW=593.16' (Free Discharge)

↑ **2=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.60 cfs @ 11.98 hrs HW=593.16' TW=587.31' (Dynamic Tailwater)

↑ **1=Culvert** (Inlet Controls 0.60 cfs @ 3.07 fps)

Pond 3P: ADS Stormtech Chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Row Length Adjustment= +0.44' x 6.45 sf x 2 rows

51.0" Wide + 12.0" Spacing = 63.0" C-C Row Spacing

2 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 14.68' Row Length +12.0" End Stone x 2 = 16.68' Base Length

2 Rows x 51.0" Wide + 12.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.50' Base Width

12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

4 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 2 Rows = 189.4 cf Chamber Storage

767.3 cf Field - 189.4 cf Chambers = 577.8 cf Stone x 40.0% Voids = 231.1 cf Stone Storage

Chamber Storage + Stone Storage = 420.6 cf = 0.010 af

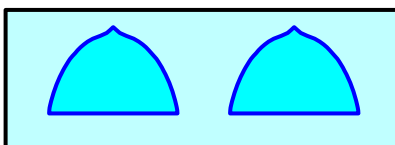
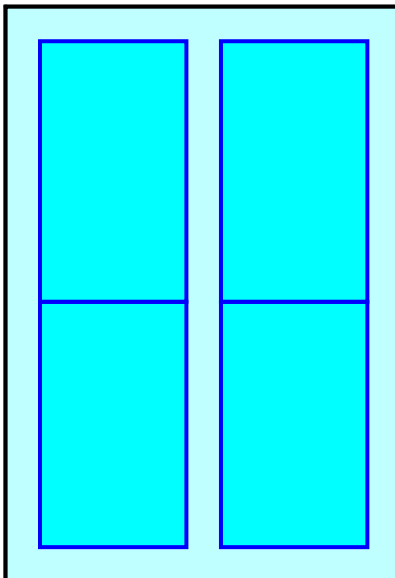
Overall Storage Efficiency = 54.8%

Overall System Size = 16.68' x 11.50' x 4.00'

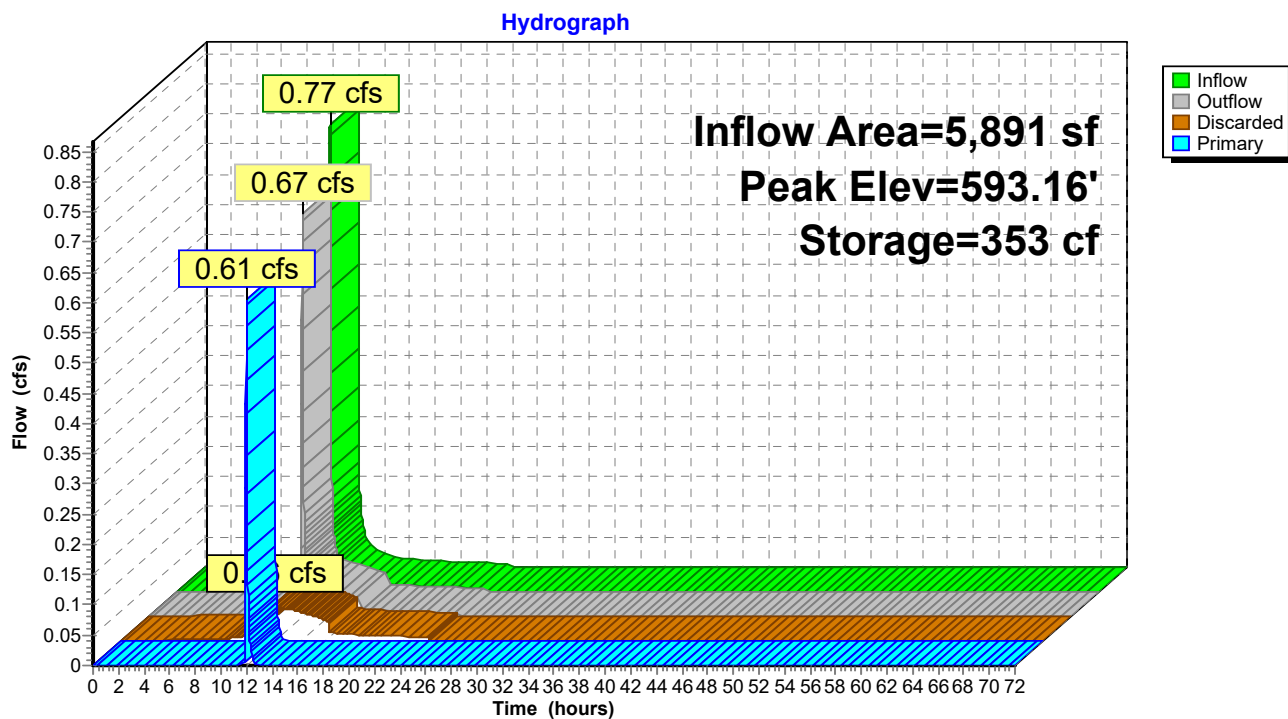
4 Chambers

28.4 cy Field

21.4 cy Stone



Pond 3P: ADS Stormtech Chambers

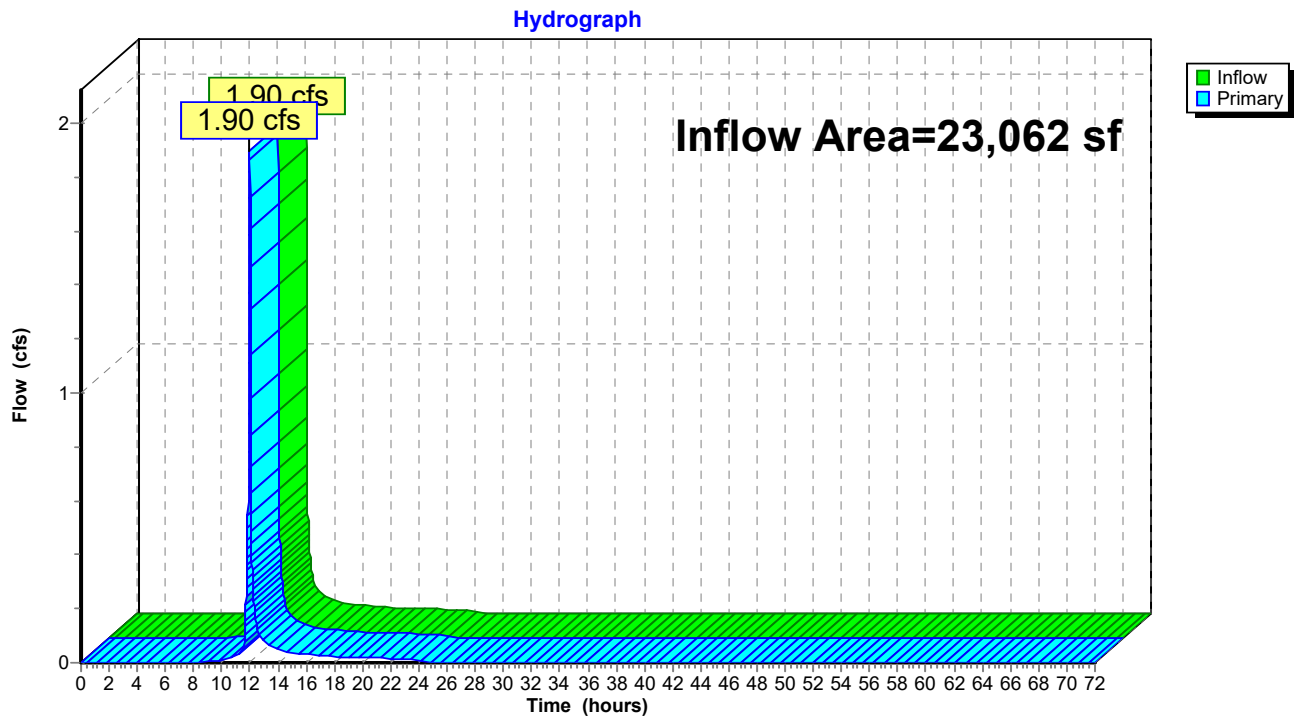


Summary for Link 1L: City of Leb Drainage

Inflow Area = 23,062 sf, 32.66% Impervious, Inflow Depth = 1.60" for 50 YR event
 Inflow = 1.90 cfs @ 11.98 hrs, Volume= 3,082 cf
 Primary = 1.90 cfs @ 11.98 hrs, Volume= 3,082 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link 1L: City of Leb Drainage



25-03-24_13444 UVMC_POST DEVELOPMENT

Prepared by Pathways Consulting LLC

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Type II 24-hr 100 YR Rainfall=6.02"

Revised 01/21/2025 Printed 3/21/2025

Page 54

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points x 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: East Side of LotRunoff Area=9,200 sf 67.20% Impervious Runoff Depth=3.70"
Flow Length=123' Tc=6.6 min CN=79 Runoff=1.34 cfs 2,835 cf**Subcatchment2S: West Side of Lot**Runoff Area=7,971 sf 0.00% Impervious Runoff Depth=1.15"
Flow Length=215' Tc=4.0 min CN=50 Runoff=0.37 cfs 766 cf**Subcatchment3S: Building Addition**Runoff Area=1,350 sf 100.00% Impervious Runoff Depth=5.78"
Tc=4.0 min CN=98 Runoff=0.28 cfs 650 cf**Subcatchment4S: Center Parking Area**Runoff Area=4,541 sf 0.00% Impervious Runoff Depth=3.40"
Flow Length=140' Slope=0.0210 '/' Tc=4.0 min CN=76 Runoff=0.67 cfs 1,286 cf**Pond 1P: Existing CB1**Peak Elev=587.42' Inflow=2.14 cfs 3,372 cf
18.0" Round Culvert n=0.020 L=50.0' S=0.0100 '/' Outflow=2.14 cfs 3,372 cf**Pond 2P: Existing CB2**Peak Elev=586.05' Inflow=0.37 cfs 766 cf
12.0" Round Culvert n=0.020 L=50.0' S=0.0200 '/' Outflow=0.37 cfs 766 cf**Pond 3P: ADS Stormtech Chambers**Peak Elev=593.46' Storage=379 cf Inflow=0.96 cfs 1,936 cf
Discarded=0.06 cfs 1,399 cf Primary=0.80 cfs 537 cf Outflow=0.86 cfs 1,936 cf**Link 1L: City of Leb Drainage**Inflow=2.50 cfs 4,138 cf
Primary=2.50 cfs 4,138 cf**Total Runoff Area = 23,062 sf Runoff Volume = 5,536 cf Average Runoff Depth = 2.88"**
67.34% Pervious = 15,530 sf 32.66% Impervious = 7,532 sf

25-03-24_13444 UVMC_POST DEVELOPMENT

Prepared by Pathways Consulting LLC

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Type II 24-hr 100 YR Rainfall=6.02"

Revised 01/21/2025 Printed 3/21/2025

Page 55

Summary for Subcatchment 1S: East Side of Lot

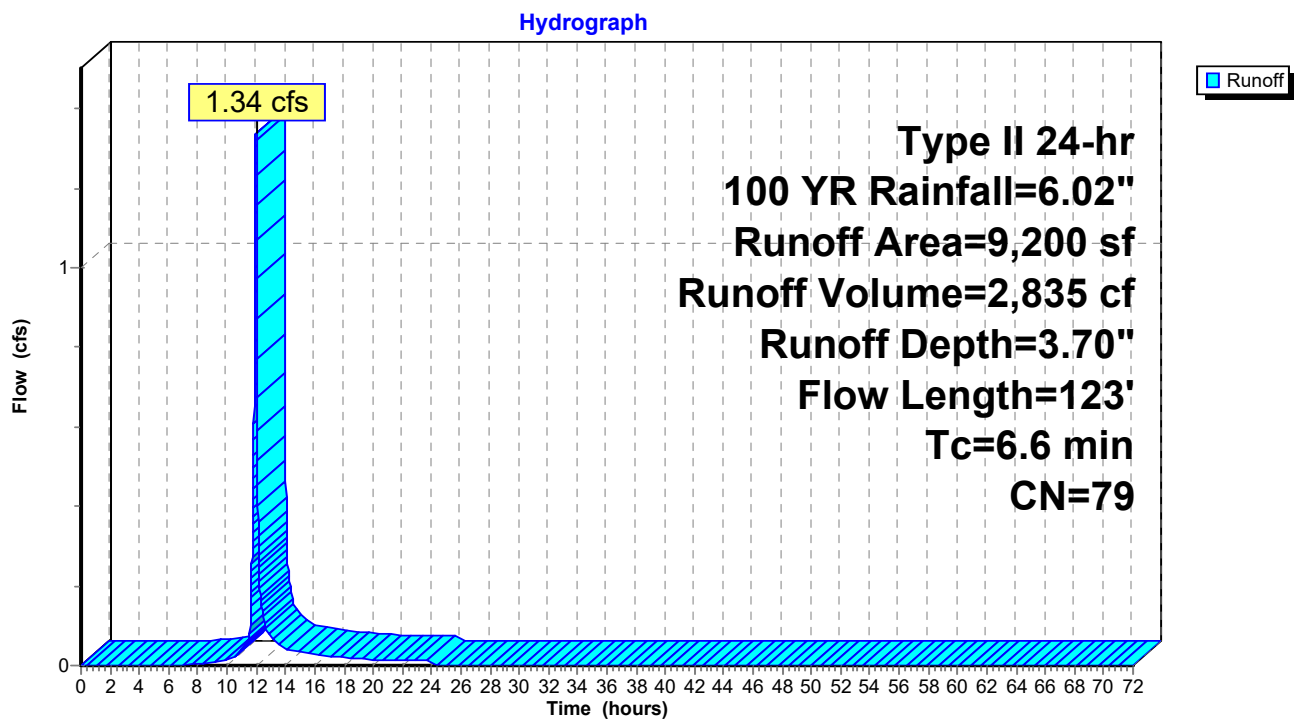
Runoff = 1.34 cfs @ 11.98 hrs, Volume= 2,835 cf, Depth= 3.70"
 Routed to Pond 1P : Existing CB1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Type II 24-hr 100 YR Rainfall=6.02"

Area (sf)	CN	Description
4,910	98	Unconnected pavement, HSG A
3,018	39	>75% Grass cover, Good, HSG A
1,272	98	Roofs, HSG A
9,200	79	Weighted Average
3,018		32.80% Pervious Area
6,182		67.20% Impervious Area
4,910		79.42% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	6	0.0800	1.21		Sheet Flow, A - B Smooth surfaces n= 0.011 P2= 2.50"
6.5	94	0.0680	0.24		Sheet Flow, B-C Grass: Short n= 0.150 P2= 2.50"
0.0	7	0.1300	2.52		Shallow Concentrated Flow, C-D Short Grass Pasture Kv= 7.0 fps
0.0	16	0.1000	6.42		Shallow Concentrated Flow, D-E Paved Kv= 20.3 fps
6.6	123	Total			

Subcatchment 1S: East Side of Lot



Summary for Subcatchment 2S: West Side of Lot

Runoff = 0.37 cfs @ 11.96 hrs, Volume= 766 cf, Depth= 1.15"
Routed to Pond 2P : Existing CB2

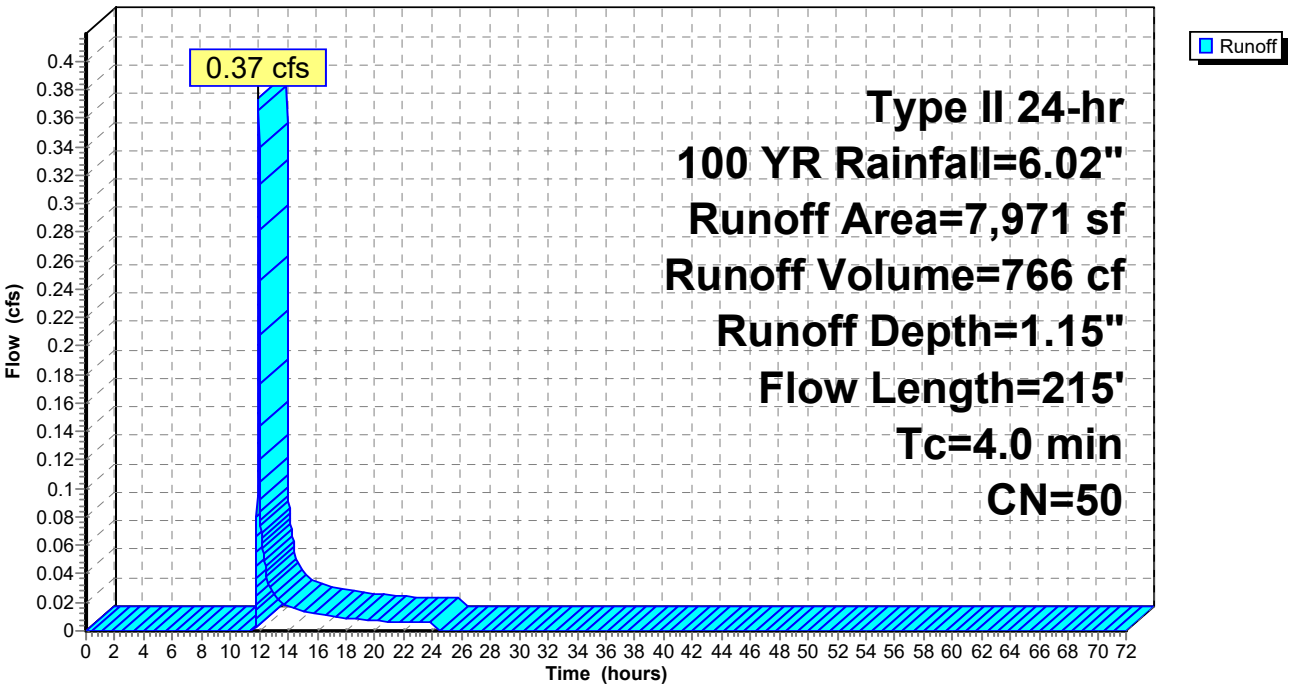
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 YR Rainfall=6.02"

Area (sf)	CN	Description
6,363	39	>75% Grass cover, Good, HSG A
1,608	96	Gravel surface, HSG A
7,971	50	Weighted Average
7,971		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	120	0.0210	1.29		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 2.50"
0.8	95	0.0730	1.89		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
2.4	215	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 2S: West Side of Lot

Hydrograph



Summary for Subcatchment 3S: Building Addition

Runoff = 0.28 cfs @ 11.94 hrs, Volume= 650 cf, Depth= 5.78"
Routed to Pond 3P : ADS Stormtech Chambers

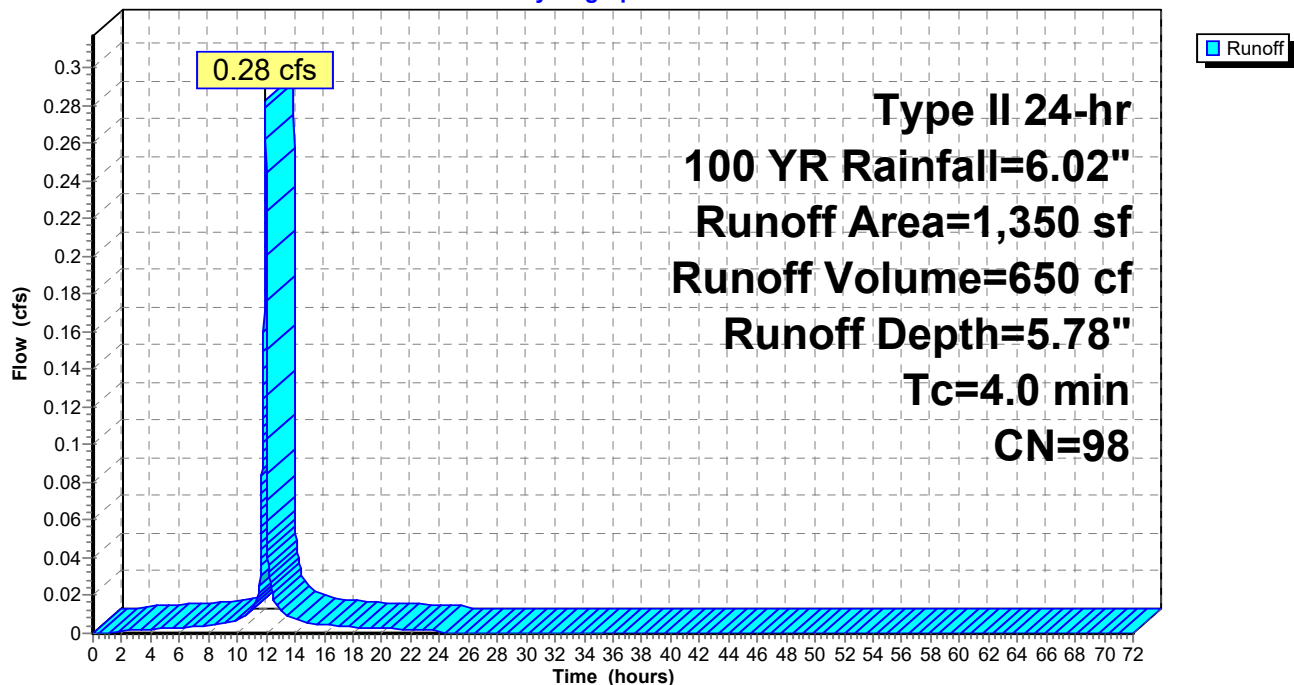
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 YR Rainfall=6.02"

	Area (sf)	CN	Description
*	468	98	Building Addition - Roof
*	882	98	Existing Roof
	1,350	98	Weighted Average
	1,350		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0					Direct Entry, Min tc
1.0	0				Total, Increased to minimum Tc = 4.0 min

Subcatchment 3S: Building Addition

Hydrograph



Summary for Subcatchment 4S: Center Parking Area

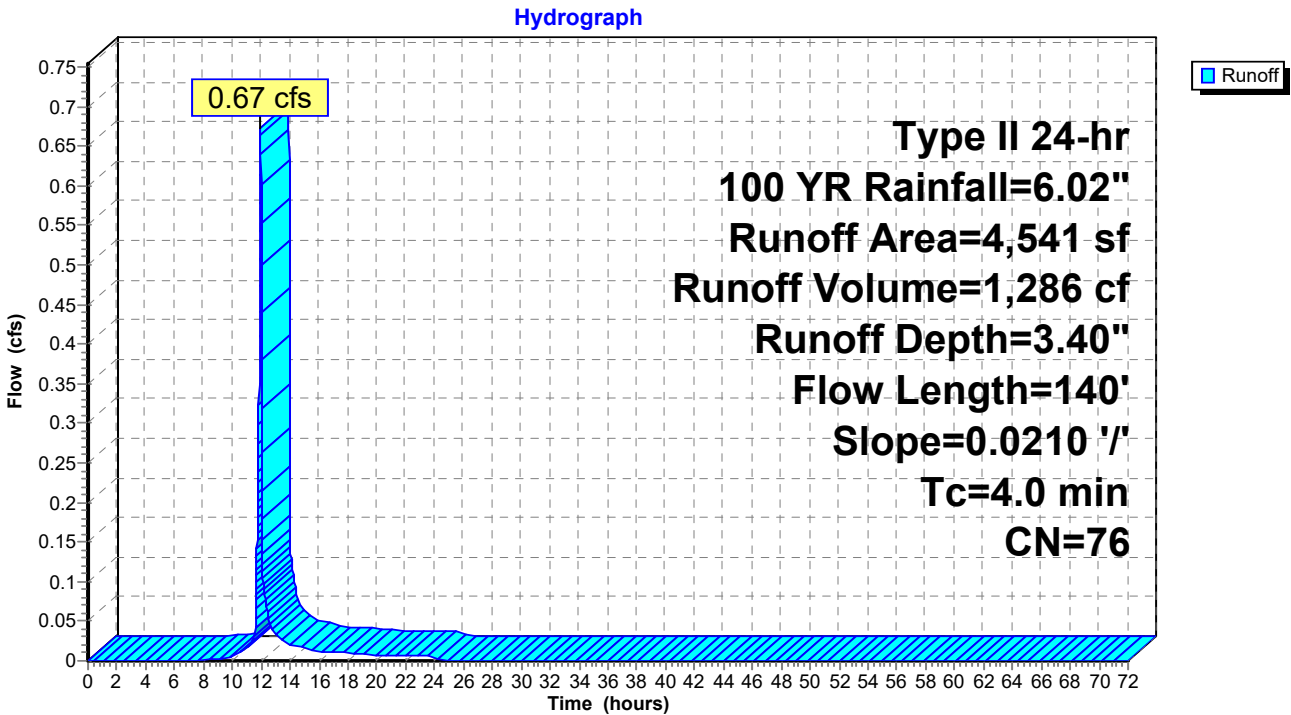
Runoff = 0.67 cfs @ 11.95 hrs, Volume= 1,286 cf, Depth= 3.40"
Routed to Pond 3P : ADS Stormtech Chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Type II 24-hr 100 YR Rainfall=6.02"

Area (sf)	CN	Description
2,951	96	Gravel surface, HSG A
1,590	39	>75% Grass cover, Good, HSG A
4,541	76	Weighted Average
4,541		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.8	140	0.0210	1.33		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 2.50"
1.8	140	Total, Increased to minimum Tc = 4.0 min			

Subcatchment 4S: Center Parking Area



Summary for Pond 1P: Existing CB1

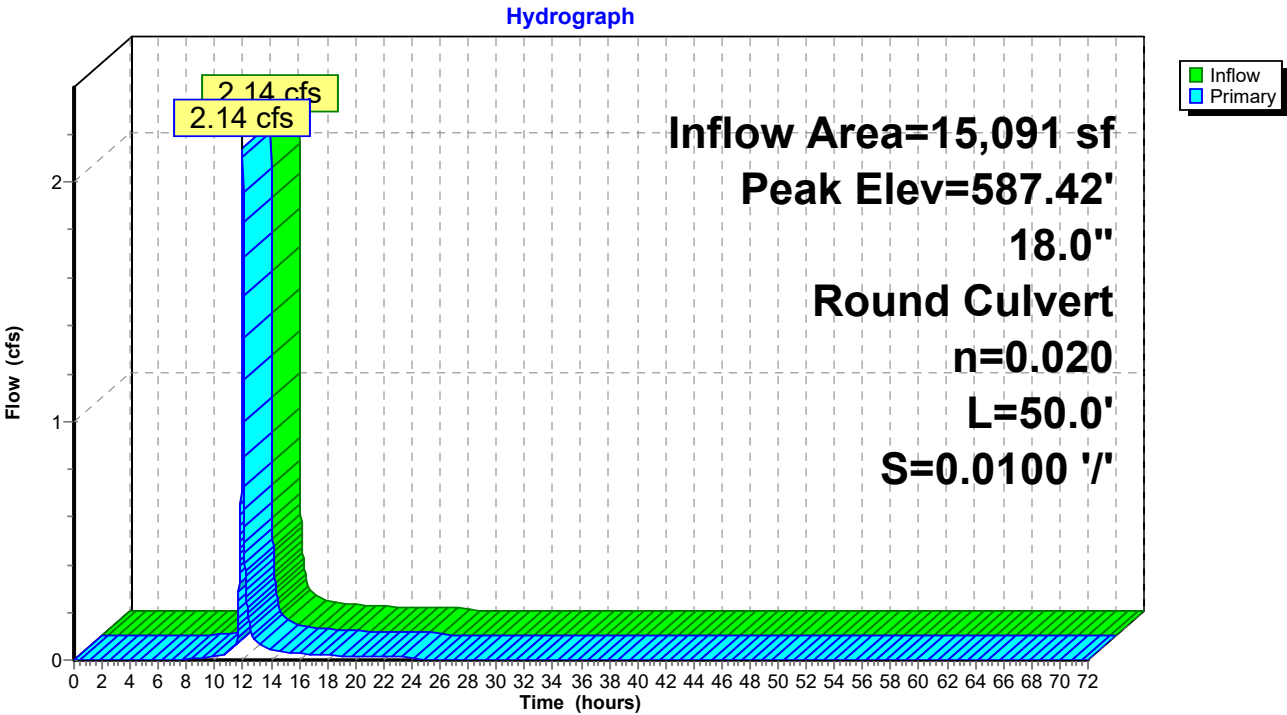
Inflow Area = 15,091 sf, 49.91% Impervious, Inflow Depth = 2.68" for 100 YR event
Inflow = 2.14 cfs @ 11.98 hrs, Volume= 3,372 cf
Outflow = 2.14 cfs @ 11.98 hrs, Volume= 3,372 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.14 cfs @ 11.98 hrs, Volume= 3,372 cf
Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 587.42' @ 11.98 hrs
Flood Elev= 591.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.60'	18.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 586.60' / 586.10' S= 0.0100 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 1.77 sf

Primary OutFlow Max=2.14 cfs @ 11.98 hrs HW=587.42' TW=0.00' (Dynamic Tailwater)
1=Culvert (Barrel Controls 2.14 cfs @ 3.14 fps)

Pond 1P: Existing CB1



Summary for Pond 2P: Existing CB2

Inflow Area = 7,971 sf, 0.00% Impervious, Inflow Depth = 1.15" for 100 YR event
 Inflow = 0.37 cfs @ 11.96 hrs, Volume= 766 cf
 Outflow = 0.37 cfs @ 11.96 hrs, Volume= 766 cf, Atten= 0%, Lag= 0.0 min
 Primary = 0.37 cfs @ 11.96 hrs, Volume= 766 cf
 Routed to Link 1L : City of Leb Drainage

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2

Peak Elev= 586.05' @ 11.96 hrs

Flood Elev= 591.10'

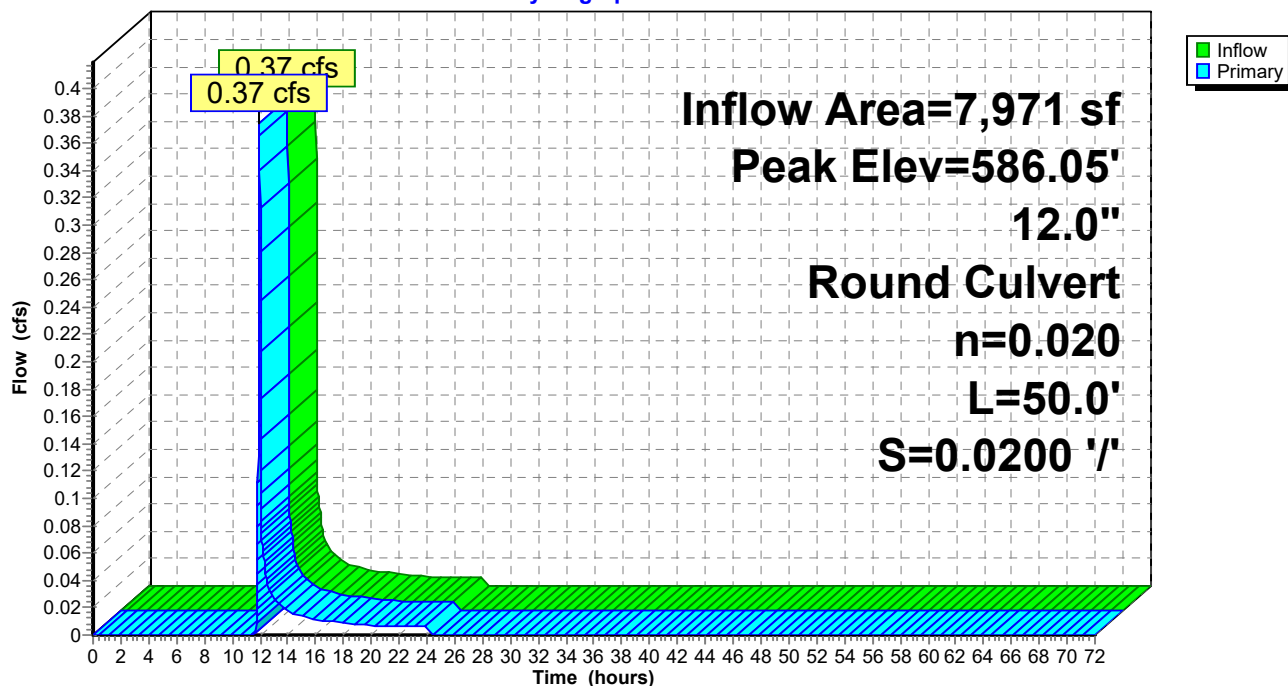
Device	Routing	Invert	Outlet Devices
#1	Primary	585.70'	12.0" Round Culvert L= 50.0' Ke= 1.000 Inlet / Outlet Invert= 585.70' / 584.70' S= 0.0200 '/ Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.37 cfs @ 11.96 hrs HW=586.05' TW=0.00' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 0.37 cfs @ 1.51 fps)

Pond 2P: Existing CB2

Hydrograph



Summary for Pond 3P: ADS Stormtech Chambers

Typical safety factor of 50% applied to exfiltration value to account for clogging

Inflow Area = 5,891 sf, 22.92% Impervious, Inflow Depth = 3.94" for 100 YR event
 Inflow = 0.96 cfs @ 11.95 hrs, Volume= 1,936 cf
 Outflow = 0.86 cfs @ 11.98 hrs, Volume= 1,936 cf, Atten= 10%, Lag= 1.8 min
 Discarded = 0.06 cfs @ 11.98 hrs, Volume= 1,399 cf
 Primary = 0.80 cfs @ 11.98 hrs, Volume= 537 cf
 Routed to Pond 1P : Existing CB1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 593.46' @ 11.98 hrs Surf.Area= 192 sf Storage= 379 cf

Plug-Flow detention time= 28.6 min calculated for 1,936 cf (100% of inflow)
 Center-of-Mass det. time= 28.6 min (820.7 - 792.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	590.00'	231 cf	11.50'W x 16.68'L x 4.00'H Field A 767 cf Overall - 189 cf Embedded = 578 cf x 40.0% Voids
#2A	591.00'	189 cf	ADS_StormTech SC-740 x 4 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 2 rows
		421 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	592.50'	6.0" Round Culvert L= 108.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.50' / 588.50' S= 0.0370 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Discarded	590.00'	14.000 in/hr Exfiltration X 0.50 over Wetted area Phase-In= 0.01'

Discarded OutFlow Max=0.06 cfs @ 11.98 hrs HW=593.46' (Free Discharge)

↑**2=Exfiltration** (Exfiltration Controls 0.06 cfs)

Primary OutFlow Max=0.80 cfs @ 11.98 hrs HW=593.46' TW=587.42' (Dynamic Tailwater)

↑**1=Culvert** (Inlet Controls 0.80 cfs @ 4.06 fps)

Pond 3P: ADS Stormtech Chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Row Length Adjustment= +0.44' x 6.45 sf x 2 rows

51.0" Wide + 12.0" Spacing = 63.0" C-C Row Spacing

2 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 14.68' Row Length +12.0" End Stone x 2 = 16.68' Base Length

2 Rows x 51.0" Wide + 12.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.50' Base Width

12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

4 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 2 Rows = 189.4 cf Chamber Storage

767.3 cf Field - 189.4 cf Chambers = 577.8 cf Stone x 40.0% Voids = 231.1 cf Stone Storage

Chamber Storage + Stone Storage = 420.6 cf = 0.010 af

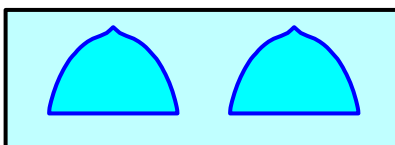
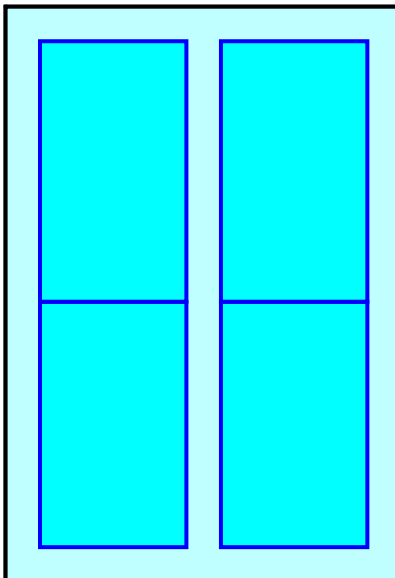
Overall Storage Efficiency = 54.8%

Overall System Size = 16.68' x 11.50' x 4.00'

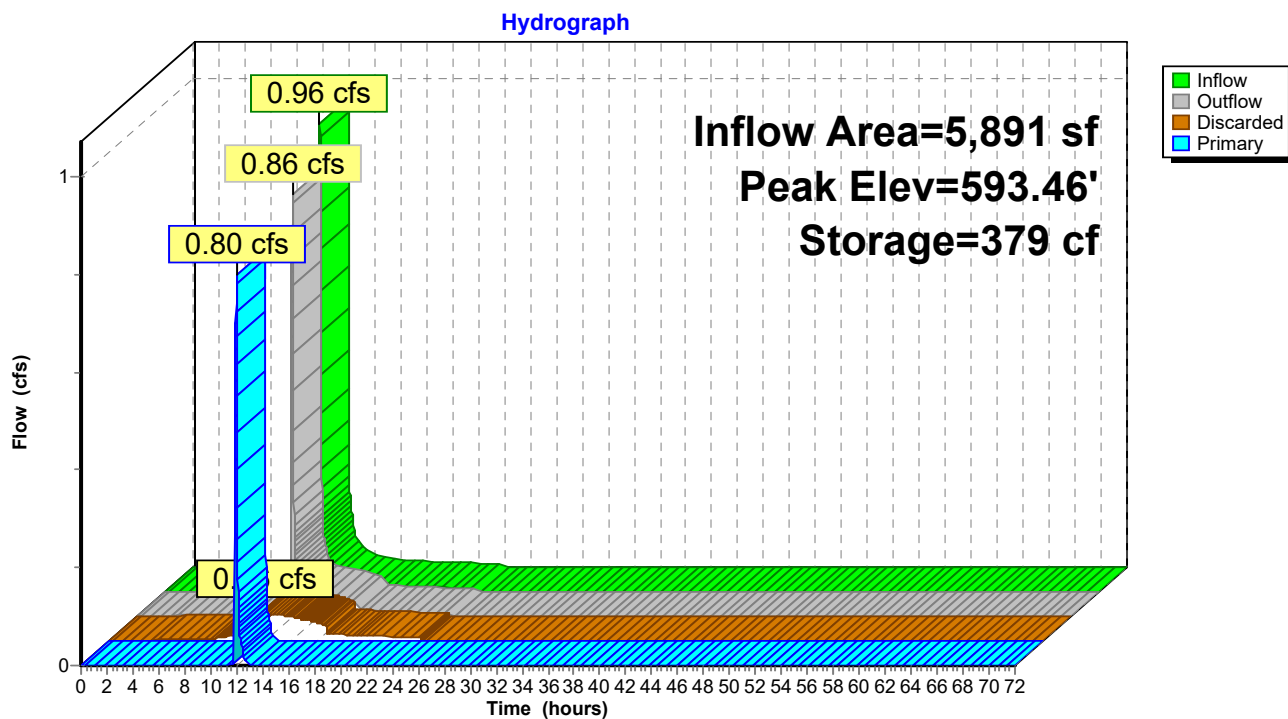
4 Chambers

28.4 cy Field

21.4 cy Stone



Pond 3P: ADS Stormtech Chambers

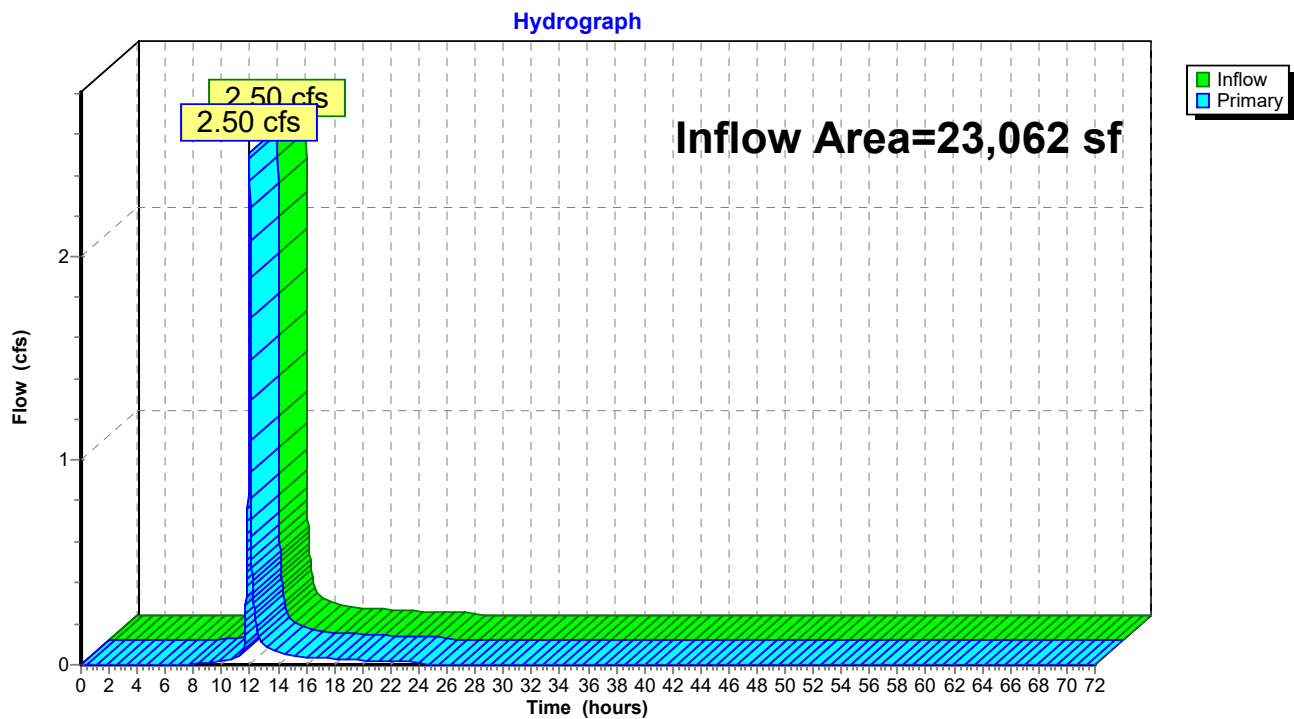


Summary for Link 1L: City of Leb Drainage

Inflow Area = 23,062 sf, 32.66% Impervious, Inflow Depth = 2.15" for 100 YR event
 Inflow = 2.50 cfs @ 11.97 hrs, Volume= 4,138 cf
 Primary = 2.50 cfs @ 11.97 hrs, Volume= 4,138 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Link 1L: City of Leb Drainage





**STORMWATER FACILITIES INSPECTION
AND
MAINTENANCE MANUAL

FOR**

**UPPER VALLEY MUSIC CENTER
BUILDING ADDITION AND SITE
IMPROVEMENTS PROJECT
8 SOUTH PARK STREET
LEBANON, NEW HAMPSHIRE**

DATED MARCH 24, 2025

Prepared By:
Pathways Consulting, LLC
Project No. 13337
Date Written: September 13, 2024
Revised: _____
Last Update: _____

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1. INTRODUCTION.....	1
2. PURPOSE.....	1
3. RESPONSIBLE PARTY.....	1
4. SITE DESCRIPTION.....	2
5. STRUCTURAL BMP IDENTIFICATION.....	4
6. ROUTINE INSPECTIONS AND MAINTENANCE REQUIREMENTS.....	5
7. DE-ICING PLAN.....	6
8. GENERAL REQUIREMENTS.....	6
9. SUMMARY OF UPDATES.....	7

APPENDICES

Appendix

- A Table 3-2 Best Management Practices Selection (Factors)
- B Site Plans for Stormwater Practices
- C Semi-Annual Inspection Checklist and Log

1. Introduction

This Inspection and Maintenance Manual (I&M Manual) covers the stormwater management facilities installed for the Upper Valley Music Center Building Addition and Site Improvements project located within the property at 8 South Park Street in Lebanon, New Hampshire (refer to the attached Site Plan). The I&M Manual has been developed as required under the City of Lebanon Stormwater Review Regulations Technical Checklist (part of the Site Plan Review) and New Hampshire Stormwater Management Manual, specifically for the proposed sediment basin, underground chamber stormwater detention and infiltration system, and related measures constructed for the referenced project. This I&M Manual provides a description of the project site and its stormwater management facilities, and it outlines the periodic inspection and maintenance requirements of these practices.

2. Purpose

Regular inspections and maintenance are essential for long-term effectiveness of stormwater Best Management Practices (BMPs). BMPs are also very expensive to repair and replace. Sediment, trash, and other debris can accumulate in BMPs and need to be removed periodically. If not properly maintained, the BMP will not operate as designed and will not provide effective treatment of stormwater runoff. This neglect jeopardizes water quality and may violate permit conditions. All stormwater BMPs require maintenance; however, the frequency and complexity of maintenance activities and the equipment needed to carry them out varies. Table 3-2 of the New Hampshire Stormwater Manual, Volume 2, Post-Construction Best Management Practices Selection & Design, December 2008, summarizes the relative level of maintenance required by each stormwater BMP. This table is included in Appendix A of this I&M Manual for reference by the responsible parties. Inspectors and those overseeing or performing maintenance should be well-trained and thoroughly familiar with the plans for each BMP, and they should utilize the I&M Manual provided herein to document their inspection and maintenance procedures.

3. Responsible Party

The Responsible Party will be responsible for implementing the I&M Manual and ensuring that it is in compliance with the City of Lebanon Stormwater Regulations.

Responsible Party: Upper Valley Music Center

Address: 8 South Park Street, Post Office Box 826, Lebanon, NH 03766

Contact Person: Benjamin Van Vliet, Executive Director

Phone: 603-448-1642 Ext. 3

Email: ben@uvmusic.org

Responsibilities:

- The Responsible Party shall implement the required reporting, inspection, and maintenance activities identified in the I&M Manual.
- Photographs shall be taken of the respective stormwater practices during each inspection of those practices.
- All record keeping required by the I&M Manual shall be maintained by the Responsible Party and be made available to the NHDES upon request.

- Upon completion of all terrain alteration activities that direct stormwater to a particular practice, the Responsible Party shall initiate the I&M activities.
- The Responsible Party may contract with one or more third parties to conduct the I&M activities, but shall remain responsible for ensuring the long-term effectiveness of the stormwater practices.
- If ownership of the property is transferred, the new owner(s) shall become the Responsible Party(ies).

4. Site Description

4.1 Facility Information

Street Address: 8 South Park Street

City: Lebanon State: NH Zip: 03766

Map/Lot: 92 / 10

Facility Operator/Owner: Upper Valley Music Center

Address: 8 South Park Street, Post Office Box 826, Lebanon, NH 03766

Contact Person: Benjamin Van Vliet, Executive Director

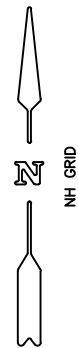
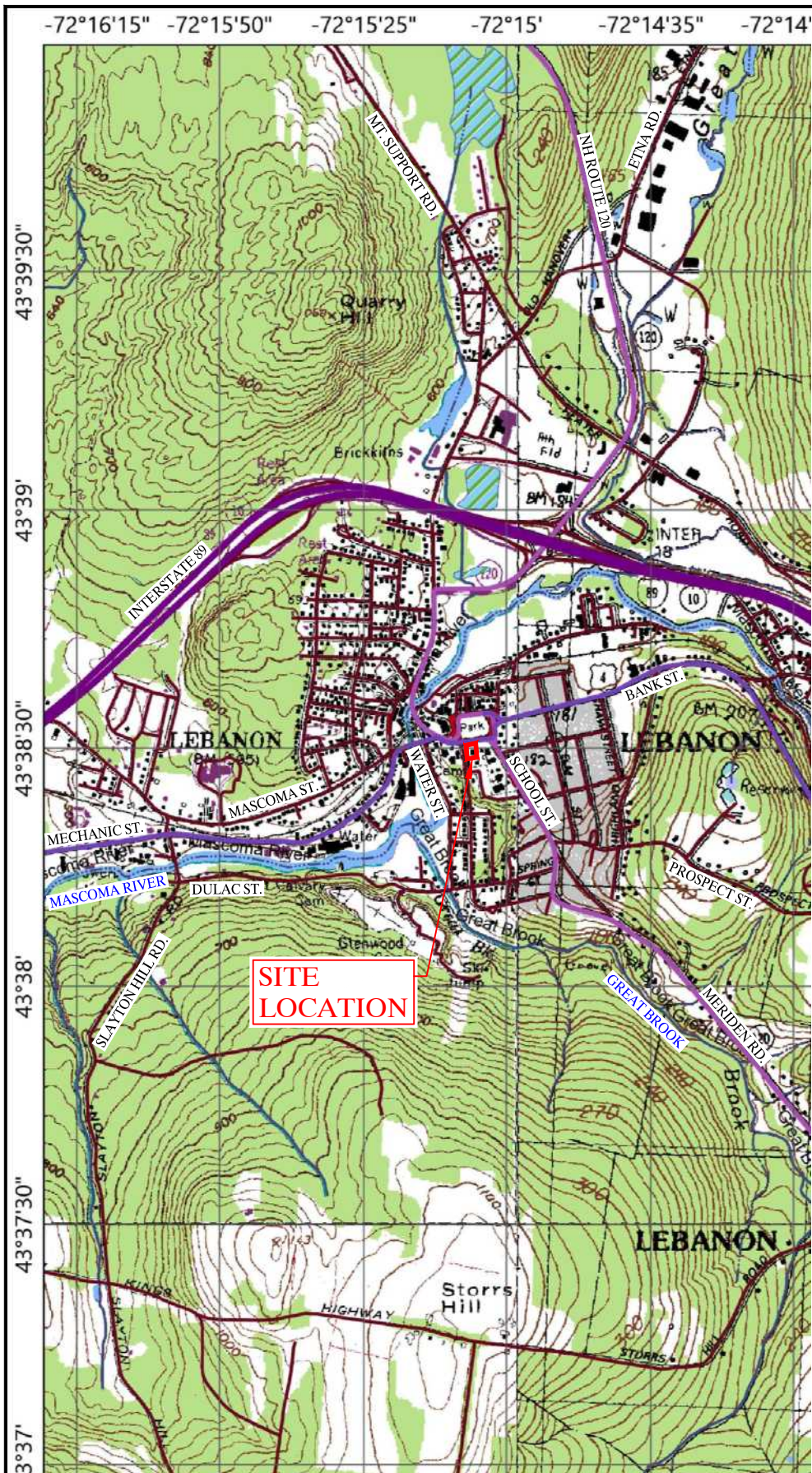
Phone: 603-448-1642 Ext. 3

Email: ben@uvmusic.org

4.2 Site Description

The Upper Valley Music Center project involves the construction of a 468 square foot addition on the west side of the existing building and associated stormwater drainage facilities. The project includes a proposed underground chamber stormwater system located within a shallow grass-lined sediment basin at the north end of the existing gravel parking lot, a 6-inch diameter PVC drain pipe connecting an internal roof drain in the new addition to the underground chamber system, and a separate 6-inch diameter PVC drain pipe overflow outlet extending from the underground chamber system to an existing catch basin in South Park Street near the northeast corner of the subject property.

4.3 General Location Map (See USGS Site Map on next page)



Legend

- State
- County
- City/Town
- Interstates
- US Routes
- State Routes
- Local Roads
- Stream Centerlines
 - Perennial Stream
 - Intermittent Stream
- Artificial Paths
- Water Bodies
 - Lake/Pond
 - Reservoir
 - Estuary
 - Swamp/Marsh
- Other Water Features
 - River
 - Spillway
 - Inundation Area
 - Dam/Weir
 - Canal/Ditch
 - Rapids

Map Scale

1: 24,000

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Map Generated: 3/17/2025



Pathways Consulting, LLC
 240 Mechanic Street, Suite 100
 Lebanon, New Hampshire 03766
 (603) 448-2200 FAX: (603) 448-1221

SITE LOCATION MAP FOR
 UPPER VALLEY MUSIC CENTER
 8 SOUTH STREET – LEBANON, NEW HAMPSHIRE

SCALE: AS SHOWN
 DESIGNED BY: JLD
 DRAWN BY: JLD
 CHECKED BY: SAW
 DATE: 03/24/25
 PROJ. NO. 13444

4.4 Site Maps

The Site Plan depicts the stormwater management features or structural BMPs within the project area. A reduced plan is provided in Appendix B.

5. Structural BMP Identification

The stormwater runoff from the roof of the proposed building addition (and a portion of the existing roof that drains onto the new roof) will be collected from a roof drain and conveyed through a new 6-inch drain pipe routed through the new addition to a below-grade penetration in the building foundation. From the building foundation, the drain pipe will extend under the existing gravel parking to connect directly into the southwest side of the underground chamber system located at the north end of the parking lot. The underground chamber system will also have a 6-inch drain pipe outlet extending from the northeast side extending across the grass lawn area north of the existing building to the existing catch basin in South Park Street, northeast of the site. The underground chamber system is designed to provide a minimum volume of runoff detention/storage exceeding the amount of runoff generated from the proposed building addition during a 25-year design storm event. The porous stone bottom of the underground storage system will also encourage infiltration of stormwater into the subsoils that are anticipated to be well-drained soils with low groundwater levels. This underground system will be installed below a one-foot deep graded sediment basin located on the north end of the existing gravel parking lot (near the northwest corner of the existing building). The site grading will direct the majority of the current runoff from the existing gravel parking lot to the sediment basin and into the underground chamber system, and the system has been designed to accommodate this increase volume of runoff. The sediment basin will also provide pretreatment for the underground chamber system by collecting and containing any sediment from the gravel parking lot.

Structure:	Underground Chamber Storage System	
Date of Implementation:	Summer 2025	
Maintenance Requirement(s):	Frequency:	
Basin should be inspected by a qualified professional for settlement, erosion, seepage, animal burrows, and other conditions that could degrade the system and reduce its stability for impounding water. Immediate corrective action should be implemented if any such conditions are found, with maintenance or rehabilitation conducted as warranted by such inspection.	At least twice per year	
Chambers, inlet and outlet pipes, inlet and outlet structures, energy dissipation structures or practices, and other structural appurtenances should be inspected by a qualified professional to ensure that they are clear of woody vegetation, have no accumulated sediment/debris, and no evidence of erosion. Immediate corrective action should be implemented (e.g., maintenance, repairs, or replacement) as indicated by such inspection.	At least twice per year	
Accumulated sediment should be removed when it significantly affects basin capacity, reduces outflow, or results in redirection of flow.	As needed.	
Trash and debris should be removed from the basin and any inlet or outlet structures whenever observed by inspection.	During any inspections	

Structure:	Sediment Basin	
Date of Implementation:	Summer 2025	
Maintenance Requirement(s):	Frequency:	
Inspection for erosion, sediment accumulation, vegetation loss, and presence of invasive species	Periodically, at least annually,	
Mowing of embankments	Periodically, never shorter than WQF depth, (minimum 4")	
Removal of debris and accumulated sediment	Inspect every 6 months	
Repair eroded areas, remove invasive species and dead vegetation, and reseed with applicable grass mix as warranted by inspection	Periodically, at least annually,	
Regrade side slopes to ensure sheet flow from adjacent parking lot, and adding additional material to fill in voids and low spots	Periodically, at least annually,	
Embankments should be inspected by a qualified professional for settlement, erosion, seepage, animal burrows, woody vegetation, and other conditions that could degrade the embankment and reduce its stability. Immediate corrective action should be implemented if any such conditions are found, with maintenance or rehabilitation conducted as warranted by such inspection.	At least annually	

Structure:	Gravel Parking Lot	
Date of Implementation:	Summer 2025	
Maintenance Requirement(s):	Frequency:	
Application of salt for ice control should be limited only to when safety is in question.		
Never reseal or repave with impermeable materials. Inspect annually for surface deterioration and repair accordingly.		
Monitor to ensure that the surface drains effectively after storms.	Periodically	
Major rutting or heaving may necessitate replacement of gravel, and possibly subbase course materials.	As needed	
Embankments should be inspected by a qualified professional for settlement, erosion, seepage, animal burrows, woody vegetation, and other conditions that could degrade the embankment and reduce its stability. Immediate corrective action should be implemented if any such conditions are found, with maintenance or rehabilitation conducted as warranted by such inspection.	At least annually	

6. Routine Inspections and Maintenance Requirements

6.1 Sensitive BMPs

BMPs are susceptible to damage during inspections and maintenance activities and due to environmental factors. Liners and steep side slopes of ponds can be damaged when oversized vehicles are used to remove accumulated sediment. Sediment removal activities can damage many other BMPs as well, especially when vehicles such as excavators or backhoes are used. Loss of filtration capacity is an important concern for the infiltration areas. Hand removal of sediment may be the best option in sensitive BMPs.

6.2 Semi-Annual Visual Inspections and Maintenance

Facility inspections will be examined every six months in non-winter conditions (recommended during spring and fall) by the Responsible Party for evidence of sediment or other visible contamination during a runoff event. The inspection will take place within the first 30 minutes of a precipitation or snowmelt event, if possible, but no more than 60 minutes after onset. Precipitation events must be greater than 0.1 inch in magnitude and occur at least 72 hours after the last runoff-producing event. If stormwater BMPs are found to be functioning incorrectly, maintenance will be performed before the next anticipated storm event, or as necessary to maintain the effectiveness of the stormwater controls. A sample inspection checklist and an inspection recording log are provided in Appendix C of the I&M Manual. Completed checklists and logs shall be kept in Appendix C.

6.3 Updates to I&M Manual

Ultimately, the goal of the I&M Manual is to maintain the integrity of the stormwater management system to protect the quality of water resources and prevent impacts to off-site and downstream areas. Inspection results should be used to reassess regularly the effectiveness of the BMPs on reducing the transport of sediment and providing adequate conveyance of stormwater flows. The I&M Manual may be updated and improved throughout the life of the system.

7. De-icing Plan

Snow will be removed from the parking lot as needed by plow, snowblower, or other mechanical equipment as needed. Temporary snow storage areas have been depicted on the plans. Salt or other deicing agents should be limited on the site, including the access drive, due to the close proximity to sensitive surface waters.

8. General Requirements

8.1 Record Keeping and Reporting

A copy of this I&M Manual will be sent to the City of Lebanon and the original will be maintained on-site. Records pertaining to inspections and maintenance will be kept on-site with the I&M Manual. This manual will be made available upon request to the City of Lebanon during scheduled site visits and to the public for review if a formal written request is made.

8.2 Maintaining the Updated I&M Manual

This I&M Manual will be amended if inspections should indicate a deficiency, when corrective actions are implemented, or the Responsible Party determines that the stormwater system is not effectively collecting, conveying, treating, or detaining stormwater and/or controlling stormwater pollutant discharges. A history of amendments will be kept with this plan in Section 9.

9. Summary of Updates

Date Plan Amended	Summary of Updates

APPENDIX A
Table 3-2 Best Management Practice Selection (Factors)

Table 3-2. Best Management Practice Selection (Factors)

BMP Type	Best Management Practice	Chapter Env-Wq 1500 Reference	Physical Feasibility Factors														
			Drainage Area (acres)					Soil Infiltration Capacity (inches per hour)		Depth to High Water Table/ Depth to Bedrock ^a		Land Area		Slope	Maintenance Sensitivity		
			0-5	5-10	10-25	25-50	50+	<0.15	≥0.15 and ≤6.5	>6.5	0-3 ft	3+ ft	Requires Large Land Area			Requires Small Land Area	
Low Impact Development (LID)																	
	Site Management Practices																
	Comprehensive LID Site Design		●	●	●	●	●	●	●	●	●	●	●	●			◇
	Disconnect Impervious Area		●	●	●	●	●	●	●	●	●	●	●	●			◇
	Minimize Disturbance Area		●	●	●	●	●	●	●	●	●	●	●	●			◇
	Minimize Site Imperviousness		●	●	●	●	●	●	●	●	●	●	●	●			◇
	Flow Path Practices		●	●	●	●	●	●	●	●	●	●	●	●			◇
	Preserve Infiltratable Soils		●	●	●	●	●	●	●	●	●	●	●	●			◇
	Preserve Natural Depression Areas		●	●	●	●	●	●	●	●	●	●	●	●			◇
	Other: Natural Vegetation Preservation, Soil Amendment		●	●	●	●	●	●	●	●	●	●	●	●			◇
	Interception or Recharge Practices (constructed BMPs)																
	Green Roof							●	●	●	●	●	●	●			◇
	Rain Barrel/Cistern (with on-site re-use)		●	●	●	●	●	●	●	●	●	●	●	●			◇
	Rain Garden/Bioretenion		●					○	●	●	●	●	●	●	<15%		◆
	Pervious Pavers/Pervious Pavement		●	●	●	●	●	○	●	●	○	●	●	●	<15%		◆
Source Control BMPs																	
	Street Sweeping		●	●	●	●	●	●	●	●	●	●	●	●			◆
	Snow and Ice Management		●	●	●	●	●	●	●	●	●	●	●	●			◆
Treatment BMPs																	
	Stormwater Ponds	1508.03															
	Dry Extended Detention Pond With Micropool							●	○	○	●	○	●				◇
	Wet Pond							●	○	○	●	○	●				◇
	Wet Extended Detention Pond							●	○	○	●	○	●				◇
	Multiple Pond System							●	○	○	●	○	●				◇
	Pocket Pond							●	○	○	●	○		●			◇
	Stormwater Wetlands	1508.04															
	Shallow Wetland							●	○	○	●	○					◇
	Extended Detention Wetland							●	○	○	●	○	●				◇
	Pond/Wetland System							●	○	○	●	○	●				◇
	Gravel Wetland							●	○	○	●	○					◇
	Infiltration Practices	1508.05															
	Infiltration Trench and Drip Edge		●	●				●	○		●		●		<15%		◆
	In-ground Infiltration Basin			●	●	●		●	○		●		●		<15%		◆
	Underground Infiltration Basin		●					●	○		●				<15%		◆
	Dry Well		●					●	○		●		●		<15%		◆
	Permeable Pavement		●	●	●	●	●	●	○		●				<15%		◆

Table 3-2. Best Management Practice Selection (Factors)

BMP Type	Best Management Practice	Chapter Env-Wq 1500 Reference	Physical Feasibility Factors												Maintenance Sensitivity
			Drainage Area (acres)					Soil Infiltration Capacity (inches per hour)		Depth to High Water Table / Depth to Bedrock*		Land Area		Slope	
0-5	5-10	10-25	25-50	50+	<0.15	0.15 and <0.5	>0.5	0-3 ft	3+ ft	Requires Large Land Area	Requires Small Land Area				
Treatment BMPs, Continued															
	Filtering Practices	1508.06													
	Surface Sand Filter		●	●				●	●	●	●	●			◆
	Underground Sand Filter		●	●				●	●	●	●	●			◆
	Bioretention System (underdrained)		●					●	●	●	●	●	●		◆
	Permeable Pavement (with sand bed, underdrain, and piped outlet)		●	●	●	●	●	●	●	●	●	●			◆
	Flow-Through Treatment Swale	1508.07							○	●					◇
	Vegetated Buffer (vegetated filter strip)	1508.08													
	Residential or Small Pervious Area Buffer		●					●	●	●	●	●		<15%	◆
	Developed Area Buffer		●					●	●	●	●	●		<15%	◆
	Buffers on Downhill Side of Roadway		●					●	●	●	●	●		<20%	◆
	Ditch Turn-out Buffer		●					●	●	●	●	●		<15%	◆
	Other practices	1508.09													
Pretreatment BMPs															
	Sediment Forebay	1508.10	●	●	●	●	●	●	●	●	●	●			◇
	Vegetated Filter Strip	1508.11	●					●	●	●	●	●	●		◆
	Pre-treatment Swale	1508.12						●	●	●	●	●	●		◇
	Flow-through Structures	1508.13													
	Water Quality Inlet		●					●	●	●	●	●	●		◆
	Proprietary Devices		●					●	●	●	●	●	●		◆
	Deep-sump Catch Basin	1508.14	●					●	●	●	●	●	●		◆
Groundwater Recharge Practices		1508.15													
	Infiltration Practices	1508.05	●	●	●	●	●	●	●		●			<15%	◆
	Filtering Practices Which Include Infiltration	1508.06	●	●				●	●	●	●			<15%	◆
	Permeable Surfaces		●	●	●	●	●	●	●		●			<15%	◆
Conveyance Practices															
	Detention Basin	1508.16		●	●	●	●	●	●	●	●	●			◇
	Stone Berm Level Spreader	1508.17	●					●	●	●	●	●		<15%	◆
	Conveyance Swale	1508.18						●	●	●	●	●			◇
	Terraced Slopes or Benching	1508.19													◇
	Flow Splitters		●	●	●	●	●	●	●	●	●	●			◇
	Permanent Outlet Protection		●	●	●	●	●	●	●	●	●	●			◆

● Applicable

○ May be applicable w/ careful design

* See Table 3-4 for a summary of BMP restrictions associated with high load and protected resources.

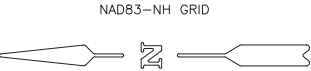
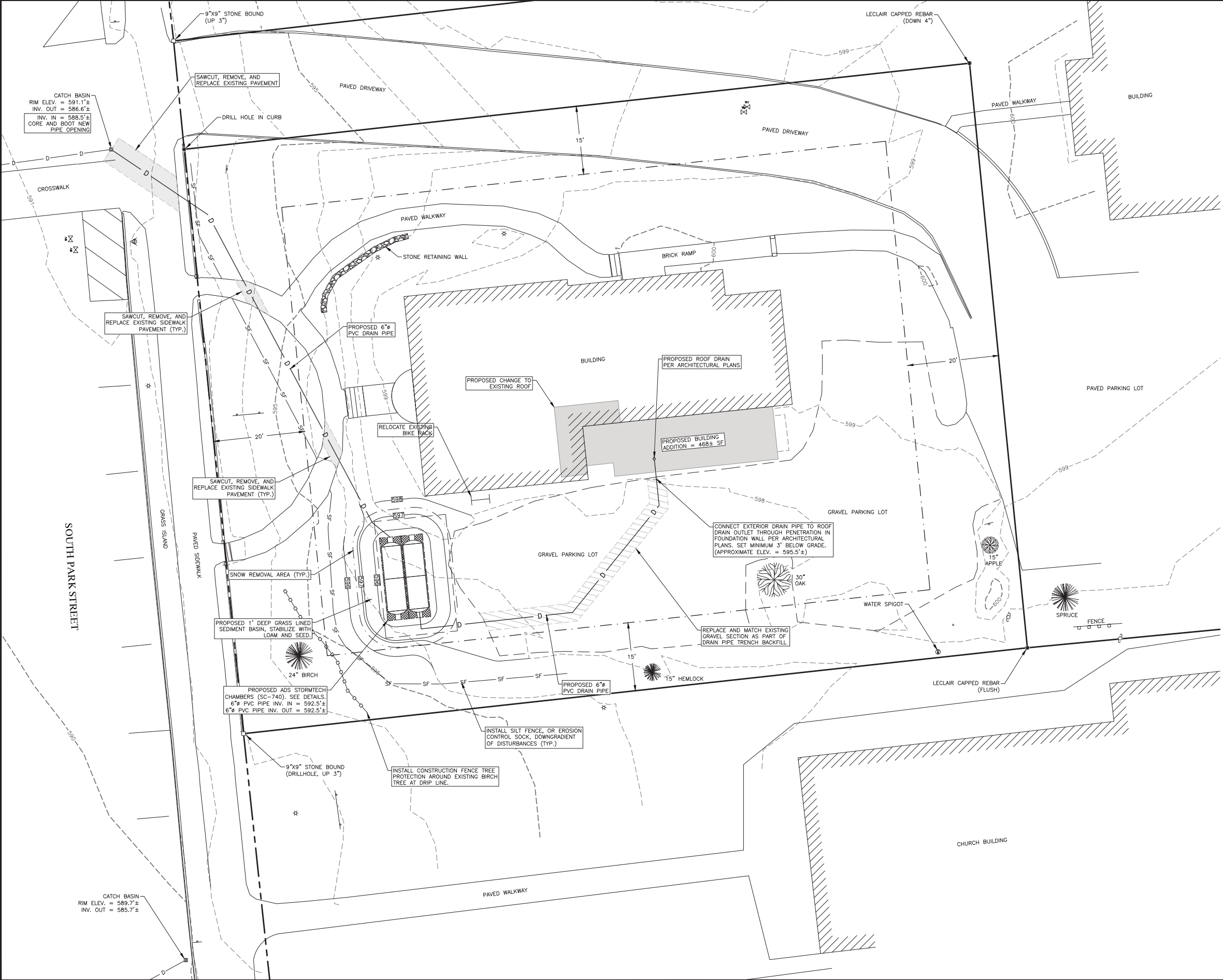
Maintenance Sensitivity - a practice's susceptibility to reduced performance if not adequately maintained.

◆ Significant

◆ Moderate

◇ Least

APPENDIX B
Site Plans for Stormwater Practices (Reduced Size)



SITE INFORMATION

TAX MAP AND LOT NUMBER:	92-10
ADDRESS:	8 SOUTH PARK STREET
ZONING DISTRICT:	PB (PROFESSIONAL BUSINESS DISTRICT)
EXISTING USE:	DEVELOPED MUSIC CENTER
PROPOSED USE:	BUILDING ADDITION TO EXISTING MUSIC CENTER
GROSS AREA OF PROPOSED BUILDING:	468± SQ. FT. (SEE INFORMATION PROVIDED)
AREA OF LOT:	0.51± ACRES (22,300± SQ. FT.)
PARKING SPACES:	13 (2 HANDICAP ACCESSIBLE SPACES)
LOADING SPACES:	0
NUMBER OF STORIES:	2

LOT SIZE/DIMENSION:	AREA (SQ. FT.)	WIDTH	MAX. HEIGHT
CLASS 1	10,000	75'	45'±
CLASS 2	15,000	75'	45'±
CLASS 3	40,000	100'	45'±

BUILDING SETBACKS:	FRONT	SIDE	REAR
CLASS 1	20'	15'	20'
CLASS 2	20'	15'	20'
CLASS 3	25'	25'	30'

LOT COVERAGE (BUILDINGS):	ALLOWED	EXISTING	PROPOSED
	20%	13.2%	15.3%

IMPERVIOUS AREA:	11,615± SQ. FT. (52.1%)
WETLANDS CONSERVATION DISTRICT/FLOODPLAIN DISTRICT, SHORELAND WATER QUALITY PROTECTION JURISDICTION:	THE SITE IS NOT WITHIN THE WETLANDS CONSERVATION DISTRICT/FLOODPLAIN DISTRICT OR WITHIN THE SHORELAND WATER QUALITY PROTECTION JURISDICTION.

LEGEND - EXISTING

EXISTING IRON PIPE OR REBAR	● AS NOTED
STONE/CONCRETE BOUNDARY MARK	□ AS NOTED
BOUNDARY LINE	—
RIGHT-OF-WAY	—
BUILDING SETBACK LINE	—
CONTOUR	—
FENCE-STOCKADE	—
EDGE PAVEMENT	—
EDGE GRAVEL	—
UTILITY POLE/GUY WIRE	—
LIGHT POLE	—
CATCH BASIN	—
DRAIN MANHOLE	—
STORMWATER PIPE	—
SANITARY MANHOLE	—
SIGN	—
HYDRANT	—
GATE VALVE	—
WATER SPIGOT	—
HARDWOOD TREE	—
SOFTWOOD TREE	—
DEED REFERENCE	—
TAX MAP/LOT NO.	12-122

GENERAL SURVEY NOTES:

1. HORIZONTAL DATUM: NH STATE PLANE GRID NAD83 (SURVEY FEET) FROM GIS OBSERVATION.
2. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) FROM GIS OBSERVATION.
3. STRUCTURES FOR UNDERGROUND UTILITIES ARE SHOWN AS OBSERVED. THE SURVEYOR DOES NOT CERTIFY THAT OTHER UNDERGROUND UTILITIES DO NOT EXIST. UNDERGROUND UTILITIES ARE NOT WARRANTED TO BE EXACT OR COMPLETE AND ARE TO BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR SITE MODIFICATIONS.



REVISION NO.	DATE	DESCRIPTION	MADE BY	CHECKED BY	APPROVED BY

PROPOSED SITE PLAN FOR
UPPER VALLEY MUSIC CENTER
BUILDING ADDITION AND SITE IMPROVEMENTS
SOUTH PARK STREET, LEBANON, NEW HAMPSHIRE

PATHWAYS CONSULTING, LLC
240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

SCALE: AS SHOWN
DESIGNED BY: SAW
DRAWN BY: DAS
CHECKED BY: SAW
DATE: 03-24-25
PROJ. NO. 13444

SC-740 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-740.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/(IN AND IN) AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

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

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

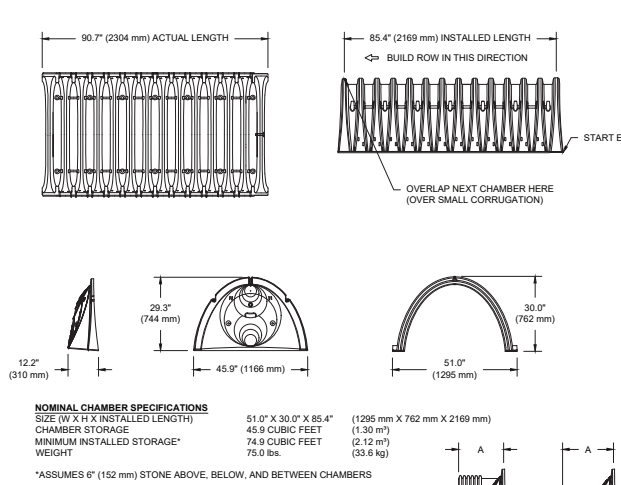
NOTES FOR CONSTRUCTION EQUIPMENT

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

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

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

SC-740 TECHNICAL SPECIFICATION



NOMINAL CHAMBER SPECIFICATIONS

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

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

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

PART #	STUB	A	B		C	
			18.5" (470 mm)	0.5" (13 mm)	16.5" (419 mm)	0.6" (15 mm)
SC740EPE06T / SC740EPE06BPC	6" (150 mm)	10.9" (277 mm)	---	---	---	---
SC740EPE08T / SC740EPE08BPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---	---	---
SC740EPE10T / SC740EPE10BPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---	---	---
SC740EPE12T / SC740EPE12BPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---	---	---
SC740EPE15T / SC740EPE15BPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---	---	---
SC740EPE18T / SC740EPE18BPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---	---	---
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	---	---	---
SC740EPE24BR*	24" (600 mm)	18.5" (470 mm)	---	---	---	---

ALL STUBS, EXCEPT FOR THE SC740EPE24B/SC740EPE24BR ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

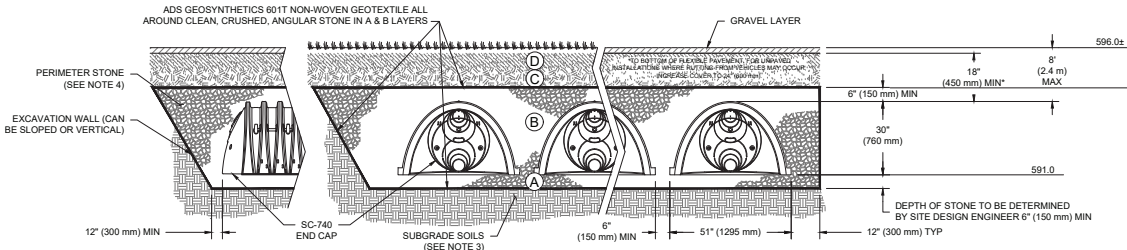
* FOR THE SC740EPE24B/SC740EPE24BR THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL, AND 90% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

PLEASE NOTE:

- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/(IN AND IN) AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
- A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
- A.3. USING A FLASHLIGHT AND STADI ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
- A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
- B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
- i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
- ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
- B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

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

SITE AND DRAINAGE DETAILS FOR
UPPER VALLEY MUSIC CENTER
BUILDING ADDITION AND SITE IMPROVEMENTS
SOUTH PARK STREET, LEBANON, NEW HAMPSHIRE

PATHWAYS CONSULTING, LLC

240 MECHANIC STREET, SUITE 100
LEBANON, NEW HAMPSHIRE 03766
(603) 448-2200

SCALE: AS SHOWN
DESIGNED BY: SAW
DRAWN BY: DAS
CHECKED BY: SAW
DATE: 03-24-25
PROJ. NO. 13444

4

APPENDIX C
Semi-Annual Inspection Checklist and Log
Keep the completed inspection forms here.

UPPER VALLEY MUSIC CENTER
BUILDING ADDITION AND SITE IMPROVEMENTS PROJECT
8 SOUTH PARK STREET, LEBANON, NEW HAMPSHIRE
SEMI-ANNUAL INSPECTION CHECKLIST

Please refer to the New Hampshire Stormwater Manual for specific information regarding the frequency of maintenance, inspection, and reporting requirements.

Project Name: Upper Valley Music Center – Building Addition and Site Improvements Project
Permittee Name: Upper Valley Music Center

Project Address: 8 South Park Street, Lebanon, NH 03766
Responsible Party for Facility: Benjamin Van Vliet, Executive Director
Address: 8 South Park Street, Post Office Box 826, Lebanon, NH 03766
Contact Person: Benjamin Van Vliet, Executive Director
Phone: 603-448-1642 Ext. 3
Email: ben@uvmusic.org

Inspector Name (if applicable): _____

***Inspector does not need to be an Engineer, Authorized Representative is acceptable**

Address:

Phone #:

Has ownership or project name changed since previous authorization? ☐N ☐Y - *If yes, attach explanation.*

Has amount of impervious area changed since previous authorization? ☐N ☐Y - *If yes, attach explanation.*

Maintenance Requirements

The Responsible Party(ies) shall at all times properly operate, inspect, and maintain all stormwater treatment and control systems which are installed or used to maintain compliance with the City of Lebanon Stormwater Regulations. The Responsible Party(ies) shall continue to comply with the inspection and maintenance requirements set forth in the City of Lebanon Stormwater Regulations

Maintenance Inspection Checklist

Please consider the item listed below:

Underground Chamber Storage System:

- Embankments show signs of settlement, erosion, seepage, animal burrows, woody vegetation, and other conditions that could degrade the embankment and reduce its stability for impounding water? ☐N ☐Y *If yes, immediate corrective action should be implemented if any such conditions are found, with maintenance or rehabilitation conducted as warranted by such inspection.*
- Are there any vegetated areas, including embankments, that require mowing, or other maintenance? ☐N ☐Y *If yes, attach an explanation and schedule for mowing or maintenance to be completed.*
- Inlet and outlet pipes, inlet and outlet structures, energy dissipation structures or practices, and other structural appurtenances in need of corrective action implemented (e.g., maintenance,

repairs, or replacement)? ☐N ☐Y - *If yes, attach an explanation and schedule for maintenance, repairs, or replacement to be completed.*

- Trash and debris need to be removed from the basin and any inlet or outlet structures?. ☐N ☐Y - *If yes, attach an explanation and schedule for trash and debris removal.*
- Was any accumulation of sediment noted in the basin that will significantly affect the basin capacity? ☐N ☐Y - *If yes, provide an explanation and schedule for cleaning.*

Gravel Parking Lot:

- Any surface deterioration? ☐N ☐Y - *If yes, provide an explanation and schedule for repair.*
- Surface drains effectively after storms. ☐N ☐Y - *If no, provide an explanation and schedule for investigation into why. Major clogging may necessitate replacement of pavement surface, and possibly filter course and sub-base course.*
- Any bare spots on the gravel surface? ☐N ☐Y - *If yes, Reseed immediately.*
- Embankments showing any signs of settlement, erosion, seepage, animal burrows, woody vegetation, and other conditions that could degrade the embankment and reduce its stability?
☐N ☐Y - *If yes, immediate corrective action should be implemented, with maintenance or rehabilitation conducted as warranted by such inspection.*

Sediment Basin:

- Are there any vegetated areas that require mowing or other maintenance? ☐N ☐Y - *If yes, attach an explanation and schedule for mowing or maintenance to be completed.*
- Was any erosion noted during inspection (for example in areas of exposed soil in channels, outlets, or on pond berms)? ☐N ☐Y - *If yes, provide explanation and schedule for repair.*
- Was any accumulation of sediment or debris noted in the basin? ☐N ☐Y - *If yes, provide an explanation and schedule for cleaning.*
- Is the basin surface and inlet remaining level with no voids or low spots preventing sheet flow at discharge point? ☐N ☐Y - *If yes, attach an explanation and schedule for maintenance to be completed.*
- Embankments showing any signs of settlement, erosion, seepage, animal burrows, woody vegetation, and other conditions that could degrade the embankment and reduce its stability?
☐N ☐Y - *If yes, immediate corrective action should be implemented, with maintenance or rehabilitation conducted as warranted by such inspection.*
☐N ☐Y - *If yes, immediate corrective action should be implemented, with maintenance or rehabilitation conducted as warranted by such inspection.*

General Maintenance:

- To the best of your knowledge, have there been any illicit discharges to the system (illicit discharges would include dumping of oil, gas, detergent, vehicle wash water, etc)? ☐N ☐Y - *If yes, attach an explanation and preventative measures taken.*
- Was any erosion noted during inspection (for example in areas of exposed soil in channels, outlets, or on pond berms)? ☐N ☐Y - *If yes, provide explanation and schedule for repair.*
- Have you performed all of the inspection and maintenance requirements in the individual stormwater permit that was previously issued for your stormwater treatment and control system?
☐N ☐Y - *If there are inspection and maintenance requirements in the previous individual permit that are not listed above, please attach an explanation of them and provide a schedule for their completion or indicate that they have been completed.*

- Has there been any re-routing of stormwater to avoid the system? ☐N ☐Y - *If yes, attach an explanation.*
 - Is there any additional maintenance or repairs needed at this time? ☐N ☐Y - *If yes, provide an explanation and schedule for maintenance or repairs to be completed.*
- ☐ Based on the above observations, and to the best of my knowledge, this report can serve as confirmation that the stormwater system **is** being maintained and operated in general conformance with the approved plans and the City of Lebanon Stormwater Regulations and that the stormwater system is in good operating condition.
- ☐ Based on the above observations, and to the best of my knowledge, this report can serve as notification that the stormwater system **is not** being maintained and operated in general conformance with the approved plans and the City of Lebanon Stormwater Regulations, and that the stormwater system is **not** in good operating condition. *(If checked, attach an explanation noting any deficiencies as well as a schedule for correction of the deficiencies. Note: Any deficiencies noted during inspection shall be corrected as soon as possible, but not later than sixty (60) days after detection).*

Signature of Inspector

Date of Inspection

Print or Type Name

Semi-Annual Inspection Log

*If practical, inspections at each stormwater practice should be made within the first 30 minutes of a significant rainfall event.
Observations should note color, odor, turbidity, solids, foam, oil sheen, or any other obvious form of contamination.*

Date: _____

Weather Conditions: _____

Stormwater Practice	Is maintenance needed? (Y/N)	Does it function as expected? (Y/N)	Describe the problem (sediment, contamination, invasive species growth?)	Corrective actions to be taken	Schedule for completion
Underground Chamber Storage System					
Gravel Parking Lot					
Sediment Basin					

Date Completed: _____

Completed by: _____



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

April 15, 2024 Meeting

Staff Memorandum – PB2025-13-EXT

APPLICATION INFORMATION

Agenda Item: 3.E

Application ID: PB2025-13-EXT

Application Type:

Request for extension and rephasing of Site Plan approval for a use change, a 5-story 72-unit multi-family dwelling, and a 6-story, 80-unit multi-family dwelling

Property Location & Tax Map:

2 Mascoma St (Tax Map 91, Lot 254)

Applicant/Property Owner:

Recreo, LLC

Zoning District: Lebanon Downtown (LD)

Property Size: +/-2.1 acres

Zoning Overlay Districts: None

Future Land Use Map:

Central Business District

Existing Improvements and Use:

- +/-26,392 sq. ft. (finished) two-story multi-tenant commercial building constructed in 1975 (*per the City Assessor's records*)
- +/-5,436 sq. ft. (finished) one-story commercial building constructed in 1945 (*per the City Assessor's records*)

Proposed Improvements and Use:

Razing of 5,436 sq. ft. building and construction of two (2) multi-family dwellings with a total of 152 units, a parking garage, parking lot and related site improvements

Staff Attachments:

- 7/11/22 Notice of Action
- Approved Site Plan ("Layout Plan")
- 7/8/24 Notice of Action
- 7/8/24 Phasing Schedule

LEGAL NOTICE

Recreo, LLC, 2 Mascoma Street (Tax Map 91, Lot 254), zoned LD: Applicant received Site Plan approval on July 11, 2022 (PB2022-17-SPR) for a phased redevelopment of the property including construction of two (2) multi-family dwellings containing a total of 152 units together with associated site improvements, which was extended on July 8, 2024 (PB2024-25-EXT). Applicant now requests (1) a waiver from Section 4.10.C of the Site Plan Review Regulations providing that the Planning Board shall grant no more than one extension for any site plan, and (2) an additional extension of the timelines associated with obtaining a building permit and for constructing required site improvements. PB2025-13-EXT

PLANS AND APPLICATION MATERIALS

- ▶ Application form (1 page)
- ▶ 2 Mascoma Street Redevelopment Extension Request Narrative, dated March 21, 2025, prepared by Studio Nexus (2 pages)
- ▶ Application for Waivers dated March 21, 2025 (2 pages)
- ▶ Certified Notification List (2 pages)
- ▶ Fee Schedule (1 page)
- ▶ Plan sheet titled, "Phasing & Scheduling Site Plan," dated March 14, 2022
- ▶ Plan sheet titled, "Village Market Redevelopment," prepared by Studio Nexus, dated March 24, 2025 (proposed upper level plan)
- ▶ Plan sheet titled, "Village Market Redevelopment," prepared by Studio Nexus, dated March 24, 2025 (proposed exterior elevations)

COMPLETENESS REVIEW

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

BACKGROUND

The subject property (outlined in blue in Figure 1 below) is currently improved with two commercial buildings:

- a +/-26,392 sq. ft. (finished) two-story multi-tenant commercial building constructed in 1975 (per the City Assessor's records), formerly occupied by the Village Market; and
- a +/-5,436 sq. ft. (finished) one-story commercial building constructed in 1945 (per the City Assessor's records), currently occupied by the Sunrise Buffet restaurant.

On July 11, 2022, the applicant obtained Site Plan approval to raze the Sunrise Buffet building and to redevelop the property with the construction of two (2) new multi-family buildings containing a total of 152 dwelling units (148 studios and 4 one-bedrooms) (PB2022-17-SPR). The project was approved to be constructed in two phases. A copy of the Planning Board's Notice of Action is attached for reference. As described in the applicant's project narrative submitted with the original site plan application:

- Multi-family building #1, which will be located at the southern end of the property, "consists of a 5-story, 48,028 SF, 72-unit apartment building plus a basement level that sits atop an 8,028 SF, 17-car parking garage. Built on the southern end of the site, the building and its main entry are oriented east—facing the upper level parking lot and Colburn Park beyond."
- Multi-family building #2, which will be located at the corner of Mascoma Street and Water Street, "consists of a 6- story (plus two walk-out basement levels), 56,800 SF, 80-unit residential building of similar construction and unit mix to Building 1. [...]."
- "[The multi-family] buildings will provide small, but high quality studio (and a few one-bedroom) apartments in a diversity of sizes and shapes, but typically between 400 - 450 SF."

On July 8, 2024, the Planning Board approved the applicant's request to extend the timelines within the phasing schedule pursuant to a revised phasing schedule submitted by the applicant (the "7/8/24 Phasing Schedule"). Copies of the July 8, 2024 Notice of Action for PB2024-25-EXT and a copy of the 7/8/24 Phasing Schedule are attached for reference.

To date, the applicant has not yet begun construction or obtained a building permit for what is currently identified as Phase 1.

APPLICATION OVERVIEW

At this time, the applicant is requesting:

1. A waiver from the Section 4.10.C which prohibits the Board from granting more than one extension of the time within which to obtain a building permit;
2. Another extension of the phasing schedule with respect to both phases; and
3. An amendment to the approved site plan to permit the renovation of the second floor of the former Village Market building for a proposed "Italian Market", food court and restaurant use, and an amendment to the phasing schedule to identify this work as the new Phase 1 of the development. *Please note that due to time constraints and general confusion surrounding this application, the legal notice does not identify this third component of the application.*

With respect to the requested waiver, Section 4.10.C provides that, "[t]he Board shall grant no more than one extension for any site plan, unless it determines, based on legal advice, that such extension is

required in order to prevent a violation of constitutional rights.”¹ Because an extension was already granted for both phases on July 8, 2024 (PB2024-25-EXT), the Board is prohibited from granting an additional extension of time to obtain a building permit for either phase unless it waives the Section 4.10.C limitation as requested by the applicant.

If the Board grants the requested waiver from Section 4.10.C, the Board would then need to evaluate the applicant’s phasing schedule extension request in the same manner as it did in connection with the applicant’s prior extension request (see discussion below). Additionally, the Board would also need to evaluate the applicant’s request to amend the site plan and phasing schedule to account for the proposed change of use to the second floor of the Village Market building, as described in the attached project narrative prepared by Studio Nexus.

Figure 1. Bird’s Eye View of subject property (looking north).



©2021 Eagleview (image taken 4/4/2021)

¹ Phased developments are subject to the Section 4.10.C limitation pursuant to Section 4.9.F which provides as follows: “If the applicant anticipates being unable to meet any time deadline(s) set forth in the approved phasing schedule with respect to any phase, he or she may apply to the Planning Board for an extension of up to two years for the particular phase, **pursuant to Section 4.10 of these Regulations**. The request for an extension shall be submitted to the Planning and Development Department prior to the expiration of the deadline(s) involved.” (emphasis added)

SITE PLAN REVIEW REGULATIONS & STAFF COMMENTS**A. Waiver Request**

To grant the requested waiver from Section 4.10.C, the Board must determine that the applicant has satisfied at least one of the following waiver criteria set forth in Section 7.1:

- 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.

If the waiver request is denied, the remainder of the application is moot and the applicant would need to apply for a new site plan approval.

B. Phasing Plan Extension

If the applicant's request to waive Section 4.10.C is granted, the Board will then need to evaluate the applicant's request to approve extensions for each phase. For each of the two phases (which should be considered separately), there are two components to the extension request that must be specifically evaluated: extending the building permit deadline and extending the active and substantial development deadline.

1. Building Permit Extension

In determining whether to grant an extension (and the duration of any such extension), Section 4.10.C provides that "the Board shall consider the totality of the circumstances, including the extent and complexity of the conditions precedent, and whether the need for more time is attributable to unusual circumstances beyond the control of the Applicant, rather than to the Applicant's neglect or failure to proceed with reasonable promptness."

For reference, the relevant portions of Section 4.10 ("Expiration of Site Plan Approval") are provided below:

- A. Any approved site plan for which a Building Permit has not been obtained within two (2) years of the date of the original approval shall be considered void; however, the Board may, for good cause, specify in the original Notice of Action some alternative time limit for obtaining a Building Permit. The voiding of an approval under this paragraph shall terminate the vesting of the application against changes in regulations, as set forth in RSA 676:12, VI and RSA 674:39.
- B. Notwithstanding paragraph A above, the Board may grant an extension of up to two (2) additional years beyond the original expiration date. A request for such an extension must be submitted by the Applicant to the Planning Office prior to such expiration date, and requests for extension of the site plan approval received after the expiration date will not be considered by the Board. An extension may be granted only after a public hearing with notice as provided in Section 4.8 of these Regulations.

- C. In determining whether to grant such an extension, the Board shall consider the totality of the circumstances, including the extent and complexity of the conditions precedent, the extent of the progress made by the Applicant toward satisfying the conditions-precedent and/or starting construction, and whether the need for more time is attributable to unusual circumstances beyond the control of the Applicant, rather than to the Applicant's neglect or failure to proceed with reasonable promptness. The Board shall indicate in its minutes the reason(s) for its decision on an extension request under this Section. The Board shall grant no more than one extension for any site plan, unless it determines, based on legal advice, that such extension is required in order to prevent a violation of constitutional rights.

2. Active and Substantial Development (Vesting) Extension

Section 8.4.A.2 of the Site Plan Review Regulations requires that, "Active and Substantial Development," as defined in Section 8.4.A.1 (provided below) shall be achieved within two (2) years from the date of the Planning Board's approval. If active and substantial development is not achieved within two (2) years of the date of the Planning Board's approval, the development shall be subject to any changes in the City's land use regulations.

Upon demonstration of "good cause," Section 8.4.A.3 allows the Planning Board to grant an extension of the time for completion of active and substantial development. For reference, Section 8.4.A ("Active and Substantial Development or Building") is provided below:

1. For purposes of these Regulations, unless modified by the Board at the time of approval of a specific application, the completion of all of the following shall imply "Active and Substantial Development or Building" when inspected and approved by the Reviewing Engineer:
 - a. Construction of and/or installation of basic infrastructure to support the development (including all of the following: roadways, access ways, parking lots, etc. to a minimum gravel base; and water and wastewater lines and other utilities placed in underground conduit ready for connection to proposed buildings/structures) in accordance with the approved plans; and,
 - b. Construction and completion of drainage improvements to service the development (including all of the following: detention/retention basins, treatment swales, pipes, underdrains, catch basins, etc.) in accordance with the approved plans; and,
 - c. Placement and maintenance of all erosion control measures on the site as specified on the approved plans.

Movement of earth, excavation, or logging of a site without completion of items a, b, and c above, shall not be considered "Active and Substantial Development or Building." Plans approved in phases shall be subject to this definition for the phase or phases currently being developed.

2. Unless otherwise specified by the Board, Active and Substantial Development or Building shall be achieved within two (2) years from the date of the Planning Board's approval.
3. The time for completion of Active and Substantial Development or Building may be extended for good cause by the Planning Board. A request for an extension of time within which to complete such Active and Substantial Development or Building shall be submitted by the Applicant to the Planning and Development Department prior to such expiration date for review in accordance with the provisions of Section 4.10 of these Regulations. Requests for extension of time to complete Active and Substantial Development or Building received after the expiration date shall not be considered by the Board. An extension may be granted only after a public hearing with notice as provided in Section 4.8 of these Regulations.

In no event shall the time for completion of Active and Substantial Development or Building be extended to more than five (5) years from the date of the Planning Board's approval, unless the development has been approved for completion in phases in accordance with Section 4.9 of these Regulations. In the event the Planning Board approves an extension request, the Applicant shall be required to update any Security Agreements or other documents, as necessary, to reflect the dates of the extended approval.

3. Other Staff Comments on the Phasing Plan

Staff has not reviewed the applicant's proposed phasing plan as it was submitted on the same day as the writing of this memo. Without the benefit of having yet reviewed the plan, staff offers the following comments to the extent applicable:

- The phasing plan should provide all information required Section 4.9.C of the Site Plan Review Regulations for each phase, including but not limited to dates for active and substantial development (which must be specifically approved pursuant to the criteria above) as well as dates for substantial completion.
- The dates associated with each phase should be specific dates, not just the month and year.
- The date on the Phasing Plan is March 14, 2022. Revision dates should be added to reflect the prior approved revision and current proposed revision.
- Condition 4.h set forth in the July 11, 2022 Notice of Action provides that the applicant shall, "[a]mend the phasing plan to ensure that drainage infrastructure of sufficient capacity is in place to accommodate additional flows and to provide required treatment from all added impervious areas to be constructed as part of Phase 1." Staff recommends that the applicant address this condition prior to and not as a condition of any approval of the applicant's current extension request.

C. Site Plan and Phasing Plan Amendment

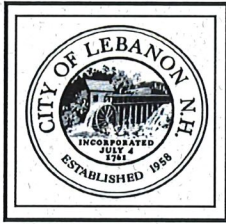
As noted in the attached project narrative from Studio Nexus, the applicant is proposing to renovate the second floor of the former Village Market building for use as an "Italian market," food court, and restaurant. Staff made a determination that the proposed use constitutes a "minor change" as defined in Article II of the Site Plan Review Regulations and, therefore, requires site plan review. Ordinarily, review by the Minor Site Plan Committee would suffice; however, where there's an existing approved site plan, a separate site plan approval for the change of use would render the approved site plan void. Consequently, staff advised the applicant to instead amend the approved site plan and identify the

proposed change of use and its related site improvements as Phase 1 of the development (thereby shifting current Phase 1 to Phase 2 and current Phase 2 to Phase 3).

While the applicant has provided an updated phasing schedule which includes the new Phase 1 of the development, a site plan showing the proposed site layout in connection with the new Phase 1 has not been provided. A site plan for Phase 1 should be submitted clearly show parking, landscaping, utilities, and all other site features, as is always required in connection with any site plan review. It would be expected that some site improvements would be made in connection with the change of use to bring the property closer to compliance with the Site Plan Review Regulations and as a bridge to what will now be Phase 2 of the development. Staff recommends that the hearing is continued so that the applicant provides the requested Phase 1 site layout information.

Attachments

cc: Recreo, LLC (tim@ledgworks.com)
Jim Wasser, Studio Nexus (jjmw@studionexusarch.com)
File



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

NOTICE OF ACTION LEBANON PLANNING BOARD PB2022-17-SPR

Notice is hereby given that on **May 9, 2022** the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Jeremy Rutter moved that the application of Recreo, LLC, 2 Mascoma Street (Tax Map 91, Lots 254), zoned LD is complete enough for the Planning Board to accept jurisdiction and commence review.

The motion was seconded by **Laurel Stavis**. The vote on the motion was unanimous in favor, 9-0.

Notice is hereby given that on **June 27, 2022**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that for the application of Recreo, LLC, PB2022-17-SPR, the Lebanon Planning Board **APPROVE** a waiver from the following section of the Site Plan Review Regulations:

- Section 6.2.B.1 – to allow less than the minimum required 15 ft. buffer at the southeastern corner of the property between the buried propane tanks and the property line.

The motion was seconded by Kathie Romano. The vote on the motion was approved, 5-3.

Notice is hereby given that on **June 27, 2022**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that for the application of Recreo, LLC, PB2022-17-SPR, the Lebanon Planning Board **APPROVE** a waiver from the following section of the Site Plan Review Regulations:

- Section 6.2.B.4 – requiring all trees to be planted a minimum of 8 ft. from any property line.

The motion was seconded by **Cori Hirai**. The vote on the motion was approved, 7-1.

Notice is hereby given that on **June 27, 2022**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that for the application of Recreo, LLC, PB2022-17-SPR, the Lebanon Planning Board **APPROVE** a waiver from the following section of the Site Plan Review Regulations:

- Section 6.2.D.1 – landscaping around buildings requirements (with respect to the Village Market building).

The motion was seconded by **Cori Hirai**. The vote on the motion was approved, 7-1.

Notice is hereby given that on **June 27, 2022**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that for the application of Recreo, LLC, PB2022-17-SPR, the Lebanon Planning Board **APPROVE** a waiver from the following section of the Site Plan Review Regulations:

- Section 6.2.D.1 – landscaping around buildings requirements (with respect to multi-family building #2).

The motion was seconded by **Kathie Romano**. The vote on the motion was approved, 6-2.

Notice is hereby given that on **June 27, 2022**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that for the application of Recreo, LLC, PB2022-17-SPR, the Lebanon Planning Board **APPROVE** a waiver from the following section of the Site Plan Review Regulations:

- Section 6.5.E.8 – requiring parking lots with multiple drive aisles to be oriented perpendicular to the building to reduce the number of traffic aisles that a pedestrian must cross to reach the building.

The motion was seconded by **Kathie Romano**. The vote on the motion was approved, 7-1.

Notice is hereby given that on **June 27, 2022**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that for the application of Recreo, LLC, PB2022-17-SPR, the Lebanon Planning Board **APPROVE** a waiver from the following section of the Site Plan Review Regulations:

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

The motion was seconded by **Cori Hirai**. The vote on the motion was approved, 5-3.

Notice is hereby given that on June 27, 2022, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that for the application of Recreo, LLC, PB2022-17-SPR, the Lebanon Planning Board **APPROVE** a waiver from the following section of the Site Plan Review Regulations:

- Section 6.2.E.1 – requiring landscaping to visually screen parking areas.

The motion was seconded by **Kathie Romano**. The vote on the motion was approved, 5-3.

Notice is hereby given that on June 27, 2022, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that for the application of Recreo, LLC, PB2022-17-SPR, the Lebanon Planning Board **APPROVE** a waiver from the following section of the Site Plan Review Regulations:

- Section 6.10.C.4.a – requiring a landscaped buffer of at least 5 feet along the frontage of any accessory parking area and requiring that the buffer is designed to create an attractive streetscape and shall be provided through an appropriate combination of plantings, planters, benches, fences, public art, pedestrian-scale lighting, and low walls under four feet in height.

The motion was seconded by **Kathie Romano**. The vote on the motion was approved, 7-1.

Notice is hereby given that on **June 27, 2022**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Read by Matthew Hall:

On May 9, 2022, June 13, 2022, and June 27, 2022, at duly noticed meetings of the Lebanon Planning Board, there appeared Jim Wasser and Tim Sidore on behalf of Recreo, LLC, regarding 2 Mascoma Street (Tax Map 91, Lot 254), zoned LD, requesting a Conditional Use Permit per Section 307.3 of the Zoning Ordinance to allow a reduced minimum required rear yard. PB2022-17-SPR

I. FINDINGS OF FACT

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

1. Recreo, LLC proposes to redevelop the property with the construction of two (2) new multi-family buildings containing a total of 152 dwelling units and proposes to construct the southernmost building 7 ft. from the rear lot line.
2. In the LD District, the minimum required rear yard of 10 ft. established per Section 307.3 may be reduced by conditional use permit per Section 302.4.
3. Pursuant to Section 307.3, the applicant requests a Conditional Use Permit to reduce the minimum required rear yard to 7 ft. and has submitted an Application for Conditional Use Permit Support Statement addressing the Section 302.4.D criteria.

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 Planning Board concludes the following with respect to the Enhanced Performance Standards set forth in §302.4.D of the Zoning Ordinance:

1. The site **IS** suitable for the proposal. (§302.4.D.1)
2. The external impacts of the proposed use on abutting properties and the neighborhood **ARE** commensurate with the impacts of adjacent existing uses or other uses permitted in the zoning district. (§302.4.D.2)
3. The proposal **DOES** satisfy the criteria of Section 302.4.D.3:
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.
4. The proposal **DOES** satisfy the criteria of Section 302.4.D.4:
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.
5. The proposal **DOES** satisfy the criteria of Section 302.4.D.5:
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.

III. DECISION

Now therefore be it resolved, the Planning Board, on this **27th day of June, 2022**, hereby **GRANTS** the request of Recreo, LLC for a Conditional Use Permit per Section 307.3, as set forth above and per testimony, plans, and materials submitted, and per the following conditions:

1. The Conditional Use Permit is contingent on approval of the site plan application of Recreo, LLC for 2 Mascoma Street (Tax Map 91, Lots 254), PB2022-23-SPR, currently pending before the Board.

The motion was seconded by Gregorio Amaro. The CUP was approved 5-3.

Notice is hereby given that on **June 27, 2022**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Read by Matthew Hall:

On May 9, 2022 June 13, 2022, and June 27, 2022, at duly noticed meetings of the Lebanon Planning Board, there appeared Jim Wasser and Tim Sidore on behalf of Recreo, LLC, regarding 2 Mascoma Street (Tax Map 91, Lot 254), zoned LD, requesting a Conditional Use Permit per Section 307.8.A of the Zoning Ordinance to allow an increase in the maximum permitted building height. PB2022-17-SPR

1. Recreo, LLC proposes to redevelop the property with the construction of two (2) new multi-family buildings containing a total of 152 dwelling units and proposes a height of 65 ft. for the northernmost building.
2. 55 ft. is the maximum building height in the LD District. However, per Section 307.8.A, the Planning Board may allow building height of up to 65 ft. by Conditional Use Permit per Section 302.4.D.
3. Pursuant to Section 307.8.A, the applicant requests a Conditional Use Permit to allow building #2 to have a height of 65 ft. and has submitted an Application for Conditional Use Permit Support Statement addressing the Section 302.4.D and Section 307.8.A criteria.
4. 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 specific requirements of Section 307.8.A.

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 Planning Board concludes the following with respect to the Enhanced Performance Standards set forth in Section 302.4.D and Section 307.8.A of the Zoning Ordinance:

1. The site **IS** suitable for the proposal. (§302.4.D.1)
2. The external impacts of the proposed use on abutting properties and the neighborhood **ARE** commensurate with the impacts of adjacent existing uses or other uses permitted in the zoning district. (§302.4.D.2)
3. The proposal **DOES** satisfy the criteria of Section 302.4.D.3:
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.

4. The proposal **DOES** satisfy the criteria of Section 302.4.D.4:
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.
5. The proposal **DOES** satisfy the criteria of Section 302.4.D.5:
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.
6. 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. (Section 307.8.A.1)
7. The proposal **DOES** provide 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. (Section 307.8.A.2)
8. The proposal **DOES** include a high-quality design with attention to architectural quality and detail, universal accessibility, and/or environmental sustainability. (Section 307.8.A.3)

III. **DECISION**

Now therefore be it resolved, the Planning Board, on this **27th day of June, 2022**, hereby **GRANTS** the request of Recreo, LLC for a Conditional Use Permit per Section 307.8.A, as set forth above and per testimony, plans, and materials submitted, and per the following conditions:

1. The Conditional Use Permit is contingent on approval of the site plan application of Recreo, LLC for 2 Mascoma Street (Tax Map 91, Lots 254), PB2022-23-SPR, currently pending before the Board.

The motion was seconded by Cori Hirai. The CUP was approved, 5-3.

Notice is hereby given that on **June 27, 2022**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Read by Matthew Hall:

On May 9, 2022, June 13, 2022, and June 27, 2022, at duly noticed meetings of the Lebanon Planning Board, there appeared Jim Wasser and Tim Sidore on behalf of Recreo, LLC, regarding 2 Mascoma Street (Tax Map 91, Lot 254), zoned LD, requesting a Conditional Use Permit per Section 307.9.B of the Zoning Ordinance to allow parking spaces and a vehicular circulation drive to be located within the front yard. PB2022-17-SPR

I. **FINDINGS OF FACT**

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

1. Recreo, LLC proposes to redevelop the property with the construction of two (2) new multi-family buildings containing a total of 152 dwelling units.
2. Section 307.9.B of the Zoning Ordinance prohibits parking areas and vehicular circulation areas within the front yard. However, "[f]or improved surfaces in existence as of January 20, 2021, the Planning Board may waive these requirements by conditional use permit pursuant to Section 302.4 if the Board finds that there is no other location on the lot to provide parking."
3. Pursuant to Section 307.9.B, the applicant requests a Conditional Use Permit to allow a 20 ft. circulation drive and 8 parking spaces in the front yard and has submitted the attached Application for Conditional Use Permit Support Statement addressing the Section 302.4.D and Section 307.9.B criteria.
4. 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 specific requirements of Section 307.9.B.

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 Planning Board concludes the following with respect to the Enhanced Performance Standards set forth in Section 302.4.D and Section 307.9.B of the Zoning Ordinance:

1. The site **IS** suitable for the proposal. (§302.4.D.1)
2. The external impacts of the proposed use on abutting properties and the neighborhood **ARE** commensurate with the impacts of adjacent existing uses or other uses permitted in the zoning district. (§302.4.D.2)
3. The proposal **DOES** satisfy the criteria of Section 302.4.D.3:
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.
4. The proposal **DOES** satisfy the criteria of Section 302.4.D.4:
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.
5. The proposal **DOES** satisfy the criteria of Section 302.4.D.5:
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.
6. The improved surface was in existence as of January 20, 2021, and there is no other location on the lot to provide parking. (Section 307.9.B)

III. DECISION

Now therefore be it resolved, the Planning Board, on this **27th day of June, 2022**, hereby **GRANTS** the request of Recreo, LLC for a Conditional Use Permit per Section 307.9.B, as set forth above and per testimony, plans, and materials submitted, and per the following conditions:

1. The Conditional Use Permit is contingent on approval of the site plan application of Recreo, LLC for 2 Mascoma Street (Tax Map 91, Lots 254), PB2022-23-SPR, currently pending before the Board.

The motion was seconded by Cori Hirai. The CUP was approved 7-1.

Notice is hereby given that on July 11, 2022, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

Matthew Hall moved that the Lebanon Planning Board **APPROVE** the application of Recreo, LLC for Site Plan Review to construct two (2) multi-family dwellings containing a total of 152 units together with parking, landscaping, utilities, and other associated site improvements at 2 Mascoma Street (Tax Map 91, Lots 254), zoned LD, PB2022-17-SPR, as shown on a plan set titled "Village Market Redevelopment," dated March 14, 2022, revised April 22, 2022, prepared by Studio Nexus Architects & Planners, Project No.: 2119 (architectural plans; 37 sheets), 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 and Prior to the Start of Any Construction Activities

1. The Boundary Line Adjustment plat approved by the Planning Board on April 11, 2022 (PB2022-16-BLA) shall be recorded pursuant to and in conformance with the Notice of Action.
2. The applicant shall address comments 1-3 in the letter dated April 29, 2022, from Steve Keach, PE, of Keach-Nordstrom Associates, Inc., to the satisfaction of the City Engineer.
3. The applicant shall address comments 2-4 in the memo dated May 9, 2022, from Duane Egner, Lebanon Fire Inspection, to the satisfaction of the Fire Department.
4. 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 and #3.
 - b) Identify the name of the county on the cover sheet.
 - c) Update zoning chart as follows:
 - i. Correct the number of proposed dwelling units to 152;
 - ii. Identify the building to be demolished as an existing use;
 - iii. Identify impervious coverage both in square feet and as a percentage (Section 5.1.E.10);
 - iv. For proposed lot area, include reference the approved boundary line adjustment plat;
 - v. For proposed parking, refer to requested Conditional Use Permit to allow off-lot parking;
 - vi. Identify 7 ft. proposed rear setback and refer to requested Conditional Use Permit;
 - vii. Indicate the parcel is subject to the NHDES Shoreland Water Quality Protection jurisdiction; and
 - viii. Refer to the requested Conditional Use Permit for the proposed height of building #2.
 - d) Provide specifications for all site signage.

- e) Identify location of protected shoreland buffer (pursuant to the NH SWQPA).
- f) Identify handicap accessible parking for building #1 and an accessible route.
- g) Amend the cover sheet to provide description of plan revisions (5.1.E.4.d).
- h) Amend the phasing plan to ensure that drainage infrastructure of sufficient capacity is in place to accommodate additional flows and to provide required treatment from all added impervious areas to be constructed as part of Phase 1.

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.

5. 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.

6. 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.

7. All engineering review fees shall be paid in full as required by Section 4.7.E.1 of the Site Plan Review Regulations.

8. The applicant shall prepare a plan to the satisfaction of the Fire Department and the City Manager to re-pave and re-stripe the existing paved area at 12 South Park Street to the rear of the Fire Station and to provide pavement markings for the proposed access way to Church Street.

9. The applicant shall satisfy all conditions of the off-lot parking Conditional Use Permit approved by the Planning Board on June 27, 2022 (PB2022-22-CUP).

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

10. 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.

11. 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.

12. All water and sewer fees shall be paid as set forth in City Code Chapter 68.

13. 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, if necessary

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

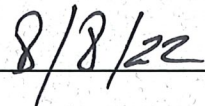
- 14. The impact fee calculated pursuant to Condition of Approval #10 shall be paid.
- 15. Third-party engineer or design engineer inspection reports and as-built drawings provided by the applicants (PDF format and CAD .dwg format, using the NH State Plane Coordinate System), including tie sheets, shall be reviewed and approved by the City Engineer prior to acceptance of any utility improvements by the City.
- 16. 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.
- 17. The existing paved area at 12 South Park Street to the rear of the Fire Station shall be paved, striped, and marked pursuant to the plan prepared in accordance with Condition of Approval #8.

General Conditions

- 18. Pursuant to Section 4.9 of the Site Plan Review Regulation, the project may be constructed in phases per the phasing plan amended per Condition of Approval #4.g.
- 19. 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.
- 20. 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.
- 21. The applicant shall implement and maintain NHDES Site Specific Best Management Practices before, during, and after construction.
- 22. The applicant shall obtain an Excavation Permit, a Driveway Permit, and a Stormwater Permit from the Department of Public Works for any site work in the public right-of-way prior to undertaking any work in the right-of-way and prior to constructing any stormwater connections to the municipal system.
- 23. 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).
- 24. The applicant shall be responsible for maintaining all improvements constructed within the public right-of-way.

The motion was seconded by Kathie Romano. The vote on the motion was approved, 6-3.

THE CITY OF LEBANON

By:  DATE: 
Planning Board Chair

ACCESS & PARKING AREAS: 36,845 SF
WALKWAYS: 6,078 SF
TOTAL SNOW REMOVAL AREA: 42,923 SF
DENSITY REDUCTION FACTOR X 0.25
REQUIRED SNOW REMOVAL AREA: 10,731 SF ⚠️
PROVIDED SNOW REMOVAL AREA: 5,392 SF (IN USABLE LANDSCAPED AREAS)
THE OWNER IS RESPONSIBLE FOR PROVIDING ADEQUATE SNOW REMOVAL OPERATIONS.
TRUCKING SNOW OFF-SITE MAY BE REQUIRED.

⚠️ REMOVED "ON-SITE IMPERVIOUS AREA CALCULATIONS"
⚠️ REMOVED "ON-SITE PARKING NOTES"
REMOVED UNDERGROUND UTILITIES FROM PLAN DISPLAY

The logo for Horizons Engineering features the word "horizons" in a bold, black, sans-serif font. The letter "i" is replaced by a stylized graphic of a vertical line with a circle at the top, resembling a surveying instrument or a horizon line. Below "horizons", the word "Engineering" is written in a black, cursive script font. Below the company name, the services "Civil and Structural Engineering", "Land Surveying and", and "Environmental Consulting" are listed in a bold, black, sans-serif font. At the bottom, the locations "MAINE • NEW HAMPSHIRE • VERMONT" and the website "www.horizonsengineering.com" are displayed in a smaller, black, sans-serif font.

horizons
Engineering

**Civil and Structural Engineering
Land Surveying and
Environmental Consulting**

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Issued For

SITE PLAN REVIEW

**PRELIMINARY
NOT FOR
CONSTRUCTION**

WILL DAVIS' ELECTRONIC OR DIGITAL SEAL OR SIGNATURE IS EFFECTIVE ONLY AS TO THAT VERSION OF THIS DOCUMENT AS ORIGINALLY PUBLISHED BY HORIZONS ENGINEERING, INC. WILL DAVIS IS NOT RESPONSIBLE FOR ANY MODIFICATION, CORRUPTION OR UNAUTHORIZED USE OF SUCH DOCUMENT. TO VERIFY THE VALIDITY OR APPLICABILITY OF THE SEAL OR SIGNATURE, CONTACT WILL DAVIS.

Issue Date: March 14, 2022

Revisions		
No.	Description	Date
	REVISION 1	04/22/2022

LAYOUT PLAN

Project No.: 2119

C-201

 SHEET 5 OF 37



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

NOTICE OF ACTION LEBANON PLANNING BOARD PB2024-25-EXT

Notice is hereby given that on **July 8, 2024**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

“Kathie Romano moved that the application of Recreo, LLC, 2 Mascoma Street (Tax Map 91, Lot 254), zoned LD is complete enough for the Planning Board to accept jurisdiction and commence review.

The motion was seconded by Jerry Rutter. The vote on the motion was unanimous in favor, 7-0.”

Notice is hereby given that on **July 8, 2024**, the following action was taken by a majority of the Lebanon Planning Board in accordance with the City of Lebanon Site Plan Review Regulations:

“Brandon Hill moved that the Lebanon Planning Board **APPROVE** the application of Recreo, LLC, PB2024-25-EXT, for an extension of time per Section 4.10.B of the Site Plan Review Regulations to obtain a building permit with respect to a site plan for two (2) multi-family dwellings containing a total of 152 units together with associated site improvements, originally approved on July 11, 2022 (PB2022-17-SPR), and for an extension of time per Section 8.4.A.3 to achieve active and substantial development, per application materials submitted and including any and all submissions and testimony provided for and during the public hearing.

In support of its decision, the Board finds that:

1. The applicant **HAS** submitted a complete and timely request for an extension pursuant to Section 4.10.B of the Site Plan Review Regulations;
2. Per Section 4.10.B, the applicant **HAS** demonstrated that an extension of time to obtain a building permit is warranted, considering the totality of the circumstances, including the extent and complexity of the conditions precedent, the extent of the progress made by the Applicant toward satisfying the conditions-precedent and/or starting construction, and whether the need for more time is attributable to unusual circumstances beyond the control of the Applicant rather than to the Applicant's neglect or failure to proceed with reasonable promptness; and
3. Per Section 8.4.A.3, the applicant **HAS** demonstrated good cause for an extension of time to achieve active and substantial development.

This approval is subject to the following conditions:

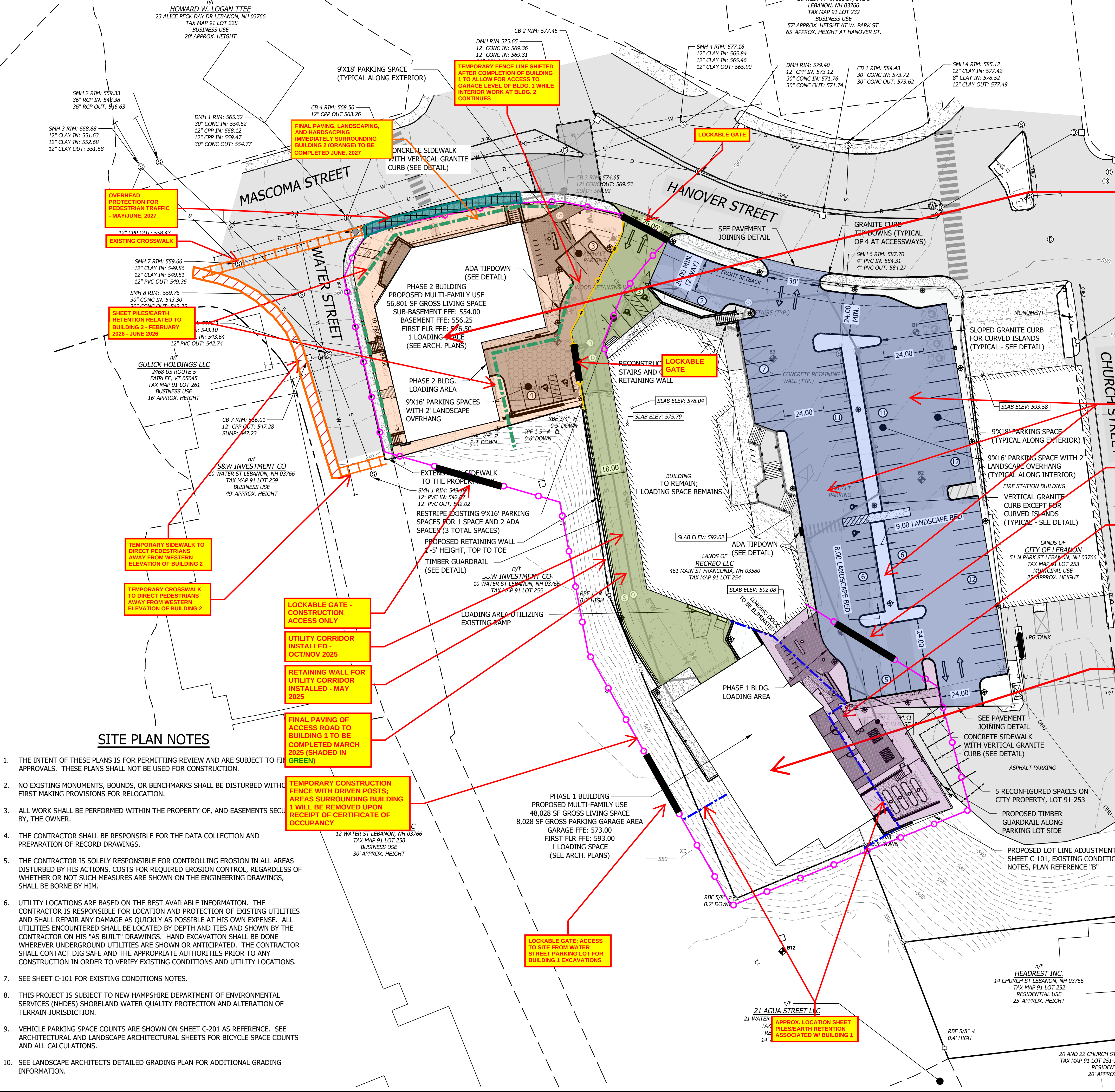
1. The applicant shall satisfy and comply with the Planning Board Notice of Action for PB2022-17-SPR, dated July 11, 2022, and all conditions of approval thereof except as may be superseded by condition #2 below.
2. Condition #18 set forth in the Planning Board Notice of Action for PB2022-17-SPR dated June 27, 2022, is hereby stricken and replaced with the following:

Pursuant to Section 4.9 of the Site Plan Review Regulations, the project may be constructed in phases per the phasing plan submitted for PB2024-25-EXT and per the conditions of approval set forth in the Planning Board Notice of Action for PB2022-17-SPR dated June 27, 2022, including but not limited to condition 4.h (requiring the applicant to “[a]mend the phasing plan to ensure that drainage infrastructure of sufficient capacity is in place to accommodate additional flows and to provide required treatment from all added impervious areas to be constructed as part of Phase 1.”) The dates by which a building permit will be obtained for each phase, by which active and substantial development will be achieved for each phase, and by which substantial completion will be achieved for each phase shall be as set forth in the phasing plan, as may be revised pursuant to condition 4.h of the June 27, 2022 Notice of Action for PB2022-17-SPR. All dates on the phasing plan shall be understood as being the last day of the month identified. All future changes to the phasing plan and any extension requests for any phase shall be subject to and evaluated pursuant to the applicable requirements of Section 4.9.C and Section 4.9.D of the Site Plan Review Regulations, and not Section 4.10.B or 8.4.A.

The motion was seconded by Jeremy Rutter. The vote on the motion was approved, 7-0.”

Notice of Action prepared by: Crystal Taplin, Administrative Assistant, July 16, 2024

Staff Note: Phasing Plan approved on July 8, 2025, in connection with the PB2024-25-EXT



LEBANON ON-SITE IMPERVIOUS AREA CALCULATIONS

EXISTING LOT AREA: 86,674 SF (1.99 AC)	EXISTING (SF)	PROPOSED (SF)
PROPOSED LOT AREA: 91,320 SF (2.10 AC)	69,904 (80.7%)	74,235 (81.3%)
IMPERVIOUS AREA* (PAVEMENT, GRAVEL, ROOF)		

* THESE VALUES ARE ON-SITE AREAS AND PERCENTAGES. THE STORMWATER MODEL REPORT TOTAL DRAINAGE AREA INCLUDES AN ADDITIONAL SMALL PORTION OF LAND OFF-SITE BEHIND THE EXISTING FIRE DEPARTMENT PROPERTY DRAINING TOWARDS THE SUBJECT PROPERTY, THEREFORE, THE STORMWATER MODEL IMPERVIOUS CALCULATIONS MAY DIFFER SLIGHTLY.

BUILDING 2 (PHASE II) MILESTONE DATES:

- 1) DECEMBER 2025 - COMMENCE SITEWORK RELATED TO BUILDING 2
- 2) JANUARY 2026 - BEGIN REMOVAL OF UNSUITABLE SOILS, GENERAL SITE PREPARATION
- 3) FEBRUARY - JUNE 2026 - FOUNDATIONS; PLACE EARTH RETENTION SYSTEMS ASSOCIATED WITH BUILDING 1; FORM AND POUR FOOTINGS AND WALLS; BACKFILL
- 4) JULY 2026 - BEGIN STEEL ERECTION
- 5) OCTOBER 2026 - STEEL ERECTION COMPLETE
- 6) JANUARY 2027 - BUILDING 1 WEATHER TIGHT
- 7) MARCH/APRIL 2027 - BUILDING ENVELOPE COMPLETE
- 8) MAY/JUNE 2027 - LANDSCAPE, HARDSCAPE, AND FINAL PAVING COMPLETE
- 9) JUNE 2027 - FINAL INSPECTION & CERTIFICATE OF OCCUPANCY

LEGEND

PROPOSED MAJOR / MINOR CONTOURS	PROPOSED 6" WATER LINE
PROPOSED 6" WATER LINE	PROPOSED 8" WATER LINE
PROPOSED SEWER LINE	PROPOSED DRAIN LINE
PROPOSED FENCELINE	PROPOSED GUARDRAIL
PROPOSED BUILDING	PROPOSED CONCRETE
PROPOSED PAVEMENT	PROPOSED IMPERVIOUS PAVER SURFACE
PROPOSED CATCH BASIN	PROPOSED DRAIN MANHOLE
PROPOSED SEWER MANHOLE	PROPOSED GATE VALVE
PROPOSED FIRE HYDRANT	

FINAL PAVING AND LANDSCAPING WITHIN PARKING ISLANDS OF UPPER LOT (BLUE) TO TAKE PLACE IN EARLY FALL, 2025

LOCKABLE GATE - CONSTRUCTION ACCESS ONLY

BUILDING 1 HARDSCAPING & LANDSCAPING (PURPLE) TO TAKE PLACE FALL, 2026

BUILDING 1 (PHASE I) MILESTONE DATES:

- 1) MARCH 2025 - INITIAL MOBILIZATION, COMMENCE SITEWORK
- 2) APRIL 2025 - BEGIN REMOVAL OF UNSUITABLE SOILS; FOUNDATION EXCAVATION
- 3) MAY 2025 - NOVEMBER 2025 - FOUNDATIONS; PLACE EARTH RETENTION SYSTEMS ASSOCIATED WITH BUILDING 1; FORM AND POUR FOOTINGS AND WALLS; BACKFILL
- 4) NOVEMBER 2025 - BEGIN STEEL ERECTION
- 5) FEBRUARY 2026 - STEEL ERECTION COMPLETE
- 6) MAY 2026 - BUILDING 1 WEATHER TIGHT
- 7) JULY/AUGUST 2026 - BUILDING ENVELOPE COMPLETE
- 8) SEPTEMBER/OCTOBER 2026 - LANDSCAPING & HAR6SCAPING COMPLETE
- 9) SEPTEMBER 2026 - FINAL INSPECTION & CERTIFICATE OF OCCUPANCY

MAJOR MILESTONE DATES SUMMARY

- BUILDING 1**
OBTAIN BUILDING PERMIT: FEBRUARY 2025
ACTIVE AND SUBSTANTIAL DEVELOPMENT: AUGUST 2026
SUBSTANTIAL COMPLETION; SEPTEMBER 2026
- BUILDING 2**
OBTAIN BUILDING PERMIT: NOVEMBER 2025
ACTIVE AND SUBSTANTIAL DEVELOPMENT: MAY 2027
SUBSTANTIAL COMPLETION: JUNE 2027

SITE PLAN NOTES

1. THE INTENT OF THESE PLANS IS FOR PERMITTING REVIEW AND ARE SUBJECT TO FINAL APPROVALS. THESE PLANS SHALL NOT BE USED FOR CONSTRUCTION.
2. NO EXISTING MONUMENTS, BOUNDS, OR BENCHMARKS SHALL BE DISTURBED WITHOUT FIRST MAKING PROVISIONS FOR RELOCATION.
3. ALL WORK SHALL BE PERFORMED WITHIN THE PROPERTY OF, AND EASEMENTS SECURED BY, THE OWNER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DATA COLLECTION AND PREPARATION OF RECORD DRAWINGS.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONTROLLING EROSION IN ALL AREAS DISTURBED BY HIS ACTIONS. COSTS FOR REQUIRED EROSION CONTROL, REGARDLESS OF WHETHER OR NOT SUCH MEASURES ARE SHOWN ON THE ENGINEERING DRAWINGS, SHALL BE BORNE BY HIM.
6. UTILITY LOCATIONS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR LOCATION AND PROTECTION OF EXISTING UTILITIES AND SHALL REPAIR ANY DAMAGE AS QUICKLY AS POSSIBLE AT HIS OWN EXPENSE. ALL UTILITIES ENCOUNTERED SHALL BE LOCATED BY DEPTH AND TIES AND SHOWN BY THE CONTRACTOR ON HIS "AS BUILT" DRAWINGS. HAND EXCAVATION SHALL BE DONE WHEREVER UNDERGROUND UTILITIES ARE SHOWN OR ANTICIPATED. THE CONTRACTOR SHALL CONTACT DIG SAFE AND THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION IN ORDER TO VERIFY EXISTING CONDITIONS AND UTILITY LOCATIONS.
7. SEE SHEET C-101 FOR EXISTING CONDITIONS NOTES.
8. THIS PROJECT IS SUBJECT TO NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES (NHDES) SHORELAND WATER QUALITY PROTECTION AND ALTERATION OF TERRAIN JURISDICTION.
9. VEHICLE PARKING SPACE COUNTS ARE SHOWN ON SHEET C-201 AS REFERENCE. SEE ARCHITECTURAL AND LANDSCAPE ARCHITECTURAL SHEETS FOR BICYCLE SPACE COUNTS AND ALL CALCULATIONS.
10. SEE LANDSCAPE ARCHITECTS DETAILED GRADING PLAN FOR ADDITIONAL GRADING INFORMATION.

TEMPORARY CONSTRUCTION FENCE WITH DRIVEN POSTS; AREAS SURROUNDING BUILDING 1 WILL BE REMOVED UPON RECEIPT OF CERTIFICATE OF OCCUPANCY

LOCKABLE GATE; ACCESS TO SITE FROM WATER STREET PARKING LOT FOR BUILDING 1 EXCAVATIONS

APPROX. LOCATION SHEET PILES/EARTH RETENTION ASSOCIATED W/ BUILDING 1

DATE OF PRINT
MARCH 14 2022
HORIZONS ENGINEERING



STUDIO NEXUS

ARCHITECTS + PLANNERS
PO Box 275, White River Junction, VT 05001
802 275 5110 | studionexusarch.com

horizons Engineering

Civil and Structural Engineering
Land Surveying and Environmental Consulting
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com



RECRO LLC

Issued For:
SITE PLAN REVIEW

PRELIMINARY
NOT FOR
CONSTRUCTION

WILL DAVIS' ELECTRONIC OR DIGITAL SEAL OR SIGNATURE IS EFFECTIVE ONLY AS TO THAT VERSION OF THIS DOCUMENT AS ORIGINALLY PUBLISHED BY HORIZONS ENGINEERING, INC. WILL DAVIS IS NOT RESPONSIBLE FOR ANY MODIFICATION, CORRUPTION OR UNAUTHORIZED USE OF SUCH DOCUMENT. TO VERIFY THE VALIDITY OR APPLICABILITY OF THE SEAL OR SIGNATURE, CONTACT WILL DAVIS.

Issue Date: March 14, 2022

Revisions		
No.	Description	Date

PHASING &
SCHEDULING
SITE PLAN

Project No.: 2119

CITY OF LEDARON APPLICATION FOR

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

☒ OTHER EXTENSION

PROPERTY OWNER (APPLICANT):

NAME: PERCINO, LLC

MAILING ADDRESS:

E-MAIL ADDRESS:

CO-APPLICANT, AGENT, OR LESSEE:

NAME:

TEL.#:

MAILING ADDRESS:

E-MAIL ADDRESS:

PROJECT LOCATION:

TAX MAP #: 91

LOT #: 254

PLOT #:

ZONE: LD

STREET ADDRESS OF PROJECT: 2 MASCOMA STREET

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

SCOPE OF PROJECT:

REQUEST TWO YEAR EXTENSION TO COMMENCE PHASE 1 OF PB 2024-25-EXT. ALSO
REQUEST WAIVER OF ONE EXTENSION LIMIT SET FORTH IN 4.10.C.

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: EXISTING COMMERCIAL NOT CHANGING

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 _____, 20____, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY

OWNER: James P. Bole

DATE: 25 FEB 2025

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: James P. Bole

DATE: 25 FEB 2025

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #			
2025-02-27	91-254	PB2025-13-EXT			

2 Mascoma Street Redevelopment Project

Extension Request Narrative

3/21/2025

Section 4.10 – Expiration of Site Plan Approval

A. Any approved site plan for which a Building Permit has not been obtained within two (2) years of the date of the original approval shall be considered void....

B. Notwithstanding paragraph A above, the Board may grant an extension of up to two (2) additional years beyond the original expiration date....

C. In determining whether to grant such an extension, the Board shall consider the totality of the circumstances, including the extent and complexity of the conditions precedent, the extent of the progress made by the Applicant toward satisfying the conditions-precedent and/or starting construction, and whether the need for more time is attributable to unusual circumstances beyond the control of the Applicant, rather than to the Applicant's neglect or failure to proceed with reasonable promptness....The board shall grant no more than one extension for any site plan....

Last summer we applied for an extension for this project based on a new anticipated construction schedule. That application, which was approved by the Planning Board in August of 2024 included a revised deadline to obtain a building permit by the end of February 2025, an extension of less than a year from the July 11, 2026 deadline allowable by Section 4.10 (the original approval from the Planning Board for the project was on July 11, 2022). We are asking the Board to waive Section 4.10.C and grant the full two-year extension that the project would have been entitled to request last summer (but we chose not to request at that time).

Due to high costs and a dearth of labor, the construction of new apartment towers has remained untenable to this point. Our prognostication is that the market will allow for construction, albeit on the proposed revised phasing schedule and we need the full two years to move forward on the construction of the towers (Phases II and III). In addition, we have new opportunities for the redevelopment of the existing Village Market building, which, when completed will add aesthetic, programmatic and financial value to the property and provide impetus for the construction of the towers. We have continued to focus on the renovation of the existing grocery store building; we are excited to announce the upcoming opening of Pellegrino's Italian Market, formerly of Enfield, at the former Village Market. Pellegrino's will be an anchor and the first step of a complete rehabilitation of the second floor of the Market building. We have an exciting concept that includes a food court and a full-service restaurant. On the advice of the planning/zoning staff we have added the redevelopment of the existing market building to the Phasing schedule. It is now Phase I and the development of the housing towers bump to Phases II and III.

We appreciate the Board's continued support of our efforts to bring critically needed retail and housing units to the downtown community.

Mike Davidson, Recreo LLC

Tim Sidore, Recreo LLC

Jim Wasser, Studio Nexus Architects + Planners PC

MAJOR MILESTONE DATES SUMMARY

EXISTING BUILDING (PHASE I)

Obtain Building Permit for Italian Market: April 2025

Active and Substantial Development for Italian Market: May 2025

Substantial Completion for Italian Market: June 2025

Obtain Building Permit for Food Court and Exterior Improvements: July 2025

Active and Substantial Development for Food Court and Exterior Improvements: August 2025

Substantial Completion for Food Court and Exterior Improvements: December 2025

BUILDING 1 (PHASE II)

Obtain Building Permit: by July 11, 2026

Active and Substantial Development: September 2026

Substantial Completion: March 2028

BUILDING 2 (PHASE III)

Obtain Building Permit: by September 2027

Active and Substantial Development: October 2027

Substantial Completion: April 2029



City of Lebanon, New Hampshire

APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: Recreo, LLC (Tim Sidore)

Project Name: 2 Mascoma Street Redevelopment

Project Address: 2 Mascoma Street, Lebanon, NH 03766

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).]

- 4.10.C
1. Section 4.10.C of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because When we originally applied for the extension we asked for less than a one year extension on obtaining a building permit, not the allowable two years. However, the economic climate has remained the same and we need the full two years to move the construction of the towers (Phases II and III) forward. In addition, we have new opportunities for the redevelopment of the existing Village Market building, which, when completed will add aesthetic, programmatic and financial value to the property and provide impetus for the construction of the towers.
 2. Section ____ of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A** / **Criteria B** because _____

3. Section ____ of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because _____
- _____
- _____
4. Section ____ of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because _____
- _____
- _____
5. Section ____ of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because _____
- _____
- _____
6. Section ____ of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because _____
- _____
- _____
7. Section ____ of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because _____
- _____
- _____
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: James R. P. [Signature] Date: 21 MAR 2025

CERTIFIED NOTIFICATION LIST

Notice shall be sent by certified mail to the Owner; Applicant, if different from Owner; Abutters; Holders of conservation, preservation, or agricultural preservation restrictions (as defined under RSA 477:45) on the subject property; the holders of easements, rights-of-way, and other restrictions; and every engineer, architect, land surveyor, or soil or wetlands scientist whose seal appears on any plan submitted to the Board; and any other persons required by RSA 676:4, I(d). The names and mailing addresses shall be furnished by the Applicant.

672:3 Abutter. – "Abutter" means any person whose property is located in New Hampshire and adjoins or is directly across the street or stream from the land under consideration by the local land use board. For purposes of receiving testimony only, and not for purposes of notification, the term "abutter" shall include any person who is able to demonstrate that his land will be directly affected by the proposal under consideration. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a condominium or other collective form of ownership, the term abutter means the officers of the collective or association, as defined in RSA 356-B:3, XXIII. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a manufactured housing park form of ownership as defined in RSA 205-A:1, II, the term "abutter" includes the manufactured housing park owner and the tenants who own manufactured housing which adjoins or is directly across the street or stream from the land under consideration by the local land use board.

Source. 1983, 447:1. 1986, 33:2. 2002, 216:1, eff. July 15, 2002.

PLEASE PROVIDE NAMES & MAILING ADDRESSES FOR ALL PERSONS LISTED ABOVE.

Map & Lot Number: 91-254	Map & Lot Number:
Property Owner: Recreo, LLC 77 Bank Street Lebanon, NH 03766	Applicant, Co-Applicant, Agent, or Lessee: Studio Nexus Architects & Planners, LLC P.O. Box 275 White River Junction, VT 05001
Map & Lot Number: 91-228	Map & Lot Number: 91-260
Benton Hill, LLC 3 Spencer Road Hanover, NH 03755	Gulick Holdings, LLC 2468 US Route 5S Fairlee, VT 05045
Map & Lot Number: 91-259, 91-255	Map & Lot Number: 91-232
Water Street Mill, LLC 10 Water Street, Suite 190 Lebanon, NH 03766	20 West Park, LLC 20 West Park Street, Suite 1 Lebanon, NH 03766

Map & Lot Number: 91-230, 91-253	Map & Lot Number: Civil Engineer
City of Lebanon 51 N. Park Street Lebanon, NH 03766	Horizons Engineering 176 Newport Road, Suite 8 New London, NH 03257
Map & Lot Number: Landscape Architect	Map & Lot Number: Geo-technical Engineer
SE Group 131 Church Street, Suite 200 Burlington, VT 05401	S.W. Cole Engineering 10 Center Road Somersworth, NH 03878
Map & Lot Number:	Map & Lot Number:
Map & Lot Number: Surveyor	Map & Lot Number:
DiBernardo Associates, LLC P.O. Box 52 Bellows Falls, VT 05101	
Map & Lot Number:	Map & Lot Number:
Map & Lot Number:	Map & Lot Number:
Map & Lot Number:	Map & Lot Number:

(Revised 2/8/2024)

FEE SCHEDULE LEBANON PLANNING BOARD

Adopted January 24, 2022

LOT LINE ADJUSTMENT (Boundary Line Adjustment)		
		TOTALS
FILING FEE	\$25.00	\$25.00
ADVERTISING FEE	\$100	\$100
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE		\$
MINOR SUBDIVISION		
		TOTALS
FILING FEE	\$150.00	\$150.00
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$
**Engineering Review fees may also be required. See note on page 2.		
PRELIMINARY REVIEW OF A MAJOR SUBDIVISION		
		TOTALS
FILING FEE	\$200.00	\$200.00
NUMBER OF LOTS* _____	\$30.00 per lot*	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$
*Or units when the subdivision does not create individual lots.		
**Engineering Review fees will also be required. See note on page 2.		
FINAL REVIEW OF A MAJOR SUBDIVISION		
		TOTALS
FILING FEE	\$500.00	\$500.00
FIRST FIVE (5) LOTS*	\$75.00 per lot*	
NUMBER OF LOTS 6+*	\$150.00 per lot*	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE TIME OF FILING		\$
*Or units when the subdivision does not create individual lots.		
**Engineering Review fees will also be required. See note on page 2.		
SITE PLAN REVIEW		
		TOTALS
FILING FEE	\$250.00	\$250.00
SQUARE FOOTAGE	\$75.00 per 1,000 sq. ft. (gross floor area)	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)

SITE PLAN REVIEW		
TOTAL DUE AT TIME OF FILING		\$
**Engineering Review fees will also be required. See note on page 2.		

SITE PLAN REVIEW AMENDMENT (WITH STRUCTURAL CHANGES)		
		TOTALS
FILING FEE	\$250.00	\$250.00
SQUARE FOOTAGE	\$75.00 per 1,000 sq. ft. (gross floor area)	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note below)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$
**Engineering Review fees may also be required. See note below.		

OTHER		
-SITE PLAN REVIEW AMENDMENT (WITH NO STRUCTURAL CHANGES) -EXTENSION REQUESTS -CONDITIONAL USE PERMITS		
		TOTALS
FILING FEE	\$250.00	\$250.00
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note below)	\$5.00 + Current USPS rate per certified notice (see below) X <u>10</u> notices	\$5.00 \$ <u>55.40</u> (abutter certified)
TOTAL DUE AT TIME OF FILING		\$ <u>410.40</u>
**Engineering Review fees may also be required. See note below.		

MINOR SITE PLAN REVIEW		
		TOTALS
FILING FEE	\$150.00	\$150.00
NOTIFICATION FEE (see note below)	Current USPS rate per certified notice (see below) X _____ notices	\$ _____ (abutter certified)
TOTAL DUE		\$

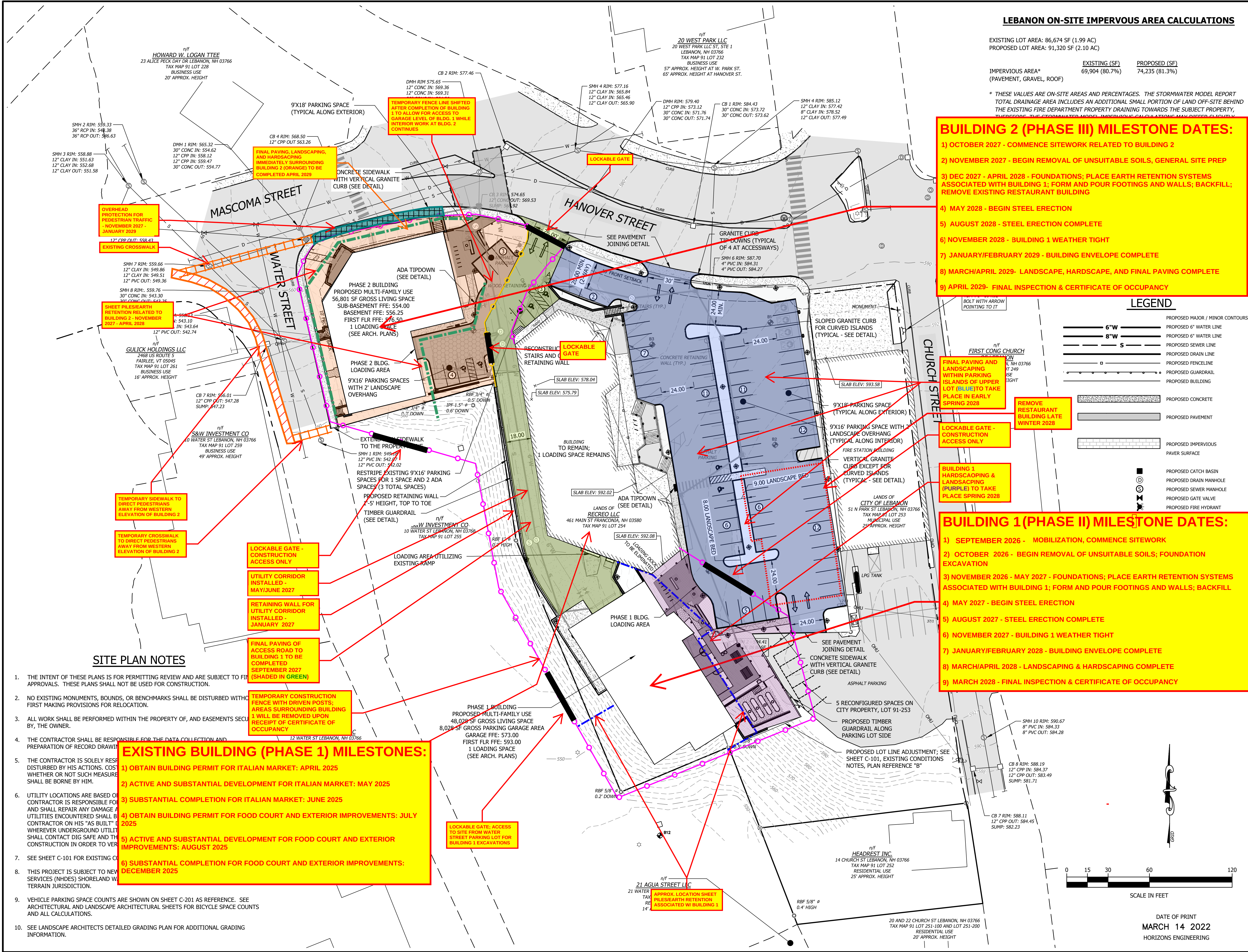
ENGINEERING REVIEW FEES:

After an application to the Planning Board is submitted and the filing fees identified above have been paid, the Planning & Development Department will determine the scope of required engineering review and will obtain an estimated cost from the reviewing engineer. A cost estimate of the review fees will usually be generated within two (2) – three (3) business days. Once conveyed to the applicant, the estimated review fees shall be paid by the applicant within five (5) business days, and an escrow account shall be established by the Planning & Development Department. No plans will be reviewed unless and until the review fee estimate is paid, if required.

Please note that escrow fees are only an estimate of what services will cost and actual costs of review may be less or more than the amount initially estimated. Any unused portion of the escrow will be returned to the applicant at the end of the approval process if such a surplus remains. Additionally, in the event the escrow amount does not cover the full cost of services the Applicant shall pay any remaining costs as a condition of approval. See also Section 4.7 of the Site Plan Review Regulations and Section 7.7 of the Subdivision Regulations.

NOTIFICATION FEE: CURRENT FEE as of July 2024 is \$5.54 per certified notice

THE CERTIFIED NOTIFICATION FEE IN ALL SECTIONS ABOVE INCLUDES THE FOLLOWING: ALL ABUTTERS, THE APPLICANT, PROPERTY OWNER, HOLDER OF CONSERVATION, PRESERVATION, OR AGRICULTURAL PRESERVATION RESTRICTION(S); AND EVERY ENGINEER, ARCHITECT, LAND SURVEYOR OR SOIL SCIENTIST WHOSE PROFESSIONAL SEAL APPEARS ON ANY PLAT SUBMITTED TO THE BOARD AND ANY OTHER PERSONS REQUIRED BY RSA 676:4, I(d).



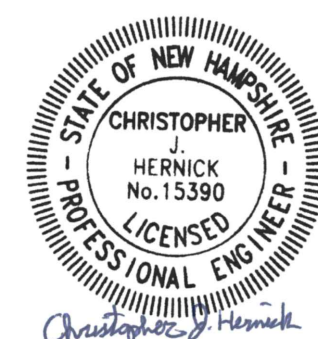
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RECRO LLC

Issued For:

SITE PLAN REVIEW

**PRELIMINARY
NOT FOR
CONSTRUCTION**

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Issue Date:

March 14, 2022

Revisions		
No.	Description	Date

**PHASING &
SCHEDULING
SITE PLAN**

Project No.:

2119



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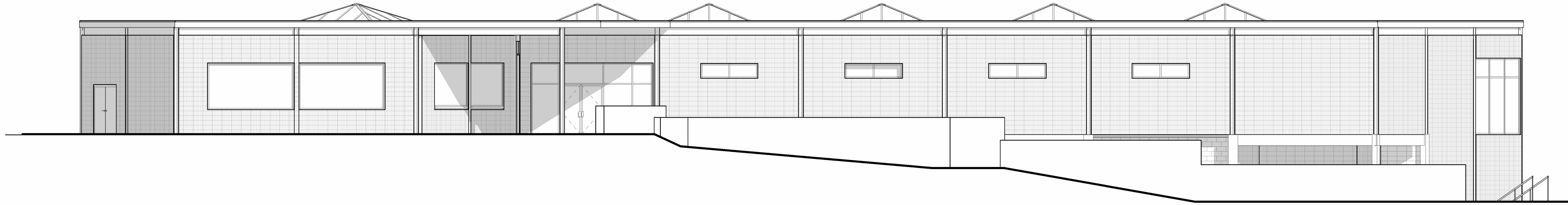
Village Market Redevelopment

RECCEO LLC

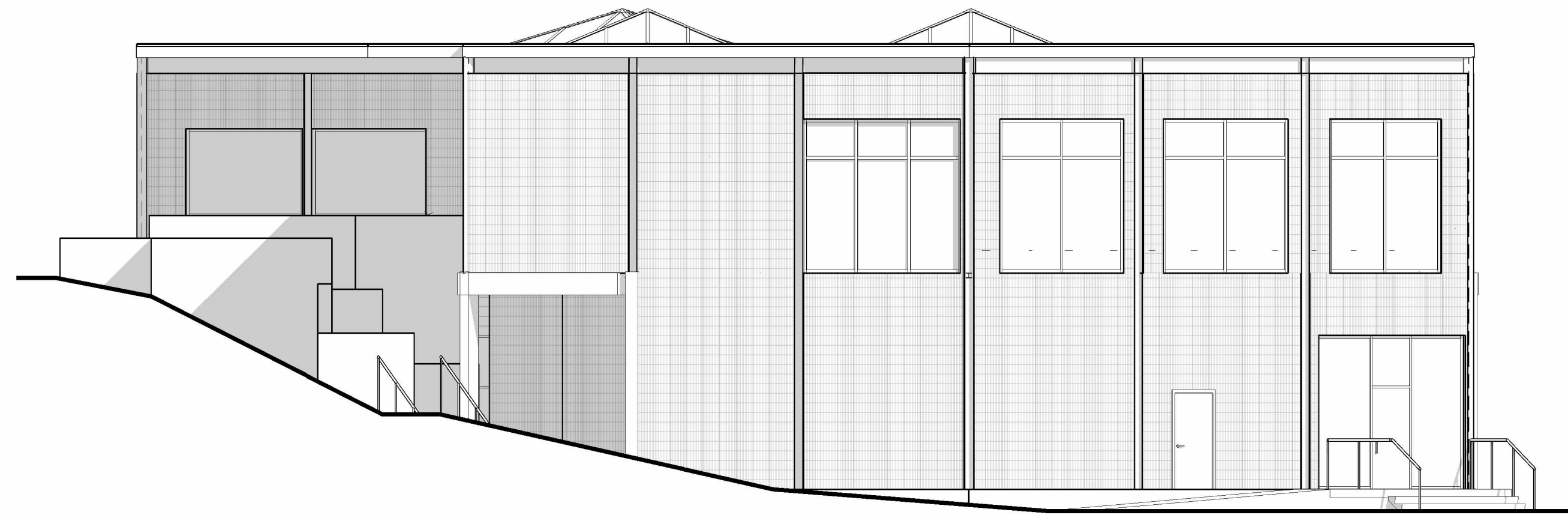
Proposed Upper Level Plan
SD-1

March 24, 2025

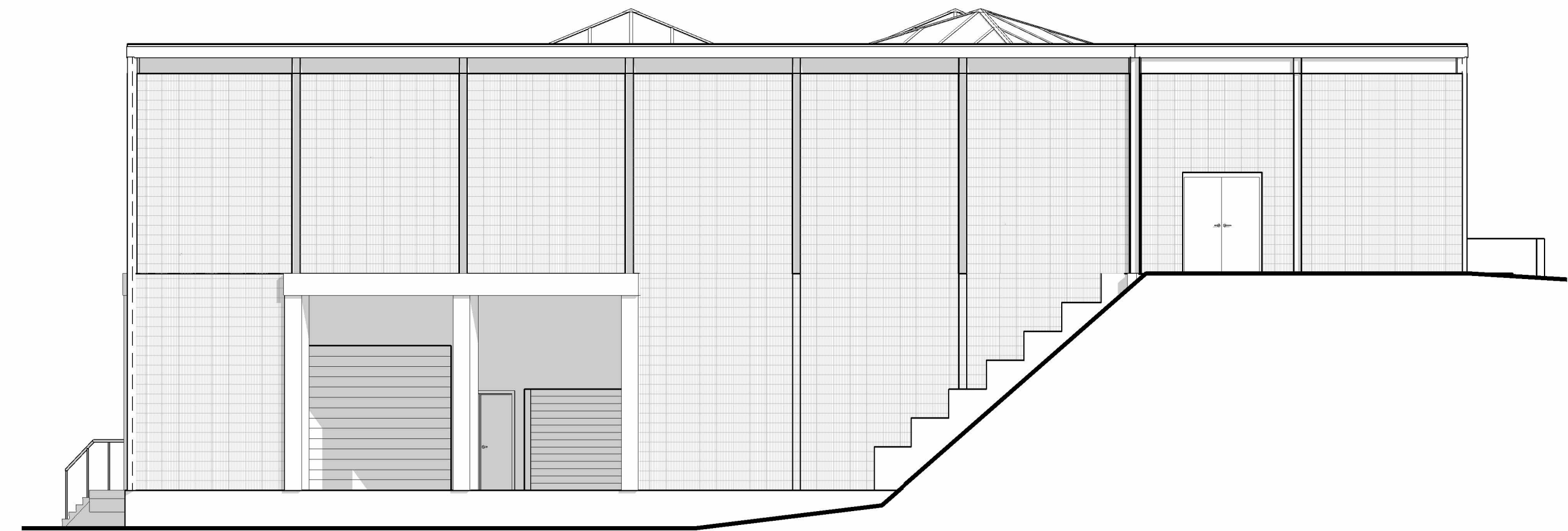
1/8" = 1'-0"



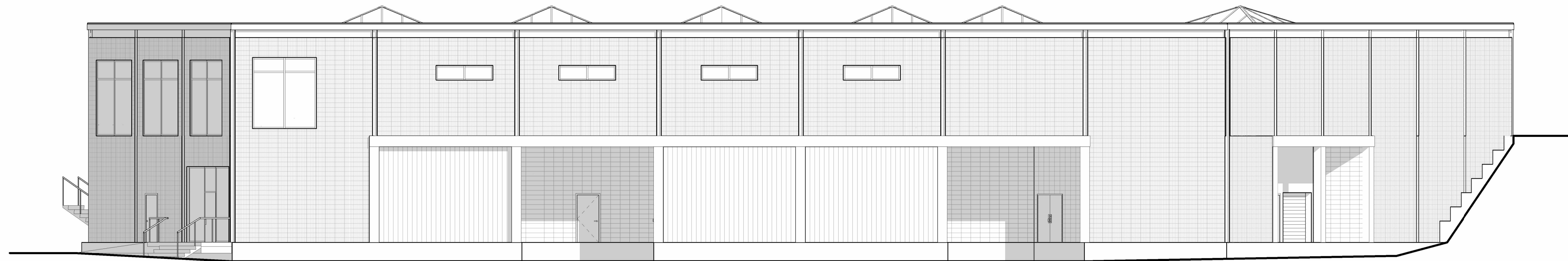
② East Elevation
1/8" = 1'-0"



① North Elevation
1/8" = 1'-0"



③ South Elevation
1/8" = 1'-0"



④ West Elevation
1/8" = 1'-0"



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Village Market Redevelopment RECRO LLC

Proposed Exterior Elevations

SD-2

March 24, 2025

1/8" = 1'-0"



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

April 14, 2025 Meeting

Staff Memorandum – PB2025-17-SPR

APPLICATION INFORMATION

Agenda Item: 3.F

Application ID:
PB2025-17-SPR

Application Type:
Site Plan Review for a proposed +/- 19,661 sq. ft., 3-story treatment and recovery center/group residence with 12 residential rooms and related site improvements

Property Location & Tax Map:
424 Mount Support Road (Tax Map 24, Lot 6)

Applicant & Property Owner:
Families Flourish North East (applicant), Mary Hitchcock Memorial Hospital (property owner)

Property Size:
+/-1.81 acres

Zoning District(s):
Residential One (R-1)

Overlay District(s):
Wetlands Conservation District

Future Land Use Map:
Residential – High

Existing Use & Improvements:
Vacant

Staff Attachments:
4/7/24 e-mail from Planning & Development Department staff to applicant (2 pages with 3 page attachment)

LEGAL NOTICE

Families Flourish North East (applicant), Mary Hitchcock Memorial Hospital (property owner), 424 Mount Support Road (Tax Map 24, Lot 6), zoned R-1: Applicant requests Site Plan Review for a proposed +/- 19,661 sq. ft., 3-story treatment and recovery center/group residence with 12 residential rooms, together with associated site improvements including access, parking, utilities, landscaping, and lighting. PB2025-17-SPR

PLANS AND APPLICATION MATERIALS

Available on-line only:

- ▶ Application form (1 page)
- ▶ Letter dated March 10, 2025, from Nicholas A. Fiore, PE, of Engineering Ventures, PC (project narrative; 3 pages)
- ▶ Application for Waivers dated March 10, 2025 (2 pages)
- ▶ Site Plan Review Regulations Technical Checklist dated March 10, 2025 (10 pages)
- ▶ Certified Notification List (2 pages)
- ▶ Fee Schedule (2 pages)
- ▶ Plan set titled “Families Flourish Northeast,” dated March 10, 2025, prepared by Engineering Ventures, PC, EV Project # 22063 (20 sheets)
- ▶ Lighting specifications by Lithonia Lighting and by Juno/Acuity Brands (20 pages)
- ▶ Drainage Analysis report titled, “Families Flourish Northeast, 424 Mount Support Road,” dated March 10, 2025, prepared by Engineering Ventures, PC, EV Project # 22063 (41 pages)

COMPLETENESS REVIEW

In order to accept jurisdiction and commence review of the applicant's proposal, the Planning Board must first determine that the application is complete. See NH RSA 676:4, I(c)(1) and Section 4.7.C.3 (“Initial Completeness Determination”) of the Site Plan Review Regulations. Section 4.7.C.3 provides as follows:

- a. The Planning & Development Department shall review the application for completeness pursuant to the requirements of Section 4.7.A and Section 5.1. If the Planning & Development Department finds that the application is complete, or lacks only those items or documents for which waiver requests have been submitted, then the Planning & Development Department shall make a preliminary determination of whether the waiver requests meet the standards of Section 7.2 of these Regulations, and if so, then the Planning & Development Department shall recommend to the Board acceptance of the application for review.
- b. If the Planning & Development Department finds that the application is not complete or that one or more of the waiver requests do not meet the standards of Section 7.2, the Planning & Development Department shall so advise the Applicant, who can elect to complete the missing submission requirements. [...]

Pursuant to Section 4.7.C.3.a, Planning and Development Department staff reviewed the application for compliance with the Site Plan Review Regulations and found that the application was incomplete with respect to some of the submission requirements set forth in Section 5.1. Pursuant to Section 4.7.C.3.b, staff has advised the applicant that the application is currently incomplete and has requested that the applicant submit the missing information and materials. See attached e-mail from Planning & Development Department staff sent to the applicant's representatives on April 7, 2025.

STAFF COMMENTS

The subject application is under review per "Schedule B" which ordinarily means that the Planning Board makes a completeness determination at its regular meeting following submission of the application and holds the public hearing at the second regular meeting following submission of the application (i.e. the subject application was submitted on March 10, 2025 and placed on Schedule B such that a completeness determination would ordinarily be made at the April 14, 2025, Planning Board meeting with the public hearing held at the May 12, 2025 meeting).

Given that the application is on Schedule B, the applicant will need additional time to provide the information required for a complete application. Consequently, staff recommends that the Planning Board postpone the completeness determination to the May 12, 2025, meeting with the public hearing to immediately follow.

However, the Planning Board is statutorily obligated to make a completeness determination at the April 14, 2025 meeting. See NH RSA 676:4, I(c)(1) ("The [Planning] board shall, at the next regular meeting or within 30 days following the delivery of the application, for which notice can be given in accordance with the requirements of subparagraph (b), determine if a submitted application is complete according to the board's regulation and shall vote upon its acceptance."). Consequently, **the Board will need the applicant's approval in order to postpone the completeness determination**. If agreeable to the postponement, staff has asked the applicant to provide its written approval of the postponement either before or at the Board's April 14th meeting.

Attachments

cc: Families Flourish Northeast
Mary Hitchcock Memorial Hospital
File

Tim Corwin

From: Tim Corwin
Sent: Monday, April 7, 2025 4:43 PM
To: Nikf@engineeringventures.com; tsullivan@sullivanconstruction.com; maralandscape@gmail.com; Sue Cobb
Cc: David F. Duncan; Brian Vincent; Crystal Taplin; Jim Wasser; Catheryn Hembree
Subject: 424 Mount Support Rd_PB2025-17-SPR_Completeness
Attachments: Site Plan Checklist.pdf

Dear applicants:

In advance of the on-line staff review meeting scheduled for this coming Thursday, 4/10 at noon, regarding your site plan application for 424 Mount Support Rd (24-6), PB2025-17-SPR, please note the following:

1) Missing Information Planning staff has reviewed the application for compliance with the submission requirements set forth in Article V of the Site Plan Review Regulations and has identified certain missing information (please see attached checklist). This review has been conducted pursuant to Section 427C3a which provides as follows: “The Planning & Development Department shall review the application for completeness pursuant to the requirements of Section 427A and Section 521.” Pursuant to Section 427C3b of the Site Plan Review Regulations, all information and materials required to be provided by Section 521 must be submitted. Currently Section 427C3b does not identify a resubmission date for Schedule B applications, but typically we ask that application materials responsive to staff comments be submitted within 10 days following staff review. We can identify the specific resubmission deadline at Thursday’s staff review meeting. Finally, as we mention to all applicants, please note that pursuant to Section 427C3c, “If the applicant elects not to complete the missing requirements [or] fails to deliver all missing submission requirements prior to the deadline [...], the Planning & Development Department shall recommend that the Board deem the application incomplete.”

2) Request to Postpone Completeness Determination NH RSA 676:4, I(c)(1) requires that, “The [Planning] board shall, at the next regular meeting or within 30 days following the delivery of the application, for which notice can be given in accordance with the requirements of subparagraph (b), determine if a submitted application is complete according to the board's regulation and shall vote upon its acceptance.” Given that the applicant is currently missing information required by Article V of the Site Plan Review Regulations, staff recommends that the applicant agree to a postponement of the completeness determination to the Board’s May 12th meeting, so that the completeness determination would be made immediately prior to the public hearing which is also scheduled for the May 12th meeting. If so agreeable, the applicant can provide written permission to postpone completeness at any time prior to or at the Planning Board’s April 14th meeting. Alternatively, pursuant to Section 427C3c, staff will need to make a recommendation to the Board that the application is incomplete.

3) Other Review Comments Planning staff comments regarding the application’s compliance with the Article VI design criteria will be provided at the April 10th staff review meeting (and subsequently in writing via e-mail). In the meantime, please note that we have received preliminary comments on the application from the City Engineer, the Lebanon Tree Advisory Board, and the Lebanon Pedestrian & Bicyclist Committee. I have pasted those below for your reference.

Should you have any questions in advance of Thursday’s staff review meeting at noon, please don’t hesitate to let me know.

Thank you, Tim

Other Preliminary Comments re: PB2025-17-SPR:

A. City Engineer

Site Plan Review:

Site Plan

- 1? Please clarify the construction intent immediately south of the proposed building? It may be a concrete ramp?

Grading and Drainage

- 2? Please add top and bottom of wall elevations along the proposed south retaining wall?
- 3? Please add additional proposed contours along the infrastructure south of the proposed building?

Sewer Force Main

- 4? Consider ledge probes
- 5? Please add pavement saw cut detail to include shiplap pavement cutting?
- 6? Please confirm that a NHDES permit is required for the sewer force main extension?

Drainage Analysis Review:

- 1? Please expand the “Drainage Analysis” to include a drainage narrative, methodology, summary, results, water quality volume calculations, and conclusion sections?
- 2? Please expand drainage analysis to provide proposed stormwater runoff model? It appears that only “existing conditions” is shown?
- 3? Please expand the drainage analysis to include additional stormwater model printout documentations such as groundwater recharge calculations, stormwater chamber and control structure performance such as flood elevations, peak elevations, infiltration rate, and resulting runoff peak flows and volumes? Please show and label each existing and proposed stormwater components (catch basins, infiltration facilities, etc?) shown in the stormwater model on the drainage area maps? Please show the performance of any proposed stormwater elements (i.e. outlet control structures) within the drainage analysis?
- 4? Please explain what is meant by “R-tank” in what is labeled as “existing” conditions analysis?
- 5? Please provide a summary of design intent? Is the stormwater peak flow control system meant to infiltrate any stormwater? If so, please provide the estimated seasonal high-water (ESHWT) table and the site-specific saturated hydraulic conductivity rate (K-Sat) within the practice area, and ensure that Section 6? of the Site Plan Review Regulations are met?
- 6? Please provide a comprehensive stormwater management plan as required by Section 6?C? of the Site Plan Review Regulations?

B. Lebanon Tree Advisory Board

- 1. It seems that there is potential for additional tree planting along the sidewalk road through the use of tree wells.
- 2. The Rhododendron and Syringa could be replaced by native species of similar character.
- 3. Considering that the size of the project drives the wetland destruction, it may be that the project is too large for the lot.

C. Lebanon Pedestrian & Bicyclist Committee

No comment?

424 Mount Support Rd - PB2025-17-SPR

Site Plan Review Submission Requirements (Art V) Checklist	Checklist	Staff Comments
5.1.E(2) The names and mailing addresses of the Applicant; the Owner(s) of record of the site; the Owners of abutting properties ; and the Holders of any easements, rights of way, or other restrictions, based on the current records of the City Assessor available at City Hall, not more than 5 days before the date of filing of the application.	Missing	Abutter info from across Mount Support Rd missing
5.1.E(5) A current survey certified by a land surveyor licensed in New Hampshire , depicting the perimeter boundaries of the lot(s) of the proposed site, including compass bearings, distances, and lot areas, and depicting the location of any existing improvements on the property and the width and location of any rights-of-way and/or easements on the property.	Missing	
5.1.E(7) The shape, size, height , and location of all existing structures, located on the site and within 200 feet of the site . 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.	Missing	
ponds, wetlands, rock outcrops, or wooded areas, and existing man-made features such as roads and structures. The plan shall indicate those natural and man-made features that are to be removed, retained, or altered. Wetlands on the property shall be delineated by a NH Certified Wetlands Scientist, whose seal and signature shall appear on the plan. In addition, 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 Office.	Missing	Plan set does not clearly identify natural features to be removed/retained/altere d. Recommend adding LOD to Sheet 3, in addition to any other appropriate notations
5.1.E(9) 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.	Missing	
5.1.E(10) 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. Vehicle and bicycle parking spaces shall be numbered. Loading spaces and facilities used in connection with any structures on the site shall be shown. The total square footage and percentage of the lot covered by impervious cover shall also be shown.	Missing	
5.1.E(12) The size and location of all existing and proposed public and private utilities . Applications may not be submitted that rely on the use of utilities planned or under construction unless the proposed utilities are part of the application.	Missing?	cannot locate size of existing water main?

424 Mount Support Rd - PB2025-17-SPR

5.1.E(13) A plan for outdoor lighting showing the proposed location mounting height , fixture type, lamp type, color correlated temperature (CCT) , and wattage of all exterior free-standing or building-mounted light fixtures, as well as analyses and illuminance-level diagrams, to include average and minimum foot-candle measurements, showing that the proposed installation conforms to the lighting level standards in these Regulations. Manufacturer's specification information shall be provided for each proposed light fixture and lamp. The plan shall also include drawings of all relevant building elevations, showing the location and height of all building-mounted fixtures , the portions of any walls or architectural features to be illuminated, the illumination levels of the walls or architectural features, and the aiming points for any remote light fixtures.	Missing	
5.1.E(14) A plan for the location of free-standing or building-mounted signs, including the location, mounting, aiming, and shielding of any remote light fixtures for externally-lit signs. For internally-lit signs, relevant information concerning the method of illumination and the opacity of the sign background shall be provided, showing that the proposed installation conforms to the requirements of these Regulations.	Marked "N/A" on applicant's checklist	Note that if any signage is proposed in the future, a site plan amendment will be required
5.1.E(16) A landscaping plan showing proposed new plantings to be installed and existing natural vegetation to be retained. The combination of existing and new plantings must meet or exceed the required total as set forth in these Regulations. The plan shall show in detail the number, size (height and/or caliper), and species (botanical and common names), of all proposed shrubs and trees. Existing trees over 12 inches in diameter, measured 4.5 feet above the ground surface, and within 25 feet of the disturbed area, must be counted and shown on the plan, if included towards fulfilling the landscaping requirements. All calculations for square footage of perimeter landscaping shall be shown. All landscape plans shall show parking lot shading calculations by depicting new trees and shrubs at their 10-year crown size.	Missing?	Applicant has requested a waiver from 6.2.B.1 relative to the front perimeter landscaping buffer. Applicant also requires waiver from 6.2.B relative to the side and rear perimeter buffers, OR if requesting approval per 6.2.I.2, the highlighted information must be provided
5.1.E(17) All existing and proposed surface and subsurface storm drainage facilities, including City storm drainage facilities located within 200 feet of the site. Plans for retention, detention, slow release, and treatment of storm water shall be provided, in accordance with the requirements of section 6.6.	Missing?	Are measures proposed to control the 100 yr storm as required by 6.6.F.2?
5.1.E(18) Section 6.6 submission requirements	Missing?	a) Has analysis for 100 year storm required per 6.6.C.2.1 been provided? b) Has an O&M plan been provided as required per 6.6.C.2.4?
5.1.E(19) Plans for snow removal and storage.	Missing	Addressed in applicants's project narrative, but does not snow removal areas do not appear to be identified in plan set

424 Mount Support Rd - PB2025-17-SPR

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.		Planning staff assumes this will be requested by the Fire Dept - can confirm at 4/10 staff review meeting with applicant
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 Institute of Transportation Engineers' Trip Generation Manual) shall prepare and submit a Traffic Impact Study in accordance with standard traffic analysis conventions as set forth by the NH Department of Transportation. The Board may, in 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.		Please add anticipated trip generation calculations to verify traffic study is not required

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: Mary Hitchcock Memorial Hospital c/o David Duncan

TEL.#: [REDACTED]

MAILING ADDRESS: [REDACTED]

E-MAIL ADDRESS: [REDACTED]

CO-APPLICANT, AGENT, OR LESSEE:

NAME: Families Flourish North East, c/o Tom Sullivan

TE: [REDACTED]

MAILING ADDRESS: [REDACTED]

E-MAIL ADDRESS: [REDACTED]

PROJECT LOCATION:

TAX MAP #: 24

LOT#: 6

PLOT #:

ZONE: R1

STREET ADDRESS OF PROJECT: 424 Mount Support Road

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

SCOPE OF PROJECT:

A multi-family, residential, treatment and recovery center for pregnant and parenting mothers and their children.

The 3-story building will have 12 residential rooms and additional program spaces.

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 _____, 20____, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY

OWNER: _____ DATE: _____

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 #	
2025-03-10	24-6	PB2025-17-SPR	[REDACTED]

March 10, 2025

City of Lebanon Planning Department
51 North Park St
Lebanon, NH 03766

RE: Site Plan Review Application
Families Flourish Northeast, 424 Mt Support Rd
Tax Map 24 Lot 6

Dear City of Lebanon Planning,

On behalf of Mary Hitchcock Memorial Hospital (Owner) and Families Flourish Northeast (FFNE) (Co-Applicant), Engineering Ventures, PC (EV) is pleased to submit the enclosed application package for Site Plan Review for a project located at 424 Mt Support Rd (Tax Map 24 Lot 6).

The proposed project involves the construction of a multi-family residential facility to provide substance-use treatment center for pregnant and parenting women and their children. The proposed building will have a footprint of approximately 5,853 square feet and will be three stories tall. Work will also include the construction of a driveway, 15 parking spaces, and stormwater management/treatment measures. Construction is expected to occur in 2025-2026.

The project received two (2) Special Exception from the Lebanon Zoning Board of Adjustment on January 16, 2025 (file numbers ZB2025-01-SE and ZB2025-02-SE). One is for a Group Residence in the R1 zoning district, and the other is for wetland impacts caused by the project. The project has also submitted an application to NHDES for a wetlands dredge and fill permit, and that review process is ongoing.

Project Location / Existing Conditions

The 1.81-acre property is situated to the southeast of the Lahaye Drive and Mount Support Road intersection. The property consists of a mowed field that is surrounded by forested wetland. Most of the field is upland, although the wetland wraps around the edge and extends slightly into the field. A large, forested wetland is located east of the property, beyond the project limits. This wetland extends to Lahaye Drive and NH Route 120 and drains south toward a tributary of the Mascoma River. A building and parking lot are located to the south of the project area, on the adjacent parcel.

Wetlands on the property were delineated in May 2024. Additional information on the wetland resources is provided in the enclosed Wetland Delineation report.

There are no streams, prime wetlands, or mapped floodplains within the project area.

The project area is not within a designated river corridor and will not impact any impaired, Class A, or outstanding resource waters.

According to the Wildlife Action Plan, the project area is not mapped as Highest Ranked Habitat in NH or the Region.

Proposed Work

The new building will total approximately 19,661 square feet, have twelve (12) residential units, and include additional staffing and support space. As stated above, the project will include the construction of a driveway, fifteen (15) parking spaces, and stormwater management/treatment measures, and utility improvements. The new driveway from Mt Support Road will be formalized in roughly the same location as an existing curb cut. Its location is far enough from the new roundabout at Mt Support Road and Lahaye Drive that it will not interfere with traffic flow.

The number of parking spaces was derived from the table in Section 607.1 of the Lebanon Zoning Ordinance and using its parking rates of 0.33 spaces per resident for Group Residence and 1 space/250 square feet for Office. The table below shows the parking calculations.

Table 1 – Parking Calculations

Use	Independent Variable	Independent Variable Value	Min. Spaces Required
Group Residence	0.33/Bed	12	4
Office	1/250sf	2,600	11
Total Space Required			15
120% Spaces Required			18
150% Spaces Required			22.5

Snow removal will be conducted carefully to use the landscape area for storage and avoid sending salty and gritty snow into the surrounding wetland areas. Stored snow will be removed from the site as required.

Utilities

A City water main exists in Mt Support Road, and this project will extend a new service from it to the building.

There is not an existing City sewer main in Mt Support Road adjacent to the project site. Existing wetlands and wetland setbacks prevent the possibility of installing an onsite wastewater disposal system. The building will include a sewer ejector in its basement and a small force main will be installed in Mt Support Road. The force main will run southerly along Mt Support Road for approximately 1,200 feet and connect to an existing sewer line as it crosses the road near the southern limits of the Summit on Juniper residential development.

Runoff withing most of the developed portion of the site will be directed to a stormwater treatment and management system. Surface runoff will be routed to a catch basin at the end of the parking lot and roof runoff will be collected in gutters and internal drains and also routed to the catch basing at the end of the parking lot. From there, Runoff will pass through a hydrodynamic pretreatment chamber, then through a proprietary treatment system (Contech Jellyfish JF6), then

into underground detention chambers. A weir with various orifices in a manhole will control the discharge rate from the chambers.

Stormwater analysis was conducted using HydroCAD Version 10.20-6a to compute the post-construction conditions for the 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

	2-yr cfs	10-yr cfs	25-yr cfs	50-yr cfs
Existing	0.70	1.70	2.57	3.42
Post Construction	0.53	1.30	1.98	2.67
Δ	-0.17	-0.40	-0.59	-0.75

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 and new catch basin inlets. Straw wattles will create a perimeter barrier to prevent contamination of undisturbed areas. 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.

Thank you for your time and consideration with this project. We look forward to reviewing this project with you and the City staff. In the meantime, please do not hesitate to call or email if you have any questions or need additional information.

Sincerely,
ENGINEERING VENTURES, PC



Nicholas A. Fiore, PE
Vice President

Enc: Application Form
Fee Schedule
Certified Notification List
Technical Checklist & Stormwater Checklist
Waiver Request
Lighting cut sheets.
Drainage analysis
Site Development Plans: 1 24x36 copy



City of Lebanon, New Hampshire

APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: Mary Hitchcock Memorial Hospital / Families Flourish Northeast

Project Name: Families Flourish Northeast

Project Address: 424 Mount Support Rd

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).]

1. 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 The compact nature of the site design is an effort to preserve the wetlands on the property. The landscape areas around the buildings have been maximized while maintaining that goal. Including a full 10 feet of landscaping around the whole building would result in significant impacts to the wetlands.

2. Section 6.2.B.1 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because The city constructed multi-use pathway along Mt Support Road encroaches in the front yard of the 424 Mt Support Road property by more than 10 feet, leaving less than 15 feet between the pathway and the proposed parking. The site plan places parking along the front setback line to minimize wetland disturbance.

- 6.5.E.7
3. Section ____ of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because _____
The site plan includes parking in the front yard to minimize wetland impacts. The central area at the front of the lot is where most of the property's upland area is. Many site configurations were considered and no option with the parking not in the front yard yielded a lower wetland impact total.
4. Section ____ of the (circle one) **Site Plan Review / Subdivision Regulations**. A Waiver of this Section meets (circle one) **Criteria A / Criteria B** because _____

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

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

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

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: 03/10/2025

CITY OF LEBANON, NH SITE PLAN REVIEW REGULATIONS TECHNICAL CHECKLIST	
PROJECT NAME: Families Flourish North East	
APPLICANT: Mary Hitchcock Memorial Hospital / Families Flourish North East	DATE: 03/10/2025
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
TECHNICAL CHECKLIST & STORMWATER CHECKLIST

Plan Requirements	Info. Provided	Waiver Sought
5.1.E(1) - Vicinity sketch showing the location of the site in relation to the surrounding public street system (suggested scale: 1" = 500').	✗	N/A
5.1.E(2) - Names and mailing addresses of the Applicant; the Owner(s) of record of the site; the Owners of abutting properties; and the Holders of any easements, rights of way, or other restrictions, based on the current records of the City Assessor available at City Hall, not more than 5 days before the date of filing of the application.	✗	N/A
5.1.E(3) - Names and business addresses of the preparer(s) of the plan and every surveyor, engineer, architect, soil scientist, or wetlands scientist whose professional seal appears on any plan or document submitted to the Board.	✗	N/A
5.1.E(4) - The following information shall be provided on the first page (or cover page, if applicable) of the Site Plan: a. Name of the City and County in which the development is proposed; b. North arrow; c. Scale of the plan; d. Date of the plan and of any revisions to the plan; (NOTE: The date on the plan 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 plan shall include a revision date and description of the revision(s).) e. The following basic site information in <u>TABLE FORM</u> : 1. Zoning designation for subject property; 2. Tax Map and Lot number(s) for subject property; 3. Area of lot; 4. Gross floor area of existing and proposed buildings/additions; 5. Number of existing and proposed on- and off-street parking spaces as a table. The table must identify (i) the number of required (minimum) parking spaces and the permitted (maximum) number of parking spaces and the calculations for each, (ii) future proposed, and (iii) existing parking capacity. If the site is part of an existing development or subdivision, the master table must provide such information for all related sites and phases, individually and as a project total; 6. Number of existing and proposed short- and long-term bicycle storage spaces; 7. Number of existing and proposed loading spaces; 8. Height of existing and proposed buildings/additions; 9. Number of stories and gross square footage of each; 10. Proposed use; 11. Required and proposed front, side, and rear yard setbacks 12. Maximum allowable lot coverage with existing and proposed calculations; 13. Indication of whether or not the property is subject to any City Overlay districts (for example, the Wetlands Conservation District or Flood Plain District) or to NHDES Shoreland Water Quality Protection jurisdiction.	✗ ✗ ✗ ✗ ✗ ✗ ✗ ✗ ✗ ✗ ✗ ✗ ✗ ✗ ✗ ✗ ✗	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A
5.1.E(5) - Current survey certified by a land surveyor licensed in New Hampshire, depicting the perimeter boundaries of the lot(s) of the proposed site, including compass bearings, distances, and lot areas, and depicting the location of any existing improvements on the property and the width and location of any rights-of-way and/or easements on the property.	✗	☐

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

Plan Requirements (cont.)	Info. Provided	Waiver Sought
5.1.E(6) - 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.	☒	☐
5.1.E(7) - Shape, size, height, and location of all existing structures located on site and within 200 feet of site.	☒	☐
5.1.E(7) - 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.	☒	☐
5.1.E(8) - 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.	☒	☐
5.1.E(8) - 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.	☒	☐
5.1.E(9) - Zoning District, Tax Map and Lot number, and use of abutting properties within 200 feet of property.	☒	☐
5.1.E(9) - 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.	☒	☐
5.1.E(10) - 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.	☒	☐
5.1.E(10) - Vehicle and bicycle parking spaces shall be numbered.	☒	☐
5.1.E(10) - Loading spaces and facilities used in connection with any structures on the site shall be shown	☒	☐
5.1.E(10) - Total square footage and percentage of the lot covered by impervious cover shall be shown.	☒	☐
5.1.E(11) - 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.	☒	☐
5.1.E(12) - 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
5.1.E(13) - 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.	☒	☐
5.1.E(13) - 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.	☒	☐
5.1.E(13) - 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).	☒	☐
5.1.E(13) - 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.	☒	☐
5.1.E(14) - 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.	N/A	☐
5.1.E(14) - 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.	N/A	☐
5.1.E(15) - 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).	☒	☐
5.1.E(15) - For properties located within the Floodplain District, the 100-year flood elevation, floodway, shoreland protection zone, and flood plain limits shall be identified.	N/A	☐
5.1.E(16) - 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.	☒	☐
5.1.E(16) - 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.	N/A	☐
5.1.E(16) - Calculations for square footage of perimeter landscaping.	☒	☐
5.1.E(16) - Parking lot shading calculations shall be provided by depicting new trees and shrubs at 10-year crown size.	☒	☐
5.1.E(17) - Existing and proposed surface and subsurface storm drainage facilities, including City storm drainage facilities located within 200' of site.	☒	☐
5.1.E(17) - 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.	☒	☐
5.1.E(18) - Section 6.6. Stormwater Management submission requirements.	See Stormwater Checklist	
5.1.E(19) - 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.)	N/A	☐
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.	N/A	☐
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 Application for Waivers form).	☒	☐
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.	N/A	☐

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: EV - 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: Families Flourish North East	
APPLICANT: Mary Hitchcock Memorial Hospital / Families Flourish North East	DATE: 03/10/2025

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]

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

[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.	N/A	☐

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: EV - Nicholas A. Fiore

(Last Revised 9/20/2021)

Planning office Use Only:

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

CERTIFIED NOTIFICATION LIST

Notice shall be sent by certified mail to the Owner; Applicant, if different from Owner; Abutters; Holders of conservation, preservation, or agricultural preservation restrictions (as defined under RSA 477:45) on the subject property; the holders of easements, rights-of-way, and other restrictions; and every engineer, architect, land surveyor, or soil or wetlands scientist whose seal appears on any plan submitted to the Board; and any other persons required by RSA 676:4, I(d). The names and mailing addresses shall be furnished by the Applicant.

672:3 Abutter. – "Abutter" means any person whose property is located in New Hampshire and adjoins or is directly across the street or stream from the land under consideration by the local land use board. For purposes of receiving testimony only, and not for purposes of notification, the term "abutter" shall include any person who is able to demonstrate that his land will be directly affected by the proposal under consideration. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a condominium or other collective form of ownership, the term abutter means the officers of the collective or association, as defined in RSA 356-B:3, XXIII. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a manufactured housing park form of ownership as defined in RSA 205-A:1, II, the term "abutter" includes the manufactured housing park owner and the tenants who own manufactured housing which adjoins or is directly across the street or stream from the land under consideration by the local land use board.

Source. 1983, 447:1. 1986, 33:2. 2002, 216:1, eff. July 15, 2002.

PLEASE PROVIDE NAMES & MAILING ADDRESSES FOR ALL PERSONS LISTED ABOVE.

Map & Lot Number: 24-6	Map & Lot Number:
Property Owner: Mary Hitchcock Memorial Hospital One Medical Center Drive Lebanon, NH 03756	Applicant, Co-Applicant, Agent, or Lessee: Families Flourish North East c/o Tom Sullivan 258 South River Road Bedford, NH 03110
Map & Lot Number: 24-7	Map & Lot Number: 24-3, 24-4, 10-24-100, 24-8
Upper Valley Supportive Housing 226 Holiday Drive, Suite 20 White River Junction, VT 05001	Dartmouth College Trustees PO Box 5188 Hanover, NH 03755
Map & Lot Number:	Map & Lot Number:
Engineering Ventures c/o Nicholas Fiore 85 Mechanic Street, Suite E2-3 Lebanon, NH, 03766	GM2 c/o Jennifer Riordan 197 Loudon, Road, Suite 310 Concord, NH 03301

Map & Lot Number:	Map & Lot Number:
Red Bird Integrated Consulting c/o Sue Cobb 42 Collins Mountain Road Richmond, VT 05477	Black River Design c/o Mark Montminy 73 Main Street, Room 9 Montpelier, VT 05602
Map & Lot Number:	Map & Lot Number:
Map & Lot Number:	Map & Lot Number:
Map & Lot Number:	Map & Lot Number:
Map & Lot Number:	Map & Lot Number:
Map & Lot Number:	Map & Lot Number:
Map & Lot Number:	Map & Lot Number:
Map & Lot Number:	Map & Lot Number:

(Revised 2/8/2024)

FEE SCHEDULE LEBANON PLANNING BOARD

Adopted January 24, 2022

LOT LINE ADJUSTMENT (Boundary Line Adjustment)		
		TOTALS
FILING FEE	\$25.00	\$25.00
ADVERTISING FEE	\$100	\$100
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE		\$ _____
MINOR SUBDIVISION		
		TOTALS
FILING FEE	\$150.00	\$150.00
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$ _____
**Engineering Review fees may also be required. See note on page 2.		
PRELIMINARY REVIEW OF A MAJOR SUBDIVISION		
		TOTALS
FILING FEE	\$200.00	\$200.00
NUMBER OF LOTS* _____	\$60.00 per lot*	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$ _____
*Or units when the subdivision does not create individual lots. **Engineering Review fees will also be required. See note on page 2.		
FINAL REVIEW OF A MAJOR SUBDIVISION		
		TOTALS
FILING FEE	\$500.00	\$500.00
FIRST FIVE (5) LOTS*	\$75.00 per lot*	
NUMBER OF LOTS 6+**	\$150.00 per lot*	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE TIME OF FILING		\$ _____
*Or units when the subdivision does not create individual lots. **Engineering Review fees will also be required. See note on page 2.		
SITE PLAN REVIEW		
		TOTALS
FILING FEE	\$250.00	\$250.00
SQUARE FOOTAGE 19,661 sf	\$75.00 per 1,000 sq. ft. (gross floor area)	\$1,474.57
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note on page 2)	\$5.00 + Current USPS rate per certified notice (see below) X 8 notices	\$5.00 \$ 44.32 (abutter certified)

SITE PLAN REVIEW		
TOTAL DUE AT TIME OF FILING		\$ 1,873.89
**Engineering Review fees will also be required. See note on page 2.		

SITE PLAN REVIEW AMENDMENT (WITH STRUCTURAL CHANGES)		
		TOTALS
FILING FEE	\$250.00	\$250.00
SQUARE FOOTAGE	\$75.00 per 1,000 sq. ft. (gross floor area)	
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note below)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$
**Engineering Review fees may also be required. See note below.		

OTHER		
-SITE PLAN REVIEW AMENDMENT (WITH NO STRUCTURAL CHANGES) -EXTENSION REQUESTS -CONDITIONAL USE PERMITS		
		TOTALS
FILING FEE	\$250.00	\$250.00
ADVERTISING FEE	\$100.00	\$100.00
NOTIFICATION FEE (see note below)	\$5.00 + Current USPS rate per certified notice (see below) X _____ notices	\$5.00 \$ _____ (abutter certified)
TOTAL DUE AT TIME OF FILING		\$
**Engineering Review fees may also be required. See note below.		

MINOR SITE PLAN REVIEW		
		TOTALS
FILING FEE	\$150.00	\$150.00
NOTIFICATION FEE (see note below)	Current USPS rate per certified notice (see below) X _____ notices	\$ _____ (abutter certified)
TOTAL DUE		\$

ENGINEERING REVIEW FEES:

After an application to the Planning Board is submitted and the filing fees identified above have been paid, the Planning & Development Department will determine the scope of required engineering review and will obtain an estimated cost from the reviewing engineer. A cost estimate of the review fees will usually be generated within two (2) – three (3) business days. Once conveyed to the applicant, the estimated review fees shall be paid by the applicant within five (5) business days, and an escrow account shall be established by the Planning & Development Department. No plans will be reviewed unless and until the review fee estimate is paid, if required.

Please note that escrow fees are only an estimate of what services will cost and actual costs of review may be less or more than the amount initially estimated. Any unused portion of the escrow will be returned to the applicant at the end of the approval process if such a surplus remains. Additionally, in the event the escrow amount does not cover the full cost of services the Applicant shall pay any remaining costs as a condition of approval. See also Section 4.7 of the Site Plan Review Regulations and Section 7.7 of the Subdivision Regulations.

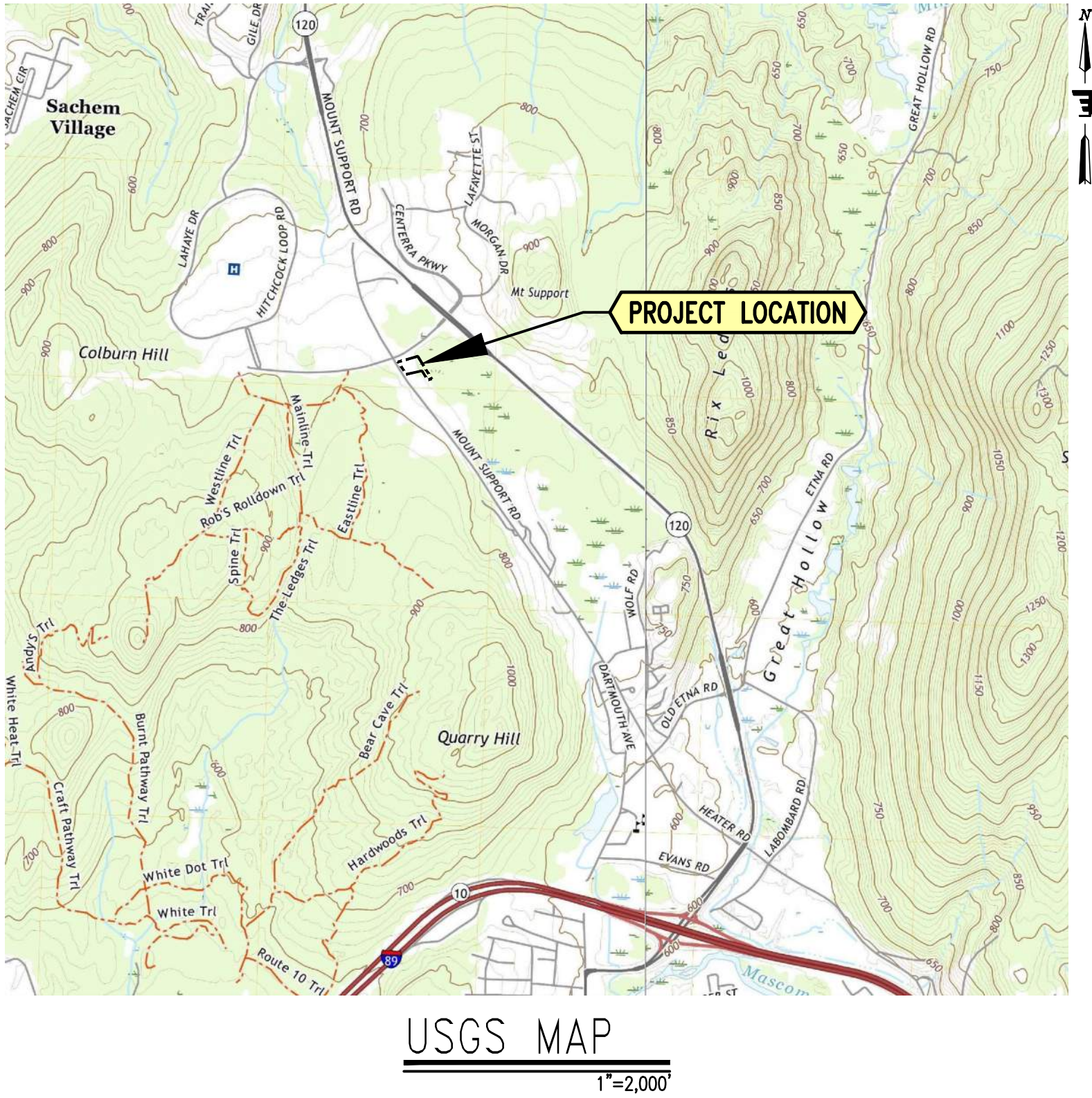
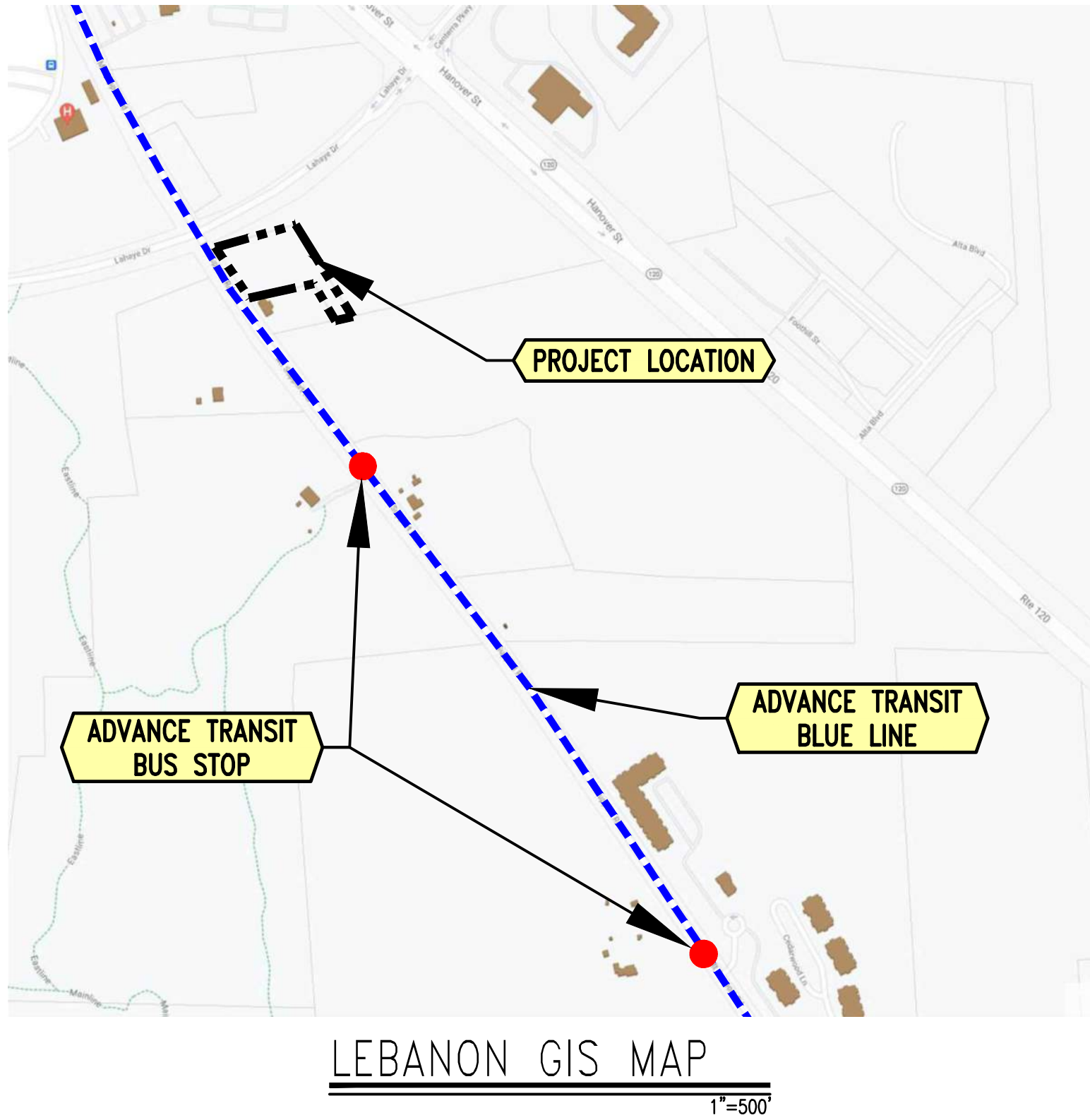
NOTIFICATION FEE: CURRENT FEE as of July 2024 is \$5.54 per certified notice

THE CERTIFIED NOTIFICATION FEE IN ALL SECTIONS ABOVE INCLUDES THE FOLLOWING: ALL ABUTTERS, THE APPLICANT, PROPERTY OWNER, HOLDER OF CONSERVATION, PRESERVATION, OR AGRICULTURAL PRESERVATION RESTRICTION(S); AND EVERY ENGINEER, ARCHITECT, LAND SURVEYOR OR SOIL SCIENTIST WHOSE PROFESSIONAL SEAL APPEARS ON ANY PLAT SUBMITTED TO THE BOARD AND ANY OTHER PERSONS REQUIRED BY RSA 676:4, I(d).

FAMILIES FLOURISH NORTHEAST

424 MOUNT SUPPORT ROAD

SITE DEVELOPMENT PLANS



ZONING CHART

	Existing	Proposed	Notes
Zoning District	R1	R1	
Tax Map / Lot #	24-6	24-6	
Use	Vacant	Group Residence	
Classification of Lot	Class 2	Class 1	1
Area of Lot, Minimum (SF)	15,000	40,000	2
Area of Lot (SF)	79,008	79,008	
Area of Lot (AC)	1.81	1.81	
Building Footprint (SF)	0	5,897	
Building Coverage Maximum	20%	25%	
Building Coverage	0.0%	7.5%	
Building Floor Area - Basement (SF)	-	4,982	
Building Floor Area - 1st Floor (SF)	-	5,897	
Building Floor Area - 2nd Floor (SF)	-	4,785	
Building Floor Area - 3rd Floor (SF)	-	3,997	
Building Gross Floor Area (SF)	0	19,661	
Building Height Maximum	45' / 55'	45' / 55'	3
Building Height	0	40'	
Number of Stories	0	4	4
Number of Dwelling Units	0	12	
Parking Spaces Provided	0	15	5?
Loading Spaces	0	0	
Bicycle Parking Spaces (LT / ST)	0	4 / 4	6
Impervious Area (SF)	0	15,662	7
Impervious Area (% of lot)	0%	19.82%	
Setbacks (Minimum / Provided)			
Front	25' / -	20' / 63.9'	1
Rear	30' / -	20' / 126.2'	1
Side	25' / -	25' / 38.4'	1
City Overlay Districts	Wetlands	Wetlands	
NHDES Jurisdictions	Wetlands	Wetlands	
FEMA Flood Hazard Designation	Zone X	Zone X	

- Notes:
- The project will connect the building to municipal sewer which changes it classification.
 - Calculation for Class 1 minimum size: 10,000SF + ((12-2)*3,000SF) = 40,000SF.
 - 45' allowed by right, 55' allowed with conditional use permit.
 - Number of Stories includes below grade building space.
 - See Parking Summary for parking calculations.
 - Long term bike parking in the basement.
 - Impervious area excludes multi-use path and roadway improvements installed by the City.

PARKING SUMMARY

Use	Independent Variable	Independent Variable Value	Min. Spaces Required
Group Residence	0.33/Bed	12	4
Office	1/250sf	2,600	11
Total Space Required			15
120% Spaces Required			18
150% Spaces Required			22.5
Spaces Provided			15

TABLE OF CONTENTS

SHEET	TITLE	CONSULTANT	PAGE
C0.0	COVER SHEET	ENGINEERING VENTURES	1 of 20
C0.1	SITE LEGEND AND NOTES	ENGINEERING VENTURES	2 of 20
C1.1	EXISTING CONDITIONS PLAN	ENGINEERING VENTURES	3 of 20
C2.0	WETLANDS IMPACT EXHIBIT	ENGINEERING VENTURES	4 of 20
C2.1	SITE LAYOUT PLAN	ENGINEERING VENTURES	5 of 20
C2.2	GRADING AND DRAINAGE PLAN	ENGINEERING VENTURES	6 of 20
C2.3	UTILITIES PLAN	ENGINEERING VENTURES	7 of 20
C2.4	EROSION PREVENTION AND SEDIMENT CONTROL PLAN	ENGINEERING VENTURES	8 of 20
C3.1	SEWER FORCE MAIN (1 OF 3)	ENGINEERING VENTURES	9 of 20
C3.2	SEWER FORCE MAIN (2 OF 3)	ENGINEERING VENTURES	10 of 20
C3.3	SEWER FORCE MAIN (3 OF 3)	ENGINEERING VENTURES	11 of 20
C4.1	SITE DETAILS (1 OF 2)	ENGINEERING VENTURES	12 of 20
C4.2	SITE DETAILS (2 OF 2)	ENGINEERING VENTURES	13 of 20
C4.3	STORMWATER DETAILS	ENGINEERING VENTURES	14 of 20
C4.4	SANITARY SEWER DETAILS	ENGINEERING VENTURES	15 of 20
C4.5	WATER DETAILS	ENGINEERING VENTURES	16 of 20
C4.6	EROSION PREVENTION AND SEDIMENT CONTROL DETAILS	ENGINEERING VENTURES	17 of 20
L-1	LANDSCAPE PLAN	MARA LANDSCAPE DESIGN, LLC	18 of 20
	SITE LIGHTING LAYOUT	VISIBLE LIGHT, INC.	19 of 20
	PROPOSED BUILDING ELEVATIONS	BLACK RIVER DESIGN	20 of 20

SUBJECT PROPERTY:

TAX MAP 24 LOT 6
CITY OF LEBANON
GRAFTON COUNTY
NEW HAMPSHIRE, 03766

OWNER\APPLICANT:

MARY HITCHCOCK MEMORIAL HOSPITAL
FACILITIES MANAGEMENT
ONE MEDICAL CENTER DRIVE
LEBANON, NEW HAMPSHIRE 03756

CO-APPLICANT:

FAMILIES FLOURISH NORTH EAST
258 SOUTH RIVER ROAD
BEDFORD, NEW HAMPSHIRE 03110

CONSULTANTS:

CIVIL ENGINEER:
ENGINEERING VENTURES, PC
NICHOLAS A. FIORE, PE
85 MECHANIC ST. SUITE B2-2
LEBANON, NH 03766
(603) 442-9333

ARCHITECT:
BLACK RIVER DESIGN, ARCHITECTS
JESSE REMICK, AIA
73 MAIN STREET
MONTPELIER, VERMONT 05602
(802) 223-2044

TOPOGRAPHIC SURVEY:
CARDIGAN MOUNTAIN LAND SURVEYS, LLC
SCOTT SANBORN, LLS
32 PEASLEE ROAD
ORANGE, NEW HAMPSHIRE 03741
(603) 523-7535

WETLAND SCIENTIST:
GNZ ASSOCIATES, INC.
JENNIFER RIORDAN, CWS
197 LOUDON ROAD
CONCORD, NH 03301
(603) 856-7854

Stamp	
Date	
Description	
No.	
ENGINEERING VENTURES PC 208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-6225 85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333 414 Union Street, Schenectady, NY 12305 • 518-630-9614 www.engineeringventures.com	
FAMILIES FLOURISH NORTHEAST C/O TOM SULLIVAN 258 SOUTH RIVER ROAD BEDFORD, NH 03110 603-647-1777	
COVER SHEET	FAMILIES FLOURISH NORTHEAST CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE
Sheet Title:	Project Title:
EV Project #	22063
Drawn By:	JWF
Checked By:	NAF
Scale:	NO SCALE
Date:	03/10/2025
C0.0	

STANDARD ABBREVIATIONS

BENCHMARK	BM	END OF VERTICAL CURVE ELEVATION	EVCE	LIMITS OF CONSTRUCTION	LOC	REINFORCED CONCRETE PIPE	RCP
BEGINNING OF VERTICAL CURVE ELEVATION	BVCE	END OF VERTICAL CURVE STATION	EVCS	LIMITS OF DISTURBANCE	LOD	RIGHT-OF-WAY	ROW
BEGINNING OF VERTICAL CURVE STATION	BVCS	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 ON 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	DIA	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	POND	PND	TOP OF BANK	TOB
EDGE OF CONCRETE	EOC	HYDRANT	HYD	POLYVINYL CHLORIDE	PVC	TOP OF CURB	TOC
EDGE OF GRAVEL	EOG	INTERSECTION	INT	POINT OF VERTICAL INTERSECTION	PVI	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	VIF
ELECTRIC MANHOLE	EMH	IRON PIPE SIZE	IPS	QUALITY CONTROL	QC	WATER VALVE	WV
ELEVATION	ELEV	LENGTH	L=	RADIUS	R=		

GENERAL NOTES

- 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.
- UTILITIES SHOWN DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATED UPON OR ADJACENT TO THE SURVEYED PREMISES. EXISTING UTILITY LOCATIONS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES. ALL DISCREPANCIES SHALL BE REPORTED TO THE OWNER AND ENGINEER. SITE CONTRACTOR SHALL CALL UTILITY LOCATOR SERVICE AND UTILITY OWNERS 72 HOURS, EXCLUSIVE OF WEEKENDS AND HOLIDAYS, PRIOR TO ANY DIGGING, DRILLING, OR BLASTING:
 - DIG SAFE (TEL: #811)
 - NON DIG SAFE MEMBER FACILITY OPERATORS IF KNOWN. A LIST OF DIG SAFE MEMBERS BY STATE CAN BE FOUND ON THE DIG SAFE WEB SITE WWW.DIGSAFE.COM
- 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.
- THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
- 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.
- THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
- THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING, AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, AND CERTIFICATES.
- 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.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS, AND COORDINATE WORK WITH ALL CONTRACTS FOR THE SITE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT EXPLORATORY TEST PITS AS MAY BE REQUIRED TO DETERMINE UNDERGROUND CONDITIONS.
- ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS FOR CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
- MAINTAIN FLOW FOR ALL EXISTING UTILITIES, UNLESS NOTED OTHERWISE.
- ALL SITE FILL SHALL MEET SELECTED FILL STANDARDS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- CONTRACTOR TO GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND IMPERVIOUS SURFACES.
- 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.
- 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.

SYMBOL LEGEND

PROPOSED FEATURES	EXISTING FEATURES
BOUND	STONE BOUND, CONCRETE BOUND
BENCHMARK	BENCHMARK
DRILL HOLE	DRILL HOLE
SURVEY POINT	SURVEY POINT
IRON PIN	IRON ROD/PIN, IRON PIPE
TP1	TEST PIT
B1	BORING
PERC TEST	PERC TEST
CATCH BASIN (SQUARE)	CATCH BASIN (SQUARE)
CATCH BASIN (ROUND)	CATCH BASIN (ROUND)
HEADWALL	HEADWALL
FLARED END SECTION	FLARED END SECTION
STONE APRON	STONE APRON
DRAIN MANHOLE (DMH)	DRAIN MANHOLE (DMH)
DRAINAGE CLEAN OUT	DRAINAGE CLEAN OUT
SANITARY SEWER MANHOLE (SMH)	SANITARY SEWER MANHOLE (SMH)
SANITARY CLEAN OUT	SANITARY CLEAN OUT
HYDRANT	HYDRANT
WATER SHUTOFF	WATER SHUTOFF
TAPPING SLEEVE & VALVE	TAPPING SLEEVE & VALVE
GATE VALVE	GATE VALVE
WELL	WELL
UTILITY POLE	UTILITY POLE
GUY POLE	GUY POLE
ELECTRICAL MANHOLE	ELECTRICAL MANHOLE
BUILDING MOUNTED LIGHT	FLOOD LIGHT
LIGHT POST	LIGHT POST
TELEPHONE MANHOLE	TELEPHONE MANHOLE
NATURAL GAS MANHOLE	NATURAL GAS MANHOLE
COMMUNICATION MANHOLE	COMMUNICATION MANHOLE
BOLLARD	BOLLARD
SINGLE POLE SIGN	SINGLE POLE SIGN
DOUBLE POLE SIGN	DOUBLE POLE SIGN
SPOT ELEVATION	SPOT ELEVATION
ACCESSIBLE PARKING STALL	ACCESSIBLE PARKING STALL
DRAINAGE FLOW	DRAINAGE FLOW
DECIDUOUS TREE	DECIDUOUS TREE
CONIFEROUS TREE	CONIFEROUS TREE
	STONE WALL (PILED BOULDERS & STONES)
	WETLAND DELINEATION FLAG

LINETYPE LEGEND

PROPOSED FEATURES	EXISTING FEATURES
100	MAJOR CONTOUR
98	MINOR CONTOUR
EDGE OF RIVER	EDGE OF RIVER
EDGE OF POND	EDGE OF POND
FLOOD PLAIN	FLOOD PLAIN
PROPERTY LINE	PROPERTY LINE
RIGHT OF WAY	RIGHT OF WAY
SETBACK	SETBACK
EASEMENT	EASEMENT
LIMIT OF CONSTRUCTION	LIMIT OF CONSTRUCTION
LIMIT OF DISTURBANCE	LIMIT OF DISTURBANCE
SILT FENCE/ STRAW FIBER ROLL	SILT FENCE
SEDIMENT/TURBIDITY CURTAIN	DEMOLITION WORK
DEMOLITION WORK	DEMOLITION WORK
CENTERLINE	CENTERLINE
EDGE OF PAVEMENT	EDGE OF PAVEMENT
EDGE OF GRAVEL	EDGE OF GRAVEL
EDGE OF CONCRETE	EDGE OF CONCRETE
CURB	CURB
FENCE (BARBED WIRE)	FENCE (BARBED WIRE)
FENCE (CHAIN LINK)	FENCE (CHAIN LINK)
FENCE (WOODEN)	FENCE (WOODEN)
GUARD RAIL	GUARD RAIL
TREE LINE	TREE LINE
EDGE OF WETLANDS - DELINEATED	EDGE OF WETLANDS - DELINEATED
EDGE OF WETLANDS - APPROXIMATE	EDGE OF WETLANDS - APPROXIMATE
EDGE OF RARE PLANTS - DELINEATED	EDGE OF RARE PLANTS - DELINEATED
STONE WALL	STONE WALL
SANITARY SEWER	SANITARY SEWER
SEWER FORCEMAIN	SEWER FORCEMAIN
SEWER SERVICE	SEWER SERVICE
DISPOSAL AREA LATERAL	DISPOSAL AREA LATERAL
STORM LINE	STORM LINE
UNDER DRAIN	UNDER DRAIN
FOUNDATION DRAIN	FOUNDATION DRAIN
ROOF DRAIN	ROOF DRAIN
DITCH/SWALE	DITCH/SWALE
TELECOMM	TELECOMM
UNDERGROUND TELECOMM	UNDERGROUND TELECOMM
OVERHEAD TELECOMM	OVERHEAD TELECOMM
ELECTRIC LINE	ELECTRIC LINE
UNDERGROUND ELECTRIC	UNDERGROUND ELECTRIC
OVERHEAD ELECTRIC	OVERHEAD ELECTRIC
ELECTRICAL SITE LIGHTING	ELECTRICAL SITE LIGHTING
WATER LINE	WATER LINE
WATER SERVICE	WATER SERVICE
GAS LINE	GAS LINE
CABLE TV	CABLE TV
UNDERGROUND CABLE TV	UNDERGROUND CABLE TV
OVERHEAD CABLE TV	OVERHEAD CABLE TV
STEAM LINE	STEAM LINE
LOW PRESSURE STEAM	LOW PRESSURE STEAM
HIGH PRESSURE STEAM	HIGH PRESSURE STEAM
HOT WATER	HOT WATER
CHILLED WATER	CHILLED WATER
GRANITE CURB	GRANITE CURB
SNOW FENCE	SNOW FENCE
SCATTERED RARE PLANT SURVEY DELINEATION	SCATTERED RARE PLANT SURVEY DELINEATION
"CATCH LINE" (LIMIT OF CONSTRUCTION DISTURBANCE)	"CATCH LINE" (LIMIT OF CONSTRUCTION DISTURBANCE)

Date

Description

No.

ENGINEERING VENTURES PC

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

FAMILIES FLOURISH NORTHEAST

C/O TOM SULLIVAN
258 SOUTH RIVER ROAD
BEDFORD, NH 03110
603-647-1777

SITE LEGEND AND NOTES

FAMILIES FLOURISH NORTHEAST
CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

Sheet Title

Project Title

EV Project #

22063

Drawn By:

JWF

Checked By:

NAF

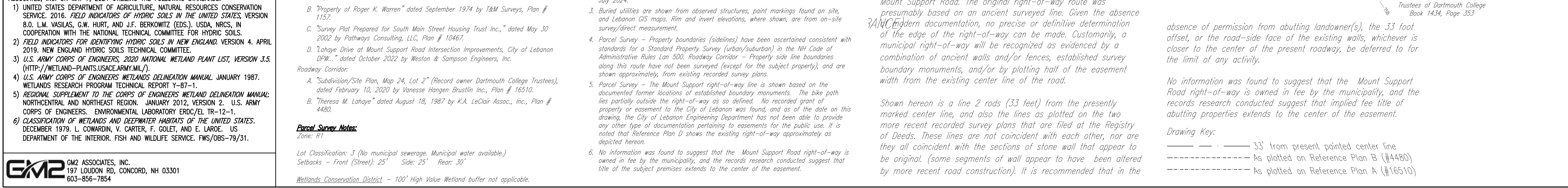
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1" = 10'

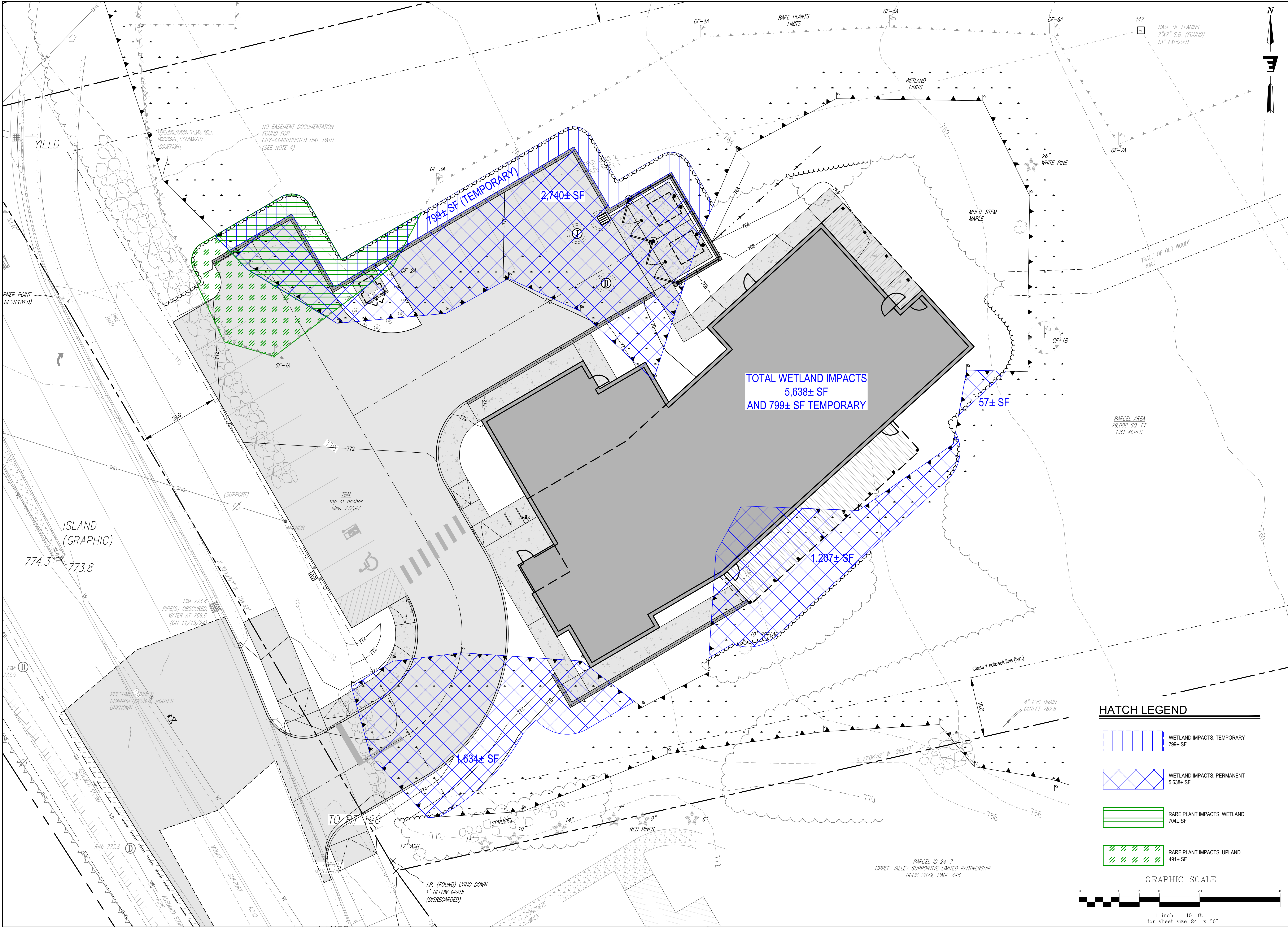
Date:

03/10/2025

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EXISTING CONDITIONS PLAN Sheet Title: FAMILIES FLOURISH NORTHEAST CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE		FAMILIES FLOURISH NORTHEAST C/O TOM SULLIVAN 258 SOUTH RIVER ROAD BEDFORD, NH 03110 603-647-1777 ENGINEERING PC 208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-483-6225 85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333 414 Union Street, Schenectady, NY 12305 • 518-630-9614 www.engineeringventures.com	
EV Project # 22063 Drawn By: JWF Checked By: NAF Scale: 1" = 10' Date: 03/10/2024		No. Description Date	



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Date	Description	No.

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FAMILIES FLOURISH NORTHEAST
 C/O TOM SULLIVAN
 258 SOUTH RIVER ROAD
 BEDFORD, NH 03110
 603-647-1777

WETLANDS IMPACT EXHIBIT

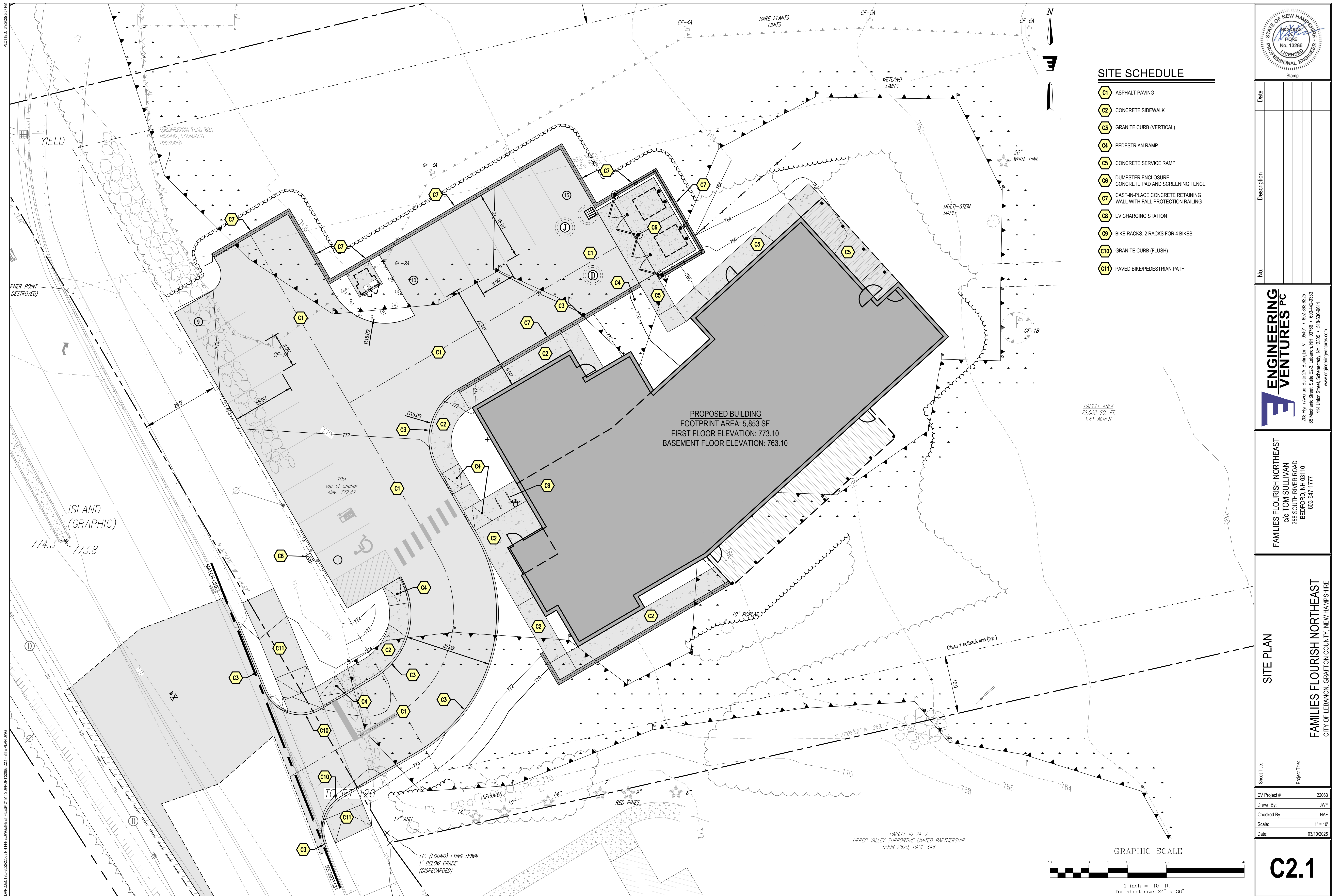
Sheet Title:

FAMILIES FLOURISH NORTHEAST
 CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

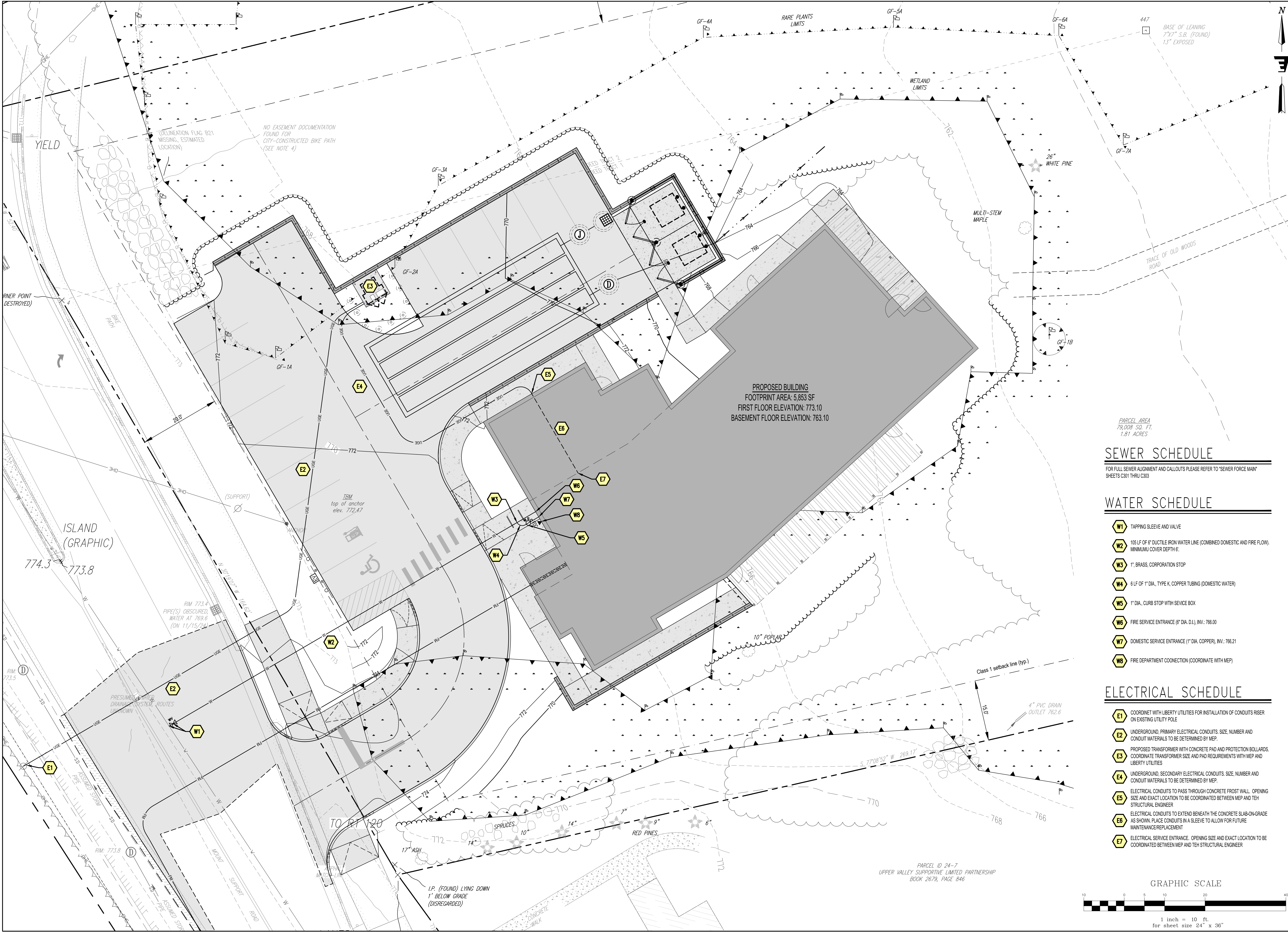
Project Title:

EV Project #	22063
Drawn By:	JWF
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Scale:	1" = 10'
Date:	03/10/2025

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FAMILIES FLOURISH NORTHEAST

C/O TOM SULLIVAN

258 SOUTH RIVER ROAD

BEDFORD, NH 03110

603-647-1777

UTILITIES PLAN

FAMILIES FLOURISH NORTHEAST

CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

EV Project # 22068

Drawn By: JWF

Checked By: NAF

Scale: 1" = 10'

Date: 03/10/2025

C2.3

1 inch = 10 ft.

for sheet size 24" x 36"

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.

TEMPORARY INLET PROTECTION - INSTALL AS INDICATED ON PLANS. STONE TO BE REMOVED AND REPLACED WITH CLEAN STONE WHEN SEDIMENT IS < 1/2 DEPTH OF STONE. REMOVE ALL SEDIMENT IF COLLECTED IN STRUCTURE 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 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 ORIFICE ON THE OUTLET STRUCTURES SHALL BE OMITTED UNTIL THE SITE IS STABILIZED TO IMPOUND 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 ORIFICE SHALL BE DRILLED 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 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 MATRIXES, 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.

SEDIMENT TRAP

STAGING AREA

SOIL STOCKPILE

EROSION CONTROL SCHEDULE

- E1

LIMIT OF DISTURBANCE
- E2

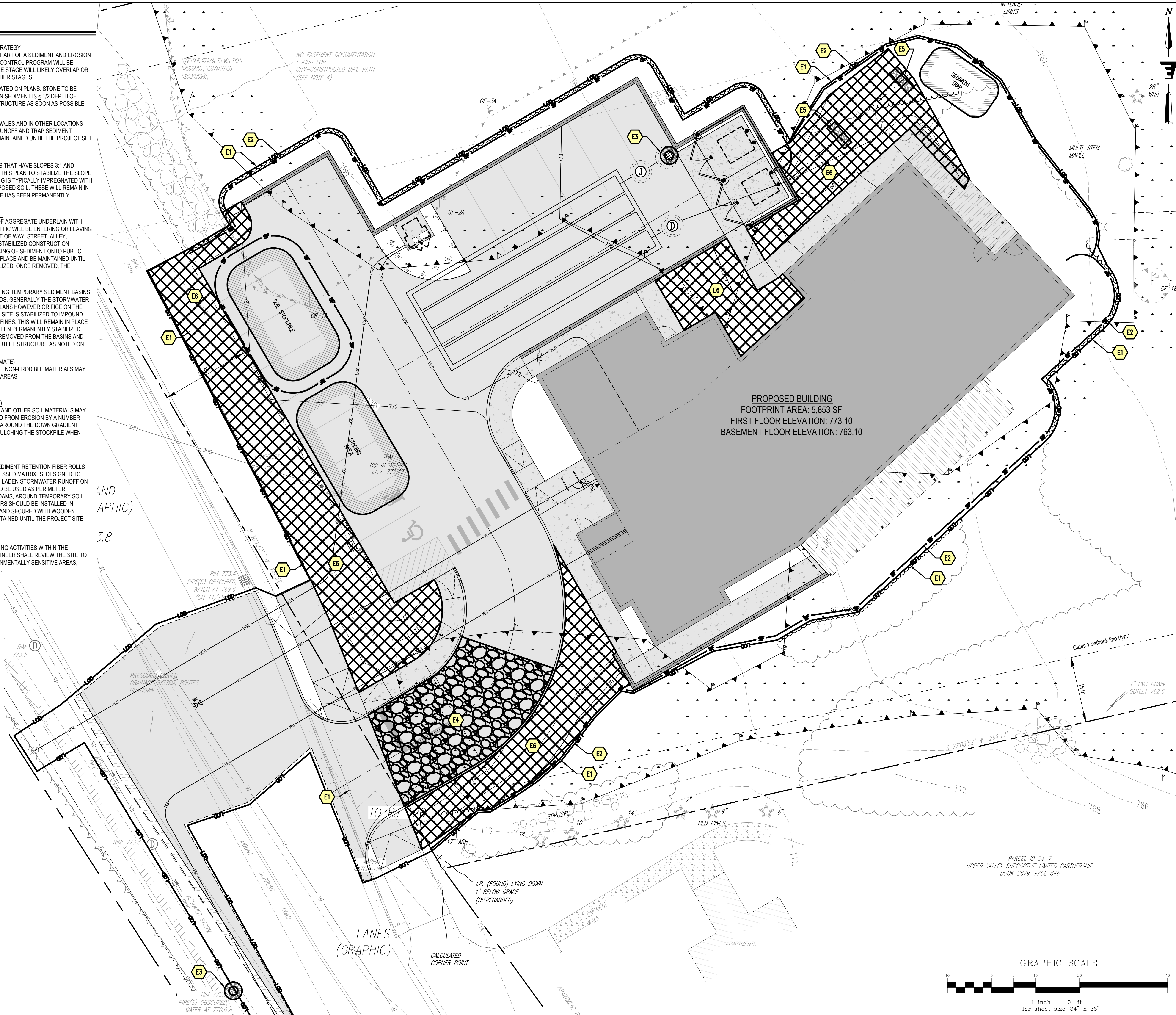
DOUBLE ROW OF STRAW FIBER ROLL (TYP.)
- E3

INLET PROTECTION (TYP.)
- E4

STABILIZED CONSTRUCTION ENTRANCE
- E5

CHECK DAM
- E6

EROSION CONTROL NETTING



Date

Description

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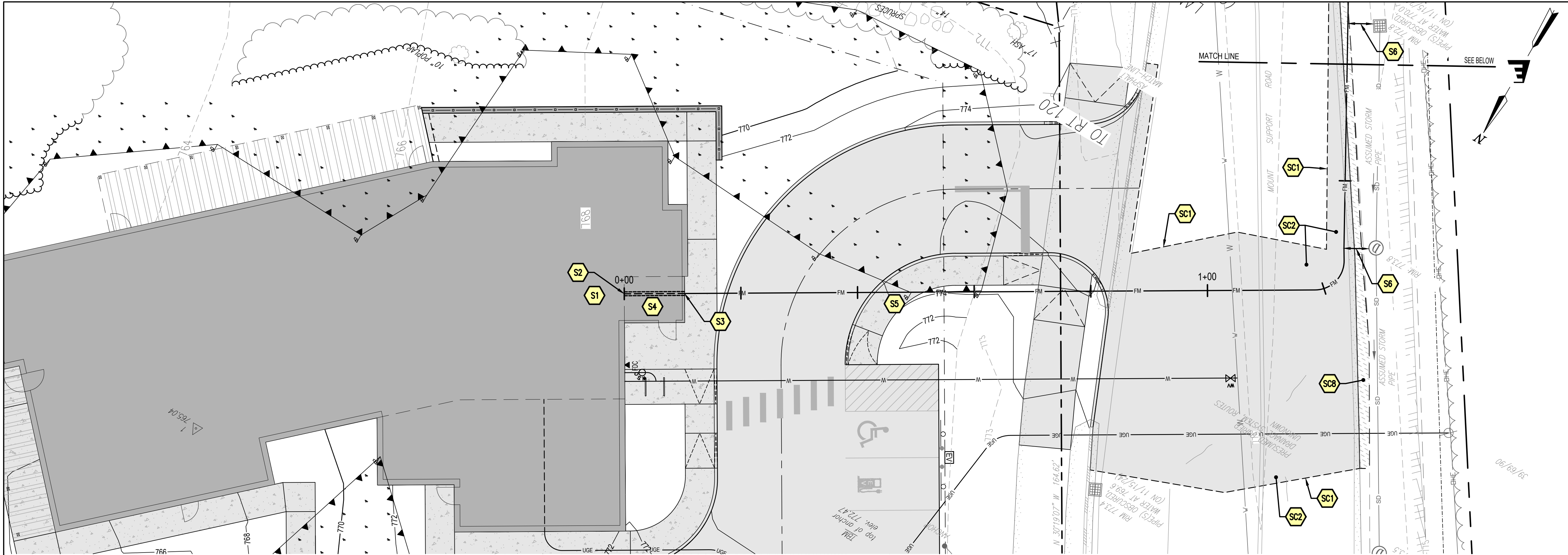
EROSION PREVENTION AND SEDIMENT CONTROL PLAN

Sheet Title

Project Title

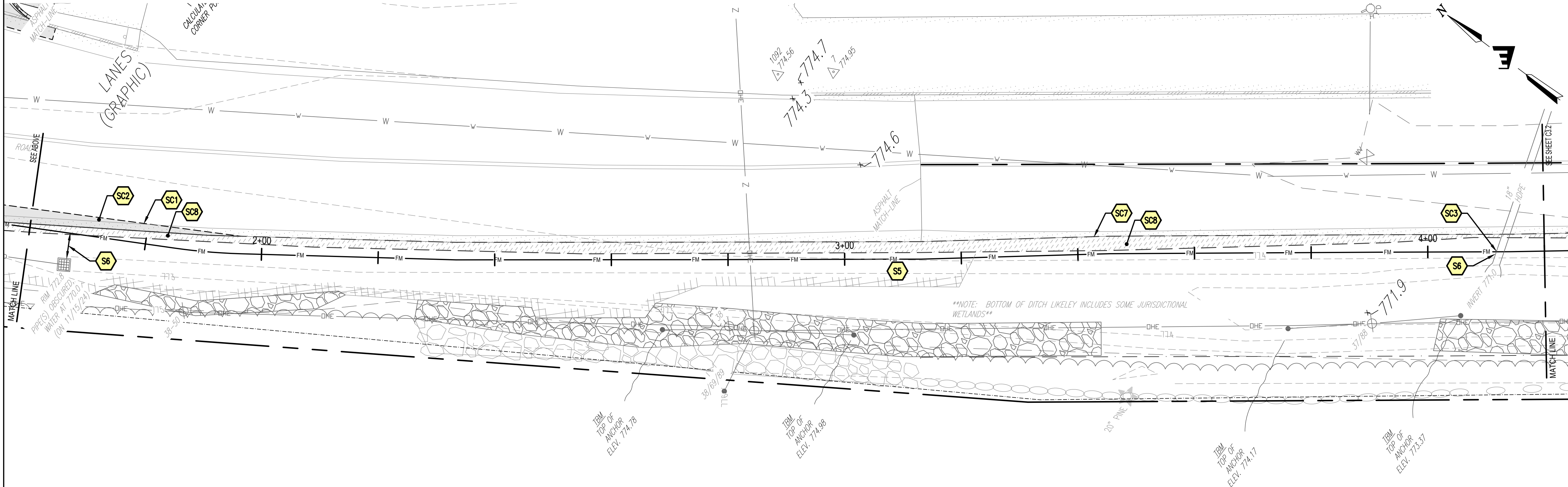
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Drawn By: JWF
Checked By: NAF
Scale: 1" = 10'
Date: 03/10/2025

C2.4



PROPOSED SEWER FORCE MAIN, STA. 0+00 - 1+60

SCALE: 1" = 10'



PROPOSED SEWER FORCE MAIN, STA. 1+60 - 4+20

SCALE: 1" = 10'

SEWER SITE SCHEDULE

- SC1 SAWCUT EXISTING PAVING
- SC2 PERMANENT ASPHALT PAVED TRENCH PATCH
- SC3 PRESERVE AND PROTECT EXISTING DRAINAGE PIPE
- SC4 PRESERVE AND PROTECT EXISTING HEADWALL
- SC5 REMOVE AND RESET EXISTING CURB
- SC6 PRESERVE AND PROTECT EXISTING CURB AND CONCRETE PAD
- SC7 PRESERVE AND PROTECT EDGE OF EXISTING PAVEMENT, TYP.
- SC8 REBUILD EXISTING GRAVEL SHOULDER TO MATCH EXISING
- SC9 REMOVE AND RESET EXISING "PEDESTRIAN CROSSING" SIGN

SEWER SCHEDULE

- S1 INDOOR (BASEMENT), PUMP STATION, BY ENVIRONMENT ONE CORP. (E/ONE), OR APPROVED EQUAL
- S2 SANITARY SEWER SERVICE ENTRANCE, INV.: 766.90
- S3 SEWER FORCE MAIN TO PASS THROUGH PROPOSED FROST WALL, INV.: 766.60
- S4 PROVIDE 4" DIA., DUCTILE IRON SLEEVE BETWEEN FROST WALL AND FOUNDATION WALL TO ALL FUTURE ACCESS/REPLACEMENT TO/OF FORCE MAIN
- S5 1.360 LF OF 1-1/4", SDR 11, P.E. FORCE MAIN TUBING. MINIMUM COVER DEPTH 6".
- S6 WHERE THE DISTANCE BETWEEN DRAINAGE STRUCURE (OR CULVERT) AND SEWER FORCEMAIN IS LESS THAN 6', PROVIDE A 4" LAYER OF RIGID FOAM INSULATION.
- S7 4' ID. PRECAST CONCRETE MANHOLE
 RM: 787.94
 INV. IN (PROPOSED 6" PVC (NW)): 778.87
 INV. IN (EXIST. 8" (W)): 778.77
 INV. OUT (EXIST 8" (E)): 778.77

GRAPHIC SCALE



1 inch = 10 ft.
 for sheet size 24" x 36"

Stamp

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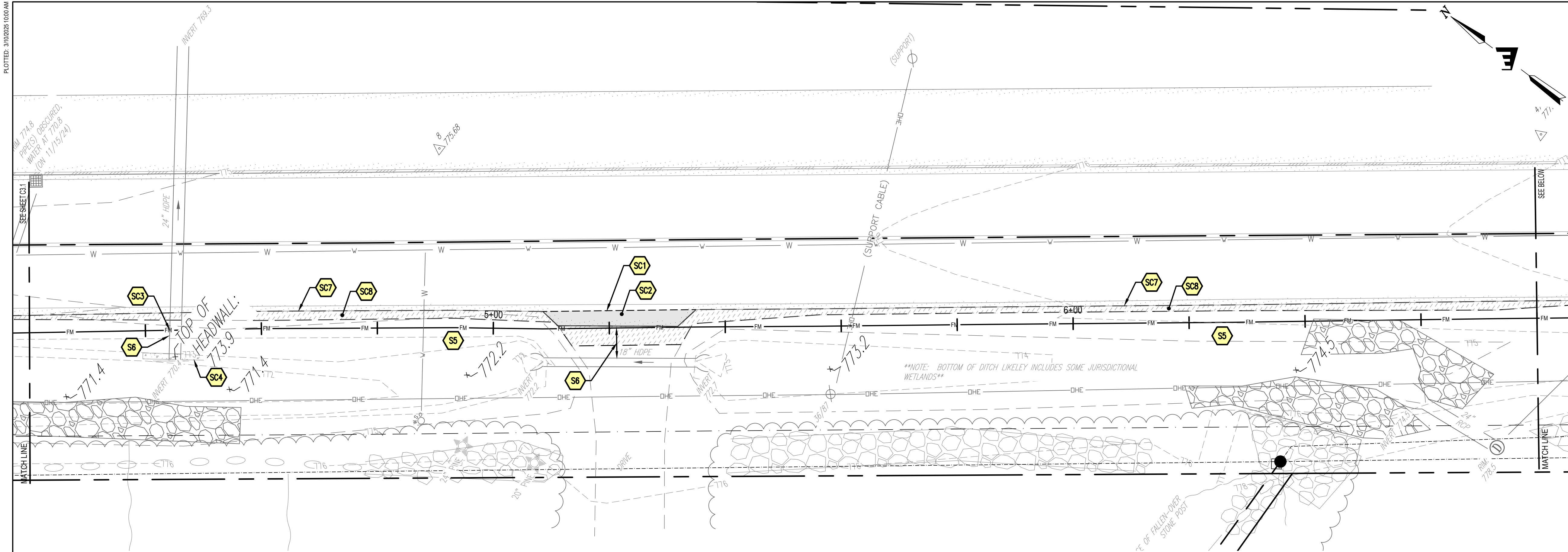
SEWER FORCE MAIN (1 OF 3)

FAMILIES FLOURISH NORTHEAST

CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

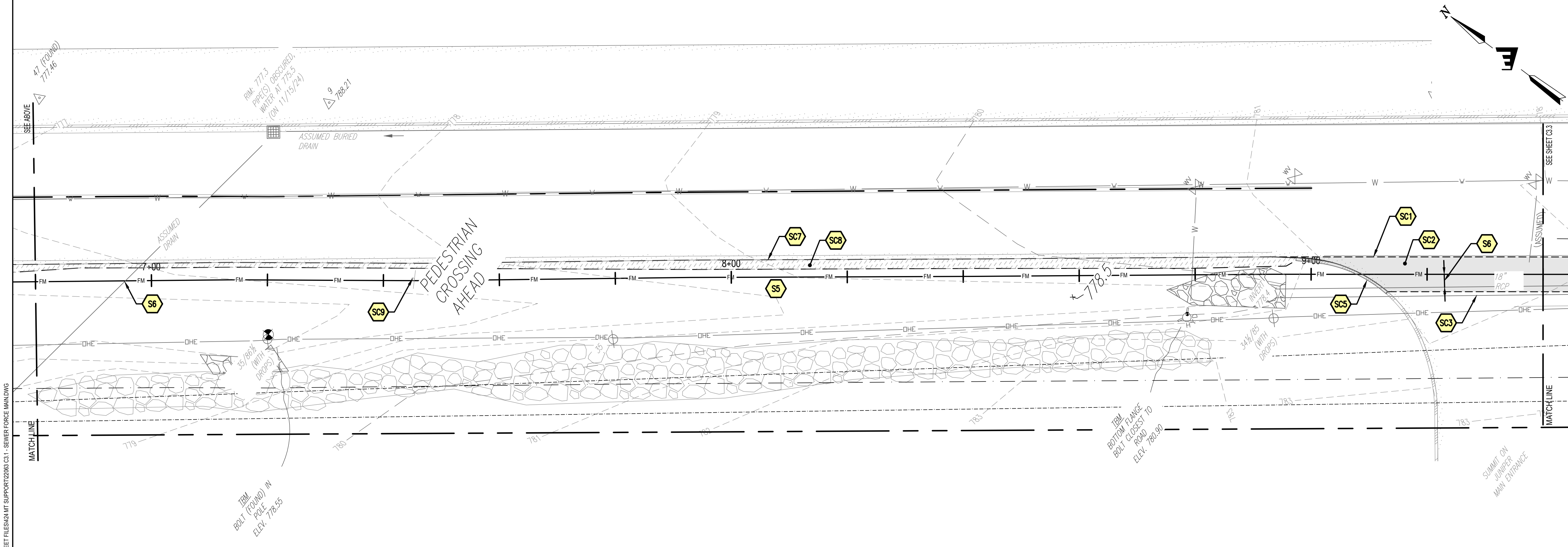
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Drawn By:	JWF
Checked By:	NAF
Scale:	1" = 10'
Date:	03/10/2025

C3.1



PROPOSED SEWER FORCE MAIN, STA. 4+20 - 6+80

SCALE: 1" = 10'



PROPOSED SEWER FORCE MAIN, STA. 6+80 - 9+40

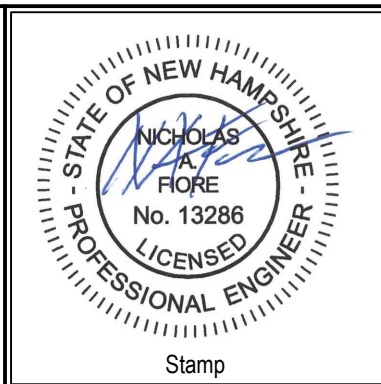
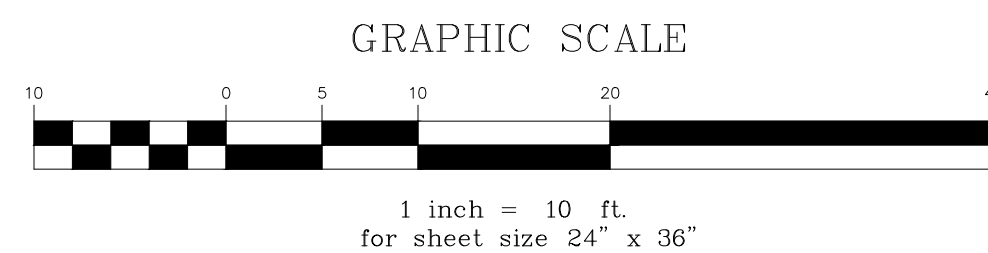
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SEWER SITE SCHEDULE

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- SC2 PERMANENT ASPHALT PAVED TRENCH PATCH
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INV. OUT (EXIST 8" (E)): 778.77



No.	Description	Date

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SEWER FORCE MAIN (2 OF 3)

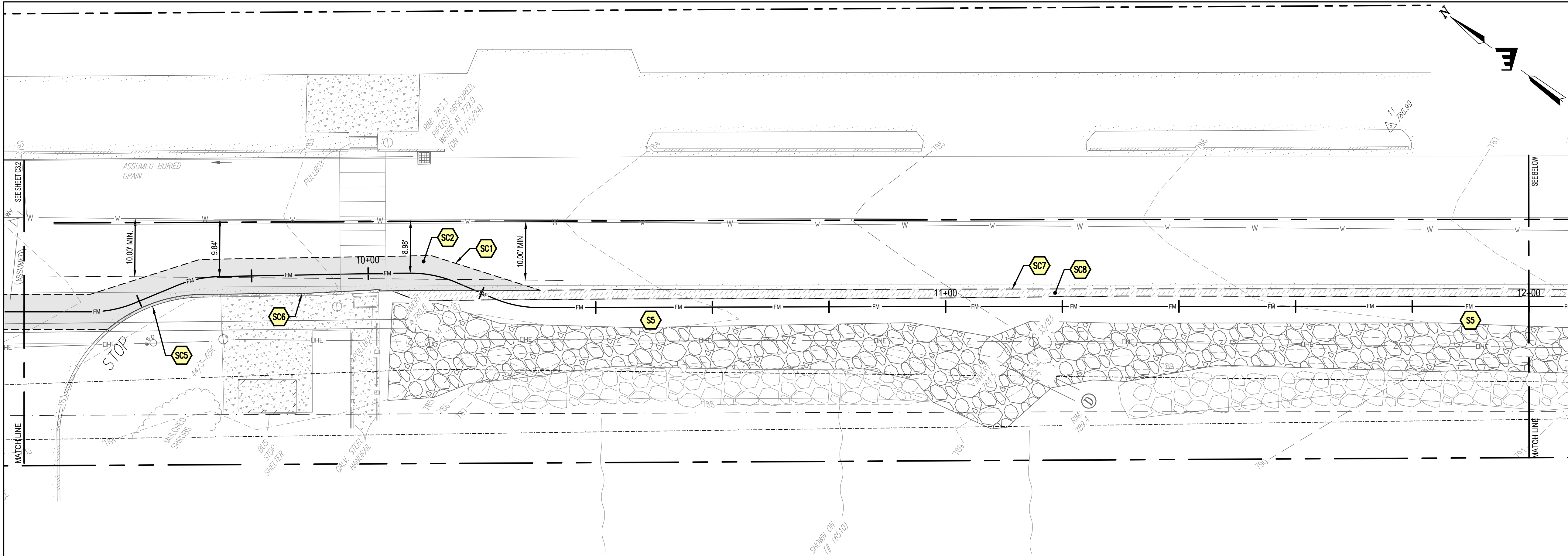
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Project Title: **FAMILIES FLOURISH NORTHEAST**
CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

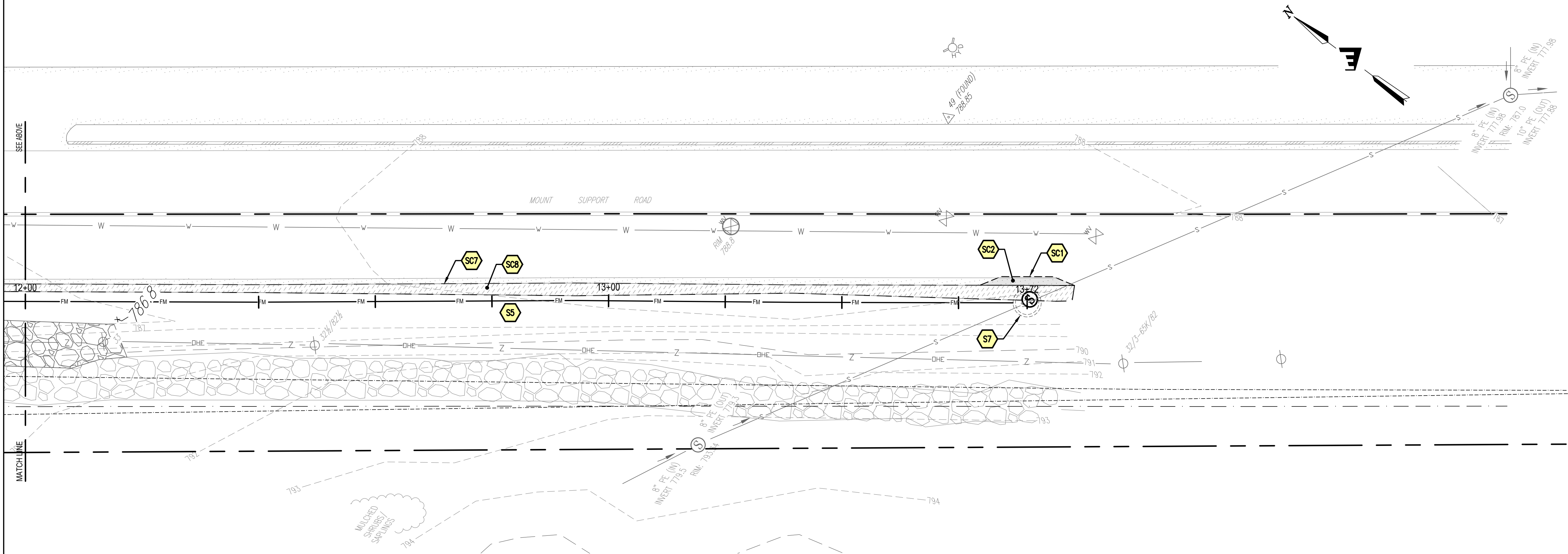
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C3.2

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PROPOSED SEWER FORCE MAIN, STA. 9+40 - 12+00
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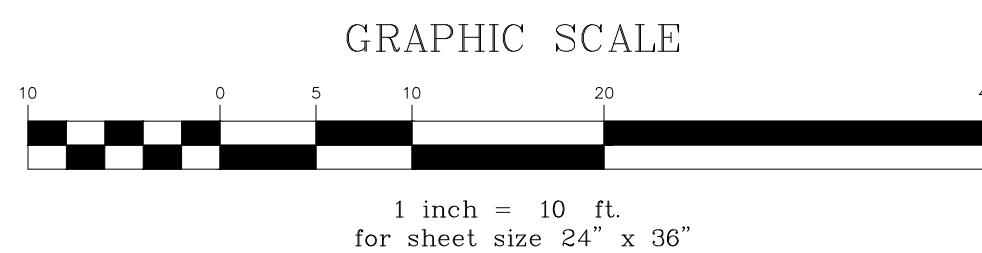
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SCALE: 1" = 10'

SEWER SITE SCHEDULE

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- SC2 PERMANENT ASPHALT PAVED TRENCH PATCH
- SC3 PRESERVE AND PROTECT EXISTING DRAINAGE PIPE
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INV. IN (PROPOSED 6" PVC (NW)): 778.87
INV. IN (EXIST. 8" (W)): 778.77
INV. OUT (EXIST 8" (E)): 778.77



STATE OF NEW HAMPSHIRE

NO. 13286

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SEWER FORCE MAIN (3 OF 3)

Sheet Title

FAMILIES FLOURISH NORTHEAST

CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

Project Title

EV Project #

22063

Drawn By:

JWF

Checked By:

NAF

Scale:

1" = 10'

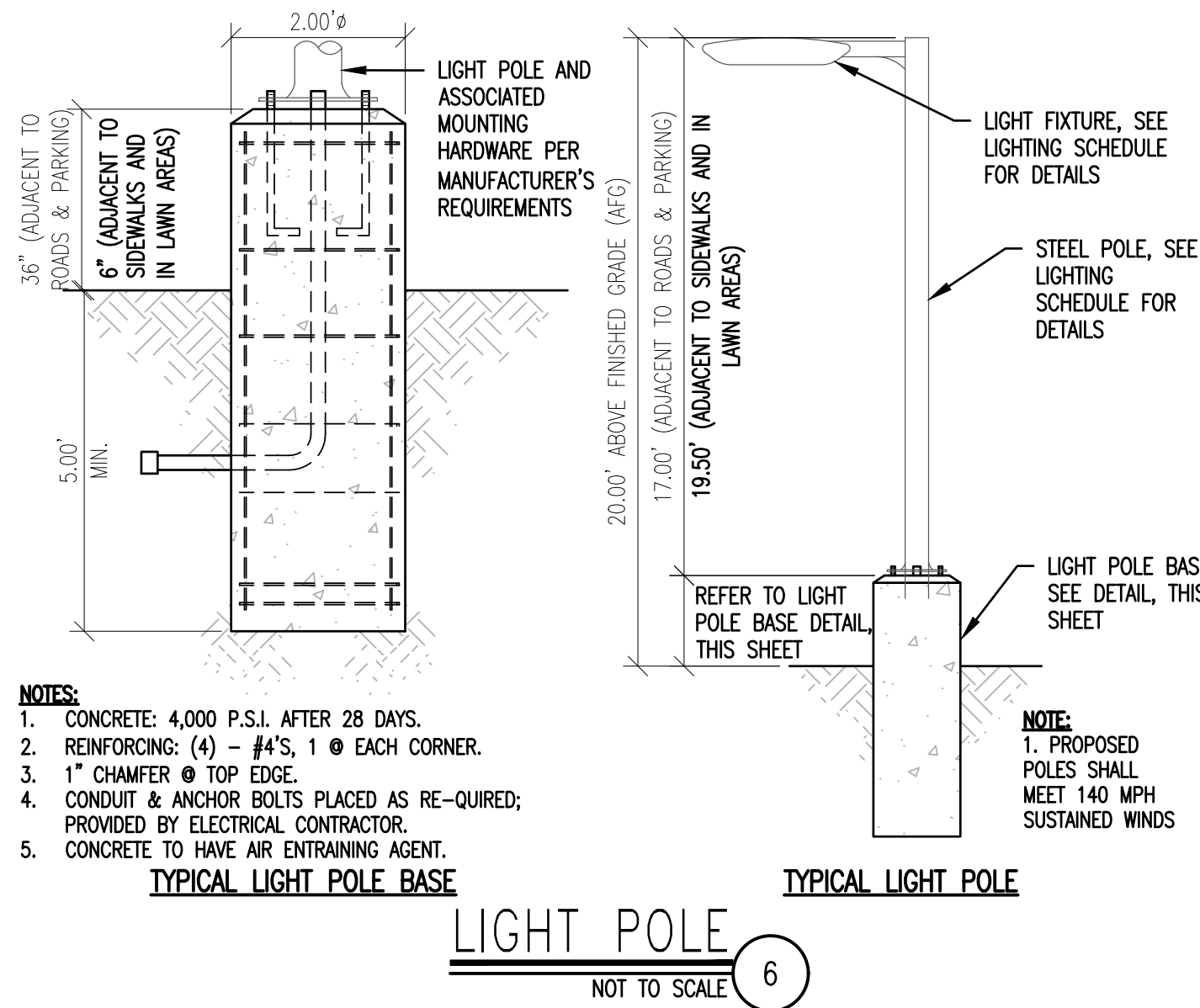
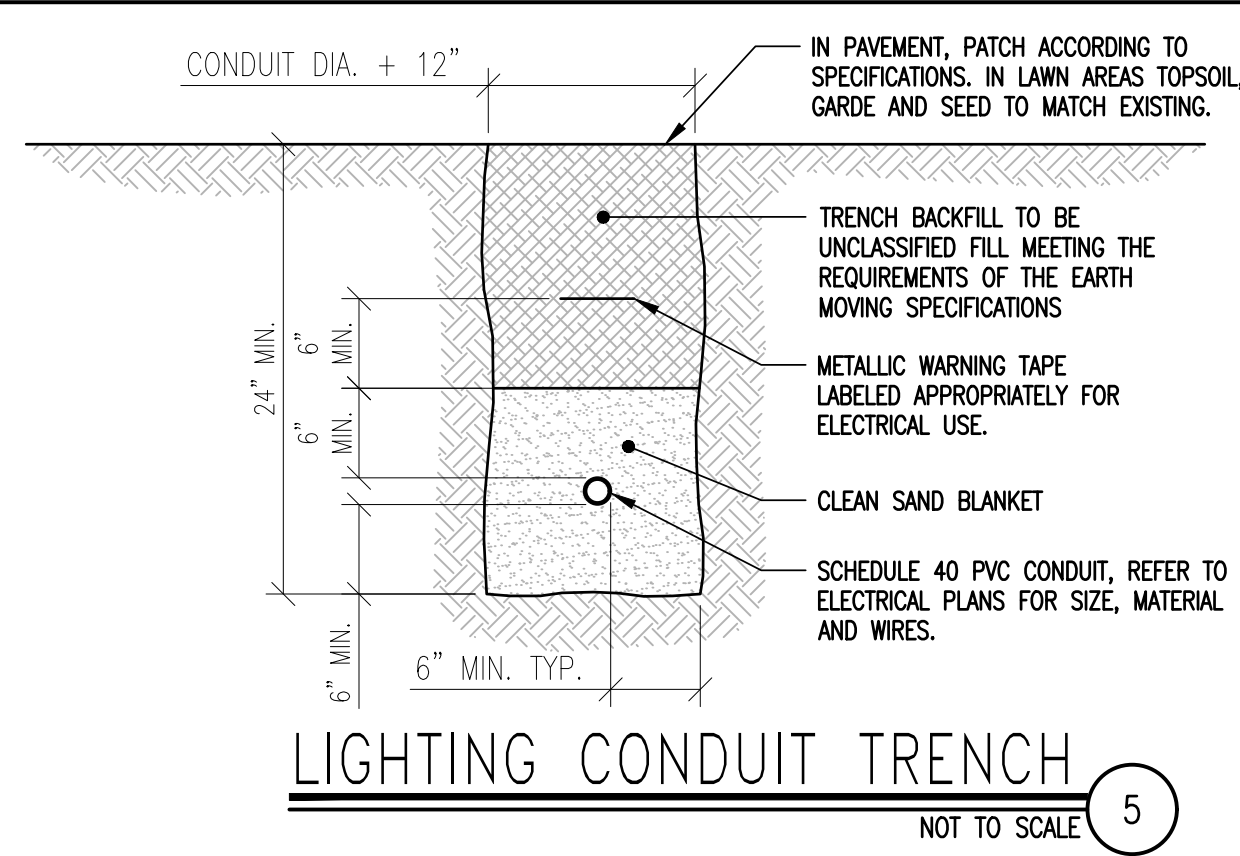
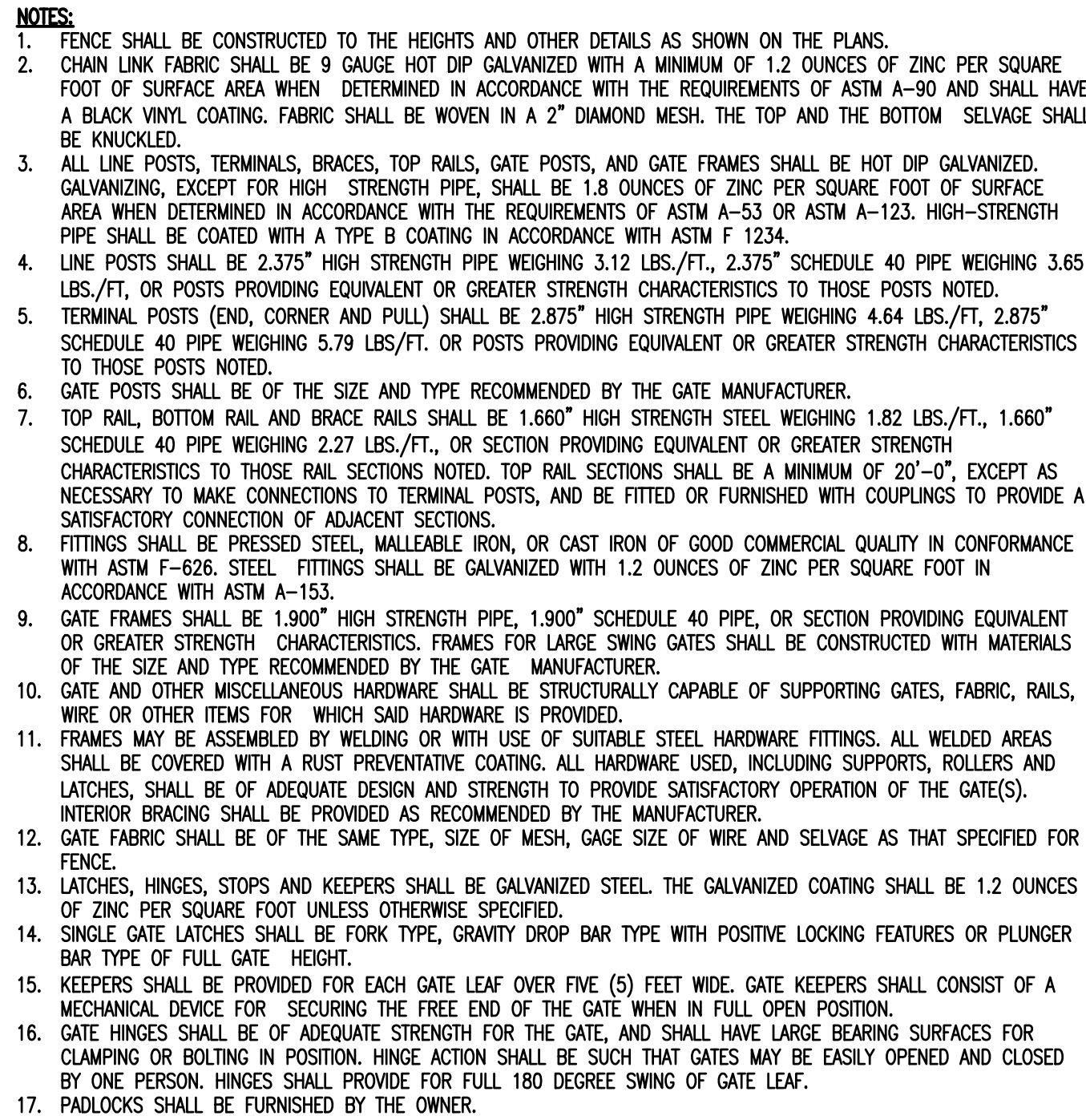
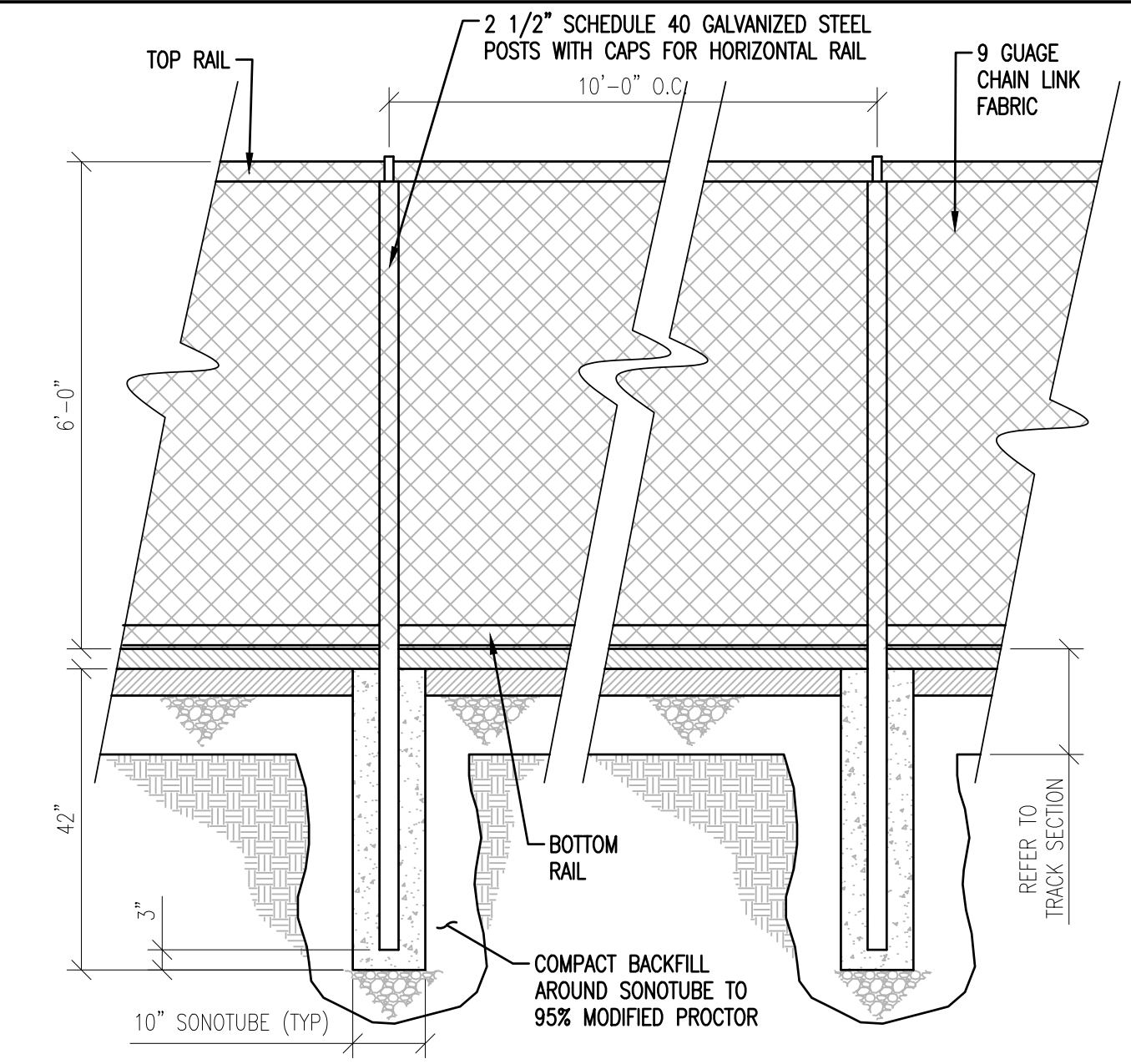
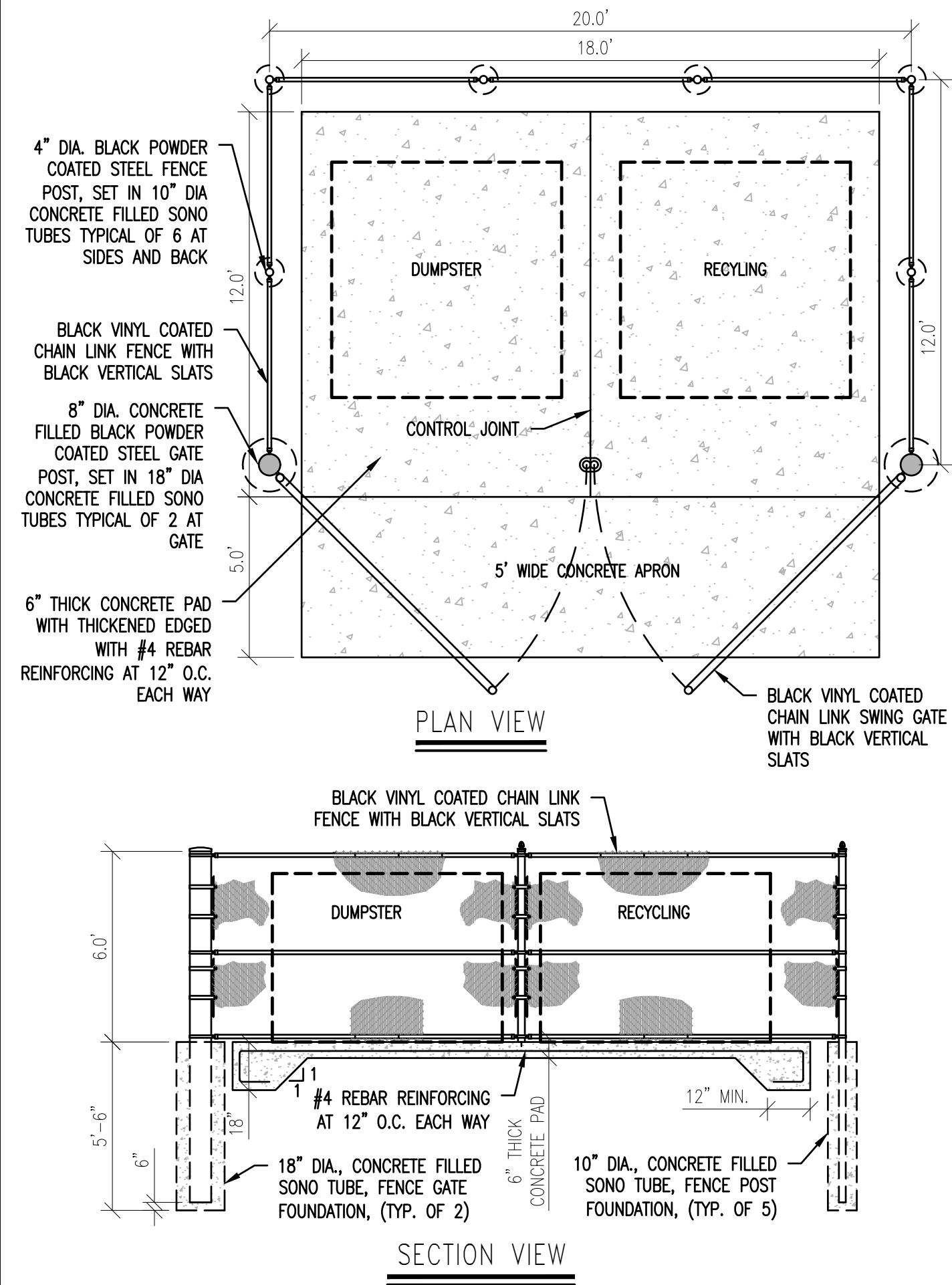
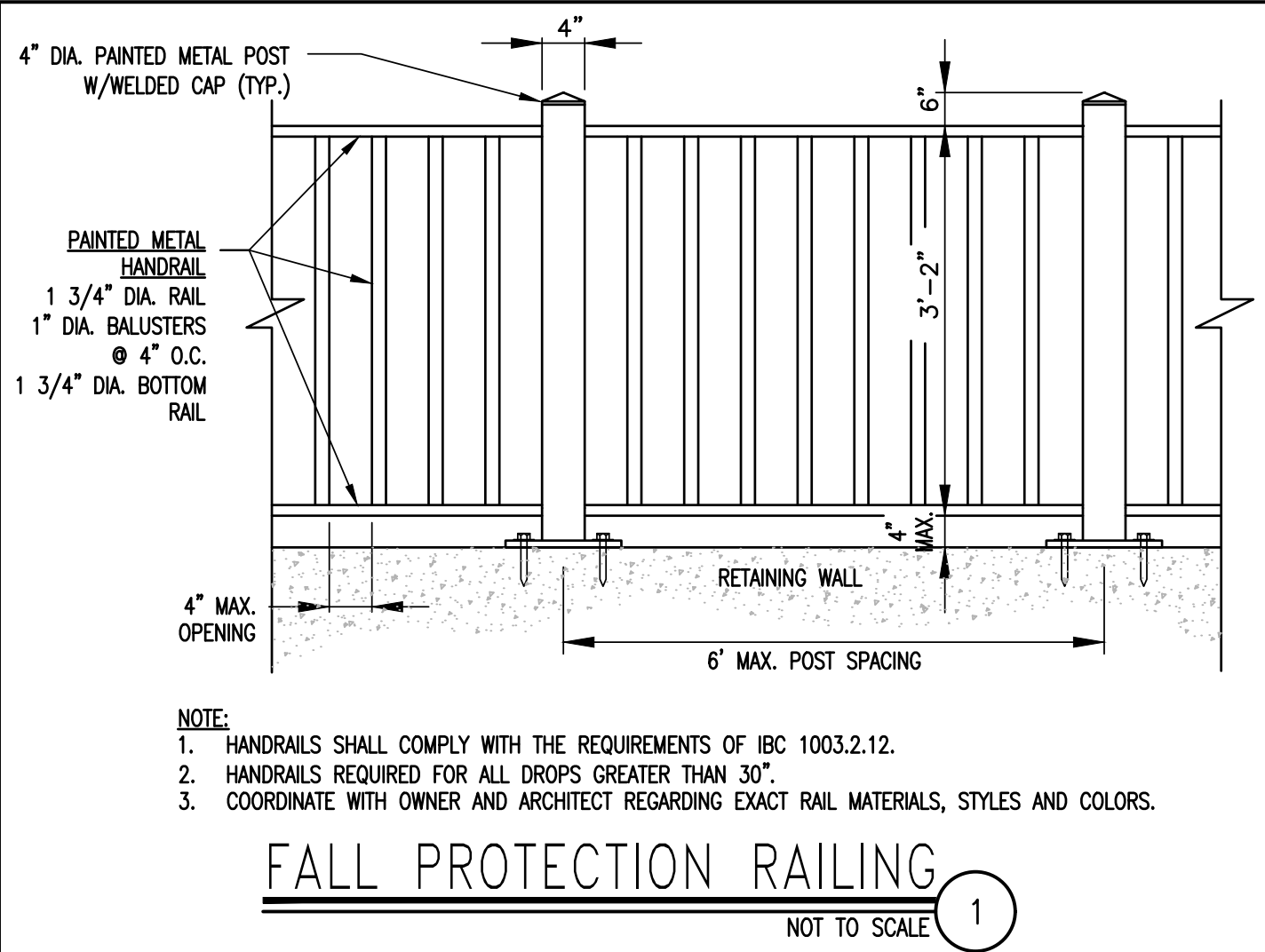
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03/10/2025

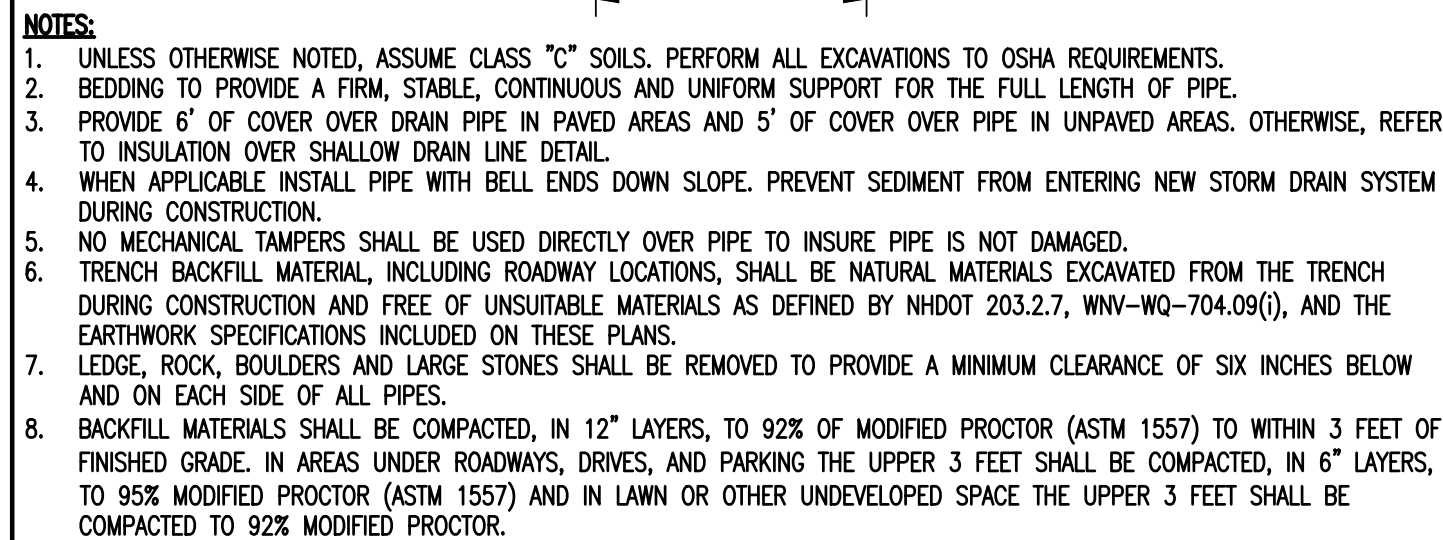
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Page 334 of 450

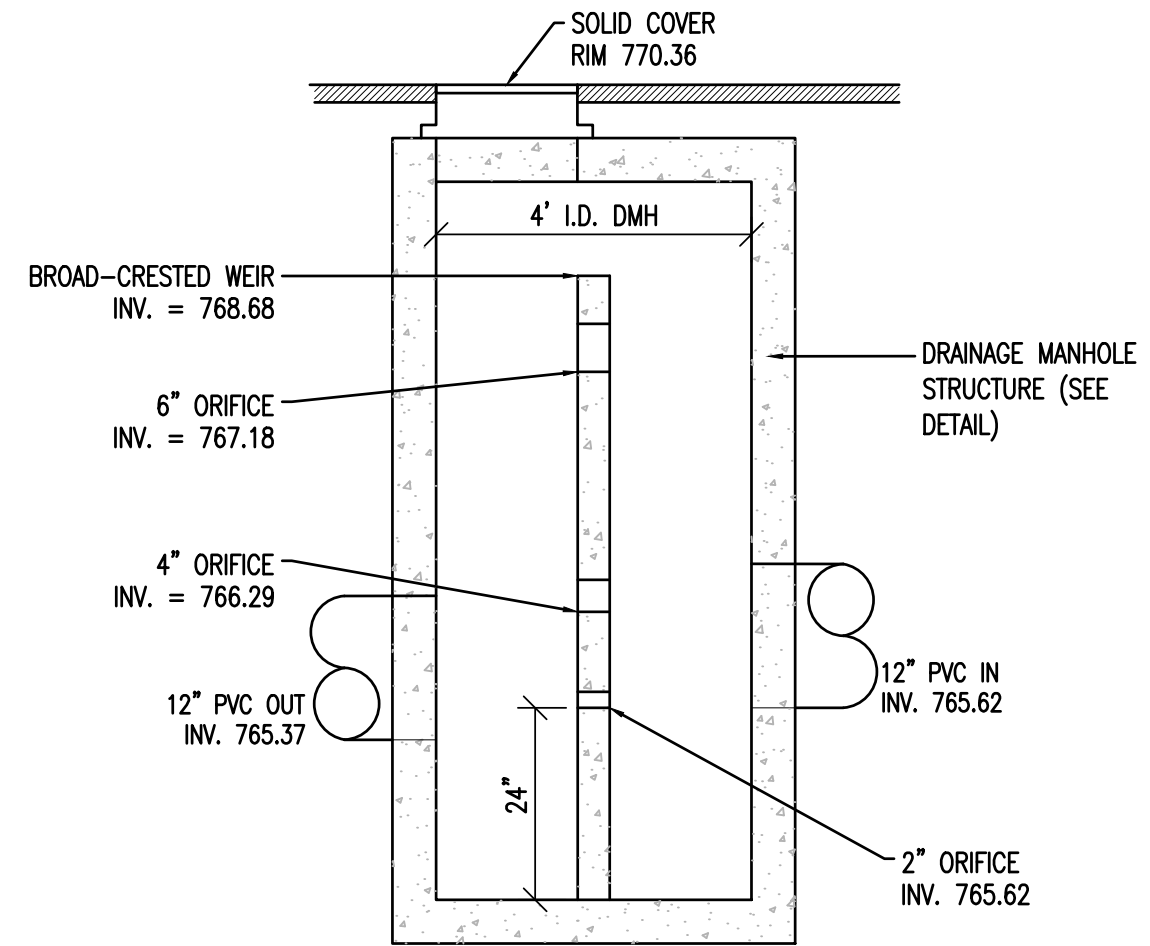
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SITE DETAILS (2 OF 2)	
FAMILIES FLOURISH NORTHEAST CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE	
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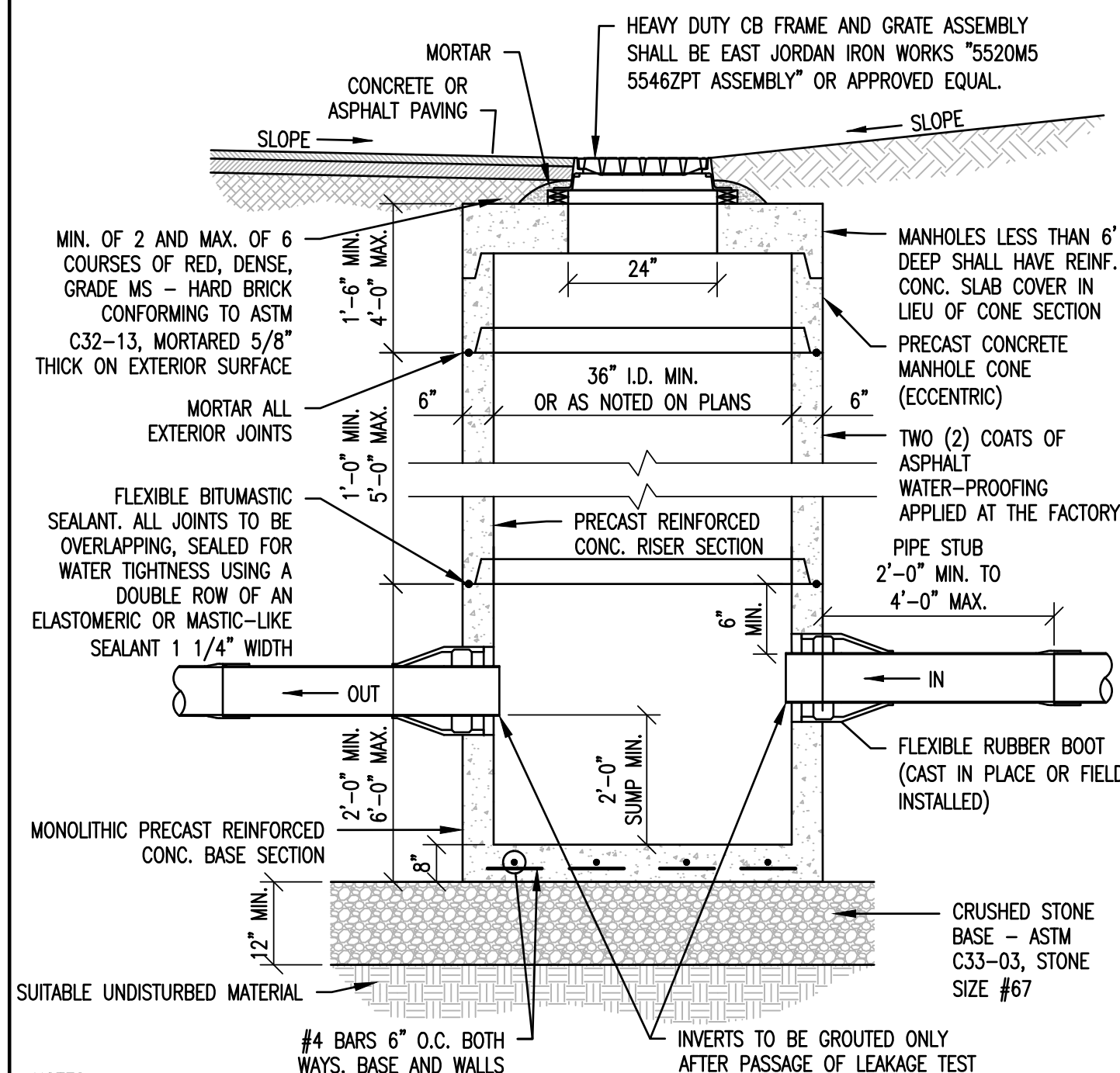


TYPICAL STORM DRAIN TRENCH

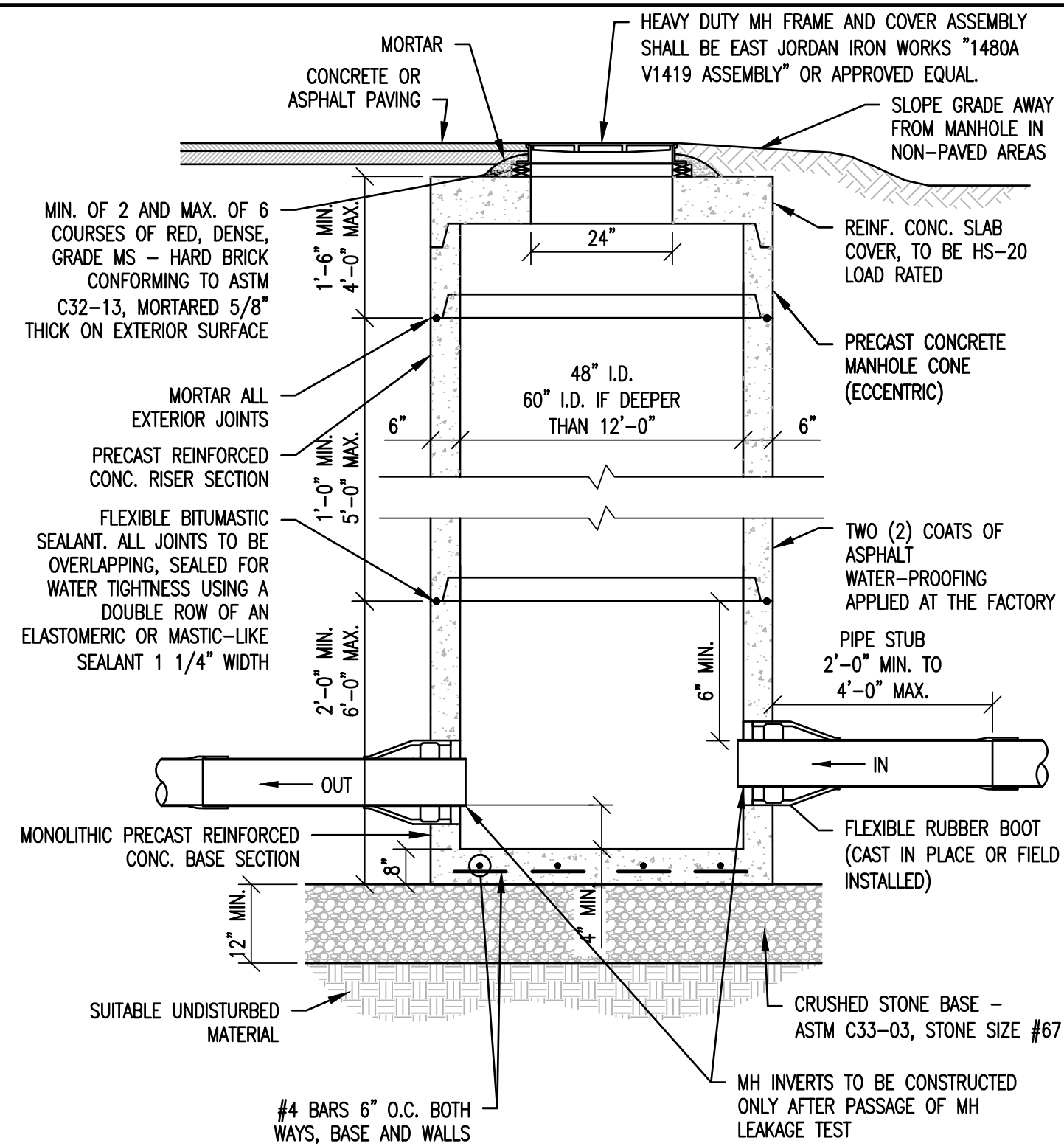


DETENTION OUTLET STRUCTURE

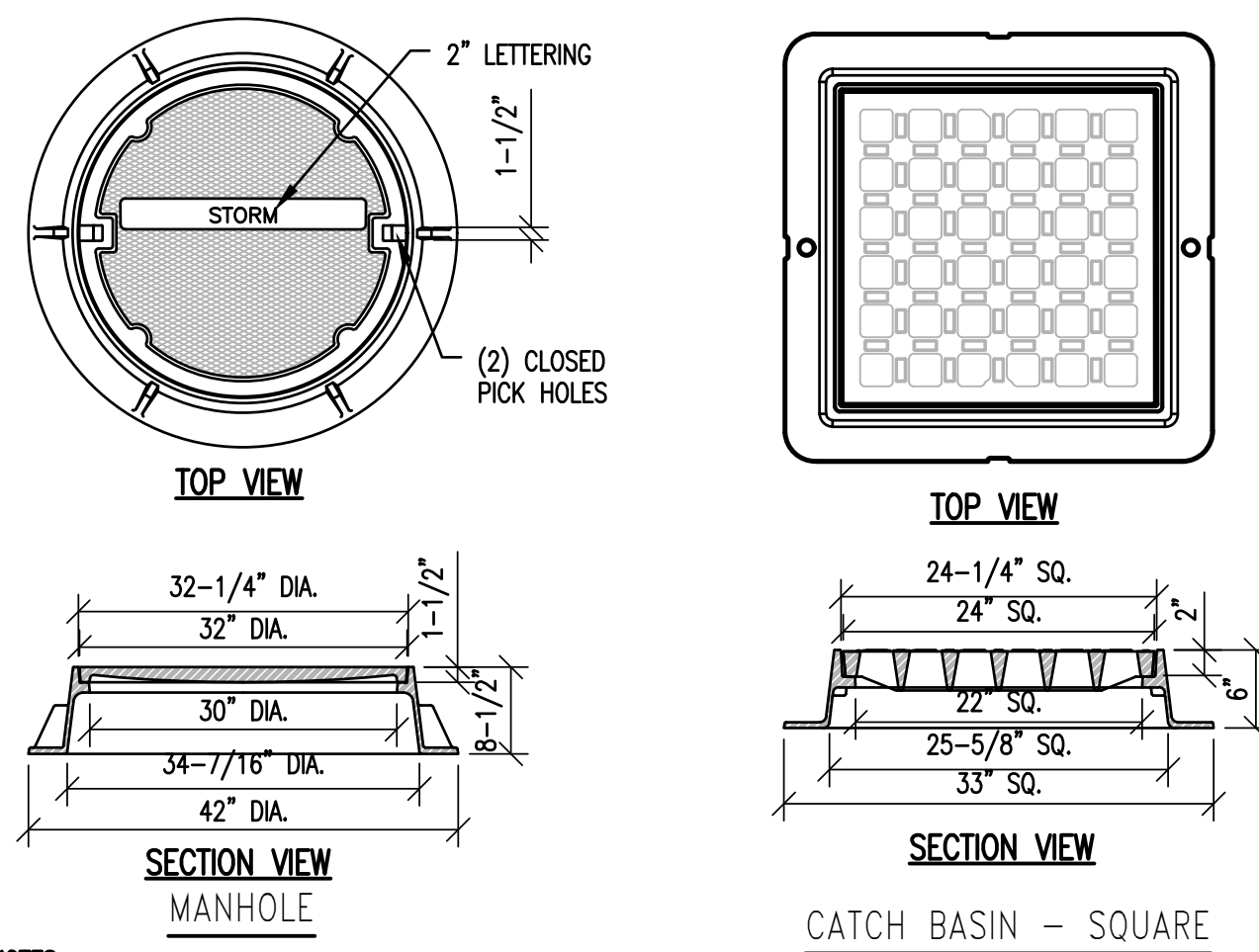
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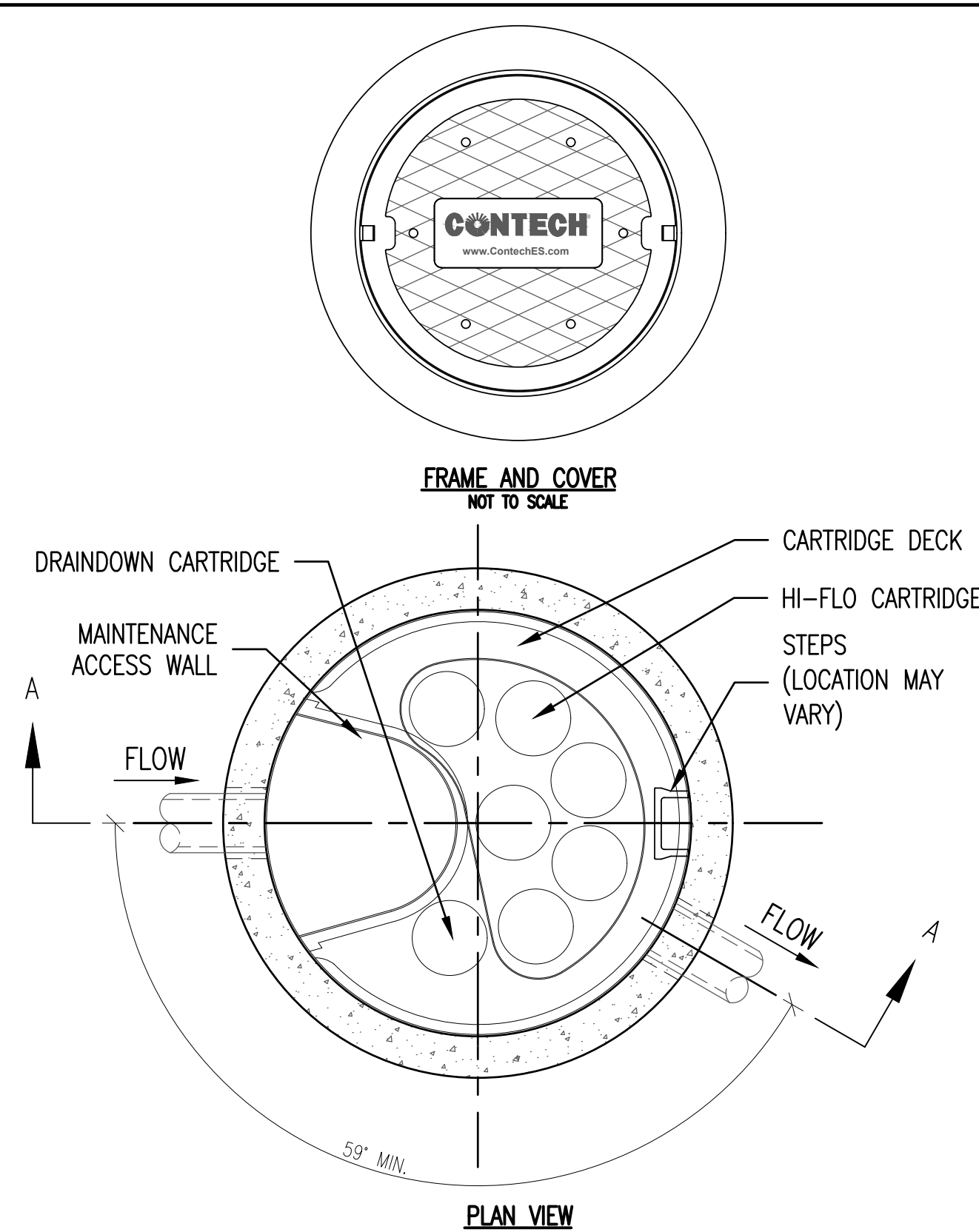
CATCH BASIN
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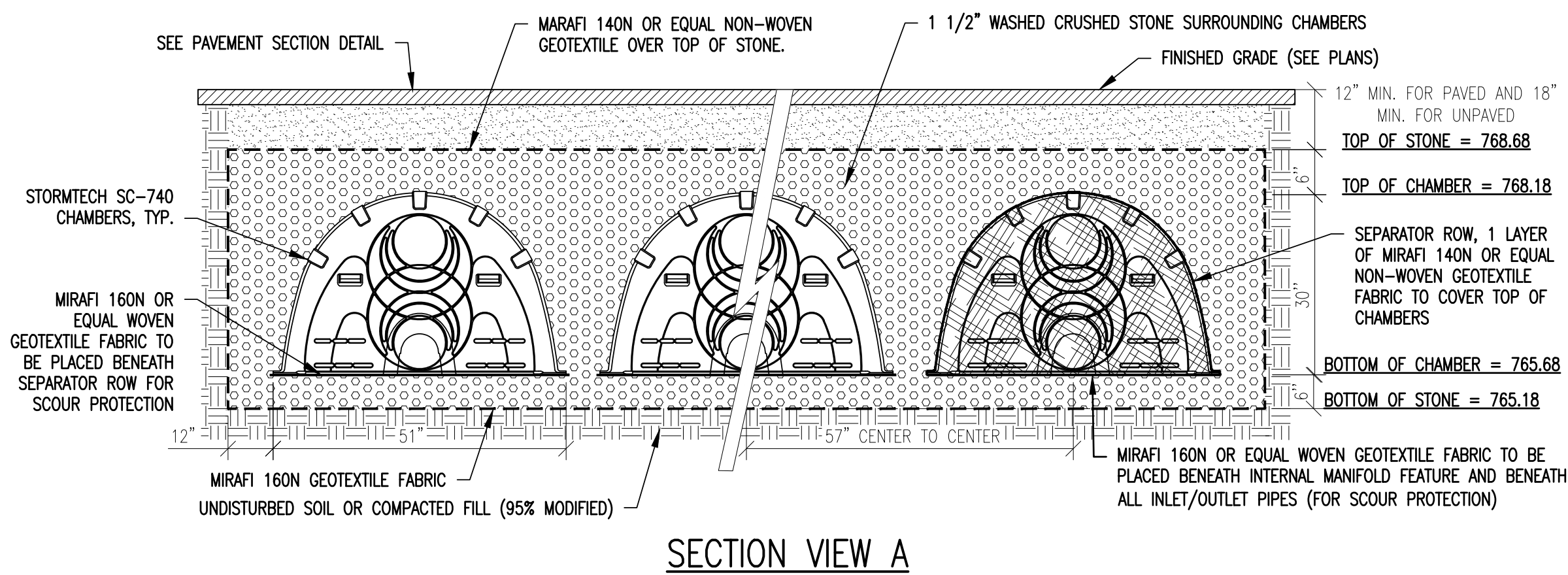
DRAINAGE MANHOLE DETAIL (FLAT TOP)



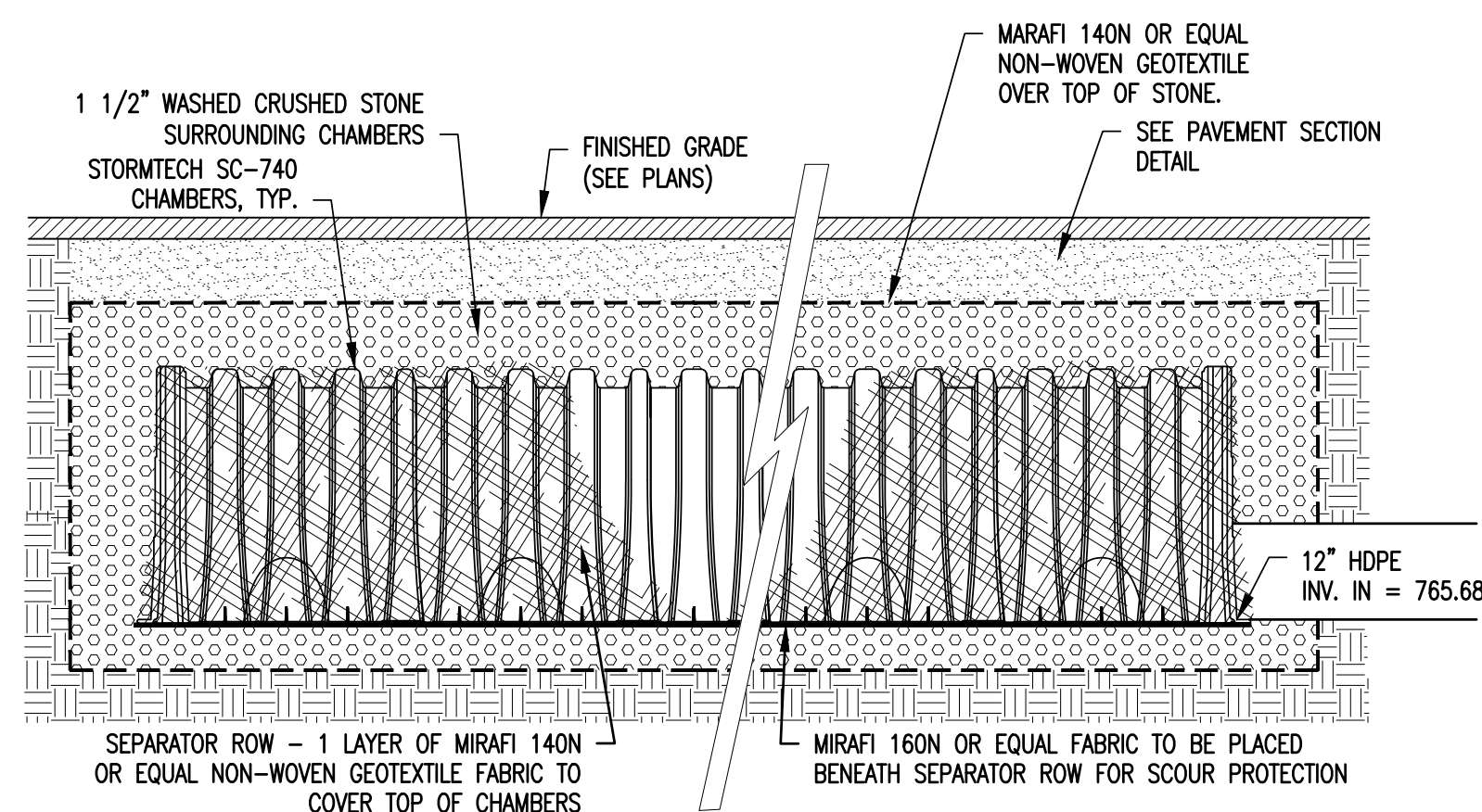
STORMWATER MH COVERS AND CB GRATES



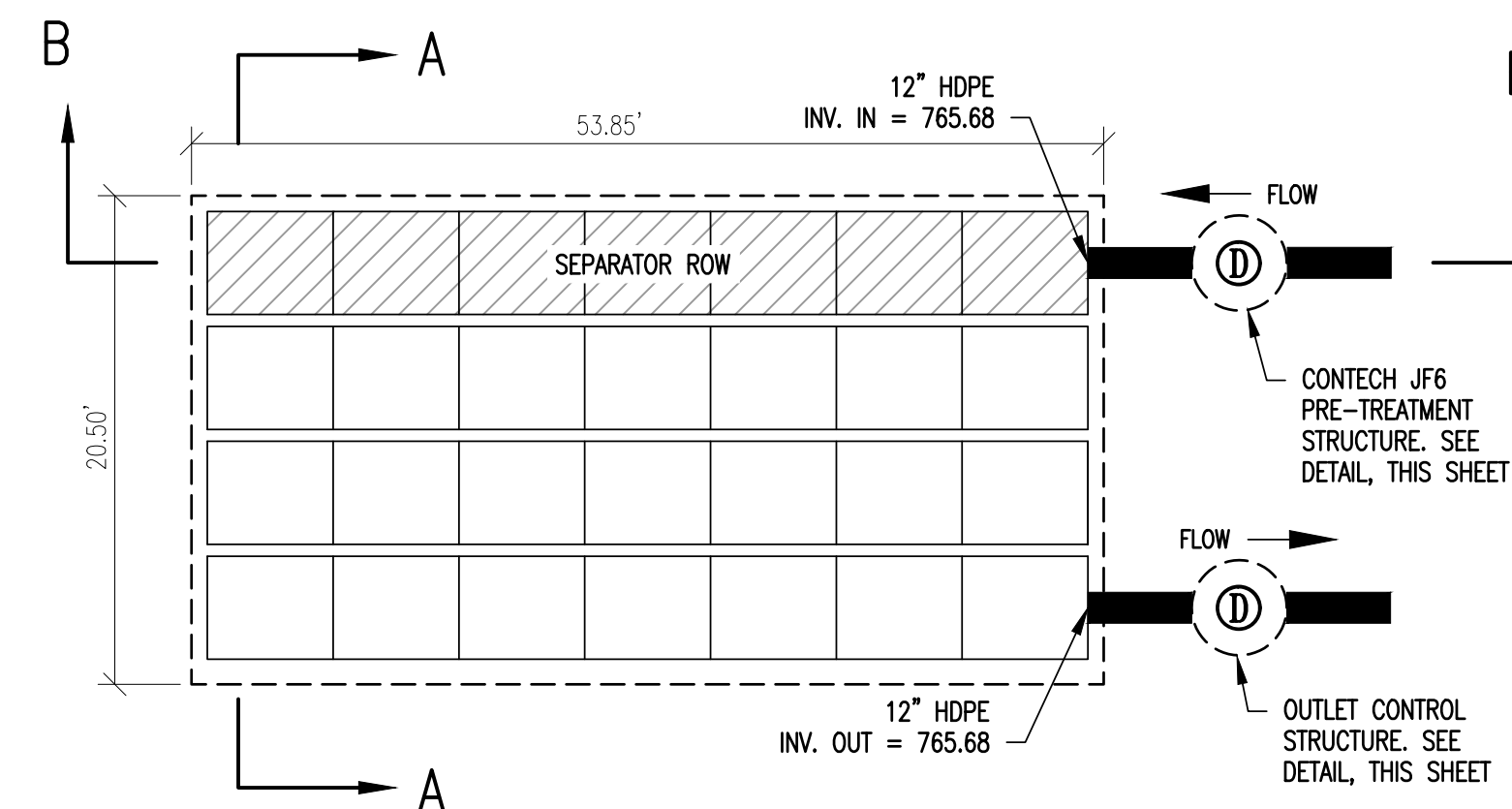
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SECTION VIEW A



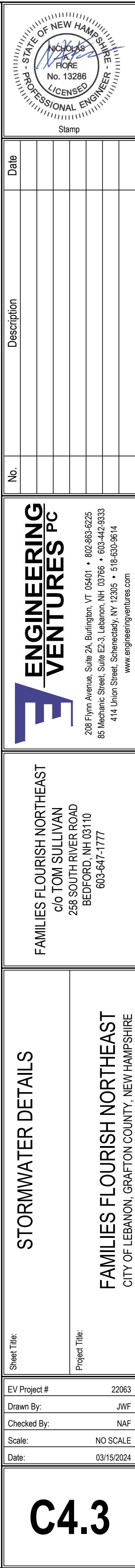
SECTION VIEW B

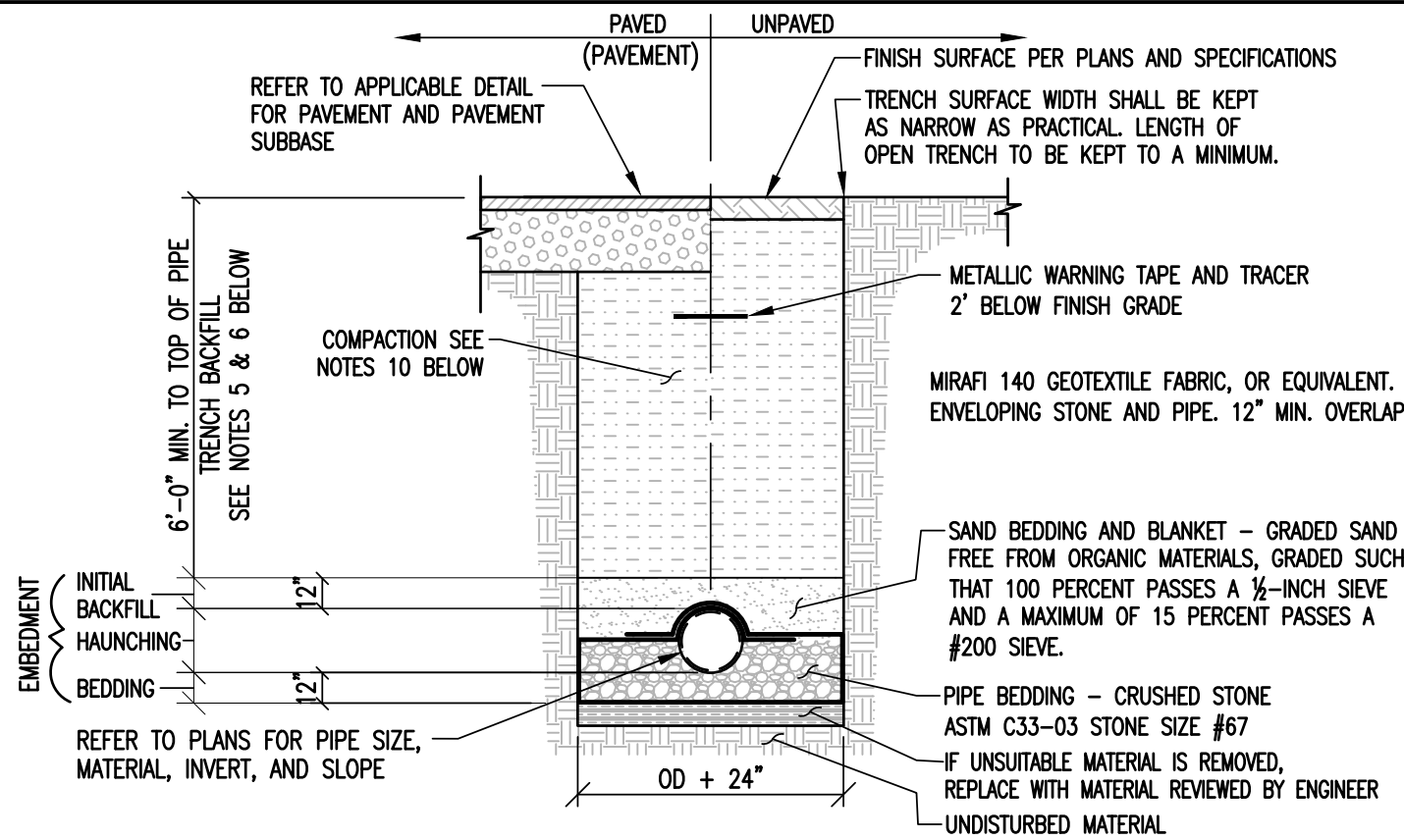


PLAN VIEW

STORMWATER CHAMBER SYSTEM

NOT TO SCALE 7



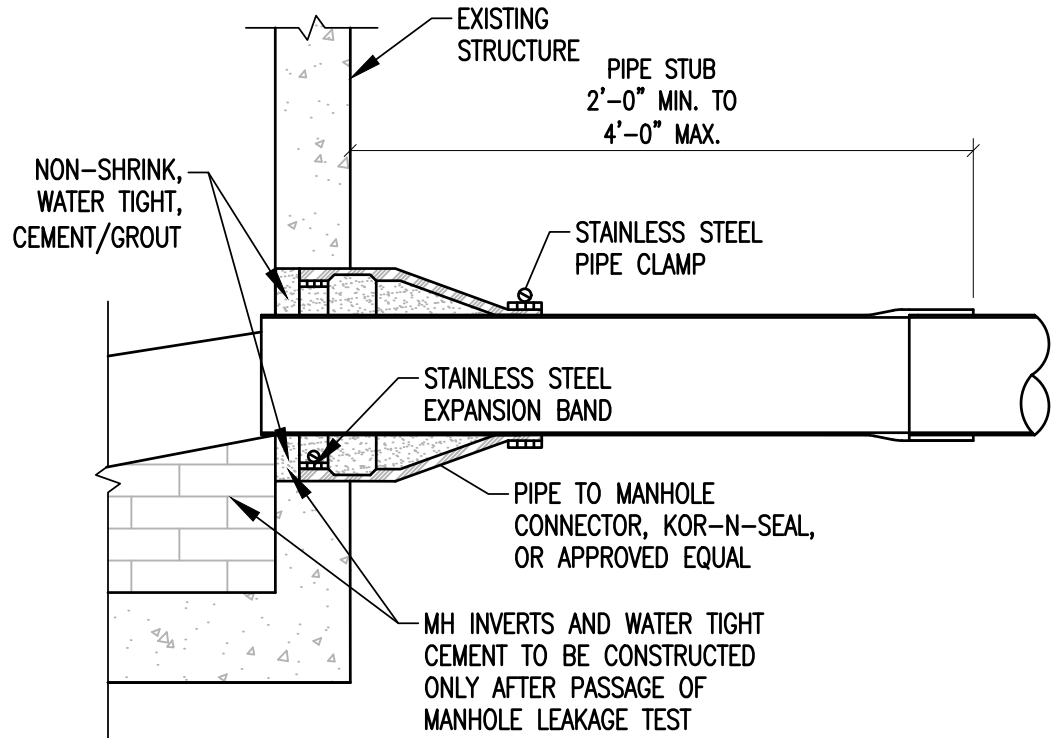


SANITARY FORCE MAIN TRENCH NOTES:

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 FORCE MAINS THE MINIMUM DEPTH TO THE TOP OF THE PIPE SHALL BE 6'-0".
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 BY NHDOT 203.2.7, ENV-WQ-704.11(h), AND THE EARTHWORK SPECIFICATIONS INCLUDED ON THESE PLANS.
6. WHEN APPLICABLE INSTALL PIPE WITH BELL ENDS DOWN SLOPE. PREVENT SEDIMENT FROM ENTERING NEW SEWER FORCE MAIN 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.

SEWER FORCE MAIN TRENCH

NOT TO SCALE 1

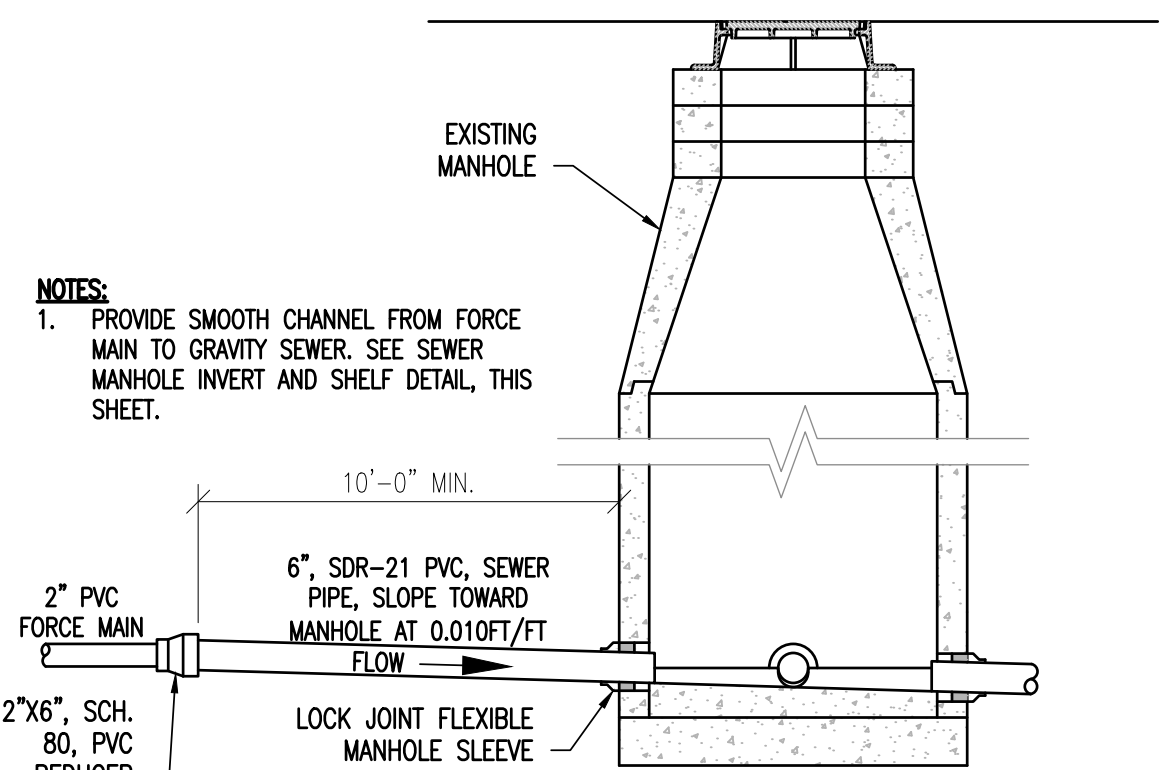


NOTES:

1. CORE HOLE SHALL BE SMOOTH, SYMMETRICAL, AND APPROPRIATELY SIZED FOR SEWER PIPE INSTALLATION.
2. CONTRACTOR SHALL RECONSTRUCT EXISTING INVERT AND SHELF IN MANHOLE TO PROVIDE POSITIVE FLOW TO INVERT OUT.

MANHOLE CONNECTION

NOT TO SCALE 2

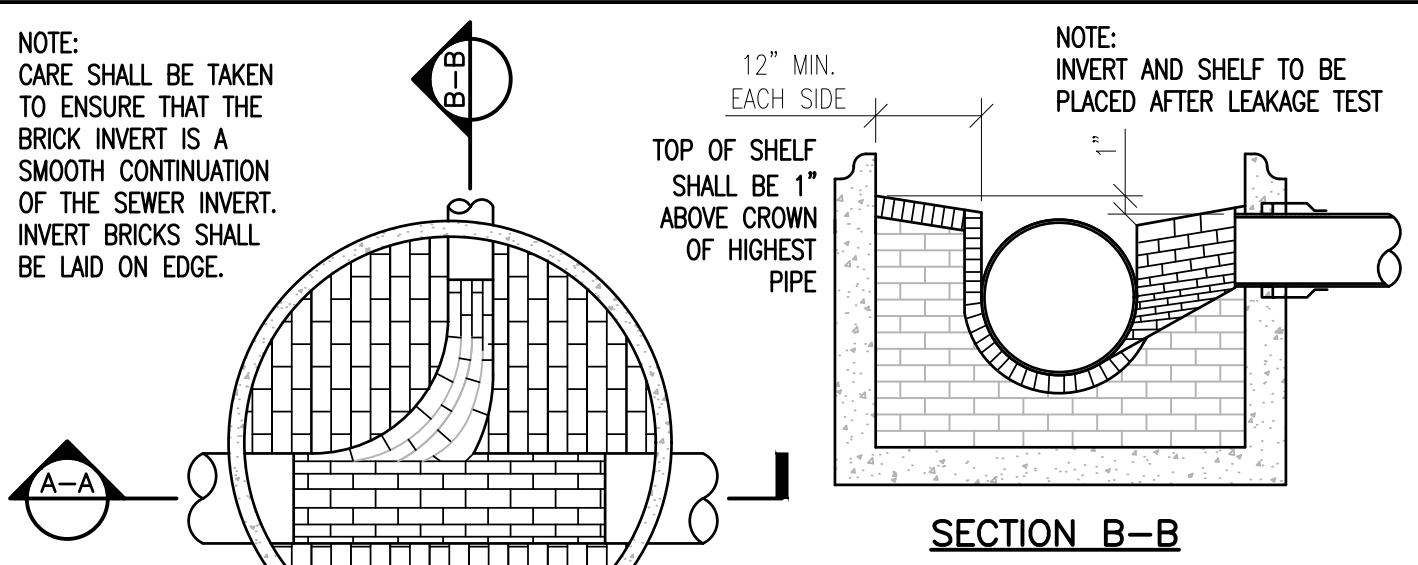


NOTES:

1. PROVIDE SMOOTH CHANNEL FROM FORCE MAIN TO GRAVITY SEWER. SEE SEWER MANHOLE INVERT AND SHELF DETAIL, THIS SHEET.

FORCEMAIN TERMINATION MANHOLE

NOT TO SCALE 3

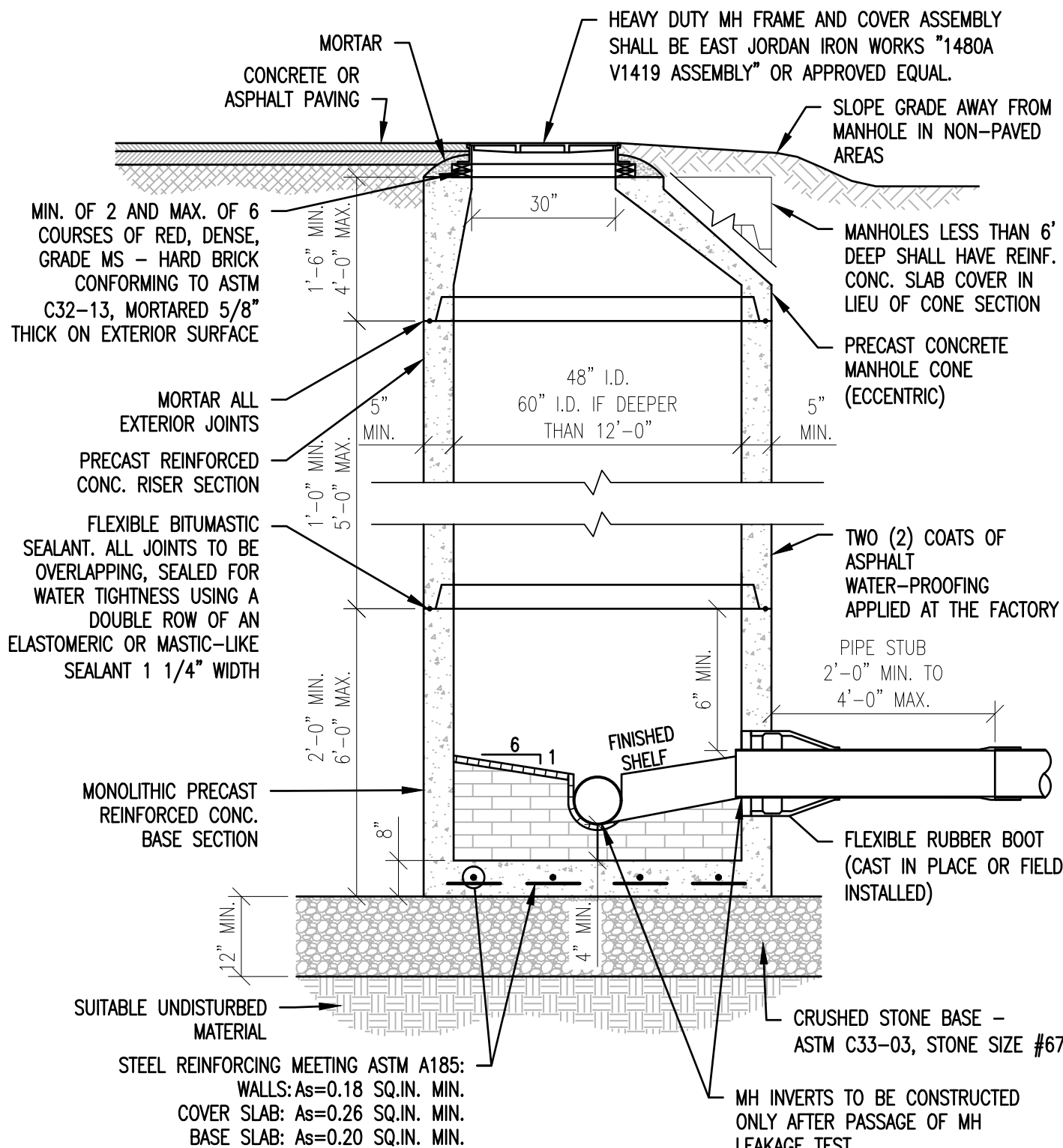


NOTES:

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

NOT TO SCALE 4

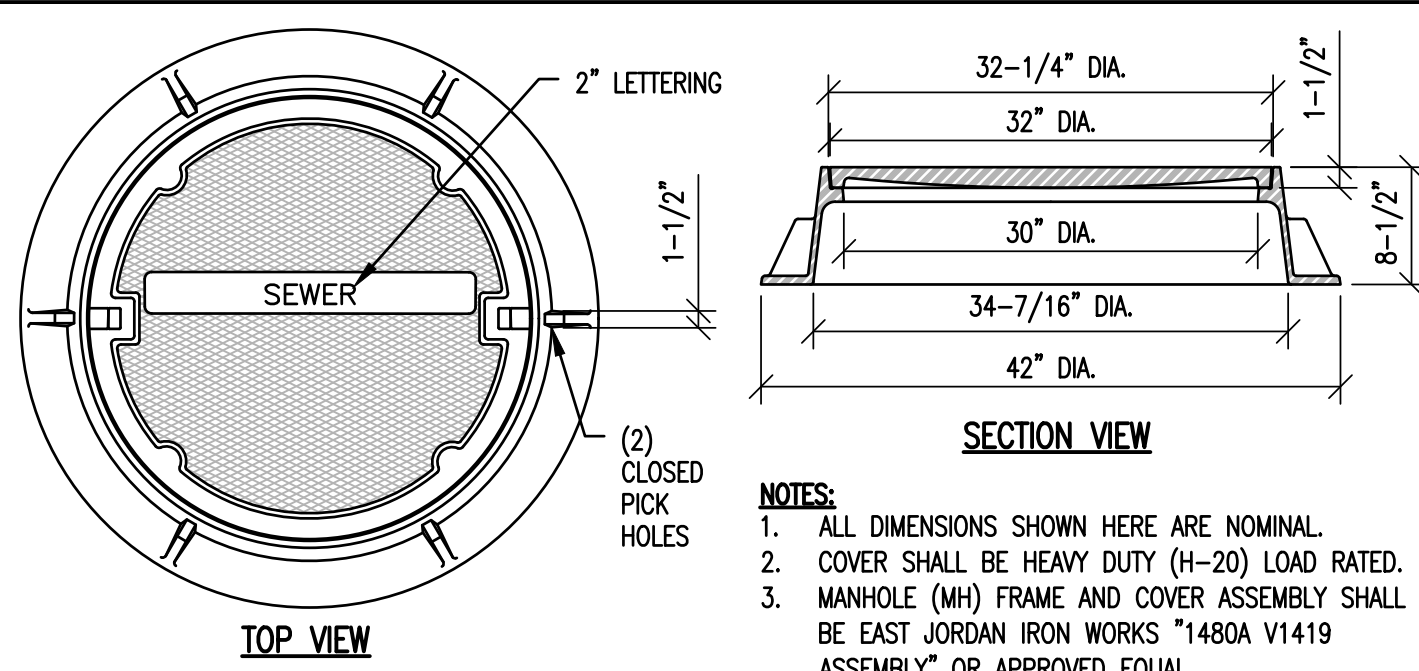


NOTES:

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 FC=4,000 PSI @ 28 DAYS MINIMUM
8. BASE SECTION SHALL BE A ONE POUR MONOLITHIC SECTION

SEWER MANHOLE

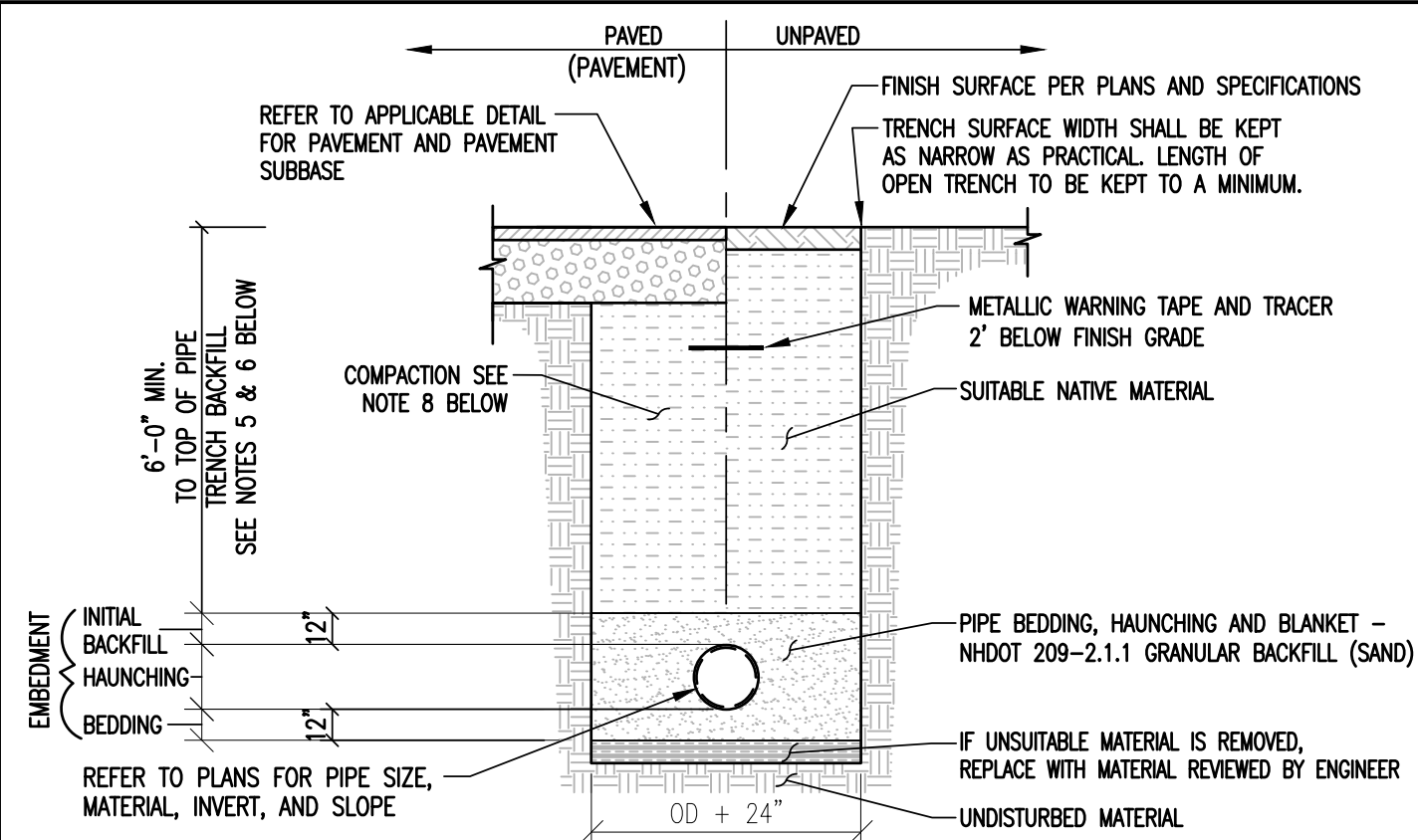
NOT TO SCALE 5



SEWER MANHOLE FRAME & COVER

NOT TO SCALE 6

Date	
Description	
No.	
ENGINEERING VENTURES PC 208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-6225 85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333 414 Union Street, Schenectady, NY 12305 • 518-630-9614 www.engineeringventures.com	
FAMILIES FLOURISH NORTHEAST C/O TOM SULLIVAN 258 SOUTH RIVER ROAD BEDFORD, NH 03110 603-647-1777	
Sheet Title	SANITARY SEWER DETAILS
Project Title	FAMILIES FLOURISH NORTHEAST CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE
EV Project #	22063
Drawn By:	JWF
Checked By:	NAF
Scale:	NO SCALE
Date:	03/15/2024
C4.4	



- 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 C600.
 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, 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.

WATER TRENCH

NOT TO SCALE

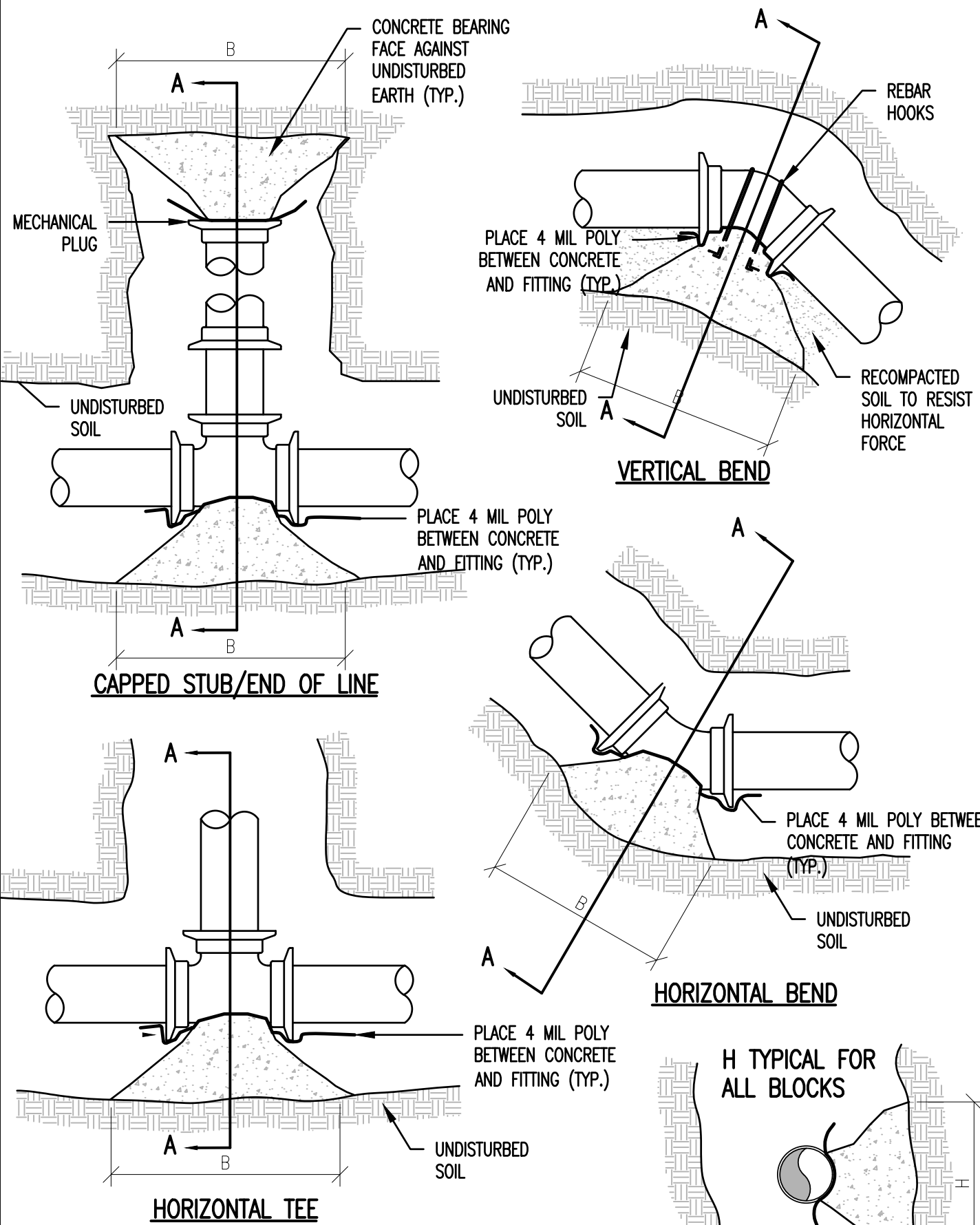


TABLE 2 - THRUST DEVELOPED PER 100psi PRESSURE (lbs force)					
PIPE DIAMETER IN.	VALVES AND DEAD ENDS, TEES	90° BENDS	45° BENDS	22 1/2° BENDS	11 1/4° BENDS
4	1810	2560	1390	635	320
6	3740	5290	2860	1370	690
8	6430	9100	4920	2320	1170
10	9680	13680	7410	3610	1820
12	13690	19350	10470	5080	2550
14	18380	25990	14100	6100	3080
16	23780	33630	18280	7960	4020

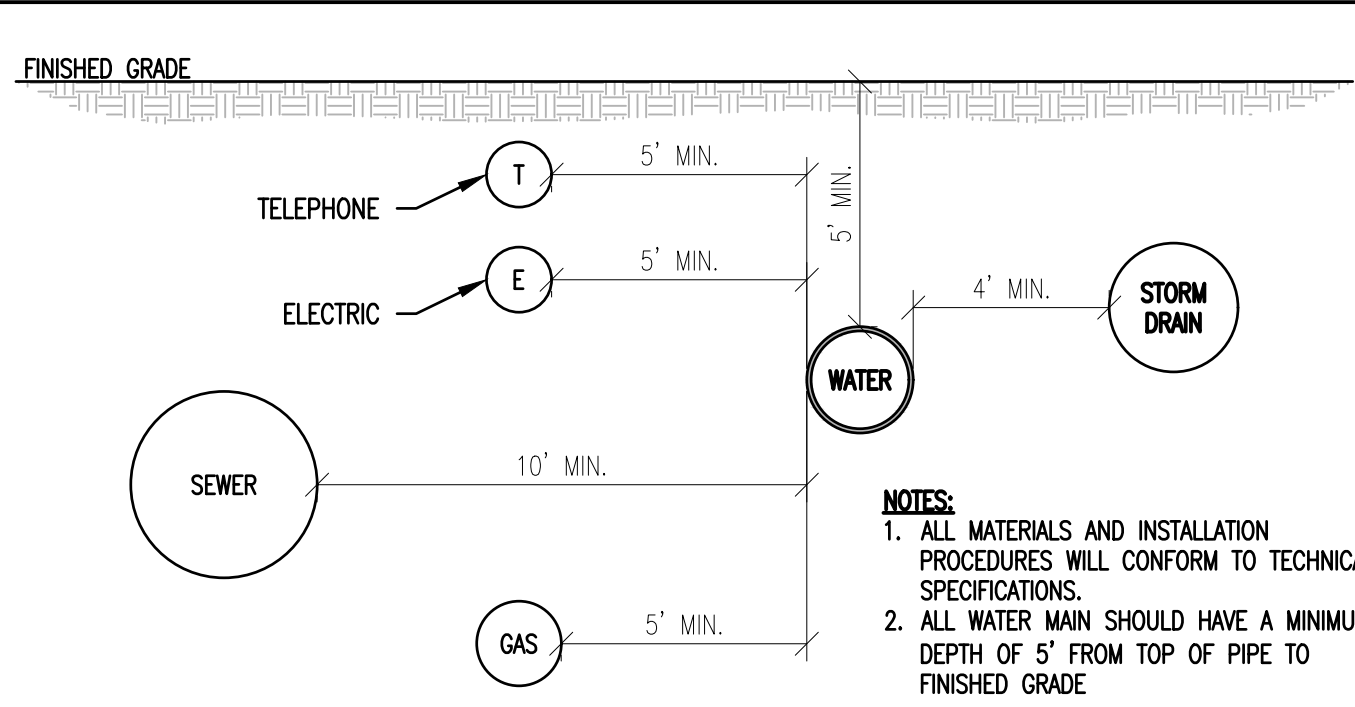
TABLE 1 - BEARING STRENGTH OF UNDISTURBED SOIL	
SOIL TYPE	BEARING STRENGTH
PEAT, ETC.	0 lb/ft ²
SOFT CLAY	500 lb/ft ²
SAND	1000 lb/ft ²
SAND AND GRAVEL	1500 lb/ft ²
SAND AND GRAVEL WITH CLAY	2000 lb/ft ²
SAND AND GRAVEL CEMENTED WITH CLAY	4000 lb/ft ²
HARD PAN	5000 lb/ft ²

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 BLOCK). USE THE TEST PRESSURE TO DETERMINE THE TOTAL THRUST.

$$AREA = \frac{THRUST DEVELOPED (lbs force)}{BEARING STRENGTH OF SOIL}$$

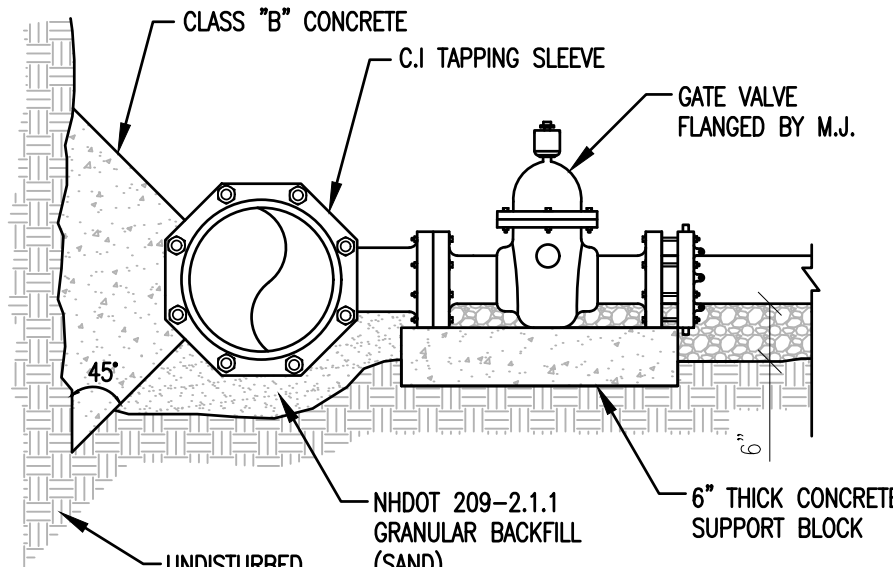
TYPICAL BEARING THRUST BLOCK

NOT TO SCALE



WATER MAIN UTILITY SEPARATIONS

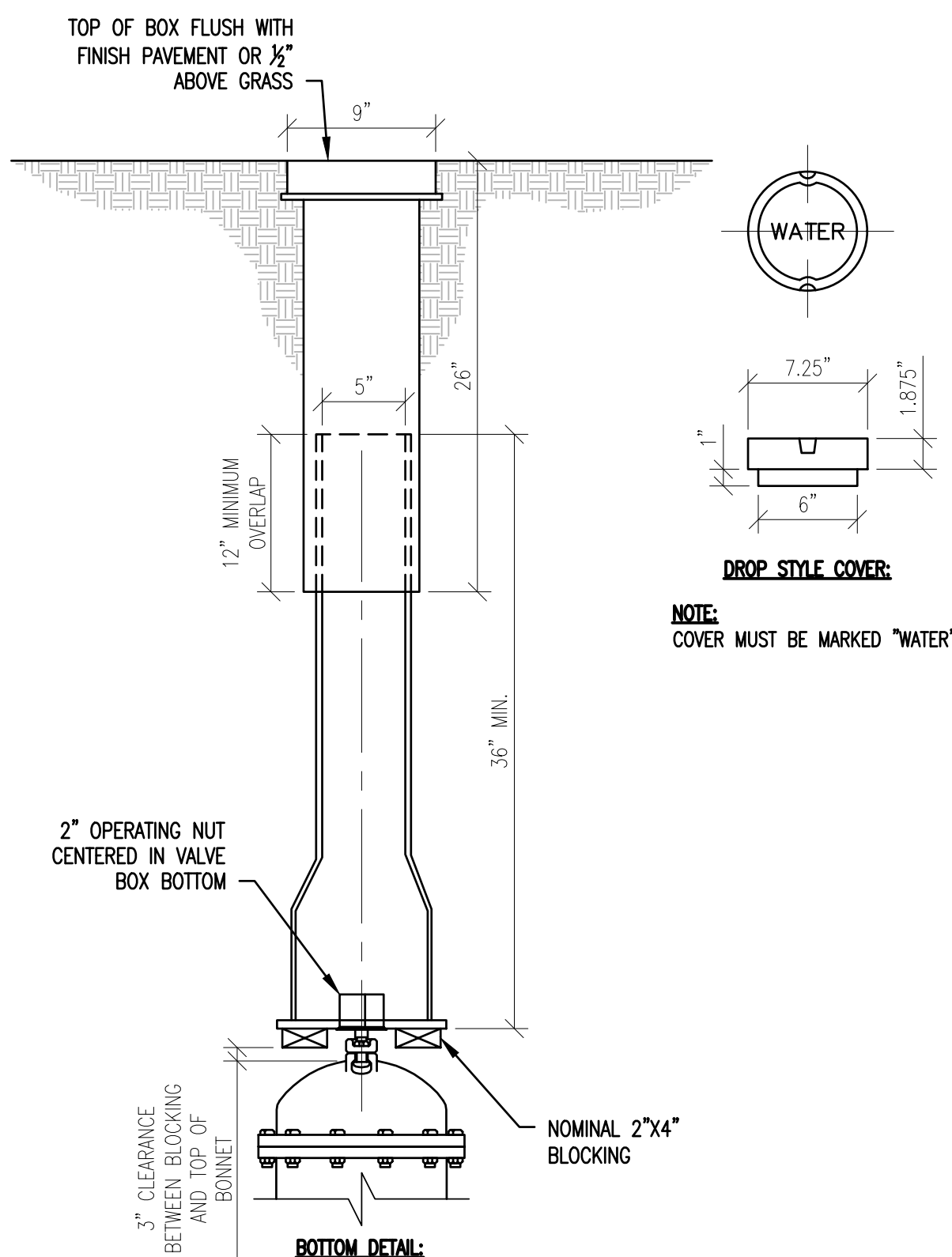
NOT TO SCALE



- 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

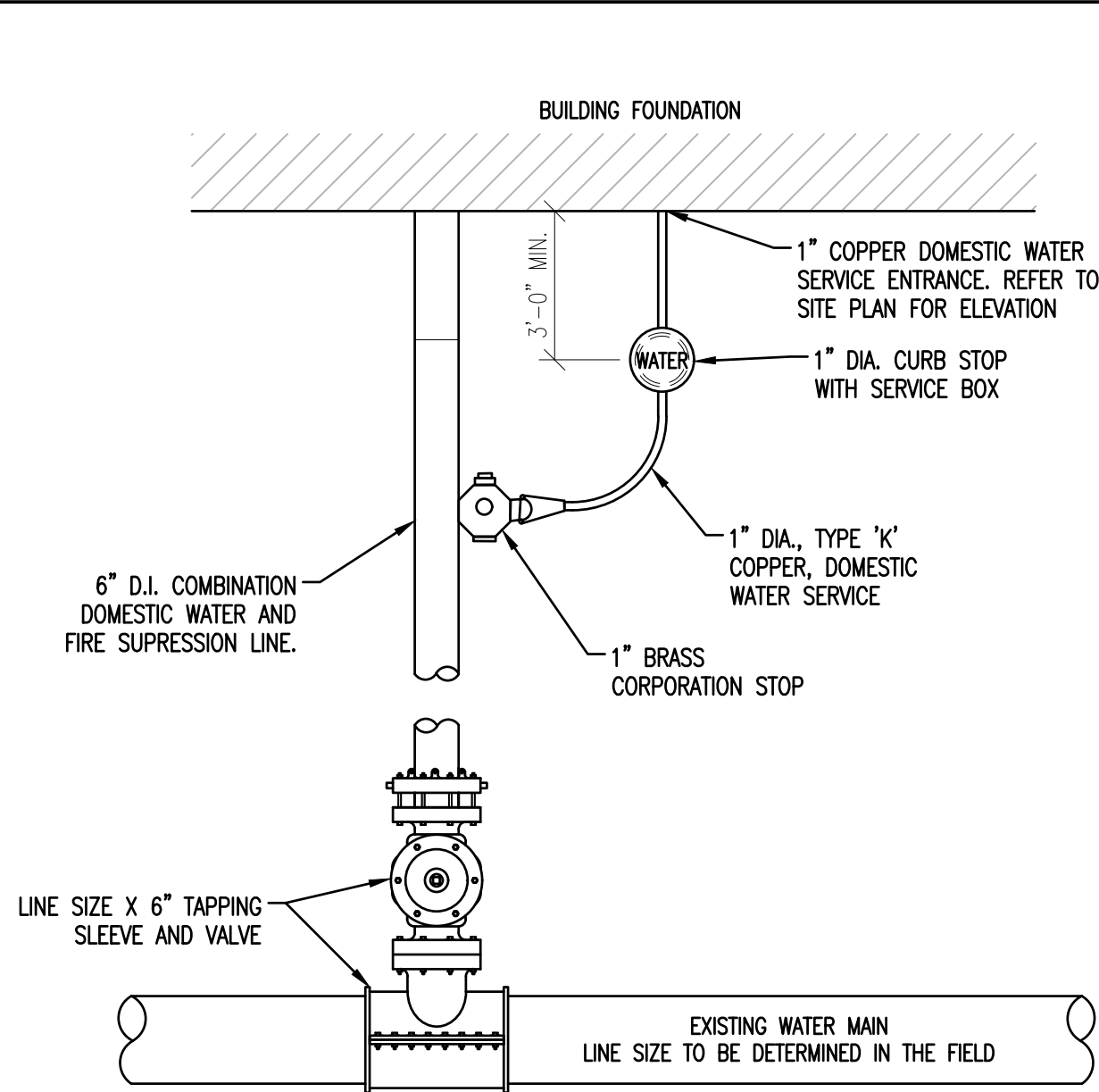
NOT TO SCALE



- 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

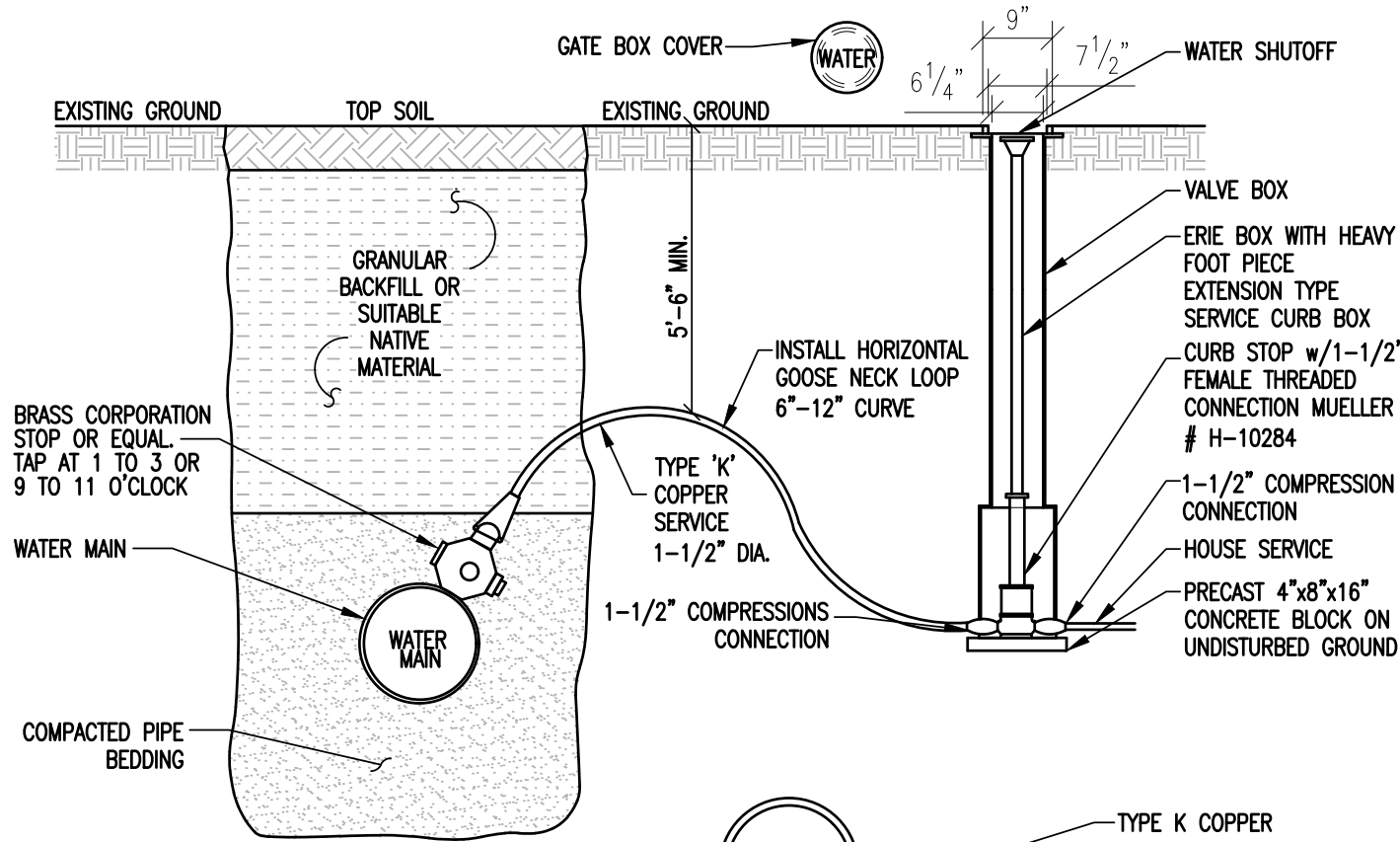
TYPICAL VALVE BOX

NOT TO SCALE



TYPICAL WATER SERVICE ENTRANCE

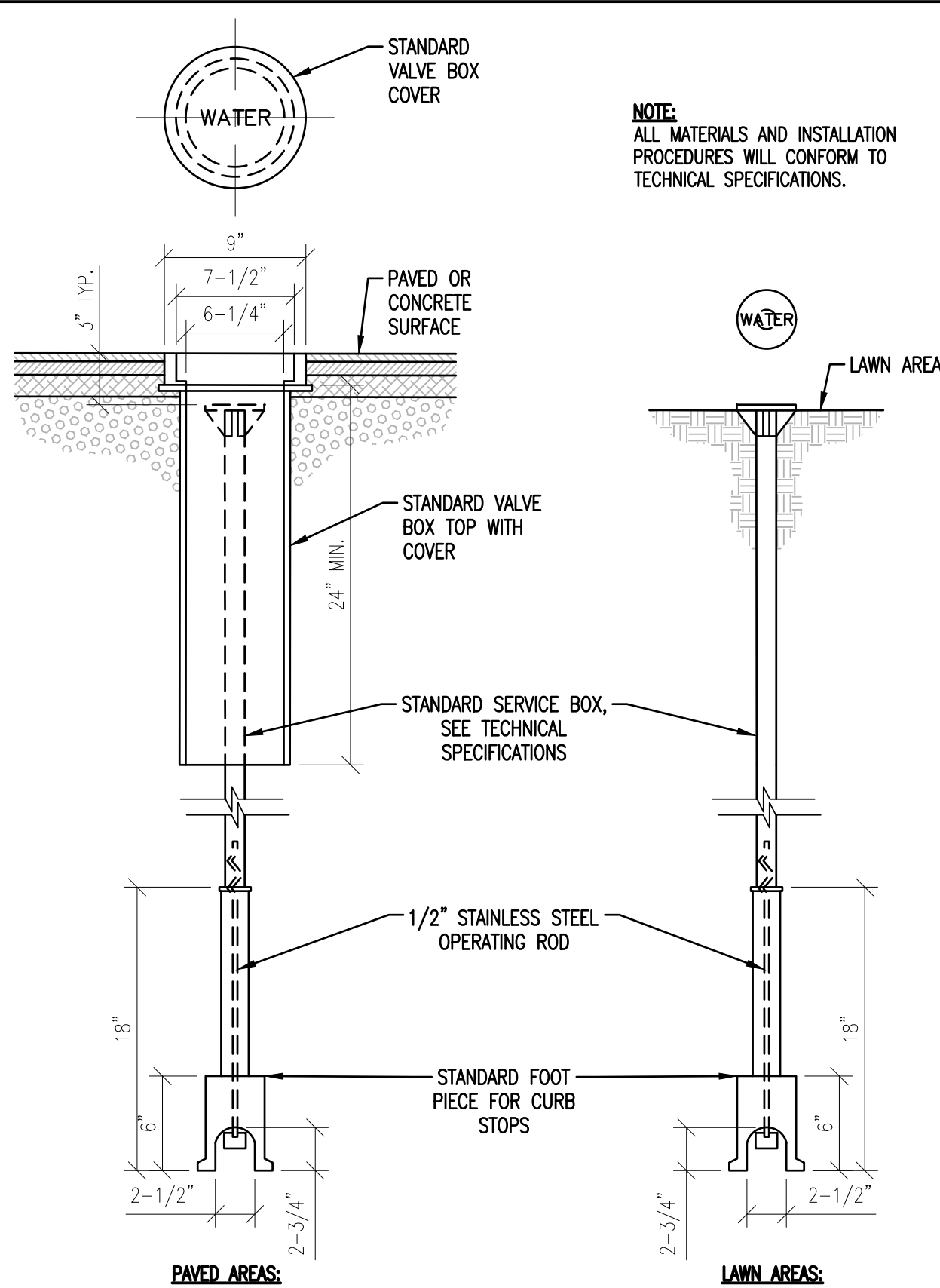
NOT TO SCALE



- NOTES:**
1. TEFLON THREADED SEALANT TAPE WILL BE USED ON ALL CORPORATION STOPS PRIOR TO INSTALLATION.
A. SPIRAL WRAP COMPLETELY COVERING THE THREAD AREA WITH TWO WRAPS.
B. PIPE DOPE OR OTHER LIQUID THREAD SEALANTS ARE NOT ACCEPTABLE.
 2. LEAVE UP TO THREE THREADS SHOWING OUTSIDE OF PIPE. A TORQUE OF 35 POUNDS IS RECOMMENDED.

COPPER SERVICE CONNECTION

NOT TO SCALE



TYPICAL SERVICE BOX

NOT TO SCALE

NOTE:
ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO TECHNICAL SPECIFICATIONS.

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NOTARIAL PUBLIC
No. 13286
LICENSED PROFESSIONAL ENGINEER
Stamp

Date

Description

No.

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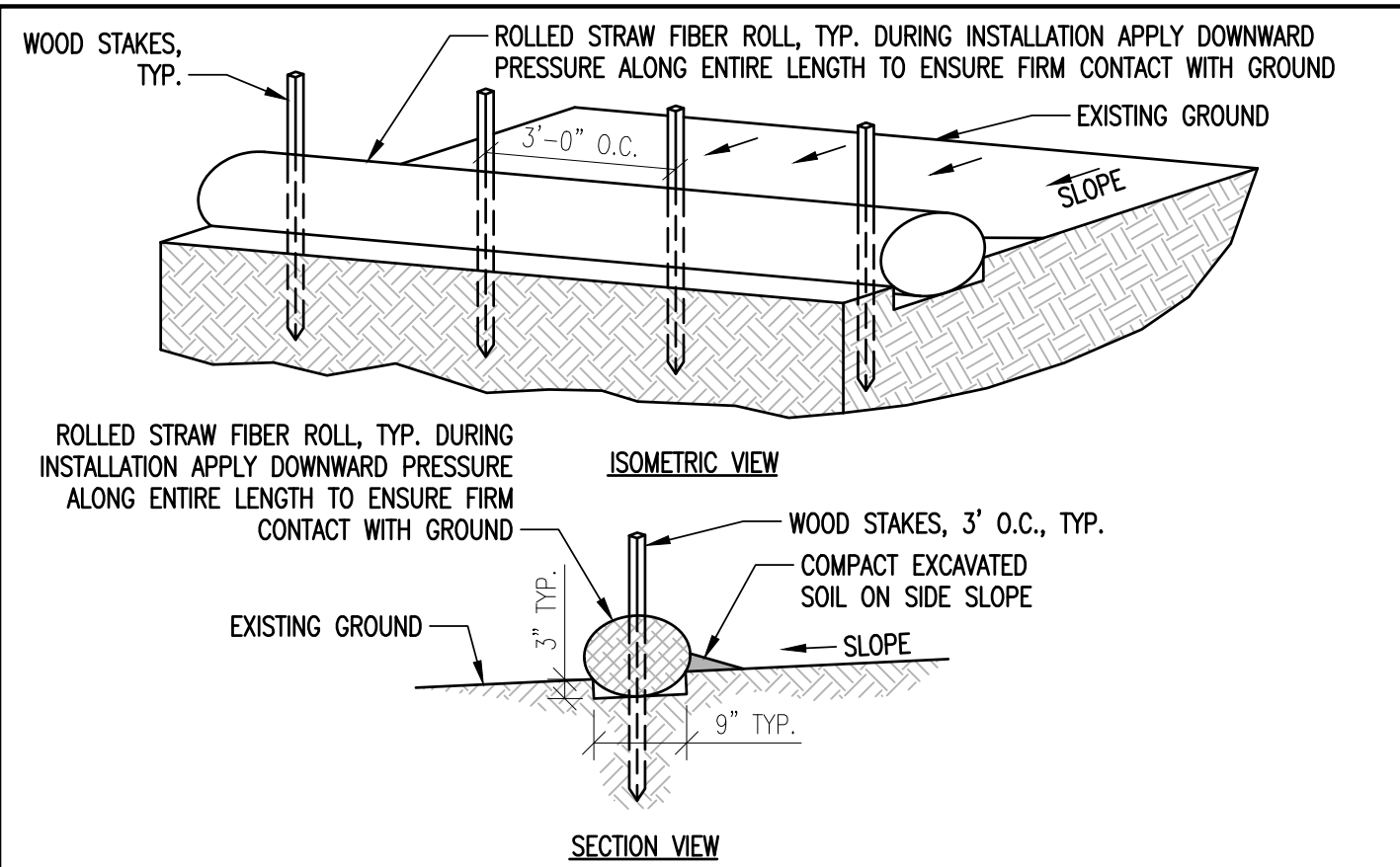
WATER DETAILS

FAMILIES FLOURISH NORTHEAST
CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

EV Project # 22063
Drawn By: JWF
Checked By: NAF
Scale: NO SCALE
Date: 03/15/2024

C4.5

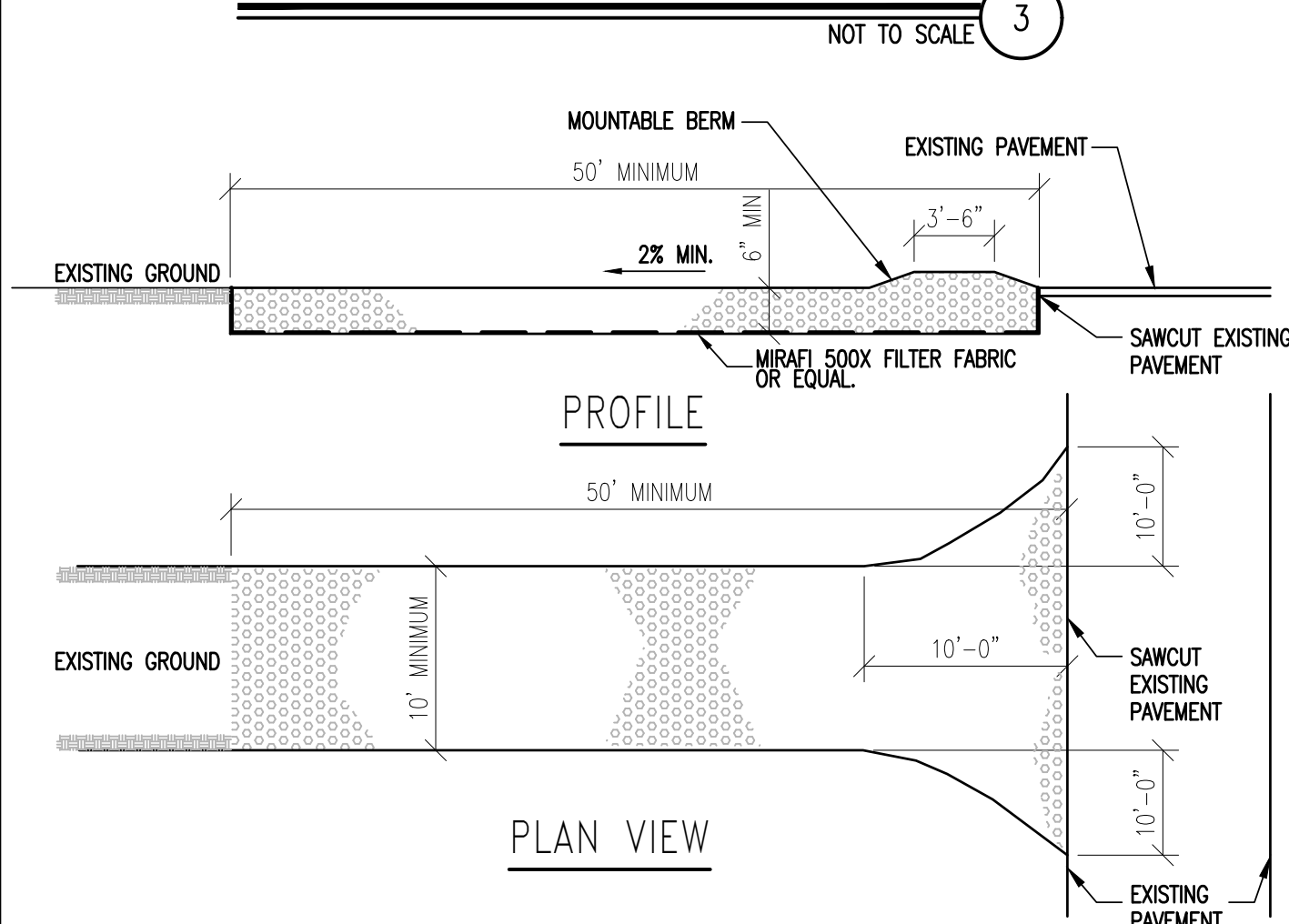
Page 339 of 450



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

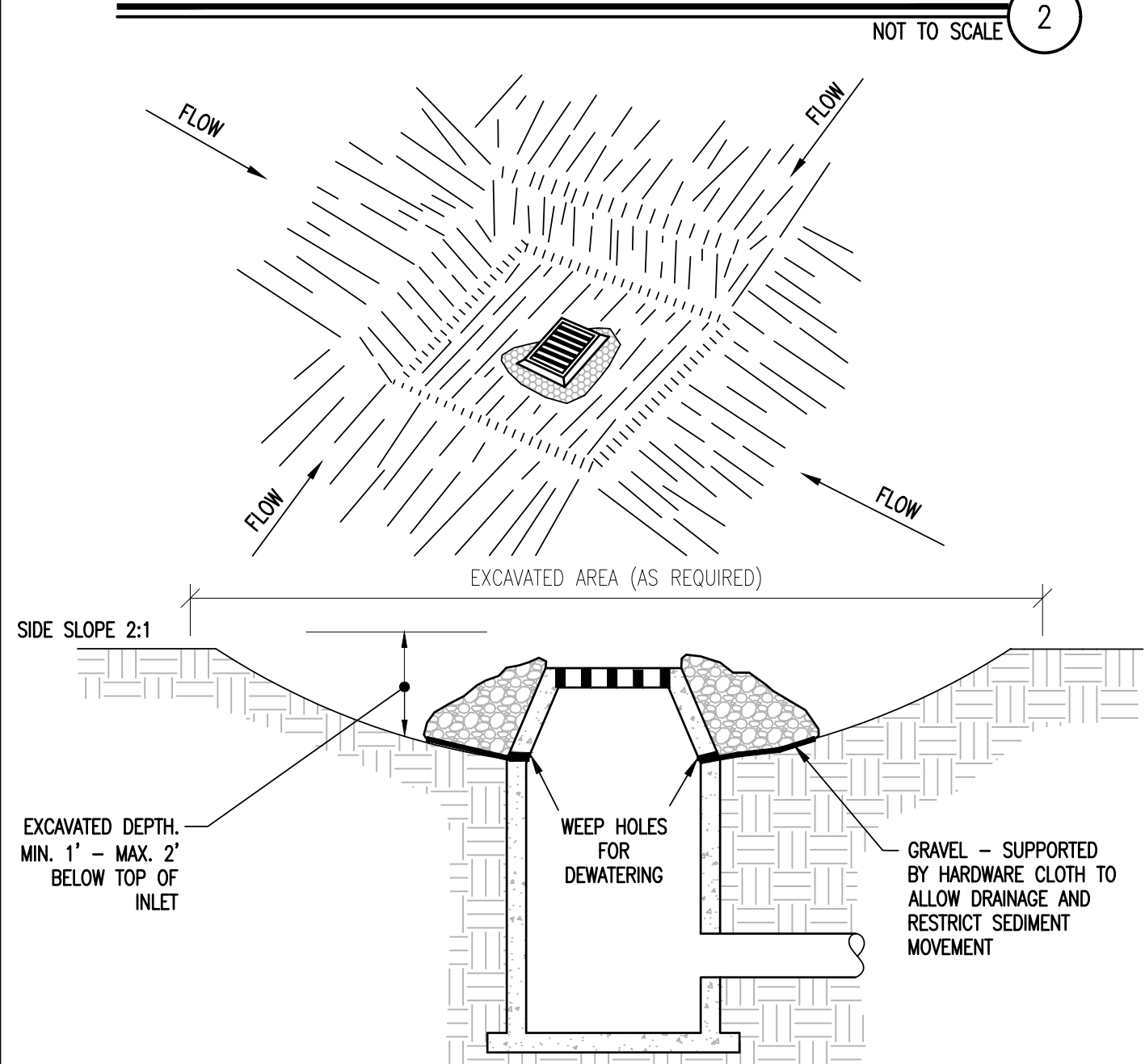
STRAW FIBER ROLL – SOIL



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 CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING TRUCKS, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

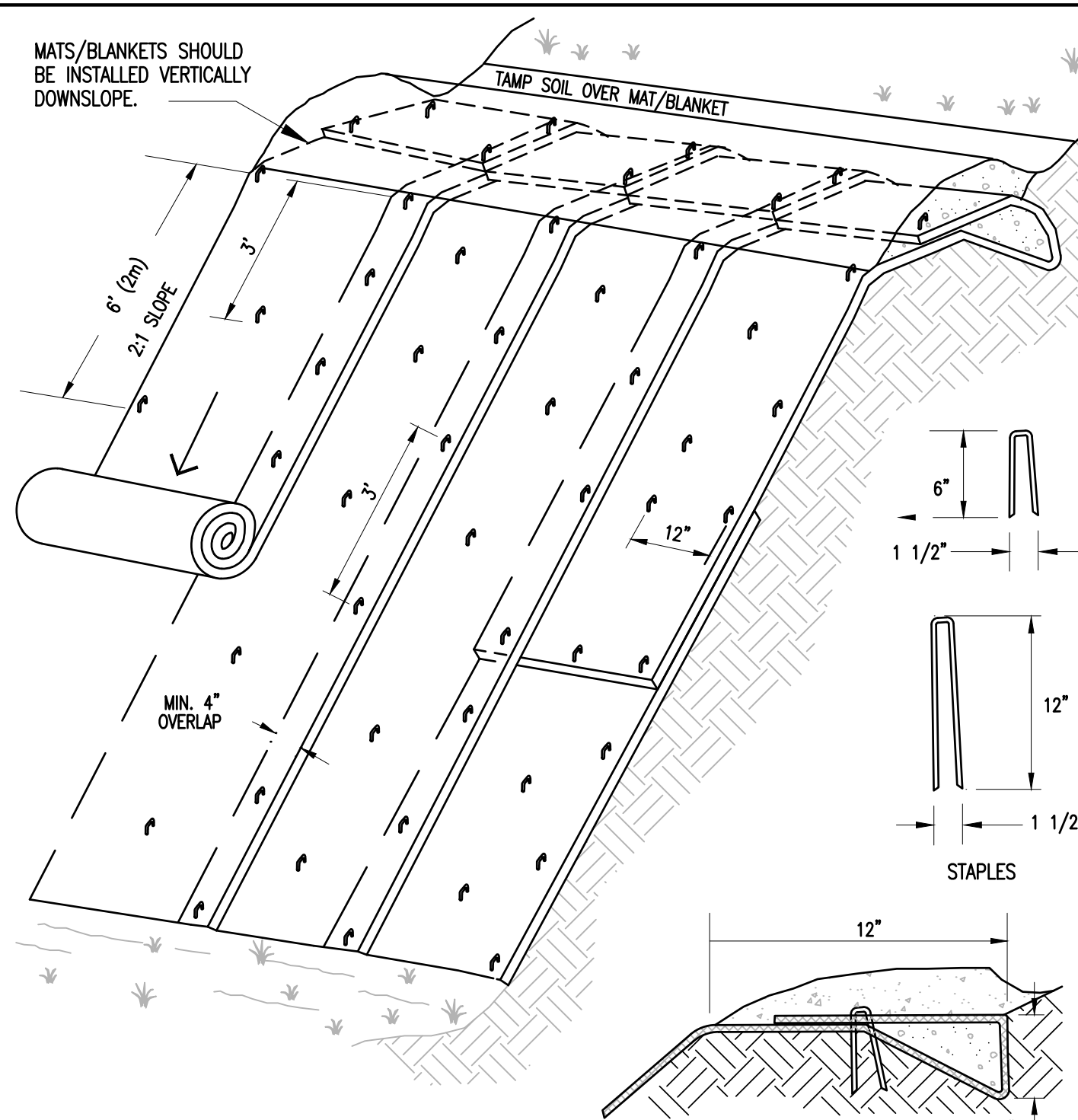
STABILIZED CONSTRUCTION ENTRANCE



NOTES:

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. WEED HOLES SHALL BE PROTECTED BY GRAVEL.
4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEED HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.

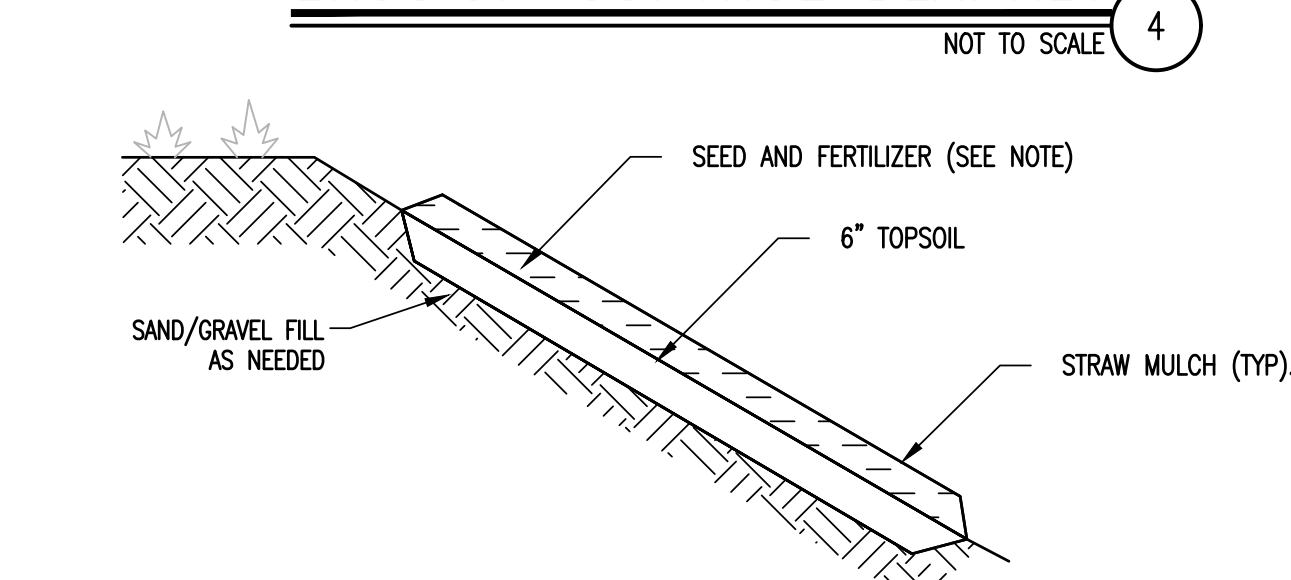
INLET PROTECTION



NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS, LOGS, 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, MULTI-FUNCTION OR MONOLAYER POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/4 INCHES MATERIAL NOT APPLIED 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-49 100% BIODEGRADABLE COIR MAT AVAILABLE THROUGH EAST COAST EROSION CONTROL OR EQUAL.

EROSION CONTROL BLANKET



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 80-1,000 LBS./1,000 SQ. YD. MULCH SHALL NOT BE PLACED ON SLOPES OF GREATER THAN 3:1. SEED IMPREGNATED EROSION CONTROL NETTING SHALL BE USED IN ITS PLACE.
3. SEEDING: SEEDING SHALL OCCUR AFTER APRIL 15 AND PRIOR TO SEPTEMBER 15TH IN ORDER TO ESTABLISH A STAND OF GRASS PRIOR TO GROUND FREEZING. SEED SHALL BE IN ACCORDANCE WITH SEED SPECIFICATION ON THIS SHEET.
4. COVER SEED TO 4 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



SEEDING SPECIFICATION:

URBAN MIX GRASS SEED-- FOR USE IN GRASSED LAWN AREAS AROUND BUILDING AND PARKING -- TEMPORARY AND PERMANENT APPLICATIONS		
% BY WEIGHT	LBS. LBS. SEED PER 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. LBS. SEED PER ACRE	TYPE OF SEED
50	15.0	SMOOTH BROMEGRASS
30	5.0	RYEGRASS
33	10.0	BIRDSFOOT TREFOIL
100	30.0 $\#$ LIVE SEED/ACRE	

FERTILIZER- 10 LBS. PER 1000S.F.
SPRING SEEDING
FALL SEEDING

LIME- 90 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



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 EVENT. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CESP 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 PATCHES OF SMALLER AREAS 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 NHDOT 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

3. 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(AASHTO M 144) OR SODIUM CHLORIDE(AASHTO 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 MHDES 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; AND
6. RETAIN 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 EARLY 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 AREAS SHALL BE SEEDING/LOADED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
12. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - 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 SEVEN DAYS OF ROUGH 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 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.

EROSION CONTROL CONSTRUCTION SEQUENCE:

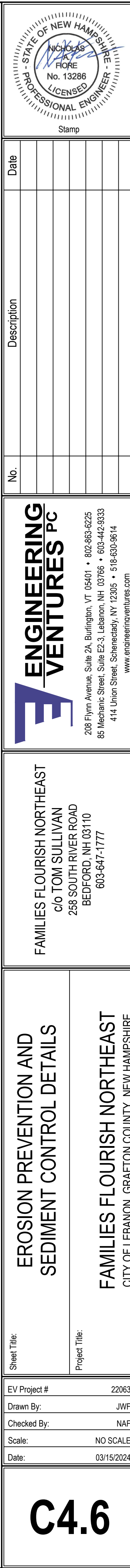
1. THE "ON-SITE EROSION CONTROL PLAN COORDINATOR" SHALL BE THE GENERAL CONTRACTOR, THIS INDIVIDUAL SHALL BE PRESENT ON SITE FROM DAY TO DAY, AND SHALL BE RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL MEASURES REQUIRED BY THE EROSION CONTROL PLAN, DETAILS AND NOTES, ARE PROPERLY INSTALLED AND MAINTAINED. 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. SMOOTH 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 WATTLIES 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 WATTLIES 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 REPAIRED WHEN VEGETATION IS ESTABLISHED.
5. PROTECTION INLET 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 CLEANED 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 SEEDED 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 LIRED SWALES SHALL BE TOP SOILED, SODDED AND FERTILIZED AREAS WHICH EXHIBIT SIGNS OF EROSION SHALL BE RE-SODDED IMMEDIATELY AND MAINTAINED UNTIL SOED HAS PERMANENT HOLD AND IS HEALTHY.
2. WHEN CONSTRUCTION IS COMPLETED IN AN AREA, IT SHALL BE IMMEDIATELY TOP SOILED, SEEDED, 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 DISTURBED SITE IS RECOVERED, THE CONTRACTOR SHALL TAKE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.
5. RE-SEEDING SHALL BE DONE UNTIL ALL AREAS ARE COMPLETELY COVERED WITH A MATURE STAND OF GRASS. AN AREA SHALL BE CONSIDERED COVERED WHEN THE ENTIRE SURFACE CONTAINS A VERDURIOUS STAND OF GRASS. AREAS THAT, IN THE OPINION OF THE ENGINEER, ARE PREDOMINATELY WEEDS SHALL BE PLOWED UP, FINE GRADED, FERTILIZED AND RE-SEEDED IN THE MANNER SPECIFIED PREVIOUSLY, EXERCISING CAUTION NOT TO CAUSE DAMAGE TO NEW OR EXISTING PLANT MATERIAL.



Families Flourish Northeast Plant List					
Qty	Symbol	Botanical Name	Common Name	Size-See Landscape Notes	
Trees					
4	CC	Cercis canadensis	Eastern Redbud	2.5"-3"	Cal. B&B
5	UA	Ulmus americana 'Prniceton'	Princeton Elm	2.5"-3"	Cal. B&B
Shrubs:					
17	LB	Juniperus virginiana 'Emerald Sentinel'	Emerald Sentinel cedar	8-10' Height	B&B
13	RP	Rhododendron PJM	PJM Rhododendron	#5 (no < than 24-36")	Cont.
Perennials/Grasses:					
49	CA	Syringa patula 'Miss Kim'	Miss Kim Lilac	#3 (no < than 18-24")	Cont.
42	HH	Heemerocalis 'Happy Returns'	Happy Returns Daylily	#3 (no < than 18-24")	Cont.

- Landscape Notes:
- 1). Please refer to site plan C-2.1/C-2.2 for all UT locations. Some UT locations have been "frozen" in this viewport for clarity.
 - 2). All new plant material shall be grown to nursery stock.
 - 3). Contractor shall guarantee all plant material for up to one growing season from date of install.
 - 4). Any substitutions made to this plan must be approved by the client and are subject to review by the city of Lebanon Planning Board.
 - 5). All Plantings shall be planted in loam containing 5% of organic material.
 - 6). All Landscape beds shall be cut in and receive 2" of aged dark mulch. Bark mulch shall be kept away from the trunk of the tree.
 - 7). Per site plan req. 6.2.B.3 "All new plant material shall be nursery grown stock."
 - 8). Per site plan req. 6.2.B.4 "At the time of planting, all deciduous trees shall be a minimum of 2.5-3" in caliper, measured 6" above finish grade level; all evergreen trees shall be a minimum of 6-7' in height. All shrubs shall be 24-30" in height or 18-24" in spread."
 - 9). Per site plan req. 6.2.H.1 "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 an orderly appearance."
 - 10). Per site plan req. 6.2.H.1 "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 an orderly appearance."

30% Shade Parking Lot Req.	
Total s.f. of parking=	6,065 s.f.
Total number of trees provided at perimeter for shade req.=	5
Total % of shade provided=	30%

15' Landscape Requirement	20,605
Total number of trees required=	34
Total number of trees provided=	9+ (Heavily vegetated exsiting border)
Total number of shrubs required=	170
Total number of shrubs provided=	17+ (Heavily vegetated exsiting border)

L-1

Scale: 1"=10'

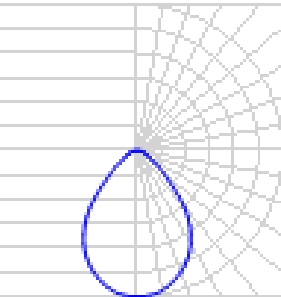
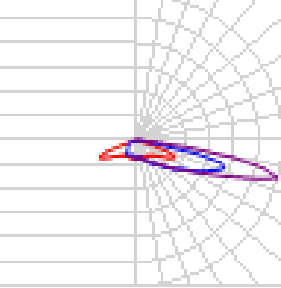
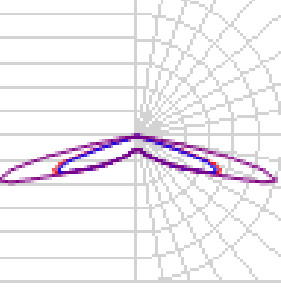
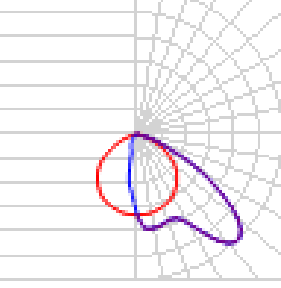
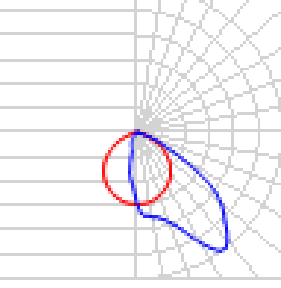
Date: March 10, 2025

Landscape Plan
created for:
Families Flourish Northeast
Located in:
Lebanon, NH

Mara landscape design, LLC

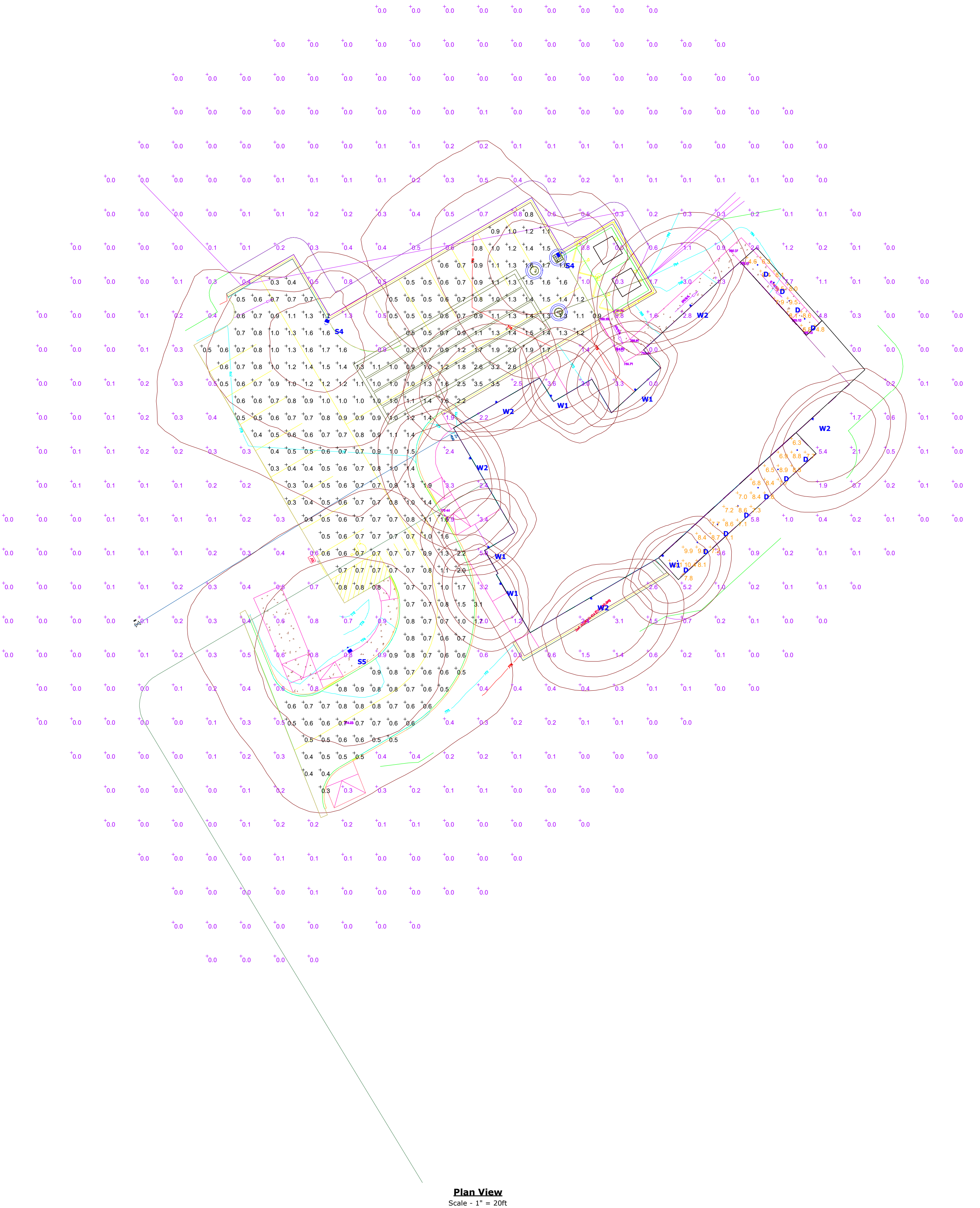
16 Myrtle Ave. Newburyport, MA 01950 105 BANK STREET Lebanon, NH 03766
maralandscape@gmail.com 978.968.0331



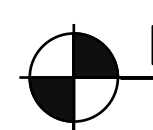
Schedule										
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Lumens per Lamp	LLF	Wattage	Polar Plot
	D	11	Juno	JPDZ4 DB ALO10 SWW5WD 90CRI JPDZRDNCMF MVOLT ZT10 WWH	Juno Podz 4in LED Roiund Downlight (1000lm, 3000K); mounted at 10ft	LED	1027	0.9	13.7	 Max: 616cd
	S4	2	Acuity Brands	DSX0 LED P1 30K 80CRI TFTM MVOLT SPA DDBXD with SSS 16 4C DM19AS DDBXD	D-Series Size 0 Area Fixture with Forward Throw Optics; mounted at 18ft (16ft pole on 2ft base)	LED	4265	0.9	33.21	 Max: 3843cd
	S5	1	Acuity Brands	DSX0 LED P1 30K 80CRI T5M MVOLT SPA DDBXD with SSS 16 4C DM19AS DDBXD	D-Series Size 0 Area Luminaire P1 Performance Package 3000K CCT 80 CRI Type 5 Medium	LED	4358	0.9	33.21	 Max: 2391cd
	W1	5	Acuity Brands	WDGE1 LED P1 30K 80CRI VF MVOLT SRM DDBXD	WDGE1 LED Wallpack; mounted at 10ft	LED	1161	0.9	10.0002	 Max: 808cd
	W2	5	Acuity Brands	WDGE1 LED P2 30K 80CRI VW MVOLT SRM DDBXD	WDGE1 LED Wallpack; mounted at 15ft	LED	1876	0.9	15.0178	 Max: 1414cd

Statistics

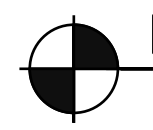
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Outside of Parking Lot	+	0.4 fc	7.7 fc	0.0 fc	N/A	N/A
Parking Lot	+	0.9 fc	3.5 fc	0.3 fc	11.7:1	3.0:1
Under Large Canopy	+	8.0 fc	10.4 fc	6.3 fc	1.7:1	1.3:1
Under Small Canopy	+	7.5 fc	9.5 fc	4.6 fc	2.1:1	1.6:1



Plan View
Scale = 1" = 20ft



EL. 140'-0" Ridge



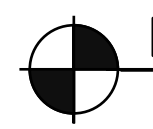
EL. 100'-0" First Floor



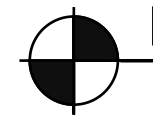
West Elevation



South Elevation



EL. 140'-0" Ridge



EL. 100'-0" First Floor



North Elevation



East Elevation

Proposed Building Elevations

Families Flourish Northeast

Lebanon NH March 10, 2025

1/8" = 1'-0"

BLACK RIVER DESIGN ARCHITECTS

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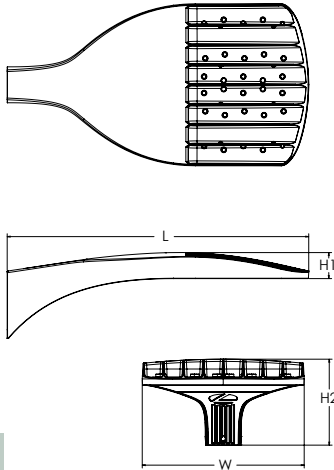
D-Series Size 0 LED Area Luminaire



d^{series}

Specifications

EPA:	0.44 ft ² (0.04 m ²)
Length:	26.18" (66.5 cm)
Width:	14.06" (35.7 cm)
Height H1:	2.26" (5.7 cm)
Height H2:	7.46" (18.9 cm)
Weight:	23 lbs (10.4 kg)



Design Select options indicated by this color background.

Catalog
Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications, with typical energy savings of 70% and expected service life of over 100,000 hours.



Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

Ordering Information

EXAMPLE: DSX0 LED P6 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED						
Series	LEDs	Color temperature ²	Color Rendering Index ²	Distribution	Voltage	Mounting
DSX0 LED	Forward optics P1 P5 P2 P6 P3 P7 P4 Rotated optics P10 ¹ P12 ¹ P11 ¹ P13 ¹	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K (this section 80CRI only, extended lead times apply) 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3M Type III medium T3LG Type III low glare ³ T4M Type IV medium T4LG Type IV low glare ³ TFTM Forward throw medium T5M Type V medium T5LG Type V low glare T5W Type V wide BLC3 Type III backlight control ³ BLC4 Type IV backlight control ³ LCCO Left corner cutoff ³ RCCO Right corner cutoff ³	MVOLT (120V-277V) ⁴ HVOLT (347V-480V) ^{5,6} XVOLT (277V-480V) ^{7,8} 120 ^{16, 24} 208 ^{16, 24} 240 ^{16, 24} 277 ^{16, 24} 347 ^{16, 24} 480 ^{16, 24}	Shipped included SPA Square pole mounting (#8 drilling, 3.5" min. SQ pole) RPA Round pole mounting (#8 drilling, 3" min. RND pole) SPA5 Square pole mounting (#5 drilling, 3" min. SQ pole) ⁹ RPA5 Round pole mounting (#5 drilling, 3" min. RND pole) ⁹ SPA8N Square narrow pole mounting (#8 drilling, 3" min. SQ pole) WBA Wall bracket ¹⁰ MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)
Control options				Other options		Finish (required)
Shipped installed NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc. ^{11, 12, 18, 19} PIR High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc. ^{13, 18, 19} PER NEMA twist-lock receptacle only (controls ordered separate) ¹⁴ PERS Five-pin receptacle only (controls ordered separate) ^{14, 19}				Shipped installed HS Houseside shield (black finish standard) ²⁰ L90 Left rotated optics ¹ R90 Right rotated optics ¹ CCE Coastal Construction ²¹ HA 50°C ambient operation ²² BAA Buy America(n) Act and/or Build America Buy America Qualified SF Single fuse (120, 277, 347V) ²⁴ DF Double fuse (208, 240, 480V) ²⁴ Shipped separately EGSR External Glare Shield (reversible, field install required, matches housing finish) BSDB Bird Spikes (field install required)		DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white
PER7 Seven-pin receptacle only (controls ordered separate) ^{14, 19} FAO Field adjustable output ^{15, 19} BL30 Bi-level switched dimming, 30% ^{16, 19} BL50 Bi-level switched dimming, 50% ^{16, 19} DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ¹⁷						



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DSX0-LED
Rev. 01/28/25
Page 1 of 9

Ordering Information

Accessories

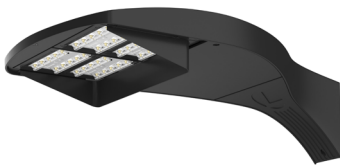
Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) ²³
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) ²³
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) ²³
DSHORT SBK	Shorting cap ²³
DSX0HS P#	House-side shield (enter package number P1-7, P10-13 in place of #)
DSXRPA (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXRPA5 (FINISH)	Round pole adapter #5 drilling (specify finish)
DSXSPA5 (FINISH)	Square pole adapter #5 drilling (specify finish)
DSX0EGSR (FINISH)	External glare shield (specify finish)
DSX0BDB (FINISH)	Bird spike deterrent bracket (specify finish)

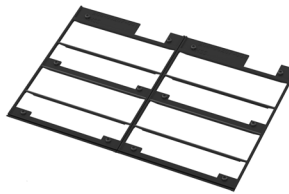
NOTES

- Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
- 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
- T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- HVOLT not available with package P1, P2 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
- XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
- XVOLT not available in packages P1, P2 or P10. XVOLT not available with fusing (SF or DF).
- SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
- WBA cannot be combined with Type 5 distributions plus photocell (PER).
- NLTAIR2 and PIRHN must be ordered together. For more information on nLight Air 2.
- NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50 and DMG. NLTAIR2 PIRHN not available with P1, P2 and P10 using HVOLT. NLTAIR2 PIRHN not available with P1, P2 and P10 using XVOLT. NLTAIR2 PIRHN not available with P1 using MVOLT.
- PIR not available with NLTAIR2, PER, PER5, PER7, FAO BL30, BL50 and DMG. PIR not available with P1, P2 and P10 using HVOLT. PIR not available with P1, P2 and P10 using XVOLT. PIR not available with P1 using MVOLT.
- PER/PER5/PER7 not available with NLTAIR2, PIR, BL30, BL50. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
- FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, or DMG.
- BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO and DMG. BL30 or BL50 must specify 120 or 277V.
- DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50 and FAO.
- Reference Motion Sensor Default Settings table on page 4 to see functionality.
- Reference Controls Options table on page 4.
- Option HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
- CCE option not available with option BS and EGSR. Contact Technical Support for availability.
- Option HA not available with performance packages P6, P7, P12 and P13.
- Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
- Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).

Shield Accessories



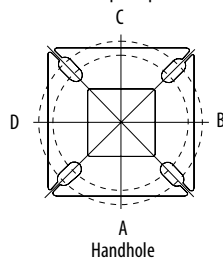
External Glare Shield (EGSR)



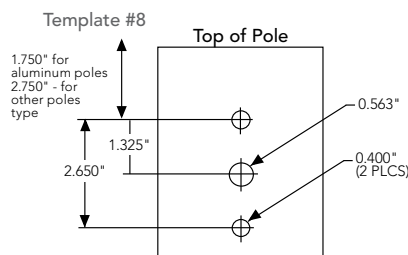
House Side Shield (HS)

Drilling

HANDHOLE ORIENTATION (from top of pole)



Handhole



Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
Minimum Acceptable Outside Pole Dimension							
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPA5	#5	3"	3"	3"	3"		3"
RPA5	#5	3"	3"	3"	3"	3"	3"
SPA8N	#8	3"	3"	3"	3"		3"

DSX0 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX0 with SPA	0.44	0.88	0.96	1.18	---	1.16
DSX0 with SPA5, SPA8N	0.51	1.02	1.06	1.26	---	1.29
DSX0 with RPA, RPA5	0.51	1.02	1.06	1.26	1.24	1.29
DSX0 with MA	0.64	1.28	1.24	1.67	1.70	1.93



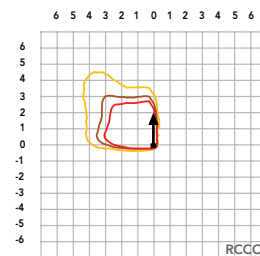
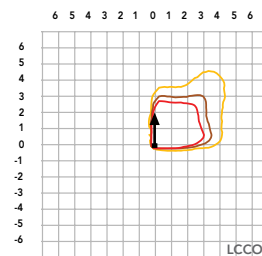
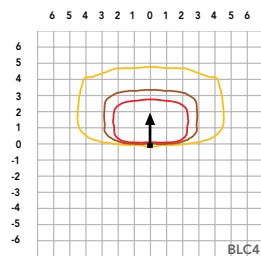
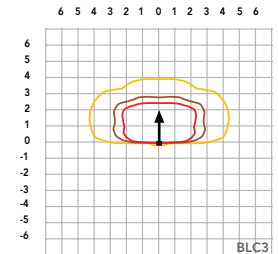
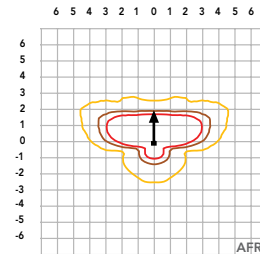
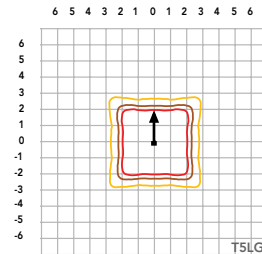
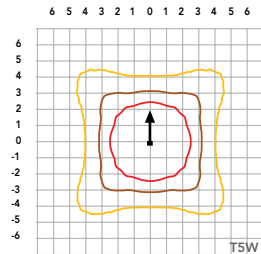
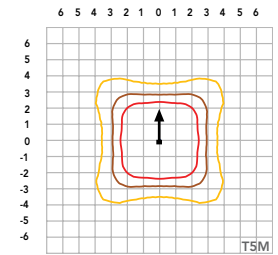
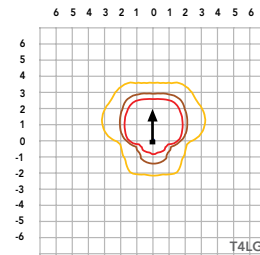
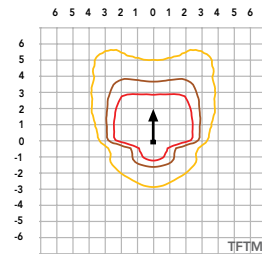
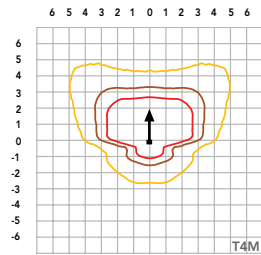
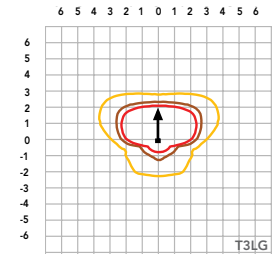
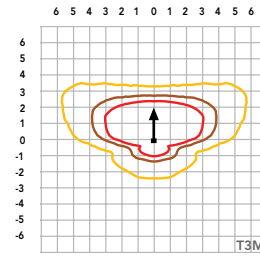
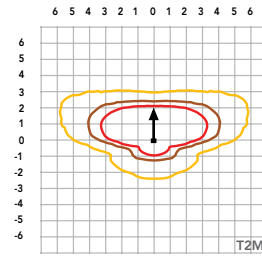
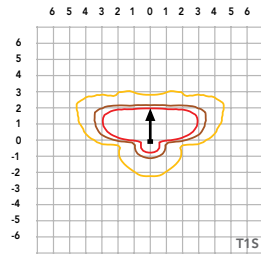
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DSX0-LED
Rev. 01/28/25
Page 2 of 9

Isofootcandle plots for the DSX0 LED P7 40K 70CRI. Distances are in units of mounting height (20').

LEGEND



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.94
50,000	0.89
100,000	0.80

FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use published values for each package based on input watts and lumens by optic type.

Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Photocell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PERS or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor override when wirelessly connected to the nLight Eclipse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V

Electrical Load

					Current (A)					
	Performance Package	LED Count	Drive Current (mA)	Wattage	120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	20	530	34	0.28	0.16	0.14	0.12	0.10	0.07
	P2	20	700	45	0.38	0.22	0.19	0.16	0.13	0.09
	P3	20	1050	69	0.57	0.33	0.29	0.25	0.20	0.14
	P4	20	1400	94	0.78	0.45	0.39	0.34	0.27	0.19
	P5	40	700	89	0.75	0.43	0.38	0.33	0.26	0.19
	P6	40	1050	136	1.14	0.66	0.57	0.49	0.39	0.29
	P7	40	1300	170	1.42	0.82	0.71	0.62	0.49	0.36
Rotated Optics (Requires L90 or R90)	P10	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P11	30	700	67	0.57	0.33	0.28	0.25	0.20	0.14
	P12	30	1050	103	0.86	0.50	0.43	0.37	0.30	0.22
	P13	30	1300	129	1.07	0.62	0.54	0.46	0.37	0.27

LED Color Temperature / Color Rendering Multipliers

	70 CRI		80CRI		90CRI	
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)

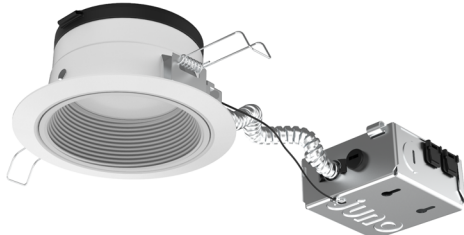
Note: Some LED types are available as per special request. Contact Technical Support for more information.

Juno®

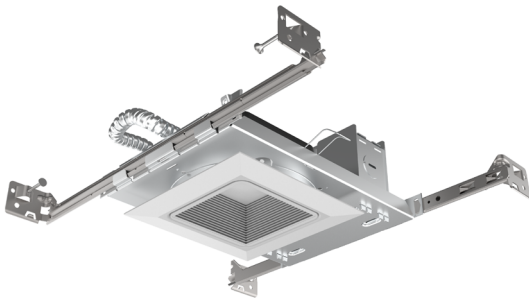
Podz™ LED Downlight Series

4" Canless Round and Square LED Downlight
New Construction or Remodel

JPDZ4 Series



Complete remodel fixture shown



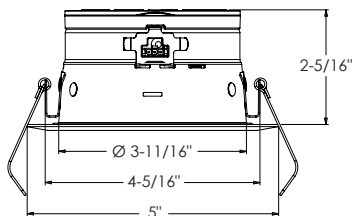
Complete new construction fixture shown



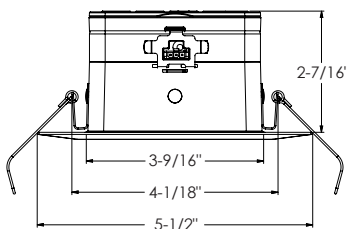
WarmDim®

Dimensions

4" Round



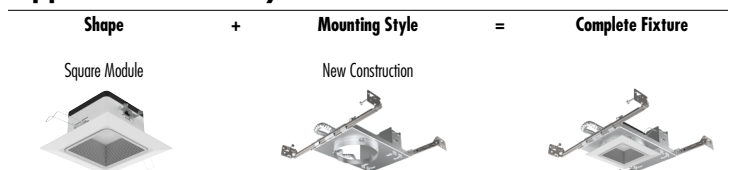
4" Square



Application Flexibility - Remodel



Application Flexibility - New Construction



Project:

Fixture Type:

Location:

Contact/Phone:

Product Features

Canless low profile 4" LED recessed downlight with deeply regressed light source and technology rich features offers performance up to 1200L and installation solutions for both new construction and remodel applications.

Patented color temperature and intensity configurable lighting fixture (US Patent No. 11,259,377 B2)

- Integrated light engine offers switchable LED color temperature and adjustable lumen output directly on module for easy switching
- Advanced color mixing technology provides consistent color rendering on the black body curve at all LED color temperatures while maintaining a high 90+ CRI
- Warmdim™ setting provides performance similar to incandescent light sources and warms the LED color temperature over the dimming range from 2850K to 1900K

Installation flexibility and ease

- Low profile integrated LED downlight less than 3" in height fits virtually anywhere
- Installs directly into the plenum - eliminates need for typical recessed housing
- Installs into new construction or remodel applications

Applications

- Ideal for a breadth of residential and commercial applications
- Shallow plenum installations
- IC rated - for direct contact with insulation
- Wet location listed - for use in shower and outdoor covered ceiling applications

Performance

Switchable Delivered Lumens	700L, 1000L, 1200L
Switchable LED Color Temperature	27K, 30K, 35K, 40K, 50K
WarmDim Included as standard	2850K - 1900K over dimming range
CRI	90+
Voltage	Dedicated 120V or MVOLT (120-277V)
Dimming	Forward/Reverse Phase or 0-10V Dimming range from 100% to 5%

Specifications

	Round	Square
Aperture:	3.75" (9.53)	3.56" (9.04)
Ceiling Opening:	4.5" (11.43)	4.75" (12.07)
Overlap Trim:	5.05" (12.82)	5.5" (13.97)
Height:	2.32" (5.89)	2.44" (6.2)

All dimensions are in Inches (centimeters unless otherwise indicated).



Podz™ LED Downlight Series

4" Canless Round and Square LED Downlight
New Construction or Remodel

ORDERING INFORMATION

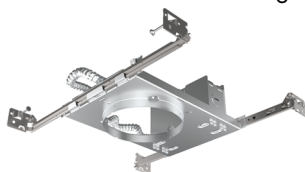
Two ways to
order Podz:

1. Ship separate trim module and mounting

Trim Module



Mounting Option



or



Example: JPDZ4 DC AL010 SWSWD 90CRI JPDZRMJBX 120 FRPC WWH, Ships as example: Trim module: JPDZ4 DC AL010 SWSWD 90CRI 120 FRPC WWH M6, Mounting: JPDZRMJBX 120 FRPC M6

Series	Trim Type	Lumens	Color Temperature	CRI
JPDZ4 Juno Podz 4" LED Downlights	DB Round Downlight Baffle DC Round Downlight Cone SQDB Square Downlight Baffle SQDC Square Downlight Reflector	AL010 Adjustable Lumen Output 700L, 1000L, and 1200L	SWSWD Switchable White 2700K, 3000K, 3500K, 4000K, 5000K, + WarmDim (2850K-1900K)	90CRI 90+CRI

Mounting (Required for complete fixture)	Voltage/Driver	Finish
REMODEL: JPDZRMJBX 4 Juno Podz universal remodel junction box (for 4", 5", 6")	120 FRPC 120V Forward/Reverse Phase Cut, 5% dim MVOLT ZT10 Multi-Volt (120-277), 0-10V, 10% dim	WWH ¹ White, White Trim Ring BWH ^{2,5} Black, White Trim Ring CWH ³ Clear, White Trim Ring HZWH ³ Haze, White Trim Ring WHZWH ³ Wheat Haze, White Trim Ring
NEW CONSTRUCTION: JPDZ4RDNCMF Juno Podz 4IN Round New Construction Mounting Frame JPDZ4SQNCMF Juno Podz 4IN Square New Construction Mounting Frame		

NOTES

- WWH is available with DB, SQDB, DC and SQDC.
- BWH only available with DB and SQDB.
- CWH, HZWH and WHZWH only available with DC and SQDC.
- Not for use in an existing housing.
- Square black baffle not T24 certified.

2. All-in-one box remodel downlight

Series	Trim Type/Voltage	Finish
JPDZ4JB Juno Podz 4" Trim and Remodel Junction Box	RDB1 Round Downlight Baffle 120V RDC1 Round Downlight Cone 120V	WWH White, White Trim Ring

EMERGENCY OPERATION OPTION

For use in Non-IC applications where insulation is spaced at least 3" away.
If installing from below the ceiling, minimum plenum depths required:
IIS 25 = 15 7/8" for JPDZ4 RD and 14 3/4" for JPDZ4 SQ
IIS 50 = 20 1/8" for JPDZ4 RD and 18 5/8" for JPDZ4 SQ

Iota IIS 25 I	25W Emergency Micro-Inverter
Iota IIS 50 I	50W Emergency Micro-Inverter

ACCESSORIES

Trim inserts are interchangeable and field installable to easily change the aesthetic of the Podz luminaire

RK3JPDZ4 DB BWH BFL	4" Round Baffle Black Trim Insert
RK3JPDZ4 DB WWH BFL	4" Round Baffle White Trim Insert
RK3JPDZ4 DC CWH RFL	4" Round Cone Clear Trim Insert
RK3JPDZ4 DC HZWH RFL	4" Round Cone Haze Trim Insert
RK3JPDZ4 DC WHZWH RFL	4" Round Cone Wheat Haze Trim Insert
RK3JPDZ4 DC WWH RFL	4" Round Cone White Trim Insert
RK3JPDZ4 SQDB BWH BFL	4" Square Baffle Black Trim Insert
RK3JPDZ4 SQDB WWH BFL	4" Square Baffle White Trim Insert
RK3JPDZ4 SQDC CWH RFL	4" Square Cone Clear Trim Insert
RK3JPDZ4 SQDC HZWH RFL	4" Square Cone Haze Trim Insert
RK3JPDZ4 SQDC WHZWH RFL	4" Square Cone Wheat Haze Trim Insert
RK3JPDZ4 SQDC WWH RFL	4" Square Cone White Trim Insert



Podz™ LED Downlight Series

4" Canless Round and Square LED Downlight
New Construction or Remodel

Specifications

LED Light Engine

Patented color temperature and intensity configurable lighting fixture (US Patent No. 11,259,377 B2) with integrated light engine that mounts directly to aluminum housing providing superior heat transfer to ensure long life of the electronics • Switchable LED color temperature and adjustable lumen output directly on module for easy switching • Advanced color mixing technology provides consistent color rendering on the black body curve at all LED color temperatures • LED color temperature settings include 2700K, 3000K, 3500K, 4000K and 5000K; factory set at 3000K • Three lumen switching options include 700L, 1000L and 1200L; factory set at 1000L • Dedicated WarmDim setting provides performance similar to incandescent light sources and warms the LED color temperature over the dimming range from 2850K to 1900K • 90CRI minimum

LED Driver

Choice of dedicated 120 volt (120) driver or universal voltage (MVOLT) drivers that accommodate input voltages from 120-277 volts AC at 50/60Hz • Power factor > 0.9 at 120V input • 120 volt only driver is dimmable with the use of most incandescent, magnetic low voltage and electronic low voltage wall box dimmers • Universal voltage drivers are dimmable with the use of most 0-10V wall box dimmers • For a list of compatible dimmers, see [JUNOICLED-DIM](#)

Optical System

Computer-optimized reflector design with high reflectance white finish coupled with a high transmission diffusing lens conceals the LEDS and produces uniform aperture luminance • Deep regression of lens produces a low glare, efficient system typical of a standard 4" downlight medium flood distribution providing even illumination for general downlighting applications.

Certifications

Can be used to comply with 2019 Title 24, Part 6, JA8 high efficacy LED light source requirements • UL listed for U.S. and Canada through-branch wiring, damp locations and for wet location (indoor and outdoor covered ceiling) • UL and cUL • NOM certified.

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Trim Module Construction

Low profile, < 3" aluminum housing with integral white flange • Designed for installation directly into the plenum in IC (insulated ceiling) or non-IC construction • Provided with spring clips for ease of installation • Accommodates up to a 1" ceiling thickness

Trim Finishes

Choice of baffle or cone trims in a selection of finishes ship installed in trim • Optional field installable trim inserts available.

Remodel Junction Box Construction

22-gauge die-formed galvanized steel junction box • Conduit cable with quick connect electrical plug pre-wired on junction box and allows for easy electrical connection with the trim module • Junction box provided with (5) ½" and (1) ¾" knockouts, (4) integrated wire traps for 12/2 or 12/3 NM cable UL listed and cUL listed for through-branch wiring, maximum of 4 #12 branch circuit

New Construction Mounting Frame

22-gauge die-formed galvanized steel mounting frame • Rough-in section (junction box, mounting frame and bar hangers) fully assembled for ease of installation • Pre-installed Air-Loc gasket applied to frame • Conduit cable with quick connect electrical plug pre-wired on junction box and allows for easy electrical connection with the trim module • Junction box provided with (5) ½" and (1) ¾" knockouts, (4) knockouts for 12/2 or 12/3 NM cable and ground wire • UL listed and cUL listed for through-branch wiring, maximum of 6 #12 branch circuit conductors • Junction box provided with removable access plates • Knock-outs equipped with pryout slots

Includes Patented (US Patent D552,969) Real Nail® 3 bar hangers: telescoping system permits quick placement of housing any where within 24" O.C. joists or suspended ceilings • Includes removable nail for repositioning of fixture in wood joist construction • Integral T-bar notch and clip for suspended ceilings.

LED housing is designed to provide 33,000 hours of life at 70% lumen maintenance • 5 year limited warranty on LED components.

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.



Control the LED color temperature and lumen output in your space with the switchable LED color temperature and adjustable lumen output switches accessible directly on the Podz trim.

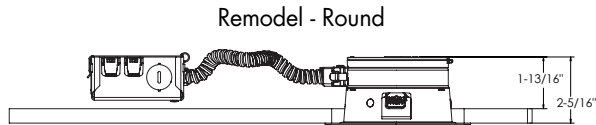


Podz™ LED Downlight Series

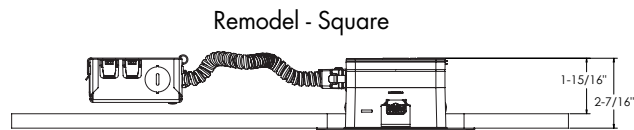
4" Canless Round and Square LED Downlight
New Construction or Remodel

TECHNICAL DATA

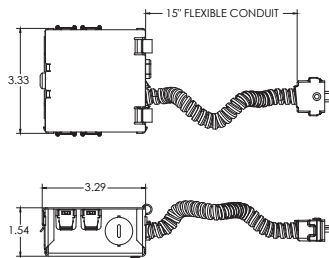
Dimensional Data and Electrical Data



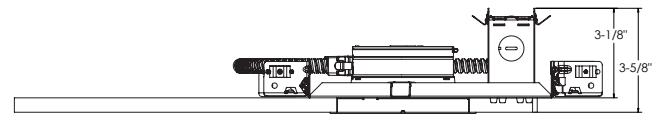
4 1/2" CEILING CUTOUT



4 3/4" ROUND CEILING CUTOUT

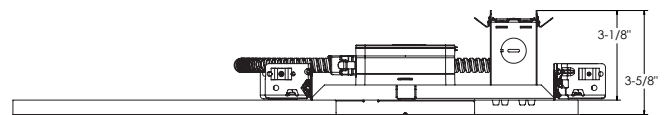


New Construction - Round



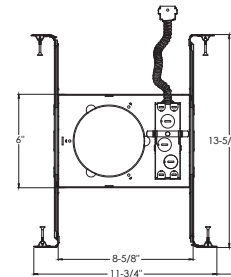
4 1/2" CEILING CUTOUT

New Construction - Square



4 3/4" ROUND CEILING CUTOUT

Note: For ease of installation, a larger sized round cutout is used for the 4" square mounting frame.



ELECTRICAL DATA

Dedicated 120V Only Driver Option (120 FRPC)

	700L	1000L	1200L
Input Power	9.3W (+/-5%)	13.7W (+/-5%)	15.9W (+/-5%)
Input Current	0.08A	0.12A	0.14A
Frequency	50/60Hz	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)
Minimum starting temp	-20°C	-20°C	-20°C

ELECTRICAL DATA

Universal Voltage

MVOLT ZT10

700L		1000L		1200L	
120V	277V	120V	277V	120V	277V
Input Power	9.3W (+/-5%)	9.3W (+/-5%)	13.7W (+/-5%)	15.9W (+/-5%)	15.9W (+/-5%)
Input Current	0.08A	0.03A	0.12A	0.05A	0.06A
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)
Minimum starting temp	-20°C	-20°C	-20°C	-20°C	-20°C



Podz™ LED Downlight Series

4" Canless Round and Square LED Downlight
New Construction or Remodel

PHOTOMETRICS

Distribution Curve

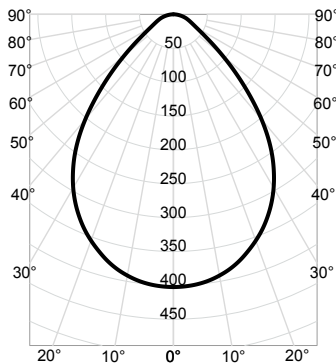
Distribution Data

Output Data

Coefficient of Utilization

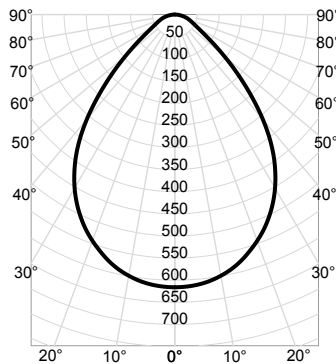
Illuminance Data at 30" Above
Floor for a Single Luminaire

JPDZ4 DB 700LM 3000K 90CRI WWH Input Watts: 9.3, Delivered Lumens: 671, LPW: 72.2, S/MH: 1.11, Test No: 20-973-1P39



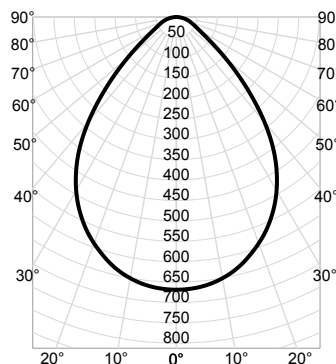
CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)	
						pf	80%			20%			50%				Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance
0°		Zone	Lumens	% Fixture	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%						
0°	403	0° - 30°	295	44%	0	119	119	119	116	116	116	111	111	111	6.0	11.2	10.1	0°	65,595	
5°	400	0° - 40°	452	67%	1	108	104	101	105	102	100	101	99	97	8.0	6.3	13.5	45°	33,377	
15°	377	0° - 60°	619	92%	2	97	92	87	95	90	86	92	88	84	10.0	4.0	16.8	55°	16,658	
25°	329	0° - 90°	671	100%	3	88	81	76	86	80	75	84	78	74	12.0	2.8	20.2	65°	11,246	
35°	254	90° - 180°	0	0%	4	80	73	67	79	72	67	76	71	66	14.0	2.1	23.6	75°	10,502	
45°	145	0° - 180°	671	100%	5	73	65	60	72	65	60	70	64	59					85°	8,964
55°	59				6	67	59	54	66	59	54	64	58	53						
65°	29				7	62	54	49	61	54	49	59	53	48						
75°	17				8	57	50	44	56	49	44	55	49	44						
85°	5				9	53	46	41	52	45	41	51	45	41						
90°	0				10	49	42	38	49	42	37	48	42	37						

JPDZ4 DB 1000LM 3000K 90CRI WWH Input Watts: 13.7, Delivered Lumens: 1027, LPW: 75.0, S/MH: 1.11, Test No: 20-973-1P51



CP Summary		Zonal Lumen Summary			Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)		
					pf	80%					20%					Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance	
					pc	50%	30%	10%	50%	30%	10%	50%	30%	10%						
0°	616	0° - 30°	451	44%	0	119	119	119	116	116	116	111	111	111	6.0	17.1	10.1	0°	100,397	
5°	612	0° - 40°	692	67%	1	108	104	101	105	102	100	101	99	97	8.0	9.6	13.5	45°	51,085	
15°	576	0° - 60°	947	92%	2	97	92	87	95	90	86	92	88	84	10.0	6.2	16.8	55°	25,495	
25°	504	0° - 90°	1,027	100%	3	88	81	76	86	80	75	84	78	74	12.0	4.3	20.2	65°	17,213	
35°	389	90° - 180°	0	0%	4	80	73	67	79	72	67	76	71	66	14.0	3.1	23.6	75°	16,074	
45°	222	0° - 180°	1,027	100%	5	73	65	60	72	65	60	70	64	59					85°	13,720
55°	90				6	67	59	54	66	59	54	64	58	53						
65°	45				7	62	54	49	61	54	49	59	53	48						
75°	26				8	57	50	44	56	49	44	55	49	44						
85°	7				9	53	46	41	52	45	41	51	45	41						
90°	0				10	49	42	38	49	42	37	48	42	37						
																			Beam Angle: 80.2°	
																			Field Angle: 119.3°	

JPDZ4 DB 1200LM 3000K 90CRI WWH Input Watts: 15.9, Delivered Lumens: 1115, LPW: 70.1, S/MH: 1.11, Test No: 20-973-1P63



CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)	
						pf	80%			20%			50%				Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance
		Zone	Lumens	% Fixture	pc	50%	30%	10%	50%	30%	10%	50%	30%	10%						
0°		Zone	Lumens	% Fixture	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%						
0°	669	0° - 30°	490	44%	0	119	119	119	116	116	116	111	111	111	6.0	18.6	10.1	0° 108,999		
5°	665	0° - 40°	751	67%	1	108	104	101	105	102	100	101	99	97	8.0	10.5	13.5	45° 55,463		
15°	626	0° - 60°	1,028	92%	2	97	92	87	95	90	86	92	88	84	10.0	6.7	16.8	55° 27,680		
25°	547	0° - 90°	1,115	100%	3	88	81	76	86	80	75	84	78	74	12.0	4.6	20.2	65° 18,688		
35°	422	90° - 180°	0	0%	4	80	73	67	79	72	67	76	71	66	14.0	3.4	23.6	75° 17,452		
45°	241	0° - 180°	1,115	100%	5	73	65	60	72	65	60	70	64	59	Beam Angle: 80.2° Field Angle: 119.3°			85° 14,896		
55°	97				6	67	59	54	66	59	54	64	58	53						
65°	48				7	62	54	49	61	54	49	59	53	48						
75°	28				8	57	50	44	56	49	44	55	49	44						
85°	8				9	53	46	41	52	45	41	51	45	41						
90°	0				10	49	42	38	49	42	37	48	42	37						



Podz™ LED Downlight Series

4" Canless Round and Square LED Downlight
New Construction or Remodel

PHOTOMETRICS

Distribution Curve

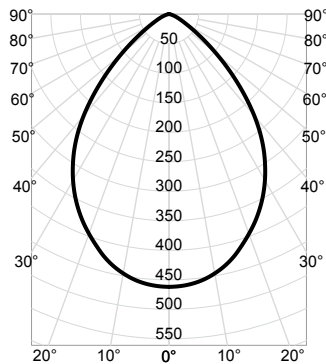
Distribution Data

Output Data

Coefficient of Utilization

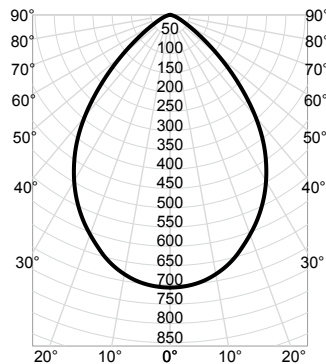
Illuminance Data at 30" Above
Floor for a Single Luminaire

JPDZ4 DC 700LM 3000K 90CRI WWH Input Watts: 9.3, Delivered Lumens: 713, LPW: 76.7, S/MH: 1.07, Test No: 20-973-4P77



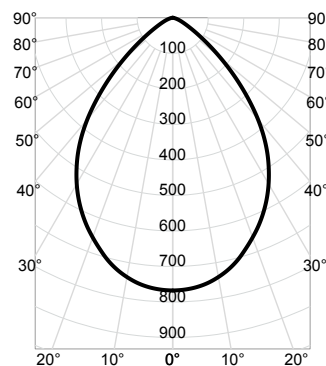
CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)					
						pf						20%					Mounting Height	Initial FC Center Beam	Beam Diameter					
						pc	80%					70%								50%				
	0°	Zone	Lumens	% Fixture	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%							
0°	462	0° - 30°	330	46%	0	119	119	119	116	116	116	111	111	111				6.0	12.8	9.9	0°	75,280		
5°	458	0° - 40°	503	70%	1	109	106	103	106	104	101	102	100	98				8.0	7.2	13.2	45°	37,619		
15°	425	0° - 60°	685	96%	2	99	94	89	97	92	88	94	90	86				10.0	4.6	16.5	55°	17,391		
25°	364	0° - 90°	713	100%	3	90	84	79	88	83	78	86	81	77				12.0	3.2	19.8	65°	7,553		
35°	279	90° - 180°	0	0%	4	82	75	70	81	74	69	78	73	68				14.0	2.4	23.1	75°	3,533		
45°	163	0° - 180°	713	100%	5	75	68	62	74	67	62	72	66	62							85°	1,335		
55°	61				6	69	62	56	68	61	56	66	60	56				Beam Angle: 78.9° Field Angle: 114.9°						
65°	20				7	63	56	51	63	56	51	61	55	51										
75°	6				8	59	52	47	58	51	46	57	51	46										
85°	1				9	55	47	43	54	47	43	53	47	42										
90°	0				10	51	44	39	50	44	39	49	43	39										

JPDZ4 DC 1000LM 3000K 90CRI WWH Input Watts: 13.7, Delivered Lumens: 1091, LPW: 79.6, S/MH: 1.07, Test No: 20-973-4P101



CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)	
						pf	80%			20%			50%				Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance
	0°	Zone	Lumens	% Fixture	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%						
0°	707	0° - 30°	505	46%	0	119	119	119	116	116	116	111	111	111	6.0	19.6	9.9	0° 115,219		
5°	701	0° - 40°	769	70%	1	109	106	103	106	104	101	102	100	98	8.0	11.0	13.2	45° 57,578		
15°	650	0° - 60°	1,049	96%	2	99	94	89	97	92	88	94	90	86	10.0	7.1	16.5	55° 26,618		
25°	557	0° - 90°	1,091	100%	3	90	84	79	88	83	78	86	81	77	12.0	4.9	19.8	65° 11,560		
35°	428	90° - 180°	0	0%	4	82	75	70	81	74	69	78	73	68	14.0	3.6	23.1	75° 5,407		
45°	250	0° - 180°	1,091	100%	5	75	68	62	74	67	62	72	66	62	Beam Angle: 78.9° Field Angle: 114.9°			85° 2,044		
55°	94																			
65°	30																			
75°	9																			
85°	1																			
90°	0																			

JPDZ4 DC 1200LM 3000K 90CRI WWH Input Watts: 15.9, Delivered Lumens: 1185, LPW: 74.5, S/MH: 1.07, Test No: 20-973-4P125



CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)	
						pf	80%			20%			50%				Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance
	0°	Zone	Lumens	% Fixture		pc	50%	30%	10%	50%	30%	10%	50%	30%	10%					
0°	768	0° - 30°	548	46%	0	119	119	119	116	116	116	111	111	111	111	6.0	21.3	9.9	0° 125,092	
5°	761	0° - 40°	835	70%	1	109	106	103	106	104	101	102	100	98	8.0	12.0	13.2	45° 62,511		
15°	706	0° - 60°	1,139	96%	2	99	94	89	97	92	88	94	90	86	10.0	7.7	16.5	55° 28,899		
25°	604	0° - 90°	1,185	100%	3	90	84	79	88	83	78	86	81	77	12.0	5.3	19.8	65° 12,551		
35°	464	90° - 180°	0	0%	4	82	75	70	81	74	69	78	73	68	14.0	3.9	23.1	75° 5,871		
45°	271	0° - 180°	1,185	100%	5	75	68	62	74	67	62	72	66	62	Beam Angle: 78.9° Field Angle: 114.9°					85° 2,219
55°	102																			
65°	33																			
75°	9																			
85°	1																			
90°	0																			



Podz™ LED Downlight Series

4" Canless Round and Square LED Downlight
New Construction or Remodel

PHOTOMETRICS

Distribution Curve

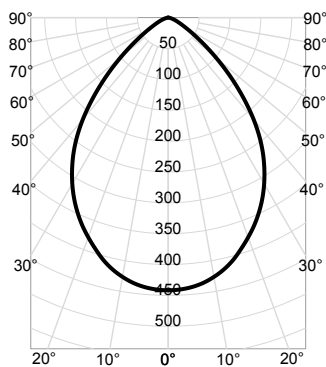
Distribution Data

Output Data

Coefficient of Utilization

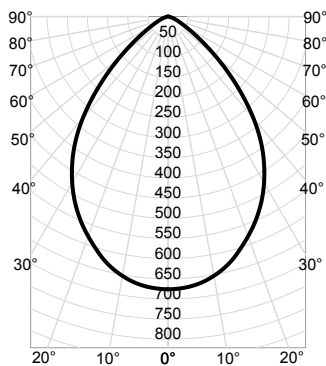
Illuminance Data at 30" Above
Floor for a Single Luminaire

JPDZ4 DC 700LM 3000K 90CRI HZWH Input Watts: 9.3, Delivered Lumens: 682, LPW: 73.3, S/MH: 1.07, Test No: 20-973-4P79



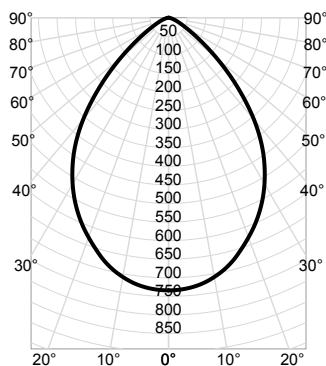
CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)	
						pf	80%					20%					Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance
0°		Zone	Lumens % Fixture	pc	50%	30%	10%	50%	30%	10%	50%	30%	10%							
0°	442	0° - 30°	315 46%	0	119	119	119	116	116	116	111	111	111	6.0	12.3	9.9	0°	72,000		
5°	438	0° - 40°	481 70%	1	109	106	103	106	104	101	102	100	98	8.0	6.9	13.2	45°	35,980		
15°	406	0° - 60°	655 96%	2	99	94	89	97	92	88	94	90	86	10.0	4.4	16.5	55°	16,633		
25°	348	0° - 90°	682 100%	3	90	84	79	88	83	78	86	81	77	12.0	3.1	19.8	65°	7,224		
35°	267	90° - 180°	0 0%	4	82	75	70	81	74	69	78	73	68	14.0	2.3	23.1	75°	3,379		
45°	156	0° - 180°	682 100%	5	75	68	62	74	67	62	72	66	62	Beam Angle: 78.9° Field Angle: 114.9°			85°	1,277		
55°	59			6	69	62	56	68	61	56	66	60	56							
65°	19			7	63	56	51	63	56	51	61	55	51							
75°	5			8	59	52	47	58	51	46	57	51	46							
85°	1			9	55	47	43	54	47	43	53	47	42							
90°	0			10	51	44	39	50	44	39	49	43	39							

JPDZ4 DC 1000LM 3000K 90CRI HZWH Input Watts: 13.7, Delivered Lumens: 1044, LPW: 76.2, S/MH: 1.07, Test No: 20-973-4P103



CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)	
						pf	80%					20%					Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance
0°		Zone	Lumens % Fixture	pc	50%	30%	10%	50%	30%	10%	50%	30%	10%							
0°	676	0° - 30°	483 46%	0	119	119	119	116	116	116	111	111	111	6.0	18.8	9.9	0°	110,199		
5°	671	0° - 40°	736 70%	1	109	106	103	106	104	101	102	100	98	8.0	10.6	13.2	45°	55,069		
15°	622	0° - 60°	1,003 96%	2	99	94	89	97	92	88	94	90	86	10.0	6.8	16.5	55°	25,458		
25°	532	0° - 90°	1,044 100%	3	90	84	79	88	83	78	86	81	77	12.0	4.7	19.8	65°	11,057		
35°	409	90° - 180°	0 0%	4	82	75	70	81	74	69	78	73	68	14.0	3.5	23.1	75°	5,172		
45°	239	0° - 180°	1,044 100%	5	75	68	62	74	67	62	72	66	62	Beam Angle: 78.9° Field Angle: 114.9°				85°	1,955	
55°	90			6	69	62	56	68	61	56	66	60	56							
65°	29			7	63	56	51	63	56	51	61	55	51							
75°	8			8	59	52	47	58	51	46	57	51	46							
85°	1			9	55	47	43	54	47	43	53	47	42							
90°	0			10	51	44	39	50	44	39	49	43	39							

JPDZ4 DC 1200LM 3000K 90CRI HZWH Input Watts: 15.9, Delivered Lumens: 1133, LPW: 71.3, S/MH: 1.07, Test No: 20-973-4P127



CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)		
						pf	80%					20%					Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance	
						pc	50%	30%	10%	50%	30%	10%	50%	30%	10%						
0°		Zone	Lumens	% Fixture		pw	50%	30%	10%	50%	30%	10%	50%	30%	10%						
0°	734	0° - 30°	524	46%		0	119	119	119	116	116	116	111	111	111	6.0	20.4	9.9	0°	119,642	
5°	728	0° - 40°	799	70%		1	109	106	103	106	104	101	102	100	98	8.0	11.5	13.2	45°	59,788	
15°	675	0° - 60°	1,089	96%		2	99	94	89	97	92	88	94	90	86	10.0	7.3	16.5	55°	27,640	
25°	578	0° - 90°	1,133	100%		3	90	84	79	88	83	78	86	81	77	12.0	5.1	19.8	65°	12,004	
35°	444	90° - 180°	0	0%		4	82	75	70	81	74	69	78	73	68	14.0	3.7	23.1	75°	5,615	
45°	259	0° - 180°	1,133	100%		5	75	68	62	74	67	62	72	66	62	Beam Angle: 78.9° Field Angle: 114.9°				85°	2,122
55°	97				6	69	62	56	68	61	56	66	60	56							
65°	31				7	63	56	51	63	56	51	61	55	51							
75°	9				8	59	52	47	58	51	46	57	51	46							
85°	1				9	55	47	43	54	47	43	53	47	42							
90°	0				10	51	44	39	50	44	39	49	43	39							



Podz™ LED Downlight Series

4" Canless Round and Square LED Downlight
New Construction or Remodel

PHOTOMETRICS

Distribution Curve

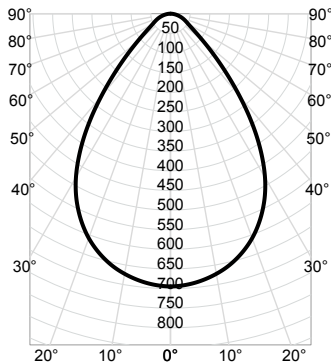
Distribution Data

Output Data

Coefficient of Utilization

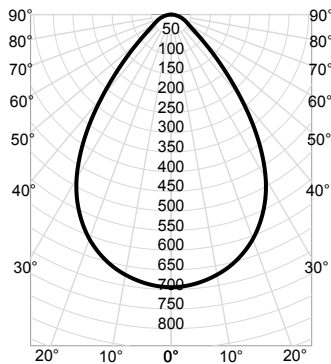
Illuminance Data at 30" Above
Floor for a Single Luminaire

JPDZ4 SQDB 700LM 3000K 90CRI FRPC WWH Input Watts: 9.2, Delivered Lumens: 643, LPW: 69.9, S/MH: 1.07, Test No: 21-608-1P50



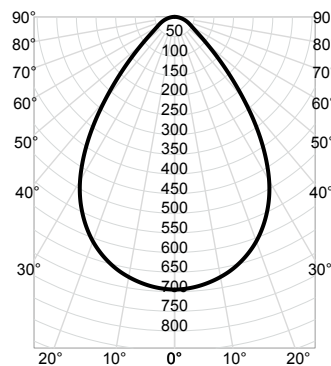
CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)	
						pf	80%			20%			50%			Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance	
0°		Zone	Lumens	% Fixture	pc	50%	30%	10%	50%	30%	10%	50%	30%	10%						
0°	695	0° - 30°	504	47%	0	119	119	119	117	117	117	111	111	111	6.0	19.3	8.9	0°	102,560	
5°	689	0° - 40°	755	71%	1	108	105	102	106	103	101	102	100	97	8.0	10.9	11.9	45°	36,835	
15°	647	0° - 60°	994	93%	2	98	93	89	96	92	88	93	89	86	10.0	6.9	14.9	55°	18,251	
25°	554	0° - 90°	1,066	100%	3	89	83	78	88	82	77	85	80	76	12.0	4.8	17.9	65°	14,359	
35°	384	90° - 180°	0	0%	4	81	74	69	80	74	69	78	72	68	14.0	3.5	20.9	75°	12,950	
45°	176	0° - 180°	1,066	100%	5	75	67	62	74	67	62	72	66	61	Beam Angle: 73.4° Field Angle: 110.6°			85°	10,673	
55°	71				6	69	61	56	68	61	56	66	60	55						
65°	41				7	63	56	51	63	56	51	61	55	50						
75°	23				8	59	52	47	58	51	46	57	51	46						
85°	6				9	55	48	43	54	47	43	53	47	43						
90°	0				10	51	44	40	51	44	40	50	44	39						

JPDZ4 SQDB 1000LM 3000K 90CRI FRPC WWH Input Watts: 13.7, Delivered Lumens: 929, LPW: 67.8, S/MH: 1.07, Test No: 21-608-1P44



CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)	
						pf	80%			20%			50%				Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance
	0°	Zone	Lumens	% Fixture	pc	50%	30%	10%	50%	30%	10%	50%	30%	10%						
0°	695	0° - 30°	504	47%	0	119	119	119	117	117	117	111	111	111	6.0	19.3	8.9	0°	102,560	
5°	689	0° - 40°	755	71%	1	108	105	102	106	103	101	102	100	97	8.0	10.9	11.9	45°	36,835	
15°	647	0° - 60°	994	93%	2	98	93	89	96	92	88	93	89	86	10.0	6.9	14.9	55°	18,251	
25°	554	0° - 90°	1,066	100%	3	89	83	78	88	82	77	85	80	76	12.0	4.8	17.9	65°	14,359	
35°	384	90° - 180°	0	0%	4	81	74	69	80	74	69	78	72	68	14.0	3.5	20.9	75°	12,950	
45°	176	0° - 180°	1,066	100%	5	75	67	62	74	67	62	72	66	61	Beam Angle: 73.4° Field Angle: 110.6°			85°	10,673	
55°	71				6	69	61	56	68	61	56	66	60	55						
65°	41				7	63	56	51	63	56	51	61	55	50						
75°	23				8	59	52	47	58	51	46	57	51	46						
85°	6				9	55	48	43	54	47	43	53	47	43						
90°	0				10	51	44	40	51	44	40	50	44	39						

JPDZ4 SQDB 1200LM 3000K 90CRI FRPC WWH Input Watts: 15.7, Delivered Lumens: 1044, LPW: 66.5, S/MH: 1.07, Test No: 21-608-1P38



CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)		
						pf	80%			20%			50%				Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance	
0°		Zone	Lumens	% Fixture	pc	50%	30%	10%	50%	30%	10%	50%	30%	10%							
0°	695	0° - 30°	504	47%	0	119	119	119	117	117	117	111	111	111	6.0	19.3	8.9	0°	102,560		
5°	689	0° - 40°	755	71%	1	108	105	102	106	103	101	102	100	97	8.0	10.9	11.9	45°	36,835		
15°	647	0° - 60°	994	93%	2	98	93	89	96	92	88	93	89	86	10.0	6.9	14.9	55°	18,251		
25°	554	0° - 90°	1,066	100%	3	89	83	78	88	82	77	85	80	76	12.0	4.8	17.9	65°	14,359		
35°	384	90° - 180°	0	0%	4	81	74	69	80	74	69	78	72	68	14.0	3.5	20.9	75°	12,950		
45°	176	0° - 180°	1,066	100%	5	75	67	62	74	67	62	72	66	61	Beam Angle: 73.4° Field Angle: 110.6°			85°	10,673		
55°	71				6	69	61	56	68	61	56	66	60	55							
65°	41				7	63	56	51	63	56	51	61	55	50							
75°	23				8	59	52	47	58	51	46	57	51	46							
85°	6				9	55	48	43	54	47	43	53	47	43							
90°	0				10	51	44	40	51	44	40	50	44	39							

Podz™ LED Downlight Series

4" Canless Round and Square LED Downlight

PHOTOMETRICS

Distribution Curve

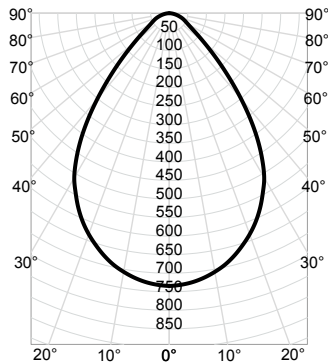
Distribution Data

Output Data

Coefficient of Utilization

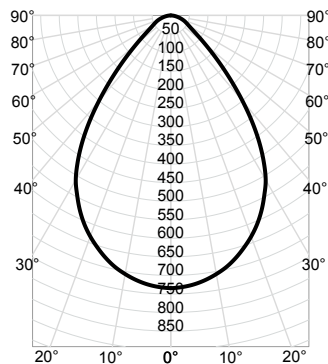
Illuminance Data at 30" Above Floor for a Single Luminaire

JPDZ4 SQDC 700LM 3000K 90CRI FRPC WWH Input Watts: 9.2, Delivered Lumens: 682, LPW: 74.1, S/MH: 1.06, Test No: 21-609-1P32



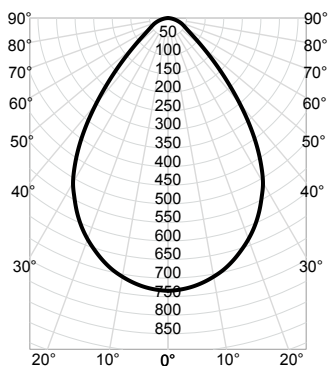
CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)	
						Cavity					Surface					Mounting Height	Initial FC Center Beam	Beam Diameter		
0°		Zone	Lumens	% Fixture	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%				Average Luminance		
0°	734	0° - 30°	526	46%	0	119	119	119	117	117	117	111	111	111	6.0	20.4	9.1	0° 108,422		
5°	727	0° - 40°	792	70%	1	108	105	102	106	103	100	102	99	97	8.0	11.5	12.1	45° 41,094		
15°	676	0° - 60°	1,057	93%	2	98	93	88	96	91	87	93	89	85	10.0	7.3	15.1	55° 20,285		
25°	579	0° - 90°	1,136	100%	3	89	83	77	87	82	77	85	80	75	12.0	5.1	18.2	65° 15,792		
35°	415	90° - 180°	0	0%	4	81	74	69	80	73	68	78	72	67	14.0	3.7	21.2	75° 13,578		
45°	197	0° - 180°	1,136	100%	5	74	67	61	73	66	61	71	65	61				85° 9,826		
55°	79				6	68	61	55	67	60	55	66	59	55	Beam Angle: 74.2° Field Angle: 112.1°					
65°	45				7	63	56	50	62	55	50	61	55	50						
75°	24				8	58	51	46	58	51	46	57	50	46						
85°	6				9	54	47	42	54	47	42	53	46	42						
90°	0				10	51	44	39	50	43	39	49	43	39						

JPDZ4 SQDC 1000LM 3000K 90CRI FRPC WWH Input Watts: 13.7, Delivered Lumens: 986, LPW: 72.0, S/MH: 1.06, Test No: 21-609-1P26



CP Summary	Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)		
	0°	Zone	Lumens	% Fixture	pf	80%			20%			50%				Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance	
					pc	50%	30%	10%	50%	30%	10%	50%	30%	10%						
0°	734	0° - 30°	526	46%	0	119	119	119	117	117	117	111	111	111	6.0	20.4	9.1	0°	108,422	
5°	727	0° - 40°	792	70%	1	108	105	102	106	103	100	102	99	97	8.0	11.5	12.1	45°	41,094	
15°	676	0° - 60°	1,057	93%	2	98	93	88	96	91	87	93	89	85	10.0	7.3	15.1	55°	20,285	
25°	579	0° - 90°	1,136	100%	3	89	83	77	87	82	77	85	80	75	12.0	5.1	18.2	65°	15,792	
35°	415	90° - 180°	0	0%	4	81	74	69	80	73	68	78	72	67	14.0	3.7	21.2	75°	13,578	
45°	197	0° - 180°	1,136	100%	5	74	67	61	73	66	61	71	65	61	Beam Angle: 74.2° Field Angle: 112.1°				85°	9,826
55°	79				6	68	61	55	67	60	55	66	59	55						
65°	45				7	63	56	50	62	55	50	61	55	50						
75°	24				8	58	51	46	58	51	46	57	50	46						
85°	6				9	54	47	42	54	47	42	53	46	42						
90°	0				10	51	44	39	50	43	39	49	43	39						

JPDZ4 SQDC 1200LM 3000K 90CRI FRPC WWH Input Watts: 15.7, Delivered Lumens: 1108, LPW: 72.4, S/MH: 1.06, Test No: 21-609-1P19



CP Summary	Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)			
	0°	Zone	Lumens	% Fixture	pf	80%					20%					Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance		
					pc																
					50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%					10%	
0°	734	0° - 30°	526	46%	0	119	119	119	117	117	117	111	111	111	6.0	20.4	9.1	0°	108,422		
5°	727	0° - 40°	792	70%	1	108	105	102	106	103	100	102	99	97	8.0	11.5	12.1	45°	41,094		
15°	676	0° - 60°	1,057	93%	2	98	93	88	96	91	87	93	89	85	10.0	7.3	15.1	55°	20,285		
25°	579	0° - 90°	1,136	100%	3	89	83	77	87	82	77	85	80	75	12.0	5.1	18.2	65°	15,792		
35°	415	90° - 180°	0	0%	4	81	74	69	80	73	68	78	72	67	14.0	3.7	21.2	75°	13,578		
45°	197	0° - 180°	1,136	100%	5	74	67	61	73	66	61	71	65	61	Beam Angle: 74.2° Field Angle: 112.1°				85°	9,826	
55°	79				6	68	61	55	67	60	55	66	59	55							
65°	45				7	63	56	50	62	55	50	61	55	50							
75°	24				8	58	51	46	58	51	46	57	50	46							
85°	6				9	54	47	42	54	47	42	53	46	42							
90°	0				10	51	44	39	50	43	39	49	43	39							



Podz™ LED Downlight Series

4" Canless Round and Square LED Downlight
New Construction or Remodel

PHOTOMETRICS

Distribution Curve

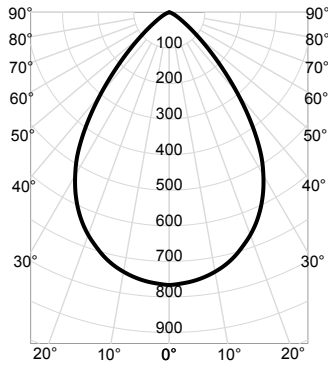
Distribution Data

Output Data

Coefficient of Utilization

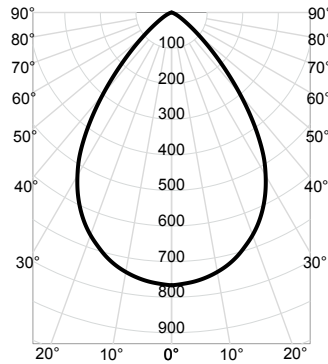
Illuminance Data at 30" Above
Floor for a Single Luminaire

JPDZ4 SQDC 700LM 3000K 90CRI FRPC HZWH Input Watts: 9.2, Delivered Lumens: 650, LPW: 70.7, S/MH: 1.06, Test No: 21-625-1P32



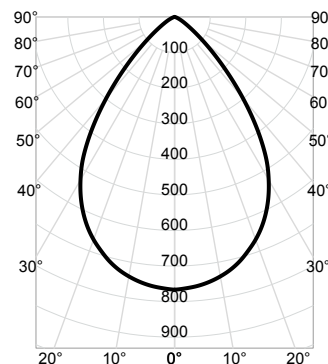
CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)	
						pf	80%			70%			50%			Mounting Height	Initial FC Center Beam	Beam Diameter		Average Luminance
	0°	Zone	Lumens	% Fixture	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%						
0°	767	0° - 30°	553	51%	0	119	119	119	117	117	117	111	111	111	6.0	21.3	8.9	0°	113,176	
5°	758	0° - 40°	827	77%	1	110	107	104	107	105	103	103	101	99	8.0	12.0	11.9	45°	38,630	
15°	710	0° - 60°	1,061	98%	2	100	96	92	99	94	91	95	92	89	10.0	7.7	14.9	55°	13,669	
25°	607	0° - 90°	1,081	100%	3	92	86	81	90	85	81	88	83	79	12.0	5.3	17.9	65°	5,171	
35°	425	90° - 180°	0	0%	4	84	78	73	83	77	72	81	76	71	14.0	3.9	20.9	75°	1,711	
45°	185	0° - 180°	1,081	100%	5	78	71	66	77	70	65	75	69	65	Beam Angle: 73.3° Field Angle: 104.6°			85°	678	
55°	53				6	72	65	60	71	64	59	69	63	59						
65°	15				7	66	59	54	66	59	54	64	58	54						
75°	3				8	62	55	50	61	54	50	60	54	49						
85°	0				9	57	51	46	57	50	46	56	50	46						
90°	0				10	54	47	42	53	47	42	52	46	42						

JPDZ4 SQDC 1000LM 3000K 90CRI FRPC HZWH Input Watts: 13.7, Delivered Lumens: 939, LPW: 68.5, S/MH: 1.06, Test No: 21-625-1P26



CP Summary		Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)	
						pf	80%			20%			50%				Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance
	0°	Zone	Lumens	% Fixture	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%						
0°	767	0° - 30°	553	51%	0	119	119	119	117	117	117	111	111	111	6.0	21.3	8.9	0° 113,176		
5°	758	0° - 40°	827	77%	1	110	107	104	107	105	103	103	101	99	8.0	12.0	11.9	45° 38,630		
15°	710	0° - 60°	1,061	98%	2	100	96	92	99	94	91	95	92	89	10.0	7.7	14.9	55° 13,669		
25°	607	0° - 90°	1,081	100%	3	92	86	81	90	85	81	88	83	79	12.0	5.3	17.9	65° 5,171		
35°	425	90° - 180°	0	0%	4	84	78	73	83	77	72	81	76	71	14.0	3.9	20.9	75° 1,711		
45°	185	0° - 180°	1,081	100%	5	78	71	66	77	70	65	75	69	65	Beam Angle: 73.3° Field Angle: 104.6°			85° 678		
55°	53				6	72	65	60	71	64	59	69	63	59						
65°	15				7	66	59	54	66	59	54	64	58	54						
75°	3				8	62	55	50	61	54	50	60	54	49						
85°	0				9	57	51	46	57	50	46	56	50	46						
90°	0				10	54	47	42	53	47	42	52	46	42						

JPDZ4 SQDC 1200LM 3000K 90CRI FRPC HZWH Input Watts: 15.7, Delivered Lumens: 1055, LPW: 67.2, S/MH: 1.06, Test No: 21-625-1P20



CP Summary	Zonal Lumen Summary				Coefficients of Utilization										Cone of Light			Luminance (cd/sq.m)	
	0°	Zone	Lumens	% Fixture	pf	80%					20%					Mounting Height	Initial FC Center Beam	Beam Diameter	Average Luminance
					pc	50%	30%	10%	50%	30%	10%	50%	30%	10%					
0°	767	0° - 30°	553	51%	0	119	119	119	117	117	117	111	111	111	6.0	21.3	8.9	0°	113,176
5°	758	0° - 40°	827	77%	1	110	107	104	107	105	103	103	101	99	8.0	12.0	11.9	45°	38,630
15°	710	0° - 60°	1,061	98%	2	100	96	92	99	94	91	95	92	89	10.0	7.7	14.9	55°	13,669
25°	607	0° - 90°	1,081	100%	3	92	86	81	90	85	81	88	83	79	12.0	5.3	17.9	65°	5,171
35°	425	90° - 180°	0	0%	4	84	78	73	83	77	72	81	76	71	14.0	3.9	20.9	75°	1,711
45°	185	0° - 180°	1,081	100%	5	78	71	66	77	70	65	75	69	65	Beam Angle: 73.3° Field Angle: 104.6°			85°	678
55°	53				6	72	65	60	71	64	59	69	63	59					
65°	15				7	66	59	54	66	59	54	64	58	54					
75°	3				8	62	55	50	61	54	50	60	54	49					
85°	0				9	57	51	46	57	50	46	56	50	46					
90°	0				10	54	47	42	53	47	42	52	46	42					

4" ROUND LUMEN OUTPUT MULTIPLIERS

CCT	DB WWH	DB BWH	DC WWH	DC CWH	DC WHZWH	DC HZWH
2700K	1.01	0.78	1.07	1.11	1.03	1.01
3000K	1.00	0.77	1.06	1.09	1.01	1.00
3500K	1.00	0.77	1.07	1.10	1.02	1.00
4000K	1.01	0.78	1.07	1.11	1.02	1.01
5000K	1.00	0.77	1.06	1.09	1.01	1.00
Warm Dim	0.92	0.71	0.98	1.01	0.93	0.92

4" SQUARE LUMEN OUTPUT MULTIPLIERS

CCT	DB WWH	DB BWH	DC WWH	DC CWH	DC WHZWH	DC HZWH
2700K	1.04	0.74	1.06	1.08	0.98	1.01
3000K	1	0.74	1.06	1.08	0.98	1.01
3500K	1.07	0.74	1.06	1.08	0.98	1.01
4000K	1.08	0.74	1.06	1.08	0.98	1.01
5000K	0.98	0.74	1.06	1.08	0.98	1.01
Warm Dim	0.88	0.74	1.06	1.08	0.98	1.01



WDGE1 LED

Architectural Wall Sconce



Catalog
Number

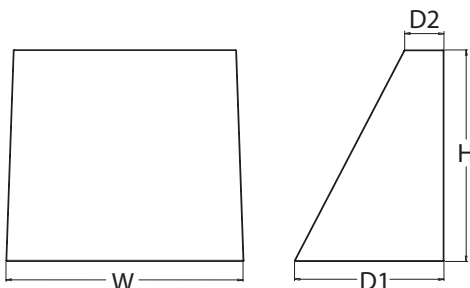
Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Depth (D1): 5.5"
Depth (D2): 1.5"
Height: 8"
Width: 9"
Weight: 9 lbs
(without options)



Introduction

The WDGE1 LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing true site-wide solution.

WDGE1 delivers up to 2,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of WDGE1, with its integrated emergency battery backup option, makes it an ideal over-the-door wall-mounted lighting solution.



Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

WDGE LED Family Overview

Luminaire	Optics	Standard EM, 0°C	Cold EM, -20°C	Sensor	Approximate Lumens (4000K, 80CRI)						
					P0	P1	P2	P3	P4	P5	P6
WDGE1 LED	Visual Comfort	4W		--	750	1,200	2,000	--	--	--	--
WDGE2 LED	Visual Comfort	10W	18W	Standalone / nLight	--	1,200	2,000	3,000	4,500	6,000	--
WDGE2 LED	Precision Refractive	10W	18W	Standalone / nLight	700	1,200	2,000	3,200	4,200	--	--
WDGE3 LED	Precision Refractive	15W	18W	Standalone / nLight	6,000	7,500	8,500	10,000	12,000	--	--
WDGE4 LED	Precision Refractive			Standalone / nLight	--	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WDGE1 LED P2 40K 80CRI VF MVOLT SRM PE DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGE1 LED	P0	27K 2700K	80CRI	VF Visual comfort forward throw	MVOLT 347 ²	Shipped included SRM Surface mounting bracket ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only) ³ Shipped separately AWS 3/8inch Architectural wall spacer ⁴ PBBW Surface-mounted back box (top, left, right conduit entry) Use when there is no junction box available. ⁴
	P1	30K 3000K	90CRI	VW Visual comfort wide		
	P2	35K 3500K				
		40K 4000K				
		50K ¹ 5000K				

Options		Finish			
E4WH	Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min) ⁵	DDBXD	Dark bronze	DDBTXD	Textured dark bronze
PE	Photocell, Button Type ⁶	DBLXD	Black	DBLBXD	Textured black
DS	Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details) ⁷	DNAXD	Natural aluminum	DNATXD	Textured natural aluminum
DMG	0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	DWHXD	White	DWHGXD	Textured white
BCE	Bottom conduit entry for back box (PBBW). Total of 4 entry points.	DSSXD	Sandstone	DSSTXD	Textured sandstone
DSLE	Dual Switching (1 Driver, 2 Light Engines)				
CCE	Coastal Construction ⁴				



COMMERCIAL OUTDOOR

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WDGE1 LED
Rev. 08/07/24

Accessories

Ordered and shipped separately.

WDGEAWS DDBXD	WDGE 3/8inch Architectural Wall Spacer (specify finish)
WDGE1PBBW DDBXD U	WDGE1 surface-mounted back box (specify finish)

NOTES

- 50K not available in 90CRI.
- 347V not available with E4WH, DS, DSLE or PE.
- Not qualified for DLC. Not available with E4WH.
- For PBBW and AWS with CCE option, require an RFA.
- E4WH not available with PE or DS.
- PE not available with DS.
- DS is not available with P0.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Dist. Type	27K (2700K, 80 CRI)					30K (3000K, 80 CRI)					35K (3500K, 80 CRI)					40K (4000K, 80 CRI)					50K (5000K, 80 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P0	7W	VF	693	99	0	0	0	718	103	0	0	0	739	106	0	0	0	759	108	0	0	0	764	109	0	0	0
		VW	694	99	0	0	0	720	103	0	0	0	740	106	0	0	0	760	109	0	0	0	766	109	0	0	0
P1	10W	VF	1,120	112	0	0	0	1,161	116	0	0	0	1,194	119	0	0	0	1,227	123	0	0	0	1,235	123	0	0	0
		VW	1,122	112	0	0	0	1,163	116	0	0	0	1,196	120	0	0	0	1,229	123	0	0	0	1,237	124	0	0	0
P2	15W	VF	1,806	120	1	0	0	1,872	125	1	0	0	1,925	128	1	0	0	1,978	132	1	0	0	1,992	133	1	0	0
		VW	1,809	120	1	0	0	1,876	125	1	0	0	1,929	128	1	0	0	1,982	132	1	0	0	1,996	133	1	0	0

Electrical Load

Performance Package	System Watts	Current (A)				
		120V	208V	240V	277V	347V
P0	7W	0.060	0.035	0.030	0.026	--
	9W	--	--	--	--	0.026
P1	10W	0.082	0.049	0.043	0.038	--
	13W	--	--	--	--	0.046
P2	15W	0.132	0.081	0.072	0.064	--
	18W	--	--	--	--	0.056

Lumen Multiplier for 90CRI

CCT	Multiplier
27K	0.845
30K	0.867
35K	0.845
40K	0.885
50K	0.898

Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Dist. Type	Lumens
E4WH	VF	646
	VW	647

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.95	>0.91



COMMERCIAL OUTDOOR

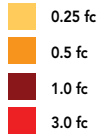
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WDGE1 LED
Rev. 08/07/24

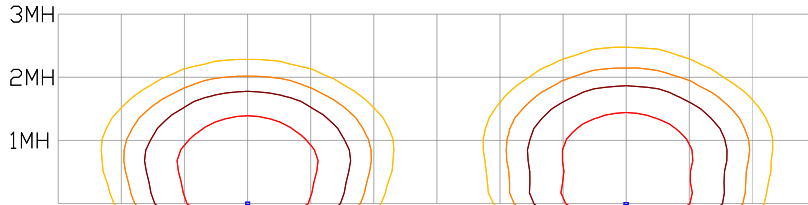
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage.
Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND



MH = 8ft
Grid = 8ft x 8ft



WDGE1 LED P2 40K 80CRI VW

WDGE1 LED P2 40K 80CRI VF

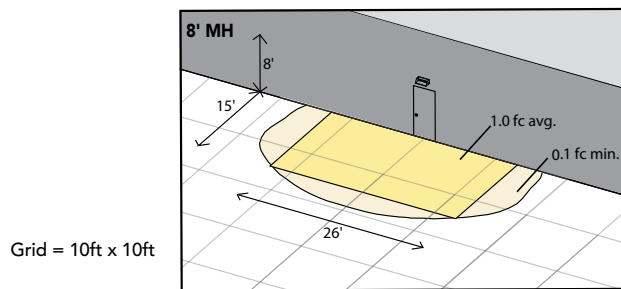
Emergency Egress Options

Emergency Battery Backup

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90 minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9

The example below shows illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E4WH and VF distribution.

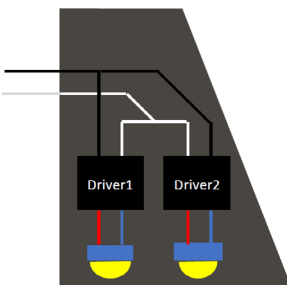


WDGE1 LED xx 40K 80CRI VF MVOLT E4WH

Dual Switching (DS) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with two drivers and two light engines. These work completely independent to each other so that a failure of any individual component does not cause the whole luminaire to go dark.

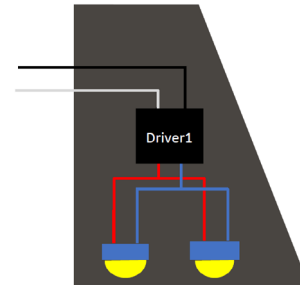
Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9



Dual Switching Light Engine (DSLE) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with one driver and two light engines. These work completely independent to each other so that a failure of either light engine does not cause the whole luminaire to go dark.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9





E4WH – 4W Emergency Battery Backup

D = 5.5"

H = 8"

W = 9"



PBBW – Surface-Mounted Back Box

Use when there is no junction box available.

D = 1.75"

H = 8"

W = 9"



AWS – 3/8inch Architectural Wall Spacer

D = 0.38"

H = 4.4"

W = 7.5"

FEATURES & SPECIFICATIONS

INTENDED USE

Common architectural look, with clean rectilinear shape, of the WDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

CONSTRUCTION

The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

FINISH

Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS

Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine consists of high-efficiency LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2). Fixture ships standard with 0-10v dimmable driver.

INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

GOVERNMENT PROCUREMENT

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

FEATURES & SPECIFICATIONS

INTENDED USE — These specifications are for USA standards only. Square Straight Steel is a general purpose light pole for up to 39-foot mounting heights. This pole provides a robust yet cost effective option for mounting area lights and floodlights.

CONSTRUCTION

Pole Shaft: The pole shaft is of uniform dimension and wall thickness and is made of a weldable-grade, hot-rolled, commercial-quality steel tubing with a minimum yield of 55 KSI (11-gauge, 0.120"), or 50 KSI (7-gauge, 0.179"). Shaft is one-piece with a full-length longitudinal high-frequency electric resistance weld. Uniformly square in cross-section with flat sides, small corner radii and excellent torsional qualities. Available shaft widths are 4", 5" and 6".

Pole Top: Options include 4" tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable top cap.

Handhole: A reinforced handhole with grounding provision is provided at 18" from the base on side A. Positioning the handhole lower may not be possible and requires engineering review; consult Tech Support-Outdoor for further information. Every handhole includes a cover and cover attachment hardware. The handhole has a nominal dimension of 2.5" x 5".

Base Cover: A durable ABS plastic two-piece full base cover, finished to match the pole, is provided with each pole assembly. Additional base cover options are available upon request.

Anchor Base/Bolts: Anchor base is fabricated from steel that meets ASTM A36 standards and can be altered to match existing foundations; consult factory for modifications. Anchor bolts are manufactured to ASTM F1554 Standards grade 55, (55 KSI minimum yield strength and tensile strength of 75-95 KSI). Top threaded portion (nominal 12") is hot-dipped galvanized per ASTM A-153.

HARDWARE — All structural fasteners are high-strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

FINISH — Extra durable painted finish is coated with TGIC (Triglycidyl Isocyanurate) Polyester powder that meets 5A and 5B classifications of ASTM D3359. Powder-coat finishes include Dark Bronze, White, Black, and Natural Aluminum colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes.

GOVERNMENT PROCUREMENT

BAA — Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA — Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to www.acuitybrands.com/buy-american for additional information.

INSTALLATION — **Do not** erect poles without having fixtures installed. Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates. If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage. Lithonia Lighting is not responsible for the foundation design.

WARRANTY — 1-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.

Catalog Number
Notes
Type



Anchor Base Poles

SSS

SQUARE STRAIGHT STEEL



SSS Square Straight Steel Poles

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative. Example: SSS 20 5C DM28AS DDBXD

SSS					
Series	Nominal fixture mounting height	Nominal shaft base size/wall thickness ¹	Mounting ²	Options	Finish
SSS	10'-39' (for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.) (See technical information table for complete ordering information.)	4C 4" 11g (0.120") 4G 4" 7g (0.179") 5C 5" 11g (0.120") 5G 5" 7g (0.179") 6G 6" 7g (0.179") (See technical information table for complete ordering information.)	<u>Tenon mounting</u> PT Open top (includes top cap) T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) <u>DSX/RSX/OMERO™ Drill mounting³</u> DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90° <u>RAD drill mounting³</u> DM19RAD 1 at 90° DM28RAD 2 at 180° DM29RAD 2 at 90° DM39RAD 3 at 90° DM49RAD 4 at 90° <u>ESX Drill mounting³</u> DM19ESX 1 at 90° DM28ESX 2 at 180° DM29ESX 2 at 90° DM39ESX 3 at 90° DM49ESX 4 at 90° <u>Arm drill mounting</u> To be added as series + drill orientations EX: SMAC19 for SMAC arm drilling 1 at 90°	<u>Shipped installed</u> VD Vibration damper ⁴ JHxy J-Hook for cable strain relief ⁵ HAXy Horizontal arm bracket (1 fixture) ^{5,6} FDLxy Festoon outlet less electrical ^{5,7} FDLGFCLxy Festoon with GFCI outlet and in-use cover ^{5,8} CPL12/xy 1/2" coupling ⁵ CPL34/xy 3/4" coupling ⁵ CPL1/xy 1" coupling ⁵ NPL12/xy 1/2" threaded nipple ⁵ NPL34/xy 3/4" threaded nipple ⁵ NPL1/xy 1" threaded nipple ⁵ EHHxy Extra handhole ^{5,9} STLHHC Steel handhole cover (standard is plastic, finish is smooth) ¹⁰ FBCSTL2PC 2 Piece steel base cover (standard is plastic) ¹⁰ IC Interior coating ¹¹ L/AB Less anchor bolts (Include when anchor bolts are not needed) TP Tamper resistant handhole cover fasteners NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) UL UL listed with label (Includes NEC compliant cover) BAA Buy America(n) Act Compliant ¹² VM/original order# Match pole to prior order or project ¹³	<u>Super durable paint colors</u> DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DGCXD Charcoal gray DTGXD Tennis green DBRXD Bright red DSBXD Steel blue DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white <u>Other finishes</u> GALV Galvanized finish <u>Architectural colors and special finishes¹⁴</u> [PAINT] GALV Paint over galvanizing VP30 3 year warranty extension VP53 5 year warranty extension RAL#### Use designated Lithonia Lighting nomenclature in brochure Custom color Nomenclature assigned through Customer Care "Custom Color Process"

Accessories: Order as separate catalog number.	
PL DT20	Plugs for ESX drillings
PL DT8	Plugs for DMxxAS drillings
FVD xxFT	Field installed vibration damper (snake style)

- NOTES:**
- Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.120" | "G" - 0.179".
 - PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, specify as drilling option/tenon option. The combination includes a required extra handhole.
Example: DM28/T20.
 - Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
 - On 4" and 5" poles, VD cannot be installed if provisions (EHH, FDL, NPL, CPL) are located higher than 2/3 of the pole's total height.
Example: Pole height is 25ft, A provision cannot be placed above 16ft.
 - Specify location and orientation when ordering option.
For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-".
Example: 5ft = 5 and 20ft 3in = 20-3
For "y": Specify orientation from handhole (A,B,C,D) Refer to the Handhole Orientation diagram below.
Example: 1/2" coupling at 5' 8", orientation C = CPL12/5-8C
 - Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arm at the same height, specify with HAXxy.
Example: HA20BD.
 - FDL does not come with GFCI outlet or handhole cover. These must be supplied by contractor or electrician.
 - Festoon option that comes with GFCI and in-use cover. GFCI and in-use cover ship separately from pole.
 - Combination of tenon-top and drill mount includes extra handhole. EHH includes cover.
 - Plastic hand hole cover and base covers come standard with all poles. Items ship separately. Additional parts can be ordered as replacements.
 - N/A with GALV.
 - Use when mill certifications are required.
 - Must add original order number. Not for replacement parts or post sales issues, contact tech support or post sales teams. VM is used to ensure poles match in appearance exactly from order to order, on a single project site. A common use case would be a multi-phase project with multiple orders. *Example: VM/010-36784*
 - Must be quoted through AQD. Finishes do not require RFA. RAL colors available are shown in "Architectural Colors brochure". Lead times may be extended up to 2 weeks due to paint procurement.

FAMILIES FLOURISH NORTHEAST
424 MOUNT SUPPORT ROAD
CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

DRAINAGE ANALYSIS

MARCH 10, 2025

Prepared For:

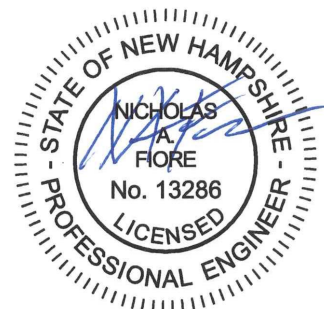
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Prepared By:



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85 Mechanic Street, Suite E2-3
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603-442-9333

EV Project # 22063



FAMILIES FLOURISH NORTHEAST 424 MOUNT SUPPORT ROAD

DRAINAGE ANALYSIS

TABLE OF CONTENTS:

- Extreme Precipitation Data Table for Lebanon, NH
- NRCS Soil Report
- Existing HydroCAD Model Reports
 - I. Drainage Diagram.....1
 - II. Area Listings.....2
 - III. Soil Listings.....3
 - IV. Node Listings for 2-year, 10-year, 25-year, and 50-year Storm Events.....4 - 7
 - V. Full Summaries for the 25-year Storm Event.....8
- Post Development HydroCAD Model Reports
 - VI. Drainage Diagram.....9
 - VII. Area Listings.....10
 - VIII. Soil Listings.....11
 - IX. Node Listings for 2-year, 10-year, 25-year, and 50-year Storm Events...12 - 15
 - X. Full Summaries for the 25-year Storm Event.....16 - 20
 - XI. Pond Summaries for the 50-year Storm Event.....21 - 22

Drainage Maps

- D1.1 Existing Drainage Map
- D1.2 Proposed Drainage Map

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Smoothing	Yes
State	New Hampshire
Location	
Longitude	72.262 degrees West
Latitude	43.670 degrees North
Elevation	0 feet
Date/Time	Thu, 30 Sep 2021 14:44:24 -0400

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.66	0.82	1.02	1yr	0.71	0.93	1.17	1.44	1.76	2.15	2.41	1yr	1.90	2.32	2.69	3.30	3.79	1yr
2yr	0.31	0.48	0.59	0.78	0.98	1.22	2yr	0.85	1.11	1.40	1.71	2.07	2.50	2.81	2yr	2.21	2.70	3.15	3.77	4.31	2yr
5yr	0.37	0.57	0.72	0.96	1.23	1.54	5yr	1.06	1.41	1.76	2.14	2.57	3.07	3.47	5yr	2.71	3.34	3.86	4.55	5.18	5yr
10yr	0.41	0.65	0.82	1.12	1.46	1.84	10yr	1.26	1.68	2.11	2.55	3.04	3.58	4.08	10yr	3.17	3.92	4.51	5.25	5.95	10yr
25yr	0.50	0.79	1.00	1.38	1.83	2.32	25yr	1.58	2.12	2.65	3.19	3.78	4.40	5.04	25yr	3.90	4.85	5.55	6.35	7.16	25yr
50yr	0.57	0.91	1.16	1.63	2.18	2.77	50yr	1.88	2.53	3.17	3.80	4.45	5.15	5.93	50yr	4.56	5.70	6.48	7.33	8.24	50yr
100yr	0.64	1.04	1.34	1.90	2.60	3.30	100yr	2.24	3.02	3.78	4.51	5.26	6.02	6.97	100yr	5.33	6.70	7.58	8.48	9.48	100yr
200yr	0.74	1.21	1.57	2.24	3.09	3.94	200yr	2.67	3.61	4.51	5.35	6.20	7.05	8.20	200yr	6.24	7.88	8.87	9.80	10.91	200yr
500yr	0.90	1.47	1.92	2.78	3.90	4.98	500yr	3.36	4.58	5.68	6.71	7.71	8.68	10.17	500yr	7.68	9.78	10.92	11.88	13.14	500yr

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.24	0.37	0.45	0.61	0.75	0.83	1yr	0.65	0.81	1.00	1.19	1.58	1.98	2.23	1yr	1.76	2.15	2.50	3.03	3.55	1yr
2yr	0.30	0.46	0.57	0.77	0.94	1.11	2yr	0.82	1.08	1.24	1.62	2.06	2.45	2.75	2yr	2.17	2.65	3.09	3.71	4.23	2yr
5yr	0.34	0.53	0.65	0.89	1.14	1.32	5yr	0.98	1.30	1.49	1.90	2.41	2.92	3.28	5yr	2.59	3.16	3.66	4.31	4.93	5yr
10yr	0.38	0.58	0.72	1.00	1.30	1.51	10yr	1.12	1.47	1.69	2.16	2.70	3.33	3.76	10yr	2.95	3.61	4.17	4.83	5.54	10yr
25yr	0.43	0.66	0.82	1.18	1.55	1.78	25yr	1.33	1.74	1.98	2.52	3.13	3.97	4.49	25yr	3.51	4.32	4.94	5.61	6.45	25yr
50yr	0.48	0.73	0.90	1.30	1.75	2.03	50yr	1.51	1.98	2.23	2.85	3.52	4.53	5.14	50yr	4.01	4.95	5.62	6.27	7.24	50yr
100yr	0.53	0.80	1.01	1.45	1.99	2.29	100yr	1.72	2.24	2.49	3.19	3.95	5.17	5.88	100yr	4.58	5.66	6.40	7.01	8.12	100yr
200yr	0.59	0.89	1.12	1.63	2.27	2.60	200yr	1.96	2.54	2.80	3.60	4.48	5.91	6.73	200yr	5.23	6.47	7.30	7.84	9.11	200yr
500yr	0.68	1.01	1.30	1.89	2.69	3.05	500yr	2.32	2.98	3.23	4.19	5.26	7.06	8.06	500yr	6.25	7.75	8.70	9.08	10.62	500yr

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.29	0.44	0.54	0.73	0.90	1.03	1yr	0.77	1.01	1.19	1.51	1.89	2.29	2.59	1yr	2.03	2.50	2.86	3.49	3.99	1yr
2yr	0.32	0.49	0.61	0.82	1.01	1.19	2yr	0.87	1.17	1.36	1.73	2.17	2.56	2.87	2yr	2.27	2.76	3.22	3.87	4.40	2yr
5yr	0.40	0.62	0.76	1.05	1.34	1.57	5yr	1.15	1.53	1.74	2.16	2.70	3.22	3.65	5yr	2.85	3.51	4.06	4.77	5.42	5yr
10yr	0.48	0.74	0.92	1.28	1.66	1.96	10yr	1.43	1.91	2.15	2.60	3.20	3.85	4.39	10yr	3.41	4.22	4.86	5.62	6.36	10yr
25yr	0.62	0.94	1.17	1.67	2.19	2.63	25yr	1.89	2.57	2.86	3.33	4.01	4.87	5.62	25yr	4.31	5.40	6.14	6.98	7.86	25yr
50yr	0.74	1.13	1.40	2.02	2.72	3.29	50yr	2.35	3.21	3.57	4.00	4.77	5.81	6.77	50yr	5.14	6.51	7.34	8.25	9.25	50yr
100yr	0.90	1.36	1.70	2.45	3.37	4.13	100yr	2.91	4.03	4.47	4.83	5.67	6.94	8.17	100yr	6.14	7.86	8.78	9.75	10.88	100yr
200yr	1.09	1.63	2.07	3.00	4.18	5.18	200yr	3.61	5.06	5.59	5.83	6.76	8.28	9.85	200yr	7.33	9.47	10.51	11.54	12.80	200yr
500yr	1.41	2.10	2.70	3.92	5.57	7.02	500yr	4.81	6.86	7.53	7.46	8.47	10.49	12.63	500yr	9.29	12.15	13.33	14.44	15.90	500yr



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Grafton County, New Hampshire

424 Mt Support Mt



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface	2
Soil Map	5
Soil Map.....	6
Legend.....	7
Map Unit Legend.....	8
Map Unit Descriptions.....	8
Grafton County, New Hampshire.....	10
336B—Pittstown loam, 3 to 8 percent slopes, very stony.....	10
341A—Stissing silt loam, 0 to 3 percent slopes, very stony.....	11
References	13

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Grafton County, New Hampshire
Survey Area Data: Version 28, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 27, 2020—Sep 16, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
336B	Pittstown loam, 3 to 8 percent slopes, very stony	2.3	99.8%
341A	Stissing silt loam, 0 to 3 percent slopes, very stony	0.0	0.2%
Totals for Area of Interest		2.3	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Grafton County, New Hampshire

336B—Pittstown loam, 3 to 8 percent slopes, very stony

Map Unit Setting

National map unit symbol: 9fhq
Elevation: 480 to 1,640 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 36 to 55 degrees F
Frost-free period: 90 to 250 days
Farmland classification: Farmland of local importance

Map Unit Composition

Pittstown and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pittstown

Setting

Parent material: Till

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 25 inches: loam
H3 - 25 to 65 inches: channery loam

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: F144AY037MA - Moist Dense Till Uplands
Hydric soil rating: No

Minor Components

Bernardston

Percent of map unit: 3 percent
Hydric soil rating: No

Not named

Percent of map unit: 3 percent
Hydric soil rating: No

Stissing

Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

Kearsarge

Percent of map unit: 3 percent
Hydric soil rating: No

Cardigan

Percent of map unit: 3 percent
Hydric soil rating: No

341A—Stissing silt loam, 0 to 3 percent slopes, very stony

Map Unit Setting

National map unit symbol: 9ftt
Elevation: 510 to 1,540 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 36 to 55 degrees F
Frost-free period: 90 to 250 days
Farmland classification: Farmland of local importance

Map Unit Composition

Stissing and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Stissing

Setting

Landform: Ground moraines

Typical profile

H1 - 0 to 10 inches: silt loam
H2 - 10 to 20 inches: gravelly loam
H3 - 20 to 65 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: C/D

Ecological site: F144AY009CT - Wet Till Depressions

Hydric soil rating: Yes

Minor Components

Not named wet

Percent of map unit: 5 percent

Landform: Swamps

Hydric soil rating: Yes

Not named

Percent of map unit: 5 percent

Hydric soil rating: No

Pittstown

Percent of map unit: 5 percent

Hydric soil rating: No

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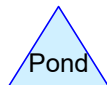
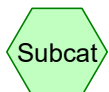
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Existing Site



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Page 2

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
18,077	74	>75% Grass cover, Good, HSG C (ES1)
23,689	70	Woods, Good, HSG C (ES1)
41,766	72	TOTAL AREA

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Page 3

Soil Listing (selected nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
41,766	HSG C	ES1
0	HSG D	
0	Other	
41,766		TOTAL AREA

22063 Existing

Type II 24-hr 2-YR Rainfall=2.50"

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Page 4

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentES1: Existing Site

Runoff Area=41,766 sf 0.00% Impervious Runoff Depth=0.53"

Tc=10.0 min CN=72 Runoff=0.70 cfs 1,840 cf

Total Runoff Area = 41,766 sf Runoff Volume = 1,840 cf Average Runoff Depth = 0.53"

100.00% Pervious = 41,766 sf 0.00% Impervious = 0 sf

22063 Existing*Type II 24-hr 10-YR Rainfall=3.58"*

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Page 5

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentES1: Existing Site

Runoff Area=41,766 sf 0.00% Impervious Runoff Depth=1.17"

Tc=10.0 min CN=72 Runoff=1.70 cfs 4,085 cf

Total Runoff Area = 41,766 sf Runoff Volume = 4,085 cf Average Runoff Depth = 1.17"**100.00% Pervious = 41,766 sf 0.00% Impervious = 0 sf**

22063 Existing

Type II 24-hr 25-YR Rainfall=4.40"

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Page 6

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentES1: Existing Site

Runoff Area=41,766 sf 0.00% Impervious Runoff Depth=1.75"

Tc=10.0 min CN=72 Runoff=2.57 cfs 6,080 cf

Total Runoff Area = 41,766 sf Runoff Volume = 6,080 cf Average Runoff Depth = 1.75"

100.00% Pervious = 41,766 sf 0.00% Impervious = 0 sf

22063 Existing

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Type II 24-hr 50-YR Rainfall=5.15"

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Page 7

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentES1: Existing Site

Runoff Area=41,766 sf 0.00% Impervious Runoff Depth=2.31"

Tc=10.0 min CN=72 Runoff=3.42 cfs 8,054 cf

Total Runoff Area = 41,766 sf Runoff Volume = 8,054 cf Average Runoff Depth = 2.31"

100.00% Pervious = 41,766 sf 0.00% Impervious = 0 sf

22063 Existing

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Type II 24-hr 25-YR Rainfall=4.40"

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Page 8

Summary for Subcatchment ES1: Existing Site

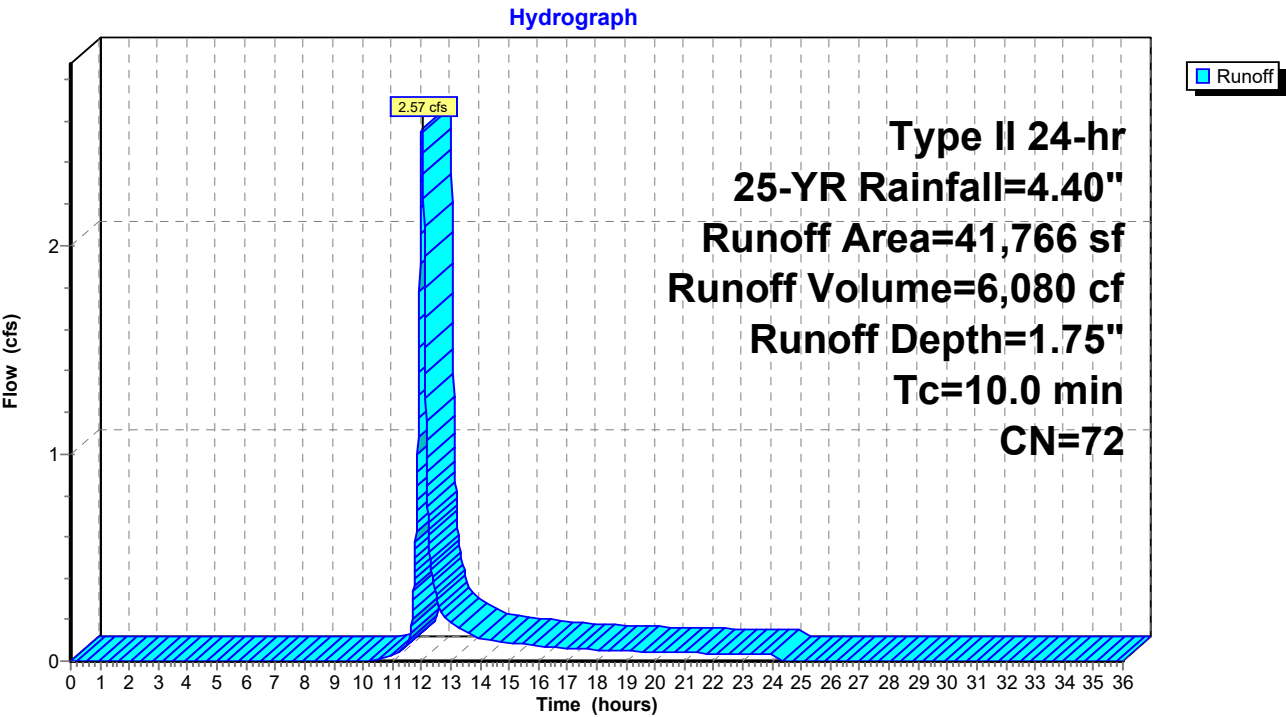
Runoff = 2.57 cfs @ 12.02 hrs, Volume= 6,080 cf, Depth= 1.75"

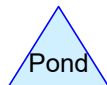
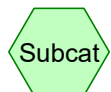
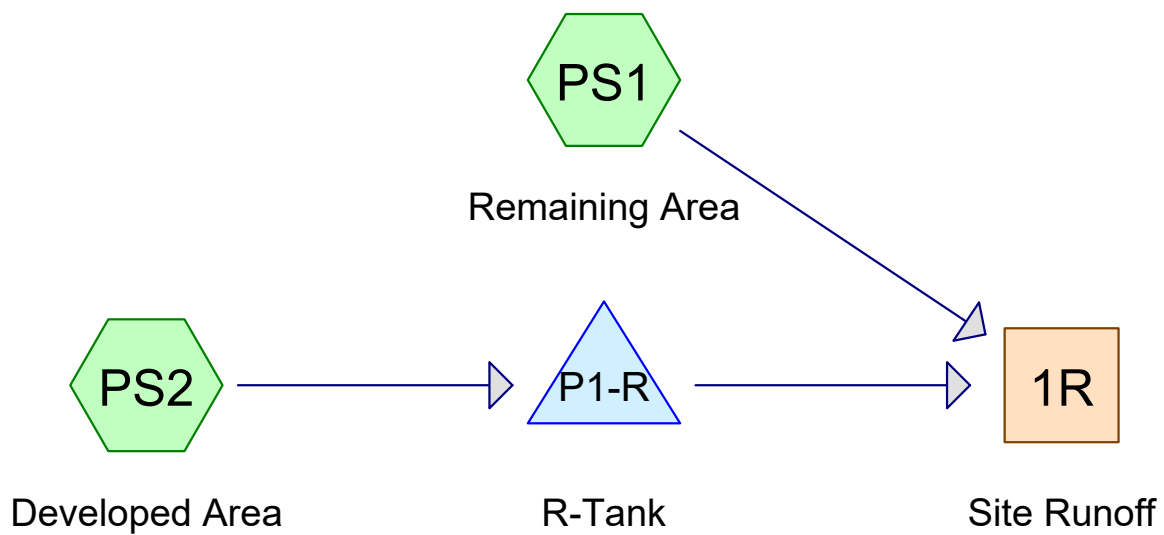
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.40"

Area (sf)	CN	Description
18,077	74	>75% Grass cover, Good, HSG C
23,689	70	Woods, Good, HSG C
41,766	72	Weighted Average
41,766		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment ES1: Existing Site





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Page 10

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
8,673	74	>75% Grass cover, Good, HSG C (PS1, PS2)
1,472	65	Brush, Good, HSG C (PS2)
524	98	Paved parking, HSG C (PS1)
9,396	98	Paved roads w/curbs & sewers, HSG C (PS2)
5,897	98	Roofs, HSG C (PS2)
15,804	70	Woods, Good, HSG C (PS1)
41,766	81	TOTAL AREA

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Page 11

Soil Listing (selected nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
41,766	HSG C	PS1, PS2
0	HSG D	
0	Other	
41,766		TOTAL AREA

22063 Existing*Type II 24-hr 2-YR Rainfall=2.50"*

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Page 12

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentPS1: Remaining Area

Runoff Area=24,743 sf 2.12% Impervious Runoff Depth=0.53"
Tc=10.0 min CN=72 Runoff=0.41 cfs 1,090 cf

SubcatchmentPS2: Developed Area

Runoff Area=17,023 sf 89.84% Impervious Runoff Depth=1.96"
Tc=10.0 min CN=95 Runoff=1.11 cfs 2,785 cf

Reach 1R: Site Runoff

Inflow=0.53 cfs 3,873 cf
Outflow=0.53 cfs 3,873 cf

Pond P1-R: R-Tank

Peak Elev=766.11' Storage=1,175 cf Inflow=1.11 cfs 2,785 cf
Outflow=0.16 cfs 2,783 cf

Total Runoff Area = 41,766 sf Runoff Volume = 3,875 cf Average Runoff Depth = 1.11"
62.13% Pervious = 25,949 sf 37.87% Impervious = 15,817 sf

22063 Existing*Type II 24-hr 10-YR Rainfall=3.58"*

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Page 13

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentPS1: Remaining Area Runoff Area=24,743 sf 2.12% Impervious Runoff Depth=1.17"
Tc=10.0 min CN=72 Runoff=1.01 cfs 2,420 cf

SubcatchmentPS2: Developed Area Runoff Area=17,023 sf 89.84% Impervious Runoff Depth=3.02"
Tc=10.0 min CN=95 Runoff=1.67 cfs 4,281 cf

Reach 1R: Site Runoff Inflow=1.30 cfs 6,698 cf
Outflow=1.30 cfs 6,698 cf

Pond P1-R: R-Tank Peak Elev=766.72' Storage=1,644 cf Inflow=1.67 cfs 4,281 cf
Outflow=0.47 cfs 4,278 cf

Total Runoff Area = 41,766 sf Runoff Volume = 6,701 cf Average Runoff Depth = 1.93"
62.13% Pervious = 25,949 sf 37.87% Impervious = 15,817 sf

22063 Existing*Type II 24-hr 25-YR Rainfall=4.40"*

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Page 14

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentPS1: Remaining Area Runoff Area=24,743 sf 2.12% Impervious Runoff Depth=1.75"
Tc=10.0 min CN=72 Runoff=1.52 cfs 3,602 cf

SubcatchmentPS2: Developed Area Runoff Area=17,023 sf 89.84% Impervious Runoff Depth=3.83"
Tc=10.0 min CN=95 Runoff=2.09 cfs 5,427 cf

Reach 1R: Site Runoff Inflow=1.98 cfs 9,027 cf
Outflow=1.98 cfs 9,027 cf

Pond P1-R: R-Tank Peak Elev=767.31' Storage=2,012 cf Inflow=2.09 cfs 5,427 cf
Outflow=0.70 cfs 5,425 cf

Total Runoff Area = 41,766 sf Runoff Volume = 9,029 cf Average Runoff Depth = 2.59"
62.13% Pervious = 25,949 sf 37.87% Impervious = 15,817 sf

22063 Existing*Type II 24-hr 50-YR Rainfall=5.15"*

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Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

SubcatchmentPS1: Remaining Area Runoff Area=24,743 sf 2.12% Impervious Runoff Depth=2.31"
Tc=10.0 min CN=72 Runoff=2.03 cfs 4,771 cf

SubcatchmentPS2: Developed Area Runoff Area=17,023 sf 89.84% Impervious Runoff Depth=4.57"
Tc=10.0 min CN=95 Runoff=2.46 cfs 6,480 cf

Reach 1R: Site Runoff Inflow=2.67 cfs 11,249 cf
Outflow=2.67 cfs 11,249 cf

Pond P1-R: R-Tank Peak Elev=767.86' Storage=2,259 cf Inflow=2.46 cfs 6,480 cf
Outflow=1.38 cfs 6,478 cf

Total Runoff Area = 41,766 sf Runoff Volume = 11,252 cf Average Runoff Depth = 3.23"
62.13% Pervious = 25,949 sf 37.87% Impervious = 15,817 sf

22063 Existing

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HydroCAD® 10.20-6a s/n 02106 © 2024 HydroCAD Software Solutions LLC

Type II 24-hr 25-YR Rainfall=4.40"

Printed 3/10/2025

Page 16

Summary for Subcatchment PS1: Remaining Area

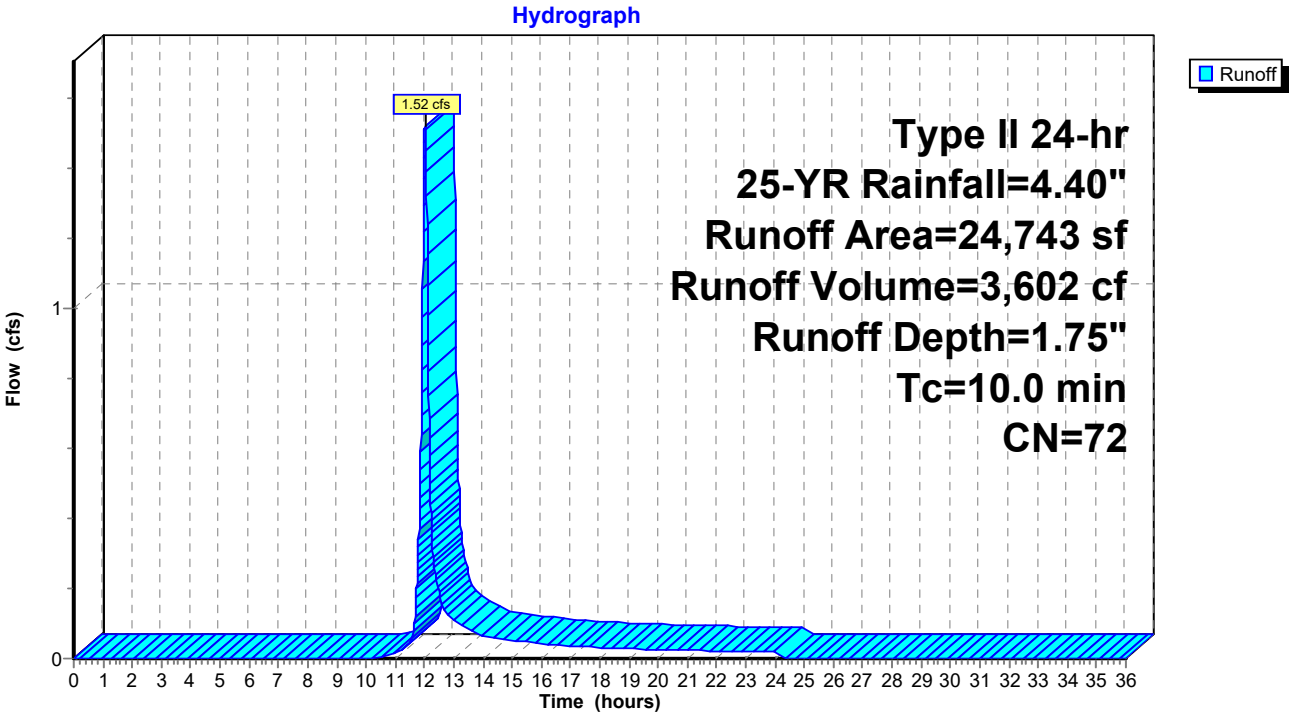
Runoff = 1.52 cfs @ 12.02 hrs, Volume= 3,602 cf, Depth= 1.75"
Routed to Reach 1R : Site Runoff

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.40"

Area (sf)	CN	Description
8,415	74	>75% Grass cover, Good, HSG C
15,804	70	Woods, Good, HSG C
524	98	Paved parking, HSG C
24,743	72	Weighted Average
24,219		97.88% Pervious Area
524		2.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment PS1: Remaining Area



22063 Existing

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Type II 24-hr 25-YR Rainfall=4.40"
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Page 17

Summary for Subcatchment PS2: Developed Area

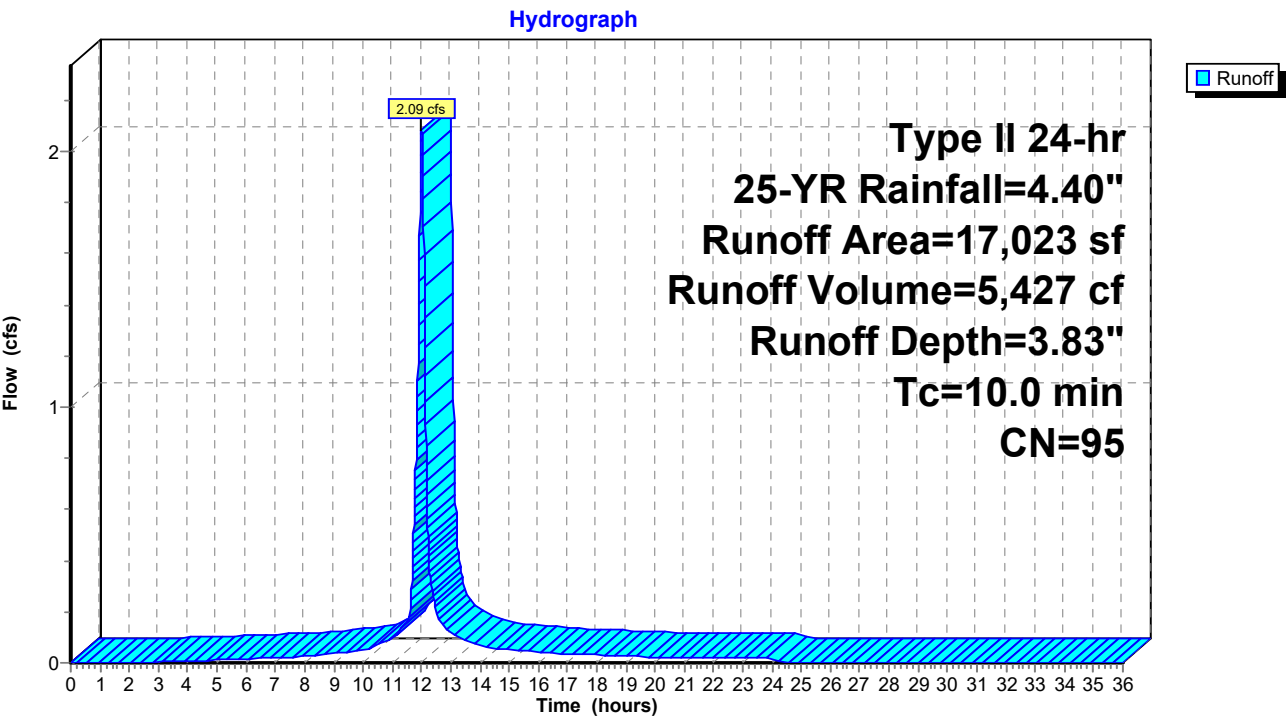
Runoff = 2.09 cfs @ 12.01 hrs, Volume= 5,427 cf, Depth= 3.83"
Routed to Pond P1-R : R-Tank

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.40"

Area (sf)	CN	Description
258	74	>75% Grass cover, Good, HSG C
1,472	65	Brush, Good, HSG C
5,897	98	Roofs, HSG C
9,396	98	Paved roads w/curbs & sewers, HSG C
17,023	95	Weighted Average
1,730		10.16% Pervious Area
15,293		89.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

Subcatchment PS2: Developed Area

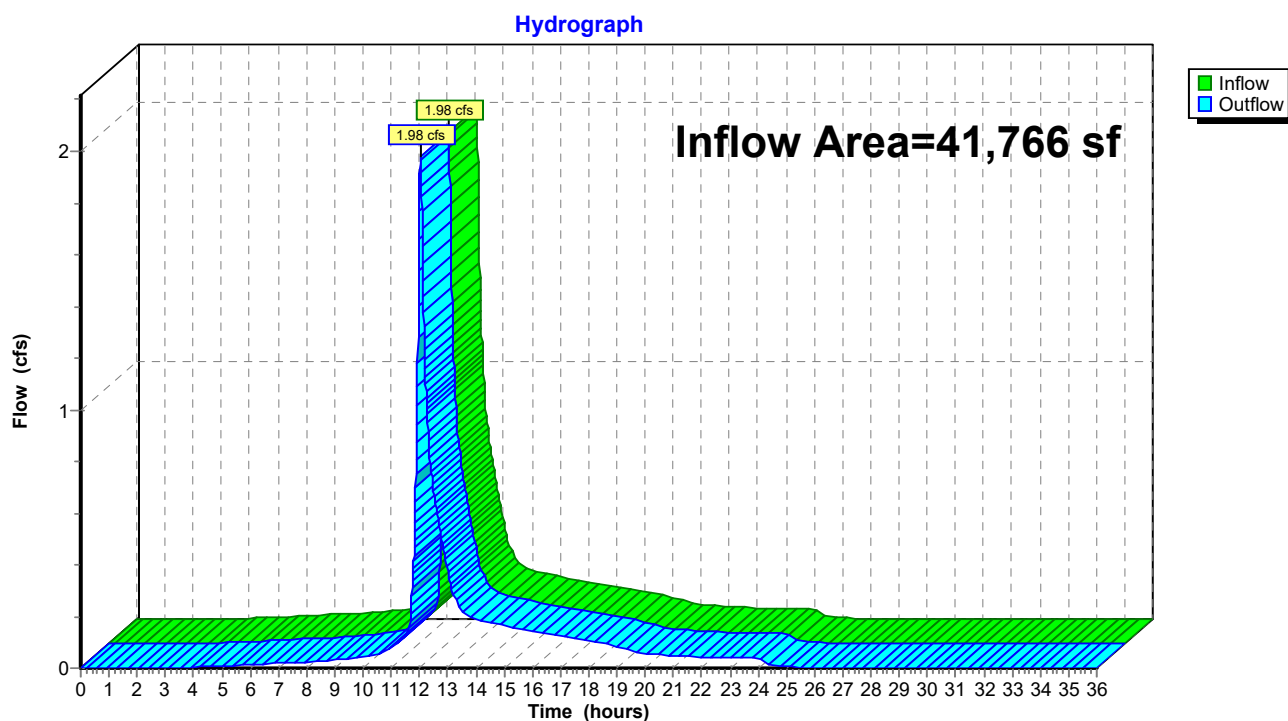


Summary for Reach 1R: Site Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 41,766 sf, 37.87% Impervious, Inflow Depth = 2.59" for 25-YR event
Inflow = 1.98 cfs @ 12.03 hrs, Volume= 9,027 cf
Outflow = 1.98 cfs @ 12.03 hrs, Volume= 9,027 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Reach 1R: Site Runoff

22063 Existing

Prepared by Engineering Ventures, Inc

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Type II 24-hr 25-YR Rainfall=4.40"

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Page 19

Summary for Pond P1-R: R-Tank

Inflow Area = 17,023 sf, 89.84% Impervious, Inflow Depth = 3.83" for 25-YR event
 Inflow = 2.09 cfs @ 12.01 hrs, Volume= 5,427 cf
 Outflow = 0.70 cfs @ 12.17 hrs, Volume= 5,425 cf, Atten= 67%, Lag= 9.7 min
 Primary = 0.70 cfs @ 12.17 hrs, Volume= 5,425 cf
 Routed to Reach 1R : Site Runoff

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 767.31' @ 12.17 hrs Surf.Area= 1,096 sf Storage= 2,012 cf

Plug-Flow detention time= 76.2 min calculated for 5,425 cf (100% of inflow)
 Center-of-Mass det. time= 75.9 min (847.7 - 771.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	764.50'	1,230 cf	20.50'W x 53.46'L x 4.00'H Field A 4,383 cf Overall - 1,308 cf Embedded = 3,076 cf x 40.0% Voids
#2A	765.00'	1,308 cf	ADS_StormTech SC-740 b +Capx 28 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 28 Chambers in 4 Rows Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf
		2,538 cf	Total Available Storage

Storage Group A created with Chamber Wizard

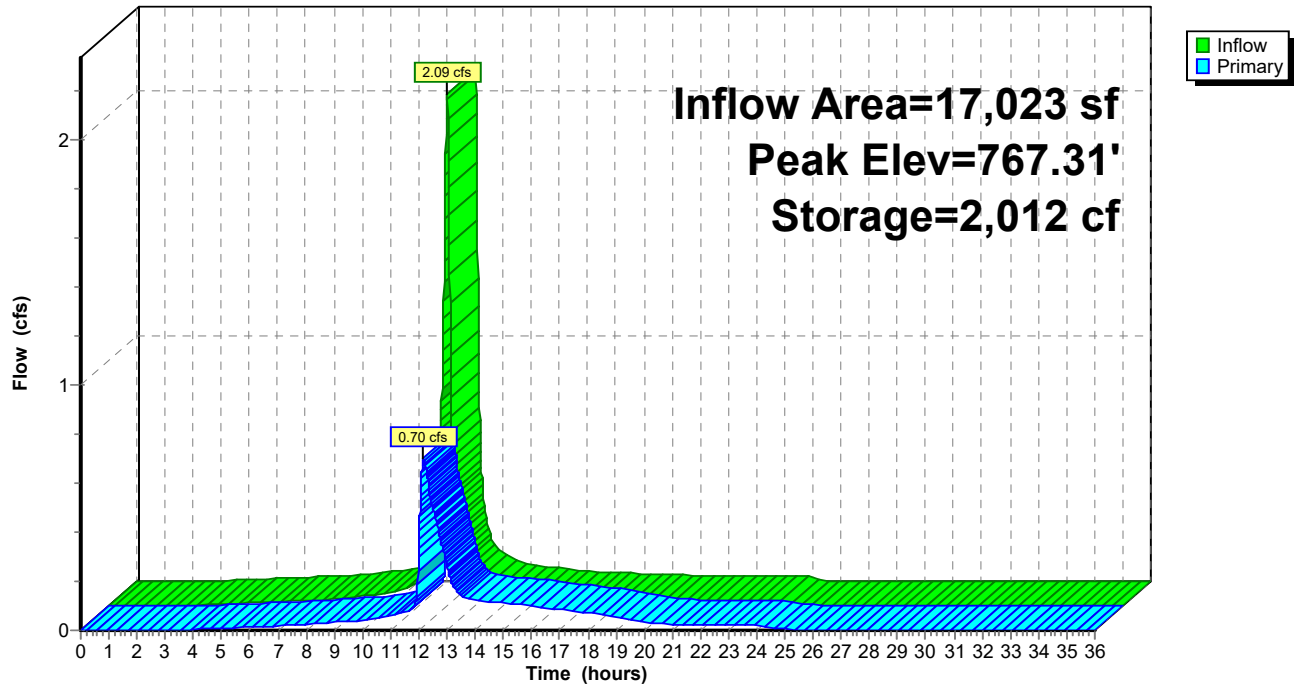
Device	Routing	Invert	Outlet Devices
#1	Primary	764.40'	12.0" Round Culvert L= 25.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 764.40' / 764.00' S= 0.0155 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	764.50'	2.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	766.00'	4.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Device 1	767.00'	6.0" W x 0.7" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#5	Device 1	767.75'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s) 0.5' Crest Height

Primary OutFlow Max=0.70 cfs @ 12.17 hrs HW=767.31' TW=0.00' (Dynamic Tailwater)

- 1=Culvert (Passes 0.70 cfs of 5.87 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.17 cfs @ 7.95 fps)
 3=Orifice/Grate (Orifice Controls 0.45 cfs @ 5.15 fps)
 4=Orifice/Grate (Orifice Controls 0.07 cfs @ 2.56 fps)
 5=Sharp-Crested Rectangular Weir(Controls 0.00 cfs)

Pond P1-R: R-Tank

Hydrograph



22063 Existing

Prepared by Engineering Ventures, Inc

HydroCAD® 10.20-6a s/n 02106 © 2024 HydroCAD Software Solutions LLC

Type II 24-hr 50-YR Rainfall=5.15"

Printed 3/10/2025

Page 21

Summary for Pond P1-R: R-Tank

Inflow Area = 17,023 sf, 89.84% Impervious, Inflow Depth = 4.57" for 50-YR event
 Inflow = 2.46 cfs @ 12.01 hrs, Volume= 6,480 cf
 Outflow = 1.38 cfs @ 12.12 hrs, Volume= 6,478 cf, Atten= 44%, Lag= 6.4 min
 Primary = 1.38 cfs @ 12.12 hrs, Volume= 6,478 cf
 Routed to Reach 1R : Site Runoff

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 767.86' @ 12.12 hrs Surf.Area= 1,096 sf Storage= 2,259 cf

Plug-Flow detention time= 72.2 min calculated for 6,476 cf (100% of inflow)
 Center-of-Mass det. time= 72.0 min (839.6 - 767.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	764.50'	1,230 cf	20.50'W x 53.46'L x 4.00'H Field A 4,383 cf Overall - 1,308 cf Embedded = 3,076 cf x 40.0% Voids
#2A	765.00'	1,308 cf	ADS_StormTech SC-740 b +Capx 28 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 28 Chambers in 4 Rows Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf
		2,538 cf	Total Available Storage

Storage Group A created with Chamber Wizard

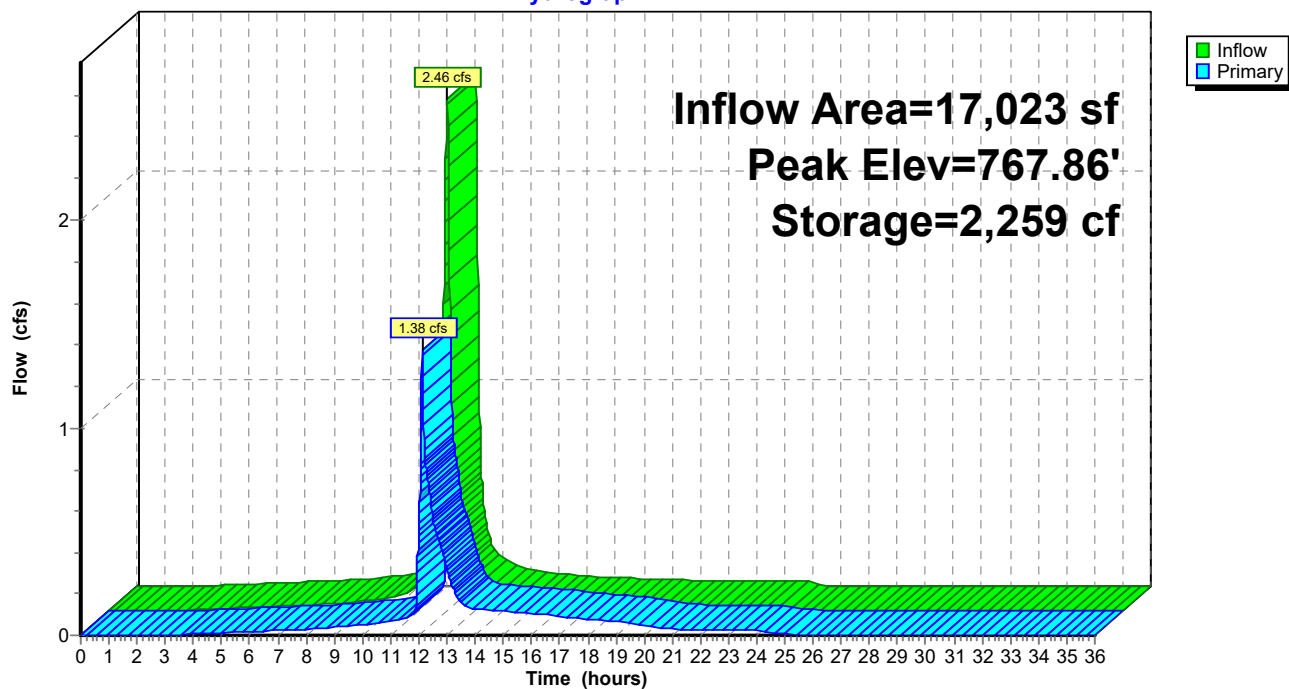
Device	Routing	Invert	Outlet Devices
#1	Primary	764.40'	12.0" Round Culvert L= 25.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 764.40' / 764.00' S= 0.0155 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	764.50'	2.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	766.00'	4.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Device 1	767.00'	6.0" W x 0.7" H Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#5	Device 1	767.75'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s) 0.5' Crest Height

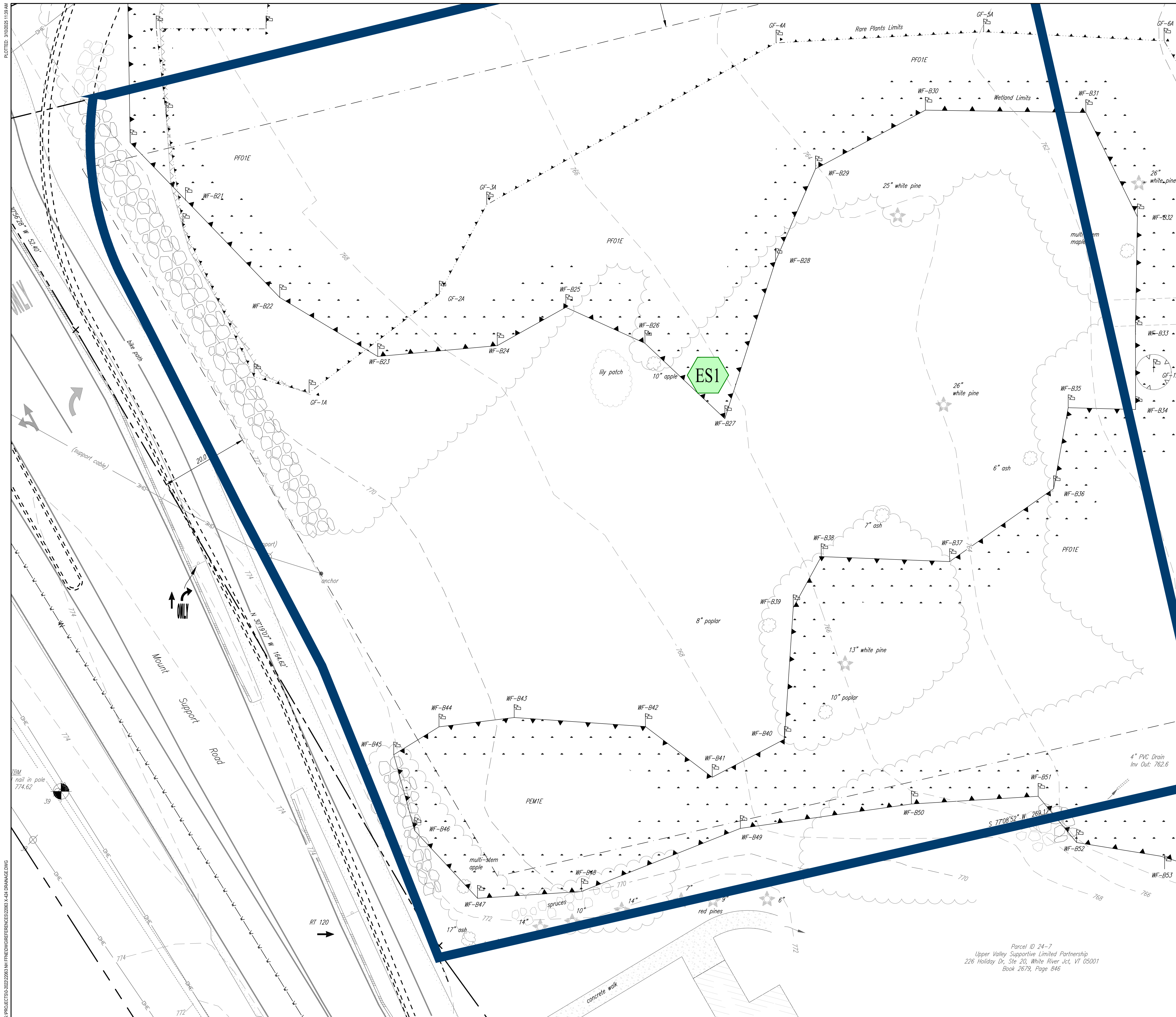
Primary OutFlow Max=1.37 cfs @ 12.12 hrs HW=767.86' TW=0.00' (Dynamic Tailwater)

- 1=Culvert (Passes 1.37 cfs of 6.51 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.19 cfs @ 8.72 fps)
 3=Orifice/Grate (Orifice Controls 0.55 cfs @ 6.27 fps)
 4=Orifice/Grate (Orifice Controls 0.13 cfs @ 4.40 fps)
 5=Sharp-Crested Rectangular Weir (Weir Controls 0.51 cfs @ 1.13 fps)

Pond P1-R: R-Tank

Hydrograph





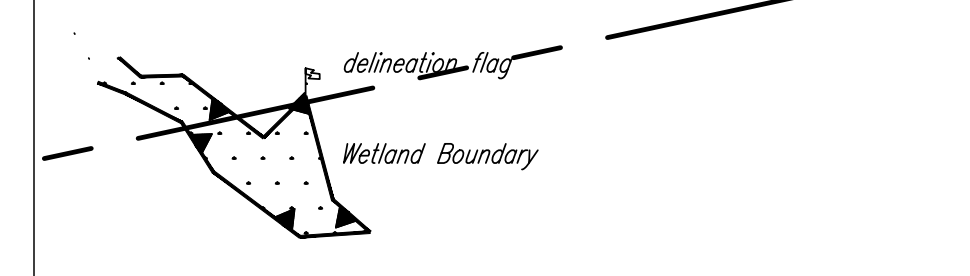
PLOTTED: 3/10/2025 11:39 AM

C:\PROJECTS\0-2022\22063 NH FF\DWG\REFERENCES\22063 X-424 DRAINAGE.DWG

LEGEND



- | | |
|--|---|
| | Stone |
| | Concrete |
| | Iron Road or Pin (I.R.) |
| | Iron Pipe (I.P., inside dia. noted) |
| | Utility Pole |
| | Sewer Manhole |
| | Drain Manhole |
| | Catch Basin |
| | Deciduous Tree |
| | Coniferous Tree |
| | Shrub |
| | Tree/Brush Line |
| | Stone Wall (old farm wall) |
| | Stone Wall (piled boulders & stones) |
| | Existing Gravel Surface |
| | Existing Asphalt Surface |
| | Existing Concrete Surface |
| | Culvert |
| | Overhead Utility Line |
| | Buried Sewer Line (NOT VERIFIED) |
| | Buried Water Line (NOT VERIFIED) |
| | Exterior Building Wall |
| | Soil Boring |
| | Hydrant |
| | Water Valve |
| | Water Shut-off ("Curb Stop") |
| | Spot Elevation |
| | Traffic Signal Base Pole |
| | Streetlight |
| | Granite Curb |
| | Snow Fence |
| | Scattered Rare Plant Survey Delineation |



*Parcel ID 24-6
Mary Hitchcock Memorial Hospital
Book 2815, Page 760
79,008 sq. ft.
1.81 acres*

DRAINAGE AREAS - EXISTING

	ES1	Total
Grass, HSG C	18,077	18,077
Woods, HSG C	23,689	23,689
Building, HSG C		-
Roadway/Sidewalk, HSG C		-
Total	41,766	41,766

DRAINAGE LEGEND



- SUBCATCHMENT DESIGNATION



- SUBCATCHMENT BOUNDARIES

GRAPHIC SCALE



1 inch = 10 ft.
for sheet size 24" x 36"

Stamp

Date _____

Description

No.

**ENGINEERING
VENTURES^{PC}**

FAMILIES FLOURISH NORTHEAST
c/o TOM SULLIVAN
258 SOUTH RIVER ROAD
BEDFORD, NH 03110
603-647-1777

DRAINAGE MAP - EXISTING

FAMILIES FLOURISH NORTHEAST

Sheet Title:

Project Title:

EV Project #	22063
Drawn By:	JWPF
Checked By:	NAP
Scale:	1" = 10'
Date:	03/10/2025

D1.1



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

April 14, 2025 Meeting

Staff Memorandum – PB2025-18-SPR

APPLICATION INFORMATION

Agenda Item: 3.G

Application ID: PB2025-18-SPR

Application Type:

Site Plan Review to convert office space for residential use and add dwelling units to an existing multi-family use for a total of 12 units

Property Location & Tax Map:

3 Campbell Street (Tax Map 92, Lot 65)

Applicant & Property Owner:

Michael Davidson

Property Size:

+/-0.51 acres (+/-22,215 sq. ft.)

Zoning District:

Lebanon Downtown (LD) District

Overlay District(s):

None

Future Land Use Map:

Central Business District

Staff Attachments:

- E-mail correspondence between Planning & Development Department staff and applicant (5 pages)
- Site Plan Review Regulations Technical Checklist (6 of 10 pages)

LEGAL NOTICE

Michael Davidson, 3 Campbell Street (Tax Map 92, Lot 65), zoned LD:

The property is improved with a main building utilized as a mixed use office and multi-family dwelling, and a carriage house utilized as a multi-family dwelling. The Applicant requests Site Plan Review to add additional dwelling units to the property for a total of twelve (12) dwelling units, and to convert the use of the main house to a multi-family dwelling only. PB2025-18-SPR

APPLICATION MATERIALS

- ▶ Application form (1 page)
- ▶ Application for Minor Site Plan Review Support Statement (2 pages)
- ▶ Undated plot plan of subject property

Available on-line only:

- ▶ Floor plans by Matterport (7 pages)
- ▶ GIS map of neighborhood dated February 28, 2025 (1 page)
- ▶ Mailing labels (2 pages)

COMPLETENESS REVIEW

In order to accept jurisdiction and commence review of the applicant's proposal, the Planning Board must first determine that the application is complete. See NH RSA 676:4, I(c)(1) and Section 4.7.C.3.a of the Site Plan Review Regulations, which provides as follows: "The Planning & Development Department shall review the application for completeness pursuant to the requirements of Section 4.7.A and Section 5.1."

Section 4.7.A in relevant part provides as follows:

2. *A complete application shall address or consist of the documents and information required by Article V (Submission Requirements)[...].*
3. *For submission requirements which the applicant wishes the Board to waive, the applicant shall provide waiver requests in accordance with Article VII of these Regulations in lieu of providing the information or documents.*
4. *The applicant shall submit a completed checklist form, provided by the City, indicating all information that has been submitted and any appropriate waivers that have been requested.*

The Article V submission requirements are listed on the technical checklist that an applicant is required to submit per Section 4.7.A.4. A copy of the technical checklist is attached for reference.

Pursuant to Section 4.7.C.3.a, Planning and Development Department staff reviewed the application for compliance with the Site Plan Review Regulations and found that the application was substantially incomplete with respect to Section 4.7.A in that almost none of the information required by Section 5.1 was provided (4.7.A.2), no waiver requests were otherwise submitted (4.7.A.3), and a completed technical checklist wasn't provided (4.7.A.3).

Pursuant to Section 4.7.C.3.b, staff advised the applicant that the application is incomplete and requested that the applicant submit the missing information and materials. See attached e-mail from Planning & Development Department staff to Tim Sidore, dated March 18, 2025. At the same time, staff explained that if the applicant elects not to provide the missing information, staff will recommend that the Board deem the application incomplete as required by Section 4.7.C.3.c.

As communicated to the applicant, all missing information was required to be provided by March 24, 2025, pursuant to Section 4.7.C.3.b. To date, the applicant has not submitted the information required by Section 4.7.A and Section 5.1 of the Site Plan Review Regulations. Consequently, pursuant to Section 4.7.C.3.c, staff recommends that the Board deem the application incomplete.

BACKGROUND

The subject property is improved with two buildings both constructed in 1880 according to the City's assessing records. The building closest to the Campbell Street has 3 stories and a living area of 5,134 sq. ft. while the building to the rear has 2 stories with a living area of 1,620 sq. ft. In 1992, the property was utilized as multi-family residential with a total of 11 dwelling units between the two buildings. On February 10, 1992, the Planning Board approved the applicant's request for Site Plan approval to convert two of the dwelling units in the 3 story building at the front of the lot to an office use. The hearing for the application was noticed as follows:

2. MICHAEL DAVIDSON - requesting site plan review for a change in use to convert two apartment units to offices in an eleven unit apartment building on Campbell St. in the CBD zone.

Pursuant to the 1992 Site Plan approval, therefore, the permitted use of the property is an office with nine (9) residential units. Following Planning Board approval, a Building Permit was issued on April 16, 1992 to "change 6 apartment units to 4 units and office area" (see image below from the approval letter):

City of Lebanon

April 16, 1992

Michael Davidson
CN 9004
Lebanon, NH 03766

Dear Mr. Davidson:

The Building Permit application (#92044A) to change 6 apartment units to 4 units and office area, has been reviewed by the Zoning, Planning, Public Works, Fire and Building Departments and is approved with the following conditions from the Building Department:

Based on the Building Permit approval, it can be inferred that pursuant to the 1992 Site Plan approval, the approved allocation of dwelling units on the property is four (4) within the front building and five (5) within the rear building.

On April 11, 1994, the Planning Board approved a Site Plan application for the conversion of another dwelling unit (consisting of approximately 600 sq. ft.) to additional office space within the 3-story building at the front of the property. Pursuant to the 1994 Planning Board approval, the permitted use of the property is an office with eight (8) dwelling units. At the time of the writing of this staff memo, however, it is not clear whether the 1994 office conversion was utilized. *Therefore, for purposes of this memo, staff will assume that the 1994 office conversion approval was not utilized.*

In or about late 2024 / early 2025, the Planning & Development Department received a Building Code-related complaint from a residential tenant of the subject property. Upon inspection and further investigation, it was discovered that the office use had been converted to dwelling units without any permits or approvals, including site plan approval. Subsequently, to address the site plan violation, the applicant submitted an application to the Minor Site Plan Committee for minor site plan approval. In submitting the application via e-mail sent to Planning & Development Department staff on February 28, 2025, the applicant stated the following:

When Mike bought the property, it was entirely multifamily. He sought and obtained approval in 1992 to use part of the main house as an office. When Nick retired last summer, we reverted to entirely residential use. We understand we need to update the planning and zoning file. There are no changes to the site or structures. There are twelve total housing units between the main house and the carriage house, and sufficient parking.

Please find attached our application packet for a minor site plan review; please let me know the appropriate fee and if you need anything additional.

In reviewing the application, however, Planning & Development Department staff determined that the conversion of the office space to additional dwelling units does not qualify for minor site plan review and instead requires site plan review from the Planning Board. Section 3.1.C.1 of the Site Plan Review Regulations provides in relevant part as follows:

A. MINOR SITE PLAN COMMITTEE REVIEW

Minor site plan approval from the Minor Site Plan Committee in accordance with the procedures set forth in Section 3.2 shall be required for any of the following:

1. Minor site plan approval from the Minor Site Plan Committee in accordance with the procedures set forth in Section 3.2 shall be required when one or more of the criteria in Column A is satisfied. However, if ANY of the criteria in Column B is also satisfied, the application for *land development* shall be reviewed by the Planning Board per Section 3.1.D.

Type of <i>Land Development</i>	Column A	Column B
[...]		
For a multi-family dwelling of five (5) or more units	an increase in the number of dwelling units not to exceed 20% of the existing units	an increase in the number of dwelling units that exceeds 20% of the existing units
[...]		

Pursuant to Section 3.1.C.1, when adding dwelling units to an existing multi-family dwelling of five (5) units or more, the Minor Site Plan Committee has site plan review jurisdiction where the increase in the number of dwelling units does not exceed 20% of the existing units. Where the increase in the number of dwelling units exceeds 20% of the existing units, the Planning Board has site plan review jurisdiction. It is staff's understanding the three (3) new dwelling units are all located within the main building at the front of the property, which was approved for four (4) dwelling units pursuant to the 1992 Site Plan approval. $20\% \text{ of } 4 = 0.8$, which means that the addition of one or more dwelling units to the main building will exceed 20% of the existing approved units. Consequently, any addition of dwelling units to the main building at the front of the property requires Site Plan review by the Planning Board.

Figure 1. Bird's eye view of property (looking east).



Image ©2021 Eagleview (image taken 4/4/2021)

STAFF COMMENTS

Section 7.7.C.3.c provides that prior to acting on staff's recommendation that the Board deem the application incomplete, the Board shall give the Applicant a reasonable opportunity to be heard on the limited issue of completeness.

Should the Planning Board deem the application incomplete, note that NH RSA 676:4, I(c)(1) requires the Board to "notify the applicant of the determination in accordance with RSA 676:3, which shall describe the information, procedure, or other requirement necessary for the application to be complete." RSA 676:3, I, provides in relevant part: "The local land use board shall issue a final written decision which either approves or disapproves an application for a local permit and make a copy of the decision available to the applicant. The decision shall include specific written findings of fact that support the decision."

Attachments

cc (via e-mail): Michael Davidson (via e-mail)
Tim Sidore (via e-mail)
Brian Bouchard, Esq. (via e-mail)
Leigh Hayes, Chief Building Official & Health Officer
Nathan Reichert, Planning & Development Director & Zoning Administrator
File

From: [Tim Sidore](#)
To: [Tim Corwin](#)
Cc: [Mike Davidson](#); [Crystal Taplin](#); [Brian Bouchard](#)
Subject: Re: [EXTERNAL] Re: 3 Campbell St_92-65_PB2025-18-SPR
Date: Monday, March 31, 2025 7:42:03 PM

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Tim,

At the moment, we will proceed with the 3 Campbell application “as-is.”

We are pursuing other avenues of action as well.

Best,

Tim Sidore, CAM, NALP
Chief of Operations
Ledgeworks, Inc.
(603) 727-9024 (O)
Option #2 for After-Hours Emergency Maintenance

Managing Agent for:

Execusuite, LLC
21 Agua Street, LLC
Michael Davidson Properties
O' Brothers, LLC
One NorthPark, LLC
Recreo, LLC
Chorro, LLC
Colburn Park, LLC
12 Tremont Street, LLC
Aldama, LLC
Sollano, LLC

Sent from my iPhone

On Mar 31, 2025, at 7:27 PM, Tim Corwin <Tim.Corwin@lebanonnh.gov> wrote:

Tim –

I'm following up from my e-mail below. Please let me know how you'd like to proceed with respect to the 3 Campbell Street application.

Thank you, Tim

From: Tim Corwin

Sent: Tuesday, March 25, 2025 9:36 AM

To: Tim Sidore <tim@ledgeworks.com>

Cc: Mike Davidson <mike@ledgeworks.com>; Crystal Taplin
<Crystal.Taplin@lebanonnh.gov>

Subject: RE: [EXTERNAL] Re: 3 Campbell St_92-65_PB2025-18-SPR

Tim –

Thank you. As you know, staff's responsibility is to enforce the City's land use regulations as they are written. And as currently written, site plan review is required per Section 3.1.D of the Site Plan Review Regulations. I will prepare a formal Notice of Violation shortly in order to establish a clear timeframe for appeal of staff's determination to the Planning Board (should you choose to appeal rather than provide the required submission materials).

In the meantime, we need to resolve the status of your current Planning Board application (PB2025-18-SPR). I believe there are three options:

1. You can provide the required submission information outlined in my March 18th e-mail below. The submission deadline per the Site Plan Review Regulations was on Monday, but I can confer with the Planning Board Chair to see if we can extend the deadline since this is a 5-Monday month (ie. we have an extra week in between the resubmission deadline and the Planning Board meeting); or
2. You can withdraw the application; or
3. Staff can submit the application as is to the Planning Board with a recommendation that the application is incomplete (a recommendation we would be required to make per Section 4.7.C.3.c of the Site Plan Review Regulations).

Please let us know how you'd like to proceed with PB2025-18-SPR. -Tim

TIM CORWIN, AICP
DEPUTY PLANNING AND DEVELOPMENT DIRECTOR

CITY OF LEBANON
(603) 448-1524 (OFFICE)
(603) 442-6127 (DIRECT)
(603) 678-0741 (CELL)
TIM.CORWIN@LEBANONNH.GOV
[BOOK A TIME TO MEET WITH ME](#)

From: Tim Sidore <tim@ledgeworks.com>
Sent: Monday, March 24, 2025 4:49 PM
To: Tim Corwin <Tim.Corwin@lebanonnh.gov>; Mike Davidson <mike@ledgeworks.com>
Cc: Nathan Reichert <Nathan.Reichert@lebanonnh.gov>; Leigh Hays <Leigh.Hays@lebanonnh.gov>; Tiffany Adams <Tiffany.Adams@lebanonnh.gov>; Crystal Taplin <Crystal.Taplin@lebanonnh.gov>
Subject: [EXTERNAL] Re: 3 Campbell St_92-65_PB2025-18-SPR

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Tim,

Respectfully, we disagree with the need for a full site plan review. The site and the building exteriors have not changed since 1992/1994. Parking, which is always the most significant factor during application hearings, is alleviated by the reversion of the office space to housing. In fact, the demographics of renters have changed in the last 40+ years; most of these apartments now have single occupants, which means the 17 spaces shown on the site plan are in excess of the requirement. Reoccupying former apartments does not impact the neighborhood in any negative way, and brings badly needed housing units back to the mix. As you pointed out, there were eleven apartments, and now there are twelve. Keep in mind the City did not have the correct number of apartments on file to begin with; the carriage house was listed as having two units when it has had the same five apartments since before Mike bought the property in 1985. We are more than willing to work with staff to bring the zoning file up to date and make any necessary life safety updates, but request relief from an unnecessary full site plan review.

PS, it was nice to see 3 Campbell and Lucky's featured on the front page of the paper this past weekend!

Best,

Tim Sidore, CAM, NALP
Chief of Operations
Ledgeworks, Inc
[\(603\) 727-9024](tel:6037279024) (O)
Option #2 for After-Hours Emergency Maintenance

Managing Agent for:

Execusuite, LLC
21 Agua Street, LLC
Michael Davidson Properties
O' Brothers, LLC
One NorthPark, LLC
Chorro, LLC
Recreo, LLC
Colburn Park, LLC
12 Tremont Street, LLC
Aldama, LLC
Sollano, LLC

On Tue, Mar 18, 2025 at 4:10 PM Tim Corwin <Tim.Corwin@lebanonnh.gov> wrote:

Tim –

Following up from the staff review meeting yesterday, I have confirmed that the proposal for new dwelling units at 3 Campbell Street will require Site Plan review from the Planning Board and does not qualify for review by the Minor Site Plan Committee. Per the City's records (which I believe you have been provided with, but if not, please let me know), in 1992, the Planning Board approved the conversion of what was then 11 dwelling units on the property to 9 dwelling units with an office. The addition of 3 new dwelling units for a total of 12 on the property requires Planning Board site plan approval per Section 3.1.D of the Site Plan Review Regulations. Note that we have also found a 1994 Planning Board Notice of Action approving the conversion of an additional unit to office space which would mean that only 8 dwelling units are currently approved for the property. We haven't yet researched whether a building permit or CO was issued for the additional office conversion approved in 1994.

Regarding your current Site Plan application, it is substantially incomplete at this time. The only item provided with your minor site plan application that meets the minimum site plan review submission requirements of Section 5.1 of

the Site Plan Review Regulations is the application form. The other materials and information required to be submitted for a complete site plan application to the Planning Board are identified in the [Site Plan Review Technical Checklist](#). The information required to be provided includes the forms located [here](#) (ie the Certified Notification List, Fee Schedule, the Site Plan Review Technical Checklist, and the Application for Waivers, if needed).

Pursuant to Section 4.7.C.3.b of the Site Plan Review Regulations, all information and materials required to be provided by Section 5.1.E (as set forth on the [Site Plan Review Technical Checklist](#)) must be submitted by the close of business on **Monday, March 24, 2025**. (Section 4.7.C.3.b provides that, “Missing submission requirements, including any necessary waiver requests, shall be delivered to the Planning & Development Department by close of business on the fourth Monday of the month (or the following business day if the office is closed) for submission to the Board the following month.”) Note that pursuant to Section 4.7.C.3.c, **“If the applicant elects not to complete the missing requirements [or] fails to deliver all missing submission requirements prior to the deadline [...], the Planning & Development Department shall recommend that the Board deem the application incomplete.”**

If you have any questions about any of the site plan submission requirements or anything else, please don’t hesitate to ask.

Thank you, Tim

TIM CORWIN, AICP
DEPUTY PLANNING AND DEVELOPMENT DIRECTOR
CITY OF LEBANON
(603) 448-1524 (OFFICE)
(603) 442-6127 (DIRECT)
TIM.CORWIN@LEBANONNH.GOV
[BOOK A TIME TO MEET WITH ME](#)

This email has been scanned for spam and viruses by Proofpoint Essentials. Click [here](#) to report this email as spam.

CITY OF LEBANON, NH SITE PLAN REVIEW REGULATIONS TECHNICAL CHECKLIST	
PROJECT NAME:	
APPLICANT:	DATE:
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
TECHNICAL CHECKLIST & STORMWATER CHECKLIST**

[illegible]

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

Plan Requirements (cont.)	Info. Provided	Waiver Sought
5.1.E(6) - 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.	☐	☐
5.1.E(7) - Shape, size, height, and location of all existing structures located on site and within 200 feet of site.	☐	☐
5.1.E(7) - 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.	☐	☐
5.1.E(8) - 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.	☐	☐
5.1.E(8) - 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.	☐	☐
5.1.E(9) - Zoning District, Tax Map and Lot number, and use of abutting properties within 200 feet of property.	☐	☐
5.1.E(9) - 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.	☐	☐
5.1.E(10) - 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.	☐	☐
5.1.E(10) - Vehicle and bicycle parking spaces shall be numbered.	☐	☐
5.1.E(10) - Loading spaces and facilities used in connection with any structures on the site shall be shown	☐	☐
5.1.E(10) - Total square footage and percentage of the lot covered by impervious cover shall be shown.	☐	☐
5.1.E(11) - 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.	☐	☐
5.1.E(12) - 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
5.1.E(13) - 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.	☐	☐
5.1.E(13) - 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.	☐	☐
5.1.E(13) - 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).	☐	☐
5.1.E(13) - 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.	☐	☐
5.1.E(14) - 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.	☐	☐
5.1.E(14) - 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.	☐	☐
5.1.E(15) - 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).	☐	☐
5.1.E(15) - For properties located within the Floodplain District, the 100-year flood elevation, floodway, shoreland protection zone, and flood plain limits shall be identified.	☐	☐
5.1.E(16) - 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.	☐	☐
5.1.E(16) - 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.	☐	☐
5.1.E(16) - Calculations for square footage of perimeter landscaping.	☐	☐
5.1.E(16) - Parking lot shading calculations shall be provided by depicting new trees and shrubs at 10-year crown size.	☐	☐
5.1.E(17) - Existing and proposed surface and subsurface storm drainage facilities, including City storm drainage facilities located within 200' of site.	☐	☐
5.1.E(17) - 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.	☐	☐
5.1.E(18) - Section 6.6. Stormwater Management submission requirements.	See Stormwater Checklist	
5.1.E(19) - 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 Application for Waivers form).	☐	☐
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: _____

CITY OF LEDARON APPLICATION FOR

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

☐ OTHER _____

PROPERTY OWNER (APPLICANT):

NAME: Michael Davison

MAILING ADDRESS:

E-MAIL ADDRESS:

CO-APPLICANT, AGENT, OR LESSEE:

NAME: Tim Sidor

MAILING ADDRESS:

E-MAIL ADDRESS:

PROJECT LOCATION:

TAX MAP #: 92 LOT#: 65 PLOT #: _____ ZONE: LD

STREET ADDRESS OF PROJECT: 3 Campbell Street

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

SCOPE OF PROJECT:

USE HAS REVERTED TO RESIDENTIAL / MULTIFAMILY - TWELVE (12)
TOTAL UNITS.

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 APRIL 10, 2025, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY

OWNER: Tim Sidor

DATE: 28 FEB 2025

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: Tim Sidor

DATE: 28 FEB 2025

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #	
2025-03-10	92-65	PB2025-18-SPR	



City of Lebanon, New Hampshire

APPLICATION FOR MINOR SITE PLAN REVIEW

SUPPORT STATEMENT

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

I. APPLICATION CHECKLIST [per §3.2.B.7 of the Site Plan Review Regulations]

- An Application, completed in full and signed by the property owner [§3.2.B.7.a]
This Support Statement, completed in full and signed by the applicant [§3.2.B.7.b]
Payment of the appropriate filing fees [§3.2.B.7.c]
A completed Public Hearing Notification List [§3.2.B.7.d]
A digital copy of the site plan set, prepared in accordance with the requirements of §3.2.B.7.e, in .PDF format
Optional: photos and any other materials in support of your application

II. PROJECT DESCRIPTION

Describe your proposed project with as much detail as possible, including but not limited to changes to the use(s), to the exterior of the building, and to the site. You can respond in the space provided below or on a separate sheet of paper.

USE HAS REVERTED TO RESIDENTIAL / MULTIFAMILY; SEVEN (7) UNITS
IN MAIN HOUSE IN ADDITION TO FIVE (5) IN CARRIAGE HOUSE.
NO CHANGES TO BUILDINGS OR SITE.

III. SITE PLAN TECHNICAL CHECKLIST

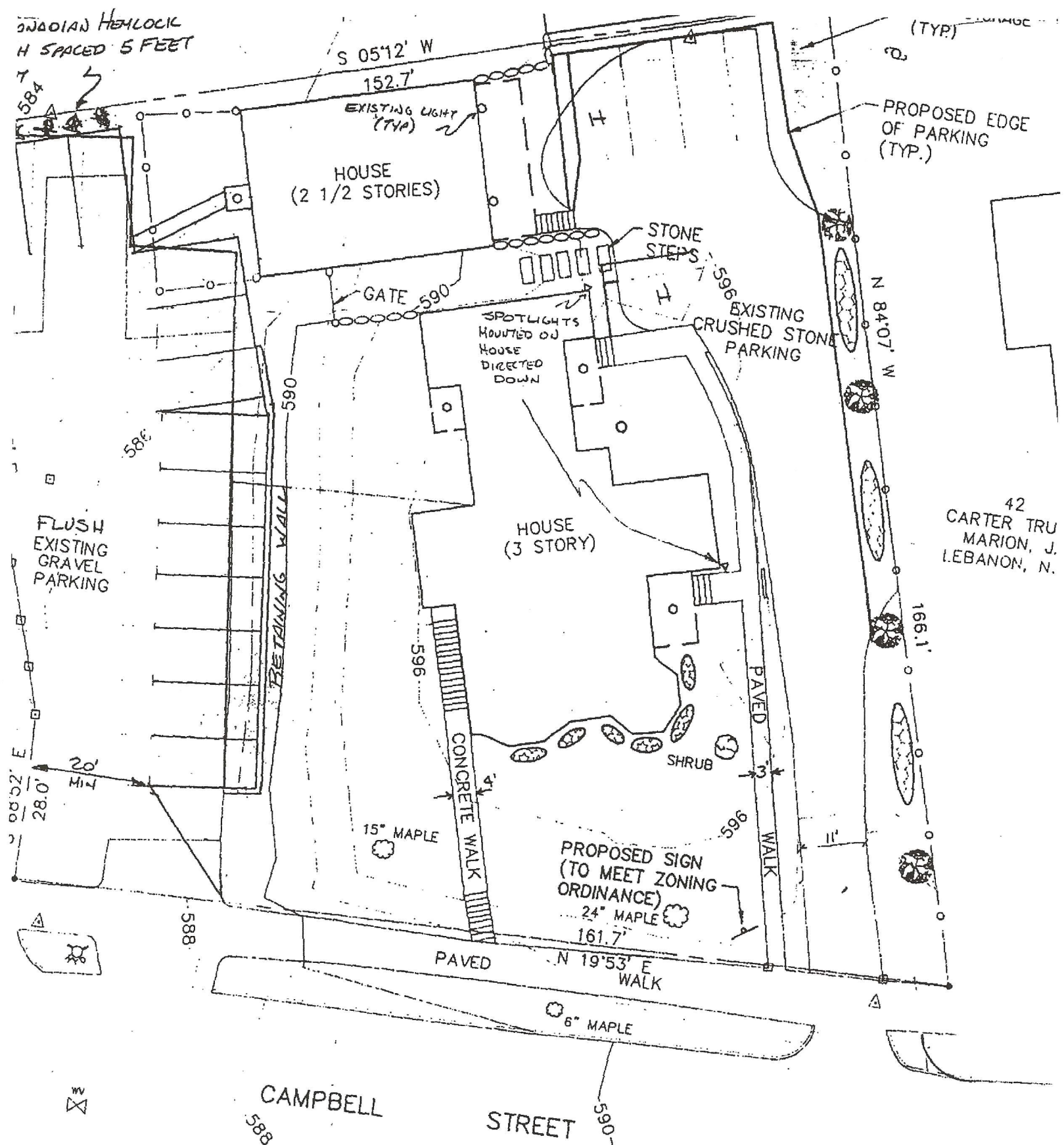
The site plan shall:	Info. Provided
<u>3.2.B.7.e</u> - Be scaled	☒
<u>3.2.B.7.e</u> - Be prepared utilizing the current approved site plan as a base map, if available	☒
<u>3.2.B.7.e</u> - Identify all abutters	☒
<u>3.2.B.7.e.i</u> - Indicate the site location	☒
<u>3.2.B.7.e.i</u> - Indicate the address of the subject property	☒
<u>3.2.B.7.e.i</u> - Indicate the zoning classification of the subject property	☒
<u>3.2.B.7.e.ii</u> - Describe the size, shape, and use of the subject property	☒
<u>3.2.B.7.e.ii</u> - Describe relevant information about existing site topography, drainage, hydrologic features, vegetation, and other natural features	☒
<u>3.2.B.7.e.ii</u> - Describe proposed changes to site topography, drainage, hydrologic features, vegetation, and other natural features	☒

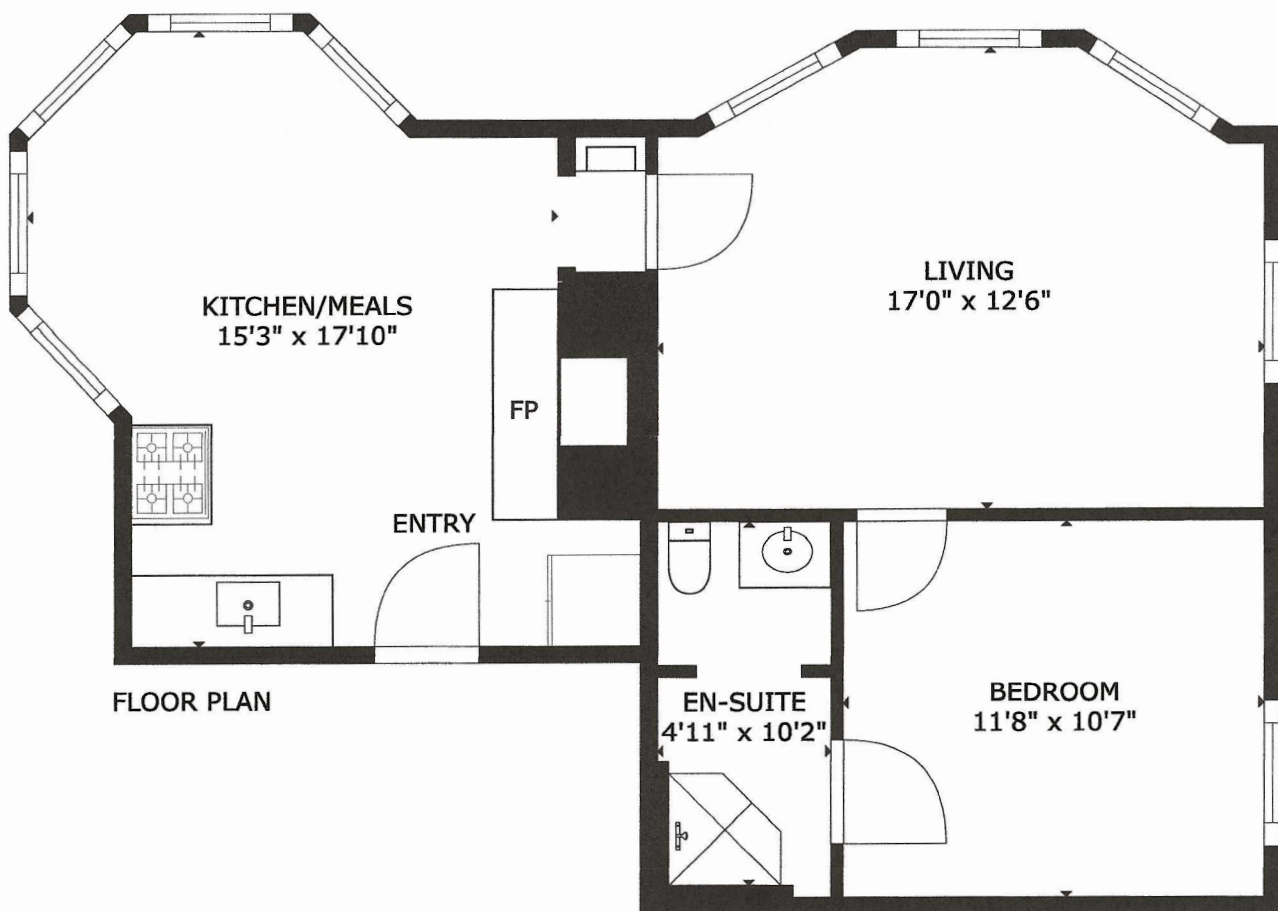
The site plan shall:	Info. Provided	Not Applicable
3.2.B.7.e.iii - Show the size, dimensions, location, and height (as applicable) of: - existing structures - proposed structures - expansions to existing structures - landscaping - parking areas - walkways / ramps - driveways - lighting fixtures - stormwater control devices - exterior waste receptacles - exterior equipment - utilities - all other improvements	☒ ☐ ☐ ☒ ☒ ☒ ☒ ☒ ☒ ☒ ☒ ☒ ☐ ☒ ☒	☐ ☒ ☒ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☒ ☐ ☐
3.2.B.7.e.iv (Article VI design compliance) - Identify or show: where/how stormwater will be discharged	☒	X
3.2.B.7.e.v (Zoning Ordinance compliance) - Identify or show: - setbacks (in ft.) of existing buildings and structures - setbacks (in ft.) of proposed buildings and structures - existing use(s) of property - proposed use(s) of property - size of each existing and proposed non-residential unit - number of existing and proposed dwelling units - number of existing on-site parking spaces - for each use, the number of required parking spaces per Section 607 of the Zoning Ordinance - total proposed number of on-site parking spaces	☒ ☒ ☒ ☒ ☐ ☒ ☒ ☐ ☒ ☒	☐ ☐ X X ☒ ☐ ☐ ☐ ☐ ☐

I hereby attest that to the best of my knowledge all of the information on this Support Statement and in the accompanying Minor Site Plan application materials and documentation is true and accurate.


 Signature of Applicant

28 FEB 2025
 Date





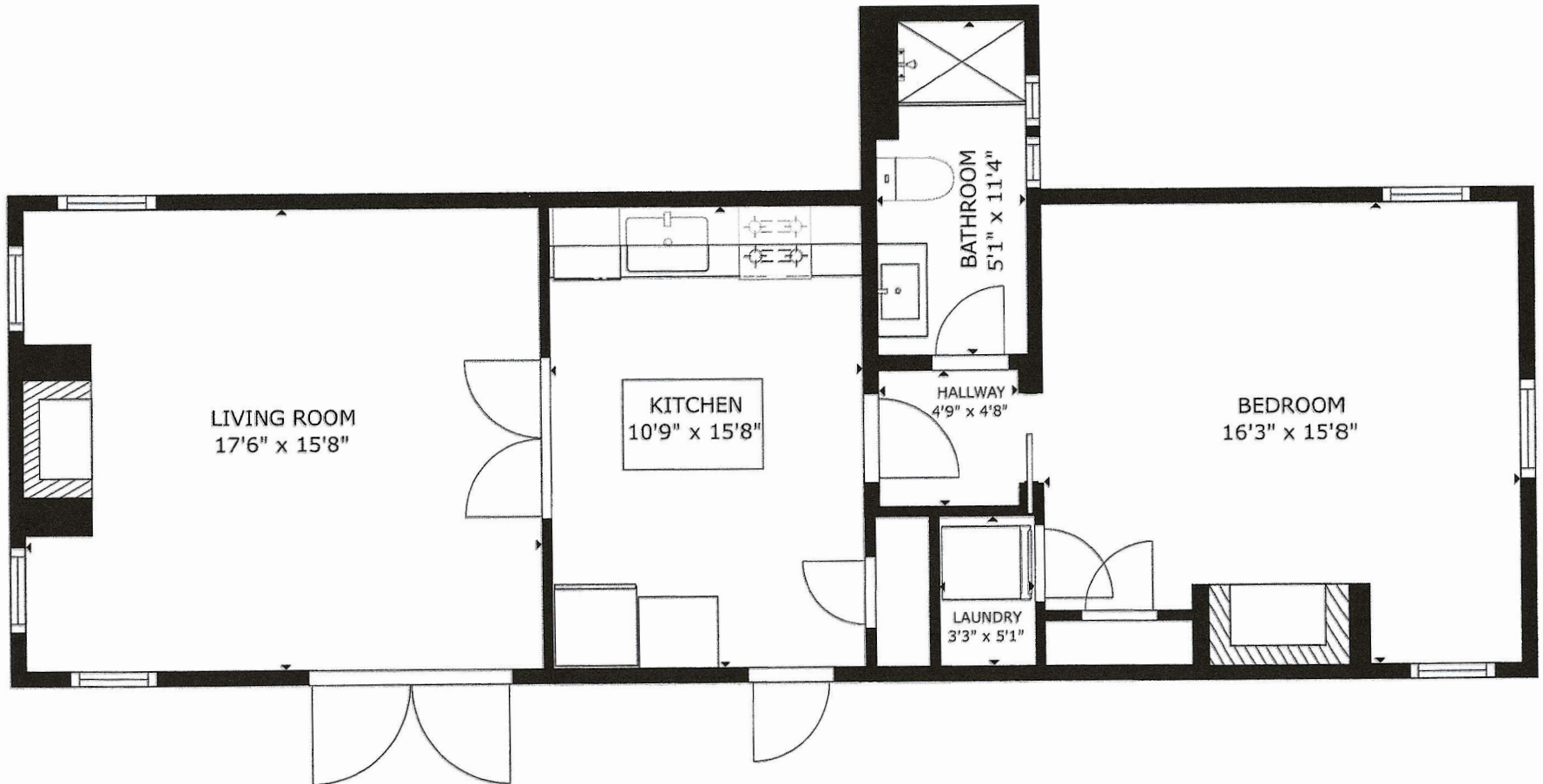
FLOOR PLAN

3 CAMPBELL #1F

GROSS INTERNAL AREA
FLOOR PLAN: 653 sq. ft

SIZES AND DIMENSIONS ARE APPROXIMATE, ACTUAL MAY VARY.



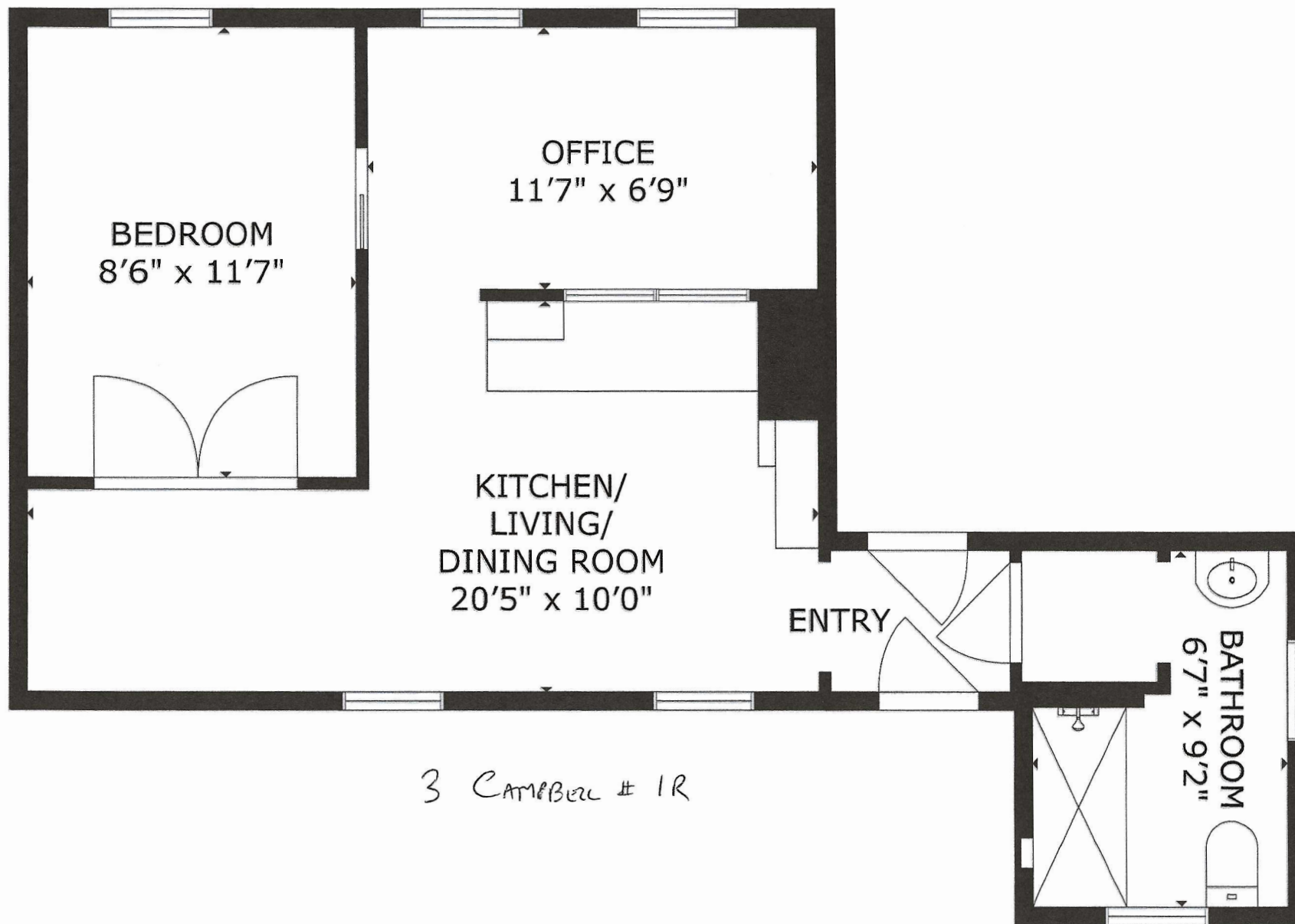


3 CAMPBELL #1M

GROSS INTERNAL AREA
FLOOR 1: 826 sq ft
TOTAL: 826 sq ft

*ALL DIMENSIONS ARE APPROXIMATE, AS SHOWN ON DRAWING

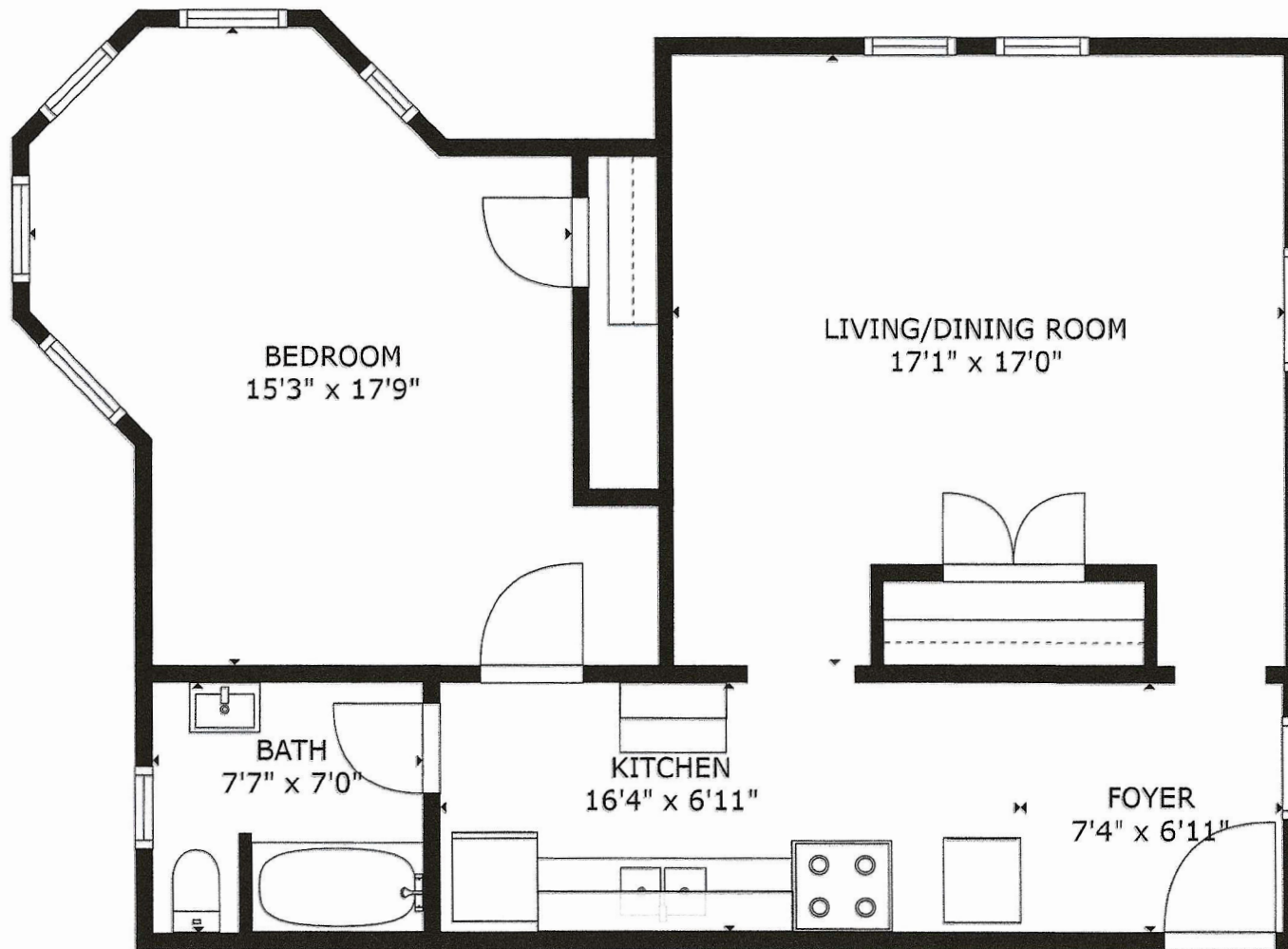




FLOOR 1

GROSS INTERNAL AREA
TOTAL: 430 sq.ft
SIZES AND DIMENSIONS ARE APPROXIMATE. ACTUAL MAY VARY.





FLOOR 1

3 CAMPBELL # 2F

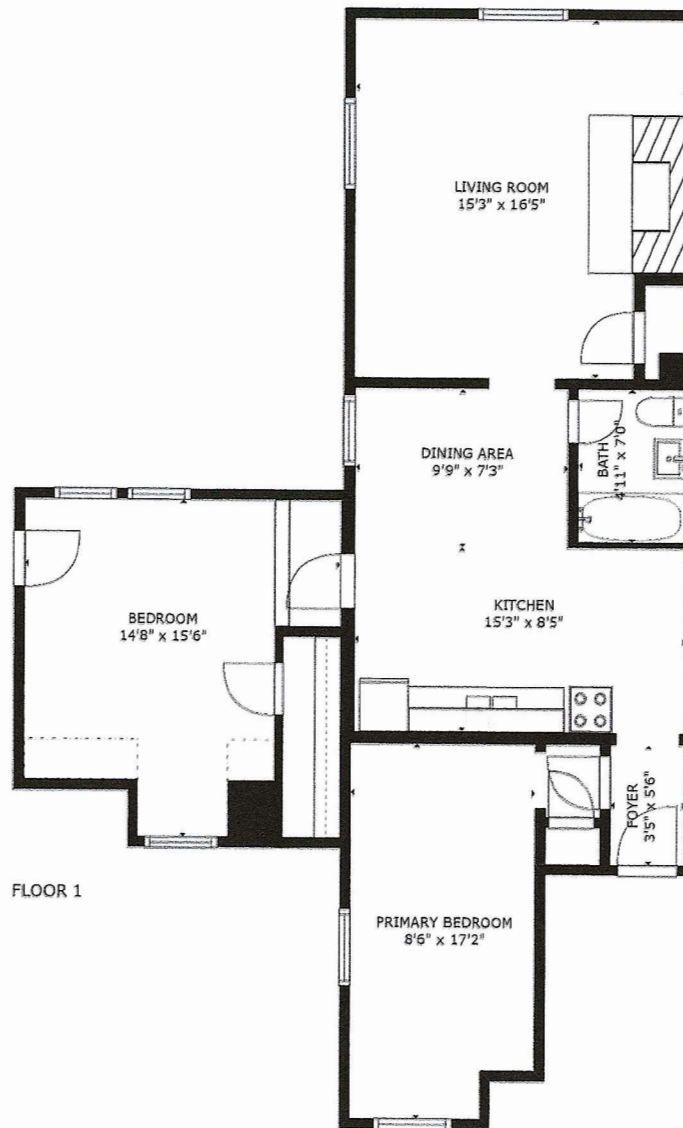
GROSS INTERNAL AREA

FLOOR 1: 784 sq. ft

TOTAL: 784 sq. ft

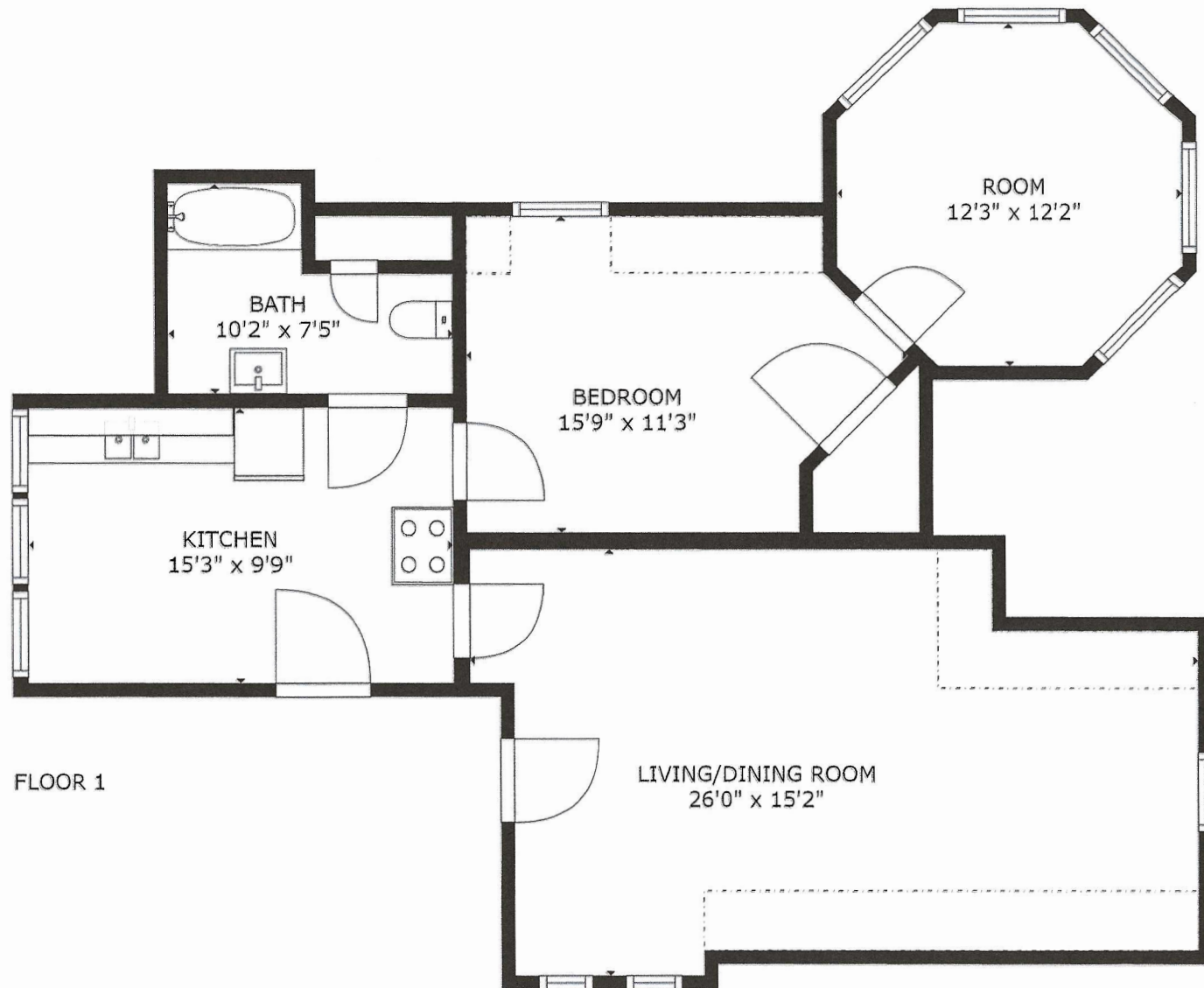
SIZES AND DIMENSIONS ARE APPROXIMATE, ACTUAL MAY VARY.





3 CAMPBELL # 2R

GROSS INTERNAL AREA
FLOOR 1: 887 sq. ft, EXCLUDED AREAS:
REDUCED HEADROOM BELOW 1.5M: 19 sq. ft
TOTAL: 887 sq. ft
SIZES AND DIMENSIONS ARE APPROXIMATE, ACTUAL MAY VARY.

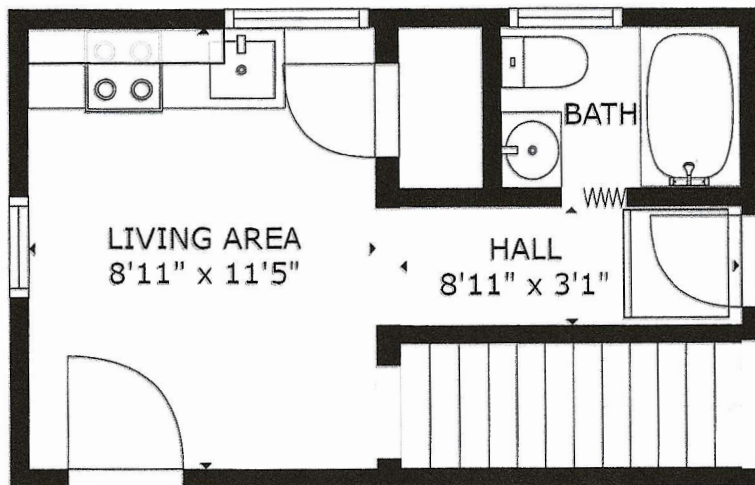


3 CAMPBELL #3F

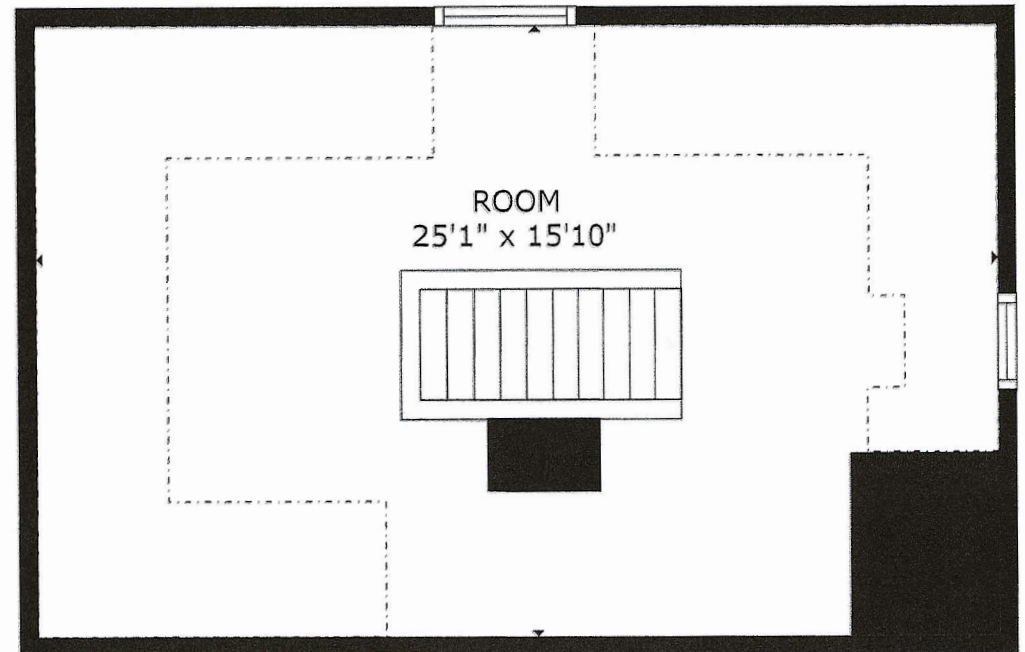
GROSS INTERNAL AREA
FLOOR 1: 801 sq. ft, EXCLUDED AREAS:
REDUCED HEADROOM BELOW 1.5M: 81 sq. ft
TOTAL: 801 sq. ft

SIZES AND DIMENSIONS ARE APPROXIMATE, ACTUAL MAY VARY





FLOOR 1

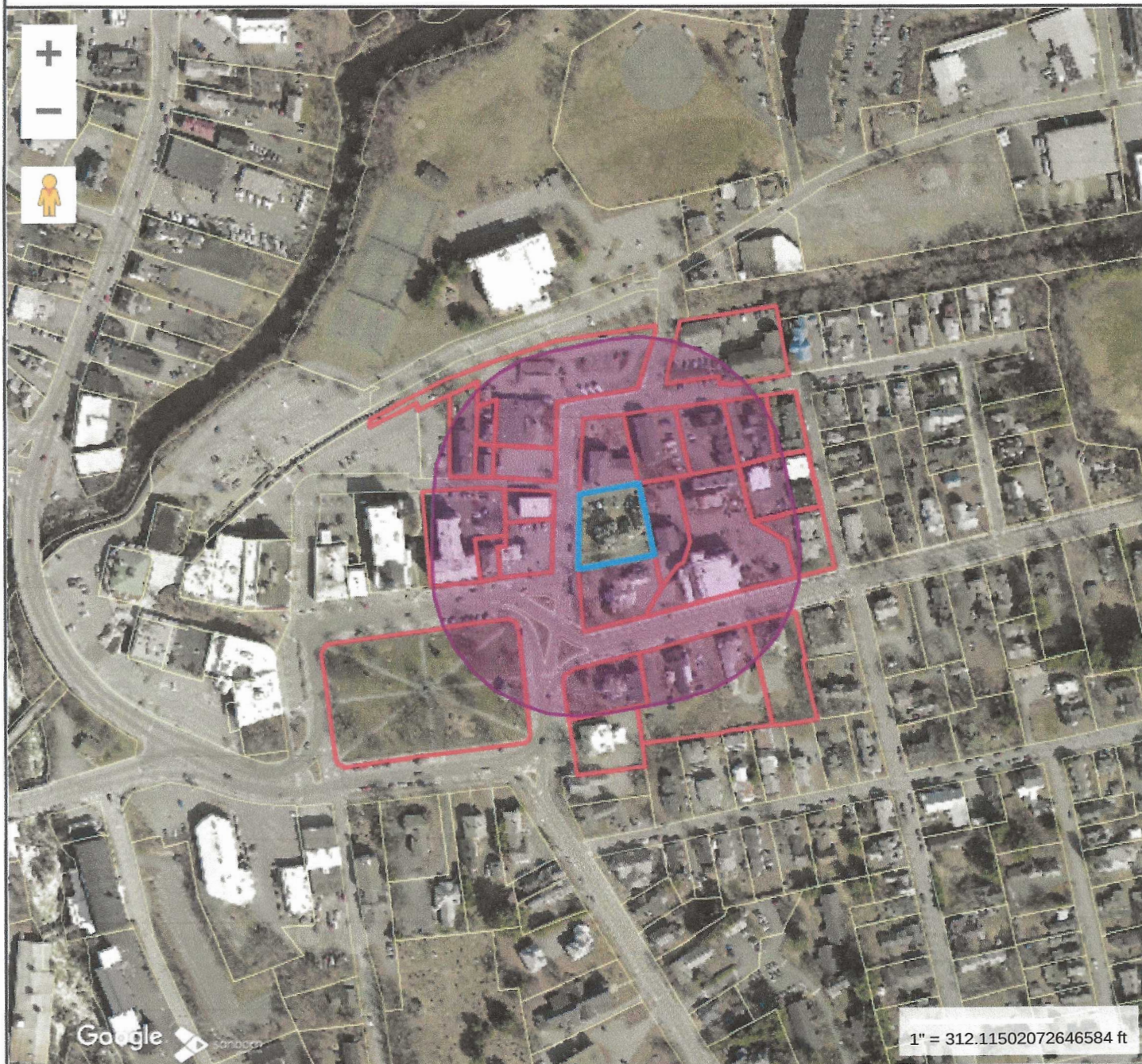


FLOOR 2

3 CAMPBELL #6

GROSS INTERNAL AREA
 FLOOR 1: 211 sq ft, FLOOR 2: 222 sq ft
 EXCLUDED AREAS: , REDUCED HEADROOM BELOW 1.5M: 158 sq ft
 TOTAL: 433 sq ft

SIZES AND DIMENSIONS ARE APPROXIMATE, ACTUAL MAY VARY

**Property Information**

Property ID 92-65
Location 3 CAMPBELL ST
Owner DAVIDSON, MICHAEL

**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 01/30/2025
Data updated 11/18/2018

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

CACL HOLDINGS LLC
187 SAINT GAUDENS RD
CORNISH, NH 03745

CITY OF LEBANON
51 NORTH PARK ST
LEBANON, NH 03766

UNITED STATES POSTAL SERVICE
11 EAST PARK ST
LEBANON, NH 03766

CITY OF LEBANON
51 NORTH PARK ST
LEBANON, NH 03766

LEBANON HOUSING AUTHORITY
31 ROMANO CIR
WEST LEBANON, NH 03784

CITY OF LEBANON
51 NORTH PARK ST
LEBANON, NH 03766

ONE NORTHPARK LLC
31 ELM ST
LEBANON, NH 03766

TEOMOR LLC
2 CAMPBELL ST
LEBANON, NH 03766

NBKS, LLC
21 SCHOOL ST
LEBANON, NH 03766

MARTIN, TIMOTHY E
11 FLYNN ST
LEBANON, NH 03766

TEOMOR LLC
2 CAMPBELL ST
LEBANON, NH 03766

GRAFTON CTY SENIOR CITIZENS
PO BOX 433
LEBANON, NH 03766

TWIN PINES HOUSING TRUST
226 HOLIDAY DR, STE 20
WHITE RIVER JCT, VT 05001

CHEN, ZI
30 1/2 WEST WHEELOCK ST
HANOVER, NH 03755

PARKHURST COMM HOUSING INC
226 HOLIDAY DR, STE 20
WHITE RIVER JCT, VT 05001

CARTER COMM BLDG ASSOC
1 TAYLOR ST
LEBANON, NH 03766

MARION J CARTER TRUST
28 TIMBER LN
LEBANON, NH 03766

COMMUNITY GALLERY INC
11 BANK ST
LEBANON, NH 03766

CHORRO LLC
21 WATER ST
LEBANON, NH 03766

GUARALDI, LAWRENCE V
21 BANK ST
LEBANON, NH 03766

LEIRAS ANTONIO & DEBRA TTEES
7035 BARGELLO ST
ENGLEWOOD, FL 34224

OFFICER, THOMAS F
13 FLYNN ST
LEBANON, NH 03766

14 PARKHURST-HINCH LLC
PO BOX 4301
WHITE RIVER JCT, VT 05001

ETTING, CHAD D
2 ELM ST
LEBANON, NH 03766

SCHUSTER, BARRY C TTEE
PO BOX 447
LEBANON, NH 03766

GALLERY COURT CONDOMINIUM
2-12 ELM ST
LEBANON, NH 03766

CAVANAUGH, CHRISTINE M
6 ELM ST
LEBANON, NH 03766

PRINZ, BIANKA D
8 ELM ST
LEBANON, NH 03766

SMITH, VICTORIA HALL
10 ELM ST
LEBANON, NH 03766

WAGNER LUCY M
12 ELM ST
LEBANON, NH 03766

KCC PROPERTIES BANK ST LLC
32 LEBANON ST STE A
HANOVER, NH 03755

DRAFT

**LEBANON PLANNING BOARD
COUNCIL CHAMBERS, CITY HALL OR
REMOTE VIA MICROSOFT TEAMS
LEBANONNH.GOV/LIVE
MONDAY, MARCH 17, 2025 6:30PM**

MEMBERS PRESENT: Andrew Faunce (Chair), Richard Ford Burley (Vice Chair), Eric Stacy, Patrick Kennelly, Jeremy Rutter, Karen Zook (City Council Rep), Kathie Roman, (alt) (REMOTE), Kellen Appleton

MEMBERS ABSENT: Brian Ceglarski

STAFF PRESENT: Tim Corwin (Deputy Planning Director), Nathan Reichert (Director of Planning & Development), Brian Vincent (City Engineer)

1. CALL TO ORDER

Chair Faunce called the meeting to order at 6:30pm. Mr. Corwin reviewed the City's meeting in-person and REMOTE attendance policies and procedures.

Ms. Romano said she was attending remotely because she was out of town. She said she would participate as an alternate Board member. She said no one was in the room with her while attending the meeting.

2. NOTICE OF REGIONAL IMPACT

The following applications were received by the Planning and Development Department on or before March 10, 2025:

- **Recreo, LLC, 2 Mascoma Street (Tax Map 91, Lot 254), zoned LD: Applicant requests a two (2)-year extension to commence Phase one (1) of a recently approved phasing plan (PB2024-25-EXT), site plan originally approved on July 11, 2022 (PB2022-17-SPR). PB2025-13-EXT**
- **Occom Path, Inc., 5 Oak Ridge Road (Tax Map 4, Lot 5), zoned R-3: Request for waivers from section 14.4.C of the Site Plan Review regulations. PB2025-14-SUBA**
- **Gregory Walker, 169 Slayton Hill Road (Tax Map 163, Lot 9), zoned RL-2: Request for approval of a proposed two (2)-lot Minor Subdivision. PB2025-15-MIN**
- **Upper Valley Music Center, Inc., 8 S Park Street (Tax Map 92, Lot 10), zoned PBD: Site plan review for a proposed +/- 920 sq. ft. 2-story addition to an existing building, together with associated site improvements. PB2025-16-SPR**
- **Families Flourish North East (applicant), Mary Hitchcock Memorial Hospital (property owner), 424 Mount Support Road (Tax Map 24, Lot 6), zoned R-1: Site**

plan review for a proposed +/- 5,853 sq. ft. 3-story multi-family building, treatment and recovery center together with associated site improvements. PB2025-17-SPR

- Michael Davidson, 3 Campbell Street (Tax Map 92, Lot 65), zoned CBD: Site plan review to convert an existing multi-use building to multi-family. The existing house and carriage house will contain twelve (12) units total. PB2025-18-SPR

Mr. Corwin said Staff recommends the applications do not have the potential for regional impact.

A MOTION was made by Richard Ford Burley that the applications of Recreo, LLC, 2 Mascoma Street (Tax Map 91, Lot 254), zoned LD PB2025-13-EXT, Occom Path, Inc., 5 Oak Ridge Road (Tax Map 4, Lot 5), zoned R-3 PB2025-15-MIN, Upper Valley Music Center, Inc., 8 S Park Street (Tax Map 92, Lot 10), zoned PBD PB2025-16-SPR, Families Flourish North East (applicant), Mary Hitchcock Memorial Hospital (property owner), 424 Mount Support Road (Tax Map 24, Lot 6), zoned R-1 PB2025-17-SPR, and Michael Davidson, 3 Campbell Street (Tax Map 92, Lot 65), zoned CBD PB2025-18-SPR do not have the potential for regional impact. The MOTION was seconded by Jeremy Rutter.

Chair Faunce appointed Ms. Romano as a voting member for this meeting.

Roll Call Vote:

Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly, Dr. Rutter, and Ms. Appleton

Voting Against – None

***The MOTION was approved (8-0).**

Chair Faunce said the Public Hearing items listed on the meeting agenda would be discussed in the following order: Item 3C, Item 3E, Item 3B, Item 3D, and Item 3A.

3. PUBLIC HEARING ITEMS

C. Clayton Morlock & Sally Shoop, 30 Storrs Hill Road (Tax Map 136, Lot 22), Richard & Paula Tobin, 28 Storrs Hill Road (Tax Map 136, Lot 23) and 0 Storrs Hill Road (Tax Map 136, Lot 24), and David & Deborah Roberts, 14 Storrs Hill Road (Tax Map 136, Lot 25), zoned RL-2 & RL-3: Request for approval of a Boundary Line Adjustment between Lot 136-22, Lot 136-23, and Lot 136-24, and a Voluntary Lot Merger of Lot 136-24 and Lot 136-25. PB2025-08-BLAVLM

Mr. Corwin stated that Staff recommends that the application is complete enough for the Planning Board to accept jurisdiction and commence review.

A MOTION was made by Richard Ford Burley that the application of Clayton Morlock & Sally Shoop, 30 Storrs Hill Road (Tax Map 136, Lot 22), Richard & Paula Tobin, 28 Storrs Hill Road (Tax Map 136, Lot 23) and 0 Storrs Hill Road (Tax Map 136, Lot 24), and David & Deborah Roberts, 14 Storrs Hill Road (Tax Map 136, Lot 25), zoned RL-2 & RL-3 is complete enough for the Planning Board to accept jurisdiction and commence review. The MOTION was seconded by Jeremy Rutter.

Roll Call Vote:

Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly, Dr. Rutter, and Ms. Appleton

Voting Against – None

****The MOTION was approved (8-0).***

Mr. Clayton Morlock was present on behalf of the applicant.

Mr. Corwin explained that several neighbors purchased an empty lot that abuts their properties, and the owners now want to adjust their property lines appropriately, so the empty lot becomes part of each of their properties.

He noted there is an easement to the west of the empty property that allows access to the lot that will no longer be in effect after the property line adjustment.



Chair Faunce opened the public comment portion of the meeting.

Ms. Janelle Lemay (Storrs Hill) asked for clarification that the boundary line adjustment will result in the vacant property being divided amongst the abutters. The abutters present confirmed the property will be divided as she indicated.

Chair Faunce closed the public comment portion of the meeting.

A MOTION was made by Richard Ford Burley that the Lebanon Planning Board approves the application of Clayton Morlock & Sally Shoop, Richard & Paula Tobin, and David & Deborah Roberts for a proposed Boundary Line Adjustment between 30 Storrs Hill Road (136-22), 28 Storrs Hill Road (136-23), 0 Storrs Hill Road (136-24), and 14 Storrs Hill Road (136-25), PB2025-08-BLA, as shown on a plat titled "Boundary Adjustment Survey, Land of Clayton R. Morlock & Sally A. Shoop, Richard E. & Paula F. Tobin, David E. & Deborah M. Roberts," prepared by Holt Gilmour Survey Associates LLC, dated January 10, 2025, with a "final submission" date of March 3, 2025, including any and all supplemental submissions and testimony provided during the public hearing, subject to the following conditions:

General Conditions

- 1. This approval shall be considered void unless all conditions precedent are met and the plat is recorded in the Registry of Deeds within two (2) years from the date of the Notice of Action (Section 7.12.B). The plat shall be recorded by the Planning & Development Department in accordance with Planning & Development Department recording procedures.***
- 2. This approval shall automatically expire and be considered void upon failure to meet any of the conditions of approval set forth herein within the timeframes specified.***

Conditions to be Satisfied Prior to the Signing and Recording of the Plat

- 1 1. *The applicants shall provide a revised plat depicting the following changes to the*
2 *satisfaction of the Planning and Development Department:*
 - 3 a. *Add metes and bound notations.*
 - 4 b. *Correct the double line at the southeast corner of Lot 136-25.*
 - 5 c. *Provide the date and description of the plat revisions. (8.2.A.1)*
- 6 2. *The applicants shall provide a digital record drawing of the final revised plat (Cad .dwg*
7 *format, using the NH State Plane Coordinate system).*
- 8 3. *The applicants shall provide to the City draft copies of the deeds of the land transfer for*
9 *review to ensure the transfer will be completed properly for Assessing and recording*
10 *purposes.*
- 11 4. *The applicants shall submit two (2) mylars of the approved plat and applicable*
12 *recording fees to the Planning & Development Department in accordance with*
13 *Planning & Development Department recording procedures. (8.1.D & 7.11)*
- 14 5. *The applicants shall submit the executed deeds of the land transfer together with*
15 *applicable recording fees to the Planning & Development Department to be recorded*
16 *contemporaneously with the plat.*

17
18 *The MOTION was seconded by Patrick Kennelly*

19
20 Mr. Corwin noted that one previous owner of the vacant property had passed away since the
21 purchase of the lot was completed. Ms. Jenna Luce, who is the daughter of the deceased owner,
22 said her parents' name will be removed once the new deed is written.

23
24 Chair Faunce closed the public hearing.

25
26 ***Roll Call Vote:***

27 ***Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly,***
28 ***Dr. Rutter, and Ms. Appleton***

29 ***Voting Against – None***

30
31 ****The MOTION was approved (8-0).***

32
33 ***A MOTION was made by Richard Ford Burley that the Lebanon Planning Board authorizes***
34 ***the Chair to sign the plat of Clayton Morlock & Sally Shoop, Richard & Paula Tobin, and***
35 ***David & Deborah Roberts, PB2025-08-BLA, as revised pursuant the Planning Board's***
36 ***conditions of approval. The MOTION was seconded by Jeremy Rutter***

37
38 ***Roll Call Vote:***

39 ***Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly,***
40 ***Dr. Rutter, and Ms. Appleton***

41 ***Voting Against – None***

42
43 ****The MOTION was approved (8-0).***

- 44
45 **E. Grafton County Economic Development Council, Inc. & North Country Council,**
46 **Inc., 16 Cavendish Court (Tax Map 10, Lot 11, Plot 3600), zoned IND-L: Applicant**
47 **requests an extension of time per Section 8.4.A.3 of the Site Plan Review Regulations**
48 **to achieve active and substantial development and per Section 4.10.B to obtain a**

building permit pursuant to a site plan approved on March 20, 2023 (PB2022-48-SPR) to construct an expansion of the existing parking lot. PB2025-10-EXT

Mr. Corwin stated that Staff recommends that the application is complete enough for the Planning Board to accept jurisdiction and commence review.

A MOTION was made by Richard Ford Burley that the application of Grafton County Economic Development Council, Inc. & North Country Council, Inc., 16 Cavendish Court (Tax Map 10, Lot 11, Plot 3600), zoned IND-L PB2025-10-EXT is complete enough for the Planning Board to accept jurisdiction and commence review. The MOTION was seconded by Kellen Appleton.

Roll Call Vote:

Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly, Dr. Rutter, and Ms. Appleton

Voting Against – None

****The MOTION was approved (8-0).***

Mr. Corwin explained that applicants have two years to achieve “active and substantial completion” (90% of the improvements constructed) for site plan applications. He said the Board can grant up to a three-year extension to allow the applicant to achieve “active and substantial completion” upon the demonstration of “good cause.” He said this applicant has also requested an extension to obtain a Building Permit, and the Board can grant the applicant an extension of up to two years for that.

Mr. Aaron Prescott (Facility Manager, Hazen Hill Construction) was present on behalf of the applicant. He said the project delays were due to funding issues and challenges related to weather conditions. Chair Faunce asked if a finance plan had been in place when the application was first submitted. Mr. Prescott said the applicant had a funding plan, but large repair projects came up and funding was diverted to address those issues.

Dr. Rutter noted that the North arrow is positioned inconsistently in different parts of the plans. Mr. Corwin, there were several conditions of approval that needed to be satisfied regarding updating the plan set, and he would keep that inconsistency in mind when reviewing the updated plan set.

Ms. Romano asked if readiness for electric vehicles needed to be addressed in the new plan set, and Mr. Corwin said he would check on if the regulation for EV readiness was triggered at the time that the plans were approved. Mr. Corwin confirmed that only one extension will be granted by the Planning Board.

Mr. Prescott said the applicant is requesting two-year extensions to achieve “active and substantial completion,” as well as to obtain the building permit. He said the project team will commence work as soon as the ground is ready to be worked.

Chair Faunce opened the public comment portion of the meeting. No one from the public spoke. Chair Faunce closed the public comment portion of the meeting.

1 Chair Faunce closed the public hearing.

2
3 ***A MOTION was made by Richard Ford Burley that the Lebanon Planning Board approves***
4 ***the application of the Grafton County Economic Development Council, Inc. & North Country***
5 ***Council, Inc., PB2025-10-EXT, for an extension of time (a) per Section 8.4.A.3 of the Site***
6 ***Plan Review Regulations to achieve active and substantial development and (b) per Section***
7 ***4.10.B to obtain a building permit with respect to a site plan approved on March 20, 2023***
8 ***(PB2022-48-SPR) to construct an expansion of the existing parking lot, per application***
9 ***materials submitted and including any and all submissions and testimony provided for and***
10 ***during the public hearing.***

11
12 ***In support of its decision, the Board finds that:***

- 13 ***1. The applicant has submitted a complete and timely request for an extension pursuant to***
14 ***Section 4.10.B of the Site Plan Review Regulations;***
- 15 ***2. Per Section 8.4.A.3, the applicant has demonstrated good cause for an extension of time to***
16 ***achieve active and substantial development.***
- 17 ***3. Per Section 4.10.B, the applicant has demonstrated that an extension of time to obtain a***
18 ***building permit is warranted, considering the totality of the circumstances, including the***
19 ***extent and complexity of the conditions precedent, the extent of the progress made by the***
20 ***Applicant toward satisfying the conditions-precedent and/or starting construction, and***
21 ***whether the need for more time is attributable to unusual circumstances beyond the***
22 ***control of the Applicant rather than to the Applicant's neglect or failure to proceed with***
23 ***reasonable promptness; and***

24
25 ***This approval is subject to the following conditions:***

- 26 ***1. The applicant shall satisfy and comply with the Planning Board Notice of Action for***
27 ***PB2022-48-SPR, dated March 20, 2023, and all conditions of approval thereof except as***
28 ***may be superseded by the conditions below.***
- 29 ***2. A building permit, if required pursuant to the Building Code, must be applied for and***
30 ***issued by no later than March 20, 2027.***
- 31 ***3. "Active and substantial development," as defined in Section 8.4.A.1 of the Site Plan***
32 ***Review Regulations, shall be achieved by no later March 20, 2027. If active and***
33 ***substantial development is not achieved by March 20, 2027, the development shall be***
34 ***subject to all changes in the City's land use regulations.***
- 35 ***4. "Substantial completion," as defined in Section 8.4.B.1 of the Site Plan Review***
36 ***Regulations, shall be achieved within five (5) years of the March 20, 2023, approval for***
37 ***PB2022-48-SPR. If substantial completion is not achieved within that time, the***
38 ***development shall be subject to all changes in the City's land use regulations.***

39
40 ***The MOTION was seconded by Kellen Appleton.***

41
42 ***Roll Call Vote:***

43 ***Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly,***
44 ***Dr. Rutter, and Ms. Appleton***

45 ***Voting Against – None***

46
47 ****The MOTION was approved (8-0).***
48

1 Chair Faunce said that Item 3B would be discussed later in the meeting, and that Item 3D would
2 be discussed next.

3
4 **D. Tycoga NH West, LLC (applicant), Ledyard National Bank (property owner), 42 Old**
5 **Etna Road (Tax Map 50, Lot 30, Plot 100), zoned GC: Request for Site Plan Review to**
6 **construct a +/-880 sq. ft. drive-through refreshment stand/coffee shop within the**
7 **existing parking lot, together with associated site improvements. PB2025-09-SPR**
8

9 Mr. Corwin stated that Staff recommends that the application is complete enough for the
10 Planning Board to accept jurisdiction and commence review.

11
12 *A MOTION was made by Richard Ford Burley that the application of Tycoga NH West, LLC*
13 *(applicant), Ledyard National Bank (property owner), 42 Old Etna Road (Tax Map 50, Lot 30,*
14 *Plot 100), zoned GC PB2025-09-SPR is complete enough for the Planning Board to accept*
15 *jurisdiction and commence review. The MOTION was seconded by Jeremy Rutter.*
16

17 *Roll Call Vote:*

18 *Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly,*
19 *Dr. Rutter, and Ms. Appleton*

20 *Voting Against – None*
21

22 **The MOTION was approved (8-0).*
23

24 Mr. Michael Malynowski (Allen & Major Associates), Mr. Glenn Amnot (Tycoga NH West) and
25 Ms. Becky Tibbets (Ledyard Bank) were present on behalf of the applicant.

26
27 Mr. Corwin said the project involves adding an Aroma Joe's coffee shop with a drive-up window
28 to an existing building.

29
30 Mr. Malynowski gave an overview of the project. He said the original site plan includes the
31 Ledyard Bank building, which was approved in 1998, and a small retail space that was never
32 constructed. He discussed the parking needs for the drive-up customers and explained the
33 adjustments that would be made to the parking lot. He said the project would result in a net
34 decrease in the amount of impervious cover by 1,500 square feet. He said there would be no
35 expansion of the existing pavement.

36
37 The group discussed stormwater management and drainage on the site. Mr. Malynowski said
38 there is no potential for excess channelization of water flow as it comes off the site with this new
39 design. Mr. Vincent said the channelization of flow for the new design is very similar to the
40 current plan and is not a concern, and the open drainage concept will be maintained.

41
42 Mr. Malynowski said they changed the design of the curbing around a landscaping island from
43 vertical granite to a sloped design, per a request from the Fire Department, to ease navigation if
44 the fire trucks' rear tires come into contact with the island's curbing.

45
46 The group discussed at length whether the addition of sidewalks along the public frontage area
47 would be a condition of approval. Mr. Malynowski said the applicant is requesting a waiver of
48 this requirement because sidewalks were not a requirement when the site plan was initially
49 approved. He said the applicant does not agree that he should be required to add sidewalks or to

1 include an easement on private property to allow the City to add sidewalks at a later time. After
2 much discussion, the Board agreed to strike Condition of Approval #24B (from the draft motion)
3 related to the requirement of an easement because they concluded that there is plenty of right-of-
4 way space to add sidewalks and an easement would not be needed.

5
6 The group discussed whether customers will try to bike to the coffee shop and if bicycle parking
7 should be added. The applicant agreed to add some bicycle parking spaces in the lot. The group
8 also discussed lighting and Mr. Corwin confirmed the plan includes downlit lighting at the
9 building entrances and said any additional future lighting might require review under the Site
10 Plan Review Regulations.

11
12 Chair Faunce opened the public comment portion of the meeting. No one from the public spoke.
13 Chair Faunce closed the public comment portion of the meeting.

14
15 Chair Faunce closed the public hearing.

16
17 ***A MOTION was made by Richard Ford Burley that for the application of Tycoga NH West,***
18 ***LLC and Ledyard National Bank, PB2025-09-SPR, the Lebanon Planning Board approves***
19 ***partial waivers from the following sections of the Site Plan Review Regulations:***

20
21 ***1. Section 5.1.E(13) of the Site Plan Review. A Waiver of this Section meets Criteria because***
22 ***To not provide a photometric plan for the existing wall mounted fixtures and parking lot***
23 ***lighting to remain. As no new lighting is proposed as part of this application strict conformity***
24 ***would pose an unnecessary hardship to the Applicant and the waiver would not be contrary to***
25 ***the spirit and intent of the regulations. Any new building mounted lights or site lighting shall***
26 ***be full cut-off and in compliance with Section 5.1***

27 ***2. Section 6.6.C.1(1) of the Site Plan Review. A Waiver of this Section meets Criteria A***
28 ***because To not show soils information as delineated by a Licensed Soil Scientist as the***
29 ***existing parcel is completely developed. The proposed development has no impacts that extend***
30 ***beyond the limits of the existing paved parking area. Strict conformity would pose an***
31 ***unnecessary hardship to the Applicant and waiver would not be contrary to the spirit and***
32 ***intent of the regulations as this information was previously approved as part of the original***
33 ***site plan approvals.***

34 ***3. Section 6.6.C.2 of the Site Plan Review. A Waiver of this Section meets Criteria A because***
35 ***To not provide a comprehensive drainage analysis that includes calculations comparing pre-***
36 ***and post-development stormwater runoff rates. The Stormwater associated with the***
37 ***development area was previously approved and currently constructed stormwater***
38 ***infrastructure was previously designed to accommodate and treat stormwater flows. The***
39 ***proposed development will also provide a net decrease in the impervious cover previously***
40 ***envisioned. Strict conformity would pose an unnecessary hardship to the Applicant and waiver***
41 ***would not be contrary to the spirit and intent of the regulations.***

42 ***4. Section 6.2.D.1 of the Site Plan Review. A Waiver of this Section meets Criteria B because***
43 ***Due to the nature of the coffee shop building have drive-up windows on two sides of the***
44 ***building, the required 10 feet of landscape area around the building cannot be met without***
45 ***eliminating access to the drive-up windows.***

46 ***5. Section 6.5.C.2 of the Site Plan Review. A Waiver of this Section meets Criteria B because***
47 ***Due to the nature of the coffee shop business, there is no public entrance into the building as***
48 ***the primary function of the restaurant is to service vehicular traffic. The waiver is to not have***

1 *at least one primary entrance to the building face the public way on which the lot has*
2 *frontage.*

3 *6. Section 5.1.E.17 & 18 of the Site Plan Review. A Waiver of this Section meets Criteria A*
4 *because the current site was designed with "country" style above ground drainage &*
5 *conveyance measures. As the existing site is fully developed and graded such that any*
6 *stormwater which falls on the parcel is directed to the north to an existing bio-retention*
7 *system. As no stormwater leaves the parcel to the south and west, locating and drainage*
8 *measures 200 feet off the property are not warranted and would cause an additional financial*
9 *burden to the developer*

10 *7. Section 5.0 & 6.0 of the Site Plan Review. A Waiver of this Section meets Criteria B because*
11 *the area outside of the proposed development area was previously approved and constructed in*
12 *accordance with City planning approvals. The waiver would be to not satisfy the Site Plan*
13 *Review Regulations for the area outside of the development area as previously approved. The*
14 *proposed development area directly adjacent to the new coffee shop will be constructed in*
15 *accordance with the current regulations.*

16 *8. Section 6.6.G of the Site Plan Review. A Waiver of this Section meets Criteria B because the*
17 *re-development area consisted of a previously approved parking lot and stormwater associated*
18 *with the re-development area was previously approved and currently constructed stormwater*
19 *infrastructure was previously designed to accommodate and treat stormwater flows. The*
20 *proposed re-development area will also provide a net decrease in the impervious cover*
21 *previously envisioned. Strict conformity would pose an unnecessary hardship to the Applicant*
22 *and waiver would not be contrary to the spirit and intent of the regulations.*

23 *9. Section 6.5.D.5 of the Site Plan Review. A Waiver of this Section meets Criteria B because*
24 *the proposed plan is a modification to an existing approved plan which did not require the*
25 *installation nor contribution of an amount equal to the cost of sidewalk construction in lieu of*
26 *actual construction. Due to the nature of the drive-thru coffee shop business and the existing*
27 *bank use on the property, both of these uses are highly vehicle dependent and not suited for*
28 *pedestrian walk-up services. Additionally, there are currently no sidewalks within the vicinity*
29 *of the project, either along Old Etna Rd. nor Route 120.*

30
31 *The MOTION was seconded by Eric Stacy.*

32
33 *Roll Call Vote:*

34 *Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly,*
35 *Dr. Rutter, and Ms. Appleton*

36 *Voting Against – None*

37
38 **The MOTION was approved (8-0).*

39
40
41 *A MOTION was made by Richard Ford Burley that the Lebanon Planning Board moved that*
42 *the Lebanon Planning Board approves the application of Tycoga NH West, LLC (applicant)*
43 *and Ledyard National Bank (property owner), regarding 42 Old Etna Road (Tax Map 50, Lot*
44 *30, Plot 100), zoned GC, PB2025-09-SPR, for Site Plan approval to construct a +/-880 sq. ft.*
45 *drive-through refreshment stand/coffee shop within the existing parking lot, together with*
46 *associated site improvements as shown on a plan set titled "Site Plans for 42 Old Etna Road,"*
47 *prepared by Allen & Major Associates, Inc., dated January 28, 2025, last revised March 10,*
48 *2025, Project No. 3472-01, including any and all submissions and testimony provided for and*
49 *during the public hearing.*

In support of its decision, the Board finds that the applicant has submitted plans, testimony, technical data, information, reports, and studies that together satisfactorily demonstrate compliance with the applicable requirements of the Site Plan Review Regulations, except as may reasonably be addressed through the imposition of certain conditions of approval, set forth below, and except as may have been waived pursuant to Section 7.1.

This approval is subject to the following conditions:

General Conditions

- 1. The Notice of Action for C.D. Cairns Trust dated May 18, 1998 (signed May 29, 1998) and the site plan set referenced therein shall remain in force and in effect except as may be modified pursuant to this approval.*
- 2. This approval shall automatically expire and be deemed void upon failure to meet any of the conditions of approval set forth herein within the timeframes specified. It shall be the applicant's responsibility to be familiar with and aware of these conditions of approval, and it shall be the applicant's responsibility to satisfy these conditions of approval and to satisfy them within the relevant timeframes outlined below.*
- 3. The development is subject to the Site Plan Review Regulations adopted May 13, 1991, last revised January 23, 2023, and the Zoning Ordinance adopted January 16, 2013, last amended April 3, 2024, which are the regulations in effect at the time the application was submitted.*
- 4. A building permit must be applied for and issued within two (2) years of the date of this approval (4.10.A), subject to an extension if applied for by the applicant and if approved by the Planning Board per Section 4.10.B.*
- 5. "Active and substantial development," as defined in Section 8.4.A.1 of the Site Plan Review Regulations, shall be achieved within two (2) years of the date of this approval (8.4.A.2), subject to an extension if applied for by the applicant and if approved by the Planning Board per Section 8.4.A.3. If active and substantial development is not achieved within two (2) years of the date of the Planning Board's approval, the development shall be subject to any changes in the City's land use regulations.*
- 6. "Substantial completion," as defined in Section 8.4.B.1 of the Site Plan Review Regulations, shall be achieved within five (5) years of the date of this approval. If substantial completion is not achieved within five (5) years of the date of the Planning Board's approval, the development shall be subject to any changes in the City's land use regulations.*
- 7. 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.*
- 8. The applicant shall implement and maintain NHDES Site Specific Best Management Practices before, during, and after construction.*
- 9. Prior to the start of any construction activities on the property, erosion control measures, including edge-of-disturbance fencing if applicable, 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.*
- 10. All service areas and facilities including garbage and waste disposal containers, recycling bins, electrical and mechanical equipment such as transformers and compressors, meter clusters, and other utility elements must be screened in accordance with Section 6.2.B.8 and Section 6.10.B.5 of the Site Plan Review Regulations.*
- 11. Changes to underground utilities that do not impact surface conditions may be approved administratively unless determined by the Reviewing Engineer and the*

1 *Planning & Development Department to materially alter the development and the*
2 *approved site plan, in which case such changes shall be reviewed pursuant to Article*
3 *IX of the Site Plan Review Regulations.*

4 *12. The development shall be subject to City of Lebanon Impact Fees, pursuant to Section*
5 *213 of the Zoning Ordinance, in a total amount of \$1,399.20 based on the Impact Fee*
6 *Schedule adopted on May 20, 2024.*

7 *13. All proposed business signage shall obtain a sign permit pursuant to Section 607 of the*
8 *Zoning Ordinance prior to installation.*

9
10 *Conditions to be Satisfied Prior to Application for a Building Permit and Prior to the Start of*
11 *Any Construction Activities*

12 *14. Within 45 days of the Planning Board's approval, the applicant shall address the*
13 *comments of the Fire Department as set forth in the staff memo.*

14 *15. Within 45 days of the Planning Board's approval, the applicant shall demonstrate*
15 *compliance with the perimeter landscaping requirements of Section 6.2.B, to the*
16 *satisfaction of the Planning and Development Department, and shall submit an*
17 *updated plan set as needed.*

18 *16. Within 45 days of the Planning Board's approval, the applicant shall make the*
19 *following revisions to the plan set to the satisfaction of the Planning and Development*
20 *Department and the City Engineer:*

21 *a) Any changes necessitated pursuant to conditions #14 and #15 above*

22 *b) Bicycle parking shall be added pursuant to Section 6.5.1*

23 *c) Amend the cover sheet to provide description of plan revisions (5.1.E.4.d)*

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

27 *17. The applicant shall provide a letter or certification from the engineer or record or other*
28 *qualified design professional confirming that the approved plan set meets the*
29 *accessibility standards of the State of New Hampshire Building Code.*

30 *18. The applicant shall schedule and hold a pre-building permit application meeting with*
31 *the Planning and Development Department, City Building Inspectors, City*
32 *Engineer/Department of Public Works, and Fire Department, in order to help*
33 *streamline the building permit review process and to review applicable code*
34 *requirements.*

35 *19. The applicant shall obtain approval from the City Council or the City Manager's office*
36 *for any additional water and/or sewer flows in accordance with the applicable Chapter*
37 *136 and 182 of the City Code.*

38 *20. All engineering review fees shall be paid in full as required by Section 4.7.E.1 of the*
39 *Site Plan Review Regulations. (Note: applicant can request an invoice from the*
40 *Department of Public Works).*

41
42 *Conditions to be Satisfied Prior to the Issuance of a Building Permit*

43 *21. Prior to the start of any construction activities on the property for which construction*
44 *inspection is required pursuant to this decision or any applicable ordinance or code,*
45 *the City shall retain the services of an independent third-party inspector, for which the*
46 *applicant shall be responsible for all inspection fees related to (a) on-site work related*
47 *to sewer, water, temporary sedimentation and erosion control, and drainage*
48 *improvements, and (b) all off-site work within the City's right-of-way (including but*
49 *not limited to water, sewer, driveways, drainage), in accordance with 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 an Infrastructure Inspection Agreement.

22. All water and sewer fees shall be paid as set forth in City Code Chapter 68.

23. The applicant shall obtain from the Department of Public Works an Excavation Permit, Driveway Permit, and Stormwater Permit, if required by the Department of Public Works.

24. Prior to the start of any construction activities on the property, the applicant shall obtain or update (if appropriate) any required Federal or State approvals.

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

25. In lieu of installing sidewalks along the property's frontages as required by Section 6.5.D.5 of the Site Plan Review Regulations, the applicant shall:

a) Contribute funds to an amount to be determined by the City to be equal to the construction cost of the sidewalk no longer than the frontage of the applicant's property along Old Etna Road. Said monies shall be pooled with other available funds to pay for the Route 120–Etna–Old Etna Road Pedestrian Improvements project, included in the 2025-2030 Capital Improvement Plan

26. The applicant shall verify that the property is in compliance with the Planning Board's Notice of Action for C.D. Cairns Trust dated May 18, 1998 (signed May 29, 1998) and the site plan set referenced therein, except as may be modified pursuant to this approval.

27. The applicant shall grant an easement or other authorization to the City in a form acceptable to the Department of Public Works to access the on-site water shut-off valves.

28. The impact fee calculated pursuant to Condition of Approval #12 shall be paid.

29. Third-party engineer or design engineer inspection reports and contractor 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.

30. 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.

The MOTION was seconded by Kellen Appleton.

Roll Call Vote:

Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly, Dr. Rutter, and Ms. Appleton

Voting Against – None

**The MOTION was approved (8-0).*

At 8:22pm, Chair Faunce called for a recess.

At 8:30pm, the meeting resumed.

B. Cicotte Holdings, LLC, 51 Evans Drive (Tax Map 78, Lot 40, Plot 200), zoned R-O-1: Request for a Conditional Use Permit pursuant to Section 311A.2 of the Lebanon Zoning Ordinance and for Site Plan Review per Section 3.1.D of the Site Plan Review Regulations to expand the outdoor vehicular storage area for an existing vehicular sales use together with associated site improvements including landscaping and lighting. PB2024-48-SPRCUP -Continued from February 10, 2025

Mr. Dan Nash (Advanced Geomatics & Design) was present on behalf of the applicant. He presented revisions to the previously submitted plan set.

The group discussed the number of vehicles that will be accommodated in the parking lots. Dr. Rutter noted that the plan set indicates 66 spaces are for display, but those spaces are not completely defined in the plans by lines or striping. Mr. Kennelly suggested that the applicant paint rows on the lot and delineate the parking lot area from the vehicle display area with landscaping islands.

The group discussed the ambiguity of the parking spaces versus the display spaces in the plan materials at length. Ms. Romano asked if the 104 spaces indicated on the cover sheet of the plan materials include the 66 spaces that are intended for display. Mr. Nash said the total number of allowable parking spaces is 184.

The group discussed lighting and landscaping differences between a parking lot area and a display area (where customers are walking among vehicles). Dr. Rutter said the numbering of light posts on Sheet 10 is unclear and hard to read. The group discussed the proposed location of light poles in the plans.

Chair Faunce said he believed the applicant had sufficient information from the Board as to some of the sticking points in the submitted application are, based upon the conversation. He suggested that the hearing be continued at the April 14 Board meeting.

A MOTION was made by Richard Ford Burley to continue the public hearing for the application of Cicotte Holdings, LLC, PB 2024-48 SPRCUP until the April 14, 2025 Planning Board meeting. The MOTION was seconded by Andrew Faunce.

Roll Call Vote:

Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly, Dr. Rutter, and Ms. Appleton

Voting Against – None

****The MOTION was approved (8-0).***

A. XYZ Dairy, LLC & Lyme Properties 2, LLC, River Park Drive (Tax Map 44, Lots 21 - 30 & 7), zoned CB, IND-L and R-3: Applicant requests a two (2)-year extension of the River Park Site Plan approval (PB2010-25-SPR), as most recently amended on September 9, 2019 (PB2018-34-SPA) and extended on October 12, 2021 (PB2021-29-EXT). PB2025-05-EXT - Continued from February 24, 2025

Dr. Ford Burley noted he was not present at the last meeting when this item was discussed, but he said he watched the full video of the meeting and would participate in the discussion and vote (if any) for this item. Ms. Romano recused herself from the discussion.

Chair Faunce opened the public comment portion of the meeting. No one from the public spoke. Chair Faunce closed the public comment portion of the meeting.

Chair Faunce closed the public hearing.

The Board members discussed whether to grant an extension to the applicant, and, if so, how long that extension should be. The members each indicated their opinion:

Stacy, Rutter, Appleton:	Agreed to a two-year extension. Ms. Appleton suggested that starting points for each phase should be established if the extension is granted
Faunce, Ford Burley, Kennelly, Zook:	Agreed to a one-year extension

Chair Faunce noted that, after conferring with Staff, a final plan set has been confirmed and is currently in the possession of the Planning Department.

The group discussed the applicant's request and the court's decision to grant an extension of 11 months and two days at length.

A MOTION was made by Richard Ford Burley to extend the meeting to 10:00pm. The MOTION was seconded by Jeremy Rutter.

Roll Call Vote:

Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly, Dr. Rutter, and Ms. Appleton

Voting Against – None

****The MOTION was approved (8-0).***

Mr. Stacy stated he believed the two-year extension should be granted to support big projects like this one. He noted that the applicant is "fed up" and the probability of the applicant walking away from the project is pretty high. Chair Faunce said the Board's decision for this request is a matter of what case the applicant has made for the two-year extension.

A MOTION was made by Andrew Faunce that the Lebanon Planning Board denies the application presented by Mr. David Clem, representative for XYZ Dairy, for a two-year extension of the River Park phased development site plan and, subject to the conditions below, instead approves a one-year extension for the completion of all current and remaining phases of the above cited project.

The basis provided by the applicant in written and spoken testimony was the November 25, 2024 ruling of the NH Superior Court that, as of that date, reinstated the building permit and

1 *extended Phase 1 site plan approval 11 months and 2 days beyond the approved deadline of*
2 *January 5, 2025 which is the amount of time between the revocation and restoration of the*
3 *building permit. The applicant testified before the Court that the three months the applicant*
4 *calculated as needed to complete all required Phase 1 improvements would be sufficiently*
5 *covered by the Court's ruling. Accordingly, the Planning Board finds no near term need to*
6 *address the Phase 1 deadline as extended by the Court. In person and subject to questions*
7 *from the Board, the applicant presented no evidence of specific future impairment to the*
8 *remaining phases of the project.*

9
10 *Nonetheless, upon deliberation the Board reached the following agreement that conforms to*
11 *the regulatory context for making extension decisions: (1) there is good cause to extend a*
12 *similar extension to all remaining project phases so that the initially agreed-upon allotment of*
13 *time for each phase is available to the applicant and (2) not doing so could create schedule*
14 *compression conditions for the next phase for which a subsequent request for extension could*
15 *cite that the reduced time to complete that phase was a factor beyond the applicant's control.*

16
17 *Further, and for simplicity of record-keeping and reference, the relief provided by the*
18 *Planning Board is a full 1-year extension for each deadline in Phase 1 (superseding the*
19 *Court's 11-month and two-day extension for Phase 1) as well as for all subsequent phases.*

20
21 **1. General Conditions:**

- 22 **a. This approval shall automatically expire and be considered void upon failure to meet**
23 **any of the conditions of approval set forth herein within the timeframes specified.**

24
25 **2. Specific Conditions:**

- 26 **a. Within 30 days of the application approval date the applicant shall provide to the**
27 **Planning and Development staff the following materials, as required by the 2009 City**
28 **of Lebanon Site Plan Review Regulations, under which terms this development is**
29 **presently operating, to the satisfaction of the Planning Board as represented by the**
30 **Chair.**

- 31 **i. A table showing the current phase commencement and completion dates and,**
32 **as newly approved, the revised phase commencement and completion dates.**

- 33 **ii. A document showing the following for each phase:**

- 34 **1. A specification of all improvements, on-site or off-site, to be installed**
35 **as part of that phase, as detailed on page 5 of the 2019 Notice of Action**
36 **PB2018-34-SPA;**

- 37 **2. The 1-year adjusted deadline for the posting of any required security**
38 **for that phase;**

- 39 **3. The 1-year adjusted deadline for the completion of such**
40 **improvements subsequent to the posting of such security, and;**

- 41 **4. A date by which a Building Permit must be obtained to prevent the**
42 **approval for that phase from being considered void pursuant to**
43 **Section 4.10 of the 2009 City of Lebanon Site Plan Review**
44 **Regulations.**

- 45 **b. The approved plan set has been affirmed as follows:**

- 46 **i. Plans titled "Site Plans – River Park" (Sheets numbered 1 through 5; D1**
47 **through D18; 1-1 through 1-16; 2-1 through 2-21; 3-1 through 3-16; 4-1**
48 **through 4-9; 5-1 through 5-7; 6-1 through 6-9; and 7-1 through 7-8), prepared**

by Holden Engineering & Surveying, Inc., issued for permitting: June 10, 2010, latest issue: May 2, 2011 (“Approved Plan Set”).

ii. Plans titled “River Park, Proposed Amendment to Site Plan – Lot 1, West Lebanon, Grafton County, New Hampshire” prepared by Elkus/Manfredi Architects, dated April 13, 2015, and plans titled “Site Plans, River Park, River Park Drive, Lebanon, New Hampshire, Grafton County,” prepared by TF Moran, dated May 26, 2015. [These plan sets supersede and replace Sheets 1-1 through 1-16 of the Approved Plan Set].

- c. The project's five-year exemption from impact fees has expired. While the reinstated building permit for Phase 1 remains in force it continues to exempt the subject of the building permit from impact fees. All subsequent activity for which new building permits are required, including the Phase 1 building if the current building permit expires and a new building permit is issued, will incur impact fees in effect at the time of those applications.

The MOTION was seconded by Richard Ford Burley

Chair Faunce confirmed that, if approved, the completion date for the one-year extension is January 5, 2026.

Roll Call Vote:

Voting For – Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly,

Voting Against – Mr. Stacy, Dr. Rutter, Ms. Appleton

***The MOTION was approved (4-3).**

Ms. Romano rejoined the meeting.

4. STUDY ITEMS

A. Strategic Plan - Annual Goals and Workplan – postponed to a future meeting

B. Consideration of Zoning Change Recommendations to City Council

Mr. Reichert said, during the discussion over the zoning amendments that resulted from the Route 120, it was noted by the Conservation Commission that they wished to see a policy piece relative to the “Northern Lebanon” environmental overlay to be considered concurrently with any of the zoning and/or map changes that were being put in front of City Council at the June 18, 2025 meeting.

He said the suggested Environmental Overlay policy recommendations have been written by a task force consisting of the Chair and Vice Chair of the Planning Board, the Chair and Vice Chair of the Conservation Commission, as well as Mr. Reichert and Mr. Mark Goodwin as staff. He said the Planning Board, Zoning Board, and Conservation Commission will receive copies for review and additional Staff-driven public hearings will likely be held to garner more input on all of the topics. He said all those comments could be presented to the City Council at the June 18th meeting for consideration.

He said one issue that came from the discussions was related to the Planning Board’s recommendation to the City Council to rezone the parcels on the West side of Etna Road from IND-L to GC-1. Dr. Ford Burley and Chair Faunce noted that it appeared that, because the parcels on the West side of Etna Rd are located adjacent to a uniquely important natural area, it

will be very difficult to rezone the area in an environmentally conscious way without introducing spot zoning. The group decided to make a new recommendation that rescinds its previous recommendation to rezone the area.

A MOTION was made by Andrew Faunce to extend the meeting to 10:05pm. The MOTION was seconded by Eric Stacy.

Roll Call Vote:

Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly, Dr. Rutter, and Ms. Appleton

Voting Against – None

****The MOTION was approved (8-0).***

A MOTION was made by Richard Ford Burley that the Planning Board recommends to the Lebanon City Council that the zoning on the West side of Aetna Rd, East of Route 120, remain as it currently is. The MOTION was seconded by Eric Stacy.

Roll Call Vote:

Voting For – Ms. Romano, Mr. Stacy, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly, Dr. Rutter, and Ms. Appleton

Voting Against – None

****The MOTION was approved (7-0, with Ms. Zook abstaining).***

5. OTHER BUSINESS

None

6. APPROVAL OF MINUTES – February 10, 2025

This item was postponed to next meeting

7. ADJOURNMENT

A MOTION was made by Kellen Appleton to adjourn the meeting at 10:03pm. The MOTION was seconded by Jeremy Rutter.

Roll Call Vote:

Voting For – Ms. Romano, Mr. Stacy, Ms. Zook, Dr. Ford Burley, Mr. Faunce, Mr. Kennelly, Dr. Rutter, and Ms. Appleton

Voting Against – None

****The MOTION was approved (8-0).***

The meeting was adjourned at 10:03pm.

Respectfully submitted,

Paula Roux

Recording Secretary