



**LEBANON PLANNING BOARD
JULY 12, 2021 - 6:30 PM
COUNCIL CHAMBERS, CITY HALL OR
REMOTE VIA VIRTUAL PLATFORM
LEBANONNH.GOV/LIVE**

-
- 1. Call to Order**
 - 2. Notice of Regional Impact**
 - 3. Public Hearing Items**
 - A. Mason Storage, LLC, 38 Spencer Street (Tax Map 78, Lot 39), zoned LD:** Request for Site Plan Review to construct a 15,000 sq. ft. addition to an existing warehouse building. PB2021-13-SPR - Postponed from May 10, 2021. Applicant has requested a postponement to the July 12, 2021 Planning Board meeting. - Completeness Review Only (postponed from June 14, 2021)
 - B. Walt Cunningham & John Eric Hoffman and Wilder Ridge Estates, LLC, 58 East Wilder Road (Tax Map 7, Lot 9) and 0 East Wilder Road (Tax Map 7, Lot 10), zoned R-3:** Request for approval of a Boundary Line Adjustment between lands located at 58 East Wilder Road and 0 East Wilder Road. PB2021-18-BLA
 - C. St. Johnsbury Automobile Group (applicant) and ORQT, LLC (property owner), 425 Miracle Mile (Tax Map 103, Lot 15), zoned GC:** Request for Site Plan Review to expand the existing building with the construction of +/-12,900 sq. ft. of additional building area to accommodate a showroom and additional vehicle service bays, together with associated site improvements including utilities, lighting, landscaping, stormwater management, parking, and access. PB2021-19-SPR
 - D. Hardy Hill, LLC, 27 Jenkins Road (Tax Map 80, Lot 14), zoned RL-2:** Request for approval of a proposed three (3)-lot Minor Subdivision of 27 Jenkins Road. PB2021-20-MIN
 - 4. Other Business**
 - 5. Approval of Minutes**
 - A. June 14, 2021**
 - 6. Adjournment**

The order of agenda items is subject to change.

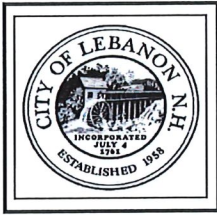
Meetings are open for in-person and remote attendance. Members of the public that wish to attend remotely may do so by going to LebanonNH.gov/Live where you will find instructions on how to enter the meeting. Members of the public will be able to participate and ask questions through the City's

virtual platform or by phone. Please note: Should technical difficulties occur during the meeting that disrupts virtual or phone connection(s), the meeting will continue without remote access capabilities.

Agenda
Planning Board
July 12, 2021

Agenda Item #3A
Public Hearing Items

Mason Storage, LLC, 38 Spencer
Street (Tax Map 78, Lot 39), zoned
LD
PB2021-13-SPR



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

July 12, 2021 Meeting

Staff Memorandum – PB2021-13-SPR – *postponed from 6/7/21*

APPLICATION INFORMATION

Agenda Item: 3.A

Application ID: PB2021-13-SPR

Application Type:

Site Plan Review for a proposed addition to an existing warehouse building

Property Location & Tax Map:

38 Spencer Street (Tax Map 78, Lot 39)

Applicant/Property Owner:

Mason Storage, LLC

Zoning District: Lebanon

Downtown (CB) District

Future Land Use Map:

Central Business District

Property Size:

+/-1.2 acres (+/-52,272 sq. ft.)

Existing Use & Improvements:

+/-13,000 sq. ft. warehouse constructed in 1984, per the City Assessor's records (a non-conforming use in the CBD per §306.2)

Proposed Use:

Construct a +/-15,000 sq. ft. building expansion; non-conforming warehouse use to continue

Overlay Districts: Floodplain

District

LEGAL NOTICE

Mason Storage, LLC, 38 Spencer Street (Tax Map 78, Lot 39), zoned LD: Request for Site Plan Review to construct a 15,000 sq. ft. addition to an existing warehouse building. PB2021-13-SPR

PLANS AND APPLICATION MATERIALS

New:

- ▶ Application for Waivers (2 pages)

Included with May 10, 2021 Planning Board agenda packet:

- ▶ Application form
- ▶ Letter dated April 12, 2021, from Daniel Nash, PE, of Advanced Geomatics & Design (project description; 2 pages)
- ▶ Letter dated April 12, 2021, from Daniel Nash, PE, of Advanced Geomatics & Design (additional project information; 1 page)
- ▶ Letter dated April 12, 2021, from Daniel Nash, PE, of Advanced Geomatics & Design (waiver requests; 1 page)
- ▶ Site Plan Review Regulations Technical Checklist (10 pages)
- ▶ Excerpt from plan set titled "Mason Storage, LLC" prepared by Daniel A. Nash, PE, dated April 11, 2021, PN: 19-003 (Cover Sheet and Site Plan)

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

- ▶ Plan set titled "Mason Storage, LLC" prepared by Daniel A. Nash, PE, dated April 11, 2021, last revised June 28, 2021, PN: 19-003 (14 Sheets)
- ▶ Letter dated May 4, 2021, from Daniel Nash, PE, of Advanced Geomatics & Design (drainage report; 6 pages)
- ▶ Letter dated June 30, 2021, from Daniel Nash, PE, of Advanced Geomatics & Design (turning diagrams; 4 pages)
- ▶ Two (2) photos of exterior of existing building
- ▶ Lighting fixture specifications by Lithonia Lighting (5 pages)

COMPLETENESS REVIEW & STAFF COMMENTS

In order to accept jurisdiction and commence review of the applicant's proposal, the Planning Board must first determine that the application is complete. NH RSA 676:4, I(c)(1). Section 4.7.C.2 ("Initial Completeness Determination") of the Site Plan Review Regulations 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 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 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. [...]

The Planning and Development Department has reviewed the application in accordance with the Lebanon Site Plan Review Regulations and, per Section 4.7.C.2.b, has requested additional information from the applicant in order to make a recommendation to the Board with respect to completeness. The outstanding completeness items include the following:

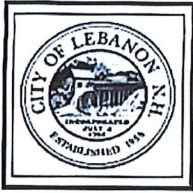
- Update the outdoor lighting plan and associated lighting package to indicate the color correlated temperature (CCT).
- Submit a conditional use permit application per Section 307.9.B and 302.4 of the Zoning Ordinance to allow parking in the front yard.
- Show the size of all existing public and private utilities.
- Provide a legend and/or labels that more clearly identify the different lines and markings on the site plan (e.g. identify the zig zag line that runs through the building lengthwise) to make the plan less confusing and more readable.
- Revise architectural renderings to show the height and location of wall-mounted lighting fixtures.
- Provide a scalable landscaping plan.

Staff will review any revised plans and materials that are submitted by the applicant prior to the July 12th meeting and will provide the Board with a recommendation at that time as to whether the application is complete enough to accept jurisdiction and to commence review.

If the Board deems the application complete, the public hearing should be opened and continued to the next regular meeting of the Planning Board scheduled for **August 9, 2021**.

Attachments

cc: Shawn Mason, Mason Storage, LLC (via e-mail)
Daniel Nash, PE, of Advanced Geomatics & Design (via e-mail)
File



City of Lebanon, New Hampshire APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: Mason Storage, LLC

Project Name: Mason Storage

Project Address: 38 Spencer Street

WAIVER REGULATIONS

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

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

OR

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

WAIVER REQUEST(S)

I (we) hereby request a Waiver from:

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

1. Section 302.4 (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

The parking and loading areas are existing and have been for many years. They are necessary to support the functions of the existing portion of the building.

2. Section 6.10.A.9 (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

The existing building is a warehouse. Windows, except minimal ones needed for the office areas are not needed or recommended for a warehouse use.

3. Section 6.10.C.2.B (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

The parking and loading areas in the front of the building are existing and have been for many years. They are necessary to support the functions of the existing portion of the building. This existing use precludes the front yard landscaping.

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

The proposed building is proposed to be sprinklered. the site does not lend itself to providing such a fire lane, and the fire lane should not be necessary. It is important to note the site abuts the rail trail which is accessible by fire vehicles.

5. Section 6.2.D.1 (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

The parking and loading areas in the front of the building support the functions of the existing portion of the building. This existing use precludes the 10' foundation landscaping. On the west side, the narrowness of the lot prevents the full 10' width; 5' have been provided.

6. Section 6.2.E.1 (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

As noted above, a landscaped bed of sufficient width to support trees is not possible on the east side of new parking. The site does not have double rows of parking to take advantage of the "internal planting" shading calculation.

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

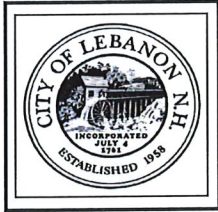
I (we) hereby submit this application to the Planning Board and attest that to the best of my (our) knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As the applicant or as the agent of the applicant, I attest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

Signature of Applicant: P. J. K. Date: 6-29-21

Agenda
Planning Board
July 12, 2021

Agenda Item #3B
Public Hearing Items

Walt Cunningham & John Eric
Hoffman and Wilder Ridge Estates,
LLC, 58 East Wilder Road (Tax Map
7, Lots 9 & 10), zoned R-3
PB2021-18-BLA



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

July 12, 2021 Meeting

Staff Memorandum – PB2021-18-BLA

APPLICATION INFORMATION

Agenda Item: 3.B

Application ID: PB2021-18-BLA

Application Type:
Boundary Line Adjustment

Property Location & Tax Map:

- 58 East Wilder Road (Tax Map 7, Lot 9)
- 0 East Wilder Road (Tax Map 7, Lot 10)

Property Owners/Applicants:

Walt Cunningham & John Eric Hoffman, and Wilder Ridge Estates, LLC

Property Sizes (existing):

- 58 East Wilder Road (Tax Map 7, Lot 9): +/-1.17 acres *per boundary line plat*
- 0 East Wilder Road (Tax Map 7, Lot 10): +/-4.88 acres *per boundary line plat*

Property Sizes (proposed):

- 58 East Wilder Road (Tax Map 7, Lot 9): +/-0.92 acres *per boundary line plat*
- 0 East Wilder Road (Tax Map 7, Lot 10): +/-5.13 acres *per boundary line plat*

Zoning District:

Residential Three (R-3)

Zoning Overlay District(s):

none

LEGAL NOTICE

Walt Cunningham & John Eric Hoffman and Wilder Ridge Estates, LLC, 58 East Wilder Road (Tax Map 7, Lot 9) and 0 East Wilder Road (Tax Map 7, Lot 10), zoned R-3: Request for approval of a Boundary Line Adjustment between lands located at 58 East Wilder Road and 0 East Wilder Road. PB2021-18-BLA

PLANS AND APPLICATION MATERIALS

- ▶ Application form (1 page)
- ▶ Project description (1 page)
- ▶ Subdivision Regulations - Technical Checklist (2 pages)
- ▶ Plat titled "Boundary Line Adjustment Plan Prepared for Wilder Ridge Estates, LLC and Walter Cunningham & John Eric Hoffman", prepared by Paton Land Surveying, LLC, dated May 27, 2021, revised June 26, 2021, Project No. 2020-279-44

COMPLETENESS REVIEW

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

APPLICATION OVERVIEW

This is a request for a Boundary Line Adjustment between lands located at 58 East Wilder Road (Tax Map 7, Lot 9) and 0 East Wilder Road (Tax Map 7, Lot 10). As proposed, the changes resulting from the Boundary Line Adjustment are as follows:

- ▶ Map/Lot 7-9 will decrease by a net of +/-0.25 acres, from +/-1.17 acres to +/-0.92 acres.
- ▶ Map/Lot 7-10 will increase by a net of +/-0.25 acres, from +/-4.88 acres to +/-5.13 acres.

The proposed changes are highlighted in Figures 1 and 2 below. Note that Figures 1 and 2 depict only that portion of Map/Lot 7-10 that is impacted by the proposed boundary line adjustment.

STAFF MEMORANDUM

PB2021-17-BLA
58 and 0 East Wilder Road
July 12, 2021 PB Mtg
Agenda Item 3.B
Page 2 of 3

Figure 1. Existing Boundaries.

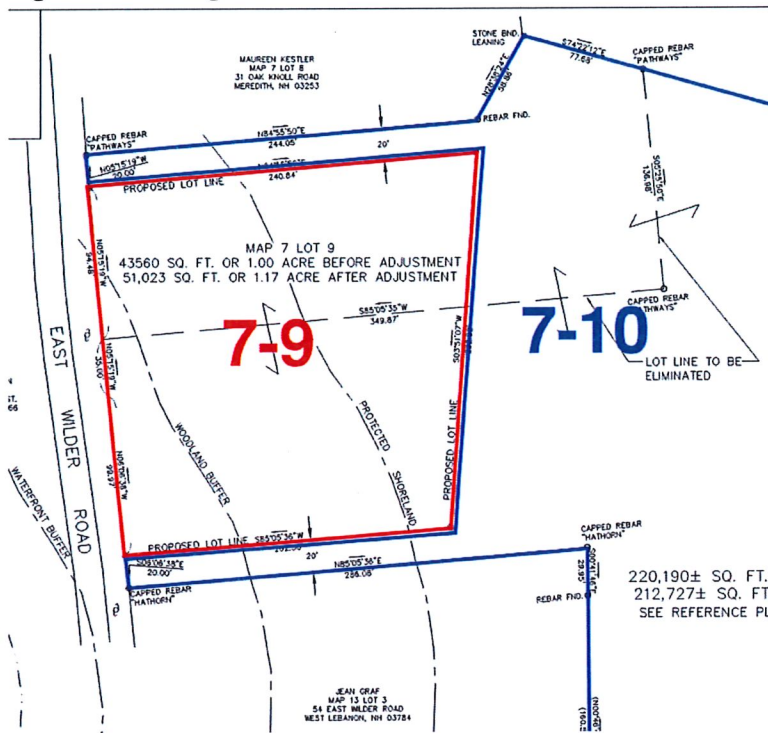
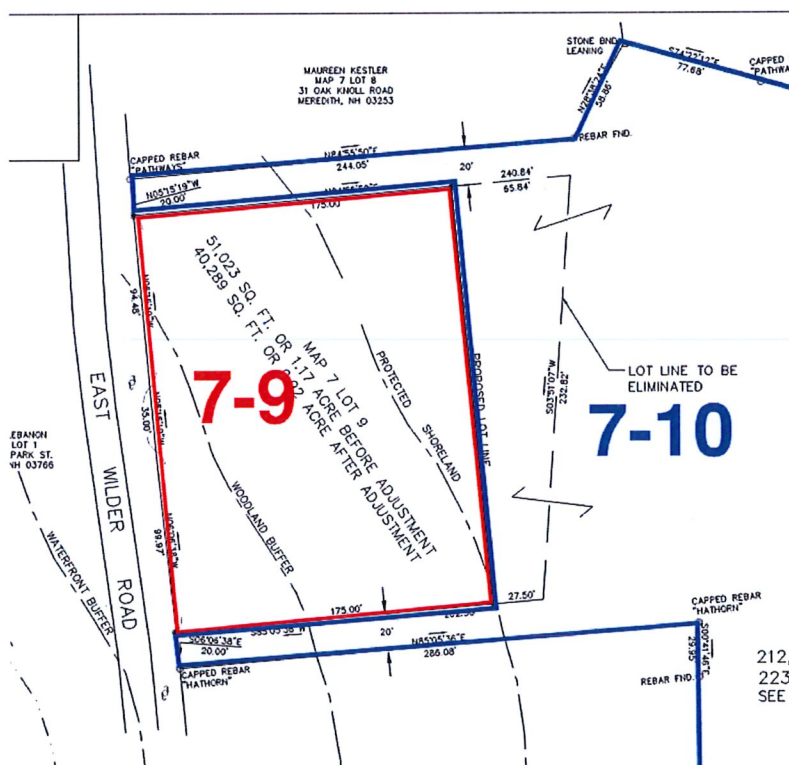


Figure 2. Proposed Boundaries.



STAFF MEMORANDUM

PB2021-17-BLA
58 and 0 East Wilder Road
July 12, 2021 PB Mtg
Agenda Item 3.B
Page 3 of 3

STAFF COMMENTS

ASSESSING

No comment.

BUILDING INSPECTION

No comment.

FIRE

No comment.

POLICE

No comment.

PUBLIC WORKS/CITY ENGINEER

No comment.

PLANNING & ZONING

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

The Planning and Development Department recommends a few minor changes to the plat in order to satisfy the requirements set forth in Section 8.2.A of the Subdivision Regulations. The recommended changes are listed in proposed condition of approval #1 below.

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 prior to the signing and recording of the plat:

1. The applicants shall provide a revised plat depicting the following changes to the satisfaction of the Planning and Development Department:
 - a. Change note #1 to include John Eric Hoffman as an owner of Tax Map 7, Lot 9.
 - b. Change note #7 to read as follows: "No easements, rights of way or other restrictions on the subject properties were found in the chains of title." (Section 8.2.A.2)
 - c. Provide a site location map showing the original boundaries of the subject lots and adjacent lots. (Section 8.2.A.6)
 - d. Add boundary line symbology to the legend.
2. The applicants shall provide to the City a draft copy of the deed of the land transfer for review to ensure the transfer will be completed properly for Assessing and recording purposes.
3. The applicants shall provide one (1) full-size copy of the plat and a digital record drawing (Cad .dwg Format using NH State Plane Coordinate system).

Attachments

cc: Walt Cunningham & John Eric Hoffman
Wilder Ridge Estates, LLC
File

**CITY OF LEBANON
APPLICATION FOR**

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

PROPERTY OWNER (APPLICANT):

NAME: Walt Cunningham, John Eric Hoffman TEL.#: 973-330-1210
 MAILING ADDRESS: 1421 S Wabash St, Unit 2E, Chicago, IL 60605
 E-MAIL ADDRESS: waltcunningham@gmail.com

CO-APPLICANT, AGENT, OR LESSEE:

NAME: EO HAUKE, EP HAUKE LLC TEL.#: 603-748-0226
 MAILING ADDRESS: PO Box 2322, New London, NH 03257
 E-MAIL ADDRESS: efhauck@live.com / PDodge78@gmail.com
Peter Dodge

PROJECT LOCATION:

TAX MAP #: 7 LOT#: 9 PLOT #: _____ ZONE: R3
 STREET ADDRESS OF PROJECT: 58 EAST WILDER ROAD
 IS THIS PROPERTY LOCATED IN THE: **WETLANDS** ☐ YES ☒ NO **HISTORIC DISTRICT** ☐ YES ☒ NO
FLOOD PLAIN ☐ YES ☒ NO

SCOPE OF PROJECT:

Reduce lot size from 57,025 ft² to 40,289 ft²

TYPE OF OCCUPANCY: UNDEVELOPED LOT

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: Peter Dodge Peter Dodge for EP HAUKE INC

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 JULY 12, 2021, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY OWNER: X 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: X DATE: _____

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #	FEE - \$ AMOUNT	DATE PAID	VOUCHER #
6-14-21	7/947/10	PB2021-18	\$75.21	6-14-21	18311

BLA

(Last Revised 4/04/18)

To:
Lebanon Planning Board

From:
Peter Dodge
EFHauck LLC
603-359-1680

Re
Minor Lot Line Adjustment
East Wilder Road Mat 7 Lot 9
On behalf of
Walt Cunningham

Project Description

Lot line adjustment, reducing current lot 7-9 owned by Walt Cunningham and John Eric Hoffman, from 51,023 sq ft to 40,289 sq ft. Lot 7-10 owned by Wilder Ridge Estates LLC will be increase from 212,727 sq ft to 223,461 sq ft.

Peter Dodge
For
EF Hauck LLC

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

PLAN SUBMITTAL TECHNICAL CHECKLIST:

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

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

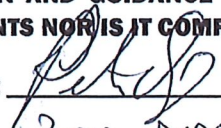
A written request for waiver shall be required, pursuant to Section 7.15 of the Subdivision Regulations, for any submission requirement for which the information or data is not provided by the applicant. [§8.2.C]

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

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

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

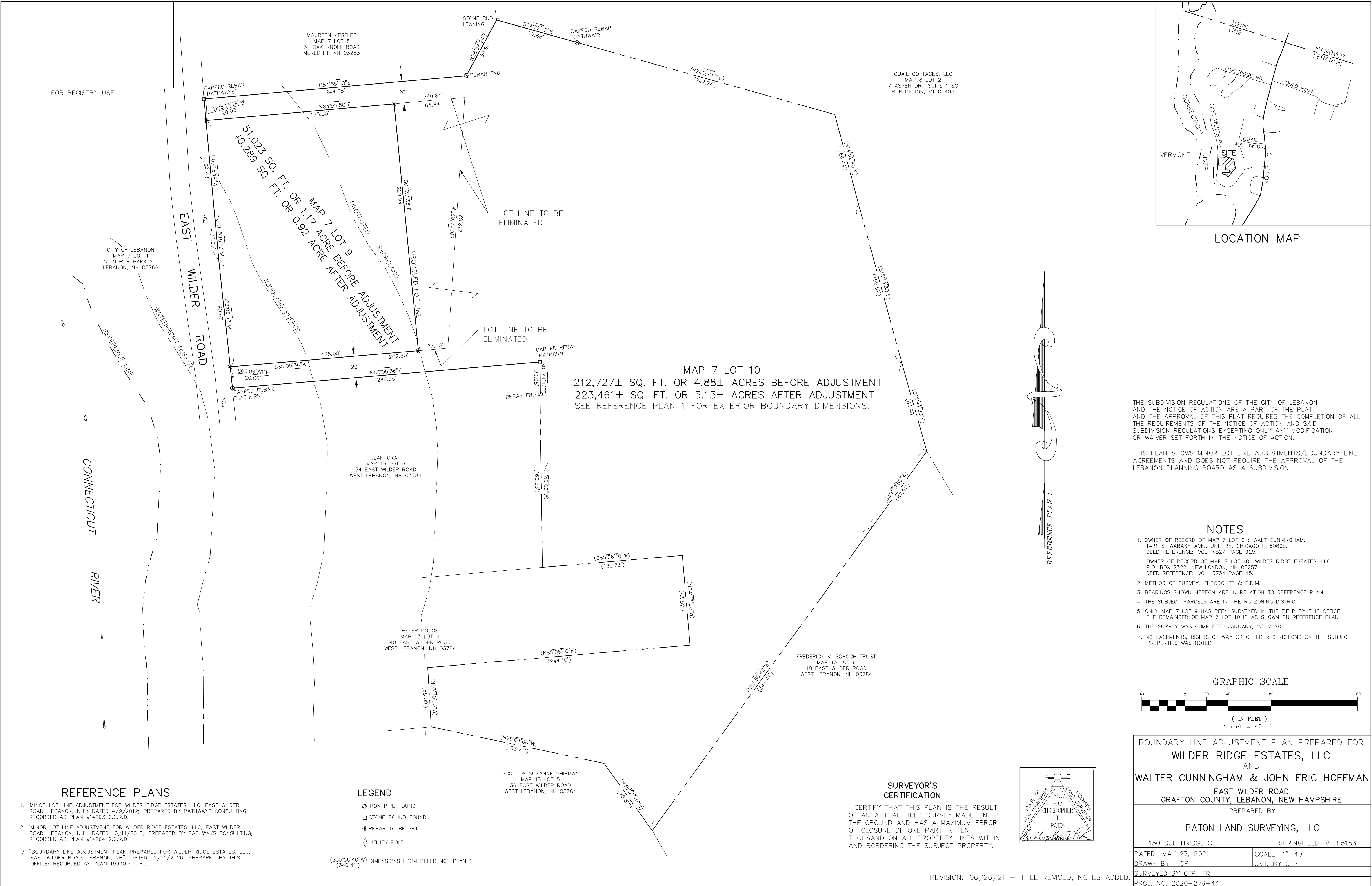
NOTE: THE APPLICANT IS RESPONSIBLE FOR PROVIDING THE REQUIRED INFORMATION PURSUANT TO SECTION 8 OF THE SUBDIVISION REGULATIONS. PLEASE BE AWARE THAT THIS CHECKLIST IS FOR INFORMATION AND GUIDANCE ONLY AND DOES NOT REPRESENT THE LAW DICTATING SUBMITTAL REQUIREMENTS NOR IS IT COMPLETE AND INCLUSIVE THEREOF.

Completed By: 
 Peter Dodge
 EF TRUCK LLC

Planning office Use Only:

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

(Last Revised 05/22/13)



Agenda
Planning Board
July 12, 2021

Agenda Item #3C
Public Hearing Items

St. Johnsbury Automobile Group
(applicant) and ORQT, LLC (property
owner), 425 Miracle Mile (Tax Map
103, Lot 15), zoned GC
PB2021-19-SPR



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

July 12, 2021 Meeting

Staff Memorandum – PB2021-19-SPR

APPLICATION INFORMATION

Agenda Item: 3.C

Application ID: PB2021-19-SPR

Application Type:

Site Plan Review for a proposed building addition to expand the existing vehicular sales and service use

Property Location & Tax Map:

425 Miracle Mile (Tax Map 103, Lot 15)

Applicant / Property Owner:

St. Johnsbury Automobile Group and ORQT, LLC

Property Size:

+/-3.51 acres (per City Assessor's records)

Existing Use & Improvements:

+/-30,464 (gross) sq. ft. vehicular sales and repair commercial building constructed in 1948, per the City Assessor's records (a conforming use in the GC District per §305.2)

Proposed Use:

Construct a +/-12,900 sq. ft. building expansion; existing use to continue

Zoning District:

General Commercial (GC)

Overlay Districts:

none

Future Land Use Map:

General Commercial

LEGAL NOTICE

St. Johnsbury Automobile Group (applicant) and ORQT, LLC (property owner), 425 Miracle Mile (Tax Map 103, Lot 15), zoned GC: Request for Site Plan Review to expand the existing building with the construction of +/-12,900 sq. ft. of additional building area to accommodate a showroom and additional vehicle service bays, together with associated site improvements including utilities, lighting, landscaping, stormwater management, parking, and access. PB2021-19-SPR

PLANS AND APPLICATION MATERIALS

- ▶ Application form
- ▶ Memo from Adam Morse, P.E., of Engineering Ventures, PC, dated June 14, 2021 (project description; 8 pages)
- ▶ Site Plan Review Regulations Technical Checklist (5 pages)
- ▶ Application for Waivers (2 pages)
- ▶ Plan set titled "425 Miracle Mile, Lebanon Ford Addition" prepared by Engineering Ventures, PC, dated May 19, 2021, project no. 21198 (20 Sheets) ("Plan Set")

On-line only (not included with Planning Board hard copy agenda packets):

- ▶ Preliminary Construction Schedule (1 sheet)
- ▶ Green Mountain Electric Supply Project Submittal (lighting specifications; 38 pages)
- ▶ Updated lighting plan (Sheet 16 of the Plan Set, *received by the Planning and Development Department on June 30, 2021* (1 Sheet)
- ▶ Updated drainage plans (Sheets 9, 10, and 13 of the Plan Set), *received by the Planning and Development Department on July 7, 2021* (3 Sheets)
- ▶ Drainage analysis report titled, "Lebanon Ford New Addition – 425 Miracle Mile," prepared by Engineering Ventures, PC, dated July 11, 2021, EV Project #21198 (51 pages)
- ▶ Memo from Adam Morse, P.E., of Engineering Ventures, PC, dated June 29, 2021 (response to staff comments; 8 pages)

COMPLETENESS REVIEW

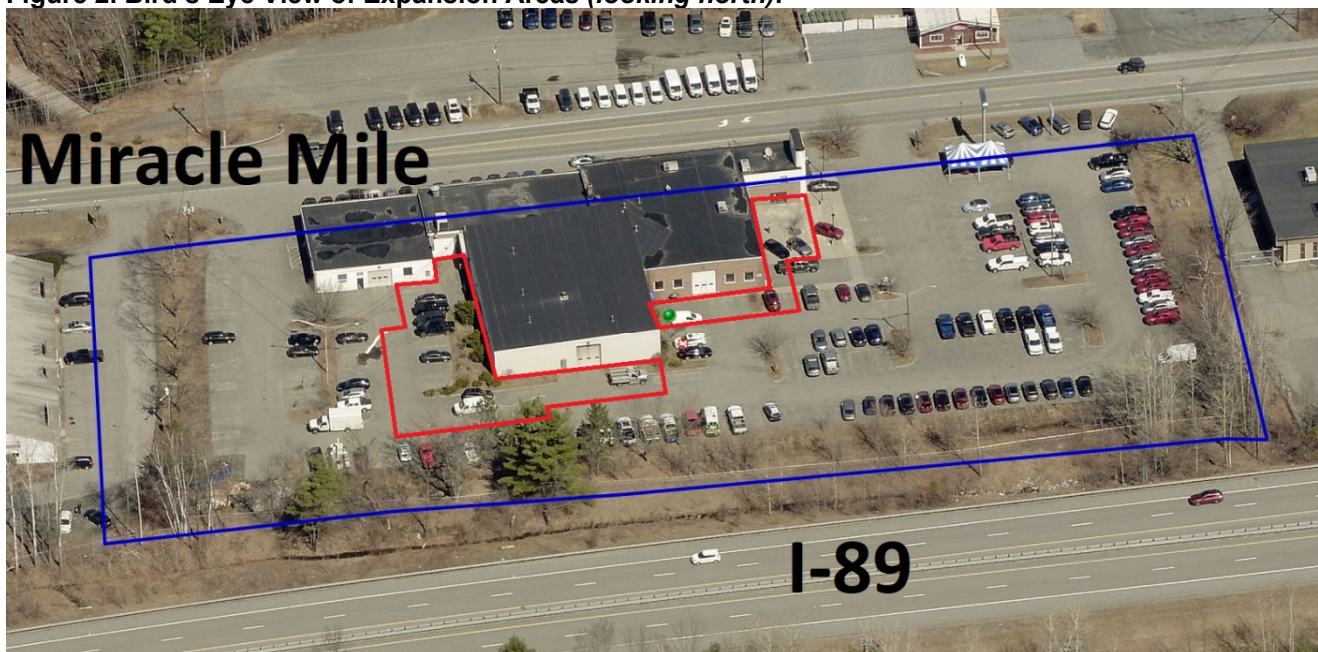
In order to accept jurisdiction and commence review of the applicant's proposal, the Planning Board must first determine that the application is complete as required by NH RSA 676:4, I(c)(1). The Planning and Development Department has reviewed the application for compliance with the Site Plan Review Regulations and recommends that the Board find that the application is complete enough to accept jurisdiction and to commence review.

Figure 1. Bird's Eye View of Subject Property (looking south).



©2021 Eagleview (image taken 4/3/2021)

Figure 2. Bird's Eye View of Expansion Areas (looking north).



©2021 Eagleview (image taken 4/3/2021)

APPLICATION OVERVIEW

The subject property is a +/-3.51-acre parcel located between I-89 and Miracle Mile in the GC District. The property is improved with a +/-30,464 (gross) sq. ft. commercial building constructed in 1948 (per the City Assessor's records), occupied by a vehicular sales and repair use (currently a Ford dealership).

As described in the attached letter from Adam Morse, P.E., of Engineering Ventures, PC, dated June 14, 2021, the applicant proposes to expand the existing building with the construction of +/-12,900 sq. ft. of additional building area to accommodate a showroom and additional vehicle service bays, together with associated site improvements including utilities, lighting, landscaping, stormwater management, parking, and access. The area of the proposed expansion is roughly outlined in red in Figure 2 above.

STAFF COMMENTS**PLANNING****I. SITE PLAN REVIEW REGULATIONS:**

Planning Board approval of the proposed project is required pursuant to Section 3.1.C of the Site Plan Review Regulations which requires site plan review for the construction of building additions of 1,000 gross sq. ft. or more.

Waiver Requests

Pursuant to Section 7.1 ("Waiver of Regulations"), the applicant has requested waivers from certain provisions of Article VI ("Design and Construction Requirements") of the Site Plan Review Regulations. Please see attached Application for Waivers for a discussion of each.

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

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

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

SECTION 5 –SUBMISSION REQUIREMENTS

5.1 (Drawings and Other Submittals): The applicant has provided the attached materials in accordance with the submission requirements of Section 5.1 of the Site Plan Review Regulations. Please see the attached letter from Engineering Ventures, PC dated June 24, 2021 for a discussion of the project, and the Application for Waivers for an explanation of the requested waivers.

SECTION 6 – DESIGN AND CONSTRUCTION REQUIREMENTS

6.2 (Landscaping Standards): The applicant has submitted a landscaping plan in accordance with Section 5.1.E.15 of the Site Plan Review Regulations and the landscaping design standards set forth in Section 6.2 (except as noted below). The type, quantity, and location of proposed trees and shrubs are shown on Sheet 15 of the plan set. As identified on the attached Application for Waivers, the applicant is requesting waivers from the following landscaping requirements:

- 6.2.B.1-4 – perimeter landscaping requirements
- 6.2.B.10 – requiring trees along the front of the property, spaced no more than 40 ft. apart
- 6.2.D – landscaping around buildings requirements
- 6.2.E.1 – requires parking areas to be visually screened with landscaping (the proposed trees along the perimeter are required to be “supplemented with shrubs, perennials, or understory trees to visually screen the parking area.”)
- 6.2.E.2-4 – parking lot landscaping requirements
- 6.2.E.5 – parking lot shading requirements
- 6.2.L – curbing requirements (curbing is not proposed along the western side of the parking as is required by 6.2.L)

6.4 (Fees and Assessments in Effect at time of Connection): New construction will be subject to the City’s Impact Fee Ordinance and fee schedule adopted by the Board on August 13, 2018.

6.6 (Stormwater Management): The applicant proposes a stormwater management system that includes the installation of a stormwater detention area at the rear of the property. See Engineering/Public Works comments below for additional information.

6.7 (Lighting): The applicant has submitted a lighting plan in accordance with Section 5.1.E.12 of the Site Plan Review Regulations and the lighting design standards set forth in Section 6.7 (except as noted below). The type, quantity, and location of proposed lighting fixtures are shown on the plan which is Sheet 16 of the plan set. The applicant requests a waiver from Section 6.7.B.2 (“The light intensity at adjoining streets or commercial property boundaries shall not exceed 0.5 foot-candles at grade level”) and from Section 6.7.C.1 (minimum required uniformity ratios).

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

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 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:

The proposed use of the site complies with the zoning regulations of the General Commercial (GC) District.

CITY ASSESSOR

No comment at this time.

BUILDING INSPECTOR

No comment at this time.

ENGINEERING/PUBLIC WORKS

The City Engineer reviewed the applicant's initial stormwater management design and provided comment and feedback. In response, the applicant updated the drainage plans and analysis which was submitted to the Planning and Development Department on July 7th. The City Engineer is not expected to complete his review of the updated drainage analysis prior to the July 12th Planning Board meeting. As a result, staff may recommend that the Board continue the hearing to the August 9th meeting to allow a complete review of the stormwater plans, to work with the applicant to resolve any concerns, and to develop any related recommendations or proposed conditions of approval.

FIRE DEPARTMENT

No comment at this time.

POLICE DEPARTMENT

No comment at this time.

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.

Conditions to be Satisfied Prior to Application for a Building Permit

1. 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.
2. All engineering review fees shall be paid in full as required by Section 4.7.E.1 of the Subdivision Regulations.
3. Prior to the start of any construction activities on the property, the applicant shall provide two (2) revised plans sets depicting the following revisions to the satisfaction of the Planning & Development Department and the City Engineer, as follows:
 - a) Identify date and nature of plan revisions.
 - b) Remove architectural renderings.
 - c) Incorporate all revised plan sheets.

The applicant shall provide the Planning & Development Department with two (2) full size copies of the revised plan set, and a digital copy of the revised plan set saved in a PDF-A format for archival purposes.

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

4. 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 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.
5. All water and sewer fees shall be paid.
6. All water and sewer fees shall be paid as set forth in City Code Chapter 68.
7. Prior to the start of any construction activities on the property, the applicant shall obtain or update (if appropriate) any required State approvals.

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

8. The impact fee calculated pursuant to Condition of Approval #4 shall be paid.
9. All improvements depicted on the plan shall be completed, and shall be constructed as depicted on the approved plan, including any modifications to the plan as may be approved by the Planning Board in accordance with the Site Plan Review Regulations.

General Conditions

10. The applicant shall implement and maintain NHDES Site Specific Best Management Practices before, during, and after construction.

Attachments

cc: St. Johnsbury Automobile Group (via e-mail)
ORQT, LLC
Engineering Ventures, PC c/o Adam Morse, P.E. (via e-mail)
File

CITY OF LEBANON APPLICATION FOR

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

☐ OTHER _____

PROPERTY OWNER (APPLICANT):

NAME: **St. Johnsbury Automobile Group** TEL.#: **1-603-448-3363**

MAILING ADDRESS: **425 Miracle Mile, Lebanon, NH 03766**

E-MAIL ADDRESS: **ray@stjauto.com**

CO-APPLICANT, AGENT, OR LESSEE:

NAME: _____ TEL.#: _____

MAILING ADDRESS: _____

E-MAIL ADDRESS: _____

PROJECT LOCATION:

TAX MAP #: **103** LOT#: **15** PLOT #: _____ ZONE: **GC**

STREET ADDRESS OF PROJECT: _____

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

SCOPE OF PROJECT:

12,900 SF addition to existing Lebanon Ford facility. Addition of 6 service bays and 1,800 sf showroom area. Additional floor area to support service section. Includes improvements to parking and access drive to accommodate new addition. New electrical transformer, relocated propane tank, waste oil tank, lighting improvements and underground power.

TYPE OF OCCUPANCY:

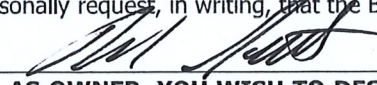
EXISTING ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☐ MULTI-FAMILY ☒ COMMERCIAL ☐ INDUSTRIAL
 PROPOSED ☐ VACANT ☐ ONE FAMILY ☐ TWO FAMILY ☐ MULTI-FAMILY ☒ COMMERCIAL ☐ INDUSTRIAL

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

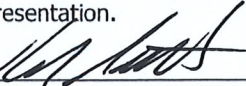
USE: _____

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 **July 12**, 20**21**, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY OWNER:  DATE: **6/9/21**

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: **6/9/21**

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #	FEE - \$ AMOUNT	DATE PAID	VOUCHER #
6-14-21	103/15	PB2021-19-SFR	\$1371.32	6-14-21	18312



208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • Tel: 802-863-6225 • Fax: 802-863-6306
85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • Tel: 603-442-9333 • Fax: 603-442-9331
414 Union Street Schenectady, NY 12305 • Tel: 518-630-9614

June 14, 2021

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

Re: Lebanon Ford New Addition
425 Miracle Mile
Subject parcel 103-15
GC Zone
Site Plan Review Request

Dear Lebanon Planning Board,

On behalf of ST Johnsbury Automobile Group, we are pleased to submit the enclosed materials and request Site Plan Review at the July 12, 2021 hearing for the above referenced project. The Owner/Applicant proposes to construct a 12,900 sq. ft. addition to the existing Lebanon Ford Dealership located at 425 Miracle Mile. The existing 3.25-acre lot is located in the General Commercial zone.

The existing property contains a 23,700-sf automobile dealership and 222 parking spaces; some of which are used for vehicle sales display. The lot is primarily hardscape and relatively flat. Drainage is managed through a series of catch basins and underground piping which ultimately discharges to the Mascoma River. There are several landscaped islands and a perimeter of landscaped area along the east, south and west boundaries. The lot is served by municipal water and sewer lines. The sewer system consists of two separate 6" lines with one of the lines collecting wastewater and the second collecting floor drainage. The floor drains flow into an oil and grit separator located at the northwest corner of the site prior to discharging to the municipal collection line in Route 4. A 6" fire line and a 1" domestic water line are connected to the existing 12" municipal water line in Route 4. The building is currently fed by overhead power and it also has an underground propane tank located near the west end of the building. A power pole in the northwest corner appears to feed the building and a portion of the site lighting. The eastern portion of the site lighting appears to be fed from a separate power pole on the northeast corner of the property.

The new addition will contain an additional 6 service bays and associated interior space to support vehicle servicing, and 1,800 sf +/- of new showroom space. The project is proposed to be constructed in two phases. Parking and landscaping will also be reoriented to accommodate the new addition. The drive access around the south side of the building will be moved further south to maintain access. A new transformer and propane tank are also proposed with the project and the building power will be converted to an underground power conduit. New parking lot lighting is proposed with a portion being fed off of the new underground power

conduit. Stormwater will be managed by a new stormwater basin proposed at the south end of the site. A new waste oil tank will also be installed.

We look forward to presenting this project to you at the July 12th hearing. If you have any questions or comments or require any additional information prior to the hearing, please give our office a call.

Sincerely,
ENGINEERING VENTURES, PC



Adam Morse, PE
Project Manager

cc: (via email): Raymond Gaudette, St. Johnsbury Automobile Group; Joe Green, Joseph Architects

CITY OF LEBANON, NH SITE PLAN REVIEW REGULATIONS TECHNICAL CHECKLIST	
PROJECT NAME: Lebanon Ford Addition	
APPLICANT: St. Johnsbury Automobile Group	DATE: 6/14/2021
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, (referenced to USGS or FEMA Flood Insurance Rate Map datums, as appropriate) prepared by a professional engineer or land surveyor licensed in NH. (Where grades are less than 20%, contours shall be at 2 ft. intervals; otherwise they shall be at 5 ft. intervals.)	☒	☐
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, if any, 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.	N/A ☐	☐
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. (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.)	☒	☐

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, 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) - 100-yr flood elevation, floodway, and floodplain limits, where relevant.	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.	☒	☐
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, where necessary.	☒	☐
5.1.E(17) - Drainage plans prepared by a professional engineer registered in NH, whose seal and signature shall appear on plan(s).	☒	☐
5.1.E(18) - Section 6.6. Stormwater Management submission requirements.	See Stormwater Checklist	
5.1.E(19) - Plans for snow removal and storage.	☒	☐
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.	☒	☐

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

Plan Requirements (cont.)	Info. Provided	Waiver Sought
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 is granted by the City Engineer.	☒	☐
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.	N/A ☐	☐
5.1.E(24) - Plans for fire protection including emergency vehicle turn radius diagrams, if requested by the Lebanon Fire Department.	☒	☐
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 <i>Application for Waivers</i> form).	N/A ☐	☐
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: _____

(Last Revised 4/19/2021)

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

CITY OF LEBANON, NH STORMWATER REVIEW REGULATIONS TECHNICAL CHECKLIST	
PROJECT NAME: Lebanon Ford Addition	
APPLICANT: St. Johnsbury Automobile Group	DATE: 6/14/2021

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
6.6.C.1 (1) - 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)	N/A ☐	☐
d. Watershed boundaries	N/A ☐	☐
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	N/A ☐	☐
i. locus plan	☒	☐
j. benchmarks	☒	☐
k. notes with datum and other plan references	☒	☐
l. instructions	☒	☐
m. detail descriptions	☒	☐
6.6.C.1 (2) - A Proposed Conditions SMP showing all proposed post-development temporary and permanent stormwater management system elements, erosion and sediment control Best Management Practices (BMP), and all important hydrologic features. The Proposed Conditions S.M.P must be at the same scale as the Existing Conditions SMP, with consistent title block, plan features, and descriptors including but not limited to the following:		
a. Existing and proposed topographic contours (2-foot minimum contour interval; 1-foot contour intervals may be required for sites with limited relief and/or where proposed stormwater outfalls are located adjacent to buffer zones.	☒	☐
b. Proposed areas of disturbance with total area of disturbance clearly labeled in square feet	☒	☐
c. Existing and proposed buildings and structures	☒	☐
d. Stormwater discharge locations labeled and matched to the drainage analyses	☒	☐
e. Wells and sanitary protective radii, if applicable	N/A ☐	☐
f. Septic systems, if applicable	N/A ☐	☐

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.	☒ ☒ N/A ☐ ☒ ☒ ☒	☐ ☐ ☐ ☐ ☐ ☐
6.6.C.2 - In addition to the above described SMP plan sheets, the following SMP supplemental information is required: 1. A drainage analysis that includes calculations comparing pre- and post-development stormwater runoff rates (cubic feet per minute) and volumes (cubic feet) based on a 1-inch rainstorm, and the 2-year, 25-year, 50-year, and 100-year, 24-hour frequency storms. Calculations shall include, but not be limited to, the sizing of all structures and BMPs, including sizing of emergency overflow structures based on the 50-year 24-hour frequency storm discharge rate, with 1-foot of free-board. Storm rates shall be based on current design depths from the Northeast Regional Climate Center - http://precip.eas.cornell.edu. <i>Any site that was primarily wooded in the last five years shall be considered undisturbed woods Any site from which wooded vegetation has been removed within 5 years prior to the first submission to the planning board with respect to a proposed development, or upon which, at some earlier time, clearing has occurred in anticipation of development, shall be treated as undisturbed woodland for purposes of calculating pre-development runoff volumes. For purposes of this paragraph any tree cutting which occurred without leaving stands of healthy, growing trees within areas near waters and highways, as required by RSA 227-J:9, I, shall be presumed to have occurred in anticipation of development</i>	☒	☐

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

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

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

Completed By: Engineering Ventures (Adam Morse)

(Last Revised 04/19/2021)

Planning office Use Only:

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



City of Lebanon, New Hampshire APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: St. Johnsbury Automobile Group (Raymond Gaudette)

Project Name: Lebanon Ford New Addition

Project Address: 425 Miracle Mile, 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 6.5.B.4 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

The City is constructing a sidewalk on the north side of Miracle Mile. Requiring a sidewalk along the frontage would be a hardship for the owner and is unnecessary since there is no adjacent sidewalk to connect on the south side of the street.

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

The only area where this criteria is not being achieved is along the Miracle Mile building frontage. Lebanon Ford owns the property across the street which is the only property that would be affected. This lighting is needed for their sales inventory display and it is also an existing condition. Removing the lighting would be a hardship for the Owner and it is unnecessary.

3. Section 6.2.B.1-4 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
The north, east and west perimeters of the property have adequate landscaping, additional landscaping along the Miracle Mile frontage would block the view of sales inventory vehicles and cause an unnecessary hardship to the owner.
4. Section 6.2.B.10 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
The north, east and west perimeters of the property have adequate landscaping, additional landscaping along the Miracle Mile frontage would block the view of sales inventory vehicles and cause an unnecessary hardship to the owner.
5. 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 _____
Landscaping has been provided in the landscape islands around the building in a few locations where possible. Additional landscaping will not fit in the other locations around the building due to the need to maintain existing sales inventory, it also cannot go in front of service bay doors and areas where service entrance to the building is required. Requiring additional landscaping along the building would create an unnecessary hardship.
6. Section 6.2.E.1 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
Additional parking lot landscaping would block the view of sales inventory vehicles and cause an unnecessary hardship to the owner. Additionally several of the existing islands do have landscaping including trees, shrubs and grasses providing some shade. Reworking the parking lot to achieve this requirement would be a major undertaking and cause additional hardship.
7. Section 6.2.E.2-4 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
Additional parking lot landscaping would block the view of sales inventory vehicles and cause an unnecessary hardship to the owner. Additionally several of the existing islands do have landscaping including trees, shrubs and grasses providing some shade. Reworking the parking lot to achieve this requirement would be a major undertaking and cause additional hardship.
8. Section 6.2.E.5 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
Additional parking lot landscaping would block the view of sales inventory vehicles and cause an unnecessary hardship to the owner. Additionally several of the existing islands do have landscaping including trees, shrubs and grasses providing some shade. Reworking the parking lot to achieve this requirement would be a major undertaking and cause additional hardship.
9. Section 6.2.L of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____
The existing parking lot condition on the west end does not have curbing in this location, the grade is relatively flat and curbing is not required for vehicle roll safety, curbing is not necessary for drainage purposes since drainage is funneled to the central catch basins. Requiring curbing would cause an unnecessary hardship.

10. Section 6.7.C.1 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

Minimum required uniformity ratio is not able to be accomplished. It would be a hardship for the owner to add several more parking lot lights to meet this requirement, not only would it add substantially to the project expenses but it would also reduce vehicle inventory substantially. Further the low light area in the southeast is used primarily for service car parking and in the northeast corner there is a light on the Liberty Utility property which shines onto Lebanon Ford providing higher illumination than is documented in the plan. Meeting this requirement is unnecessary and would cause a hardship for the owner.

11. Section 6.7.B.9 of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

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

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

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

15. 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: Raymond Gaudet Date: 6/29/21

S:\PLN\FORMS - APPLICATION\Planning Board Applications\WAIVER\Waiver Application.docx

SUBJECTS: 2021/21108 NH1 BRANNON FORD ADDITIONAL/IGISHEET FILES: 21108 ON COVER SHEET DWG:



SYMBOL LEGEND

PROPOSED FEATURES	EXISTING FEATURES
BOUND	BOUND
BENCHMARK	BENCHMARK
DRILL HOLE	DRILL HOLE
SURVEY POINT	SURVEY POINT
IRON PIN	IRON PIN
TP1	TP1
B1	B1
BORING	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
FLOOD 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

LINETYPE LEGEND

PROPOSED FEATURES	EXISTING FEATURES
100 MAJOR CONTOUR	100 MAJOR CONTOUR
98 MINOR CONTOUR	98 MINOR CONTOUR
EDGE OF RIVER	EDGE OF RIVER
EDGE OF POND	EDGE OF POND
PROPERTY LINE	PROPERTY LINE
RIGHT OF WAY	RIGHT OF WAY
SETBACK	SETBACK
EASEMENT	EASEMENT
LOC LIMIT OF CONSTRUCTION	LOC LIMIT OF CONSTRUCTION
LOD LIMIT OF DISTURBANCE	LOD LIMIT OF DISTURBANCE
SF SILT FENCE	SF SILT FENCE
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
SANITARY SEWER	SANITARY SEWER
SANITARY SEWER APPROX.	SANITARY SEWER APPROX.
FM SEWER FORCEMAIN	FM SEWER FORCEMAIN
SS SEWER SERVICE	SS SEWER SERVICE
SLA DISPOSAL AREA LATERAL	SLA DISPOSAL AREA LATERAL
SD STORM LINE	SD STORM LINE
(ST) STORM LINE APPROX.	(ST) STORM LINE APPROX.
UD UNDER DRAIN	UD UNDER DRAIN
FD FOUNDATION DRAIN	FD FOUNDATION DRAIN
RD ROOF DRAIN	RD ROOF DRAIN
DITCH/SWALE	DITCH/SWALE
T TELECOMM	T TELECOMM
(T) TELECOMM APPROX.	(T) TELECOMM APPROX.
UGT UNDERGROUND TELECOMM	UGT UNDERGROUND TELECOMM
OHT OVERHEAD TELECOMM	OHT OVERHEAD TELECOMM
E ELECTRIC LINE	E ELECTRIC LINE
UGE UNDERGROUND ELECTRIC	UGE UNDERGROUND ELECTRIC
OHE OVERHEAD ELECTRIC	OHE OVERHEAD ELECTRIC
SL ELECTRICAL SITE LIGHTING	SL ELECTRICAL SITE LIGHTING
W WATER LINE	W WATER LINE
WS WATER SERVICE	WS WATER SERVICE
GAS GAS LINE	GAS GAS LINE
WATER APPROX.	WATER APPROX.
CATV CABLE TV	CATV CABLE TV
UGTV UNDERGROUND CABLE TV	UGTV UNDERGROUND CABLE TV
OHTV OVERHEAD CABLE TV	OHTV OVERHEAD CABLE TV

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	SILT FENCE	SF
CATCH BASIN	CB	FINISHED GRADE/GROUND	FG	MONITORING WELL	MW	SLOPE	S=
CENTERLINE	CL	FIELD INLET	FI	MONUMENT	MON	STATION	STA
CLEAN OUT	C/O	FLARED END SECTION	FES	NOT IN CONTRACT	NIC	STORM MANHOLE	DMH
CORRUGATED METAL PIPE	CMP	FOOT, FEET	FT	NOT TO SCALE	NTS	TANGENT	TAN
CUBIC FEET	CF	FOOTING	FTG	POINT OF CURVATURE	PC	TANGENT TO CURVE	TC
CUBIC FEET PER SECOND	CFS	FOUNDATION	FND	POINT OF INTERSECTION	PI	TAPPING SLEEVE AND VALVE	TS&V
CUBIC YARD	CY	GALLONS PER MINUTE	GPM	POLYETHYLENE, PROFESSIONAL ENGINEER	PE	TEMPORARY BENCHMARK	TBM
DIAMETER	DIA	GATE VALVE	GV	PROPERTY LINE	PL	TEST PIT	TP
DISTRIBUTION BOX	D-BOX	HEADWALL	HW	PERC TEST, POINT OF TANGENCY	PT	TOP OF BANK	TOB
DUCTILE IRON	DI	HIGH DENSITY POLYETHYLENE	HDPE	POLYVINYL CHLORIDE	PVC	TOP OF CURB	TOC
EDGE OF CONCRETE	EOC	HYDRANT	HYD	POLYVINYL CHLORIDE	PVC	TOP OF WALL	TOW
EDGE OF GRAVEL	EOG	INTERSECTION	INT	POND	PND	TYPICAL	TYP
EDGE OF PAVEMENT	EOP	INVERT	INV	POINT OF VERTICAL INTERSECTION	PVI	VERIFY IN FIELD	VIF
ELECTRIC	ELEC	IRON PIN	IP	QUANTITY	QTY	WATER VALVE	WV
ELECTRIC MANHOLE	EMH	IRON PIPE SIZE	IPS	QUALITY ASSURANCE	QA		
ELEVATION	ELEV	LENGTH	L=	QUALITY CONTROL	QC		
				RADIUS	R=		

GENERAL NOTES

1. EXACT OBJECT LOCATIONS MAY DIFFER FROM THAT AS SHOWN, AND ADDITIONAL SUB-SURFACE AND SURFACE UTILITIES AND STRUCTURES MAY EXIST. THE CONTRACTOR IS TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK AND TO CALL DIG SAFE 72 HOURS PRIOR TO ANY DIGGING, DRILLING OR BLASTING.
2. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL FROM THE ENGINEER.
3. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
4. THE CONTRACTOR SHALL RESTORE LAWNS, DRIVEWAYS, CULVERTS, SIGNS AND OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO EXISTING CONDITIONS OR BETTER AS DETERMINED BY THE ENGINEER. ANY DAMAGED TREES, SHRUBS AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, UNLESS NOTED OTHERWISE.
5. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
6. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING, AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, AND CERTIFICATES.
7. THE CONTRACTOR WILL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A NEW HAMPSHIRE STATE LICENSED LAND SURVEYOR.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS, AND COORDINATE WORK WITH ALL CONTRACTS FOR THE SITE.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT EXPLORATORY TEST PITS AS MAY BE REQUIRED TO DETERMINE UNDERGROUND CONDITIONS.
10. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS FOR CONSTRUCTION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
12. MAINTAIN FLOW FOR ALL EXISTING UTILITIES, UNLESS NOTED OTHERWISE.
13. CONTRACTOR TO GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND IMPERVIOUS SURFACES.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT.
15. 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.

LANDSCAPE NOTES

1. ALL NEW PLANT MATERIAL SHALL BE NURSERY-GROWN STOCK.
2. AT THE TIME OF PLANTING, ALL DECIDUOUS TREES SHALL BE A MINIMUM 2.5 TO 3 INCHES IN CALIPER, MEASURED 6 INCHES ABOVE THE FINISH GRADE LEVEL; ALL EVERGREEN TREES SHALL BE A MINIMUM OF 6 TO 7 FEET IN HEIGHT.
3. AT THE TIME OF PLANTING, ALL SHRUBS, WHETHER DECIDUOUS OR EVERGREEN, SHALL BE 24 TO 30 INCHES IN HEIGHT AND/OR 18 TO 24 INCHES IN SPREAD.
4. GRADED AREAS SHALL BE VEGETATED TO INSURE EROSION CONTROL BY SEEDING, MULCHING, AND FERTILIZING. DISTURBED AREAS SHALL BE PLANTED WITH SUITABLE PLANT MATERIALS.
2. GRADING SHALL NOT EXCEED A RATIO OF 3 HORIZONTAL TO 1 VERTICAL WITHOUT SPECIAL EROSION CONTROL MEASURES. NETTING OR SIMILAR MATERIAL SHALL BE PROVIDED ON SLOPES WITH A RATIO GREATER THAN 3:1 WHILE GROUND COVER IS BEING ESTABLISHED.
5. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING, TO INCLUDE GRASS AND MULCH, IN GOOD, HEALTHY CONDITION SO AS TO PRESENT A NEAT AND ORDERLY APPEARANCE. THE PROPERTY OWNER SHALL REPLACE ANY UNHEALTHY OR DEAD PLANT MATERIALS IN CONFORMANCE WITH THE LANDSCAPE PLAN APPROVED BY THE BOARD AS PART OF THE SITE PLAN.
6. ALL PLANTINGS, FENCES, AND WALLS NECESSITATED BY THESE LANDSCAPING AND SCREENING REQUIREMENTS SHALL CONFORM WITH THE STREET INTERSECTION SIGHT-OBSTRUCTION REQUIREMENTS PROVIDED IN SECTION 206 OF THE LEBANON ZONING ORDINANCE. ALL SUCH PLANT MATERIALS MUST BE PRUNED AS NECESSARY TO MAINTAIN COMPLIANCE.
7. ENCROACHMENT ON LANDSCAPED AREAS AFTER THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE STORAGE, DISPLAY, OR PARKING OF MOTOR VEHICLES, BOATS, MOBILE HOMES, TRAILERS, OR CONSTRUCTION EQUIPMENT WITHIN LANDSCAPED AREAS, BUFFERS, OR SCREENS, SHOWN AS SUCH ON THE APPROVED LANDSCAPE PLAN, IS EXPRESSLY PROHIBITED AND A VIOLATION OF THE NOTICE OF ACTION.

Date

No.

Description

ENGINEERING VENTURES PC

St. Johnsbury Automobile Group
425 Miracle Mile
Lebanon, NH
603-448-3363

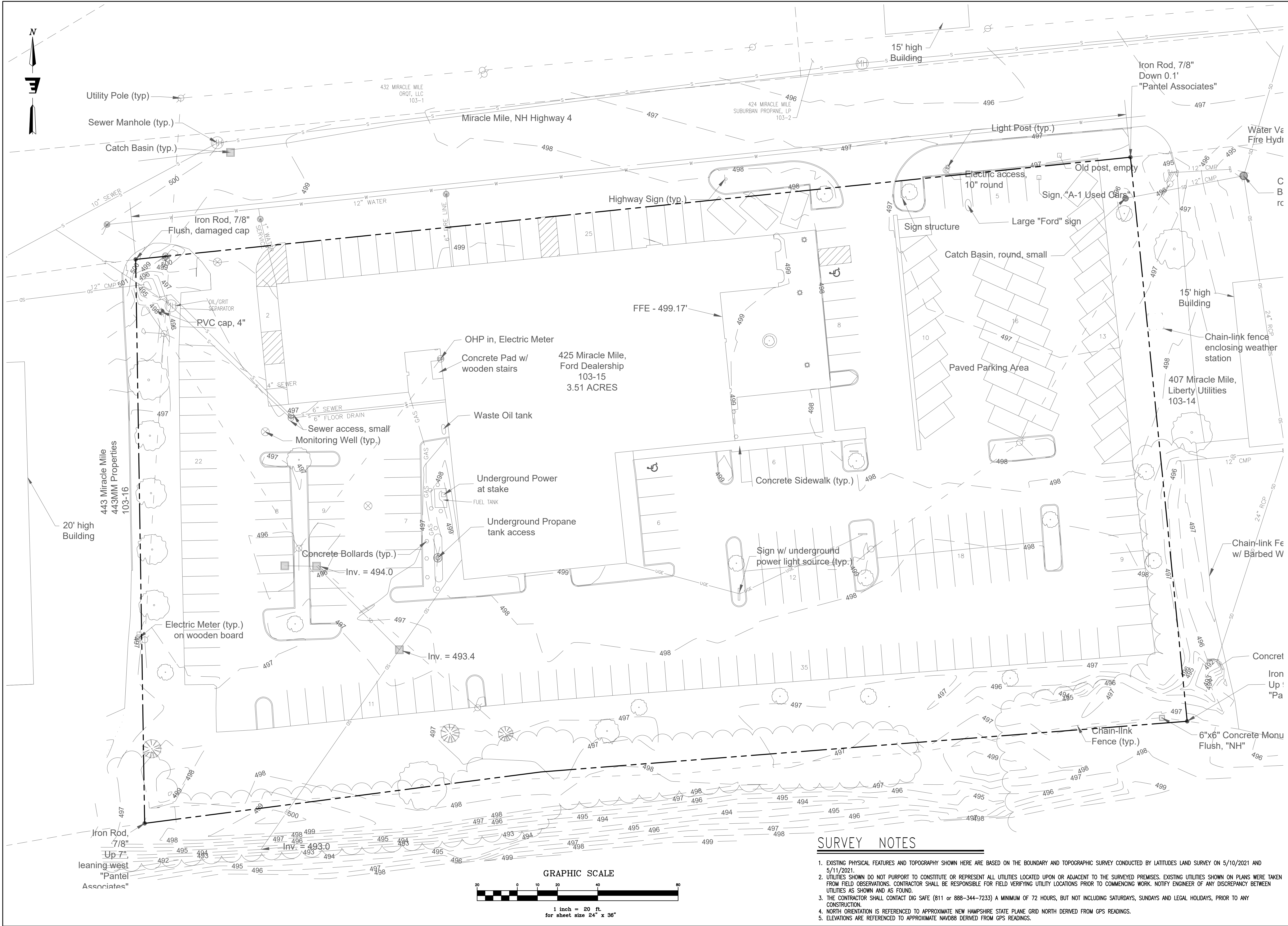
LEGEND AND NOTES

Project Title: LEBANON FORD NEW ADDITION

EV Project # 21198
Drawn By: AM
Checked By: NF
Scale: AS NOTED
Date: 5/19/2021

C0.1

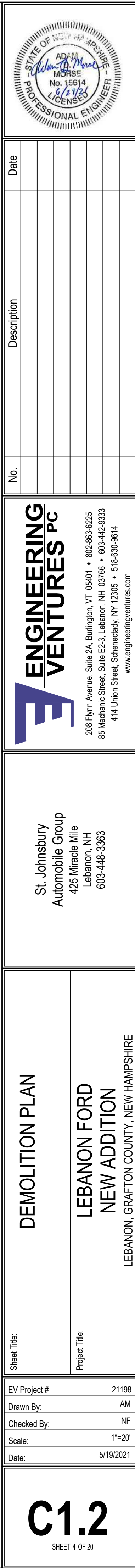
SHEET 2 OF 20



SURVEY NOTES

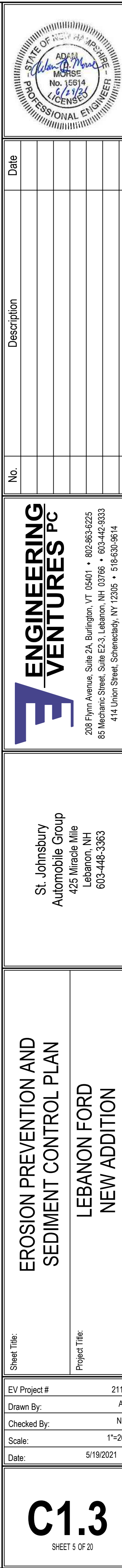
1. EXISTING PHYSICAL FEATURES AND TOPOGRAPHY SHOWN HERE ARE BASED ON THE BOUNDARY AND TOPOGRAPHIC SURVEY CONDUCTED BY LATITUDES LAND SURVEY ON 5/10/2021 AND 5/11/2021.
2. UTILITIES SHOWN DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATED UPON OR ADJACENT TO THE SURVEYED PREMISES. EXISTING UTILITIES SHOWN ON PLANS WERE TAKEN FROM FIELD OBSERVATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING UTILITY LOCATIONS PRIOR TO COMMENCING WORK. NOTIFY ENGINEER OF ANY DISCREPANCY BETWEEN UTILITIES AS SHOWN AND AS FOUND.
3. THE CONTRACTOR SHALL CONTACT DIG SAFE (811 or 888-344-7233) A MINIMUM OF 72 HOURS, BUT NOT INCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, PRIOR TO ANY CONSTRUCTION.
4. NORTH ORIENTATION IS REFERENCED TO APPROXIMATE NEW HAMPSHIRE STATE PLANE GRID NORTH DERIVED FROM GPS READINGS.
5. ELEVATIONS ARE REFERENCED TO APPROXIMATE NAVD88 DERIVED FROM GPS READINGS.

	
No.	Date
Description	
 ENGINEERING VENTURES PC 208 Flynn Avenue, Suite 2A, Burlington, VT 05401 • 802-863-4225 85 Mechanic Street, Suite E2-3, Lebanon, NH 03766 • 603-442-9333 414 Union Street, Saco, NH 03085 • 603-883-6565 www.engineeringventures.com	
St. Johnsbury Automobile Group 425 Miracle Mile Lebanon, NH 603-448-3363	
EXISTING CONDITIONS PLAN	
Sheet Title:	EV Project # 21198
Project Title:	AM
Drawn By:	Checked By: NF
Scale:	1"=20'
Date:	5/19/2021
C1.1 SHEET 3 OF 20	





- | | |
|----|---|
| E1 | LIMIT OF DISTURBANCE (AREA OF DISTURBANCE = 57,000 SF) |
| E2 | PORTABLE SANITATION FACILITIES, TO BE STAKED DOWN AND SECURED |
| E3 | INLET PROTECTION (TYP.) |
| E4 | SILT FENCE |
| E5 | CONCRETE WASHOUT |
| E6 | STABILIZED CONSTRUCTION ENTRANCE |
| E7 | CHECK DAM |



EROSION CONTROL LEGEND

EROSION PREVENTION AND SEDIMENT CONTROL STRATEGY
THE FOLLOWING TECHNIQUES WILL BE UTILIZED AS PART OF A SEDIMENT AND EROSION CONTROL PROGRAM. THE SEDIMENT AND EROSION CONTROL PROGRAM WILL BE IMPLEMENTED IN STAGES. CERTAIN ITEMS FROM ONE STAGE WILL LIKELY OVERLAP OR TAKE PLACE CONCURRENTLY WITH ITEMS FROM OTHER STAGES. HAY PRODUCTS SHALL NOT BE USED.

TEMPORARY INLET PROTECTION - STONE COLLARS AND/OR INLET SOCKS. INSTALL AS INDICATED ON PLANS. STONE TO BE REMOVED AND REPLACED WITH CLEAN STONE WHEN SEDIMENT IS $\leq 1/2$ DEPTH OF STONE. REMOVE ALL SEDIMENT COLLECTED IN STRUCTURE OR SOCK AS SOON AS POSSIBLE.

STONE CHECK DAM

THIS STRUCTURAL MEASURE IS ALONG DITCHES/ SWALES AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO SLOW STORMWATER RUNOFF AND TRAP SEDIMENT PARTICLES. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

PERMANENT EROSION CONTROL NETTING.

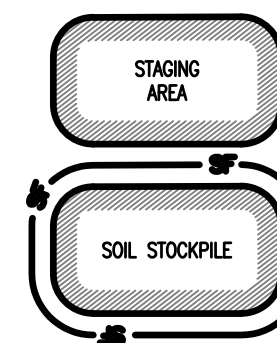
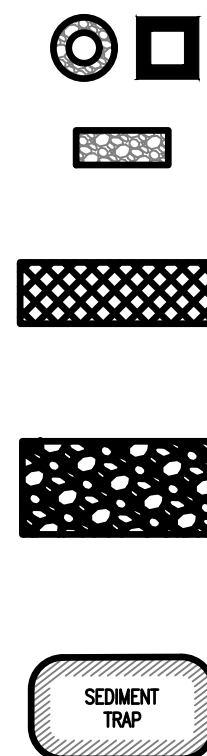
THIS STRUCTURAL MEASURE IS INSTALLED IN AREAS THAT HAVE SLOPES 3:1 AND GREATER AND IN OTHER LOCATIONS INDICATED ON THIS PLAN TO STABILIZE THE SLOPE AND REDUCE THE EROSION POTENTIAL. THE NETTING IS TYPICALLY IMPREGNATED WITH GRASS SEED AND SOMETIMES STAPLED TO THE EXPOSED SOIL. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

THIS STRUCTURAL MEASURE IS A STABILIZED PAD OF AGGREGATE UNDERLAIN WITH FILTER FABRIC LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, OR PARKING AREA. THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OR STREETS. THIS WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED. ONCE REMOVED, THE IMPACTED AREA SHALL BE 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.

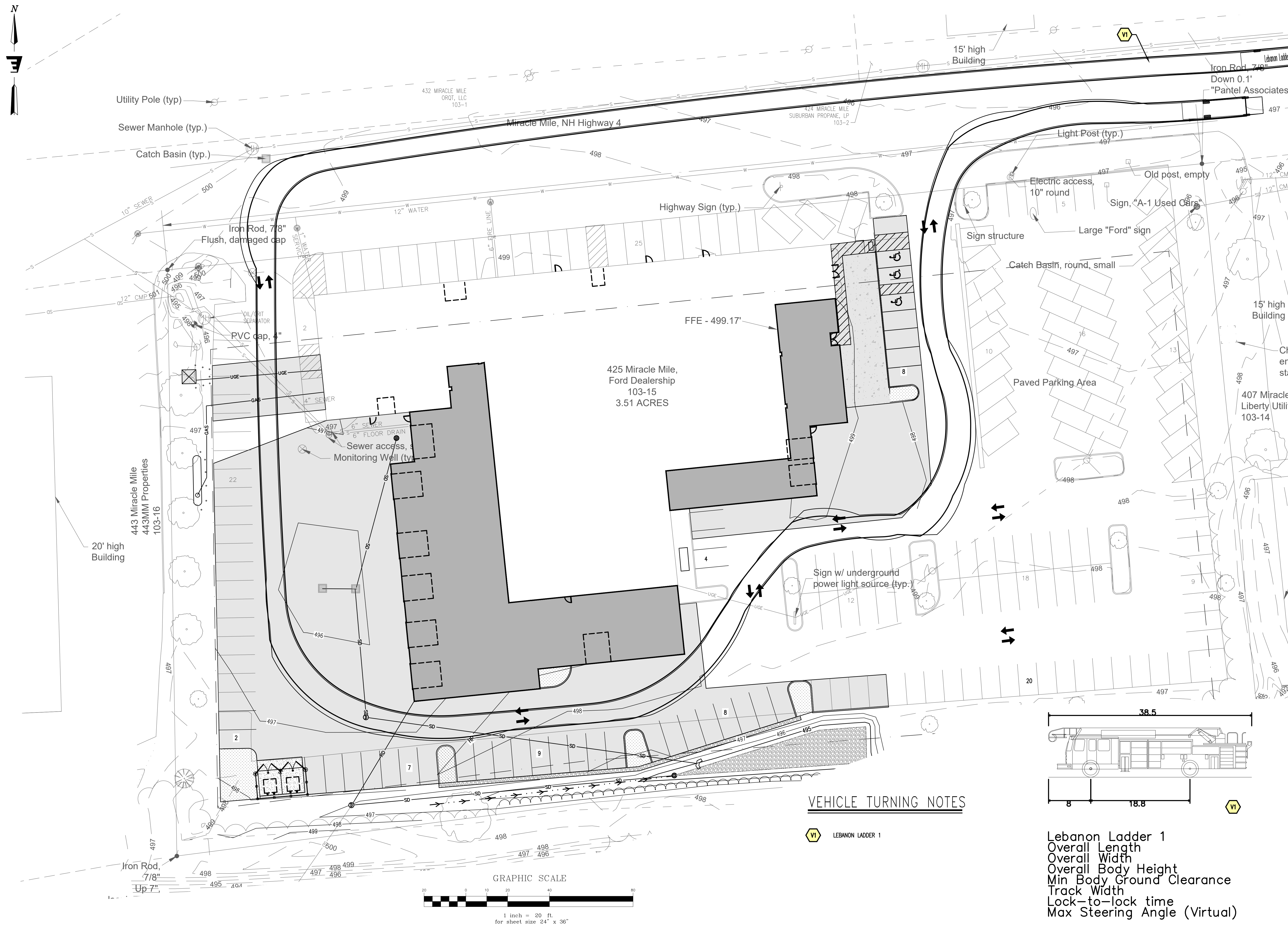
TEMPORARY SOIL STOCKPILE AREAS (APPROXIMATE)
THESE ARE APPROVED LOCATIONS WHERE TOPSOIL AND OTHER SOIL MATERIALS MAY BE STORED. THESE STOCKPILES WILL BE PROTECTED FROM EROSION BY A NUMBER OF METHODS, INCLUDING INSTALLING SILT FENCING AROUND THE DOWN GRADIENT PERIMETER OF THE STOCKPILE AND SEEDING AND MULCHING THE STOCKPILE WHEN NOT IN USE FOR MORE THAN FIVE DAYS.

TEMPORARY SILT FENCING IS A TEMPORARY BARRIER OF GEOTEXTILE FABRIC USED TO INTERCEPT SEDIMENT LOAD RUNOFF FROM SMALL DRAINAGE AREAS OF DISTURBED SOIL. IT IS INSTALLED ALONG THE PERIMETER OF IMPACTED AREAS AND ALONG THE BASE OF THE FILL SLOPES. ADDITIONALLY, WHEN DESIGNATED ALONG THE LIMITS OF DISTURBANCE, IT ALSO CONSTRUCTION FENCE BEHIND THE SILT FENCE. SILT FENCING IS EFFECTIVE IN REDUCING STORMWATER RUNOFF VELOCITIES, ASSIST IN THE DEPOSITION OF TRANSPORTED SEDIMENT LOAD AND PREVENT EROSION OF SOILS ON ADJACENT AREAS. THESE WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE PROJECT SITE HAS BEEN PERMANENTLY STABILIZED.

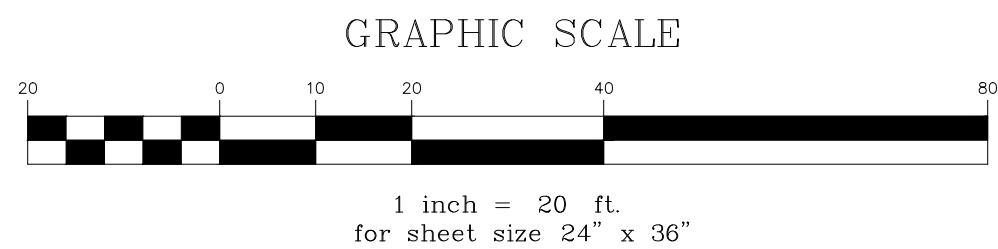
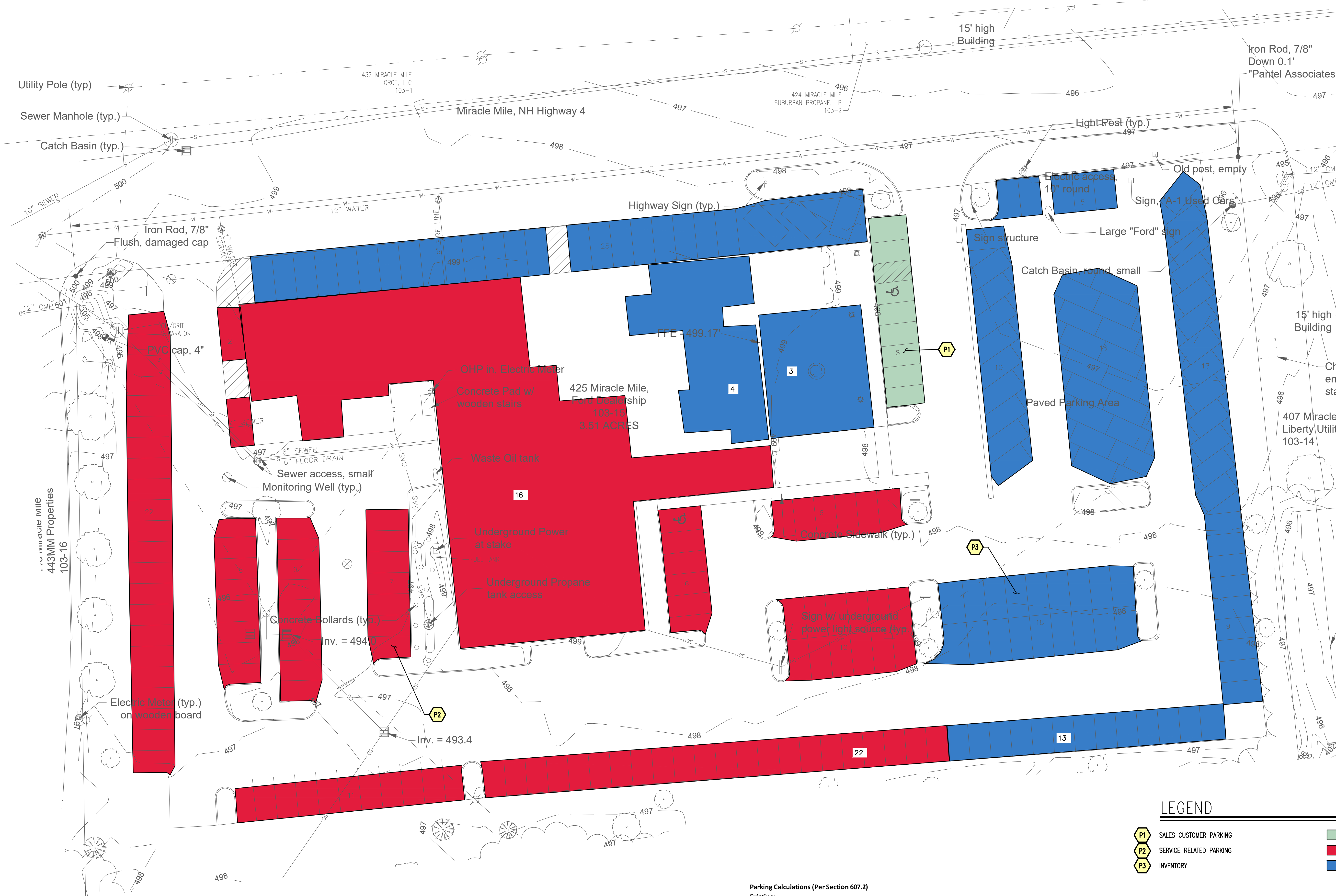
LIMITS OF DISTURBANCE
THE CONTRACTOR SHALL CONTAIN ANY EARTH MOVING ACTIVITIES WITHIN THE DESIGNATED LIMITS SHOWN ON THIS PLAN. THE ENGINEER SHALL REVIEW THE SITE TO MAKE ANY ADJUSTMENTS TO ACCOUNT FOR ENVIRONMENTALLY SENSITIVE AREAS, SPECIMEN TREES AND SPECIAL AREAS OF CONCERN.

EV Project #	21198
Drawn By:	AM
Checked By:	NF
Scale:	1"=20'
Date:	5/19/2021

C1.3
SHEET 5 OF 20



S:\PROJECTS\2021\118 NH LEBANON FORD ADDITION\DWGSHEET FILES\118 C1.D\VEHICLE TURNING PLAN.DWG
PLOTTED: 6/20/2021 1:02 PM



Parking Calculations (Per Section 607.2)

Existing:

Type of Use	Unit	Parking Spaces per unit	number of units	Required	Provided
Service Bay	bay	4.0 per bay	16	64	121
vehicular sales	gfa	1.0/600 sq. ft.	4764	8	8
Inventory					116
Total				72	245

LEGEND

- P1 SALES CUSTOMER PARKING
- P2 SERVICE RELATED PARKING
- P3 INVENTORY

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 • 518-530-9614
www.engineeringventures.com

St. Johnsbury Automobile Group
425 Miracle Mile
Lebanon, NH
603-448-3363

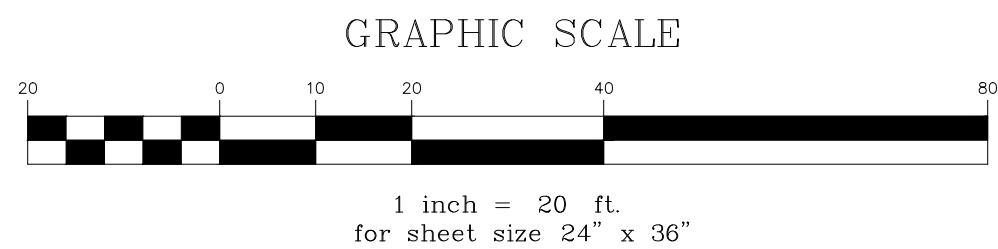
Sheet Title:
EXISTING PARKING PLAN

Project Title:
LEBANON FORD NEW ADDITION
LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

Project Title:
EV Project # 21198
Drawn By: AM
Checked By: NF
Scale: 1"=20'
Date: 5/19/2021

C1.5

SHEET 7 OF 20



Parking Calculations (Per Section 607.2)

Proposed:

Type of Use	Unit	Parking Spaces per unit	number of units	Required	Provided
Service Bay	bay	4.0 per bay	22	88	92
vehicular sales	gfa	1.0/600 sq. ft.	6552	11	11
Inventory				114	
Total				97	217

Notes:

1. Proposed spaces include (3) regular ADA parking spaces and one van accessible parking space.

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
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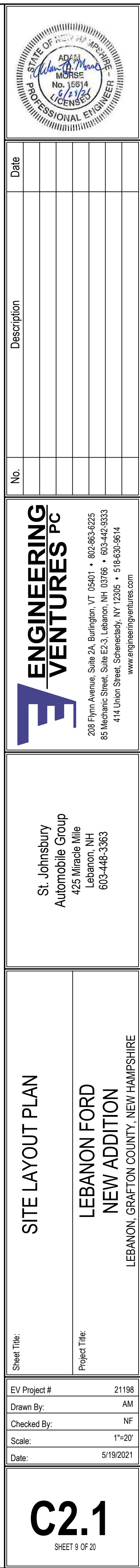
PROPOSED PARKING PLAN

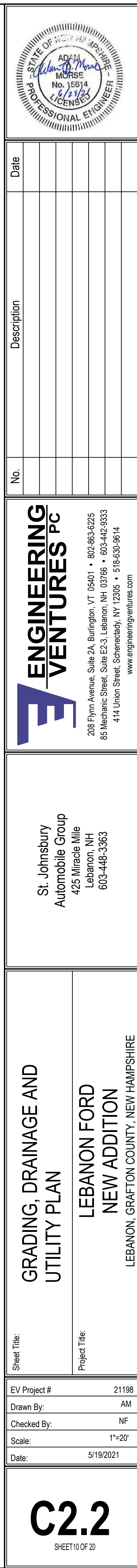
LEBANON FORD
NEW ADDITION

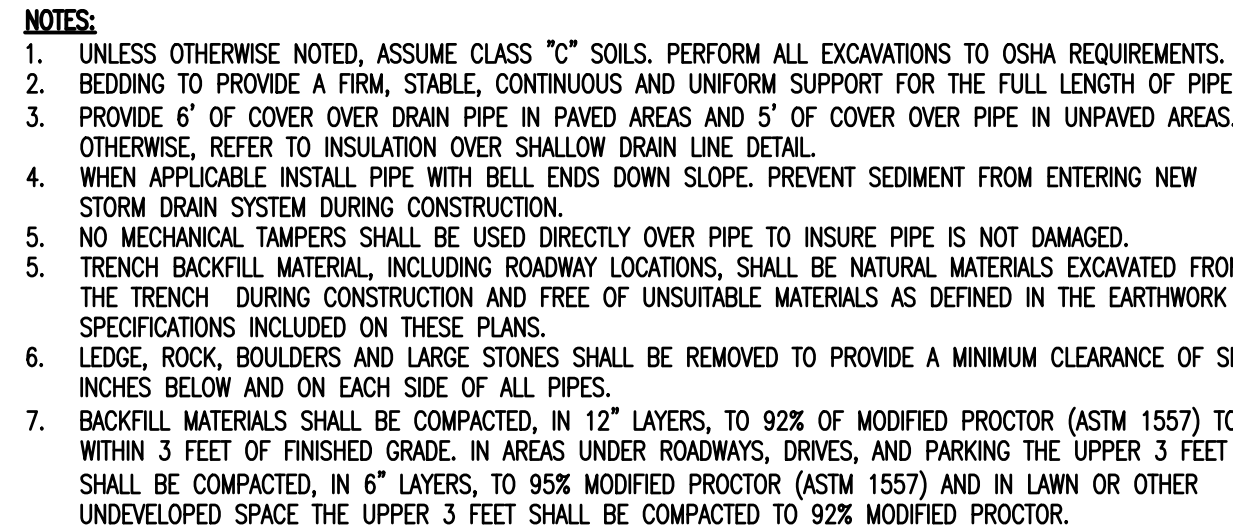
LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

EV Project # 21198
Drawn By: AM
Checked By: NF
Scale: 1"=20'
Date: 5/19/2021

C1.6
SHEET 8 OF 20







NOT TO SCALE



1. ALL DIMENSIONS SHOWN HERE ARE NOMINAL.
2. COVER SHALL BE HEAVY DUTY (H-20) LOAD RATED.
3. CATCH BASIN (CB) FRAME AND GRATE ASSEMBLY SHALL BE EAST JORDAN IRON WORKS "5520M5 5546ZPT ASSEMBLY" OR APPROVED EQUAL.
4. MANHOLE (MH) FRAME AND COVER ASSEMBLY SHALL BE EAST JORDAN IRON WORKS "1480A V1419 ASSEMBLY" OR APPROVED EQUAL.



NOT TO SCALE



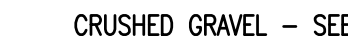
- NOTES:**
1. GRANITE CURBS SHALL BE INSTALLED IN ACCORDANCE WITH PROJECT AND STATE SPECIFICATIONS.
 2. WHERE CURB IS ADJACENT TO ENTRY/EXIT DOOR PADS WITH FROST WALL FOUNDATIONS, CURB SHALL BE DOWELED TO PAD WITH 24" LONG #4 DOWELS (CENTERED) AT 1'-6" OC (PORTION OF DOWEL IN CURB TO BE GREASED).
 3. WHERE CURB IS ADJACENT TO SIDEWALK, OR OTHER HARD FEATURE, 1/4" EXPANSION MATERIAL (FULL DEPTH OF CURB) SHALL BE INSTALLED BETWEEN FEATURE AND CURB.

NOT TO SCALE



1. IF DEPTH OF MANHOLE IS 6 FT. OR LESS FROM RIM TO CENTERLINE INVERT, THEN A FLAT TOP WILL BE INSTALLED. IF DEPTH OF MANHOLE FROM RIM TO CENTERLINE INVERT IS MORE THAN 6 FT., THEN AN ECCENTRIC CONICAL TOP WILL BE INSTALLED.
2. CATCH BASIN AND GRATE SHALL BE DESIGNED FOR H2O LOADING.

NOT TO SCALE



NOT TO SCALE



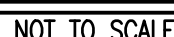
1. ALL SUBBASE MATERIALS SHALL BE PLACED IN 6" LIFTS AND COMPACTED TO 95% MAXIMUM DENSITY ACCORDING TO ASTM D-1557 (MODIFIED PROCTOR).
2. ROAD/PARKING LOT PAVEMENT CROSS SECTION BASED ON NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ITEM 401, TABLE 2.

NOT TO SCALE



1. CONCRETE: 4,000 P.S.I. AFTER 28 DAYS.
2. REINFORCING: (4) - #4'S, 1 @ EACH CORNER.
3. 1" CHAMFER @ TOP EDGE.
4. CONDUIT & ANCHOR BOLTS PLACED AS RE-QUIRED;
PROVIDED BY ELECTRICAL CONTRACTOR.
5. CONCRETE TO HAVE AIR ENTRAINING AGENT.

TYPICAL LIGHT POLE BASE



- POLES SHALL
MEET 140 MPH
SUSTAINED WINDS

NOT TO SCALE

1. PRIOR TO THE START OF WORK, A PRE-CONSTRUCTION MEETING WILL BE HELD WITH THE CONTRACTOR, AND PROJECT ENGINEER TO REVIEW PROCEDURES, IDENTIFY RESPONSIBILITIES. UNLESS STATED OTHERWISE, ALL MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH THE MOST RECENT VERSION OF MHDOT SPECIFICATIONS.
2. CLEANING AND GRUBBING AREAS TO BE RESTORED TO PRE-CONSTRUCTION CONDITIONS, INCLUDING DRIVEWAYS, STONE WALLS, AND GRASS AREAS. THE DRIVEWAY SUB-GRADE MATERIAL SHALL EXTEND ONE FOOT BEYOND THE EDGE OF PAVEMENT.
3. COMPACTION OF ALL MATERIALS SHALL BE PERFORMED USING VIBRATORY ROLLERS AND WATER IN LIFTS OF NO GREATER THAN TWELVE INCHES. COMPACTION SHALL BE PERFORMED UNTIL THE REQUIRED DENSITY IS ACHIEVED. DENSITY SHALL BE DETERMINED BY ASTM D2922 AND SHALL BE AT LEAST 95% OF THE THEORITICAL MAXIMUM DENSITY.
4. COMPACTION TESTING SHALL BE PERFORMED FOR EVERY LAYER OF MATERIAL PLACED AND FOR EVERY 1000 SQUARE FEET OF AREA.
5. PAVEMENT SHALL MEET THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AS PUBLISHED BY VIRGINIA.
6. PAVEMENT SHALL NOT BE INSTALLED WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT, NOR WHEN THE ROAD BASE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT. PAVEMENT SHALL NOT BE INSTALLED WHEN THE FAVORABLE CONDITIONS FOR THE COMPLETION OF ROLLING, PAVEMENT SHALL NOT BE INSTALLED WHEN THE SUBGRADE IS FROZEN OR THE GRADES ARE INCORRECT.
7. ALL REMAINING DISTURBED AREAS SHALL BE FERTILIZED AND SEEDING IN ACCORDANCE WITH APPLICABLE STATE SPECIFICATIONS FOR EROSION CONTROL.
8. THE SEEDING OF 10% OR GREATER SLOPES SHALL REQUIRE THE USE OF EROSION CONTROL MATTING.
9. ALL EARTHWORK MATERIALS SHALL BE OBTAINED FROM APPROVED SOURCES. THEY SHALL CONSIST OF SATISFACTORILY GRADED, FREE DRAINING MATERIAL, REASONABLY FREE FROM LOAM, SILT, CLAY AND ORGANIC MATERIAL. EARTHWORK MATERIALS SHALL MEET THE REQUIREMENTS OF

	NO. 100	0 - 12
	NO. 200	0 - 6

G. TYPE I STONE FOR STONE FILL THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM 1 INCH TO 12 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF FOUR INCHES.

H. TYPE II STONE FOR STONE FILL THE LONGEST DIMENSION OF THE STONE SHALL VARY FROM TWO INCHES TO 50 PERCENT OF THE VOLUME OF THE STONE IN PLACE SHALL HAVE A LEAST DIMENSION OF 12 INCHES.

- I. TOPSOIL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE SPECIFICALLY STATED IN THE CONTRACT DOCUMENTS:
1. THE pH OF THE MATERIAL SHALL BE BETWEEN 5.5 AND 7.6.
 2. THE ORGANIC CONTENT SHALL BE NOT LESS THAN 2% NOR MORE THAN 20%.
 3. GRADATION:

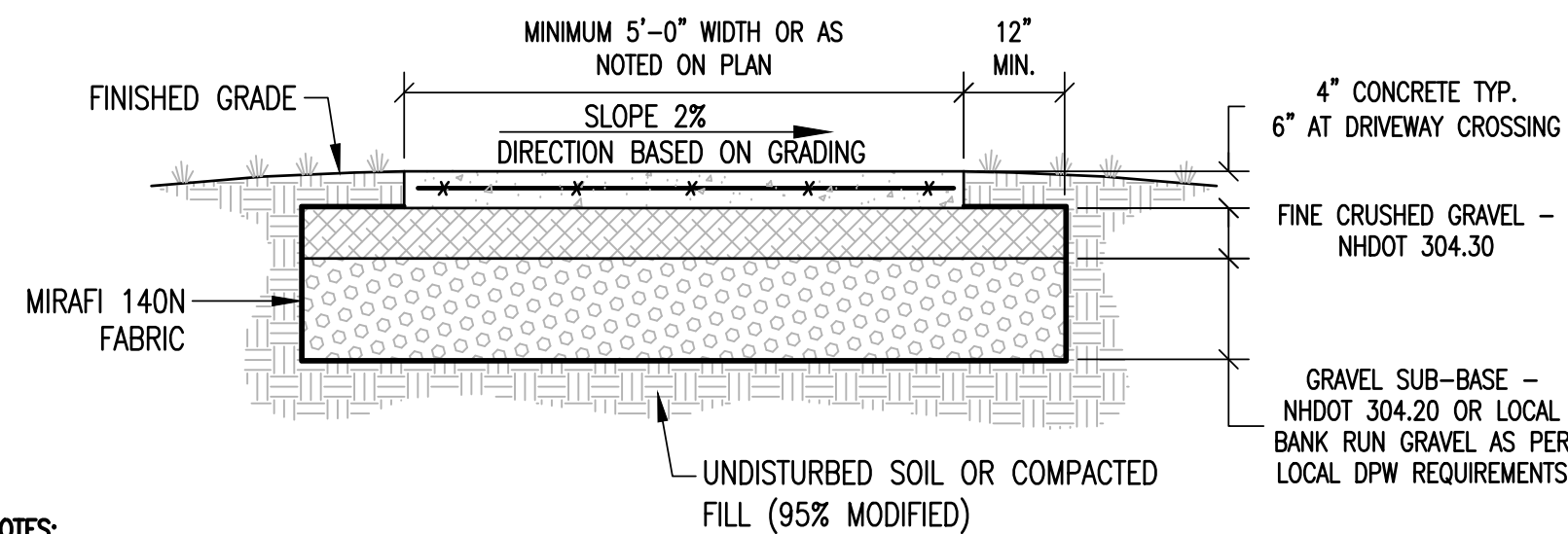
THE CONTRACTOR MAY AMEND NATURAL TOPSOIL WITH APPROVED MATERIALS AND BY APPROVED METHOD TO MEET THE ABOVE SPECIFICATIONS.

NOTES:

THE CONTRACTOR MAY AMEND NATURAL TOPSOIL WITH APPROVED MATERIALS AND BY APPROVED METHODS TO MEET THE ABOVE SPECIFICATIONS.

NOTES:

1. CONTRACTOR TO SUBMIT DRAWING STAMPED BY NH LICENSED PROFESSIONAL GEO-TECHNICAL ENGINEER FOR APPROVAL BY PROJECT ENGINEER AND CITY OF LEBANON.
2. STRIP ALL VEGETATION, ORGANIC SOILS AND UNSUITABLE FILL SOILS FROM THE WALL ALIGNMENT AREA.
3. BENCH CUT ALL EXCAVATED SLOPES.
4. DO NOT OVER EXCAVATE UNLESS DIRECTED TO DO SO BY THE OWNER'S SITE REPRESENTATIVE IN ORDER TO REMOVE UNSUITABLE SOIL.
5. THE OWNER'S SITE REPRESENTATIVE SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT PER THE DESIGN STANDARDS AND PARAMETERS.
6. LEVELING PAD SHALL CONSIST OF COMPACTED, $\frac{3}{4}$ " CRUSHED GRAVEL, 12" THICK AND EXTENDING AT LEAST 12" TO EITHER SIDE OF THE BASE BLOCK. A SMOOTHING SURFACE OF $\frac{3}{4}$ " CRUSHED STONE MAY BE UTILIZED.
7. MINIMUM EMBEDMENT OF WALL BELOW FINISH GRADE SHALL BE AS INDICATED ON THE WALL FACE DRAWING.
8. FOLLOW APPLICABLE PROVISIONS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS, ESPECIALLY WITH REGARDS TO LEVELING OF BLOCKS AND BASE.
9. DRAINAGE FILL SHALL CONSIST OF $\frac{3}{4}$ " CRUSHED STONE, LESS THAN 10% FINES, PLACED AND COMPACTED BEHIND THE WALL EXTENDING A MINIMUM OF 2 FEET, OR THE LENGTH OF THE REQUIRED GEO-GRID THE BACK, WHICHEVER IS GREATER. BEHIND THE WALL, A FILTER FABRIC SHALL BE PLACED OVER THE CUT OR FILL FACE BEHIND THE WALL AREA TO PREVENT SOIL MIGRATION INTO THE DRAINAGE MATERIAL.
10. WHERE PERFORATED HDPE DRAINS ARE USED, PROVIDE OUTLETS AT THE ENDS OF THE WALL OR AT A LOW COLLECTION POINT ALONG THE WALL. (ALTERNATIVE OUTLET METHODS MAY BE APPROVED BY THE DESIGN ENGINEER.)
11. BACKFILL AND COMPACT THE FILL MATERIAL BEHIND THE WALL AS THE WALL IS INSTALLED.
12. COMPACTION TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MINIMUM NUMBER OF TESTS SHALL BE DETERMINED BY THE OWNER'S SITE REPRESENTATIVE.
13. PLACE FILTER FABRIC (MIRAFIX 140N, OR EQUIVALENT) OVER THE DRAINAGE MATERIAL TO MINIMIZE SOIL MIGRATION FROM THE SURFACE MATERIAL INTO THE DRAINAGE MATERIAL.
14. COMPACTION SHALL BE TO 92% (MODIFIED PROCTOR) OR 95% (STANDARD PROCTOR).
15. PROVIDE LATERAL DRAINAGE SWALES TO DIRECT FLOWS ALONG THE ENDS OF THE WALL AND AWAY FROM THE WALL DURING CONSTRUCTION. DO NOT CONSTRUCT A SWALE BEHIND THE WALL AS PART OF THE FINISHED WALL. GRADE ABOVE THE WALL SO THAT WATER FLOWS OVER THE FACE OR TO A POINT AT LEAST AS FAR BEHIND THE WALL AS THE WALL HEIGHT.
16. TURF, OR SOME ACCEPTABLE FORM OF SOIL EROSION PROTECTION, SHALL BE ESTABLISHED AT THE TOP OF THE WALL (WHERE REQUIRED) BY THE LANDSCAPE CONTRACTOR AS SOON AS THE WALL IS COMPLETED.
17. FINAL WALL ALIGNMENT SHALL BE LOCATED IN THE FIELD.
18. RECOMMENDED COMPACTION EQUIPMENT WITHIN 15 FEET OF THE BACK OF THE WALL IS AS FOLLOWS:
0-4 FEET HAND TAMP OR VIBRATE PLATE COMPACTOR
4-15 FEET NOTHING LARGER THAN TWO-DRUM WALK BEHIND VIBRATORY ROLLER
 (LARGER ROLLERS CAN BE USED STATICALLY, PROVIDED LIFT SIZE DOES NOT COMPROMISE ACHIEVEMENT OF NECESSARY COMPACTION RATES.)



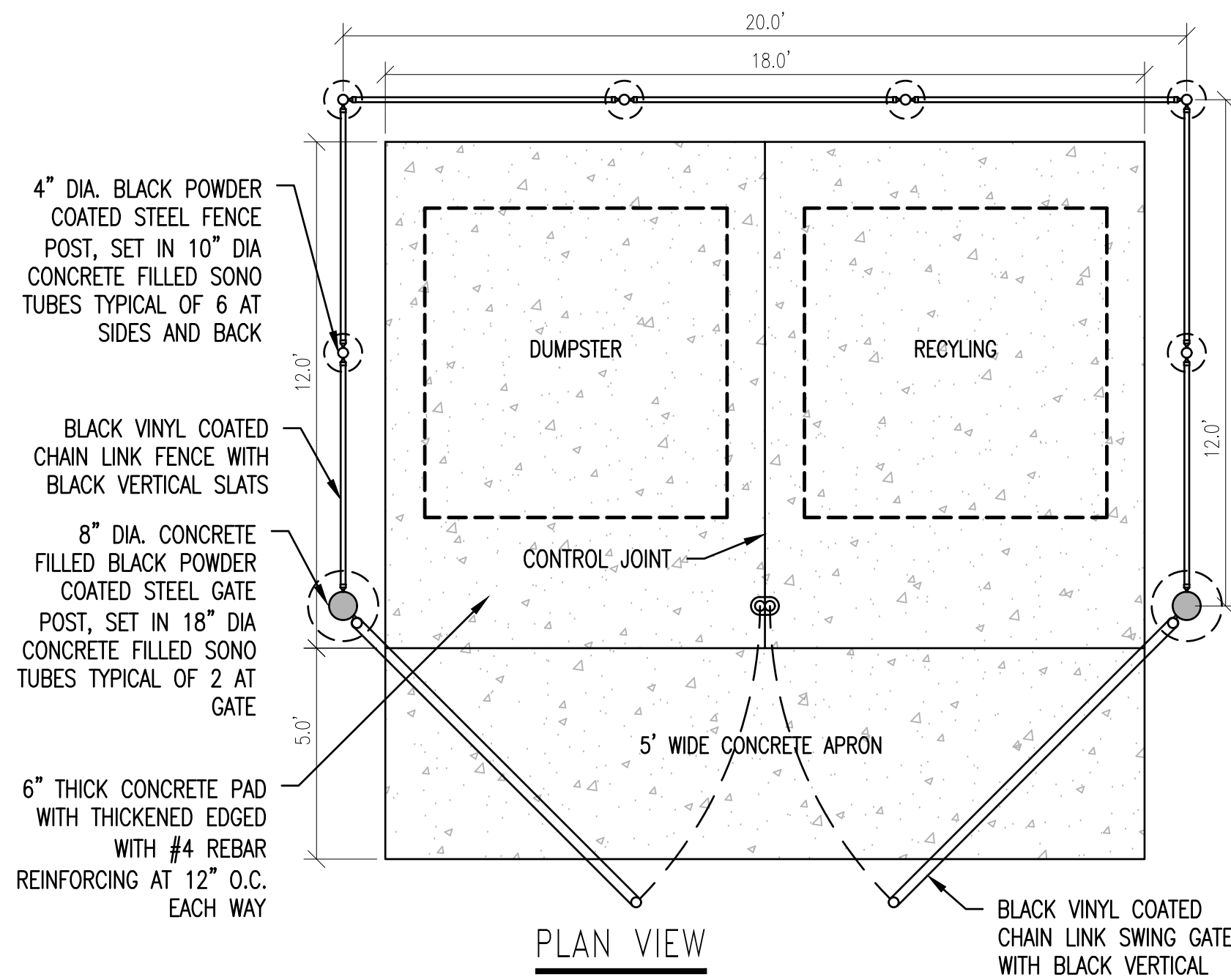
- FILL (95% MODIFIED)
- NOTES:
1. PLACE A TOOLED JOINT 1/8" WIDE AND AT LEAST 1/3 OF THE DEPTH, TYPICALLY AT INTERVALS MATCHING THE SIDEWALK WIDTH, OR AS NOTED ON PLANS (NOT TO EXCEED 10'-0").
 2. PLACE EXPANSION JOINT AS INDICATED ON PLANS, NOT TO EXCEED 20'-0" MAX.
 3. BROOM FINISH WITH SMOOTH TROWELED EDGES. TREAT WITH SILANE-SILOXANE OR EQUAL.
 4. CAST-IN-PLACE CONCRETE TO BE 4000 psi CONCRETE, 5%-7% AIR ENTRAINMENT WITH 6x6-W4.0xW4.0 REINFORCING CENTERED IN SIDEWALK.
 5. WHERE SIDEWALK IS ADJACENT TO ENTRY/EXIT DOOR PADS WITH FROST WALL FOUNDATIONS, SIDEWALK SHALL BE DOWELED TO PAD WITH 24" LONG #4 DOWELS (CENTERED) AT 1'-6" OC (PORTION OF DOWEL IN SIDEWALK TO BE GREASED).
 6. WHERE SIDEWALK IS ADJACENT TO CURB, BOLLARD OR OTHER HARD FEATURE, INSTALL 1/2" EXPANSION MATERIAL (FULL DEPTH OF SIDEWALK), BETWEEN FEATURE AND SIDEWALK.

CONCRETE SIDEWALK

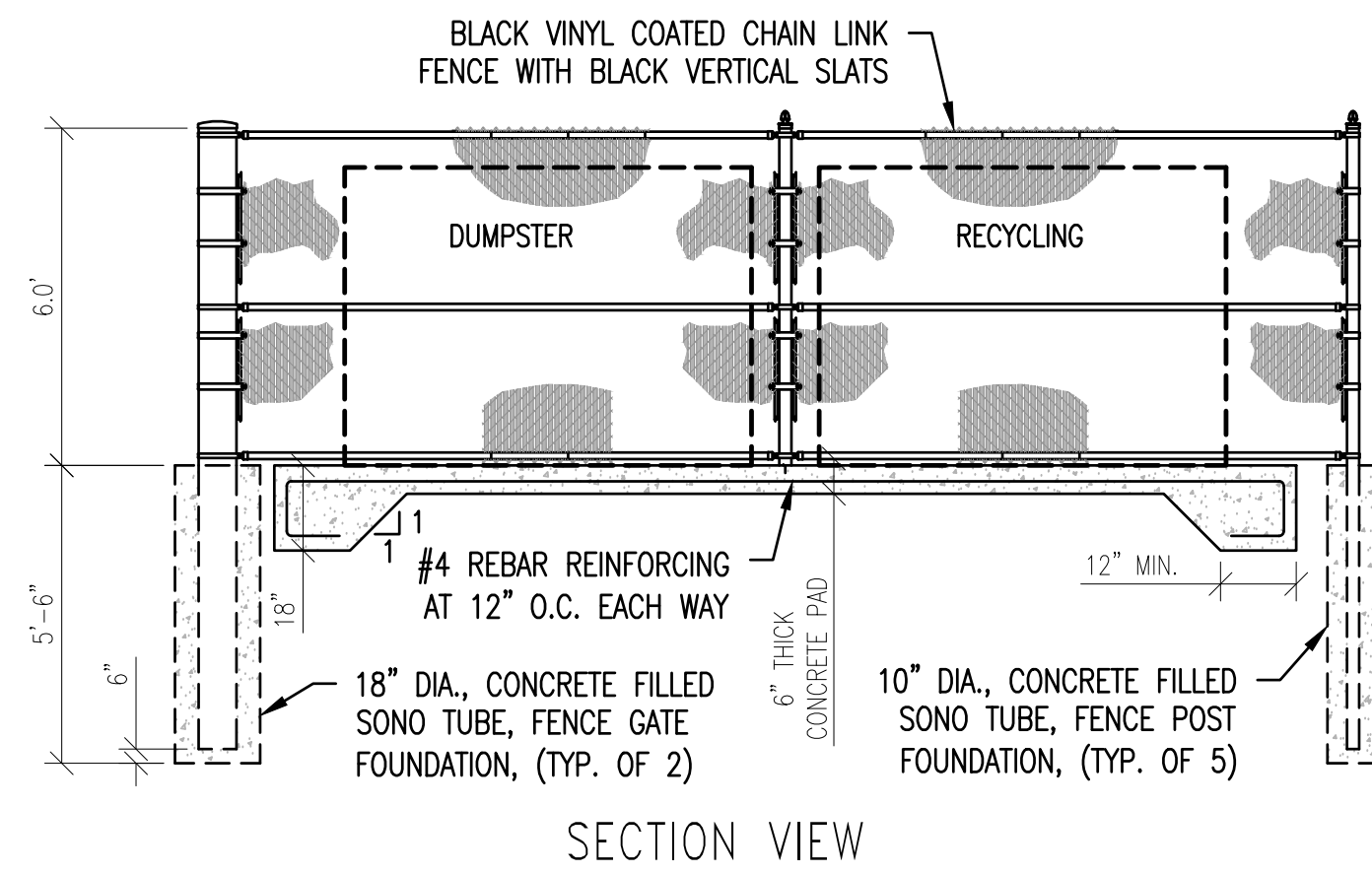
NOT TO SCALE 4



ADA PAVEMENT MARKINGS



PLAN VIEW

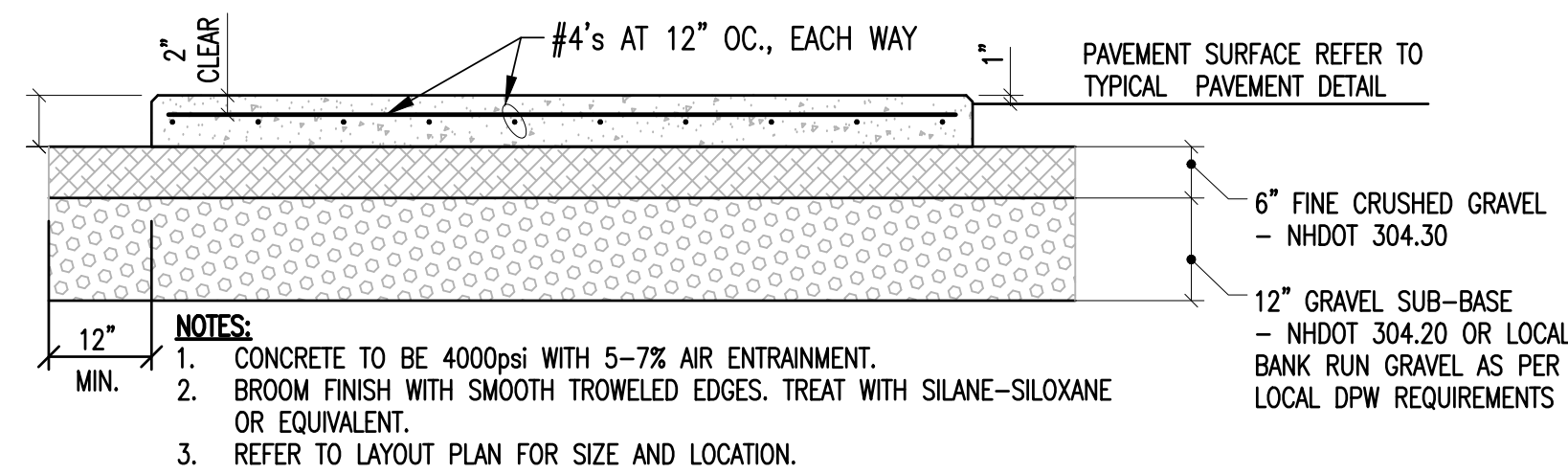


SECTION VIEW

- NOTES:**
1. CONCRETE TO BE 4000psi WITH 5-7% AIR ENTRAINMENT.
 2. BROOM FINISH WITH SMOOTH TROWELED EDGES. TREAT WITH SILANE-SILOXANE OR EQUIVALENT.
 3. CONTROL JOINT SHALL BE A 1/8" WIDE JOINT AT LEAST 1/3 OF THE DEPTH OF THE PAD.

DUMPSTER PAD WITH FENCE ENCLOSURE

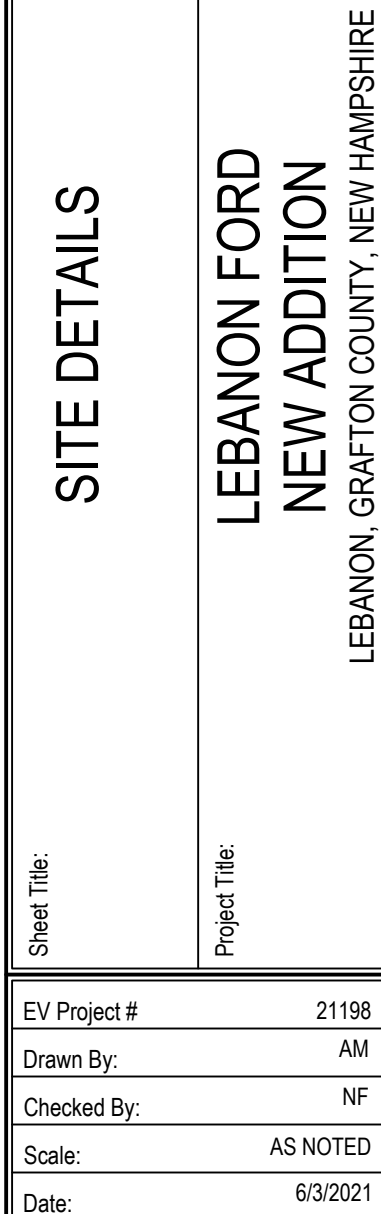
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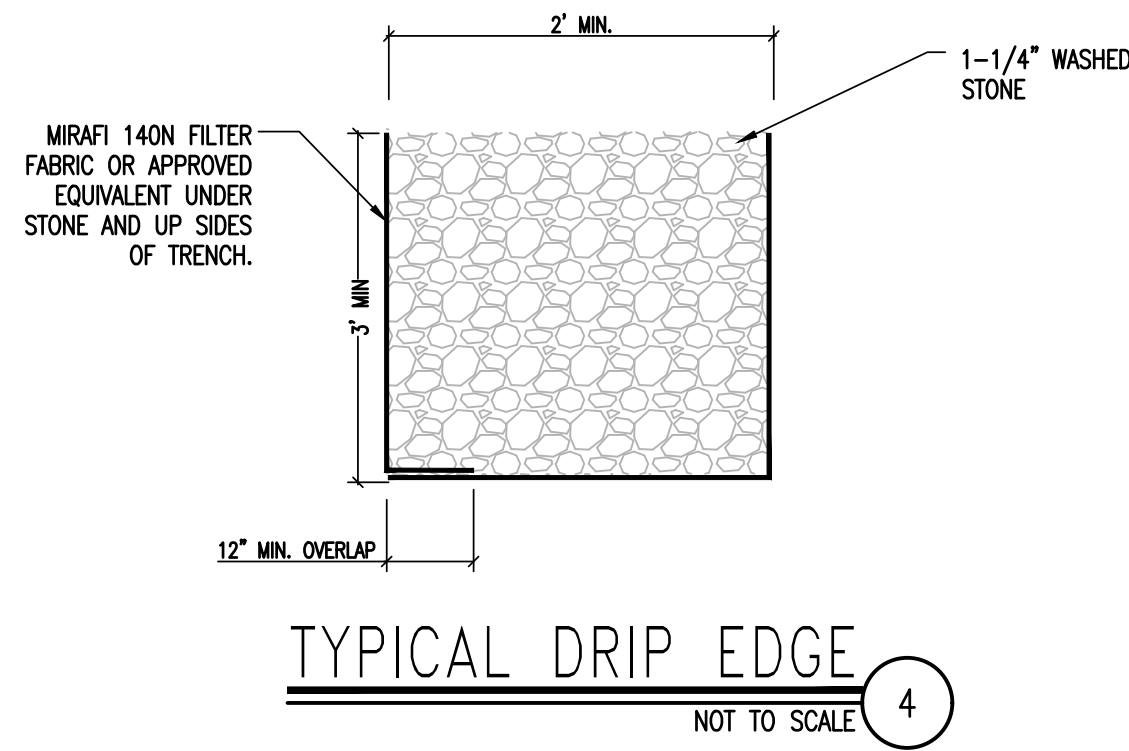
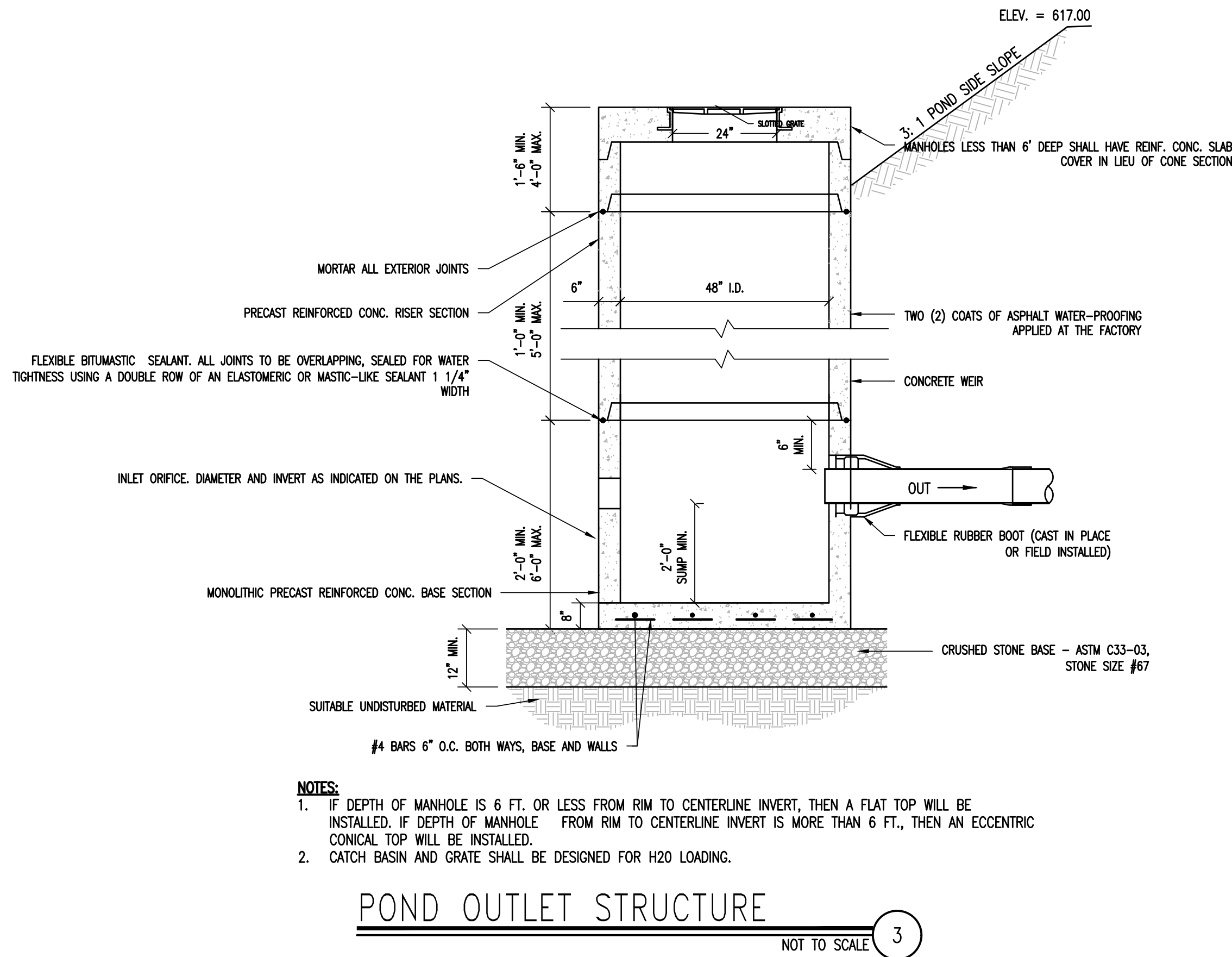
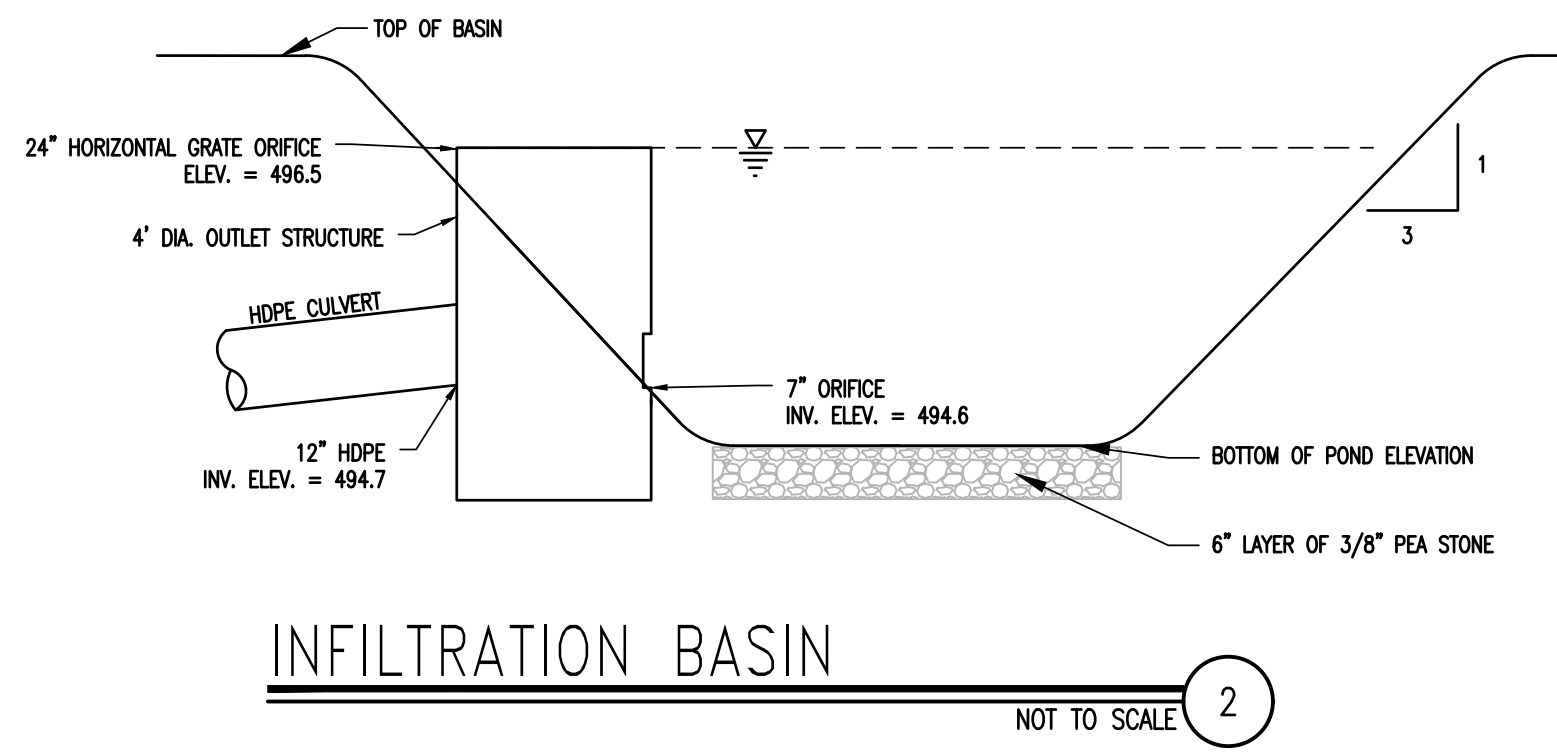
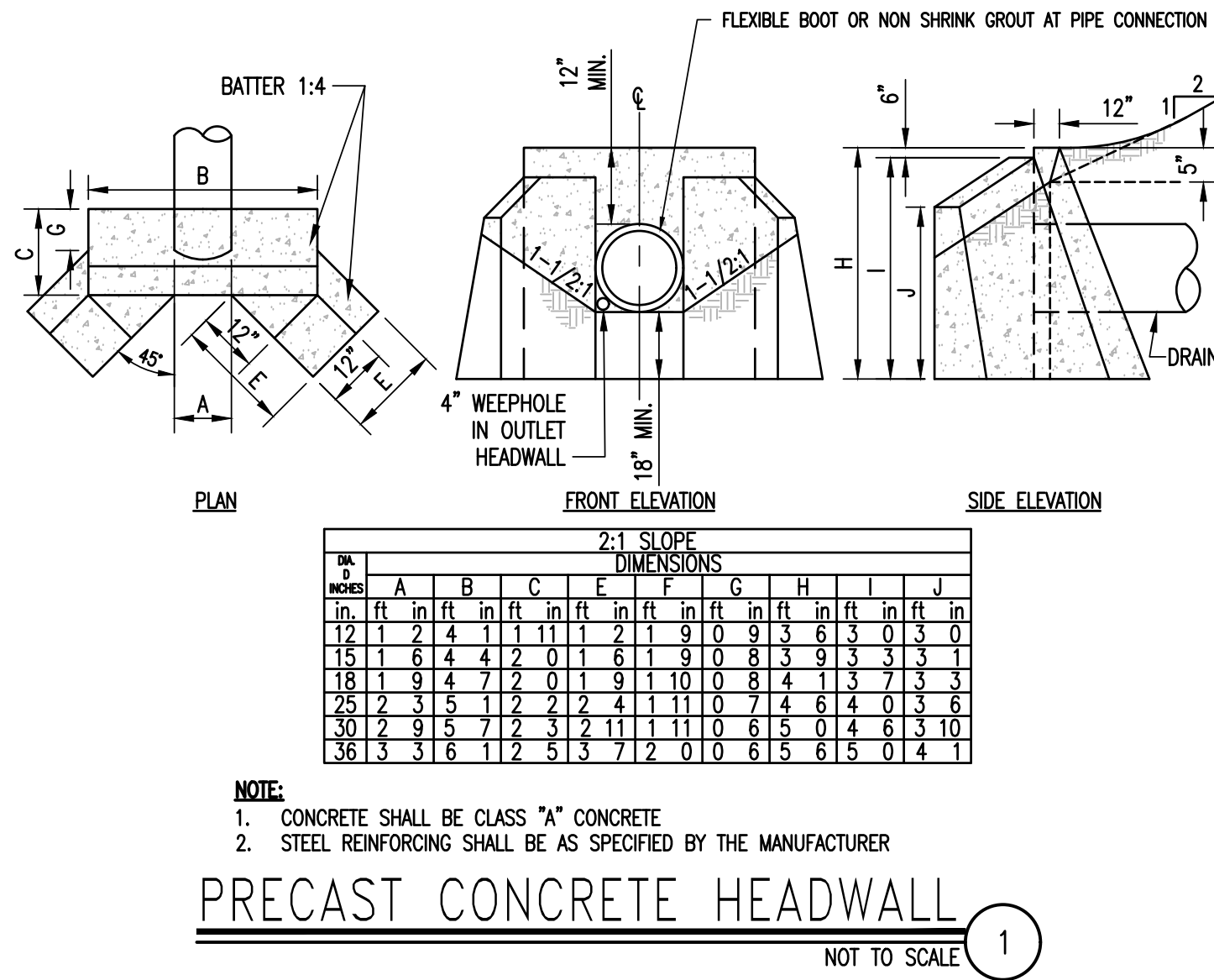


CONCRETE PAD DETAIL

NOT TO SCALE

6





No.

Date

Description

ENGINEERING VENTURES PC

St. Johnsbury Automobile Group
425 Miracle Mile
Lebanon, NH
603-448-3363

DRAINAGE DETAILS

LEBANON FORD
NEW ADDITION
LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

EV Project # 21198

Drawn By: AM

Checked By: NF

Scale: AS NOTED

Date: 6/28/2021

C3.3

SHEET 13 OF 20

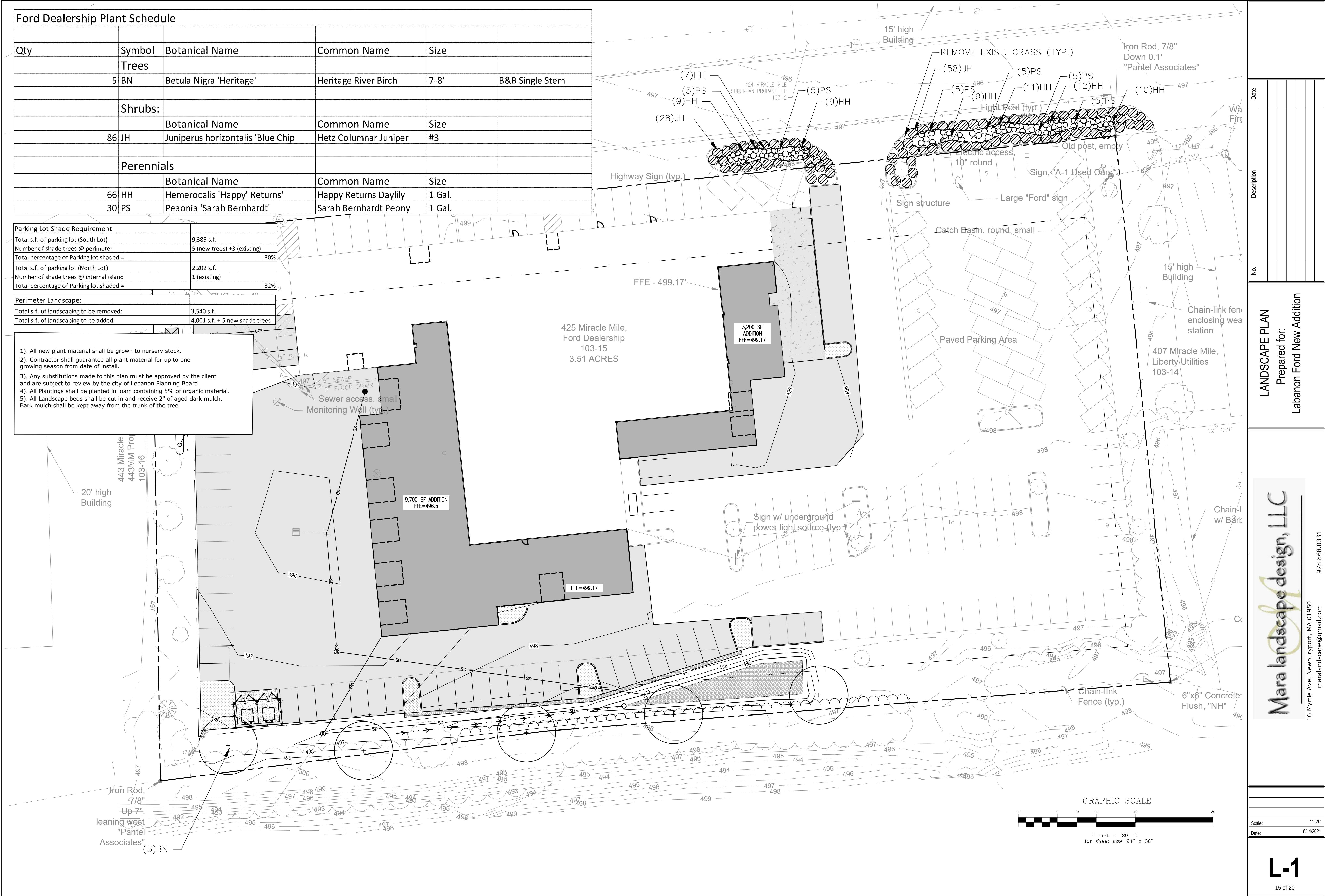
Ford Dealership Plant Schedule

Qty	Symbol	Botanical Name	Common Name	Size	
Trees					
5	BN	Betula Nigra 'Heritage'	Heritage River Birch	7-8'	B&B Single Stem
Shrubs:					
86	JH	Juniperus horizontalis 'Blue Chip'	Hetz Columnar Juniper	#3	
Perennials					
66	HH	Hemerocalis 'Happy' Returns'	Happy Returns Daylily	1 Gal.	
30	PS	Peaonia 'Sarah Bernhardt'	Sarah Bernhardt Peony	1 Gal.	

Parking Lot Shade Requirement	
Total s.f. of parking lot (South Lot)	9,385 s.f.
Number of shade trees @ perimeter	5 (new trees) +3 (existing)
Total percentage of Parking lot shaded =	30%
Total s.f. of parking lot (North Lot)	2,202 s.f.
Number of shade trees @ internal island	1 (existing)
Total percentage of Parking lot shaded =	32%

Perimeter Landscape:	
Total s.f. of landscaping to be removed:	3,540 s.f.
Total s.f. of landscaping to be added:	4,001 s.f. + 5 new shade trees

- 1). All new plant material shall be grown to nursery stock.
- 2). Contractor shall guarantee all plant material for up to one growing season from date of install.
- 3). Any substitutions made to this plan must be approved by the client and are subject to review by the city of Lebanon Planning Board.
- 4). All Plantings shall be planted in loam containing 5% of organic material.
- 5). 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.



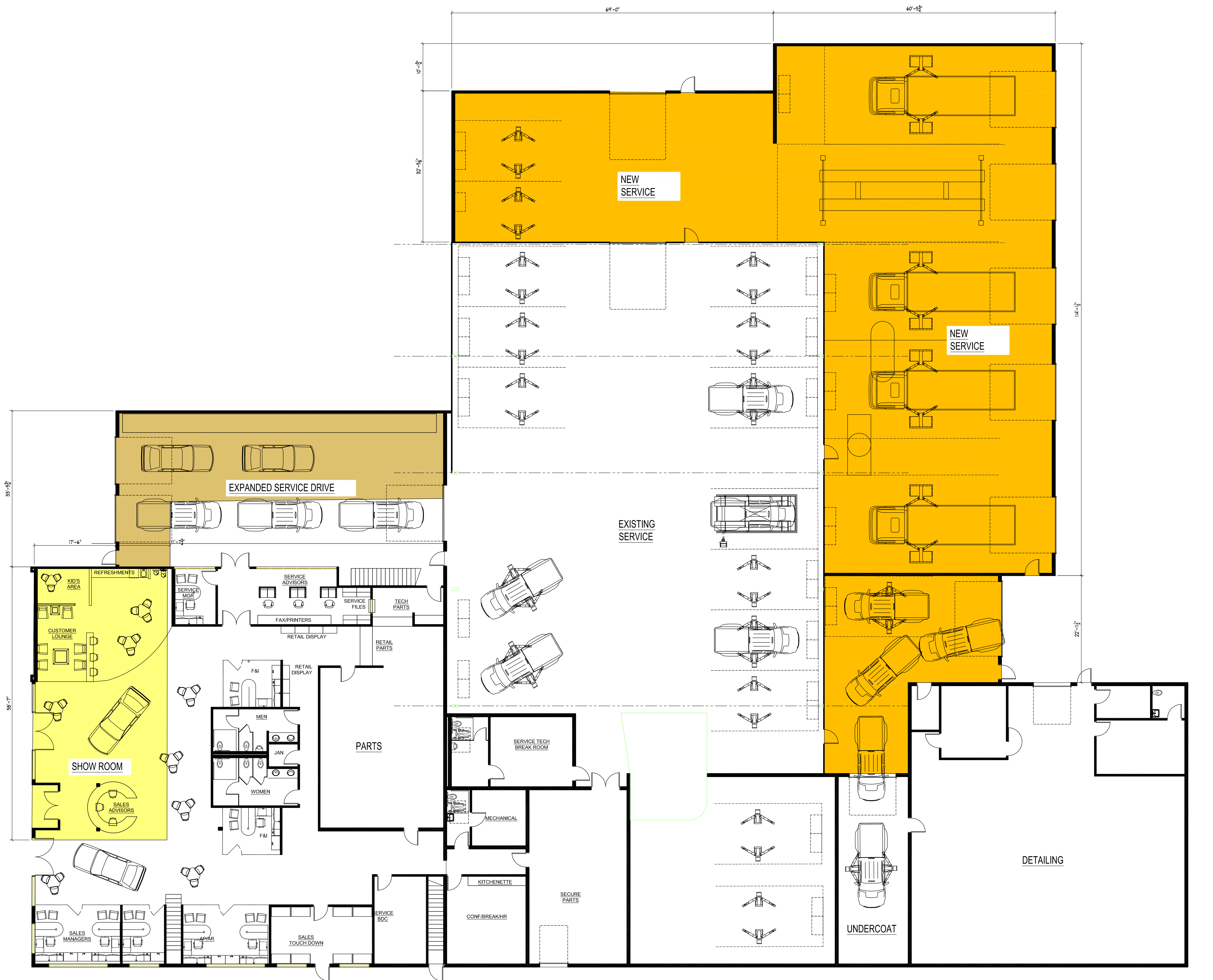
LANDSCAPE PLAN
Prepared for:
Labanon Ford New Addition

Mara landscape design, LLC
16 Myrtle Ave. Newburyport, MA 01950
maralandscape@gmail.com
978.868.0331

Scale: 1"=20'
Date: 6/14/2021

L-1
15 of 20

133



- NEW SHOP
10,525 SF
- EXISTING SHOP
17,000 SF
- NEW SHOW ROOM
1,788 SF
- EXISTING SHOW ROOM
4,764 SF
- NEW SERVICE DRIVE
2,404 SF
- EXISTING DRIVE
1,523 SF
- NEW PARTS
40 SF MEZZ
- EXISTING PARTS
1,937 SF + 3,700 2ND
LEVEL

1 OVERALL NEW WORK - FLOOR PLAN
SCALE: 1/8" = 1'-0"

0 4' 8' 16'
SCALE: 1/8" = 1'-0"

REVISION
Rev #

PROJECT NAME AND ADDRESS
ST J AUTO
LEBANON FORD
LEBANON, NH

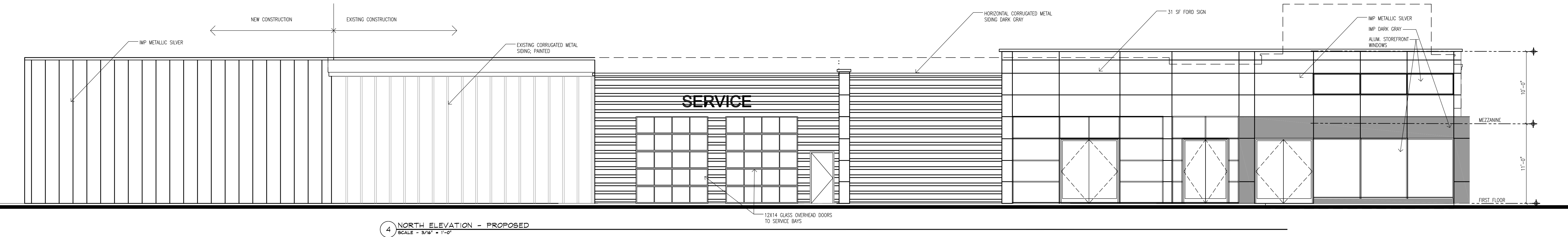
2000 - CELEBRATING 20 YEARS - 2020
Joseph Architects
25 Crossroad
Waterbury, Vermont 05676
Tel: 802-244-5220
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DRAWING NAME
OVERALL FIRST FLOOR
NEW WORK PLAN

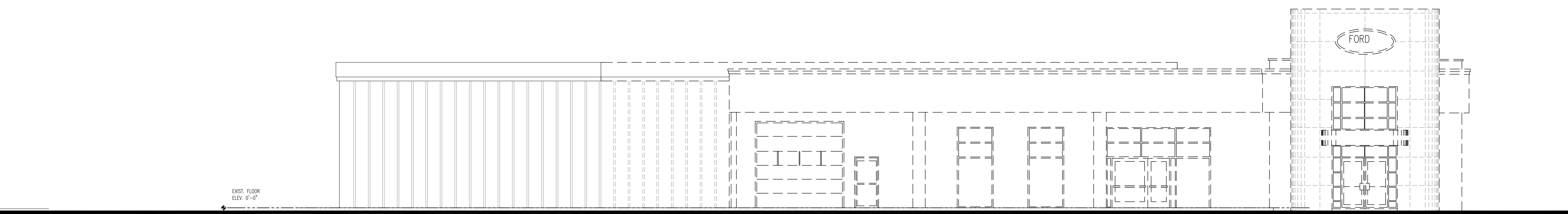
J.D. DRAWN BY 20210620 DATE
20-100 PROJECT NUMBER SHEET

17 of 20

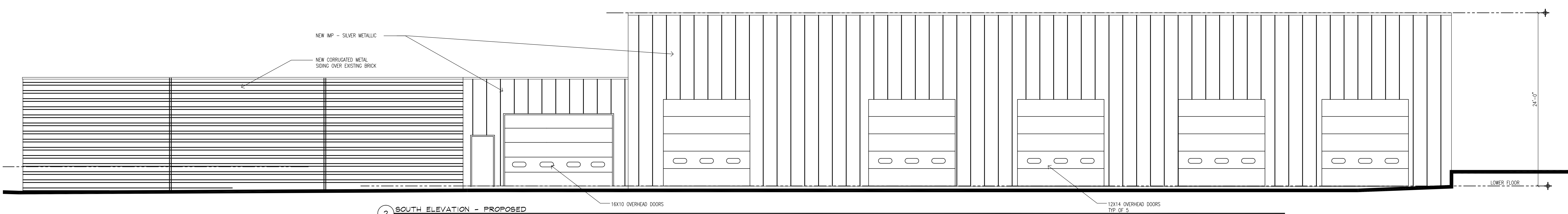
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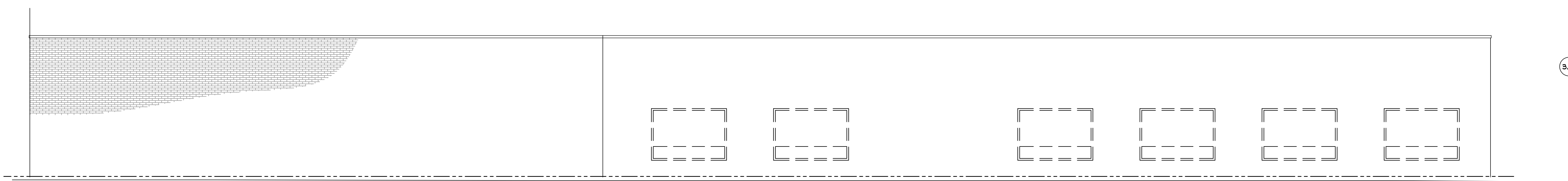
4 NORTH ELEVATION - PROPOSED
SCALE - 3/16" = 1'-0"



3 NORTH ELEVATION - EXISTING / DEMO
SCALE - 3/16" = 1'-0"



2 SOUTH ELEVATION - PROPOSED
SCALE - 3/16" = 1'-0"



1 SOUTH ELEVATION - EXISTING / DEMO
SCALE - 3/16" = 1'-0"

REVISION

Rev #	REVISION
1/2	

KEY PLAN
NTS

SCALE: 3/16" = 1'-0"

PROJECT NAME AND ADDRESS

ST J AUTO
LEBANON FORD
LEBANON, NH

2000 - CELEBRATING 20 YEARS - 2020

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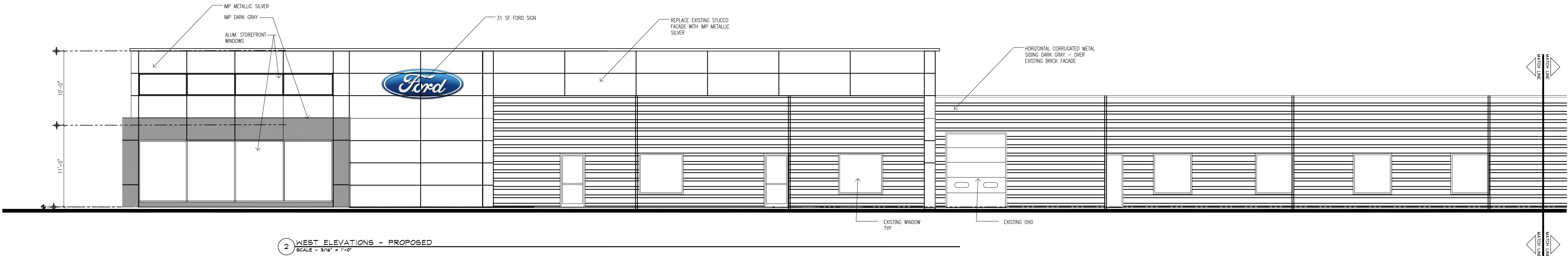
DRAWING NAME

**EXTERIOR
BUILDING ELEVATIONS**

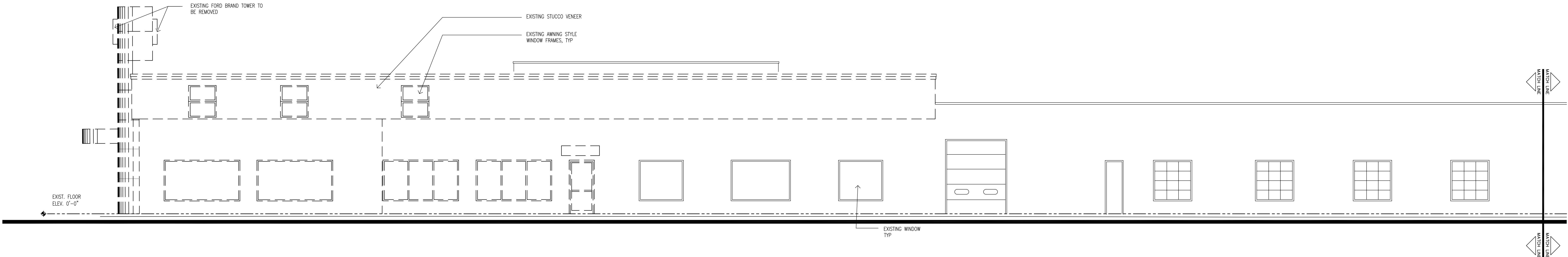
J.O.	DRAWN BY	20210620	DATE
20-100	PROJECT NUMBER		SHEET

18 of 20

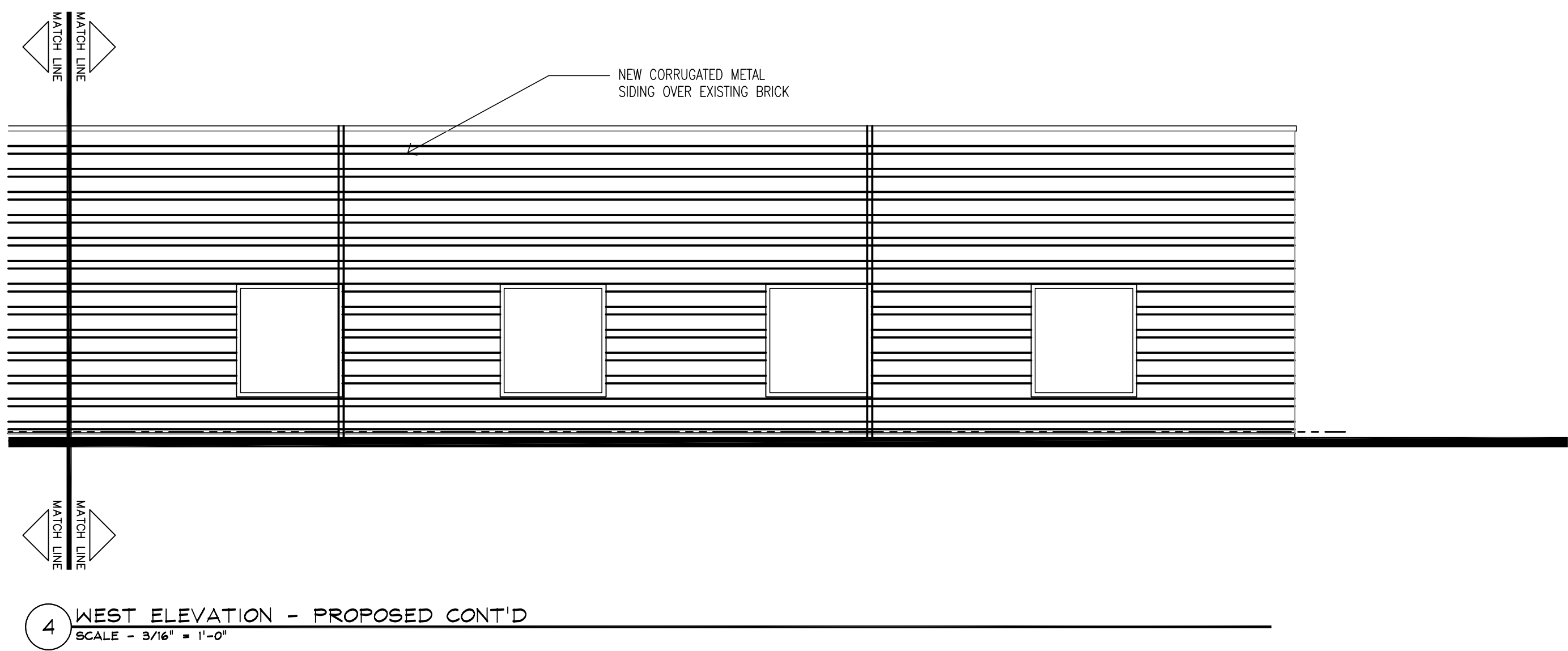
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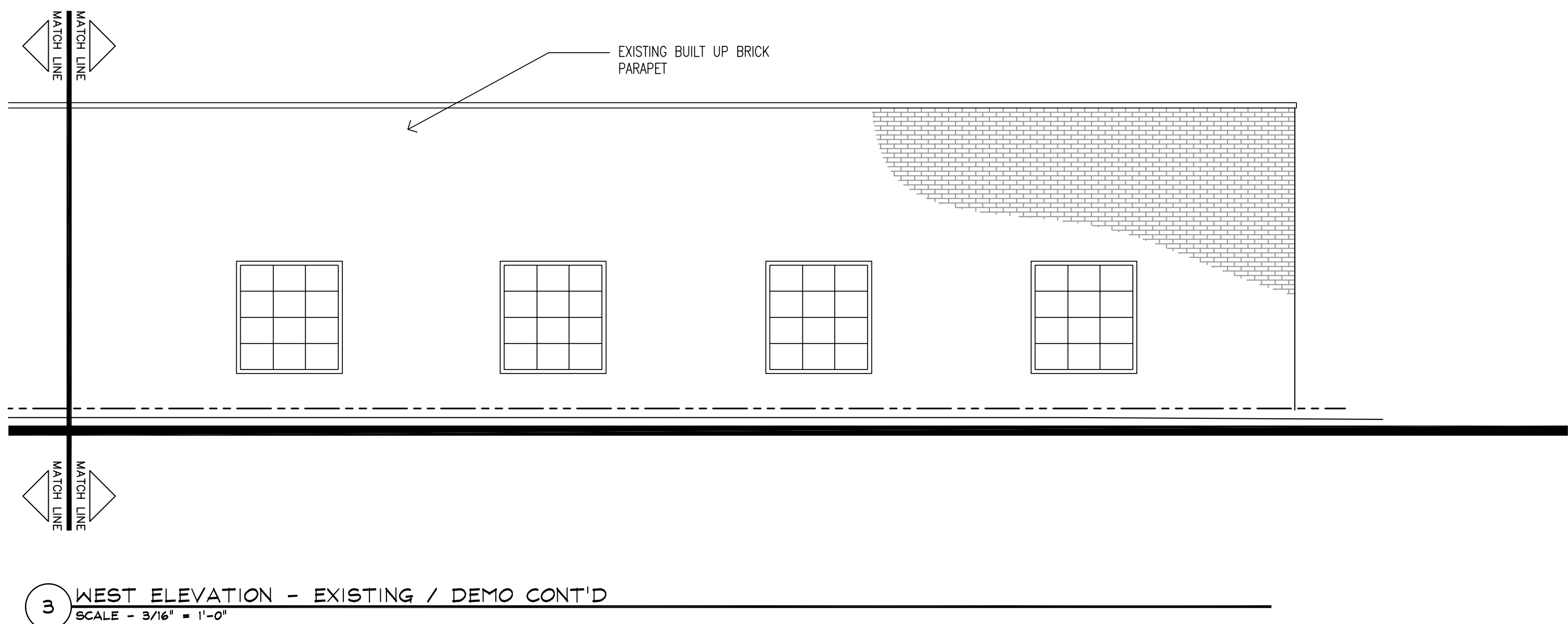
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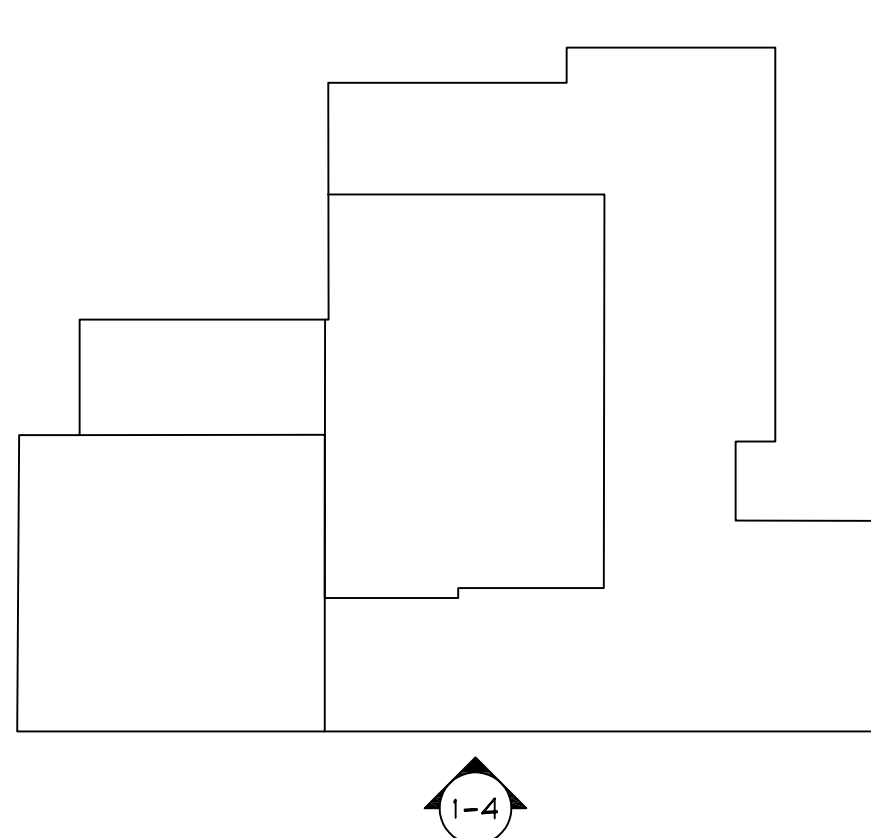
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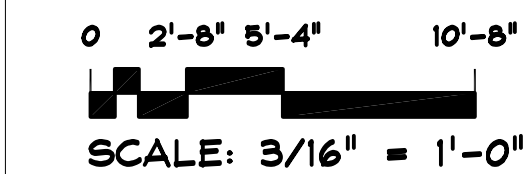
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3 WEST ELEVATION - EXISTING / DEMO CONT'D
SCALE: 3/16" = 1'-0"



KEY PLAN
NTS



SCALE: 3/16" = 1'-0"

REVISION

PROJECT NAME AND ADDRESS

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LEBANON, NH

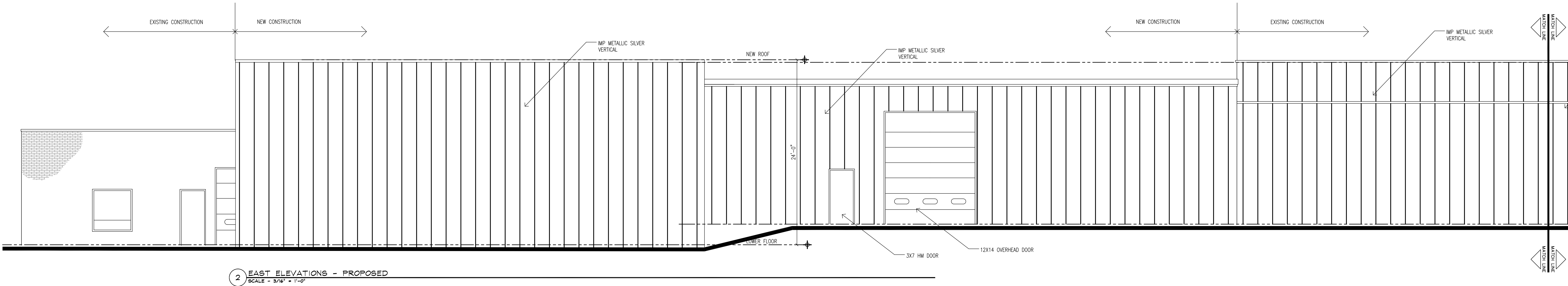
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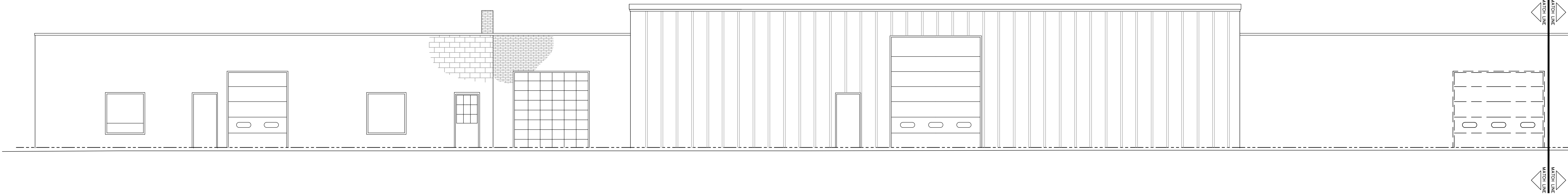
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EXTERIOR
BUILDING ELEVATIONS

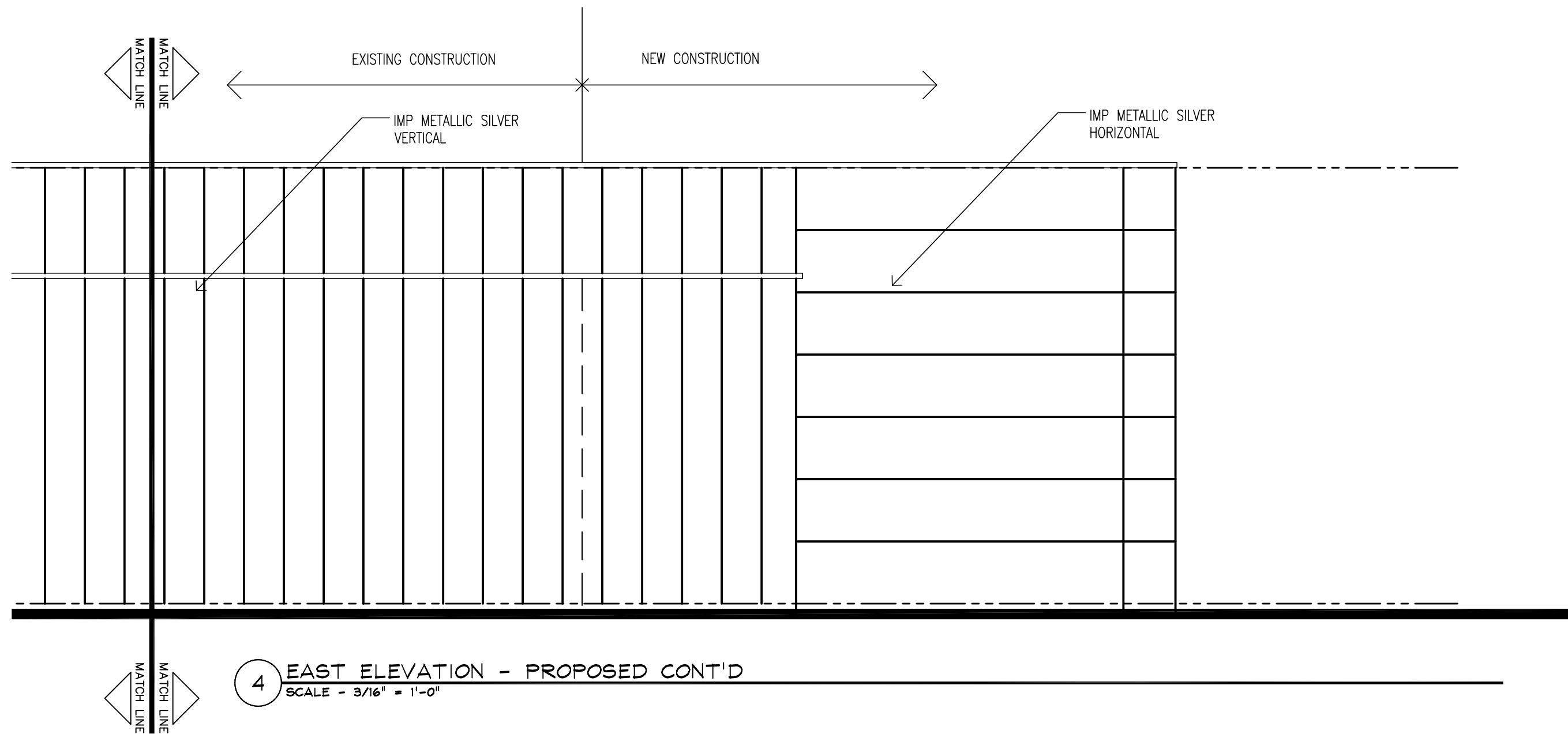
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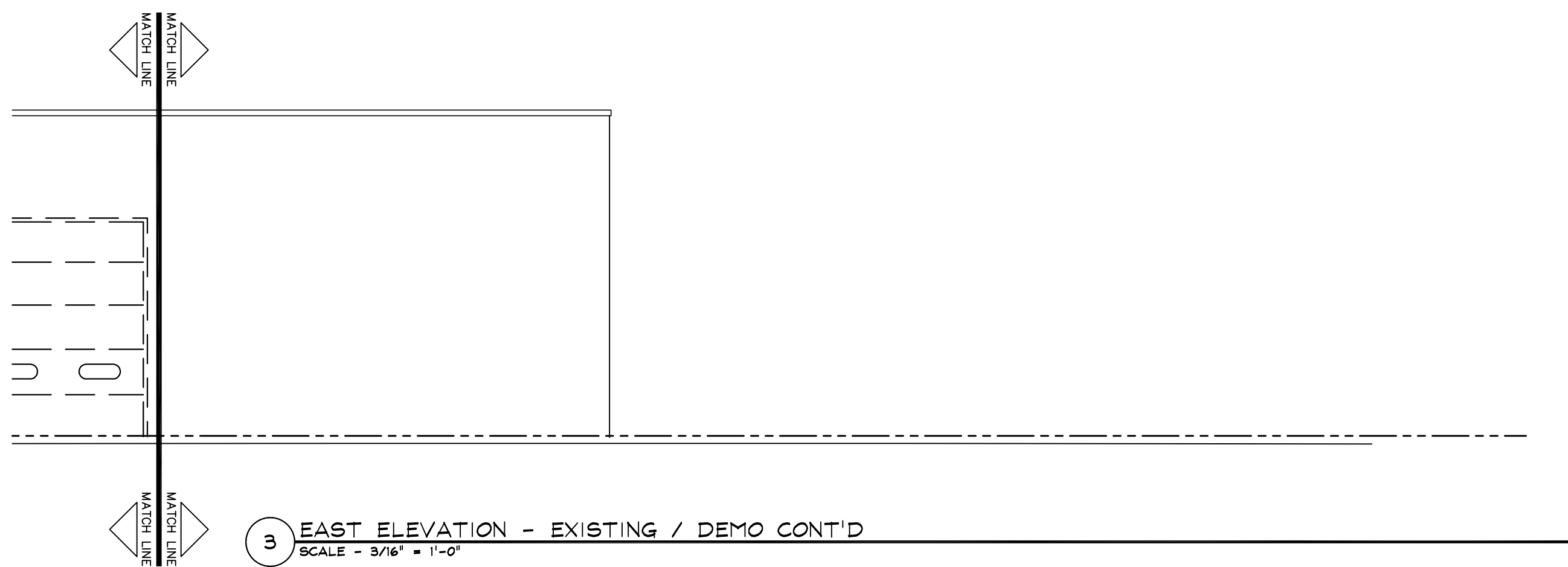
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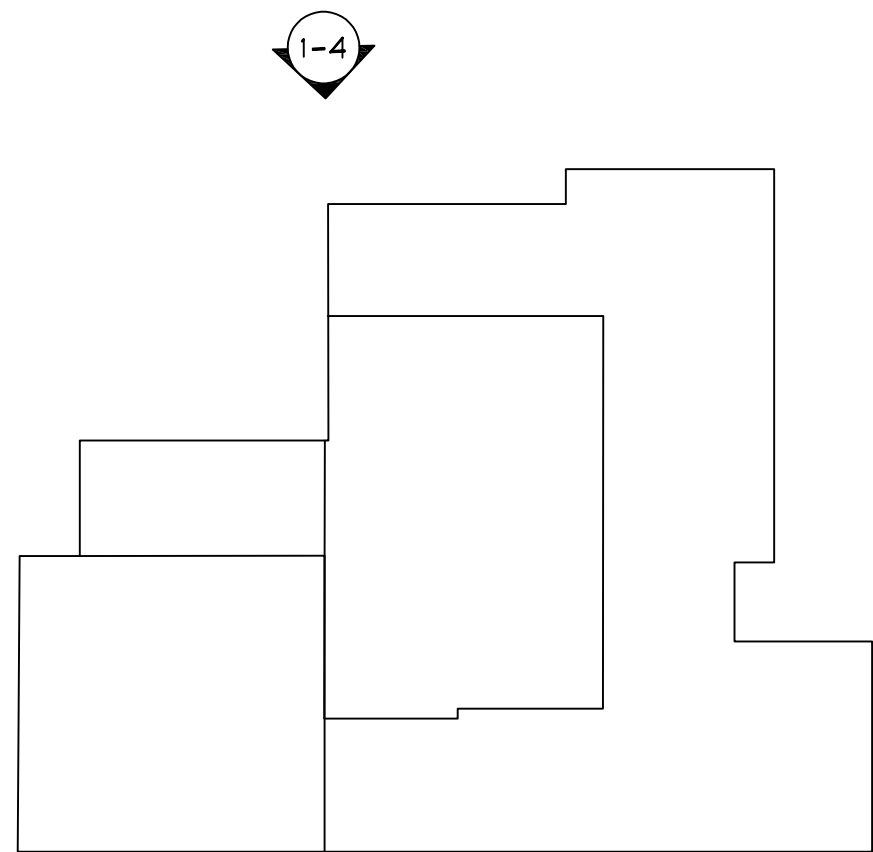
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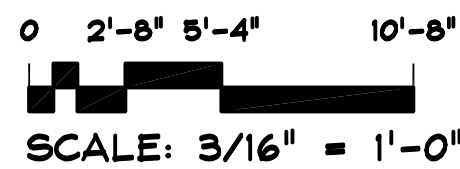
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SCALE - 3/16" = 1'-0"



3 EAST ELEVATION - EXISTING / DEMO CONT'D
SCALE - 3/16" = 1'-0"



KEY PLAN
NTS



SCALE: 3/16" = 1'-0"

Rev #

REVISION

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DRAWING NAME

EXTERIOR
BUILDING ELEVATIONS

J.O.

DRAWN BY

2010620

DATE

20-100

PROJECT NUMBER

20 of 20

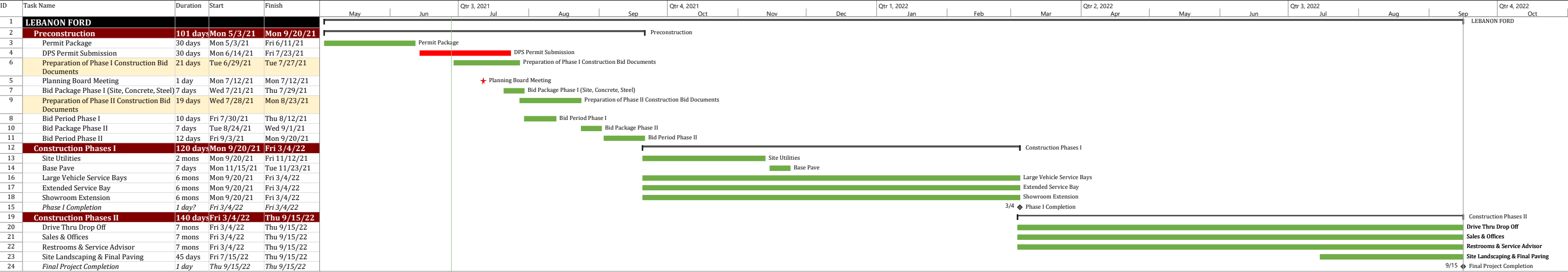
SHEET

A-2.2

LEBANON FORD

Lebanon, NH

Preliminary Construction Schedule



PROJECT SUBMITTAL

Date: June 29, 2021



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Customer:
Bradley Fontaine
CFW Electric, LLC
578 US Route 2 W
Danville, VT 05828
802-684-2157

PROJECT DETAILS

PROJECT NAME	Lebanon Ford
PROJECT LOCATION	Lebanon, NH
PROJECT DESCRIPTION	Site Lighting Package

GENERAL NOTES

1. N/A

If you have any questions concerning this submittal, please contact Kurt Green, kurtg@gmes.com, 802-249-9107.

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NY – Red Hook, Watervliet, Oneonta, Plattsburgh, Queensbury
NH – West Lebanon, Derry, Keene

PROJECT SUBMITTAL

Date: June 29, 2021



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Customer:
Bradley Fontaine
CFW Electric, LLC
578 US Route 2 W
Danville, VT 05828
802-684-2157

TABLE OF CONTENTS

QTY	TYPE	MFG	PART#
22	W	LITHONIA	ARC2 LED P5 30K MVOLT DDBTXD
4	2S3	LITHONIA	RSX1 LED P4 30K R3 MVOLT SPA DDBXD
2	S3	LITHONIA	RSX1 LED P4 30K R3 MVOLT SPA DDBXD
1	S3HS	LITHONIA	RSX1 LED P4 30K R3 MVOLT HS SPA DDBXD
1	S4HS	LITHONIA	RSX1 LED P4 30K R4 MVOLT HS SPA DDBXD
2	P1	LITHONIA	SSS 17 4C DM28AS DDBXD
4	P2	LITHONIA	SSS 17 4C DM19AS DDBXD

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NH – West Lebanon, Derry, Keene



ARC2 LED

Architectural Wall Luminaire



Catalog Number **ARC2 LED P5 30K MVOLT DDBTXD**

Notes

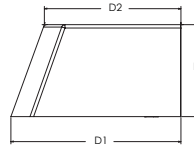
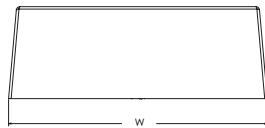
Type

W

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Depth (D1): 9.25"
Depth (D2): 7.5"
Height: 5"
Width: 14"
Weight: 11 lbs
 (without options)



Introduction

The Lithonia Lighting ARC LED wall-mounted luminaires provide both architectural styling and visually comfortable illumination while providing the high energy savings and low initial costs for quick financial payback.

ARC2 delivers up to 6,500 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. It offers integrated emergency battery backup options, including an 8W cold temperature option, making it suitable for pedestrian scale applications in any environment.

ARC LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Approximate Lumens (4000K)				
			P1	P2	P3	P4	P5
ARC1 LED	4W	--	1,500	2,000	3,000	--	--
ARC2 LED	4W	8W	1,500	2,000	3,000	4,000	6,500

Ordering Information

EXAMPLE: ARC2 LED P2 40K MVOLT PE DDBXD

Series	Package	Color Temperature	Voltage	Options	Finish
ARC2 LED	P1 1,500 Lumens	30K 3000K	MVOLT 347 ¹	E4WH Emergency battery backup, CEC compliant (4W, 0°C min) ¹	DDBXD Dark bronze
	P2 2,000 Lumens	40K 4000K		E8WC Emergency battery backup, CEC compliant (8W, -20°C min) ¹	DBLXD Black
	P3 3,000 Lumens	50K 5000K		PE Button type photocell for dusk-to-dawn operation	DNAXD Natural aluminum
	P4 4,000 Lumens			DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately) ²	DWHXD White
	P5 6,500 Lumens			SPD6KV 6kV surge protection ¹	DSSXD Sandstone
				FAO Field adjustable light output device. Allows for easy adjustment to the desired light levels, from 20% to 100% ²	DDBTXD Textured dark bronze
					DBLBXD Textured black
					DNATXD Textured natural aluminum
					DWHGXD Textured white
					DSSTXD Textured sandstone

Accessories

Ordered and shipped separately.

WSBBW DDBXD U

Surface - mounted back box (specify finish)

NOTES

- 347V not available with E4WH, E8WC and SPD6KV.
- FAO not available with DMG.



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ARC2 LED
 Rev. 05/11/21

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	30K (3000K, 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
P1	11W	1,502	142	0	0	1	1,587	150	0	0	1	1,598	151	0	0	1
P2	16W	2,250	140	0	0	1	2,377	147	0	0	1	2,393	148	0	0	1
P3	24W	3,206	135	0	0	1	3,387	143	0	0	1	3,410	144	0	0	1
P4	30W	3,903	128	1	0	1	4,124	136	1	0	1	4,152	136	1	0	1
P5	51W	6,260	122	1	0	1	6,615	129	1	0	1	6,659	130	1	0	1

Electrical Load

Performance Package	System Watts	Current (A)				
		120V	208V	240V	277V	347V
P1	11W	0.090	0.055	0.049	0.046	0.045
P2	16W	0.141	0.081	0.072	0.064	0.059
P3	24W	0.202	0.117	0.103	0.091	0.079
P4	30W	0.280	0.162	0.144	0.128	0.095
P5	51W	0.471	0.272	0.239	0.212	0.158

Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Lumens
E4WH	693
E8WC	1,413

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
10°C	50°F	1.03
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
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	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.93	>0.88

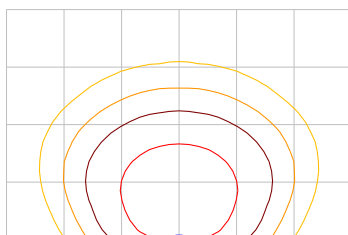
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting ARC LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND

	0.25 fc
	0.5 fc
	1.0 fc
	3.0 fc

MH = 15ft
Grid = 15ft x 15ft



ARC2 LED P3 40K



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Emergency Egress Options

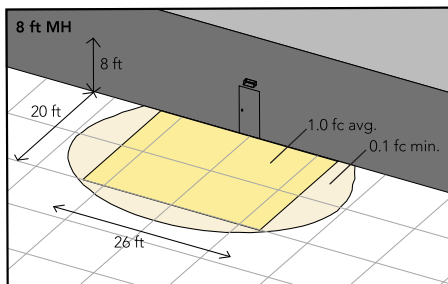
Emergency Battery Backup

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.

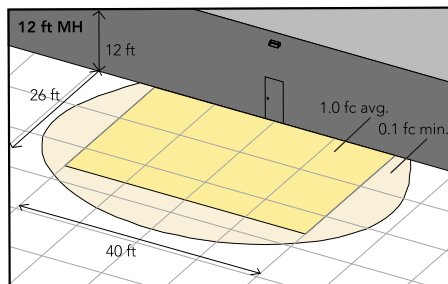
Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9

The example below shows illuminance of 1 fc average and 0.1 fc minimum in emergency mode.

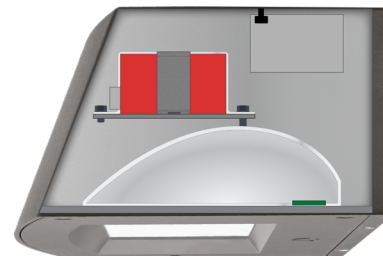
Grid = 10ft x 10ft



ARC2 LED 40K MVOLT E4WH



ARC2 LED 40K MVOLT E8WC



Self-contained solution for clean aesthetic

Mounting, Options & Accessories

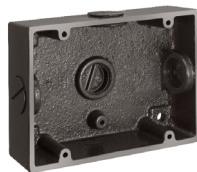


E4WH and E8WC – Emergency Battery Backup

D = 6.5"

H = 5"

W = 11"



BBW – Standard Back Box

D = 1.5"

H = 4"

W = 5.5"

For surface conduit applications.
3/4" conduit entry holes.

FEATURES & SPECIFICATIONS

INTENDED USE

The clean architectural shape of the ARC LED was designed for applications such as hospitals, schools, malls, restaurants, and commercial buildings. The long-life LEDs and driver make this luminaire nearly maintenance-free.

CONSTRUCTION

The die-cast aluminum housing and door act as heat sinks to optimize thermal transfer from the light engine and driver to promote 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 IP65 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

Recessed lens to cut off high angle light and reduce glare. Combination of diffused lens and reflector design has low surface brightness creating a visually comfortable environment with great distribution. LEDs are fully hidden from view to eliminate pixelization and harsh glare. The ARC 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-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long-life (up to L88/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire is 0-10V dimmable.

INSTALLATION

The universal wall plate, supplied with the luminaire, fits multiple size junction boxes and supports it during wiring for easy installation. Built-in wet location wiring compartment on the luminaire to accommodate wiring connections for applications with no junction box. 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 IP65 rated. 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 DarkSky Association (IDA) Fixture Seal of approval (FSA) is available for all products on this page utilizing 3000K color temperature only. Rated for -40°C minimum ambient.

WARRANTY

5-year limited warranty. 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.



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ARC2 LED
Rev. 05/11/21



RSX1 LED Area Luminaire

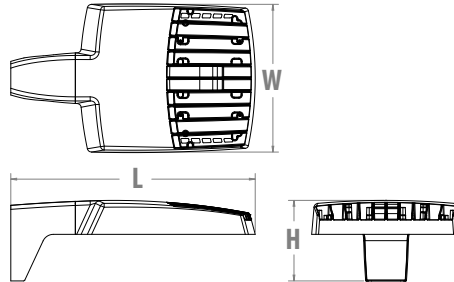


Catalog Number	RSX1 LED P4 30K R3 MVOLT SPA DDBXD
Notes	
Type	2S3 & S3

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA (ft²@0°):	0.57 ft² (0.05 m²)
Length:	21.8" (55.4 cm) (SPA mount)
Width:	13.3" (33.8 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm
Weight: (SPA mount):	22.0 lbs (10.0 kg)



Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX1 LED	P1 P2 P3 P4	30K 3000K 40K 4000K 50K 5000K	R2 Type 2 Wide R3 Type 3 Wide R3S Type 3 Short R4 Type 4 Wide R4S Type 4 Short R5 Type 5 Wide ¹ R5S Type 5 Short ¹ AFR Automotive Front Row AFRR90 Automotive Front Row Right Rotated AFRL90 Automotive Front Row Left Rotated	MVOLT (120V-277V)² HVOLT (347V-480V) ³ XVOLT (277V-480V) ⁴ (use specific voltage for options as noted) 120 ³ 277 ⁵ 208 ³ 347 ⁵ 240 ³ 480 ⁵	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°) RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°) MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon) IS Adjustable slipfitter (fits 2-3/8" OD tenon) ⁶ WBA Wall bracket ¹ WBASC Wall bracket with surface conduit box AASP Adjustable tilt arm square pole mounting ⁶ AARP Adjustable tilt arm round pole mounting ⁶ AAWB Adjustable tilt arm with wall bracket ⁶ AAWSC Adjustable tilt arm wall bracket and surface conduit box ⁶

Options	Finish
Shipped Installed HS House-side shield ⁷ PE Photocontrol, button style ^{8,9} PEX Photocontrol external threaded, adjustable ^{9,10} PER7 Seven-wire twist-lock receptacle only (no controls) ^{9,11,12,13} CE34 Conduit entry 3/4" NPT (Qty 2) SF Single fuse (120, 277, 347) ⁵ DF Double fuse (208, 240, 480) ⁵ SPD20KV 20KV Surge pack (10KV standard) FAO Field adjustable output ^{9,13} DMG 0-10V dimming extend out back of housing for external control (control ordered separate) ^{9,13}	DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured Dark Bronze DBLBXD Textured Black DNATXD Textured Natural Aluminum DWHGXD Textured White
Shipped Installed *Standalone and Networked Sensors/Controls (factory default settings, see table page 9) NLTAIR2 nLight AIR generation 2 ^{13,14,15} PIRHN Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) ^{13,15,16} BAA Buy America(n) Act Compliant *Note: PIRHN with nLight Air can be used as a standalone or networked solution. Sensor coverage pattern is affected when luminaire is tilted. Shipped Separately (requires some field assembly) EGS External glare shield ⁷ EGFV External glare full visor (360° around light aperture) ⁷ BS Bird spikes ¹⁷	



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Lithonia RSX1 Area LED
Rev. 05/04/21
Page 1 of 9

Ordering Information

Accessories

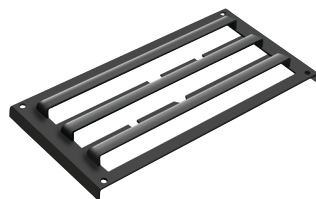
Ordered and shipped separately.

RSX1HS	RSX1 House side shield (includes 1 shield)
RSX1HSAFRR U	RSX1 House side shield for AFR rotated optics (includes 1 shield)
RSX1EGS (FINISH) U	External glare shield (specify finish)
RSX1EGFV (FINISH) U	External glare full visor (specify finish)
RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify finish)
RSXWBA (FINISH) U	RSX WBA wall bracket (specify finish) ¹
RSXSCB (FINISH) U	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DLL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) ¹⁸
DLL347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) ¹⁸
DLL480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) ¹⁸
DSHORT SBK U	Shorting cap ¹⁸

NOTES

- Any Type 5 distribution, is not available with WBA.
- 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).
- XVOLT driver not available with P1 or P2. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing (SF or DF) and not available with PE or PEX.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Maximum tilt is 90° above horizontal.
- It may be ordered as an accessory.
- Requires MVOLT or 347V.
- Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, FAO, DMG, PIRHN).
- Requires 120V, 208V, 240V or 277V.
- Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
- For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
- Two or more of the following options cannot be combined including DMG, PER7, FAO and PIRHN.
- Must be ordered with PIRHN.
- Requires MVOLT or HVOLT.
- Must be ordered with NLTAR2. For additional information on PIRHN visit [here](#).
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

External Shields



House Side Shield



External Glare Shield

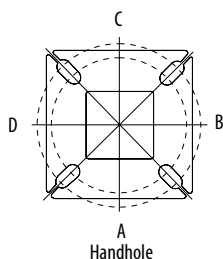


External 360 Full Visor

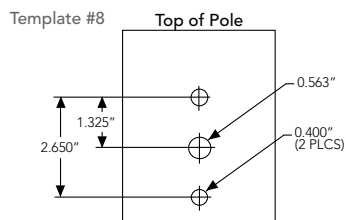
Pole/Mounting Information

Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

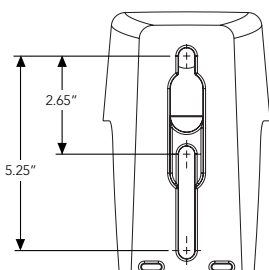
HANDHOLE ORIENTATION



RSX POLE DRILLING



RSX STANDARD ARM & ADJUSTABLE ARM



Round Tenon Mount - Pole Top Slipfitters

Tenon O.D.	RSX Mounting	Single	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
2 - 3/8"	RPA, AARP	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 320	AS3-5 390	AS3-5 490
2 - 7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
#8	Drill Nomenclature	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

RSX1 - Luminaire EPA

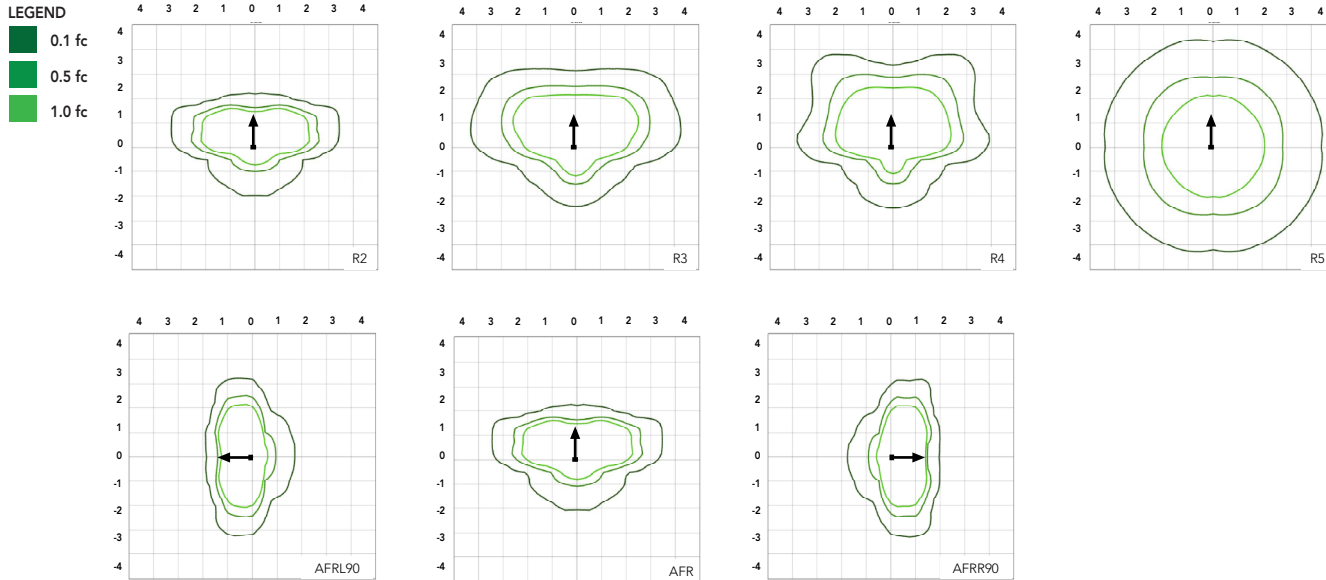
*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0 °	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
RPA - Round Pole Adaptor		0.62	1.08	1.15	1.62	1.46	2.13	1.36	1.8	2.36
MA - Mast Arm Adaptor		0.49	0.95	0.89	1.36	1.2	1.87	1.23	1.54	2.1
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole	0 °	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
	10°	0.68	1.34	1.33	2	1.74	2.64	1.35	2.03	2.71
	20°	0.87	1.71	1.73	2.56	2.26	3.42	1.75	2.62	3.49
	30°	1.24	2.19	2.3	3.21	2.87	4.36	2.49	3.73	4.97
	40°	1.81	2.68	2.98	3.85	3.68	5.30	3.62	5.43	7.24
	45°	2.11	2.92	3.44	4.2	4.08	5.77	4.22	6.33	8.44
	50°	2.31	3.17	3.72	4.52	4.44	6.26	4.62	6.94	9.25
	60°	2.71	3.66	4.38	5.21	5.15	7.24	5.43	8.14	10.86
	70°	2.78	3.98	4.54	5.67	5.47	7.91	5.52	8.27	11.03
	80°	2.76	4.18	4.62	5.97	5.76	8.31	5.51	8.27	11.03
90°	2.73	4.25	4.64	6.11	5.91	8.47	5.45	8.18	10.97	

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [RSX Area homepage](#).

Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

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

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
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
45°C	113°F	0.96
50°C	122°F	0.95

Electrical Load

Performance Package	System Watts (W)	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	51W	0.42	0.25	0.21	0.19	0.14	0.11
P2	72W	0.60	0.35	0.30	0.26	0.21	0.15
P3	109W	0.91	0.52	0.45	0.39	0.31	0.23
P4	133W	1.11	0.64	0.55	0.48	0.38	0.27

Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.



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Lithonia RSX1 Area LED
Rev. 05/04/21
Page 3 of 9

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.

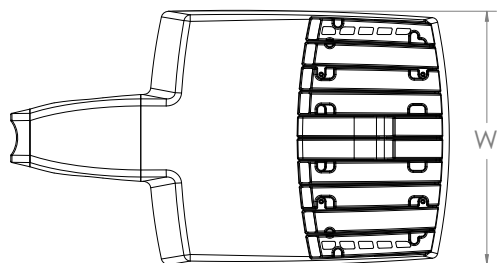
Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	51W	R2	6,482	1	0	1	126	7,121	1	0	1	139	7,121	1	0	1	139
		R3	6,459	1	0	2	127	7,096	1	0	2	139	7,096	1	0	2	139
		R3S	6,631	1	0	1	129	7,286	1	0	2	142	7,286	1	0	2	142
		R4	6,543	1	0	2	128	7,189	1	0	2	141	7,189	1	0	2	141
		R4S	6,313	1	0	1	124	6,936	1	0	1	136	6,936	1	0	1	136
		R5	6,631	3	0	2	130	7,286	3	0	2	143	7,286	3	0	2	143
		R5S	6,807	3	0	1	133	7,479	3	0	1	147	7,479	3	0	1	147
		AFR	6,473	1	0	1	127	7,112	1	0	1	139	7,112	1	0	1	139
		AFRR90	6,535	2	0	2	127	7,179	2	0	2	140	7,179	2	0	2	140
		AFRL90	6,562	2	0	1	128	7,210	2	0	2	140	7,210	2	0	2	140
P2	72W	R2	8,991	2	0	1	123	9,878	2	0	1	135	9,878	2	0	1	135
		R3	8,959	2	0	2	124	9,843	2	0	2	137	9,843	2	0	2	137
		R3S	9,198	2	0	2	126	10,106	2	0	2	139	10,106	2	0	2	139
		R4	9,077	2	0	2	126	9,972	2	0	2	139	9,972	2	0	2	139
		R4S	8,757	1	0	2	122	9,622	2	0	2	134	9,622	2	0	2	134
		R5	9,198	4	0	2	128	10,106	4	0	2	140	10,106	4	0	2	140
		R5S	9,443	3	0	1	131	10,374	3	0	1	144	10,374	3	0	1	144
		AFR	8,979	2	0	1	125	9,865	2	0	1	137	9,865	2	0	1	137
		AFRR90	9,064	3	0	2	124	9,959	3	0	2	137	9,959	3	0	2	137
		AFRL90	9,102	3	0	2	125	10,001	3	0	2	137	10,001	3	0	2	137
P3	109W	R2	12,808	2	0	1	117	14,072	2	0	2	129	14,072	2	0	2	129
		R3	12,763	2	0	2	117	14,023	2	0	2	129	14,023	2	0	2	129
		R3S	13,104	2	0	2	120	14,397	2	0	2	132	14,397	2	0	2	132
		R4	12,930	2	0	2	119	14,206	2	0	2	130	14,206	2	0	2	130
		R4S	12,475	2	0	2	114	13,707	2	0	2	126	13,707	2	0	2	126
		R5	13,104	4	0	2	120	14,397	4	0	2	132	14,397	4	0	2	132
		R5S	13,452	3	0	2	123	14,779	3	0	2	136	14,779	3	0	2	136
		AFR	12,791	2	0	1	117	14,053	2	0	2	129	14,053	2	0	2	129
		AFRR90	12,913	3	0	3	118	14,187	3	0	3	130	14,187	3	0	3	130
		AFRL90	12,967	3	0	2	118	14,247	3	0	3	130	14,247	3	0	3	130
P4	133W	R2	14,943	2	0	2	112	16,417	2	0	2	123	16,417	2	0	2	123
		R3	14,890	2	0	3	112	16,360	2	0	3	123	16,360	2	0	3	123
		R3S	15,287	2	0	2	115	16,796	2	0	2	126	16,796	2	0	2	126
		R4	15,085	2	0	3	113	16,574	2	0	3	125	16,574	2	0	3	125
		R4S	14,554	2	0	2	109	15,991	2	0	2	120	15,991	2	0	2	120
		R5	15,287	4	0	2	115	16,796	4	0	2	126	16,796	4	0	2	126
		R5S	15,693	4	0	2	118	17,242	4	0	2	130	17,242	4	0	2	130
		AFR	14,923	2	0	2	112	16,395	2	0	2	123	16,395	2	0	2	123
		AFRR90	15,065	3	0	3	113	16,551	3	0	3	124	16,551	3	0	3	124
		AFRL90	15,128	3	0	3	114	16,621	3	0	3	125	16,621	3	0	3	125

Dimensions & Weights

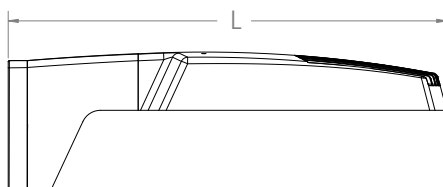
Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	22 lbs
RPA	24 lbs
MA	22 lbs
WBA	25 lbs
WBASC	28 lbs
IS	25 lbs
AASP	25 lbs
AARP	27 lbs
AAWB	28 lbs
AAWSC	31 lbs

RSX1 with Round Pole Adapter (RPA)



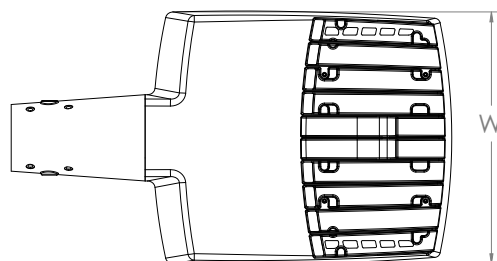
Length: 22.8" (57.9 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 7.2" (18.4 cm) Arm



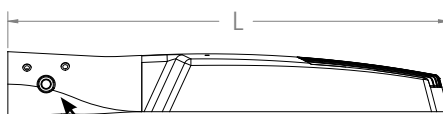
Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.



RSX1 with Mast Arm Adapter (MA)



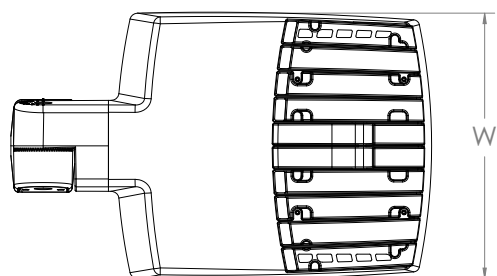
Length: 23.2" (59.1 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 3.5" (8.9 cm) Arm



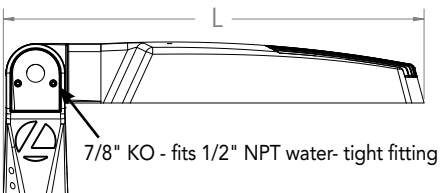
7/16" locking thru bolt/nut provided



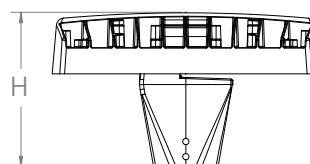
RSX1 with Adjustable Slipfitter (IS)



Length: 20.7" (52.7 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 7.6" (19.3 cm) Arm



7/8" KO - fits 1/2" NPT water-tight fitting



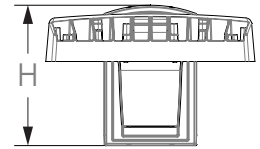
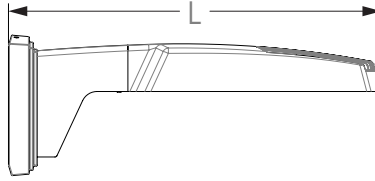
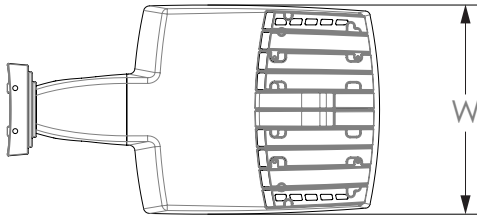
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Lithonia RSX1 Area LED
 Rev. 05/04/21
 Page 5 of 9

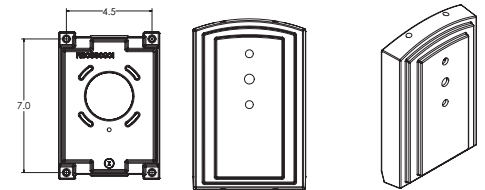
Dimensions

RSX1 with Wall Bracket (WBA)

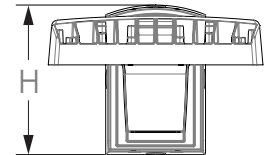
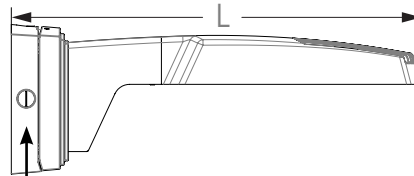
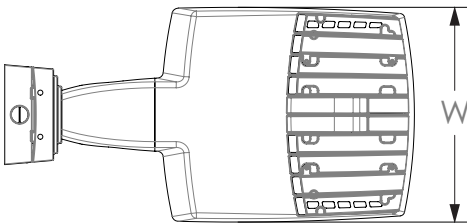


Length: 23.6" (59.9 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 8.9" (22.6 cm) Arm

Wall Bracket (WBA) Mounting Detail



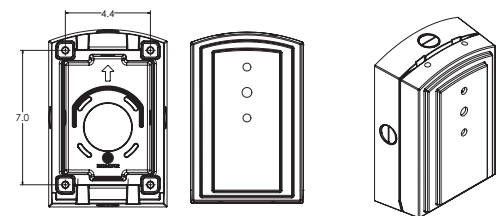
RSX1 with Wall Bracket with Surface Conduit Box (WBASC)



3/4" NPT taps with plugs - Qty (4) provided

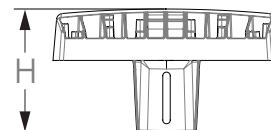
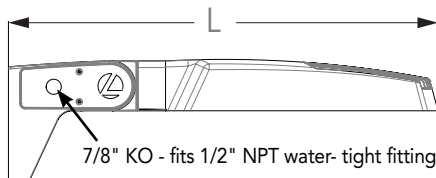
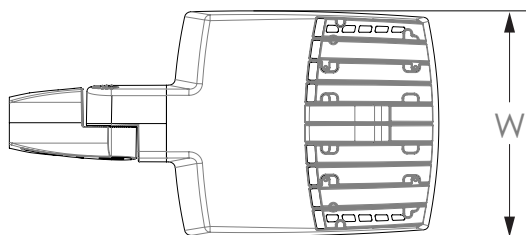
Length: 25.3" (64.3 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 9.2" (23.4 cm) Arm

Surface Conduit Box (SCB) Mounting Detail

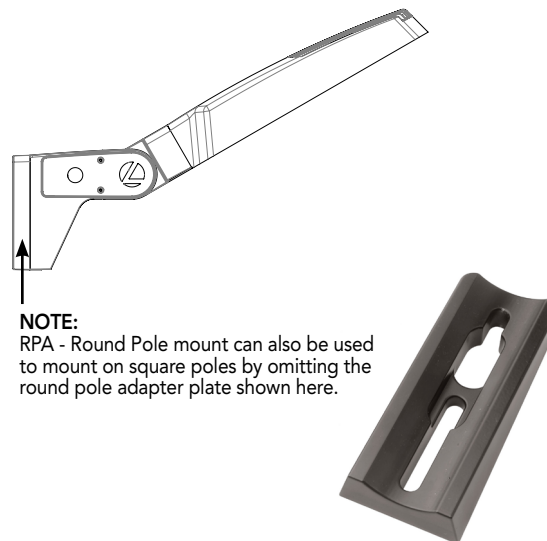


Dimensions

RSX1 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)



Length: 25.3" (65.3 cm) **AASP**
 26.3" (66.8 cm) **AARP**
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 7.2" (18.2 cm) Arm



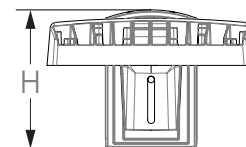
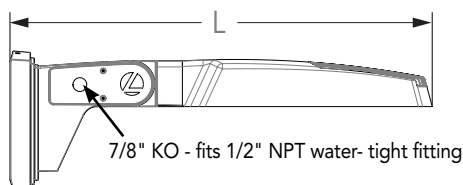
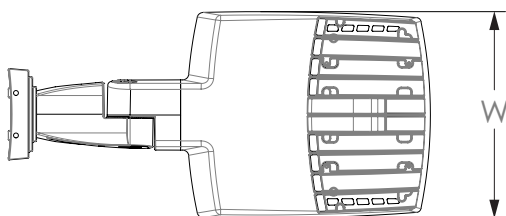
NOTE:
 RPA - Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

Notes

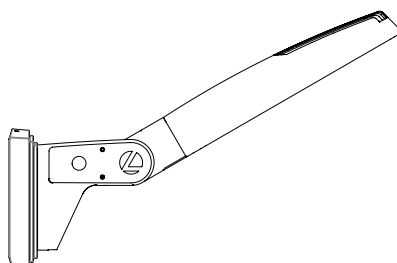
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.

AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

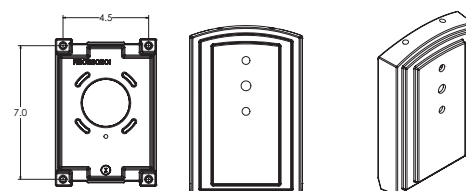
RSX1 with Adjustable Tilt Arm with Wall Bracket (AAWB)



Length: 27.1" (68.8 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 8.9" (22.6 cm) Arm

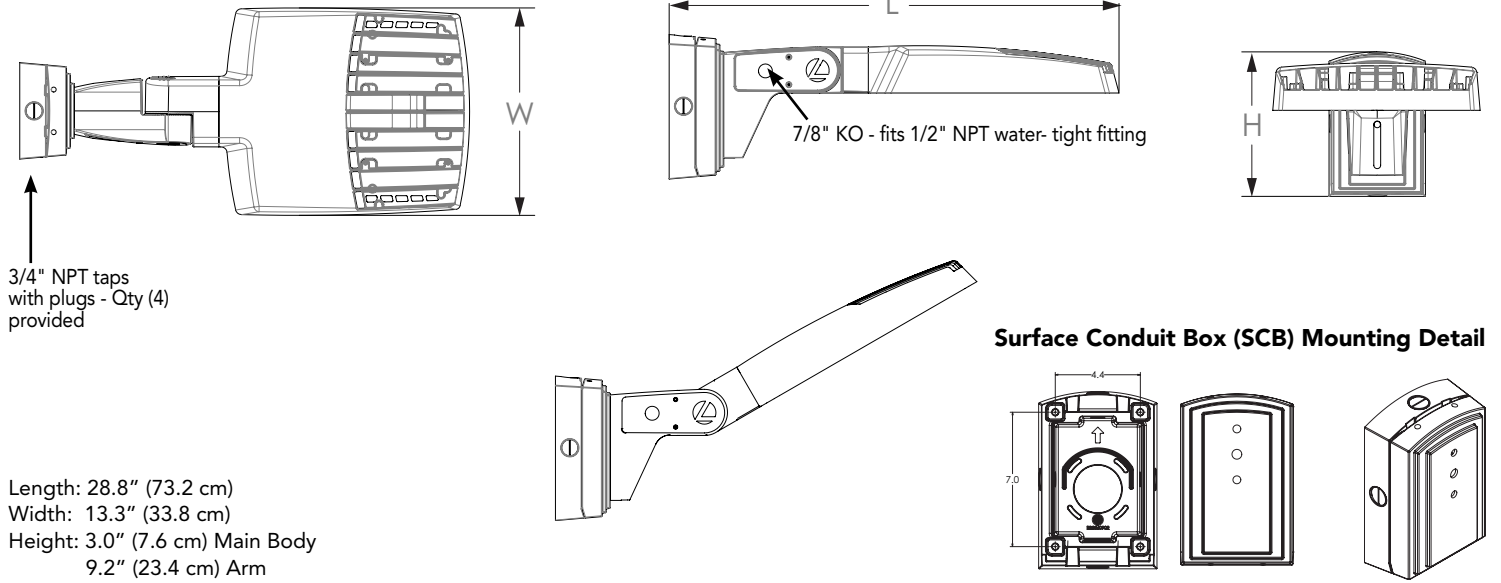


Wall Bracket (WBA) Mounting Detail

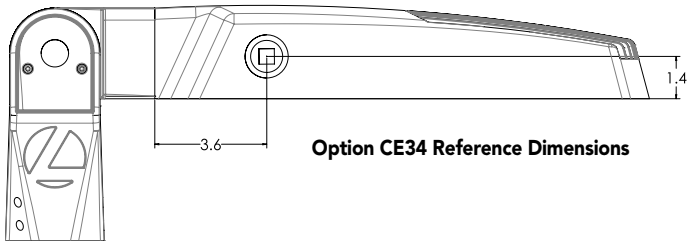


Dimensions

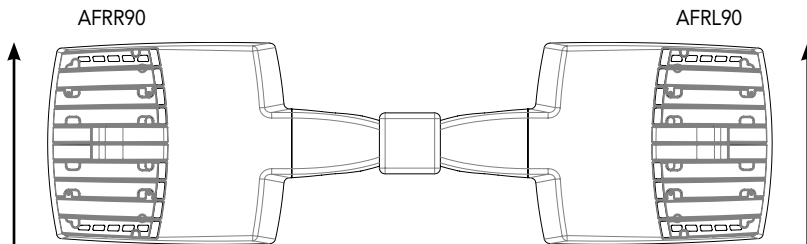
RSX1 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)



Additional Reference Drawings

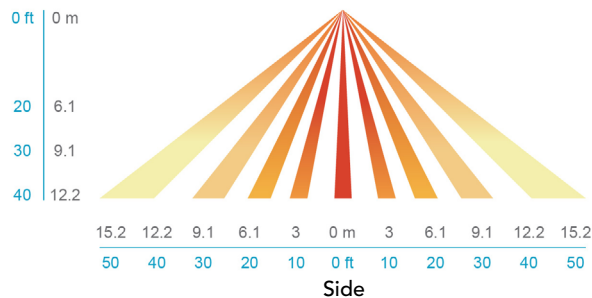
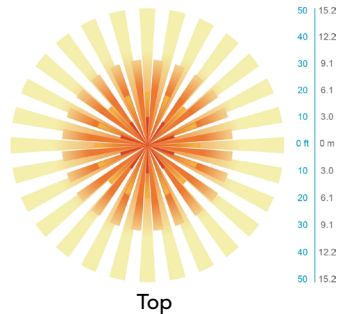
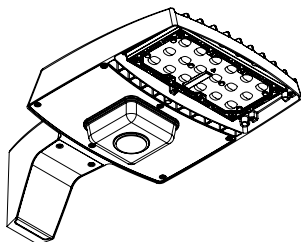


Automotive Front Row - Rotated Optics (AFRL90/R90)



(Example: 2@180 - arrows indicate direction of light exiting the luminaire)

nLight Sensor Coverage Pattern NLTAIR2 PIRHN



Motion Sensor Default Settings - Option PIRHN

Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)
NLTAIR2 PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds	5 minutes

*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clairity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is tilted.

FEATURES & SPECIFICATIONS

INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX1 delivers 7,000 to 17,000 lumens and is ideal for replacing 70W to 400W HID pole-mounted luminaires in parking lots and other area lighting applications.

CONSTRUCTION

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. All mountings are rated for minimum 1.5 G vibration load per ANSI C136.31. 3G Mountings: Include SPA, RPA, MA, IS, AASP, and AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

FINISH

Exterior 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 superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warranted not to crack or peel.

OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row), and AFR rotated AFR90 and ARFL90.

ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

INSTALLATION

Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. 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 3000K color temperature only.

BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/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.



RSX1 LED Area Luminaire

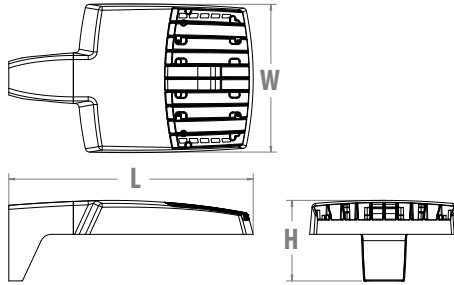


Catalog Number	RSX1 LED P4 30K R3 MVOLT HS SPA DDBXD
Notes	
Type	S3HS

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA (ft²@0°):	0.57 ft² (0.05 m²)
Length:	21.8" (55.4 cm) (SPA mount)
Width:	13.3" (33.8 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm
Weight: (SPA mount):	22.0 lbs (10.0 kg)



Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX1 LED	P1 P2 P3 P4	30K 3000K 40K 4000K 50K 5000K	R2 Type 2 Wide R3 Type 3 Wide R3S Type 3 Short R4 Type 4 Wide R4S Type 4 Short R5 Type 5 Wide ¹ R5S Type 5 Short ¹ AFR Automotive Front Row AFRR90 Automotive Front Row Right Rotated AFRL90 Automotive Front Row Left Rotated	MVOLT (120V-277V) ² HVOLT (347V-480V) ³ XVOLT (277V-480V) ⁴ (use specific voltage for options as noted) 120 ³ 277 ⁵ 208 ³ 347 ⁵ 240 ³ 480 ⁵	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°) RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°) MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon) IS Adjustable slipfitter (fits 2-3/8" OD tenon) ⁶ WBA Wall bracket ¹ WBASC Wall bracket with surface conduit box AASP Adjustable tilt arm square pole mounting ⁶ AARP Adjustable tilt arm round pole mounting ⁶ AAWB Adjustable tilt arm with wall bracket ⁶ AAWSC Adjustable tilt arm wall bracket and surface conduit box ⁶

Options	Finish
Shipped Installed HS House-side shield ⁷ PE Photocontrol, button style ^{8,9} PEX Photocontrol external threaded, adjustable ^{9,10} PER7 Seven-wire twist-lock receptacle only (no controls) ^{9,11,12,13} CE34 Conduit entry 3/4" NPT (Qty 2) SF Single fuse (120, 277, 347) ⁵ DF Double fuse (208, 240, 480) ⁵ SPD20KV 20KV Surge pack (10KV standard) FAO Field adjustable output ^{9,13} DMG 0-10V dimming extend out back of housing for external control (control ordered separate) ^{9,13}	DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured Dark Bronze DBLBXD Textured Black DNATXD Textured Natural Aluminum DWHGXD Textured White
Shipped Installed *Standalone and Networked Sensors/Controls (factory default settings, see table page 9) NLTAIR2 nLight AIR generation 2 ^{13,14,15} PIRHN Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) ^{13,15,16} BAA Buy America(n) Act Compliant *Note: PIRHN with nLight Air can be used as a standalone or networked solution. Sensor coverage pattern is affected when luminaire is tilted. Shipped Separately (requires some field assembly) EGS External glare shield ⁷ EGFV External glare full visor (360° around light aperture) ⁷ BS Bird spikes ¹⁷	



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Lithonia RSX1 Area LED
Rev. 05/04/21
Page 1 of 9

Ordering Information

Accessories

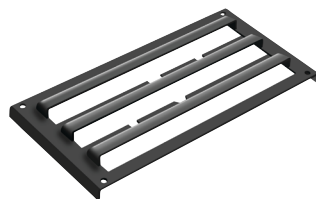
Ordered and shipped separately.

RSX1HS	RSX1 House side shield (includes 1 shield)
RSX1HSAFRR U	RSX1 House side shield for AFR rotated optics (includes 1 shield)
RSX1EGS (FINISH) U	External glare shield (specify finish)
RSX1EGFV (FINISH) U	External glare full visor (specify finish)
RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify finish)
RSXWBA (FINISH) U	RSX WBA wall bracket (specify finish) ¹
RSXSCB (FINISH) U	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DLL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) ¹⁸
DLL347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) ¹⁸
DLL480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) ¹⁸
DSHORT SBK U	Shorting cap ¹⁸

NOTES

- Any Type 5 distribution, is not available with WBA.
- 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).
- XVOLT driver not available with P1 or P2. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing (SF or DF) and not available with PE or PEX.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Maximum tilt is 90° above horizontal.
- It may be ordered as an accessory.
- Requires MVOLT or 347V.
- Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, FAO, DMG, PIRHN).
- Requires 120V, 208V, 240V or 277V.
- Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
- For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
- Two or more of the following options cannot be combined including DMG, PER7, FAO and PIRHN.
- Must be ordered with PIRHN.
- Requires MVOLT or HVOLT.
- Must be ordered with NLTAR2. For additional information on PIRHN visit [here](#).
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

External Shields



House Side Shield



External Glare Shield

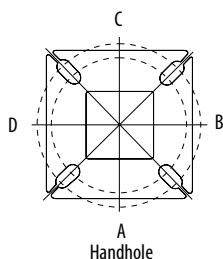


External 360 Full Visor

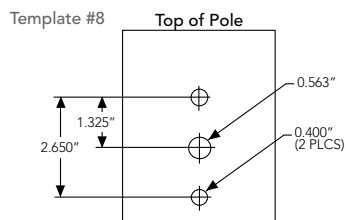
Pole/Mounting Information

Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

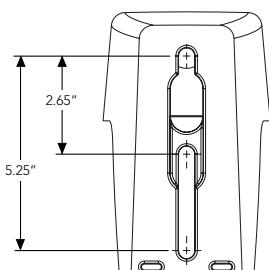
HANDHOLE ORIENTATION



RSX POLE DRILLING



RSX STANDARD ARM & ADJUSTABLE ARM



Round Tenon Mount - Pole Top Slipfitters

Tenon O.D.	RSX Mounting	Single	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
2 - 3/8"	RPA, AARP	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 320	AS3-5 390	AS3-5 490
2 - 7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
#8	Drill Nomenclature	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

RSX1 - Luminaire EPA

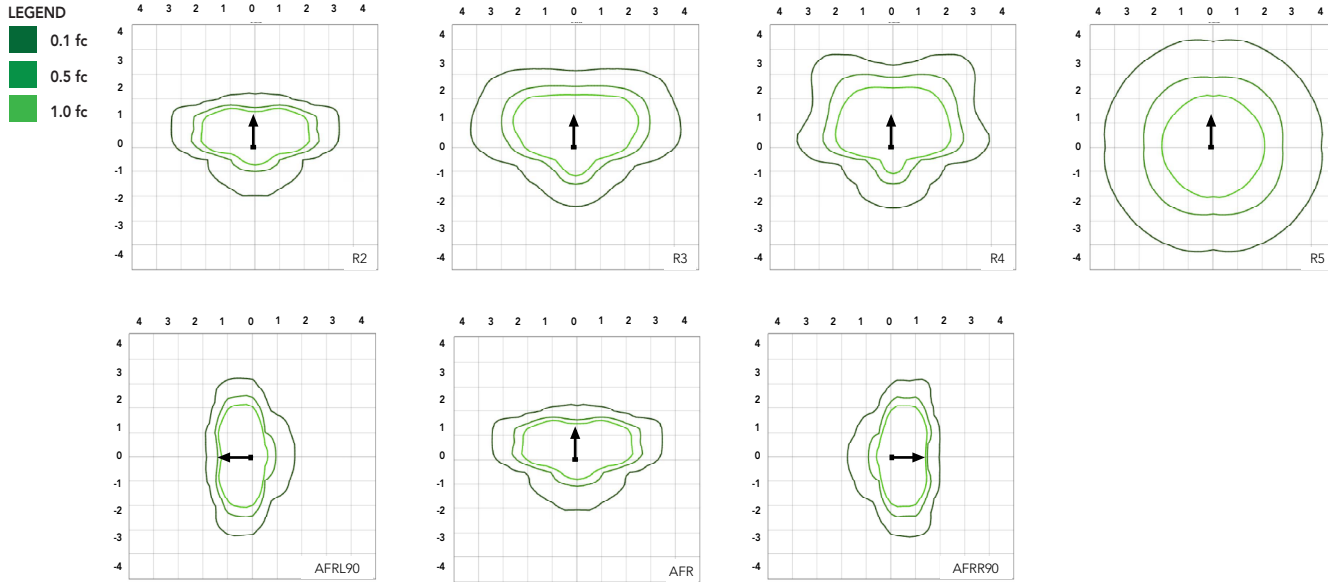
*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0 °	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
RPA - Round Pole Adaptor		0.62	1.08	1.15	1.62	1.46	2.13	1.36	1.8	2.36
MA - Mast Arm Adaptor		0.49	0.95	0.89	1.36	1.2	1.87	1.23	1.54	2.1
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole	0 °	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
	10°	0.68	1.34	1.33	2	1.74	2.64	1.35	2.03	2.71
	20°	0.87	1.71	1.73	2.56	2.26	3.42	1.75	2.62	3.49
	30°	1.24	2.19	2.3	3.21	2.87	4.36	2.49	3.73	4.97
	40°	1.81	2.68	2.98	3.85	3.68	5.30	3.62	5.43	7.24
	45°	2.11	2.92	3.44	4.2	4.08	5.77	4.22	6.33	8.44
	50°	2.31	3.17	3.72	4.52	4.44	6.26	4.62	6.94	9.25
	60°	2.71	3.66	4.38	5.21	5.15	7.24	5.43	8.14	10.86
	70°	2.78	3.98	4.54	5.67	5.47	7.91	5.52	8.27	11.03
	80°	2.76	4.18	4.62	5.97	5.76	8.31	5.51	8.27	11.03
	90°	2.73	4.25	4.64	6.11	5.91	8.47	5.45	8.18	10.97

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [RSX Area homepage](#).

Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

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

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
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
45°C	113°F	0.96
50°C	122°F	0.95

Electrical Load

Performance Package	System Watts (W)	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	51W	0.42	0.25	0.21	0.19	0.14	0.11
P2	72W	0.60	0.35	0.30	0.26	0.21	0.15
P3	109W	0.91	0.52	0.45	0.39	0.31	0.23
P4	133W	1.11	0.64	0.55	0.48	0.38	0.27

Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.



COMMERCIAL OUTDOOR

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Lithonia RSX1 Area LED
Rev. 05/04/21
Page 3 of 9

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.

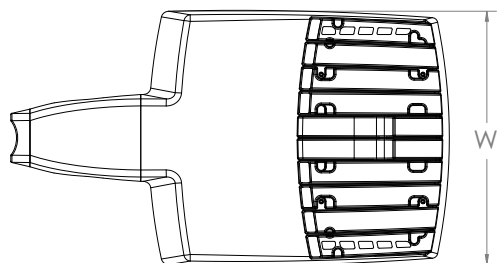
Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	51W	R2	6,482	1	0	1	126	7,121	1	0	1	139	7,121	1	0	1	139
		R3	6,459	1	0	2	127	7,096	1	0	2	139	7,096	1	0	2	139
		R3S	6,631	1	0	1	129	7,286	1	0	2	142	7,286	1	0	2	142
		R4	6,543	1	0	2	128	7,189	1	0	2	141	7,189	1	0	2	141
		R4S	6,313	1	0	1	124	6,936	1	0	1	136	6,936	1	0	1	136
		R5	6,631	3	0	2	130	7,286	3	0	2	143	7,286	3	0	2	143
		R5S	6,807	3	0	1	133	7,479	3	0	1	147	7,479	3	0	1	147
		AFR	6,473	1	0	1	127	7,112	1	0	1	139	7,112	1	0	1	139
		AFRR90	6,535	2	0	2	127	7,179	2	0	2	140	7,179	2	0	2	140
		AFRL90	6,562	2	0	1	128	7,210	2	0	2	140	7,210	2	0	2	140
P2	72W	R2	8,991	2	0	1	123	9,878	2	0	1	135	9,878	2	0	1	135
		R3	8,959	2	0	2	124	9,843	2	0	2	137	9,843	2	0	2	137
		R3S	9,198	2	0	2	126	10,106	2	0	2	139	10,106	2	0	2	139
		R4	9,077	2	0	2	126	9,972	2	0	2	139	9,972	2	0	2	139
		R4S	8,757	1	0	2	122	9,622	2	0	2	134	9,622	2	0	2	134
		R5	9,198	4	0	2	128	10,106	4	0	2	140	10,106	4	0	2	140
		R5S	9,443	3	0	1	131	10,374	3	0	1	144	10,374	3	0	1	144
		AFR	8,979	2	0	1	125	9,865	2	0	1	137	9,865	2	0	1	137
		AFRR90	9,064	3	0	2	124	9,959	3	0	2	137	9,959	3	0	2	137
		AFRL90	9,102	3	0	2	125	10,001	3	0	2	137	10,001	3	0	2	137
P3	109W	R2	12,808	2	0	1	117	14,072	2	0	2	129	14,072	2	0	2	129
		R3	12,763	2	0	2	117	14,023	2	0	2	129	14,023	2	0	2	129
		R3S	13,104	2	0	2	120	14,397	2	0	2	132	14,397	2	0	2	132
		R4	12,930	2	0	2	119	14,206	2	0	2	130	14,206	2	0	2	130
		R4S	12,475	2	0	2	114	13,707	2	0	2	126	13,707	2	0	2	126
		R5	13,104	4	0	2	120	14,397	4	0	2	132	14,397	4	0	2	132
		R5S	13,452	3	0	2	123	14,779	3	0	2	136	14,779	3	0	2	136
		AFR	12,791	2	0	1	117	14,053	2	0	2	129	14,053	2	0	2	129
		AFRR90	12,913	3	0	3	118	14,187	3	0	3	130	14,187	3	0	3	130
		AFRL90	12,967	3	0	2	118	14,247	3	0	3	130	14,247	3	0	3	130
P4	133W	R2	14,943	2	0	2	112	16,417	2	0	2	123	16,417	2	0	2	123
		R3	14,890	2	0	3	112	16,360	2	0	3	123	16,360	2	0	3	123
		R3S	15,287	2	0	2	115	16,796	2	0	2	126	16,796	2	0	2	126
		R4	15,085	2	0	3	113	16,574	2	0	3	125	16,574	2	0	3	125
		R4S	14,554	2	0	2	109	15,991	2	0	2	120	15,991	2	0	2	120
		R5	15,287	4	0	2	115	16,796	4	0	2	126	16,796	4	0	2	126
		R5S	15,693	4	0	2	118	17,242	4	0	2	130	17,242	4	0	2	130
		AFR	14,923	2	0	2	112	16,395	2	0	2	123	16,395	2	0	2	123
		AFRR90	15,065	3	0	3	113	16,551	3	0	3	124	16,551	3	0	3	124
		AFRL90	15,128	3	0	3	114	16,621	3	0	3	125	16,621	3	0	3	125

Dimensions & Weights

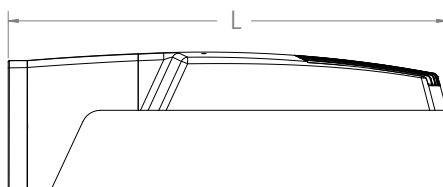
Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	22 lbs
RPA	24 lbs
MA	22 lbs
WBA	25 lbs
WBASC	28 lbs
IS	25 lbs
AASP	25 lbs
AARP	27 lbs
AAWB	28 lbs
AAWSC	31 lbs

RSX1 with Round Pole Adapter (RPA)



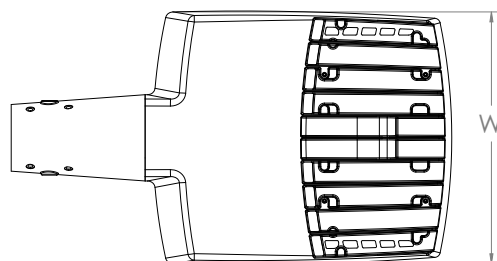
Length: 22.8" (57.9 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 7.2" (18.4 cm) Arm



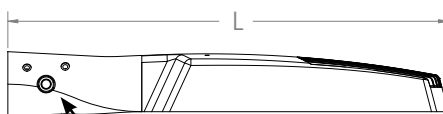
Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.



RSX1 with Mast Arm Adapter (MA)

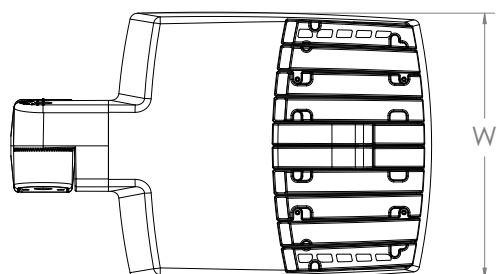


Length: 23.2" (59.1 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 3.5" (8.9 cm) Arm

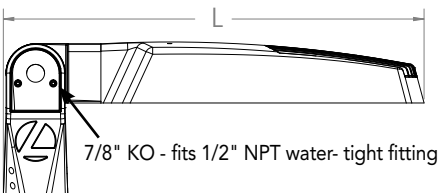


7/16" locking thru bolt/nut provided

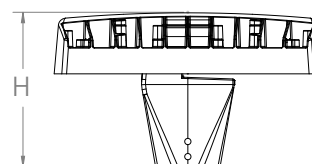
RSX1 with Adjustable Slipfitter (IS)



Length: 20.7" (52.7 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 7.6" (19.3 cm) Arm



7/8" KO - fits 1/2" NPT water-tight fitting



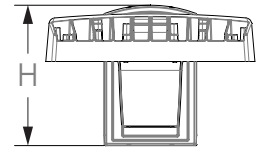
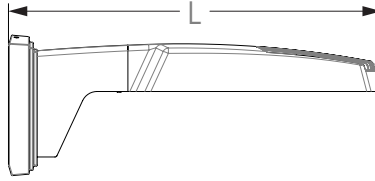
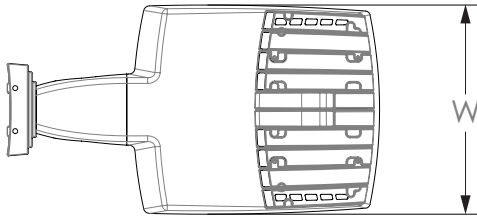
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Lithonia RSX1 Area LED
 Rev. 05/04/21
 Page 5 of 9

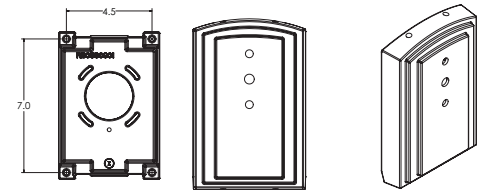
Dimensions

RSX1 with Wall Bracket (WBA)

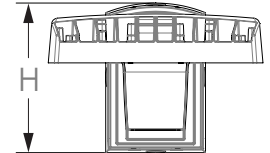
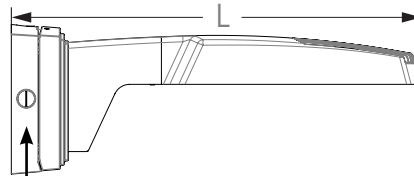
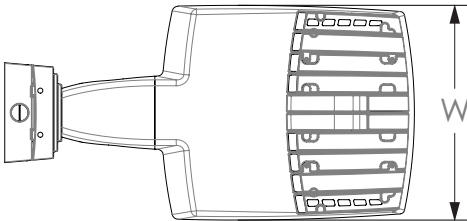


Length: 23.6" (59.9 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 8.9" (22.6 cm) Arm

Wall Bracket (WBA) Mounting Detail



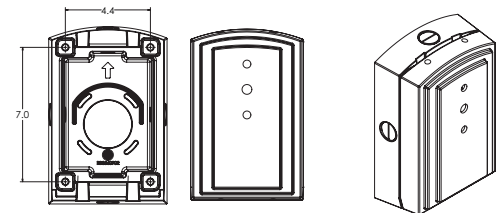
RSX1 with Wall Bracket with Surface Conduit Box (WBASC)



3/4" NPT taps with plugs - Qty (4) provided

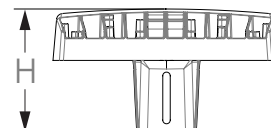
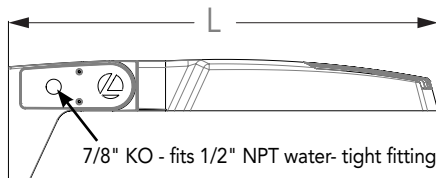
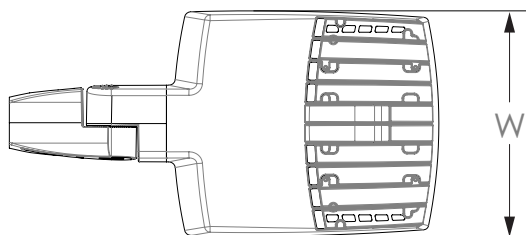
Length: 25.3" (64.3 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 9.2" (23.4 cm) Arm

Surface Conduit Box (SCB) Mounting Detail

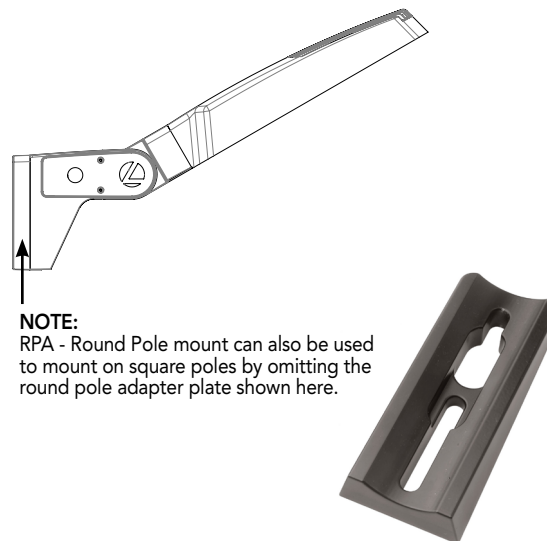


Dimensions

RSX1 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)



Length: 25.3" (65.3 cm) **AASP**
 26.3" (66.8 cm) **AARP**
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 7.2" (18.2 cm) Arm



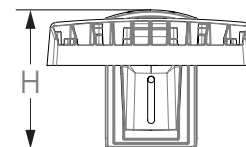
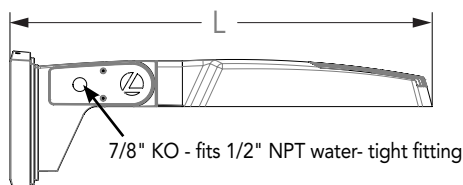
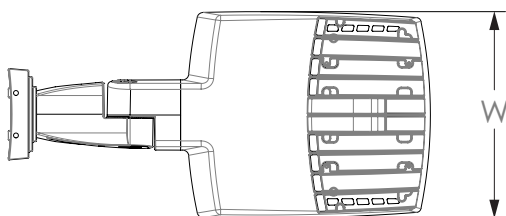
NOTE:
 RPA - Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

Notes

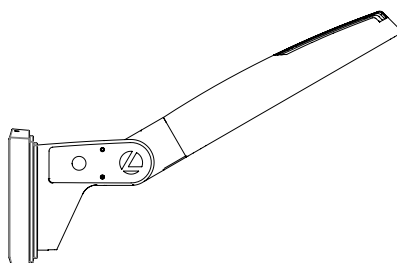
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.

AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

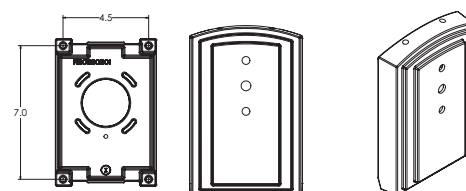
RSX1 with Adjustable Tilt Arm with Wall Bracket (AAWB)



Length: 27.1" (68.8 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 8.9" (22.6 cm) Arm



Wall Bracket (WBA) Mounting Detail



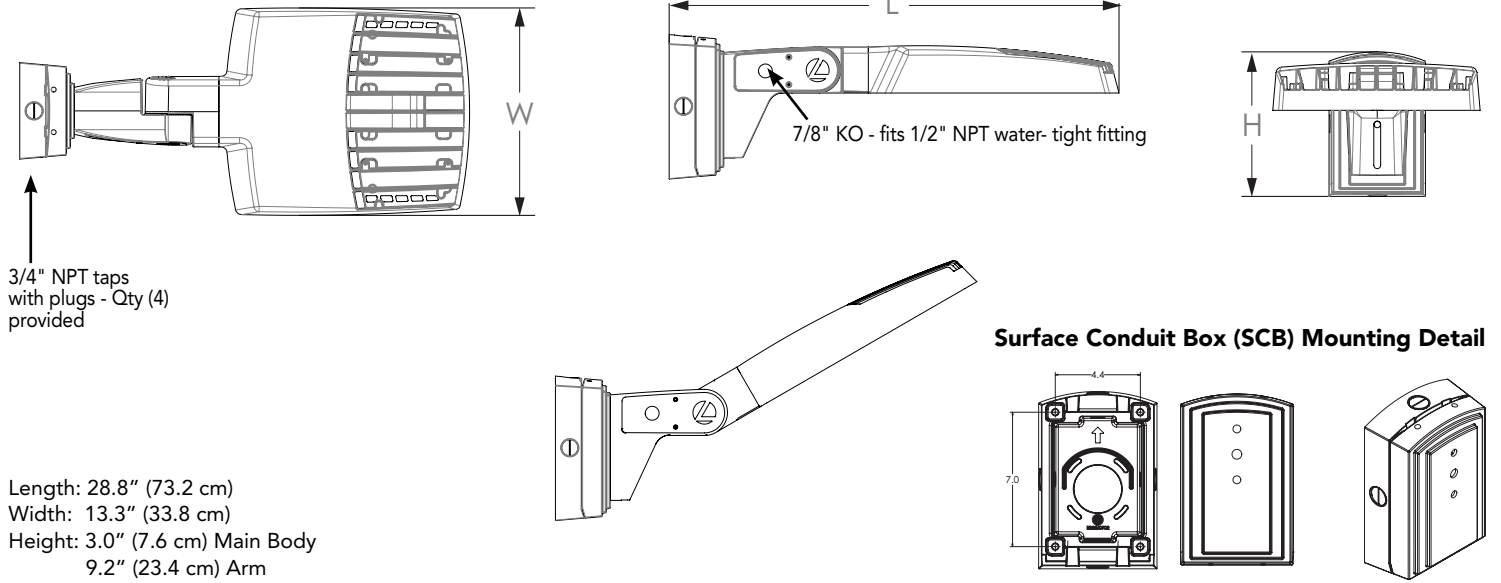
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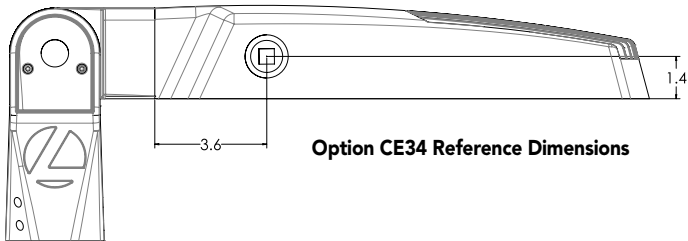
Lithonia RSX1 Area LED
 Rev. 05/04/21
 Page 7 of 9

Dimensions

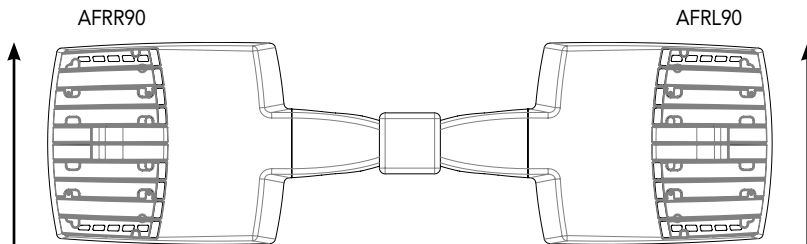
RSX1 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)



Additional Reference Drawings

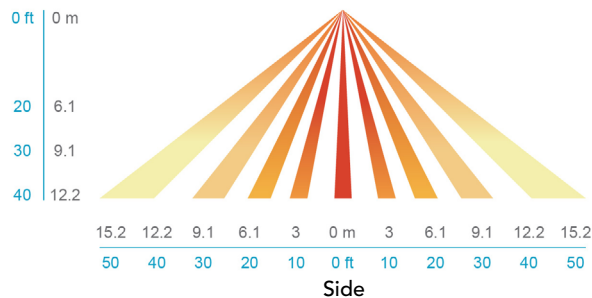
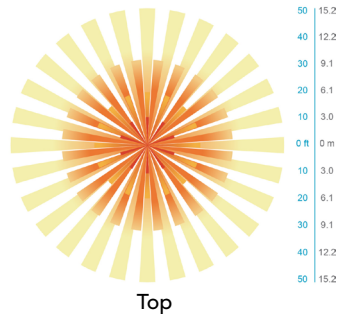
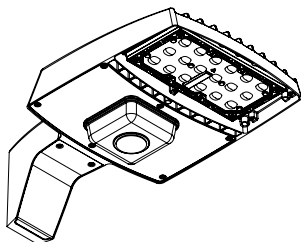


Automotive Front Row - Rotated Optics (AFRL90/R90)



(Example: 2@180 - arrows indicate direction of light exiting the luminaire)

nLight Sensor Coverage Pattern NLTAIR2 PIRHN



Motion Sensor Default Settings - Option PIRHN

Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)
NLTAIR2 PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds	5 minutes

*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clairity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is tilted.

FEATURES & SPECIFICATIONS

INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX1 delivers 7,000 to 17,000 lumens and is ideal for replacing 70W to 400W HID pole-mounted luminaires in parking lots and other area lighting applications.

CONSTRUCTION

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. All mountings are rated for minimum 1.5 G vibration load per ANSI C136.31. 3G Mountings: Include SPA, RPA, MA, IS, AASP, and AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

FINISH

Exterior 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 superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warranted not to crack or peel.

OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row), and AFR rotated AFR90 and ARFL90.

ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

INSTALLATION

Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. 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 3000K color temperature only.

BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/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.



RSX1 LED Area Luminaire

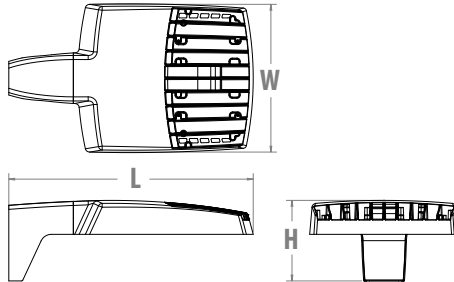


Catalog Number	RSX1 LED P4 30K R4 MVOLT HS SPA DDBXD
Notes	
Type	S4HS

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA (ft ² @0°):	0.57 ft ² (0.05 m ²)
Length:	21.8" (55.4 cm) (SPA mount)
Width:	13.3" (33.8 cm)
Height:	3.0" (7.6 cm) Main Body 7.2" (18.4 cm) Arm
Weight: (SPA mount):	22.0 lbs (10.0 kg)



Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX1 delivers 7,000 to 17,000 lumens allowing it to replace 70W to 400W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

Ordering Information

EXAMPLE: RSX1 LED P4 40K R3 MVOLT SPA DDBXD

Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX1 LED	P1 P2 P3 P4	30K 3000K 40K 4000K 50K 5000K	R2 Type 2 Wide R3 Type 3 Wide R3S Type 3 Short R4 Type 4 Wide R4S Type 4 Short R5 Type 5 Wide ¹ R5S Type 5 Short ¹ AFR Automotive Front Row AFRR90 Automotive Front Row Right Rotated AFRL90 Automotive Front Row Left Rotated	MVOLT (120V-277V) ² HVOLT (347V-480V) ³ XVOLT (277V-480V) ⁴ (use specific voltage for options as noted) 120 ³ 277 ⁵ 208 ³ 347 ⁵ 240 ³ 480 ⁵	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°) RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°) MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon) IS Adjustable slipfitter (fits 2-3/8" OD tenon) ⁶ WBA Wall bracket ¹ WBASC Wall bracket with surface conduit box AASP Adjustable tilt arm square pole mounting ⁶ AARP Adjustable tilt arm round pole mounting ⁶ AAWB Adjustable tilt arm with wall bracket ⁶ AAWSC Adjustable tilt arm wall bracket and surface conduit box ⁶

Options	Finish
Shipped Installed HS House-side shield ⁷ PE Photocontrol, button style ^{8,9} PEX Photocontrol external threaded, adjustable ^{9,10} PER7 Seven-wire twist-lock receptacle only (no controls) ^{9,11,12,13} CE34 Conduit entry 3/4" NPT (Qty 2) SF Single fuse (120, 277, 347) ⁵ DF Double fuse (208, 240, 480) ⁵ SPD20KV 20KV Surge pack (10KV standard) FAO Field adjustable output ^{9,13} DMG 0-10V dimming extend out back of housing for external control (control ordered separate) ^{9,13}	DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured Dark Bronze DBLTXD Textured Black DNATXD Textured Natural Aluminum DWHGXD Textured White
Shipped Installed *Standalone and Networked Sensors/Controls (factory default settings, see table page 9) NLTAIR2 nLight AIR generation 2 ^{13,14,15} PIRHN Networked, Bi-Level motion/ambient sensor (for use with NLTAIR2) ^{13,15,16} BAA Buy America(n) Act Compliant *Note: PIRHN with nLight Air can be used as a standalone or networked solution. Sensor coverage pattern is affected when luminaire is tilted. Shipped Separately (requires some field assembly) EGS External glare shield ⁷ EGFV External glare full visor (360° around light aperture) ⁷ BS Bird spikes ¹⁷	



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Lithonia RSX1 Area LED
Rev. 05/04/21
Page 1 of 9

Ordering Information

Accessories

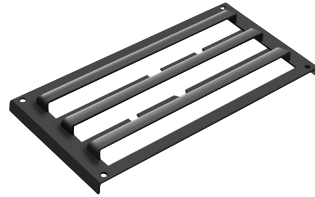
Ordered and shipped separately.

RSX1HS	RSX1 House side shield (includes 1 shield)
RSX1HSAFRR U	RSX1 House side shield for AFR rotated optics (includes 1 shield)
RSX1EGS (FINISH) U	External glare shield (specify finish)
RSX1EGFV (FINISH) U	External glare full visor (specify finish)
RSXRPA (FINISH) U	RSX Universal round pole adaptor plate (specify finish)
RSXWBA (FINISH) U	RSX WBA wall bracket (specify finish) ¹
RSXSCB (FINISH) U	RSX Surface conduit box (specify finish, for use with WBA, WBA not included)
DLL127F 1.5 JU	Photocell -SSL twist-lock (120-277V) ¹⁸
DLL347F 1.5 CUL JU	Photocell -SSL twist-lock (347V) ¹⁸
DLL480F 1.5 CUL JU	Photocell -SSL twist-lock (480V) ¹⁸
DSHORT SBK U	Shorting cap ¹⁸

NOTES

- Any Type 5 distribution, is not available with WBA.
- 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).
- XVOLT driver not available with P1 or P2. XVOLT driver operates on any line voltage from 277V-480V (50/60 Hz). XVOLT not available with fusing (SF or DF) and not available with PE or PEX.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Maximum tilt is 90° above horizontal.
- It may be ordered as an accessory.
- Requires MVOLT or 347V.
- Not available in combination with other light sensing control options (following options cannot be combined: PE, PEX, PER7, FAO, DMG, PIRHN).
- Requires 120V, 208V, 240V or 277V.
- Twistlock photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included. Dimming leads capped for future use.
- For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010.
- Two or more of the following options cannot be combined including DMG, PER7, FAO and PIRHN.
- Must be ordered with PIRHN.
- Requires MVOLT or HVOLT.
- Must be ordered with NLTAR2. For additional information on PIRHN visit [here](#).
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.

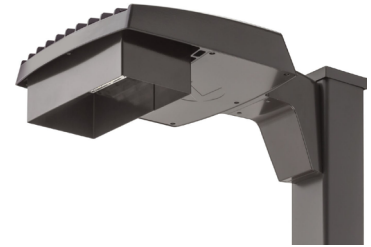
External Shields



House Side Shield



External Glare Shield

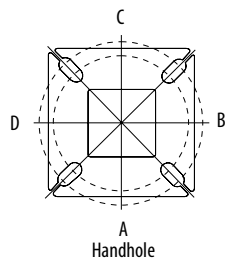


External 360 Full Visor

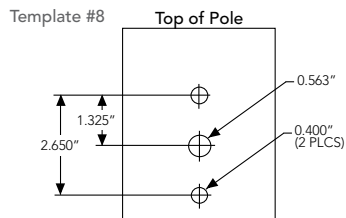
Pole/Mounting Information

Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit [Accessories](#).

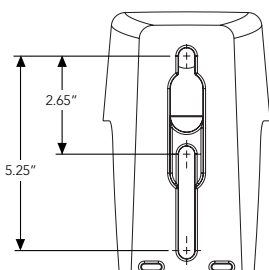
HANDHOLE ORIENTATION



RSX POLE DRILLING



RSX STANDARD ARM & ADJUSTABLE ARM



Round Tenon Mount - Pole Top Slipfitters

Tenon O.D.	RSX Mounting	Single	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
2 - 3/8"	RPA, AARP	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 320	AS3-5 390	AS3-5 490
2 - 7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Drill/Side Location by Configuration Type

Drilling Template	Mounting Option	Single	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
#8	Drill Nomenclature	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

RSX1 - Luminaire EPA

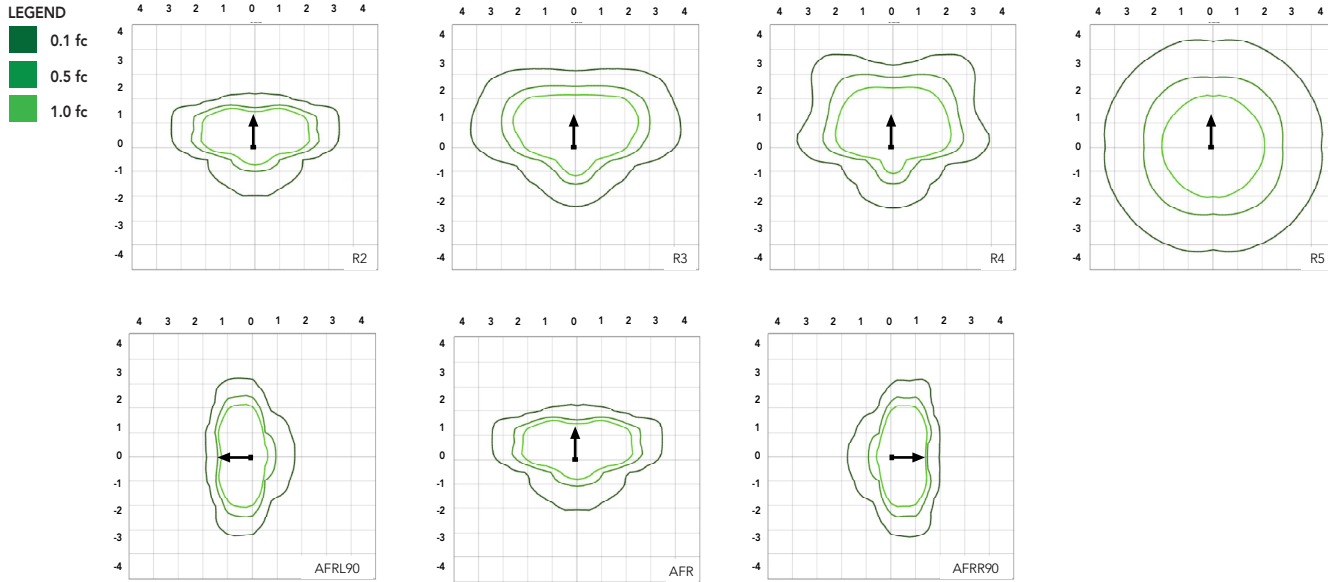
*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration		Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt									
SPA - Square Pole Adaptor	0 °	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
RPA - Round Pole Adaptor		0.62	1.08	1.15	1.62	1.46	2.13	1.36	1.8	2.36
MA - Mast Arm Adaptor		0.49	0.95	0.89	1.36	1.2	1.87	1.23	1.54	2.1
IS - Integral Slipfitter AASP/AARP - Adjustable Arm Square/Round Pole	0 °	0.57	1.03	1.05	1.52	1.36	2.03	1.31	1.7	2.26
	10°	0.68	1.34	1.33	2	1.74	2.64	1.35	2.03	2.71
	20°	0.87	1.71	1.73	2.56	2.26	3.42	1.75	2.62	3.49
	30°	1.24	2.19	2.3	3.21	2.87	4.36	2.49	3.73	4.97
	40°	1.81	2.68	2.98	3.85	3.68	5.30	3.62	5.43	7.24
	45°	2.11	2.92	3.44	4.2	4.08	5.77	4.22	6.33	8.44
	50°	2.31	3.17	3.72	4.52	4.44	6.26	4.62	6.94	9.25
	60°	2.71	3.66	4.38	5.21	5.15	7.24	5.43	8.14	10.86
	70°	2.78	3.98	4.54	5.67	5.47	7.91	5.52	8.27	11.03
	80°	2.76	4.18	4.62	5.97	5.76	8.31	5.51	8.27	11.03
	90°	2.73	4.25	4.64	6.11	5.91	8.47	5.45	8.18	10.97

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [RSX Area homepage](#).

Isofootcandle plots for the RSX1 LED P4 40K. Distances are in units of mounting height (20').



Performance Data

Lumen Ambient Temperature (LAT) Multipliers

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

Ambient	Ambient	Lumen Multiplier
0°C	32°F	1.05
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
45°C	113°F	0.96
50°C	122°F	0.95

Electrical Load

Performance Package	System Watts (W)	Current (A)					
		120V	208V	240V	277V	347V	480V
P1	51W	0.42	0.25	0.21	0.19	0.14	0.11
P2	72W	0.60	0.35	0.30	0.26	0.21	0.15
P3	109W	0.91	0.52	0.45	0.39	0.31	0.23
P4	133W	1.11	0.64	0.55	0.48	0.38	0.27

Projected LED Lumen Maintenance

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to 40°C.



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Lithonia RSX1 Area LED
Rev. 05/04/21
Page 3 of 9

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.

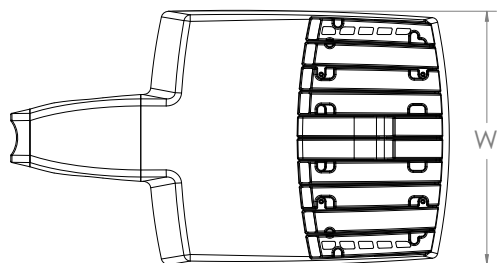
Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
P1	51W	R2	6,482	1	0	1	126	7,121	1	0	1	139	7,121	1	0	1	139
		R3	6,459	1	0	2	127	7,096	1	0	2	139	7,096	1	0	2	139
		R3S	6,631	1	0	1	129	7,286	1	0	2	142	7,286	1	0	2	142
		R4	6,543	1	0	2	128	7,189	1	0	2	141	7,189	1	0	2	141
		R4S	6,313	1	0	1	124	6,936	1	0	1	136	6,936	1	0	1	136
		R5	6,631	3	0	2	130	7,286	3	0	2	143	7,286	3	0	2	143
		R5S	6,807	3	0	1	133	7,479	3	0	1	147	7,479	3	0	1	147
		AFR	6,473	1	0	1	127	7,112	1	0	1	139	7,112	1	0	1	139
		AFRR90	6,535	2	0	2	127	7,179	2	0	2	140	7,179	2	0	2	140
		AFRL90	6,562	2	0	1	128	7,210	2	0	2	140	7,210	2	0	2	140
P2	72W	R2	8,991	2	0	1	123	9,878	2	0	1	135	9,878	2	0	1	135
		R3	8,959	2	0	2	124	9,843	2	0	2	137	9,843	2	0	2	137
		R3S	9,198	2	0	2	126	10,106	2	0	2	139	10,106	2	0	2	139
		R4	9,077	2	0	2	126	9,972	2	0	2	139	9,972	2	0	2	139
		R4S	8,757	1	0	2	122	9,622	2	0	2	134	9,622	2	0	2	134
		R5	9,198	4	0	2	128	10,106	4	0	2	140	10,106	4	0	2	140
		R5S	9,443	3	0	1	131	10,374	3	0	1	144	10,374	3	0	1	144
		AFR	8,979	2	0	1	125	9,865	2	0	1	137	9,865	2	0	1	137
		AFRR90	9,064	3	0	2	124	9,959	3	0	2	137	9,959	3	0	2	137
		AFRL90	9,102	3	0	2	125	10,001	3	0	2	137	10,001	3	0	2	137
P3	109W	R2	12,808	2	0	1	117	14,072	2	0	2	129	14,072	2	0	2	129
		R3	12,763	2	0	2	117	14,023	2	0	2	129	14,023	2	0	2	129
		R3S	13,104	2	0	2	120	14,397	2	0	2	132	14,397	2	0	2	132
		R4	12,930	2	0	2	119	14,206	2	0	2	130	14,206	2	0	2	130
		R4S	12,475	2	0	2	114	13,707	2	0	2	126	13,707	2	0	2	126
		R5	13,104	4	0	2	120	14,397	4	0	2	132	14,397	4	0	2	132
		R5S	13,452	3	0	2	123	14,779	3	0	2	136	14,779	3	0	2	136
		AFR	12,791	2	0	1	117	14,053	2	0	2	129	14,053	2	0	2	129
		AFRR90	12,913	3	0	3	118	14,187	3	0	3	130	14,187	3	0	3	130
		AFRL90	12,967	3	0	2	118	14,247	3	0	3	130	14,247	3	0	3	130
P4	133W	R2	14,943	2	0	2	112	16,417	2	0	2	123	16,417	2	0	2	123
		R3	14,890	2	0	3	112	16,360	2	0	3	123	16,360	2	0	3	123
		R3S	15,287	2	0	2	115	16,796	2	0	2	126	16,796	2	0	2	126
		R4	15,085	2	0	3	113	16,574	2	0	3	125	16,574	2	0	3	125
		R4S	14,554	2	0	2	109	15,991	2	0	2	120	15,991	2	0	2	120
		R5	15,287	4	0	2	115	16,796	4	0	2	126	16,796	4	0	2	126
		R5S	15,693	4	0	2	118	17,242	4	0	2	130	17,242	4	0	2	130
		AFR	14,923	2	0	2	112	16,395	2	0	2	123	16,395	2	0	2	123
		AFRR90	15,065	3	0	3	113	16,551	3	0	3	124	16,551	3	0	3	124
		AFRL90	15,128	3	0	3	114	16,621	3	0	3	125	16,621	3	0	3	125

Dimensions & Weights

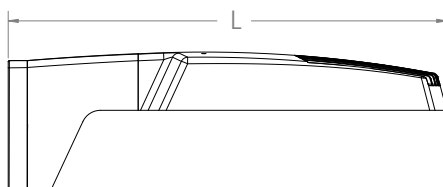
Luminaire Weight by Mounting Type

Mounting Configuration	Total Luminaire Weight
SPA	22 lbs
RPA	24 lbs
MA	22 lbs
WBA	25 lbs
WBASC	28 lbs
IS	25 lbs
AASP	25 lbs
AARP	27 lbs
AAWB	28 lbs
AAWSC	31 lbs

RSX1 with Round Pole Adapter (RPA)



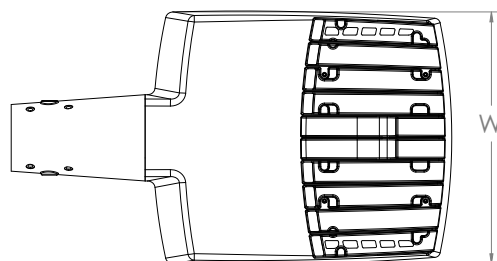
Length: 22.8" (57.9 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 7.2" (18.4 cm) Arm



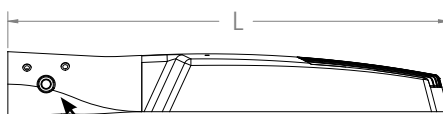
Note: RPA — Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.



RSX1 with Mast Arm Adapter (MA)

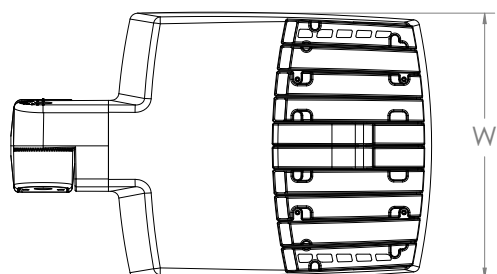


Length: 23.2" (59.1 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 3.5" (8.9 cm) Arm

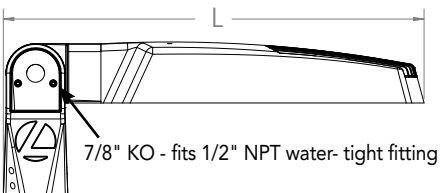


7/16" locking thru bolt/nut provided

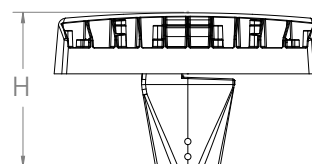
RSX1 with Adjustable Slipfitter (IS)



Length: 20.7" (52.7 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 7.6" (19.3 cm) Arm



7/8" KO - fits 1/2" NPT water-tight fitting



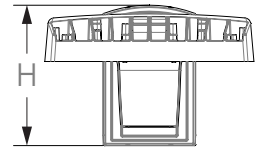
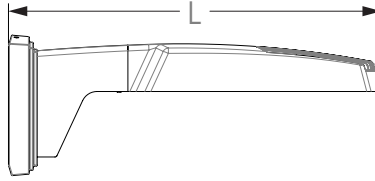
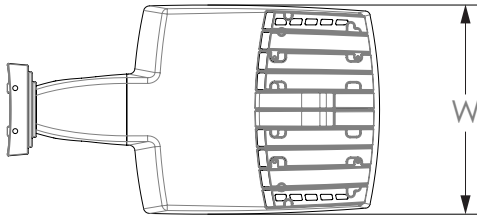
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Lithonia RSX1 Area LED
 Rev. 05/04/21
 Page 5 of 9

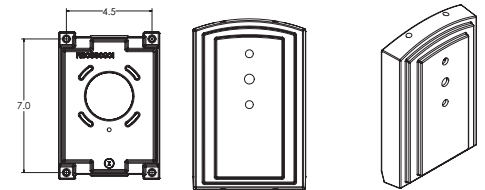
Dimensions

RSX1 with Wall Bracket (WBA)

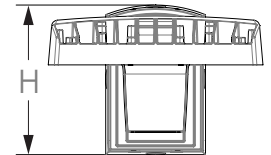
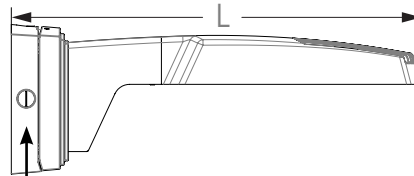
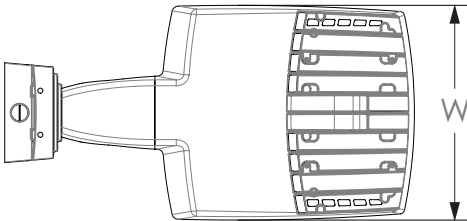


Length: 23.6" (59.9 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 8.9" (22.6 cm) Arm

Wall Bracket (WBA) Mounting Detail



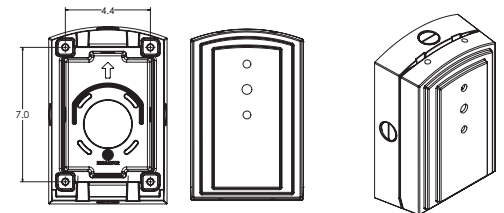
RSX1 with Wall Bracket with Surface Conduit Box (WBASC)



3/4" NPT taps with plugs - Qty (4) provided

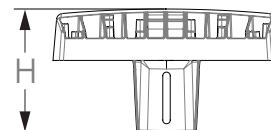
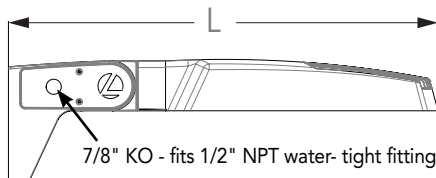
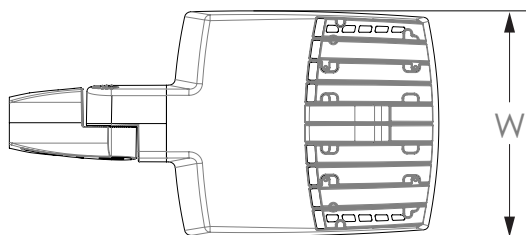
Length: 25.3" (64.3 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 9.2" (23.4 cm) Arm

Surface Conduit Box (SCB) Mounting Detail

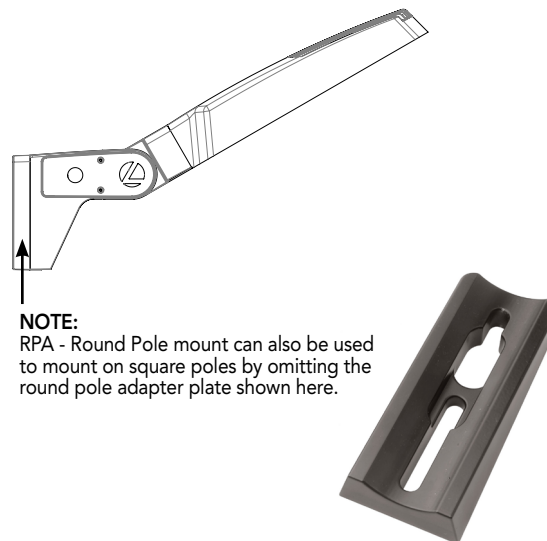


Dimensions

RSX1 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)



Length: 25.3" (65.3 cm) **AASP**
 26.3" (66.8 cm) **AARP**
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 7.2" (18.2 cm) Arm



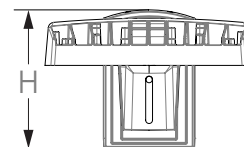
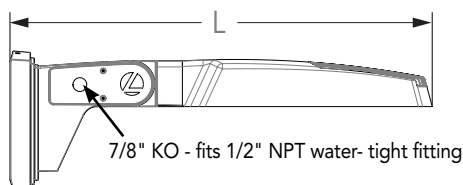
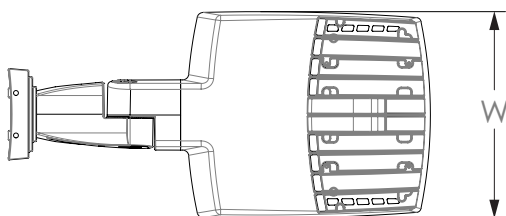
NOTE:
 RPA - Round Pole mount can also be used to mount on square poles by omitting the round pole adapter plate shown here.

Notes

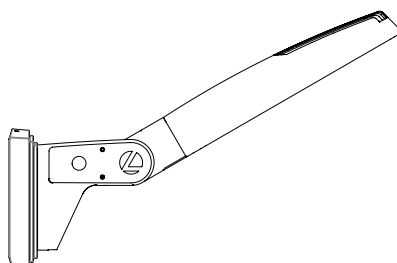
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.

AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

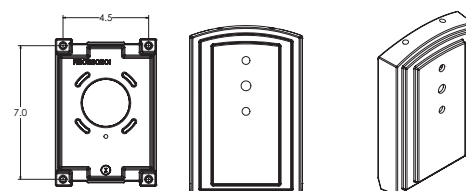
RSX1 with Adjustable Tilt Arm with Wall Bracket (AAWB)



Length: 27.1" (68.8 cm)
 Width: 13.3" (33.8 cm)
 Height: 3.0" (7.6 cm) Main Body
 8.9" (22.6 cm) Arm



Wall Bracket (WBA) Mounting Detail



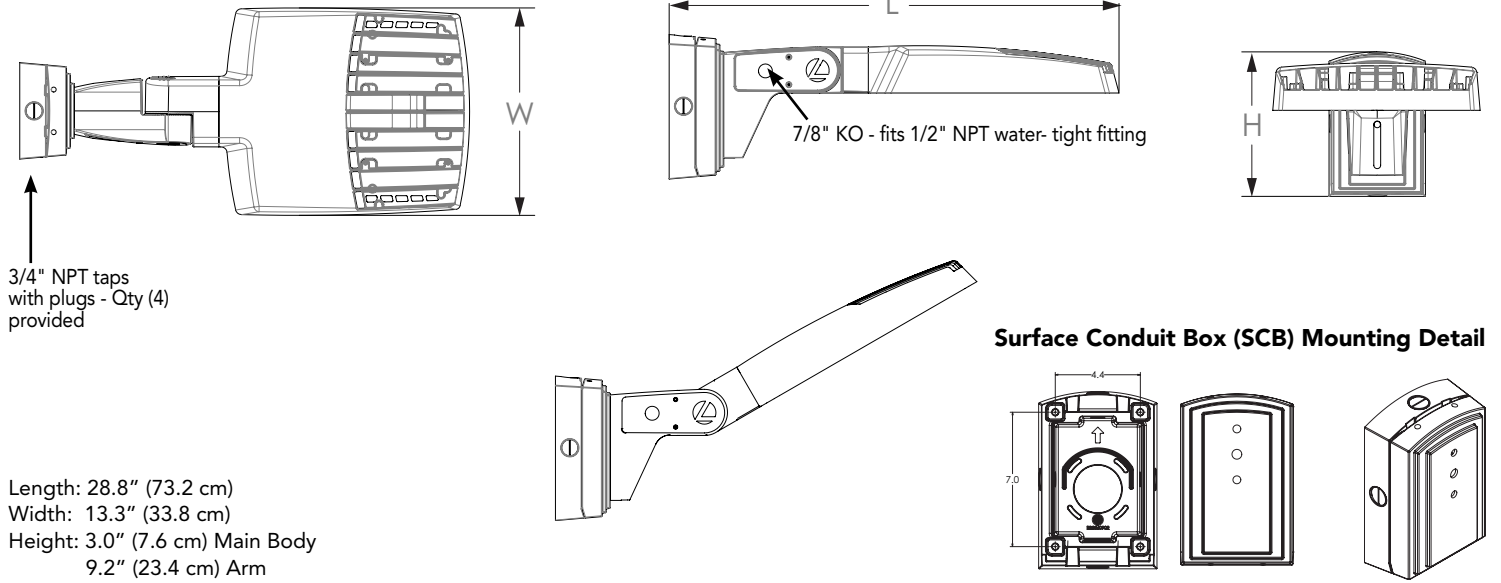
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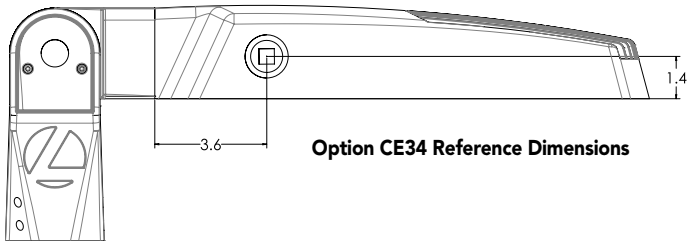
Lithonia RSX1 Area LED
 Rev. 05/04/21
 Page 7 of 9

Dimensions

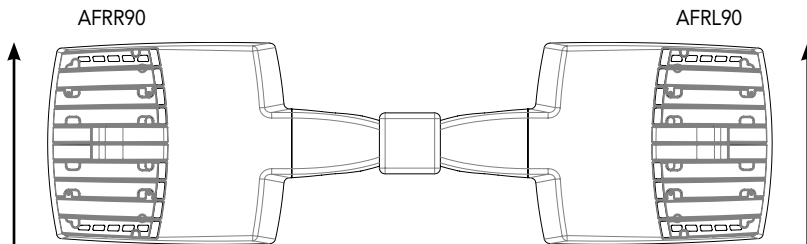
RSX1 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)



Additional Reference Drawings

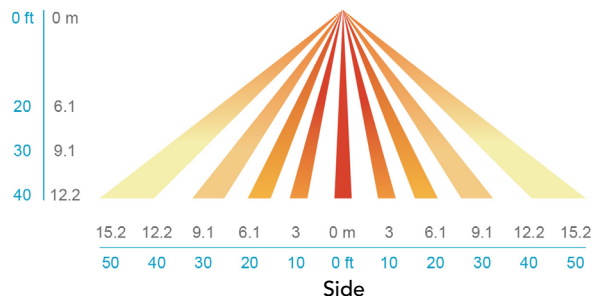
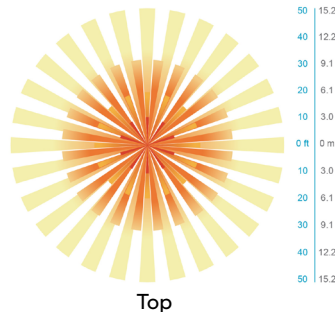
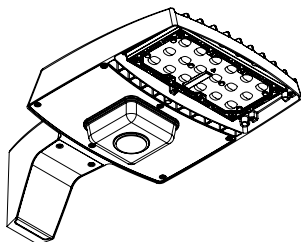


Automotive Front Row - Rotated Optics (AFRL90/R90)



(Example: 2@180 - arrows indicate direction of light exiting the luminaire)

nLight Sensor Coverage Pattern NLTAIR2 PIRHN



Motion Sensor Default Settings - Option PIRHN						
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)
NLTAIR2 PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds	5 minutes

*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clairity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is tilted.

FEATURES & SPECIFICATIONS

INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-for-one replacement of existing metal halide or high pressure sodium lighting. The RSX1 delivers 7,000 to 17,000 lumens and is ideal for replacing 70W to 400W HID pole-mounted luminaires in parking lots and other area lighting applications.

CONSTRUCTION

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heat-dissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. All mountings are rated for minimum 1.5 G vibration load per ANSI C136.31. 3G Mountings: Include SPA, RPA, MA, IS, AASP, and AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

FINISH

Exterior 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 superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warranted not to crack or peel.

OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row), and AFR rotated AFR90 and ARFL90.

ELECTRICAL

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default out-of-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found [here](#).

INSTALLATION

Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to 90° above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

LISTINGS

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. 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 3000K color temperature only.

BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/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, .1196"), or 50 KSI (7-gauge, .1793"). 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: A flush non-metallic black top cap is provided for all poles that will receive drilling patterns for side-mount luminaire arm assemblies or when ordered with PT option.

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 standard powder-coat finishes include Dark Bronze, White, Black, Medium Bronze and Natural Aluminum colors. Classic finishes include Sandstone, Charcoal Gray, Tennis Green, Bright Red and Steel Blue colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Hot-dipped Galvanized, Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes. Factory-applied primer paint finish is available for customer field-paint applications.

BUY AMERICAN — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY — 1-year limited warranty. 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	SSS 17 4C DM28AS DDBXD
Notes	17FT POLE ON 3FT BASES DBL HEAD POLE (2S3)
Type	P1



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 DM19 DDB

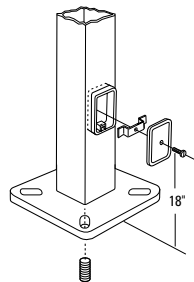
SSS						
Series	Nominal fixture mounting height	Nominal shaft base size/wall thickness¹	Mounting²		Options	Finish¹⁰
SSS	10'-39' (for 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.) See technical information table for complete ordering information.) 17FT	4C 4" 11g (.1196") 4G 4" 7g (.1793") 5C 5" 11g (.1196") 5G 5" 7g (.1793") 6G 6" 7g (.1793") See technical information table for complete ordering information.)	Tenon mounting 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) KAC/KAD/KSE/KSF/KVR/KVF Drill mounting³ DM19 1 at 90° DM28 2 at 180° DM28 PL 2 at 180° with one side plugged DM29 2 at 90° DM39 3 at 90° DM49 4 at 90° CSX/DSX/RSX/AERIS™/OMERO™/HLA/KAX Drill mounting⁴ DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90° RAD drill mounting³ DM19RAD 1 at 90° DM28RAD 2 at 180° DM29RAD 2 at 90° DM32RAD 3 at 120° DM39RAD 3 at 90° DM49RAD 4 at 90° ESX Drill mounting³ DM19ESX 1 at 90° DM28ESX 2 at 180° DM29ESX 2 at 90° DM39ESX 3 at 90° DM49ESX 4 at 90°	AERIS™ Suspend drill mounting³,⁴ DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° OMERO™ Suspend drill mounting³,⁴ DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90°	Shipped installed L/AB Less anchor bolts (Include when anchor bolts are not needed) VD Vibration damper TP Tamper resistant handhole cover fasteners HAxy Horizontal arm bracket (1 fixture)⁵,⁶ FDLxy Festoon outlet less electrical⁵ CPL12/xy 1/2" coupling⁵ CPL34/xy 3/4" coupling⁵ CPL1/xy 1" coupling⁵ NPL12/xy 1/2" threaded nipple⁵ NPL34/xy 3/4" threaded nipple⁵ NPL1/xy 1" threaded nipple⁵ EHHxy Extra handhole⁵,⁷ MAEX Match existing⁸ BAA Buy America(n) Act Compliant IC Interior coating¹⁰ UL UL listed with label (Includes NEC compliant cover) NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) Shipped separately (replacement kit available) (blank) FBC Full base cover (plastic) (blank) TC Top cap (blank) HHC Handhole cover	Standard colors DDBXD Dark bronze DWHXD White DBLXD Black DMBXD Medium bronze DNAXD Natural aluminum Classic colors DSS Sandstone DGC Charcoal gray DTG Tennis green DBR Bright red DSB Steel blue Architectural Colors and Special Finishes¹¹ Galvanized, Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

- NOTES:
1. Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.1196" | "G" - 0.1793".
2. PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20.
The combination includes a required extra handhole.
3. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
4. Insert "1" or "2" to designate fixture size; e.g. DM19AST2.
5. 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
6. 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 HAxyy. Example: HA20BD.
7. Combination of tenon-top and drill mount includes extra handhole.
8. Must add original order number of existing pole(s).
9. Use when mill certifications are required.
10. Provides enhanced corrosion resistance.
11. Additional colors available; see www.lithonia.com/archcolors or Architectural Colors brochure (Form No. 794.3). Available by formal quote only, consult factory for details.

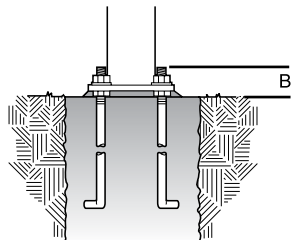
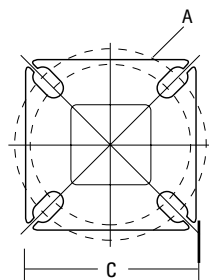
TECHNICAL INFORMATION — EPA (ft ²) with 1.3 gust													
Catalog Number	Nominal Shaft Length (ft.)*	Pole Shaft Size (Base in. x Top in. x ft.)	Wall thick (in)	Gauge	EPA (ft ²) with 1.3 gust						Bolt circle (in)	Bolt size (in. x in. x in.)	Approximate ship weight (lbs.)
					80 MPH	Max. weight	90 MPH	Max. weight	100 MPH	Max. weight			
SSS 10 4C	10	4.0 x 10.0	0.1196	11	30.6	765	23.8	595	18.9	473	8-9	3/4 x 18 x 3	75
SSS 12 4C	12	4.0 x 12.0	0.1196	11	24.4	610	18.8	470	14.8	370	8-9	3/4 x 18 x 3	90
SSS 14 4C	14	4.0 x 14.0	0.1196	11	19.9	498	15.1	378	11.7	293	8-9	3/4 x 18 x 3	100
SSS 16 4C	16	4.0 x 16.0	0.1196	11	15.9	398	11.8	295	8.9	223	8-9	3/4 x 18 x 3	115
SSS 18 4C	18	4.0 x 18.0	0.1196	11	12.6	315	9.2	230	6.7	168	8-9	3/4 x 18 x 3	125
SSS 20 4C	20	4.0 x 20.0	0.1196	11	9.6	240	6.7	167	4.5	150	8-9	3/4 x 18 x 3	140
SSS 20 4G	20	4.0 x 20.0	0.1793	7	14	350	11	275	8	200	8-9	3/4 x 30 x 3	198
SSS 20 5C	20	5.0 x 20.0	0.1196	11	17.7	443	12.7	343	9.4	235	10-12	1 x 36 x 4	185
SSS 20 5G	20	5.0 x 20.0	0.1793	7	28.1	703	21.4	535	16.2	405	10-12	1 x 36 x 4	265
SSS 25 4C	25	4.0 x 25.0	0.1196	11	4.8	150	2.6	100	1	50	8-9	3/4 x 18 x 3	170
SSS 25 4G	25	4.0 x 25.0	0.1793	7	10.8	270	7.7	188	5.4	135	8-9	3/4 x 30 x 3	245
SSS 25 5C	25	5.0 x 25.0	0.1196	11	9.8	245	6.3	157	3.7	150	10-12	1 x 36 x 4	225
SSS 25 5G	25	5.0 x 25.0	0.1793	7	18.5	463	13.3	333	9.5	238	10-12	1 x 36 x 4	360
SSS 30 4G	30	4.0 x 30.0	0.1793	7	6.7	168	4.4	110	2.6	65	8-9	3/4 x 30 x 3	295
SSS 30 5C	30	5.0 x 30.0	0.1196	11	4.7	150	2	50	--	--	10-12	1 x 36 x 4	265
SSS 30 5G	30	5.0 x 30.0	0.1793	7	10.7	267	6.7	167	3.9	100	10-12	1 x 36 x 4	380
SSS 30 6G	30	6.0 x 30.0	0.1793	7	19	475	13.2	330	9	225	11-13	1 x 36 x 4	520
SSS 35 5G	35	5.0 x 35.0	0.1793	7	5.9	150	2.5	100	--	--	10-12	1 x 36 x 4	440
SSS 35 6G	35	6.0 x 35.0	0.1793	7	12.4	310	7.6	190	4.2	105	11-13	1 x 36 x 4	540
SSS 39 6G	39	6.0 x 39.0	0.1793	7	7.2	180	3	75	--	--	11-13	1 x 36 x 4	605

* EPA values are based ASCE 7-93 wind map. For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

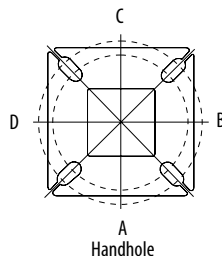
BASE DETAIL



POLE DATA								
Shaft base size	Bolt circle A	Bolt projection B	Base diameter C	Base plate thickness	Template description	Anchor bolt description	Anchor bolt and template number	Anchor bolt description
4"C	8" - 9"	3.25" - 3.75"	8" - 8.25"	0.75"	ABTEMPLATE PJ50004	AB18-0	ABSSS-4C	3/4"x18"x3"
4"G	8" - 9"	3.38" - 3.75"	8" - 8.25"	0.875"	ABTEMPLATE PJ50004	AB30-0	ABSSS-4G	3/4"x30"x3"
5"	10" - 12"	3.5" - 4"	11"	1"	ABTEMPLATE PJ50010	AB36-0	ABSSS-5	1"x36"x4"
6"	11" - 13"	4" - 4.50"	12.5"	1"	ABTEMPLATE PJ50011	AB36-0	N/A	1"x36"x4"



HANDHOLE ORIENTATION



Default DM19 is on side B.

IMPORTANT INSTALLATION NOTES:

- 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.

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, .1196"), or 50 KSI (7-gauge, .1793"). 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: A flush non-metallic black top cap is provided for all poles that will receive drilling patterns for side-mount luminaire arm assemblies or when ordered with PT option.

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 standard powder-coat finishes include Dark Bronze, White, Black, Medium Bronze and Natural Aluminum colors. Classic finishes include Sandstone, Charcoal Gray, Tennis Green, Bright Red and Steel Blue colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Hot-dipped Galvanized, Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes. Factory-applied primer paint finish is available for customer field-paint applications.

BUY AMERICAN — Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY — 1-year limited warranty. 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	SSS 17 4C DM19AS DDBXD
Notes	17FT POLE ON 3FT BASES SGL HEAD POLES (S3, S3HS, S4HS)
Type	P2



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 DM19 DDB

SSS							
Series	Nominal fixture mounting height	Nominal shaft base size/wall thickness ¹	Mounting ²		Options	Finish ¹⁰	
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.) 17FT	4C 4" 11g (.1196") 4G 4" 7g (.1793") 5C 5" 11g (.1196") 5G 5" 7g (.1793") 6G 6" 7g (.1793") See technical information table for complete ordering information.)	Tenon mounting		<u>AERIS™ Suspend drill mounting</u> ^{3,4} DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90° <u>OMERO™ Suspend drill mounting</u> ^{3,4} DM19MRT_ 1 at 90° DM28MRT_ 2 at 180° DM29MRT_ 2 at 90° DM39MRT_ 3 at 90° DM49MRT_ 4 at 90°	<u>Shipped installed</u> L/AB Less anchor bolts (Include when anchor bolts are not needed) VD Vibration damper TP Tamper resistant handhole cover fasteners HAXy Horizontal arm bracket (1 fixture) ^{5,6} FDLxy Festoon outlet less electrical ⁵ 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 ^{5,7} MAEX Match existing ⁸ BAA Buy America(n) Act Compliant IC Interior coating ¹⁰ UL UL listed with label (Includes NEC compliant cover) NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) <u>Shipped separately (replacement kit available)</u> (blank) FBC Full base cover (plastic) (blank) TC Top cap (blank) HHC Handhole cover	<u>Standard colors</u> DDBXD Dark bronze DWHXD White DBLXD Black DMBXD Medium bronze DNAXD Natural aluminum <u>Classic colors</u> DSS Sandstone DGC Charcoal gray DTG Tennis green DBR Bright red DSB Steel blue <u>Architectural Colors and Special Finishes</u> ¹¹ Galvanized, Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.
			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>KAC/KAD/KSE/KSF/KVR/KVF Drill mounting</u> ³				
			DM19 1 at 90°				
			DM28 2 at 180°				
			DM28 PL 2 at 180° with one side plugged				
DM29 2 at 90°							
DM39 3 at 90°							
DM49 4 at 90°							
<u>CSX/DSX/RSX/AERIS™/OMERO™/HLA/KAX Drill mounting</u> ³							
<u>DM19AS 1 at 90°</u>							
DM28AS 2 at 180°							
DM29AS 2 at 90°							
DM39AS 3 at 90°							
DM49AS 4 at 90°							
<u>RAD drill mounting</u> ³							
DM19RAD 1 at 90°							
DM28RAD 2 at 180°							
DM29RAD 2 at 90°							
DM32RAD 3 at 120°							
DM39RAD 3 at 90°							
DM49RAD 4 at 90°							
<u>ESX Drill mounting</u> ³							
DM19ESX 1 at 90°							
DM28ESX 2 at 180°							
DM29ESX 2 at 90°							
DM39ESX 3 at 90°							
DM49ESX 4 at 90°							

- NOTES:
1. Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.1196" | "G" - 0.1793".

2. PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, follow this example: DM28/T20.
The combination includes a required extra handhole.

3. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.

4. Insert "1" or "2" to designate fixture size; e.g. DM19AST2.

5. 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

6. 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 HAxyy. Example: HA20BD.

7. Combination of tenon-top and drill mount includes extra handhole.

8. Must add original order number of existing pole(s).

9. Use when mill certifications are required.

10. Provides enhanced corrosion resistance.

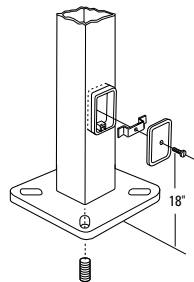
11. Additional colors available; see www.lithonia.com/archcolors or Architectural Colors brochure (Form No. 794.3). Available by formal quote only, consult factory for details.

SSS Square Straight Steel Poles

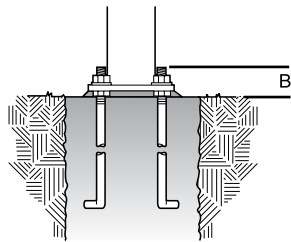
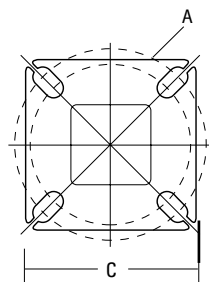
TECHNICAL INFORMATION — EPA (ft ²) with 1.3 gust													
Catalog Number	Nominal Shaft Length (ft.)*	Pole Shaft Size (Base in. x Top in. x ft.)	Wall thick (in)	Gauge	EPA (ft ²) with 1.3 gust						Bolt circle (in)	Bolt size (in. x in. x in.)	Approximate ship weight (lbs.)
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SSS 12 4C	12	4.0 x 12.0	0.1196	11	24.4	610	18.8	470	14.8	370	8-9	3/4 x 18 x 3	90
SSS 14 4C	14	4.0 x 14.0	0.1196	11	19.9	498	15.1	378	11.7	293	8-9	3/4 x 18 x 3	100
SSS 16 4C	16	4.0 x 16.0	0.1196	11	15.9	398	11.8	295	8.9	223	8-9	3/4 x 18 x 3	115
SSS 18 4C	18	4.0 x 18.0	0.1196	11	12.6	315	9.2	230	6.7	168	8-9	3/4 x 18 x 3	125
SSS 20 4C	20	4.0 x 20.0	0.1196	11	9.6	240	6.7	167	4.5	150	8-9	3/4 x 18 x 3	140
SSS 20 4G	20	4.0 x 20.0	0.1793	7	14	350	11	275	8	200	8-9	3/4 x 30 x 3	198
SSS 20 5C	20	5.0 x 20.0	0.1196	11	17.7	443	12.7	343	9.4	235	10-12	1 x 36 x 4	185
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SSS 25 4C	25	4.0 x 25.0	0.1196	11	4.8	150	2.6	100	1	50	8-9	3/4 x 18 x 3	170
SSS 25 4G	25	4.0 x 25.0	0.1793	7	10.8	270	7.7	188	5.4	135	8-9	3/4 x 30 x 3	245
SSS 25 5C	25	5.0 x 25.0	0.1196	11	9.8	245	6.3	157	3.7	150	10-12	1 x 36 x 4	225
SSS 25 5G	25	5.0 x 25.0	0.1793	7	18.5	463	13.3	333	9.5	238	10-12	1 x 36 x 4	360
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SSS 30 5C	30	5.0 x 30.0	0.1196	11	4.7	150	2	50	--	--	10-12	1 x 36 x 4	265
SSS 30 5G	30	5.0 x 30.0	0.1793	7	10.7	267	6.7	167	3.9	100	10-12	1 x 36 x 4	380
SSS 30 6G	30	6.0 x 30.0	0.1793	7	19	475	13.2	330	9	225	11-13	1 x 36 x 4	520
SSS 35 5G	35	5.0 x 35.0	0.1793	7	5.9	150	2.5	100	--	--	10-12	1 x 36 x 4	440
SSS 35 6G	35	6.0 x 35.0	0.1793	7	12.4	310	7.6	190	4.2	105	11-13	1 x 36 x 4	540
SSS 39 6G	39	6.0 x 39.0	0.1793	7	7.2	180	3	75	--	--	11-13	1 x 36 x 4	605

* EPA values are based ASCE 7-93 wind map. For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

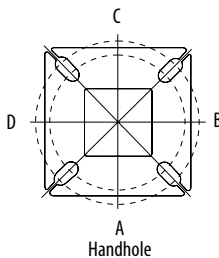
BASE DETAIL



POLE DATA								
Shaft base size	Bolt circle A	Bolt projection B	Base diameter C	Base plate thickness	Template description	Anchor bolt description	Anchor bolt and template number	Anchor bolt description
4"C	8" - 9"	3.25" - 3.75"	8" - 8.25"	0.75"	ABTEMPLATE PJ50004	AB18-0	ABSSS-4C	3/4"x18"x3"
4"G	8" - 9"	3.38" - 3.75"	8" - 8.25"	0.875"	ABTEMPLATE PJ50004	AB30-0	ABSSS-4G	3/4"x30"x3"
5"	10" - 12"	3.5" - 4"	11"	1"	ABTEMPLATE PJ50010	AB36-0	ABSSS-5	1"x36"x4"
6"	11" - 13"	4" - 4.50"	12.5"	1"	ABTEMPLATE PJ50011	AB36-0	N/A	1"x36"x4"



HANDHOLE ORIENTATION



Default DM19 is on side B.

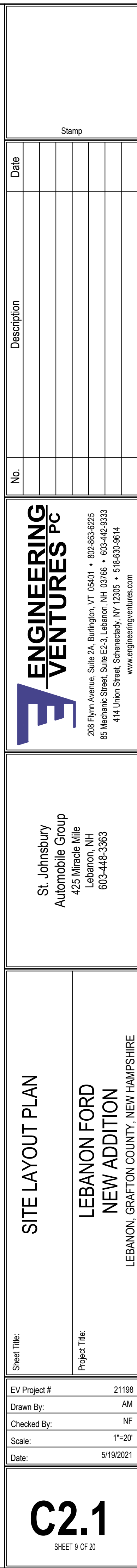
IMPORTANT INSTALLATION NOTES:

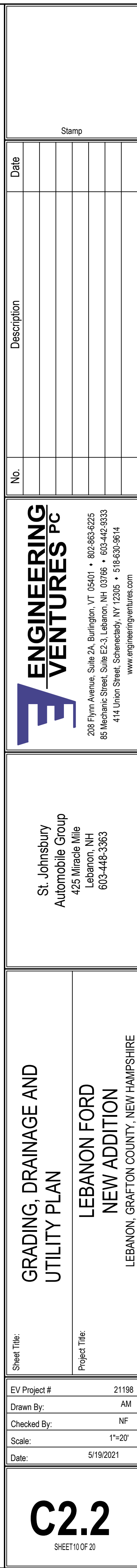
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- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.

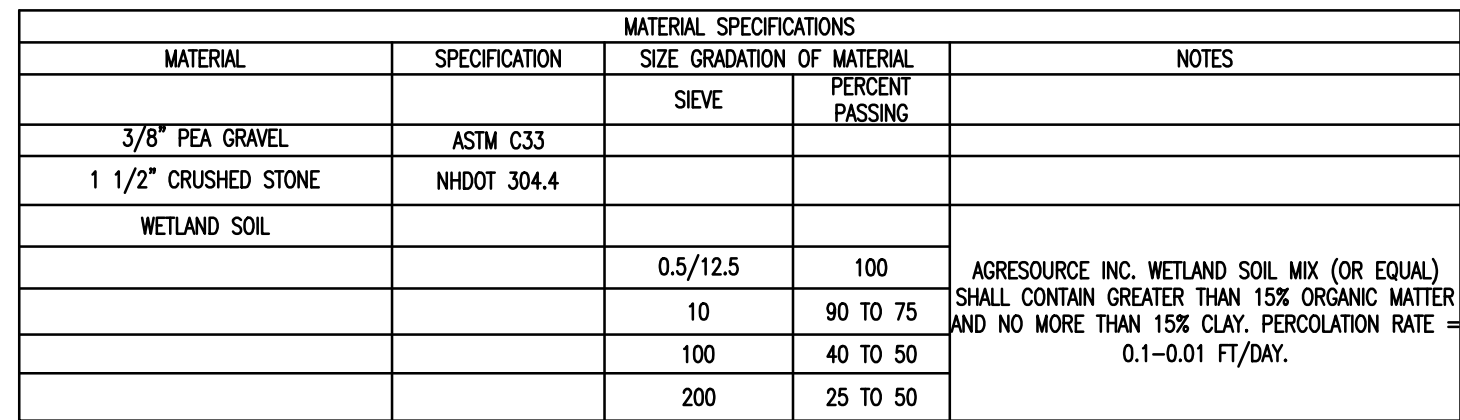


2 of 2

Page 99 of 183



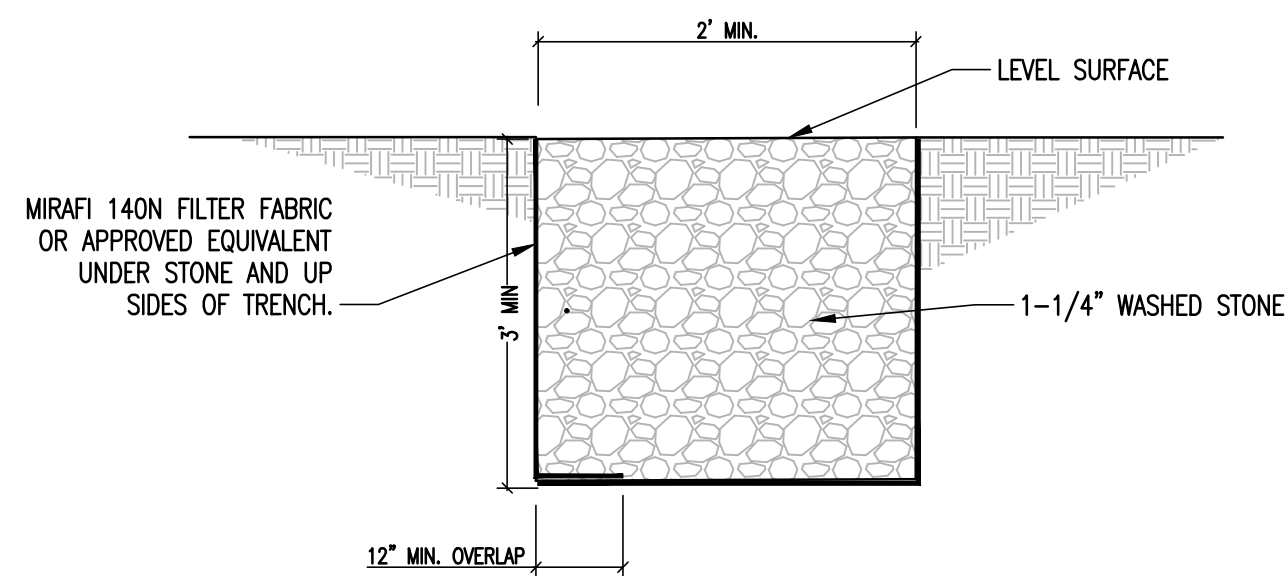




GRAVEL WETLAND

NOT TO SCALE

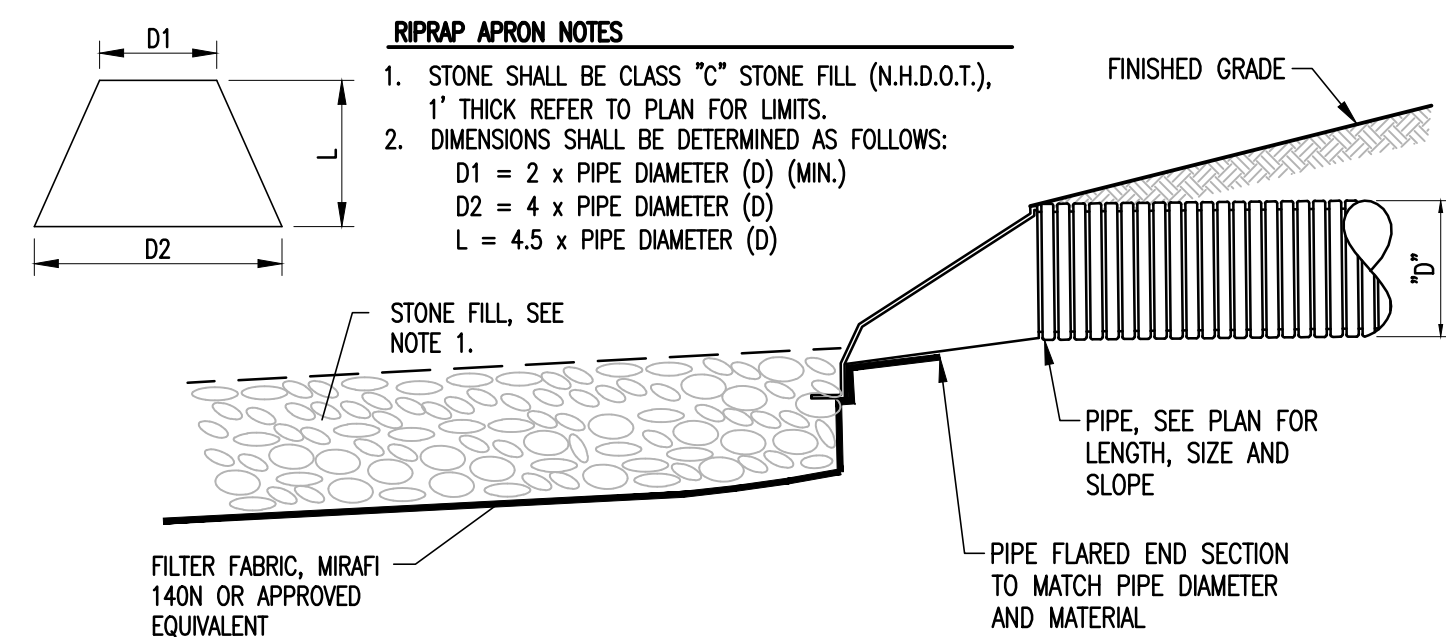
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TYPICAL DRIP EDGE

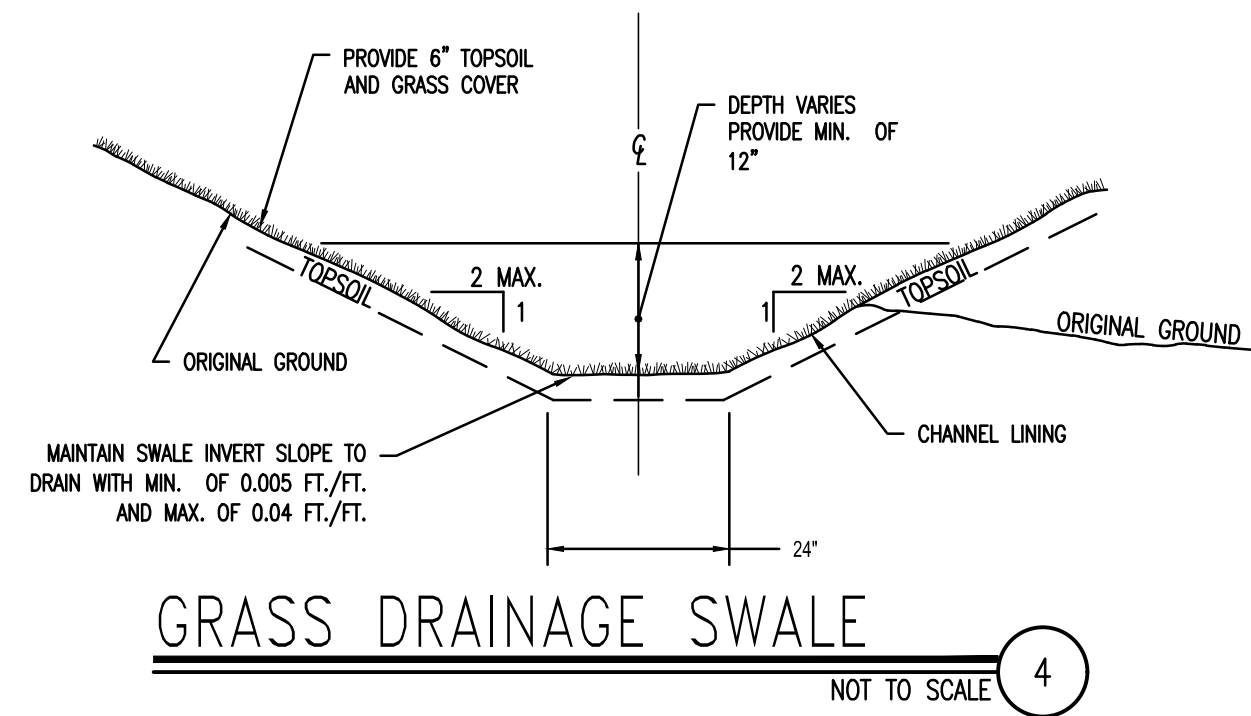
NOT TO SCALE

2



FLARED END SECTION W/STONE APRON DETAIL

NOT TO SCALE 3



GRASS DRAINAGE SWALE

NOT TO SCALE

4

L



**ENGINEERING
VENTURES^{PC}**

St. Johnsbury
Automobile Group
425 Miracle Mile
Lebanon, NH
603-448-3363

DRAINAGE DETAILS

LEBANON FORD
NEW ADDITION

LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

EV Project #	21198
Drawn By:	AM
Checked By:	NF
Scale:	AS NOTED
Date:	6/28/2021

C3.3
SHEET 13 OF 20

LEBANON FORD NEW ADDITION 425 MIRACLE MILE

CITY OF LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE

DRAINAGE ANALYSIS

JULY 11, 2021

Prepared For:

ST. JOHNSBURY AUTOMOBILE GROUP

**425 Miracle Mile
Lebanon, NH 03766**

Prepared By:



85 Mechanic Street, Suite E2-3

Lebanon, NH 03766

Tel: 603-442-9333

EV Project # 18537

LEBANON FORD NEW ADDITION
425 MIRACLE MILE, CITY OF LEBANON, GRAFTON COUNTY, NH

DRAINAGE ANALYSIS

TABLE OF CONTENTS:

- Drainage Narrative
- Extreme Precipitation Data Table for Lebanon, NH
- Existing Drainage Map
- Proposed Drainage Map
- Existing HydroCAD Model Report
- Proposed HydroCAD Model Report
- Stormwater Inspection and Maintenance Manual

Lebanon Ford New Addition 425 Miracle Mile, City of Lebanon, NH

Drainage Report

Project Narrative

**EV Project # 21198
July 11, 2021**

I Introduction

The project will consist construction of an addition to the Lebanon Ford Dealership located at 425 Miracle Mile. The existing lot is located in the General Commercial zone. The new addition will contain an additional 6 service bays and associated interior space to support vehicle service, and 1,800 sf +/- of new showroom space. St Johnsbury Automobile Group is the owner/operator of the facility.

II Existing Conditions

The subject property, Lot 103-15, is a 3.25-acre lot. The existing property currently contains a 23,700-sf automobile dealership and 222 parking spaces; some of which are used for vehicle sales display. The lot is primarily hardscape and relatively flat. There are three catch basins on the west side in the center of the parking area which appear to collect approximately half of the drainage from the site including the building roof. Drainage from the northeast portion of the lot appears to flow to a round catch basin located near the east boundary line. Drainage from the southeast portion of the lot flows to a concrete headwall on the neighbor's property and enters the underground storm drain system at this point. All drainage appears to outfall to the Mascoma River to the north of the site.

The lot is served by municipal water and sewer lines. The sewer system consists of two separate 6" lines with one of the lines collecting wastewater and the second collecting floor drainage. The floor drains flow into an oil and grit separator located at the northwest corner of the site prior to discharging to the municipal collection line in Route 4. A 6" fire line and a 1" domestic water line are both connected to the existing 12" municipal water line in Route 4. The building and site lighting is currently fed by overhead power and also has a propane tank located near the west end of the building. A power pole in the northwest corner appears to feed the building and a portion of the site lighting. The eastern portion of the site lighting appears to be fed from a separate power pole on the northeast corner of the property. Directly north of the propane tank there used to be an underground fuel tank but this has been discontinued and abandoned. The remaining tank pump and electrical equipment will be removed with this project. North of the old fuel tank there is a 300+/- gallon waste oil tank; also to be relocated.

Depth to seasonal high-water table was field verified on July 2, 2021 and found to be within 18 inches of the ground surface in the vicinity of the gravel wetland. At a depth of approximately 3' the underlying soil layer changes from a coarse sand layer to greyish silty clay. The test pit was advanced to a depth of 10 ft.+/- below ground surface.

II Proposed Work

The project will involve the construction of a new approximately 12,900 sf addition to the existing building. The new addition includes an additional 6 vehicle service bays and 1,800 sf showroom. Parking and landscaping will also be reoriented to accommodate the new addition. The drive access around the south side of the building will need to be diverted around the building to maintain access. A new transformer and propane tank will be installed with the project and the building power will be converted to an underground power conduit. New parking lot lighting will also be installed with a portion being fed off of the new underground power conduit.

Stormwater management will be accomplished through installing a stone drip edge at the south end of the new parking, drainage from this area will drain directly off of the pavement into the drip edge and be collected in a grass swale. The drip edge will provide pretreatment for the system. The existing catch basins to the north will be re-routed to their existing outfall to the southwest of the site and therefore will bypass the treatment system. Drainage from a portion of the new parking surfaces and all roof runoff will be directed to a new gravel wetland system south of the parking lot. Stormwater treatment will be achieved through natural wetland treatment processes.

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

- $WQ_v = (P)(R_v)(A)$
 - $P = 1''$ of rainfall (NHDES standard)
 - $R_v = \text{Runoff Coefficient} = 0.05 + (0.9 * I)$
 - $I = \% \text{ impervious draining to practice}$
 - $A = \text{Area draining to practice}$
 - $A_i = \text{Impervious area draining to practice}$
- **WQ_v Calculations for area draining to POI-1:**
 - $P = 1''$
 - $A = 1.28 \text{ acres}$
 - $A_i = 1.08 \text{ acres}$
 - $I = 1.08.35/1.28 = 0.84$
 - $R_v = 0.05 + (0.9 * 0.84) = 0.81 \text{ unitless}$
 - $WQ_v = (1'') (0.81) (1.28) = 1.04 \text{ ac-in}$
 - $WQ_v = 3,763 \text{ cf } (1.04 \text{ ac-in} * 43,560 \text{ sf/ac} * 1' / 12'')$

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

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

Table 1 – HydroCAD Results

POI 1	2-yr Storm	2-yr Storm	10-yr Storm	10-yr Storm	25-yr Storm	25-yr Storm	50-yr Storm	50-yr Storm	100-yr Storm	100-yr Storm
	cfs	cf	cfs	cf	cfs	cf	cfs	cf	cfs	cf
Pre-Development (POI-1)	3.71	7,360	6.07	12,347	7.85	16,240	9.47	19,860	11.37	24,155
Post-Development (POI-1)	1.81	8,629	2.90	15,061	5.29	20,037	8.16	24,649	11.15	30,111
Δ(POI-1)	-1.90	1,269	-3.17	2,714	-2.56	3,797	-1.31	4,789	-0.22	5,956

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

POI 3	2-yr Storm	2-yr Storm	10-yr Storm	10-yr Storm	25-yr Storm	25-yr Storm	50-yr Storm	50-yr Storm	100-yr Storm	100-yr Storm
	cfs	cf	cfs	cf	cfs	cf	cfs	cf	cfs	cf
Pre-Development (POI-3)	4.39	8,932	7.09	14,738	9.15	19,271	11.03	23,490	13.24	28,501
Post-Development (POI-3)	3.59	7,342	5.70	11,933	7.29	15,490	8.74	18,787	10.44	22,692
Δ(POI-1)	-0.80	-1,590	-1.39	-2,805	-1.86	-3,781	-2.29	-4,703	-2.80	-5,809

Soil Erosion and Sedimentation Control

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

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	72.293 degrees West
Latitude	43.636 degrees North
Elevation	0 feet
Date/Time	Tue, 08 Jun 2021 11:55:43 -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	0.65	0.81	1.01	1yr	0.70	0.93	1.16	1.43	1.75	2.15	2.41	1yr	1.90	2.32	2.68	3.28	3.77	1yr
2yr	0.31	0.47	0.59	0.77	0.97	1.21	2yr	0.84	1.11	1.39	1.70	2.06	2.49	2.80	2yr	2.20	2.69	3.13	3.74	4.28	2yr
5yr	0.36	0.57	0.71	0.95	1.21	1.52	5yr	1.05	1.39	1.74	2.12	2.55	3.06	3.45	5yr	2.70	3.32	3.85	4.52	5.14	5yr
10yr	0.41	0.64	0.81	1.11	1.44	1.81	10yr	1.24	1.66	2.08	2.52	3.01	3.57	4.06	10yr	3.16	3.90	4.49	5.21	5.90	10yr
25yr	0.49	0.77	0.98	1.35	1.80	2.27	25yr	1.55	2.09	2.61	3.15	3.74	4.38	5.01	25yr	3.88	4.82	5.52	6.29	7.10	25yr
50yr	0.55	0.89	1.13	1.59	2.13	2.71	50yr	1.84	2.49	3.11	3.74	4.41	5.12	5.89	50yr	4.53	5.67	6.46	7.26	8.16	50yr
100yr	0.63	1.01	1.31	1.85	2.53	3.23	100yr	2.18	2.97	3.71	4.44	5.20	5.98	6.92	100yr	5.29	6.66	7.55	8.39	9.38	100yr
200yr	0.72	1.18	1.52	2.18	3.01	3.84	200yr	2.59	3.54	4.41	5.26	6.12	6.99	8.14	200yr	6.19	7.83	8.84	9.69	10.78	200yr
500yr	0.86	1.42	1.85	2.69	3.77	4.84	500yr	3.26	4.47	5.54	6.58	7.60	8.61	10.09	500yr	7.62	9.70	10.88	11.73	12.98	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	0.60	0.74	0.82	1yr	0.64	0.80	0.97	1.22	1.56	1.83	2.14	1yr	1.62	2.05	2.36	2.77	3.45	1yr
2yr	0.29	0.46	0.56	0.76	0.94	1.10	2yr	0.81	1.08	1.24	1.61	2.05	2.44	2.74	2yr	2.16	2.63	3.07	3.68	4.19	2yr
5yr	0.34	0.52	0.64	0.88	1.13	1.31	5yr	0.97	1.28	1.48	1.89	2.40	2.87	3.24	5yr	2.54	3.11	3.62	4.24	4.85	5yr
10yr	0.37	0.57	0.71	1.00	1.29	1.49	10yr	1.11	1.46	1.68	2.14	2.68	3.24	3.69	10yr	2.87	3.55	4.10	4.71	5.40	10yr
25yr	0.43	0.66	0.82	1.16	1.53	1.76	25yr	1.32	1.72	1.98	2.49	3.09	3.81	4.38	25yr	3.38	4.21	4.83	5.40	6.21	25yr
50yr	0.47	0.72	0.89	1.28	1.73	2.00	50yr	1.49	1.95	2.24	2.81	3.45	4.30	4.99	50yr	3.81	4.80	5.48	5.98	6.90	50yr
100yr	0.53	0.80	1.00	1.44	1.97	2.25	100yr	1.70	2.20	2.54	3.14	3.86	4.86	5.67	100yr	4.30	5.45	6.22	6.62	7.61	100yr
200yr	0.58	0.88	1.11	1.61	2.25	2.55	200yr	1.94	2.50	2.87	3.54	4.34	5.48	6.46	200yr	4.85	6.21	7.08	7.32	8.43	200yr
500yr	0.68	1.01	1.29	1.88	2.67	2.99	500yr	2.31	2.92	3.38	4.12	5.05	6.43	7.68	500yr	5.69	7.39	8.41	8.33	9.63	500yr

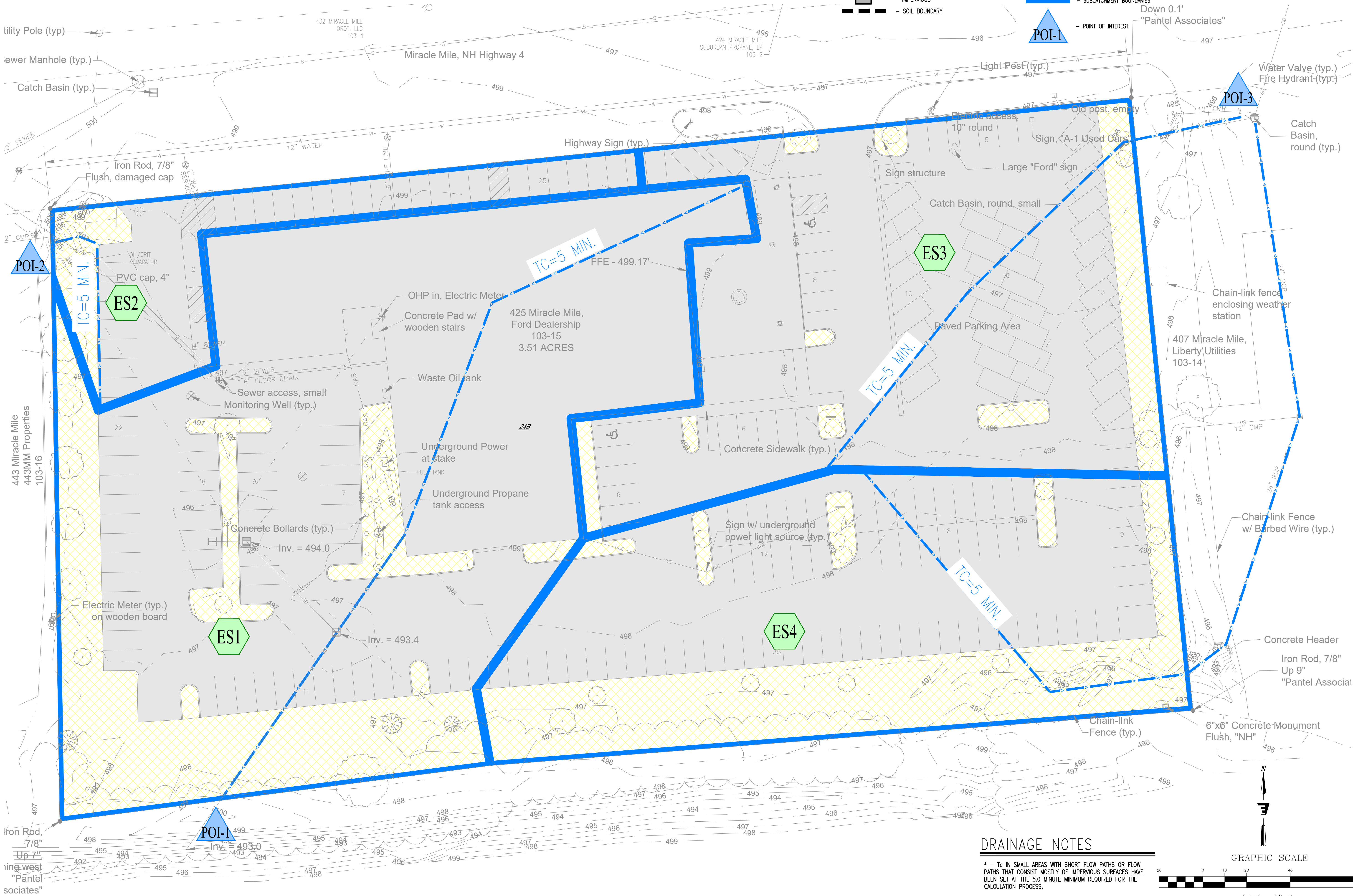
Upper Confidence Limits

	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	0.72	0.89	1.03	1yr	0.77	1.01	1.18	1.52	1.89	2.34	2.65	1yr	2.07	2.55	2.88	3.51	4.02	1yr
2yr	0.32	0.49	0.60	0.82	1.01	1.19	2yr	0.87	1.16	1.35	1.72	2.17	2.56	2.87	2yr	2.26	2.76	3.23	3.85	4.40	2yr
5yr	0.39	0.61	0.76	1.04	1.32	1.54	5yr	1.14	1.51	1.72	2.16	2.71	3.25	3.66	5yr	2.87	3.52	4.08	4.78	5.45	5yr
10yr	0.47	0.73	0.90	1.26	1.63	1.91	10yr	1.40	1.87	2.11	2.61	3.22	3.90	4.41	10yr	3.45	4.24	4.89	5.64	6.43	10yr
25yr	0.60	0.92	1.14	1.63	2.14	2.53	25yr	1.85	2.48	2.79	3.34	4.05	4.98	5.66	25yr	4.40	5.45	6.22	7.05	8.03	25yr
50yr	0.72	1.10	1.37	1.96	2.64	3.14	50yr	2.28	3.07	3.45	4.03	4.82	5.97	6.84	50yr	5.29	6.58	7.46	8.36	9.52	50yr
100yr	0.87	1.32	1.65	2.38	3.27	3.90	100yr	2.82	3.82	4.27	4.86	5.76	7.19	8.27	100yr	6.36	7.96	8.94	9.93	11.29	100yr
200yr	1.05	1.58	2.00	2.90	4.04	4.85	200yr	3.49	4.74	5.29	5.88	6.85	8.65	9.99	200yr	7.66	9.61	10.72	11.82	13.40	200yr
500yr	1.35	2.01	2.59	3.77	5.35	6.48	500yr	4.62	6.34	7.03	7.55	8.63	11.08	12.84	500yr	9.81	12.35	13.63	14.89	16.82	500yr



EXISTING DRAINAGE AREAS

	ES1	ES2	ES3	ES4	Total
>75% Grass cover (good), HSG B	14928	1574	4113	13324	33938
Impervious, HSG B	45785	7920	32709	21045	107459
Total	60712	9494	36822	34369	141397



SOILS MAPPING LEGEND

- NRCS - NATURAL RESOURCES CONSERVATION SERVICE
- 1324
 - NRCS SOIL MAP UNIT SYMBOL
 - NRCS HYDROLOGIC SOIL GROUP "A"
 - NRCS HYDROLOGIC SOIL GROUP "B"
 - NRCS HYDROLOGIC SOIL GROUP "C"
 - NRCS HYDROLOGIC SOIL GROUP "D"
 - IMPERVIOUS
 - SOIL BOUNDARY

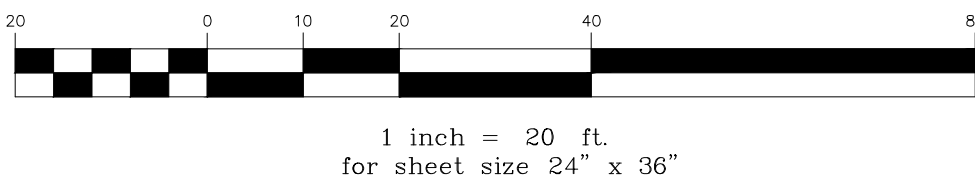
DRAINAGE LEGEND

- ES1 - SUBCATCHMENT DESIGNATION
- TIME OF CONCENTRATION (Tc) PATH
- SUBCATCHMENT BOUNDARIES
- POINT OF INTEREST

DRAINAGE NOTES

* - Tc IN SMALL AREAS WITH SHORT FLOW PATHS OR FLOW PATHS THAT CONSIST MOSTLY OF IMPERVIOUS SURFACES HAVE BEEN SET AT THE 5.0 MINUTE MINIMUM REQUIRED FOR THE CALCULATION PROCESS.

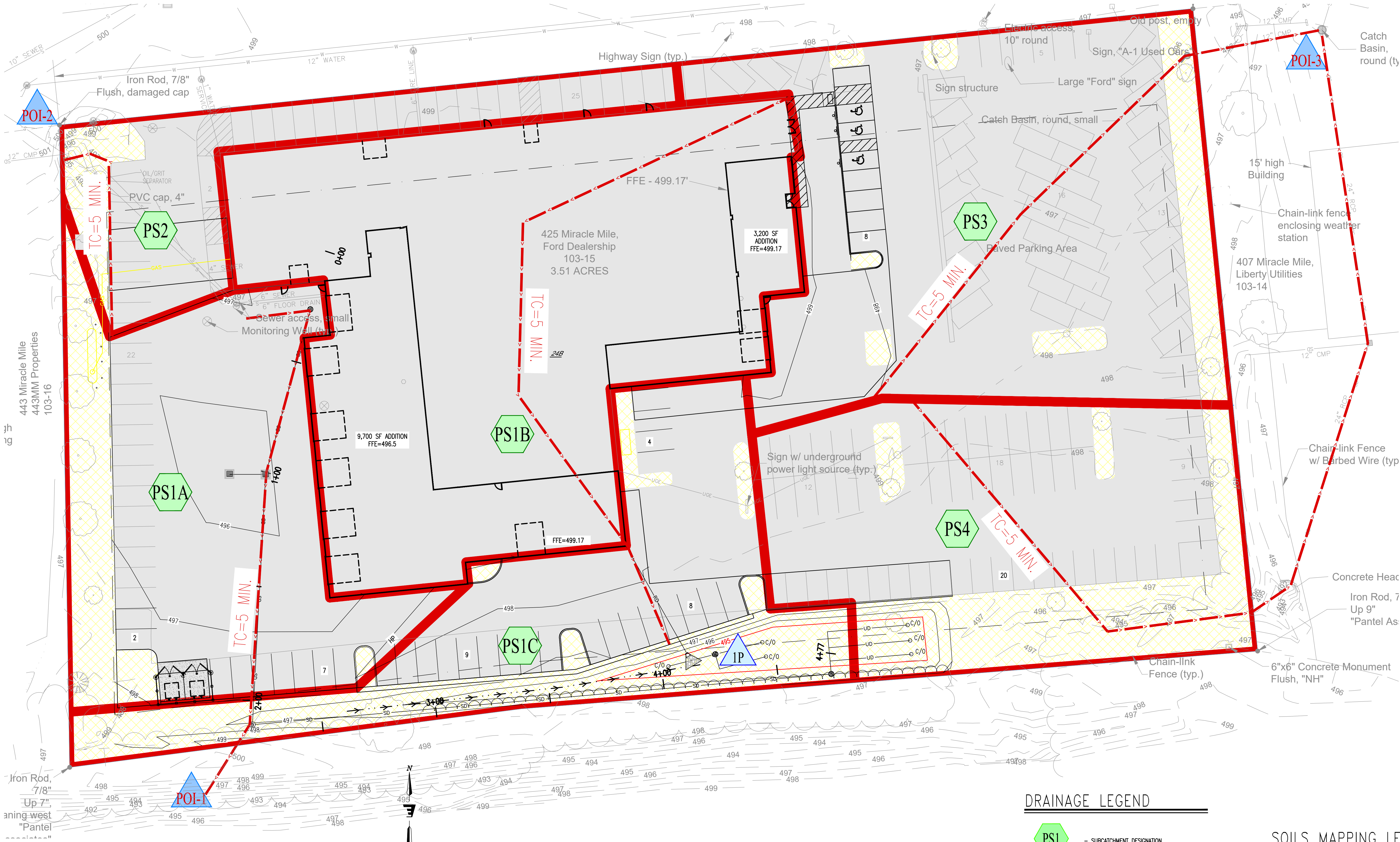
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Date	
Description	
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St. Johnsbury Automobile Group 425 Miracle Mile Lebanon, NH 603-448-3363	
PREDEVELOPMENT DRAINAGE PLAN LEBANON FORD NEW ADDITION LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE	Sheet Title: Project Title: EV Project # 21198 Drawn By: AM Checked By: NF Scale: 1"=20' Date: 5/19/2021
D1 SHEET OF 15	

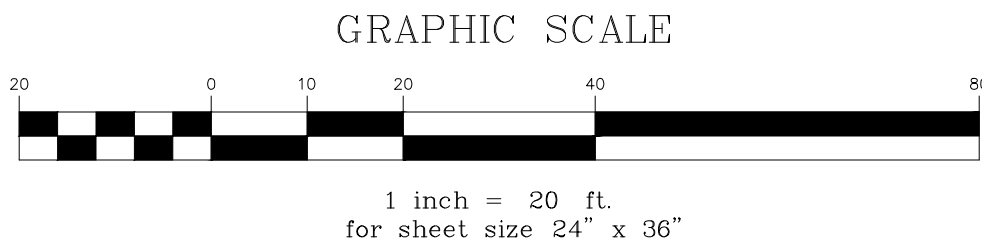
PROPOSED DRAINAGE AREAS

	PS1A	PS1B	PS1C	PS2	PS3	PS4	Total
>75% Grass cover (good), HSG B	4625	0	8828	1574	3533	7700	26260
Impervious, HSG B	16701	36943	9917	7920	28202	15449	115132
Total	21326	36943	18746	9494	31734	23149	141392



DRAINAGE NOTES

* - Tc IN SMALL AREAS WITH SHORT FLOW PATHS OR FLOW PATHS THAT CONSIST MOSTLY OF IMPERVIOUS SURFACES HAVE BEEN SET AT THE 5.0 MINUTE MINIMUM REQUIRED FOR THE CALCULATION PROCESS.



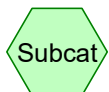
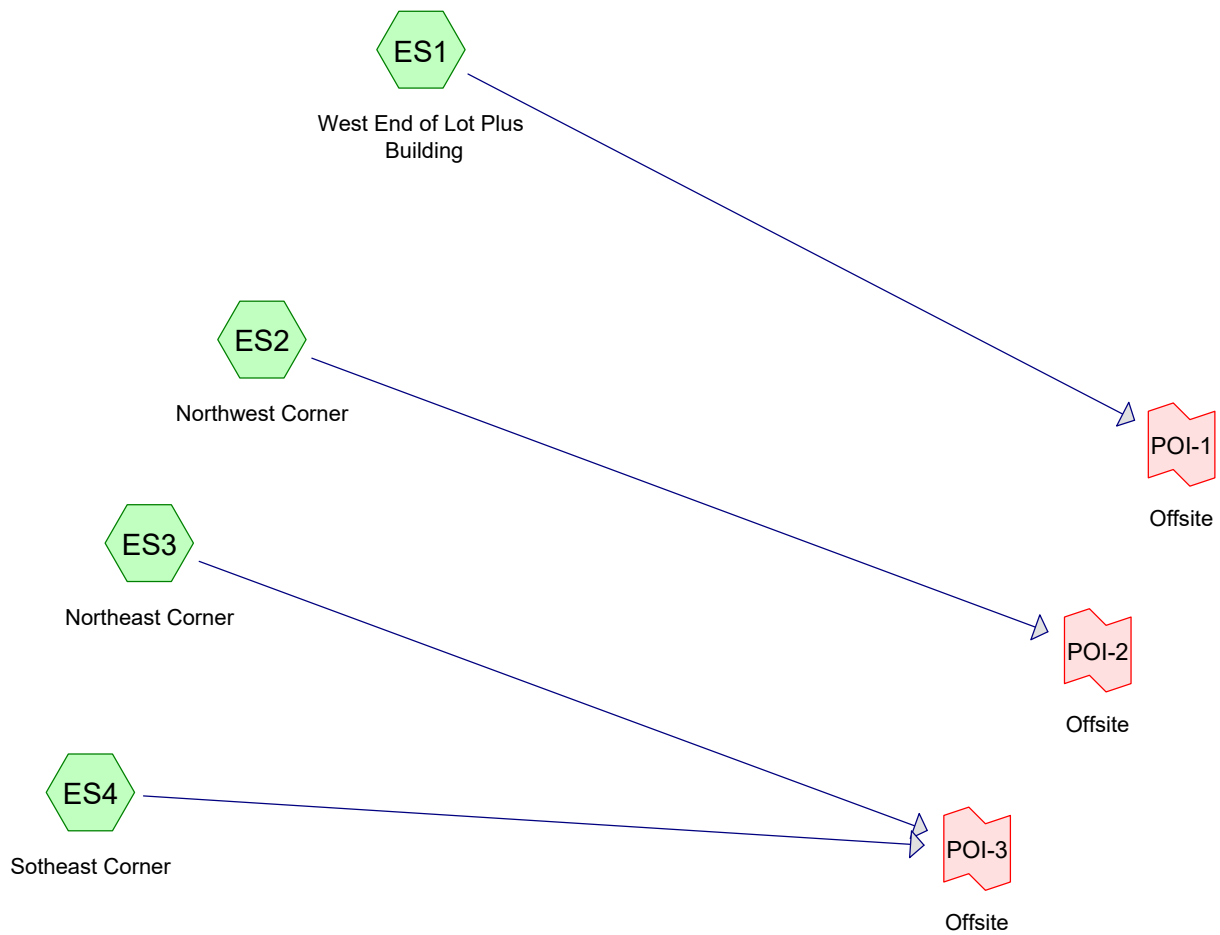
DRAINAGE LEGEND

- PS1 - SUBCATCHMENT DESIGNATION
- TIME OF CONCENTRATION (Tc) PATH
- SUBCATCHMENT BOUNDARIES
- POI-1 - POINT OF INTEREST

SOILS MAPPING LEGEND

- NRCS - NATURAL RESOURCES CONSERVATION SERVICE
- NRCS SOIL MAP UNIT SYMBOL
- NRCS HYDROLOGIC SOIL GROUP "A"
- NRCS HYDROLOGIC SOIL GROUP "B"
- NRCS HYDROLOGIC SOIL GROUP "C"
- NRCS HYDROLOGIC SOIL GROUP "D"
- IMPERVIOUS
- NRCS SOIL BOUNDARY

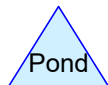
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St. Johnsbury Automobile Group 425 Miracle Mile Lebanon, NH 603-448-3363	
POST DEVELOPMENT DRAINAGE PLAN LEBANON FORD NEW ADDITION LEBANON, GRAFTON COUNTY, NEW HAMPSHIRE	
EV Project #	21198
Drawn By:	NF
Checked By:	11/20
Scale:	5/19/2021
Date:	
D2	
SHEET OF 20	



Subcat



Reach



Pond



Link

Routing Diagram for 21198 Lebanon Ford Pre
Prepared by Microsoft, Printed 6/11/2021
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21198 Lebanon Ford Pre

Prepared by Microsoft

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Page 2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
33,939	61	>75% Grass cover, Good, HSG B (ES1, ES2, ES3, ES4)
107,459	98	Unconnected roofs, HSG B (ES1, ES2, ES3, ES4)
141,398	89	TOTAL AREA

21198 Lebanon Ford Pre

Prepared by Microsoft

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Page 3

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
141,398	HSG B	ES1, ES2, ES3, ES4
0	HSG C	
0	HSG D	
0	Other	
141,398		TOTAL AREA

21198 Lebanon Ford Pre*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 Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentES1: West End of Lot Plus Runoff Area=60,713 sf 75.41% Impervious Runoff Depth=1.45"
Tc=5.0 min CN=89 Runoff=3.71 cfs 7,360 cf

SubcatchmentES2: Northwest Corner Runoff Area=9,494 sf 83.42% Impervious Runoff Depth=1.69"
Tc=5.0 min CN=92 Runoff=0.66 cfs 1,340 cf

SubcatchmentES3: Northeast Corner Runoff Area=36,822 sf 88.83% Impervious Runoff Depth=1.87"
Tc=5.0 min CN=94 Runoff=2.75 cfs 5,736 cf

SubcatchmentES4: Sotheast Corner Runoff Area=34,369 sf 61.23% Impervious Runoff Depth=1.12"
Tc=5.0 min CN=84 Runoff=1.64 cfs 3,196 cf

Link POI-1: Offsite Inflow=3.71 cfs 7,360 cf
Primary=3.71 cfs 7,360 cf

Link POI-2: Offsite Inflow=0.66 cfs 1,340 cf
Primary=0.66 cfs 1,340 cf

Link POI-3: Offsite Inflow=4.39 cfs 8,932 cf
Primary=4.39 cfs 8,932 cf

Total Runoff Area = 141,398 sf Runoff Volume = 17,632 cf Average Runoff Depth = 1.50"
24.00% Pervious = 33,939 sf 76.00% Impervious = 107,459 sf

21198 Lebanon Ford Pre*Type II 24-hr 10-YR Rainfall=3.59"*

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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 Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentES1: West End of Lot Plus Runoff Area=60,713 sf 75.41% Impervious Runoff Depth=2.44"
Tc=5.0 min CN=89 Runoff=6.07 cfs 12,347 cf

SubcatchmentES2: Northwest Corner Runoff Area=9,494 sf 83.42% Impervious Runoff Depth=2.72"
Tc=5.0 min CN=92 Runoff=1.03 cfs 2,154 cf

SubcatchmentES3: Northeast Corner Runoff Area=36,822 sf 88.83% Impervious Runoff Depth=2.92"
Tc=5.0 min CN=94 Runoff=4.17 cfs 8,970 cf

SubcatchmentES4: Sotheast Corner Runoff Area=34,369 sf 61.23% Impervious Runoff Depth=2.01"
Tc=5.0 min CN=84 Runoff=2.92 cfs 5,768 cf

Link POI-1: Offsite Inflow=6.07 cfs 12,347 cf
Primary=6.07 cfs 12,347 cf

Link POI-2: Offsite Inflow=1.03 cfs 2,154 cf
Primary=1.03 cfs 2,154 cf

Link POI-3: Offsite Inflow=7.09 cfs 14,738 cf
Primary=7.09 cfs 14,738 cf

Total Runoff Area = 141,398 sf Runoff Volume = 29,240 cf Average Runoff Depth = 2.48"
24.00% Pervious = 33,939 sf 76.00% Impervious = 107,459 sf

21198 Lebanon Ford Pre*Type II 24-hr 25-YR Rainfall=4.41"*

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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 Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentES1: West End of Lot Plus Runoff Area=60,713 sf 75.41% Impervious Runoff Depth=3.21"
Tc=5.0 min CN=89 Runoff=7.85 cfs 16,240 cf

SubcatchmentES2: Northwest Corner Runoff Area=9,494 sf 83.42% Impervious Runoff Depth=3.51"
Tc=5.0 min CN=92 Runoff=1.30 cfs 2,781 cf

SubcatchmentES3: Northeast Corner Runoff Area=36,822 sf 88.83% Impervious Runoff Depth=3.73"
Tc=5.0 min CN=94 Runoff=5.23 cfs 11,436 cf

SubcatchmentES4: Sotheast Corner Runoff Area=34,369 sf 61.23% Impervious Runoff Depth=2.74"
Tc=5.0 min CN=84 Runoff=3.91 cfs 7,835 cf

Link POI-1: Offsite Inflow=7.85 cfs 16,240 cf
Primary=7.85 cfs 16,240 cf

Link POI-2: Offsite Inflow=1.30 cfs 2,781 cf
Primary=1.30 cfs 2,781 cf

Link POI-3: Offsite Inflow=9.15 cfs 19,271 cf
Primary=9.15 cfs 19,271 cf

Total Runoff Area = 141,398 sf Runoff Volume = 38,292 cf Average Runoff Depth = 3.25"
24.00% Pervious = 33,939 sf 76.00% Impervious = 107,459 sf

21198 Lebanon Ford Pre*Type II 24-hr 50-YR Rainfall=5.16"*

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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 Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentES1: West End of Lot Plus Runoff Area=60,713 sf 75.41% Impervious Runoff Depth=3.93"
Tc=5.0 min CN=89 Runoff=9.47 cfs 19,860 cf

SubcatchmentES2: Northwest Corner Runoff Area=9,494 sf 83.42% Impervious Runoff Depth=4.25"
Tc=5.0 min CN=92 Runoff=1.56 cfs 3,359 cf

SubcatchmentES3: Northeast Corner Runoff Area=36,822 sf 88.83% Impervious Runoff Depth=4.47"
Tc=5.0 min CN=94 Runoff=6.20 cfs 13,704 cf

SubcatchmentES4: Sotheast Corner Runoff Area=34,369 sf 61.23% Impervious Runoff Depth=3.42"
Tc=5.0 min CN=84 Runoff=4.83 cfs 9,787 cf

Link POI-1: Offsite Inflow=9.47 cfs 19,860 cf
Primary=9.47 cfs 19,860 cf

Link POI-2: Offsite Inflow=1.56 cfs 3,359 cf
Primary=1.56 cfs 3,359 cf

Link POI-3: Offsite Inflow=11.03 cfs 23,490 cf
Primary=11.03 cfs 23,490 cf

Total Runoff Area = 141,398 sf Runoff Volume = 46,709 cf Average Runoff Depth = 3.96"
24.00% Pervious = 33,939 sf 76.00% Impervious = 107,459 sf

21198 Lebanon Ford Pre*Type II 24-hr 100-YR Rainfall=6.04"*

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Page 8

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 Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentES1: West End of Lot Plus Runoff Area=60,713 sf 75.41% Impervious Runoff Depth=4.77"
Tc=5.0 min CN=89 Runoff=11.37 cfs 24,155 cf

SubcatchmentES2: Northwest Corner Runoff Area=9,494 sf 83.42% Impervious Runoff Depth=5.11"
Tc=5.0 min CN=92 Runoff=1.85 cfs 4,042 cf

SubcatchmentES3: Northeast Corner Runoff Area=36,822 sf 88.83% Impervious Runoff Depth=5.34"
Tc=5.0 min CN=94 Runoff=7.32 cfs 16,374 cf

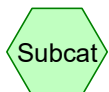
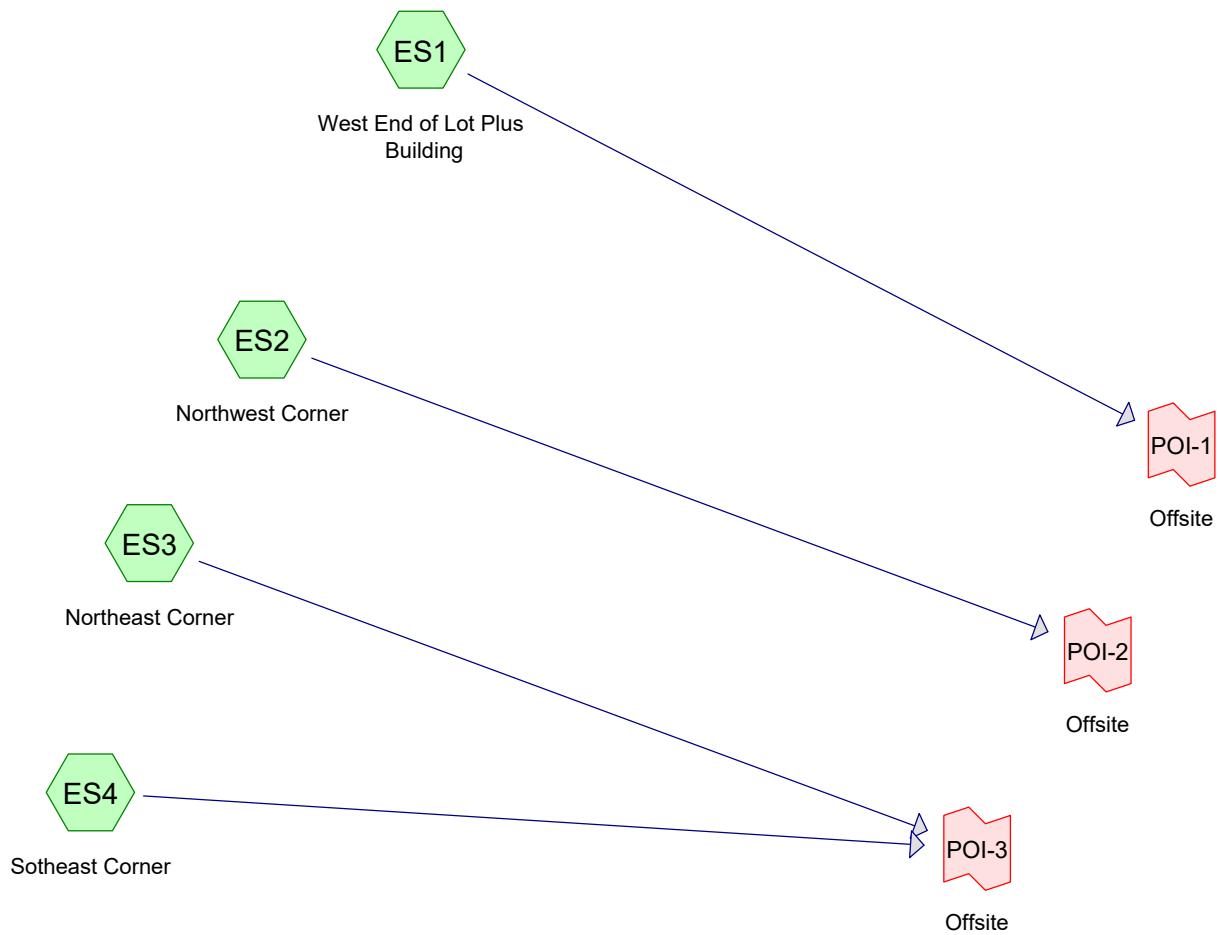
SubcatchmentES4: Sotheast Corner Runoff Area=34,369 sf 61.23% Impervious Runoff Depth=4.23"
Tc=5.0 min CN=84 Runoff=5.92 cfs 12,126 cf

Link POI-1: Offsite Inflow=11.37 cfs 24,155 cf
Primary=11.37 cfs 24,155 cf

Link POI-2: Offsite Inflow=1.85 cfs 4,042 cf
Primary=1.85 cfs 4,042 cf

Link POI-3: Offsite Inflow=13.24 cfs 28,501 cf
Primary=13.24 cfs 28,501 cf

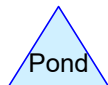
Total Runoff Area = 141,398 sf Runoff Volume = 56,697 cf Average Runoff Depth = 4.81"
24.00% Pervious = 33,939 sf 76.00% Impervious = 107,459 sf



Subcat



Reach



Pond



Link

Routing Diagram for 21198 Lebanon Ford Pre
Prepared by Microsoft, Printed 6/11/2021
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Summary for Subcatchment ES1: West End of Lot Plus Building

Runoff = 6.07 cfs @ 11.96 hrs, Volume= 12,347 cf, Depth= 2.44"

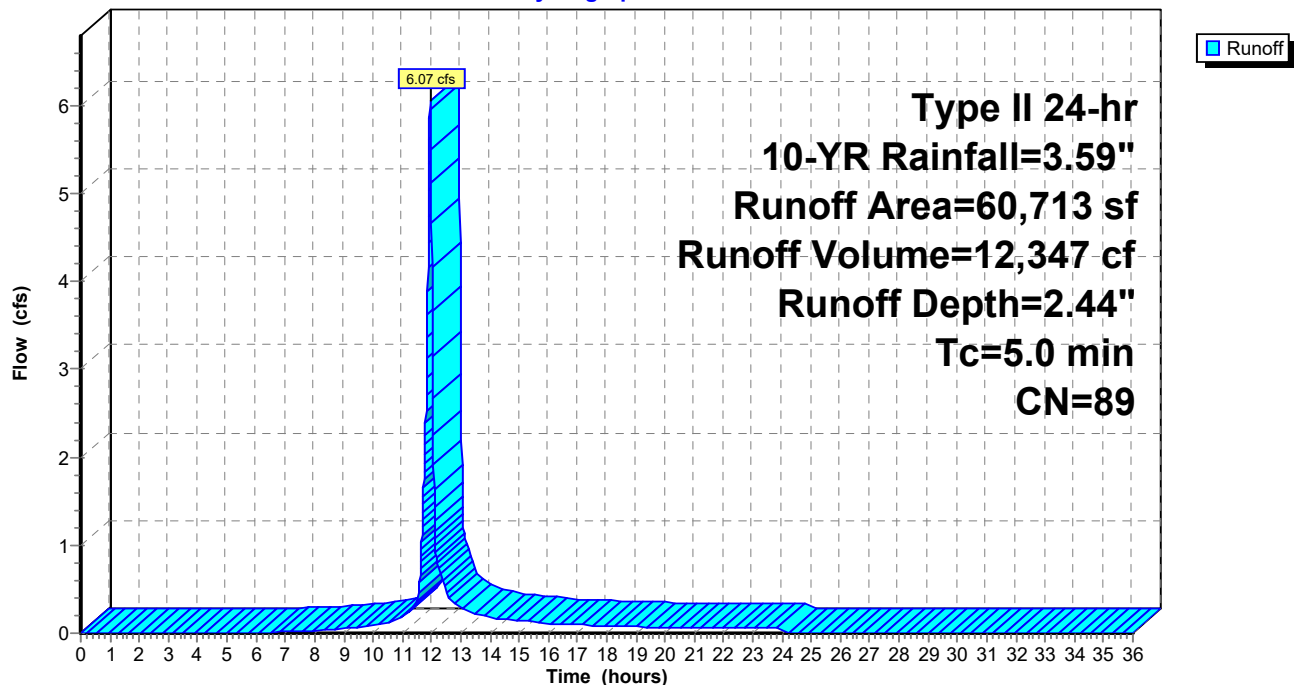
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.59"

Area (sf)	CN	Description
14,928	61	>75% Grass cover, Good, HSG B
45,785	98	Unconnected roofs, HSG B
60,713	89	Weighted Average
14,928		24.59% Pervious Area
45,785		75.41% Impervious Area
45,785		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment ES1: West End of Lot Plus Building

Hydrograph



Summary for Subcatchment ES2: Northwest Corner

Runoff = 1.03 cfs @ 11.96 hrs, Volume= 2,154 cf, Depth= 2.72"

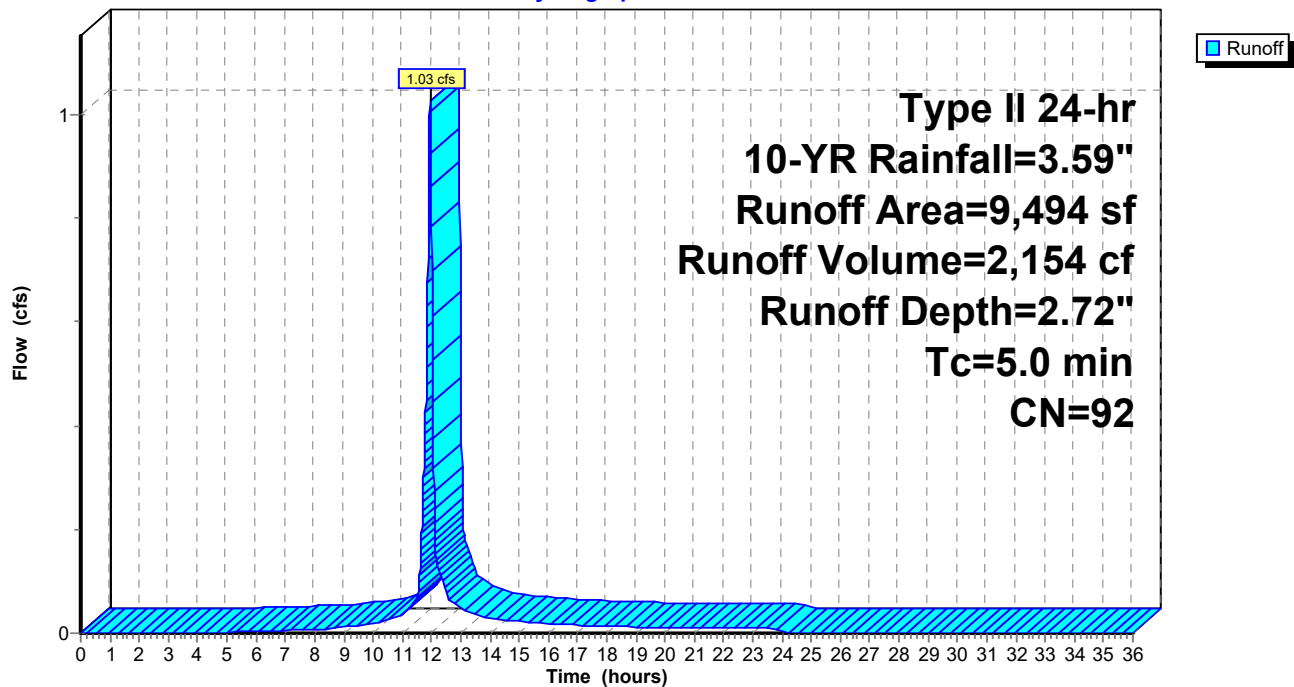
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.59"

Area (sf)	CN	Description
1,574	61	>75% Grass cover, Good, HSG B
7,920	98	Unconnected roofs, HSG B
9,494	92	Weighted Average
1,574		16.58% Pervious Area
7,920		83.42% Impervious Area
7,920		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment ES2: Northwest Corner

Hydrograph



Summary for Subcatchment ES3: Northeast Corner

Runoff = 4.17 cfs @ 11.96 hrs, Volume= 8,970 cf, Depth= 2.92"

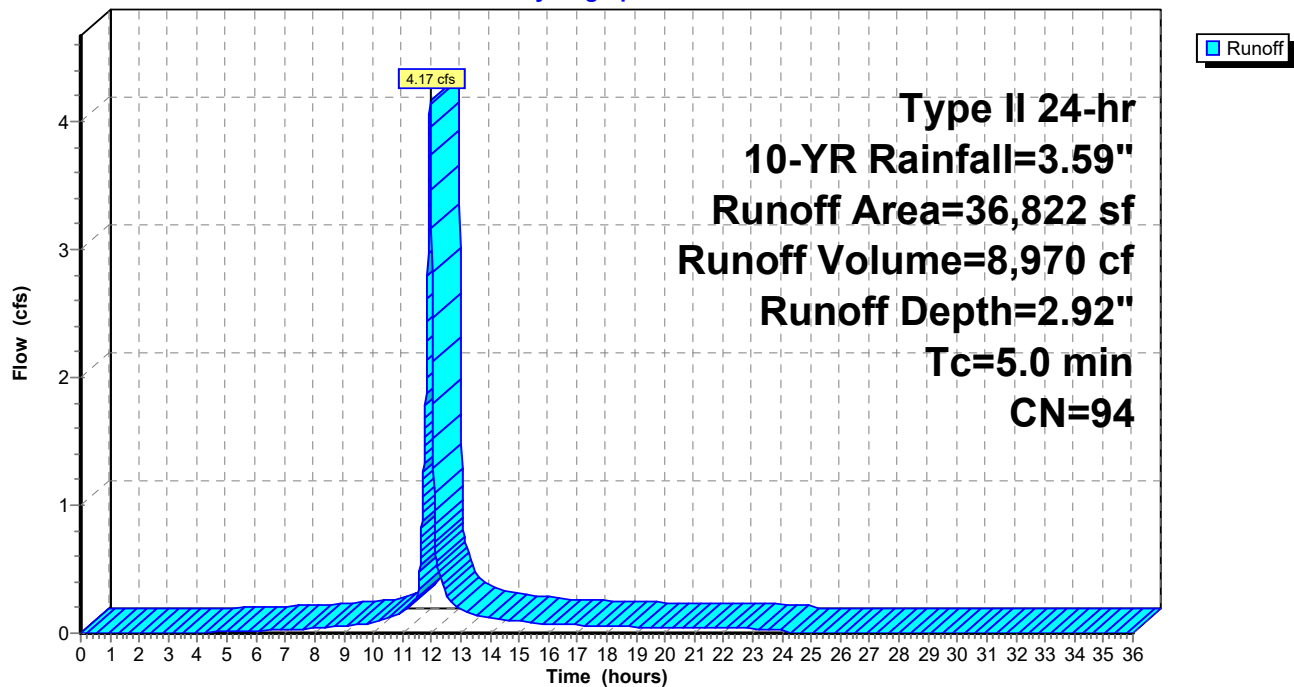
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.59"

Area (sf)	CN	Description
4,113	61	>75% Grass cover, Good, HSG B
32,709	98	Unconnected roofs, HSG B
36,822	94	Weighted Average
4,113		11.17% Pervious Area
32,709		88.83% Impervious Area
32,709		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment ES3: Northeast Corner

Hydrograph



Summary for Subcatchment ES4: Sotheast Corner

Runoff = 2.92 cfs @ 11.96 hrs, Volume= 5,768 cf, Depth= 2.01"

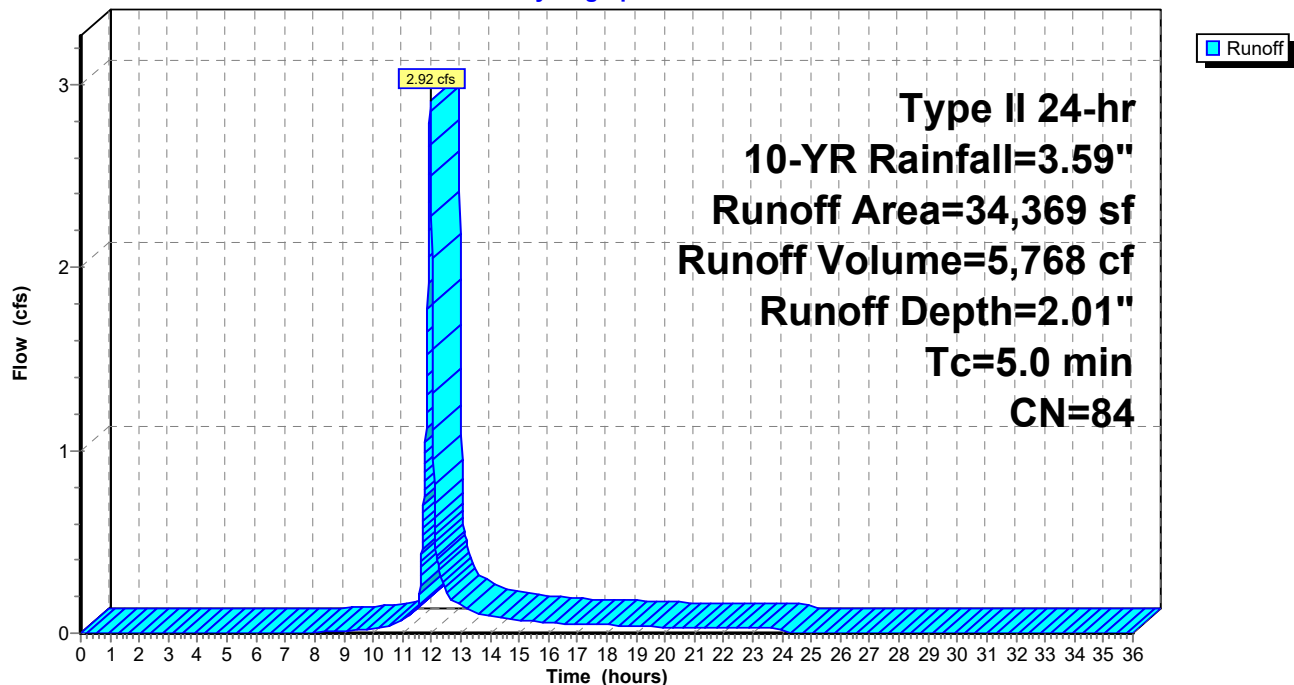
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.59"

Area (sf)	CN	Description
13,324	61	>75% Grass cover, Good, HSG B
21,045	98	Unconnected roofs, HSG B
34,369	84	Weighted Average
13,324		38.77% Pervious Area
21,045		61.23% Impervious Area
21,045		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment ES4: Sotheast Corner

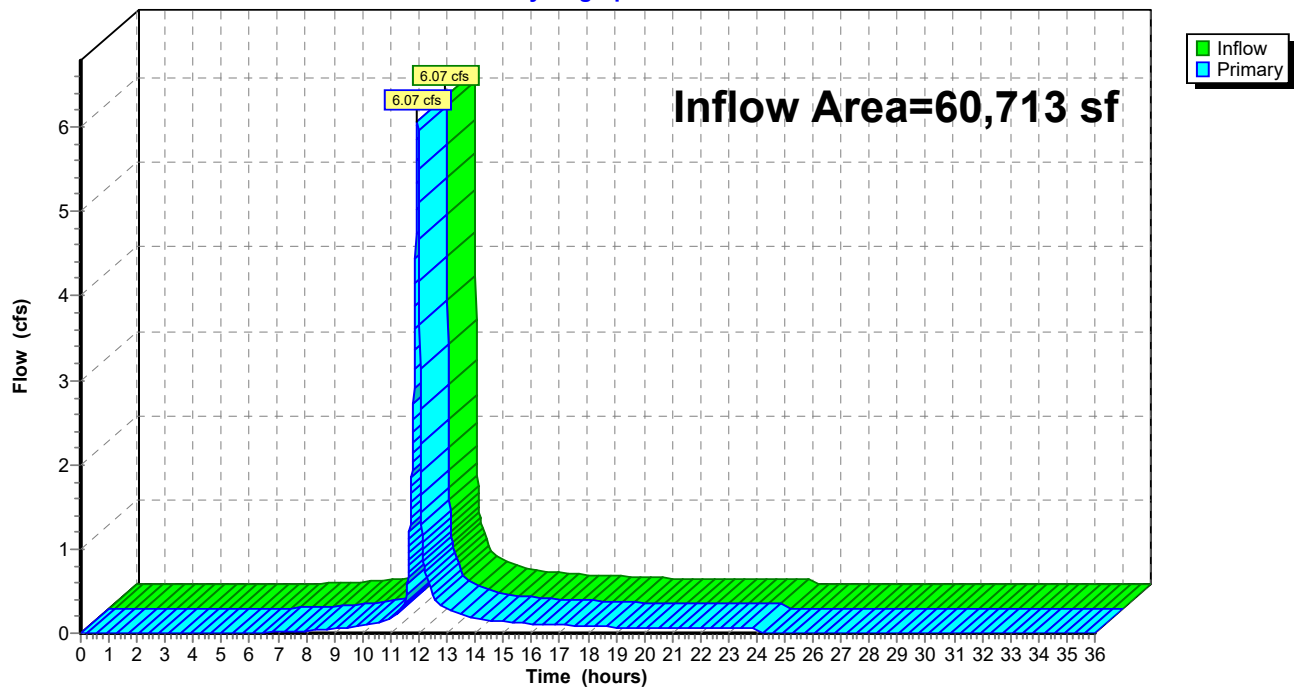
Hydrograph



Summary for Link POI-1: Offsite

Inflow Area = 60,713 sf, 75.41% Impervious, Inflow Depth = 2.44" for 10-YR event
Inflow = 6.07 cfs @ 11.96 hrs, Volume= 12,347 cf
Primary = 6.07 cfs @ 11.96 hrs, Volume= 12,347 cf, Atten= 0%, Lag= 0.0 min

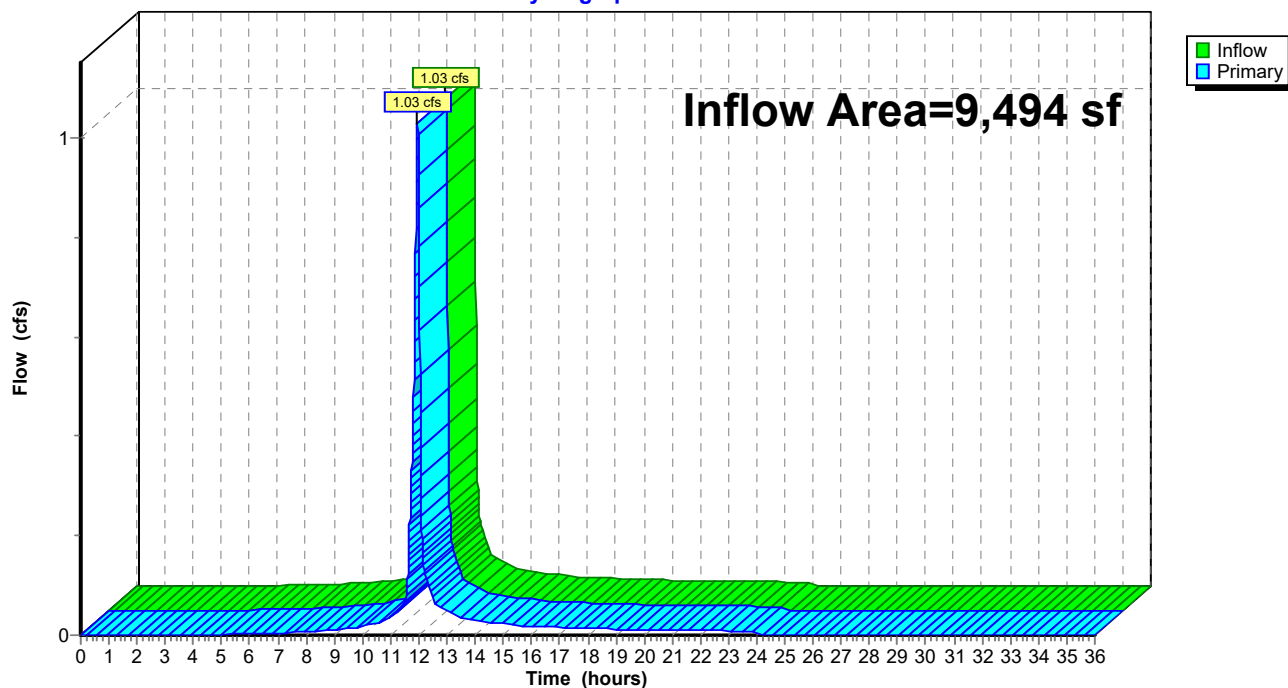
Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link POI-1: Offsite**Hydrograph**

Summary for Link POI-2: Offsite

Inflow Area = 9,494 sf, 83.42% Impervious, Inflow Depth = 2.72" for 10-YR event
Inflow = 1.03 cfs @ 11.96 hrs, Volume= 2,154 cf
Primary = 1.03 cfs @ 11.96 hrs, Volume= 2,154 cf, Atten= 0%, Lag= 0.0 min

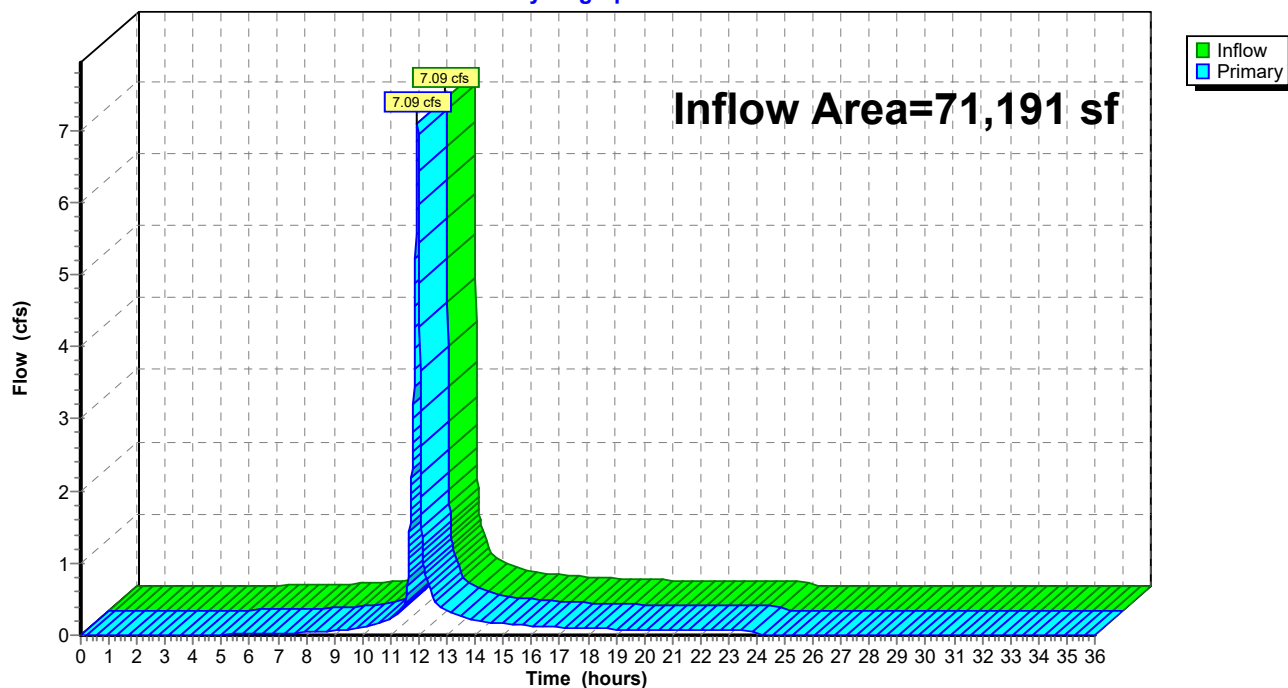
Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

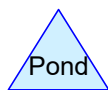
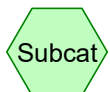
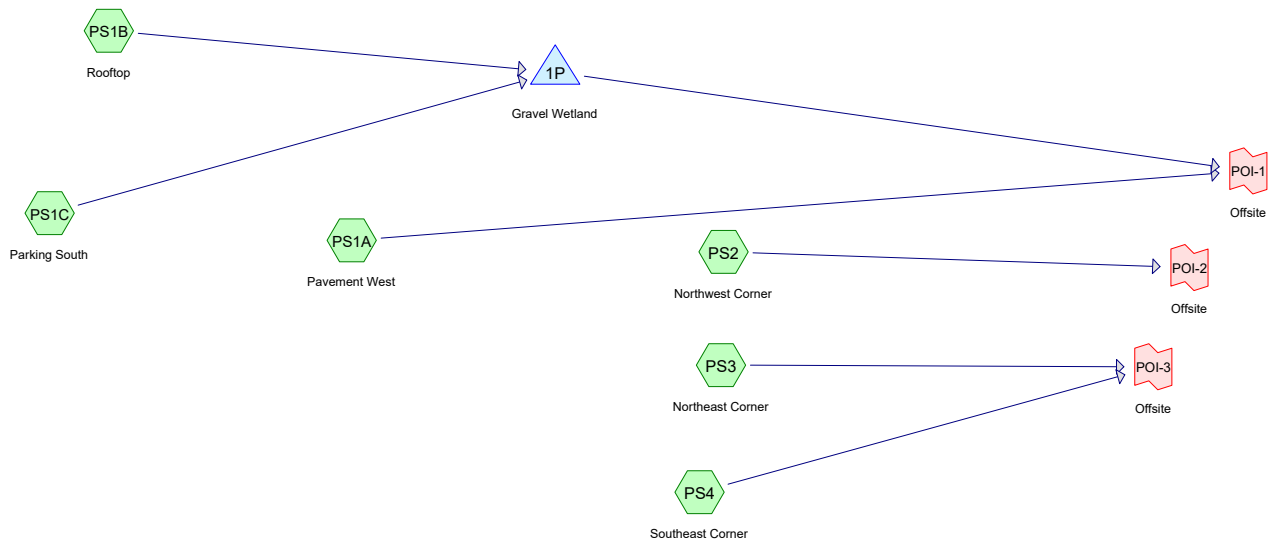
Link POI-2: Offsite**Hydrograph**

Summary for Link POI-3: Offsite

Inflow Area = 71,191 sf, 75.51% Impervious, Inflow Depth = 2.48" for 10-YR event
Inflow = 7.09 cfs @ 11.96 hrs, Volume= 14,738 cf
Primary = 7.09 cfs @ 11.96 hrs, Volume= 14,738 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link POI-3: Offsite**Hydrograph**



Routing Diagram for 21198 Lebanon Ford Post
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21198 Lebanon Ford Post

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Page 2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
26,260	61	>75% Grass cover, Good, HSG B (PS1A, PS1C, PS2, PS3, PS4)
115,132	98	Unconnected roofs, HSG B (PS1A, PS1B, PS1C, PS2, PS3, PS4)
141,392	91	TOTAL AREA

21198 Lebanon Ford Post

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Page 3

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
141,392	HSG B	PS1A, PS1B, PS1C, PS2, PS3, PS4
0	HSG C	
0	HSG D	
0	Other	
141,392		TOTAL AREA

21198 Lebanon Ford Post*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 Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentPS1A: Pavement West Runoff Area=21,326 sf 78.31% Impervious Runoff Depth=1.53"
Tc=5.0 min CN=90 Runoff=1.36 cfs 2,721 cf

SubcatchmentPS1B: Rooftop Runoff Area=36,943 sf 100.00% Impervious Runoff Depth=2.27"
Tc=5.0 min CN=98 Runoff=3.07 cfs 6,991 cf

SubcatchmentPS1C: Parking South Runoff Area=18,745 sf 52.90% Impervious Runoff Depth=0.94"
Tc=5.0 min CN=81 Runoff=0.75 cfs 1,472 cf

SubcatchmentPS2: Northwest Corner Runoff Area=9,494 sf 83.42% Impervious Runoff Depth=1.69"
Tc=5.0 min CN=92 Runoff=0.66 cfs 1,340 cf

SubcatchmentPS3: Northeast Corner Runoff Area=31,735 sf 88.87% Impervious Runoff Depth=1.87"
Tc=5.0 min CN=94 Runoff=2.37 cfs 4,944 cf

SubcatchmentPS4: Southeast Corner Runoff Area=23,149 sf 66.74% Impervious Runoff Depth=1.24"
Tc=5.0 min CN=86 Runoff=1.23 cfs 2,399 cf

Pond 1P: Gravel Wetland Peak Elev=495.92' Storage=4,695 cf Inflow=3.82 cfs 8,463 cf
Outflow=0.59 cfs 5,908 cf

Link POI-1: Offsite Inflow=1.81 cfs 8,629 cf
Primary=1.81 cfs 8,629 cf

Link POI-2: Offsite Inflow=0.66 cfs 1,340 cf
Primary=0.66 cfs 1,340 cf

Link POI-3: Offsite Inflow=3.59 cfs 7,342 cf
Primary=3.59 cfs 7,342 cf

Total Runoff Area = 141,392 sf Runoff Volume = 19,866 cf Average Runoff Depth = 1.69"
18.57% Pervious = 26,260 sf 81.43% Impervious = 115,132 sf

21198 Lebanon Ford Post*Type II 24-hr 10-YR Rainfall=3.59"*

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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 Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentPS1A: Pavement West	Runoff Area=21,326 sf 78.31% Impervious Runoff Depth=2.53" Tc=5.0 min CN=90 Runoff=2.19 cfs 4,500 cf
SubcatchmentPS1B: Rooftop	Runoff Area=36,943 sf 100.00% Impervious Runoff Depth=3.36" Tc=5.0 min CN=98 Runoff=4.45 cfs 10,332 cf
SubcatchmentPS1C: Parking South	Runoff Area=18,745 sf 52.90% Impervious Runoff Depth=1.78" Tc=5.0 min CN=81 Runoff=1.42 cfs 2,783 cf
SubcatchmentPS2: Northwest Corner	Runoff Area=9,494 sf 83.42% Impervious Runoff Depth=2.72" Tc=5.0 min CN=92 Runoff=1.03 cfs 2,154 cf
SubcatchmentPS3: Northeast Corner	Runoff Area=31,735 sf 88.87% Impervious Runoff Depth=2.92" Tc=5.0 min CN=94 Runoff=3.60 cfs 7,731 cf
SubcatchmentPS4: Southeast Corner	Runoff Area=23,149 sf 66.74% Impervious Runoff Depth=2.18" Tc=5.0 min CN=86 Runoff=2.11 cfs 4,202 cf
Pond 1P: Gravel Wetland	Peak Elev=496.55' Storage=7,075 cf Inflow=5.87 cfs 13,116 cf Outflow=1.09 cfs 10,561 cf
Link POI-1: Offsite	Inflow=2.90 cfs 15,061 cf Primary=2.90 cfs 15,061 cf
Link POI-2: Offsite	Inflow=1.03 cfs 2,154 cf Primary=1.03 cfs 2,154 cf
Link POI-3: Offsite	Inflow=5.70 cfs 11,933 cf Primary=5.70 cfs 11,933 cf

Total Runoff Area = 141,392 sf Runoff Volume = 31,703 cf Average Runoff Depth = 2.69"
18.57% Pervious = 26,260 sf 81.43% Impervious = 115,132 sf

21198 Lebanon Ford Post*Type II 24-hr 25-YR Rainfall=4.41"*

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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 Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentPS1A: Pavement West	Runoff Area=21,326 sf 78.31% Impervious Runoff Depth=3.31" Tc=5.0 min CN=90 Runoff=2.82 cfs 5,882 cf
SubcatchmentPS1B: Rooftop	Runoff Area=36,943 sf 100.00% Impervious Runoff Depth=4.17" Tc=5.0 min CN=98 Runoff=5.49 cfs 12,851 cf
SubcatchmentPS1C: Parking South	Runoff Area=18,745 sf 52.90% Impervious Runoff Depth=2.47" Tc=5.0 min CN=81 Runoff=1.95 cfs 3,859 cf
SubcatchmentPS2: Northwest Corner	Runoff Area=9,494 sf 83.42% Impervious Runoff Depth=3.51" Tc=5.0 min CN=92 Runoff=1.30 cfs 2,781 cf
SubcatchmentPS3: Northeast Corner	Runoff Area=31,735 sf 88.87% Impervious Runoff Depth=3.73" Tc=5.0 min CN=94 Runoff=4.51 cfs 9,856 cf
SubcatchmentPS4: Southeast Corner	Runoff Area=23,149 sf 66.74% Impervious Runoff Depth=2.92" Tc=5.0 min CN=86 Runoff=2.78 cfs 5,634 cf
Pond 1P: Gravel Wetland	Peak Elev=496.76' Storage=8,000 cf Inflow=7.44 cfs 16,710 cf Outflow=3.59 cfs 14,155 cf
Link POI-1: Offsite	Inflow=5.29 cfs 20,037 cf Primary=5.29 cfs 20,037 cf
Link POI-2: Offsite	Inflow=1.30 cfs 2,781 cf Primary=1.30 cfs 2,781 cf
Link POI-3: Offsite	Inflow=7.29 cfs 15,490 cf Primary=7.29 cfs 15,490 cf

Total Runoff Area = 141,392 sf Runoff Volume = 40,862 cf Average Runoff Depth = 3.47"
18.57% Pervious = 26,260 sf 81.43% Impervious = 115,132 sf

21198 Lebanon Ford Post*Type II 24-hr 50-YR Rainfall=5.16"*

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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 Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentPS1A: Pavement West	Runoff Area=21,326 sf 78.31% Impervious Runoff Depth=4.03" Tc=5.0 min CN=90 Runoff=3.39 cfs 7,163 cf
SubcatchmentPS1B: Rooftop	Runoff Area=36,943 sf 100.00% Impervious Runoff Depth=4.92" Tc=5.0 min CN=98 Runoff=6.43 cfs 15,156 cf
SubcatchmentPS1C: Parking South	Runoff Area=18,745 sf 52.90% Impervious Runoff Depth=3.13" Tc=5.0 min CN=81 Runoff=2.45 cfs 4,885 cf
SubcatchmentPS2: Northwest Corner	Runoff Area=9,494 sf 83.42% Impervious Runoff Depth=4.25" Tc=5.0 min CN=92 Runoff=1.56 cfs 3,359 cf
SubcatchmentPS3: Northeast Corner	Runoff Area=31,735 sf 88.87% Impervious Runoff Depth=4.47" Tc=5.0 min CN=94 Runoff=5.34 cfs 11,810 cf
SubcatchmentPS4: Southeast Corner	Runoff Area=23,149 sf 66.74% Impervious Runoff Depth=3.62" Tc=5.0 min CN=86 Runoff=3.40 cfs 6,977 cf
Pond 1P: Gravel Wetland	Peak Elev=496.88' Storage=8,571 cf Inflow=8.88 cfs 20,040 cf Outflow=5.67 cfs 17,486 cf
Link POI-1: Offsite	Inflow=8.16 cfs 24,649 cf Primary=8.16 cfs 24,649 cf
Link POI-2: Offsite	Inflow=1.56 cfs 3,359 cf Primary=1.56 cfs 3,359 cf
Link POI-3: Offsite	Inflow=8.74 cfs 18,787 cf Primary=8.74 cfs 18,787 cf

Total Runoff Area = 141,392 sf Runoff Volume = 49,350 cf Average Runoff Depth = 4.19"
18.57% Pervious = 26,260 sf 81.43% Impervious = 115,132 sf

21198 Lebanon Ford Post*Type II 24-hr 100-YR Rainfall=6.04"*

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Page 8

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 Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentPS1A: Pavement West	Runoff Area=21,326 sf 78.31% Impervious Runoff Depth=4.88" Tc=5.0 min CN=90 Runoff=4.05 cfs 8,681 cf
SubcatchmentPS1B: Rooftop	Runoff Area=36,943 sf 100.00% Impervious Runoff Depth=5.80" Tc=5.0 min CN=98 Runoff=7.54 cfs 17,861 cf
SubcatchmentPS1C: Parking South	Runoff Area=18,745 sf 52.90% Impervious Runoff Depth=3.92" Tc=5.0 min CN=81 Runoff=3.04 cfs 6,124 cf
SubcatchmentPS2: Northwest Corner	Runoff Area=9,494 sf 83.42% Impervious Runoff Depth=5.11" Tc=5.0 min CN=92 Runoff=1.85 cfs 4,042 cf
SubcatchmentPS3: Northeast Corner	Runoff Area=31,735 sf 88.87% Impervious Runoff Depth=5.34" Tc=5.0 min CN=94 Runoff=6.31 cfs 14,112 cf
SubcatchmentPS4: Southeast Corner	Runoff Area=23,149 sf 66.74% Impervious Runoff Depth=4.45" Tc=5.0 min CN=86 Runoff=4.13 cfs 8,579 cf
Pond 1P: Gravel Wetland	Peak Elev=496.98' Storage=9,105 cf Inflow=10.57 cfs 23,985 cf Outflow=7.83 cfs 21,430 cf
Link POI-1: Offsite	Inflow=11.15 cfs 30,111 cf Primary=11.15 cfs 30,111 cf
Link POI-2: Offsite	Inflow=1.85 cfs 4,042 cf Primary=1.85 cfs 4,042 cf
Link POI-3: Offsite	Inflow=10.44 cfs 22,692 cf Primary=10.44 cfs 22,692 cf

Total Runoff Area = 141,392 sf Runoff Volume = 59,400 cf Average Runoff Depth = 5.04"
18.57% Pervious = 26,260 sf 81.43% Impervious = 115,132 sf

21198 Lebanon Ford Post

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Type II 24-hr 10-YR Rainfall=3.59"

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Page 9

Summary for Subcatchment PS1A: Pavement West

Runoff = 2.19 cfs @ 11.96 hrs, Volume= 4,500 cf, Depth= 2.53"
Routed to Link POI-1 : Offsite

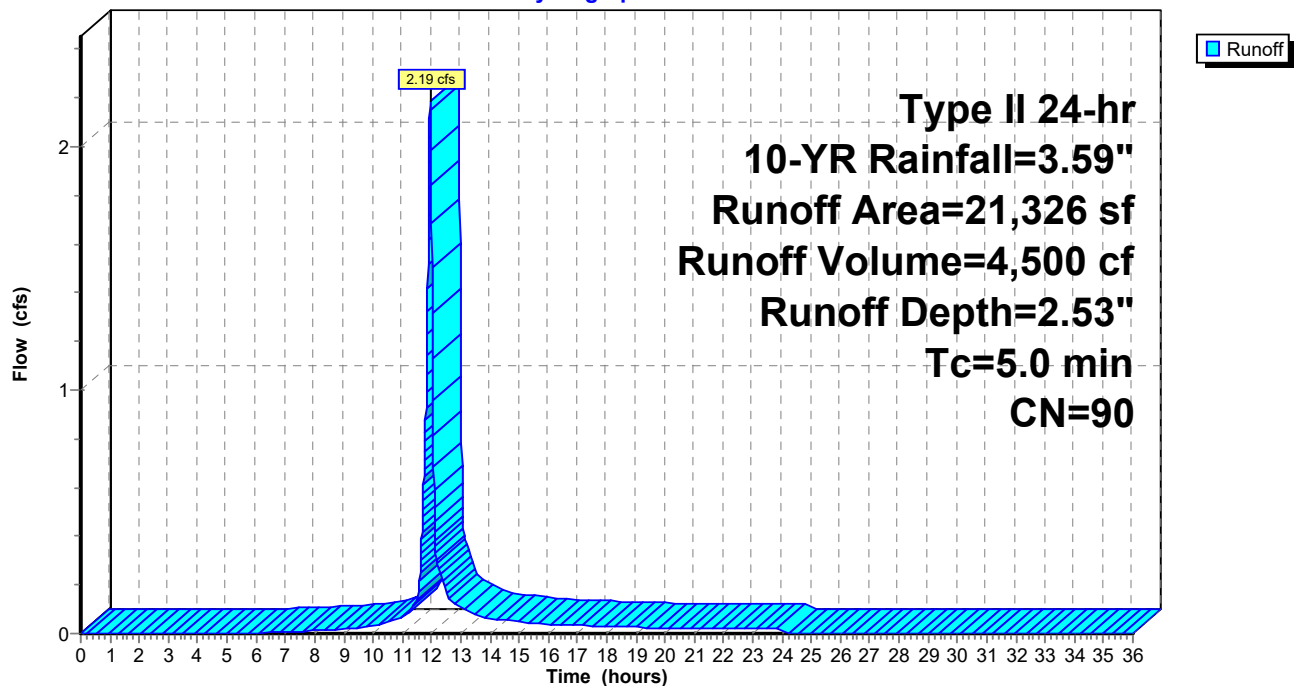
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.59"

Area (sf)	CN	Description
4,625	61	>75% Grass cover, Good, HSG B
16,701	98	Unconnected roofs, HSG B
21,326	90	Weighted Average
4,625		21.69% Pervious Area
16,701		78.31% Impervious Area
16,701		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment PS1A: Pavement West

Hydrograph



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Type II 24-hr 10-YR Rainfall=3.59"

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Page 10

Summary for Subcatchment PS1B: Rooftop

Runoff = 4.45 cfs @ 11.96 hrs, Volume= 10,332 cf, Depth= 3.36"
Routed to Pond 1P : Gravel Wetland

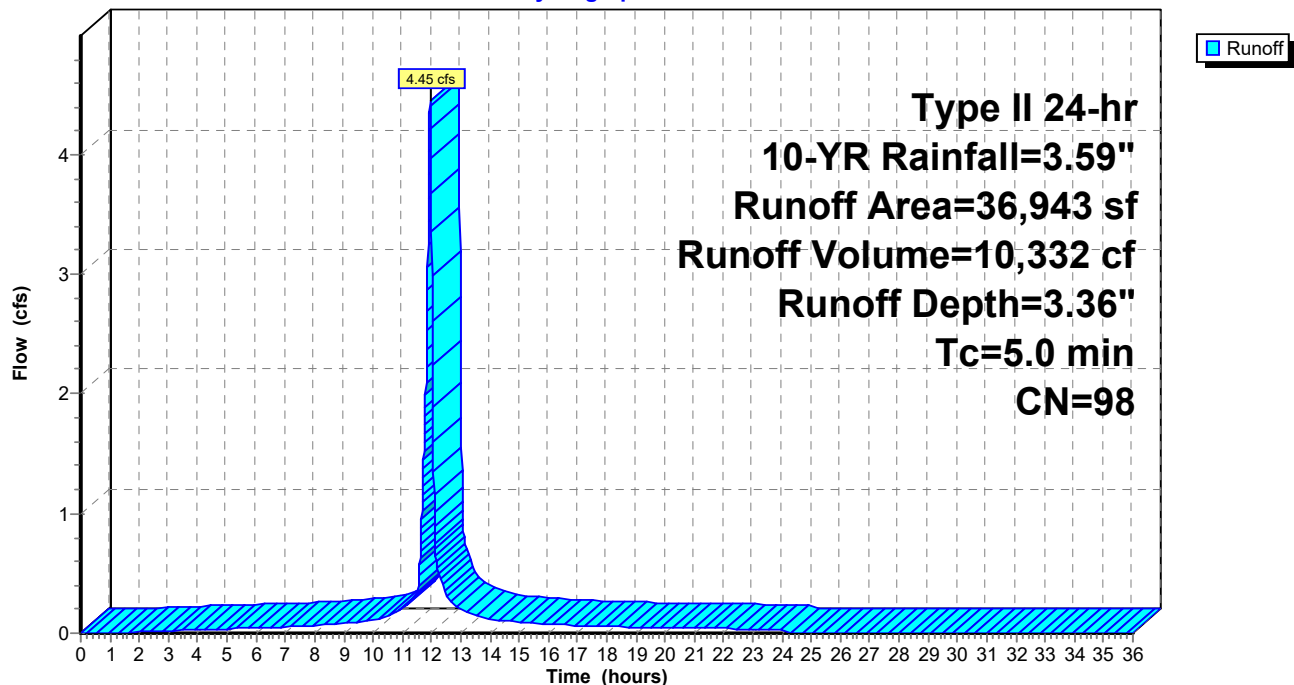
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.59"

Area (sf)	CN	Description
0	61	>75% Grass cover, Good, HSG B
36,943	98	Unconnected roofs, HSG B
36,943	98	Weighted Average
36,943		100.00% Impervious Area
36,943		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment PS1B: Rooftop

Hydrograph



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Type II 24-hr 10-YR Rainfall=3.59"

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Page 11

Summary for Subcatchment PS1C: Parking South

Runoff = 1.42 cfs @ 11.96 hrs, Volume= 2,783 cf, Depth= 1.78"
Routed to Pond 1P : Gravel Wetland

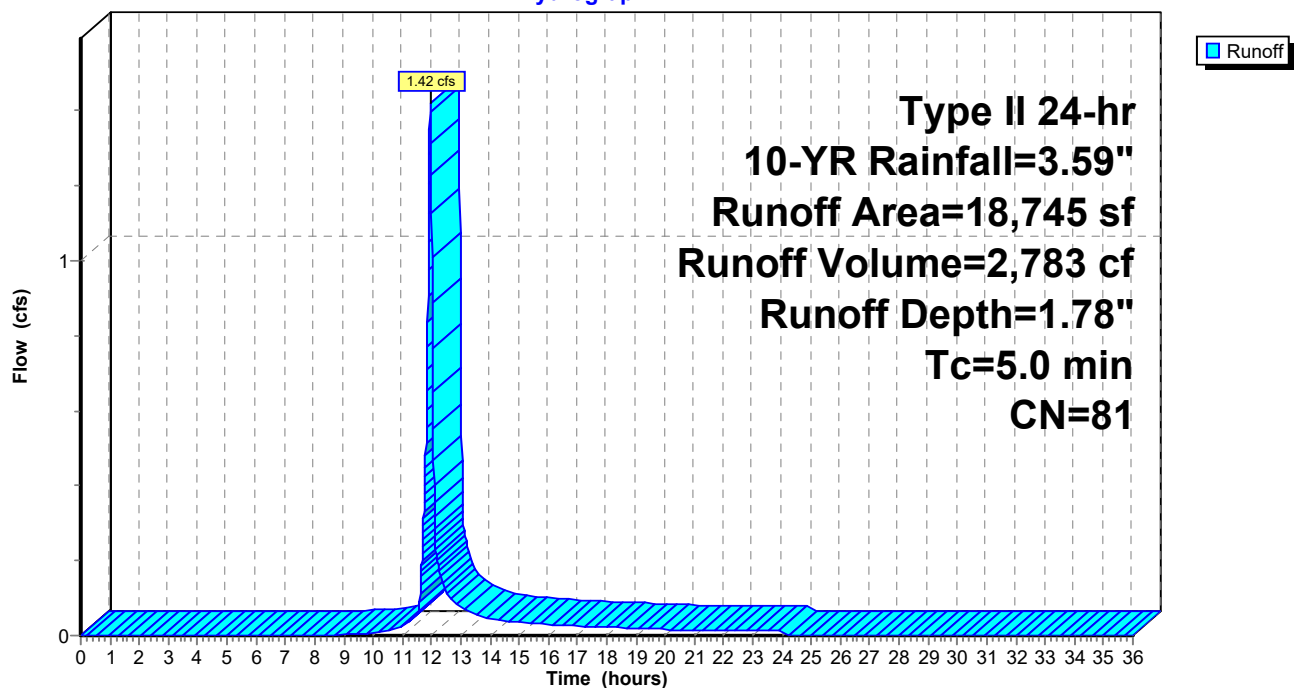
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.59"

Area (sf)	CN	Description
8,828	61	>75% Grass cover, Good, HSG B
9,917	98	Unconnected roofs, HSG B
18,745	81	Weighted Average
8,828		47.10% Pervious Area
9,917		52.90% Impervious Area
9,917		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment PS1C: Parking South

Hydrograph



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Type II 24-hr 10-YR Rainfall=3.59"

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Page 12

Summary for Subcatchment PS2: Northwest Corner

Runoff = 1.03 cfs @ 11.96 hrs, Volume= 2,154 cf, Depth= 2.72"
Routed to Link POI-2 : Offsite

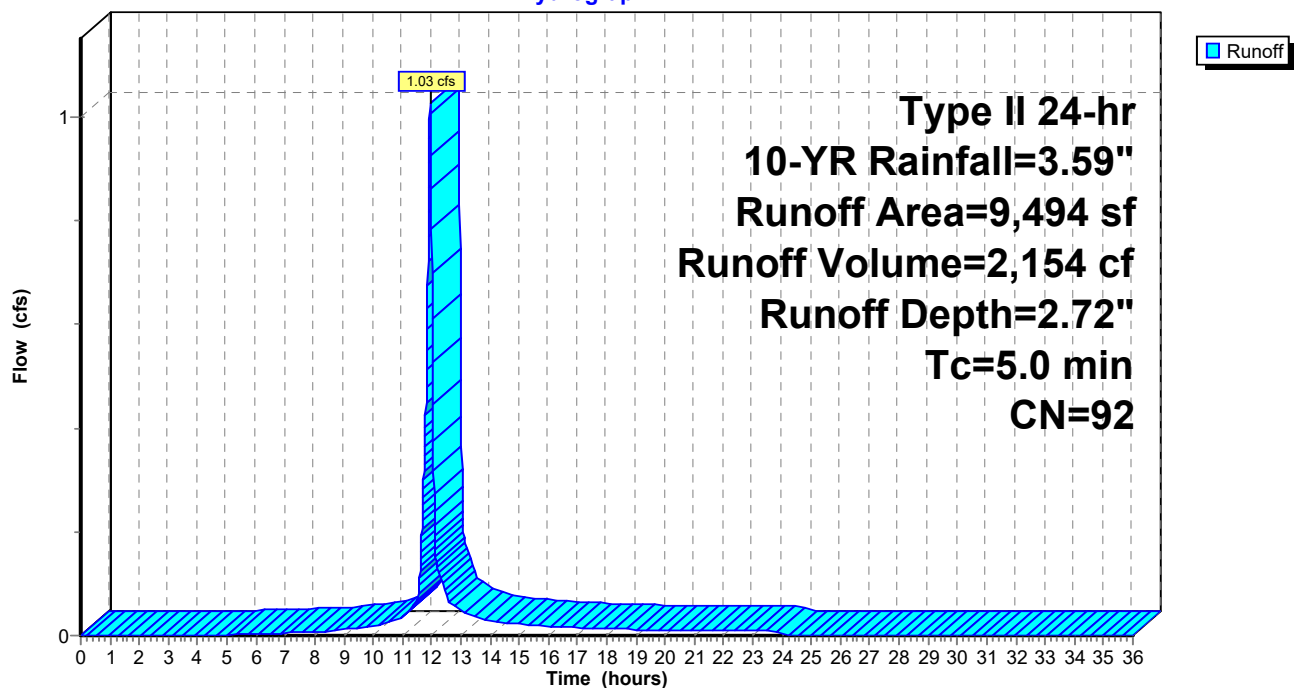
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.59"

Area (sf)	CN	Description
1,574	61	>75% Grass cover, Good, HSG B
7,920	98	Unconnected roofs, HSG B
9,494	92	Weighted Average
1,574		16.58% Pervious Area
7,920		83.42% Impervious Area
7,920		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment PS2: Northwest Corner

Hydrograph



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Type II 24-hr 10-YR Rainfall=3.59"

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Page 13

Summary for Subcatchment PS3: Northeast Corner

Runoff = 3.60 cfs @ 11.96 hrs, Volume= 7,731 cf, Depth= 2.92"
Routed to Link POI-3 : Offsite

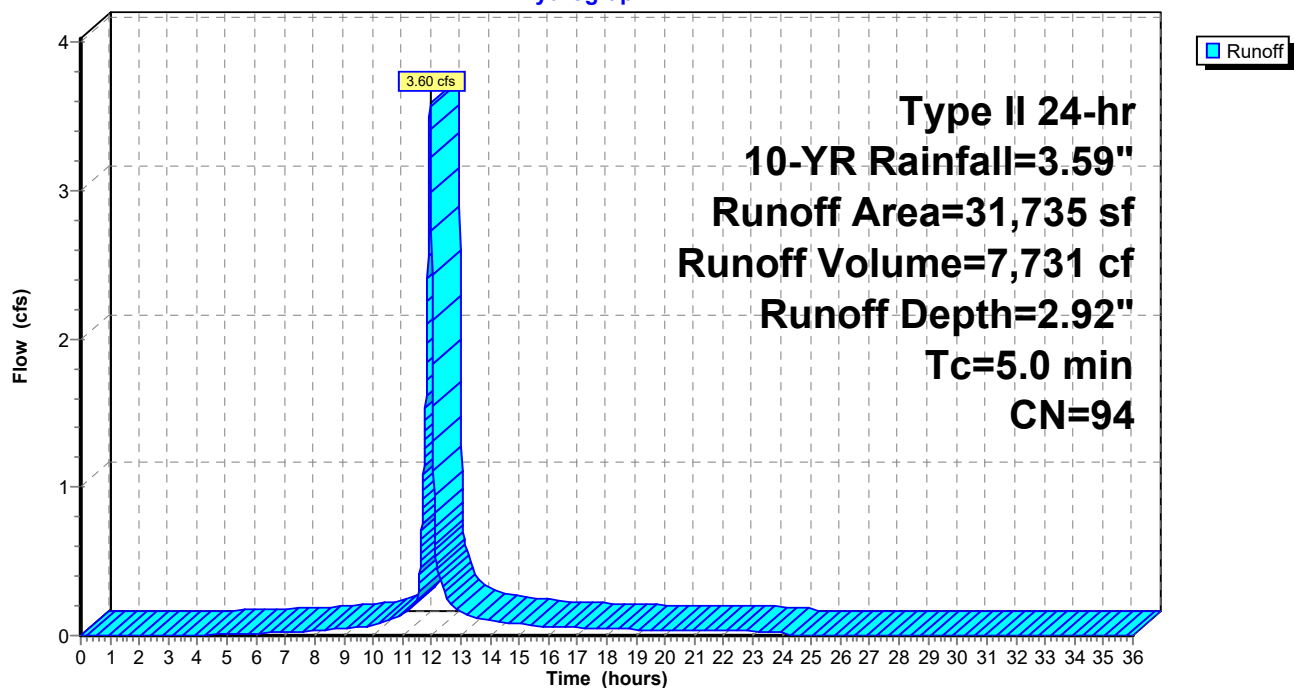
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.59"

Area (sf)	CN	Description
3,533	61	>75% Grass cover, Good, HSG B
28,202	98	Unconnected roofs, HSG B
31,735	94	Weighted Average
3,533		11.13% Pervious Area
28,202		88.87% Impervious Area
28,202		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment PS3: Northeast Corner

Hydrograph



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Type II 24-hr 10-YR Rainfall=3.59"

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Page 14

Summary for Subcatchment PS4: Southeast Corner

Runoff = 2.11 cfs @ 11.96 hrs, Volume= 4,202 cf, Depth= 2.18"
Routed to Link POI-3 : Offsite

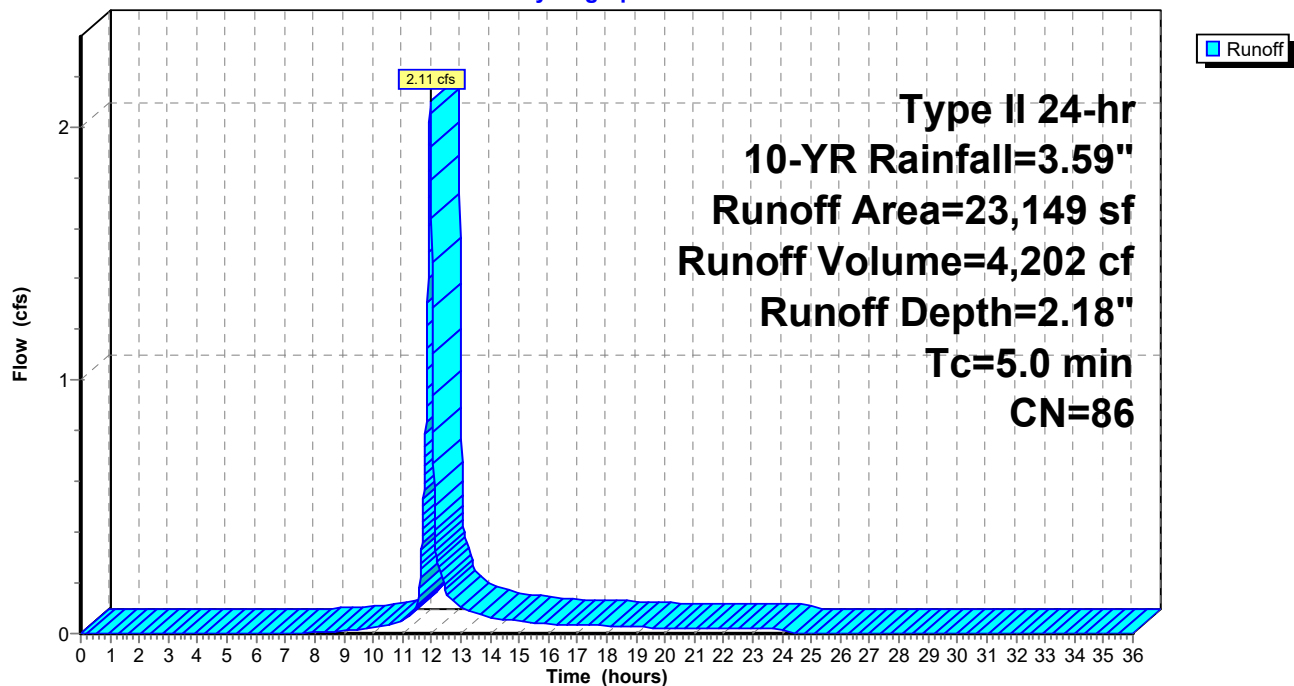
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.59"

Area (sf)	CN	Description
7,700	61	>75% Grass cover, Good, HSG B
15,449	98	Unconnected roofs, HSG B
23,149	86	Weighted Average
7,700		33.26% Pervious Area
15,449		66.74% Impervious Area
15,449		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment PS4: Southeast Corner

Hydrograph



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Type II 24-hr 10-YR Rainfall=3.59"

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Page 15

Summary for Pond 1P: Gravel Wetland

Inflow Area = 55,688 sf, 84.15% Impervious, Inflow Depth = 2.83" for 10-YR event
 Inflow = 5.87 cfs @ 11.96 hrs, Volume= 13,116 cf
 Outflow = 1.09 cfs @ 12.11 hrs, Volume= 10,561 cf, Atten= 81%, Lag= 9.3 min
 Primary = 1.09 cfs @ 12.11 hrs, Volume= 10,561 cf
 Routed to Link POI-1 : Offsite

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 496.55' @ 12.11 hrs Surf.Area= 4,340 sf Storage= 7,075 cf

Plug-Flow detention time= 201.5 min calculated for 10,561 cf (81% of inflow)
 Center-of-Mass det. time= 120.2 min (886.5 - 766.3)

Volume	Invert	Avail.Storage	Storage Description	
#1	492.00'	9,197 cf	Pond (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
492.00	1,961	0.0	0	0
495.00	1,961	40.0	2,353	2,353
495.01	1,961	100.0	20	2,373
496.00	3,272	100.0	2,590	4,963
497.00	5,196	100.0	4,234	9,197

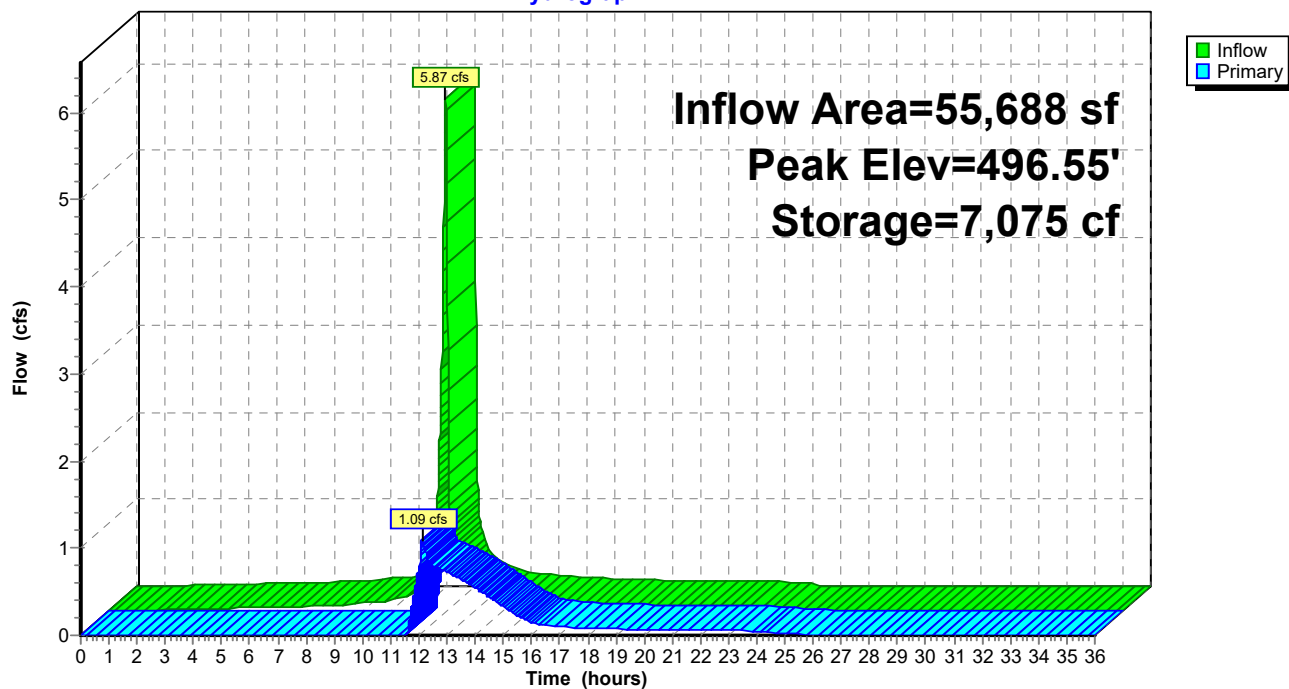
Device	Routing	Invert	Outlet Devices	
#1	Primary	494.30'	18.0" Round Culvert L= 254.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 494.30' / 493.10' S= 0.0047 ' S= 0.0047 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf	
#2	Device 1	496.50'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads	
#3	Device 1	495.10'	3.0" Vert. Orifice/Grate C= 0.600	Limited to weir flow at low heads
#4	Device 1	495.10'	3.0" Vert. Orifice/Grate C= 0.600	Limited to weir flow at low heads
#5	Device 1	495.10'	3.0" Vert. Orifice/Grate C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=1.08 cfs @ 12.11 hrs HW=496.55' (Free Discharge)

- 1=Culvert (Passes 1.08 cfs of 8.00 cfs potential flow)
- 2=Orifice/Grate (Weir Controls 0.26 cfs @ 0.77 fps)
- 3=Orifice/Grate (Orifice Controls 0.27 cfs @ 5.55 fps)
- 4=Orifice/Grate (Orifice Controls 0.27 cfs @ 5.55 fps)
- 5=Orifice/Grate (Orifice Controls 0.27 cfs @ 5.55 fps)

Pond 1P: Gravel Wetland

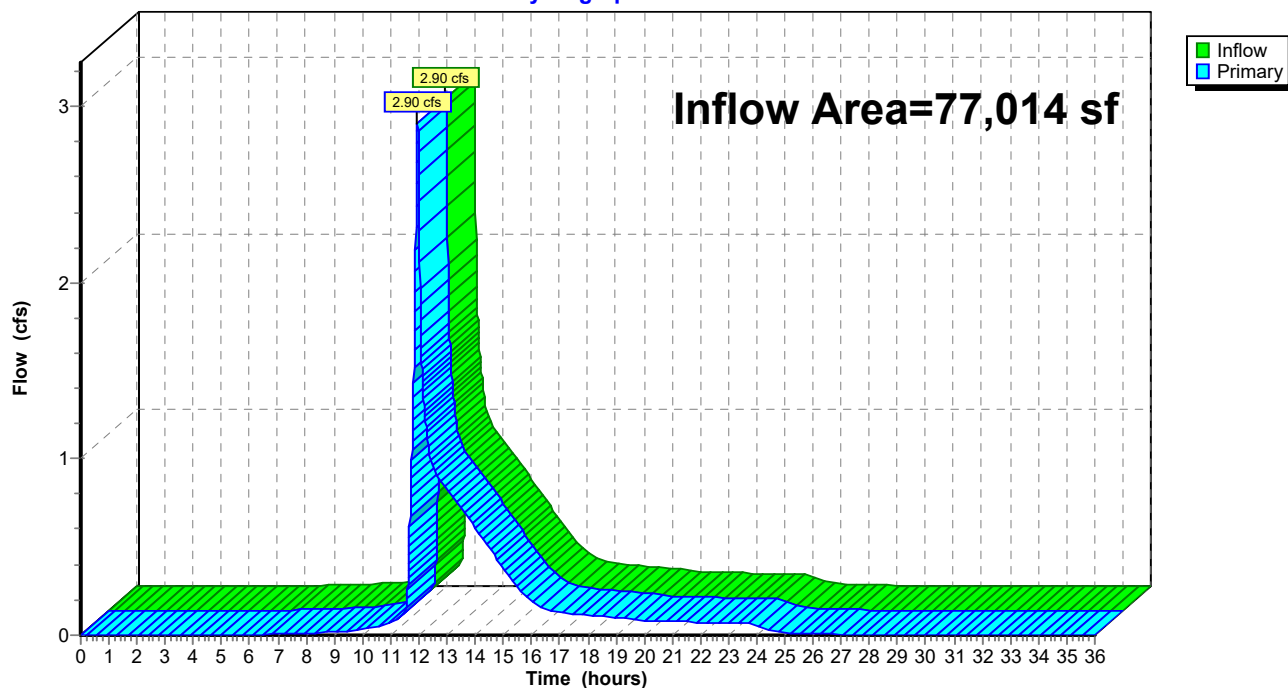
Hydrograph



Summary for Link POI-1: Offsite

Inflow Area = 77,014 sf, 82.53% Impervious, Inflow Depth = 2.35" for 10-YR event
Inflow = 2.90 cfs @ 11.96 hrs, Volume= 15,061 cf
Primary = 2.90 cfs @ 11.96 hrs, Volume= 15,061 cf, Atten= 0%, Lag= 0.0 min

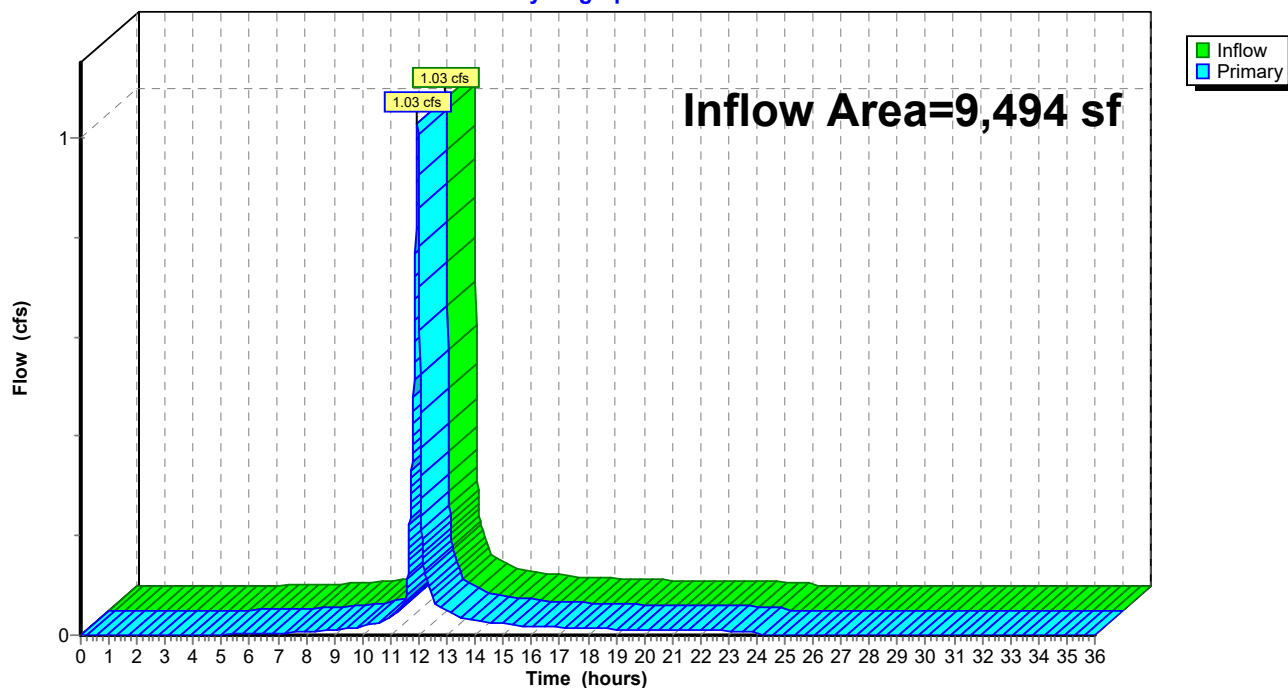
Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link POI-1: Offsite**Hydrograph**

Summary for Link POI-2: Offsite

Inflow Area = 9,494 sf, 83.42% Impervious, Inflow Depth = 2.72" for 10-YR event
Inflow = 1.03 cfs @ 11.96 hrs, Volume= 2,154 cf
Primary = 1.03 cfs @ 11.96 hrs, Volume= 2,154 cf, Atten= 0%, Lag= 0.0 min

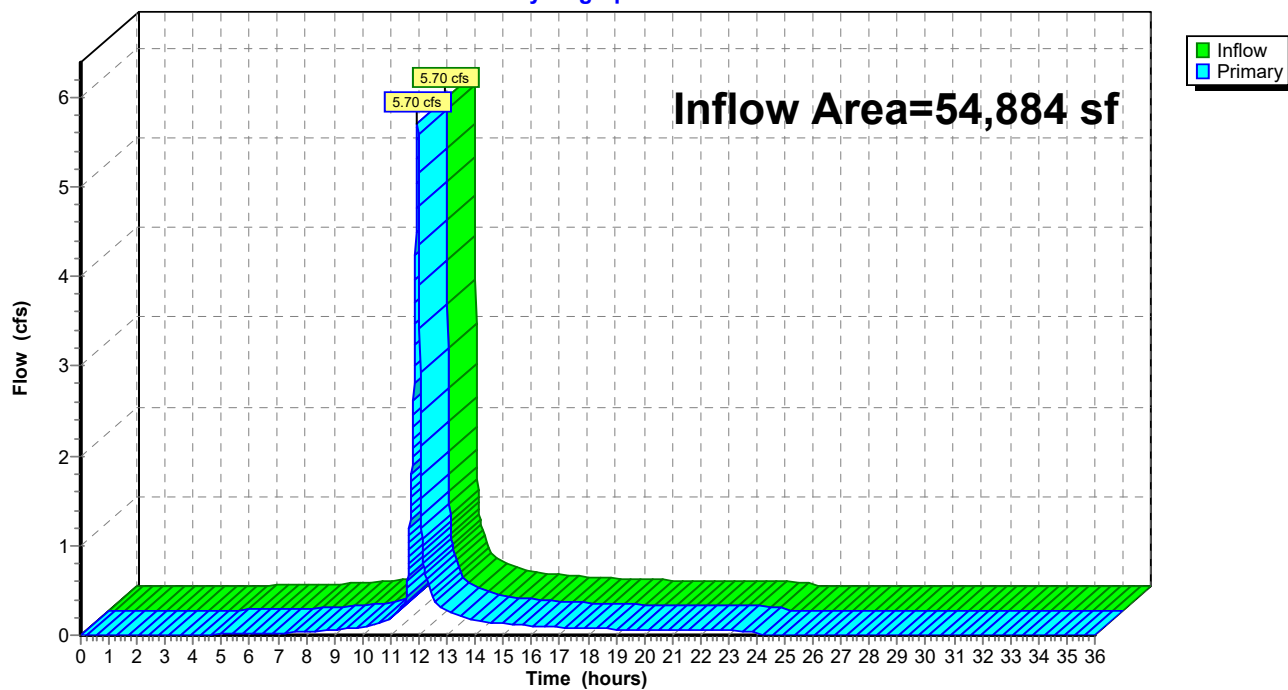
Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link POI-2: Offsite**Hydrograph**

Summary for Link POI-3: Offsite

Inflow Area = 54,884 sf, 79.53% Impervious, Inflow Depth = 2.61" for 10-YR event
Inflow = 5.70 cfs @ 11.96 hrs, Volume= 11,933 cf
Primary = 5.70 cfs @ 11.96 hrs, Volume= 11,933 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link POI-3: Offsite**Hydrograph**

Lebanon Ford New Addition

Stormwater Appurtenance Inspection and Maintenance Manual

Introduction

The Lebanon Ford New Addition project contains stormwater appurtenances which must be inspected and maintained on a regular basis. These systems include Ponds/Detention Systems, storm drainage piping and catch basins. In order to ensure the long-term effectiveness of approved stormwater practices, The Owner shall provide for on-going inspections and maintenance (I&M) for so long as the practices are reasonably expected to be used.

This text outlines the inspection and maintenance requirements of each system.

- (1) The party responsible for implementing the required reporting, inspection, and maintenance activities identified in this I&M Manual shall be:

St. Johnsbury Automobile Group
Raymond Gaudette
425 Miracle Mile
Lebanon, NH 03766

- (2) The frequency of inspections shall be as follows:

Gravel Wetland System:

- 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.
- At least once annually, system should be inspected for drawdown time. If system does not drain to the level of the outlet invert within 72-hours following a rainfall event, then a qualified professional should assess the condition of the facility to determine measures required to unclog underdrain systems (as applicable), including but not limited to removal of accumulated sediments and or reconstruction of system as appropriate.

Catch Basins

- At a minimum, it is recommended that catch basins be inspected at least twice annually, once following snow-melt and once following leafdrop, and cleaned as indicated by inspection.

Drip Edge

- At a minimum, it is recommended that drip edges be inspected at least twice annually, once following snow-melt and once following leafdrop, and cleaned as indicated by inspection. At this time they should be inspected for siltation, and if siltation is visible from the surface, the drip edge stone shall be replaced.

Lebanon Ford New Addition

Stormwater Appurtenance Inspection and Maintenance Manual

- (3) An inspection checklist to be used during each inspection Log can be found starting on Pages 3-5 of this manual.
- (4) An I&M Log shall be used to document each inspection and maintenance activity. A blank I&M Log can be found on Page 6 of this manual.
- (5) A Deicing Log shall be used to track the amount and type of deicing materials applied to surfaces within the PBP site that drain to the gravel wetland. A blank Deicing Log can be found on Page 7 of this manual.
- (6) A plan showing the locations of the site and the stormwater appurtenances is included with this manual. The Infiltration Basin and appurtenances are shown on the Site, Grading, Drainage and Utility Plan.
- (7) If any invasive species begin to grow in the stormwater ponds they shall be manually removed immediately and disposed properly. Herbicides are not recommended.

This I&M Manual and adherence to it are requirements of the Town's stormwater permit.

All record keeping required by the I&M manual shall be maintained by the responsible party(ies) and be made available to the department upon request.

The Owner shall initiate the I&M activities upon the completion of all terrain alteration activities that direct stormwater to each appurtenance.

The Owner 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).

Lebanon Ford New Addition

Stormwater Appurtenance Inspection and Maintenance Manual

I&M Checklist

Inspector:	Date:
Current Weather:	Time:
Rainfall in the Last 24 Hours (in): Can be checked here: http://www.nrcc.cornell.edu/page_nowdata.html	

Infiltration Basin Components

Items Inspected (Frequency)	Checked		Maintenance Needed		Maintenance Performed	
DEBRIS CLEANOUT (M)	Y	N	Y	N	Y	N
1. Ponds, Infiltration basin system and contributing areas clean of debris						
2. No dumping of yard wastes into ponds						
3. Litter (trash, debris, etc.) have been removed						
VEGETATION (M)						
4. No evidence of erosion.						
5. Is plant composition still according to plans						
6. No placement of inappropriate plants.						
7. No evidence of invasive species.						
DEWATERING AND SEDIMENTATION (A, AMS)						
8. Surface ponds dewater between storms.						
9. No evidence of standing water.						
10. No evidence of surface clogging.						
OUTLETS/OVERFLOW SPILLWAY (2A, AMS)						
11. Good condition, no need for repair						
12. No evidence of erosion.						
13. No evidence of any blockages.						
INTEGRITY OF Infiltration Basin System and Appurtenances (2A, AMS)						
14. System has not been blocked or filled inappropriately.						
15. Mulch layer is still in place (depth of at least 3").						
16. Noxious plants or weeds removed.						

Inspection Frequency Key: A= Annual, 2A=Twice Annually, M=Monthly, AMS=After Major Storm (2.5")

Lebanon Ford New Addition

Stormwater Appurtenance Inspection and Maintenance Manual

(cont.)

I&M Checklist (cont.)

Inspector:	Date:
Current Weather:	Time:
Rainfall in the Last 24 Hours (in): Can be checked here: http://www.nrcc.cornell.edu/page_nowdata.html	

Gravel Wetland Components

Items Inspected (Frequency)	Checked		Maintenance Needed		Maintenance Performed	
DEBRIS CLEANOUT (M)	Y	N	Y	N	Y	N
17. Gravel wetland and contributing areas clean of debris						
18. No dumping of yard wastes into gravel wetland						
19. Litter (trash, debris, etc.) have been removed						
VEGETATION (M)						
20. No evidence of erosion.						
21. Is plant composition still according to plans						
22. No placement of inappropriate plants.						
23. No evidence of invasive species.						
DEWATERING AND SEDIMENTATION (A, AMS)						
24. Gravel wetland surface dewaterers between storms.						
25. No evidence of standing water.						
26. No evidence of surface clogging.						
OUTLETS/OVERFLOW SPILLWAY (2A, AMS)						
27. Good condition, no need for repair						
28. No evidence of erosion.						
29. No evidence of any blockages.						
INTEGRITY OF SYSTEM						
30. Chambers have not been blocked or filled inappropriately.						
31. Gravel bed cleaned of accumulated sediment.						
32. Noxious plants or weeds removed.						

Lebanon Ford New Addition

Stormwater Appurtenance Inspection and Maintenance Manual

Inspection Frequency Key A= Annual, 2A=Twice Annually, M= Monthly, AMS= After Major Storm (2.5")
(cont.)

I&M Checklist (cont.)

Inspector:	Date:
Current Weather:	Time:
Rainfall in the Last 24 Hours (in): Can be checked here: http://www.nrcc.cornell.edu/page_nowdata.html	

Catch Basins

Items Inspected (Frequency)	Checked		Maintenance Needed		Maintenance Performed	
DEBRIS CLEANOUT (2A)	Y	N	Y	N	Y	N
33. Contributing areas clean of debris						
34. Litter (trash, debris, etc.) have been removed						
35. Sediment removed if approaching half the sump depth.						
36. Floating hydrocarbons removed immediately by skimming, absorbent materials, or other method and disposed in conformance with applicable state and federal regulations.						

Inspection Frequency Key A= Annual, 2A=Twice Annually, M= Monthly, AMS= After Major Storm (2.5")

Comments:

Date by which outstanding maintenance must be completed: _____

Inspector's Signature: _____

Lebanon Ford New Addition

Stormwater Appurtenance Inspection and Maintenance Manual

I&M Log

Date	Appurtenances Inspected	Maintenance Performed	Inspector's Signature

Lebanon Ford New Addition

Stormwater Appurtenance Inspection and Maintenance Manual

Deicing Log

Date	Area Deiced	Deicing Material	Amount Used	Deicer's Signature

June 29, 2021

Tim Corwin
Senior Planner
City of Lebanon
51 North Park Street
Lebanon, NH 03766

**Re: Lebanon Ford New Addition
425 Miracle Mile
Subject parcel 103-15
GC Zone
Site Plan Review Request**

Dear Tim,

On behalf of the Applicant and design team, please find responses to your email received June 23, 2021; we understand that the highlighted comments must be addressed prior to the resubmittal deadline of June 29. Any unhighlighted comments not addressed in this letter will be addressed following review by the planning board.

A. Engineering Comments

Plans:

1. Please add rim elevations to structures noted in the "Drainage Notes" table. *This information has been added to the plans*
2. Please add a detail of the proposed concrete headwall. *This information has been added to the plans*
3. Please add a detail/cross section of the proposed infiltration basin. *This information has been added to the plans*
4. Please add a detail/cross section of the proposed stone drip edge. *This information has been added to the plans*
5. Please add a detail of the proposed stormwater outlet structure. *This information has been added to the plans*
6. Please describe how the proposed stone drip edge will be maintained. *The drip edge will have to be replaced with new stone when it is filled in with sediment, it should be checked twice yearly to see if it is silting in and replaced accordingly.*

Drainage Analysis:

7. Please add a section to the drainage analysis report that describes how stormwater pre-treatment will be achieved. Stormwater pretreatment will be achieved by a 4' deep catch basin sump in the parking lot and the stone drip edge and grass swale combination along the east section of the parking lot.
8. Please provide more information that demonstrates that the proposed bottom of infiltration practice is 3 feet above estimated seasonal high-water table. This information will be determined by test pit excavation.

B. Planning Comments

General

1. It appears a waiver or partial waiver is required from the following requirements of the Site Plan Review Regulations (*please note that the identification of necessary waivers below should not – unless otherwise indicated - be construed as staff's support or endorsement of such waiver requests*).
 - a. 5.1.E.7 – Requiring the plans to depict the size and height all existing structures within 200 feet of the site. This information has been added to the plans
 - b. 5.1.E.16 – requiring calculations for square footage of perimeter landscaping to be provided This information has been added to the plans
 - c. 6.5.B.4 (sidewalk required along frontage). Waiver requested
 - d. 6.7.B.2 (“The light intensity at adjoining streets or commercial property boundaries shall not exceed 0.5 foot-candles at grade level”) Waiver requested
 - e. 6.7.B.5 (“The maximum mounting height of the light fixture shall not exceed [...] twenty (20) feet in commercial [...] zoning districts.”) This information has been added to the plans
 - f. 6.2.B.1-4 – perimeter landscaping requirements Waiver requested
 - g. 6.2.B.10 – requiring trees along the front of the property, spaced no more than 40 ft. apart Waiver requested
 - h. 6.2.D - landscaping around buildings requirements Waiver requested
 - i. 6.2.E.1 - requires parking areas to be visually screened with landscaping (the proposed trees along the perimeter are required to be “supplemented with shrubs, perennials, or understory trees to visually screen the parking area.”) Waiver requested
 - j. 6.2.E.2-4 – parking lot landscaping requirements Waiver requested
 - k. 6.2.E.5 – parking lot shading requirements Waiver requested
 - l. 6.2.L - curbing requirements (curbing is not proposed along the western side of the parking as is required by 6.2.L) Waiver requested
 - m. 6.7.B.9 (“outdoor lighting shall have a color correlated temperature (CCT) of 3000 Kelvin (K) or less (warmer light)”) This information has been added to the plans
 - n. Any other requirements identified in the comments below that remain unaddressed.
2. Provide an Application for Waivers Waiver application has been provided

- a. Note that the Board must find either Criteria A or Criteria B (as identified on the Application for Waivers) is satisfied in order to grant the waiver. Each waiver request, therefore, should demonstrate how the request meets either Criteria A or B. It is not clear to staff that all of the necessary requested waivers can be justified, and recommends that the applicant try as much as possible to provide as much of the missing information as possible.
3. Please identify how the project complies with Section 6.5.E of the Site Plan Review Regulations (groundwater protection). The stormwater system provides pretreatment prior to discharging into the infiltration basin. The infiltration basin will then provide treatment by infiltration of stormwater into the ground. Adequate groundwater recharge will then be accomplished following stormwater treatment.
4. Provide emergency vehicle turn radius diagrams as requested by the Fire Department (5.1.E.24) A vehicle turning plan has been added to the revised plan set.
5. Provide an estimated timetable for construction and completion of buildings, parking facilities, landscaping, and other required improvements. (5.1.G.1) A schedule has been provided
6. Engineer's stamp is required on plan set. Revised plans have been stamped
7. The site plan (Sheet 7) and landscaping plan (Sheet 11) are very difficult to read and contain unnecessary and confusing information. Please simplify and provide additional sheets, if needed. See additional comments below. The site plan has been separated out into site layout and a separate grading plan for clarity. Unnecessary background information has been removed from the landscape plan.
8. Please separate the utilities and grading from the site plan (Sheet 7) and provide a separate utilities and grading plan. The site layout plan has now been separated from the grading and drainage plan and both are now included in the revised plan set.

Plan Set Comments

Sheet 1

9. Please add the following information to the "Zoning Chart" table, as required by Section 5.1.E.4.e:
 - a. 5.1.E(4)(e)(6) Number of existing & proposed short- & long-term bicycle storage spaces
This information has been added to the zoning chart, there are no existing or proposed bicycle racks with this project.
 - b. 5.1.E(4)(e)(8) Height of the proposed addition This information has been added to the zoning chart
 - c. 5.1.E(4)(e)(9) The gross square footage of each floor in the building if more than two stories This information has been added to the zoning chart
 - The chart indicates that the building is currently two-stories, but will be converted to a single story building, is that correct? The building is one story with a mezzanine. The existing 3,700 sq. ft. mezzanine is to remain
 - d. 5.1.E.4.e(10) Proposed use This information has been added to the zoning chart

- e. 5.1.E.4.e(12) and 5.1.E.10 - The total square footage (in addition to percentage) of existing and proposed lot/impervious coverage This information has been added to the zoning chart
- f. 5.1.E.4.3(13) Whether or not the property is subject to any zoning overlay districts per Article IV of the Zoning Ordinance This information has been added to the zoning chart

Sheet 2

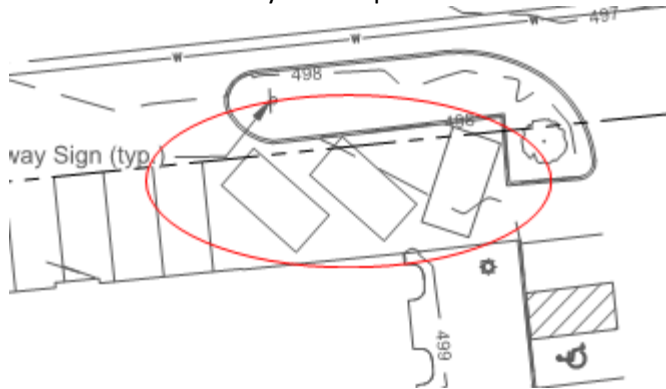
- 10. Ideally, a customized legend would be included with each plan sheet. However, if using a general legend, please remove symbols that do not appear anywhere in the plan set. For example, it does not appear that there are any chilled water or steam lines on site. This information has been removed from the legend

Sheet 3

- 11. The survey does not scale as printed. Please address. The boundary survey has been removed from the plan set. The survey is the existing condition plan prepared by EV and based on field data collected by Latitudes Land Survey.

Sheet 4

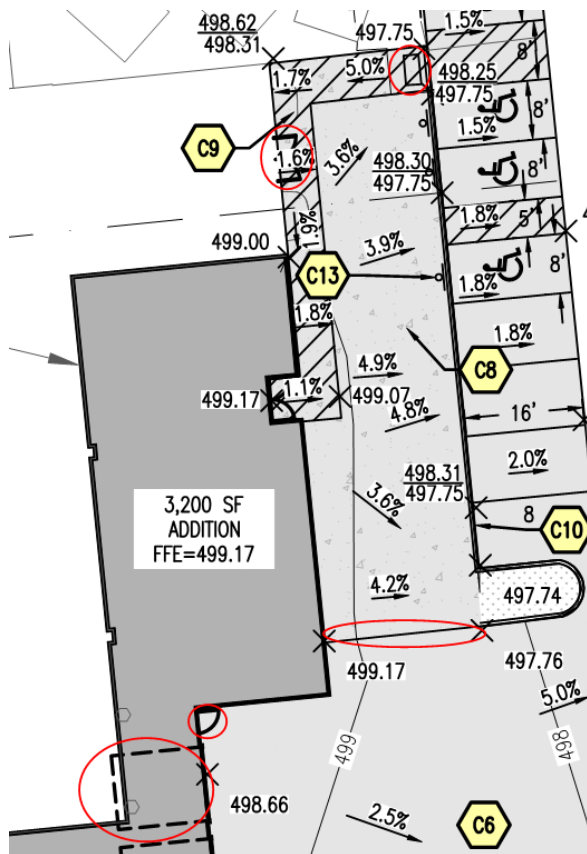
- 12. Are contours referenced to USGS datum? (5.1.E.6) yes
- 13. Stamp required for PE or LLS who prepared the topo (5.1.E.6) PE stamp added
- 14. Survey Note 2: the existing conditions (and site plan) should be prepared utilizing the survey (Sheet 3). Please update note accordingly. The existing conditions has been prepared based on the survey
- 15. Please identify the shapes circled in red: Those are vehicle inventory spaces



Sheet 7

- 16. The plat is very difficult to read. For the benefit of the Planning Board members and the site plan review process, please provide a site plan that primarily shows the above-ground proposed physical improvements that is readable and is without any unnecessary or confusing information. As noted above, please separate the utilities and grading from the site plan and provide a separate utilities and grading plan. The plans have been separated to make them appear less confusing

- a. The idea is that Planning Board members, in general, are primarily interested in understanding how the site will operate and what it will look like above ground when its finished. It's confusing and unnecessary then to have the existing conditions shown. Of course it's important from an engineering/construction standpoint to have a sheet that overlays the proposed conditions on top of the existing conditions. But from a Planning Board review perspective, it's just as important to also have a sheet that only shows the above-ground site as it will be. I hope this makes sense. If not, please let me know.
- 17. Please provide a legend and and/or labels that more clearly identify the different lines and markings and remove unnecessary layers - including the existing conditions - to make the plan less confusing and more readable. *The legend and notes sheet has been weeded to be more discernible*
- 18. To assist with making the site plan more legible, please remove the handicap grading information and either include it with a separate grading plan or add it as inset/detail on Sheet 9. *As mentioned, the grading plan has been separated from site layout plan*
- 19. New parking areas are prohibited in the front yard (6.5.C.7) – please remove or relocate the three handicap parking spaces that are proposed to be located in the front yard. *This is an existing parking area that is to be paved and restriped, it is not new parking, please see parking summary plan for additional information.*
- 20. Please identify/delineate those parking spaces/areas that are for vehicle storage/display. *Please refer to the parking summary plans included with this submittal*
- 21. Show required sight distances at curb cuts and dimensions for the inside radii of all curves. (5.1.E.10) *Sight distance triangles have been added to the plans*
- 22. Please add direction of travel throughout the site and add identify width of main drive aisles (5.1.E.10) *Direction of travel has been added to the site layout plan*
- 23. Provide plans for snow removal and storage. (5.1.E.19) *Snow storage has been provided at the south boundary of the site. Additional snow storage will be achieved by trucking snow off site*
- 24. Provide a customized legend on this page so that Board members do not have to go back and forth between this sheet and the legend on Sheet 2. Please be sure to identify all lines so that it's clear what is being proposed. For example, it is not clear what the following lines are intended to depict: *The legend sheet has been updated, the full legend would not fit on this sheet*



Sheet 11

25. The plat is very difficult to read. To make less confusing and more readable, please remove unnecessary layers including existing conditions. The unnecessary layers and information have been removed from the landscape plan
26. Staff recommends that additional landscaping improvements are provided in order to bring the property more into conformance with the Section 6.2.B, D, and E landscaping design requirements.
27. Indicate how the dumpster will be screened as required by Section 6.2.B.8, and provide details. The dumpster screen detail has been added to sheet C3.2 The dumpster screen detail has been added to plan sheet C3.2, please see detail 5 on this sheet.
28. On the "Plant Schedule" table:

- a. What does the “B&B Single Stem” notation mean? **Balled and burlapped**
 - b. What does the “#3” in the size column mean? **3 gallon container**
 - c. Is “1 gallon” the correct size for the perennials? **yes**
29. Please add notes relative to the planting and seeding of disturbed areas. **Please see detail 3 on sheet C3.3 for this information**
30. Please add the following sections of the Site Plan Review Regulations as plan notes:
- a. 6.2.B.3 (“All new plant material shall be nursery-grown stock.”)
 - b. 6.2.B.4 (just the first sentence)
 - c. 6.2.B.5
 - d. 6.2.F.1
 - e. 6.2.F.2
 - f. 6.2.H.1
 - g. 6.2.J
 - h. 6.2.K

The above landscape notes have been added to sheet C0.1 Legends and Notes

Sheet 12

- 31. Plan is very difficult to read – please replace photo with the proposed site plan (*but without any unnecessary layers including but not limited to utilities, drainage features, and existing conditions that will be changing*). **The site plan has been added to the photometric plan background and the plan has now been cleaned up to only show pertinent information**
- 32. Revise schedule to add column for wattage of each proposed lighting fixture. (5.1.E.12) **The wattage has now been provided on the revised photometric table**
- 33. Identify average and minimum foot-candle measurements. (5.1.E.12) **This information has been added to the plans**
- 34. Provide manufacturer’s specifications for each propose lighting fixture. (5.1.E.12) **Manufacturer’s specifications are included with this submittal**
- 35. Please address the requirements of Section 6.7.C.1 (parking lot lighting levels and uniformity ratio). **Waiver Requested**
- 36. Address Section 6.7.B.4 through a plan note [“Lighting installations shall include timers, dimmers, sensors, and/or other energy-saving technologies to reduce overall energy consumption. Non-essential lighting shall be turned off or reduced after normal business hours, leaving only necessary lighting for security purposes. (Non-essential lighting includes, but may not be limited to, display, aesthetic, parking, and/or sign lighting as determined by the Board.)”] **This note has been added to the plan**

Sheets 13-16

- 37. Please remove from plan set and provide as a separate exhibit. **removed**

Sheet 17

- 38. Building elevations are required per 5.1.E.7, however, the elevations provided do not appear to match the proposed layout. Also, per 5.1.E.13, the elevations must show the location and height

of all building-mounted fixtures. The revised elevations and floor plan are included in this plan set

Thank you and please don't hesitate to give me a call if you have any questions regarding my responses above.

Sincerely,



Adam Morse, P.E.

Agenda
Planning Board
July 12, 2021

Agenda Item #3D
Public Hearing Items

Hardy Hill, LLC, 27 Jenkins Road
(Tax Map 80, Lot 14), zoned RL-2
PB2021-20-MIN



CITY OF LEBANON ~ PLANNING & DEVELOPMENT

PLANNING BOARD

July 12, 2021 Meeting

Staff Memorandum – PB2021-20-MIN

APPLICATION INFORMATION

Agenda Item: 3.D

Application ID:
PB2021-20-MIN

Application Type:
Minor Subdivision

Property Location & Tax Map:
27 Jenkins Road (Tax Map 80, Lot 14)

Property Owner/Applicant:
Hardy Hill, LLC

Zoning District:
Rural Lands Two (RL-2)

Property Size (existing):
+/-19.24 acres (per applicant's minor subdivision plat)

Overlay District(s):
• Wetlands Conservation District

LEGAL NOTICE

Hardy Hill, LLC, 27 Jenkins Road (Tax Map 80, Lot 14), zoned RL-2: Request for approval of a proposed three (3)-lot Minor Subdivision of 27 Jenkins Road. PB2021-20-MIN

PLANS AND APPLICATION MATERIALS

- ▶ Application form (1 page)
- ▶ Memo from Eric Peabody, LLS, dated June 14, 2021 (1 page; project description)
- ▶ Subdivision Regulations - Technical Checklist (3 pages)
- ▶ Application for Waivers (1 page)
- ▶ NHDES Subsurface Systems Bureau lot sizing data and test pit results, prepared by Travis N. Royce (2 pages)
- ▶ Drilled water well record information from NHDES (1 page)
- ▶ Plat titled, "Minor Subdivision Plan for Hardy Hill, LLC," prepared by Green Top Land Surveying, LLC, dated June 14, 2021, last revised June 28, 2021, project no: 1055

COMPLETENESS REVIEW

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

APPLICATION OVERVIEW

The subject property is a +/-19.24 acre parcel owned by the applicant, located in the Rural Lands Two (RL-2) District, and currently improved with a one-family dwelling (see Figure 1). The applicant proposes to subdivide the property into three (3) residential lots as follows:

- Lot 80-14 (improved with the existing home): +/-6.05 acres;
- Lot 80-14-100: +/-3.5 acres; and
- Lot 80-14-200: +/-9.69 acres.

The lots will continue to have frontage on Jenkins Road, will be accessed by individual driveways, and will be served by on-site water and wastewater systems.

STAFF MEMORANDUM

PB2021-20-MIN
27 Jenkins Rd (80-14)
July 12, 2021 PB Mtg
Agenda Item 3.D
Page 2 of 3

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



©2021 Eagleview (image taken 4/6/2021)

STAFF COMMENTS

ASSESSING

No comment at this time.

BUILDING INSPECTION

No comment at this time.

ENGINEERING / PUBLIC WORKS

The proposed driveway access to Lot 2 must comply with the City's Driveway Regulations and cannot exceed a 10 percent grade.

FIRE

The Fire Department recommends that a dry hydrant is installed in the pond in order to satisfy the requirements of Section 13.12 of the Subdivision Regulations.

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. The applicant will be required to obtain NHDES approval for the installation of any septic systems on the parcels.

The Planning and Development Department recommends a few minor changes to the plat which are identified in proposed condition of approval #1 below.

POLICE

No comment at this time.

STAFF MEMORANDUM

PB2021-20-MIN
27 Jenkins Rd (80-14)
July 12, 2021 PB Mtg
Agenda Item 3.D
Page 3 of 3

WAIVER REQUESTS

As set forth on the attached Application for Waivers, and pursuant to Section 7.15 ("Waiver of Regulations") of the Subdivision Regulations, the applicant has requested a partial waiver from **Section 9.5.A.7** (*requiring that the plan shall depict all wetlands that are located on the property.*)

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 & Development Department and the Fire Department:
 - a. Depict the seal and signature of the Certified Wetlands Scientist who delineated the wetlands. (Section 9.5.A.7)
 - b. Depict and/or add a note regarding the installation of a dry hydrant in the pond in order to satisfy the requirements of Section 13.12 of the Subdivision Regulations.
 - c. Add a note indicating that the plat was approved pursuant to the City of Lebanon Subdivision Regulations last revised March 22, 2021.
 - d. Remove the building envelopes from Lots 80-14-100 & 200 (*staff note: building envelopes are helpful in reviewing a proposed subdivision, but staff does not recommend that they be included on the recorded plat*).
2. The applicant shall provide a digital record drawing (Cad .dwg format using NH State Plane Coordinate system or an alternative approved by the City's GIS Coordinator).
3. Subdivision approval from the New Hampshire Department of Environmental Services shall be obtained and a copy of such approval shall be provided to the Planning and Development Department. (Section 9.5.C.2)

General Conditions

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 August 13, 2018, and such fees shall be due and payable at the time of issuance of a Certificate of Occupancy. 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.
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: Hardy Hill, LLC (via e-mail)
Eric Peabody, Green Top Land Surveying, LLC (via e-mail)
File

**CITY OF LEBANON
APPLICATION FOR**

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

☐ OTHER _____

PROPERTY OWNER (APPLICANT):

NAME: Hardy Hill, LLC c/o John Dickey TEL.#: 617-335-0051

MAILING ADDRESS: 42 Essex Street, Hamilton, MA 01982

E-MAIL ADDRESS: jvdickey@hotmail.com

CO-APPLICANT, AGENT, OR LESSEE:

NAME: Eric Peabody, Green Top Land Surveying, LLC TEL.#: 603-477-7422

MAILING ADDRESS: 19 Butler Terrace, Claremont, NH 03743

E-MAIL ADDRESS: eric@greentoplandsurveying.com

PROJECT LOCATION:

TAX MAP #: 80 LOT#: 14 PLOT #: ZONE: RL-2

STREET ADDRESS OF PROJECT: 27 Jenkins Road

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

SCOPE OF PROJECT:

Map 80, Lot 14, a Class 3 parcel with 19.24 acres, will be subdivided into three lots, leaving Map 80, Lot 14 with 6.05 acres and the existing single-family residence. Map 80, Lot 14-100 will have 3.50 acres. Map 80, Lot 14-200 will have 9.69 acres.

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: Residential

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 July 12, 2021, unless I personally request, in writing, that the Board delay its determination of completeness to a later date.

PROPERTY OWNER: Eric Peabody Eric Peabody, LLS DATE: 6/14/2021

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: John V. Dickey (c/o Hardy Hill, LLC) DATE: 6/14/2021

DATE RECEIVED	FILE # (MAP/LOT)	APPLICATION #	FEE - \$ AMOUNT	DATE PAID	VOUCHER #
6-14-21	80/14	PB2021-20-MIN	\$320.76	6-14-21	18313

(Last Revised 4/04/18)

Green Top Land Surveying, LLC
Eric Peabody - NH LLS #1007, VT LLS #024.0115155
19 Butler Terrace, Claremont, New Hampshire 03743
603-477-7422 eric@greentoplandsurveying.com

June 14, 2021

To: Lebanon Planning Board
From: Eric Peabody, LLS
RE: Minor subdivision for Tax Map 80, Lot 14 located at 27 Jenkins Road

Project Description:

The project is a minor subdivision of Map 80, Lot 14 (19.24 acres). Map 80, Lot 14 is a Class 3 parcel and is located in the Rural Lands Two (RL-2) zoning district.

Map 80, Lot 14 will be subdivided into three lots, leaving Map 80, Lot 14 with 6.05 acres, 437' of road frontage and the existing single-family residence. Map 80, Lot 14-100 will have 3.50 acres and 205' of contiguous road frontage. Map 80, Lot 14-200 will have 9.69 acres and 410' of contiguous road frontage on Jenkins Road and 221' of contiguous road frontage on Sunset Rock Road.

Statements:

Subdivision Regulations 7.7.A(3)v. There are no persons holding conservation, preservation, or agricultural preservation restrictions (as defined under RSA 477:45) on the subject property.

Subdivision Regulations 7.7.A(3)vi. There are no holders of any easements, rights-of-way, or other restrictions on or over the subject property.

Sincerely,



Eric Peabody
Green Top Land Surveying, LLC
603-477-7422

CITY OF LEBANON, NH SUBDIVISION REGULATIONS – TECHNICAL CHECKLIST MINOR SUBDIVISION	
PROJECT NAME: Hardy Hill, LLC proposed minor subdivision at 27 Jenkins Road (Map 80, Lot 14)	
APPLICANT: Eric Peabody, LLS	DATE: 6/14/2021
GENERAL SUBMISSION REQUIREMENTS:	

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

- ☒ A properly completed and signed Application Form. [§7.7.A(1)]
- ☒ The appropriate filing fees. [§7.7.A(2)]
- ☒ A written project description. [§7.7.A(3)]
- ☒ A list of the names and mailing addresses of all persons to be notified, by certified mail, of the public hearing. [§7.7.A(4)]
- ☒ A completed and signed Technical Checklist. [§7.7.B]
[Applicants must complete the entire checklist to ensure that all necessary information and materials have been provided with the application or that written requests for waivers have been properly provided in accordance with Section 7.15 of the Subdivision Regulations, as appropriate.]
- ☒ Eight (8) sets of project plans to be distributed for Staff Review. [§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.

CITY OF LEBANON, NH
SUBDIVISION REGULATIONS - TECHNICAL CHECKLIST
MINOR SUBDIVISION

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.	☒	☐

CITY OF LEBANON, NH
SUBDIVISION REGULATIONS - TECHNICAL CHECKLIST
MINOR SUBDIVISION

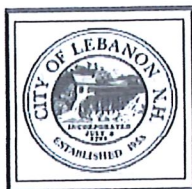
Plan Requirements (cont.)	Info. Provided	Waiver Sought
<u>9.5.A(7)</u> - Location of all existing structures, easements, permanent and intermittent watercourses, flood plains and wetlands, rock outcrops, wooded areas, and other significant existing features on the property. Indicate those natural and 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.	☒	☒
<u>9.5.A(8)</u> - 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.	☒	☐
<u>9.4</u> - 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
<u>9.5.C(1)</u> - 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.	☒	☐
<u>9.5.C(2)</u> - 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.	☒	☐
<u>9.5.C(3)</u> - 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.	☐	☒
<u>9.5.C(4)</u> - 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: Eric Peabody Eric Peabody, LLS

Planning office Use Only:		
Date Received ___/___/___	Checklist Complete YES or NO	Checked by: _____

(Last Revised 05/22/13)



City of Lebanon, New Hampshire APPLICATION FOR WAIVERS

Office Use Only

Date Received: _____

File No.: _____

PROJECT INFORMATION

Name of Applicant: Eric Peabody, LLS

Project Name: Hardy Hill, LLC

Project Address: 27 Jenkins 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 ^{9.5.A(7)} of the (circle one) Site Plan Review / Subdivision Regulations A Waiver of this Section meets (circle one) Criteria A / Criteria B because Not all of the wetlands were delineated on the subject property (Map 80, Lot 14). The wetlands affecting the development of Map 80, Lot 14-100 were delineated. Delineating the remaining wetlands on the subject property will not alter the proposed building envelope for Map 80, Lot 14-100.
2. Section ____ of the (circle one) Site Plan Review / Subdivision Regulations. A Waiver of this Section meets (circle one) Criteria A / Criteria B because _____

NHDES SUBSURFACE BUREAU AND CITY OF LEBANON LOT SIZING

PROPERTY OF HARDY HILL LLC
JENKINS ROAD, LEBANON, NH
TAX MAP 80 LOT 14

NHDES SUBSURFACE SYSTEMS BUREAU LOT SIZING

LOT 14-100

(600GPD/2000)X 1.76(GROUP3 8-15%) = 0.53AC (23,087SQFT) REQUIRED
1.25 ACRES CONTIGUOUS PROVIDED EAST OF THE STREAM/WETLAND

MAP 80, LOT 14-100

PITTSTOWN 8-15% SLOPE
LEBANON LOT SIZING 323C = 90,000 SQFT REQUIRED

TOTAL PITTSTOWN 56,908 SQ. FT. = 63.2%

CHARLTON 15-25% SLOPE
LEBANON LOT SIZING 111D = 60,000 SQFT REQUIRED

TOTAL CHARLTON 37,191 SQ. FT. = 62.0%

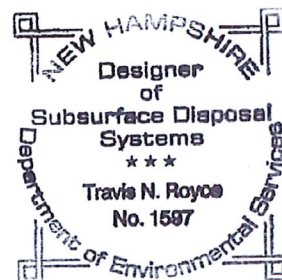
MAP 80, LOT 14-200

PITTSTOWN 8-15% SLOPE
LEBANON LOT SIZING 323C = 90,000 SQFT REQUIRED

TOTAL PITTSTOWN 81,232 SQ. FT. = 90.2%

CHARLTON 15-25% SLOPE
LEBANON LOT SIZING 111D = 60,000 SQFT REQUIRED

TOTAL CHARLTON 52,377 SQ. FT. = 87.3%



SOIL DATA FROM NRCS SOILS SURVEY / WEBSOIL SURVEY

SLOPE DATA FROM CITY OF LEBANON GIS WEBSITE

TEST PIT RESULTS
PROPERTY OF HARDY HILL LLC
JENKINS ROAD, LEBANON, NH
TAX MAP 80 LOT 14

SITE — PROPOSED LOT 14-100

PITTSTOWN LOAM
WEB SOIL SURVEY



TEST PIT DATA

Ap 0-9" 10YR3/4 FINE SANDY LOAM
FRIABLE LOOSE GRANULAR
B 9-25" 10YR4/4 FINE SANDY LOAM
FRIABLE LOOSE GRANULAR
C 25"+ 2.5Y4/3 FINE SANDY LOAM
SOMEWHAT FIRM IN PLACE

E.S.H.W.T. 25"
H2O OBSERVED AT — NONE
BOTTOM AT 64" NO REFUSAL
FEW COBBLES THROUGHOUT
ROOTS TO 26"



1"IN 18 MINUTES

SITE — PROPOSED LOT 14-200

PITTSTOWN LOAM
WEB SOIL SURVEY



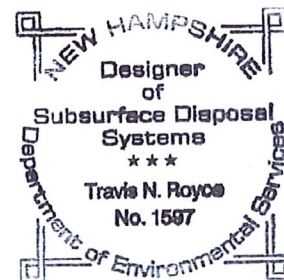
TEST PIT DATA

Ap 0-7" 10YR3/4 FINE SANDY LOAM
FRIABLE LOOSE GRANULAR
B 7-24" 10YR4/4 FINE SANDY LOAM
FRIABLE LOOSE GRANULAR
C 24"+ 2.5Y4/3 FINE SANDY LOAM
SOMEWHAT FIRM IN PLACE

E.S.H.W.T. 24"
H2O OBSERVED AT — NONE
BOTTOM AT 60" NO REFUSAL
FEW COBBLES THROUGHOUT
ROOTS TO 26"



1"IN 18 MINUTES



TEST PITS OBSERVED AND LOGGED BY
TRAVIS ROYCE NH DESIGNER #1597
06/04/2021

Existing drilled water wells in the proximity of 27 Jenkins Road to demonstrate compliance with Section 13.8.A.1 of the Subdivision Regulations

Water Well Record information taken from the New Hampshire Department of Environ

WRB_NUMBER	NAME	ADDRESS_1	DRILLER_WELL_NO	DATE_COMPLETED	MAP	LOT	TYPE_DESCRIPTION	TOTAL_DEPTH	DEPTH_TO_BEDROCK	CASING	TESTED_YIELD	DRILLER_NAME
134.0228	M. NUNLIST	20 DORSET LN	3899	10/15/1991	54	20	DRILLED IN BEDROCK	205 ft	30 ft	40 ft	30 gal/min	VALLEY ARTESIAN WELL CO INC
134.0508	UNKNOWN NAME	65 JENKINS	13149	09/26/2013	54	2	BEDROCK (DRILLED)	320 ft	67 ft	100 ft	10 gal/min	CAPITAL WELL CO INC
134.0232	S. BICKFORD	14 SUNSET ROCK RD	591	08/02/1991	80	19	DRILLED IN BEDROCK	100 ft	10 ft	20 ft	30 gal/min	SARGENT ARTESIAN WELLS
134.0350	E. HARRIS	70 SUNSET ROCK RD	NH14202	09/13/2002	82	20	DRILLED IN BEDROCK	300 ft	24 ft	40 ft	20 gal/min	SARGENT ARTESIAN WELLS
134.0601	JOANE & FRANK ROBERTS	26 SUNSET ROCK ROAD	011917	01/19/2017	80	36	BEDROCK (DRILLED)	120 ft	8 ft	20 ft	30 gal/min	VALLEY ARTESIAN WELL CO INC
134.0473	P. & M. BELL	6 WHIPPLE RD	NH #1 213/43	07/28/2008	80	22	DRILLED IN BEDROCK	260 ft	38 ft	60 ft	20 gal/min	OTTAUQUECHEE WELL DRILLING INC

Agenda
Planning Board
July 12, 2021

Agenda Item #5A
Approval of Minutes

June 14, 2021

DRAFT

**LEBANON PLANNING BOARD
Regular Meeting
Monday, June 14, 2021, 6:30 PM
Council Chambers, City Hall
51 N Park St, Lebanon, NH**

MEMBERS PRESENT: Bruce Garland (Chair), Matthew Hall (Vice-Chair), Karen Zook (Council Representative), Gregorio Amaro, Kim Chewning, Joan Monroe, Kathie Romano, Jeremy Rutter, Laurel Stavis

MEMBERS ABSENT: None

STAFF PRESENT: David Brooks (Planning Director), Tim Corwin (Senior Planner)

1. Call to Order Chair Garland called the meeting to order at 6:30 PM.

2. Notice of Regional Impact

The following applications were received by the Planning and Development Department on or before June 14, 2021:

Walt Cunningham & John Eric Hoffman and Wilder Ridge Estates, LLC, 58 East Wilder Road (Tax Map 7, Lot 9) and 0 East Wilder Road (Tax Map 7, Lot 10), zoned R-3: Request for approval of a Boundary Line Adjustment between lands located at 58 East Wilder Road and 0 East Wilder Road. **PB2021-18-BLA**

St. Johnsbury Automobile Group (applicant) and ORQT, LLC (property owner), 425 Miracle Mile (Tax Map 103, Lot 15), zoned GC: Request for Site Plan Review to expand the existing building with the construction of +/-12,900 sq. ft. of additional building area to accommodate a showroom and additional vehicle service bays, together with associated site improvements including utilities, lighting, landscaping, stormwater management, parking, and access. **PB2021-19-SPR**

Hardy Hill, LLC, 27 Jenkins Road (Tax Map 80, Lot 14), zoned RL-2: Request for approval of a proposed three (3)-lot Minor Subdivision of 27 Jenkins Road. **PB2021-20-MIN**

Mr. Corwin recommended that none of the applications above have the potential for regional impact.

A MOTION by Matthew Hall that the above applications have no potential for regional impact.

The motion was seconded by Joan Monroe.

**The motion was unanimously approved (9-0).*

3. Public Hearing Items

A. Virginia Wong, 43 Mechanic Street (Tax Map 106, Lot 34), zoned LD: Request for Site Plan Review to convert an existing three (3) unit multifamily dwelling to a six (6) unit multi-

1 family dwelling. **PB2021-11-SPR** - Postponed from May 10, 2021. Completeness review
2 only, public hearing to commence on July 12, 2021 if deemed complete.
3

4 Mr. Corwin explained that there were missing items from the submission requirements, which began in
5 September of 2020. The Planning Department has not heard from applicant and recommends finding that
6 the application is incomplete to convert a 3-unit multi-family dwelling to a 6-unit multi-family dwelling.
7

8 Several Board members expressed concern over ignored regulations and enforcement. Mr. Brooks noted
9 that it has taken a lot to get this owner's attention. This is one of multiple properties the City is working
10 on with this property owner. There are many conditions that are not allowed. The enforcement effort on
11 this property has involved going to court on two occasions and working with fire department and State
12 Fire Marshal for code enforcements. It is a matter of bringing each property into compliance, which is
13 taking longer than the City would like. Mr. Hall confirmed that the applicant was not present. It was
14 generally agreed that the building could accommodate six units. Mr. Brooks stated that the property needs
15 to go back to the original three units, and then it could be converted to six units that are in compliance
16 with applicable regulations.
17

18 *A MOTION by Laurel Stavis that the application of Virginia Wong, 43 Mechanic Street (Tax Map 106,*
19 *Lot 34), zoned LD is incomplete.*
20

21 *The motion was seconded by Jeremy Rutter.*
22

23 **The motion was approved unanimously (9-0).*
24

25 B. **Mason Storage, LLC, 38 Spencer Street (Tax Map 78, Lot 39), zoned LD:** Request for
26 Site Plan Review to construct a 15,000 sq. ft. addition to an existing warehouse building.
27 **PB2021-13-SPR** - Postponed from May 10, 2021. Applicant has requested a postponement
28 to the July 12, 2021 Planning Board meeting.
29

30 Mr. Corwin explained that the Zoning Board granted a special exception in 2019 to allow expansion as a
31 nonconforming storage building. The applicant had two years to submit a Planning Board application,
32 which was submitted just prior to the deadline in April. There are concerns about the completeness of the
33 application, and Staff would be concerned about additional extensions.
34

35 Mr. Mason and Dan Nash of Advanced Geomatics were present on behalf of the application.
36

37 Mr. Nash stated that this was to be a simple addition to the building as a plain metal box. The new site
38 plan regulations were added, which require compliance with all of the new downtown requirements. It
39 was a challenge to get the application done to be able to present it to the Planning Board.
40

41 Mr. Corwin stated that this project was not grandfathered, and the new regulations were adopted in
42 March of 2020.
43

44 Mr. Nash stated that the Planning Department prefers to have the determination on completeness at a
45 separate meeting from the public hearing. They will need a decision on completeness by Staff once they
46 submit the additional materials.
47

48 Chair Garland inquired if all materials would be ready by July 12 if the Planning Board grants the
49 postponement. Mr. Nash stated that they would.
50

1 *A MOTION by Matthew Hall to grant an extension for Mason Storage, LLC, 38 Spencer Street (Tax*
2 *Map 78, Lot 39), zoned LD to July 12, 2021, without further extensions.*

3
4 *The motion was seconded by Joan Monroe.*

5
6 **The motion was approved unanimously (9-0).*
7
8

9 **C. Stoney Brook Veterinary Hospital Realty Holdings, LLC, and Alan & Mondae Dupuis,**
10 **88 Riverside Drive (Tax Map 110, Lot 20) and 0 Stoney Brook Road (Tax Map 110, Lot**
11 **22), zoned RL-1: Request for approval of a Boundary Line Adjustment between lands**
12 **located at 88 Riverside Drive (Tax Map 110, Lot 20) and 0 Stoney Brook Road (Tax Map**
13 **110, Lot 22). PB2021-17-BLA**
14
15
16
17

18 Mr. Corwin stated that Planning Staff has reviewed the application and recommends it is complete enough
19 for the Planning Board to accept jurisdiction and commence review.
20

21 *A MOTION by Matthew Hall that the application of Stoney Brook Veterinary Hospital Realty Holdings,*
22 *LLC, and Alan & Mondae Dupuis, 88 Riverside Drive (Tax Map 110, Lot 20) and 0 Stoney Brook Road*
23 *(Tax Map 110, Lot 22), zoned RL-1 is complete enough for the Planning Board to accept jurisdiction*
24 *and commence review.*

25
26 *The motion was seconded by Kathie Romano.*
27

28 **The motion was unanimously approved (9-0).*
29

30 Alan Dupuis, Attorney Aaron Simpson, and Dr. Kim Jones appeared to speak on behalf of the
31 application.

32 Mr. Simpson gave a history of the property line issue. The surveyor has located where the traveled way
33 still exists and remnants of the traveled way that were discontinued. The veterinary hospital has been
34 using up to the center of the area. At this time, the applicants have reached an agreement, and Dr. Jones
35 will acquire enough property to be less nonconforming, and the Dupuis lot will remain conforming.

36 Mr. Dupuis stated that this agreement settles a suit about right-of-way.

37 Mr. Brooks stated that when the Planning Board approved the site plan in 2007, Stoney Brook Road had
38 not been discontinued. Mr. Dupuis expressed concern over encroachment on his property, and a condition
39 of approval was included for Dr. Jones to delineate the center line of the old road as the new boundary.
40 Boulders were approved as a visual indication of the property boundary. Following this boundary line
41 adjustment, there is no need to delineate the old roadway center line, and Condition #6 of the original
42 approval is no longer necessary.

43 Mr. Dupuis noted there would be pins placed along the surveyed area indicating the new property line.
44 Either party has the right to put up a rope type fence to signal that this is the property line. That would

1 prevent traffic on their property.

2 Ms. Monroe recalled that there was some pavement left when that road was reviewed by the Class VI
3 Roads Committee. Mr. Tom Jones noted that there are some remnants of the old road, but grass is
4 growing through it. Dr. Jones stated that they did have someone remove the pavement, but there may be
5 some residual pieces.

6 Chair Garland closed the Public Hearing.

7 **Matthew Hall moved** that the Lebanon Planning Board **APPROVE** the application of Stoney Brook
8 Veterinary Hospital Realty Holdings, LLC, and Alan & Mondae Dupuis for a Boundary Line Adjustment
9 between lands located at 88 Riverside Drive (Tax Map 110, Lot 20) and 0 Stoney Brook Road (Tax Map
10 110, Lot 22), PB2021-17-BLA, as shown on a plat titled "Boundary Line Adjustment Plan for Stoney Brook
11 Veterinary Hospital Realty Holdings, LLC and Alan & Mondae Lee Dupuis," prepared by Pathway
12 Consulting, LLC, dated March 29, 2021, Proj. No. 12124, including any and all supplemental submissions
13 and testimony provided during the public hearing, with the following conditions:

- 14 1. Prior to the signing and recording of the plat, the applicants shall provide one (1) full-size copy of
15 the plat and a digital record drawing (Cad .dwg Format using NH State Plane Coordinate system);
16 Prior to the signing and recording of the final plat, the applicants shall provide to the City a draft
17 copy of the deed of the land transfer for review to ensure the transfer will be completed properly
18 for Assessing and recording purposes; and
19
- 20 2. Prior to the signing and recording of the plat, the applicants shall provide one (1) full-size copy of
21 the plat and a digital record drawing (Cad .dwg Format using NH State Plane Coordinate system);
22

23 and with the following finding:

- 24 1. On December 10, 2007, the Planning Board granted Site Plan approval for 88 Riverside Drive
25 (Project #PB2007-37). Condition #6 of the Notice of Action provided that, "[t]he applicant shall
26 delineate the boundary along the length of the abandoned Stoney Brook Road by a split-rail fence
27 or something similar if and when the road is thrown up." The Board now finds that with the
28 relocation of the common boundary between 88 Riverside Drive and 0 Stoney Brook Road through
29 the recording of the Boundary Line Adjustment plat, the delineation of the former roadway
30 centerline required by Condition #6 of the December 10, 2007 approval is no longer necessary.
31

32 *The motion was seconded by Laurel Stavis.*

33
34 **The motion was unanimously approved (9-0).*
35
36

37 **Matthew Hall moved** that the Lebanon Planning Board **authorizes the Chair to sign the Boundary Line**
38 **Adjustment plat for Stoney Brook Veterinary Hospital Realty Holdings, LLC, and Alan & Mondae**
39 **Dupuis, PB2021-17-BLA, titled "Boundary Line Adjustment Plan for Stoney Brook Veterinary Hospital**
40 **Realty Holdings, LLC and Alan & Mondae Lee Dupuis," prepared by Pathway Consulting, LLC, dated**
41 **March 29, 2021, Proj. No. 12124.**
42

43 *The motion was seconded by Laurel Stavis.*

1
2 **The motion was approved unanimously (9-0).*

3
4 Mr. Rutter inquired how many properties have a #0 as the street address. Mr. Brooks stated that due to
5 911 numbering, undeveloped property typically gets a "0". Some newer subdivisions have numbers
6 assigned to lots, but there are many older lots with #0. There can be more than one #0 on the same road.
7

8 **4. Other Business**

9
10 **A. Proposed fire code-related amendments to the Site Plan Review and Subdivision**
11 **Regulations**

12
13 Mr. Corwin explained the work on the fire code-related amendments. The Planning Department would
14 encourage applicants to meet with Staff to get the best idea at the outset as to how to meet all of the
15 regulations and codes. The Fire Department has created a 2-page draft of the most relevant site design
16 elements from the fire code. The Planning Department would call any developer's attention to the codes
17 at the outset of the application process. The intention is to create a document as part of a development
18 handbook for developers.
19

20 Chair Garland noted that this process is intended to remove duplication of effort on the part of the
21 Planning Department and Fire Department. The Board members discussed matters of updates and
22 requirements for applicants. Ms. Romano suggested a checklist would be helpful in order to explicitly
23 spell out what is required, adding that having a list would ensure completeness and make it easier to
24 know what to do in each case based on the number of units.
25

26 Mr. Brooks stated that applicants should meet with Staff to learn what is required before submitting an
27 application. A handbook would convey the requirements in clearest way possible.

28 Mr. Corwin noted that a meeting with Staff is recommended when developers call about applying for a
29 building permit.
30

31 Mr. Hall recommended a text change for Section 1.6.
32

33 Ms. Monroe suggested adding information about fire resistant vegetation in a new category.
34

35 Mr. Rutter recommended textual changes.
36

37 Ms. Stavis suggested changes to wording within the fire references.
38

39 ***A MOTION by Laurel Stavis to schedule a Public Hearing regarding the Proposed Fire Code-related***
40 ***Amendments to the Site Plan Review and Subdivision Regulations for June 28, 2021, at 6:30 PM.***

41
42 *The motion was seconded Jeremy Rutter.*

43
44 **The motion was unanimously approved (9-0).*

45
46 **B. Proposed Site Plan Review amendments creating a minor Site Plan process and**
47 **Minor Site Plan Committee**

48
49 Mr. Corwin stated that Staff is working with Mr. Hall and will give a presentation at the June 28 work
50 session, when the Board can have an in-depth conversation. The review process would determine if a

1 project is exempt from any Site Plan Review or qualifies for a Minor Site Plan Review. Mr. Hall
2 explained that they are trying to make it an easier process for small developers.

3
4 Mr. Corwin invited feedback from Board members before the next version is presented on June 28.

5
6
7 C. Proposed amendments to the Rules of procedure re: Rules of Decorum

8
9 *A MOTION by Matthew Hall to suspend the statement adopted on May 24, 2021, and schedule a vote*
10 *at the June 28, 2021 meeting.*

11
12 *The motion was seconded by Laurel Stavis.*

13
14 **The motion was approved unanimously (9-0).*

15
16 Ms. Monroe suggested that applicants could be sworn in to be held to a higher level of truthfulness.

17
18 D. Review of minor alterations to approved site plan for Novo Nordisk US Bio Production, Inc.,
19 5 & 9 Technology Drive (Tax Map 130, Lot 1 and Tax Map 145, Lot 3) (PB2020-19-SPA)

20
21 Rod Finley attended remotely on behalf of the application. There were no comments.

22
23 Mr. Hall inquired about the requirement for applicants to appear in person. Mr. Corwin stated that it isn't
24 possible to discriminate between applicants and the public. Ms. Stavis stated that the NH legislature
25 allows remote participation. Mr. Hall stated that he believes it is important to be in person. Mr. Brooks
26 stated that Planning Staff will look into it further.

27
28 Ms. Romano noted that in winter with people driving up from Massachusetts or down State, attending
29 remotely would make sense.

30
31 Ms. Zook noted that the law only requires a quorum present in the room.

32
33 Chair Garland stated that the Board will await a response from Planning Staff.

34
35 **5. Approval of Minutes**

36
37 A. May 10, 2021

38
39 *A MOTION by Laurel Stavis that the Planning Board Minutes of May 10, 2021, be approved as*
40 *presented.*

41
42 *The motion was seconded by Matthew Hall.*

43
44 **The motion was approved (9-0).*

45
46 B. May 17, 2021

47
48 *A MOTION by Laurel Stavis that the Planning Board Minutes of May 17, 2021, be approved as*
49 *presented.*

50
51 *The motion was seconded by Jeremy Rutter.*

1
2 **The motion was approved (9-0).*

3
4 A. May 24, 2021

5
6 Page 2, line 22, to read, "New Hampshire does not allow municipalities to convert duplex units to triplex
7 and quadraplex units under current water and sewer regulations."

8 Page 3, line 10, delete the public health statement; line 14, to read, "It is better to give the Board
9 flexibility in specific cases." Delete lines 30-31.

10
11 *A MOTION by Laurel Stavis that the Planning Board Minutes of May 24, 2021, be approved as*
12 *amended.*

13
14 *The motion was seconded by Jeremy Rutter.*

15
16 **The motion was approved (9-0).*

17
18
19 **5. Other Business**

20
21 Ms. Monroe noted that the Planners Journal is very helpful and allows one to regularly do a self-review,
22 which she just completed.

23
24 Mr. Brooks noted that the Vital Communities housing breakfast was last Friday, and there is a link to the
25 video and slides. It was well done.

26
27
28 **6. Adjournment**

29
30 *A MOTION by Matthew Hall to adjourn the meeting.*

31
32 *The motion was seconded by Jeremy Rutter.*

33
34 **The MOTION was approved (9-0).*

35
36 The meeting was adjourned at 8:54 PM.

37
38 Respectfully submitted,
39 Holly Howes
40 Recording Secretary