CITY OF DOVER

DOVER PLANNING BOARD – AGENDA

REVISED

Meeting Type:	Regular Meeting
Meeting Location:	Council Chambers, City Hall, 288 Central Avenue, Dover, NH 03820
Meeting Date:	**Tuesday, March 11, 2025**
Meeting Time:	**7:00 pm**

1. **CITIZENS' FORUM**
2. **APPROVAL OF THE PRIOR MINUTES**
   - February 11, 2025 Regular Meeting Minutes
3. **OLD BUSINESS**
4. **NEW BUSINESS**

   A. Consideration and acceptance of an Extension Request for Bruton & Berube, PLLC (Owners: Harlech, LLC), Assessor's Map 31, Lot 5, zoned CBD-T, located at 47 Chestnut Street. (Proposal is request for extension of approvals for Site Plan P21-84 and CUP P21-85.) *(WAIV-2025-0001)

   B. Consideration and acceptance of a Conditional Use Permit for Bruton & Berube, PLLC, (Owners: Hawkins Family Revocable Trust), Assessor's Map 30, Lot 88-1, zoned CBD-M, located at 33 ½ Sixth Street. (Proposal is to remodel the interior of the structure, with no external impact, to utilize the structure as a two-unit residential structure.) *(COND-2025-0003)

   C. Consideration and acceptance of a Conditional Use Permit for 16 Industrial Park, LLC, Assessor's Map G, Lot 4-1, zoned CM, located at Industrial Park Road. (Proposal is for the construction of a stormwater management system and associated site grading for a seasonal automobile storage and maintenance facility, resulting in 6,830 ± s.f. of wetland buffer impacts.) *(COND-2025-0001)

   D. Consideration and acceptance of a Site Plan for 16 Industrial Park, LLC, Assessor's Map G, Lot 4-1, zoned CM, located at Industrial Park Road. (Proposal is for a ± 27,040 s.f. seasonal automobile storage and maintenance facility.) *(SITE-2025-0001)

   E. Consideration and possible posting on the proposed Amendments regarding Chapter 153 (Site Plan Regulations). The full text of the amendments is available in the Planning Department and at www.dover.nh.gov located under meeting materials and on the Planning Department page*.

   F. Consideration and possible posting on the proposed Amendments regarding Chapter 157 (Land Subdivision Regulations). The full text of the amendments is available in the Planning Department and at www.dover.nh.gov located under meeting materials and on the Planning Department page*.

   G. Consideration and possible posting on the proposed Amendments regarding Chapter 170 (Zoning Ordinance). The full text of the amendments is available in the Planning Department and at www.dover.nh.gov located under meeting materials and on the Planning Department page*.

5. **STAFF COMMENT**
6. **MEMBER COMMENTS**
7. **ADJOURNMENT**

*Indicates that if the application is accepted for discussion, the public hearing will be held the same evening. Note that some hearings will be continued from one meeting to another and some may be postponed. Since this is only a partial description of the proposal and may change, persons with questions or wishing to see the plans are invited to visit the Planning Office, Monday through Thursday from 8:30 am to 5:30 pm and Friday 8:30 am to 4:00 pm or email Dover-Planning@dover.nh.gov. You may also view materials at www.dover.nh.gov. Follow us on Twitter @DoverNHPlanning and find us on Facebook at https://www.facebook.com/DoverNHPlanning. The public is encouraged to leave comments in advance by emailing Dover-Planning@dover.nh.gov, or mailing written comments to Planning Board, Dover City Hall, 288 Central Ave., Dover, NH 03820. Messages must be received no later than 4 p.m. the day of the meeting and should identify the name and Dover address of the person leaving the message or providing the comment.

CITY OF DOVER

DOVER PLANNING BOARD – MINUTES

Meeting Type:	Regular Meeting
Meeting Location:	Council Chambers, City Hall, 288 Central Ave, Dover, NH.
Meeting Date:	**Tuesday, February 11, 2025**
Meeting Time:	**7:00 pm**

Members Present: Gina Cruikshank (Chair), Doug Glennon (Vice Chair), Ken Mavrogeorge, Kyle Pimental, George DeBoer, Melina Gambino
Members Not Present (excused): Jeff Sanborn (Alternate), Tom Clark, Fergus Cullen (Councilor), Mallory Strange
Staff Present: Donna Benton, Planning Director, and Paul Crouser, Zoning Administrator

Gina Cruikshank (Chair) called the meeting to order at 7:00p.m.

1. CITIZENS' FORUM

Citizens Forum Open

Hilary Hamer, 91 Court St. asked for clarification on what the board approved for the TDR application for 103 Court St on January 28th. She expressed concerns about what will come to be on that lot. She addressed the master plan pillar 2 being ignored. She considers that her only recourse left is legal which has a finite timeline of action required before the site plan will be produced.

Citizens Forum Closed

2. APPROVAL OF THE PRIOR MINUTES

- January 28, 2025 Regular Meeting Minutes

Motion: M. Gambino moved to approve the regular meeting minutes of January 28, 2025. Seconded by: K. Mavrogeorge. Vote: U/A

3. OLD BUSINESS

4. NEW BUSINESS

The Chair announced Items 4A & B would be heard together.

A. Consideration and acceptance of a Conditional Use Permit for Heath J. Todd Revocable Trust, Assessor's Map M, Lot 104, zoned R-40, located at Back Road. (The proposal involves creating an access drive to the developable portion of a lot for the construction of a single home and accessory structures, resulting in 8,938 s.f. of permanent wetlands impact and 28,193 s.f. of permanent impact to the 50-foot wetland buffer, along with 166 s.f. of temporary wetlands impact.) *(COND-2024-0023)

B. Consideration and acceptance of a Conditional Use Permit for Heath J. Todd Revocable Trust, Assessor's Map M, Lot 104, zoned R-40, located at Back Road. (Proposal is for 1,110 s.f. of permanent impact and 73 s.f. of temporary impact to the Conservation District, associated with a patio path, patio, and access to a proposed tidal docking structure.) *(COND-2024-0027)

D. Benton explained that the applicant is proposing to construct a driveway from Back Road to the developable portion of the subject parcel and to construct a patio, patio path, and access to a proposed tidal docking structure. This project was previously presented to the Planning Board on August 27, 2024 and tabled before acceptance.

The applicant is proposing to construct a driveway from Back Road to the developable portion of the subject parcel. The proposed driveway will primarily be constructed on a ~20'-wide strip of the subject parcel and total approximately 2,250± linear feet.

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The driveway is proposed to be gravel except for the first 100± linear feet and 40± linear feet connecting to the proposed residence, which will be paved. A single-family residence and accessory structures are proposed to be built on the developable portion of the subject parcel.

The proposed project will create 8,938± square feet of permanent impacts to wetlands and 28,193± square feet of permanent impacts to the 50-foot wetland buffer.

In response to feedback from the Planning Board and TRC, the applicant revised their application to incorporate site design modifications, along with a revised Drainage Analysis and Sediment and Erosion Control Plan. Compared to the previous review, the total wetlands impact increased by 58 square feet, while the total wetlands buffer impact decreased by 983 square feet.

The proposed accessory structure and access paths will create 1,110± square feet of permanent impact to the Conservation District. There are also 73± square feet of temporary impact. Since the Planning Board previously considered this project, there were no changes related to the proposed impacts to the Conservation District.

The applicant has also applied for NHDES Wetlands Bureau approvals.

The Technical Review Committee reviewed the application at their December 5, 2024 meeting and the Conservation Commission reviewed and endorsed the application at their January 13, 2025 meeting.

Mike Parsont represented the application and explained the changes to impacts.

Motion: K. Pimental moved to accept the application and declared no regional impact. Seconded by: G. DeBoer**.** Vote: U/A

Public hearing opened.
Norm Hildreth, 5 Cullen Bay Rd and Cullen Bay Homeowners Association noted they are an abutter and are concerned about water building up due to the road. How do we know the number of culverts proposed is enough and what is the maintenance plan for those culverts.
Public hearing closed.

John Lorden, Beals Assoc responded to public comment noting they did a lot of trial and error on the design of the culverts (7). They are oversized and the owner will be required to maintain them at least twice a year and after any major storm.

STAFF RECOMMENDATION: Wetland Protection District Conditional Use Permit
The Wetlands Protection District ordinance §170.28F provides for Conditional Use Permits to allow impacts to the Wetlands Protection District if standards related to demonstration that no practicable alternative is available, impact avoidance was considered, impacts were minimized, mitigation has been sought, and approval of the wetlands impact from NHDES Wetlands Bureau has been granted.

Planning Staff feels that the applicant considered and met all of the criteria as specified in §170-28F per their narrative. There is no alternative access approach to the developable portion of the subject parcel and the driveway has been redesigned to minimize impacts upon resource areas and wetland/stream crossings have been designed with culverts to manage stormwater flow appropriately. Since the last consideration by Planning Board, an additional culvert has been included in the site design towards these efforts. The proposed project

does not require state mitigation and the applicant has applied for NHDES Wetlands Bureau approvals which have been reviewed and endorsed by the Conservation Commission.
The Planning Department recommends the Planning Board make the necessary and supporting findings of fact, and to approve the Conditional Use Permit with the following subsequent conditions, as the plans meet the standards outlined:

Subsequent Conditions to Be Met Prior to Issuance of a Conditional Use Permit:

1. Approval of COND-2024-0027;
2. Copies of the NHDES Alteration of Terrain, Individual Sewage Disposal System, Dredge and Fill, Shoreland Permit, and Construction General Permit submitted to the Planning Department.
3. Include plan note that Design Engineer shall provide signed letter to City Engineer certifying that the stormwater management system has been installed in accordance with approved plans.
4. Add note that relief from the 5-foot side boundary driveway setback has been granted by the Community Services Director per §157-50C(3).
5. Add note that any work within public right of way requires permits from Community Service.

Motion G. DeBoer moved to approve the Conditional Use Permit with the subsequent conditions. Seconded by M. Gambino. Vote: U/A

STAFF RECOMMENDATION: Conservation District Conditional Use Permit
The Conservation District ordinance §170.27.C provides for Conditional Use Permits to allow impacts to the Conservation District if standards related to demonstration that the use is essential to the productive use of land, a soil erosion and sedimentation control plan is submitted, state and federal approvals have been applied for, and a written review by the Conservation Commission has been sought.

Planning Staff feels that the applicant considered and met all of the criteria as specified in §170.27.C per their narrative. Project impacts have been minimized through the placement of the structures, with only accessory structures falling within the Conservation District, and pervious pavers and crushed stone being used for the patio and paths. Temporary impacts are to facilitate project construction and will be restored and no fertilizers or chemicals will be used in the project area. The applicant has also applied for NHDES Wetlands Bureau approvals which have been reviewed and endorsed by the Conservation Commission.

The Planning Department recommends the Planning Board make the necessary and supporting findings of fact, and to approve the Conditional Use Permit with the following subsequent conditions, as the plans meet the standards outlined:

Subsequent Conditions to Be Met Prior to Issuance of a Conditional Use Permit:

1. Approval of COND-2024-0023;
2. Copies of the NHDES Alteration of Terrain, Individual Sewage Disposal System, Dredge and Fill, Shoreland Permit, and Construction General Permit submitted to the Planning Department;
3. Include plan note that Design Engineer shall provide signed letter to City Engineer certifying that the stormwater management system has been installed in accordance with approved plans;
4. Add note that relief from the 5-foot side boundary driveway setback, required by § 157-50C(3) has been granted by the Community Services Director.

Motion: G. DeBoer moved to accept the application and declared no regional impact. Seconded by: K. Mavrogeorge**.** Vote: U/A
Motion: D. Glennon moved to approve the Conditional Use Permit with the subsequent conditions. Seconded by K. Mavrogeorge. Vote: U/A

The Chair announced the applicant requested that Item 4C be withdrawn.

C. Consideration and acceptance of a Lot Line Adjustment for Hawkins Family Revocable Trust, Assessor's Map 30, Lots 88 and 88-1, zoned RM-U and CBD-MU, located at 31 Sixth Street and 31 ½ Sixth Street. *(LOTA-2025-0002) ***(The applicant has requested to withdraw this item.)***

D. Discussion on Accessory Dwelling Units. *

D. Benton gave a presentation on ADUs which included history, what they look like in Dover, City ordinances and state statutes.

D. Benton answered clarifying questions from board members. Discussion ensued to educate the board on current policies and practices and proposed zoning amendments related to ADUs.

Public Hearing Opened
Hilary Hamer, 91 Court St asked questions about TDR units then getting approved for ADUs.
Public Hearing Closed

D. Benton addressed public comment and board members continued the discussion on the question. Discussion continued about what restrictions could be legally applied for not allowing ADUs on properties having received TDR units and whether that restriction is applied through conditions of approval or at the ordinance level or if state statute would allow for that. Staff will look further into these questions.

E. Discussion on Transfer of Development Rights. *

D. Benton gave a presentation to explain TDR which included Dover's intents regarding the program and some samples.
She reviewed the list of changes to the TDR program that have been discussed by the board.

Public Hearing Opened
Caitllin Wilkie, 568 Sixth St, encouraged language modifications to TDR for clarity and transparency. She gave opinions on how she perceives the process favors developers over abutters. She explained the clarification she is looking to see in the revisions. She requests reporting and community involvement with the feedback and revision process.

Dorna Hamer, 18 Tuttle Ln, expressed concerns about abutters being at a disadvantage from developers in the process.

Hilary Hamer, 91 Court St
Requested this not be the workshop on TDR that was promised at a January meeting. This is not a workshop format. She highlighted concerns with development in relation to context / what other development is going on in the City, vague language that needs to be addressed/ changed, false narratives on applications and usage of TDR fees.

Christopher Berry, Berry Survey and Engineering spoke about the TDR process and how it positively affected projects he has presented to their beneficial completions. He addressed the original intent of TDR for keeping the R-40 zone less dense, but that process was cumbersome and highly unused. He addressed the more current usage of the TDR by developers of purchasing units to fund conservation and also for developers to include an element of affordability of housing within the plans. He noted often the developer's presented plan is not what is the most development we can cram in for the most money, but what can be

included that gets them to the break-even point and will be sure the project moves forward. There are contextual requirements for TDR to be used within the zone which are analyzed prior to plan development such as density for the zone and higher and better use.
Public Hearing Closed

D. Benton addressed public comment:

- TDR process/options
  - Explained 103 Court St TDR approval in January and not on site plan.
- TDR fact sheet does need revision
- TDR fees collected vs invoiced
- Conservation fund usage and that $100k per year currently goes towards conservation planners salary and benefits.
- Other uses of conservation funds
- Other funding for conservation other than TDR fees
- Narratives are reviewed – TRC does not have the same jurisdiction for CUPs and TDR that it does for subdivisions and site plans so the narratives may not looked at closely during TRC process- focus is on the plans
- TDR requests have been denied/ tabled/fizzled out/ comments given by Planning board and/or staff
- 10-day abutter notice is a state statute. Dover notifies abutters beyond state statute requirements.

City attorney is available to staff as needed to confirm legality issues.

D. Benton noted tonight's discussion is not the only one for TDR. Can proceed as the board wishes. If amendments are proposed, there will be additional public hearings at both the Planning Board and in the case of zoning amendments at City Council level as well. She would like Planning Board to give some direction tonight regarding amendments so staff can start working in that direction for further discussion.

M. Gambino suggested a public session with the community to have a back-and-forth discussion/ dialogue.
G. DeBoer agreed this will have to be addressed over a period of time. He is not ready for amendment language at this time. He has larger picture questions relating to how much of Dover is conserved, if the TDR program is working based on its intent etc. He appreciates everyone's feedback and insight tonight. It may appear we are on different sides, but we are all working toward a goal.
D. Glennon agreed with M. Gambino to have more dialogue with multiple groups. Perhaps we can look at the positive projects and use them to help codify our TDR program. The fees should be reviewed and perhaps increased.
K. Pimental suggested putting a committee together with members such as a staff member, a Planning Board member, a developer and a resident or two to pick apart the regulations and come back to the full board with recommendations. He volunteered to be on that committee if the board chooses that route.
Chair Cruikshank agreed that a subcommittee can be useful in this instance.
M. Gambino agreed with the subcommittee idea.
G. DeBoer agreed as well.
D. Glennon noted he is also interested in volunteering for the subcommittee

M. Gambino noted on the city's website does not easily provide the information being sought about TDR. It would be great to publicly track the funds.

5. STAFF COMMENT

- No applications were submitted for the February 25 meeting, so no meeting until March 11.
- There have been no TRCs since the last meeting.
- One upcoming TRC item on Feb. 20th:
  - Site Review for a proposal on Industrial Park Road. Proposal is for a ± 27,040 s.f. seasonal automobile storage and maintenance facility.
- Community listening sessions have been conducted for CDBG. Still an opportunity to provide input on the Con Plan update on Polco.
- SRPC has a survey out about a regional master plan.
- Planning's budget presentation will be March 5th.

6. MEMBER COMMENTS

- M. Gambino
  - Submitted a letter to the City Council in support of Councilor Cullen remaining on the Planning Board
- K. Pimental
  - City Staff dealt with a water main break over the weekend along with snow clean-up
- K. Mavrogeorge
  - Agreed and acknowledged the staff in their efforts.
  - Commented on the City's aging infrastructure
  - Explanations on the water leak issue
- The Chair signed the following:
  - Lot Line Adjustment for Cocheco Street properties.
  - City of Dover Site Plan for Engineering and Inspection Services building on Mast Road.
  - City of Dover Site Plan for the Dover Public Library renovation and upgrades.

7. ADJOURNMENT

Motion: G. DeBoer moved to adjourn at 8:42p.m. Seconded by K. Mavrogeorge. Vote U/A.

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CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE # WAIV-2025-0001

Application Type:	Extension of Time Request
Applicant(s):	Harlech, LLC
Owner(s):	Harlech, LLC
Location:	47 Chestnut St. (Assessor's Map 31, Lot 5)
Meeting Date:	March 11, 2025

INTENT: The Board previously approved a Site Plan and two (2) Conditional Use Permits (CUPs) to construct a 173-unit multi-family residential building with commercial space. The applicant seeks another extension to meet financing requirements.

UNITS PROPOSED: 173 Residential Units (previously approved)

AGENDA ITEM #: 4-A

ACREAGE: 3.64± acres

ZONING DISTRICT: CBD-TOD

EXISTING USE: Commercial

PROPOSED USE: Mixed-Use

SURROUNDING USES: Commercial/Residential/ Transportation Center/Community Trail/Cochecho River

ZBA ACTION: None

ATTACHMENTS: Application materials, previous waiver request, site plan

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

NOTICES SENT: Abutter notices were sent by certified mail.

PERMITS REQUIRED: City of Dover CUPs for: Side & Rear Setback, Frontage Build-out, Lot Coverage, and Solar/Green Roof Standards, NH DES Wetlands Permit and Alteration of Terrain

WAIVERS REQUIRED: None

Summary of Request and Background

Chapter 153-9 discusses that Planning Board approval shall be valid for five years from the date of said approval. If a building permit has not been issued within such time constraints, then said approval shall be considered null and void, except if the Planning Board grants time extensions.

Additionally, RSA 674:39 states that any site plan approved by the Planning Board shall be immune from any future changes to local site plan, subdivision, impact fee regulations and zoning ordinance amendments if active and substantial development, as defined by the municipality, is initiated within a twenty-four (24) month period following the Planning Board's initial approval of the plan. The statute elaborates that the Planning Board may, at their discretion, extend the twenty-four (24) month exemption deadline.

The applicant previously submitted a twelve (12) month extension request citing high interest rates and construction costs as a justification for the extension, which this Board granted on April 23, 2024. The applicant now seeks an additional twelve (12) month extension, citing the same reasons, high interest rates and construction costs, which necessitate this second extension so the applicant may meet the conditions of approval set forth in the Board's May 11 and May 17, 2022 Notices of Decision.

While high interest rates and construction costs undoubtedly pose challenges to the project's viability, it is crucial for the applicant to demonstrate a good-faith effort towards initiating the project. Staff acknowledges the difficulties these factors present, but similarly would like some assurance that the applicants are pursuing options to have the site redevelopment happen in the short term.

STAFF RECOMMENDATION:

With the above taken into consideration, the Planning Department recommends the Planning Board vote to grant the Extension Request for both the Site Plan (P21-84) and Conditional Use Permits (P21-85 and P22-29) with the same conditions of approval as outlined in the original Notices of Decision, with the understanding that no further extensions of existing approvals will be applied for.

WAIV-2025-0001 47 CHESTNUT STREET

Property Information

Location	47 CHESTNUT ST
Owner	HARLECH LLC
Land Use	322C
Zoning Code	CBD-T
Property Id	31005-000000

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 10/30/2023
Data updated Daily

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

PLAN SNAPSHOT REPORT WAIV-2025-0001
FOR CITY OF DOVER, N.H.

Plan Type:	Waiver / Extension / Amendment	**Project:**		**App Date:**	02/18/2025
Work Class:	Plan	**District:**	None	**Exp Date:**	04/24/2025
Status:	In Review	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	

Description: Request for Extension of Approvals for Site Plan P21-84 and CUP P21-85.

Parcel:	31005-000000	Main	**Address:**	47 Chestnut St Dover, 03820	Main

Zone:

Owner
Harlech, LLC
273 Corporate Drive, Suite 150
Portsmouth, NH

Applicant
Francis X Bruton
601 Central Ave
Dover, NH 03820
Business: (603) 749-4529

Plan Custom Fields

Project Location	47 Chestnut Street	Waiver Request Type	Extension	Project Name	47 Chestnut
Owner Name	Harlech, LLC	Original Plan Approval Date	May 10 2022 12:00AM	Owner Address	273 Corporate Dr, Ste 150 Portsmouth, NH 03801
Original Plan End Date	May 10 2027 12:00AM	Plan ID Number	P21-84, P21-85	Plan Type	Site Plan
# Extensions Previously Granted	1	Current Plan End Date	May 10 2027 12:00AM	Extension Request Detail	See Narrative

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00011306	Planning Waiver / Extension /Amend Application Fee	$200.00	$0.00
	Total for Invoice INV-00011306	**$200.00**	**$0.00**
	Grand Total for Plan	**$200.00**	**$0.00**

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1			
Confirm application complete v.1	Generic Action		
Technical Review Committee Meeting Agenda v.1	Task		
Land Use Plan Technical Review v.1	Receive Submittal		
Technical Review Committee Meeting v.1	Hold Meeting		
Planning Board v.1			
Planning Board Agenda v.1	Task		
Invoice for Notices v.1	Task		
Send Notices v.1	Task		
Planner Creates Staff Recommendations v.1	Plan Activity		
Distribute Planning Board Materials v.1	Task		
Planning Board Hearing v.1	Hold Hearing		
Planning Board Decision v.1	Plan Activity		
NOD Sent to Applicant v.1	Create Report		
Final Plan v.1			
Land Use Plan Stamped and Signed v.1	Generic Action		
Recording v.1	Task		
Document Archival v.1	Generic Action		
Internal Notification of Plan Completion v.1	Generic Action		
Building Official Notifies Address v.1	Generic Action		
Pre-Con Meeting v.1	Hold Meeting		

PLAN SNAPSHOT REPORT (WAIV-2025-0001)

Create/Link to Records v.1	
Create / Link to Permit - Building Major v.1	Create Sub Permit
Create / Link to Permit - Site Work, Construction v.1	Create Sub Permit

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February 14, 2025

Gina Cruikshank, Chair
Dover Planning Board
City of Dover
288 Central Avenue
Dover, New Hampshire 03820

RE: 47 Chestnut Street, Dover, New Hampshire
Site Plan Approval (Case No. P21-84)
Conditional Use Permit (Case No. P21-85)
Date of Approval: May 10, 2022

REQUEST FOR EXTENSION OF APPROVALS

Dear Chair Cruikshank:

Please be advised that this office represents Harlech, LLC. Harlech, LLC is the owner of property subject to a Site Plan and Conditional Use Permit approval (the "Approvals"), which was approved by the Dover Planning Board on May 10, 2022, related to a mixed-use site plan approval for property located at 47 Chestnut Street, Dover, New Hampshire pursuant to the cases as referenced above.

Given the Planning Board's approval of the owner's Site Plan & Conditional Use Permit on May 10, 2022, pursuant to Section 149-9 of the Dover Site Plan Regulations, those approvals are valid through May 10, 2027. In addition, pursuant to NH RSA 674:39, which was adopted within the Site Plan Regulations, the Approvals would be vested for a period of five (5) years to the extent that "active and substantial development or building" occurs within twenty-four (24) months of the date of approval. The Dover Site Plan Regulations provide a definition of active and substantial development or building, which is set forth in Section 149-9 which provides as follows:

> "The construction of basic infrastructure to support the development, including foundation walls and footings, driveway and parking lot construction to a minimum of gravel base, utilities placed in underground conduits, construction of all drainage

improvements, and installation of all EROSION and SEDIMENT control measures."

As you may be aware, the above referenced vesting protects the Approvals from subsequent changes in Site Plan Regulations or changes to the Zoning Ordinance. On April 23, 2024, this Board extended the period for active and substantial development by twelve months. The Applicant seeks a second such extension.

To the best of our knowledge and understanding, the city of Dover is not contemplating any change to the Site Plan Regulations or the Zoning Ordinances that would affect the Approvals and we understand. Nonetheless, the owner is attempting to secure financing to construct the project, and, as part of these efforts, and in order to do so, the time frame for commencement of active and substantial activity needs to be extended by an additional twelve (12) months from the existing thirty six (36) months already provided. The Planning Board has the authority to extend this period. The delay in seeking this financing relates to the previous spike in interest rates and construction costs.

With the above in mind and given the authority that the Planning Board has to extend the referenced timeframe, pursuant to NH RSA 674:39, for good cause, the owner respectfully requests that the timeframe to begin "active and substantial development" associated with the Approvals be extended an additional twelve months.

Sincerely,

Francis X. Bruton, III, Esquire
E-mail: fx@brutonlaw.com

FXB/mas

cc: Harlech, LLC
Ms. Donna P. Benton, AICP

WAIV-2025-0001 **47 CHESTNUT STREET**

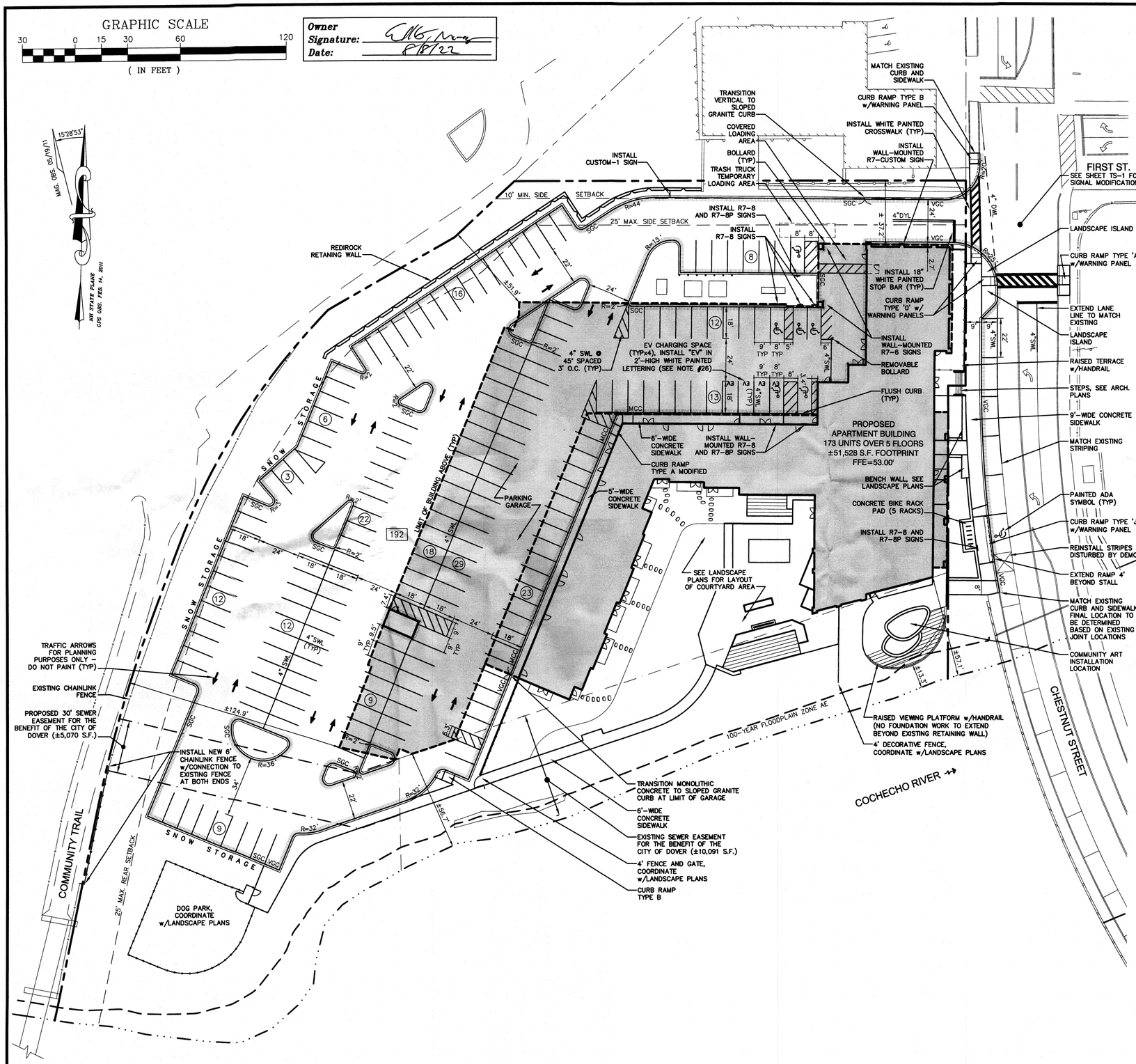
Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
01041-000000	5 GREEN ST	RIVERVIEW BUILDING CONDOMINIUM		40 COURT ST STE 650	BOSTON	MA	02108
01042-000000	3 GREEN ST	DOVER HOUSING AUTHORITY		62 WHITTIER STREET	DOVER	NH	03820
02083-001000	ORCHARD ST	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
06003-001000	200 FIRST ST	FIRST STREET AT GARRISON LLC		466 CENTRAL AVE STE 12	DOVER	NH	03820
06009-000000	24 CHESTNUT ST	FIRST STREET AT CHESTNUT LLC		466 CENTRAL AVE	DOVER	NH	03820
06010-000000	22 CHESTNUT ST	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
06010-A00000	37 FIRST ST	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
06011-000000	35 FIRST ST	R&M HOLDINGS LLC		8 BLEVENS DR	BOW	NH	03304
06012-000000	31 FIRST ST	31-33 FIRST STREET LLC		496 WALLIS RD	RYE	NH	03870
06029-000000	36 SECOND ST	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
10034-000000	ALONG B & M RR	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
10040-000000	WASHINGTON ST	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
10041-000000	1 CAPITAL DR	192 WASHINGTON SQUARE LLC		242 CENTRAL AVE	DOVER	NH	03820
31004-B00000	33 CHESTNUT ST	COCHECO MILLS HOLDINGS LLC		3 PENSTOCK WAY	NEWMARKET	NH	03857-4416
31004-B00LSE	33 CHESTNUT ST	CITY OF DOVER EASEMENT					
31006-000000	45 CHESTNUT ST	LOYAL ORDER OF MOOSE #443		45 CHESTNUT STREET	DOVER	NH	03820
31005-000000	47 CHESTNUT ST	HARLECH LLC		273 CORPORATE DR STE 1	PORTSMOUTH	NH	03801
		BRUTON & BERUBE, PLLC		601 CENTRAL AVENUE	DOVER	NH	03820

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

Owner Signature: _____ **Date:** 8/8/22



SITE NOTES

1. DESIGN INTENT – THIS PLAN SET IS INTENDED TO PROVIDE THE NECESSARY INFORMATION FOR THE DESIGN AND REVIEW OF THE REDEVELOPMENT OF THE SITE FOR A MULTI-FAMILY RESIDENTIAL USE COMPRISED OF 173 UNITS AND ±2,500 SF OF RESTAURANT/COMMERCIAL SPACE WITH ASSOCIATED ACCESSWAYS, PARKING AND INFRASTRUCTURE.
2. LOT AREA: ±158,446 S.F. (±3.64 AC.)
3. THE SUBJECT PARCEL IS SHOWN AS DOVER TAX MAP 31, LOT 5.
4. REFERENCE DEED: STRAFFORD COUNTY REGISTRY OF DEEDS BOOK 2036 PAGE 090
5. THE SUBJECT PROPERTY IS ENCUMBERED BY AN EXISTING SEWER EASEMENT FOR THE BENEFIT OF THE CITY OF DOVER AS SHOWN. THE PUBLIC SHALL BE ALLOWED ACCESS TO THE VIEWING PLATFORM LOCATED WITHIN SAID EASEMENT.
6. ZONE: CENTRAL BUSINESS DISTRICT TRANSIT-ORIENTED DEVELOPMENT SUBDISTRICT DIMENSIONAL REQUIREMENTS (CBD-TOD):

MIN. LOT AREA:	NR (3.64 AC. PROVIDED)
MIN. STREET FRONTAGE:	NR (290.77' PROVIDED)
FRONT SETBACK:	0' MIN./0' MAX. (0' PROVIDED)
SIDE SETBACK:	10' MIN./25' MAX. (±37.2' PROVIDED**)
REAR SETBACK:	0' MIN./25' MAX. (±51.9' PROVIDED**)
MAX. BUILDING HEIGHT:	3 STORY MIN./5 STORY MAX.
LOT COVERAGE (BLDG.):	75-100% (38.41% PROVIDED, EXCLUDING EASEMENT**) (32.52% PROVIDED, INCLUDING EASEMENT**)
PARKING SETBACK:	10' (FRONT), 5' (SIDE & REAR)
FRONTAGE BUILD-OUT:	80% MIN. (66.14% PROVIDED**)
OPEN SPACE:	NR (34.18% PROVIDED)

(** INDICATES CONDITIONAL USE PERMIT UNDER ZONING SECTION 170-20B GRANTED 05/10/22)

7. PARKING:
MAXIMUM PARKING PERMITTED:
RESIDENTIAL (1.9 SPACES/UNIT): 1.9 x 173 = 329 SPACES
RETAIL/SERVICE (1 SPACE/275 S.F.): 2,500 S.F./275 = 9 SPACES
TOTAL MAXIMUM PARKING PERMITTED = 338 SPACES
TOTAL PARKING PROVIDED = 192 SPACES (6 ADA, 4 EV, 6 EV-READY, 176 REG.)
PARKING LOT LANDSCAPING: 8% REQUIRED (8.41% PROVIDED)
8. PORTIONS OF THE PROJECT SITE ARE IN SPECIAL FLOOD HAZARD ZONE AE.
9. NO WETLANDS ARE LOCATED ON THE PROJECT SITE PER GOVE ENVIRONMENTAL SERVICES, INC. (LUKE HURLEY, NH CERTIFIED WETLANDS SCIENTIST #232, NOVEMBER 16, 2021).
10. NHDES ALTERATION OF TERRAIN PERMIT AoT-2139 GRANTED 04/22/22 AND WETLANDS PERMIT 2021-03652 GRANTED 04/20/22 (NO DIRECT WETLANDS IMPACTS PROPOSED). SITE IS LOCATED IN URBAN EXEMPTION ZONE, NHDES SHORELAND PERMIT NOT REQUIRED.
11. PER DOVER ZONING ORDINANCE SECTION 170-20.H(1)a. "ANY REDEVELOPMENT WITHIN THE CBD IS EXEMPT FROM (CITY) WETLANDS REGULATIONS"
12. SNOW SHALL BE STORED AT THE EDGE OF PAVEMENT, IN AREAS SHOWN HEREON, AND/OR TRUCKED OFF SITE AS APPROPRIATE.
13. PAVEMENT MARKINGS SHALL BE CONSTRUCTED USING WHITE, YELLOW OR BLUE TRAFFIC PAINT (WHERE SPECIFIED) MEETING THE REQUIREMENTS OF AASHTO M248, TYPE F OR EQUAL. PAINTED ISLANDS AND LOADING ZONES SHALL BE 4"-WIDE DIAGONAL WHITE LINES 3'-0" O.C. BORDERED BY 4"-WIDE WHITE LINES. PARKING STALLS SHALL BE SEPARATED BY 4"-WIDE WHITE LINES. SEE DETAILS FOR HANDICAP SYMBOLS, SIGNS AND SIGN DETAILS.
14. PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC DEVICES," "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" AND THE AMERICANS WITH DISABILITIES ACT (ADA), LATEST EDITIONS.
15. ALL CONSTRUCTION SHALL CONFORM WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND WITH THE CITY OF DOVER COMMUNITY SERVICES REGULATIONS AND STANDARD SPECIFICATIONS FOR CONSTRUCTION, LATEST EDITIONS. THE MORE STRINGENT SPECIFICATION SHALL APPLY.
16. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAWCUT LINES WITH RS-1 IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
17. ALL BONDS AND FEES SHALL BE PAID/POSTED PRIOR TO INITIATING CONSTRUCTION.
18. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM WITH DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
19. CONSTRUCTION HOURS SHALL BE LIMITED TO MON-FRI 7AM-6PM, SAT-SUN 9AM-4PM. THE HOURS OF CONSTRUCTION MUST BE DOCUMENTED ON A SITE CONSTRUCTION SIGN ALONG WITH CONTACT INFORMATION FOR THE GENERAL CONTRACTOR. SAID SIGNAGE MUST BE LOCATED AND APPROVED BY THE CITY ENGINEER OR ASST. CITY MANAGER.
20. UNLESS OTHERWISE NOTED, ALL NEW CURBING SHALL BE VERTICAL OR SLOPED GRANITE WITH A MINIMUM RADIUS OF 4'.
21. THE CONTRACTOR SHALL VERIFY ALL BUILDING DIMENSIONS WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PRIOR TO CONSTRUCTION. ALL DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER FOR RESOLUTION.
22. BUILDING AREA SHOWN IS BASED ON FOOTPRINT MEASURED TO THE EDGE OF FOUNDATIONS AND/OR SLABS. ACTUAL INTERIOR SPACE WILL DIFFER.
23. AS-BUILT PLANS OF THE SITE SHALL BE SUBMITTED ON PAPER AND IN A DIGITAL FORMAT IN PDF AND AUTOCAD DWG, AUTOCAD DXF OR AN ESRI FORMAT TO THE CITY OF DOVER ENGINEER'S OFFICE UPON COMPLETION OF PROJECT. AS-BUILT PLANS SHALL BE PREPARED AND CERTIFIED CORRECT BY A L.L.S. OR P.E. DIGITAL FILES SHALL BE GEO-REFERENCED TO NEW HAMPSHIRE STATE PLANE COORDINATES NAD83 AND SHALL BE EXPRESSED IN FEET.
24. BUILDING ADDRESSES SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
25. THIS SITE PLAN IS DESIGNED IN COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY REGULATIONS. THE PROPOSED BUILDING IS DESIGNED IN COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY REGULATIONS INCLUDING NH RSA 155-A:5-a&b, THE IBC AND ANSI 117.1.
26. FOUR PARKING SPACES WILL BE EQUIPPED WITH EV CHARGING STATIONS AND AN ADDITIONAL SIX SPACES WILL BE EV-READY, COORDINATE WITH MEP PLANS.
27. ANY FENCE TALLER THAN SEVEN FEET (7') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
28. RESIDENTS OF THE DEVELOPMENT SHALL NOT PLACE TRASH OR DEBRIS ON THE COMMUNITY TRAIL OR TRAILHEAD.
29. SUBJECT PROPERTY WAS GRANTED A VARIANCE ON 08/17/95 FOR SIGNAGE (DOVER REF. Z95-15).
30. PAVEMENT MARKING ABBREVIATIONS:
SWL: SINGLE WHITE LINE (4" SOLID LINE)
DWL: DOTTED WHITE LINE (4" x 2' LINES EVERY 6', ALSO REFERRED TO AS A SKIP LINE)
DYL: DOUBLE YELLOW LINE (2 x 4" SOLID LINES SEPARATED BY 4")
31. MAINTENANCE OF LANDSCAPING AND HARDSCAPING ALONG THE SITE FRONTAGE ON CHESTNUT STREET AND THE OVERLOOK DECK AND IT'S RELATED LANDSCAPING SHALL BE THE RESPONSIBILITY OF THE OWNER.
32. TRASH SHALL BE STORED INTERNAL TO THE BUILDING IN ROLL-OUT DUMPSTERS WHICH SHALL BE STAGED FOR PICK UP WITHIN THE SITE ON A DEMAND-BASED FREQUENCY.
33. TRASH RECEPTACLE AT DOG PARK TO BE SERVICED DAILY.
34. TOTAL ROOF AREA = 51,528 SF
30% OF ROOF = 14,458
GREEN ROOF AREA = 10,767 SF
COURTYARD = 9,306 SF

APPROVED
DATE 01/12/2023
City of Dover, N.H.
PLANNING BOARD
CHAIRMAN/DIRECTOR

ALTUS ENGINEERING, INC.
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

STATE OF NEW HAMPSHIRE – ERIC D. WEINRIEB No. 7634 LICENSED PROFESSIONAL ENGINEER

8/1/22

NOT FOR CONSTRUCTION

ISSUED FOR: FINAL APPROVAL

ISSUE DATE: AUGUST 8, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	TRC	EBS	11/23/21
1	TRC	EBS	02/24/22
2	TRC	EBS	04/05/22
3	PLANNING BOARD	EBS	04/19/22
4	CONDITIONS OF APPROVAL	EBS	08/08/22

DRAWN BY: EBS
APPROVED BY: EBS
DRAWING FILE: 4904-SITE.dwg

SCALE:
22" x 34" - 1" = 30'
11" x 17" - 1" = 60'

OWNER:
HARLECH, LLC
273 CORPORATE DR., SUITE 150
PORTSMOUTH, NH 03801

APPLICANT:
REDGATE REAL ESTATE ADVISORS, LLC
265 FRANKLIN ST., SUITE 602
BOSTON, MA 02110

PROJECT:
47 CHESTNUT SITE REDEVELOPMENT
TAX MAP 31, LOT 5
47 CHESTNUT STREET
DOVER, NH
DOVER FILE NO. P21-84

TITLE:
SITE PLAN

SHEET NUMBER:
C-3

P4904

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #COND-2025-0003

Application Type:	Conditional Use Permit
Applicant(s):	Bruton & Berube, PLLC
Owner(s):	Hawkins Family Revocable Trust
Location:	31 ½ Sixth St. (Assessor's Map 30, Lot 88-1)
Meeting Date:	March 11, 2025

INTENT: Proposal is for a Conditional Use Permit to convert an existing single-family home into a two-unit residential structure, with no exterior alterations.

AGENDA ITEM #: 4-B

FILE: COND-2025-0003

LOTS/UNITS PROPOSED: One (1) additional unit proposed, two (2) units total

APPLICANT: Bruton & Berube, PLLC

OWNER: Hawkins Family Revocable Trust

LOCATION: 31 ½ Sixth St. (Assessor's Map 30, Lot 88-1)

ACREAGE: ±0.12 acres (approx. 5,000 s.f.)

ZONING DISTRICT: CBD-MU (small portion falls within RM-U)

EXISTING USE: Residential

PROPOSED USE: Residential

SURROUNDING USE: Residential, Commercial

WAIVERS REQUESTED: N/A

ZBA ACTION: N/A

PERMITS REQUIRED: City of Dover CUP for relief from CBD-MU density regulations, pursuant to Section 170-20.B of the Zoning Ordinance.

CONSERVATION COMMISSION: N/A

ATTACHMENTS: CUP Application, Site Plan

Summary of Request and Background

Proposal is for a Conditional Use Permit to convert an existing single-family home into a two-unit residential structure. The property is primarily within the Central Business District Mixed-Use (CBD-MU) Sub-District, with a small portion in the Urban Density Multi-Residential (RM-U) District.

Within the CBD district, conditional use approval for relief may be granted by the Planning Board, provided that the proposed project complies with the following standards:

> *(a) The requested use shall be compatible with abutting uses and the surrounding neighborhood.*
> *(b) The requested use will not create undue traffic congestion or unduly impair pedestrian safety.*
> *(c) The requested use will not result in objectionable noise or odor which would constitute a nuisance.*

The CBD-MU zone allows up to ten units on a lot with a minimum of 5,000 square feet per unit. The applicant is requesting a CUP to allow two (2) units on the ±5,000 square foot lot (or 2,500 square feet per unit). The applicant is only proposing interior alterations and proposes one parking space for the existing unit and two parking spaces for the new unit.

Consistency with Land Use Regulations – Non-Environmental CUP Criteria

Chapter 170-19.B.2 outlines the criteria for granting a Conditional Use Permit for relief. Staff feels this proposal meets those criteria which include:

> *(a) That both public and private buildings and landscaping shall contribute to the physical definition of rights-of-way as civic spaces.*
> *(b) That development shall adequately accommodate automobiles, while respecting the pedestrian and the spatial form of public areas.*
> *(c) That the design of streets and buildings shall reinforce safe environments, but not at the expense of accessibility.*
> *(d) That architecture and landscape design shall grow from local climate, topography, history, and building practice.*
> *(e) That buildings shall provide their inhabitants with a clear sense of geography and climate through energy-efficient methods via a mixture of elements including windows, floor plan, and public and private space.*
> *(f) That encourage civic buildings and other public gathering places be provided as locations that reinforce community identity and activity.*
> *(g) That civic buildings shall be distinctive and appropriate to a role more important than the other buildings that constitute the fabric of the City.*
> *(h) That the preservation and renewal of historic buildings shall be facilitated.*
> *(i) That the harmonious and orderly evolution of urban areas shall be advanced by the proposed building and/or use.*
> *(j) That if the relief is granted, the surrounding neighborhood is not negatively impacted.*

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #COND-2025-0003

Application Type:	Conditional Use Permit
Applicant(s):	Bruton & Berube, PLLC
Owner(s):	Hawkins Family Revocable Trust
Location:	31 ½ Sixth St. (Assessor's Map 30, Lot 88-1)
Meeting Date:	March 11, 2025

Staff feels the applicant has met said criteria as the proposal will not alter the exterior appearance of the building, impact public spaces or pedestrian safety, or change street design. The applicant has also explained adequate parking for the project; however, Planning Staff will expect a parking layout as a condition of approval.

Consistency with Land Use Regulations – CBD CUP Criteria
Chapter 170-20.B.2 outlines the criteria for granting a Conditional Use Permit for relief within the Central Business District. Staff feels this proposal meets those criteria which include:

(a) The requested use shall be compatible with abutting uses and the surrounding neighborhood.
(b) The requested use will not create undue traffic congestion, or unduly impair pedestrian safety.
(c) The requested use will not result in objectionable noise or odor which would constitute a nuisance.

The applicant's request to convert a single residential unit into two units complies with these standards, as the project proposes no exterior alterations and avoidance of nuisances or impacts to the neighborhood traffic pattern.

STAFF RECOMMENDATION:
The Planning Department recommends that the Planning Board accept the application as complete, note it is not of regional impact, hold a public hearing, make the necessary and supporting findings of fact, and vote to approve the Conditional Use Permit, as staff notes that this CUP application, as presented, addresses all CUP criteria requirements. Staff would, however, recommend the following conditions.

Subsequent Conditions to Be Met Prior to Issuance of a Conditional Use Permit:

1. Provide a parking plan for all units at 31 Sixth St. (Map 30, Lot 88) and 31 ½ Sixth St. (Map 30, Lot 88-1).
2. Submit a copy of the easement granting parking and access to 31 Sixth St. (Map 30, Lot 88) for units at 31 ½ Sixth St. (Map 30, Lot 88-1).
3. Work with the Planning Department to endorse a development agreement per Chapter 170-20B(3) and then record at SCRD.

COND-2025-0003 31 1/2 SIXTH STREET

Property Information

Location	SIXTH ST
Owner	HAWKINS MATTHEW & ASHLEY TRUSTEES
Land Use	101R
Zoning Code	CBD-M
Property Id	30088-001000

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 10/30/2023
Data updated Daily

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

PERMIT SNAPSHOT REPORT COND-2025-0003
FOR CITY OF DOVER, N.H.

Permit Type	Conditional Use	**Project:**		**App Date:**	02/18/2025
Work Class:	Non-Environmental	**District:**	None	**Exp Date:**	NOT AVAILABLE
Status:	In Review	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	

Description: The Applicant's intent is to remodel the interior of the structure, with no external impact, to utilize the structure as a two-unit residential structure.

Parcel:	**Address:** 31 1/2 Sixth Street Dover, NH 03820	Main	**Zone:**

Plan Preparer	Applicant	Owner	Owner
McEneaney Survey Associates P.O. Box 1166 DOVER, NH 03821 Business: (603) 742-0911	Francis X Bruton 601 Central Ave Dover, NH 03820 Business: (603) 749-4529	Matt Hawkins PO Box 308 Dover, NH 03821 Business: (603) 661-5175 Mobile: (603) 661-5175	Matthew and Ashley Hawkins, Trustees Mobile: (603) 661-5175

Permit Custom Fields

Select Permit Type	Central Business District - Mixed Use	General Purpose	Alteration / Addition	Project Zone	Residential
What is the parcel zoned?	CBD-M	New Change in Impervious/Paved Area (sq ft)	0	Work	The Applicant's intent is to remodel the interior of the structure, with no external impact, to utilize the structure as a two-unit residential structure.
permitstatefed	Not applicable.				

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Francis_Bruton_2/18/2025.jpg	02/18/2025 11:10	Bruton, Francis		Uploaded via CSS
Permit Snapshot Report.pdf	02/18/2025 11:17	Service, EnerGov		Attached by IO - ATTACH: Initial Permit Snapshot

Invoice No.	Fee		Fee Amount	Amount Paid
INV-00011302	Planning General Application Fee		$200.00	$200.00
		Total for Invoice INV-00011302	$200.00	$200.00
INV-00011327	Planning Certified Mailing to Abutters		$30.00	$30.00
	Planning Public Notice in Newspaper		$120.00	$120.00
		Total for Invoice INV-00011327	$150.00	$150.00
		Grand Total for Permit	**$350.00**	**$350.00**

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Conditional Use Review v.1	Approved	02/18/2025	03/25/2025	02/25/2025	No	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Bassegio, Erin	Approved	02/25/2025	03/25/2025	02/25/2025

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		02/25/2025 10:01	02/25/2025 10:02
Confirm application complete v.1	Generic Action		02/25/2025 10:01
Conditional Use Review v.1	Receive Submittal	02/25/2025 0:00	02/25/2025 10:02
Planning Board v.1		02/25/2025 10:02	
Planning Board Agenda v.1	Task	02/25/2025 10:02	02/25/2025 10:03

PERMIT SNAPSHOT REPORT (COND-2025-0003)

Invoice for Notices v.1	Task	02/25/2025 10:03
Send Notices v.1	Task	
Planner Creates Staff Recommendations v.1	Permit Activity	
Distribute Planning Board Materials v.1	Task	
Planning Board Hearing v.1	Hold Hearing	
Planning Board Decision v.1	Permit Activity	
NOD Sent to Applicant v.1	Create Report	
Issue Permit v.1		
Verify Fees Prior to Permit v.1	Generic Action	
Issue and Review Permit v.1	Generic Action	
Print and Email Permit v.1	Generic Action	
Plans uploaded to Treeno v.1	Generic Action	
Internal Notification of Plan Completion v.1	Generic Action	
Recording v.1	Task	

City of Dover, New Hampshire
CONDITIONAL USE PERMIT APPLICATION

[Revision Date: October 19, 2020]

Office Use Only	Project #:		Date Received:	
	Amount Paid:		Time Received:	

APPLICANT AND OWNER INFORMATION

Name of Applicant: Hawkins Family Revocable Trust Telephone # (603) 661-5175

Address of Applicant: PO Box 308, Dover, NH 03821-0308

E-Mail Address: matthewahawkins@gmail.com

Name of Property Owner (if different from applicant): Same Telephone #

Address of Property Owner:

PROPERTY INFORMATION

Assessor's Map # 30 Lot(s) # 88-1

Address of Property: 31 1/2 Sixth Street, Dover, NH

Zoning District(s) RM-U Overlay District(s)

Existing Use of Property: The property currently contains one residential unit.

CONDITIONAL USE PERMIT INFORMATION

Type of Conditional Use Permit (Check All That Apply):

☐ Conservation District	☐ RCM Use Overlay District	☐ Gateway District
☐ Groundwater Protection	☐ Off-Street Parking and Loading	☐ Alternative Treatment Center
☐ Wetland Protection District	☐ Central Business District	☐ Heritage Residential District

Describe Proposed Use or Activity That Requires Conditional Use Permit and Describe Any Impacts:

Please see the attached narrative.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: Please see the attached narrative.

Name of Professional That Prepared Plans: Kevin M. McEneaney, LLS
McEneaney Survey Associates of New England

Address PO Box 681, 24 Chestnut Street, Dover, NH 03820 Telephone #: (603) 742-0911

Professional License #: 661 E-mail address: Kevin@surveynh.com

SIGNATURES

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

Signature of Property Owner: Trustee Date: 2-18-25
Matthew Hawkins & Ashley Hawkins, Trustees

Signature of Applicant (if different from owner): Trustee Date: 2-18-25
Matthew Hawkins & Ashley Hawkins, Trustees

Signature of Agent: Date: 2/18/25
Francis X. Bruton, III, Esquire, Attorney for Applicant

AUTHORIZATION TO ENTER SUBJECT PROPERTY

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: Date: 2-18-25

CITY OF DOVER CONDITIONAL USE
LIST OF ABUTTERS

Pursuant to RSA 676:4, the State Law of New Hampshire, the City of Dover is required to notify the applicant, abutters (including holders of conservation easements), and any professional whose seal is on the plan, of the public hearing by certified mail, return receipt requested. Staff will provide the abutter information, while the applicant must provide accurate contact information for the owner, applicant and professional agents representing the project.

Owner:

TAX MAP	LOT #	PROPERTY OWNER	MAILING ADDRESS

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
	See attached.	

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

COND-2025-0003 **33 1/2 SIXTH STREET**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
30071-000000	39 SIXTH ST	FORBES KRISTEN K		39 SIXTH ST	DOVER	NH	03820
30072-000000	37 SIXTH ST	PROPERTY BROTHERS LLC		PO BOX 801	NEWCASTLE	NH	03854
30073-000000	56 GROVE ST	WOOD GEOFFREY J &	WOOD CHRISTINA A	123 PORTSMOUTH AVE	STRATHAM	NH	03885-2420
30085-000000	53 GROVE ST	O BRIEN LOUISE J		PO BOX 2801	SEABROOK	NH	03874
30086-000000	51 GROVE ST	SULLIVAN MICHAEL B &	SULLIVAN SARA C	51 GROVE ST	DOVER	NH	03820
30087-000000	49 GROVE ST	DRAKE JAMES T TRUSTEE	DRAKE JAMES T 2019 REVOCABLE TRUST	49 GROVE STREET	DOVER	NH	03820
30088-000000	31 SIXTH ST	HAWKINS MATTHEW & ASHLEY TRUSTEES	HAWKINS FAMILY REVOCABLE TRUST	PO BOX 308	DOVER	NH	03821-0308
30089-000000	33 SIXTH ST	WENTWORTH MERLE P	C/O TRISTAN WENTWORTH	203 OLD ROCHESTER RD	SOMERSWORTH	NH	03878
30090-000000	25 SIXTH ST	D & P PROPERTIES LLC		23 LAREDO LN	EAST ROCHESTER	NH	03868
30091-000000	21 SIXTH ST	SMITH MARTIN F III		PO BOX 1144	DOVER	NH	03820
30092-000000	4 MOUNT VERNON ST	KAROUTAS PAUL TRUSTEE	KAROUTAS PAUL LIVING REVOCABLE TRUST	3 KENNEDY CIRCLE	DOVER	NH	03820
30093-000000	8 MOUNT VERNON ST	WILSON PERRY K		PO BOX 1105	DOVER	NH	03821
30094-000000	12 MOUNT VERNON ST	12 MT VERNON ST LLC		72 FOYES LANE	KITTERY	ME	03905
30096-000000	20 MOUNT VERNON ST	MOUNT VERNON HOLDINGS LLC		27 GROVE ST	GREENLAND	NH	03840
31083-000000	32 SIXTH ST	BULLOCK BERNARD A	C/O BM BULLOCK PROPERTY MANAGEMENT LLC	PO BOX 588	EXETER	NH	03833
31084-000000	42 SIXTH ST	LEDDY ALEXIA TRUSTEE	444 OWLS REVOCABLE TRUST	154 WASHINGTON RD	RYE	NH	03870-2442
31085-000000	46 SIXTH ST	VITKO THOMAS J & SUZANNE M TRUSTEES	VITKO ANCESTRAL GRANTOR TRUST	186 BACK RD	DOVER	NH	03820
31086-000000	41 GROVE ST	HELLO GROVE LLC		PO BOX 504	PORTSMOUTH	NH	03802
31087-000000	39 GROVE ST	PILLSBURY RAYMOND D		39 GROVE ST	DOVER	NH	03820
31099-000000	56 SIXTH ST	MHC 155 (DOVER NH) LLC	C/O EXTRA SPACE MANAGEMENT INC	PO BOX 71870 6890 S 2300 E	SALT LAKE CITY	UT	84171
31099-A00000	40 GROVE ST	ROSALIND REAL ESTATE LLC		3 GRANITE STREET	CAMBRIDGE	MA	02139
30088-001000	SIXTH ST	HAWKINS MATTHEW & ASHLEY TRUSTEES	HAWKINS FAMILY REVOCABLE TRUST	PO BOX 308	DOVER	NH	03821-0308
		MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND		PO BOX 681	DOVER	NH	03820
		BRUTON & BERUBE, PLLC	FRANCIS BRUTON	601 CENTRAL AVENUE	DOVER	NH	03820

Project Narrative

Hawkins Family Revocable Trust
Property Address: 31 Sixth Street, Dover
Tax Map: Map 3, Lot 88
Zoning District: CDB-MU

The property in question is located at 31 Sixth Street, Dover, as is shown on the Dover Tax Maps at Map 3, Lot 88. The structure on the parcel is currently used as a single residential unit. The structure lies entirely within the CBD-MU zoning district, although a small portion of the property, which is a split zone parcel, lies within the RM-U zoning district.

The Applicant's intent is to remodel the interior of the structure, with no external impact, to utilize the structure as a two-unit residential structure. The unit will comply with the parking regulations of Dover with 1 space for the existing tenant and 2 parking spaces for the new tenant, as the new unit must satisfy Section 153-14 (D) of the site plan parking regulation. The two spaces are comprised of 1.4 spaces, plus 0.5 space for a visitor. Per the prior approved subdivision (see copy of subdivision, recorded at Strafford County Registry of Deeds as Plan 1220, attached hereto) of Map 30, Lot 88 and Map 30, Lot 88-1, an easement for the 2 spaces will be provided on Lot 88.

Per Attachment 15, within the Dover Zoning Ordinance, the CBD-MU zone permits up to 10 units one on parcels, with such density allowed at 5,000 sf lot size per unit. The lot size in this case is 5,000 sf. Within the CBD-MU zoning district the density regulations are permitted to be adjusted with the grant of a conditional use permit, pursuant to Section 170-20B.

The Applicant would like to provide for additional necessary housing in Dover, with the added benefit of taking a large single residential unit and reducing the size of the resulting two units, thus reducing the individual rents of each resulting unit. As such, the Applicant seeks a conditional use permit to allow density for each unit to be roughly 2,500 sf.

Section 170-20B Conditional Use Permit Requirements:

The provisions of Section 170-20B incorporate the provisions of Section 170-19, which are also addressed:

Section 170-19 and Section 170-20B - Conditional use criteria:

(1) Conditional use approval for relief from the standards herein may be granted by the Planning Board (RSA 674:21, II) after proper public notice and public hearing provided that the proposed project complies with the following standards:

(a) That both public and private buildings and landscaping shall contribute to the physical definition of rights-of-way as civic spaces. ***The exterior appearance of the existing structure will not be modified.***

(b) That development shall adequately accommodate automobiles, while respecting the pedestrian and the spatial form of public areas. ***The parking spaces required for the two dwellings units comply with Dover regulations.***

(c) That the design of streets and buildings shall reinforce safe environments, but not at the expense of accessibility. ***There will be no change in the existing design of streets and buildings.***

(d) That architecture and landscape design shall grow from local climate, topography, history, and building practice. ***There will be no change in the existing design of streets and buildings.***

(e) That buildings shall provide their inhabitants with a clear sense of geography and climate through energy-efficient methods via a mixture of elements including windows, floor plan, and public and private space. ***There will be no change in the existing design of streets and buildings.***

(f) That encourage civic buildings and other public gathering places be provided as locations that reinforce community identity and activity. ***There will be no change in the existing design of streets and buildings. The addition of an additional unit within the same structure that exists now will address the needs for more housing in Dover and thus reinforce community identity and activity.***

(g) That civic buildings shall be distinctive and appropriate to a role more important than the other buildings that constitute the fabric of the City. ***There will be no change in the existing design of streets and buildings.***

(h) That the preservation and renewal of historic buildings shall be facilitated. ***There will be no change in the existing design of streets and buildings.***

(i) That the harmonious and orderly evolution of urban areas shall be advanced by the proposed building and/or use. ***There will be no change in the existing design of streets and buildings. The addition of an additional unit within the same structure that exists now will advance the harmonious and orderly evolution of this urban are by the proposed use set forth herein.***

(j) That if the relief is granted, the surrounding neighborhood is not negatively impacted. ***There will be no negative impact to the existing neighborhood with the addition of one residential unit within an existing residential structure.***

(2) Conditional use approval for relief from the use standards herein may be granted by the Planning Board (RSA 674:21, II) after proper public notice and public hearing provided that the proposed project complies with the following standards:

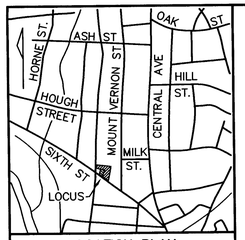
(a) The requested use shall be compatible with abutting uses and the surrounding neighborhood. ***There will be no change in the existing design of streets and buildings. There will be no negative impact to the existing neighborhood with the addition of one residential unit within an existing residential structure.***

(b) The requested use will not create undue traffic congestion or unduly impair pedestrian safety. **The addition of one residential unit, within the structure of an existing single residential unit, with no exterior modification will have no negative impact to the existing neighborhood.**

(c) The requested use will not result in objectionable noise or odor which would constitute a nuisance. **The addition of one residential unit, within the structure of an existing single residential unit, with no exterior modification will not result in objectionable noise or odor.**

(3) Conditional use approval shall be subject to a formal agreement between the Planning Board and the applicant. Said agreement shall be recorded at the Strafford County Registry of Deeds. **The Applicant is willing to sign such an agreement for recording with the Strafford County Registry of Deeds.**

Plan# 12208 09/28/2020 11:00:27 AM
Page 1 of 1
Register of Deeds, Strafford County
LCHIP STA165087 25.00



LOCATION PLAN
(NO SCALE)

No.	Bearing	Distance
L1	S54°40'07"E	22.29'
L2	S35°43'49"W	27.00'

NH STATE PLANE NAD 83 - GPS OBS.

30 / 94
12 MT VERNON ST, LLC
72 FOYES LANE
KITTERY, ME 03905
4640 / 864

30 / 87
JAMES T. DRAKE, TRUSTEE
JAMES T. DRAKE 2019 REVOCABLE TRUST
49 GROVE STREET
DOVER, NH 03820
4653 / 34

IRON ROD FOUND ON LINE

STEEL FENCE POST
N - 256,967.856
E - 1,194,596.933
(SEE NOTE 7)

30 / 93
PERRY K. WILSON
P.O. Box 1105
DOVER, NH 03821
3934 / 879

S08°33'57"W 76.12'

3/4"ø IRON PIPE FOUND, 0.28' OFF LINE
I.R.(TBS)

30 / 92
PAUL KAROUTAS, TRUSTEE
PAUL KAROUTAS LIVING REVOCABLE TRUST OF 2004
3 KENNEDY CIRCLE
DOVER, NH 03820
4157 / 108

S11°34'26"W 51.25'

IRON PIPE FOUND 1"ø UP 6", OFF LINE 0.95'

S83°24'54"E 210.13'

BUILDING SETBACK LINE (TYP.)

WOOD FRAME DWELLING

WOOD FRAME GARAGE

2 1/2 STORY WOOD FRAME DWELLING #31

OIL TANK

OLD CONCRETE FOUNDATION

GAS METERS

ELEC. METERS

OIL TANK

GAS METER

1 STORY WOOD FRAME DWELLING

OHU

ELEC. METER

30 / 88
REMAINING LAND AREA
24,207 S.F.
0.56 Ac.

BIT. CONCRETE WALK & STEPS

I.R.(TBS)
N - 256,991.953
E - 1,194,388.192
(SEE NOTE 7)

IRON PIPE FOUND FLUSH, OUT 0.90'

BITUMINOUS CONCRETE DRIVEWAY AND PARKING AREA (SEE NOTE 9)

VGC

CONCRETE SIDEWALK

N07°59'47"E 49.16'

GROVE STREET
{PUBLIC; 50' WIDE R.O.W.}

IRON ROD W/ CAP #661 FOUND

S80°44'42"E 44.88'

L1

L2

BAY DOOR

30 / 88-1
1 STORY WOOD FRAME DWELLING #31 1/2

WOOD RET. WALL

I.R. (TBS)

2 1/2 STORY WOOD FRAME DWELLING #31

GAS METER

ELEC. METERS

BITUMINOUS CONCRETE DRIVEWAY AND PARKING AREA

I.R.(TBS)
1 1/4"ø IRON PIPE FOUND, 0.47' OFF LINE

30 / 90
D & P PROPERTIES, LLC
23 LAREDO LANE
EAST ROCHESTER, NH 03868
4454 / 220

N74°16'42"W 66.42'

IRON ROD W/ CAP #661 FOUND (IN TREE)

CHAIN LINK FENCE

N14°29'40"E 76.00'

S17°19'40"W 66.30'

S12°06'14"W 89.29'

WOOD FRAME STRUCTURE

ELEC. METER

GAS METER

BITUMINOUS CONCRETE DRIVEWAY AND PARKING AREA

IRON ROD W/ CAP #661 FOUND

CONCRETE WALK & STEPS

I.R. (TBS)

56.50'

105.74'

I.R. (TBS)

STONE RETAINING WALL

30 / 72
PROPERTY BROTHERS, LLC
P.O. Box 801
NEWCASTLE, NH 03854
4567 / 824

SMH

CB

STOP BAR

CROSS-WALK

DRIVEWAY

N53°26'54"W

CONCRETE SIDEWALK

VGC

SWL

30 / 89
MERLE P. WENTWORTH
33 SIXTH STREET
DOVER, NH 03820
1894 / 554

30 / 88-1
LOT 1 AREA
5,003 S.F.
0.12 Ac.

SIXTH STREET
{PUBLIC; 66' WIDE R.O.W.}

DYL

GRANITE BOUND FOUND

GROVE STREET

31 / 85
THOMAS J. VITKO
SUSANNE M. VITKO
186 BACK ROAD
DOVER, NH 03820
1882 / 679

31 / 84
ALEXIA LEDDY
110 CLARK ROAD
RYE, NH 03870
4640 / 423

31 / 83
BERNARD A. BULLOCK
C/O BM BULLOCK PROPERTY MANAGEMENT LLC
P.O. Box 588
EXETER, NH 03833
2851 / 121

LEGEND

I.R.(TBS) – IRON ROD TO BE SET
S.F. – SQUARE FEET
Ac. – ACRE
(TYP.) – TYPICAL
± – MORE OR LESS
ø – DIAMETER
N – – NORTHING
E – – EASTING
S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
-o- UP – UTILITY POLE
>—— – GUY WIRE
—OHU—— – OVERHEAD UTILITIES
ELEC. – ELECTRIC
BIT. – BITUMINOUS
VGC – VERTICAL GRANITE CURB
DYL – DOUBLE YELLOW LINE
SWL – SINGLE WHITE LINE
S SMH – SEWER MANHOLE
CB – CATCH BASIN
—G—— – GAS LINE
GV – GAS VALVE
– FIRE HYDRANT
– WATER SHUT-OFF

NO.	DATE	REVISIONS / DESCRIPTION	BY	CHK
1	9/1/20	REVISE PER PL. BOARD CONDITIONS OF APPROVAL	RJM	KMM

PROJECT NO	TYPE	FIELDBOOK & PAGES
20-2263	SUBDIVISION	20-02 54-63

REFERENCE PLANS:

1.) PLAN OF LAND PREPARED FOR CRAIG AND LAURA FAHEY, TAX MAP 30, LOT No. 92, 4 MOUNT VERNON STREET, DOVER, STRAFFORD COUNTY, NEW HAMPSHIRE. SCALE: 1" = 20'; DATED: OCTOBER 20, 2000. BY: McENEANEY SURVEY ASSOCIATES, INC. RECORDED S.C.R.D. PLAN 52-63.

OWNERS SIGNATURES

NOTES:

1.) OWNER OF RECORD:
MATTHEW HAWKINS, TRUSTEE
ASHLEY HAWKINS, TRUSTEE
HAWKINS FAMILY REVOCABLE TRUST
2 WHITTIER FALLS WAY
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOLUME 4702, PAGE 548

2.) 30 / 88 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) TOTAL PARCEL AREA: 29,210 S.F. / 0.67 Ac.

4.) PLAN INTENT: TO SUBDIVIDE THE SUBJECT PARCEL AS SHOWN, PARCEL IS SERVICED BY MUNICIPAL SEWER AND WATER.
THE EXISTING USE ON PROPOSED LOT 1 IS A SINGLE FAMILY RESIDENCE.

5.) ZONING DISTRICT: CBD, MIXED USE SUB-DISTRICT

MINIMUM LOT SIZE	= N/A
MINIMUM LOT COVERAGE	= 50 PERCENT
FRONTAGE BUILD-OUT	= 60 PERCENT MINIMUM
FRONT BUILD TO LINE	= 5 FEET MIN. / 20 FEET MAX.
SIDE SETBACK	= 5 FEET MIN. / 20 FEET MAX.
REAR SETBACK	= 10 FEET MIN. / 20 FEET MAX.
MAXIMUM BUILDING HEIGHT	= 3 STORY MAX / 2 STORY MIN.

6.) THE SUBJECT PARCEL IS LOCATED OUTSIDE OF THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY NUMBER 330145; PANEL 0310; SUFFIX E; MAP NUMBER 33017C0310E; EFFECTIVE DATE SEPTEMBER 30, 2015.

7.) BASIS OF BEARING IS NH STATE PLANE (NAD83) BASED ON GPS OBSERVATION.

8.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY THIS OFFICE DURING FEBRUARY 2020 WITH AN ERROR OF CLOSURE NOT GREATER THAN 1 IN 10,000.

9.) PARCEL 30/88-1 WILL HAVE USE OF THE DRIVEWAY AND PARKING AREA OFF GROVE STREET. AN EASEMENT FOR ACCESS AND PARKING WILL BE INCLUDED IN THE DEED CONVEYING THIS PARCEL.

10.) THERE ARE NO WETLANDS OBSERVED ON THE PROPERTY. AS REVIEWED BY DAMON E. BURT, N.H.C.W.S. #163 OF FRAGGLE ROCK ENVIRONMENTAL SERVICES IN ACCORDANCE WITH CHAPTER 170-27.1 OF THE ZONING ORDINANCE, ON JUNE 15, 2020.

APPROVED
DATE 9/22/20
City of Dover, NH
PLANNING BOARD
CHAIRMAN/DIRECTOR

MINOR SUBDIVISION OF LAND
PREPARED FOR THE
HAWKINS FAMILY REVOCABLE TRUST
TAX MAP 30, LOT No. 88
31 SIXTH STREET & GROVE STREET
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DOVER PLANNING FILE No. P 20-29

DRAWN BY: RJM | FILE: MSA\2263\20-2263 NAD83
SCALE: 1" = 20' | DATE: MARCH 18, 2020

20 10 0 10 20 40 60 80

"I HEREBY CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL GROUND SURVEY PERFORMED WITH A TOTAL STATION, BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, SAID SURVEY MEETS OR EXCEEDS THE MINIMUM PRECISION REQUIREMENTS FOR SURVEY CLASSIFICATION "U" AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS."

STATE OF NEW HAMPSHIRE – No. 661 KEVIN M. McENEANEY – LICENSED LAND SURVEYOR – SIGNATURE

McEneaney Survey Associates of NEW ENGLAND
P.O. Box 681 – 24 CHESTNUT STREET
DOVER, NH 03820 (603) 742-0911
SURVEYING – PLANNING – CONSULTING

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #COND-2025-0001

Application Type:	Conditional Use Permit
Applicant(s):	Summit Land Development, LLC
Owner(s):	16 Industrial Park, LLC
Location:	Industrial Park Road (Assessor's Map G, Lot 4-1)
Meeting Date:	March 11, 2025

INTENT: Proposal is for a Conditional Use Permit (CUP) to construct a stormwater management system and associated site grading for a seasonal automobile storage and maintenance facility, resulting in 6,830 ± s.f. of wetland buffer impacts.

AGENDA ITEM #: 4-C

FILE: COND-2025-0001

APPLICANT: Summit Land Development, LLC

OWNER: 16 Industrial Park, LLC

LOTS/UNITS PROPOSED: N/A

ACREAGE: ±2.03 acres

ZONING DISTRICT: Commercial Manufacturing (CM), Wetland Protection District

EXISTING USE: Vacant

PROPOSED USE: Commercial

SURROUNDING USE: Commercial, Light Manufacturing

ZBA ACTION: ZONE-2025-0003, Special Exception for use granted on 2/20/25

PERMITS: City of Dover CUP for wetland buffer impacts, EPA General Construction Permit

WAIVERS REQUESTED: §153-13.A (12) Landscape plan by LLA, §153-14A(3)(b)[4] Post-development surface water runoff volume

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

NOTICES SENT: Abutter notices were sent by certified mail to all abutters.

TRC: 2/20/25

CONSERVATION COMMISSION: Reviewed and endorsed on 2/10/25.

ATTACHMENTS: Site Plan, Application Materials.

Summary of Request and Background:
The applicant proposes to construct a Seasonal Automobile Storage and Maintenance Facility on a vacant lot on Industrial Park Road (Assessor's Map G, Lot 4-1). The proposed development will be an approx. 27,040 square feet structure and the primary use for the business is a specialty automotive storage facility with an on-site mechanic.

As part of the stormwater management system and associated site grading for the project, there are 6,830 ± square feet of wetland buffer impacts being proposed. There are no direct impacts to the wetlands and buffer impacts have been limited to the construction of the wet-extended detention pond, sediment forebay, and the associated grading.

The Zoning Board of Adjustment approved a Special Exception for the proposed use, (ZONE-2025-0003), on February 20, 2025.

The Technical Review Committee reviewed the application at their February 20, 2025 meeting. *(minutes attached)*

The Conservation Commission reviewed and endorsed the application at their February 10, 2025 meeting. *(minutes attached)*

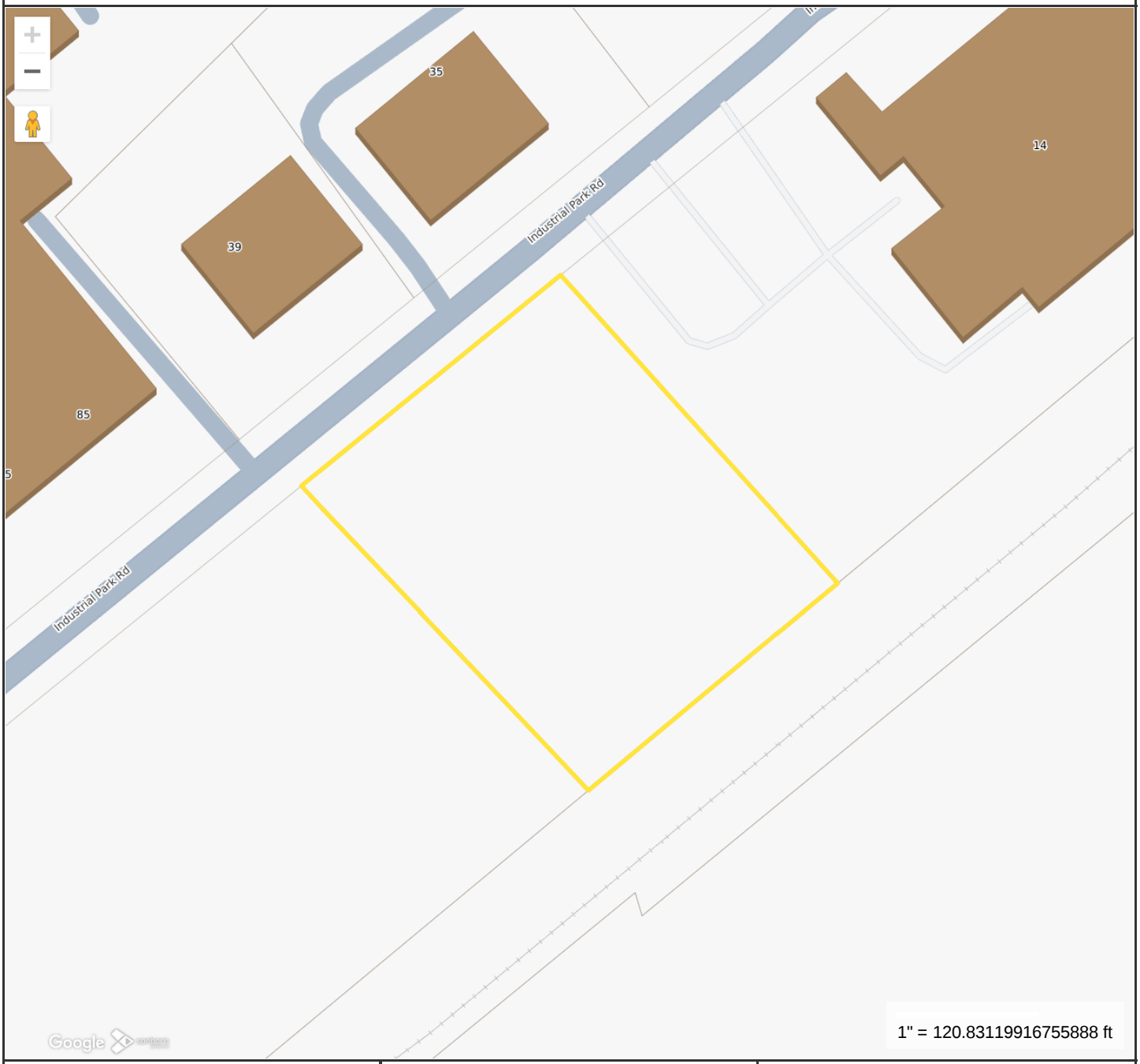
Consistency with Land Use Regulations – CUP 170-28.F
The Wetlands Protection District ordinance §170-28.F provides for Conditional Use Permits to allow impacts to the Wetlands Protection District if standards related to demonstration that no practicable alternative is available, impact avoidance was considered, impacts were minimized, mitigation has been sought, and approval of the wetlands impact from NHDES Wetlands Bureau has been granted.

Planning Staff feels that the applicant considered and met all of the criteria as specified in §170-28.F per their narrative. The applicant explained there is no practicable alternative with less impact on the area.
The site design avoids wetlands and minimizes wetland buffer impacts by considering existing slopes, seasonal high-water levels, and soil types. The proposed project does not require state mitigation and the applicant does not require approvals from the NHDES Wetlands Bureau but the proposal has been reviewed and endorsed by the Conservation Commission.

STAFF RECOMMENDATION:
The Planning Department recommends that the Planning Board vote to accept the application and determine it not to have regional impact, open a public hearing, close the public hearing, make the necessary and supporting findings of fact, and vote to approve the site plan with the following subsequent conditions:
Subsequent Conditions to Be Met Prior to Issuance of a Conditional Use Permit:

1. Approval of SITE-2025-0001;
2. Add note to plan that copies of the EPA Construction General Permit will submitted to the Planning Department once received.

COND-2025-0001 INDUSTRIAL PARK ROAD



Property Information

Location	INDUSTRIAL PARK RD
Owner	16 INDUSTRIAL PARK LLC
Land Use	440V
Zoning Code	CM
Property Id	G0004-001000

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 10/30/2023
Data updated Daily

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

PERMIT SNAPSHOT REPORT COND-2025-0001
FOR CITY OF DOVER, N.H.

Permit Type	Conditional Use	**Project:**		**App Date:**	01/29/2025
Work Class:	Environmental	**District:**	None	**Exp Date:**	NOT AVAILABLE
Status:	In Review	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	

Description: To allow wetland buffer impact of 6830 sf. No wetlands will be impacted.

Parcel:	G0004-001000	Main	**Address:**	Industrial Park Rd Dover, NH	Main	**Zone:**	CM(Non-Residential - Commercial Manuf

Owner
Chad Kageleiry
Business: (603) 749-2800

Plan Preparer
Stephen Haight
Business: (603) 749-0443

Applicant
Chad Kageleiry
Business: (603) 749-2800

Applicant
Civilworks New England
Steve Haight
181 Watson Road PO Box 1166
Dover, NH 03820
Business: (603) 749-0443
Mobile: (603) 817-6651

Permit Custom Fields

Select Permit Type	Wetland Protection District	General Purpose	New Construction	Project Zone	Non-Residential
What is the parcel zoned?	CM	New Change in Impervious/Paved Area (sq ft)	26944	Work	To construction grading and drainage associated with the site design within the wetland buffer setback. No buildings will be within the wetland buffer. No wetlands will be impacted.
permitstatefed	EPA Notice of Intent General Construction Permit				

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Steve_Haight_1/29/2025.jpg	01/29/2025 14:42	Haight, Steve		Uploaded via CSS
Permit Snapshot Report.pdf	01/29/2025 14:42	Service, EnerGov		Attached by IO - ATTACH: Initial Permit Snapshot
2025.02.10_ConservationCommission.Minutes.draft.pdf	02/19/2025 14:11	Blonigen, Rachel		Draft ConCom Minutes

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00011007	Planning General Application Fee	$200.00	$200.00
	Planning Impervious Paved Area Fee	$1,886.08	$1,886.08
	Total for Invoice INV-00011007	$2,086.08	$2,086.08
	Grand Total for Permit	**$2,086.08**	**$2,086.08**

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Conditional Use Review v.1	Approved	01/28/2025	02/07/2025	02/25/2025	No	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Bassegio, Erin	Approved	02/25/2025	03/25/2025	02/07/2025

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		02/25/2025 10:21	02/25/2025 10:22
Confirm application complete v.1	Generic Action		02/25/2025 10:22
Conditional Use Review v.1	Receive Submittal	02/25/2025 0:00	02/25/2025 10:22

PERMIT SNAPSHOT REPORT (COND-2025-0001)

Planning Board v.1		02/25/2025 10:22	
Planning Board Agenda v.1	Task	02/25/2025 10:22	02/25/2025 10:24
Invoice for Notices v.1	Task	02/25/2025 10:23	
Send Notices v.1	Task		
Planner Creates Staff Recommendations v.1	Permit Activity		
Distribute Planning Board Materials v.1	Task		
Planning Board Hearing v.1	Hold Hearing		
Planning Board Decision v.1	Permit Activity		
NOD Sent to Applicant v.1	Create Report		
Issue Permit v.1			
Verify Fees Prior to Permit v.1	Generic Action		
Issue and Review Permit v.1	Generic Action		
Print and Email Permit v.1	Generic Action		
Plans uploaded to Treeno v.1	Generic Action		
Internal Notification of Plan Completion v.1	Generic Action		
Recording v.1	Task		

City of Dover, New Hampshire
CONDITIONAL USE PERMIT APPLICATION

[Revision Date: October 19, 2020]

Office Use Only	Project #:		Date Received:	
	Amount Paid:		Time Received:	

APPLICANT AND OWNER INFORMATION

Name of Applicant: Summit Land Development, LLC Telephone # 603-749-2800

Address of Applicant: 340 Central Ave., Suite 202, Dover, NH 03820

E-Mail Address: chad@summitlanddev.com

Name of Property Owner (if different from applicant): 16 Industrial Park, LLC Telephone # 603-749-2800

Address of Property Owner: 340 Central Ave., Suite 202, Dover, NH 03820

PROPERTY INFORMATION

Assessor's Map # G Lot(s) # 4-1

Address of Property: 34 Industrial Park Road

Zoning District(s) CM Overlay District(s) Wetland Protection District

Existing Use of Property: Vacant

CONDITIONAL USE PERMIT INFORMATION

Type of Conditional Use Permit (Check All That Apply):

☐ Conservation District	☐ RCM Use Overlay District	☐ Gateway District
☐ Groundwater Protection	☐ Off-Street Parking and Loading	☐ Alternative Treatment Center
☒ Wetland Protection District	☐ Central Business District	☐ Heritage Residential District

Describe Proposed Use or Activity That Requires Conditional Use Permit and Describe Any Impacts:

6830± sq. ft. of disturbance are proposed within the 50' wetland buffer. To mitigate development, a drainage system is proposed within the buffer including grading, a sediment forebay, a portion of a wet pond, an outlet control structure, a plunge pool, two (2) culvert outlets, and rip rap outlet control. No wetland impacts are proposed. No parking or building is proposed within the 50' wetland buffer.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: EPA, Notice of Intent General Construction Permit

Name of Professional That Prepared Plans: Civilworks NE, Stephen J. Haight, PE

Address 181 Watson Rd., P.O. Box 1166 Telephone #: 603-749-0443

Professional License #: NH PE #7978 E-mail address: shaight@civilworksne.com

SIGNATURES

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

Signature of Property Owner: _____ Date: 1-28-25

Signature of Applicant (if different from owner): _____ Date: 1-28-25

Signature of Agent: _____ Date: _____

AUTHORIZATION TO ENTER SUBJECT PROPERTY

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: _____ Date: 1-28-25

CITY OF DOVER CONDITIONAL USE
LIST OF ABUTTERS

Pursuant to RSA 676:4, the State Law of New Hampshire, the City of Dover is required to notify the applicant, abutters (including holders of conservation easements), and any professional whose seal is on the plan, of the public hearing by certified mail, return receipt requested. Staff will provide the abutter information, while the applicant must provide accurate contact information for the owner, applicant and professional agents representing the project.

Owner:

TAX MAP	LOT #	PROPERTY OWNER	MAILING ADDRESS
G	4-1	16 Industrial Park, LLC	340 Central Avenue, Suite 202
			Dover, NH 03820

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS
	Summit Land Development	340 Central Avenue, Suite 202
		Dover, NH 03820

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
Stephen J. Haight, PE	Civilworks New England	P.O. Box 1166 Dover, NH 03821
Kevin McEneaney, LLS	McEneaney Survey Associates	P.O. Box 1166 Dover, NH 03821

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

Summit Land Development, LLC
16 Industrial Park, LLC
340 Central Avenue, Suite 202
Dover, New Hampshire 03820

January 28, 2025

City of Dover
288 Central Avenue
Dover, NH 03820

Attn: Planning Board

Re: LETTER OF APPLICANT/OWNER AUTHORIZATION
Site Plan Review Applications & Approvals
16 Industrial Park Road – Tax Map G, Lot 4-1

I, Chad Kageleiry, authorize Civilworks New England and McEneaney Survey Associates to represent all applications made on behalf of me as Member of both Summit Land Development, LLC (APPLICANT) and 16 Industrial Park, LLC (OWNER) to the City of Dover Planning Board and any other Dover Board or Committee, as well as any State of NH departments, as necessary, relative to the pursuit of approvals and permits for the development of the subject parcel.

Sincerely,

Chad Kageleiry, Member
Summit Land Development, LLC
& 16 Industrial Park, LLC

COND-2025-0001 **INDUSTRIAL PARK ROAD**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
G0003-B00000	85 INDUSTRIAL PARK RD	85 INDUSTRIAL PARK II LLC		210 COMMERCE DR STE 300	PORTSMOUTH	NH	03801
G0004-000000	14 INDUSTRIAL PARK RD	16 INDUSTRIAL PARK LLC		340 CENTRAL AVE SUITE 202	DOVER	NH	03820
G0004-B00000	35 INDUSTRIAL PARK RD	CAMH LLC		35 INDUSTRIAL PARK RD	DOVER	NH	03820
G0004-B00001	39 INDUSTRIAL PARK RD	BOND ENTERPRISES LLC		174 ESTES RD	ROCHESTER	NH	03867
G0004-C00001	29 INDUSTRIAL PARK RD	R&R BERNSTEIN HOLDING LLC		29 INDUSTRIAL PARK RD	DOVER	NH	03820
G0005-000000	LITTLEWORTH RD	BOSTON & MAINE RR	IRON HORSE PARK	500 WATER STREET J-910	JACKSONVILLE	FL	32202
H0031-000000	30 LITTLEWORTH RD	SOUSANE RUTH K &	QUINLAN NANCY K	30 LITTLEWORTH RD	DOVER	NH	03820
G0004-001000	INDUSTRIAL PARK RD	16 INDUSTRIAL PARK LLC		340 CENTRAL AVE SUITE 202	DOVER	NH	03820
		CIVILWORKS NEW ENGLAND	STEPHEN HAIGHT, I	PO BOX 1166	DOVER	NH	03820

CONDITIONAL USE NARRATIVE
§170-27.1
WETLAND PROTECTION DISTRICT
CONDITIONAL USE APPROVAL REQUIREMENTS
for
Summit Land Development, LLC
Seasonal Automobile Storage and Maintenance Facility
Commercial Site Development
Tax Map G, Lot 4-1

F. Conditional use approval.

(1) Conditional use approval may be granted by the PLANNING BOARD (RSA 674:21II) after proper public notice and public hearing, for construction within the Wetland Protection District or buffer. Said construction may include but is not limited to a road or other accessway, utility right-of-way, communication lines, power lines and pipelines, structures, and parking lots provided that the proposed construction complies with the following standards:

(a) Practicable Alternative: There is no practicable alternative that would have a less adverse impact on the area. **The site design will not impact any wetlands. The site design incorporates unique site characteristics including existing slope, depth to estimated seasonal high water, and soil type to minimize wetland buffer impacts and maximize stormwater treatment for pollutant removal. The site layout is designed to limit the wetland buffer impacts for the stormwater management system and associated grading. Additionally, the area disturbed within the wetland buffer will be loamed and seeded with a conservation mix.**

(b) Avoidance: The potential impacts have been avoided to the maximum extent practicable. The APPLICANT will demonstrate by plan and example that the proposed construction represents the least impacting alternative. **There are 1,545 sf of wetlands on site. There are 6,830± sf of wetland buffer impacts, which have been limited to the construction of the wet extended detention pond, sediment forebay and the associated grading. The site design incorporates the unique site characteristics including existing slopes, depth to estimated seasonal high water, and soil type to minimize wetland buffer impacts and maximize stormwater treatment for pollutant removal. The site is designed to provide the ability to treat the project site stormwater run-off, while maintaining existing drainage ways from adjacent sites.**

(c) Minimization: Any unavoidable impacts have been minimized. No reasonable Alternative to the proposed construction exists which does not impact a wetland, or which has less detrimental impact on a wetland. Design, construction, and maintenance methods will be prepared by a registered engineer to minimize detrimental impacts to the wetlands and include restoration of the site as nearly as possible to its original grade. **There are 6,830 sf of wetland buffer impacts. All impacts have been minimized to the greatest extent practicable, including the use of 3:1 & 2:1 slope to help minimize grading within the wetland buffer. Increasing the slopes from 3:1 to 2:1 in the area of the wet extended detention pond and sediment detention basins is not allowed per Env-Wq 1508.03(e) and Env-Wq 1508.12(e).**

(d) Mitigation: If the APPLICANT is required by State rules to prepare a compensatory mitigation plan, the APPLICANT shall provide the Conservation Commission and PLANNING BOARD with one copy each of said plan for their review. **Mitigation is not required. There will be no impact on wetlands.**

(e) Approval for the wetlands impact has been received from the NHDES Wetlands Bureau pursuant to Section G (3), below. **There will be no impact on wetlands.**

G. Specific provisions.

(1) Wetland Buffers.

(a) Buffers Established. Buffers are hereby established around and encircling all wetlands other than those that were created as legally permitted sedimentation/detention basins or roadside drainage ditches. The minimum width of the wetland buffers shall be fifty (50) feet horizontal distance as measured outward from the perimeter edge of the wetland. Wherever a permit to fill a wetland has been issued by either the New Hampshire Department of Environmental Services (NHDES) or the U.S. Army Corps of Engineers (USACOE), the perimeter of the wetland shall be deemed to be the new edge between the fill as placed in accordance with the permit and the remaining wetland. If there is no remaining wetland, there is no buffer. All other wetland edges shall be determined in accordance with Section D (1) above. **There will be no disturbance within the wetlands. A 50-foot wetland buffer is shown on the site plan, a portion of which will be impacted by the project design, for a wet extended detention pond sediment forebay and associated site grading.**

(b) Natural Conditions to be Maintained within Buffers. Where wetland buffer disturbance is allowed pursuant to a state or federal permit, or a conditional use permit, restoration of the disturbed area is required. Restoration is defined as filling ruts or excavated areas with similar soils while maintaining original grade. Applications for a City of Dover BUILDING permit that includes a temporary disturbance of wetlands buffers, pursuant to Section G (1) (e) (iv) below, shall include a "Wetlands Buffer Encroachment and Restoration Plan." Said plan shall be submitted, reviewed, and approved by Building Inspector, in consultation with City staff, prior to the disturbance. Replanting to restore buffers shall be with native non-invasive species specified in the "Wetlands Buffer Encroachment and Restoration Plan". Implementation of the plan shall include the clear delineation of the boundaries of wetland buffers in the field using construction tape or other clear marking devise. Mowing to maintain an existing lawn or field within a wetland buffer area is allowed without a permit, as specified in Section G (1)(e), below, provided the roots of the vegetation are not disturbed and the ground is frozen or sufficiently dry to avoid making ruts. **The wetland buffer impact for this project will be primarily of a permanent nature as allowed by obtaining a Conditional Use Permit. Some areas being impacted by typical grading around the site will be restored as much as is practical as a maintained lawn area.**

(c) Certain Uses Prohibited in Buffers. The following uses and activities are prohibited within a wetland buffer: DOVER CODE P 170-107 (i) The establishment or expansion of salt storage, JUNKYARDs, resource recovery facilities, transfer stations, landfills, or solid or hazardous waste facilities; (ii) The BULK storage of chemicals, petroleum products, or toxic and hazardous materials; (iii) The dumping or disposal of snow and ice collected from roadways and parking LOTs; **Not applicable.**

(d) Uses Allowed Only with a Conditional Use Permit. The following uses and activities are allowed within a wetland buffer only if a conditional use permit is obtained in accordance with Section F above: (i) All uses not specifically prohibited in Section G (1) (c) above or specifically exempted in Section G (1) (e) below. (ii) The erection or construction of a BUILDING or STRUCTURE, excluding FENCEs that meet the requirements of 170-33, or the construction of parking LOTs or loading areas. (iii) Timber harvesting, except as conducted in accordance with the terms and provisions of RSA 227-J, Timber Harvesting. (iv) The removal of stumps and roots (grubbing), the recontouring or grading of the land, or the placement of impervious surfaces or creation of storm water detention ponds. (v) The installation of water, sewer, or buried electrical or telecommunications cables. (vi) The installation of water supply wells. **A Conditional Use Permit is being requested to allow for a stormwater management system, and associated grading within the wetland buffer for this project.**

(e) Uses Allowed Without a Conditional Use Permit. The following uses and activities are allowed within a wetland buffer with the noted conditions: (i) Activities within wetlands jurisdictional areas that are allowed without a State of New Hampshire Dredge and Fill Permit, in accordance with NHDES Rules Env-Wt 308.01(a) and 308.02 – repair of an existing legal STRUCTURE; or successor rules. (ii) The removal of vegetation in accordance with NHDES Rules Env-Wt 303.05(b), or successor rules, provided the roots of the vegetation are ZONING P 170-108 not disturbed, and the ground is frozen or sufficiently dry to avoid making ruts. (iii) The installation of monitoring or test wells or geotechnical borings completed in accordance with NHDES Rules Env-Wt 309.02(i) or successor rules. (iv) Temporary disturbance of the wetland buffer to facilitate construction activities completed under a valid City of Dover BUILDING permit, provided the temporary disturbance is restored in accordance with Section G (1) (b) above. **Not applicable.**

(2) No septic tank or leach field may be constructed or enlarged closer than seventy-five (75) feet to any Wetland Protection District. In new subdivisions approved subsequent to adoption of this section, there must be sufficient LOT size to place a house, a state-approved septic system, where applicable, and a state-approved well, where applicable, without locating them in a wetland. This provision can be waived if conditional use approval is obtained from the PLANNING BOARD. **Not applicable.**

(3) A state dredge and fill application shall be submitted for any proposed change to a wetland (RSA 482-A). **Not applicable.**

CITY OF DOVER

DOVER CONSERVATION COMMISSION – MINUTES

Meeting Type:	Regular Meeting
Meeting Location:	City Council Conference Room - 288 Central Avenue, Dover, NH
Meeting Date:	Monday February 10, 2025
Meeting Time:	**5:30 pm**

MEMBERS PRESENT: Bill Hunt (Chair), Steve Fellows (Vice Chair), Kristen Murphy, Abigail Lyon, Russ Warnock (Alternate), Brianna Group, Robert Atwood (Secretary)
Absent (Excused):
Absent (Unexcused): Jake Geddes
STAFF PRESENT: Makayla Edgecomb (Conservation Planner), Donna Benton (Planning Director)
OTHERS PRESENT:

1. CALL TO ORDER AND ROLL CALL

The meeting was convened at 5:30 PM.

2. ANNUAL NOMINATIONS AND ELECTIONS OF OFFICERS FOR 2025

The current officers all agreed to serve another year unless someone else was interested.
The members voted all in favor for the slate of officers as is for another year.

3. CITIZENS' FORUM

The Chair gave instructions for Citizens' forum.
No one spoke

4. APPROVAL OF THE PRIOR MEETING MINUTES- JANUARY 13, 2025

S. Fellows moved to approve the minutes of January 13, 2025 as submitted. A. Lyon seconded. Vote: U/A

5. OLD BUSINESS:

M. Edgecomb noted staff is working on a committee handbook starting with Planning Board as a template and will move to other boards and committees after that. The goal is to have one in the next few months.

6. NEW BUSINESS

The Chair noted there has been a request to proceed with the meeting out of order as listed on the agenda. No one had an objection.

B. City of Dover Conditional Use Permit for Summit Land Development, LLC, (Owner: 16 Industrial Park, LLC), Assessor's Map G, Lot 4-1, zoned CM, located at Industrial Park Road. Proposal is for a stormwater management system and associated site grading for a seasonal automobile storage and maintenance facility, resulting in 6,830 ± s.f. of wetland buffer impacts and no direct wetland impacts.

Jace Gregoire, Civil Works represented the item, described the site and noted the proposal is to is for a stormwater management system and associated site grading for a seasonal automobile storage and maintenance facility. The wetland buffer impacts result in 6,830 ± s.f. with no direct wetland impacts.

Committee members asked some clarifying questions which were addressed by the applicant.

S. Fellows moved to endorse the CUP as presented. Seconded by: R. Atwood. Vote: All in favor with 0 opposed.

DRAFT

A. City of Dover Conditional Use Permit and NHDES Expedited Minimum Impact Wetlands Permit for True North Development, LLC, Assessor's Map 7, Lot 14, zoned R-20, located at 35 Boston Harbor Rd. . Proposal is to construct utility lines and drainage and grading improvements to support the development of two (2) new single-family homes, resulting in 2,756 square feet of impact within the Conservation District. *(The two single-family homes were previously approved through Transfer of Development Rights (TRAN-2024_0013) and are proposed outside of the Conservation District*

Proposal is to construct utility lines and drainage and grading improvements to support the development of two (2) new single-family homes, resulting in 2,756 square feet of impact within the Conservation District. Approval required of NHDES Expedited Minimum Impact Wetlands Permit for True North Development, LLC

Jace Gregoire, Civil Works presented the item. He explained the site: location and existing elements. He explained the proposal to the committee.

D. Benton explained the transfer of development rights program/ options.

The applicant answered questions from committee members.

Members expressed concerns about the proposed impervious cover so close to the bay. The applicant addressed the concern by giving additional details.
Discussion occurred relating to the approved development and its relation to the water.
Continued discussion items included: trees/ vegetation, culverts, drainage, stormwater maintenance and management.

S. Fellows noted hesitation to approve, but as the buildings have been approved for construction, it seems reasonable to make the allowances for utilities and drainage.

S. Fellows moved to endorse the CUP and wetlands permit as presented. Seconded by: K. Murphy.
Additional discussion:

- The drainage will be reviewed by City Engineer for compliance/ requirements. There is concern about the future with run-off and the TDR program should be looked at and sensitive areas like this should perhaps not be granted TDR approval.
- Interested to have DES input prior to a vote. There was a recent item that was approved by Conservation Commission and then denied by DES.
- Plantings

Vote: 3 in favor with 4 opposed. Request is not approved.

Discussion with committee and staff on next steps. Committee should write up a list of items they have concerns about and provide that information to staff so the items can be addressed by staff and the applicant as appropriate.

- Run model again
- City Engineering review
- Have DES weigh in first

Details about concerns were reviewed with the applicant.

R. Warnock moved to continue the item for the reasons discussed. Seconded by: A. Lyon. Vote: All in favor

DRAFT

C. Conservation Fund Request for Staff Administration Costs

D. Benton explained the annual request.

S. Fellows moved to approve the fund request of $110,000. K. Murphy seconded. Vote: All in favor.

7. REPORT FROM THE CHAIR

a. Review of Correspondence Received from NH Department of Environmental Services

M. Edgecomb noted the correspondence received is one letter from NHDES, an approval of a tidal docking structure at the undeveloped lot on Back Rd.

8. OTHER BUSINESS

A. Update from Forest Management Subcommittee

- **a.** Ash trees
  - **i.** Met with John Storer of Community Services
  - **ii.** How can Con Com help?
  - **iii.** Focus on replacing non-ash trees with current budget funds
  - **iv.** subcommittee will work on a plan to most efficiently replace the ash trees
    1. Prep a Grant for a plan for the ash trees- in progress
    2. Discussion on timeline

B. **City Nature Challenge**

a. B. Group looking to set this up in Dover. It's April 25-28. She explained the details.
   i. Discussion and ideas

9. ADJOURNMENT

S. Fellows moved to adjourn. R. Warnock seconded. Vote: U/A
The meeting was adjourned at 6:47 PM.

DRAFT

B A G

LAND CONSULTANTS

January 25, 2025

Stephen Haight, PE
Civilworks New England / Haight Engineering, PLLC
181 Watson Road
Dover, NH 03821

RE: 16 Industrial Park, LLC Project [Map G; Lots 4 & 4-1]
16 Industrial Park Road, Dover, NH

Dear Steve:

ONSITE NH WETLAND DELINEATION REPORT

At your request we visited the above-referenced property for the purpose of identifying and delineating state jurisdictional wetland limits. We understand this project is proposing land improvements for existing industrial park parcel. Our environmental consulting services will support any local or state permitting review agency requirements.

We utilized the wetland identification standards set forth in the ACOE Federal Technical Report. This is a three (3) factor criteria that requires the positive evidence of hydric soils to a depth of 20" below the soil surface; the predominance (> 50%) of hydrophytic vegetation; and the presence of primary/secondary hydrologic indicators for an area to be delineated as State jurisdictional wetlands.

We conducted a field visit and placed a total of thirteen (13) wetland flags on this project. Those flags are pink colored, dated (10/30/24), initialed (BAG), labeled (NHWET) and sequentially numbered A1 – A5 and B1 – D8. To assist your survey crew, we have sent over a sketch plan detailing the approximate location of the wetland flags in the field.

This concludes our wetland identification and delineation services. Please do not hesitate to call with any future wetland and/or soil questions.

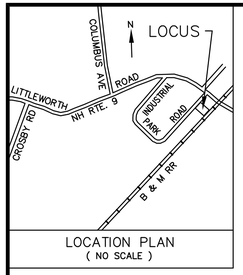
Sincerely,

Bruce A. Gilday

Bruce Gilday
Certified Wetland Scientist

STATE OF NEW HAMPSHIRE
BRUCE A. GILDAY
No. 088
CERTIFIED WETLAND SCIENTIST

Attachment
BAG3595



LOCATION PLAN
(NO SCALE)

CB
RIM = 112.78
INV. OUT = 110.93

TBM
BOLT IN UTILITY POLE #305/5
ELEV. = 114.12

INDUSTRIAL PARK ROAD
{PUBLIC; 50'WIDE R.O.W.}

PROPOSED CONSTRUCTION ENTRANCE

PCBA
RIM=111.8
INV.OUT=109.0

PROPOSED 10 LF
18" HDPE ADS N-12
S=0.004
(PIPE A)

CONTECH CASCADE SEPARATOR
(TO BE DESIGNED BY CITY OF DOVER)
RIM=115.1
INV.IN=108.95
INV.OUT=108.95

PCB1
RIM=113.3
INV.OUT=110.3

PROPOSED 110 LF
12" HDPE ADS N-12
S=0.005

PROPOSED EROSION
CONTROL BARRIER

PROPOSED CITY OF DOVER
DRAINAGE EASEMENT LINE

MONITORING
WELL

PROPOSED 280 LF
18" HDPE ADS N-12
S=0.004
(PIPE B)

PROPOSED BUILDING
27,040 S.F.
F.F.E. = 114.5

PCB2
RIM=113.0
INV.IN=109.8
INV.OUT=109.7

PROPOSED
RIP-RAP
1' DEEP WITH
D50=6"

PROPOSED148 LF
12" HDPE ADS N-12
S=0.005

ALL CUT/FILL SLOPES SHALL
HAVE NORTH AMERICAN
GREEN SC150 BN
(TYP)

PROPOSED
CITY OF DOVER
DRAINAGE EASEMENT

PROPOSED
CITY OF DOVER
DRAINAGE EASEMENT
LINE

PROPOSED 50 'WETLAND
BUFFER IMPACT
FOR CITY DRAINAGE
AREA A = 564 S.F.

FES-A
INV.OUT=107.6

PROPOSED
PLUNGE POOL "A"

INV.IN=110.0

FES
INV.OUT=109.8

PROPOSED 15" HDPE
ADS N-12
L=6'
S=0.014

PROPOSED
SEDIMENT
FOREBAY 1

PROPOSED EROSION
CONTROL BARRIER

PROPOSED
GRASS LINE
CONVEYANCE
SWALE

PCB3
RIM=112.3
INV.IN=109.2
INV.OUT=109.0

FES
INV.OUT=109.0

PROPOSED
WET POND

PROPOSED
DOUBLE ROW OF
BARRIER WITHIN
WETLAND BUFFER

VENT 6"
CAST IRON

MONITORING
WELL

OS-1

PROPOSED 6 LF
12" HDPE ADS N-12
S=0.033

FES
INV.OUT=109.0

PROPOSED
SEDIMENT
FOREBAY 2

FES
INV.OUT=108.2

PROPOSED 18 LF
12" HDPE ADS N-12
S=0.011

PROPOSED 50 'WETLAND
BUFFER IMPACT
AREA B = 6,266 S.F.

NH STATE PLANE
NAD 83 - GPS OBS.

PROPOSED CITY OF DOVER DRAINAGE

1. PCBA, PIPE A, CONTECH CASCADE SEPARATOR, PIPE B, FES-A & PLUNGE POOL A WILL BE OWNED & MAINTAINED BY THE CITY OF DOVER.
2. THE CITY WILL PROVIDE ALL MATERIAL (STRUCTURES , PIPES RIP-RAP STONE BED/SAND, BACKFILL & ALL OTHER MATERIALS) ASSOCIATED WITH THE INSTALLATION OF THE PUBLIC DRAINAGE.
3. THE SITE CONTRACTOR FOR THIS PROJECT WILL BE RESPONSIBLE FOR INSTALLING THE PROPOSED PUBLIC DRAINAGE.

– PROPOSED CITY OF DOVER DRAINAGE EASEMENT

PROPOSED IMPACT AREA

AREA A = 564 S.F.
AREA B = 6,266 S.F.
TOTAL = 6,830 S.F

TOTAL DISTURBANCE ON SITE = 78,963 S.F.

* ALTERATION OF TERRAIN PERMIT: NOT REQUIRED
* EPA CONSTRUCTION GENERAL PERMIT: REQUIRED

Total Pollutant Removal Provided

Pollutant Removal Provided				
Pollutant	Annual Load (lbs/yr)	Removal Required (lbs/yr)	Removal Provided (lbs/yr)	% Removed
TSS	203.58	162.86	162.82	80%
TN	22.65	11.32	12.46	55%
TP	1.64	0.82	1.11	68%

Conclusion: The proposed mitigation measures implemented on site meet the minimum treatment rates for TSS, TN, and TP required by the City's regulations.

NOTE:
1. COPIES OF ANY AND ALL TEST PIT LOGS FOR BUILDING OR PAVEMENT DEIGN, OR ANY OTHER REASON, SHALL BE PROVIDED TO COMMUNITY SERVICES.

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE

DATE: 1-29-25
SCALE: 1"=30'
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 23062
FILE: SITE.DWG

GRADING, DRAINAGE & EROSION CONTROL PLAN

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE
STORAGE/MAINTENANCE
16 INDUSTRIAL PARK ROAD
DOVER, NH 03820

7

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #SITE-2025-0001

Application Type:	Site Plan
Applicant(s):	Summit Land Development, LLC
Owner(s):	16 Industrial Park, LLC
Location:	Industrial Park Road (Assessor's Map G, Lot 4-1)
Meeting Date:	March 11, 2025

INTENT: Proposal is to construct a ± 27,040 s.f. seasonal automobile storage and maintenance facility.

AGENDA ITEM #: 4-D

FILE: SITE-2025-0001

APPLICANT: Summit Land Development, LLC

OWNER: 16 Industrial Park, LLC

LOTS/UNITS PROPOSED: N/A

ACREAGE: ±2.03 acres

ZONING DISTRICT: Commercial Manufacturing (CM), Wetland Protection District

EXISTING USE: Vacant

PROPOSED USE: Commercial

SURROUNDING USE: Commercial, Light Manufacturing

ZBA ACTION: ZONE-2025-0003, Special Exception for use granted on 2/20/25

PERMITS: City of Dover CUP for wetland buffer impacts, EPA General Construction Permit

WAIVERS REQUESTED: §153-13.A (12) Landscape plan signed by LLA and §153-14A(3)(b)[4] Post-development surface water runoff volume

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

NOTICES SENT: Abutter notices were sent by certified mail to all abutters.

TRC: 2/20/25

CONSERVATION COMMISSION: Reviewed and endorsed on 2/10/25.

ATTACHMENTS: Site Plan, Application Materials.

Summary of Request and Background:
The applicant proposes to construct a Seasonal Automobile Storage and Maintenance Facility on a vacant lot on Industrial Park Road (Assessor's Map G, Lot 4-1). The proposed development will be an approximately 27,040 square feet structure and the primary use for the business is a specialty automotive storage facility with an on-site mechanic.

As part of the stormwater management system and associated site grading for the project, there are 6,830 ± square feet of wetland buffer impacts being proposed. The applicant has also applied for a related City of Dover Conditional Use Permit (CUP) for these impacts.

The Zoning Board of Adjustment approved a Special Exception for the proposed use, (ZONE-2025-0003), on February 20, 2025.

Two (2) waivers are being proposed as part of this project requesting relief from a signed landscape plan and post-development surface water runoff volume.

The Technical Review Committee reviewed the application at their February 20, 2025 meeting. *(minutes attached)*

The Conservation Commission reviewed and endorsed the application at their February 10, 2025 meeting. *(minutes attached)*

Summary of Waiver Requests:
The applicant is seeking two (2) waivers as part of this proposal. The waivers are from the following:

1. §153-13.A (12) Landscape plan signed by LLA
2. §153-14A(3)(b)[4] Post-development surface water runoff volume

Consistency with Land Use Regulations –Waivers/Relief
§153-21 of the Site Plan Review Regulations state the "Planning Board may waive specific provisions of these regulations. The Planning Board may only grant a waiver if the Planning Board finds, by majority vote, that:

(1) Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulations; or
(2) Specific circumstances relative to the subdivision, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations."

Planning Staff believes the applicant's rational for the waivers meets criterion (1) and waiving such standards and requirements is not contrary to the spirit or intent of the ordinance.

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #SITE-2025-0001

Application Type:	Site Plan
Applicant(s):	Summit Land Development, LLC
Owner(s):	16 Industrial Park, LLC
Location:	Industrial Park Road (Assessor's Map G, Lot 4-1)
Meeting Date:	March 11, 2025

STAFF RECOMMENDATION - Waivers/Relief:
The Planning Department recommends that the Planning Board accept the applications as complete, note they are not of regional impact, hold a public hearing, make the necessary and supporting findings of fact, and vote to grant the waiver with the following subsequent condition:

Subsequent Condition to be Met Prior to the Signing of the Plans:

1. Add a note that the Planning Board found the criteria of Chapter 153-21 have been met and the Board approved the following waivers:
   §153-13.A (12) Landscape plan signed by LLA
   §153-14A(3)(b)[4] Post-development surface water runoff volume

Consistency with Land Use Regulations – Site Plan
§153-4 of the Site Review Regulations of the City Code provides for site review by the Planning Board of new construction of various types. This plan is consistent with those regulations.

STAFF RECOMMENDATION:
The Planning Department recommends that the Planning Board makes the necessary and supporting findings of fact, and vote to approve the site plan with the following subsequent conditions:

Subsequent Conditions to be Met Prior to Signing of Plans:

1. Approval of COND-2025-0001;
2. Provide approval from Community Services Director that second driveway access has been approved per §157-50.C(1);
3. Provide Unitil letter to serve;
4. Show adherence to Solar/Green Roof requirement within the CM Zoning District;
5. Provide physical and digital copies (including CAD) of complete plan set for final Planning Board signature which additionally shall include:
   5.1. Owner's signatures;
   5.2. Professional stamps and signatures;

Subsequent Condition to Be Met Prior to Construction:

8. City's standard site construction sign with the contact information for the general contractor must be displayed in a location approved by the City Engineer or Planning Director;

Subsequent Conditions to Be Met Prior to Building Permit:

9. Payment of Water and Sewer Investment Fees if applicable at time or request of service;

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #SITE-2025-0001

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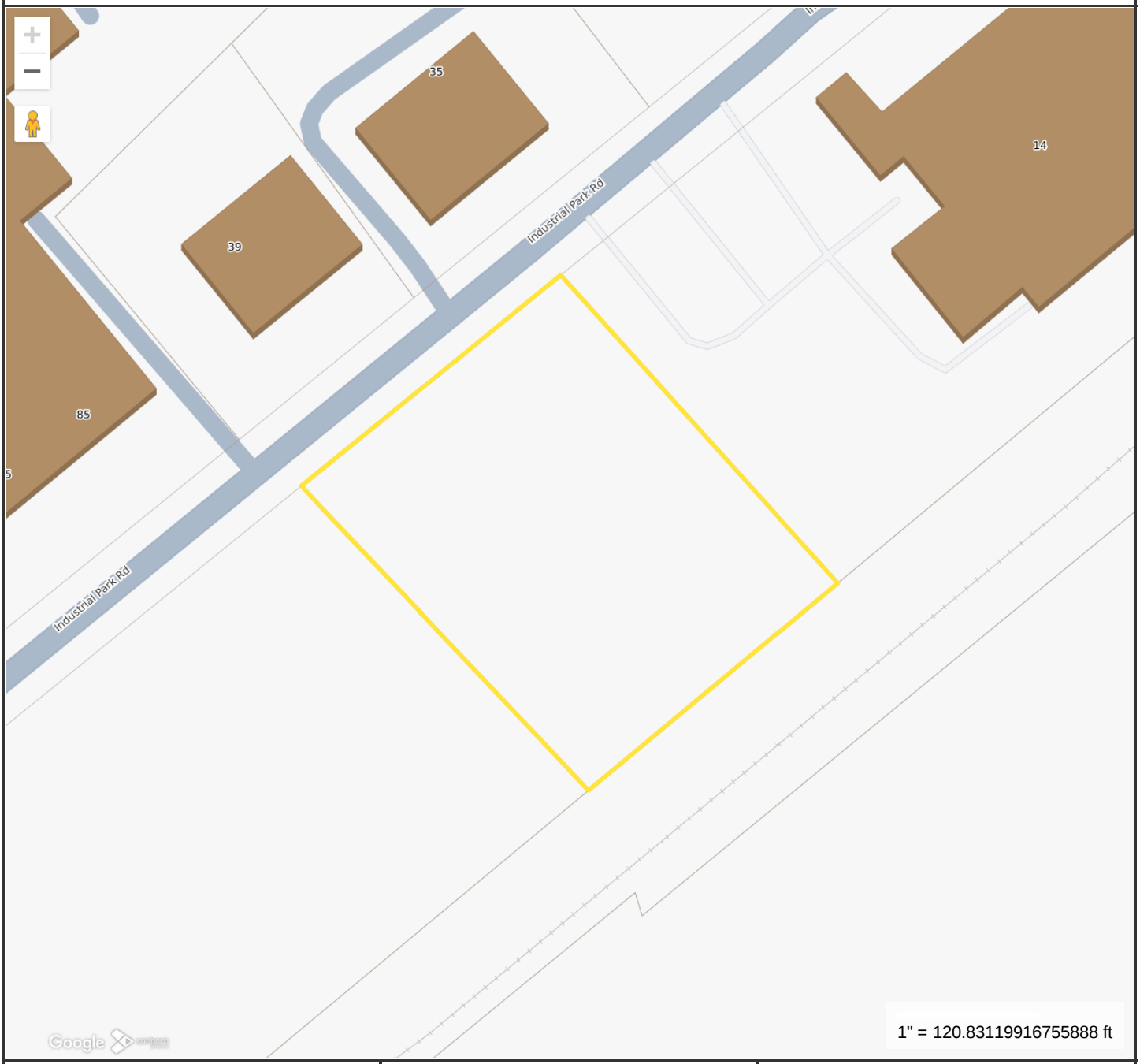
Subsequent Conditions to Be Met Prior to Occupancy:

10. Issuance of Certificate of Occupancy;
11. Surety or other form of security acceptable to the City is provided for any unfinished work;
12. Design engineer to submit a construction certification letter to the City ensuring construction was completed in accordance with the plans and specifications approved by the City of Dover.

SITE-2025-0001 INDUSTRIAL PARK ROAD



Property Information

Location	INDUSTRIAL PARK RD
Owner	16 INDUSTRIAL PARK LLC
Land Use	440V
Zoning Code	CM
Property Id	G0004-001000

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

City of Dover, NH makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 10/30/2023
Data updated Daily

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

PLAN SNAPSHOT REPORT SITE-2025-0001
FOR CITY OF DOVER, N.H.

Plan Type:	Site Plan - Major	**Project:**		**App Date:**	01/29/2025
Work Class:	New Construction	**District:**	None	**Exp Date:**	04/04/2025
Status:	Fees Paid	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	
Description:	Seasonal Automotive Storage & Maintenance Facility				

Parcel:	G0004-001000 Main	**Address:**	Industrial Park Rd Main Dover, NH	**Zone:**	CM(Non-Residential - Commercial Manuf

Owner
Chad Kageleiry
Business: (603) 749-2800

Applicant
Civilworks New England
Steve Haight
181 Watson Road PO Box 1166
Dover, NH 03820
Business: (603) 749-0443
Mobile: (603) 817-6651

Applicant
Chad Kageleiry
Business: (603) 749-2800

Plan Custom Fields

Total	0	Total2	27040	Total3	26944
Total4	0	Total5	0	Total6	0
Total7	0	Total8	27040	Total9	27040
Street Classification Type	Municipal	Net Change in # Parking Spaces (+/-)	16	Water Service	Municipal
Recording Number		Sewer Service	Municipal	Total Acres (GIS)	2.03
Deed Book		Total SQFT	88426.8	Deed Page	
Deed Date		Proposed Property Use	Vacant	Area of Parcel to be Developed (SQFT)	78963
Number of Parking Spaces Existing	0	Number of Parking Spaces Proposed	16	Number of Employees Total	10
Number of Employees in Max Shift	1	Distance to City Water	40	Distance to City Sewer	10
Type of Building to be Built	Steel & Concrete Commercial Building	Estimated Construction Value	5400000.00	Refuse Removal	Private
Is there an existing Conservation Easement?	No	Existing Conservation Easement Details		TotalImpactFeeSDTOD	0.00
TotalImpactFeeTHTOD	0.00	TotalImpactFee23FTOD	0.00	TotalImpactFeeA4TOD	0.00
TotalImpactFeeMHTOD	0.00	TotalImpactFeeADUTOD	0.00	TotalImpactFeeAONRTOD	0.00
TotalImpactFeeAR55TOD	0.00	TotalImpactFeeAR62TOD	0.00	Sub Total Residential	0.00
TotalImpactFeeRIRCTOD	0.00	TotalImpactFeeOCSTOD	0.00	TotalImpactFeeITWCTOD	0.00
TotalImpactFeeNHALTOD	0.00	TotalImpactFeeOIUTOD	0.00	TotalImpactFeeAFAOTOD	0.00
Sub Total Non-Residential	0.00	Total of Impact Fees to be Assessed	0.00		

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Steve_Haight_1/29/2025.jpg	01/29/2025 14:25	Haight, Steve		Uploaded via CSS
2025.02.20_PlanningTechnicalReviewCommittee.Agenda.pdf	02/04/2025 13:34	Blonigen, Rachel		TRC Agenda
2025.02.20_PlanningTechnicalReviewCommittee.IndustrialPark_SITE-2025-000.draft.pdf	02/25/2025 10:44	Blonigen, Rachel		Draft TRC minutes

PLAN SNAPSHOT REPORT (SITE-2025-0001)

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00011006	Planning General Application Fee	$200.00	$200.00
	Total for Invoice INV-00011006	$200.00	$200.00
NOT INVOICED	Planning Impervious Paved Area Fee	$1,886.08	$0.00
	Planning Non-Res/Mixed Use – New Construction	$4,056.00	$0.00
	Total for Invoice NOT INVOICED	$5,942.08	$0.00
	Grand Total for Plan	**$6,142.08**	**$200.00**

Meeting Type	Location	Scheduled Date	Subject
Technical Review Committee Meeting v.1	City Hall, Second Floor Conference Room	02/20/2025	Technical Review Committee Meeting

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	Approved	02/04/2025	02/19/2025	02/25/2025	No	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Business Development	Business Development	Burdin, James	Approved	02/04/2025	03/04/2025	02/25/2025

Comments: Parking in spaces 8-16 would require walking past 5-6 overhead doors and loading dock access to get to/from the office/lobby. Possible to reconfigure parking and/or vehicle access points to reduce conflict points?

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
City Engineer	Community Services - Engineering	Mavrogeorge, Kenneth	Approved	02/04/2025	02/19/2025	02/25/2025

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Bassegio, Erin	Approved	02/04/2025	03/04/2025	02/25/2025

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Zoning Administrator	Planning	Crouser, Paul	Approved	02/04/2025	02/19/2025	02/25/2025

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
IS Building Official	Planning / Inspection Services	Maxfield, Jim	Approved	02/04/2025	02/19/2025	02/25/2025

Comments: Indicate the use(s) of the proposed structure and if multiple occupancy
• Provide individual exterior domestic and suppression water shut off gate for each service
• Consider locating FDC to front of structure to protect from vehicular traffic/snow removal operations
• Indicate the generator fuel type and size
• Adequate separation shall be maintained between utilities (i.e. gas/electric)
• Provide protection from physical damage to gas and electrical services.
• Relocate proposed EV charger location to ensure accessibility

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Traffic Coordinator	Police	Speidel, Marn	Approved	02/04/2025	02/19/2025	02/25/2025

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		01/30/2025 10:00	02/25/2025 10:48
Confirm application complete v.1	Generic Action		01/30/2025 10:00
Technical Review Committee Meeting Agenda v.1	Task	01/30/2025 10:00	02/04/2025 13:08
Land Use Plan Technical Review v.1	Receive Submittal	02/04/2025 0:00	02/25/2025 10:48

PLAN SNAPSHOT REPORT (SITE-2025-0001)

Technical Review Committee Meeting v.1	Hold Meeting	02/25/2025 10:48	02/25/2025 10:48
Planning Board v.1		02/25/2025 10:48	
Planning Board Agenda v.1	Task	02/25/2025 10:48	02/25/2025 10:52
Invoice for Notices v.1	Task	02/25/2025 10:51	
Send Notices v.1	Task		
Planner Creates Staff Recommendations v.1	Plan Activity		
Distribute Planning Board Materials v.1	Task		
Planning Board Hearing v.1	Hold Hearing		
Planning Board Decision v.1	Plan Activity		
NOD Sent to Applicant v.1	Create Report		
Final Plan v.1			
Land Use Plan Stamped and Signed v.1	Generic Action		
Recording v.1	Task		
Document Archival v.1	Generic Action		
Internal Notification of Plan Completion v.1	Generic Action		
Building Official Notifies Address v.1	Generic Action		
Pre-Con Meeting v.1	Hold Meeting		
Create/Link to Records v.1			
Create / Link to Permit - Building Major v.1	Create Sub Permit		
Create / Link to Permit - Site Work, Construction v.1	Create Sub Permit		

City of Dover, New Hampshire
SITE REVIEW APPLICATION

[Revision Date: July 1, 2021]

Office Use Only	Project #:		Date Received:	
	Amount Paid:		Time Received:	

APPLICANT AND OWNER INFORMATION

Name of Applicant: Summit Land Development,LLC Telephone #603-749-2800

Address of Applicant: 340 Central Avenue, Suite 202, Dover, NH 03820

E-Mail Address: chad@summitlanddev.com

Name of Property Owner (*if different from applicant*): 16 Industrial Park, LLC Telephone #603-749-2800

Address of Property Owner: 340 Central Ave, Suite 202, Dover, NH 03820

PROPERTY INFORMATION

Address of Property: 34 Industrial Park Road

Assessor's Map # G Lot(s) # 4-1

Zoning District(s) CM Overlay District(s) Wetland Protection District

Size of Parcel: 88,425 sq. ft. 2.03 ac. Property Deed: Book 5190 Page: 36

Existing Use of Property: Vacant

SITE PLAN INFORMATION

Describe Proposed Use: Seasonal Automotive Storage and Maintenance Facility

Area of Parcel to be Developed: 78,963± sq. ft.

If Multi-family Residential: Number of Units NA & Buildings Proposed _____

If lodging: Number of Units NA & number of Buildings _____

Number of Parking Spaces: Existing 0 Proposed 16

Highway Access (check where applicable): x City Street ____ State Highway

Number of Employees Total: 10 In Maximum Shift: 1

Disposition of Parcel:

Building Footprint 27,040 sq. ft.

Total Building Area 27,040 sq. ft.

Paved Area 26,944± sq. ft.

Building Setbacks:

Front Yard 35 ft.

Rear Yard 10 ft.

Side Yard: Right 10 ft. Left 10 ft.

City Water? x Yes ___ No How far is city water from the property? 40 feet

City Sewer? x Yes ___ No How far is city sewer from the property? 10 feet

TRANSFER OF DEVELOPMENT RIGHTS INFORMATION N/A

Type of TRANSFER OF DEVELOPMENT RIGHT REQUEST (Check All That Apply):

□ Residential □ Residential (reduced size) □ Industrial | □ Purchase □ Land Preservation

Relief sought (Check All That Apply):

□ Lot Size □ Frontage □ Setback □ 30' Buffer □ Increase by _____ units

Describe Proposed Use or Activity that requires TDR; describe any impacts and document mitigation:

BUILDING INFORMATION

Type of Building to be Built: Commercial Vehicle Storage and Maintenace Facilty

Height of Building: 30' Finished Floor Elevation: 114.50

Number of Seats (where applicable) NA

Estimated value of construction: $5,400,000 Refuse removal: Public/Private (circle one)

WAIVER REQUESTS

Site Review Regulations section(s) to be waived: Article IV 153-13 A.12 : Licensed Landscape Architect
Article IV 153-14 A.3.B.4 : Increase of Stormwater Volume

Justification for waiver request(s) (*attach additional sheets as needed*):

See attached WAIVER REQUESTS.

SURVEYOR INFORMATION

Name of Surveyor and Company (Licensed in N.H.) Kevin McEneaney, LLS McEneaney Survey Associates

Address PO Box 1166, Dover, NH 03821 Telephone #: 603-742-0911

Professional License #: _____ E-mail address: kevin@surveynh.com

ENGINEER INFORMATION

Name of Engineer and Company (Licensed in N.H.) Stephen J. Haight, PE Civilworks New England

Address PO Box 1166, Dover, NH 03821 Telephone #: 603-749-0443

Professional License #: NH PE #7978 E-mail address: shaight@civilworksne.com

ARCHITECT INFORMATION

Name of Architect and Company (Licensed in N.H.) A. Matthew Wirth - ProCon, Inc.

Address 1359 Hooksett Road Hooksett, NH 03106 Telephone #: 603-518-2152

Professional License #: _____ E-mail address: mwirth@proconinc.com

LANDSCAPE ARCHITECT INFORMATION

Name of Landscape Architect and Company (Licensed in N.H.) see Waiver Request

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

SOIL SCIENTIST INFORMATION

Name of Soil Scientist and Company (Licensed in N.H.) Bruce A. Gilday NHCWS #88

Address 43 ROCKINGHAM STREET,CONCORD,NH 03301 Telephone #: 603-228-5775

Professional License #: NHCWS#88, NHCSS#12 E-mail address: bagilday@comcast.net

CONSERVATION EASEMENT HOLDER NA

Name of Easement Holder: _____ Telephone #_____

Address Easement Holder: _____

SIGNATURES

I/We hereby submit this application to the City of Dover Planning Board and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. Furthermore, I/we submit that the existing conditions sheet of the plan represents the lot in question, and that no alteration of the site shall take place during Planning Board review up to and including the pre-construction meeting. As applicant or as agent, I attest that I am duly authorized to act in this capacity.

Signature of Property Owner: _____ Date: 1-28-25

Signature of Applicant (*if different from owner*): _____ Date: 1-28-25

Signature of Agent: _____ Date: _____

AUTHORIZATION TO ENTER SUBJECT PROPERTY

I, and my successors, hereby authorize members of the Dover Planning Board, Planning Department and other pertinent City Departments and boards to enter my property for the purpose of evaluating this application, including performing inspections during the application phase, post-approval phase, construction phase and occupancy phase. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: _____ Date: 1-28-25

AUTHORIZATION TO COMPLETE THE PROJECT ON SUBJECT PROPERTY

I, and my successors, hereby the City of Dover or its assigns to enter my property for the purpose of completing the site work as required by the approved plan should the letter or credit or other surety be called. It is understood that these individuals must use all reasonable care, courtesy, and diligence when on the property.

Signature of Property Owner: _____ Date: 1-28-25

Signature of Applicant (*if different from owner*): _____ Date: 1-28-25

CERTIFICATION OF FEES

I, and my successors, hereby certify that I understand that the City of Dover collects impact fees, utility investment fees and inspection fees for projects developed in Dover. Said fees must be paid before a Certificate of Occupancy can be obtained for a structure, unless a different payment schedule is agreed to by the applicant and the City prior to approvals being issued by the Dover Planning Board. Additionally, should the property be in "Current Use" it will be subject to the Land Use Change Tax.

Signature of Property Owner: _____ Date: 1-28-25

Signature of Applicant (*if different from owner*): _____ Date: 1-28-25

CITY OF DOVER SITE REVIEW
LIST OF ABUTTERS

Pursuant to RSA 676:4, the State Law of New Hampshire, the City of Dover is required to notify the applicant, abutters (including holders of conservation easements), and any professional whose seal is on the plan, of the public hearing by certified mail, return receipt requested. Staff will provide the abutter information, while the applicant must provide accurate contact information for the owner, applicant and professional agents representing the project.

Owner:

TAX MAP	LOT #	PROPERTY OWNER	MAILING ADDRESS
G	4-1	16 Industrial Park, LLC	340 Central Avenue, Suite 202 Dover, NH 03820

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS
	Summit Land Development	340 Central Avenue, Suite 202 Dover, NH 03820

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
Stephen J. Haight, PE	Civilworks New England	PO Box 1166 Dover, NH 03821
Kevin McEneaney, LLS	McEneaney Survey Associates	PO Box 1166 Dover, NH 03821
Bruce A. Gilday, CWS	BAG Land Consultants	43 Rockingham St Concord, NH 03301

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

City of Dover, New Hampshire
SITE PLAN REVIEW SUBMISSION CHECKLIST

[Revision Date: June 4, 2019]

This site plan review checklist, as required by Chapter 153-6-B(2), should be completed by the applicant. It is intended to assist the applicant in the planning process of preparing a Site Plan Review application for Planning Board action. The size of the project will determine the types of information required for review, therefore, a **pre-application conference** with the Planning Department to determine the list of items that must be completed is strongly encouraged.

The first step would be to appear before the Technical Review Committee, to apply, eight (8) folded copies of the site plan with scale of not less than 1"=50' or 1" =100' for larger site plans, need to be provided, along with payment of plan review fees.

Two weeks prior to Planning Board, three (3) full size and twelve (12) half size (11x17), folded, copies of the plan set and materials, including response to TRC comments, will be due. Abutter/Notice Fees will be invoiced and need to be paid 28 hours prior to the Planning Board meeting.

The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all site plan review requirements. Please refer to the Site Plan Review Regulations for full details.

APPLICANT: Summit Land Development, LLC File Number: SITE-2025-0001

PROJECT TITLE: Seasonal Automotive Storage & Service Facility

PROPERTY LOCATION: 34 Industrial Park Road Tax Map: G Lot: 4-1

	Where/How Provided	Reviewed
1. Completed and signed Application form	X	
2. Plan Review Fees are provided	X	
3. Electronic copy of the engineered/surveyed plan layout	X	
4. Electronic copy of supplementary materials and application	X	
5. Traffic Impact Assessment and Analysis (Standard or Advanced)	X	
6. Waiver requests to the Site Plan Review Regulations, with written justification	X	
7. Conditional Use Permit applications	X	
8. A colored rendering of the streetscape that will be created along the existing public right-of-way	X	
9. A colored architectural plan showing all sides of buildings	X	
10. Folded copies of site plan w/scale of not less than 1"=50' or 1"=100' for larger site plans, for TRC. Plans shall contain the following items as appropriate:	X	
Location map at appropriate scale	X	
Proposed Project name and title and Planning File #	X	
Date, north arrow and scale	X	
Names of all abutting property owners	X	
Name and address of owners and/or applicants	X	
Signature & stamp of NH licensed land surveyor and/or engineer	X	
Zoning District boundaries, including any special or overlay districts	N/A	
Location of Conservation District areas	X	
Location, names and widths of existing and proposed streets, including pavement widths, grades, curbs and crosswalks	X	
Location and widths of existing & proposed easements & right of ways	X	
Location and width of existing and proposed access/egress ways	X	

	Explain How Provided	Reviewed
Depict pedestrian walkways and accessible access		
Existing and proposed property lines with dimensions and bearings tied into Dover's Geographic Information System coordinate system	X	
Existing and proposed topographic information at two foot intervals	X	
Existing and proposed buildings and structure locations	X	
Minimum building setbacks or build to lines on all lots	X	
Location and size of existing and proposed electric, telephone, gas cable and other underground utilities	X	
Existing and proposed water lines and fire hydrants, including materials and capacity needed	X	
Location and materials of sanitary sewage facilities within project site and projected additional peak hour sewer load	X	
Existing and proposed stormwater lines and facilities	X	
Lighting plan depicting all existing and proposed exterior light fixtures and a lighting level analysis for parking lots	X	
Location of Flood Hazard Zone	N/A	
Location of all bodies of water and watercourses	N/A	
Location of wetlands and buffers	X	
Neighborhood plan with aerial underlay showing how project relates to abutting uses within the plan set	X	
Existing natural features and/or significant vegetation on property	X	
Depict existing contours up to 100 ft. beyond project limits	X	
Landscape plan depicting existing and proposed landscaping, prepared by a licensed Professional Landscape Architect	X (also see Waiver request)	
Location of parking layout delineating spaces and arrangement; note addressing maximum required spaces	X	
Location, material and size of existing and proposed pavement area	X	
Location of proposed fire lanes	X	
Specify finished floor elevations of buildings	X	
Location of solid waste disposal facilities (dumpster, pad and screening, etc.), including required screening	X	
Depict all service, storage, loading bays and utility areas	N/A	
All applicable Dover Common Site Plan notes	X	
11. Additional Information if appropriate		
Stormwater Management Plan depicting the existing & proposed storm drainage system and engineered drainage analysis	X	
Stormwater Management System Operation and Maintenance Plan	X	
Letter to Serve from Public and Private Utilities	X	
Erosion and Sedimentation Control Plan	X	
Landscape Operation and Maintenance Plan	X	
Proposed restrictive covenants or homeowners association documents	N/A	
Dates and permit numbers of all required state and federal permits	X	
If wetland buffer, indicate placards locations, as applicable	X	
Depict test boring locations, groundwater elevations and soil profiles and/or soils types call-outs	X	
Location of proposed drive-in facilities	N/A	
Provide additional exhibits/technical data determined appropriate by the Planning Board or its staff as required	TBD	

REVIEWED BY: _____ DATE_____ TRC DATE_____

Summit Land Development, LLC
16 Industrial Park, LLC
340 Central Avenue, Suite 202
Dover, New Hampshire 03820

January 28, 2025

City of Dover
288 Central Avenue
Dover, NH 03820

Attn: Planning Board

Re: LETTER OF APPLICANT/OWNER AUTHORIZATION
Site Plan Review Applications & Approvals
34 Industrial Park Road – Tax Map G, Lot 4-1

I, Chad Kageleiry, authorize Civilworks New England and McEneaney Survey Associates to represent all applications made on behalf of me as Member of both Summit Land Development, LLC (APPLICANT) and 16 Industrial Park, LLC (OWNER) to the City of Dover Planning Board and any other Dover Board or Committee, as well as any State of NH departments, as necessary, relative to the pursuit of approvals and permits for the development of the subject parcel.

Sincerely,

Chad Kageleiry, Member
Summit Land Development, LLC
& 16 Industrial Park, LLC

SITE-2025-0001 **INDUSTRIAL PARK ROAD**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
G0003-B00000	85 INDUSTRIAL PARK RD	85 INDUSTRIAL PARK II LLC		210 COMMERCE DR STE 300	PORTSMOUTH	NH	03801
G0004-000000	14 INDUSTRIAL PARK RD	16 INDUSTRIAL PARK LLC		340 CENTRAL AVE SUITE 202	DOVER	NH	03820
G0004-B00000	35 INDUSTRIAL PARK RD	CAMH LLC		35 INDUSTRIAL PARK RD	DOVER	NH	03820
G0004-B00001	39 INDUSTRIAL PARK RD	BOND ENTERPRISES LLC		174 ESTES RD	ROCHESTER	NH	03867
G0004-C00001	29 INDUSTRIAL PARK RD	R&R BERNSTEIN HOLDING LLC		29 INDUSTRIAL PARK RD	DOVER	NH	03820
G0005-000000	LITTLEWORTH RD	BOSTON & MAINE RR	IRON HORSE PARK	500 WATER STREET J-910	JACKSONVILLE	FL	32202
H0031-000000	30 LITTLEWORTH RD	SOUSANE RUTH K &	QUINLAN NANCY K	30 LITTLEWORTH RD	DOVER	NH	03820
G0004-001000	INDUSTRIAL PARK RD	16 INDUSTRIAL PARK LLC		340 CENTRAL AVE SUITE 202	DOVER	NH	03820
		CIVILWORKS NEW ENGLAND	STEPHEN HAIGHT, I	PO BOX 1166	DOVER	NH	03820

CITY OF DOVER

TECHNICAL REVIEW COMMITTEE MINUTES – SITE-2025-0001

Application Type:	Site Review
Applicant(s):	Summit Land Development, LLC
Owner(s):	16 Industrial Park, LLC
Location:	Industrial Park Road (Assessor's Map G, Lot 4-1)
Date:	February 20, 2025

INTENT: Proposal is for the construction of a ± 27,040 s.f. seasonal automobile storage and maintenance facility.

LOTS/UNITS PROPOSED: N/A

AGENDA ITEM #: 1

ACREAGE: ±2.03 acres

ZONING DISTRICT: Commercial Manufacturing (CM), Wetland Protection District

EXISTING USE: Vacant

PROPOSED USE: Commercial

SURROUNDING USE: Commercial, Light Manufacturing

ZBA ACTION: Special Exception for use required, being heard by ZBA on 2/20/25

CONSERVATION COMMISSION ACTION: CUP endorsed on 2/10/25

PERMITS REQUESTED: City of Dover CUP for wetland buffer impacts, EPA General Construction Permit

WAIVERS REQUESTED:

- §153-13.A (12) Landscape plan stamped by LLA
- §153-14G(3)(a) Permitter landscaping
- §153-14A(3)(b)[4] Post-development surface water runoff volume

ATTENDANCE:
Erin Bassegio, Planning
Makayla Edgecomb, Zoning
Jim Maxfield, Inspection Services
Ken Mavrogeorge, Engineering
Marn Speidel, Police Department
James Burdin, Business Development

Others:
Jase Gregoire, Civilworks NE
Chad Kageleiry, Property Owner
Elijah Allen, Civilworks NE

Approval of minutes from January 9, 2025:
J. Burdin moved to approve the January 9, 2025 minutes. Seconded by K. Mavrogeorge. Vote: U/A

PLAN REVIEW:
Planning:

- Confirm addressing with Building Official.
- Confirm sight distance cited in TAM for both proposed accessways.
- Provide communication from Community Services Director that second driveway access has been approved per §157-50C(1).
- Solar/green roof standard applies: all buildings must be solar-ready, commercial and mixed-use buildings that are 25,000 square feet or more must also incorporate solar panels and/or a green roof on at least 30% of the roof area.
- Perimeter landscape screening on side? §153-14G(3)(a)
- Provide Unitil letter to serve when available.
- Reminders:
  - Special Exception will need to be granted by the ZBA.
  - Any changes in wetland buffer impacts will need to be reviewed again by the Conservation Commission.
  - Water and sewer investment fees.
  - Owner signatures needed on final plans.
  - Include permit numbers on final plans.

Engineering:

- General Comment:
  - Applicant and Contractor shall review the Dover Construction Guidelines prior to scheduling a Preconstruction meeting with City staff. The guidelines can be found on the City of Dover Website on the Engineering page. https://www.dover.nh.gov/Assets/government/city-operations/1form/community-services/engineering/engineering-documents/Construction%20Guidelines.pdf
  - Show and confirm snow storage areas do not conflict with landscaping. Recommend storing snow in areas where landscaping won't get in the way.
  - Coordinate with Community Services (Engineering Department) for latest City Standard Details.

DRAFT

- Dwg 4 Note Sheet:
  - Dover Notes 36. CE's office does not have record of this request and does not provide elevation data. Confirm source and meet city requirements for horizontal and vertical datums.
  - Demolition Notes 8. Are stone walls present onsite?
  - Site Notes 13. Not applicable to this project.
- Dwg 5 Demolition Plan:
  - Regarding 48" hardwood tree located along south westerly property line, is this tree on the subject property?
  - Regarding (8) 8" dia. hardwood trees along rear boundary, how will the trees be relocated?
- Dwg 6 Site Plan:
  - Review City details for trench patch. Note staggered joint requirements for pavement repair.
  - Recommend heavy duty pavement across front area for fire truck.
  - Confirm sight distance sufficient for second curb cut per Dover Code Section 157-50(C).
  - Add no parking signs and markings in striped median adjacent to side of building.
- Dwg 7 Grading, Drainage & Erosion Control Plan
  - Coordinate with Tritech and their client across the street. Tritech has calculated the proper size of the pipe that needs to be provided (24" dia.). Not sure if there is sufficient cover to get a 24-inch pipe installed. Maybe double barrel pipes?
  - Is the monitoring well shown decommissioned or to remain?
  - Will there be a sign along the road?
  - Add dimensions of each rip rap apron.
- Dwg 8 Utility Plan
  - Show gate valve anchored to the main.
- Dwg 12 Detail Sheet
  - Check these standard details against our updated set.
- Dwg 14 Detail Sheet
  - Coordinate with CS for new details.
- Dwg 15 Detail Sheet
  - Check against updated CS details.
- Dwg 20 Dover Ladder Truck Movement Plan
  - Defer to IS if location of FDC should be on front side of building.
  - Is access at the rear needed? The FDC is on the side of the building.
- Dwg L-1 Landscape Plan
  - Do relocated trees meet the criteria of the Planning Board?
- Drainage Analysis
  - Page 5/98, Post Development Volume (af), waiver appears to be required for increase in volume per 153-14.
  - Page 60/98, WQV=3,851 CF vs 4,314 CF
  - Page 68/98, make sure outlet protection dimensions match the plan and are called out on it.

Police:

- Sheet 4, Dover Note 25: confirm that "light manufacturing" is accurate description for this proposed use
- Consider consolidating to a single curb cut?
- RE: overhead door on SW corner of building, access appears tight from 18' side driveway. Would it be more functional to relocate this overhead door to the rear?
- Add No Parking Fire Lane signs to the 18' driveway along SW side of building

Inspection Services:

- Indicate the use(s) of the proposed structure and if multiple occupancy
- Provide individual exterior domestic and suppression water shut off gate for each service
- Consider locating FDC to front of structure to protect from vehicular traffic/snow removal operations
- Indicate the generator fuel type and size
- Adequate separation shall be maintained between utilities (i.e. gas/electric)
- Provide protection from physical damage to gas and electrical services.
- Relocate proposed EV charger location to ensure accessibility.

DRAFT

Fire Department:

- N/A

Business Development:

- Parking in spaces 8-16 would require walking past 5-6 overhead doors and loading dock access to get to/from the office/lobby. Possible to reconfigure parking and/or vehicle access points to reduce conflict points?

Planning Board:

- N/A

Next Steps: Revise plans per comments above and submit for Planning Board.

Adjournment: J. Maxfield moved to adjourn the meeting at 11:13 a.m. Seconded by K. Mavrogeorge. Vote: U/A

DRAFT

RECEIVED
Planning Office
MAR 05 2025
Dover, New Hampshire

CIVILWORKS NEW ENGLAND
181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: 603.749.0443 FAX: 603.749.7348

March 4, 2025

Dover Planning Board
288 Central Avenue
Dover, NH 03820

Attn: Technical Review Committee

Re: Technical Review Committee minutes – SITE-2025-0001 dated February 21, 2025
34 Industrial Park Road - Assessor's Map G, Lot 4-1

Dear Planning Board:

In response to Technical Review Committee minutes – SITE-2025-0001, by TRC dated February 20, 2025, we submit the following responses in bold beneath the review comments in italic.

Planning

1. *Confirm addressing with Building Official.*
   The building official has confirmed that the site address is to be 34 Industrial Park Road.

2. *Confirm sight distance cited in TAM for both proposed accessways.*
   Sight Distance has been confirmed, and Plan & Profiles have been included in the revised plan set.

3. *Provide communication from Community Services Director that second driveway access has been approved per §157-50C(1).*
   Additional information has been provided to Community Services and Sight Distance Plan & Profiles have been included in the revised plan set.

4. *Solar/green roof standard applies: all buildings must be solar-ready, commercial and mixed-use buildings that are 25,000 square feet or more must also incorporate solar panels and/or a green roof on at least 30% of the roof area.*
   Acknowledged.

5. *Perimeter landscape screening on side? §153-14G(3)(a)*
   Additional planting has been added, and the plans have been updated accordingly.

6. *Provide Unitil letter to serve when available.*
   Will serve letter will be provided to planning department when available.

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7. *Reminders:*
   - *Special Exception will need to be granted by the ZBA.*
     Special Exception for seasonal automotive storage & automotive service use was granted on February 26, 2025.
   - *Any changes in wetland buffer impacts will need to be reviewed again by the Conservation Commission.*
     Acknowledged.
   - *Water and sewer investment fees.*
     Acknowledged.
   - *Owner signatures needed on final plans.*
     Acknowledged.
   - *Include permit numbers on final plans.*
     Acknowledged.

Engineering

General

8. *Applicant and Contractor shall review the Dover Construction Guidelines prior to scheduling a Preconstruction meeting with City staff. The guidelines can be found on the City of Dover Website on the Engineering page. https://www.dover.nh.gov/Assets/government/city-operations/1form/community-services/engineering/engineering-documents/Construction%20Guidelines.pdf*
   Acknowledged.

9. *Show and confirm snow storage areas do not conflict with landscaping. Recommend storing snow in areas where landscaping won't get in the way.*
   The plans have been updated accordingly.

10. *Coordinate with Community Services (Engineering Department) for latest City Standard Details.*
    Coordination has occurred and the plans have been updated with the latest details.

Sheet 4 Note Sheet

11. *Dover Notes 36. CE's office does not have record of this request and does not provide elevation data. Confirm source and meet city requirements for horizontal and vertical datums.*
    The standard Dover Site Plan Note has been updated accordingly.

12. *Demolition Notes 8. Are stone walls present onsite?*
    There are no stone walls on site, this is a standard note. No changes are necessary.

13. *Site Notes 13. Not applicable to this project.*
    The plan has been updated accordingly.

Sheet 5 Demolition Plan

14. *Regarding 48" hardwood tree located along south westerly property line, is this tree on the subject property?*
    It is our understanding that the tree is located on the subject parcel. A note has been added to indicate removal as necessary.

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15. *Regarding (8) 8" dia. hardwood trees along rear boundary, how will the trees be relocated?*
During construction the owner is going to attempt to transplant the existing trees located on-site. If the trees are unbale to be transplanted the owner will plant new trees similar in species and size. A note has been added to the landscaping plan (L-1).

Sheet 6 Site Plan

16. *Review City details for trench patch. Note staggered joint requirements for pavement repair.*
The plans have been updated with the new City of Dover Details.

17. *Recommend heavy duty pavement across front area for fire truck.*
The plans have been updated accordingly.

18. *Confirm sight distance sufficient for second curb cut per Dover Code Section 157-50(C).*
Sight Distance Plan & Profiles have been included in the revised plan set.

19. *Add no parking signs and markings in striped median adjacent to side of building.*
The plans have been updated accordingly.

Sheet 7 Grading, Drainage & Erosion Control Plan

20. *Coordinate with Tritech and their client across the street. Tritech has calculated the proper size of the pipe that needs to be provided (24" dia.). Not sure if there is sufficient cover to get a 24-inch pipe installed. Maybe double barrel pipes?*
CNE has provided information to Tritech for their use with their design effort.

21. *Is the monitoring well shown decommissioned or to remain?*
The monitoring well will be cut and re-capped at grade. A callout has been added to the demolition plan.

22. *Will there be a sign along the road?*
The signage will be mounted on the building. No ground mounted signage is proposed.

23. *Add dimensions of each rip rap apron.*
Rip rap aprons were drawn to scale and the dimensions are provided on sheet 16.

Sheet 8 Utility Plan

24. *Show gate valve anchored to the main.*
The plans have been updated accordingly.

Sheet 12 Detail Sheet

25. *Check these standard details against our updated set.*
The plans have been updated with the new City of Dover Details.

Sheet 14 Detail Sheet

26. *Coordinate with CS for new details.*
The plans have been updated with the new City of Dover Details.

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Sheet 15 Detail Sheet

27. *Check against updated CS details.*
    The plans have been updated with the new City of Dover Details.

Sheet 20 Dover Ladder Truck Movement Plan

28. *Defer to IS if location of FDC should be on front side of building.*
    The plans have been updated accordingly.

29. *Is access at the rear needed? The FDC is on the side of the building.*
    Based on TRC review adequate access is provided with this site layout. The FDC has been relocated to the front of the building.

Sheet L-1 Landscape Plan

30 *Do relocated trees meet the criteria of the Planning Board?*
    The landscape plan has been updated accordingly.

Drainage Analysis

31. *Page 5/98, Post Development Volume (af), waiver appears to be required for increase in volume per 153-14.*
    Acknowledged, an official waiver has been requested, attached.

32. *Page 60/98, WQV=3,851 CF vs 4,314 CF*
    The information is provided and confirms that the requisite WQV has been provided.

33. *Page 68/98, make sure outlet protection dimensions match the plan and are called out on it.*
    The proposed outlet protection locations are shown on the site plans and the size and dimensions are provided in a chart on sheet 16.

Police

34. *Sheet 4, Dover Note 25: confirm that "light manufacturing" is accurate description for this proposed use*
    The plan has been updated to indicate proposed use.

35. *Consider consolidating to a single curb cut?*
    The two curb cuts are proposed for emergency vehicle & delivery vehicle maneuverability. Due to the building use and configuration a single access point is not practical.

36. *RE: overhead door on SW corner of building, access appears tight from 18' side driveway. Would it be more functional to relocate this overhead door to the rear?*
    This is preferred by the applicant for their specific use of the building.

37. *Add No Parking Fire Lane signs to the 18' driveway along SW side of building*
    The plans have been updated accordingly.

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Inspection Services

38. *Indicate the use(s) of the proposed structure and if multiple occupancy*
The plans have been updated accordingly.

39. *Provide individual exterior domestic and suppression water shut off gate for each service*
The proposed water service is shown on the utility plan and a "blow up" detail of the water connection at the building is shown on detail sheet 15.

40. *Consider locating FDC to front of structure to protect from vehicular traffic/snow removal operations*
The FDC has been relocated to the front of the building.

41. *Indicate the generator fuel type and size*
The type and size of generator are currently unknown and will be provided as part of the building permit application.

42. *Adequate separation shall be maintained between utilities (i.e. gas/electric)*
Noted, adequate separation has been provided.

43. *Provide protection from physical damage to gas and electrical services.*
The plans have been updated to include bollards for protection.

44. *Relocate proposed EV charger location to ensure accessibility.*
The current layout provides EV access for both an accessible space and a standard space. A dedicated 5' wide painted island has been provided. It is anticipated that the EV station will have a minimum of 2 charge ports.

Business Development:

45. *Parking in spaces 8-16 would require walking past 5-6 overhead doors and loading dock access to get to/from the office/lobby. Possible to reconfigure parking and/or vehicle access points to reduce conflict points?*
Acknowledged. The purposed use is a specialty use with few employees. The overhead door locations and loading dock are located to best serve the intended use. Sufficient access has been provided for the intended use.

CIVILWORKS NEW ENGLAND
Sincerely,

Stephen J Haight, PE

PROJECT NARRATIVE

for

Summit Land Development, LLC

Site Plan Review

Seasonal Automobile Storage and Maintenance Facility

Tax Map G, Lot 4-1

34 Industrial Park Road

PROJECT OVERVIEW & SITE CHARACTERISTICS

The Proposed Industrial Development Site Plan is for a Commercial Seasonal Automobile Storage and Maintenance Facility on a 2.03-acre parcel in the Commercial Manufacturing District (CM) located at 34 Industrial Park Road, Dover, NH.

The lot is currently undeveloped. Adjacent to the proposed development are the following: the Boston and Maine Railroad to the South; 16 Industrial Park Road parking lot to the East; 85 Industrial Park Road parking lot to the West and Industrial Park Road to the North.

City records indicate that on July 28, 2009, the City of Dover Planning Board approved a two-lot subdivision in the I-2 zone, City of Dover Project # P09-23, Tax Map G Lot 4 and the subject lot, Lot 4-1.

The proposed site design includes the construction of a proposed 27,040 square foot Seasonal Automobile Storage and Maintenance Facility.

The project site consists of the following general improvement plan:

- Clear the site, as necessary, for construction.
- Construction of the Seasonal Automobile Storage and Maintenance Facility associated parking, and landscaping.
- Construction of on-site stormwater detention and treatment system, grading, and other drainage requirements.
- Construction of City of Dover drainage.
- Site utility construction & installation.
- Stabilize remaining areas with loam and seed.

In addition to a Site Plan Review and Condition Use Permit from the Planning Board, the applicant obtained special exception approval on February 20, 2025 (ZONE-2025-0003) from the Zoning Board for Automotive Service use in the Commercial Manufacturing Zone (CM). The primary use for this business is a specialty automotive storage facility with an on-site mechanic to maintain and service the stored vehicles and specialty classic automobiles. Notably, a special exception was approved in 2006 for a similar use directly across the street from the subject property.

DRIVEWAY AND PARKING LOT

The proposed development will provide two (2) driveway entrances on the 266.83 feet of frontage along Industrial Park Road. The two (2) driveway entrances will provide adequate site distance and allow for adequate fire vehicle ingress and egress. The two driveways are proposed 24’ wide with 15’ curb radii. Industrial Park Road is a 34’ wide edge of pavement to edge of pavement roadway on a 50-foot wide Right of Way.

WETLAND PROTECTION DISTRICT SETBACK & IMPACT

There are two wetland pockets on the rear of the property abutting the railroad, totaling 1,545 square feet; therefore, the parcel is within the City of Dover's Wetland Protection District. Grading and Stormwater Management is proposed within 50' of the wetland boundary and a conditional use permit is required for this disturbance. The work within the wetlands buffer totals 6,830 square feet of impact, 564 square feet for the installation of City of Dover drainage, and 6,266 square feet for construction of a Stormwater Sediment Basin, Wet Extended Detention Pond, Outlet Culvert and installation of Rip Rap for Stormwater Outlet Protection. All impervious areas are located upland of the wetland buffer and the disturbed areas within the wetland buffer are for stormwater construction. There are no proposed wetland impacts.

DRAINAGE

The project proposes the construction of a 27,040 square foot Seasonal Automobile Storage and Maintenance Facility along with 26,944 square feet of pavement for access, parking, and vehicle storage. To mitigate development run-off, the proposed drainage system incorporates deep sumo catch basins, two (2) sediment basins, a wet extended detention pond, and riprap protection at all outfalls of culverts. The proposed stormwater system captures, treats, and stores the stormwater runoff from the site and redirects it to the existing discharge points. The proposed stormwater drainage structures will be maintained by the project proponent as outlined within the Stormwater Management document. The stormwater system has been designed to achieve the required pollutant removal set fourth in the stormwater regulations; calculations are included in the drainage analysis.

As a partnership with the City of Dover, stormwater run-off from the Industrial Park Road has been incorporated into the site design. Proposed Catch Basin "A" (Northwest Corner of Property) will collect road stormwater run-off and direct it into a City of Dover sized and maintained Contech Cascade Separator. The outlet culvert will run in a drainage easement in favor of the City of Dover to a plunge pool, and will then flow overland into the existing wetland at the Southwest corner of the property.

TRAFFIC

A traffic assessment was completed for the project and is attached as a report to this submittal. The traffic assessment indicates that this proposed project will increase the ADT on Littleworth road only by 1.56 percent. Overall, and as expected, there is a minimal increase in traffic as a result of the proposed development.

UTILITIES

The proposed project will connect to the existing City of Dover water and sewer lines located in Industrial Park Road. Existing electric and communication services are also located on Industrial Park Road. Building and utility connections will be made per the City's Community Services Utility Division and Fire Department requirements and standards.

DONNA P. BENTON, AICP
Director of Planning and
Community Development
d.benton@dover.nh.gov

288 Central Avenue
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City of Dover, New Hampshire

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

Zoning Board of Adjustment
NOTICE OF DECISION

February 26, 2025

Re: **ZONE-2025-0003 – Industrial Park (vacant parcel) (Tax Map G, Lot 4-1)**

Dear Mr. Kageleiry:

Please be advised that after a public hearing on Thursday, February 20, 2025, the Zoning Board of Adjustment ("ZBA") voted 4-*0 to* ***APPROVE*** your request pursuant to **Section 170-11(C) and the Commercial Manufacturing Table of Uses** to grant a Special Exception to allow for a seasonal automobile storage and maintenance facility use within the CM zoning district. The ZBA found the criteria of the Special Exception were met and approved your request without conditions.

Note: The City Council, any party to the action, or any person directly affected has a right to seek rehearing and thereafter appeal the ZBA's determination by timely following the procedural requirements outlined within New Hampshire statutes. *See generally* New Hampshire Revised Statutes Annotated, Chapter 677, *available at*: https://www.gencourt.state.nh.us/rsa/html/NHTOC/NHTOC-LXIV-677.htm

If you have any questions, please do not hesitate to contact us directly at: (603) 516-6008.

Sincerely,

Paul R. Crouser
Zoning Administrator, Assistant City Planner

Enclo.: Donna Benton, AICP — Director of Planning and Community Development
James Maxfield — Building Official
Michelle Dube — Inspection Services Office Manager
Donna Langley — City Assessor

Douglas LaRosa

From: Mavrogeorge, Kenneth <K.Mavrogeorge@dover.nh.gov>
Sent: Thursday, January 23, 2025 10:55 AM
To: Douglas LaRosa
Cc: Cheryl Andreason
Subject: RE: CNE# 23062 16 Industrial Park Road, Water and Sewer Availability

Doug,

Municipal Water and Sewer are present in the road that this property is located on.

Regards,

Ken

Ken Mavrogeorge, PE
City Engineer
City of Dover, NH
271 Mast Rd.
Dover, NH 03820-4169
e: k.mavrogeorge@dover.nh.gov
p: 603.516.6454 | f: 603.516.6463

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http://www.dover.nh.gov

****Click here to read the latest City of Dover Engineering Monthly Report!****

From: Douglas LaRosa <dlarosa@civilworksne.com>
Sent: Thursday, January 23, 2025 10:32 AM
To: Mavrogeorge, Kenneth <K.Mavrogeorge@dover.nh.gov>
Cc: Cheryl Andreason <cheryl@surveynh.com>
Subject: CNE# 23062 16 Industrial Park Road, Water and Sewer Availability

Security Notice: External sender. Use caution with hyperlinks or attachments.

Good Morning Ken,

Please confirm that Municipal Water and Municipal Sewer are available at 16 Industrial Park Road, Tax Map G Lot 4-1.

Thanks,
Doug

Douglas J. LaRosa
Civilworks New England/Haight Engineering, PLLC
181 Watson Road
P.O. Box 1166
Dover, New Hampshire 03821
O: 603.749-0443
F: 603.749.7348

dlarosa@civilworksne.com
www.civilworksne.com

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EVERSOURCE ENERGY

January 25, 2025

1700 Lafayette Road
Portsmouth, NH 03801

Trevor S Emmons
603-332-7515
Trevor.emmons@eversource.com

16 Industrial Park Road, LLC
340 Central Avenue, Suite 202
Dover NH 03820

Dear 16 Industrial Park Road, LLC,

I am responding to your request to confirm the availability of electric service for the proposed 34 Industrial Park Road, Dover NH 03820 project being constructed for/by Summit Land Development, LLC.

The proposed project consists of (1) 27,040 square foot-warehouse to store vehicles. The proposed development will be constructed along Industrial Park Road Street.

The developer will be responsible for the installation of all underground/overhead facilities and infrastructure required to service the new building. The service will be as shown on the attached marked up Utility Plan The proposed building service will be fed from a source. to be determined by Eversource Engineering as depicted on utility plan. The developer will work with Eversource to obtain all necessary easements and licenses for the proposed underground/overhead facilities listed above.

This letter serves as confirmation that Eversource has sufficient capacity in the area to provide service to this proposed development. The cost of extending service to the aforementioned location and any associated infrastructure improvements necessary to provide service will be borne by the developer unless otherwise agreed upon.

The attached drawing titled "SEASONAL AUTO STORAGE/MAINTENANCE, SHEET 8 Utility Plan" dated 1/29/2025, shows transformer locations to service your proposed project.

Eversource approves the locations shown; assuming the final installed locations meet all clearances, physical protection, and access requirements as outlined in Eversource's "Information & Requirements for Electric Supply" (pending).

If you require additional information or I can be of further assistance please do not hesitate to contact me at our Portsmouth Office, 603-436-7708 Ext. 555-5678

Respectfully.

Michael J. Busby, PE
NH Eastern Regional Engineering and Design Manager, Eversource

cc: (via e-mail)
Thomas Boulter, Eastern Region Operations Manager, Eversource
Nickolai Kosko, Field Supervisor, Electric Design, Eversource

Unitil
Northern Utilities, Inc.

March 13th, 2024

Summit Land Development
Dover, NH

Natural Gas to Commercial Development at 16 Industrial Park Rd. in Dover, NH

To Whom it May Concern,

Unitil/Northern Utilities Natural Gas Division has reviewed the requested site for natural gas Service:

Unitil hereby confirms that natural gas is available for the proposed development at 16 Industrial Park Rd. in Dover, NH.

If you have any questions, please contact me at 603-264-2033.

Sincerely,

Josh Wilk
Senior Business Development Rep
Unitil

T 603.227.4628
M 603.264.2033
F 603.294.5264
Email wilkj@unitil.com

CIVILWORKS NEW ENGLAND

181 WATSON ROAD
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TRAFFIC ASSESSMENT MEMORANDUM

INTRODUCTION

Civilworks New England has prepared this traffic-assessment memorandum (TAM) in regard to the development project proposed on Tax Map G, Lot 4-1 at 34 Industrial Park Road in the City of Dover, NH.

This TAM includes:

- existing site description
- proposed project description
- road description
- public transit
- sight distances at the proposed driveways
- trip generation
- trip distribution/assignment
- potential traffic impacts

This TAM concludes that:

- relevant sight distances at the Industrial Park Road/proposed driveways intersection will be adequate.
- The proposed project is not anticipated to add significant new traffic to the area.

EXISTING SITE DESCRIPTION

The site:

- is along the easterly side of the eastern leg of Industrial Park Road (to the southwest of Sid Harvey's/ Hudson Tool).
- has an area of 88,426 SF (2.03 acres) that is currently vacant, open field land.

PROPOSED PROJECT DESCRIPTION

The project will provide:

- one building housing light industrial space that is proposed to have a floor area of about 27,040 square feet (sf) as follows:
  - 26,240 sf of light industrial space.
  - 800 sf of office space.
- Two unsignalized driveways intersecting Industrial Park Road for access to the off-street parking and loading areas of the building.

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ROAD DESCRIPTION

Industrial Park Road:

- is under the jurisdiction of the City of Dover.
- in the vicinity of the site has a straight horizontal alignment oriented about southwest-northeast.
- has minor vertical grades.
- has bituminous concrete pavement in overall good condition.
- has one travel lane per direction, with an overall pavement width of 32 ft.
- has no lane markings.
- has no posted speed limit therefore, the NH default of 35 MPH is presumed.
- has no sidewalks on either side.
- streetside parking is not observed (and is prohibited via no parking signs along specific sections of the road).
- includes existing utility services.

Littleworth Road:

- has a posted speed limit of 35 MPH in the Industrial Park Road project area.
- has a total average daily traffic (ADT) volume of 10,722***** vehicles (5,376 eastbound and 5,346 westbound) as reported by the NHDOT for 2023.
  [***** actual reported volume = 9,696 vehicles which is not the sum of EB and WB traffic]

PUBLIC TRANSIT

Collaborative Alliance for Seacoast Transportation (COAST) Route 34 provides bus service along Knox Marsh Road. A bus stop is located just west of Littleworth Road. Service is on non-holiday weekdays and Saturdays. COAST Route 34 connects with central Dover and the Dover Transportation Center.

SIGHT DISTANCES

The project site is on a straight section of Industrial Park Road that has limited elevation change so sight distance in both directions is optimized. Several commercial driveways exist along this stretch of roadway.

The American Association of State Highway and Transportation Officials (AASHTO) has established authoritative policy for appropriate sight distances in terms of stopping sight distance (SSD) for vehicles on the main road reacting to existing traffic, and intersection sight distance (ISD) for left turn movements from a stop. There is no posted speed limit for Industrial Park Road so the speed limit on Littleworth Road will be considered. For a 35 mile per hour roadway, AASHTO has established the SSD to be 250 feet and ISD to be 390 feet. The available sight distance along Industrial Park Road to the northeast and southwest from the proposed project driveway (where loading egress will occur) is on the order of 600 feet or more, which is suitable for ISD at 55 miles per hour.

Therefore, ample stopping and intersection sight distances are provided and are adequate for a safe means of egress. Sight distance from the access drive will not be impeded by the unobstructed nature of the streetside, and with the absence of streetside parking, the opportunity to maintain these sightlines unhindered throughout the year is provided.

CALCULATED TRIP GENERATION

The Institute of Transportation Engineers (ITE) compiles and publishes trip-generation information for a variety of land uses in *Trip Generation Manual*.[1] This authoritative guide for calculating site traffic includes vehicle trip information for Light Industrial (Land Use Code 110) based on floor area[2] and General Office Building (Land Use Code 710) based on floor area.[3] Table 1 shows calculated vehicle trip ends due to the light industrial portion of the proposed development project while Table 2 shows the calculations for the general office building portion of the proposed development. The total vehicle trips generated by the project are:

- Daily (weekday) = 166.4 total trips (83.2 into site and 83.2 out of site)
- AM peak hour (weekday) = 24.2 total trips (21.3 in and 2.9 out)
- PM peak hour (weekday) = 18.4 total trips (2.7 in and 15.7 out)

Table 1: Trip Generation - Light Industrial

	Vehicle Trips*				
Weekday Period	Avg. Trips / 1,000 sf	Proposed s.f. (1,000)	Total	In	Out
Daily	4.87	26.24	149	74.5	74.5
AM - Peak Hour of Adjacent Street Traffic	0.74	26.24	21.6	19	2.6
PM - Peak Hour of Adjacent Street Traffic	0.65	26.24	15.4	2.2	13.2

* ITE, *Trip Generation Manual,* General Light Industrial - Land Use Code 110

[1] ITE, *Trip Generation Manual,* 11th edition (Washington DC, September 2021).

[1] ITE, *Trip Generation Manual,* Volume 3, General Urban/Suburban and Rural (Land Uses 000-399), pages 30 to 35.

[1] ITE, *Trip Generation Manual,* Volume 4, General Urban/Suburban and Rural (Land Uses 400-799), pages 707 to 711.

Table 2: Trip Generation - General Office Building

	Vehicle Trips*				
Weekday Period	Avg. Trips / 1,000 sf	Proposed s.f. (1,000)	Total	In	Out
Daily	10.84	0.8	17.4	8.7	8.7
AM - Peak Hour of Adjacent Street Traffic	1.52	0.8	2.6	2.3	0.3
PM - Peak Hour of Adjacent Street Traffic	1.44	0.8	3	0.5	2.5

* ITE, *Trip Generation Manual,* General Office Building - Land Use Code 710

[1] ITE, *Trip Generation Manual,* 11th edition (Washington DC, September 2021).

[2] ITE, *Trip Generation Manual,* Volume 3, General Urban/Suburban and Rural (Land Uses 000-399), pages 30 to 35.

[3] ITE, *Trip Generation Manual,* Volume 4, General Urban/Suburban and Rural (Land Uses 400-799), pages 707 to 711.

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TRIP DISTRIBUTION/ASSIGNMENT

All project-related trips will access the site from Industrial Park Road. The calculated vehicle trip generation for the development project is so low, especially at peak hours, that area traffic operations are not sensitive to trip distribution/assignment of project vehicle trips.

POTENTIAL TRAFFIC IMPACTS

The calculations show fewer than 200 weekday vehicle trips and less than 30 peak-hour trips, due to the proposed project. More specifically, the tabulated trip generation is:

- 167 total daily vehicle trips.
- 19 to 25 total peak hour vehicle trips.
- These totals are split between vehicles entering and vehicles exiting the site.

The increase in weekday trips represents only 1.56 percent of the ADT on Littleworth Road as counted in 2023. Therefore, the proposed project is not anticipated to add significant new traffic to Industrial Park Road (nor to Littleworth Road).

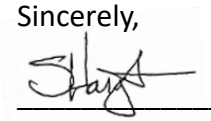
CONCLUSION

In conclusion:

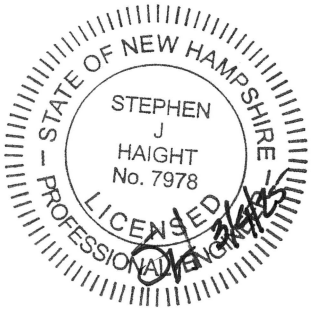
- Sight distances at the Industrial Park Road/proposed driveways intersection will be adequate.
- The proposed project is not anticipated to add significant new traffic to the area.

CIVILWORKS NEW ENGLAND

Sincerely,



Stephen J. Haight, PE



Stormwater Management System Inspection & Maintenance Plan

Prepared for:

SUMMIT LAND DEVELOPMENT
340 Central Ave Suite 202
Dover, NH

34 Industrial Park Road
Dover, New Hampshire
Tax Map G, Lot 4-1
Strafford County

January 2025

Owner of Record:

16 INDUSTRIAL PARK, LLC
340 Central Ave Suite 202
Dover, New Hampshire 03820

Prepared By:

CIVILWORKS NEW ENGLAND
P.O. Box 1166
181 Watson Road
Dover, New Hampshire 03821

Introduction

Civilworks New England, has prepared the following Stormwater Management System Inspection & Maintenance Plan for **the proposed project located at 34 Industrial Park Drive, Dover, NH 03820.** The intent of this plan is to provide a list of procedures that document the inspection and maintenance requirements of the Stormwater Management System for this site.

The inspection and maintenance requirements outlined in this document are required to be performed in perpetuity. In the event the property is sold, future owners will be responsible for implementing the responsibilities outlined in this document.

In addition to the private stormwater management system on-site, the City of Dover will own and maintain stormwater structures on-site that will be installed as part of this project. The City of Dover's stormwater structures include a catch basin located adjacent to the edge of pavement of Industrial Park Drive, the drainage pipe leaving the catch basin, the outfall of the drainage pipe, and the plunge pool at the outfall. A plan (BMP Location Plan) is attached to this document depicting the stormwater management systems and the respective party responsible for maintaining them.

The inspection and maintenance program is necessary in order to keep the Stormwater Management System functioning properly. These measures will also help to minimize potential environmental impacts to the areas surrounding the developed site. By following the enclosed procedures, the property owners, and maintenance personnel will be able to maintain the functional design of the Stormwater Management System and maximize its ability to remove sediment and other contaminants from site generated stormwater runoff.

This plan also requires the Owner/Operator to prepare and implement a salt minimization plan to reduce salt usage on-site and ultimately within the watershed. This plan will allow the owner/operator to monitor and modify how much salt is needed, when it should be applied, and where it needs to be applied, with the ultimate goal of reducing salt-use without compromising safety. It is expected that salt-use reduction will lead to long-term cost-savings as a result of purchasing less salt and reduced impacts on vegetation (e.g., landscaping) and corrosion of infrastructure.

The salt minimization plan should include the retention of a contractor who has completed the Green SnowPro Training course and obtained NHDES Salt Application Certification.

It is anticipated that this be a living document that will be updated at regular intervals (recommend updating annually in advance of the winter season in order to facilitate adjustments).

Owner:

16 Industrial Park, LLC
340 Central Ave Suite 202
Dover NH 03820

In the event of a change in ownership, this Inspection and Maintenance Plan shall be transferred to the new party.

Contact / Responsible Party:

Summitt Land Development
340 Central Ave Suite 202
Dover NH 03820

The contact information for the Contact / Responsible Party shall be kept current.

Management Company:

Summitt Land Development
340 Central Ave Suite 202
Dover NH 03820

The contact information for the Management Party shall be kept current.

Inspection Schedule / Record Retention

Inspection frequency should, at a minimum, be in accordance with New Hampshire Stormwater Manual, Volume 2, latest edition, as updated by NHDES. See the Inspection and Maintenance Plan for frequency requirements. A copy of the completed Stormwater Management System's Inspection & Maintenance Log and Deicing Salt Quantity Use Log shall be maintained, kept on-site, and be made available to local, state, or federal regulators as applicable by law. All Inspection and Maintenance records must be provided to the City of Dover Community Services Department annually before Dec 15th.

Stormwater Management System Components

The Stormwater Management System associated with the project is designed to mitigate both the quantity and quality of site-generated stormwater runoff. As a result, its design includes the following elements:

- Pipes/Culverts
- Outlet Structure(s)
- Energy Dissipation Structures (Rip Rap)
- Deep Sump Catch Basins
- Sediment Forebays
- Wet Extended Detention Pond
- Grass Lined Conveyance Swale
- Pavement
- Litter / Trash Removal

Design elements are identified in the design plans and are depicted on a Stormwater I&M Plan attached to this document. A copy of which shall be maintained with this Inspection and Maintenance Plan.

Control of Invasive Species

During maintenance activities, check for the presence of invasive plants and remove in a safe manner. Invasive plants shall be controlled to prevent them from reproducing, spreading, or re-growing. See the University of New Hampshire – Cooperative Extension's "Method for Disposing Non-Native Invasive Plants", included at the end of this manual, for guidance on the removal and disposal of invasive species.

Inspection and Maintenance Plan

By implementing the following procedures, the owners will be able to maintain the functional design of the Stormwater Management System and maximize the system's ability to remove sediment and other contaminants from site generated stormwater runoff.

PIPES/CULVERTS:

- Inspect once per year.
- Inspect for clogging and sediment accumulation.
- Remove all debris immediately and sediment accumulations ≥ 2 inches.

OUTLET STRUCTURE(S):

- Inspect once per year.
- Inspect for clogging and sediment accumulation.
- Remove all debris immediately and sediment accumulations ≥ 2 inches.

ENERGY DISSIPATION STRUCTURES (RIP RAP):

- Inspect at least once a year.
- Inspect for sediment accumulation.
- Remove all debris immediately.
- Inspect the outlet protection annually for damage or deterioration. Repair damages immediately.
- If stones become displaced from riprap areas, they should be replaced immediately and chinked in to assure stability. Add additional riprap as needed. Vegetation growing through the riprap should be eliminated at least yearly.

CATCH BASINS:

- Inspect twice per year (recommended in the spring and fall).
- Inspect for floatables, sediment accumulation, and hydrocarbons (oils and grease).
- Remove all floatables immediately.
- Sediment should be removed when it approaches half the sump depth. If no sump, remove sediment accumulation ≥ 6".
- Hydrocarbons shall be removed immediately by skimming, absorbent materials, or other methods and should be disposed of in accordance with applicable State and Federal regulations.

SEDIMENT FOREBAYS:

- Vegetated areas shall be mowed to maintain a 4" start of vegetative growth.
- Inspect at least once a year.
- Inspect for sediment accumulation.
- Remove all debris immediately.

WET EXTENDED DETENTION POND:

- Inspect at least once per year.
- Periodic mowing to control vegetation growth.
- Remove any woody vegetation.
- Remove any debris from pond and outlet structure.
- Remove accumulated sediment.

GRASS LINED CONVEYANCE SWALE:

- Inspect once per year.
- Inspect for erosion, sediment accumulation, vegetation loss, and presence of invasive species.
- Remove debris and accumulated sediment, based on inspection.
- Repair eroded areas as needed; remove invasive species and dead vegetation.
- Perform periodic mowing of swale (at least twice annually), maintain a 4" stand of vegetative growth.

PAVEMENT:

- Minimize sanding.
- Minimize application of salt for ice control.
- Clean periodically (1-2 times per year) using a sweeper or vacuum sweeper. Vacuum sweeping is the preferred method.

LITTER / TRASH REMOVAL:

- Routinely patrol site for litter pick-up.

DE-ICING AGENTS:

- To address the concerns associated with the application of chlorides and other deicing materials, NHDES recommends that the Owner/Operator develop a Road Salt and Deicing Minimization Plan for the parking lots and roadways. The plan should develop the policies that the development will keep in place to minimize salt and other deicer use after the project has been completed. The plan should include tracking the use of salt and other deicers for each storm event and compiling salt use data annually. (See Deicing Salt Quantity Use Log).
- Use sand as primary agent for driveway and access way safety during ice and snow conditions.
- Minimize the use of salt during the winter.
- Use de-icing or anti-caking agents, added to enhance performance and application characteristics of sand mixtures, only as necessary and at minimum application rates.
- Recommend using a certified Winter Operator (Green SnowPro Trained) for applying de-icing agents.
- Monitor weather and apply de-icing agents based on weather conditions and temperatures.

ANTI-ICING AND SALT MINIMIZATION:

- Owner to develop a Road Salt and Deicing Minimization Plan.
- Provide a written policy that the "Development" will keep in place to minimize salt and other deicer use after the project has been completed.
- Use the attached form to track the use of salt and other deicers for each storm event and compiling salt use data annually.

Inspection & Maintenance Table

System Component / BMP	Minimum Inspection Frequency	Minimum Inspection Requirements	Maintenance / Cleanout Threshold
Pipes/Culverts	Annually	• Check for clogging • Check for sediment accumulation	Remove when noticed Clean when necessary
Outlet Structure(s)	Annually	• Inspect once per year • Inspect for clogging and sediment accumulation • Remove all debris immediately and sediment accumulations ≥ 2 inches	≥ 2 in. sediment Remove immediately
Energy Dissipation (ED) Structures (Rip Rap)	Annually	• Check for erosion • Check for displaced stones • Check for woody vegetation • Check for sediment accumulation	≥ 3 in. sediment Remove annually Remove/ reset dislodged stones immediately
Catch Basins	Biannually Annually (at least)	• Check for sediment accumulations • Check for floatable contaminants • Check for hydrocarbons (oils and grease)	≥ 6" sediment depth or ½ sump depth Remove all floatables Remove immediately
Sediment Forebays	Annually	• Check for sediment accumulation • Check for woody vegetation growth • Check for debris • Vegetated areas shall be mowed to maintain a 4" start of vegetative growth	Remove/Dispose of accordingly Mow twice per year Remove/Dispose of accordingly
Wet Extended Detention Pond	Biannually Annually (at least)	• Check for sediment accumulation • Check for woody vegetation growth • Check for debris • Vegetated areas shall be mowed to maintain a 4" start of vegetative growth	Remove/Dispose of accordingly Mow twice per year Remove/Dispose of accordingly
Grass Lined Conveyance Swale	Annually	• Check for sediment accumulation • Check for erosion • Ensure swale is stabilized • Maintain healthy stand of veg., 4" minimum • Inspect for invasive species	≥ 1 in. sediment Repair immediately Restore vegetation in-kind Mow twice per year Remove/Dispose of accordingly
Pavement: • Sanding • Salt Applications • Sweep/Vacuum • Trash/Debris	Limit use As required 1 - 2 x's Year Periodically	• Minimize use to prevent tracking issues • RECORD APPLICATION RATES • Sweep or vacuum to prevent tracking issues • Check for trash/debris	Sweep to prevent issues Minimize (as required) Sweep/Vac as needed Remove when noticed
Litter / Trash Removal	Periodically	• Check for litter and trash	Remove when noticed

Inspection & Maintenance Checklist/Log

The following pages contain a blank copy of the Stormwater Management System's Inspection & Maintenance Log and a Deicing Salt Quantity Use Log. These forms are provided to assist the owners with the inspection and maintenance of the aforementioned Stormwater Management System.

Stormwater Management System's Inspection & Maintenance Log

Date of Inspection/Maintenance_____ Inspector:_____

System Component / BMP	Cleaning / Repair Needed (List Items / Comments)	Date of Cleaning/Repair	Performed By

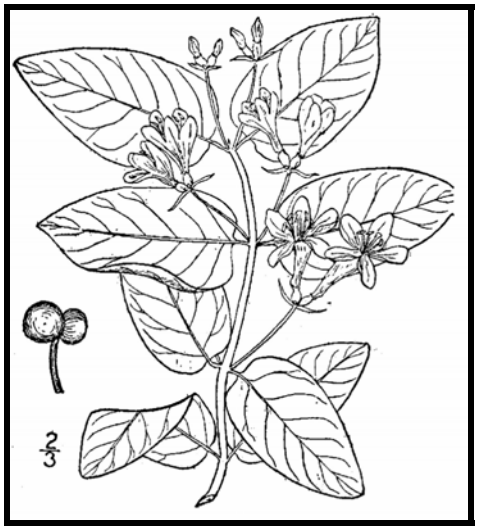
Deicing Salt Quantity Use Log

Date	Amount of Material Applied	Comments

University of New Hampshire Cooperative Extension

Methods for Disposing Non-Native Invasive Plants

Prepared by the Invasives Species Outreach Group, volunteers interested in helping people control invasive plants. Assistance provided by the Piscataquog Land Conservancy and the NH Invasives Species Committee. Edited by Karen Bennett, Extension Forestry Professor and Specialist.



Tatarian honeysuckle
Lonicera tatarica
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 3: 282.

Non-native invasive plants crowd out natives in natural and managed landscapes. They cost taxpayers billions of dollars each year from lost agricultural and forest crops, decreased biodiversity, impacts to natural resources and the environment, and the cost to control and eradicate them.

Invasive plants grow well even in less than desirable conditions such as sandy soils along roadsides, shaded wooded areas, and in wetlands. In ideal conditions, they grow and spread even faster. There are many ways to remove these non-native invasives, but once removed, care is needed to dispose the removed plant material so the plants don't grow where disposed.

Knowing how a particular plant reproduces indicates its method of spread and helps determine the appropriate disposal method. Most are spread by seed and are dispersed by wind, water, animals, or people. Some reproduce by vegetative means from pieces of stems or roots forming new plants. Others spread through both seed and vegetative means.

Because movement and disposal of viable plant parts is restricted (see NH Regulations), viable invasive parts can't be brought to most transfer stations in the state. Check with your transfer station to see if there is an approved, designated area for invasives disposal. This fact sheet gives recommendations for rendering plant parts non-viable.

Control of invasives is beyond the scope of this fact sheet. For information about control visit www.nhinvasives.org or contact your UNH Cooperative Extension office.

New Hampshire Regulations

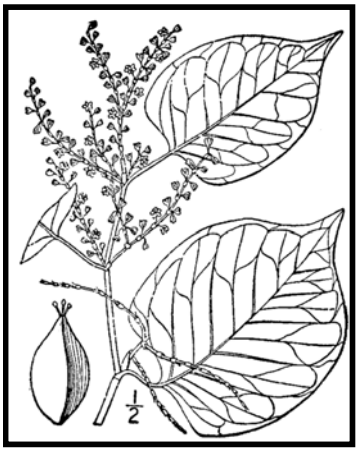
Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species, which includes all of their cultivars and varieties, listed in Table 3800.1 of the New Hampshire prohibited invasive species list. (Agr 3802.01)

How and When to Dispose of Invasives?

To prevent seed from spreading remove invasive plants before seeds are set (produced). Some plants continue to grow, flower and set seed even after pulling or cutting. Seeds can remain viable in the ground for many years. If the plant has flowers or seeds, place the flowers and seeds in a heavy plastic bag "head first" at the weeding site and transport to the disposal site. The following are general descriptions of disposal methods. See the chart for recommendations by species.

Burning: Large woody branches and trunks can be used as firewood or burned in piles. For outside burning, a written fire permit from the local forest fire warden is required unless the ground is covered in snow. Brush larger than 5 inches in diameter can't be burned. Invasive plants with easily airborne seeds like black swallow-wort with mature seed pods (indicated by their brown color) shouldn't be burned as the seeds may disperse by the hot air created by the fire.



Japanese knotweed
Polygonum cuspidatum
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 1: 676.

Bagging (solarization): Use this technique with softer-tissue plants. Use heavy black or clear plastic bags (contractor grade), making sure that no parts of the plants poke through. Allow the bags to sit in the sun for several weeks and on dark pavement for the best effect.

Tarping and Drying: Pile material on a sheet of plastic and cover with a tarp, fastening the tarp to the ground and monitoring it for escapes. Let the material dry for several weeks, or until it is clearly nonviable.

Chipping: Use this method for woody plants that don't reproduce vegetatively.

Burying: This is risky, but can be done with watchful diligence. Lay thick plastic in a deep pit before placing the cut up plant material in the hole. Place the material away from the edge of the plastic before covering it with more heavy plastic. Eliminate as much air as possible and toss in soil to weight down the material in the pit. Note that the top of the buried material should be at least three feet underground. Japanese knotweed should be at least 5 feet underground!

Drowning: Fill a large barrel with water and place soft-tissue plants in the water. Check after a few weeks and look for rotted plant material (roots, stems, leaves, flowers). Well-rotted plant material may be composted. A word of caution- seeds may still be viable after using this method. Do this before seeds are set. This method isn't used often. Be prepared for an awful stink!

Composting: Invasive plants can take root in compost. Don't compost any invasives unless you know there is no viable (living) plant material left. Use one of the above techniques (bagging, tarping, drying, chipping, or drowning) to render the plants nonviable before composting. Closely examine the plant before composting and avoid composting seeds.

Be diligent looking for seedlings for *years* in areas where removal and disposal took place.

Suggested Disposal Methods for Non-Native Invasive Plants

This table provides information concerning the disposal of removed invasive plant material. If the infestation is treated with herbicide and left in place, these guidelines don't apply. Don't bring invasives to a local transfer station, unless there is a designated area for their disposal, or they have been rendered non-viable. This listing includes wetland and upland plants from the New Hampshire Prohibited Invasive Species List. The disposal of aquatic plants isn't addressed.

<table>
<tr><th>Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">Norway maple
(Acer platanoides)
European barberry
(Berberis vulgaris)
Japanese barberry
(Berberis thunbergii)
autumn olive
(Elaeagnus umbellata)
burning bush
(Euonymus alatus)
Morrow's honeysuckle
(Lonicera morrowii)
Tatarian honeysuckle
(Lonicera tatarica)
showy bush honeysuckle
(Lonicera x bella)
common buckthorn
(Rhamnus cathartica)
glossy buckthorn
(Frangula alnus)</td><td rowspan="2">Fruit and Seeds
 </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Use as firewood.
▪ Make a brush pile.
▪ Chip.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip once all fruit has dropped from branches.
▪ Leave resulting chips on site and monitor.</td></tr>
<tr><td rowspan="2">oriental bittersweet
(Celastrus orbiculatus)
multiflora rose
(Rosa multiflora)</td><td rowspan="2">Fruits, Seeds, Plant Fragments
 </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Make a brush pile.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip – only after material has fully dried (1 year) and all fruit has dropped from branches. Leave resulting chips on site and monitor.</td></tr>
</table>

<table>
<tr><th>Non-Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">garlic mustard
(Alliaria petiolata)
spotted knapweed
(Centaurea maculosa)
▪ Sap of related knapweed can cause skin irritation and tumors. Wear gloves when handling.
black swallow-wort
(Cynanchum nigrum)
▪ May cause skin rash. Wear gloves and long sleeves when handling.
pale swallow-wort
(Cynanchum rossicum)
giant hogweed
(Heracleum mantegazzianum)
▪ Can cause major skin rash. Wear gloves and long sleeves when handling.
dame’s rocket
(Hesperis matronalis)
perennial pepperweed
(Lepidium latifolium)
purple loosestrife
(Lythrum salicaria)
Japanese stilt grass
(Microstegium vimineum)
mile-a-minute weed
(Polygonum perfoliatum)</td><td rowspan="2">Fruits and Seeds
 </td><td>Prior to flowering
Depends on scale of infestation
Small infestation
▪ Pull or cut plant and leave on site with roots exposed.

Large infestation
▪ Pull or cut plant and pile. (You can pile onto or cover with plastic sheeting).
▪ Monitor. Remove any re-sprouting material.</td></tr>
<tr><td>During and following flowering
Do nothing until the following year or remove flowering heads and bag and let rot.

Small infestation
▪ Pull or cut plant and leave on site with roots exposed.

Large infestation
▪ Pull or cut plant and pile remaining material. (You can pile onto plastic or cover with plastic sheeting).
▪ Monitor. Remove any re-sprouting material.</td></tr>
<tr><td>common reed
(Phragmites australis)
Japanese knotweed
(Polygonum cuspidatum)
Bohemian knotweed
(Polygonum x bohemicum)</td><td>Fruits, Seeds, Plant Fragments
Primary means of spread in these species is by plant parts. Although all care should be given to preventing the dispersal of seed during control activities, the presence of seed doesn’t materially influence disposal activities.</td><td>Small infestation
▪ Bag all plant material and let rot.
▪ Never pile and use resulting material as compost.
▪ Burn.

Large infestation
▪ Remove material to unsuitable habitat (dry, hot and sunny or dry and shaded location) and scatter or pile.
▪ Monitor and remove any sprouting material.
▪ Pile, let dry, and burn.</td></tr>
</table>

January 2010

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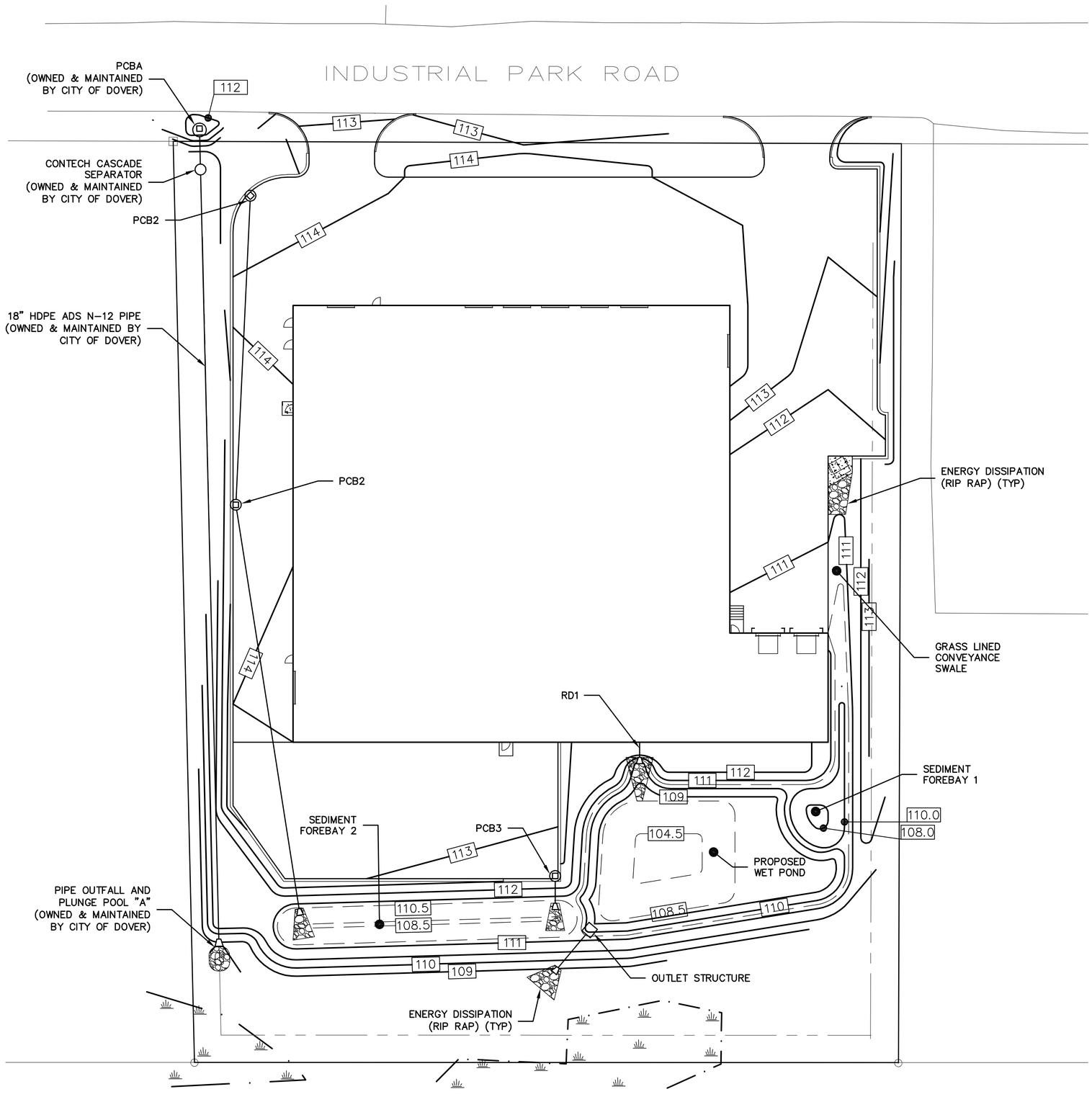

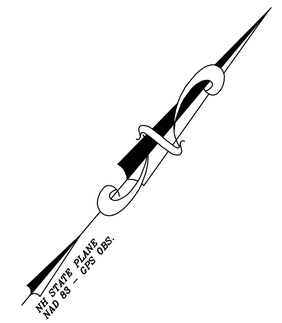

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE

DATE: 1-20-25
SCALE: 1" = 20'
DRAWN BY: IPL
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 23062
FILE: BMP

BMP LOCATION PLAN

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVE
SUITE 202
DOVER, NH 03820

SUMMIT LAND DEVELOPMENT
340 CENTRAL AVENUE
SUITE 2020
DOVER, NH 03820

BMP

SITE DEVELOPMENT DESIGN CRITERIA NARRATIVE
§153-14
STORMWATER MANAGEMENT
for
34 Industrial Park Drive
Tax Map G, Lot 4-1

A. Stormwater management, erosion control and flood hazards.

(1) Purpose and objective. These regulations establish standards to manage the discharge of runoff to the City of Dover's municipal storm sewer system and water bodies, in a manner compliant with the requirements of state and federal law, including provisions of the federal stormwater management legislation for municipal separate storm sewer systems (MS4), as amended. These provisions and standards are implemented for the purpose of:

(a) Managing stormwater runoff to protect water quality and quantity. **The proposed development has been designed in accordance with City of Dover's Stormwater management regulations to include the treatment of stormwater runoff utilizing deep sump catch basins, sediment forebays, a wet extended detention pond, and outlet protection.**

(b) Minimizing the contribution of a pollutant for which a water body is impaired to the maximum extent practicable (MEP). **The proposed development has been designed in accordance with City of Dover's Stormwater management regulations to include the treatment of stormwater runoff utilizing deep sump catch basins, sediment forebays, a wet extended detention pond, and outlet protection.**

(c) Causing no discharge of runoff to an adjacent property in excess of runoff discharge in the existing developed or undeveloped condition. **The proposed stormwater BMPs will effectively mitigate stormwater runoff and there will not be an increase of stormwater runoff to abutting properties.**

(d) Encouraging the use of low-impact development (LID) strategies. **The project proposes the use of deep sump catch basins, sediment forebays, a wet extended detention pond, and outlet protection.**

(2) Applicability of the stormwater standards.

(a) All projects requiring site plan or major subdivision approval shall be subject to the following set of stormwater standards according to the amount and type of disturbance. Applicability is as follows: **The project does not qualify for the redevelopment standards and will create greater than 4,000 square feet of impervious, as such, the stormwater standards apply.**

[1] The minimum protections and management standards shall apply to all projects. **The design incorporates these standards.**

[2] The stormwater management for new development standards shall apply to any project that results in a contiguous land disturbance of more than 20,000 square feet or creates more than 4,000 square feet of new impervious area. **The design incorporates these standards.**

[3] The stormwater management for redevelopment standards shall apply to any project that results in a contiguous land disturbance of more than 20,000 square feet or creates more than 4,000 square feet of new impervious area where the existing land use has been previously developed as commercial, industrial, institutional, governmental, recreational, or multifamily. **The redevelopment standards are not applicable to this project.**

(b) All projects of such magnitude as to require a permit from the National Pollutant Discharge Elimination System (NPDES) Program or the New Hampshire Department of Environmental Services (NHDES) Alteration of Terrain (AoT) Program shall also comply with the standards of the Environmental Protection Agency (EPA) and/or NHDES permits and this section, whereas the stricter standards shall apply. **The project will require a NPDES CGP, however will not require NH DES AoT permitting.**

(3) Design standards.

(a) Minimum protections and management standards.

[1] Where applicable, all development must comply with the EPA Phase II Stormwater Rules and the City's MS4 permit, as amended. **The project complies with the City's design and stormwater requirements.**

[2] Existing surface waters, including ponds, rivers, perennial and intermittent streams (natural or channelized), and wetlands (including vernal pools), shall be protected by the minimum buffer setback as specified in Chapter 170, Zoning, § 170-27.1. Stormwater and erosion and sediment control best management practices (BMPs) shall be located outside the specified buffer zone unless otherwise approved by the Planning Board. **The proposed project has been designed to limit the wetland buffer impacts to the greatest extent possible. The disturbance has been limited for the stormwater pond construction and associated grading. There is no proposed work within a wetland.**

[3] Low-impact development (LID) site planning and design strategies shall be used to the MEP in order to reduce the generation of the stormwater runoff Volume for both new and redevelopment projects. An owner/applicant must document why LID strategies are not appropriate if not used to manage stormwater. **The proposed stormwater management is designed per City of Dover's requirements and the NHDES Stormwater Manual. LID strategies were implemented to the maximum extent practicable, however the on-site soils are not conducive for infiltration practices.**

[4] All proposed stormwater practices and measures shall be installed and maintained in accordance with manufacturers' specifications and performance specifications outlined in the New Hampshire Stormwater Management Manual Volume 2 (December 2008 or current revision) a copy of which can be found on The NHDES website. **The project incorporates stormwater BMPs designed in accordance with NH DES requirements. A stormwater I&M is also provided.**

[5] All storage facilities for fuel, chemicals, chemical or industrial wastes, and biodegradable raw materials shall meet the regulations of the NHDES, including but not limited to those involving underground storage tanks, aboveground storage tanks, hazardous waste, and best management practices for groundwater protection (Part Env Wq 401). **The project does not propose the storage of the referenced materials onsite.**

[6] Salt and other deicing materials shall be stored under cover or located such that no direct discharges to receiving waters are possible. Snow storage areas shall be located such that no direct discharges to receiving waters are possible. See the NHDES guidance fact sheet on road salt and snow disposal. **The project does not propose the storage of deicing materials onsite.**

[7] The use of sodium-chloride-based materials for winter maintenance shall be the minimum necessary for safety. The use of sodium-chloride-based materials is discouraged within the groundwater protection districts. **The project I&M manual directs the owner/operator to produce a salt minimization plan as part of the winter maintenance of the site.**

[8] Impervious surfaces for parking areas and roads shall be minimized to the extent possible. **The project design incorporated the minimization of impervious areas to the maximum extent possible. All aspects of the design including the required number of parking spaces, drive aisle width, and turning areas were evaluated.**

[9] Stormwater runoff from new impervious surfaces shall be directed to a best management practice for flow mitigation, treatment and/or infiltration. **The proposed development has been designed in accordance with City of Dover's Stormwater management regulations to include the treatment of stormwater runoff utilizing deep sump catch basins, sediment forebays, a wet extended detention pond, and outlet protection.**

(b) Stormwater management for new development.

[1] Runoff of impervious surfaces shall be treated to provide 80% removal of total suspended solids (TSS) and 50% removal of both total nitrogen and phosphorus. Removal rates shall be determined using approved manufacturer's pollutant removal efficiency analysis or the pollutant removal efficiencies outlined in the New Hampshire Stormwater Management Manual Volume 1, Appendix E (December 2008 or current revision), a copy of which is available from the NHDES website. **The development includes 1.239 acres of new impervious area, of which 1.229 acres (0.621 acres Roof and 0.608 acres Pavement) is being treated in a Wet Extended Detention Pond. The remaining 0.010 acres of pavement was unable to be captured and treated, however, the proposed stormwater mitigation system is still able to provide the required pollutant removal per City of Dover standards.**

[2] Rainfall amount shall be based on current extreme precipitation estimates obtained from the Northeast Regional Climate Center. **The design incorporates NRCC precipitation amounts and the associated storm distribution data.**

[3] Measures shall be taken to control the post-development peak rate runoff so that it does not exceed predevelopment runoff for the two-, ten-, twenty-five- and fifty-year, twenty-four-hour storm events. **The proposed design mitigates post-development peak rate runoff of the 2, 10 ,25, and 50-year storm events.**

[4] Measures shall be taken to control the post-development surface water runoff volume so that it does not exceed predevelopment runoff for the two-, ten-, twenty-five- and fifty-year, twenty-four-hour storm events. For sites where infiltration/recharge is limited or not practicable, the owner/applicant must demonstrate that the project will not cause or contribute to flooding or functional impairments to streets, adjacent properties, and downstream properties. **The on-site soils are not conducive for infiltration practices.**

The slight increase in stormwater runoff is not anticipated to cause any downstream flooding. The post development stormwater is routed to the existing drainage patterns on-site, which discharge to the wetlands alongside the railroad bed.

[5] Infiltration rates for designing groundwater recharge practices shall be determined in accordance with Section Env-Wq 1504.14. **The on-site soils are not conducive for infiltration practices, groundwater recharge practices are not proposed.**

[6] Stormwater conveyance practices shall be sized appropriately to convey the ten-year, twenty-four-hour storm event without overtopping or causing flooding on the property. **Stormwater conveyance practices are designed to ensure they pass the 50-yr, 24-hour storm events without overtopping.**

[7] For large projects adding greater than or equal to 10 acres of impervious cover, or projects located in known areas of flooding concern, or specifically within areas with a 1% chance of being inundated by water in any given year, the owner/applicant shall submit a supplementary report that describes how the project will not increase the future flooding potential and complies with the AoT requirements pertaining to floodplain impacts as described in Section Env-Wq 1503.09, regardless of whether an AoT permit is required. **The project is located outside of the 0.2 percent annual chance floodplain. The project does not propose permanent or temporary disturbance or alteration of terrain within the flood plain.**

[8] The design of the stormwater management systems shall take into account upstream and upgradient runoff that flows onto, over, or through the site to be developed or redeveloped and provide for this contribution of runoff. **The project has incorporated offsite and upgradient stormwater runoff in support of the design for the stormwater management system.**

[9] Seasonal high-water table elevations must be accounted for in all BMP design criteria. **A wet extended detention pond has been designed for stormwater water mitigation, it is anticipated that the seasonal high-water table is high due to the on-site soils. Test pits were not conducted to verify season high water table. A liner is proposed under the wet extended detention pond to ensure the permanent pool always has water in it. If test pits are conducted for pavement or building design, a copy of the logs will be provided to Community Services.**

[10] Access for maintenance of stormwater facilities must be included as part of the design, where necessary. Access easements may be required. **Stormwater facilities for the proposed project are included on site and the site will be solely owned by the applicant. Additional public stormwater drainage structures will be built on site for stormwater runoff from Industrial Park Road. The City of Dover will be responsible for maintaining this system and will be provided a drainage easement.**

[11] Plantings in treatment areas shall be native grasses, shrubs and/or other native plants in sufficient numbers and density to prevent soil erosion and to achieve water-quality treatment. **Acknowledged, a landscape plan has been prepared.**

(c) Stormwater management for redevelopment. In order to determine the stormwater requirements for redevelopment projects, the percentage of the site covered by existing impervious areas must be calculated. Stormwater requirements for redevelopment will vary based upon the amount of site surface area that is covered by existing impervious surfaces.

The project does not meet redevelopment requirements and this section is Not Applicable (N/A).

[1] For sites meeting the definition of a redevelopment project and having less than 40% existing impervious surface coverage, the stormwater management requirements will be the same as new development projects, with the important distinction that the applicant can meet those requirements either on site or at an approved off-site location (i.e., off-site mitigation). The applicant must satisfactorily demonstrate that impervious area reduction, LID strategies and BMPs have been implemented on site to the MEP. **N/A**

[2] For sites meeting the definition of a redevelopment project and having more than 40% existing impervious surface coverage, stormwater shall be managed in accordance with one or more of the following techniques, listed in order of preference: **N/A**

[a] Implement measures on site that result in mitigation and treatment of at least 30% of the existing impervious cover as well as 50% of the additional proposed impervious surfaces and pavement areas through the application of LID; or

[b] Implement other LID techniques on site to the MEP to provide mitigation and treatment for at least 50% of the entire site area.

[3] The owner/applicant may utilize off-site mitigation to meet the redevelopment requirements when the following standards have been met. **N/A**

[a] The owner/applicant shall demonstrate, to the satisfaction of the Planning Board, that on-site treatment has been implemented to the MEP.

[b] The owner/applicant shall find an approved, off-site location within the same watershed as the project site or within the drainage area of the same receiving water body.

[c] Off-site mitigation shall be equivalent to no less than the total area of pervious cover not treated on site.

[d] The owner/applicant shall submit a full design of the proposed off-site measures for review and approval.

[e] The owner/applicant must also demonstrate that there is no downstream drainage or flooding impact as a result of not providing on-site management.

(d) Erosion control standards during construction. The following standards shall be applied in project planning and shall be implemented prior to and during construction activity: **The plan set includes temporary and permanent sediment and erosion control practice notes and details in support of meeting the erosion control standards.**

[1] All proposed measures shall meet, at a minimum, the design standards for best management practices set forth in the New Hampshire Stormwater Management Manual Volume 3 (December 2008 or current revision), a copy of which is available from the NHDES website. **The sediment and erosion control details provided in the plan set are all designed in accordance with the NH Stormwater Manual.**

[2] When a project requires a stormwater permit from the EPA Construction General Permit (CGP) Program, copies of the stormwater pollution prevention plan (SWPPP) inspections shall be provided to the Community Services Department. **Acknowledged, a copy of the SWPPP inspections will be provided to Community Services.**

[3] Stripping of vegetation shall be done in a manner that minimizes soil erosion. Whenever practical, natural vegetation shall be retained, protected, or supplemented. **The Erosion Control Notes in the provided plan set indicate that the smallest practical area shall be disturbed during construction.**

[4] The area of land disturbance shall be kept to a minimum and be limited to an area only large enough to accommodate construction activities for a particular construction phase. **The Erosion Control Notes in the provided plan set indicate that the smallest practical area shall be disturbed during construction.**

[5] Off-site surface water and runoff from undisturbed areas shall be diverted away from disturbed areas where feasible, or measures to convey stormwater through the project area without causing erosion of sediment must be included. The integrity of downstream drainage systems shall be maintained. **Direction to ensure that stormwater conveyance practices shall be stabilized prior to receiving stormwater runoff is included on the Erosion Control Notes sheet provided as part of this submittal.**

[6] Appropriate erosion and sediment control measures shall be installed prior to any soil land disturbance and must be reviewed and approved by the Community Services Department. **Construction scheduling and inspections will be discussed with Community Services at the required pre-construction meeting.**

[7] Perimeter site controls shall not be placed within wetland areas, stream channels or wetland buffers. The project proposed disturbance within a wetland buffer. **Erosion control measures are proposed along the down slope side of all construction and will be doubled up within wetland buffer to ensure protection to the onsite wetlands and abutting properties.**

[8] Disturbed soil areas shall be either temporarily or permanently stabilized. In areas where final grading has not occurred, temporary stabilization measures should be in place within seven calendar days for exposed soil areas that are within 100 feet of a surface water body or a wetland and no more than 14 calendar days for all other areas. Permanent stabilization should be in place within three calendar days following completion of final grading of exposed soil areas. **The definitions of, and direction for, stabilization of the site are provided on the Erosion Control Notes sheet provided as part of this submittal.**

[9] All temporary erosion and sediment control measures shall be maintained in functioning condition until final site stabilization is accomplished. A proposed BMP inspection schedule shall be included in the submittal. **The erosion control inspection scheduling requirements are identified on the Erosion Control Notes sheet provided as part of this submittal.**

[10] Additional temporary stabilization for the winter season consistent with NHDES guidelines shall be in place for disturbed areas that are not permanently stabilized by October 1, or at the discretion of the Community Services Department. **The NH DES AoT winter construction notes are identified on the Erosion Control Notes sheet provided as part of this submittal.**

[11] Special stabilization details shall be provided with the submission for any land disturbance on slopes equal to or steeper than 3:1. **Slopes greater than 3:1 require erosion control matting and/or armoring and those details are provided in the plan set.**

[12] All temporary erosion and sediment control measures shall be removed after final site stabilization. Trapped sediment and other disturbed soil areas resulting from the removal of temporary measures shall be permanently stabilized within 30 calendar days unless conditions dictate otherwise. **Temporary practice details identify the need to remove sediment and/or stabilize the area once the practices have been removed.**

[13] For projects proposing to disturb and expose soils in areas of 10 acres or more at one time, a temporary (or permanent) sediment basin must be provided with storage for a calculated volume of runoff from a drainage area from a two-year, twenty-four-hour storm, or equivalent control measures, where attainable, until final stabilization of the site. Alternatively, the sediment of storage per acre of drainage area until final stabilization of the site. In determining appropriate locations and number of sediment basins needed, the operators may consider such factors as erodibility of site soils, slope lengths, available area on site, construction period and other unique site considerations. **The project does not propose the disturbance of greater than 10 acres of area. A temporary sediment trap detail, designed with a maximum contributing area of 5 acres, has been provided in accordance with NH DES AoT design requirements.**

[14] Use of temporary sediment basins should avoid any additional vegetation clearing or site land disturbance not otherwise needed for post-construction. Sediment basin locations must be reviewed by the Community Services Department prior to construction and must consider the potential for off-site impacts, including public safety, especially as it relates to sediment movement and/or sediment basin failure, and alternative sediment controls must be used where site limitations preclude a safe design. **Temporary sediment basin locations, if constructed, will be discussed with Community Services prior to the construction of the practices.**

(e) Installation and construction inspections. The owner/applicant shall be responsible for inspection requirements as follow:

[1] The Community Services Department or its designated agent shall have access to the site to complete routine inspections. **Community Services access and inspection requirements will be discussed at the pre-construction meeting.**

[2] The Community Services Department shall be notified 24 hours prior to installation of a stormwater BMP in order to schedule an inspection. These inspections shall be completed during normal working hours. **The project notes provide direction for the contractor to notify the design engineer and the Community Services Department as required.**

[3] The Planning Board or Community Services Department may require the design engineer and/or an independent third party to provide inspection and oversight of the construction of the stormwater management facilities and erosion and sediment control measures at its discretion. Such oversight may be especially important for implementing techniques such as porous pavement or subsurface stormwater infiltration systems. The owner/applicant shall be responsible for all fees associated with third-party inspections. **A letter can be provided if requested. This letter, if required, will be discussed at the pre-construction meeting.**

[4] All SWPPP inspections must be conducted by a qualified professional such as a professional engineer (PE), a certified professional in erosion and sediment control (CPESC), a certified erosion sediment and stormwater inspector (CESSWI), or a certified professional in stormwater quality (CPSWQ). Inspection reports shall be submitted to the Community Services Department. **The project notes provide direction for the inspector to be qualified and for all reports to be submitted to the Community Services Department.**

[5] The owner is ultimately responsible for the installation, construction, inspection, and disposition of all stormwater management and erosion control measures required by the provisions of these regulations. **The project notes identify the owner as having the responsibility for ensuring the stormwater management and erosion control measures are installed as approved.**

(f) Stormwater management plan (SWMP) submittal requirements. At the discretion of the Planning Board or Community Services Department, a technical review by an independent third party may be required of any SWMP prepared under these regulations. Such a review shall be performed by a qualified professional consultant and the expense of which shall be the full responsibility of the owner/applicant. **The SWMP is a comprehensive set of documents that include, at a minimum, a drainage report, plan set, and Stormwater I&M Manual. These documents each serve a role in presenting the necessary information to the appropriate audience. The information required in this section is provided within the SWMP documents.**

[1] For projects requiring minimum protection standards, a plan including the following information shall be submitted:

[a] Description of erosion and sediment control measures as well as sequence for final stabilization of the project site. **This information is provided within the Erosion Control Notes within the plan set.**

[b] Proposed changes in impervious cover areas and any changes in pre- and post-development drainage patterns. **This information is provided within the drainage report and the Pre/Post Development Watershed Plans.**

[c] Description of LID proposed measures. **This information is provided in the drainage report and throughout the plan set and details.**

[2] For projects requiring new development or redevelopment standards, a drainage report that contains the following items shall be submitted: **This information is provided in the drainage report and throughout the plan set and details.**

[a] Description of construction period and earth movement schedule, including anticipated project start and completion dates, sequence and duration of grading and construction activities, sequence, and timing of installation and/or application of soil erosion and sediment control measures as well as sequence for final stabilization of the project site. **This information is provided in the drainage report and throughout the plan set and details.**

[b] Description of the on-site and adjacent wetlands, streams and other water resources, including methods used to identify these resources, and a description of any buffer setbacks that may apply, steep slopes, critical habitat, existing vegetation, areas with a 1% chance of being inundated by water in any given year, and whether any downstream water bodies are listed as impaired according

to NHDES's most recent 303(d) list. **This information is provided in the drainage report and throughout the plan set and details.**

[c] Soils information for proposed disturbed areas shall be delineated by a certified soil scientist. For all other areas that contribute runoff to the project site, soil types may be identified in accordance with Natural Resources Conservation Service (NRCS) countywide soil survey. **This information is provided in the drainage report and throughout the plan set and details.**

[d] Description of existing drainage patterns, receiving water bodies or drainage infrastructure and soil types for recharge potential. **This information is provided in the drainage report and throughout the plan set and details.**

[e] Watershed area limits, including any off-site and upstream areas contributing flow to shared drainage channels and/or infrastructure. **This information is provided in the drainage report and throughout the plan set and details.**

[f] Description of proposed changes in impervious cover areas and any changes in pre- and post-development drainage patterns. **This information is provided in the drainage report and throughout the plan set and details.**

[g] Methods and assumptions used to calculate pre- and post-development runoff volume, peak discharge, and discharge velocity for the specified design storm events. **This information is provided in the drainage report and throughout the plan set and details.**

[h] Methods and assumptions used to calculate the pollutant load removal. **This information is provided in the drainage report and throughout the plan set and details.**

[i] Description of LID measures that are proposed to limit the development footprint, preserve existing vegetation and mimic existing hydrology to the extent feasible. **This information is provided in the drainage report and throughout the plan set and details.**

[j] If not used, provide rationale why LID measures are not practical for the site. **N/A**

[k] Describe measures and calculations for proposed practices used to achieve no net increase in runoff volumes leaving the site. **This information is provided in the drainage report and throughout the plan set and details.**

[l] Provide calculations for the infiltration or exfiltration system. **This information is provided in the drainage report and throughout the plan set and details.**

[m] If an increase in post-development runoff volume is anticipated due to limited applicability for LID measures and site constraints, provide an assessment and supporting calculations to demonstrate no adverse impacts to downstream infrastructure, adjacent properties, or aquatic habitat. **The on-site soils are not conducive for infiltration practices. The slight increase in stormwater runoff is not anticipated to cause any downstream flooding. The post development stormwater is routed to the existing drainage patterns on-site, which discharge to the wetlands alongside the railroad bed.**

[n] Descriptions, details, and design criteria and calculations for all structural, nonstructural, permanent, and temporary erosion and sedimentation control measures and BMPs. This information should include seeding mixtures and rates, types of sod, methods of seedbed preparation, expected seeding dates (or limitations on seeding time frames), type and rate of lime and fertilizer application, and type and quantity of mulching for temporary and permanent control facilities. **This information is provided in the drainage report and throughout the plan set and details.**

[o] Where proposed changes are anticipated within mapped limits of the areas with a 1% chance of being inundated by water in any given year, provide hydrologic and hydraulic analysis to show no net increase in flood elevations. **N/A**

[p] Proposed schedule for the inspection and maintenance of all erosion control measures on site prior to achieving final site stabilization. **This information is provided in the drainage report and throughout the plan set and details.**

[q] Describe procedures for removing temporary erosion control measures and removal of accumulated sediment captured by such measures. **This information is provided in the drainage report and throughout the plan set and details.**

[r] Any other specific study, calculation, or investigation as requested by the City. **Additional information is provided as requested and may include traffic studies, structural designs, septic/sewer designs, geotechnical reports, etc. These documents are provided on a case-by-case basis and as requested by the City.**

[s] Describe procedures to limit and/or optimize the use of deicing materials and minimize off-site increases in chloride levels in adjacent surface water and groundwater. **The Stormwater I&M Manual includes the implementation of a salt minimization plan.**

[t] Provide a maintenance and inspection plan for post-construction monitoring of stormwater BMPs to ensure long-term performance and functionality, including details of who will be responsible for inspections and maintenance, proposed schedule, documentation, submittal procedures and contingency plans if future maintenance is required. **A Stormwater I&M Manual is provided as part of the submission.**

[u] Provide copies of pertinent state and federal permits. **Copies of permits will be provided to the City, as applicable.**

(g) Long-term operation and maintenance. The owner shall be responsible for continued inspection and maintenance requirements. **An I&M Manual that identifies the owner's responsibilities has been provided as a part of the submission.**

[1] An operation and maintenance manual shall be created with the following information:

[a] The names of the responsible qualified professionals who will implement the required reporting, inspections, and maintenance activities. **The Owner, Responsible Party, and the Management Company are identified in the I&M Manual.**

[b] An inspection checklist, identifying item or BMP, inspection frequency, and components to be inspected. The list shall clearly outline performance thresholds and triggers for maintenance. **Inspection requirements and maintenance thresholds are identified in the I&M Manual.**

[c] Snow and ice removal shall be performed by a contractor certified by the "Green SnoPro" Program, or approved equivalent, following best management practices for the application of deicing materials. **The I&M Manual requires the use of a Green SnowPro contractor.**

[d] Deicing log to track amount and type of deicing material applied. **The I&M Manual requires the implementation of a salt minimization plan that also requires the owner or operator to track salt usage onsite through a quantity usage log.**

[e] A site plan clearly identifying the locations of all stormwater practices to be inspected and maintained. **The approved Grading and Drainage Plan accompanies the I&M Manual.**

[f] Inspection and maintenance log to be submitted to the City of Dover Community Services Department on an annual basis. Documents shall be submitted no later than December 15 of each year. **The I&M Manual identifies this requirement.**

[2] The owner of record shall record at the Registry of Deeds documentation sufficient to provide notice to all persons that may acquire any property subject to the requirements and responsibilities described in the approved stormwater management plan. The notice shall comply with the applicable requirements for recording contained in RSA 477 and 478. The notice need not set forth the requirements at length, so long as it is sufficient to provide notice to prospective purchasers of the requirements for maintenance and reporting. **Not Applicable.**

Landscape Best Management Practices Operations and Maintenance Plan

Prepared for:

SUMMIT LAND DEVELOPMENT
340 Central Ave Suite 202
Dover, NH

34 Industrial Park Road
Dover, New Hampshire
Tax Map G, Lot 4-1
Strafford County

January 2025

Owner of Record:

16 INDUSTRIAL PARK, LLC
340 Central Ave Suite 202
Dover, New Hampshire 03820

Landscape Maintenance

The landscape enhancements proposed for the 34 Industrial Park development will require modest maintenance at various times throughout the year. For the site plantings, and replanting of existing trees, maintenance is most important during the first 1-2 years following installation when the plants/trees are becoming established. All maintenance personnel shall become familiar with the landscape and its features. Identified below are the required minimum maintenance tasks:

Weekly Tasks

- Prune back any shrubs overhanging curbs or sidewalks.
- Remove litter from plant beds.
- Remove broken or fallen branches from trees.
- Prune sucker growth from tree trunks.
- Physically remove weeds that are taller than 2". Weeds 2" and taller must be removed to minimize the opportunity for the dispersal of weed seeds; weeds should not be killed and left in planting beds. The application of herbicides such as roundup is discouraged.
- Any invasive species seedlings observed should be removed and disposed of properly.
- Replace any bark mulch that has been washed out plant beds. Smooth mulch layer if it has been disturbed.
- Check plants for signs of stress, pests or disease.
- Notify owner for authorization to replace dead plants at the appropriate time
- If a significant decline in plant health is attributed to an insect pest, apply an organic product and/or process to control the pest.
- Water plants that are dry and stressed.
- Identify other tasks listed on the annual and monthly checklist tasks.

Annual Tasks

Early Spring:

- Inspect for winter damage
- Prune winter damage
- Trim dead perennial foliage to within six inches of the ground
- Gently prune shrubs for shape and form, do not shear. (time of year based on species)
- As applicable, inspect, repair, and activate irrigation system.
- Inspect all mulch beds and add new mulch to a maximize depth of 2" as needed.

Summer:

- No additional tasks

September:

- Inspect and inventory all plantings, shrubs, and trees
- Replace dead or missing plants

October:

- No additional tasks

November:

- Remove leaf litter
- Remove dead vegetation
- As applicable, deactivate irrigation system
- Apply “WILT-PRUF” to broadleaf evergreens, according to label instructions, to protect shrubs from winter die back.

December:

- Prune tree branches that are broken or interfere with public safety.
- Prune parking lot trees

STORMWATER FACILITIES

The stormwater facilities are used to attenuate and treat stormwater runoff. The stormwater system includes a closed drainage system, a grassed conveyance swale, and a large wet extended detention pond. The grassed areas will be seeded with a conservation mix that has a variety of native, adaptable, and rugged perennial grasses, that can withstand water inundation for an extended period of time. Refer to the Stormwater Inspection and Maintenance manual for additional information.

RECEIVED
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MAR 05
Dover, New Hampshire

WAIVER REQUEST

FOR

SITE PLAN REVIEW APPLICATION

34 Industrial Park Road

Tax Map G, Lot 4-1

Seasonal Automotive Storage & Automotive Service

ARTICLE IV

Site Design and Development Criteria

§ 153-13. Site development plan.

A. (12) A landscape plan that delineates the arrangement, species and dimensions of all existing and proposed landscaping materials. The landscape plan, in sufficient detail to indicate compliance with these regulations, shall be prepared by a professional landscape architect who is licensed by the State of New Hampshire. The licensed landscape architect shall sign the plan. The landscape plan shall be certified by the licensed landscape architect and include his/her State of New Hampshire license number.

Requesting relief from the requirement to have a landscape plan certified by a New Hampshire Licensed Landscape Architect.

A site-specific landscape plan has been provided. The site is located in an industrial park that has little visibility to the general public. The site-specific landscape layout has been designed, to the maximum extent, to maintain the existing trees along the rear property line, and relocating smaller trees to be along the road frontage. This will provide some screening while creating an appropriate look for the proposed building and site layout, consistent with commercial use sites in the City of Dover.

WAIVER REQUEST

FOR

SITE PLAN REVIEW APPLICATION

34 Industrial Park Road

Tax Map G, Lot 4-1

Seasonal Automotive Storage & Automotive Service

ARTICLE IV

Site Design and Development Criteria

§ 153-14. Site development design criteria.

A. (3.b.4) Measures shall be taken to control the post-development surface water runoff volume so that it does not exceed predevelopment runoff for the two-, ten-, twenty-five- and fifty-year, twenty-four-hour storm events. For sites where infiltration/recharge is limited or not practicable, the owner/applicant must demonstrate that the project will not cause or contribute to flooding or functional impairments to streets, adjacent properties, and downstream properties

Requesting relief from the requirement of not exceeding the pre-development stormwater runoff volume.

The proposed site is located at 34 Industrial Park Road. The existing site primarily consists of grass with a mix of individual trees throughout the site. There are two wetland fingers located on-site directly adjacent to the railroad bed. The soils primarily consist of C/D and have poor permeability. It is expected that seasonal high-water tables will be encountered during construction, therefore infiltration practices are not feasible. A Stormwater Wet Detention Pond is proposed for stormwater mitigation which effectively will treat and reduce stormwater flow from the site.

The site drains to the wetland fingers on-site are part of a larger wetland complex located along the ditch of the railroad bed. The ditch ultimately drains to Knox Marsh Brook, which is over 3,000 feet southwest of the site. Based on the analysis and our professional opinion, the expected minimal increase in runoff volume from the site will not have any negative effect on the existing drainageways or watershed.

DRAINAGE ANALYSIS

16 INDUSTRIAL PARK, LLC
34 INDUSTRIAL PARK ROAD
TAX MAP G, LOT 4-1
DOVER, NH

January 2025

Prepared For:

Summit Land Development, LLC
340 Central Ave Suite 202
Dover, NH 03820

Prepared By:

Civilworks New England
PO Box 1166
181 Watson Road
Dover, NH 03821

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1.0 INTRODUCTION

This is a hydrologic analysis of the subject parcel located at 34 Industrial Road, Dover, NH. The 2.19± acre lot is identified as Tax Map G, Lot 4-1. The site is currently undeveloped. The ground cover primarily consists of lawn and is bounded by commercial/industrial lots to the northeast and southeast, Industrial Park Road to the northwest and the Boston and Maine Railroad to the southeast.

The project proposes the construction of a 27,000-sf commercial/industrial building with site improvements associated with site access, driveways, paved parking, grading, drainage, and utilities. The proposed drainage system incorporates a wet pond with two sediment forebays and three (3) catch basins. The proposed stormwater system captures, treats, and stores the stormwater runoff from the site and redirects it to the existing discharge point. The proposed stormwater drainage structures will be maintained by the project proponent as outlined within the Stormwater Management System Inspection & Maintenance Manual (Stormwater I&M Manual) in Appendix C.

To effectively analyze the pre-development subject parcel, the site was analyzed as one watershed, A. Watershed A drains from Industrial Park Road, through a swale, to the wetlands along the Boston and Maine railroad. Soil characteristics were obtained utilizing web soil survey and area mix of HSG B & C soils. Topography information was obtained from an on-site survey.

The post development is further divided into five (5) subcatchments that are routed to the same discharge point, A, as defined in the pre-development model. This provides a direct comparison to the pre-development model. This analysis indicates that the proposed stormwater measures and stormwater management plan will treat and mitigate stormwater runoff in general accordance with The City of Dover’s stormwater regulations. The proposed development of the site in conjunction with the implementation of the Stormwater I&M Manual will have minimal impact on the watershed.

2.0 DRAINAGE ANALYSIS

A comprehensive hydrologic study of this site has been performed utilizing nationally recognized runoff estimating techniques developed by the USDA, Soil Conservation Services (SCS). The technique and runoff models are described in various SCS publications and references as follows:

"Stormwater Management and Erosion Sediment Control Handbook for Urban and Developing Areas in New Hampshire"

"New Hampshire Stormwater Manual Volume 2 - Post-Construction Best Management Practices Selection & Design"

"Civil Engineering Reference Manual, Fifth Edition"

"Open-Channel Hydraulics" Chow.

"Stormwater Modeling System" HydroCAD Ver. 10.10

2.1 DRAINAGE DESIGN PARAMETERS

A brief review of the procedures and parameters used in the drainage study follows:

2.1.1 Watersheds

The watershed was delineated using on site topographic and as built survey data field located by McEneaney Survey Associates of New England.

2.1.2 Soils

Soil types were determined utilizing the NRCS Web Soil Survey (WSS) mapping tool at http://websoilsurvey.nrcs.usda.gov. The soil survey area is Strafford County, NH, the soil survey data is Version 24, dated Aug 22nd, 2023 and the aerial images are dated June 19th to September 20th, 2020.

Hydrologic Drainage Class B:

Map Unit Symbol	Slopes	Map Unit Name
CfB	3 to 8 %	Charlton Fine Sandy Loam

Hydrologic Drainage Class C:

Map Unit Symbol	Slopes	Map Unit Name
BzB	3 to 8 %	Buxton Silt Loam
ScA	0 to 3 %	Scantic Silt Loam

2.1.3 Rainfall Data

Extreme precipitation estimate values from the Northeast Regional Climate Center were utilized in this analysis. The analysis has been performed for the 2-year, 10-year, 25-year, and 50-year storm events with 3.14", 4.73", 5.99", and 7.15" rainfall depths respectively.

2.1.4 Runoff Curve Numbers

The SCS runoff curve numbers were used and are summarized within each sub-catchment drainage summary in Appendix A.

2.2 EXISTING CONDITIONS

For the purposes of this analysis, the subject parcel was analyzed as a single watershed that discharges to an abutting property in the predevelopment condition.

2.2.1 Table A – Existing Conditions (2, 10, 25, and 50-year storm events)

Watershed	**Pre-Development Volume (af)**	**Pre Development Peak Flows (cfs)**			
Discharge Point	**2-yr**	**2-yr**	**10-yr**	**25-yr**	**50-yr**
A	0.14	0.9	2.0	3.0	3.9

2.3 DEVELOPED CONDITIONS

The post development model analyzes runoff to the post development discharge point, which is the wetlands located along the Boston and Maine Railroad.

2.3.1 Table B – Developed Conditions (2, 10, 25, and 50-year storm events)

Watershed	**Post-Development Volume (af)**	**Post Development Peak Flows (cfs)**			
Discharge Point	**2-yr**	**2-yr**	**10-yr**	**25-yr**	**50-yr**
A	0.37	0.9	1.7	3.0	3.7

2.4 HYDROLOGIC COMPARISON

The analysis indicates that the proposed project will have negligible impact on the watershed.

2.4.1 Table C – Pre/Post Development Comparison (2, 10, 25, and 50-year storm events)

Watershed	Pre/**Post-Development Volume (af)**	Pre/**Post Development Peak Flows (cfs)**			
Discharge Point	**2-yr**	**2-yr**	**10-yr**	**25-yr**	**50-yr**
A	0.14/**0.37**	0.9/**0.9**	2.0/**1.7**	3.0/**3.0**	3.9/**3.9**

2.5 STORMWATER DESIGN

The project incorporates best management practices to mitigate runoff as well as treat and convey stormwater.

2.5.1 Stormwater Best Management Practices

This project incorporates a single Wet Pond for stormwater treatment, along with two (2) sediment forebays and two (2) deep sump catch basins for pre-treatment. See Appendix B-1 for Best Management Practice Design forms.

2.5.2 Pollutant Removal

The development includes 1.239 acres of new impervious area, of which 1.229 acres (0.621 acres Roof and 0.608 acres Pavement) is being treated in a Wet Extended Detention Pond, an approved NHDES Best Management Practice. The remaining 0.010 acres of pavement was unable to be captured and treated, however, the proposed stormwater mitigation system is still able to provide the required pollutant removal per City of Dover standards.

The stormwater management system utilized deep sump catch basins & a Wet Extended detention pond with sediment forebays to achieve 80% TSS, 55% TN, & 68% TP pollutant removal. Below are the NHDES published pollutant removal efficiencies. See Appendix B-2 for additional information.

	TSS	TN	TP
Deep Sump Catch Basin:	15%	5%	5%
Wet Extended Detention Pond:	80%	55%	68%

2.5.3 Outlet Protection

NHDES BMP outlet protection has been sized to accommodate the 25-year, 24-hour storm event. All proposed rip-rap applications shall consist of a minimum stone d50=6” with a stone layer thickness of 12” (min.) on a fabric layer or a 6” thick (min.) gravel base. See the plan set for rip rap locations and the drainage details for additional information.

APPENDIX A

HYDROLOGIC CALCULATIONS

Extreme Precipitation in New York & New England

An Interactive Web Tool for Extreme Precipitation Analysis

About this Project | Data & Products | Daily Monitoring | Documentation

Select Product

- Extreme Precipitation Tables - HTML
- Extreme Precipitation Tables - Text/CSV
- Partial Duration Series - by Point
- Partial Duration Series - by Station
- Distribution Curves - Graphical
- Distribution Curves - Text/TBL
- Intensity Frequency Duration Graphs
- Precipitation Frequency Duration Graphs
- GIS Data Files
- Regional/State Maps

Select Location *Double-click map to place a marker, or enter address or latitude/longitude.*

Hybrid | Map | Satellite | Terrain

Locate by Address → | Locate by Lat/Lon 43.18° N -70.90 °W → | Locate by State/County

Select Options

Smoothing	Delivery
Yes	Popup

Submit

Version 2.0 Copyright 2010-2022

This project is a joint collaboration between:

Northeast Regional Climate Center (NRCC) | Natural Resources Conservation Service (NRCS)

Cornell University

Contact: precip@cornell.edu

Extreme Precipitation Tables

Northeast Regional Climate Center

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

Metadata for Point	
Smoothing	Yes
State	New Hampshire
Location	New Hampshire, United States
Latitude	43.186 degrees North
Longitude	70.901 degrees West
Elevation	30 feet
Date/Time	Thu Jan 09 2025 09:20:49 GMT-0500 (Eastern Standard Time)

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.65	0.81	1.03	**1yr**	0.70	0.98	1.20	1.54	1.99	2.60	2.85	**1yr**	2.30	2.74	3.14	3.87	4.44	**1yr**
2yr	0.32	0.49	0.61	0.81	1.01	1.29	**2yr**	0.87	1.17	1.50	1.91	2.44	3.14	3.49	**2yr**	2.78	3.35	3.85	4.58	5.22	**2yr**
5yr	0.37	0.57	0.72	0.96	1.23	1.58	**5yr**	1.06	1.44	1.85	2.38	3.07	3.96	4.47	**5yr**	3.51	4.30	4.91	5.79	6.54	**5yr**
10yr	0.40	0.63	0.80	1.09	1.42	1.84	**10yr**	1.22	1.69	2.18	2.82	3.65	4.73	5.39	**10yr**	4.19	5.18	5.92	6.91	7.77	**10yr**
25yr	0.46	0.74	0.94	1.29	1.72	2.26	**25yr**	1.48	2.09	2.69	3.52	4.59	5.99	6.91	**25yr**	5.30	6.65	7.56	8.73	9.76	**25yr**
50yr	0.51	0.83	1.06	1.48	1.99	2.66	**50yr**	1.72	2.45	3.17	4.17	5.47	7.15	8.35	**50yr**	6.33	8.03	9.11	10.44	11.61	**50yr**
100yr	0.58	0.93	1.20	1.70	2.31	3.11	**100yr**	2.00	2.88	3.74	4.94	6.51	8.55	10.09	**100yr**	7.57	9.70	10.98	12.47	13.81	**100yr**
200yr	0.64	1.04	1.36	1.95	2.69	3.66	**200yr**	2.32	3.39	4.41	5.87	7.77	10.23	12.19	**200yr**	9.05	11.72	13.23	14.92	16.43	**200yr**
500yr	0.75	1.24	1.61	2.34	3.29	4.52	**500yr**	2.84	4.21	5.48	7.35	9.79	12.97	15.67	**500yr**	11.48	15.06	16.95	18.91	20.70	**500yr**

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.24	0.37	0.45	0.61	0.74	0.90	**1yr**	0.64	0.88	0.91	1.25	1.55	2.07	2.47	**1yr**	1.83	2.38	2.92	3.36	4.05	**1yr**
2yr	0.31	0.49	0.60	0.81	1.00	1.18	**2yr**	0.86	1.15	1.36	1.83	2.36	3.04	3.39	**2yr**	2.69	3.26	3.74	4.46	5.06	**2yr**
5yr	0.35	0.54	0.67	0.91	1.16	1.40	**5yr**	1.00	1.37	1.61	2.15	2.78	3.70	4.12	**5yr**	3.28	3.96	4.59	5.40	6.10	**5yr**
10yr	0.38	0.59	0.73	1.02	1.32	1.60	**10yr**	1.14	1.56	1.82	2.45	3.13	4.26	4.78	**10yr**	3.77	4.59	5.31	6.24	7.00	**10yr**
25yr	0.44	0.67	0.83	1.18	1.55	1.91	**25yr**	1.34	1.87	2.11	2.85	3.66	5.02	5.79	**25yr**	4.44	5.57	6.48	7.55	8.41	**25yr**
50yr	0.48	0.73	0.91	1.31	1.77	2.19	**50yr**	1.52	2.14	2.35	3.20	4.12	5.75	6.68	**50yr**	5.09	6.42	7.53	8.72	9.65	**50yr**
100yr	0.54	0.81	1.02	1.47	2.02	2.51	**100yr**	1.74	2.46	2.63	3.59	4.60	6.58	7.71	**100yr**	5.82	7.41	8.75	10.06	11.05	**100yr**
200yr	0.60	0.90	1.14	1.65	2.30	2.88	**200yr**	1.98	2.81	2.93	4.02	5.15	7.52	8.89	**200yr**	6.65	8.55	10.16	11.62	12.67	**200yr**
500yr	0.70	1.04	1.34	1.94	2.76	3.46	**500yr**	2.38	3.39	3.40	4.66	5.99	8.93	10.73	**500yr**	7.91	10.31	12.39	14.07	15.13	**500yr**

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.43	0.53	0.71	0.87	1.08	**1yr**	0.75	1.05	1.23	1.74	2.21	2.84	3.06	**1yr**	2.51	2.94	3.39	4.19	4.77	**1yr**
2yr	0.33	0.51	0.62	0.84	1.04	1.24	**2yr**	0.90	1.22	1.48	1.95	2.50	3.25	3.60	**2yr**	2.88	3.46	3.97	4.73	5.40	**2yr**
5yr	0.39	0.60	0.75	1.03	1.31	1.58	**5yr**	1.13	1.54	1.85	2.49	3.19	4.22	4.81	**5yr**	3.74	4.63	5.25	6.19	6.96	**5yr**
10yr	0.46	0.70	0.87	1.21	1.57	1.92	**10yr**	1.35	1.87	2.23	3.04	3.84	5.19	6.00	**10yr**	4.60	5.77	6.59	7.60	8.48	**10yr**
25yr	0.55	0.84	1.05	1.50	1.97	2.47	**25yr**	1.70	2.41	2.87	3.95	4.93	6.95	8.06	**25yr**	6.15	7.75	8.79	10.00	11.04	**25yr**
50yr	0.64	0.97	1.21	1.74	2.34	2.98	**50yr**	2.02	2.91	3.48	4.81	5.98	8.57	10.08	**50yr**	7.59	9.70	10.96	12.29	13.50	**50yr**
100yr	0.74	1.12	1.41	2.03	2.79	3.60	**100yr**	2.40	3.52	4.22	5.88	7.26	10.58	12.62	**100yr**	9.36	12.14	13.65	15.13	16.51	**100yr**
200yr	0.86	1.29	1.64	2.37	3.31	4.36	**200yr**	2.86	4.26	5.13	7.19	8.80	13.09	15.82	**200yr**	11.59	15.21	17.02	18.61	20.23	**200yr**
500yr	1.05	1.56	2.01	2.92	4.15	5.59	**500yr**	3.58	5.47	6.62	9.40	11.38	17.38	21.33	**500yr**	15.38	20.51	22.79	24.52	26.47	**500yr**

Powered by ACIS Northeast Regional Climate Center

Map Scale: 1:3,010 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

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

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

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

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

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

Soil Survey Area: Strafford County, New Hampshire
Survey Area Data: Version 25, Sep 3, 2024

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

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BzB	Buxton silt loam, 3 to 8 percent slopes	C/D	4.5	30.5%
CfB	Charlton fine sandy loam, 3 to 8 percent slopes	B	2.5	17.0%
CfC	Charlton fine sandy loam, 8 to 15 percent slopes	B	4.2	28.7%
ScA	Scantic silt loam, 0 to 3 percent slopes	C/D	3.5	23.8%
Totals for Area of Interest			**14.6**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

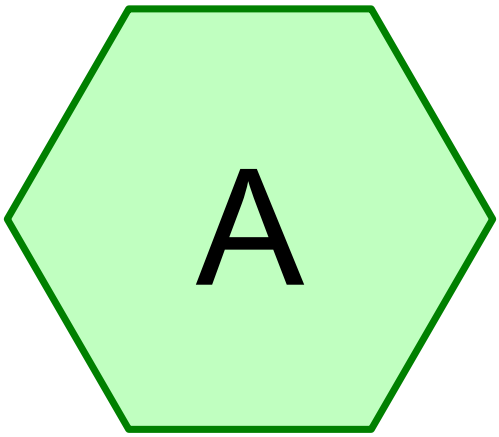
Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

A – 1

EXISTING WATERSHEDS



A

Subcat Reach Pond Link

Routing Diagram for 23062 - PRE
Prepared by CIVILWORKS NEW ENGLAND
HydroCAD® 10.10-5a s/n 03240 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.787	61	>75% Grass cover, Good, HSG B (A)
1.307	74	>75% Grass cover, Good, HSG C (A)
0.059	98	Paved parking, HSG B (A)
0.039	98	Paved parking, HSG C (A)
2.192	**70**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.846	HSG B	A
1.346	HSG C	A
0.000	HSG D	
0.000	Other	
2.192		**TOTAL AREA**

A – 1

NODE LISTING – 2-YR

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: A Runoff Area=95,468 sf 4.49% Impervious Runoff Depth=0.79"
Flow Length=784' Tc=26.9 min CN=70 Runoff=0.9 cfs 0.145 af

Total Runoff Area = 2.192 ac Runoff Volume = 0.145 af Average Runoff Depth = 0.79"
95.51% Pervious = 2.093 ac 4.49% Impervious = 0.098 ac

A – 1

NODE LISTING – 10-YR

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: A Runoff Area=95,468 sf 4.49% Impervious Runoff Depth=1.84"
Flow Length=784' Tc=26.9 min CN=70 Runoff=2.0 cfs 0.336 af

Total Runoff Area = 2.192 ac Runoff Volume = 0.336 af Average Runoff Depth = 1.84"
95.51% Pervious = 2.093 ac 4.49% Impervious = 0.098 ac

A – 1

10-YR STORM SUMMARY

Summary for Subcatchment A: A

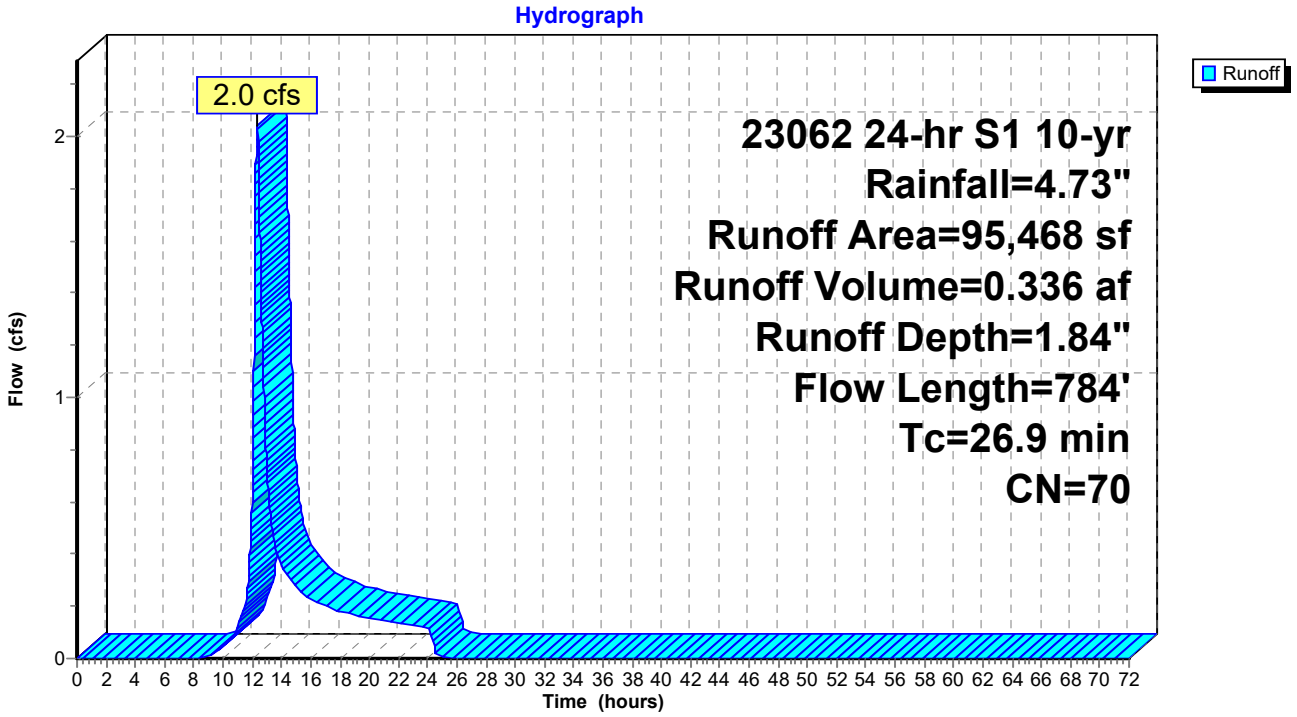
Runoff = 2.0 cfs @ 12.34 hrs, Volume= 0.336 af, Depth= 1.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
23062 24-hr S1 10-yr Rainfall=4.73"

Area (sf)	CN	Description
34,271	61	>75% Grass cover, Good, HSG B
2,578	98	Paved parking, HSG B
56,912	74	>75% Grass cover, Good, HSG C
1,707	98	Paved parking, HSG C
95,468	70	Weighted Average
91,183		95.51% Pervious Area
4,285		4.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	68	0.0367	0.15		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.61"
8.2	32	0.0070	0.06		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.61"
3.6	128	0.0070	0.59		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
7.4	556	0.0070	1.25		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
26.9	784	Total			

Subcatchment A: A



A – 1

NODE LISTING – 25-YR

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: A Runoff Area=95,468 sf 4.49% Impervious Runoff Depth=2.80"
Flow Length=784' Tc=26.9 min CN=70 Runoff=3.0 cfs 0.511 af

Total Runoff Area = 2.192 ac Runoff Volume = 0.511 af Average Runoff Depth = 2.80"
95.51% Pervious = 2.093 ac 4.49% Impervious = 0.098 ac

A – 1

NODE LISTING – 50-YR

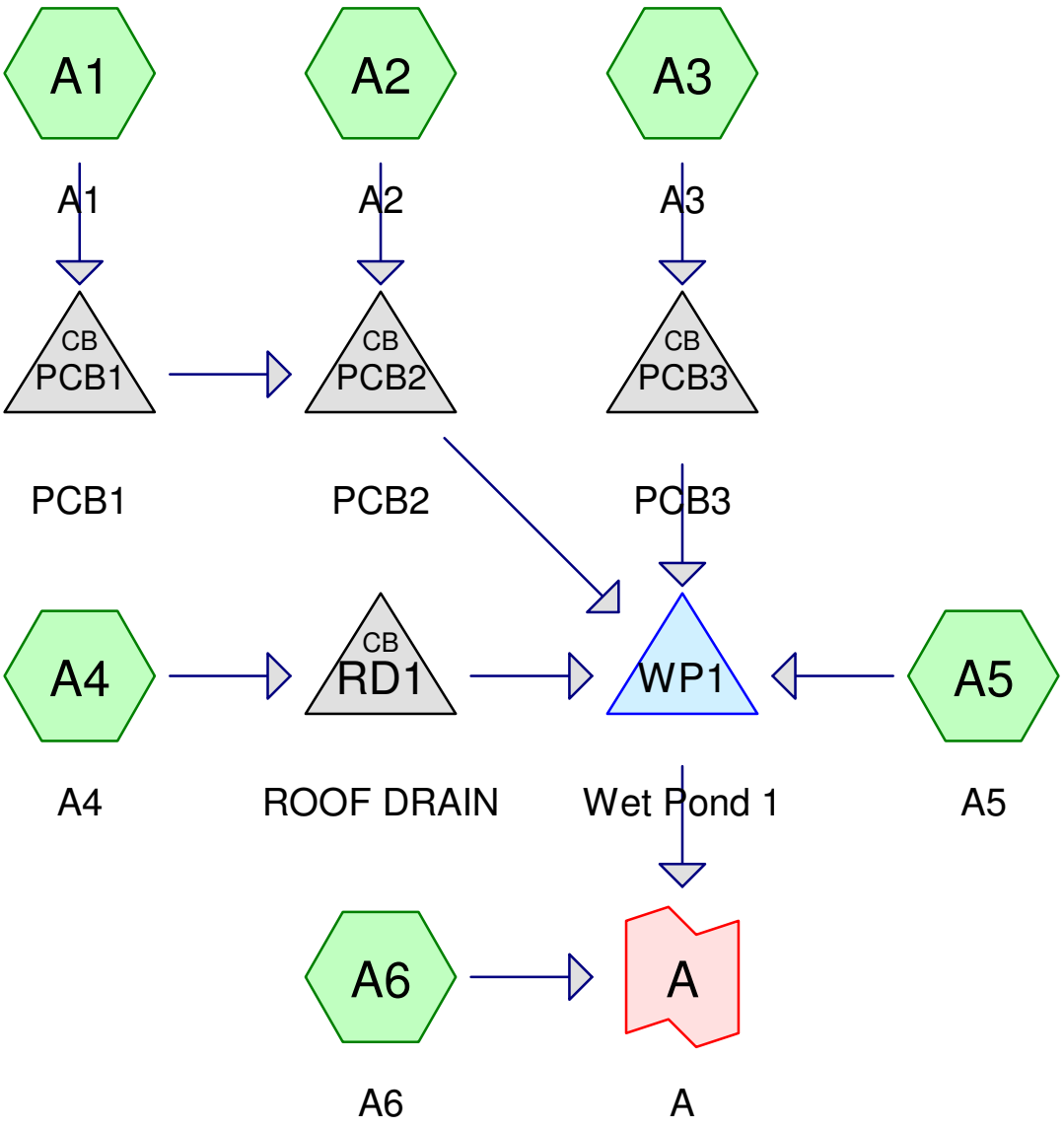
Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: A Runoff Area=95,468 sf 4.49% Impervious Runoff Depth=3.74"
Flow Length=784' Tc=26.9 min CN=70 Runoff=3.9 cfs 0.684 af

Total Runoff Area = 2.192 ac Runoff Volume = 0.684 af Average Runoff Depth = 3.74"
95.51% Pervious = 2.093 ac 4.49% Impervious = 0.098 ac

A – 2

DEVELOPED WATERSHEDS



Subcat Reach Pond Link

Routing Diagram for 23062 - Post
Prepared by CIVILWORKS NEW ENGLAND
HydroCAD® 10.10-5a s/n 03240 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.162	61	>75% Grass cover, Good, HSG B (A1, A5, A6)
0.676	74	>75% Grass cover, Good, HSG C (A5, A6)
0.449	98	Paved parking, HSG B (A1, A2, A5, A6)
0.284	98	Paved parking, HSG C (A2, A3, A5, A6)
0.235	98	Roofs, HSG B (A4)
0.386	98	Roofs, HSG C (A4)
2.192	**88**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.846	HSG B	A1, A2, A4, A5, A6
1.346	HSG C	A2, A3, A4, A5, A6
0.000	HSG D	
0.000	Other	
2.192		**TOTAL AREA**

A – 2

NODE LISTING – 2-YR

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Link A: A Inflow=0.9 cfs 0.37 af
Primary=0.9 cfs 0.37 af

Subcatchment A1: A1 Runoff Area=5,405 sf 94.54% Impervious Runoff Depth=2.69"
Flow Length=124' Slope=0.0090 '/' Tc=1.2 min CN=96 Runoff=0.4 cfs 0.03 af

Subcatchment A2: A2 Runoff Area=3,358 sf 100.00% Impervious Runoff Depth=2.91"
Flow Length=82' Slope=0.0170 '/' Tc=1.2 min CN=98 Runoff=0.3 cfs 0.02 af

Subcatchment A3: A3 Runoff Area=6,226 sf 100.00% Impervious Runoff Depth=2.91"
Flow Length=170' Slope=0.0100 '/' Tc=1.4 min CN=98 Runoff=0.5 cfs 0.03 af

Subcatchment A4: A4 Runoff Area=27,040 sf 100.00% Impervious Runoff Depth=2.91"
Tc=2.0 min CN=98 Runoff=2.2 cfs 0.15 af

Subcatchment A5: A5 Runoff Area=24,304 sf 48.49% Impervious Runoff Depth=1.71"
Flow Length=247' Tc=1.9 min CN=85 Runoff=1.3 cfs 0.08 af

Subcatchment A6: A6 Runoff Area=29,134 sf 18.73% Impervious Runoff Depth=1.11"
Flow Length=268' Tc=10.2 min CN=76 Runoff=0.7 cfs 0.06 af

Pond PCB1: PCB1 Peak Elev=110.69' Inflow=0.4 cfs 0.03 af
12.0" Round Culvert n=0.012 L=110.0' S=0.0045 '/' Outflow=0.4 cfs 0.03 af

Pond PCB2: PCB2 Peak Elev=110.20' Inflow=0.7 cfs 0.05 af
12.0" Round Culvert n=0.012 L=148.0' S=0.0047 '/' Outflow=0.7 cfs 0.05 af

Pond PCB3: PCB3 Peak Elev=109.97' Inflow=0.5 cfs 0.03 af
12.0" Round Culvert n=0.012 L=8.0' S=0.0250 '/' Outflow=0.5 cfs 0.03 af

Pond RD1: ROOF DRAIN Peak Elev=110.76' Inflow=2.2 cfs 0.15 af
15.0" Round Culvert n=0.012 L=6.0' S=0.0333 '/' Outflow=2.2 cfs 0.15 af

Pond WP1: Wet Pond 1 Peak Elev=109.97' Storage=10,082 cf Inflow=4.6 cfs 0.31 af
Outflow=0.3 cfs 0.31 af

Total Runoff Area = 2.192 ac Runoff Volume = 0.37 af Average Runoff Depth = 2.04"
38.22% Pervious = 0.838 ac 61.78% Impervious = 1.354 ac

A – 2

NODE LISTING – 10-YR

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Link A: A Inflow=1.7 cfs 0.63 af
Primary=1.7 cfs 0.63 af

Subcatchment A1: A1 Runoff Area=5,405 sf 94.54% Impervious Runoff Depth=4.26"
Flow Length=124' Slope=0.0090 '/' Tc=1.2 min CN=96 Runoff=0.5 cfs 0.04 af

Subcatchment A2: A2 Runoff Area=3,358 sf 100.00% Impervious Runoff Depth=4.49"
Flow Length=82' Slope=0.0170 '/' Tc=1.2 min CN=98 Runoff=0.3 cfs 0.03 af

Subcatchment A3: A3 Runoff Area=6,226 sf 100.00% Impervious Runoff Depth=4.49"
Flow Length=170' Slope=0.0100 '/' Tc=1.4 min CN=98 Runoff=0.6 cfs 0.05 af

Subcatchment A4: A4 Runoff Area=27,040 sf 100.00% Impervious Runoff Depth=4.49"
Tc=2.0 min CN=98 Runoff=2.8 cfs 0.23 af

Subcatchment A5: A5 Runoff Area=24,304 sf 48.49% Impervious Runoff Depth=3.12"
Flow Length=247' Tc=1.9 min CN=85 Runoff=2.0 cfs 0.15 af

Subcatchment A6: A6 Runoff Area=29,134 sf 18.73% Impervious Runoff Depth=2.31"
Flow Length=268' Tc=10.2 min CN=76 Runoff=1.3 cfs 0.13 af

Pond PCB1: PCB1 Peak Elev=110.78' Inflow=0.5 cfs 0.04 af
12.0" Round Culvert n=0.012 L=110.0' S=0.0045 '/' Outflow=0.5 cfs 0.04 af

Pond PCB2: PCB2 Peak Elev=110.47' Inflow=0.9 cfs 0.07 af
12.0" Round Culvert n=0.012 L=148.0' S=0.0047 '/' Outflow=0.9 cfs 0.07 af

Pond PCB3: PCB3 Peak Elev=110.46' Inflow=0.6 cfs 0.05 af
12.0" Round Culvert n=0.012 L=8.0' S=0.0250 '/' Outflow=0.6 cfs 0.05 af

Pond RD1: ROOF DRAIN Peak Elev=110.90' Inflow=2.8 cfs 0.23 af
15.0" Round Culvert n=0.012 L=6.0' S=0.0333 '/' Outflow=2.8 cfs 0.23 af

Pond WP1: Wet Pond 1 Peak Elev=110.46' Storage=12,765 cf Inflow=6.3 cfs 0.50 af
Outflow=0.8 cfs 0.50 af

Total Runoff Area = 2.192 ac Runoff Volume = 0.63 af Average Runoff Depth = 3.47"
38.22% Pervious = 0.838 ac 61.78% Impervious = 1.354 ac

A – 2

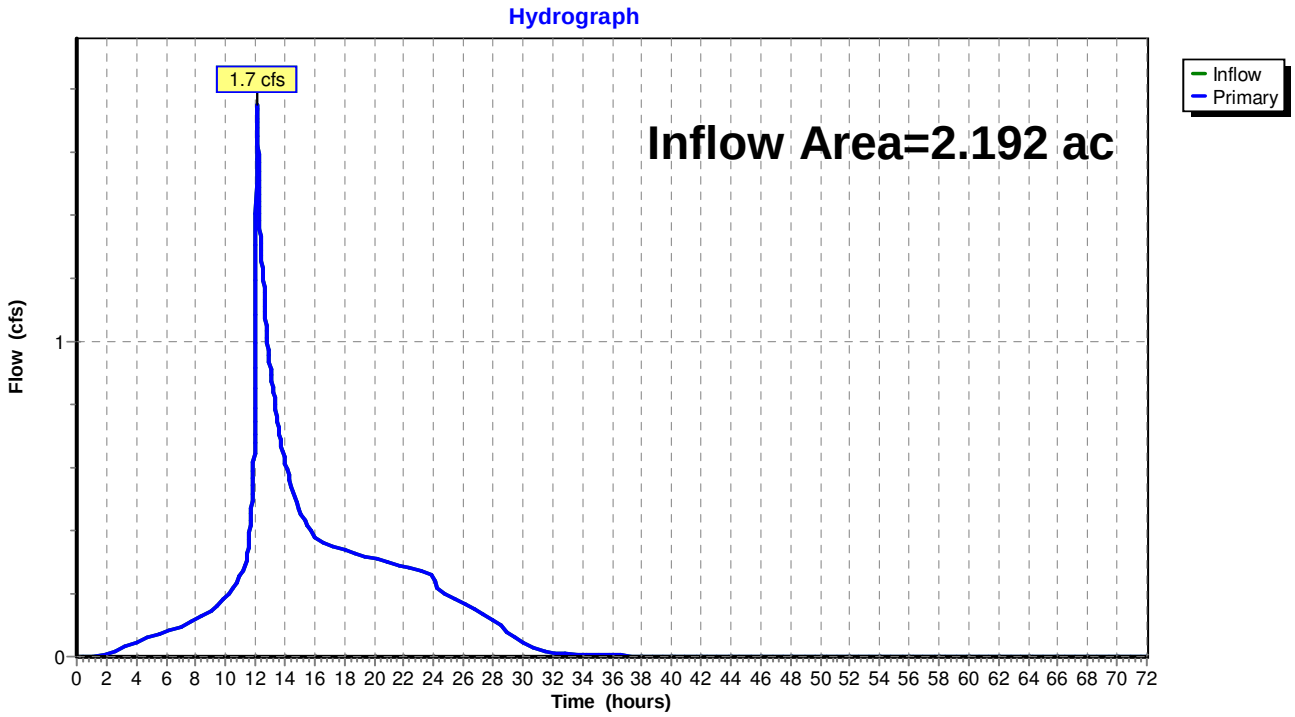
10-YR STORM SUMMARY

Summary for Link A: A

Inflow Area = 2.192 ac, 61.78% Impervious, Inflow Depth = 3.46" for 10-yr event
Inflow = 1.7 cfs @ 12.11 hrs, Volume= 0.63 af
Primary = 1.7 cfs @ 12.11 hrs, Volume= 0.63 af, Atten= 0%, Lag= 0.0 min

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

Link A: A



Summary for Subcatchment A1: A1

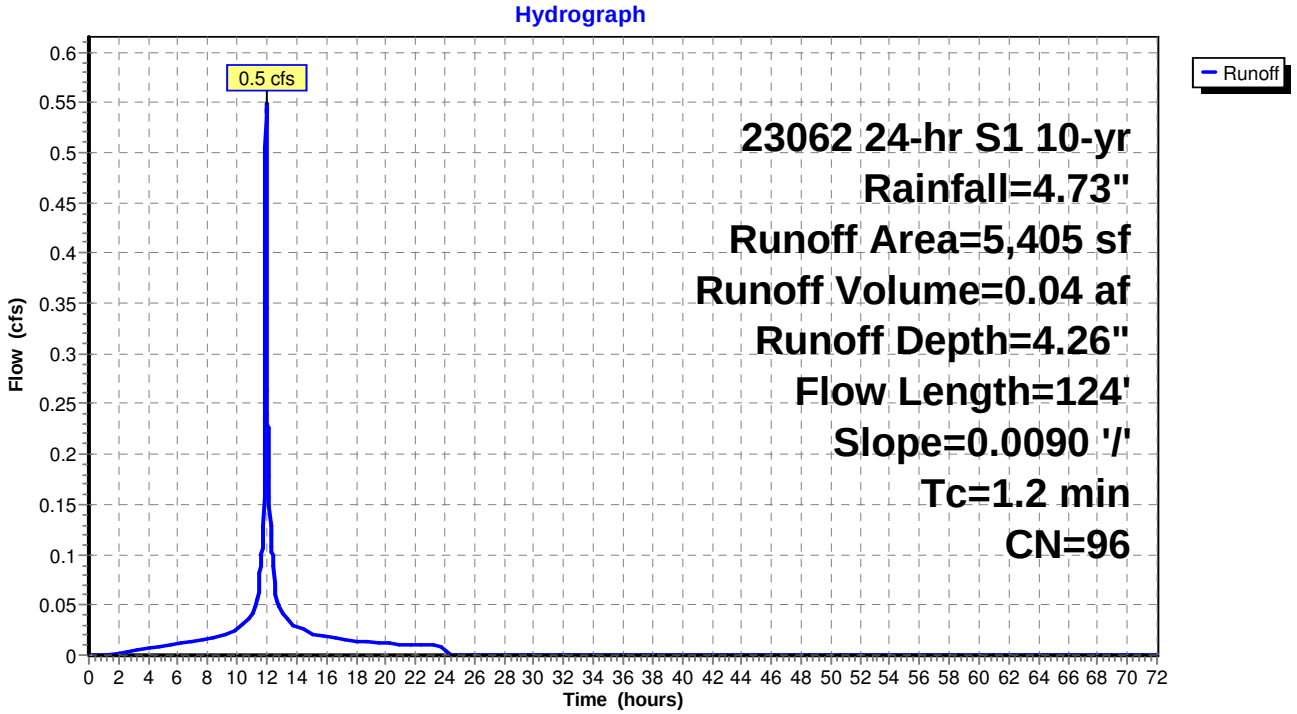
Runoff = 0.5 cfs @ 12.00 hrs, Volume= 0.04 af, Depth= 4.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
23062 24-hr S1 10-yr Rainfall=4.73"

Area (sf)	CN	Description
295	61	>75% Grass cover, Good, HSG B
5,110	98	Paved parking, HSG B
5,405	96	Weighted Average
295		5.46% Pervious Area
5,110		94.54% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	124	0.0090	1.93		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
1.1	124	Total, Increased to minimum Tc = 1.2 min			

Subcatchment A1: A1



Summary for Subcatchment A2: A2

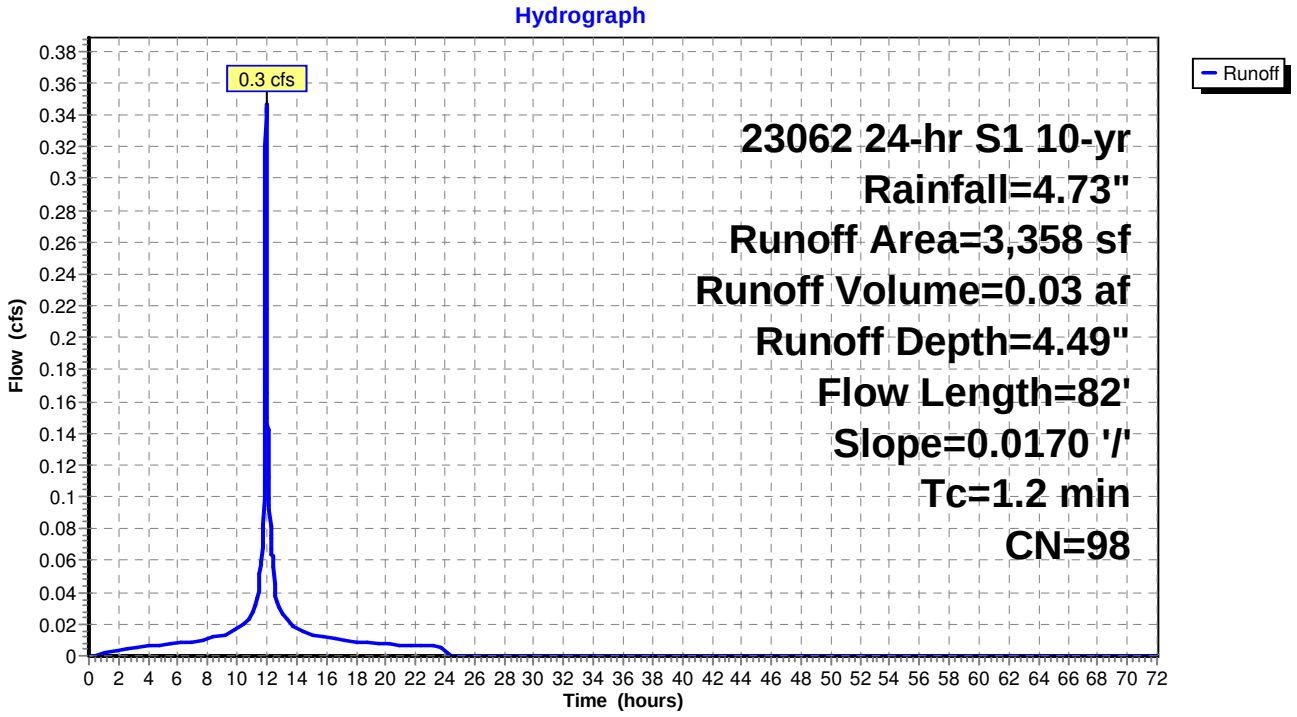
Runoff = 0.3 cfs @ 11.99 hrs, Volume= 0.03 af, Depth= 4.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
23062 24-hr S1 10-yr Rainfall=4.73"

Area (sf)	CN	Description
667	98	Paved parking, HSG B
2,691	98	Paved parking, HSG C
3,358	98	Weighted Average
3,358		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	82	0.0170	2.65		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.5	82	Total, Increased to minimum Tc = 1.2 min			

Subcatchment A2: A2



Summary for Subcatchment A3: A3

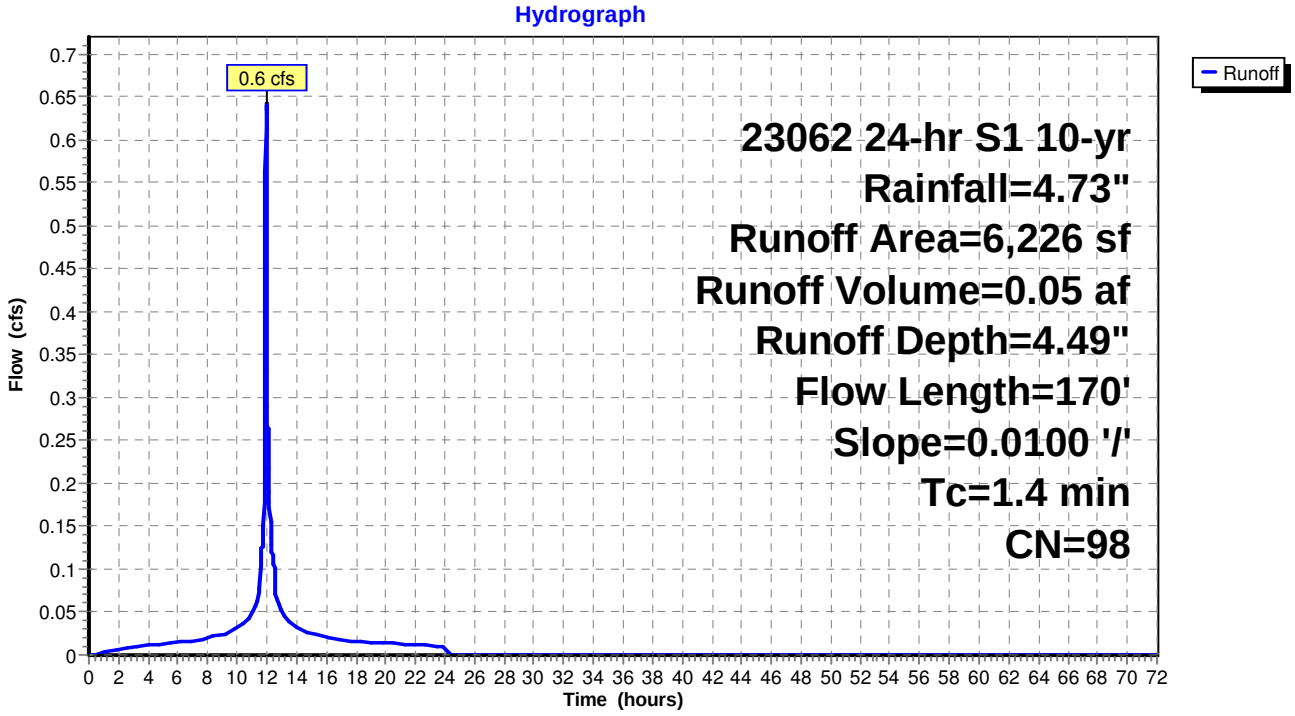
Runoff = 0.6 cfs @ 11.99 hrs, Volume= 0.05 af, Depth= 4.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
23062 24-hr S1 10-yr Rainfall=4.73"

Area (sf)	CN	Description
6,226	98	Paved parking, HSG C
6,226		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	170	0.0100	2.03		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps

Subcatchment A3: A3



Summary for Subcatchment A4: A4

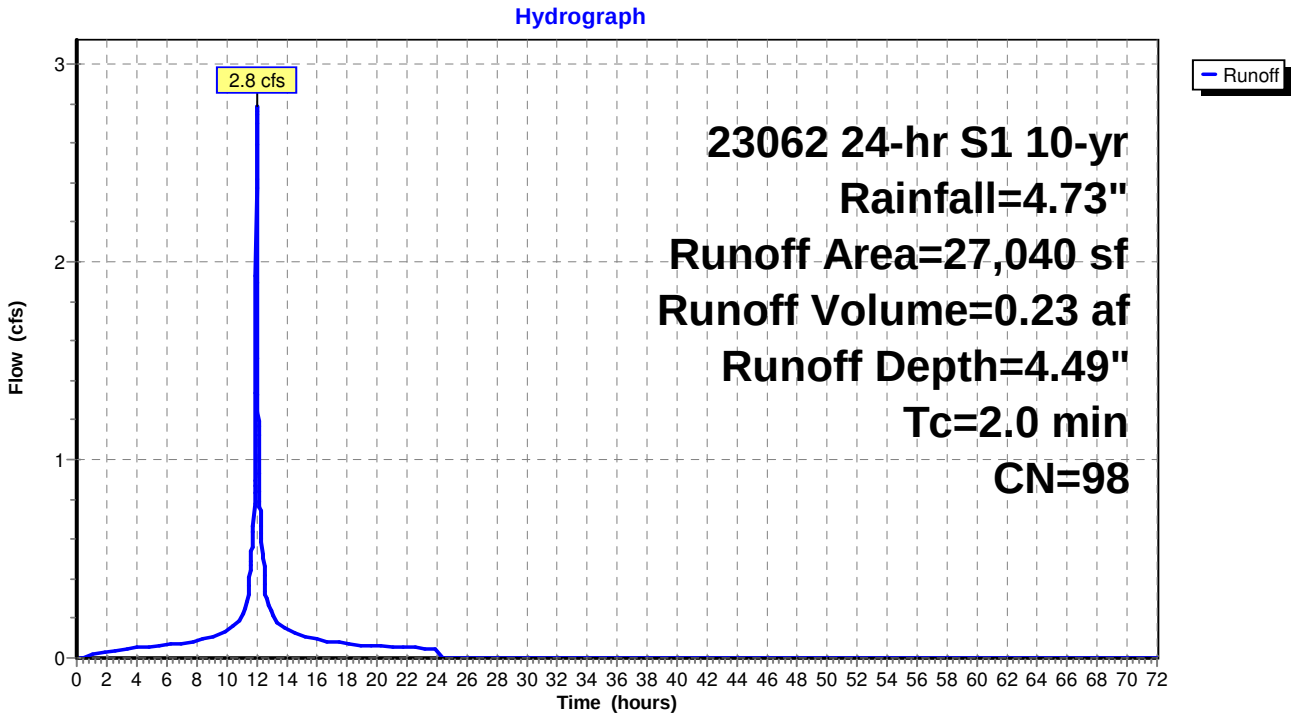
Runoff = 2.8 cfs @ 12.00 hrs, Volume= 0.23 af, Depth= 4.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
23062 24-hr S1 10-yr Rainfall=4.73"

Area (sf)	CN	Description
10,246	98	Roofs, HSG B
16,794	98	Roofs, HSG C
27,040	98	Weighted Average
27,040		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0					**Direct Entry, ROOF RUNOFF**

Subcatchment A4: A4



Summary for Subcatchment A5: A5

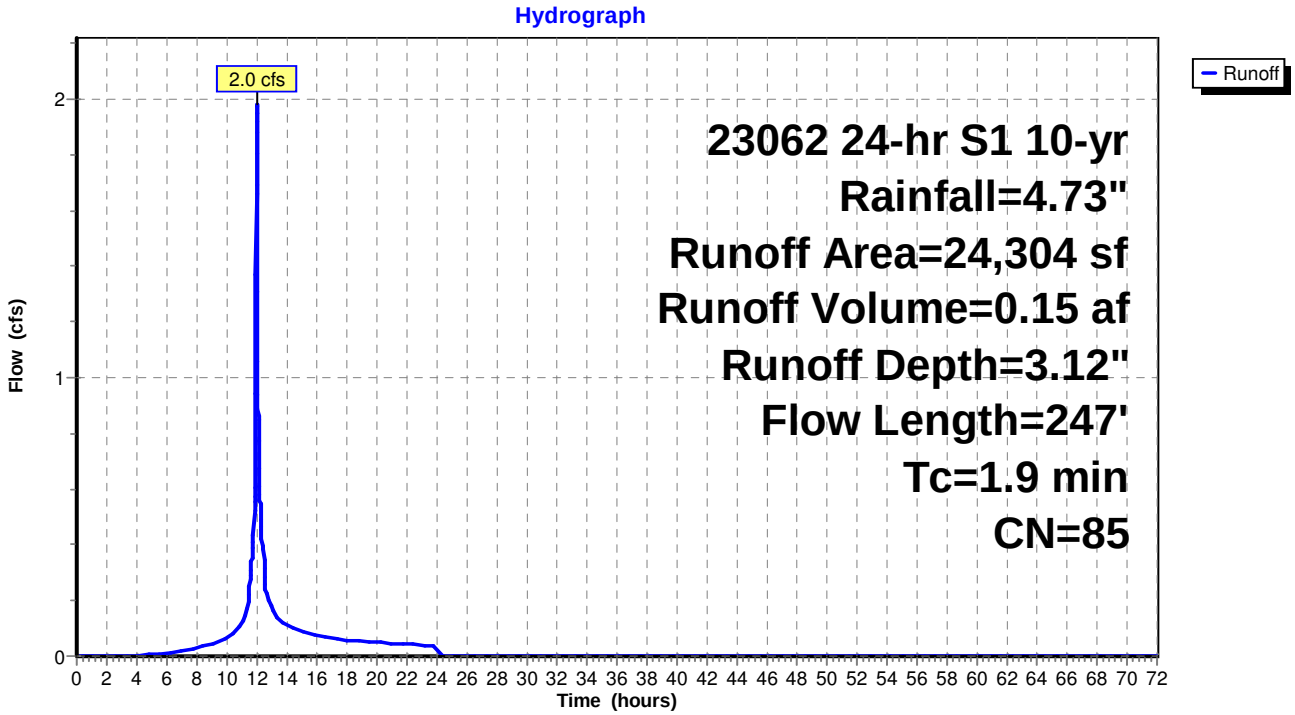
Runoff = 2.0 cfs @ 12.00 hrs, Volume= 0.15 af, Depth= 3.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
23062 24-hr S1 10-yr Rainfall=4.73"

Area (sf)	CN	Description
668	61	>75% Grass cover, Good, HSG B
10,282	98	Paved parking, HSG B
11,850	74	>75% Grass cover, Good, HSG C
1,504	98	Paved parking, HSG C
24,304	85	Weighted Average
12,518		51.51% Pervious Area
11,786		48.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	225	0.0130	2.31		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.3	22	0.0230	1.06		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
1.9	247	Total			

Subcatchment A5: A5



Summary for Subcatchment A6: A6

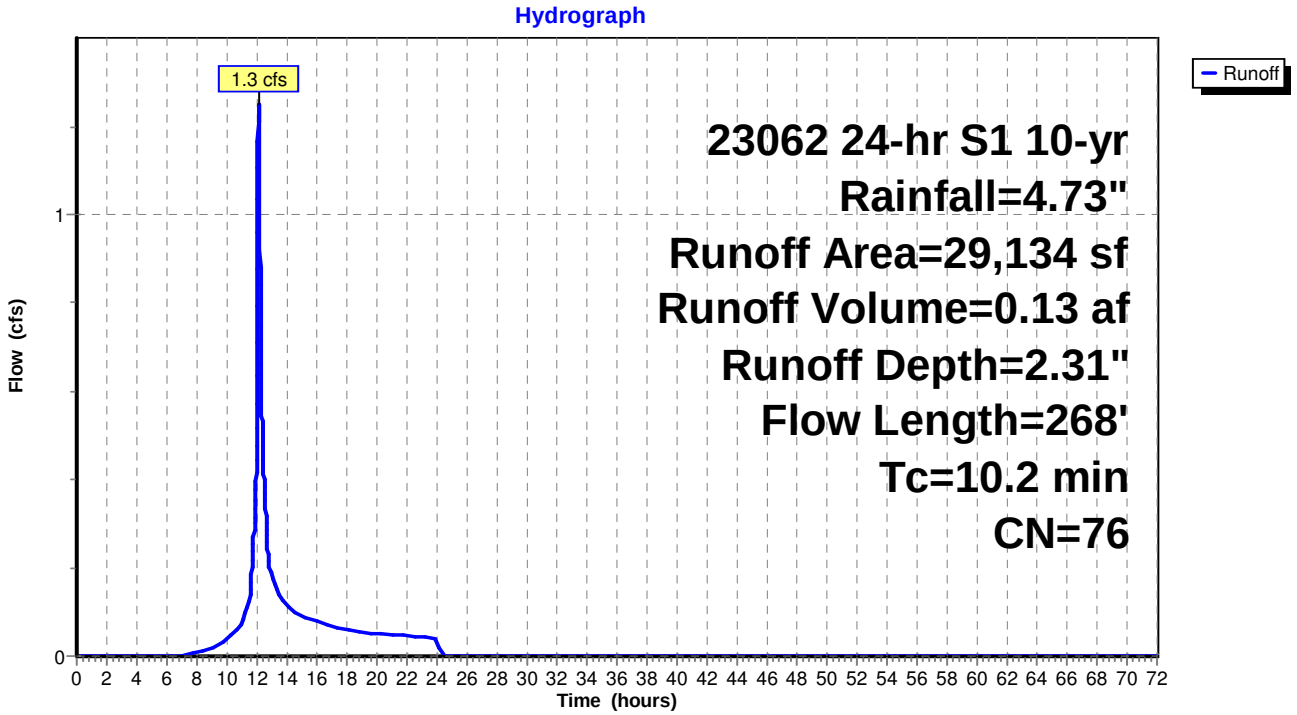
Runoff = 1.3 cfs @ 12.09 hrs, Volume= 0.13 af, Depth= 2.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
23062 24-hr S1 10-yr Rainfall=4.73"

Area (sf)	CN	Description
6,095	61	>75% Grass cover, Good, HSG B
3,486	98	Paved parking, HSG B
17,582	74	>75% Grass cover, Good, HSG C
1,971	98	Paved parking, HSG C
29,134	76	Weighted Average
23,677		81.27% Pervious Area
5,457		18.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.4	58	0.0302	0.13		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.61"
2.8	210	0.0070	1.25		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
10.2	268	Total			

Subcatchment A6: A6



Summary for Pond PCB1: PCB1

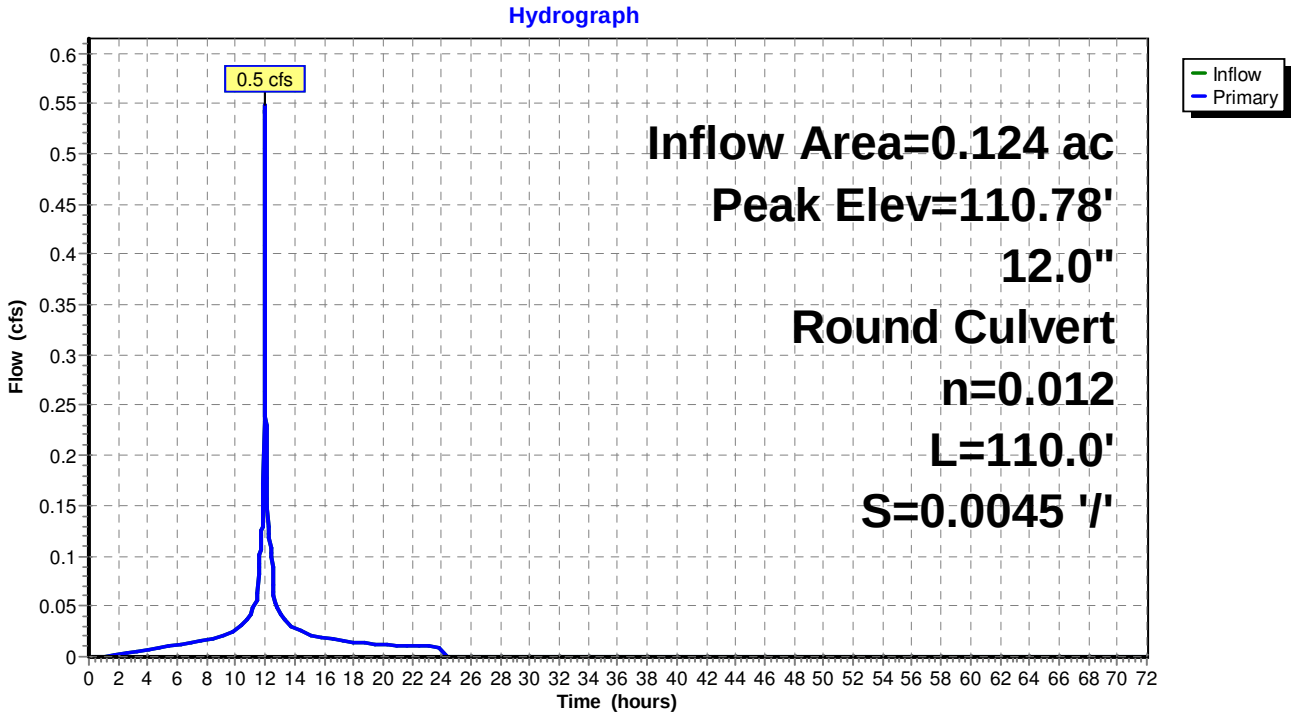
Inflow Area = 0.124 ac, 94.54% Impervious, Inflow Depth = 4.26" for 10-yr event
Inflow = 0.5 cfs @ 12.00 hrs, Volume= 0.04 af
Outflow = 0.5 cfs @ 12.00 hrs, Volume= 0.04 af, Atten= 0%, Lag= 0.0 min
Primary = 0.5 cfs @ 12.00 hrs, Volume= 0.04 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 110.78' @ 12.00 hrs
Flood Elev= 113.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	110.30'	**12.0" Round Culvert** L= 110.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 110.30' / 109.80' S= 0.0045 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.5 cfs @ 12.00 hrs HW=110.78' TW=110.40' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.5 cfs @ 2.11 fps)

Pond PCB1: PCB1



Summary for Pond PCB2: PCB2

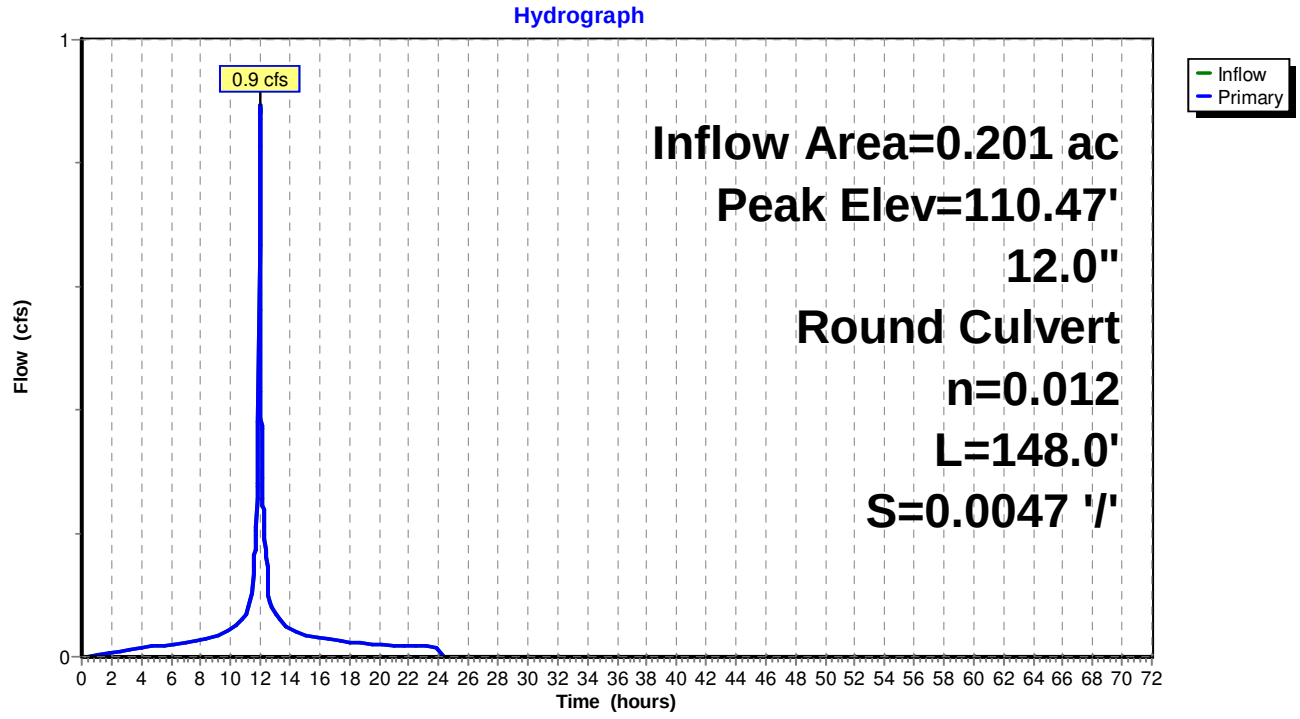
Inflow Area = 0.201 ac, 96.63% Impervious, Inflow Depth = 4.35" for 10-yr event
Inflow = 0.9 cfs @ 11.99 hrs, Volume= 0.07 af
Outflow = 0.9 cfs @ 11.99 hrs, Volume= 0.07 af, Atten= 0%, Lag= 0.0 min
Primary = 0.9 cfs @ 11.99 hrs, Volume= 0.07 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 110.47' @ 12.51 hrs
Flood Elev= 113.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	109.70'	**12.0" Round Culvert** L= 148.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 109.70' / 109.00' S= 0.0047 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.8 cfs @ 11.99 hrs HW=110.38' TW=110.02' (Dynamic Tailwater)
1=Culvert (Outlet Controls 0.8 cfs @ 2.09 fps)

Pond PCB2: PCB2



Summary for Pond PCB3: PCB3

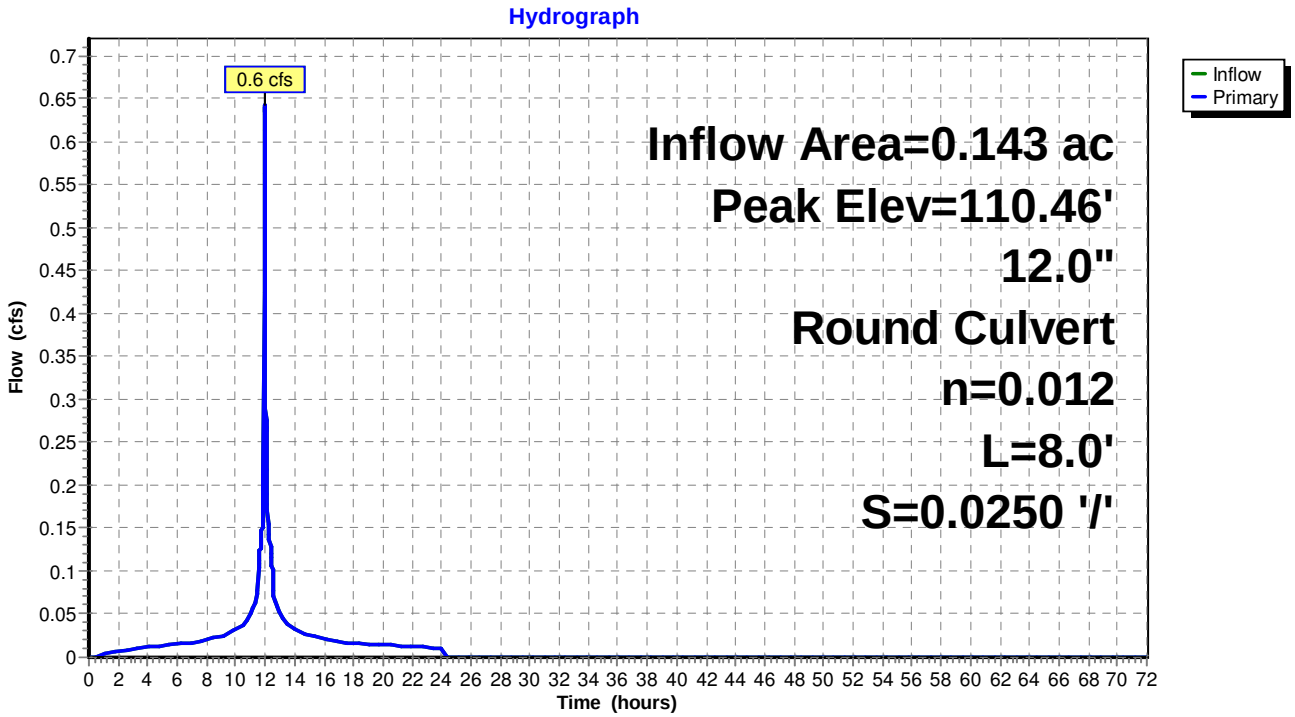
Inflow Area = 0.143 ac,100.00% Impervious, Inflow Depth = 4.49" for 10-yr event
Inflow = 0.6 cfs @ 11.99 hrs, Volume= 0.05 af
Outflow = 0.6 cfs @ 11.99 hrs, Volume= 0.05 af, Atten= 0%, Lag= 0.0 min
Primary = 0.6 cfs @ 11.99 hrs, Volume= 0.05 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 110.46' @ 12.54 hrs
Flood Elev= 112.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	109.20'	**12.0" Round Culvert** L= 8.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 109.20' / 109.00' S= 0.0250 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.0 cfs @ 11.99 hrs HW=110.02' TW=110.02' (Dynamic Tailwater)
1=Culvert (Controls 0.0 cfs)

Pond PCB3: PCB3



Summary for Pond RD1: ROOF DRAIN

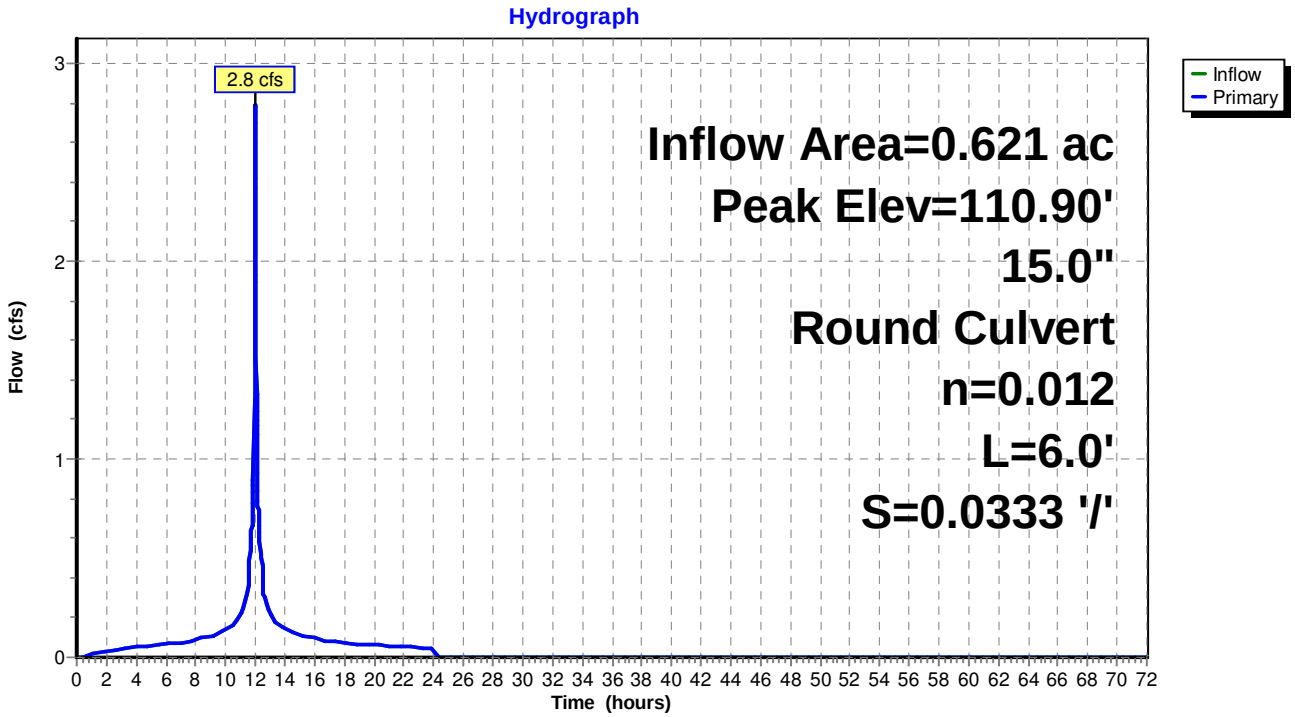
Inflow Area = 0.621 ac,100.00% Impervious, Inflow Depth = 4.49" for 10-yr event
Inflow = 2.8 cfs @ 12.00 hrs, Volume= 0.23 af
Outflow = 2.8 cfs @ 12.00 hrs, Volume= 0.23 af, Atten= 0%, Lag= 0.0 min
Primary = 2.8 cfs @ 12.00 hrs, Volume= 0.23 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 110.90' @ 12.00 hrs
Flood Elev= 111.25'

Device	Routing	Invert	Outlet Devices
#1	Primary	110.00'	**15.0" Round Culvert** L= 6.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 110.00' / 109.80' S= 0.0333 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=2.8 cfs @ 12.00 hrs HW=110.90' TW=110.06' (Dynamic Tailwater)
1=Culvert (Barrel Controls 2.8 cfs @ 4.12 fps)

Pond RD1: ROOF DRAIN



Summary for Pond WP1: Wet Pond 1

[80] Warning: Exceeded Pond PCB3 by 0.27' @ 24.06 hrs (0.3 cfs 0.01 af)

Inflow Area = 1.523 ac, 80.68% Impervious, Inflow Depth = 3.97" for 10-yr event
Inflow = 6.3 cfs @ 12.00 hrs, Volume= 0.50 af
Outflow = 0.8 cfs @ 12.53 hrs, Volume= 0.50 af, Atten= 87%, Lag= 31.8 min
Primary = 0.8 cfs @ 12.53 hrs, Volume= 0.50 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Starting Elev= 108.50' Surf.Area= 2,206 sf Storage= 4,357 cf
Peak Elev= 110.46' @ 12.53 hrs Surf.Area= 6,817 sf Storage= 12,765 cf (8,407 cf above start)
Flood Elev= 111.25' Surf.Area= 11,590 sf Storage= 19,096 cf (14,739 cf above start)

Plug-Flow detention time= 462.0 min calculated for 0.40 af (80% of inflow)
Center-of-Mass det. time= 247.9 min (1,020.5 - 772.6)

Volume	Invert	Avail.Storage	Storage Description
#1	108.00'	443 cf	**SED 1 (Irregular)** Listed below (Recalc)
#2	108.50'	1,366 cf	**SED 2 (Irregular)** Listed below (Recalc)
#3	104.50'	17,287 cf	**WET POND (Irregular)** Listed below (Recalc)
		19,096 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
108.00	57	27.6	0	0	57
110.00	448	129.3	443	443	1,336

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
108.50	146	197.4	0	0	146
110.50	1,444	235.1	1,366	1,366	1,514

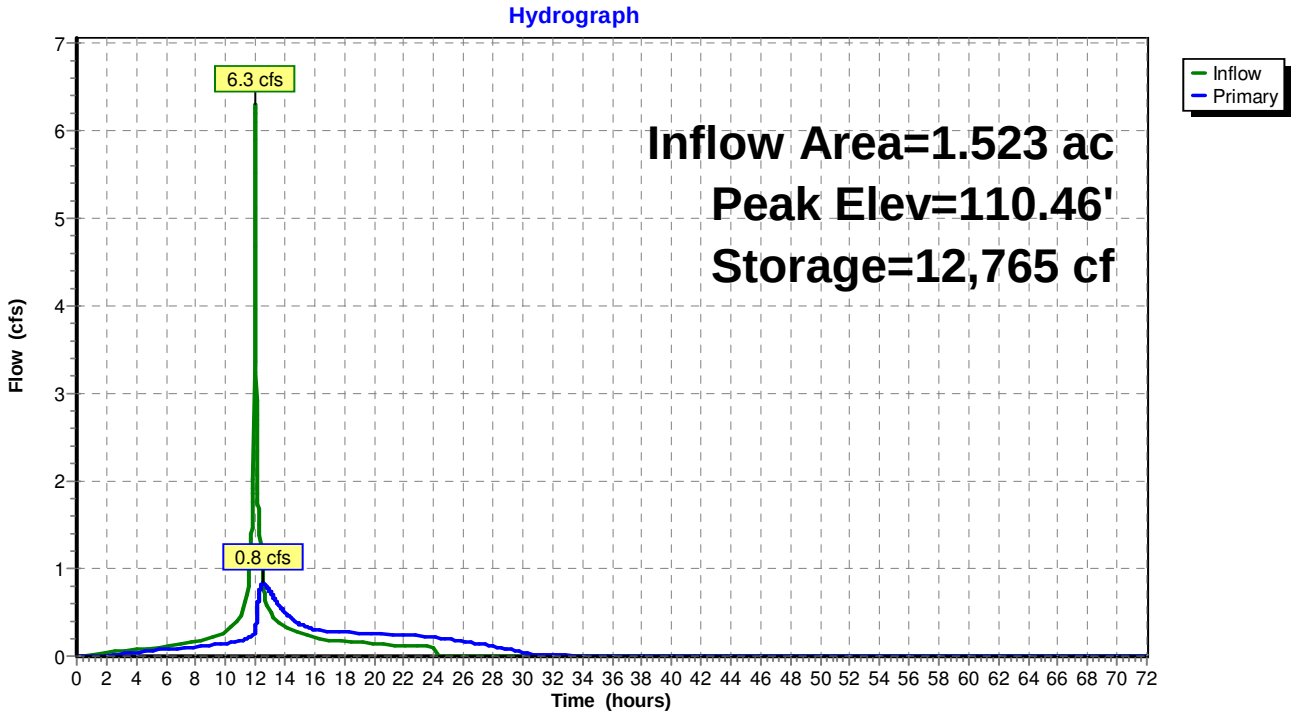
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
104.50	407	79.6	0	0	407
108.50	1,940	168.1	4,314	4,314	2,220
109.00	3,089	239.2	1,246	5,560	4,527
110.00	3,845	263.8	3,460	9,020	5,543
110.10	3,925	265.7	388	9,409	5,628
110.50	5,081	420.0	1,796	11,205	14,048
110.60	6,755	637.6	590	11,795	32,362
111.00	9,047	809.8	3,149	14,944	52,198
111.25	9,698	814.4	2,343	17,287	52,826

Device	Routing	Invert	Outlet Devices
#1	Primary	108.40'	**12.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 108.40' / 108.20' S= 0.0125 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	108.50'	**3.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	110.10'	**9.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600

			Limited to weir flow at low heads
#4	Device 1	110.85'	**48.0" W x 48.0" H Vert. Orifice/Grate** C= 0.600
			Limited to weir flow at low heads

Primary OutFlow Max=0.8 cfs @ 12.53 hrs HW=110.46' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Passes 0.8 cfs of 4.7 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.3 cfs @ 6.52 fps)
  ├─**3=Orifice/Grate** (Orifice Controls 0.5 cfs @ 1.93 fps)
  └─**4=Orifice/Grate** (Controls 0.0 cfs)

Pond WP1: Wet Pond 1



A – 2

NODE LISTING – 25-YR

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Link A: A Inflow=3.0 cfs 0.85 af
Primary=3.0 cfs 0.85 af

Subcatchment A1: A1 Runoff Area=5,405 sf 94.54% Impervious Runoff Depth=5.52"
Flow Length=124' Slope=0.0090 '/' Tc=1.2 min CN=96 Runoff=0.6 cfs 0.06 af

Subcatchment A2: A2 Runoff Area=3,358 sf 100.00% Impervious Runoff Depth=5.75"
Flow Length=82' Slope=0.0170 '/' Tc=1.2 min CN=98 Runoff=0.4 cfs 0.04 af

Subcatchment A3: A3 Runoff Area=6,226 sf 100.00% Impervious Runoff Depth=5.75"
Flow Length=170' Slope=0.0100 '/' Tc=1.4 min CN=98 Runoff=0.8 cfs 0.07 af

Subcatchment A4: A4 Runoff Area=27,040 sf 100.00% Impervious Runoff Depth=5.75"
Tc=2.0 min CN=98 Runoff=3.3 cfs 0.30 af

Subcatchment A5: A5 Runoff Area=24,304 sf 48.49% Impervious Runoff Depth=4.29"
Flow Length=247' Tc=1.9 min CN=85 Runoff=2.5 cfs 0.20 af

Subcatchment A6: A6 Runoff Area=29,134 sf 18.73% Impervious Runoff Depth=3.37"
Flow Length=268' Tc=10.2 min CN=76 Runoff=1.7 cfs 0.19 af

Pond PCB1: PCB1 Peak Elev=110.89' Inflow=0.6 cfs 0.06 af
12.0" Round Culvert n=0.012 L=110.0' S=0.0045 '/' Outflow=0.6 cfs 0.06 af

Pond PCB2: PCB2 Peak Elev=110.73' Inflow=1.1 cfs 0.09 af
12.0" Round Culvert n=0.012 L=148.0' S=0.0047 '/' Outflow=1.1 cfs 0.09 af

Pond PCB3: PCB3 Peak Elev=110.73' Inflow=0.8 cfs 0.07 af
12.0" Round Culvert n=0.012 L=8.0' S=0.0250 '/' Outflow=0.8 cfs 0.07 af

Pond RD1: ROOF DRAIN Peak Elev=111.00' Inflow=3.3 cfs 0.30 af
15.0" Round Culvert n=0.012 L=6.0' S=0.0333 '/' Outflow=3.3 cfs 0.30 af

Pond WP1: Wet Pond 1 Peak Elev=110.73' Storage=14,499 cf Inflow=7.6 cfs 0.66 af
Outflow=1.4 cfs 0.66 af

Total Runoff Area = 2.192 ac Runoff Volume = 0.85 af Average Runoff Depth = 4.64"
38.22% Pervious = 0.838 ac 61.78% Impervious = 1.354 ac

A – 2

NODE LISTING – 50-YR

Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Link A: A Inflow=3.9 cfs 1.05 af
Primary=3.9 cfs 1.05 af

Subcatchment A1: A1 Runoff Area=5,405 sf 94.54% Impervious Runoff Depth=6.67"
Flow Length=124' Slope=0.0090 '/' Tc=1.2 min CN=96 Runoff=0.7 cfs 0.07 af

Subcatchment A2: A2 Runoff Area=3,358 sf 100.00% Impervious Runoff Depth=6.91"
Flow Length=82' Slope=0.0170 '/' Tc=1.2 min CN=98 Runoff=0.5 cfs 0.04 af

Subcatchment A3: A3 Runoff Area=6,226 sf 100.00% Impervious Runoff Depth=6.91"
Flow Length=170' Slope=0.0100 '/' Tc=1.4 min CN=98 Runoff=0.9 cfs 0.08 af

Subcatchment A4: A4 Runoff Area=27,040 sf 100.00% Impervious Runoff Depth=6.91"
Tc=2.0 min CN=98 Runoff=3.7 cfs 0.36 af

Subcatchment A5: A5 Runoff Area=24,304 sf 48.49% Impervious Runoff Depth=5.40"
Flow Length=247' Tc=1.9 min CN=85 Runoff=2.9 cfs 0.25 af

Subcatchment A6: A6 Runoff Area=29,134 sf 18.73% Impervious Runoff Depth=4.39"
Flow Length=268' Tc=10.2 min CN=76 Runoff=2.1 cfs 0.24 af

Pond PCB1: PCB1 Peak Elev=111.03' Inflow=0.7 cfs 0.07 af
12.0" Round Culvert n=0.012 L=110.0' S=0.0045 '/' Outflow=0.7 cfs 0.07 af

Pond PCB2: PCB2 Peak Elev=110.95' Inflow=1.2 cfs 0.11 af
12.0" Round Culvert n=0.012 L=148.0' S=0.0047 '/' Outflow=1.2 cfs 0.11 af

Pond PCB3: PCB3 Peak Elev=110.94' Inflow=0.9 cfs 0.08 af
12.0" Round Culvert n=0.012 L=8.0' S=0.0250 '/' Outflow=0.9 cfs 0.08 af

Pond RD1: ROOF DRAIN Peak Elev=111.14' Inflow=3.7 cfs 0.36 af
15.0" Round Culvert n=0.012 L=6.0' S=0.0333 '/' Outflow=3.7 cfs 0.36 af

Pond WP1: Wet Pond 1 Peak Elev=110.94' Storage=16,192 cf Inflow=8.7 cfs 0.80 af
Outflow=2.1 cfs 0.80 af

Total Runoff Area = 2.192 ac Runoff Volume = 1.05 af Average Runoff Depth = 5.74"
38.22% Pervious = 0.838 ac 61.78% Impervious = 1.354 ac

APPENDIX B

DESIGN

B – 1

STORMWATER BEST MANAGEMENT PRACTICES

STORMWATER POND DESIGN CRITERIA

Env-Wq 1508.03

Type/Node Name: **Wet Pond (WQV Calc)**

Enter the type of stormwater pond (e.g., Wet Pond) and the node name in the drainage analysis, if applicable.

1.52	ac	A = Area draining to the practice	
1.23	ac	A_I = Impervious area draining to the practice	
0.81	decimal	I = Percent impervious area draining to the practice, in decimal form	
0.78	unitless	Rv = Runoff coefficient = 0.05 + (0.9 x I)	
1.18	ac-in	WQV= 1" x Rv x A	
4,291	cf	WQV conversion (ac-in x 43,560 sf/ac x 1ft/12")	
429	cf	10% x WQV (check calc for sediment forebay and micropool volume)	
2,145	cf	50% x WQV (check calc for extended detention volume)	
N/A	cf	V_{SED} = Sediment forebay volume	**≥ 10%WQV**
4,314	cf	V_{PP} = Permanent pool volume (volume below the lowest invert of the outlet structure) Attach stage-storage table.	
no	cf	Extended Detention?[1]	**≤ 50% WQV**
-		V_{ED} = Volume of extended detention (if "yes" is given in box above)	
		E_{ED} = Elevation of WQV if "yes" is given in box above[2]	
-	cfs	$2Q_{avg}$ = 2* V_{ED} / 24 hrs * (1hr / 3600 sec) (used to check against Q_{EDmax} below)	
	cfs	Q_{EDmax} = Discharge at the E_{ED} (attach stage-discharge table)	**< $2Q_{avg}$**
-	hours	T_{ED} = Drawdown time of extended detention = $2V_{ED}/Q_{EDmax}$	**≥ 24-hrs**
3.00	:1	Pond side slopes	**≥3:1**
108.50	ft	Elevation of seasonal high water table	
108.50	ft	Elevation of lowest pond outlet	
103.50	ft	Max floor = Maximum elevation of pond bottom (ft)	
100.50	ft	Minimum floor (to maintain depth at less than 8')	**≤ 8 ft**
104.50	ft	Elevation of pond floor[3]	**≤ Max floor and > Min floor**
165.00	ft	Length of the flow path between the inlet and outlet at mid-depth	
45.00	ft	Average width ([average of the top width + average bottom width]/2)	
3.67	:1	Length to average width ratio	**≥ 3:1**
YES	Yes/No	Is the perimeter curvilinear.	**← Yes**
YES	Yes/No	Are the inlet and outlet located as far apart as possible.	**← Yes**
NO	Yes/No	Is there a manually-controlled drain to dewater the pond over a 24hr period?	
If no state why:		The pond will be pumped if necessary	
TRASH RACKS		What mechanism is proposed to prevent the outlet structure from clogging (applicable for orifices/weirs with a dimension of <6")?	
110.94	ft	Peak elevation of the 50-year storm event	
111.25	ft	Berm elevation of the pond	
YES		50 peak elevation ≤ the berm elevation?	**←yes**

1. If the entire WQV is stored in the perm. pool, there is no extended det., and the following five lines do not apply.

2. This is the elevation of WQV **if** the hydrologic analysis is set up to include the permanent pool storage in the node description.

3. If the pond floor elevation is above the max floor elev., a hydrologic budget must be submitted to demonstrate that a minimum depth of 3 feet can be maintained. (First check whether a revised "lowest pond outlet" elev. will resolve the issue.)

Designer's Notes: PERMANENT POOL WILL BE LINED TO MAINTAIN WATER ELEVATION

STORMWATER POND DESIGN CRITERIA

Env-Wq 1508.03

Type/Node Name: **Wet Pond - Sediment Forebay 1 (10% WQV Calc)**

Enter the type of stormwater pond (e.g., Wet Pond) and the node name in the drainage analysis, if applicable.

0.56	ac	A = Area draining to the practice	
0.27	ac	A_I = Impervious area draining to the practice	
0.48	decimal	I = Percent impervious area draining to the practice, in decimal form	
0.49	unitless	Rv = Runoff coefficient = 0.05 + (0.9 x I)	
0.27	ac-in	WQV= 1" x Rv x A	
985	cf	WQV conversion (ac-in x 43,560 sf/ac x 1ft/12")	
99	cf	10% x WQV (check calc for sediment forebay and micropool volume)	
493	cf	50% x WQV (check calc for extended detention volume)	
443	cf	V_{SED} = Sediment forebay volume	**≥ 10%WQV**
N/a	cf	V_{PP} = Permanent pool volume (volume below the lowest invert of the outlet structure) Attach stage-storage table.	
no	cf	Extended Detention?[1]	**≤ 50% WQV**
-		V_{ED} = Volume of extended detention (if "yes" is given in box above)	
		E_{ED} = Elevation of WQV if "yes" is given in box above[2]	
-	cfs	$2Q_{avg}$ = 2* V_{ED} / 24 hrs * (1hr / 3600 sec) (used to check against Q_{EDmax} below)	
	cfs	Q_{EDmax} = Discharge at the E_{ED} (attach stage-discharge table)	**< $2Q_{avg}$**
-	hours	T_{ED} = Drawdown time of extended detention = $2V_{ED}/Q_{EDmax}$	**≥ 24-hrs**
	:1	Pond side slopes	**≥3:1**
	ft	Elevation of seasonal high water table	
	ft	Elevation of lowest pond outlet	
-5.00	ft	Max floor = Maximum elevation of pond bottom (ft)	
-8.00	ft	Minimum floor (to maintain depth at less than 8')	**≤ 8 ft**
	ft	Elevation of pond floor[3]	**≤ Max floor and > Min floor**
	ft	Length of the flow path between the inlet and outlet at mid-depth	
	ft	Average width ([average of the top width + average bottom width]/2)	
-	:1	Length to average width ratio	**≥ 3:1**
	Yes/No	Is the perimeter curvilinear.	**← Yes**
	Yes/No	Are the inlet and outlet located as far apart as possible.	**← Yes**
	Yes/No	Is there a manually-controlled drain to dewater the pond over a 24hr period?	
If no state why:			
		What mechanism is proposed to prevent the outlet structure from clogging (applicable for orifices/weirs with a dimension of <6")?	
	ft	Peak elevation of the 50-year storm event	
	ft	Berm elevation of the pond	
-		50 peak elevation ≤ the berm elevation?	**←yes**

1. If the entire WQV is stored in the perm. pool, there is no extended det., and the following five lines do not apply.

2. This is the elevation of WQV **if** the hydrologic analysis is set up to include the permanent pool storage in the node description.

3. If the pond floor elevation is above the max floor elev., a hydrologic budget must be submitted to demonstrate that a minimum depth of 3 feet can be maintained. (First check whether a revised "lowest pond outlet" elev. will resolve the issue.)

Designer's Notes:

STORMWATER POND DESIGN CRITERIA

Env-Wq 1508.03

Type/Node Name: **Wet Pond - Sediment Forebay 2 (10% WQV Calc)**

Enter the type of stormwater pond (e.g., Wet Pond) and the node name in the drainage analysis, if applicable.

0.20	ac	A = Area draining to the practice	
0.19	ac	A_I = Impervious area draining to the practice	
0.97	decimal	I = Percent impervious area draining to the practice, in decimal form	
0.92	unitless	Rv = Runoff coefficient = 0.05 + (0.9 x I)	
0.18	ac-in	WQV= 1" x Rv x A	
671	cf	WQV conversion (ac-in x 43,560 sf/ac x 1ft/12")	
67	cf	10% x WQV (check calc for sediment forebay and micropool volume)	
336	cf	50% x WQV (check calc for extended detention volume)	
1,366	cf	V_{SED} = Sediment forebay volume	**≥ 10%WQV**
N/A	cf	V_{PP} = Permanent pool volume (volume below the lowest invert of the outlet structure) Attach stage-storage table.	
no	cf	Extended Detention?[1]	**≤ 50% WQV**
-		V_{ED} = Volume of extended detention (if "yes" is given in box above)	
		E_{ED} = Elevation of WQV if "yes" is given in box above[2]	
-	cfs	$2Q_{avg}$ = 2* V_{ED} / 24 hrs * (1hr / 3600 sec) (used to check against Q_{EDmax} below)	
	cfs	Q_{EDmax} = Discharge at the E_{ED} (attach stage-discharge table)	**< $2Q_{avg}$**
-	hours	T_{ED} = Drawdown time of extended detention = $2V_{ED}/Q_{EDmax}$	**≥ 24-hrs**
	:1	Pond side slopes	**≥3:1**
	ft	Elevation of seasonal high water table	
	ft	Elevation of lowest pond outlet	
-5.00	ft	Max floor = Maximum elevation of pond bottom (ft)	
-8.00	ft	Minimum floor (to maintain depth at less than 8')	**≤ 8 ft**
	ft	Elevation of pond floor[3]	**≤ Max floor and > Min floor**
	ft	Length of the flow path between the inlet and outlet at mid-depth	
	ft	Average width ([average of the top width + average bottom width]/2)	
-	:1	Length to average width ratio	**≥ 3:1**
	Yes/No	Is the perimeter curvilinear.	**← Yes**
	Yes/No	Are the inlet and outlet located as far apart as possible.	**← Yes**
	Yes/No	Is there a manually-controlled drain to dewater the pond over a 24hr period?	
If no state why:			
		What mechanism is proposed to prevent the outlet structure from clogging (applicable for orifices/weirs with a dimension of <6")?	
	ft	Peak elevation of the 50-year storm event	
	ft	Berm elevation of the pond	
-		50 peak elevation ≤ the berm elevation?	**←yes**

1. If the entire WQV is stored in the perm. pool, there is no extended det., and the following five lines do not apply.

2. This is the elevation of WQV **if** the hydrologic analysis is set up to include the permanent pool storage in the node description.

3. If the pond floor elevation is above the max floor elev., a hydrologic budget must be submitted to demonstrate that a minimum depth of 3 feet can be maintained. (First check whether a revised "lowest pond outlet" elev. will resolve the issue.)

Designer's Notes:

Summary for Pond WP1: Wet Pond 1

[80] Warning: Exceeded Pond PCB2 by 0.17' @ 24.08 hrs (0.0 cfs 0.00 af)
[80] Warning: Exceeded Pond PCB3 by 0.67' @ 24.08 hrs (1.5 cfs 0.07 af)

Inflow Area = 1.523 ac, 80.68% Impervious, Inflow Depth = 6.34" for 50-yr event
Inflow = 8.7 cfs @ 12.00 hrs, Volume= 0.80 af
Outflow = 2.1 cfs @ 12.28 hrs, Volume= 0.80 af, Atten= 76%, Lag= 16.7 min
Primary = 2.1 cfs @ 12.28 hrs, Volume= 0.80 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Starting Elev= 108.50' Surf.Area= 2,206 sf Storage= 4,357 cf
Peak Elev= 110.94' @ 12.28 hrs Surf.Area= 10,554 sf Storage= 16,192 cf (11,835 cf above start)
Flood Elev= 111.25' Surf.Area= 11,590 sf Storage= 19,096 cf (14,739 cf above start)

Plug-Flow detention time= 364.8 min calculated for 0.70 af (88% of inflow)
Center-of-Mass det. time= 217.1 min (980.2 - 763.1)

Volume	Invert	Avail.Storage	Storage Description
#1	108.00'	443 cf	**SED 1 (Irregular)** Listed below (Recalc)
#2	108.50'	1,366 cf	**SED 2 (Irregular)** Listed below (Recalc)
#3	104.50'	17,287 cf	**WET POND (Irregular)** Listed below (Recalc)
		19,096 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
108.00	57	27.6	0	0	57
110.00	448	129.3	443	443	1,336

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
108.50	146	197.4	0	0	146
110.50	1,444	235.1	1,366	1,366	1,514

WQV=3,851 CF

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
104.50	407	79.6	0	0	407
108.50	1,940	168.1	4,314	4,314	2,220
109.00	3,089	239.2	1,246	5,560	4,527
110.00	3,845	263.8	3,460	9,020	5,543
110.10	3,925	265.7	388	9,409	5,628
110.50	5,081	420.0	1,796	11,205	14,048
110.60	6,755	637.6	590	11,795	32,362
111.00	9,047	809.8	3,149	14,944	52,198
111.25	9,698	814.4	2,343	17,287	52,826

Device	Routing	Invert	Outlet Devices
#1	Primary	108.40'	**12.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 108.40' / 108.20' S= 0.0125 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	108.50'	**3.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

#3	Device 1	110.10'	**9.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	110.85'	**48.0" W x 48.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.1 cfs @ 12.28 hrs HW=110.94' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Passes 2.1 cfs of 5.4 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.4 cfs @ 7.32 fps)
  ├─**3=Orifice/Grate** (Orifice Controls 1.4 cfs @ 3.66 fps)
  └─**4=Orifice/Grate** (Orifice Controls 0.3 cfs @ 0.94 fps)

B – 2

POLLUTANT REMOVAL

CIVILWORKS NEW ENGLAND
181 WATSON ROAD
P.O. BOX 1166
DOVER, NH 03821-1166
PHONE: 603.749.0443

Objective: In accordance with Chapter 153-14.A.3.b.1 runoff from impervious surfaces shall be treated to provide 80% removal of total suspended solids (TSS) and 50% removal of both total nitrogen and phosphorus using appropriate treatment measures as specified in the NH Stormwater Manual, Volumes 1 and 2, December 2008, as amended.

Narrative: The subject parcel is 2.03 acres and is located at 34 Industrial Park Drive in Dover, NH. The site is currently undeveloped and mainly consists of grassed areas with some trees scattered throughout the site. The proposed project includes site improvements associated with the construction of a 27,040 sf commercial/manufacturing building, site access, grading and drainage, and utilities. The development includes 1.239 acres of new impervious area, of which 1.229 acres (0.621 acres Roof and 0.608 acres Pavement) is being treated in a Wet Extended Detention Pond. The remaining 0.010 acres of pavement was unable to be captured and treated, however, the proposed stormwater mitigation system is still able to provide the required pollutant removal per City of Dover standards.

Pollutant Loads: Pollutant loads were calculated in accordance with NH Stormwater Manual, Volume 1, December 2008 utilizing the Simple Method.

Polutant Load Equations		
Annual Load - Simple Method Equation:	**L = 0.226 * R * C * A**	
	L	Annual Load (lbs/yr)
	0.226	Unit Conversion Constant
	R	Annual Runoff (in)
	C	Pollutant Concentration (mg/l)
	A	Area (ac)
Annual Runoff (R) Equation:	**R = P * Pj * Rv**	
	R	Annual Runoff (in)
	P	Annual Rainfall (in)
	Pj	Rainfall Runoff Fraction (0.9)
	Rv	Runoff Coefficient
Runoff Coefficient (Rv) Equation:	**Rv = 0.05 + 0.9Ia**	
	Rv	Runoff Coefficient
	Ia	% Impervious Area (decimal form)

Runoff Coefficient (Rv): Dover requires the treatment of impervious surfaces therefore the % Impervious Area (Ia) in decimal form is 1.

Rv = 0.05 + 0.9(1) = 0.95

Annual Runoff (R): U.S. Climate Data (https://www.usclimatedata.com/climate/madbury/new-hampshire/united-states/usnh0285) provides an average annual precipitation for Madbury, NH of 47.31 inches.

R = 47.31 in * 0.9 * 0.95 = 40.45 in

Annual Load (L): Utilizing the sites impervious area of 1.239 ac and the Event Mean Concentrations identified in Appendix D of the NH Stormwater Manual, Volume 1, December 2008 for Commercial Roof (9.0 mg/L TSS, 2.10 mg/L TN, and 0.14 mg/L TP) and Commercial/Res Parking (27.0 mg/L TSS, 1.90 mg/L TN, and 0.15 mg/L TP) provides the following pollutant loads for the impervious development of the parcel.

Commercial Roof:

L_{TSS} = 0.226 * 40.45 in * 9.0 mg/L * 0.621 ac = 51.07 lb/yr

L_{TN} = 0.226 * 40.45 in * 2.10 mg/L * 0.621 ac = 11.92 lb/yr

L_{TP} = 0.226 * 40.45 in * 0.14 mg/L * 0.621 ac = 0.79 lb/yr

Commercial/Res Parking:

L_{TSS} = 0.226 * 40.45 in * 27.0 mg/L * 0.608 ac = 150.04 lb/yr

L_{TN} = 0.226 * 40.45 in * 1.90 mg/L * 0.608 ac = 10.56 lb/yr

L_{TP} = 0.226 * 40.45 in * 0.15 mg/L * 0.608 ac = 0.83 lb/yr

Pollutant Removal Required: In accordance with City of Dover's Site Plan regulations, at a minimum, the following pollutant removal is required.

Pollutant Removal Required (ALL NEW IMPERVIOUS)									
Pollutant	Annual Load Roofs WP1 (lbs/yr)	Annual Load Pavement CB1	Annual Load Pavement CB2	Annual Load Pavement CB3 (lbs/yr)	Annual Load Pavement WP1 (lbs/yr)	Annual Load Untreated Driveway Pavement (lbs/yr)	Annual Load (lbs/yr)	% Removal	Removal Required (lbs/yr)
TSS	51.07	28.96	19.03	35.28	66.78	2.46	203.58	80	162.86
TN	11.92	2.04	1.34	2.48	4.70	0.17	22.65	50	11.32
TP	0.79	0.16	0.11	0.20	0.37	0.01	1.64	50	0.82

Pollutant Removal Provided: The project proposes the treatment of 1.229 acres of impervious area through three (3) deep sump catch basins, two (2) sediment forebays, and a wet extended detention pond. BMP Pollutant Removal Efficiency rates are provided in Appendix B of the NH Stormwater Manual, Volume 2, December 2008. Deep Sump Catch Basin of 15% TSS, 5% TN, and 5% TP, and Wet Extended Detention Pond of 80% TSS, 55% TN, and 68% TP.

Catch Basin 1 (CB1)

Catch Basin 1 is the first catch basin in a series of 2 catch basins, CB1 & CB2, and ultimately discharges to sediment forebay 1. This analysis considers CB1 as an "offline" catch basin due to it being first in line with CB2 and calculated pollutant removal credit associated with deep sump catch basins for the contributing impervious area. There was no credit calculated for CB2.

Pollutant Removal Provided (CB1)						
Pollutant	**Annual Load Pavement CB1 (lbs/yr)**	**Total Annual Load (lbs/yr)**	**Impervious Treated 0.177ac**	**% Removal Provided**	**Removal Provided (lbs/yr)**	**Pollutant Remaining To Be Treated In WP1 (lbs/yr)**
TSS	28.96	28.96	0.117	15	4.34	24.61
TN	2.04	2.04	0.117	5	0.10	1.94
TP	0.16	0.16	0.117	5	0.01	0.15

Catch Basin 3 (CB3)

Catch Basin 3 is a single offline deep sump catch basin that discharges directly to sediment forebay 1. This analysis calculated pollutant removal credit associated with deep sump catch basins for the contributing imperious area.

Pollutant Removal Provided (CB3)						
Pollutant	**Annual Load Pavement CB3 (lbs/yr)**	**Total Annual Load (lbs/yr)**	**Impervious Treated 0.143ac**	**% Removal Provided**	**Removal Provided (lbs/yr)**	**Pollutant Remaining To Be Treated In WP1 (lbs/yr)**
TSS	35.28	35.28	0.143	15	5.29	29.99
TN	2.48	2.48	0.143	5	0.12	2.36
TP	0.20	0.20	0.143	5	0.01	0.19

Wet Extended Detention Pond 1 (WP1)

Pollutant Removal Provided (WET EXTENDED DETENTION POND 1)									
Pollutant	**Annual Load Roofs (lbs/yr)**	**Annual Load Pavement Remaining To Be Treated CB1**	**Annual Load Pavement CB2**	**Annual Load Pavement Remaining To Be Treated CB3 (lbs/yr)**	**Annual Load Pavement WP1 (lbs/yr)**	**Impervious Treated 1.229ac**	**Annual Load (lbs/yr)**	**% Removal Provided**	**Removal Provided (lbs/yr)**
TSS	51.07	24.61	19.03	29.99	66.78	1.229	191.48	80	153.19
TN	11.92	1.94	1.34	2.36	4.70	1.229	22.25	55	12.24
TP	0.79	0.15	0.11	0.19	0.37	1.229	1.61	68	1.09

Total Pollutant Removal Provided

Pollutant Removal Provided				
Pollutant	**Annual Load (lbs/yr)**	**Removal Required (lbs/yr)**	**Removal Provided (lbs/yr)**	**% Removed**
TSS	**203.58**	**162.86**	**162.82**	**80%**
TN	**22.65**	**11.32**	**12.46**	**55%**
TP	**1.64**	**0.82**	**1.11**	**68%**

Conclusion: The proposed mitigation measures implemented on site meet the minimum treatment rates for TSS, TN, and TP required by the City's regulations.

B – 3

OUTLET PROTECTION

OUTLET PROTECTION DESIGN CALCS

NON DEFINED CHANNEL

Job #: 23062
Date: 1/20/2025
Structure: Outlet from WP1

Variables:

Q= Discharge from the pipe (cfs)
$D_{0=}$ Diameter of the pipe (ft)
Tw= Tailwater depth above the invert of the pipe (ft)
La= Apron length
w_1= Apron width at pipe outlet
w_2= Apron width at downstream end of apron

Input:

Outlet elev:	108.2
Tailwater elev:	108.32
Tw:	0.12
Q:	1.4
D_0:	1

Apron Dimensions

w_1=	**3**	(ft)
w_2=	**13**	(ft)
La=	**10**	(ft)

Apron Length:

Tw > .5D_0		Tw < .5D_0	
La:	11.200	La:	9.520

Apron Width:

Tw > .5D_0		Tw < .5D_0	
w_2:	7.48	w_2:	12.52

w_1: 3

w_1=	3.00
w_2=	12.52
La=	9.52

RipRap Sizing

d_{50}=	0.26	(ft)
d_{50}=	3.13	(in)

RipRap Gradation

Stone Size			% of Weight Smaller Then the Given Size
0.39	TO	0.52	100
0.34	TO	0.47	85
0.26	TO	0.39	50
0.08	TO	0.13	15

Minimum Depth of Rock= 0.78 (ft)

Summary for Pond WP1: Wet Pond 1

[80] Warning: Exceeded Pond PCB3 by 0.50' @ 24.09 hrs (0.9 cfs 0.03 af)

Inflow Area = 1.523 ac, 80.68% Impervious, Inflow Depth = 5.20" for 25-yr event
Inflow = 7.6 cfs @ 12.00 hrs, Volume= 0.66 af
Outflow = 1.4 cfs @ 12.42 hrs, Volume= 0.66 af, Atten= 81%, Lag= 25.3 min
Primary = 1.4 cfs @ 12.42 hrs, Volume= 0.66 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Starting Elev= 108.50' Surf.Area= 2,206 sf Storage= 4,357 cf
Peak Elev= 110.73' @ 12.42 hrs Surf.Area= 9,334 sf Storage= 14,499 cf (10,142 cf above start)
Flood Elev= 111.25' Surf.Area= 11,590 sf Storage= 19,096 cf (14,739 cf above start)

Plug-Flow detention time= 402.4 min calculated for 0.56 af (85% of inflow)
Center-of-Mass det. time= 229.4 min (996.5 - 767.2)

Volume	Invert	Avail.Storage	Storage Description
#1	108.00'	443 cf	**SED 1 (Irregular)** Listed below (Recalc)
#2	108.50'	1,366 cf	**SED 2 (Irregular)** Listed below (Recalc)
#3	104.50'	17,287 cf	**WET POND (Irregular)** Listed below (Recalc)
		19,096 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
108.00	57	27.6	0	0	57
110.00	448	129.3	443	443	1,336

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
108.50	146	197.4	0	0	146
110.50	1,444	235.1	1,366	1,366	1,514

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
104.50	407	79.6	0	0	407
108.50	1,940	168.1	4,314	4,314	2,220
109.00	3,089	239.2	1,246	5,560	4,527
110.00	3,845	263.8	3,460	9,020	5,543
110.10	3,925	265.7	388	9,409	5,628
110.50	5,081	420.0	1,796	11,205	14,048
110.60	6,755	637.6	590	11,795	32,362
111.00	9,047	809.8	3,149	14,944	52,198
111.25	9,698	814.4	2,343	17,287	52,826

Device	Routing	Invert	Outlet Devices
#1	Primary	108.40'	**12.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 108.40' / 108.20' S= 0.0125 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	108.50'	**3.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	110.10'	**9.0" W x 6.0" H Vert. Orifice/Grate** C= 0.600

			Limited to weir flow at low heads
#4	Device 1	110.85'	**48.0" W x 48.0" H Vert. Orifice/Grate** C= 0.600
			Limited to weir flow at low heads

Primary OutFlow Max=1.4 cfs @ 12.42 hrs HW=110.73' TW=108.32' (Dynamic Tailwater)
└─**1=Culvert** (Passes 1.4 cfs of 5.1 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.3 cfs @ 6.98 fps)
  ├─**3=Orifice/Grate** (Orifice Controls 1.1 cfs @ 2.89 fps)
  └─**4=Orifice/Grate** (Controls 0.0 cfs)

OUTLET PROTECTION DESIGN CALCS

NON DEFINED CHANNEL

Job #: 23062
Date: 1/20/2025
Structure: Outlet from PCB2

Variables:

Q= Discharge from the pipe (cfs)
$D_{0=}$ Diameter of the pipe (ft)
Tw= Tailwater depth above the invert of the pipe (ft)
La= Apron length
w_1= Apron width at pipe outlet
w_2= Apron width at downstream end of apron

Input:

Outlet elev:	109
Tailwater elev:	110.73
Tw:	1.73
Q:	1.1
D_0:	1

Apron Dimensions

w_1=	**3**	(ft)
w_2=	**8**	(ft)
La=	**11**	(ft)

Apron Length:

Tw > .5D_0		Tw < .5D_0	
La:	10.300	La:	8.980

Apron Width:

Tw > .5D_0		Tw < .5D_0	
w_2:	7.12	w_2:	11.98

w_1: 3

w_1=	3.00
w_2=	7.12
La=	10.3

RipRap Sizing

d_{50}=	0.01	(ft)
d_{50}=	0.16	(in)

RipRap Gradation

Stone Size			% of Weight Smaller Then the Given Size
0.02	TO	0.03	100
0.02	TO	0.02	85
0.01	TO	0.02	50
0.00	TO	0.01	15

Minimum Depth of Rock= 0.04 (ft)

Summary for Pond PCB2: PCB2

Inflow Area = 0.201 ac, 96.63% Impervious, Inflow Depth = 5.61" for 25-yr event
Inflow = 1.1 cfs @ 11.99 hrs, Volume= 0.09 af
Outflow = 1.1 cfs @ 11.99 hrs, Volume= 0.09 af, Atten= 0%, Lag= 0.0 min
Primary = 1.1 cfs @ 11.99 hrs, Volume= 0.09 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 110.73' @ 12.41 hrs
Flood Elev= 113.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	109.70'	**12.0" Round Culvert** L= 148.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 109.70' / 109.00' S= 0.0047 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.0 cfs @ 11.99 hrs HW=110.61' TW=110.41' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 1.0 cfs @ 1.69 fps)

OUTLET PROTECTION DESIGN CALCS

NON DEFINED CHANNEL

Job #: 23062
Date: 1/20/2025
Structure: Outlet from PCB3

Variables:

Q= Discharge from the pipe (cfs)
$D_{0=}$ Diameter of the pipe (ft)
Tw= Tailwater depth above the invert of the pipe (ft)
La= Apron length
w_1= Apron width at pipe outlet
w_2= Apron width at downstream end of apron

Input:

Outlet elev:	109
Tailwater elev:	110.73
Tw:	1.73
Q:	0.8
D_0:	1

Apron Dimensions

w_1=	**3**	(ft)
w_2=	**7**	(ft)
La=	**10**	(ft)

Apron Length:

Tw > .5D_0	Tw < .5D_0
La: 9.400	La: 8.440

Apron Width:

Tw > .5D_0	Tw < .5D_0
w_2: 6.76	w_2: 11.44

w_1: 3

w_1=	3.00
w_2=	6.76
La=	9.4

RipRap Sizing

d_{50}=	0.01	(ft)
d_{50}=	0.10	(in)

RipRap Gradation

Stone Size			% of Weight Smaller Then the Given Size
0.01	TO	0.02	100
0.01	TO	0.02	85
0.01	TO	0.01	50
0.00	TO	0.00	15

Minimum Depth of Rock= 0.03 (ft)

Summary for Pond PCB3: PCB3

Inflow Area = 0.143 ac,100.00% Impervious, Inflow Depth = 5.75" for 25-yr event
Inflow = 0.8 cfs @ 11.99 hrs, Volume= 0.07 af
Outflow = 0.8 cfs @ 11.99 hrs, Volume= 0.07 af, Atten= 0%, Lag= 0.0 min
Primary = 0.8 cfs @ 11.99 hrs, Volume= 0.07 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 110.73' @ 12.43 hrs
Flood Elev= 112.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	109.20'	**12.0" Round Culvert** L= 8.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 109.20' / 109.00' S= 0.0250 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.0 cfs @ 11.99 hrs HW=110.41' TW=110.41' (Dynamic Tailwater)
↑—**1=Culvert** (Controls 0.0 cfs)

OUTLET PROTECTION DESIGN CALCS

DEFINED CHANNEL

Job #: 23062
Date: 1/20/2025
Structure: Outlet from RD1

Variables:

Q= Discharge from the pipe (cfs)
$D_{0=}$ Diameter of outlet pipe (ft)
D= Width of channel (ft)
z= Channel side slope (H:V ft/ft)
Tw= Tailwater depth above the invert of the pipe (ft)
La= Apron length
w_1= Apron width at pipe outlet
w_2= Apron width at downstream end of apron

Input:

Outlet elev:	109.8
Tailwater elev:	110.73
Tw:	0.93
Q:	3.3
D_0:	1.25
D:	2
z:	3

Apron Dimensions

w_1=	**10**	(ft)
w_2=	**2**	(ft)
La=	**16**	(ft)

Apron Length:

$Tw > .5D_0$	$Tw < .5D_0$
La: 15.834	La: 13.000

Apron Width:

w_2: 2

w_1: 9.5

w_1=	9.50
w_2=	2.00
La=	15.8338634

RipRap Sizing

d_{50}=	0.08	(ft)
d_{50}=	1.01	(in)

RipRap Gradation

Stone Size			% of Weight Smaller Then the Given Size
0.13	TO	0.17	100
0.11	TO	0.15	85
0.08	TO	0.13	50
0.03	TO	0.04	15

Minimum Depth of Rock= 0.25 (ft)

Summary for Pond RD1: ROOF DRAIN

Inflow Area = 0.621 ac,100.00% Impervious, Inflow Depth = 5.75" for 25-yr event
Inflow = 3.3 cfs @ 12.00 hrs, Volume= 0.30 af
Outflow = 3.3 cfs @ 12.00 hrs, Volume= 0.30 af, Atten= 0%, Lag= 0.0 min
Primary = 3.3 cfs @ 12.00 hrs, Volume= 0.30 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 111.00' @ 12.00 hrs
Flood Elev= 111.25'

Device	Routing	Invert	Outlet Devices
#1	Primary	110.00'	**15.0" Round Culvert** L= 6.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 110.00' / 109.80' S= 0.0333 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=3.3 cfs @ 12.00 hrs HW=111.00' TW=110.45' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 3.3 cfs @ 4.25 fps)

APPENDIX C

INSPECTION AND MAINTENANCE

C – 1

STORMWATER MANAGEMENT SYSTEM INSPECTION & MAINTENANCE PLAN

Stormwater Management System Inspection & Maintenance Plan

Prepared for:

SUMMIT LAND DEVELOPMENT
340 Central Ave Suite 202
Dover, NH

16 Industrial Park Road
Dover, New Hampshire
Tax Map 5, Lot 4-1
Strafford County

January 2025

Owner of Record:

16 INDUSTRIAL PARK, LLC
340 Central Ave Suite 202
Dover, New Hampshire 03820

Prepared By:

CIVILWORKS NEW ENGLAND
P.O. Box 1166
181 Watson Road
Dover, New Hampshire 03821

Introduction

Civilworks New England, has prepared the following Stormwater Management System Inspection & Maintenance Plan for **the proposed project located at 16 Industrial Park Drive, Dover, NH 03820.** The intent of this plan is to provide a list of procedures that document the inspection and maintenance requirements of the Stormwater Management System for this site.

The inspection and maintenance requirements outlined in this document are required to be performed in perpetuity. In the event the property is sold, future owners will be responsible for implementing the responsibilities outlined in this document.

In addition to the private stormwater management system on-site, the City of Dover will own and maintain stormwater structures on-site that will be installed as part of this project. The City of Dover's stormwater structures include a catch basin located adjacent to the edge of pavement of Industrial Park Drive, the drainage pipe leaving the catch basin, the outfall of the drainage pipe, and the plunge pool at the outfall. A plan (BMP Location Plan) is attached to this document depicting the stormwater management systems and the respective party responsible for maintaining them.

The inspection and maintenance program is necessary in order to keep the Stormwater Management System functioning properly. These measures will also help to minimize potential environmental impacts to the areas surrounding the developed site. By following the enclosed procedures, the property owners, and maintenance personnel will be able to maintain the functional design of the Stormwater Management System and maximize its ability to remove sediment and other contaminants from site generated stormwater runoff.

This plan also requires the Owner/Operator to prepare and implement a salt minimization plan to reduce salt usage on-site and ultimately within the watershed. This plan will allow the owner/operator to monitor and modify how much salt is needed, when it should be applied, and where it needs to be applied, with the ultimate goal of reducing salt-use without compromising safety. It is expected that salt-use reduction will lead to long-term cost-savings as a result of purchasing less salt and reduced impacts on vegetation (e.g., landscaping) and corrosion of infrastructure.

The salt minimization plan should include the retention of a contractor who has completed the Green SnowPro Training course and obtained NHDES Salt Application Certification.

It is anticipated that this be a living document that will be updated at regular intervals (recommend updating annually in advance of the winter season in order to facilitate adjustments).

Owner:

16 Industrial Park, LLC
340 Central Ave Suite 202
Dover NH 03820

In the event of a change in ownership, this Inspection and Maintenance Plan shall be transferred to the new party.

Contact / Responsible Party:

Summitt Land Development
340 Central Ave Suite 202
Dover NH 03820

The contact information for the Contact / Responsible Party shall be kept current.

Management Company:

Summitt Land Development
340 Central Ave Suite 202
Dover NH 03820

The contact information for the Management Party shall be kept current.

Inspection Schedule / Record Retention

Inspection frequency should, at a minimum, be in accordance with New Hampshire Stormwater Manual, Volume 2, latest edition, as updated by NHDES. See the Inspection and Maintenance Plan for frequency requirements. A copy of the completed Stormwater Management System's Inspection & Maintenance Log and Deicing Salt Quantity Use Log shall be maintained, kept on-site, and be made available to local, state, or federal regulators as applicable by law. All Inspection and Maintenance records must be provided to the City of Dover Community Services Department annually before Dec 15th.

Stormwater Management System Components

The Stormwater Management System associated with the project is designed to mitigate both the quantity and quality of site-generated stormwater runoff. As a result, its design includes the following elements:

- Pipes/Culverts
- Outlet Structure(s)
- Energy Dissipation Structures (Rip Rap)
- Deep Sump Catch Basins
- Sediment Forebays
- Wet Extended Detention Pond
- Grass Lined Conveyance Swale
- Pavement
- Litter / Trash Removal

Design elements are identified in the design plans and are depicted on a Stormwater I&M Plan attached to this document. A copy of which shall be maintained with this Inspection and Maintenance Plan.

Control of Invasive Species

During maintenance activities, check for the presence of invasive plants and remove in a safe manner. Invasive plants shall be controlled to prevent them from reproducing, spreading, or re-growing. See the University of New Hampshire – Cooperative Extension's "Method for Disposing Non-Native Invasive Plants", included at the end of this manual, for guidance on the removal and disposal of invasive species.

Inspection and Maintenance Plan

By implementing the following procedures, the owners will be able to maintain the functional design of the Stormwater Management System and maximize the system's ability to remove sediment and other contaminants from site generated stormwater runoff.

PIPES/CULVERTS:

- Inspect once per year.
- Inspect for clogging and sediment accumulation.
- Remove all debris immediately and sediment accumulations ≥ 2 inches.

OUTLET STRUCTURE(S):

- Inspect once per year.
- Inspect for clogging and sediment accumulation.
- Remove all debris immediately and sediment accumulations ≥ 2 inches.

ENERGY DISSIPATION STRUCTURES (RIP RAP):

- Inspect at least once a year.
- Inspect for sediment accumulation.
- Remove all debris immediately.
- Inspect the outlet protection annually for damage or deterioration. Repair damages immediately.
- If stones become displaced from riprap areas, they should be replaced immediately and chinked in to assure stability. Add additional riprap as needed. Vegetation growing through the riprap should be eliminated at least yearly.

CATCH BASINS:

- Inspect twice per year (recommended in the spring and fall).
- Inspect for floatables, sediment accumulation, and hydrocarbons (oils and grease).
- Remove all floatables immediately.
- Sediment should be removed when it approaches half the sump depth. If no sump, remove sediment accumulation ≥ 6".
- Hydrocarbons shall be removed immediately by skimming, absorbent materials, or other methods and should be disposed of in accordance with applicable State and Federal regulations.

SEDIMENT FOREBAYS:

- Vegetated areas shall be mowed to maintain a 4" start of vegetative growth.
- Inspect at least once a year.
- Inspect for sediment accumulation.
- Remove all debris immediately.

WET EXTENDED DETENTION POND:

- Inspect at least once per year.
- Periodic mowing to control vegetation growth.
- Remove any woody vegetation.
- Remove any debris from pond and outlet structure.
- Remove accumulated sediment.

GRASS LINED CONVEYANCE SWALE:

- Inspect once per year.
- Inspect for erosion, sediment accumulation, vegetation loss, and presence of invasive species.
- Remove debris and accumulated sediment, based on inspection.
- Repair eroded areas as needed; remove invasive species and dead vegetation.
- Perform periodic mowing of swale (at least twice annually), maintain a 4" stand of vegetative growth.

PAVEMENT:

- Minimize sanding.
- Minimize application of salt for ice control.
- Clean periodically (1-2 times per year) using a sweeper or vacuum sweeper. Vacuum sweeping is the preferred method.

LITTER / TRASH REMOVAL:

- Routinely patrol site for litter pick-up.

DE-ICING AGENTS:

- To address the concerns associated with the application of chlorides and other deicing materials, NHDES recommends that the Owner/Operator develop a Road Salt and Deicing Minimization Plan for the parking lots and roadways. The plan should develop the policies that the development will keep in place to minimize salt and other deicer use after the project has been completed. The plan should include tracking the use of salt and other deicers for each storm event and compiling salt use data annually. (See Deicing Salt Quantity Use Log).
- Use sand as primary agent for driveway and access way safety during ice and snow conditions.
- Minimize the use of salt during the winter.
- Use de-icing or anti-caking agents, added to enhance performance and application characteristics of sand mixtures, only as necessary and at minimum application rates.
- Recommend using a certified Winter Operator (Green SnowPro Trained) for applying de-icing agents.
- Monitor weather and apply de-icing agents based on weather conditions and temperatures.

ANTI-ICING AND SALT MINIMIZATION:

- Owner to develop a Road Salt and Deicing Minimization Plan.
- Provide a written policy that the "Development" will keep in place to minimize salt and other deicer use after the project has been completed.
- Use the attached form to track the use of salt and other deicers for each storm event and compiling salt use data annually.

Inspection & Maintenance Table

System Component / BMP	Minimum Inspection Frequency	Minimum Inspection Requirements	Maintenance / Cleanout Threshold
Pipes/Culverts	Annually	• Check for clogging • Check for sediment accumulation	Remove when noticed Clean when necessary
Outlet Structure(s)	Annually	• Inspect once per year • Inspect for clogging and sediment accumulation • Remove all debris immediately and sediment accumulations ≥ 2 inches	≥ 2 in. sediment Remove immediately
Energy Dissipation (ED) Structures (Rip Rap)	Annually	• Check for erosion • Check for displaced stones • Check for woody vegetation • Check for sediment accumulation	≥ 3 in. sediment Remove annually Remove/ reset dislodged stones immediately
Catch Basins	Biannually Annually (at least)	• Check for sediment accumulations • Check for floatable contaminants • Check for hydrocarbons (oils and grease)	≥ 6” sediment depth or ½ sump depth Remove all floatables Remove immediately
Sediment Forebays	Annually	• Check for sediment accumulation • Check for woody vegetation growth • Check for debris • Vegetated areas shall be mowed to maintain a 4” start of vegetative growth	Remove/Dispose of accordingly Mow twice per year Remove/Dispose of accordingly
Wet Extended Detention Pond	Biannually Annually (at least)	• Check for sediment accumulation • Check for woody vegetation growth • Check for debris • Vegetated areas shall be mowed to maintain a 4” start of vegetative growth	Remove/Dispose of accordingly Mow twice per year Remove/Dispose of accordingly
Grass Lined Conveyance Swale	Annually	• Check for sediment accumulation • Check for erosion • Ensure swale is stabilized • Maintain healthy stand of veg., 4” minimum • Inspect for invasive species	≥ 1 in. sediment Repair immediately Restore vegetation in-kind Mow twice per year Remove/Dispose of accordingly
Pavement: • Sanding • Salt Applications • Sweep/Vacuum • Trash/Debris	Limit use As required 1 - 2 x’s Year Periodically	• Minimize use to prevent tracking issues • RECORD APPLICATION RATES • Sweep or vacuum to prevent tracking issues • Check for trash/debris	Sweep to prevent issues Minimize (as required) Sweep/Vac as needed Remove when noticed
Litter / Trash Removal	Periodically	• Check for litter and trash	Remove when noticed

Inspection & Maintenance Checklist/Log

The following pages contain a blank copy of the Stormwater Management System's Inspection & Maintenance Log and a Deicing Salt Quantity Use Log. These forms are provided to assist the owners with the inspection and maintenance of the aforementioned Stormwater Management System.

Stormwater Management System's Inspection & Maintenance Log

Date of Inspection/Maintenance_____ Inspector:_____

System Component / BMP	Cleaning / Repair Needed (List Items / Comments)	Date of Cleaning/Repair	Performed By

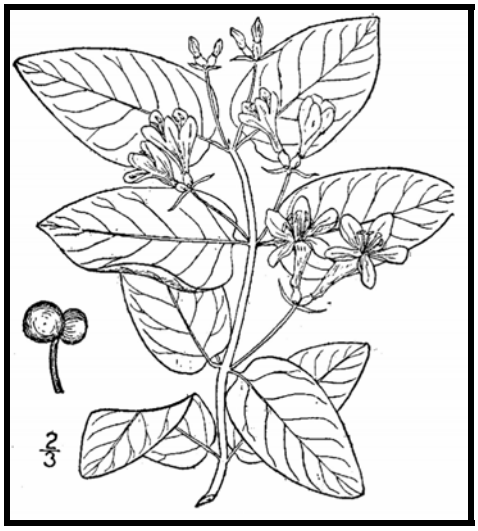
Deicing Salt Quantity Use Log

Date	Amount of Material Applied	Comments

University of New Hampshire Cooperative Extension

Methods for Disposing Non-Native Invasive Plants

Prepared by the Invasives Species Outreach Group, volunteers interested in helping people control invasive plants. Assistance provided by the Piscataquog Land Conservancy and the NH Invasives Species Committee. Edited by Karen Bennett, Extension Forestry Professor and Specialist.



Tatarian honeysuckle
Lonicera tatarica
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 3: 282.

Non-native invasive plants crowd out natives in natural and managed landscapes. They cost taxpayers billions of dollars each year from lost agricultural and forest crops, decreased biodiversity, impacts to natural resources and the environment, and the cost to control and eradicate them.

Invasive plants grow well even in less than desirable conditions such as sandy soils along roadsides, shaded wooded areas, and in wetlands. In ideal conditions, they grow and spread even faster. There are many ways to remove these non-native invasives, but once removed, care is needed to dispose the removed plant material so the plants don't grow where disposed.

Knowing how a particular plant reproduces indicates its method of spread and helps determine the appropriate disposal method. Most are spread by seed and are dispersed by wind, water, animals, or people. Some reproduce by vegetative means from pieces of stems or roots forming new plants. Others spread through both seed and vegetative means.

Because movement and disposal of viable plant parts is restricted (see NH Regulations), viable invasive parts can't be brought to most transfer stations in the state. Check with your transfer station to see if there is an approved, designated area for invasives disposal. This fact sheet gives recommendations for rendering plant parts non-viable.

Control of invasives is beyond the scope of this fact sheet. For information about control visit www.nhinvasives.org or contact your UNH Cooperative Extension office.

New Hampshire Regulations

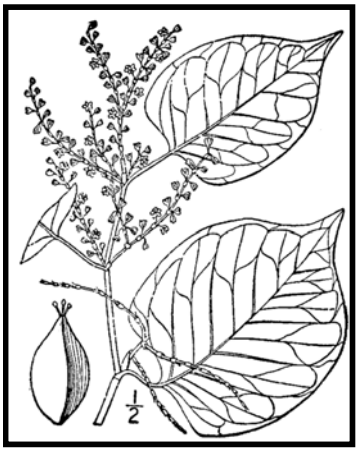
Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species, which includes all of their cultivars and varieties, listed in Table 3800.1 of the New Hampshire prohibited invasive species list. (Agr 3802.01)

How and When to Dispose of Invasives?

To prevent seed from spreading remove invasive plants before seeds are set (produced). Some plants continue to grow, flower and set seed even after pulling or cutting. Seeds can remain viable in the ground for many years. If the plant has flowers or seeds, place the flowers and seeds in a heavy plastic bag "head first" at the weeding site and transport to the disposal site. The following are general descriptions of disposal methods. See the chart for recommendations by species.

Burning: Large woody branches and trunks can be used as firewood or burned in piles. For outside burning, a written fire permit from the local forest fire warden is required unless the ground is covered in snow. Brush larger than 5 inches in diameter can't be burned. Invasive plants with easily airborne seeds like black swallow-wort with mature seed pods (indicated by their brown color) shouldn't be burned as the seeds may disperse by the hot air created by the fire.



Japanese knotweed
Polygonum cuspidatum
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 1: 676.

Bagging (solarization): Use this technique with softer-tissue plants. Use heavy black or clear plastic bags (contractor grade), making sure that no parts of the plants poke through. Allow the bags to sit in the sun for several weeks and on dark pavement for the best effect.

Tarping and Drying: Pile material on a sheet of plastic and cover with a tarp, fastening the tarp to the ground and monitoring it for escapes. Let the material dry for several weeks, or until it is clearly nonviable.

Chipping: Use this method for woody plants that don't reproduce vegetatively.

Burying: This is risky, but can be done with watchful diligence. Lay thick plastic in a deep pit before placing the cut up plant material in the hole. Place the material away from the edge of the plastic before covering it with more heavy plastic. Eliminate as much air as possible and toss in soil to weight down the material in the pit. Note that the top of the buried material should be at least three feet underground. Japanese knotweed should be at least 5 feet underground!

Drowning: Fill a large barrel with water and place soft-tissue plants in the water. Check after a few weeks and look for rotted plant material (roots, stems, leaves, flowers). Well-rotted plant material may be composted. A word of caution- seeds may still be viable after using this method. Do this before seeds are set. This method isn't used often. Be prepared for an awful stink!

Composting: Invasive plants can take root in compost. Don't compost any invasives unless you know there is no viable (living) plant material left. Use one of the above techniques (bagging, tarping, drying, chipping, or drowning) to render the plants nonviable before composting. Closely examine the plant before composting and avoid composting seeds.

Be diligent looking for seedlings for *years* in areas where removal and disposal took place.

Suggested Disposal Methods for Non-Native Invasive Plants

This table provides information concerning the disposal of removed invasive plant material. If the infestation is treated with herbicide and left in place, these guidelines don't apply. Don't bring invasives to a local transfer station, unless there is a designated area for their disposal, or they have been rendered non-viable. This listing includes wetland and upland plants from the New Hampshire Prohibited Invasive Species List. The disposal of aquatic plants isn't addressed.

<table>
<tr><th>Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">Norway maple
(Acer platanoides)
European barberry
(Berberis vulgaris)
Japanese barberry
(Berberis thunbergii)
autumn olive
(Elaeagnus umbellata)
burning bush
(Euonymus alatus)
Morrow's honeysuckle
(Lonicera morrowii)
Tatarian honeysuckle
(Lonicera tatarica)
showy bush honeysuckle
(Lonicera x bella)
common buckthorn
(Rhamnus cathartica)
glossy buckthorn
(Frangula alnus)</td><td rowspan="2">Fruit and Seeds
 </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Use as firewood.
▪ Make a brush pile.
▪ Chip.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip once all fruit has dropped from branches.
▪ Leave resulting chips on site and monitor.</td></tr>
<tr><td rowspan="2">oriental bittersweet
(Celastrus orbiculatus)
multiflora rose
(Rosa multiflora)</td><td rowspan="2">Fruits, Seeds, Plant Fragments
 </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Make a brush pile.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip – only after material has fully dried (1 year) and all fruit has dropped from branches. Leave resulting chips on site and monitor.</td></tr>
</table>

<table>
<tr><th>Non-Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">garlic mustard
(Alliaria petiolata)
spotted knapweed
(Centaurea maculosa)
▪ Sap of related knapweed can cause skin irritation and tumors. Wear gloves when handling.
black swallow-wort
(Cynanchum nigrum)
▪ May cause skin rash. Wear gloves and long sleeves when handling.
pale swallow-wort
(Cynanchum rossicum)
giant hogweed
(Heracleum mantegazzianum)
▪ Can cause major skin rash. Wear gloves and long sleeves when handling.
dame’s rocket
(Hesperis matronalis)
perennial pepperweed
(Lepidium latifolium)
purple loosestrife
(Lythrum salicaria)
Japanese stilt grass
(Microstegium vimineum)
mile-a-minute weed
(Polygonum perfoliatum)</td><td rowspan="2">Fruits and Seeds
 </td><td>Prior to flowering
Depends on scale of infestation
Small infestation
▪ Pull or cut plant and leave on site with roots exposed.

Large infestation
▪ Pull or cut plant and pile. (You can pile onto or cover with plastic sheeting).
▪ Monitor. Remove any re-sprouting material.</td></tr>
<tr><td>During and following flowering
Do nothing until the following year or remove flowering heads and bag and let rot.

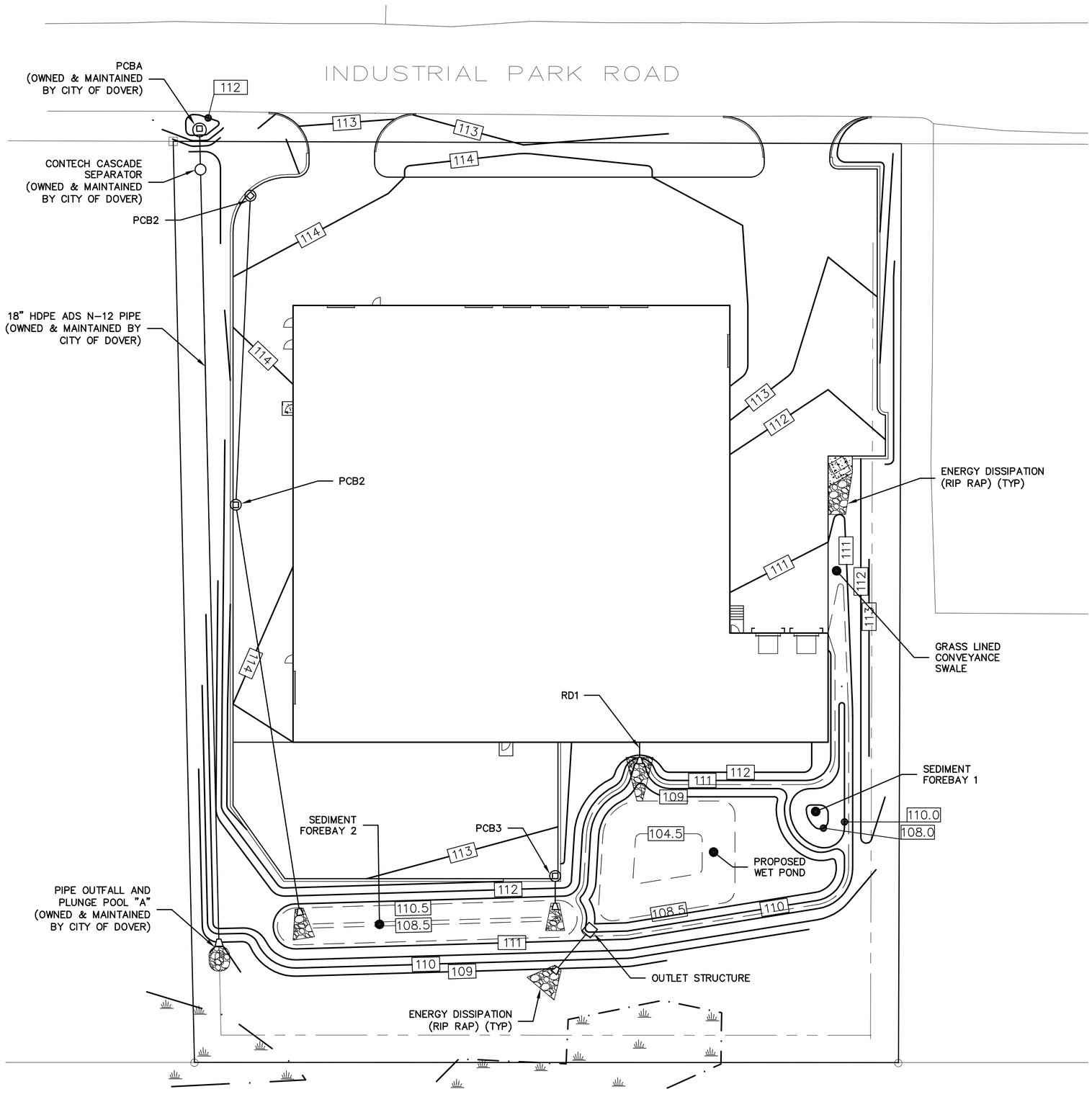
Small infestation
▪ Pull or cut plant and leave on site with roots exposed.

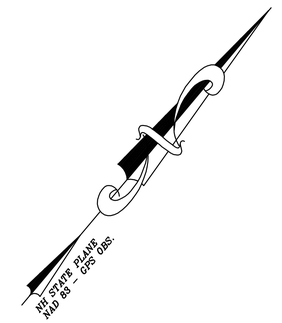
Large infestation
▪ Pull or cut plant and pile remaining material. (You can pile onto plastic or cover with plastic sheeting).
▪ Monitor. Remove any re-sprouting material.</td></tr>
<tr><td>common reed
(Phragmites australis)
Japanese knotweed
(Polygonum cuspidatum)
Bohemian knotweed
(Polygonum x bohemicum)</td><td>Fruits, Seeds, Plant Fragments
Primary means of spread in these species is by plant parts. Although all care should be given to preventing the dispersal of seed during control activities, the presence of seed doesn’t materially influence disposal activities.</td><td>Small infestation
▪ Bag all plant material and let rot.
▪ Never pile and use resulting material as compost.
▪ Burn.

Large infestation
▪ Remove material to unsuitable habitat (dry, hot and sunny or dry and shaded location) and scatter or pile.
▪ Monitor and remove any sprouting material.
▪ Pile, let dry, and burn.</td></tr>
</table>

January 2010

UNH Cooperative Extension programs and policies are consistent with pertinent Federal and State laws and regulations, and prohibits discrimination in its programs, activities and employment on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sex, sexual orientation, or veteran’s, marital or family status. College of Life Sciences and Agriculture, County Governments, NH Dept. of Resources and Economic Development, Division of Forests and Lands, NH Fish and Game ,and U.S. Dept. of Agriculture cooperating.





GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE

DATE: 1-20-25
SCALE: 1" = 20'
DRAWN BY: IPL
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 23062
FILE: BMP

BMP LOCATION PLAN

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVE
SUITE 202
DOVER, NH 03820

SUMMIT LAND DEVELOPMENT
340 CENTRAL AVENUE
SUITE 2020
DOVER, NH 03820

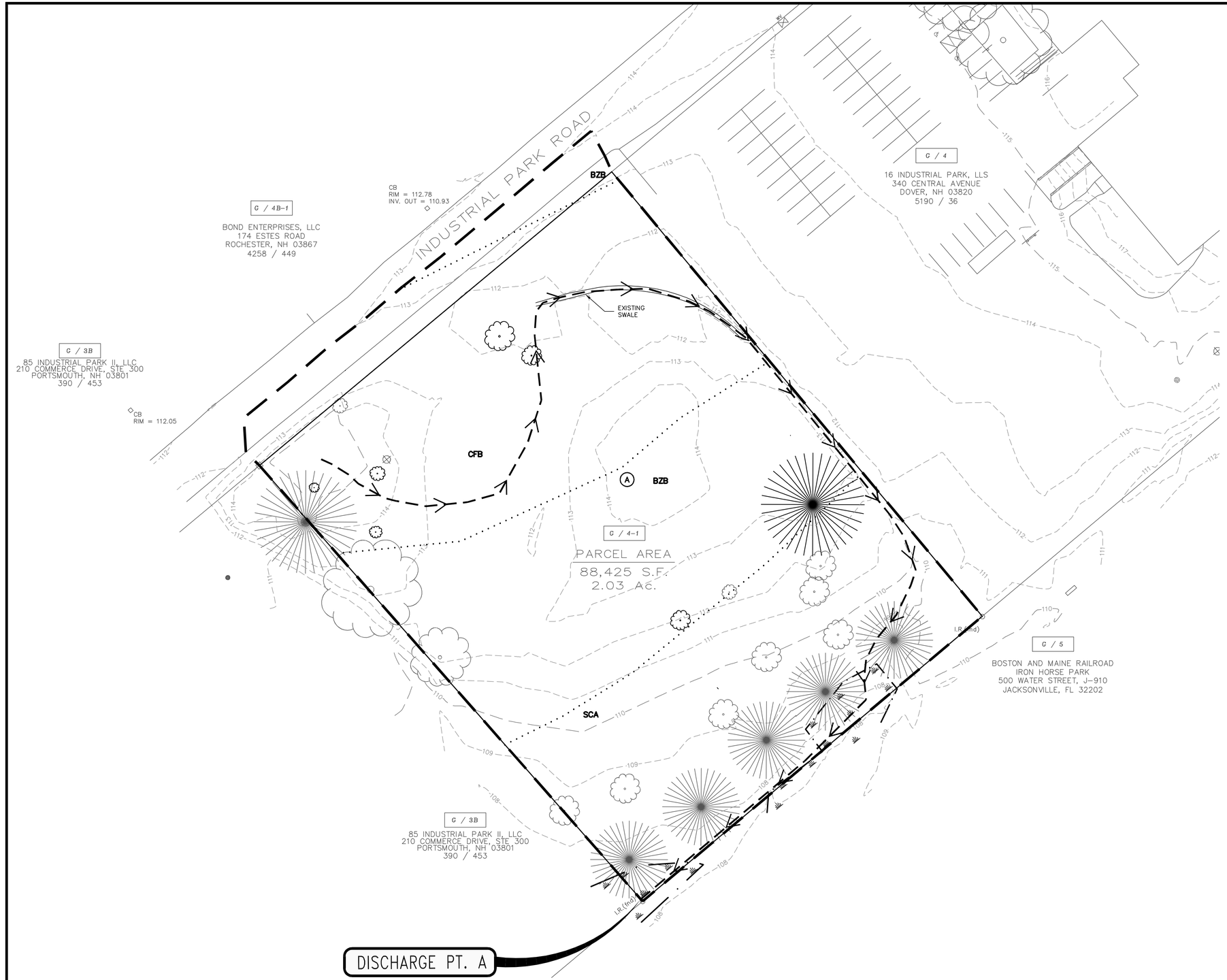
BMP

APPENDIX D

WATERSHED PLANS

D – 1

PRE-DEVELOPMENT CONDITIONS



PRE-DEVELOPMENT WATERSHED CHARACTERISTICS

SUBCATCHMENT DESIGNATION	AREA (ACRES)	LONGEST FLOW PATH (FEET)	Tc (MIN)
A	2.19	784	26.9

SOILS DATA

Hydrologic Drainage Class B:

CfB – Charlton Fine Sandy Loam, 3 – 8 Percent Slopes

Hydrologic Drainage Class C:

BzB – Buxton Silt Loam, 3 – 8 Percent Slopes
ScA – Scantic Silt Loam, 0 – 3 Percent Slopes

LEGEND:

- EX 1' CONTOUR
- EX 10' CONTOUR
- PROPERTY LINE
- EXISTING EDGE OF PAVEMENT
- SOIL BOUNDARY
- SUBCATCHMENT BOUNDARY
- LONGEST FLOW PATH WITH DIRECTION OF FLOW
- EXISTING WETLAND BOUNDARY
- EXISTING WETLAND
- (A) SUBCATCHMENT DESIGNATION
- BZB SOIL DESIGNATION

NH STATE PLANE
NAD 83 - GPS OBS.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHOCK ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE

DATE: 1-20-25
SCALE: 1" = 30'
DRAWN BY: IPL
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 23062
FILE: DRN

PRE-DEVELOPMENT WATERSHED PLAN

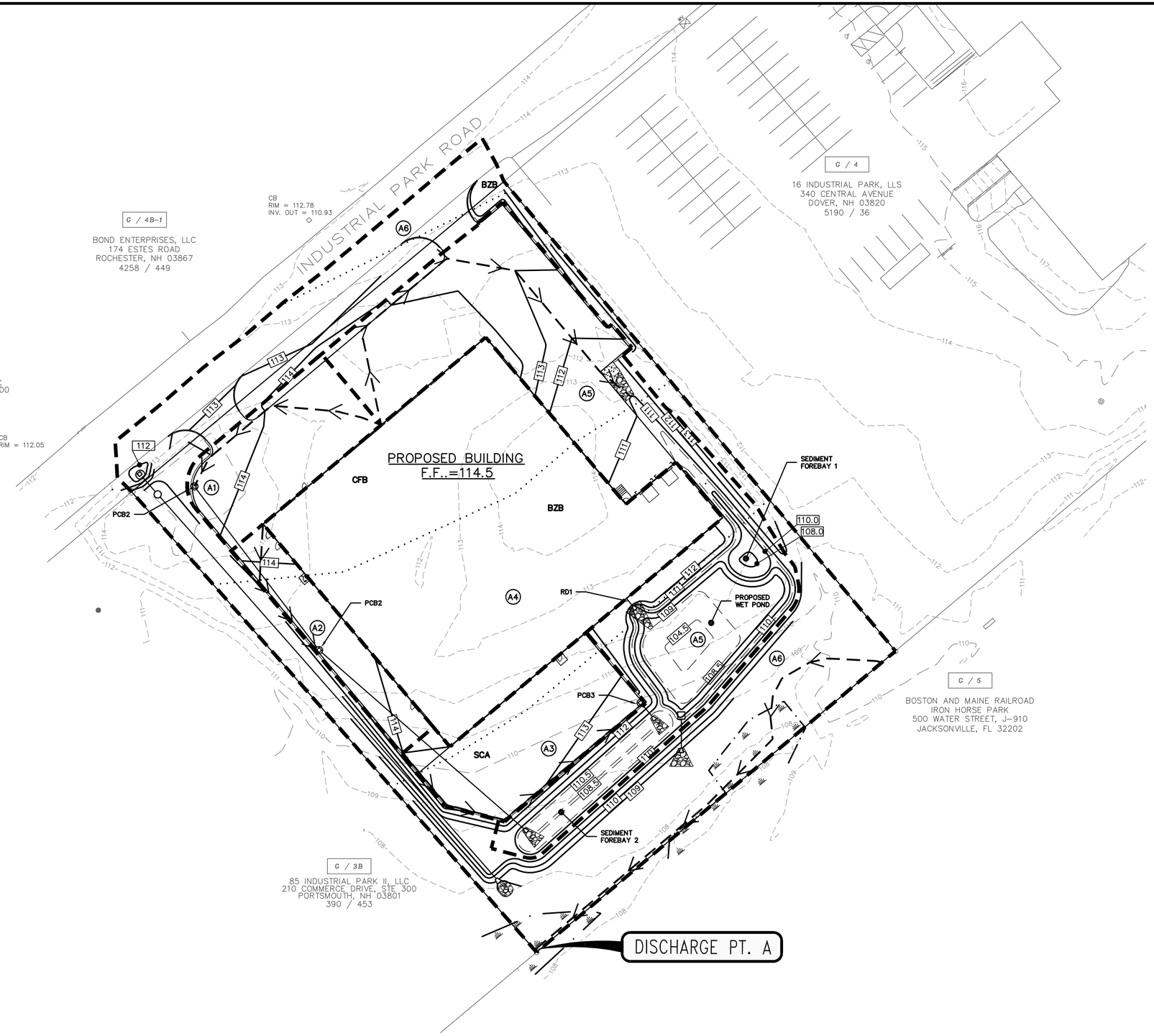
SUMMIT LAND DEVELOPMENT
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVE
SUITE 202
DOVER, NH 03820

WS-1

D – 2

POST-DEVELOPMENT CONDITIONS



POST-DEVELOPMENT WATERSHED CHARACTERISTICS

SUBCATCHMENT DESIGNATION	AREA (ACRES)	LONGEST FLOW PATH (FEET)	Tc (MIN)
A1	0.12	124	1.1
A2	0.08	82	0.5
A3	0.14	170	1.4
A4	0.62	DIRECT	2.0
A5	0.56	247	1.9
A6	0.67	268	10.2

SOILS DATA

Hydrologic Drainage Class B:

CfB – Charlton Fine Sandy Loam, 3 – 8 Percent Slopes

Hydrologic Drainage Class C:

BzB – Buxton Silt Loam, 3 – 8 Percent Slopes
ScA – Scantic Silt Loam, 0 – 3 Percent Slopes

LEGEND:

- EX 1' CONTOUR
- EX 10' CONTOUR
- PROPERTY LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING WETLAND BOUNDARY
- EXISTING WETLAND
- LONGEST FLOW PATH WITH DIRECTION OF FLOW
- SOIL BOUNDARY
- SUBCATCHMENT BOUNDARY
- BZB — SOIL DESIGNATION
- FES — FLARED END SECTION
- (A1) — SUBCATCHMENT DESIGNATION

NH STATE PLANE
NAD 83 - GPS OBS.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE

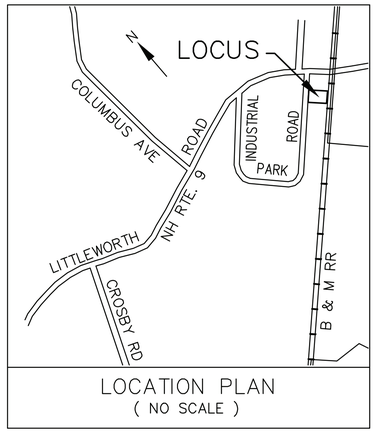
DATE: 1-20-25
SCALE: 1" = 30'
DRAWN BY: IPL
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 23062
FILE: DRN

POST-DEVELOPMENT WATERSHED PLAN

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVE
SUITE 202
DOVER, NH 03820

SUMMIT LAND DEVELOPMENT
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

WS-2



LOCATION PLAN
(NO SCALE)

SITE PLAN
FOR
SEASONAL AUTOMOTIVE STORAGE & AUTOMOTIVE SERVICE

TAX MAP G, LOT 4-1

34 INDUSTRIAL PARK ROAD
DOVER, NH
JANUARY 29, 2025
REVISED: MARCH 4, 2025

OWNER
16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

APPLICANT
SUMMITT LAND DEVELOPMENT, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

_____ DATE

_____ DATE

SITE CIVIL ENGINEER

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

LAND SURVEYOR
MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND
P.O. BOX 1166
DOVER, NH 03821
(603) 742-0911

ARCHITECT
PROCON INC.
1359 HOOKSETT ROAD
HOOKSETT, NH 03106

WETLAND SCIENTIST
BAG LAND CONSULTANTS
43 ROCKINGHAM STREET
CONCORD, NH 03301

PERMIT SUMMARY/ WAIVER SUMMARY:

1. THE FOLLOWING FEDERAL AND STATE PERMITS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY:

   EPA CONSTRUCTION GENERAL PERMIT: PENDING

2. LIST ANY VARIANCES OR SPECIAL EXCEPTIONS GRANTED BY THE ZONING BOARD OF ADJUSTMENT OR CONDITIONAL USE PERMITS GRANTED BY THE PLANNING BOARD FOR THE PROPOSED USE OR STRUCTURE, INCLUDING THE CASE NUMBER AND DATE OF DECISION AND ANY CONDITIONS.

   SITE PLAN: PENDING

   CONDITIONAL USE PERMIT: PENDING

   SPECIAL EXCEPTION: APPROVED FEBRUARY 26, 2025 ZONE-2025-0003
   A SPECIAL EXCEPTION TO ALLOW AN AUTOMOTIVE SERVICE USE WITHIN THE COMMERCIAL/MANUFACTURING (CM) ZONE.

3. WAIVERS REQUESTED: THE PLANNING BOARD HAS FOUND THE CRITERIA OF CHAPTER 153-21 HAVE BEEN MET AND HAVE BEEN APPROVED THE FOLLOWING WAIVERS:

   A WAIVER REQUEST FROM THE SITE REVIEW REGULATIONS 153-13.(12), TO ALLOW FOR THE LANDSCAPE PLAN NOT TO BE STAMPED BY A LLA.

   A WAIVER REQUEST FROM THE SITE REVIEW REGULATIONS 153-14.A.(3).(B),[4], TO ALLOW FOR AN INCREASE OF POST-DEVELOPMENT SURFACE WATER RUNOFF VOLUME TO EXCEED PRE-DEVELOPMENT VOLUMES, WHERE NO INCREASE IS REQUIRED.

SHEET INDEX	SHEET
COVER SHEET	1
NEIGHBORHOOD PLAN	2
EXISTING CONDITIONS PLAN (BY MCENEANEY SURVEY)	3
NOTE SHEET	4
DEMOLITION PLAN	5
SITE PLAN	6
GRADING, DRAINAGE & EROSION CONTROL PLAN	7
UTILITY PLAN	8
EROSION CONTROL NOTES	9
EROSION CONTROL DETAILS	10 - 11
DETAIL SHEETS	12 - 17
LIGHTING PLAN	18
LIGHTING DETAILS	19
DOVER LADDER TRUCK MOVEMENT PLAN	20
SIGHT DISTANCE PLAN & PROFILES	S-1
WETLAND BUFFER IMPACT EXHIBIT	EX-1
LANDSCAPE PLAN	L-1

ARCHITECTURAL PLANS	
OVERALL SCHEMATIC FLOOR PLAN	1.01
EXTERIOR ELEVATION VIEWS	3.01-3.03

PLANNING FILE NO.: SITE-2025-0001

ABUTTERS LIST
(WITHIN 200 FT)

	TAX MAP	LOT NO.	NAME & ADDRESS
G 4–1–0	G	4–1–0	16 INDUSTRIAL PARK, LLC 340 CENTRAL AVE SUITE 202 DOVER, NH 03820
G 4–0–0	G	4–0–0	16 INDUSTRIAL PARK, LLC 340 CENTRAL AVE SUITE 202 DOVER, NH 03820
G 4–C–1	G	4–C–1	R&R BERSTEIN HOLDINGS LLC 12 TIDE MILL ROAD HAMPTON, NH 03842
G 4–B–0	G	4–B–0	CAMH LLC 35 INDUSTRIAL PARK ROAD DOVER, NH 03820
G 4–B–1	G	4–B–1	BOND ENTERPRISES LLC 174 ESTES ROAD ROCHESTER, NH 03867
A 47–10–0	G	3–B–0	85 INDUSTRIAL PARK II LLC 210 COMMERCE DRIVE SUITE 300 PORTSMOUTH, NH 03801
G 5–0–0	G	5–0–0	BOSTON & MAINE RR IRON HORSE PARK 500 WATER STREET J–910 JACKSONVILLE, FL 32202
A 49–11–0	H	31–0–0	SOUSANE RUTHK & QUINIAN NANCY K 30 LITTLEWORTH ROAD DOVER, NH 03820

SYMBOL LEGEND

G / 4–1 — TAX MAP / LOT NUMBER

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)

PLANNING FILE NO.: SITE–2025–0001

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CNE CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3–4–25

PROJECT NO: 23062
APPROVED BY: SJH
DESIGN BY: JRG
DRAWN BY: SRD
SCALE: 1"=200'
DATE: 1–29–25
FILE: SITE.DWG

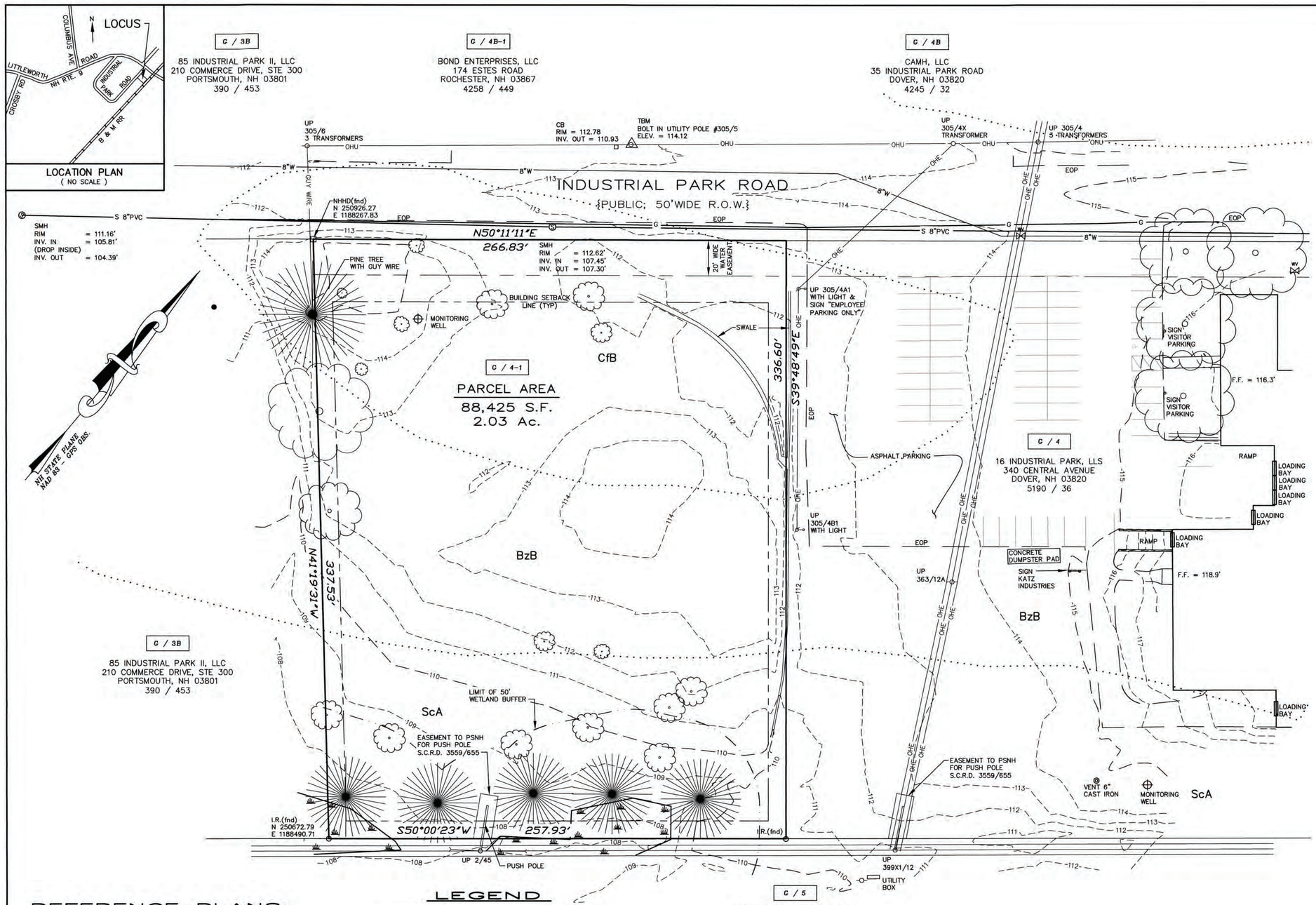
STATE OF NEW HAMPSHIRE — STEPHEN J. HAIGHT No. 7978 — LICENSED PROFESSIONAL ENGINEER

NEIGHBORHOOD PLAN

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE
STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

2



NOTES:

1.) OWNER OF RECORD:
16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOLUME 5190, PAGE 36

2.) C / 4-1 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) PARCEL AREA = 88,425 S.F. / 2.03 Ac.

4.) THE INTENT OF THIS PLAN IS TO DEPICT THE PARCEL BOUNDARY AND EXISTING SITE CONDITIONS AS OF OCTOBER 31, 2024.

5.) ZONING DISTRICT: COMMERCIAL/MANUFACTURING (CM)

DIMENSIONAL REQUIREMENTS:	
MINIMUM LOT SIZE	= 20,000 S.F.
MAXIMUM LOT COVERAGE	= 50 PERCENT
MINIMUM FRONTAGE	= 100 FEET
BUILDING SETBACK REQUIREMENTS:	
FRONT SETBACK	= 35 FEET
SIDE SETBACK	= 10 FEET
REAR SETBACK	= 10 FEET
MAXIMUM BUILDING HEIGHT	= 50 FEET

6.) THE SUBJECT PARCEL IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE AS SHOWN ON FLOOD INSURANCE RATE MAP 33017C0320E, EFFECTIVE DATE 9/30/2015.

7.) BASIS OF BEARING IS NH STATE PLANE (NAD83) AND VERTICAL DATUM IS NAVD88 BASED ON GPS OBSERVATION DATED OCTOBER 28, 2024.

8.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND ON OCTOBER 28–31, 2024 WITH AN ERROR NOT GREATER THAN 1 IN 10,000.

9.) THE IMPROVEMENTS AND UTILITIES SHOWN ARE FROM OBSERVATIONS MADE IN THE FIELD OR REFERENCE PLANS. LOCATIONS OF UNDERGROUND UTILITIES NOT MARKED ON THE SURFACE WERE NOT LOCATED. ALL VISIBLE UTILITIES ARE SHOWN.

10.) ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATIONS WITH THE RESPECTIVE UTILITY OWNERS PRIOR TO ANY WORK BEING PERFORMED. CALL DIGSAFE AT 1–888–344–7233.

11.) THIS PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON THE DATE OF THE SURVEY. THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. FROM THIS PLAN, BUT IN EXISTENCE, IS NOT INTENDED OR IMPLIED.

12.) THE SOIL TYPES ON THE SITE ARE:
BzB BUXTON SILT LOAM, 3 TO 8 PERCENT SLOPES
ScA SCANTIC SILT LOAM, 0 TO 3 PERCENT SLOPES
CfB CHARLTON FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES.
THE SOURCE FOR THE SOIL TYPE DATA IS USDA NRCS WEB SOIL SURVEY
http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

13.) WETLANDS SHOWN WERE DELINEATED BY BRUCE A. GILDAY, N.H.C.W.S. #088; N.H. C.S.S. #012 OF B A G LAND CONSULTANTS, ON OCTOBER 30, 2024 IN ACCORDANCE WITH THE 1987 CORPS. OF ENGINEERS WETLANDS DELINEATION MANUAL AND LOCATED BY THIS OFFICE.

STATE OF NEW HAMPSHIRE
BRUCE A. GILDAY
No. 088
CERTIFIED WETLAND SCIENTIST

Bruce A. Gilday
Bruce A. Gilday

REFERENCE PLANS:

1.) SUBDIVISION PLAN, 16 INDUSTRIAL PARK, LLC., 16 INDUSTRIAL PARK ROAD AND LITTLEWORTH ROAD, DOVER, NEW HAMPSHIRE; SCALE: 1" = 50'; DATED: JULY 8, 2009; BY: TRITECH ENGINEERING CORPORATION; RECORDED S.C.R.D. PLAN 98–5.

2.) PROPOSED DEVELOPMENT S.E.N.H. INDUSTRIAL PARK PROPERTY LINES, DOVER, NEW HAMPSHIRE; SCALE: 1" = 100'; DATED: MARCH 31, 1958; BY: G.L. DAVIS & ASSOCIATES; RECORDED S.C.R.D. POCKET 6, FOLDER 2, PLAN 38.

LEGEND

GAS	GAS MAIN AND / OR SERVICE
OHU	UNDERGROUND UTILITIES (POWER, TELECOMMUNICATIONS, CABLE TELEVISION)
OHE	OVERHEAD ELECTRIC LINE
UP	UTILITY POLE
INV.	INVERT
RIM	STRUCTURE RIM
N –247,351.744	NORTHING
E – 1,199,437.985	EASTING
ELEV.	ELEVATION
–56–	CONTOUR LINE – 2' INTERVAL
HDPE	HIGH DENSITY POLYETHYLENE
WSO	WATER SHUT–OFF (CURB STOP)
HYD	FIRE HYDRANT
WV	WATER GATE VALVE
SMH	SEWER MANHOLE AND ID
CB	CATCH BASIN AND ID
S.C.R.D.	STRAFFORD COUNTY REGISTRY OF DEEDS
	SCA SOIL BOUNDARY
CfB	SCA SOIL TYPE

NO.	DATE	DESCRIPTION	BY	CHK
1	2/27/25	REVISE ADDRESS	KJF	KMM
CNE 23062		REVISIONS		
24–2654		EXIST. COND.	24–12	11–14
PROJECT NO		TYPE	FIELDBOOK & PAGES	

"I HEREBY CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL GROUND SURVEY PERFORMED WITH A TOTAL STATION, BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, SAID SURVEY MEETS OR EXCEEDS THE MINIMUM PRECISION REQUIREMENTS FOR SURVEY CLASSIFICATION "U" AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS."

EXISTING CONDITIONS PLAN
PREPARED FOR
16 INDUSTRIAL PARK, LLC
TAX MAP G, LOT No. 4–1
34 INDUSTRIAL PARK ROAD
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DRAWN BY: KJF	FILE: MSA\2654\D\24–2654 EC
SCALE: 1" = 30'	DATE: NOVEMBER 13, 2024

30 15 0 15 30 60 90 120

STATE OF NEW HAMPSHIRE
No. 661
KEVIN M. McENEANEY
LICENSED LAND SURVEYOR
SIGNATURE

McEneaney Survey Associates of NEW ENGLAND
P.O. Box 1166 – 181 WATSON ROAD
DOVER, NH 03820 (603) 742–0911
SURVEYING – PLANNING – CONSULTING

2/27/2025 09:10:41 FILE:M:\2654\Drawing\24-2654 EC.dwg LAYOUT:EXISTING CONDITIONS

DOVER NOTES:

1. OWNER OF RECORD:
   16 INDUSTRIAL PARK, LLC
   340 CENTRAL AVENUE
   DOVER, NEW HAMPSHIRE 03820
   S.C.R.D. VOLUME 5190, PAGE 36
2. – DENOTES TAX MAP AND PARCEL NUMBER.
3. PARCEL AREA = 88,425 S.F. / 2.03 Ac.
4. THE INTENT OF THE E/C PLAN IS TO DEPICT THE PARCEL BOUNDARY AND EXISTING SITE CONDITIONS AS OF OCTOBER 31, 2024.
5. ZONING DISTRICT: COMMERCIAL/MANUFACTURING (CM)

DIMENSIONAL REQUIREMENTS:	REQUIRED	PROPOSED
MINIMUM LOT SIZE	20,000 S.F	88,425 S.F.
MAXIMUM LOT COVERAGE	50%	29.7%
MINIMUM FRONTAGE	100 FEET	281 FEET
BUILDING SETBACK REQUIREMENTS:		
FRONT SETBACK	35 FEET	59.4 FEET
SIDE SETBACK	10 FEET	26.1 FEET
REAR SETBACK	10 FEET	117.3 FEET
MAXIMUM BUILDING HEIGHT	50 FEET	<50 FEET

6. THE SUBJECT PARCEL IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE AS SHOWN ON FLOOD INSURANCE RATE MAP 33017C0320E, EFFECTIVE DATE 9/30/2015.
7. BASIS OF BEARING IS NH STATE PLANE (NAD83) AND VERTICAL DATUM IS NAVD88 BASED ON GPS OBSERVATION DATED OCTOBER 28, 2024.
8. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND ON OCTOBER 28–31, 2024 WITH AN ERROR NOT GREATER THAN 1 IN 10,000.
9. THE IMPROVEMENTS AND UTILITIES SHOWN ARE FROM OBSERVATIONS MADE IN THE FIELD OR REFERENCE PLANS. LOCATIONS OF UNDERGROUND UTILITIES NOT MARKED ON THE SURFACE WERE NOT LOCATED. ALL VISIBLE UTILITIES ARE SHOWN.
10. ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATIONS WITH THE RESPECTIVE UTILITY OWNERS PRIOR TO ANY WORK BEING PERFORMED. CALL DIGSAFE AT 1–888–344–7233.
11. THIS PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON THE DATE OF THE SURVEY. THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. FROM THIS PLAN, BUT IN EXISTENCE, IS NOT INTENDED OR IMPLIED.
12. THE SOIL TYPES ON THE SITE ARE:
    BzB BUXTON SILT LOAM, 3 TO 8 PERCENT SLOPES
    ScA SCANTIC SILT LOAM, 0 TO 3 PERCENT SLOPES
    CrB CHARLTON FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES.
    THE SOURCE FOR THE SOIL TYPE DATA IS USDA NRCS WEB SOIL SURVEY
    http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
13. WETLANDS SHOWN WERE DELINEATED BY BRUCE A. GILDAY, N.H.C.W.S. #088; N.H. C.S.S. #012 OF B A G LAND CONSULTANTS, ON OCTOBER 30, 2024 IN ACCORDANCE WITH THE 1987 CORPS. OF ENGINEERS WETLANDS DELINEATION MANUAL AND LOCATED BY THIS OFFICE.
14. AS–BUILT PLANS OF THE SITE PLAN SHALL BE SUBMITTED ON PAPER AND IN DIGITAL FORMAT AUTOCAD DWG, AUTOCAD DXF OR ESRI FORMAT TO THE CITY OF DOVER ENGINEER'S OFFICE UPON COMPLETION OF PROJECT. AS–BUILT PLANS SHALL BE PREPARED AND CERTIFIED CORRECT BY A L.L.S. OR P.E. DIGITAL FILES SHALL BE GEO–REFERENCED TO NEW HAMPSHIRE STATE PLANE COORDINATES NAD83 AND SHALL BE EXPRESSED IN FEET.
15. THE INSTALLATION OF ELECTRIC POWER, CABLE TELEVISION AND TELEPHONE LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE FOR WHICH DEVELOPMENT IS PROPOSED.
16. THE SUBJECT PARCEL IS SERVED BY MUNICIPAL WATER AND SEWER.
17. ALL CONSTRUCTION SHALL CONFORM WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND WITH THE CITY OF DOVER COMMUNITY SERVICES REGULATIONS AND STANDARD SPECIFICATION FOR CONSTRUCTION. THE MORE STRINGENT SPECIFICATION SHALL APPLY.
18. EROSION CONTROL NOTES INCLUDE PROVISIONS FOR CONSTRUCTION SEQUENCING, TEMPORARY EROSION CONTROL MEASURES, AND PERMANENT STANDARDS SUCH AS LOAM SPREAD RATE FOR DISTURBED AREAS, RATES OF LIME, TYPE AND RATES FOR FERTILIZER, AND SEED AND MULCH MIXTURE WITH RATES OF APPLICATION.
19. THE LIMITS OF CONSTRUCTION DISTURBANCE THAT ARE LOCATED IN OR WITHIN 50 FT. OF CONSERVATION AND WETLAND DISTRICTS SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS.
20. ALL TREATMENT SWALES TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS.
21. A LETTER OF CREDIT FOR THE COST OF REVEGETATING ALL DISTURBED AREAS ON THE SITE SHALL BE SUBMITTED, AND THE APPROVED CONSTRUCTION SIGN INSTALLED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS.
22. A PRE–CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR AND THE CITY ENGINEER SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.
23. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY–FRIDAY 7 AM–6 PM, SATURDAY 9 AM 4 PM. HOURS OF CONSTRUCTION MUST BE DOCUMENTED ON A SITE CONSTRUCTION SIGN ALONG WITH THE CONTACT INFORMATION FOR THE GENERAL CONTRACTOR. SAID SIGNAGE MUST BE LOCATED AND APPROVED BY THE CITY ENGINEER OR PLANNING DIRECTOR. WORK PRECLUDED ON SUNDAYS AND FEDERAL HOLIDAYS.
24. BUILDING ADDRESSES (INCLUDING APT/UNIT NUMBERS, IF APPLICABLE) SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
25. THE PROPOSED USE FOR THE SITE IS SEASONAL AUTOMOTIVE STORAGE & AUTOMOTIVE SERVICE.
26. THE FOLLOWING FEDERAL AND STATE PERMINTS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY: (SEE PROJECT VARIANCE/PERMIT SECTION)

DOVER NOTES CONTINUED:

27. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM TO DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
28. ANY RETAINING WALL TALLER THAN FOUR FEET (4') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
29. ANY FENCE TALLER THAN SEVEN FEET (7') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
30. APPLICANT SHALL COMPLETE LAND USE DEVELOPMENT TRACKING FORM, MOST RECENTLY REVISED VERSION, UTILIZING THE ONLINE POLLUTION TRACKING AND ACCOUNTING PILOT PROJECT (PTAPP) PORTAL.
    HTTPS://PTAPP.UNH.EDU/
31. IF APPLICABLE, THE OWNER OF RECORD SHALL RECORD AT THE REGISTRY OF DEEDS DOCUMENTATION SUFFICIENT TO PROVIDE NOTICE TO ALL PERSONS/ENTITIES THAT MAY ACQUIRE ANY PROPERTY SUBJECT TO THE REQUIREMENTS AND RESPONSIBILITIES DESCRIBED IN THE APPROVED STORMWATER MANAGEMENT PLAN. THE NOTICE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS FOR RECORDING CONTAINED IN RSA 477 AND 478. THE NOTICE NEED NOT SET FORTH THE REQUIREMENTS AT LENGTH, SO LONG AS IT IS SUFFICIENT TO PROVIDE NOTICE TO PROSPECTIVE PURCHASERS TO THE REQUIREMENTS FOR MAINTENANCE AND REPORTING.
32. FIRE DEPARTMENT ACCESS ROAD(S) SHALL BE INSTALLED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS IN ALL WEATHER CONDITIONS AT ALL TIMES.
33. THE MAXIMUM PARKING SPACE CALCULATION FOR THIS USE IS 36 SPACES. THE PROPOSED PROJECT PROVIDES 16 SPACES, INCLUDING 1 VAN ACCESSIBLE SPACE.
34. EXTERIOR LIGHTING SHALL BE CUT–OFF TYPE FIXTURES PER CHAPTER 153–14–E AND SHALL PROVIDE LIGHTING DIRECTED ON–SITE ONLY.
35. TOPOGRAPHIC SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATE, OCTOBER 2024.
36. A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 45, ARTICLE I, SECTION 45–2 OF THE CODE OF THE CITY OF DOVER. (AS APPLICABLE)
37. APPROVED BACKFLOW PREVENTERS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.
38. THE PROPOSED STRUCTURES SHALL BE SERVED BY A SPRINKLER SYSTEM AS REQUIRED BY CHAPTER 81– 30 OF THE CODE OF THE CITY OF DOVER AND THE ADOPTED STATE OF NH BUILDING AND FIRE CODES.
39. SPRINKLER CONNECTIONS MUST BE FLUSHED IN ACCORDANCE WITH NFPA 24 AND A CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM MUST BE COMPLETED AND APPROVED BY INSPECTION SERVICES PRIOR TO CONNECTION OF THE BACKFLOW DEVICE.
40. FIRE DEPARTMENT CONNECTION(S) SHALL BE LOCATED ON THE STREET SIDE OF THE BUILDING PER NFPA 13. ACCESS TO THE FDC SHALL MAINTAIN A CLEAR AND UNOBSTRUCTED PATH AT ALL TIMES.
41. THE SITE LAYOUT IS DESIGNED IN COMPLIANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. THE PROPOSED STRUCTURE WILL ALSO BE DESIGNED IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. (I.E. IBC, ANSI–117.1) AND NH RSA 155–A:5.
42. DESIGN ENGINEER SHALL PROVIDE SIGNED LETTER TO CITY ENGINEER CERTIFYING THAT THE STORMWATER MANAGEMENT SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS.
43. ALL MANHOLE COVERS SHALL BE LIFTMATE R–1743–LM OR APPROVED EQUAL WITH 90 DEGREE HINGE.
44. REQUIRED BLASTING AND EXCAVATION – DOVER FIRE DEPARTMENT SHALL BE NOTIFIED PRIOR TO ANY BLASTING ACTIVITIES AND A BLASTING PERMIT FROM THE DOVER FIRE DEPARTMENT MUST BE OBTAINED.
45. THE WATER MAIN SHALL BE POLY WRAPPED IN ACCORDANCE WITH THE CITY OF DOVER STANDARDS.
46. ALL SEWER MAINS AND MANHOLES SHALL BE TESTED IN ACCORDANCE WITH NHDES ENV–WQ 700 REQUIREMENTS. COPIES OF TEST RESULTS SHALL BE PROVIDED TO THECITY OF DOVER ENGINEERING DEPARTMENT.
47. WETLAND PLACARDS SHOULD IDENTIFY THE NO CUT WETLAND BUFFER AND SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION AND AFTER.
48. ALL FITTINGS MUST BE CLASS 140 WATER FITTINGS.
49. ALL GATE VALVES MUST BE MANUFACTURED BY MUELLER OR CLOW.

DEMOLITION NOTES:

1. COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
2. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY DEMOLITION/ CONSTRUCTION ACTIVITIES. (811).
4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, UTILITIES AND PAVEMENT ON THE SITE TO THE LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
6. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS NOT ALREADY OBTAINED BY THE OWNER AND ARRANGE AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF–SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
8. STONES FROM REMOVED STONEWALLS SHALL REMAIN ON–SITE. STONES SHALL BE REPURPOSED ON–SITE AND SHALL NOT BE USED AS FILL.
9. THE LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATION IS NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
10. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF–SITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES, AND CODES.
11. LEDGE REMOVAL VOLUMES ARE ENGINEERS ESTIMATES. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING ADDITIONAL SUBSURFACE INVESTIGATIONS IF NECESSARY TO DETERMINE ESTIMATED VOLUMES.

SITE NOTES

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO APPLICABLE CITY AND STATE CODES.
3. ALL CONSTRUCTION LAYOUT SHALL BE DONE BY A LICENSED SURVEYOR UNDER CONTRACT WITH THE CONTRACTOR.
4. SEE DETAILS FOR SIGN LEGENDS.
5. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", AND THE AMERICAN WITH DISABILITIES ACT, LATEST EDITIONS.
6. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE FACILITIES AND THEIR COMPONENTS DURING DEMOLITION AND CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE OWNERS REPRESENTATIVE. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIE–DOWNS. SUCH MATERIALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AT THE COMPLETION OF THE PROJECT.
7. METHODS OF DEMOLITION, CONSTRUCTION AND ERECTION ARE THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE AND MUNICIPAL REGULATIONS AND PERMITS. ENVIRONMENTAL CONTROLS SHALL INCLUDE BUT SHALL NOT BE LIMITED TO DUST CONTROL AND SILT BARRIERS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO STRUCTURES OR UTILITIES OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION PHASE CAUSED BY HIMSELF, HIS EMPLOYEES, HIS SUBCONTRACTORS OR EMPLOYEES OF SAME. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL TEMPORARY FACILITIES FOR THE PROTECTION OF THE WORK, WORKERS AND PUBLIC SAFETY.
9. THE SITE SHALL BE MAINTAINED TO PROVIDE ACCESSIBILITY IN ALL WEATHER CONDITIONS.
10. REFUSE PICKUP WILL BE BY PRIVATE CONTRACTOR AND WILL BE VIA DUMPSTER ON–SITE.
11. SNOW STORAGE WILL BE ACCORDING TO THE OPERATION AND MAINTENANCE PLAN AND WITHIN AREAS AS INDICATED. ON–SITE SNOW STORAGE SHALL OCCUR ALONG THE EDGES OF PROPOSED PAVEMENT.
12. ALL EXTERIOR DOORS ARE MANUAL AND OPENED FROM THE INTERIOR BY PANIC HARDWARE. ALL EXTERIOR DOORS SHALL COMPLY WITH ADA AND ALL LOCAL BUILDING CODE REQUIREMENTS.
13. BUILDINGS TO BE SOLAR READY.

GRADING NOTES:

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. CONTRACTOR SHALL RETAIN A GEOTECHNICAL ENGINEERING CONSULTANT APPROVED BY THE OWNER, TO CONDUCT COMPACTION TESTING AND FILL GRADATION MONITORING.
3. SEE EROSION CONTROL NOTES & DETAIL SHEET FOR TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
4. ALL DRAINAGE PIPES SHALL BE HDPE OR APPROVED EQUAL UNLESS OTHERWISE NOTED.
5. ALL DISTURBED AREAS NOT OTHERWISE CALLED FOR SURFACE TREATMENT SHALL RECEIVE 6" OF HIGH QUALITY LOAM AND SHALL BE SEEDED WITH GRASS.
6. ALL SITEWORK CONSTRUCTION SHALL BE ADVANCED USING "BEST MANAGEMENT PRACTICES" SANCTIONED BY THE USDA, SCS AND NHDES.
7. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED, UTILIZED AND MAINTAINED UNTIL BASE MATERIALS ARE CONSTRUCTED.
8. CONTRACTOR SHALL PROVIDE A FINISH GRADED SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE AND UNDER RAISED STRUCTURES.
9. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND AS SHOWN ON PLAN. MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED AND UPSTREAM AREAS HAVE BEEN STABILIZED.
10. INSPECT SILT BARRIERS AFTER EACH RAIN STORM OF 1/4 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF THE FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
11. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED FOR THIS PROJECT. THE SWPPP MUST INCLUDE THE APPROPRIATE BEST MANAGEMENT PRACTICES (BMP'S) TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THE SITE. PARTIES RESPONSIBLE FOR DEVELOPING THE SWPPP SHOULD REFER TO THE EPA NPDES CONSTRUCTION GENERAL PERMITS NOTICE OF INTENT FOR A COMPLETE OUTLINE OF REQUIRED ELEMENTS. THESE PLANS AND THE STORMWATER MANAGEMENT SYSTEM INSPECTION & MAINTENANCE PLAN PREPARED FOR THIS PROJECT MAY BE UTILIZED IN FULFILLING THE REQUIREMENTS.
12. LIMIT TREE CLEARING TO ONLY THE EXTENT NECESSARY FOR CONSTRUCTION.
13. CONTRACTOR SHALL NOTIFY THE CITY OF DOVER AND THE DESIGN ENGINEER 48 HOURS PRIOR TO THE INSTALLATION OF PERMANENT STORMWATER BMP'S TO PROVIDE THE CITY AND THE ENGINEER THE OPPORTUNITY TO WITNESS THE CONSTRUCTION AND MATERIALS. THE DESIGN ENGINEER MUST CERTIFY THAT THE STORMWATER MANAGEMENT SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS.
14. DENSITY REQUIREMENTS:

LOCATION	MINIMUM DENSITY
BELOW PAVED OR CONCRETE AREAS	95%
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL	95%
BELOW LOAM AND SEED AREA	90%

* ALL PERCENTAGES SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH AASHTO STANDARD 180, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH AASHTO STANDARD T–191, T–204, OR T–238 AND T–239.

UTILITY CONTACTS

NATURAL GAS: – UNITIL CORPORATION
CONTACT: DAVID MACLEAN
325 WEST ROAD
PORTSMOUTH, NH 03801
TEL: (603)–294–5261
EMAIL: MACLEAND@UNITIL.COM

WATER & SEWER: – CITY OF DOVER COMMUNITY SERVICES DEPARTMENT
PUBLIC WORKS & UTILITIES
CONTACT: KEN MAVROGEORGE, PE
271 MAST ROAD
DOVER, NH 03820
TEL: (603)–516–6450
EMAIL: K.MAVROGEORGE@DOVER.NH.GOV

ELECTRIC: – EVERSOURCE
CONTACT: TREVER EMMONS
4 OLD DOVER ROAD
ROCHESTER, NH 03867
TEL: (603)–332–7515
EMAIL: TREVER.EMMONS@EVERSOURCE.COM

UTILITY NOTES

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
3. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.
4. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
5. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
6. ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, DOUBLE CEMENT LINED DUCTILE IRON PIPE OR TYPE "K" COPPER, OR CITY APPROVED MATERIAL.
7. ALL WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION PRIOR TO ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE CHLORINATION AND TESTING WITH THE CITY OF DOVER WATER DEPARTMENT.
8. ALL GRAVITY SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE NOTED AND CONFORM TO THE REQUIREMENTS OF THE CITY OF DOVER SEWER DEPARTMENT STANDARDS.
9. EXISTING UTILITIES TO BE REMOVED SHALL BE CAPPED AT THE MAIN AND MEET THE CITY OF DOVER COMMUNITY SERVICES DEPARTMENT STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES.
10. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
11. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE UTILITY COMPANIES.
12. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
13. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO THE COMPLETION OF THIS PROJECT.
14. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
15. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES. COORDINATE WITH GAS COMPANY.
16. A 10–FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18–INCH MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS.
17. THE CONTRACTOR SHALL CONTACT "DIG–SAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE "DIG–SAFE" NUMBER ON SITE AT ALL TIMES.
18. SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
19. GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF DOVER.
20. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF DOVER.
21. CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.
22. CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION, PARTICULARLY WATER MAIN AND GAS MAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES. CONTRACTOR SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
23. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PREPARED BY THE PROJECT ELECTRICAL ENGINEER.
24. THE PROPOSED STRUCTURE SHALL COMPLY WITH CHAPTER 81, ARTICLE IV, SECTION 81–27 AND THE STATE BUILDING CODES OF THE CODE OF THE CITY OF DOVER.
25. FIRE SUPPRESSION PLANS SHALL BE PROVIDED TO THE FIRE/INSPECTION DEPARTMENT PRIOR TO INSTALLATION.
26. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
27. SEWAGE LOADING (PER NHDES ENV–WQ 1008.03)
    BUILDING :
    – OFFICE = 800 S.F. x 5 GPD/100 S.F. = 40 GPD
    – WAREHOUSE: 10 EMPLOYEES x 10 GPD = 100
    – TOTAL = 140 GPD
28. PUMP CHAMBERS AS APPLICABLE ARE UNNECESSARY.
29. AN EASEMENT WILL BE GRANTED TO THE CITY ALONG THE WATER LINES TO ALLOW ACCESS FOR OPERATION OF THE WATER INFRASTRUCTURE TO MAINTAIN WATER QUALITY.

LEGEND

S.F.	SQUARE FEET
Ac.	ACRE
±	MORE OR LESS
(TYP.)	TYPICAL
S.C.R.D.	STRAFFORD REGISTRY OF DEEDS
NHHD	NEW HAMPSHIRE HIGHWAY DEPT.
TBR	TO BE REMOVED
ELEV.	ELEVATION
INV.	INVERT
R.O.W.	RIGHT–OF–WAY
	EXISTING UTILITY POLE
	EXISTING SIGN
	EXISTING WATER SHUT–OFF
OHW	OVERHEAD UTILITIES
E	EXISTING ELECTRIC
W	EXISTING WATER LINE
S	EXISTING SEWER LINE
D	EXISTING DRAINAGE LINE
UGT	EXISTING UNDERGROUND TELEPHONE
WV	EXISTING WATER VALVE
GV	EXISTING GAS VALVE
	EXISTING HYDRANT
	EXISTING LIGHT/SIGNAL POLE
S	EXISTING SEWER MANHOLE
D	EXISTING DRAINAGE MANHOLE
	EXISTING CATCHBASIN
5'R	PAVEMENT RADIUS
BCC	BITUMINOUS CONRETE CURB
x 74.00	EXISTING SPOT GRADE
94	EXISTING GRADE
74	PROPOSED FINISH GRADE
x 74.00	PROPOSED SPOT GRADE
	PAVEMENT WITH CURB
	SILT BARRIER
PS	PROPOSED SEWER
PW	PROPOSED WATER
PUGU	PROPOSED UNDERGROUND UTILITIES
PG	PROPOSED GAS

PLANNING FILE NO.: SITE–2025–0001

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3–4–25

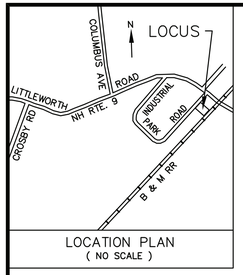
PROJECT NO: 23062
FILE: SITE.DWG
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY: SJH
SCALE: N/A
DATE: 1–29–25

STEPHEN J HAIGHT No. 7978 – STATE OF NEW HAMPSHIRE – PROFESSIONAL ENGINEER – LICENSED – 3–4–25

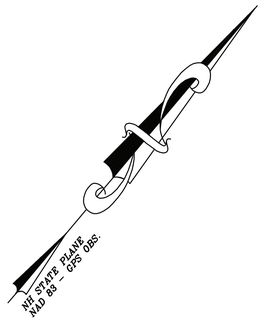
NOTE SHEET

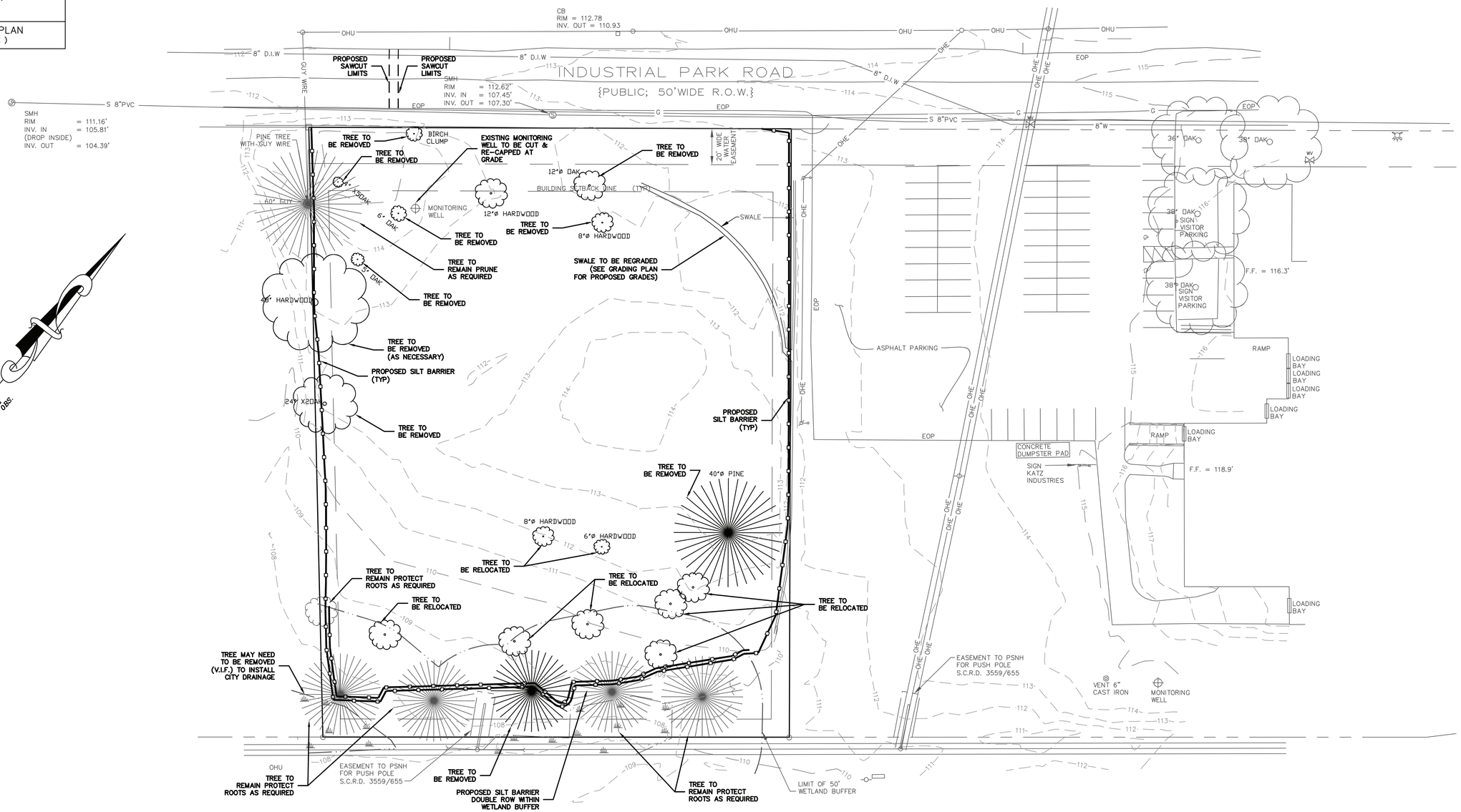
16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820



LOCATION PLAN
(NO SCALE)





NOTE:
1. FOR ALL TREES TO BE RELOCATED SEE LANDSCALE PLAN FOR LOCATION.
2. REFER TO TYPICAL TRENCH DETAIL FOR SAWCUTS & STAGGERED JOINTS FOR PAVEMENT REPAIR.

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)

PLANNING FILE NO.: SITE-2025-0001

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

PROJECT NO: 23062
APPROVED BY: SJH
DESIGN BY: JRG
DRAWN BY: SRD
SCALE: 1"=30'
DATE: 1-29-25
FILE: SITE.DWG

STEPHEN J HAIGHT No. 7978 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
3/4/2025

DEMOLITION PLAN

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

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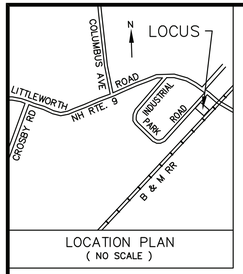
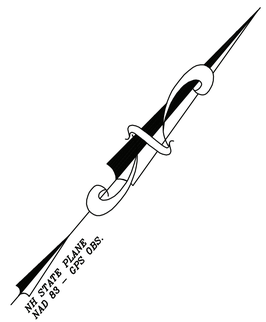
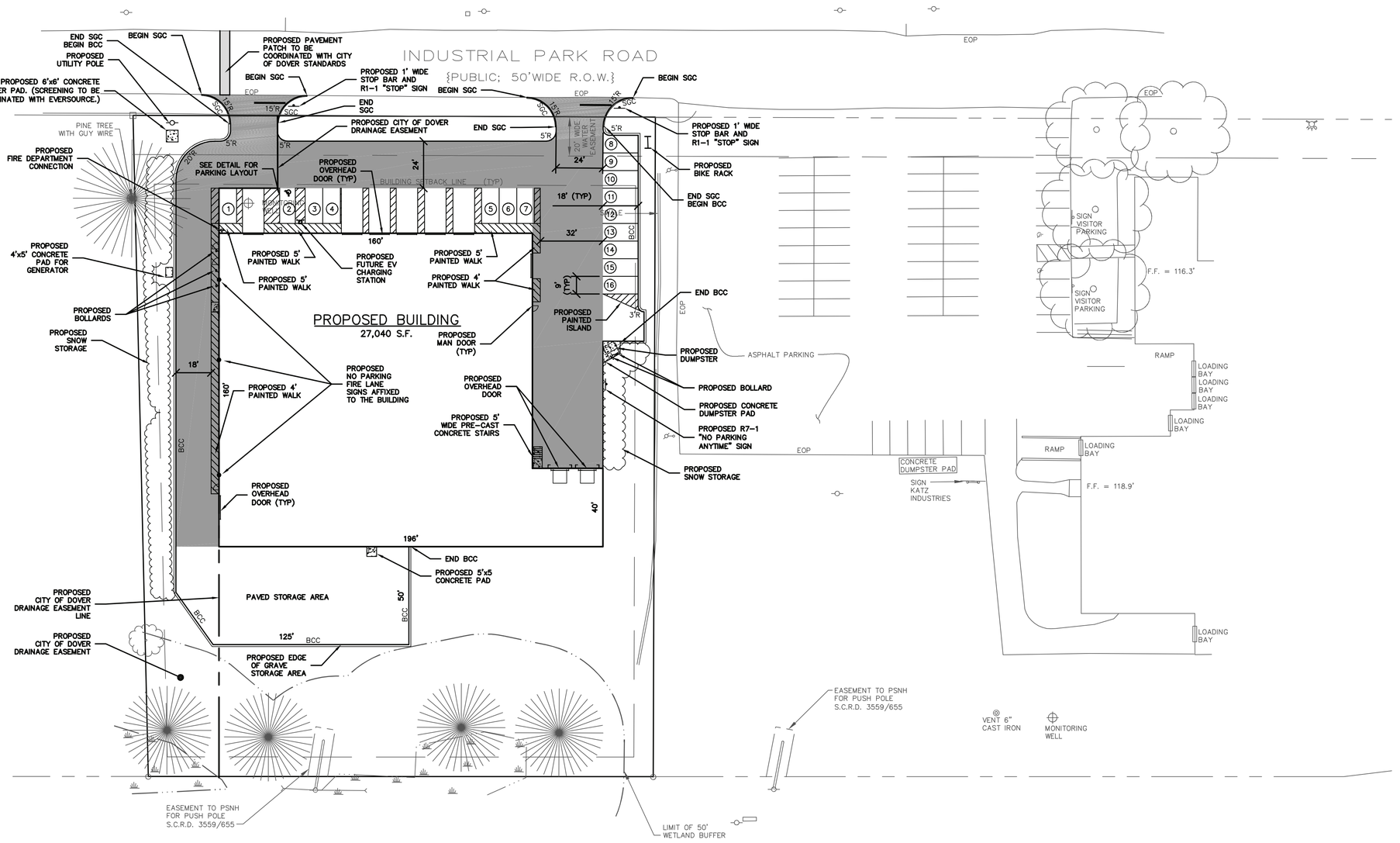


LOCATION PLAN
(NO SCALE)





SITE PARKING CALCULATIONS
COMMERCIAL/MANUFACTURING DISTRICT

USES:	REQUIRED	PROPOSED
OFFICE AREA: 1 SPACE/300 S.F. 800 S.F. x 1 / 300 S.F.=2.67	3	3
WAREHOUSE AREA: 11 SPACE/800 S.F. 26,240 S.F. x 1/800 S.F.=32.8	33	13
TOTAL	36	16
ACCESSIBLE PARKING	1 (VAN)	1 (VAN)

SNOW STORAGE CALCULATIONS
26,944 S.F. PAVEMENT 1 S.F. STORAGE / 10 SF PAVEMENT = ±2,694.4 S.F.

SNOW STORAGE AREA PROVIDED ±3,115 S.F.

– PROPOSED HEAVY DUTY PAVEMENT SECTION

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)

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NO.	REVISION	APP'D	DATE
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DRAWN BY: SRD
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PROJECT NO: 23062
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STATE OF NEW HAMPSHIRE
STEPHEN J. HAIGHT
No. 7978
LICENSED PROFESSIONAL ENGINEER

SITE PLAN

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

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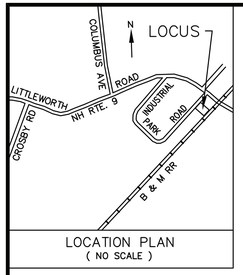
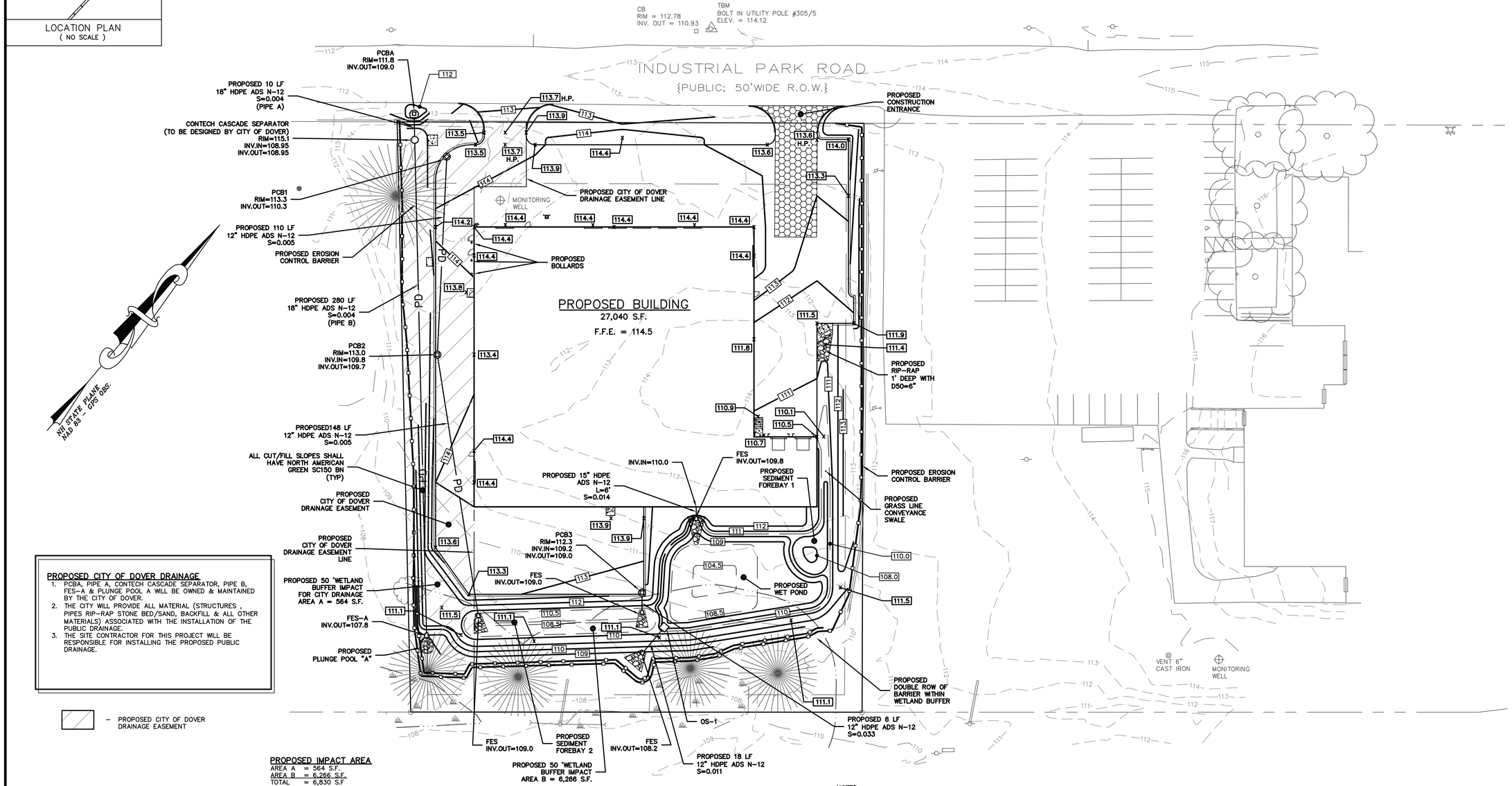


LOCATION PLAN
(NO SCALE)



PROPOSED CITY OF DOVER DRAINAGE

1. PCBA, PIPE A, CONTECH CASCADE SEPARATOR, PIPE B, FES-A & PLUNGE POOL A WILL BE OWNED & MAINTAINED BY THE CITY OF DOVER.
2. THE CITY WILL PROVIDE ALL MATERIAL (STRUCTURES , PIPES RIP-RAP STONE BED/SAND, BACKFILL & ALL OTHER MATERIALS) ASSOCIATED WITH THE INSTALLATION OF THE PUBLIC DRAINAGE.
3. THE SITE CONTRACTOR FOR THIS PROJECT WILL BE RESPONSIBLE FOR INSTALLING THE PROPOSED PUBLIC DRAINAGE.

▨ – PROPOSED CITY OF DOVER DRAINAGE EASEMENT

PROPOSED IMPACT AREA

AREA A = 564 S.F.
AREA B = 6,266 S.F.
TOTAL = 6,830 S.F

TOTAL DISTURBANCE ON SITE = 78,963 S.F.

- ALTERATION OF TERRAIN PERMIT: NOT REQUIRED
- EPA CONSTRUCTION GENERAL PERMIT: REQUIRED TO BE FILED PRIOR TO THE START OF CONSTRUCTION

Total Pollutant Removal Provided

Pollutant Removal Provided				
Pollutant	Annual Load (lbs/yr)	Removal Required (lbs/yr)	Removal Provided (lbs/yr)	% Removed
TSS	203.58	162.86	162.82	80%
TN	22.65	11.32	12.46	55%
TP	1.64	0.82	1.11	68%

Conclusion: The proposed mitigation measures implemented on site meet the minimum treatment rates for TSS, TN, and TP required by the City's regulations.

NOTES:

1. COPIES OF ANY AND ALL TEST PIT LOGS FOR BUILDING OR PAVEMENT DEIGN, OR ANY OTHER REASON, SHALL BE PROVIDED TO COMMUNITY SERVICES.
2. A CONSTRUCTION ENTRANCE IS REQUIRED AT ALL POINTS OF ACCESS TO THE SITE TO BE UTILIZED BY CONSTRUCTION VEHICLES.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

PLANNING FILE NO.: SITE-2025-0001

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PROJECT NO:23062
FILE: SITE.DWG

STEPHEN J. HAIGHT No. 7978 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE

GRADING, DRAINAGE & EROSION CONTROL PLAN

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE
STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

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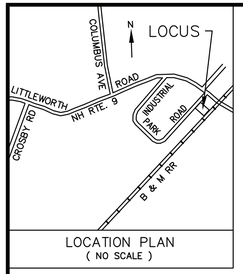

LOCATION PLAN
(NO SCALE)

NH STATE PLANE
NAD 83 - GPS OBS.

PROPOSED 8"x6" D.I. TAP & SLEEVE WITH ANCHORED GATE VALVE
PROPOSED THRUST BLOCK
PROPOSED 6" D.I. WATER LINE
PROPOSED 2" POLY GAS LINE WITH VALVE
PROPOSED UTILITY POLE
PROPOSED TRANSFORMER
PROPOSED 6" FIRE/WATER SERVICE (SEE DETAIL)
PROPOSED (3)-4" SCHEDULE 40 PVC
PROPOSED GENERATOR
PROPOSED 1" DOMESTIC WATER (SEE DETAIL)
PROPOSED FDC
PROPOSED BOLLARDS
PROPOSED (2)-4" SCHEDULE 40 PVC
PROPOSED WYE
INV.=107.31 (MATCH CROWN)
PROPOSED 70 LF 6" SDR35 S=0.020
INV.=108.7
PROPOSED FUTURE EV CHARGING
PROPOSED BUILDING
27,040 S.F.
F.F.E. = 114.5
MONITORING WELL
BUILDING SETBACK LINE (TYP)
20' WIDE WATER EASEMENT
SWALE
INDUSTRIAL PARK ROAD
{PUBLIC; 50'WIDE R.O.W.}
SMH
RIM = 112.62'
INV. IN = 107.45'
INV. OUT = 107.30'
SMH
RIM = 111.16'
INV. IN = 105.81'
(DROP INSIDE)
INV. OUT = 104.39'
PINE TREE WITH GUY WIRE
GUY WIRE
POWN
OHU
OHE
8" D.I.W
S 8"PVC
8"W
EOP
PG
PE
PD
ASPHALT PARKING
CONCRETE DUMPSTER PAD
SIGN KATZ INDUSTRIES
SIGN VISITOR PARKING
F.F. = 116.3'
F.F. = 118.9'
RAMP
LOADING BAY
EASEMENT TO PSNH FOR PUSH POLE S.C.R.D. 3559/655
VENT 6" CAST IRON
MONITORING WELL
LIMIT OF 50' WETLAND BUFFER

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)

PLANNING FILE NO.: SITE-2025-0001

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FILE: SITE.DWG

STEPHEN J HAIGHT No. 7978 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

UTILITY PLAN

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

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DESCRIPTION
1. THE INTENT OF THIS PLAN IS TO SHOW SITE IMPROVEMENTS ASSOCIATED WITH THE CONSTRUCTION OF A 27,040 S.F. BUILDING AS WELL AS DRAINAGE AND UTILITY IMPROVEMENTS, AND SITE ACCESS.

PROJECT NAME AND LOCATION
16 INDUSTRIAL PARK , LLC
TAX MAP 6, LOT 4-1 *LATITUDE N43° 11' 09"*
16 INDUSTRIAL DRIVE *LONGITUDE W70° 54' 04"*
DOVER, NH

DISTURBED AREA
±78,963 S.F..

NOTES:
1. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY TIME BEFORE DISTURBED AREAS ARE STABILIZED.
2. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

SEQUENCE OF MAJOR ACTIVITIES
1. CONTRACTOR SHALL PREPARE THE SWPPP. FILE FOR AND OBTAIN THE NOI A MINIMUM OF 2 WEEKS PRIOR TO COMMENCEMENT OF SITE WORK.
2. PLACE TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S PRIOR TO EARTH MOVING ACTIVITIES.
3. ALL EROSION CONTROL AND PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO COMMENCING EARTH MOVING OPERATIONS.
4. SELECTIVE DEMOLITION.
5. REGRADE SITE TO SUBGRADE.
6. TEMPORARY WATER DIVERSION (SWALES, BASINS) MUST BE USED AS NECCESSARY UNTIL AREAS ARE STABILIZED.
7. SWALES AND PONDS (AS APPLICABLE) SHALL BE CONSTRUCTED EARLY ON IN THE CONSTRUCTION SEQUENCE AND BEFORE ROUGH GRADING OF THE SITE AND ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
8. INSTALL DRAINAGE STRUCTURES AND CONTROLS.
9. INSTALL FOUNDATION FOOTINGS AND WALLS.
10. INSTALL UTILITIES.
11. PLACE GRAVELS AND FINE GRADE.
12. STABILIZE ROADWAYS AND PARKING AREAS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
13. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED (AS APPLICABLE) WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
14. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY 1/2" OF RAINFALL.
15. IN ALL CASES THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION AND IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
16. WHEN ALL SITE WORK IS COMPLETE AND ALL DISTURBED AREAS ARE STABILIZED REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND FILE THE EPA – N.O.T.

DEFINITIONS
AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED.
1. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED; OR
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED

INSTALLATION, MAINTENANCE, AND INSPECTION PROCEDURES OF EROSION AND SEDIMENT CONTROLS

A. SILT BARRIER
1. INSTALLATION
   a. USE SILT BARRIER AS PERIMETER CONTROLS, PARTICULARLY AT THE LOWER OR DOWN SLOPE EDGE OF A DISTURBED AREA.
   b. LEAVE SPACE FOR MAINTENANCE BETWEEN TOE AND SLOPE OF SILT BARRIER.
   c. TRENCH IN THE SILT BARRIER ON THE UPHILL SIDE (6 INCHES DEEP BY 6 INCHES WIDE).
   d. INSTALL STAKES ON THE DOWNHILL SIDE OF THE SILT BARRIER.
   e. CURVE THE END OF THE SILT BARRIER UP-GRADIENT TO HELP IT CONTAIN RUNOFF.
2. SEQUENCE OF INSTALLATION
   a. SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
3. MAINTENANCE
   a. SILT BARRIERS SHOULD BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
   b. SILT BARRIERS HAVE A USEFUL LIFE OF ONE SEASON. ON LONGER CONSTRUCTION PROJECTS, SILT BARRIERS SHOULD BE REPLACED PERIODICALLY TO MAINTAIN EFFECTIVENESS.
   c. REMOVE SEDIMENT WHEN IT REACHES ONE-THIRD (1/3) THE HEIGHT OF THE SILT BARRIER.
   d. REPLACE THE SILT BARRIERS WHERE THEY ARE TORN, WORN, OR OTHERWISED DAMAGED AND MONITOR PERFORMANCE TO ENSURE EFFECTIVE PERFORMANCE.
   e. RETRENCH OR REPLACE ANY SILT BARRIER THAT IS NOT PROPERLY ANCHORED TO THE GROUND.
   f. IF THERE IS EVIDENCE OF END FLOW ON PROPERLY INSTALLED BARRIERS, EXTEND BARRIERS UPHILL OR CONSIDER REPLACING THEM WITH OTHER MEASURES, SUCH AS TEMPORARY DIVERSIONS AND SEDIMENT TRAPS.
   g. SILT BARRIERS SHOULD BE REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SILT BARRIERS SHOULD BE REPLACED WITH A TEMPORARY CHECK DAM.

B. MULCHING
1. TIMING
   a. APPLY MULCH PRIOR TO ANY STORM EVENT. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.
   b. IN OTHER AREAS, THE TIME PERIOD CAN RANGE FROM 14 TO 30 DAYS OF INACTIVITY ON A AREA. THE LENGTH OF TIME VARYING WITH SITE CONDITIONS. PROFESSIONAL JUDGEMENT SHALL BE USED TO EVALUATE THE INTERACTION OF SITE CONDITIONS (SOIL ERODIBILITY, SEASON OF YEAR, EXTENT OF DISTURBANCE, PROXIMITY TO SENSITIVE RESOURCES, ETC.) AND THE POTENTIAL IMPACT OF EROSION ON ADJACENT AREAS TO CHOOSE AN APPROPRIATE TIME RESTRICTION.
   c. WITHIN 100 FEET OF RIVERS, STREAMS, WETLANDS, AND IN LAKE AND POND WATERSHEDS, THE TIME PERIOD OF WHICH MULCHING SHOULD TAKE OCCUR SHOULD BE NO GREATER THAN SEVEN (7) DAYS. THIS SEVEN DAY LIMIT SHOULD BE REDUCED FURTHER DURING WET WEATHER PERIODS.
2. APPLICATION RATE
   a. MULCH SHALL BE APPLIED AT A RATE OF BETWEEN 1.5 TO 2 TONS PER ACRE, OR 70 TO 90 POUNDS PER 1000 SQUARE FEET.
   b. GUIDELINES FOR WINTER MULCH APPLICATION. WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWING SEASON) IT SHALL BE AT A RATE OF 150-200 POUNDS OF HAY OR STRAW PER ACRE WITH ABOUT 4 INCHES IN DEPTH. A TACKIFIER MAY BE ADDED TO THE MULCH.
3. MAINTENANCE
   a. ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS. CHECK FOR SIGNS OF EROSION OR DISPLACEMENT OF THE MULCH. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED.
   b. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE AND SHOULD BE REPAIRED AS NECCESSARY.
   c. INSPECTIONS SHOULD TAKE PLACE UNTIL THE SITE IS ESTABLISHED.
   d. EROSION CONTROL MIX MULCH USED FOR TEMPORARY STABILIZATION SHOULD BE LEFT IN PLACE. VEGETATION ADDS STABILITY AND SHOULD BE PROMOTED.

C. TEMPORARY SEEDING
1. SEEDBED PREPARATION
   a. STONES AND TRASH SHOULD BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
   b. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
   c. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS.
      i) APPLY FERTILIZER AT A RATE OF 600 POUNDS PER ACRE OR 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER OR EQUIVALENT.
      ii) APPLY LIMESTONE AT A RATE OF 3 TONS PER ACRE OR 138 POUNDS PER 1,000 SQUARE FEET.
2. SEEDING
   a. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SUMMARY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   b. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
   c. TEMPORARY SEEDING BETWEEN MAY 15TH AND AUGUST 15TH SHOULD BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE.
   d. VEGETATED GROWTH COVERING 85% OF THE DISTURBED AREA SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH.
3. MAINTENANCE
   a. TEMPORARY SEEDING SHALL BE INSPECTED PERIODICALLY. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER FABRICS, CHECK DAMS, ETC.).

D. PERMANENT SEEDING
1. BEDDING – STONES LARGER THAN 2 INCHES, TRASH, ROOTS, AND OTHER DEBRIS INTERFERRING WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA SHOULD BE REMOVED. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF 4" TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL.
2. FERTILIZER
   a. LIME AND FERTILIZER SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 4 INCHES USING A DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT PRIOR TO OR AT THE SAME TIME OF SEEDING.
   b. FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITORGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER.
   c. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
   AGRICULTURAL LIMESTONE @ 138 LBS. PER 1,000 S.F.
   LOW PHOSPHATE (N-P205-K20) FERTILIZER @ 13.8 LBS. PER 1,000 S.F.
3. SEED MIXTURE (RECOMMENDED)
   RATE:

TYPE	LBS. PER ACRE	LBS. PER 1,000 S.F.
TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDSFOOT TREFOIL	8	0.20
TOTAL	48	1.10

4. SEEDING
   a. SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES. PERMANENT SEEDING SHOULD BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST.
   b. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   c. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT TEMPORARY STABILIZATION MEASURES FOR OVERWINTER PROTECTION.
5. HYDROSEEDING
   a. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF STRAW MULCH ON CRITICAL AREAS IS PREFERRED SINCE IT GRANTS BETTER SLOPE PROTECTION BY USING ADHESIVE MATERIALS.
   b. SLOPES MUST BE NO STEEPER THAN 2 TO 1 (2 FEET HORIZONTALLY TO 1 FOOT VERTICALLY).
   c. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
6. MAINTENANCE
   a. PERMANENT SEEDED AREAS SHOULD BE INSPECTED AT LEAST MONTHLY DURING THE COURSE OF CONSTRUCTION. INSPECTIONS, MAINTENANCE, AND CORRECTIVE ACTIONS SHOULD CONTINUE UNTIL THE OWNER ASSUMES PERMANENT OPERATION OF THE SITE.
   b. SEEDED AREAS SHOULD BE MOWED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION, WITH MOWING HEIGHT AND FREQUENCY DEPENDENT ON TYPE OF GRASS COVER.
   c. BASED ON INSPECTION, AREAS SHOULD BE RESEEDED TO ACHIEVE FULL STABALIZATION OF EXPOSED SOILS.
   d. IF EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHOULD BE MADE AND AREAS RESEEDED. WITH OTHER TEMPORARY MEASURES USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.
   e. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION.

E. STORM DRAIN INLET PROTECTION
1. SPECIFICATIONS
   a. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE BARRIER SHOULD BE LESS THAN ONE ACRE.
   b. ANY RESULTANT PONDING OF STORMWATER MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.
2. INSTALLATION
   a. INSTALL INLET PROTECTION AS SOON AS STORM DRAIN INLETS ARE INSTALLED AND BEFORE LAND-DISTURBANCE ACTIVITIES BEGIN IN AREAS WITH EXISTING STORM DRAIN SYSTEMS.
   b. PROTECT ALL INLETS THAT COULD RECEIVE STORMWATER FROM YOUR CONSTRUCTION PROJECT.
   c. USE IN CONJUNCTION WITH OTHER EROSION PREVENTION AND SEDIMENT CONTROL BMPS.
   d. DESIGN YOUR INLET PROTECTION TO HANDLE THE VOLUME OF WATER FROM THE AREA BEING DRAINED. ENSURE THAT THE DESIGN IS SIZED APPROPRIATELY.
3. MAINTENANCE
   a. INSPECT INLETS BARRIERS FREQUENTLY, BEFORE AND AFTER EACH RAINFALL EVENT AND REPAIR WHEN NECESSARY.
   b. SEDIMENT SHOULD BE REMOVED AND THE STORM DRAIN SEDIMENT BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE BARRIER.
   c. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   d. SWEEP STREETS, SIDEWALKS, AND OTHER PAVED AREAS REGULARLY.
   e. ALL CATCH BASINS AND STORM DRAIN INLETS MUST BE CLEANED AT THE END OF CONSTRUCTION AND AFTER THE SITE HAS BEEN FULLY STABILIZED

TIMING OF CONTROLS/MEASURES
AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES THE SILT BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING ANY CLEARING OR GRADING OF THE SITE. STRUCTURAL CONTROLS SHALL BE INSTALLED CONCURRENTLY WITH THE APPLICABLE ACTIVITY. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN TWENTY ONE (21) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN FOURTEEN (14) DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, SILT FENCES AND ANY EARTH/DIKES WILL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED. ALL AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.

WASTE DISPOSAL
a. WASTE MATERIALS
ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN A DUMPSTER. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON SITE. ALL PERSONEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
b. HAZARDOUS WASTE
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
c. SANITARY WASTE
ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

MAINTENACE OF STORMWATER MANAGEMENT FACILITIES
THE PROJECT PROPONENT IS RESPONSIBLE FOR THE MAINTENANCE OF ALL STORMWATER FACILITIES DURING CONSTRUCTION AND THE PROPERTY OWNER IS RESPONSIBLE AFTER CONSTRUCTION IS COMPLETE.

CATCH BASINS & STORMWATER TREATMENT STRUCTURES
1. CATCH BASINS & STORMWATER TREATMENT STRUCTURES SHOULD BE INSPECTED ON A MONTHLY BASIS AND/OR AFTER A MAJOR RAINFALL EVENT TO ASSURE THAT DEBRIS OR SEDIMENTS DO NOT REDUCE THE EFFECTIVENESS OF THE SYSTEM.

SPIL PREVENTION

A. MATERIAL MANAGEMENT PRACTICES
THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RICK OF SPILLS OR OTHER ACCIDENTAL SANITARY EXPOSURE OF MATERIALS AND SUBSTANCE DURING CONSTRUCTION TO STORMWATER RUNOFF:
GOOD HOUSEKEEPING:
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES THAT WILL BE FOLLOWED ON SITE DURING
1. THE CONSTRUCTION PROJECT:
   a. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.
   b. ALL MATERIALS STORED ON SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
   c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
   d. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.
   e. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
   f. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
2. HAZARDOUS PRODUCTS:
   a. THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
   b. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
   c. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.
   d. SURPLUS PRODUCT THAT MUST BE DISPOSED OF WILL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

B. PRODUCT SPECIFICATION PRACTICES
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:
1. PETROLEUM PRODUCTS:
   a. ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENACE TO REDUCE LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
2. FERTILIZERS:
   a. FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
3. PAINTS:
   a. ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE DISPOSED OF PROPERLY ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
4. CONCRETE TRUCKS:
   a. CONCRETE TRUCKS WILL DISCHARGE AND WASH OUT SURPLUS CONCRETE OR DRUM WASH WATER IN A CONTAINED AREA ON SITE.

C. SPILL CONTROL PRACTICES
IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
   a. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
   b. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO: BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
   c. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
   d. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
   e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OF LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
   f. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECURRING AND HOW TO CLEANUP THE SPILL IF IT OCCURS. A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.
   g. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.

THE PROJECT PROPONENT IS REQUIRED TO MANAGE CONSTRUCTION TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO CONTROLLING INVASIVE SPECIES AND CONTROLLING FUGITIVE DUST IN ACCORDANCE WITH ENV-A 1002.

AGR 3800 PROHIBITED INVASIVE PLANT SPECIES RULES

THE RULE, AGR 3800, STATES: NO PERSON SHALL COLLECT, TRANSPORT, IMPORT, EXPORT, MOVE, BUY SELL, DISTRIBUTE, PROPAGATE OR TRANSPLANT ANY LIVING AND VIABLE PORTION OF ANY PLANT SPECIES WHICH INCLUDED ALL OF THEIR CULTIVARS AND VARIETIES, LISTED IN TABLE 3800.1, NEW HAMPSHIRE PROHIBITED INVASIVE SPECIES LIST'. A COMPLETE COPY OF THE RULES CAN BE ACCESSED ON THE INTERNET AT
HTTP://AGRICULTURE.NH.GOV/TOPICS/PLANTS_INSECTS.HTM.

ENV-A 1002 FUGITIVE DUST: PRECAUTIONS TO PREVENT, ABATE, AND CONTROL FUGITIVE DUST

a. ANY PERSON ENGAGED IN ANY ACTIVITY WITHIN THE STATE EMITS FUGITIVE DUST, OTHER THAT THOSE LISTED IN ENV-A 1002.02 (b), SHALL TAKE PRECAUTIONS THROUGHOUT THE DURATION OF THE ACTIVITY IN ORDER TO PREVENT, ABATE, AND CONTROL THE EMISSION OF FUGITIVE DUST.
b. PRECAUTIONS REQUIRED BY (a) ABOVE, SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
   i) THE USE OF WATER OR HYDROPHILIC MATERIAL ON OPERATIONS OR SURFACES, OR BOTH;
   ii) THE APPLICATION OF ASPHALT, WATER, OR HYDROPHILIC MATERIAL, OR TARPS OR OTHER SUCH COVERS TO MATERIAL STOCKPILES;
   iii) THE USE OF HOODS, FANS, FABRIC FILTERS, OR OTHER DEVICES TO ENCLOSE AND VENT AREAS WHERE MATERIALS PRONE TO PRODUCING FUGITIVE DUST ARE HANDLED;
   iv) THE USE OF CONTAINMENT METHODS FOR SANDBLASTING OR SIMILAR OPERATIONS; AND
   v) THE USE OF VACUUMS OR OTHER SUCTION DEVICES TO COLLECT AIRBORNE PARTICULATE MATTER.

PER 153-10 F.
ALL SITE IMPROVEMENTS WHICH REQUIRE BLASTING OF LAND SHALL MEET THE FOLLOWING REQUIRMENTS PRIOR TO ANY BLASTING OCCURING.

1. THE APPLICANT SHALL PREPARE A PRE-BLAST SURVEY OF ALL STRUCTURES WITHIN FIVE HUNDRED (500) FEET OF THE EXTERNAL BOUNDARIES OF THE PROPOSED LOT TO BE DEVELOPED. THIS SURVEY, ALONG WITH A MONITORING PLAN, SHALL BE ON FILE WITH THE DOVER FIRE AND RESCUE. UPON RECOMMENDATIONS OF THE CHIEF, THE PLANNING BOARD MAY REQUIRE A PRE-BLAST SURVEY OF ALL STRUCTURES WITHIN ONE THOUSAND (1000) FEET.
2. THE APPLICANT SHALL HOLD A NEIGHBORHOOD MEETING TO REVIEW THE BLASTING PLAN AND PRE-BLAST SURVEY, WITH REPRESENTATIVES OF THE FIRE AND RESCUE AND THE BLASTING COMPANY IN ATTENDANCE, PRIOR TO ANY ON-SITE BLASTING. ABUTTERS WITHIN ONE THOUSAND (1000) FEET OF THE EXTERNAL BOUNDARY OF THE PROJECT PARCEL SHALL BE NOTIFIED BY THE CERTIFIED MAIL (PAID FOR BY THE APPLICANT) OF THE MEETING NO LESS THAN TEN (10) DAYS PRIOR TO THE MEETING AND NO MORE THAN FIFTEEN (15) DAYS PRIOR TO THE MEETING. THE NOTICE SHALL STATE THE TIME AND DATE OF THE BLASTING AND CONTAIN A MAP SHOWING THE BLASTING AREA, THE 1,000-FOOT-RADIUS AREA, AND THE 500-FOOT-RADIUS AREA.
3. PERMIT HOLDERS SHALL BE IN COMPLIANCE WITH NFPA 495, EXPLOSIVE MATERIALS CODE, IN ADDITION TO ALL OTHER ORDINANCES AND CODES SET FORTH IN THE CITY OF DOVER CODE, § 153-14A, STORMWATER MANAGEMENT, EROSION CONTROL AND FLOOD HAZARDS, OF THIS CHAPTER AND THE CITY OF DOVER FIRE PREVENTION CODE, WHICH SPECIFICALLY PROHIBITS THE OVERNIGHT STORAGE OF EXPLOSIVES OR BLASTING AGENTS. FURTHER, ALL STORAGE MAGAZINES SHALL BE LOCKED IN THE OPEN POSITION AT THE END OF THE DAYS OPERATION FOR EASY INSPECTION BY CITY OFFICIALS.
4. BLASTING PERMITS MAY BE OBTAINED BY CALLING THE DOVER FIRE AND RESCUE DURING NORMAL BUSINESS HOURS. THE PERMITS ARE ONLY ACTIVE FOR THE DATES AND TIME SPECIFIED ON THE PERMIT.
5. PERMIT HOLDERS SHALL HOLD INSURANCE AGAINST CLAIMS FOR DAMAGES FOR PERSONAL INJURY AND PROPERTY WHICH MAY ARISE FROM THE PERFORMANCE OF THE WORK.
6. HOURS OF OPERATION FOR THE BLASTING SHALL BE NO EARLIER THAN 8:00AM AND NO LATER THAN 6:00PM, MONDAY THROUGH FRIDAY, EXCLUDING FEDERAL HOLIDAYS.

WINTER CONSTRUCTION NOTES
1. ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT.
2. ALL DITCHES & SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS.
3. AFTER OCTOBER 15TH, INCOMPLETE ROAD AND PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

PLANNING FILE NO.: SITE-2025-0001

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NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

DATE: 1-29-25
SCALE: N/A
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO:23062
FILE: SITE.DWG

CNE
CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

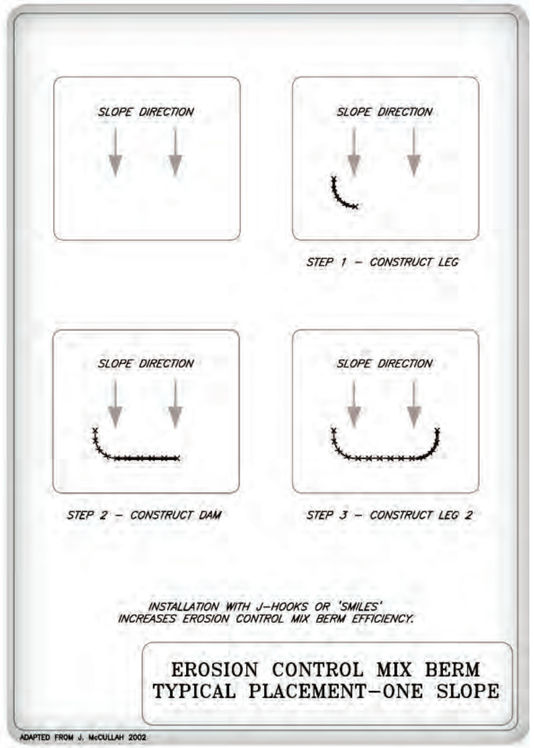
STEPHEN J HAIGHT No. 7979 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

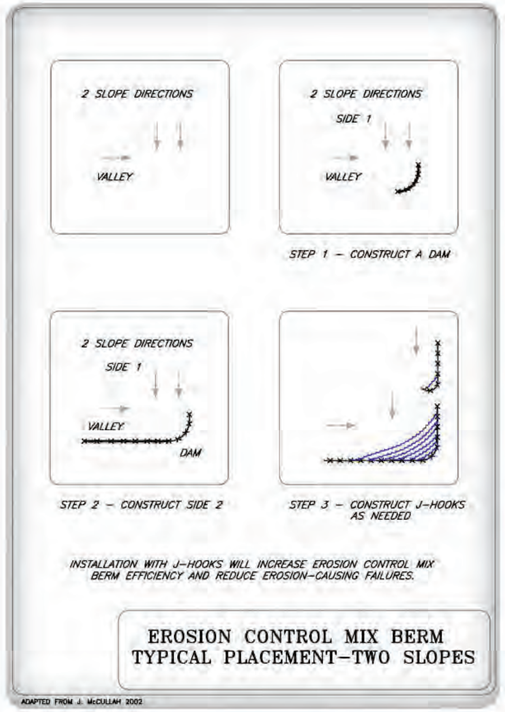
SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

EROSION CONTROL NOTES

9



DETAIL FROM NHDES STORMWATER MANUAL VOLUME 3



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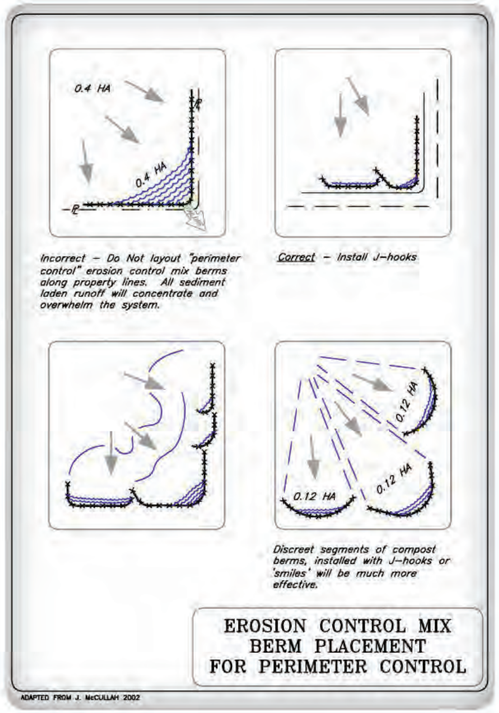

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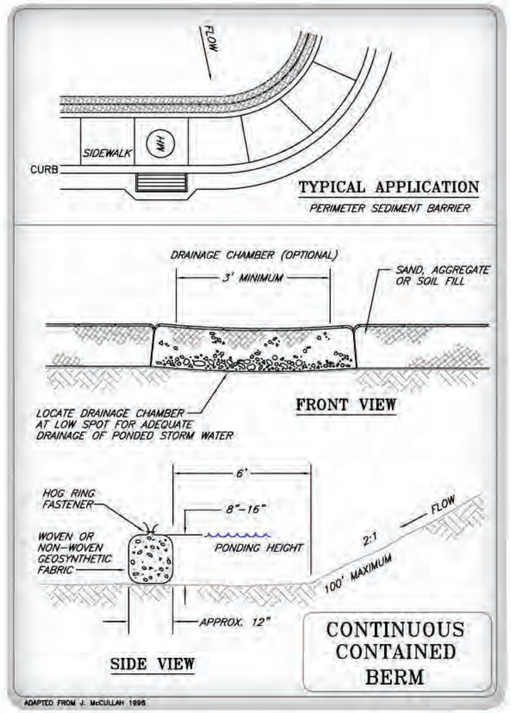

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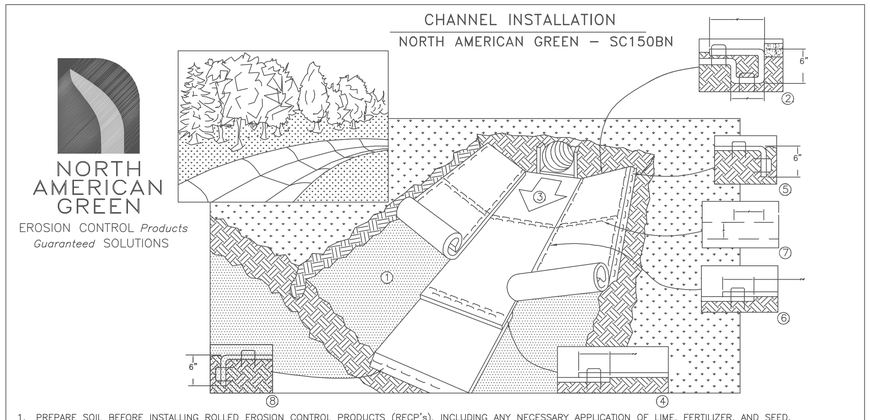
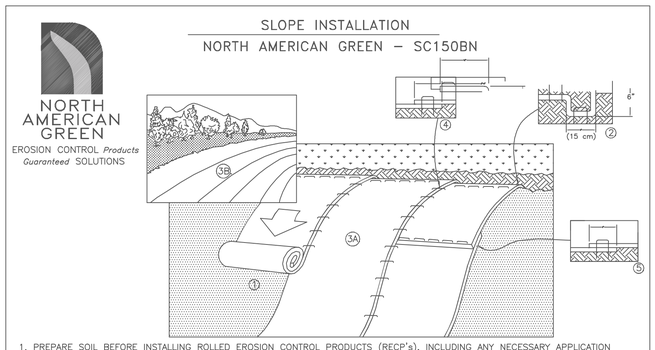


1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4" – 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" – 5" (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. NOTE: * IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

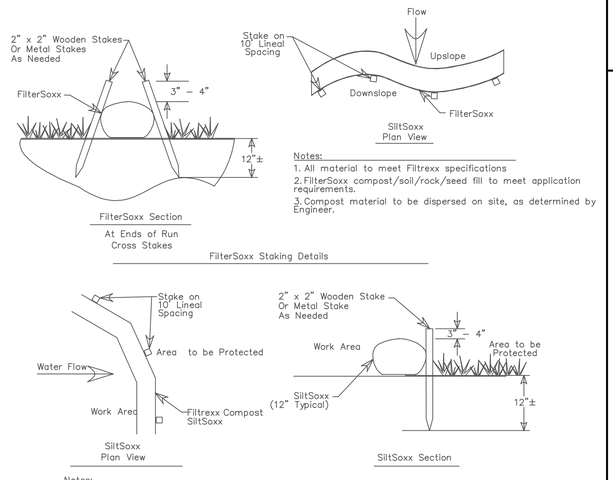
NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™ , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" – 5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH.
NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.

NOTE: THE USE OF WELDED PLASTIC OR BIODEGRADABLE PLASTIC NETTING OR THREAD IN EROSION CONTROL MATTING IS PROHIBITED. THE USE OF WILDLIFE FRIENDLY ORGANIC MATERIALS IS RECOMMENDED.



SILTSOXX DETAILS

NOT TO SCALE

PLANNING FILE NO.: SITE-2025-0001

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CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
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NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25
PROJECT NO: 23062			
APPROVED BY: SJH			
DESIGN BY: JRG			
DRAWN BY: SRD			
SCALE: N.T.S.			
DATE: 1-29-25			
FILE: SITE.DWG			

STATE OF NEW HAMPSHIRE – STEPHEN J. HAIGHT No. 7978 – LICENSED PROFESSIONAL ENGINEER

EROSION CONTROL DETAILS

SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

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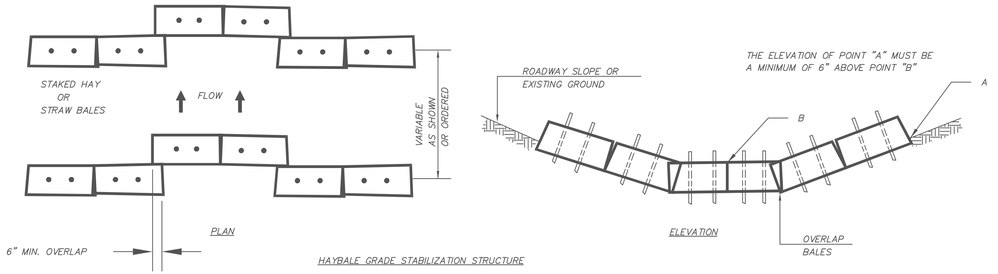
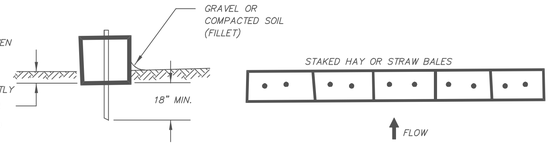


HAYBALE GRADE STABILIZATION STRUCTURE

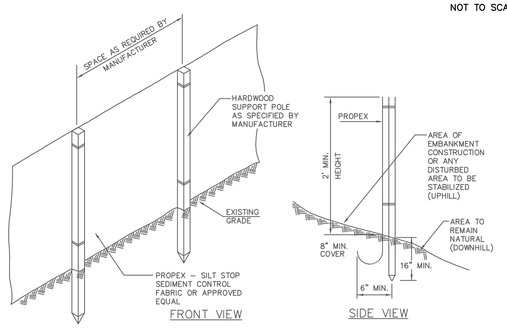
CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY 2" x 2" STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
6. REMOVE AND PROPERLY DISPOSE OF ALL SEDIMENT PRIOR TO REMOVING HAYBALES.



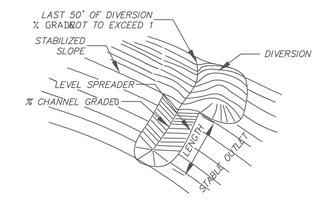
HAYBALE NOTES AND DETAILS

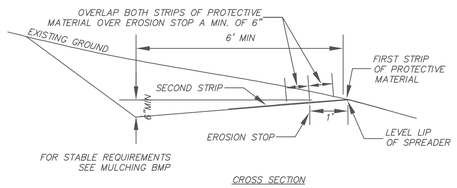
NOT TO SCALE



SILT FENCE DETAIL

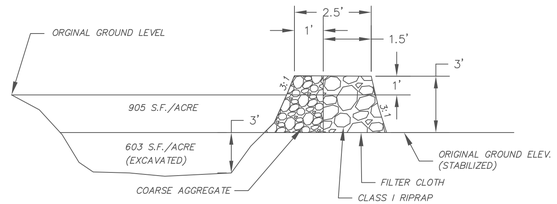
NOT TO SCALE

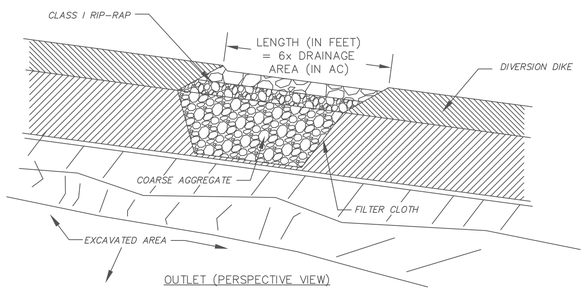




LEVEL SPREADER DETAIL

NOT TO SCALE





NOTES:
1. COARSE AGGREGATE SHALL MEET NHDOT 304.5 SPECIFICATIONS AND SHALL NOT CONTAIN MORE THAN 5% FINES PASSING THE #200 SIEVE.
2. FILTER CLOTH SHALL BE MIRAFI 700X OR APPROVED EQUAL.
3. CLASS I RIPRAP SHALL MEET NHDOT 583 SS SPECIFICATIONS.
4. THE MAXIMUM CONTRIBUTING AREA TO THE TRAP SHALL BE LESS THAN 5 AC.
5. THE TRAP SHALL BE CLEANED WHEN 50% OF THE ORIGINAL VOLUME IS FILLED.
6. MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.

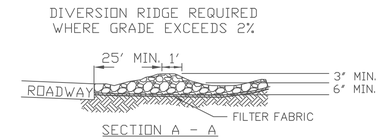
TEMPORARY SEDIMENT TRAP

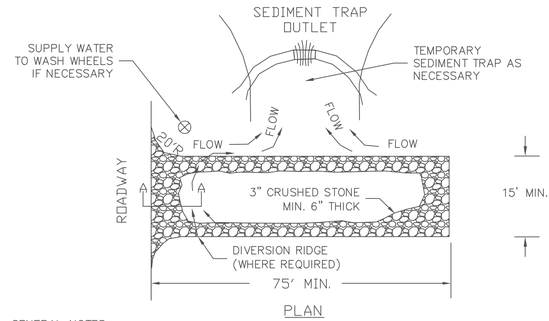
NOT TO SCALE

NOTE:
SEE EROSION CONTROL SHEET FOR MATERIAL, INSTALLATION AND MAINTENANCE REQUIREMENTS.

STONE CHECK DAM

NOT TO SCALE





A. GENERAL NOTES:

1. A STABILIZED CONSTRUCTION ENTRANCE/EXIT CONSISTS OF A PAD OF STONE AGGREGATE PLACED ON A GEOTEXTILE FILTER FABRIC, LOCATED AT ANY POINT WHERE TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE TO AN EXISTING ACCESS ROAD WAY OR OTHER PAVED SURFACE. ITS PURPOSE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES. THIS HELPS PROTECT RECEIVING WATERS FROM SEDIMENT CARRIED BY STORM WATER RUNOFF FROM ROADS
2. ONLY CONSTRUCTION TRAFFIC LEAVING THE SITE IS REQUIRED TO USE THE TEMPORARY STABILIZED EXIT. CONSIDER PROVIDING A SEPARATE, UNPROTECTED ENTRANCE FOR TRAFFIC ENTERING THE SITE. THIS WILL INCREASE THE LONGEVITY OF THE STABILIZED EXIT BY ELIMINATING HEAVY LOADS ENTERING THE SITE AND REDUCING THE TOTAL TRAFFIC OVER THE DEVICE.
3. LOCATE THE CONSTRUCTION ENTRANCES AND EXITS, A MINIMUM OF 100 FEET FROM INTERSECTIONS, TO LIMIT SEDIMENT LEAVING THE SITE AND TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES. AVOID ENTRANCES THAT HAVE STEEP GRADES AND ENTRANCES AT CURVES IN ROADS.
4. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR MAINTENANCE OF ANY MEASURES USED TO TRAP SEDIMENT.

B. SPECIFICATIONS (TEMPORARY CONSTRUCTION ENTRANCE/EXITS SHOULD MEET THE FOLLOWING REQUIREMENTS).

1. STONE SIZE MINIMUM: USE SHOULD BE 3" CRUSHED STONE.
2. THE MINIMUM LENGTH OF THE PAD SHOULD BE 75 FEET.
3. THE MINIMUM WIDTH OF THE PAD SHOULD BE 15 FEET OR THE WIDTH OF THE ENTRANCE, WHICHEVER IS GREATER
4. THE PAD SHOULD SLOPE AWAY FROM THE EXISTING ROADWAY.
5. THE PAD SHOULD BE AT LEAST 6" THICK.
6. A GEOTEXTILE FILTER FABRIC SHOULD BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACE BELOW THE PAD.
7. THE PAD SHOULD BE MAINTAINED OR REPLACED WHEN MUD AND SOIL PARTICLES CLOG THE VOIDS IN THE STONE SUCH THAT MUD AND SOIL PARTICLES ARE TRACKED OFF-SITE.
8. NATURAL DRAINAGE THAT CROSSES THE LOCATION OF THE STONE PAD SHOULD BE INTERCEPTED AND PIPED BENEATH THE PAD, AS NECESSARY, WITH SUITABLE OUTLET PROTECTION.

C. MAINTENANCE REQUIREMENTS (THE ENTRANCE/EXIT SHOULD BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT).

1. WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHOULD BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL, REGRADED ON SITE, AND STABILIZED. THE ENTRANCE SHOULD THEN BE RECONSTRUCTED.
2. THE CONTRACTOR SHOULD SWEEP THE PAVEMENT AT EXITS WHENEVER SOIL MATERIALS ARE TRACKED ONTO THE ADJACENT PAVEMENT OR TRAVELED WAY.
3. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WHEEL WASHING IS REQUIRED, IT SHOULD BE CONDUCTED ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT-TRAPPING DEVICE. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES OR WATERWAYS.

TEMPORARY CONSTRUCTION ENTRANCE/EXIT

NOT TO SCALE

PLANNING FILE NO.: SITE-2025-0001

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

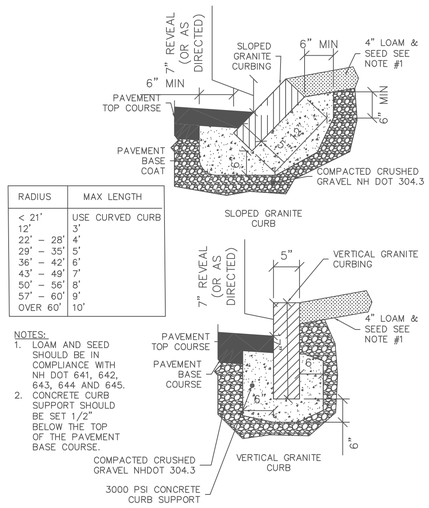
DATE: 1-29-25
SCALE: N.T.S.
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 23062
FILE: SITE.DWG

STATE OF NEW HAMPSHIRE – STEPHEN J HAIGHT No. 7978 LICENSED PROFESSIONAL ENGINEER – 3-4-25

EROSION CONTROL DETAILS

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

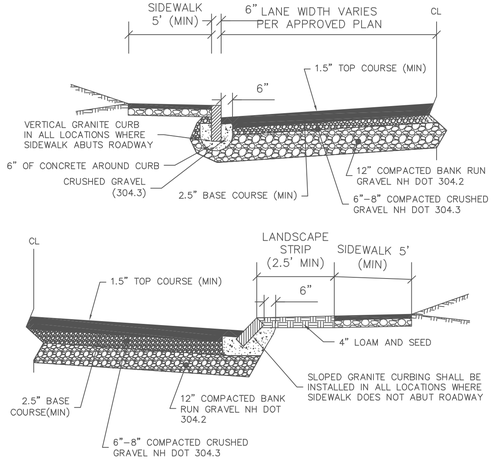


RADIUS	MAX LENGTH
< 21'	USE CURVED CURB
12'	3'
22' – 28'	4'
29' – 35'	5'
36' – 42'	6'
43' – 49'	7'
50' – 56'	8'
57' – 60'	9'
OVER 60'	10'

NOTES:
1. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.
2. CONCRETE CURB SUPPORT SHOULD BE SET 1/2" BELOW THE TOP OF THE PAVEMENT BASE COURSE.

CITY OF DOVER D–8 GRANITE CURB DETAIL

NOT TO SCALE

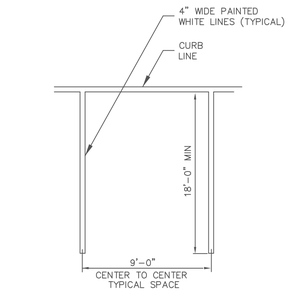


NOTES:
1. THIS DETAIL IS FOR GENERAL REVIEW PURPOSES ONLY, FINAL DESIGN SHALL BE BASED ON SPECIFIC SITE CONDITIONS AND APPROVED PLANS.
2. SIDEWALK LOCATION AND MATERIAL SHALL BE AS APPROVED BY THE CITY OF DOVER.

(FOR WORK IN R.O.W.)

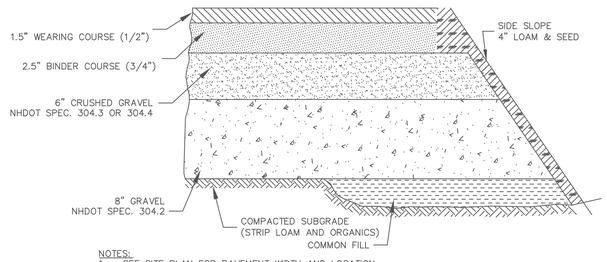
CITY OF DOVER D–5 ROADWAY CROSS SECTION DETAIL

NOT TO SCALE



STANDARD PARKING STALL

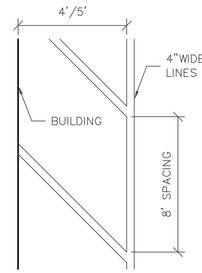
NOT TO SCALE



NOTES:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS–SLOPE.
3. GEOTEXTILE FABRIC MAYBE REQUIRED UNDER THE ROADWAY AND /OR THE PARKING AREAS AS REQUIRED BY THE ENGINEER BASED UPON SITE CONDITIONS.

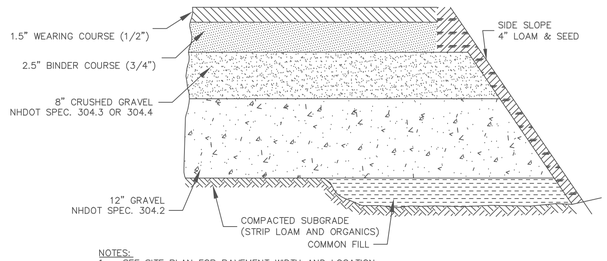
TYPICAL STANDARD PAVEMENT SECTION

NOT TO SCALE



4'/5' WIDE PAINTED PEDESTRIAN LANE

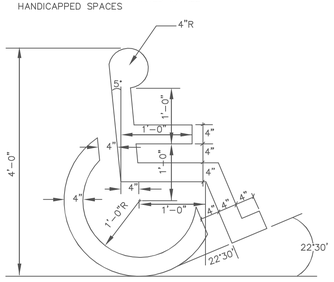
NOT TO SCALE
SEE SITE PLAN FOR LOCATIONS



NOTES:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS–SLOPE.
3. GEOTEXTILE FABRIC MAYBE REQUIRED UNDER THE ROADWAY AND /OR THE PARKING AREAS AS REQUIRED BY THE ENGINEER BASED UPON SITE CONDITIONS.

HEAVY DUTY TYPICAL PAVEMENT SECTION

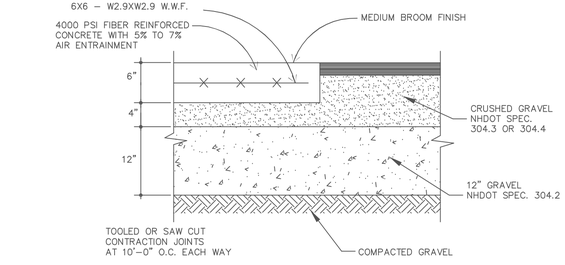
NOT TO SCALE



PAINTED

ACCESSIBLE PARKING SYMBOL

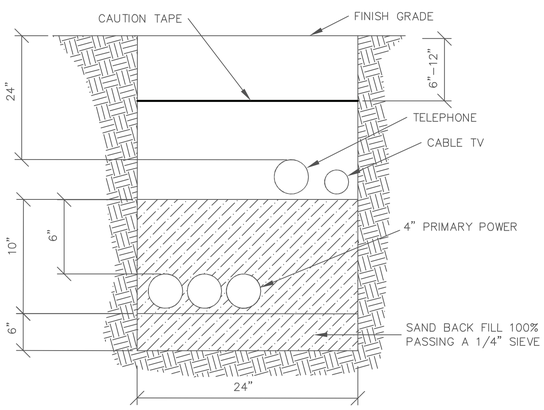
NOT TO SCALE



NOTE: PITCH CONCRETE PAD GRADING TO CENTER

DUMPSTER PAD DETAIL

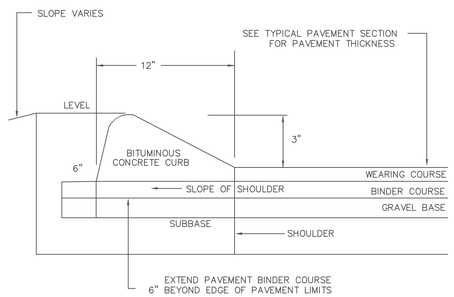
NOT TO SCALE



NOTES:
1. TELEPHONE CONDUIT SHALL BE 3" SCHEDULE 40 PVC, WITH STEEL SWEEPS AT RISER POLE, 90° BENDS AND AT BUILDING.
2. LEAVE PULL ROPE IN ALL CONDUITS FOR CABLE INSTALLATION.
3. FOR COMPLETE SPECIFICATIONS SEE "REQUIREMENTS FOR ELECTRIC SERVICE CONNECTIONS – INFORMATIONS AND REQUIREMENTS FOR ELECTRIC SUPPLY BY EVERSOURCE ENERGY".
4. CONTRACTOR SHOULD VERIFY THE NUMBER & SIZE OF CONDUIT WITH THE APPROPRIATE UTILITIES PROVIDERS.

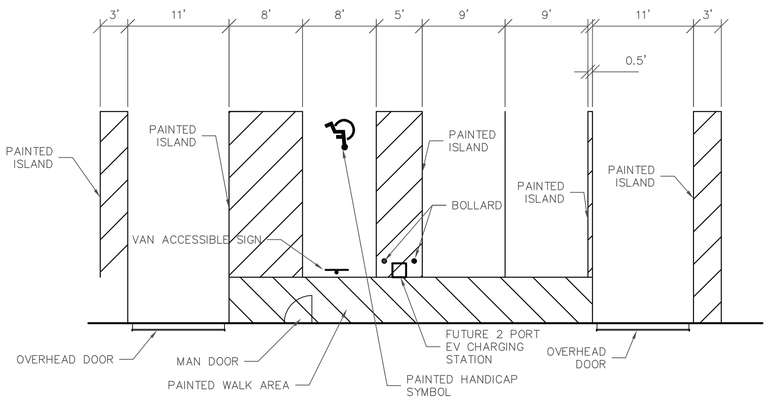
UTILITY TRENCH

NOT TO SCALE



BITUMINOUS CONCRETE CURB (BCC)

NOT TO SCALE



ACCESSIBLE PARKING LAYOUT

NOT TO SCALE

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CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
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603.749.0443

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DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
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FILE: SITE.DWG

STEPHEN J. HAIGHT No. 7978 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

DETAIL SHEET

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340 CENTRAL AVENUE
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SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
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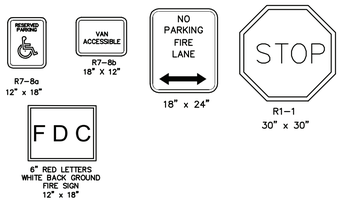
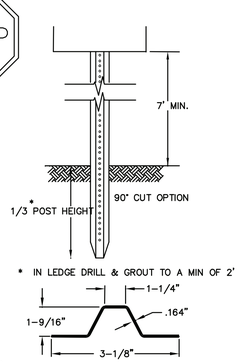
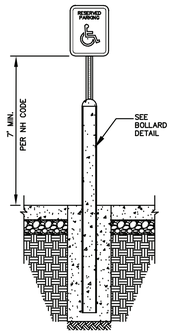


NOTE:
1. ALL SIGNS TO BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

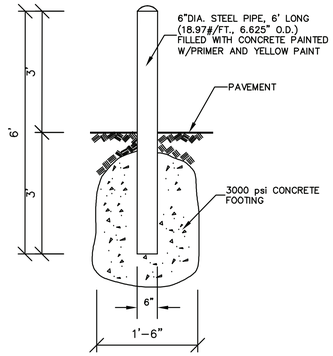
LENGTH: AS REQUIRED
WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)
HOLES: 3/8" DIAMETER, 1" C-C FULL LENGTH
STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070 - 1080)
FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN
BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.



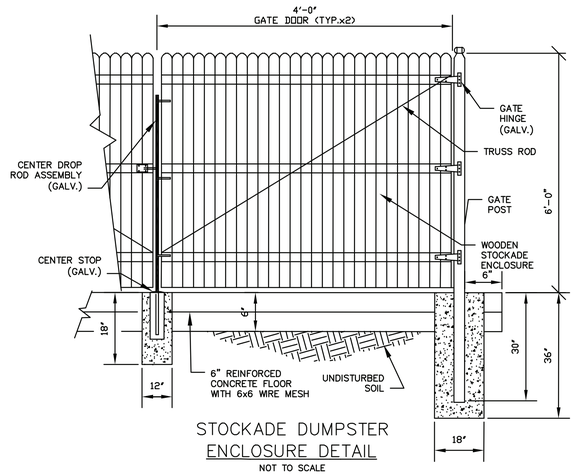
SIGN LEGEND & SIGN POST
NOT TO SCALE



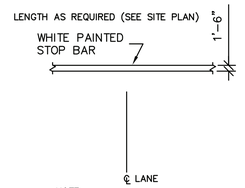
SIGN IN BOLLARD
NOT TO SCALE



BOLLARD DETAIL
NOT TO SCALE



STOCKADE DUMPSTER ENCLOSURE DETAIL
NOT TO SCALE



NOTE:
PAVEMENT MARKINGS TO BE INSTALLED IN LOCATIONS SHOWN ON THE PLANS. APPLY TWO COATS.

STOP BAR & LEGEND

PAVEMENT MARKINGS
NOT TO SCALE

chargepoint+

CT4000 Family

ChargePoint® Level 2 Commercial Charging Stations

The CT4000 family is the latest generation of ChargePoint commercial charging stations. Refined yet rugged, these stations set the industry standard for functionality and aesthetics.

The CT4000 full motion color LCD display instructs drivers and supports dynamic updates of custom branded videos and advertisements.

Intelligent power management options double the number of parking spaces served by allowing two charging ports to share a single circuit. Sites with single port EV stations can upgrade to dual port stations without requiring additional electrical services.

The CT4000 is the first ENERGY STAR® certified EV charger because it charges efficiently and conserves power when not charging. As an ENERGY STAR certified EV charger, the CT4000 uses significantly less energy than a standard EV charger when in standby mode to help you save money on your utility bill.

All CT4000 models offer one or two standard SAE J1772™ Level 2 charging ports with locking holsters, each port supplying up to 7.2kW. With this standard connector, ChargePoint level 2 stations can charge any EV.

Stations are available in bollard and wall mount configurations for easy installation anywhere. All stations are fully software upgradeable remotely over the air.

Stations come in both 6' and 8' tall models with 18' and 23' cords, respectively. With multiple options for size and cord reach, your station can service up to four parking spaces, reach all car models regardless of parking style or car sizes and increase the usability of your EV spots.

Driver Friendly User Interface

- Instructional video shows how to use the station
- Multi-language: English, French, Spanish
- Touch button interface; works in rain, ice and with gloves
- Backed by ChargePoint's world class 24/7 driver phone support

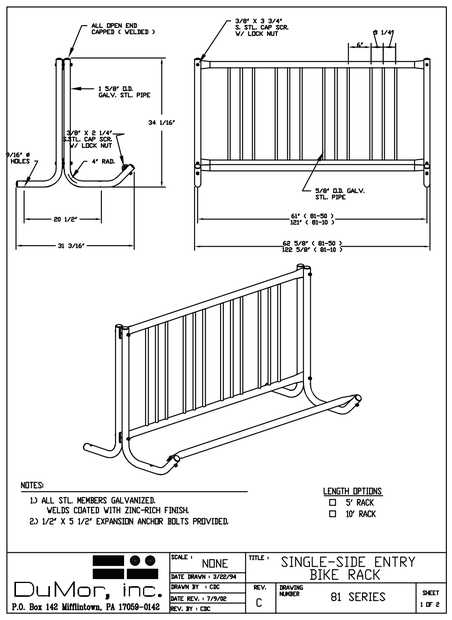
Easily Communicate with Your Drivers

Whether you're a retail establishment wanting to advertise your latest product, a workplace looking to communicate with employees or a municipality wanting to welcome visitors, ChargePoint's prominent LCD screen makes it easy to reach EV drivers:

- Daylight readable, with auto brightness control
- 640 X 480 resolution active matrix
- Full motion 30fps video support
- Upload up to 60 seconds of high quality video on a color LCD screen to individual stations as often as desired
- Brand your charging stations to communicate with drivers
- Instructional video in English, Spanish or French

ENERGY STAR
The First ENERGY STAR® Certified EV Charger

EV CHARGING STATION DETAIL (OR EQUAL)
NOT TO SCALE



BIKE RACK DETAIL
NOT TO SCALE

PLANNING FILE NO.: SITE-2025-0001

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CIVIL & WATERFRONT ENGINEERING
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STEPHEN J HAIGHT No. 7979 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

DETAIL SHEET

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340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
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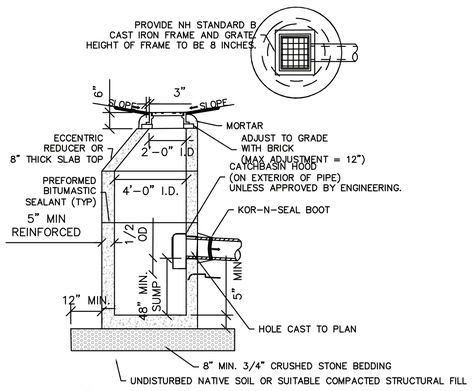
13



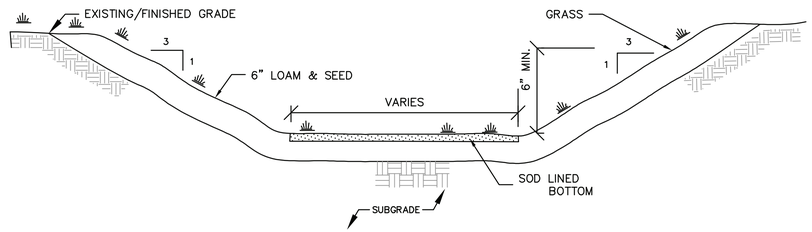
NOTE:
1. ENTIRE STRUCTURE SHALL BE H-20 LOAD RATED. PROVIDE MANUFACTURER REINFORCEMENT DETAILS TO THE CITY ENGINEER UPON REQUEST.

CITY OF DOVER D-19
CATCHBASIN DETAIL

NOT TO SCALE

SPECIFICATIONS

1. ALL CONSTRUCTION SHALL CONFORM WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT), "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION"; HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS".
2. STORM DRAINS SHALL BE ADS N12 OR APPROVED EQUAL, AND SHALL BE JOINTED WITH NEOPRENE "O" RINGS.
3. CATCH BASINS AND MANHOLES SHALL BE PRE-CAST REINFORCED CONCRETE DESIGNED BY AN ENGINEER REGISTERED IN NEW HAMPSHIRE, AND ABLE TO WITHSTAND LOADINGS OF 8 TONS (H20 LOADING).
4. MANHOLES SHALL HAVE CAST IRON FRAMES AND COVERS WITH 30" INSIDE DIAMETER OPENINGS. A 3-INCH (MINIMUM) LETTER "D" FOR DRAIN SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
5. CATCH BASINS AND MANHOLES SHALL BE ADJUSTED TO GRADE WITH COURSES OF BRICK. MAXIMUM ADJUSTMENT TO GRADE SHALL BE 12 INCHES. FRAMES SHALL BE SET ON A FULL BED OF MORTAR, TRUE TO GRADE AND CONCENTRIC WITH THE MASONRY. ALL VOIDS BETWEEN THE TOP OF THE STRUCTURE AND THE BOTTOM FLANGE OF THE FRAME SHALL BE COMPLETELY FILLED TO MAKE A WATERTIGHT FIT. A RING OF MORTAR AT LEAST ONE INCH THICK AND PITCHED TO SHED WATER AWAY FROM THE FRAME, SHALL BE PLACED OVER AND AROUND THE OUTSIDE OF THE BOTTOM FLANGE. THE MORTAR SHALL EXTEND TO THE OUTER EDGE OF THE MASONRY ALL AROUND ITS CIRCUMFERENCE AND SHALL BE FINISHED SMOOTH. NO VISIBLE LEAKAGE WILL BE PERMITTED.
6. INVERT CHANNELS OF SEWER MANHOLES SHALL BE FORMED SMOOTHLY TO THE LARGEST PIPE RADIUS. CHANGES IN GRADE SHALL BE FORMED SMOOTHLY AND EVENLY. THE FLOOR OF THE STRUCTURE OUTSIDE THE CHANNELS SHALL BE SLOPED TOWARDS THE CHANNELS AT APPROXIMATELY 1/2 INCH PER FOOT. THE FLOOR AT THE CHANNEL SHALL MATCH THE CROWN OF THE LARGEST PIPE.
7. TRENCH CONSTRUCTION WILL CONFORM WITH SECTION 603.3.1 OF THE STANDARD SPECIFICATIONS (1974).
8. WOOD SHEETING OR A SUITABLE TRENCH BOX SHALL BE USED TO SUPPORT THE TRENCH AS NECESSARY. IF WOOD SHEETING IS USED, IT SHALL BE DRIVEN AT A DISTANCE OF 1 FOOT FROM THE OUTSIDE DIAMETER OF THE PIPE TO A DEPTH 6 INCHES BELOW THE INVERT OF THE PIPE. WOOD SHEETING SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE, BUT NOT GREATER THAN 3 FEET BELOW THE FINISHED GRADE.
9. BEDDING SHALL CONFORM WITH SECTION 603.3.2 OF THE STANDARD SPECIFICATIONS (1974).
10. BACKFILL MATERIAL WILL CONFORM WITH SECTION 603.3.5 OF THE STANDARD SPECIFICATIONS (1974) AND, IN ADDITION, SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, FROZEN MATERIAL, ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION, OR ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. BACKFILL SHALL NOT BE PLACED ON FROZEN OR PREVIOUSLY FROZEN MATERIAL.
11. ALL BACKFILL AND BEDDING COMPACTION SHALL MEET THE REQUIREMENTS OF AASHO T 99 METHOD C. DENSITY SHALL BE 95 PERCENT. COMPACTION SHALL BE 6 INCH LIFTS FOR BEDDING AND BACKFILL TO A PLANE 1 FOOT ABOVE THE PIPE AND IN 12 INCH LIFTS THEREAFTER BY AN APPROVED MECHANICAL COMPACTOR.
12. SHOULD FROZEN MATERIAL BE ENCOUNTERED, IT SHALL NOT BE PLACED IN THE BACKFILL NOR SHALL BACKFILL BE PLACED UPON FROZEN MATERIAL. PREVIOUSLY FROZEN MATERIAL SHALL BE REMOVED AS REQUIRED BEFORE NEW BACKFILL IS PLACED.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO FRAMES AND GRATES DURING AND FROM THE TIME OF REMOVAL FROM THE EXISTING STRUCTURE TO AND DURING THE TIME OF RESETTING, AND SHALL REPLACE IN KIND ANY DAMAGED FRAMES OR GRATES AT NO ADDITIONAL COMPENSATION.
14. ALL TRENCHES WILL BE COVERED AND DEBRIS, INCLUDING ANY REJECTED MATERIALS, SHALL BE REMOVED DAILY. STRICT SAFETY PRECAUTIONS SHALL BE MAINTAINED AT ALL TIMES.
15. LOCATION OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE.
    A) THE CONTRACTOR SHALL, 48 HOURS PRIOR TO CONSTRUCTION, NOTIFY THE UTILITY COMPANIES AND HAVE ALL UTILITIES IN THE VICINITY OF THE CONSTRUCTION MARKED IN THE FIELD.
    B) AFTER THE UTILITIES HAVE BEEN LOCATED AND PRIOR TO CONSTRUCTION, THE CONTRACTOR WITH THE ENGINEER, SHALL LAYOUT THE PROPOSED DRAINAGE SYSTEM IN THE FIELD AND RECTIFY ANY UTILITY CONFLICTS WHICH MAY BE FOUND.
    C) ANY CONFLICTS WITH UTILITIES FOUND DURING CONSTRUCTION BY THE CONTRACTOR SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER AND THE UTILITY COMPANY AND PROPERLY RECTIFIED.
    D) THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF REPAIR FOR ANY UTILITIES DAMAGED DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT THE UTILITY COMPANY TO REPAIR ANY DAMAGES, HOWEVER, THE CONTRACTOR MAY MAKE APPROPRIATE REPAIRS WITH THE UTILITY COMPANY'S PERMISSION.
16. COMPLETE SHOP DRAWINGS FOR PIPE, MANHOLES, CATCH BASINS, FRAMES, GRATES AND COVERS SHALL BE SUBMITTED IN TRIPLICATE FOR APPROVAL BY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION. EACH SHOP DRAWING SHALL BE CHECKED AND INITIALIZED BY THE CONTRACTOR TO INDICATE APPROVAL BEFORE IT IS SUBMITTED TO THE ENGINEER.
17. SHOP DRAWINGS FOR FLAT CONCRETE COVERS SHALL BE STAMPED PRIOR TO SUBMISSION FOR APPROVAL BY A NEW HAMPSHIRE REGISTERED PROFESSIONAL ENGINEER.
18. BRICK MASONRY FOR SETTING FRAMES AND BRICK AND MORTAR PLUGS SHALL CONFORM TO THE STANDARD SPECIFICATION SECTION 604.2.4.



MAINTENANCE
TIMELY MAINTENANCE IS IMPORTANT TO KEEP THE VEGETATION IN THE SWALE IN GOOD CONDITION. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO KEEP THE VEGETATION IN VIGOROUS CONDITION AND TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION, HOWEVER IT SHOULD NOT BE MOWED TOO CLOSELY, MAINTAIN A MINIMUM 4" STAND OF VEGETATION. FERTILIZE ON AN "AS NEEDED" BASIS TO KEEP THE GRASS HEALTHY. OVER FERTILIZATION CAN RESULT IN THE SWALE BECOMING A SOURCE OF POLLUTION.

THE SWALE SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE SWALE. RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND REVEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION.

GRASS LINED CONVEYANCE SWALE DETAIL

NOT TO SCALE

PLANNING FILE NO.: SITE-2025-0001

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CNE CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

PROJECT NO: 23062
APPROVED BY: SJH
DESIGN BY: JRG
DRAWN BY: SRD
SCALE: N.T.S.
DATE: 1-29-25
FILE: SITE.DWG

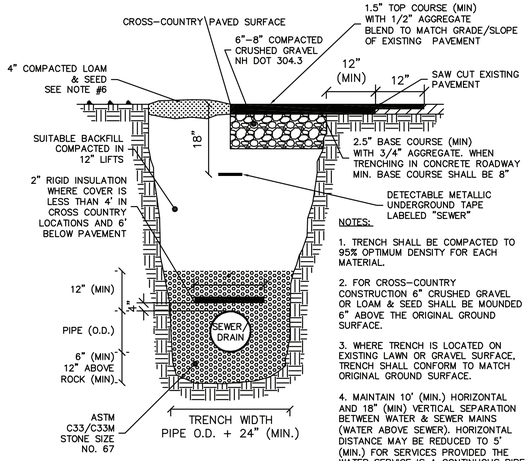
STATE OF NEW HAMPSHIRE
STEPHEN J HAIGHT No. 7978
LICENSED PROFESSIONAL ENGINEER

DETAIL SHEET

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE
STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

14

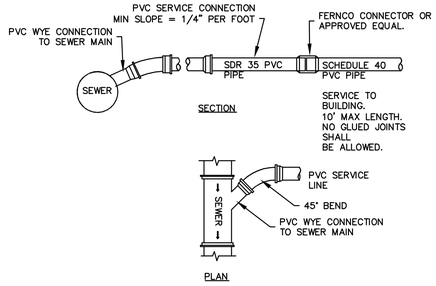


NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY FOR EACH MATERIAL.
2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE.
3. WHERE TRENCH IS LOCATED ON EXISTING LAWN OR GRAVEL SURFACE, TRENCH SHALL CONFORM TO MATCH ORIGINAL GROUND SURFACE.
4. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.
5. BACKFILL MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE: DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, MUCK, PEAT AND ROCKS OVER 6" IN LARGEST DIMENSION
6. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.

CITY OF DOVER D-3
SEWER TRENCH DETAIL

NOT TO SCALE

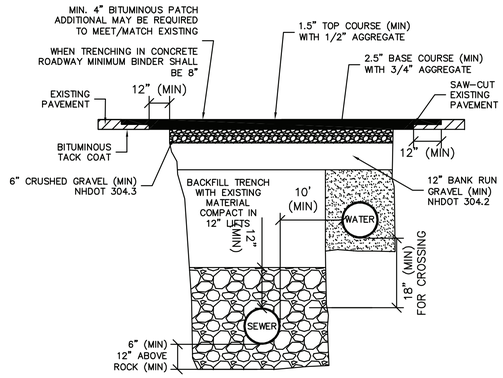


NOTES:

1. TRENCHING AND BEDDING REQUIREMENTS PER CITY SEWER TRENCH DETAIL (D-3).
2. SERVICE LATERAL DIAMETER VARIES PER APPLICATION. REVIEW SIZE WITH CITY ENGINEER PRIOR TO INSTALLATION.
3. SDR 35 SHALL NOT EXTEND INTO THE BUILDING.
4. PIPE BEDDING AND BLANKET SHALL MEET THE STANDARD SEWER TRENCH DETAIL D-3.

CITY OF DOVER D-17
SEWER SERVICE DETAIL

NOT TO SCALE

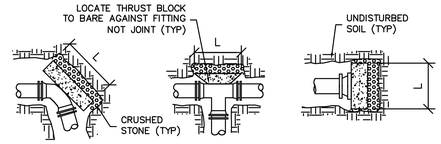


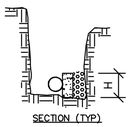
NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY.
2. ALL WORK SHALL COMPLY WITH THE CITY OF DOVER CONSTRUCTION GUIDELINES AND PROCEDURES
3. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.

CITY OF DOVER
TYPICAL TRENCH DETAIL

NOT TO SCALE





THRUST BLOCK SCHEDULE
MINIMUM BEARING AREA (SQUARE FEET)

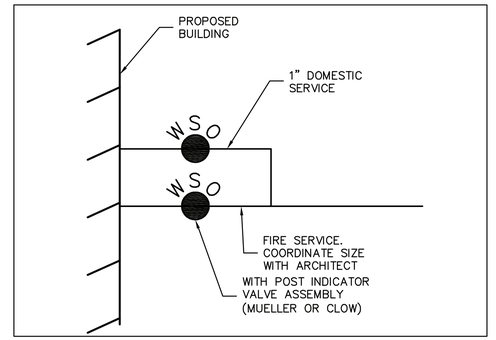
	PIPE SIZE					
Nominal Dia. (in)	4	6	8	10	12	16
Pipe Fittings	*	*	5.18	7.96	11.43	20.29
90 Degree Bends	*	4.11	7.33	11.26	16.17	28.69
45 Degree Bends	*	*	*	6.10	8.75	15.53
22-1/2 Degree Bends	*	*	*	*	4.46	7.92
11-1/4 Degree Bends	*	*	*	*	*	*
*SEE NOTE 2	System Pressure: 125 psi Safety Factor: 1.5 Soil Bearing Capacity: 2,000 psf					

NOTES:

1. ALL THRUST BLOCKS SHALL BE PRE-CAST CONCRETE UNLESS APPROVED BY THE CITY ENGINEER.
2. 2'X2'X2' MINIMUM THRUST BLOCK REQUIRED, ANY BEARING AREA OVER 4SF REQUIRES THRUST BLOCKS, RESTRAINED JOINTS AND CALCULATIONS ASSOCIATED WITH THE JOINT.
3. THE MINIMUM BEARING AREAS SHOWN IN THE THRUST BLOCK SCHEDULE ARE BASED ON A SYSTEM PRESSURE OF 125 PSI. IF THE SYSTEM PRESSURE IS ABOVE 125 PSI, INCREASE THE NOTED AREAS PROPORTIONALLY TO THE ACTUAL SYSTEM PRESSURE.
4. FOR MINIMUM BEARING AREAS OVER 4 SF, THE LENGTH (L) OF THE BLOCK IS APPROXIMATELY TWICE AS LONG AS THE HEIGHT (H).
5. PLACE CRUSHED STONE BEHIND THRUST BLOCK AGAINST UNDISTURBED SOIL.
6. PLACE THRUST BLOCK ALONG MAXIMUM LENGTH OF THE FITTING TO MAXIMIZE BEARING AREA.
7. CONCRETE COMPRESSIVE STRENGTH: 2,000 PSI MINIMUM.
8. USE OF THRUST BLOCKS DOES NOT ELIMINATE THE REQUIREMENT OF OTHER RESTRAINTS OR VICE VERSA.

CITY OF DOVER D-15
THRUST BLOCK DETAIL

NOT TO SCALE



TYPICAL FIRE AND DOMESTIC
WATER SERVICE CONNECTION DETAIL

NOT TO SCALE

TRELLEBORG PIPE SEALS

TRELLEBORG

Kor-N-Seal® I
Stainless Steel Wedge Connector
(WS Series)

Installation Instructions

CONNECTOR INSTALLATION

1. Check to be sure the Stainless Steel Waveband® is properly located in Connector groove.
2. Inspect the inside surface of the cored/formed hole. If there is porosity or wire-to-concrete separation, use patching or hydraulic cement to smooth the surface.
3. Insert Connector Assembly into hole with Wedge Expander at top of hole.
4. Position Connector so it is square to manhole both vertically and horizontally.
5. Tighten Wedge Expander using 1/2" socket wrench to 12 foot pounds.
6. Retorquing prior to shipment is recommended but not required.

Note if Vacuum Testing

Testing should be done prior to backfilling so that leaks can be easily located and repaired.

All lift holes need to be plugged with a nonshrinking mortar.

Plug all pipes entering the manhole, taking care to securely brace the pipes and plugs.

Patented Waveband technology "captures" the rubber between itself and the concrete, creating a more effective seal.

*Covered under US Patent No.: 5,738,389

PIPE INSTALLATION

1. Be sure sealing area of pipe is smooth and free of defects. Repair if needed.
2. Center pipe in Connector opening. (Pipe must not rest on Connector Korband)
3. Position the Pipe Clamp in the Connector's Pipe Clamp groove with the screw at the top.
4. Tighten the Pipe Clamp screw to 60 inch pounds with a T-handle Torque Wrench, P/N 80090

Note:

On minimum pipe O.D. installations, tension the rubber under the pipe clamp by lifting the rubber toward pipe clamp screw housing by hand. This will help prevent the rubber from wrinkling or folding over during tightening of hose clamp. Application of a very small amount pipe lube on the pipe clamp track will allow the pipe clamp to slide on the rubber and improve the performance of the hose clamp. Make sure to torque all screw locations on the pipe clamps.

Caution:

Do not use an impact wrench for installation.

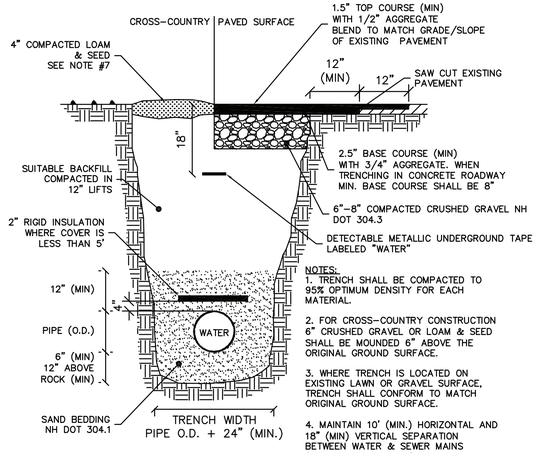
All pipe stubs must be restrained.

Adapters are required when using Corrugated Pipe. Refer to the Corrugated Pipe Adapter Data Sheet for more information.

Check calibration of torque limiters monthly

Torque limiters are available for connectors that can be used with cordless drills and hand or air ratchets.

Call 800-626-2180 for information.

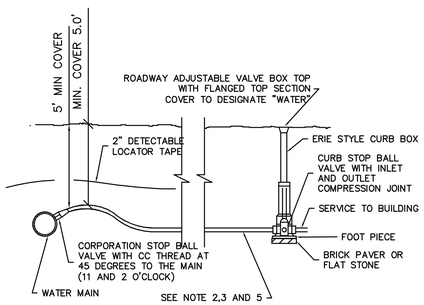


NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY FOR EACH MATERIAL.
2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE.
3. WHERE TRENCH IS LOCATED ON EXISTING LAWN OR GRAVEL SURFACE, TRENCH SHALL CONFORM TO MATCH ORIGINAL GROUND SURFACE.
4. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.
5. BACKFILL MATERIAL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE: DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, MUCK, PEAT, AND ROCKS OVER 6" IN LARGEST DIMENSION
6. PROVIDE MINIMUM 5' OF COVER. ENGINEERING APPROVAL REQUIRED FOR LESS THAN 5' OF COVER.
7. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.

CITY OF DOVER D-4
WATER TRENCH DETAIL

NOT TO SCALE



NOTES:

1. ALL WATER LINES 4" OR GREATER SHALL BE DUCTILE IRON WITH AN 8 MIL POLYETHYLENE WRAP, INCLUDING TEE AND OTHER CONNECTIONS.
2. WATER SERVICE LINES SHALL BE COPPER TUBING (TYPE K) BETWEEN MAIN AND CURB STOP.
3. SERVICE BETWEEN CURB STOP AND BUILDING MAY BE (BLUE OR BLACK) CTS SDR 9 PLASTIC POLYETHYLENE RATED FOR 250 psi.
4. CAM-LOCK REQUIRED FOR CTS OR IPS, MJ ADAPTER REQUIRED FOR HDPE.
5. ALL SERVICES SHALL BE 1". PROVIDE 1" TO 3/4" REDUCER COUPLING WHERE EXISTING SERVICES ARE 3/4". SUBSIDIARY.
6. 3/4"- COPPER, CTS
   1"- COPPER, CTS
   2"- CTS, HDPE, IPS
7. ALL SADDLES USED AS SPECIFIED SHALL HAVE DOUBLE STAINLESS STEEL STRAPS.
8. TAPS TO BE MADE AT APPROX. 2:00 AND 10:00.

CITY OF DOVER D-13
WATER SERVICE CONNECTION DETAIL

NOT TO SCALE

PLANNING FILE NO.: SITE-2025-0001

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

GNE
CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

DATE: 1-29-25
SCALE: N.T.S.
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 23062
FILE: SITE.DWG

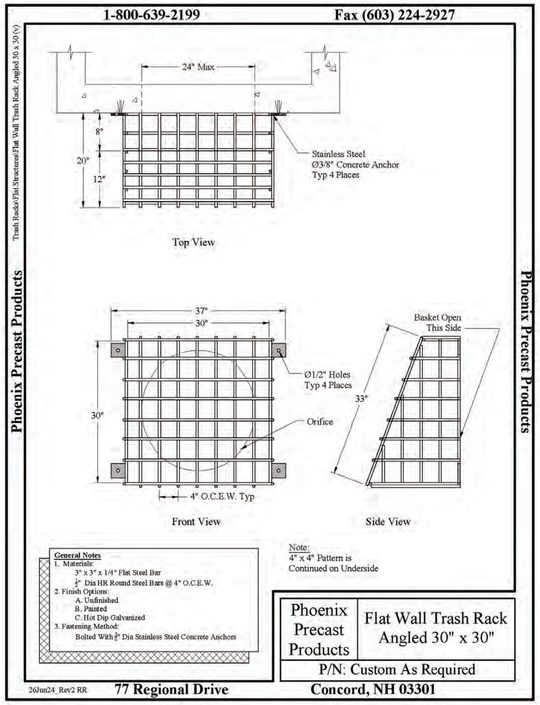
STEPHEN J. HAIGHT No. 7978 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

DETAIL SHEET

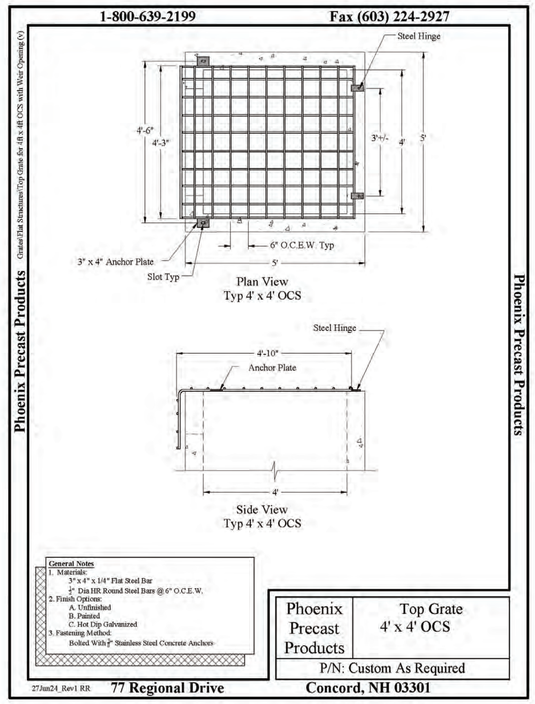
16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

15

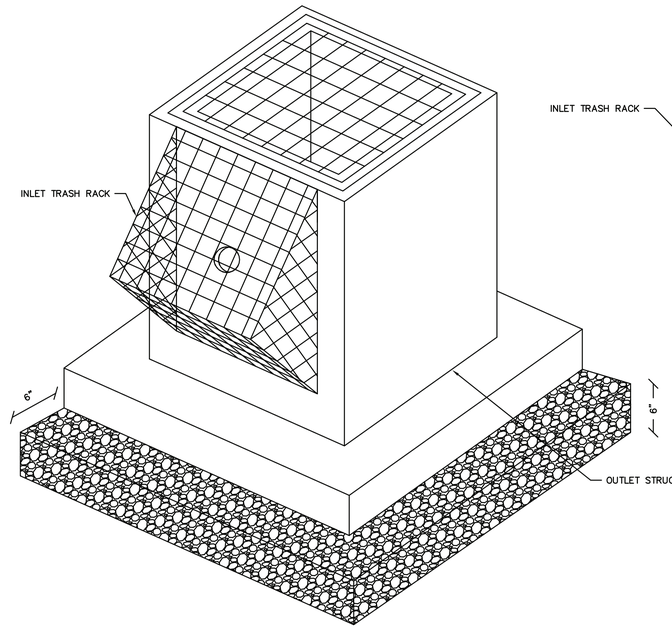


TYPICAL TRASH RACK
OR APPROVED EQUAL

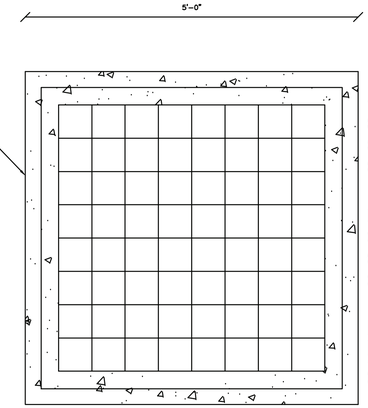


TYPICAL TRASH RACK
OR APPROVED EQUAL

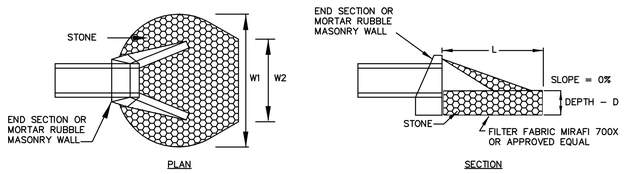
NOTE:
1. THE WRAP AROUND GRATE FOR THE "WEIR" OPENING IS NOT APPLICABLE.



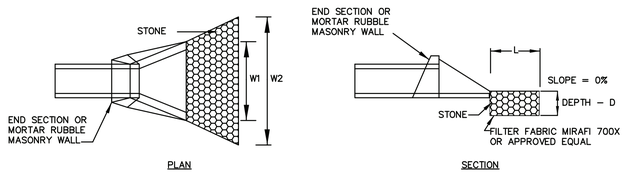
TYPICAL INLET TRASH RACKS
NOT TO SCALE



NOTE:
1. OUTLET STRUCTURES SHALL BE PRE CAST WITH A MINIMUM CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EACH STRUCTURE FOR REVIEW BY THE TOWN.



STONE APRON OUTLET PROTECTION DETAIL
OUTLET TO DEFINED CHANNEL



STONE APRON OUTLET PROTECTION DETAIL
OUTLET TO FLAT AREA, NON DEFINED CHANNEL

MAINTENANCE

THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

STONE GRADATION

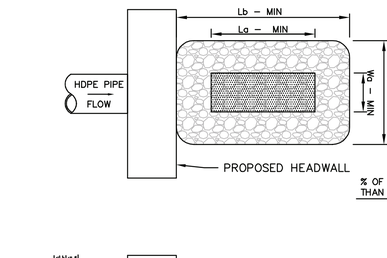
% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE
100	1.5 TO 2.0 D50
85	1.3 TO 1.8 D50
50	1.0 TO 1.5 D50
15	0.3 TO 0.5 D50

OUTLET FROM	W1(ft)	W2(ft)	L(ft)	D (ft)	D50(IN)	CHANNEL TYPE
RD1	10	2	16	1	6	DEFINED
PCB2	3	8	11	1	6	NON-DEFINED
PCB3	3	7	10	1	6	NON-DEFINED
WP1	3	13	10	1	6	NON-DEFINED

CONSTRUCTION SPECIFICATIONS

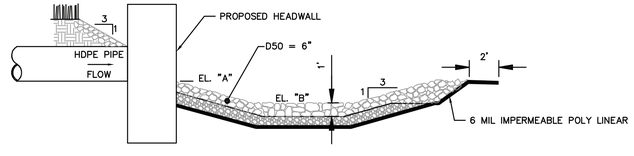
1. THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIPRAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE ROCK OR GRAVEL USED FOR FILTER OR RIPRAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIPRAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

RIP RAP OUTLET PROTECTION
NOT TO SCALE



STONE GRADATION

% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE
100	1.5 TO 2.0 D50
85	1.3 TO 1.8 D50
50	1.0 TO 1.5 D50
15	0.3 TO 0.5 D50



DIMENSIONS AND ELEVATIONS

POOL	OUTLET FROM	La	Lb	Wa	Wb	EL. "A"	EL. "B"
PLUNGE POOL A	CONTECH	4.5'	9.0'	3.0'	7.5'	107.8	107.05

CONSTRUCTION SPECIFICATIONS

1. PLUNGE POOL AREAS AND EXTENTS OF RIPRAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE ROCK OR GRAVEL USED FOR RIPRAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. STONE FOR THE PLUNGE POOL MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
4. PLUNGE POOL SHALL BE CONSTRUCTED ON A 6" THICK (MIN) CRUSHED GRAVEL BASE.

PLUNGE POOL DETAIL
NOT TO SCALE

PLANNING FILE NO.: SITE-2025-0001

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

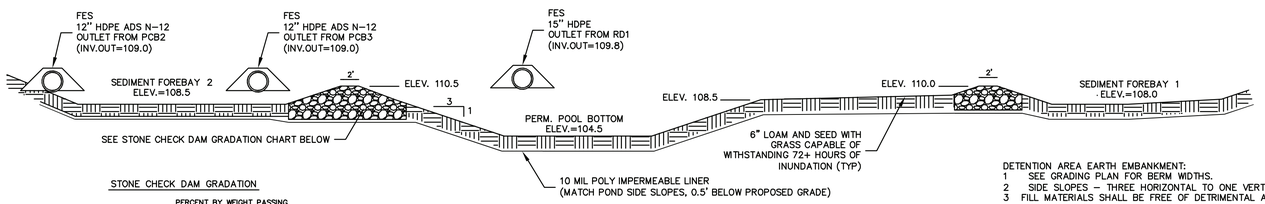
PROJECT NO: 23062
APPROVED BY: SJH
DESIGN BY: JRG
DRAWN BY: SRD
SCALE: N.T.S.
DATE: 1-29-25
FILE: SITE.DWG

DETAIL SHEET

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE
STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

16

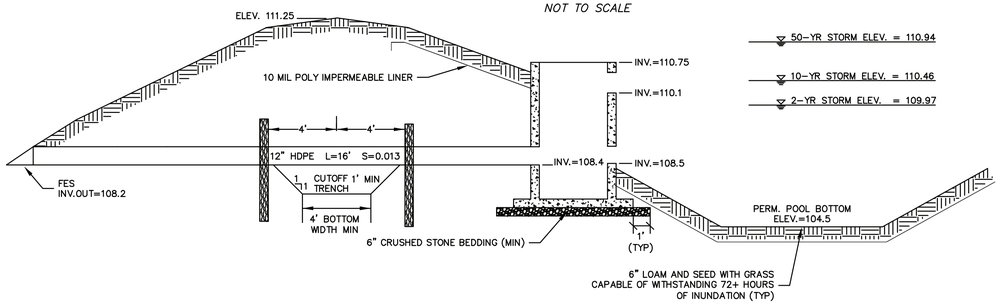


STONE CHECK DAM GRADATION

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVE
12-INCH	100%
6-INCH	84%-100%
3-INCH	68%-83%
1-INCH	42%-55%
NO.4	8%-12%

WET EXTENDED DETENTION POND PROFILE

NOT TO SCALE



WET EXTENDED DETENTION POND CROSS-SECTION

NOT TO SCALE

DETENTION AREA EARTH EMBANKMENT:
1. SEE GRADING PLAN FOR BERM WIDTHS.
2. SIDE SLOPES – THREE HORIZONTAL TO ONE VERTICAL (3:1) OR UNLESS OTHERWISE NOTED.
3. FILL MATERIALS SHALL BE FREE OF DETRIMENTAL AMOUNTS OF SOD, ROOTS, FROZEN SOIL, STONES MORE THAN 6 INCHES IN DIAMETER (EXCEPT FOR ROCK FILLS), AND OTHER OBJECTIONABLE MATERIAL.
4. FILL MATERIALS SHALL BE A MIXTURE OF STONES (NOT EXCEEDING 6" IN DIAMETER) AND A FINE SANDY SILT MATERIAL.
5. SELECTED BACKFILL MATERIAL SHALL BE PLACED AROUND STRUCTURES, PIPE CONDUITS, AND ANTISEEP COLLARS AT ABOUT THE SAME RATE ON ALL SIDES TO PREVENT DAMAGE FROM UNEQUAL LOADING.

DETENTION AREA BERM BASE PREPARATION:
1. THE BASE AREA SHALL BE CLEARED OF TREES, LOGS, STUMPS, ROOTS, BRUSH, BOULDERS, SOD, AND RUBBISH. IF NEEDED TO ESTABLISH VEGETATION, THE TOPSOIL AND SOD SHALL BE STOCKPILED AND SPREAD ON THE COMPLETED BERM. THE BASE AREA SHALL BE THOROUGHLY SCARIFIED BEFORE PLACEMENT OF MATERIAL.
2. REMOVE ALL SOFT ORGANIC MATTER, PEAT, DEBRIS AND FOREIGN MATERIAL TO A DEPTH AS NEEDED (1' MIN) TO REACH AN UNYIELDING BASE OF VIRGIN SOIL.

EXECUTION:
1. FILL MATERIALS SHALL BE PLACED IN HORIZONTAL 12" (MAX.) LIFTS TO FULL WIDTHS AS SHOWN ON THE DESIGN PLAN.
2. FILL MATERIALS SHALL BE FRESHLY PLACED PRIOR TO COMPACTION.
3. ALL FILLS SHALL BE COMPACTED BY MECHANICAL VIBRATORY COMPACTION TO 95% PROCTOR DENSITY.
4. FILL SHALL BE CONSTRUCTED IN CONTINUOUS HORIZONTAL LAYERS EXCEPT WHERE OPENINGS OR SECTIONALIZED FILLS ARE REQUIRED. IN THOSE CASES, THE SLOPE OF THE BONDING SURFACES BETWEEN THE EMBANKMENT IN PLACE AND THE EMBANKMENT TO BE PLACED SHALL NOT BE STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL. PLACE THE MORE IMPERVIOUS SOIL (HIGHER PERCENTAGE PASSING THE #200 SIEVE) IN THE UPSTREAM TWO-THIRDS (2/3) OF THE BERM. THE MORE GRANULAR SOIL MATERIAL SHOULD BE PLACED IN THE REMAINING DOWNSTREAM ONE-THIRD PORTION OF THE BERM.
5. INSTALL ANTI-SEEP COLLARS CONCURRENTLY WITH FILL MATERIAL PLACEMENT.
6. INSTALL CUT-OFF TRENCH CONCURRENTLY WITH FILL MATERIAL PLACEMENT. THE CUT OFF TRENCH SHALL BE LOCATED AT OR SLIGHTLY UPSTREAM OF THE CENTER LINE OF THE BERM. IT SHALL EXTEND UP THE ABUTMENTS AS REQUIRED AND BE DEEP ENOUGH TO EXTEND INTO A RELATIVELY IMPERVIOUS LAYER.
7. THE CUTOFF TRENCH SHALL HAVE A BOTTOM WIDTH ADEQUATE TO ACCOMMODATE THE EQUIPMENT USED FOR EXCAVATION, BACKFILL AND COMPACTION OPERATIONS. CUTOFF TRENCH TO BE EXCAVATED AND BACKFILLED PRIOR TO PLACING PIPE.
8. CUTOFF TRENCH SIDE SLOPES SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO ONE VERTICAL.

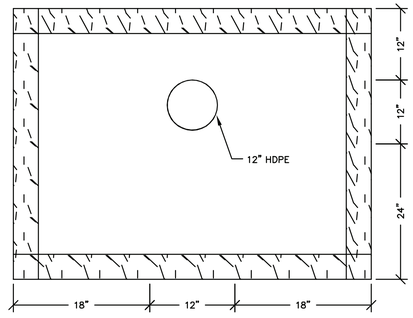
MOISTURE CONTROL
THE MOISTURE CONTENT OF THE FILL MATERIAL SHALL BE ADEQUATE FOR OBTAINING THE REQUIRED COMPACTION. MATERIAL THAT IS TOO WET SHALL BE DRIED TO MEET THIS REQUIREMENT, AND MATERIAL THAT IS TOO DRY SHALL HAVE WATER ADDED AND MIXED UNTIL THE REQUIREMENT IS MET.

COMPACTION
FILL ADJACENT TO STRUCTURES, PIPE CONDUITS, AND ANTI-SEEP COLLARS SHALL BE COMPACTED TO A DENSITY EQUIVALENT TO THAT OF THE SURROUNDING FILL BY MEANS OF HAND TAMPING OR MANUALLY DIRECTED POWER TAMPER OR PLATE VIBRATORS.

MAINTENANCE:
MAINTENANCE IS NECESSARY TO ENSURE THAT THE WET POND WILL CONTINUE TO FUNCTION AS ORIGINALLY DESIGNED. THE "HOMEOWNERS ASSOCIATION" IS RESPONSIBLE FOR MAINTAINING THE STRUCTURES AND THE BASIN AREA.

1. EMBANKMENT – THE EMBANKMENT SHOULD BE INSPECTED ANNUALLY TO DETERMINE IF RODENT BURROWS, WET AREAS, OR EROSION OF THE FILL IS TAKING PLACE. IF SUCH ISSUES ARE NOTED THEY SHALL BE RECTIFIED AS SOON AS PRACTICAL.
2. VEGETATION – THE VEGETATED AREAS OF THE BERM SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH. LIME AND FERTILIZER SHOULD BE APPLIED AS NECESSARY AS DETERMINED BY SOIL TESTS. TREES SHOULD BE KEPT OFF THE BERM AREA.
3. INLETS AND OUTLETS – SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. ACCUMULATED DEBRIS AND SEDIMENT SHOULD BE REMOVED.
4. SEDIMENT – SEDIMENT SHOULD BE CONTINUALLY CHECKED IN THE BASIN. WHEN SEDIMENT ACCUMULATIONS REACH THE STRUCTURE INLET ELEVATION. THEN THE SEDIMENT SHOULD BE REMOVED AND PROPERLY DISPOSED OF.

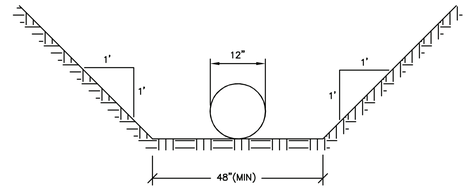
EMBANKMENT SPECIFICATIONS:
THE CORE OF THE EMBANKMENT INCLUDING THE CUTOFF TRENCH SHALL BE CONSTRUCTED OF CLAY BORROW. THIS MATERIAL SHALL CONTAIN AT LEAST 50% BY WEIGHT PARTICLES PASSING A #200 SIEVE. IT SHALL CONTAIN NO PARTICLES LARGER THAN 6 INCHES. THE MATERIAL SHALL HAVE A PLASTIC INDEX OF 8 OR GREATER. THE EMBANKMENT AREA AND CUTOFF TRENCH SHALL BE STRIPPED OF ALL ORGANIC SOILS PRIOR TO PLACEMENT OF CLAY BORROW. THE CLAY BORROW SHALL BE PLACED IN LIFTS OF 12 INCHES OR LESS AND BE COMPACTED TO AT LEAST 90% OF ASTM D-1557. THE CLAY SHALL BE PLACED AND COMPACTED AT A MOISTURE CONTENT OF OPTIMUM PLUS OR MINUS 3%. NO ORGANIC SOILS OR FROZEN MATERIAL SHALL BE PLACED IN THE CLAY BORROW. MINIMUM CORE THICKNESS SHALL BE FOUR (4) FEET. THE SHELL FOR THE EMBANKMENT MAY BE CONSTRUCTED OF EXISTING ON SITE MATERIALS. NO ORGANIC SOILS OR FROZEN MATERIAL SHALL BE USED AS SHELL MATERIAL



NOTES:
1. ANTI-SEEP COLLARS SHALL BE WATERPROOF AND HAVE A WATERPROOF CONNECTION TO THE PIPE.
2. ANTI-SEEP COLLARS TO BE AGRI DRAIN OR APPROVED EQUAL.

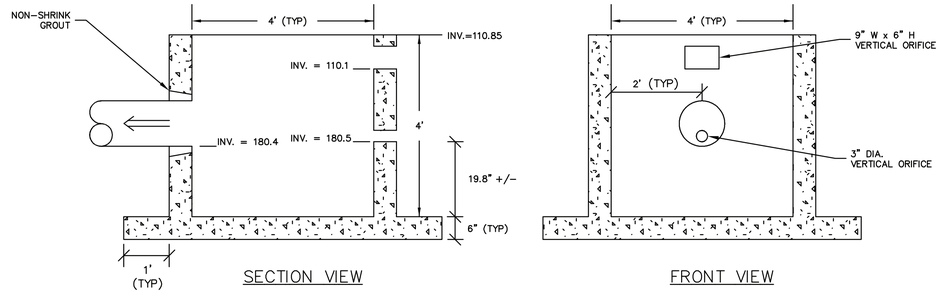
WET POND OUTLET PIPE ANTI-SEEP COLLAR DETAIL

NOT TO SCALE



WET POND OUTLET PIPE TRENCH DETAIL

NOT TO SCALE



NOTES:
1) ALL OUTLET STRUCTURES SHALL BE PRE CAST WITH A MINIMUM CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
2) THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EACH STRUCTURE FOR REVIEW BY THE TOWN.
3) A HALA AG2424 ANGLE GRATE OR APPROVED EQUAL SHALL BE INSTALLED FOR A TRASH RACK

OS-1 OUTLET STRUCTURE DETAIL

NOT TO SCALE

PLANNING FILE NO.: SITE-2025-0001

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CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

DATE: 1-29-25
SCALE: N.T.S.
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 23062
FILE: SITE.DWG

STATE OF NEW HAMPSHIRE
STEPHEN J. HAIGHT
No. 7978
LICENSED PROFESSIONAL ENGINEER

DETAIL SHEET

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE
STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

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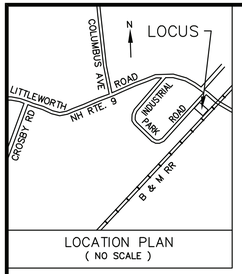


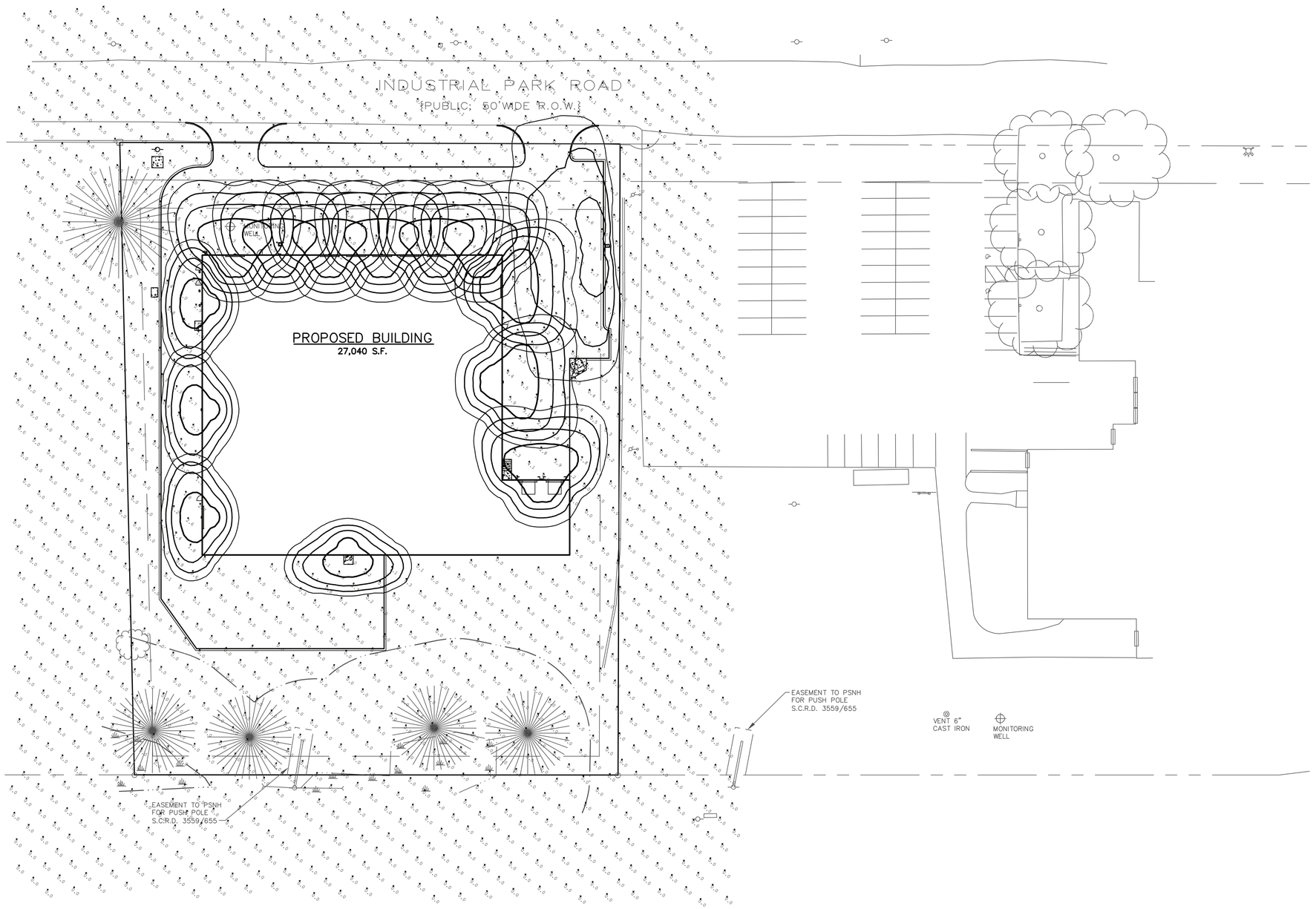
LOCATION PLAN
(NO SCALE)

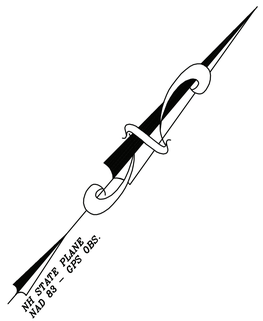
PARKING SPACES 8 - 16

Illuminance (Fc)
Average = 1.09
Maximum = 1.7
Minimum = 0.6
Avg/Min Ratio = 1.82
Max/Min Ratio = 2.83

PARKING SPACES 1 - 7

Illuminance (Fc)
Average = 4.67
Maximum = 6.5
Minimum = 2.0
Avg/Min Ratio = 2.34
Max/Min Ratio = 3.25





Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Description	Tag	[MANUFAC]
	1	S1	Single	VALS-9L-3W-UNV-30K8-CXX-SA-ALBMR2LR-IS / 4SQ B3 S11G20 S AB 4BC	20' POLE	LSI INDUSTRIES, INC.
	4	W1	Single	XWS-LED-03L-SIL-2-UNV-DIM-30-70CRI-ALBMR1LR-CXX	WALL MOUNTED AT 12' AFG	LSI INDUSTRIES, INC.
	9	W	Single	XWS-LED-06L-SIL-FT-UNV-DIM-30-70CRI-ALBMR1LR-CXX	WALL MOUNTED 12' AFG	LSI INDUSTRIES, INC.

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)

PLANNING FILE NO.: SITE-2025-0001

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

DATE: 1-29-25
SCALE: 1"=30'
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 23062
FILE: SITE.DWG

CNE
CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

STATE OF NEW HAMPSHIRE
STEPHEN J HAIGHT
No. 7978
LICENSED PROFESSIONAL ENGINEER

LIGHTING PLAN

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE
STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

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Catalog #: _____ Project: _____ Type: _____
Prepared By: _____ Date: _____

Steel Poles

Square Straight

QUICK LINKS

Ordering Guide | Configurations | Dimensions | EPA

FEATURES & SPECIFICATIONS

Pole Shaft
- Straight poles are 4", 5", or 6" square.
- Pole shaft is electro-welded ASTM-A500 Grade C steel tubing with a minimum yield strength of 50,000 psi.
- On Tenon Mount steel poles, tenon is 2-3/8" O.D. high-strength pipe. Tenon is 4-3/4" in length.

Hand-Hole
- Standard hand-hole location is 12" above pole base.
- Poles 22' and above have a 3" x 6" reinforced hand-hole. Shorter poles have a 2" x 4" non-reinforced hand-hole.

Base
- Pole base is ASTM-A36 hot-rolled steel plate with a minimum yield strength of 36,000 psi.
- Two-piece square base cover is optional.

Anchor Bolts
- Poles are furnished with anchor bolts featuring zinc-plated double nuts and washers. Galvanized anchor bolts are optional.
- Anchor Bolts conform to ASTM F 1554-07a Grade 55 with a minimum yield strength of 55,000 PSI.

Ground Lug
- Ground lug is standard.

Duplex Receptacle
- Weatherproof duplex receptacle is optional.

Ground Fault Circuit Interrupter
- Self-testing Ground fault circuit interrupter is optional.

Finishes
- Every pole is provided with the DuraGrip Protection System and a 5-year limited warranty.
- When the top-of-the line DuraGrip Plus Protection System is selected, in addition to the DuraGrip Protection System, a non-porous, automotive-grade corrosion coating is applied to the lower portion of the pole interior sealing and further protecting it from corrosion. This option extends the limited warranty to 7 years.

Determining The Luminaire/Pole Combination For Your Application:
- Select luminaire from luminaire ordering information.
- Select bracket configuration if required.
- Determine EPA value from luminaire/bracket EPA chart.
- Select Pole Height.
- Select MPH to match wind speed in the application area (See windspeed maps).
- Confirm pole EPA equal to or exceeding value of luminaire/bracket EPA.
- Consult factory for special wind load requirements and banner brackets.

Pole Vibration Damper
- A pole vibration damper is recommended in open terrain areas of the country where low steady state winds are common.
- Non-tapered poles and lightly loaded poles are more susceptible to destructive vibration if a damper is not installed.

Listings
- UL Listed
- BAA/TAA Compliant

Catalog #: _____ Project: _____ Type: _____
Prepared By: _____ Date: _____

V-Locity Small (VALS)

Outdoor LED Area Light

OVERVIEW	
Lumen Package	6,000 - 27,000
Wattage Range	36 - 178
Efficacy Range (LPW)	142 - 171
Weight lbs(kg)	20 (9.1)
Control Options	IMSBT, ALB, ALS, 7-Pin, PCI

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction
- Rugged die-cast aluminum housing contains factory prewired driver and optical units. Cast aluminum wiring access door located underneath.
- Self-contained optic, board and heat sink assembly can be rotated or replaced in the field.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: TBD lbs in carton.

Optical System
- State-of-the-Art acrylic optics delivers industry leading optical control with an integrated gasket to provide IP66 rated seal.
- Proprietary refractor optics provide exceptional coverage and uniformity in distribution types 2, 3M, 3W, 4M, 4W, 4F, FTM, 5QN, 5QM, 5Q, 5QW, AM, WF and LC/RC.
- Available in 5000K, 4000K, 3500K, 3000K and 2700K color temperatures per ANSI C78.377 as well as phosphor converted amber.
- Minimum CRI of 80 (optional 70 CRI for 5000K and 4000K).
- Factory or field installable integral shielding available for enhanced spill light control.
- Zero Uplight (excludes adjustable arms).

Electrical
- High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection.
- 0-10 volt dimming (10% - 100%) standard, must specify EXT option for dimming leads to be extended to fixture exterior.
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- L70 Calculated Life: >60K Hours.
- Total harmonic distortion: <20%.
- Operating temperature: -40°C to +50°C (-40°F to +122°F).
- Power factor: >.90.
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation.
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls
- Optional integral passive infrared Bluetooth™ motion and photocell sensor. Fixtures operate independently and can be commissioned via iOS or Android configuration app.
- LSI's AirLink™ wireless control system options reduce energy and maintenance costs while optimizing light quality 24/7.

Installation
- REDIMount pole mount arm allows for a true one person installation.
- Side arm pole mount designed to mount to square or round poles.
- Pole mount arms can accommodate pole drill patterns from 2.4 to 5" on center and utilize LSI's reduced B3 or traditional B5 drill patterns.
- Additional mounting options are available including a mast arm or adjustable slip fitter that allow for luminaire attachment to a 2 3/8" tenon or mast arm.
- Adjustable arms allow for 65º of tilt (-5º below horizontal to +60º above horizontal) in 5º increments.

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

Listings
- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- DarkSky approved with 3000K or warmer color temperature selection (side arm pole and mast arm mounting only).
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP66 rated Luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications are qualified.

Catalog #: _____ Project: _____ Type: _____
Prepared By: _____ Date: _____

Mirada Small Silicone (XWS SIL)

Outdoor Wall Sconce

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

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

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

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

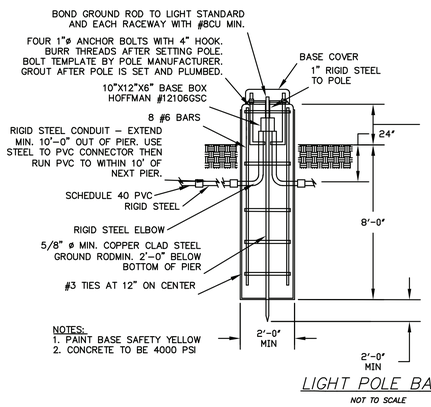
Electrical
- High-performance programmable driver features over-voltage, under-voltage, short circuit and over temperature protection. Custom lumen and wattage packages available.
- 0-10V dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- L90 Calculated Life: >100k Hours.
- Total harmonic distortion (THD): <20%.
- 3L to 12L operating temperature: -40°C to +50°C (-40°F to +122°F).
- 15L operating temperature: -40°C to +45°C (-40°F to +113°F).
- 18L operating temperature: -40°C to +40°C (-40°F to +104°F).
- 21L operating temperature: -40°C to +35°C (-40°F to + 95°F).
- Power factor (PF): >.90.
- Input power stays constant over life.
- Optional 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation.
- Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed via hinged door.
- Optional integral emergency battery pack provides 90-minutes of constant power to the LED system, ensuring code compliance. A test switch/indicator button is installed on the housing for ease of maintenance. The fixture delivers 1500 lumens during emergency mode.

Controls
- Integral passive infrared Bluetooth™ motion sensor options. Fixtures operate independently and can be commissioned via an iOS or Android configuration app. Updates and modifications to the control strategy are easily implemented via an intuitive app.
- LSI's AirLink™ Blue lighting control system is a simple feature rich wireless Bluetooth mesh network. The integrated fixture sensor module provides wireless control of grouped fixtures based on motion sensors, daylight or a fully customizable schedule.

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

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

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



NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: SITE-2025-0001

CNE CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

DATE: 1-29-25
SCALE: N.T.S.
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY: SJH
PROJECT NO: 23062
FILE: SITE.DWG

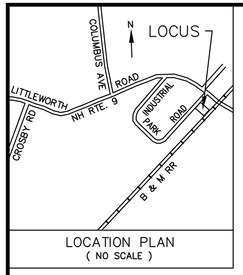
STEPHEN J. HAIGHT No. 7978 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

LIGHTING DETAILS

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

19



LOCATION PLAN
(NO SCALE)

NH STATE PLANE
NAD 83 - GPS OBS.

INDUSTRIAL PARK ROAD
{PUBLIC; 50'WIDE R.O.W.}

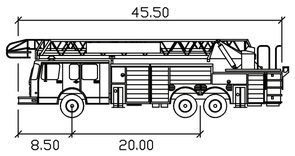
PROPOSED BUILDING
27,040 S.F.

EASEMENT TO PSNH
FOR PUSH POLE
S.C.R.D. 3559/655

EASEMENT TO PSNH
FOR PUSH POLE
S.C.R.D. 3559/655

VENT 6"
CAST IRON

MONITORING
WELL



Dover ladder feet

Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 44.0

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

PLANNING FILE NO.: SITE-2025-0001

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

DATE: 1-29-25
SCALE: 1"=30'
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 23062
FILE: SITE.DWG

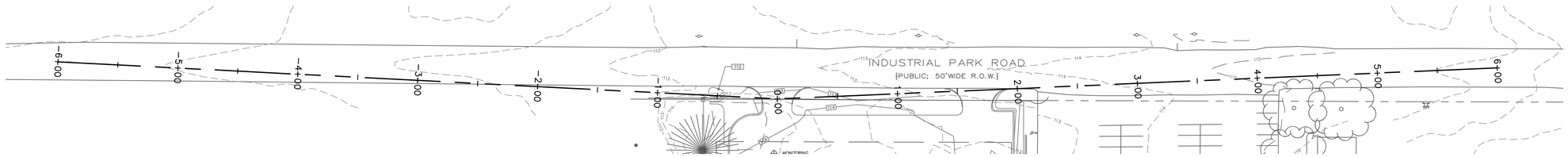
STATE OF NEW HAMPSHIRE
STEPHEN J HAIGHT
No. 7978
LICENSED PROFESSIONAL ENGINEER

DOVER LADDER TRUCK MOVEMENT PLAN

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

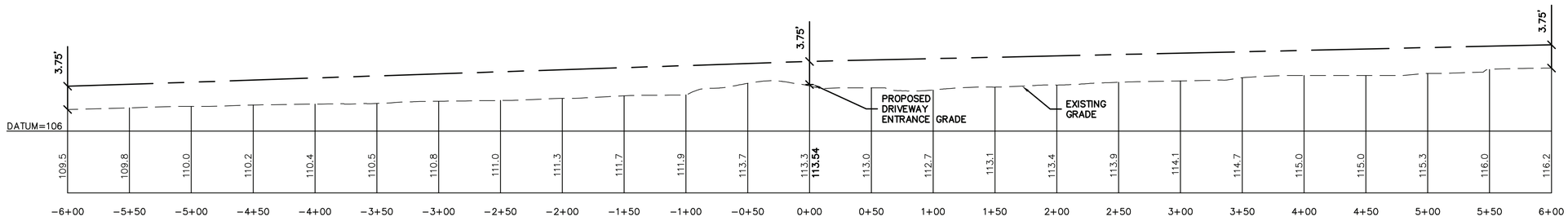
SEASONAL AUTOMOTIVE
STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

20

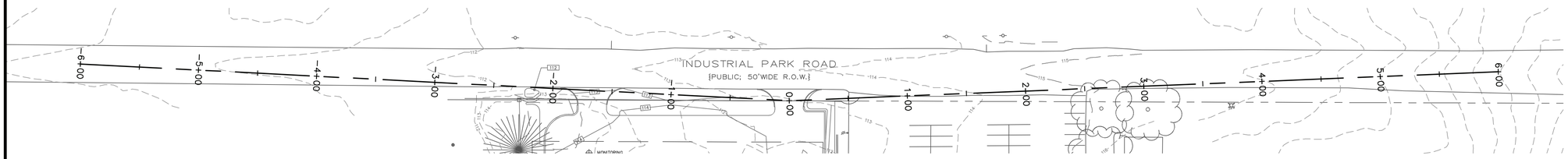


WEST DRIVEWAY ENTRANCE
PLAN VIEW
HORIZONTAL SCALE: 1"=50'

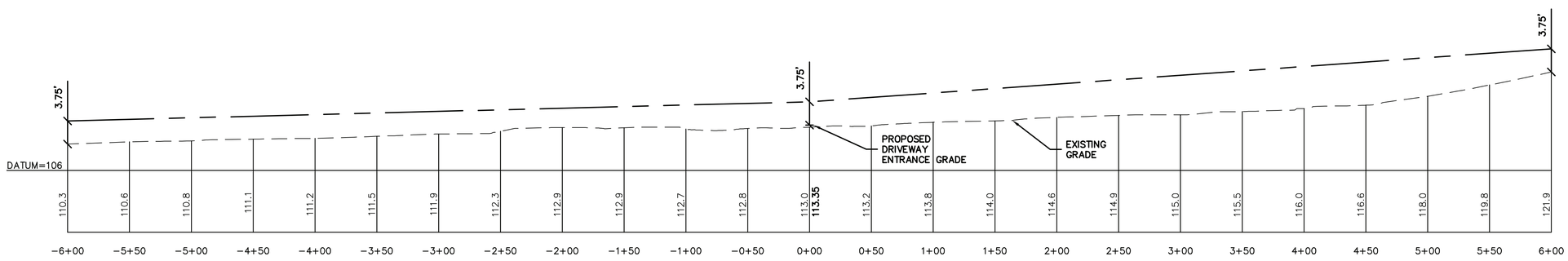
NH STATE PLANE
NAD 83 CRS 0DS:



WEST DRIVEWAY ENTRANCE
PROFILE VIEW
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'



EAST DRIVEWAY ENTRANCE
PLAN VIEW
HORIZONTAL SCALE: 1"=50'



EAST DRIVEWAY ENTRANCE
PROFILE VIEW
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)

PLANNING FILE NO.: SITE-2025-0001

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

DATE: 1-29-25
SCALE: 1"=50'
DRAWN BY: SRD
DESIGN BY: JRG
APPROVED BY:SJH
PROJECT NO: 23062
FILE: SITE.DWG

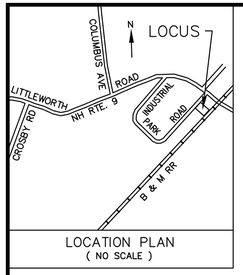
STEPHEN J. HAIGHT No. 7978 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

SIGHT DISTANCE PLAN & PROFILES

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

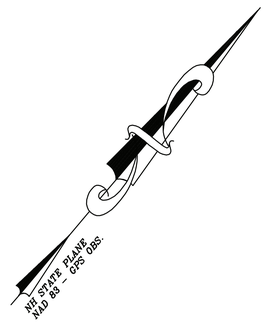
SEASONAL AUTOMOTIVE
STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

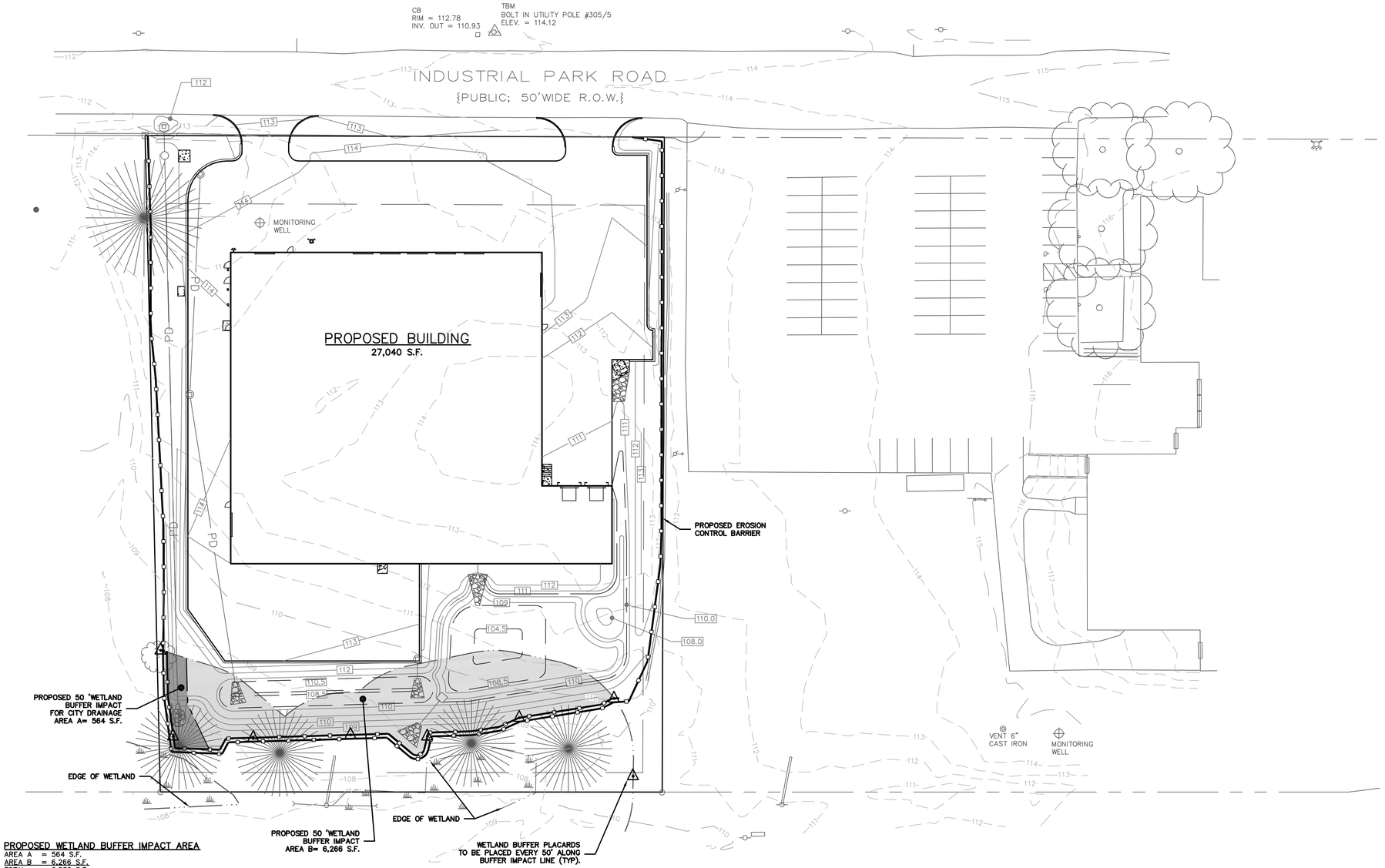
S-1



LOCATION PLAN
(NO SCALE)

WETLAND NOTE:
WETLANDS SHOWN WERE DELINEATED BY BRUCE A. GILDAY, N.H.C.W.S. #088; N.H. C.S.S. #012 OF B A G LAND CONSULTANTS, ON OCTOBER 30, 2024 IN ACCORDANCE WITH THE 1987 CORPS. OF ENGINEERS WETLANDS DELINEATION MANUAL AND LOCATED BY THIS OFFICE.





PROPOSED WETLAND BUFFER IMPACT AREA
AREA A = 564 S.F.
AREA B = 6,266 S.F.
TOTAL = 6,830 S.F

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)

PLANNING FILE NO.: SITE-2025-0001

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

PROJECT NO: 23062	
APPROVED BY: SJH	
DESIGN BY: JRG	
DRAWN BY: SRD	
SCALE: 1"=30'	
DATE: 1-29-25	
FILE: SITE.DWG	

STEPHEN J HAIGHT No. 7978 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
3/4/2025

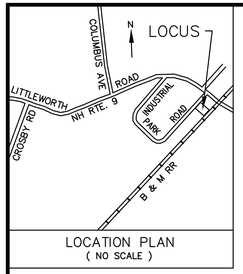
CONDITIONAL USE PERMIT

WETLAND BUFFER IMPACT EXHIBIT

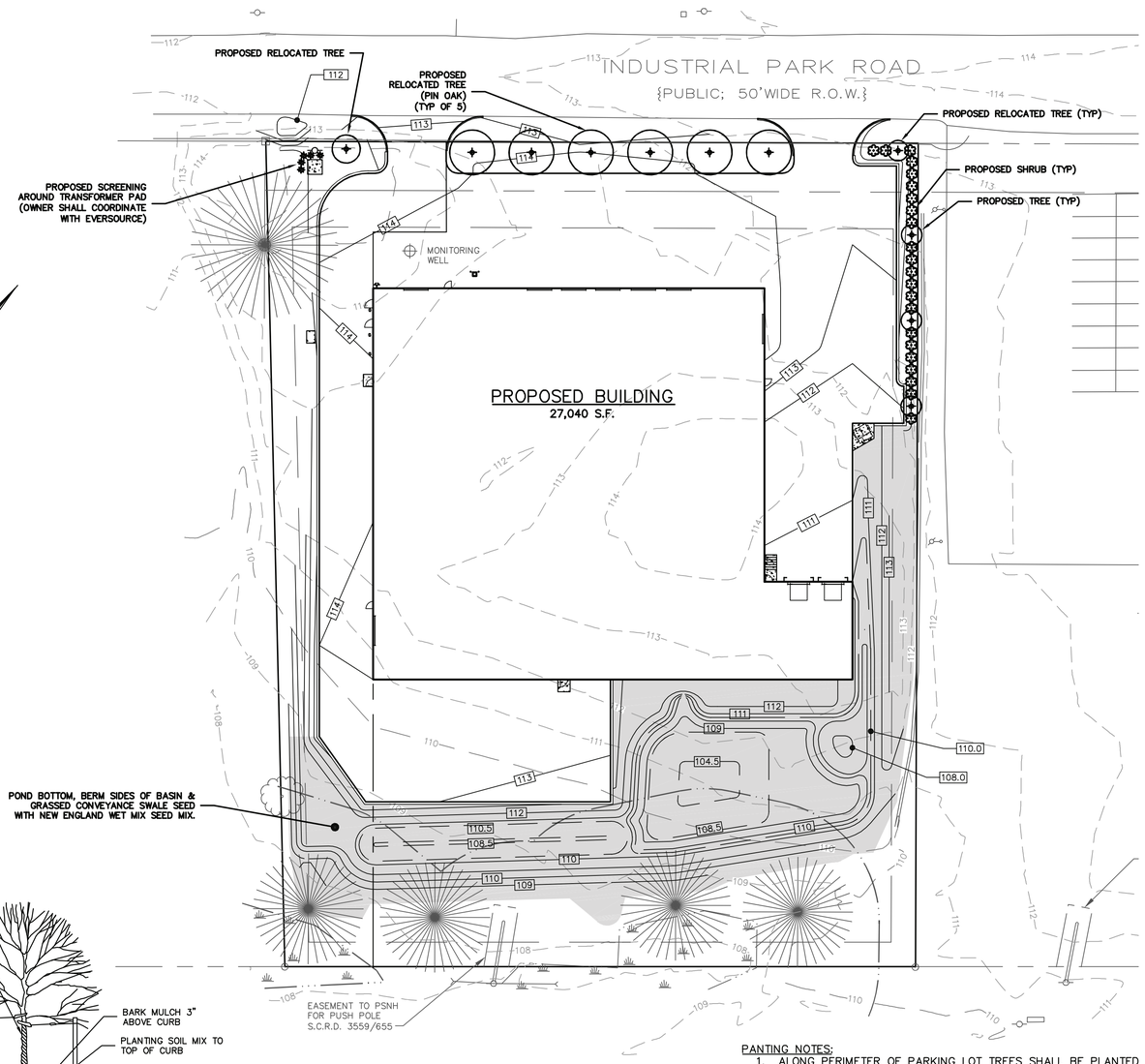
16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

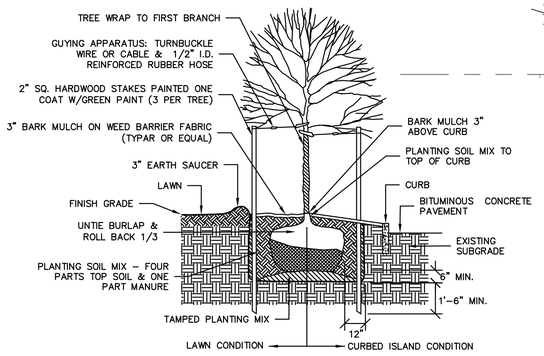
SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

EX-1



LOCATION PLAN
(NO SCALE)



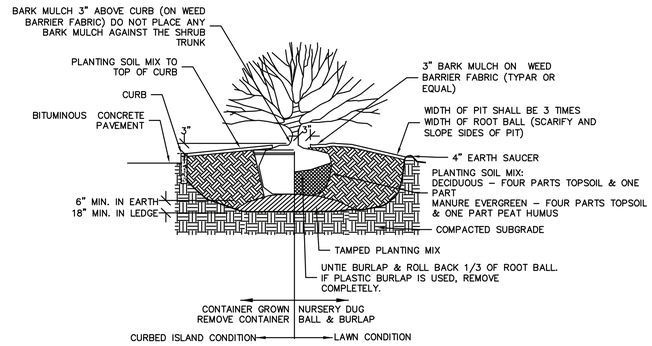


NOTE: PLANT AT SAME DEPTH AS PREVIOUSLY PLANTED OR WITHIN 2" ABOVE

DECIDUOUS TREE PLANTING DETAIL

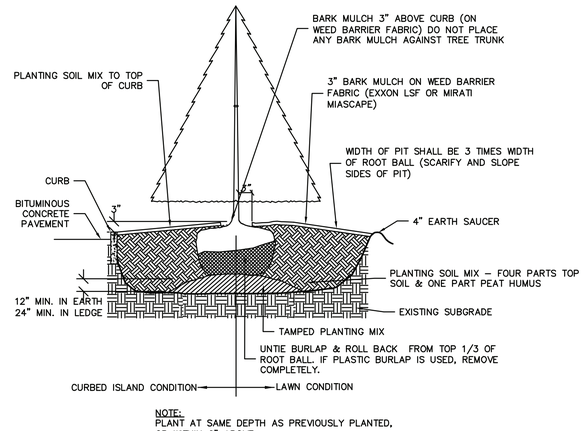
NOT TO SCALE

NOTES:
1. THE SITE SHALL RECEIVE 6" LOAM & SEED ON ALL DISTURBED AREAS UNLESS NOTED.
2. IF THE EXISTING PINE OAKS ARE UNABLE TO BE RELOCATED, TREES OF SIMILAR SPECIES SHALL BE PLANTED.
3. SCREENING AROUND TRANSFORMER PAD SHALL BE COORDINATED WITH EVER SOURCE.



SHRUB PLANTING

NOT TO SCALE



EVERGREEN TREE PLANTING

NOT TO SCALE

PANTING NOTES:
1. ALONG PERIMETER OF PARKING LOT TREES SHALL BE PLANTED AT 35 FEET ON CENTER WITHIN THE BUFFER AREA REQUIRED BY §153-17C.
   - A. TREES MUST BE TOLERANT TO CLIMATIC WEATHER CONDITIONS OF DOVER AND SHALL BE A MINIMUM CALIPER OF 2.5-3 INCHES (MEASURED AT FOUR FEET ABOVE GRADE LEVEL)
   - B. TREES SHALL CONSIST OF DECIDUOUS AND/OR EVERGREEN SHADE TREES.
   - C. TREES SHALL BE SALT- AND DROUGHT-TOLERANT, NATIVE OR NONINVASIVE SPECIES, AND HAVE A STRUCTURE AND GROWTH FROM WHICH PREVENTS THEM FROM OBSTRUCTING SIDEWALKS AND WALKWAYS. FLOOD-TOLERANT PLANTS SHALL BE USED IN DRAINAGE SWALES.
2. SHRUBS SHALL BE PLANTED BETWEEN THE TREES AT FIVE FEET ON CENTER.
   - A. SHRUBS SHALL BE A MIX OF DECIDUOUS AND EVERGREEN SPECIES TOLERANT TO CLIMATIC CONDITIONS OF DOVER.
   - B. SHRUBS SHALL HAVE A MINIMUM HEIGHT OF TWO FEET AT TIME OF PLANTING.
3. TREES PLANTED ALONG STREET SHALL USE THE 10-20-30 RULE (NO MORE THAN 10% OF TREES SHALL BE OF SAME SPECIES, NO MORE THAN 20% OF TREES IN THE SAME GENUS, AND NO MORE THAN 30% IN THE SAME FAMILY).

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

PLANNING FILE NO.: SITE-2025-0001

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

CNE CIVILWORKS NEW ENGLAND
CIVIL & WATERSHED ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	3-4-25

PROJECT NO: 23062
APPROVED BY: SJH
DESIGN BY: JRG
DRAWN BY: SRD
SCALE: 1"=30'
DATE: 1-29-25
FILE: SITE.DWG

STATE OF NEW HAMPSHIRE
STEPHEN J HAIGHT No. 7978
LICENSED PROFESSIONAL ENGINEER
3-4-25

LANDSCAPE PLAN

16 INDUSTRIAL PARK, LLC
340 CENTRAL AVENUE
SUITE 202
DOVER, NH 03820

SEASONAL AUTOMOTIVE STORAGE/MAINTENANCE
34 INDUSTRIAL PARK ROAD
DOVER, NH 03820

L-1

1 OVERALL SCHEMATIC PLAN

SCALE: 3/32" = 1'-0"

PROCON
CONNECT • CREATE • CONSTRUCT

North

0' 8' 16' 24'

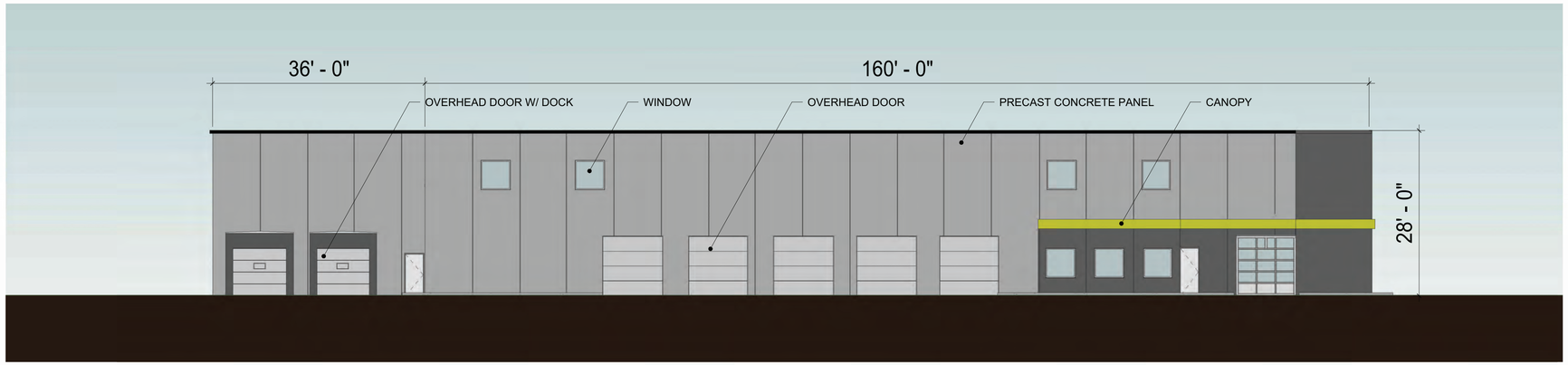
SCALE: 3/32" = 1'-0"

OVERALL SCHEMATIC FLOOR PLAN

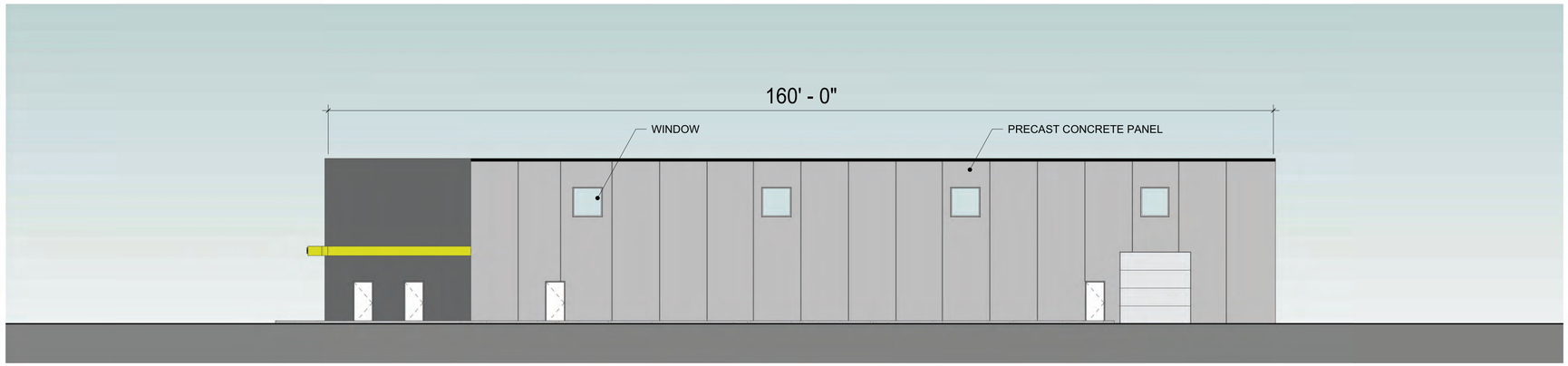
INDUSTRIAL DEVELOPMENT
16 INDUSTRIAL PARK ROAD,
DOVER, NEW HAMPSHIRE

Date 28 JAN 2025

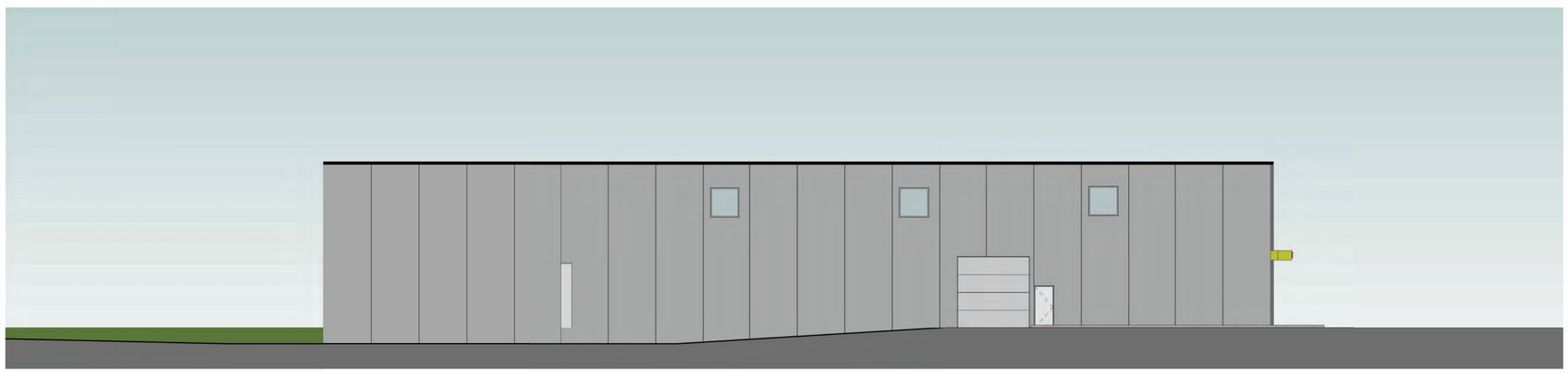
Dwg. No. 1.01



1 NORTH ELEVATION
SCALE: 3/32" = 1'-0"



2 WEST ELEVATION
SCALE: 3/32" = 1'-0"



3 EAST ELEVATION
SCALE: 3/32" = 1'-0"

PROCON
CONNECT • CREATE • CONSTRUCT

0' 20' 40' 60'
SCALE: 3/32" = 1'-0"

SCHEMATIC EXTERIOR ELEVATIONS

INDUSTRIAL DEVELOPMENT
16 INDUSTRIAL PARK ROAD,
DOVER, NEW HAMPSHIRE

Date 28 JAN 2025

Dwg. No. 3.01

PROCON
CONNECT • CREATE • CONSTRUCT

SCHEMATIC EXTERIOR VIEW ENTRY

INDUSTRIAL DEVELOPMENT
16 INDUSTRIAL PARK ROAD,
DOVER, NEW HAMPSHIRE

Date 28 JAN 2025

Dwg. No. 3.02

PROCON
CONNECT • CREATE • CONSTRUCT

SCHEMATIC EXTERIOR VIEW LOADING DOCK

INDUSTRIAL DEVELOPMENT
16 INDUSTRIAL PARK ROAD,
DOVER, NEW HAMPSHIRE

Date 28 JAN 2025

Dwg. No. 3.03

CITY OF DOVER - ORDINANCE

Posted: March XX, 2025

CITY OF DOVER

Ordinance Title: Site Review Regulations Amendments
Chapter: 153

The City of Dover Ordains:

PURPOSE
The purpose of this ordinance is to amend Chapter 153 of the Code of the City of Dover, entitled Site Review Regulations, by updating the Code to reflect changes in the community and in land use regulations.

1. Chapter 153 of the Code of the City of Dover, entitled Site Plan Review, is hereby amended by revising Section 6, "Application Requirements, Technical Review Committee," Subsection A, as follows:

A. Prior to the formal submission of an application for site review by the Planning Board, the applicant shall meet with the Technical Review Committee. Said meeting(s) shall serve to assist the applicant in preparing a development proposal that is technically conforming to the regulations contained herein. The Technical Review Committee shall be comprised of the Planning Board Chair, the Conservation Commission Chair, City Engineer, Fire and Rescue Chief, Police Chief, Building Official, Zoning Administrator, Business Development Director and Director of Planning and Community Development, who shall serve as Chair. All Committee members shall have a designated alternate available in their absence. For projects under the threshold described in Section 153-4.A but meeting the threshold of 153-4.B(1) through (5) may be approved by the majority vote of Technical Review Committee per RSA 676:43 provided no waivers or Conditional Use Permits are necessary to meet regulations.

B. Applications submitted for Planning Board review shall remain consistent in scope to application materials submitted through the Technical Review Committee process. Any substantial deviation in project scope from the Technical Review Committee process to Planning Board submission may be continued to future Planning Board meeting dates at the discretion of the Director of Planning. Generally speaking, if there is less development or less impact then changes may be permitted by the Director of Planning.

~~B.~~ C. A completed application sufficient to invoke jurisdiction of the Planning Board (or, for minor site plans, the Technical Review Committee) shall include the following elements:

(1) A completed application form, available at the Department of Planning and Community Development office and through the online portal.

(2) A completed site review checkoff list.

(3) A written narrative description of the proposed project, addressing its purpose, scope of operation, and impact on the immediate area of influence and the City in general (traffic, schools, utilities, land use compatibility, aesthetics, land and water resources, etc.).

(4) Ground/aerial photographs of the site and immediate area.

(5) Four copies of the site development plan as more fully described in Article IV of this chapter. Transmit a pdf of the site development plan via e-mail to dover-planning@dover.nh.gov. (Note: Only three copies of the preliminary plan need to be submitted initially for review by the Technical Review Committee. However, the applicant shall check with the Planning Department about number of copies that will be required for submission of the complete application to the Planning Board.)

(6) A list of owners, applicants, and professionals involved in the application. Additionally a fee for the City to create a list of abutting property owners that lie within 200 feet of the subject parcel. Information shall include name, mailing address, and Dover Tax Map and lot numbers for the applicant to review. The City will prepare verified mailings.

(7) A fee of an amount to be determined in accordance with the fee schedule contained in § 153-18 of this chapter.

~~C.~~ D. The applicant shall file the application with the Planning Board office at least 21 days prior to the Planning Board meeting, at which time the application will be accepted and a public hearing held.

(1) The applicant and abutters shall be notified of said public hearing by verified mail, with return receipt requested, stating the time, date and place of such hearing. Notice will be mailed at least 10 days prior to the date of the meeting, by the city.

(2) Such public hearing shall be advertised in a newspaper of general distribution not less than 10 days prior to the said meeting.

2. Chapter 153 of the Code of the City of Dover, entitled Site Plan Review, is hereby amended by revising Section 11, "Performance Guaranties," Subsection C, as follows:

A separate performance bond for landscaping in an amount equal to 10% of the total landscaping value shall be submitted to the City Engineer to be used in the event landscaping installed is removed, dies or is otherwise damaged during the three years following the issuance of the final certificate of occupancy. Surety amount may be adjusted by staff or the Planning Board as necessary.

3. Chapter 153 of the Code of the City of Dover, entitled Site Plan Review, is hereby amended by revising Section 14, "Site Development Design Criteria," Subsection G, Subsection (2), Subsection (b) as follows:

Parking lots which have more than two aisles which are approximately parallel shall be required to have continuous landscaped planting strips separating every four rows of parking. The landscaped planting strips shall be a minimum of 10 feet in width and shall be separated from the parking area by adequate curbing. Within the landscaped planting strips, deciduous and/or evergreen shade trees shall be planted at 40 feet on center. Trees shall be species tolerant to the climatic conditions of Dover and shall be a minimum caliper of 3 inches

(measured at four feet above grade level). If the tree species is of a multi-stem variety, the trees must have at least 3 stems and be at least 6' tall. Within the landscaped planting strips, shrubs shall be planted between the deciduous trees at five feet on center. The shrubs shall be a mix of deciduous and evergreen species, tolerant to the climatic conditions of Dover and shall be a minimum height of two feet at the time of planting. All trees, shrubs and landscaping materials shall be maintained in good condition so as to present a healthy, neat, and orderly appearance.

4. Chapter 153 of the Code of the City of Dover, entitled Site Plan Review, is hereby amended by revising Section 14, "Site Development Design Criteria," Subsection G, Subsection (3), Subsection (a) as follows:

   Along the perimeter of parking lots with 10 or more spaces, deciduous and/or evergreen shade trees shall be planted at 35 feet on center within the buffer area required by § 153-17C. Trees shall be species tolerant to the climatic conditions of Dover and shall be a minimum caliper of 3 inches (measured at four feet above grade level). If the tree species is of a multi-stem variety, the trees must have at least 3 stems and be at least 6' tall. Within the perimeter buffer, shrubs shall be planted between the trees at five feet on center. The shrubs shall be a mix of deciduous and evergreen species, tolerant to the climatic conditions of Dover and shall be a minimum height of two feet at the time of planting. All trees, shrubs and landscaping materials shall be maintained in good condition so as to present a healthy, neat, and orderly appearance.

CITY OF DOVER - ORDINANCE

Posted: March, Day, 2025

Ordinance Number: **O – yyyy.mm.dd -**
Ordinance Title: Subdivision of Land Regulation Amendments
Chapter: 157

CITY OF DOVER

The City of Dover Ordains:

PURPOSE
The purpose of this ordinance is to amend Chapter 157 of the Code of the City of Dover, entitled Subdivision of Land Regulations, by updating the Code to reflect changes in the community and in land use regulations.

1. Chapter 157 of the Code of the City of Dover, entitled Land Subdivision Regulations, is hereby amended by revising Section 10, "Application Submittal and Review", as follows:

Anyone desiring to subdivide a tract of land shall file an application with the Planning Board. Only complete applications will be reviewed by the Board.

A. To be considered complete an application shall:

(1) Be made on forms available at the Planning Board office.

(2) Include one electronic copy and ~~15~~ 6 copies of the preliminary plat layout and the plat construction detail sheets as more fully described in §§ **157-27** and **157-29**, respectively, in this chapter. Transmit a pdf of the subdivision plat via e-mail to dover-planning@dover.nh.gov. (Note: Only eight copies of the preliminary plat need to be submitted initially for review by the Technical Review Committee. However, ~~15~~ 6 copies are required for submission of the complete application to the Planning Board.)
[Amended 5-24-2016; 2-26-2019]

(3) Include a fee in an amount to be determined in accordance with the fee schedule outlined in § **157-53** of this chapter.

(4) Comply in all respects with Article **VIII** of this chapter, except where a waiver may be specifically authorized by the Planning Board.

(5) Be filed with the Director of Planning and Community Development at least 21 calendar days prior to a regularly scheduled meeting of the Board.
[Amended 1-14-2020]

(6) Be reviewed and evaluated by the Technical Review Committee as to the completeness of the information submitted by the applicant. Particular attention will be given to the arrangement, location and width of streets; topography and soil data; method of sewage disposal; water provision; on-site drainage; preservation of on-site vegetal elements; lot size and arrangement; the present and future development of adjoining lands; and conformity with the Master Plan and other relevant City ordinances. This review by the Technical Review Committee may be eliminated if, in the judgment of the Director of Planning and Community Development, such a review is not warranted. The Director shall provide a written explanation to the Planning Board for said elimination of this review.

(7) Include special investigative studies, review of documents and other matters, if required for particular applications. Reasonable fees to cover the cost of such studies or reviews shall be charged to the applicant [RSA 676:4, I(g)].

2. Chapter 157 of the Code of the City of Dover, entitled Land Subdivision Regulations, is hereby amended by revising Section 16, "Application Submittal and Review", as follows:

Anyone desiring to subdivide a tract of land under the minor subdivision classification shall file an application with the Planning Board in accordance with the following requirements, except for minor lot line adjustments and boundary agreements as noted in § **157-17** below. Only complete applications will be reviewed by the Board.

A. To be considered complete, an application shall:

(1) Be made on forms available at the Planning Board office.

(2) Include ~~15~~ 6 copies and an electronic copy of a final plat layout as described in § **157-28** of this chapter. Additional information/data may be requested by the Planning Board for the proper review of said minor subdivision.

(3) Include ~~15~~ 6 copies of the plat construction detail sheets, if appropriate, as described in § **157-36** of this chapter.

(4) Include a fee in an amount to be determined in accordance with the fee schedule contained in § **157-53** of this chapter.

(5) Be filed with the Director of Planning and Community Development at least 21 calendar days prior to a regularly scheduled meeting of the Board.

[Amended 1-14-2020]

B. Included with the application shall be the names and mailing addresses of all owners, applicants, and professionals assisting with the application. The Planning Department will create a list of the names and addresses of all abutters obtained from City records or the Strafford County Registry of Deeds not more than five calendar days before the date of filing for the applicants to review.

[Amended 1-14-2020; 7-27-2021]

C. Where City sewer service is not available, the applicant shall provide evidence that all proposed lots are of a sufficient size to support individual waste systems as described in § **157-41**.

D. Preliminary plats are required for minor subdivisions.

3. Chapter 157 of the Code of the City of Dover, entitled Land Subdivision Regulations, is hereby amended by revising Section 17, "Application Submittal and Review", as follows:

Anyone desiring to alter a lot line shall file an application with the Planning Board in accordance with the following requirements. Only complete applications will be reviewed by the Board.

A. To be considered complete, an application shall:

(1) Be made on forms available at the Planning Board office.
(2) Include ~~15~~ 6 copies and an electronic copy of a surveyed plat layout that contains the following information:
(a) Date, approximate true North point and scale.
(b) Name, address and signature of owner and stamp of registered New Hampshire surveyor.
(c) Names of owners of record of abutting properties or developments.
(d) Square footage within newly adjusted lot lines.
(e) Lot lines with accurate dimensions and bearings of a sufficient scale to determine readily the location, bearing and length of all lines.
(f) Zoning information and building setback lines for the zone.
(g) Location map.
(h) Existing structures.
(3) Be filed with the Director of Planning and Community Development at least 21 calendar days prior to a regularly scheduled meeting of the Board. [Amended 1-14-2020]
(4) Include a fee in an amount to be determined in accordance with the fee schedule contained in § 157-53 of this chapter.

B. Included with the application shall be the names and mailing addresses of all abutters as indicated in City records. The names of all abutters shall be obtained from City records or the Strafford County Registry of Deeds not more than five calendar days before the date of filing. In addition to the abutters list, three duplicate sets of adhesive mailing labels for all abutters shall be submitted for use by staff in preparing verified mailings. [Amended 1-14-2020]

C. Lots created under the cluster subdivision with lot lines method of open space subdivisions shall not be allowed to have lot line adjustments completed if the lot line adjustment would alter the area of open space approved at the time of subdivision.
[Amended 1-14-2020]

4. Chapter 157 of the Code of the City of Dover, entitled Land Subdivision Regulations, is hereby amended by revising Section 25, "Maintenance Guaranty," as follows:

An irrevocable letter of credit to guaranty that all site work was properly done shall be posted by the applicant with the Community Services Department, which shall place the letter of credit with the City Treasurer. Such maintenance guaranty shall be in an amount of 2% of the estimated project cost prepared by the City Engineer, plus the full cost of replacement for all street trees and other landscaping required for ~~three~~ two years after a final certificate of completion is issued. If such repairs are needed and are not satisfactorily installed by the developer, then such guaranty shall be used to complete and/or install such improvements in accordance with the requirements specified herein.

5. Chapter 157 of the Code of the City of Dover, entitled Land Subdivision Regulations, is hereby amended by revising Section 31, "Street Layout," as follows:

A. The provisions of this section apply to the construction, reconstruction, alteration, surfacing or resurfacing of any street which intersects with the right-of-way of any City-owned, City-maintained way and/or other private way.

~~A.~~ B. Width, location and construction. Streets shall be of sufficient width (see Section 2, pages 3 and 4 of the City of Dover Construction Guidelines[1]), suitably located and adequately constructed to conform to the Master Plan and to accommodate the projected traffic and afford access for firefighting, snow removal and other road maintenance equipment. The arrangement of streets shall be such as to avoid imposing undue hardship on adjoining properties and shall be coordinated so as to comprise a convenient system. In the event a subdivision adjoins or includes an existing street which does not conform to widths as required by this chapter or by the Master Plan of the City of Dover, the developer shall dedicate sufficient land to bring such street into conformity. Subdivisions along one side of any such street or highway shall be required to dedicate 1/2 of the required extra width. [Amended 2-26-2019] [1] Editor's Note: The Construction Guidelines are on file in the City offices.

~~B.~~ C. Arrangement. The arrangement of streets and/or rights-of-way in a subdivision shall provide for the continuation of streets and/or rights-of-way of adjoining subdivisions and for the proper protection of such accessways into adjoining properties which are not yet subdivided, in order to make possible necessary fire protection, movement of traffic and the construction or extension, presently or when later required, of needed utilities and public services, such as sewer, water and drainage facilities. Continuations or extensions of existing streets and/or rights-of-way shall be of widths equal to or greater than those appurtenances now existing; provided, however, that such improvements conform to those standards contained in Subsection A. Where, in the opinion of the Planning Board, topographic or other conditions make such continuance undesirable or impractical, the above conditions may be modified.

~~C.~~ D. Local streets. Local streets (minor) shall be so arranged that their use by through traffic shall be avoided.

~~D.~~ E. Provision for future resubdivision. Where a tract is subdivided into lots substantially larger than the minimum size required in the zoning district in which a subdivision is located, the Planning Board may require that streets and lots be arranged so as to permit future resubdivision in accordance with the requirements contained in this chapter.

~~E.~~ F. Dead-end streets (culs-de-sac). The creation of dead-end or loop residential streets shall be encouraged whenever the Planning Board finds that such type of development will not interfere with normal traffic circulation in the area. In the case of dead-end streets, where needed or desirable, the Planning Board may require the reservation of a 30-foot-wide

easement to provide for continuation of pedestrian traffic, emergency access ways and utilities to the next street. [Amended 7-27-2021]

~~F.~~ G. Block size. Blocks in general shall not be less than 500 feet nor more than 1,200 feet in length. In general, no block width shall be less than twice the normal lot depth. In blocks which exceed 800 feet in length, the Planning Board may require the reservation of an easement through the block to provide for the crossing of pedestrian traffic and underground utilities where needed or desired and may further specify, at its discretion, that a paved footpath be included.

~~G.~~ H. Intersections with collector or major arterial roads. Local (minor) or secondary street openings into such roads shall, in general, be at least 400 feet apart. Intersections of more than two streets at any one point shall not be allowed without Planning Board approval.

~~H.~~ I. Street jogs. Street jogs with center-line offsets of less than 125 feet shall be avoided.

~~I.~~ J. Angle of intersection. In general, all streets shall join each other so that for a distance of at least 100 feet, the street is approximately at right angles to the street it joins. No street shall intersect another street at an angle of less than 60°.

~~J.~~ K. Reverse curves. A minimum tangent of 100 feet shall be required between reverse curves on arterial and collector streets.

~~K.~~ L. Relation to topography. The street plan of a proposed subdivision shall bear a logical relationship to the topography of the property, and all streets shall be arranged so as to obtain as many of the building sites as possible at or above the grade of the streets. Grades of streets shall conform as closely as possible to the original topography.

~~L.~~ M. Special treatment along major arterial streets. Where a subdivision abuts or contains an existing or proposed major arterial street, the Planning Board may require limited access streets, reverse frontage with screen planting contained in a nonaccess reservation along the rear property line, deep lots with rear service alleys or such other treatments as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic.

6. Chapter 157 of the Code of the City of Dover, entitled Land Subdivision Regulations, is hereby amended by revising Section 32, “Street Design,” as follows:

A. The provisions of this section apply to the construction, reconstruction, alteration, surfacing or resurfacing of any street which intersects with the right-of-way of any City-owned, City-maintained way and/or other private way.

~~A.~~ B. Widths of rights-of-way. Streets shall be the following widths:

Type of Street	Minimum Right-of-Way (feet)	Minimum Pavement (feet)	
		Residential	Nonresidential
Arterial streets (major)	70	36	36
Collector streets	60	32	32
Local streets up to 5 lots	50	20*	28
Local streets 6 to 20 lots	50	24**	28
Local streets 21 or more lots	50	28***	28

*No on-street parking will be allowed.

**Parking must be restricted to one side of the road only.

***The Planning Board may allow a reduction to 24 feet if the subdivision is designed to provide a 100-foot setback from the existing public right-of-way for any structures on the corner lots created at the intersection(s) of the proposed subdivision street and the existing public street.

~~B.~~ C. Improvements. Streets shall be graded and improved with pavements, curbs and gutters, sidewalks, storm drainage facilities, water mains, sewers, streetlights and signs, street trees and fire hydrants, except where waivers may be requested, and the Planning Board may waive, subject to appropriate conditions, such improvements as it considers may be omitted without jeopardy to the public health, safety and general welfare. All streetlights, street trees, mailboxes, newspaper bins, trash receptacles, or any other type of obstruction shall be placed in the grass between the sidewalk and the curb. Pedestrian easements shall be improved as required by the City Engineer or designee. Such grading and improvements shall conform to the design specifications set forth in Articles VII and VIII.

~~C.~~ D. Utilities. The Planning Board shall, whenever possible, require that underground utilities be placed in the street right-of-way to simplify location and repair of lines when they require attention. The subdivider shall install underground service connections to the property line of each lot within the subdivision for such required utilities before the street is paved.

~~D.~~ E. Utility easements. Where topography is such as to make impractical the inclusion of utilities within the street right-of-way, perpetual unobstructed easements at least 30 feet in width shall be provided with satisfactory access to the street. Easement of greater width may be required where more than one utility is located in the same easement. Wherever possible, easements shall be continuous from block to block. Such easements shall be cleared and graded where required.

~~E.~~ F. No tree, shrub or building shall be placed or erected in any easement for utility or drainage purposes, except at the owner's risk as to all costs for demolition, removal or reconstruction or by arrangements made with the City Engineer and the Community Services Director. The proper authorities may have free access to and use of the easements at any time. Any planting of trees within the street right-of-way shall be in accordance with a plan approved by the Community Services Director.

~~F.~~ G. Curve radii at street intersections. Street right-of-way lines at intersections shall be rounded by curves of at least thirty-foot radius for local residential streets and at least thirty-five-foot radius for all other streets, unless otherwise specified by the Planning Board.

~~G.~~ H. Grades. No local street grade shall be in excess of 8% and no collector street grade shall be in excess of 4%, except as otherwise approved by the Planning Board due to adverse topographic conditions. For adequate drainage, the minimum grade of any new street shall not be less than 0.5%. No street shall support a grade in excess of 3% within 75 feet of its point of intersection with any other street.

~~H.~~ I. Changes in grade. All changes of grade shall be connected by vertical curves of such length and radius so as to provide smooth transition and proper sight distance.

~~I.~~ J. Steep grades and curves; visibility of intersections. A combination of steep grades and curves shall be avoided. In order to provide visibility for traffic safety, that portion of any corner lot (whether at an intersection entirely within the subdivision or of a new street with an existing street) shall be kept cleared of all growth, except isolated trees, and obstructions above a level three feet higher than the center line of the street. If necessary, ground shall be excavated to achieve visibility.

~~J.~~ K. Dead-end streets (culs-de-sac). Unless topography indicates a need for an alternative length, streets shall not be less than 500 feet nor exceed 1,000 feet in length and shall terminate in a cul-de-sac. The exact form of the cul-de-sac shall be aesthetically pleasing as well as functional. The right-of-way limits at the cul-de-sac shall be as necessary to ensure adequate property within which to properly maintain the area. The exact configuration and dimension of the cul-de-sac shall be approved by the Planning Board. Temporary dead-end streets, such as in phased construction, may require temporary turnaround facilities. Hammerhead designed dead-end streets are not acceptable for public roadways.

~~K.~~ L. Watercourses. Where a watercourse separates a proposed street from abutting property, provision shall be made for access to all lots by means of culverts or other structures of suitable design.

~~L.~~ M. Where a subdivision is traversed by a watercourse, drainageway, channel or stream, there shall be provided, upon request, a stormwater easement or drainage right-of-way. In no case shall it be less than 30 feet in width.

~~M.~~ N. If a roundabout is proposed for inclusion, a professional engineer with traffic engineering certifications must design the roundabout in conformance with "Roundabouts: An Informational Guide," as adopted and amended by the Federal Highway Administration.

7. Chapter 157 of the Code of the City of Dover, entitled Land Subdivision Regulations, is hereby amended by revising Section 35, “Parks, Open Space and Natural Features,” Subsection (E), Subsection (2) as follows:

   Trees shall have a caliper of no less than 3 inches when planted. If the tree species is of a multi-stem variety, the trees must have at least 3 stems and be at least 6’ tall.

8. Chapter 157 of the Code of the City of Dover, entitled Land Subdivision Regulations, is hereby amended by revising Section 50, “Driveways,” Subsection (B) as follows:

   It shall be unlawful to construct, reconstruct, alter, surface or resurface any driveway, whether connected to a private or public way, in a manner which affects the size, elevation or grade of such driveway until the Community Services Director, or Designee, has reviewed and approved of such construction or alteration and has issued a written permit for such work. The Community Services Director, or Designee, may be able to grant waivers for driveways connecting to private roadways. No permit shall be required for any existing driveway, entrance or approach unless the grade, elevation, location or width of said driveway is changed. For purposes of this section, any driveway so constructed, reconstructed, altered, surfaced or resurfaced as indicated above which abuts or is clearly designed to provide access to a public way as defined by RSA 259:125 shall be presumed to be situated within the right-of-way.

CITY OF DOVER

CITY OF DOVER – ORDINANCE

Ordinance Number: **O – yyyy.mm.dd -**
Ordinance Title: Updating the Dover Zoning Ordinance
Chapter: 170

The City of Dover Ordains:

1. **PURPOSE**
   The purpose of this ordinance is to amend Chapter 170 of the Code of the City of Dover, entitled Zoning, by updating the Code to reflect changes in the community and in land use regulations.

2. **AMENDMENT**
   Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-6.B., "Word Usage and Definitions", by adding the following definition to the ordinance, which is to read as follows:

   "COMMUNITY RESIDENCE means an establishment qualified for certification or licensure by the State of New Hampshire which provides resident services to individuals with a developmental disability or an acquired brain disorder. This use shall be permitted by right in all zoning districts."

3. **AMENDMENT**
   Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-6.B., "Word Usage and Definitions", by revising the definition below to read as follows:

   "OPEN SPACE means land that is not built upon or substantially altered by human activity, including open fields, such as meadows and farmland, and forest as well as undeveloped shorelands and water bodies. No more than 35% of any required open space may be comprised of any protected overlay zone such as wetlands, buffers to wetlands, steep slopes, or no-cut/ no-disturb buffers."

4. **AMENDMENT**
   Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-6.B., "Word Usage and Definitions", by adding the following definition to the ordinance, which is to read as follows:

   "ELECTRIC VEHICLE ("EV") READINESS means having installed electrical conduit and stub-outs to accommodate the power requirements of industry-standard EV chargers for future installation."

5. **AMENDMENT**
   Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-6.B., "Word Usage and Definitions", by adding the following definition to the ordinance, which is to read as follows:

   "SOLAR READINESS pursuant to a structure means that the structure in question is proven to be physically capable of supporting the industry standards for nominal loads of a roof-mounted solar array in proportion with the size and use of the structure, including electrical conduit access from the service panel to the future array location."

6. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-6.B., "Word Usage and Definitions", by adding the following definition to the ordinance, which is to read as follows:

"GRAND OPENING SIGN means any temporary sign, to include banner-type signs, which is installed prior to the initial opening of a new business. Such signs shall not exceed twenty-four (24) sf. in total and shall be installed for a period not to exceed two (2) weeks."

7. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-6.B., "Word Usage and Definitions", by revising the definition of Accessory Dwelling Unit to read as follows:

"ACCESSORY DWELLING UNIT means a secondary dwelling unit attached and subordinate to a SINGLE-FAMILY DWELLING or constructed within a detached ~~garage~~ structure that is accessory and subordinate to a single-family dwelling. See § 170-24 for the accessory dwelling unit regulations."

8. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.A., "Applicability of Tables of Use and Dimensional Regulations by District", by revising the Conditional Use Permit criteria for the Education Institution, Post Secondary use in the Innovative Technology (IT) District, to read as follows:

"A. The school is a trade/vocational/career technical school
B. The school ~~is accredited by~~ has active licensure through the State of New Hampshire, or equivalent"

9. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.B., "Applicability of Tables of Use and Dimensional Regulations by District", by revising the Signage Table in the Central Business - General (CBD-G) District, to specify the maximum number of signs intends to refer to signs per tenancy, not per lot, which is to read as follows:

Sign Size & Quantity	
Total signs permitted	2 [per tenancy, and is for lot (excluding development identification SIGNS)]

10. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.B., "Applicability of Tables of Use and Dimensional Regulations by District", by revising the Signage Table in the Central Business Mixed Use (CBD-M) District, to specify the maximum number of signs intends to refer to signs per tenancy, not per lot, which is to read as follows:

Sign Size & Quantity	
Total signs permitted	2 [per tenancy, and is for lot (excluding development identification SIGNS)]

11. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.B., "Applicability of Tables of Use and Dimensional Regulations by District", by revising the Signage Table in the Central Business Residential (CBD-R) District, to specify the maximum number of signs intends to refer to signs per tenancy, not per lot, which is to read as follows:

Sign Size & Quantity	
Total signs permitted	1 [per tenancy, and is for lot (excluding development identification SIGNS)]

12. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.B., "Applicability of Tables of Use and Dimensional Regulations by District", by revising the Signage Table in the Central Business Transit Oriented Development (CBD-TOD) District, to specify the maximum number of signs intends to refer to signs per tenancy, not per lot, which is to read as follows:

Sign Size & Quantity	
Total signs permitted	2 [per tenancy, and is for lot (excluding development identification SIGNS)]

13. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.A., "Applicability of Tables of Use and Dimensional Regulations by District", by adding "Manufactured Home" to the list of approved uses within the Medium Density Residential (R-12) District.

14. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.A., "Applicability of Tables of Use and Dimensional Regulations by District", by adding "Manufactured Home" to the list of approved uses within the Rural Density Residential (R-20) District.

15. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.A., "Applicability of Tables of Use and Dimensional Regulations by District", by

adding "Manufactured Home" to the list of approved uses within the Rural Density Residential (R-40) District.

16. AMENDMENT
Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.A., "Applicability of Tables of Use and Dimensional Regulations by District", by adding "Manufactured Home" to the list of approved uses within the Urban Density Multi Residential (RM-U) District.

17. AMENDMENT
Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.A., "Applicability of Tables of Use and Dimensional Regulations by District", by adding "Personal Services" to the list of approved uses within the Urban Density Multi Residential (RM-U) District.

18. AMENDMENT
Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.A., "Applicability of Tables of Use and Dimensional Regulations by District", by adding "Manufactured Home" to the list of approved uses within the Suburban Density Residential (RM-SU) District.

19. AMENDMENT
Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.A., "Applicability of Tables of Use and Dimensional Regulations by District", by adding "Manufactured Home" to the list of approved uses within the Commercial (C) District.

20. AMENDMENT
Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.A., "Applicability of Tables of Use and Dimensional Regulations by District", by adding "Manufactured Home" to the list of approved uses within the Hospital (H) District.

21. AMENDMENT
Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.A., "Applicability of Tables of Use and Dimensional Regulations by District", by adding "Manufactured Home" to the list of approved uses within the Little Bay Waterfront (LBW) District.

22. AMENDMENT
Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.B., "Applicability of Tables of Use and Dimensional Regulations by District", by revising the Dimensional Regulations Table within the Central Business Mixed Use (CBD-M) District Table of Uses, correct errors within the table as follows:

Principal Building	
Lot Size	N/A
Lot coverage	~~75% – 100%~~ 50% min

Frontage build-out	~~80% min~~ 60% min
Front primary build-to line	~~0 ft. min – 0 ft. max~~ 5 ft. min - 20 ft. max
Front secondary build-to line	~~0 ft. min – 0 ft. max~~ 5 ft. min - 20 ft. max
Side setback	~~10 ft. min, 25 ft. max~~ 5 ft. min - 20 ft. max
Rear setback	~~0 ft. min, 25 ft. max~~ 10 ft. min - 20 ft. max
Outbuilding	
Front setback	~~Not permitted~~ 20 ft. min + bldg. setback
Side setback	~~Not permitted~~ 5 ft. min
Rear setback	~~Not permitted~~ 5 ft. min
Private Frontages	
Common yard	~~Not permitted~~ Permitted
Porch and fence	~~Not permitted~~ Permitted
Terrace/lightwell	~~Not permitted~~ Permitted
Stoop	~~Permitted~~ Permitted
Shopfront/awning	~~Permitted~~ Permitted
Gallery	~~Permitted~~ Not permitted
Height of Building	
Principal building	~~5~~ 3 story max, ~~3~~ 2 story min
Outbuilding/accessory	~~Not permitted~~ 2 story max

23. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.B., "Applicability of Tables of Use and Dimensional Regulations by District", by revising the Downtown Architectural Standards in the Gateway District (G) Table of Uses, to read as follows:

"**DOWNTOWN ARCHITECTURAL STANDARDS***

Preserving and enhancing the architectural tradition, history, and visual appeal of the Gateway District is integral to maintaining the character and identity of our community. Buildings designs and materials along Central Ave should enhance the appearance of Dover, reinforce pedestrian character where appropriate, reflect a consistency found within the sub-district, neighboring buildings, and natural and cultural resources. Building design should also minimize potential aesthetic conflicts between residential and nonresidential uses and between single family and multifamily uses. Architectural Standards are not intended to stifle creativity or variety, but produce designs respectful of place and context. ~~**For more information, please see Section 2 of Dover's CBD Architectural Design Guidelines.**~~"

24. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12.B., "Applicability of Tables of Use and Dimensional Regulations by District", by revising the Streetscape Standards in the Gateway District (G) Table of Uses, to read as follows:

"**STREETSCAPE STANDARDS**

Streetscape standards were crafted to ensure streets in mixed use areas of the Gateway district have a relationship with adjacent buildings, accommodate pedestrians and bicyclists, and are compatible with the character of Dover's neighborhoods. All street elements must be consistent with Dover Streetscape and Landscape Standards. ~~**For more information on streetscape standards, please see Section 3 of Dover's CBD Architectural Design Guidelines.**~~"

25. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-15.B, "Recreation space and separation between use requirements", by removing subsection B, instead relying on a more comprehensive metric for determining building separation, per NFPA guidelines.

A. For each bedroom of a multifamily (greater than four dwelling units) residential structure, there shall be provided at least 100 square feet of usable recreation space. Half of this required recreation space shall be provided in such a manner so as to afford active recreational opportunities for children, to include such facilities as swings, sandboxes, slides, play areas, etc. The remainder of the required recreation space shall be provided in such a manner so as to afford passive recreational opportunities for adults, such as sitting areas, outdoor cooking facilities, walkways, etc. The active and passive recreational facilities may be combined or separated as appropriate to the site and to the anticipated occupancy needs of the development.

   (1) Efficiency apartments shall be counted on the basis of 50 square feet per unit.

   (2) A payment in lieu of providing the recreation space on site, for an identified recreation area, may be agreed to by the Planning Board.

B. The minimum distance between any main building and any accessory building not structurally attached to such main building shall ~~be not less than the height of the rear wall of the accessory building~~ <u>comply with any and all applicable regulations as specified in the currently-adopted Fire Code</u>.

C. No part of a yard or other recreation space required for any building for the purpose of complying with the provisions of this chapter shall be included as part of a yard or other recreation space similarly required for another building.

D. Nonresidential uses requiring site plan review shall be at least 150 feet from all existing residential structures located within residential zones.

E. A continuous and year-round visual buffer of either vegetation or fencing shall separate nonresidential structures or parking areas from existing residential structures located to the rear and side of any proposal.

F. All screening and setback requirements pursuant to this section shall not be binding in the IT or any mixed-use zoning district. **[Amended 7-22-2020 by Ord. No. 2020.07.08-007]**

G. All recreation space requirements pursuant to this section shall not be binding in the CBD–General, TOD and CWD districts.

26. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-19.A, "Non-environmental conditional use permit criteria", by adding a provision to clarify that exceptions granted to new or redeveloped projects for shared parking or driveways, as afforded in Chapter 153, shall also be afforded to any project requiring a non-environmental conditional for a use allowed by CUP in any of the City's zoning districts. The additional provision shall read as follows:

"A. Purpose and intent.

(1) Where a conditional use permit is being requested for relief by use or standards as allowed by this chapter, the following criteria in Subsection B shall be met.

(2) Notwithstanding any other language herein, the relief granted in Chapter 153, Site Review Regulations, §17.C., shall apply to any use as defined in §11.B of this chapter."

27. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-23, "Impact fees", by repealing its applicability past the date established by the Planning Board.

"**§ 170-23. Impact fees. [Amended 6-22-2016 by Ord. No. 2016.06.08-010]**

A. Purpose. This section is enacted pursuant to RSA 674:16 and 674:21 and in order to: **[Amended 8-22-2018 by Ord. No. 2018.08.08-009]**

(1) Assist in the implementation of the Master Plan and Capital Improvements Program.

(2) Provide adequate public capital facilities necessitated by new development.

(3) Assess an equitable share of the cost of public capital facilities to new development.

B. Applicability. This section shall only apply to site plan approvals which were made prior to September 24, 2024. Projects that had verbiage about possible impact fee policy in their condition of approval, projects that received approval or reapproval in calendar year 2024, or projects submitted since September 24, 2024 are not required to meet this section. However, if

impact fees have been paid for any project prior to the September 24, 2024 date, they are not to be voided or reimbursed unless the proposed development has been reduced or voided.

C. Authority.

(1) Impact fees may be assessed to new development to compensate the City of Dover and the School District for the proportional share of capital facilities generated by new development in the City of Dover. Any person who seeks approval for new development may be required to pay an impact fee in the manner set forth herein.

(2) The Planning Board may, as a condition of approval of any subdivision, site plan, or change of use, and when consistent with applicable Board regulations, require an applicant to pay an exaction for off-site improvements necessitated by the development.

(3) Nothing in this section shall be construed to limit the existing authority of the Planning Board to disapprove proposed development which is scattered or premature, or which would require an excessive expenditure of public funds, or which would otherwise violate applicable ordinances and regulations. Nothing in this section shall be construed to limit the Planning Board's authority to require off-site work to be performed by the applicant, in lieu of paying an exaction for off-site improvements, or the Board's authority to impose other types of conditions of approval. Nothing in this section shall be construed to affect types of fees governed by other statutes, ordinances or regulations.

D. Assessment methodology.

(1) Proportionality. The amount of the impact fee shall be calculated by the Planning Board to be a proportional share of municipal capital improvement costs which is reasonably related to the capital needs created by the development, and to the benefits accruing to the development from the capital improvements financed by the fee. The Planning Board may prepare, adopt, or amend studies or reports that are consistent with the above standards and which define a methodology for impact fee assessment for public capital facilities and impact fee assessment schedules therefor.

(2) Existing deficiencies. Upgrading of existing facilities and structures, the need for which is not created by new development, shall not be paid for by impact fees. (3) In the case of new development created by conversion or modification of an existing use, the impact fee shall be based upon the net positive increase in the impact fee assessed for the new use as compared to the highest impact fee that was or would have been assessed for the previous use in existence on or after the effective date of this chapter. **[Added 8-22-2018 by Ord. No. 2018.08.08-009]**

E. Administration.

(1) Accounting. In accord with RSA 673:16, II, and 674:21, V(c), impact fees shall be accounted for separately, shall be segregated from the City's general fund, may be spent upon order of the City Council, and shall be used solely for the capital improvements for which they were collected, or to recoup the cost of capital improvements made in anticipation of the needs which the fee was collected to meet. In the event that bonds or similar debt instruments

have been or will be issued by the City of Dover or the Dover School District for the funding of capital improvements that are the subject of impact fee assessment, impact fees from the appropriate related capital facility impact fee accounts may be applied to pay debt service on such bonds or similar debt instruments.

(2) Assessment and collection.

(a) Where subdivision or site plan approval is required for new development, impact fees shall be assessed at the time of Planning Board approval of a subdivision plat or site plan. The amount of such assessment shall be applicable to subsequent building construction within the approved subdivision or site plan for a period of five years from the date of Planning Board approval. Once this five-year period has expired, remaining construction for which no building permit has been obtained shall be subject to the adopted fee schedule in force at the time the building permit application is made. **[Amended 8-22-2018 by Ord. No. 2018.08.08-009]**

(b) With the exception of those plats and site plans meeting the conditions in Subsection D(2)(a) above, and when no other Planning Board approval is required or has been made prior to the adoption or amendment of this section, impact fees shall be assessed upon the issuance of a building permit. In such cases, the impact fee schedule in force at the time of the building permit application shall apply.

(c) Impact fees will be collected prior to or at the time of issuance of a certificate of occupancy, unless the Planning Board establishes an alternate, mutually acceptable schedule of payment of impact fees imposed on an assessed property. If an alternate schedule of payment is established, the Planning Board may require security, in the form of a cash bond, letter of credit, or performance bond, so as to guarantee future payment of impact fees. In no case will an impact fee payment be allowed to be made after the issuance of a certificate of occupancy. **[Amended 8-22-2018 by Ord. No. 2018.08.08-009]**

(3) Security. In the interim between assessment and collection, the Building Inspector may require developers to post bonds, issue letters of credit, accept liens, or otherwise provide suitable measures of security so as to guarantee future payment of assessed impact fees.

(4) Refund of fees paid. The current owner of record of property for which an impact fee has been paid shall be entitled to a refund of that fee, plus accrued interest, under the following circumstances:

(a) When either the full or partial portion of the impact fee, whichever is applicable, has not been encumbered or legally bound to be spent for the purpose for which it was collected within a period of six years from the date of the full and final payment of the fee; or

(b) When the City of Dover or, in the case of school impact fees, the Dover School District, has failed, within the period of six years from the date of the full and final payment of such fee, to appropriate its proportionate non-impact-fee share of related capital improvement

F. Appeals.

(1) A party aggrieved by a decision made by the Building Inspector regarding the assessment or collection of impact fees authorized by this section may appeal such decision to the Planning Board.

(2) In accord with RSA 676:5, III, appeals of the decision of the Planning Board in administering this section may be made to Superior Court, as provided in RSA 676:5, III, and 677:15.

G. Waivers. The Planning Board may grant full or partial waivers of impact fees where the Planning Board finds that one or more of the following criteria are met with respect to the particular public capital facilities for which impact fees are normally assessed: [Amended 8-22-2018 by Ord. No. 2018.08.08-009; 7-22-2020 by Ord. No. 2020.07.08-006]

(1) The Planning Board may agree to waive all or part of an impact fee assessment and accept in lieu of a cash payment a proposed contribution of real property or facility improvements of equivalent value and utility to the public. Prior to acting on a request for a waiver of impact fees under this provision that would involve a contribution of real property or the construction of capital facilities, the Planning Board shall submit a copy of the waiver request to the City Council for its review and consent prior to its acceptance of the proposed contribution. The value of contributions or improvements shall be credited only toward facilities of like kind and may not be credited to other categories of impact fee assessment. The applicant shall pay all costs incurred by the City for the review of such proposal, including consultant and counsel fees.

28. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-24.B, "Accessory dwelling units", by revising the ordinance to read as follows:

"B. Exterior alterations, enlargements, or extensions of the single-family dwelling or detached accessory structure are permitted in order to accommodate the accessory dwelling unit. However, no such change is permitted which would alter the appearance of the single-family dwelling to look like a duplex or any other multifamily structure (i.e., the house should not look like it was designed to occupy more than one family). The construction of any accessways into the house and/or detached ~~garage~~ structure which are required for access to the accessory dwelling unit shall be located to the side or rear of the building whenever possible."

29. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-24.C, "Accessory dwelling units", by revising the ordinance to read as follows:

"C. An ADU shall have an area of no less than 300 square feet and no greater than ~~800~~ 950 square feet. If located in a detached accessory structure, the accessory dwelling unit may be located on either floor of the structure."

30. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-50.B, "Sign review and regulations", by revising the ordinance to read as follows:

"B. Permit required. No sign, other than a residential nameplate or a sign exempted from the permitting requirements of this section as described herein, shall be erected or placed in the City of Dover without a sign permit. Said permit shall be issued by the Zoning Administrator, provided that the sign meets all the regulations of this section, after the submission of an application and a set of plans to an appropriate scale, showing site location, dimensions of any newly proposed and existing sign on the premises, method of illumination, if any, and types of materials to be used in construction. Replacement of existing signs and support structures, where the area, location or materials are being altered, shall require a permit, and such replacement shall conform to the regulations of this section."

31. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-50.O(1)(a)[2], "Sign review and regulations", by revising the ordinance to read as follows:

"[2] The temporary sign shall be limited to 24 square feet in size and shall not be placed in such a manner so as to create a traffic or safety hazard. Banner-type temporary signs are permitted only in the C Zoning District, with the exception of grand opening signs."

32. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-50, "Sign review and regulations", by eliminating irrelevant footnotes in reference to signage diagrams, eight (8) in total.

"~~Editor's Note: See Figures 8 and 9 of the Sign Diagrams, Part II, included as an attachment to this chapter.~~"

33. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-53.D, "Nonconforming structures" to create a more equitable application of the relief afforded in this section, by revising the ordinance to read as follows:

"D. Additions to nonconforming single-family structures that were made nonconforming by a zoning amendment that changed the front, side or rear setback requirements shall be permitted within the front, side or rear setback areas, provided that the addition is no closer to the lot line than the existing nonconforming structure, ~~and no closer than 10 feet to the lot line,~~ or is no closer than six (6) feet from the lot line, whichever is greater."

34. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-56, "Applicability", by revising the ordinance to read as follows:

"The following conditions shall apply to all parking and loading spaces provided in conformance with this chapter:

A. Conformity with the Site Review Regulations, Chapter 153, §§ 153-14 and 153-17, site development criteria, as deemed necessary by the Director of Planning and Community Development.

B. Where parking spaces are provided for nonresidential structures and this parking area adjoins a residential use, suitable screening at least seven feet in height shall be provided and maintained.

C. In the Central Business District (CBD) and Cochecho Waterfront District (CWD), municipal parking facilities may be substituted for the requirements of this section.

D. Parking spaces for nonresidential uses and multifamily dwellings shall have independent access to an aisle or driveway and be accessible year-round.

35. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-60.E, "Amendment procedure" by removing an erroneous reference to newspaper fees, which are not applicable to the amendment process. The updated language reads as follows:

"E. Submission requirements for petitioned amendments. A petitioned amendment proposal shall be accompanied by maps, data and narrative information describing the location, nature and purpose of the proposed amendment, as follows:

(1) A properly drafted ordinance containing the amendment in a form meeting the requirements of the City Clerk;
(2) A statement of the purposes and intent of the proposed amendment; City of Dover, NH
(3) A statement of the impact of the proposed amendment on the City's economy, environment, municipal services, municipal facilities and neighborhoods;
(4) map showing the existing zoning districts and the amendments to these districts as proposed in the amendment, if applicable;
(5) The names, addresses, and telephone numbers of those submitting the petition and of any agents or representatives of the same;
(6) A list and address labels including the name, address, and Tax Map number of each property owner of the area proposed for rezoning and each property owner within 100 feet of the subject area. The list shall be current within 10 days of submittal; and
(7) A ~~nonrefundable fee as contained within the Fee Schedule to cover the cost of the newspaper notice, and a~~ nonrefundable fee as contained within the Fee Schedule per landowner and abutter required to be notified per Subsection D(2)."

36. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-60.G, "Amendment procedure" by removing an erroneous reference to newspaper fees, which are not applicable to the amendment process. The updated language reads as follows:

"G. City Council action on proposed amendments.

(1) Setting a hearing date. Upon receipt of the Planning Board's report and recommendations on the proposed amendment, or upon the expiration of the sixty-day study period, the City Council shall establish a date for a public hearing and shall further publish and post a notice of such hearing as specified in Subsection D.

~~(2)~~ Waiver of notice. In the event that the proposed amendment is comprehensive in nature, the aforementioned provisions requiring notice by first class mail to individual landowners and abutters may be waived by a majority vote of the full City Council, with respect to the public hearing to be held before it. An amendment shall be deemed to be comprehensive in nature if it affects more than one of the zoning districts established by § 170-7 of this chapter. ~~Under no circumstances may the provisions for publication of notice in a newspaper or posting of public City of Dover, NH notice contained in Subsection D(1) of this section be waived.~~

(3) Action on the proposed amendment. After holding the duly noticed public hearing on a proposed amendment, the City Council shall approve or disapprove the amendment. The City Council shall not have the right to overrule the Planning Board recommendations unless by a vote of not less than 2/3 of its membership present and voting.

(4) Protest petition. If a valid protest petition, in accordance with RSA 675:5, has been filed against a proposed amendment, a favorable vote of 2/3 of the City Council members present shall be required.

37. TAKES EFFECT

This ordinance shall take effect upon passage and publication of notice as required by RSA 47:18.

AUTHORIZATION

Approved as to Funding:	Daniel R. Lynch Finance Director	Sponsored by:	TBD
Approved as to Legal Form and Compliance:	Jennifer Perez Acting City Attorney		
Recorded by:	Jerrica Vansylyvong-Bizier City Clerk		

DOCUMENT HISTORY:

First Reading Date:	Public Hearing Date:
Approved Date:	Effective Date:

DOCUMENT ACTIONS:

VOTING RECORD Date of Vote:	YES	NO
Mayor, Robert Carrier		
Deputy Mayor Dennis Shanahan, Ward 5		
Councilor April Richer, Ward 1		
Councilor, Robert Warach, Ward 2		
Councilor Anthony Retrosi, Ward 3		
Councilor Debra Hacket, Ward 4		
Councilor Fergus Cullen, Ward 6		
Councilor Lindsey Williams, At Large		
Councilor Linea Nemeth, At Large		
Total Votes:		
Resolution does | does not pass.		