CITY OF DOVER	DOVER PLANNING BOARD – AGENDA
	Meeting Type: Regular Meeting Meeting Location: Council Chambers, City Hall, 288 Central Avenue, Dover, NH 03820 Meeting Date: **Tuesday, July 28, 2026** Meeting Time: **7:00 pm**

1. **CITIZENS' FORUM**
2. **APPROVAL OF THE PRIOR MINUTES**
   - June 23, 2026 Regular Meeting Minutes
3. **OLD BUSINESS**
   A. Consideration and acceptance of a Site Plan Amendment for John & Maggie Randolph (Owners: 54 BRR, LLC), Assessor's Map I, Lot 6, zoned R-12, located at Uncommon Drive. (Proposal is to request an amendment to the approved Site Plan, File No. P20-60 and development agreement) *(WAIV-2026-0014) *[This item was previously continued by the Planning Board on May 26, 2026 and June 23, 2026.]*

   B. Consideration and re-vote of a Conditional Use Permit for David Patrick & Elizabeth Ann Cash, Assessor's Map 9, Lot 91, zoned CBD-M, located at 7 Church Street. (Proposal is to construct an attached two-car garage within the 10' rear setback.) *(COND-2026-0027) *[This item was previously heard by the Planning Board on June 23, 2026 but resulted in a tie-vote.]*
4. **NEW BUSINESS**
   A. Consideration and acceptance of a Minor Subdivision for Daniel G Gabriel Trust, Daniel G Gabriel Trustee, Assessor's Map L, Lot 98-A, zoned R-20, located at 260 Dover Point Road. (Proposal is for a minor subdivision creating one (1) new lot.) *(SUBM-2026-0002)

   B. Consideration and acceptance of Site Plan Review for Corey MacKoul, Assessor's Map 17, lot 38, zoned R-12, located at 89 Stark Avenue. (Proposal is to construct two (2) single-family homes utilizing TDR with site improvements.) *(SITE-2026-0008)

   C. Consideration and acceptance of Transfer of Development Rights for Wyatt Peoples (Owner: Charles L Millette Revocable Trust, Charles Millette Trustee) Assessor's Map 12, Lot 149, zoned HR, located at 116 Silver Street. (Proposal is to purchase two (2) additional units through TDR to have four (4) units in the existing house and one (1) duplex located behind the existing house for a total of six (6) units on site.) *(TRAN-2026-0007)

   D. Consideration and possible posting on the proposed Amendments regarding Chapter 170 (Zoning Ordinance). Topics include Transfer of Development Rights, Conditional Use Permit Criteria, Customary Home Occupations, Accessory Dwelling Units and others. 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~~. 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.

DOVER PLANNING BOARD – MINUTES

CITY OF DOVER

Meeting Type:	Regular Meeting
Meeting Location:	Council Chambers, City Hall, 288 Central Ave, Dover, NH.
Meeting Date:	**Tuesday, June 23, 2026**
Meeting Time:	**7:00 pm**

Members Present: Gina Cruikshank (Chair), Doug Glennon (Vice Chair), Devon Dunn, George DeBoer, Tom Clark, Richard Robison (Councilor), Melina Gambino (Alternate), Tyler Allen (Alternate)
Members Not Present (excused): Ken Mavrogeorge, Kyle Pimental, and Jeff Sanborn
Staff Present: Donna Benton, Planning Director

G. Cruikshank (Chair) called the meeting to order at 7:00pm and noted T. Allen would sit for K. Pimental and M. Gambino would sit for Jeff Sanborn.

1. CITIZENS' FORUM

Citizens Forum Open
No one spoke
Citizens Forum Closed

2. APPROVAL OF THE PRIOR MINUTES

- June 9, 2026 Regular Meeting Minutes

Motion: G. DeBoer moved to approve the regular meeting minutes of June 9, 2026 as submitted. Seconded by: T. Allen. Vote: U/A

3. OLD BUSINESS

A. Consideration and acceptance of a Site Plan Amendment for John & Maggie Randolph (Owners: 54 BRR, LLC), Assessor's Map I, Lot 6, zoned R-12, located at Uncommon Drive. (Proposal is to request an amendment to the approved Site Plan, File No. P20-60 and development agreement) *(WAIV-2026-0014) *[This item was previously heard by the Planning Board on May 26, 2026.]*

Motion: T. Clark moved to continue the item to the July 28, 2026 regular meeting of the Planning Board at 7pm in this room. Seconded by: T. Allen. Vote: U/A

4. NEW BUSINESS

A. Consideration and acceptance of Transfer of Development Rights for Moses Lawrence, Assessor's Map 37, Lot 33, zoned O, located at 814 Central Avenue. (Proposal is to request one (1) unit through TDR, resulting in a total of three (3) residential units.) *(TRAN-2026-0005) *[This item was continued from the Planning Board meeting on June 9, 2026.]*

D. Benton explained that the applicant is proposing to purchase one residential unit through TDR, for a project total of three residential units, as there is an existing single-family house on the property.

The subject parcel is located within the Office Zoning District, and as current TDR regulations state that TDR base density in mixed-use zones is determined by the underlying zoning district, and given that a two-unit structure is permitted by right in the Office District, the applicant is granted a base density of two units, seeking to purchase the third.

Staff has reviewed the proposal and supplied a TDR memo to the applicant and review by the Technical Review Committee was not required for this project.

Bob Stowell, Tritech Engineering, represented the application and explained the existing conditions, proposal to add a townhouse style duplex with garage under, utilities, required permits, and TDR request.

Mr. Stowell addressed board member questions about existing paving and landscaping, and proposal to add residential rather than commercial.

Motion: D. Glennon moved to accept the application and declared no regional impact. Seconded by: M. Gambino. Vote: U/A

Public hearing opened.
Paul LeBlanc, 816 Central Ave and abutter expressed concerns relating to living next door:
How many bedrooms for each unit
Parking specifics
Ground water/ Berry Brook/ runoff
Vinyl fencing location
Public hearing closed.

The applicant addressed public comment:
Three bedrooms each
Parking – two spaces in the garage each with space in the driveway
Runoff will be addressed through the process- there are many restrictions to adhere to
Proper screening can be provided

He addressed additional questions from the board regarding trees to be removed and kept.

STAFF RECOMMENDATION - TDR
§170-29 provides for additional density to be purchased through Transfer of Development Rights, provided that four criteria are met: The proposal is consistent with the Master Plan; is compatible with the land uses on neighboring lots; is created on property served by public water and sanitary sewer; and is not seeking relief caused by additional density.

Staff notes that the applicant has demonstrated consistency with relevant goals of the Master Plan, specifically citing an emphasis on infill development, attractive streetscapes, and low-impact growth.

The applicant described the project site and proposal within the context of the Office District and the neighboring lots, highlighting nearby four and five-unit dwellings, mixed-use structures, duplexes, and single-family homes.

The site currently has a density of roughly one unit per 17,744 square feet of developable land. In the Office District, the minimum required lot size is 10,000 square feet and allows up to two units by right. Up to four-unit structures are permitted at a rate of 1 unit per every 5,000 s.f. of lot area, though residential uses are only permitted in the second story or higher of any new structure. This means that the applicant, while complying with the density requirement, requires TDR relief for proposing a residential use in the first floor of each unit within the duplex and the Planning Board would be approving more than one principal building if this application is approved.

The property currently meets all underlying zoning dimensional requirements including setbacks and lot coverage.

The lot is served by municipal water and sewer services and does not indicate any impacts to protected wetlands, wetland buffers, or Conservation District area, although the parcel falls within the Secondary Groundwater Protection Zone, meaning that if the Board endorses this TDR plan, the applicant would be required to obtain a favorable Conditional Use Permit, first required Conservation Commission review, in order for the project to advance. The applicant would also be required to submit to this Board a full site plan for review and approval.

Although the proposal conforms with underlying zoning dimensional requirements, and proposes reasonable density, it requires subsequent environmental CUP relief and has opportunities using the underlying zoning

that wouldn't require TDR. Staff also wants to ensure Dover is offering enough space for non-residential uses and the Office District allows both residential and non-residential uses.

Therefore, staff recommends the Planning Board vote to endorse the TDR request, staff would recommend doing so with the following subsequent conditions:

Subsequent Conditions to be Met Prior to Granting TDR:

1. A Site Plan application is required to be submitted for review and approval by the TRC and Planning Board;
2. Receipt of favorable Conditional Use Permit for impacts to the Secondary Groundwater Protection District;
3. The TDR density may be reduced after the TRC and/or Planning Board reviews a fully engineered and designed Site Plan.
4. Payment of TDR fees; and
5. Payment of water/sewer investment fees at time of request for service.

Board and staff discussion continued regarding the secondary water protection restrictions, impervious surfaces and impacts to waterways, existing vs proposed impervious surface percentages, allowable uses/residential vs commercial/ layout of proposal and future maintenance and landscaping upkeep.

D. Glennon noted whatever development the applicant moves forward with on this lot will result in an improvement to the stormwater runoff. The applicant has explained why the parcel would be difficult to develop for a commercial use. He is in favor of granting the TDR for this project.

Motion: D. Glennon moved to grant the TDR request with the subsequent conditions set by staff. Seconded by M. Gambino. Vote: 8-1 with R. Robison opposed.

B. Consideration and acceptance of a Conditional Use Permit for Anthony & Stephanie Retrosi, Trustees of the Anthony and Stephanie Retrosi Revocable Trust, Map L, Lot 114, zoned R-20, located at 318 Dover Point Road. (Proposal is to construct permanent shore stabilization, resulting in approximately 2,015 square feet of temporary impacts and 1,113 square feet of permanent impacts within the Wetland Protection and Conservation Districts.) *(COND-2026-0024)

D. Benton explained that the applicant is proposing shore stabilization work along the rear of the subject property with the intent to protect the salt marsh habitat.

The proposal results in 1,113± square feet of permanent impacts and 2,015± square feet of temporary impacts, within the overlapping areas of the Wetland Protection and Conservation Districts.

The proposed impacts are overlapping within the Conservation and Wetland Protection Districts, however, due to the nature of the impacts within the wetlands and buffers, staff considered those criteria in the findings below.

The applicant received authorization from the U.S. Army Corps of Engineers for the proposed shoreline work, to include dredging and filling, on March 23, 2026. An NHDES Standard Dredge and Fill Wetlands Permit was approved for the project on November 18, 2025.

The Conservation Commission reviewed and endorsed the application at their June 8, 2026 meeting and requested a site walk during construction to see the development of the shore stabilization.

Kirsten Bordem, Riverside and Pickering Marine Contractors represented the application and explained the shoreline stabilization project to permanently stabilize the shoreline, support the existing salt marsh from erosion, re-establish the eroded salt marsh and protect existing salt marsh from phragmites infestation. She explained the process and procedures that will be used.

Motion: D. Dunn moved to accept the application and declared no regional impact. Seconded by: T. Allen. Vote: U/A

Public hearing opened.
No one spoke
Public hearing closed.

STAFF RECOMMENDATION-CUP:
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 parcel is located within the Conservation District and Wetlands Protection District and a functions and values assessment was completed for the wetlands, with shoreline stabilization determined as the primary function and value. Although impacts are being proposed to the tidal wetlands, there is no reasonable alternative as the proposed work is intended to stabilize the shoreline and support the salt marsh.

As mentioned, the applicant has been granted an NHDES Standard Dredge and Fill Wetlands Permit and received authorization from the U.S. Army Corps of Engineers for the proposed shoreline work. The Conservation Commission also reviewed and endorsed the application.

The Planning Department recommends that the Planning Board make the necessary and supporting findings of fact, and vote to approve the Conditional Use Permit.

The applicant explained the project in more detail.

Motion: T. Allen moved to approve the Conditional Use Permit. Seconded by D. Dunn. Vote: U/A

C. Consideration and acceptance of a Conditional Use Permit for David Patrick & Elizabeth Ann Cash, Assessor's Map 9, Lot 91, zoned CBD-M, located at 7 Church Street. (Proposal is to construct an attached two-car garage within the 10' rear setback.) *(COND-2026-0027)

D. Benton explained that the applicant is proposing to build an attached 1-car garage with portico 0 to 3 feet into the north (rear) 10-foot setback of the property. The garage would have about 195 s.f. of conditioned bonus space above the 370 s.f. garage.

Being located in the Central Business District Mixed-Use sub-district, relief of a rear setback would be through a conditional use permit.

As a Conditional Use Permit application, the Technical Review Committee did not review this application.

David Cash, owner represented the application. He explained the existing location and proposed build location. He gave background information about the property. He showed plans for the proposed one car garage with bonus space above and attached covered carport. He noted the 3' encroachment to the 10'

setback. He explained the construction and design to match the existing historical house. He addressed impervious surface improvement.

Motion: T. Clark moved to accept the application and declared no regional impact. Seconded by: D. Dunn. Vote: U/A

Public hearing opened
Christopher Rohr, 9 Academy St, abutter is not against the project, but prefers the 10' buffer be enforced. The houses are very close together and would be better to maintain the setback.
Public hearing closed

The applicant addressed public comment noting there have been several iterations to the plans. Initially there were plans for a fully enclosed 2-car garage, but that option encroached five feet into the setback, so the plans were reduced to a 1-car garage and open carport to allow more light and less bulk. They also changed the design of the proposed roof.

D. Benton explained the 10-foot setback and the approval required to build into it.
The applicant clarified additional information for the board members.

D. Glennon noted the reasons the applicant meets the criteria and expressed being in favor of approval.
G. Cruikshank appreciates the extra effort in design and to minimize the impact to the setback.
Board members discussed their opinions about the project and the regulations.

Staff recommendation:
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.

Staff agrees with the applicant that the above 10 criteria have been met.

Consistency with Land Use Regulations – Central Business District
Chapter 170-20.B(2) outlines the criteria for granting a Conditional Use Permit for relief within the CBD. 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.

Staff agrees with the applicant that the above three criteria have been met.

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 Conditional Use Permit with the following conditions:

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

1. Provide physical and digital copies (including CAD) of complete plan set, which additionally shall include:
   1.1. The owner's signatures;
   1.2. The Planning File #COND-2026-0024;
   1.3. Revise plan to Academy St.;
   1.4. A note that a foundation certification will need to be provided; and Work with the Planning Department to endorse a development agreement per Chapter 170-20B(3) and then record at SCRD.

The Board changed the proposed conditions to remove the need for CAD drawings and add 1.5 A note be added that if they would like to enclose the portico that a new CUP would need to be granted.

Subsequent Conditions to Be Met Prior to the Issuance of Conditional Use Permit: (REVISED)

1. Provide physical and digital copies of complete plan set, which additionally shall include:
   1.1. The owner's signatures;
   1.2. The Planning File #COND-2026-0024;
   1.3. Revise plan to Academy St.;
   1.4. A note that a foundation certification will need to be provided; and Work with the Planning Department to endorse a development agreement per Chapter 170-20B(3) and then record at SCRD.
   1.5. A note be added that to enclose the portico, a new CUP would need to be granted

T. Clark noted the plan is well thought out and the impact is designed to be minimal.

Motion: T. Clark moved to approve the Conditional Use Permit subject to the subsequent conditions laid out by staff and as amended. Seconded by: D. Dunn. Vote: 4-4 with M. Gambino, T. Allen, R. Robison, and G. DeBoer opposed. With a 4-4 tie, the motion did not pass.

Motion: D. Glennon moved for those who voted in opposition to state their findings of fact. Seconded by: R. Robison. Vote: U/A.

T. Allen stated the criteria to approve was met, but it was stated that doesn't compel board members to approve. He was torn on the vote as the applicant put together a thoughtful plan, but the abutter also has rights and expressed their concerns.

G. DeBoer agreed with what T. Allen said. The proposal is in the setback and there isn't a compelling reason to provide relief.

R. Robison agreed with T. Allen.

M. Gambino was concerned about the visual impact to the abutter.

D. Benton summarized that those opposed did not believe criteria 2A was met.

D. Consideration and acceptance of a Site Plan for Cocheco Mills Holdings, LLC, Assessor's Map 2, Lot 37-A, zoned CBD-G, located at 383 Central Avenue. (Proposal is for a change of use to convert approximately 36,207 square feet of commercial space into 27 residential units.) *(SITE-2026-0005)

D. Glennon recused himself from the item as he is an abutter. D. Dunn acted as Vice Chair.

D. Benton explained that the applicant is proposing interior renovations to the existing Cocheco Mills, addressed at 383 Central Ave., to convert approximately 36,207 square feet of commercial space into 27 residential units.

There are no exterior changes proposed to the building or site. The proposed change involves converting commercial space on the canal and lower levels of the mill building, making these levels mixed-use, while the first and second floors would remain commercial and the third and fourth floors would remain primarily residential. Overall, the structure is proposed to consist of 46.21% residential use and 53.79% commercial use.

Five waivers from Chapter 153 are being proposed as part of this project related to the requirements for a landscape plan, architectural plan, streetscape rendering, landscape operations and maintenance plan, and outdoor lighting plan. As described in staff findings below, these waiver requests are based on no exterior changes being proposed to the existing structure.

The Technical Review Committee reviewed the application at their May 14, 2026 meeting. Part of the TRC discussion and review focused on items related to the change of use, including water and sewer demand, traffic impacts, and the designation of appropriate parking for the residential units.

Steve Haight, CivilWorks NE, represented the application and explained the proposal to convert the unused space in the commercial building into residential. There have been several TRC meetings and parking has been updated through that process. Waivers being sought are for site review regulation items that wouldn't apply because there is no work being done outside.

He addressed questions from the board relating to why the applicant wants to convert commercial to residential (no demand for it), clarifications about the floors of the building in question- lower levels which are partially underground) and vacancy.

Motion: D. Dunn moved to accept the application and declared no regional impact. Seconded by: M. Gambino. Vote: U/A

Public hearing opened.
Elitsa Maskwa, owner of 2 Waldron Court Dover asked questions about parking impact downtown.
Public hearing closed.

Mr. Haight addressed public comment regarding parking and that an analysis was done based off what the property owner has available for parking in the city and submitted a copy of the transportation center parking lot.

D. Dunn noted she is in favor of the project knowing it is hard to get commercial tenants in a building like this and there is no impact to street parking.

DRAFT

STAFF RECOMMENDATION- WAIVERS:
§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 rationale for the requested waivers meets criterion (1), and granting such relief is not contrary to the spirit or intent of the ordinance. The applicant has requested relief from the above listed sections of Chapter 153 because there are no changes being proposed to existing landscaping, architectural, or lighting conditions. While a change of use is being proposed internally, the external conditions of the structure are not being altered as part of this project, and there will be no changes to the streetscape, architecture, landscaping, or outdoor lighting.

The Planning Department recommends that the Planning Board make the necessary and supporting findings of fact, and vote to grant the waivers 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:
   §153-13A(12), relief approved from required landscape plan;
   §153-13A(15), relief approved from required architectural plan;
   §153-13A(17), relief approved from required streetscape rendering;
   §153-13A(20), relief approved from required landscape operations and maintenance plan; and
   §153-14E, relief approved from outdoor lighting requirements.

Motion: M. Gambino moved to grant the waivers with the subsequent conditions outlined by staff.
Seconded by: T. Allen. Vote: U/A

STAFF RECOMMENDATION-SITE PLAN:
§153-13 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.

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. Provide physical and digital copies (including CAD) of complete plan set for final Planning Board signature which additionally shall include:
   1.6. Permit File #SITE-2026-0005;
   1.7. Owner's signatures;
   1.8. Professional stamps and signatures;

Subsequent Conditions to Be Met Prior to Construction:
2. A pre-construction meeting may need to be held with City staff if determined by the City Engineer;
3. 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;

DRAFT

Subsequent Condition to Be Met Prior to Building Permit:

4. Payment of Water and Sewer Investment Fees, if applicable, at time of request of service;

Subsequent Conditions to Be Met Prior to Occupancy:

5. Issuance of Certificate of Occupancy;
6. Surety or other form of security acceptable to the City is provided for any unfinished work;

Motion: M. Gambino moved to approve the Site Plan with subsequent conditions outlined by staff. Seconded by: D. Dunn. Vote: U/A

5. STAFF COMMENT

- Brady Sullivan is hosting a charrette Saturday 9-11am at the former Liberty Mutual building
- Next meeting is July 28th
- TRCs since last meeting:
  - On June 11th: Site Plan amendment proposal for parking layout and landscaping changes to the approved light industrial project on Industrial Park Road (SITE-2025-0001)
  - On June 11th: TDR Site Plan proposal for two, new single-family homes at 89 Stark Ave.
  - On June 11th: Site Plan proposal to redevelop the existing structure at 75 Oak St. into 22 residential units.
- Upcoming TRCs:
  - On July 2: Second TRC for 96 Broadway, LLC to construct 2 duplexes with associated parking.
- Erin and Abby in our office have had their babies so congratulations to them!

6. MEMBER COMMENTS

- M. Gambino
  - Clarified her opposed vote reasoning. She misspoke that there would be a wall on the portico. By building into the buffer, the roof would be a visual disturbance to the abutter
  - St Mary's Academy will be leaving Church st within the next couple years. That building will be up for sale.
- G. DeBoer
  - Question for staff: how many units have been approved?
    - D. Benton noted approx. 1700 have been permitted, some are underway and some may not come to fruition. There is a list she can provide.
- The Chair signed
  - 36 Forest St.
  - 24 Winter St
  - 29 Weeks Lane
  - Granite St. subdivision and CUPs

7. ADJOURNMENT

Motion: D. Dunn moved to adjourn at 8:51 pm. Seconded by D. Glennon. Vote: U/A

DRAFT

CITY OF DOVER	PLANNING BOARD - STAFF MEMO FILE #WAIV-2026-0014	
	Application Type:	Site Plan Amendment
	Applicant(s):	54 BRR LLC
	Owner(s):	54 BRR LLC
	Location:	Uncommon Drive (Map I, Lot 6)
	Meeting Date:	July 28, 2026

INTENT: Proposal is for a Site Plan Amendment to the approved Site Plan, File No. P20-60 and project development agreement. Proposed amendment is to allow the sale of a maximum of 18 units (out of the existing 44 residential units). *This item was previously continued from May 28th and June 23rd meetings.*

AGENDA ITEM #: 3-A

FILE: WAIV-2026-0014

LOTS/UNITS PROPOSED: N/A (no change)

OWNER/APPLICANT: 54 BRR LLC

LOCATION: Uncommon Drive (Map I, Lot 6)

ACREAGE: 7.16 ± ac.

ZONING DISTRICT: R-12

EXISTING/PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential, Bellamy River

WAIVERS REQUESTED: None.

ZBA ACTION: None.

PERMITS REQUIRED: None.

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

NOTICES SENT: Abutter notices were sent by certified mail to all abutters for the May meeting.

TECHNICAL REVIEW COMMITTEE: N/A

CONSERVATION COMMISSION: N/A

ATTACHMENTS: Approved Site Plan, Application Materials.

Summary of Request and Background

The applicant is proposing an amendment to the previously approved Site Plan (File No. P20-60) and recorded Development Agreement (Book 5153, Page 273 at the Strafford County Registry of Deeds) to allow for the sale of up to 40% of the units (no more than 18 of the 44 existing residential units.)

Per the Development Agreement recorded on September 23, 2023, and as referenced on the approved Site Plan, all 44 units in the development are rent restricted to HUD Fair Market Rent (FMR) levels for the Portsmouth-Rochester, NH HUD Metro Area. As part of the original project approval, a Transfer of Development Rights (TDR) application (File No. P20-61) approved the purchase of 35 of the residential units with the restriction to HUD FMR rates. In its previously approved site plan application, this applicant expressly stated: "These units will be rental units and will meet the HUD Fair Market Rent rates for Dover, NH."

The applicant is now proposing an amendment to the original approval language on the Site Plan and Development Agreement to allow for the sale and transfer of ownership of up to 40% of the units through converting ownership structure into a condominium, provided that the "monthly cost" to the buyer at the time of sale remains at or below HUD FMR rates. The narrative currently proposes to meet the "monthly cost" requirement only at the time of purchase, but staff's view and understanding of the TDR provision in the zoning ordinance and the TDR approval were clear the units were meant to be attainable in perpetuity.

The Planning Department would note the relevant section from the Zoning Ordinance for this project, §170-29G(3)(a)[2][a], that states: *"For construction of units no larger than 600 square feet of total living area, including the base calculated units, there shall be no density limit.* ***The monthly cost of said units shall conform to the HUD Fair Market Rent rates, for Dover, published annually by the New Hampshire Housing Finance Authority****, and there shall be no TDR fee collected for said unit(s)."*

Therefore, the Zoning Ordinance would require that the monthly cost for the units, in perpetuity, conform to HUD FMR rates, even if the rates are not rented. Consideration of how the "monthly cost" would be calculated for a non-rental unit arguably should include, but not be limited to, property taxes (with potential increases in valuation or assessment based on market factors or owner modifications), association fees, maintenance/repairs, insurance, and amortized loan payments.

Further, potential future modifications on units proposed to be sold would be restricted or guided by local regulations and building code requirements for tiny homes on permanent foundations.

CITY OF DOVER	PLANNING BOARD - STAFF MEMO FILE # WAIV-2026-0014
	Application Type: Site Plan Amendment Applicant(s): 54 BRR LLC Owner(s): 54 BRR LLC Location: Uncommon Drive (Map I, Lot 6) Meeting Date: May 26, 2026

At the May 26, 2026 Planning Board meeting, the applicant presented the proposal and the Board continued the discussion before accepting the application as complete. The applicant then requested a second continuance to the July 28th, 2026 meeting.

In the staff memo for the May 26th meeting, staff had suggested the applicant supply:

- An example budget breakdown for "monthly costs" for an owner-occupied unit including financing information;
- A draft revised Development Agreement that includes:
  - Note that states: "At least 60% of units shall continue to be rented at HUD Fair Market Rent rates and that the remaining units be restricted to a monthly cost that shall conform to the HUD Fair Market Rent rates, for Dover***, published annually by the New Hampshire Housing Finance Authority***,"
  - A potential breakdown of rental and for-sale units including information of the unit (ie building, limited common area) and organizational structure;
  - Amended references from "rental rates" to "monthly cost" if the Planning Board agrees to that intent
  - A note that future modifications on units proposed to be sold would be restricted or guided by local regulations and building code requirements for tiny homes on permanent foundations;
  - A note that units which are purchased may not be rented out for above the HUD Fair Market Rent (FMR) levels for the Portsmouth-Rochester, NH HUD Metro Area;
- Draft deed restriction that includes language to ensure future owners of individual units and/or the parent parcel are aware of the cost and equity restrictions to be reviewed by the Planning Department with consultation by the City Attorney;
- Draft Condominium Owner Association documents that include:
  - A budget reserve calculation;
  - An operational outline for shared responsibility of the overall property with rental units and/or existing property management; and
  - A note stating that units which are purchased may not be rented out for above the HUD Fair Market Rent (FMR) levels for the Portsmouth-Rochester, NH HUD Metro Area.

The applicant has since supplied draft condominium association documents as well as a "Equity Projections spreadsheet". The Declaration of Condominium document outlines some of the items listed above but not all. The applicant team will walk the Board through the spreadsheet and request in further detail at this Planning Board meeting.

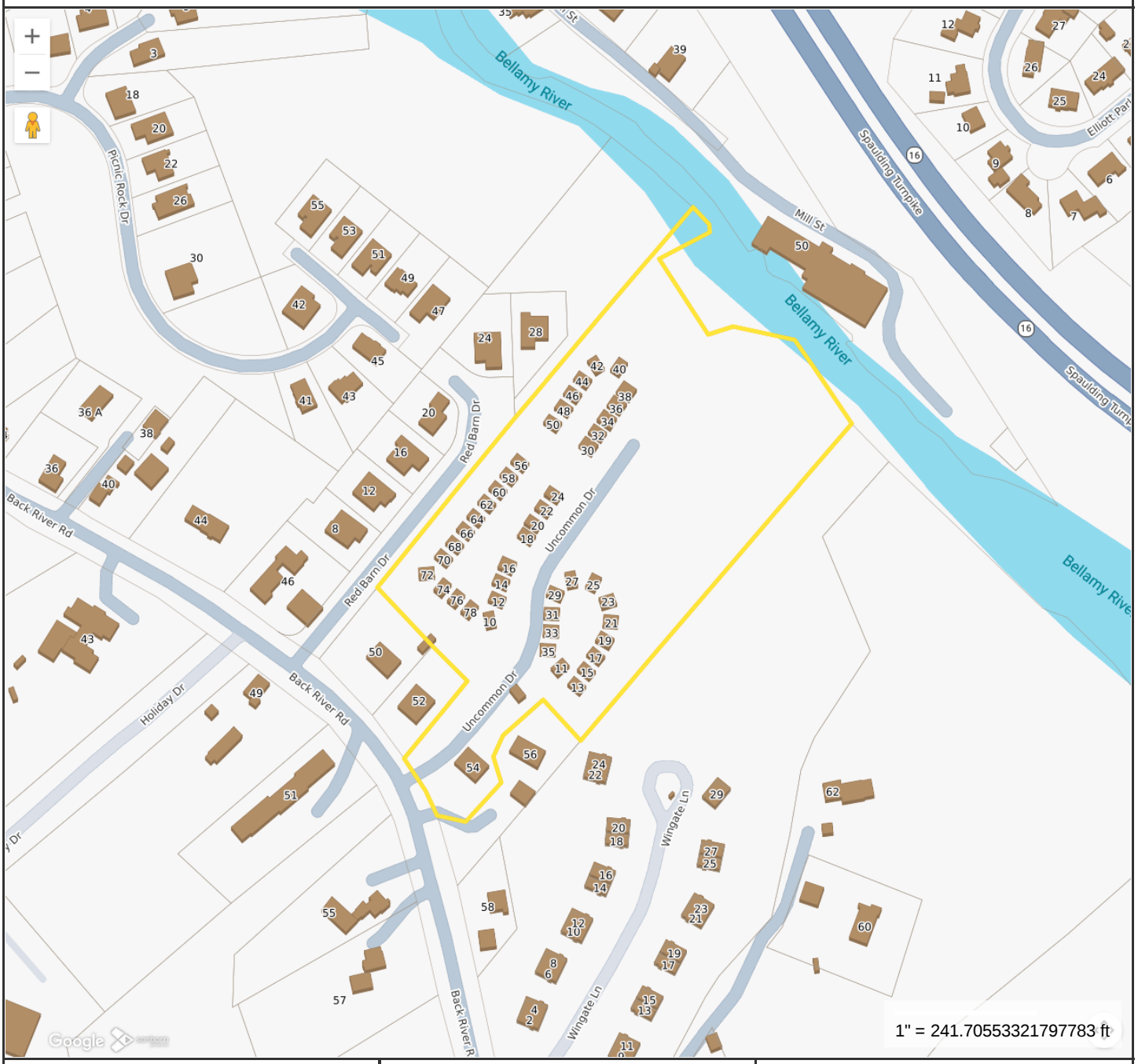
Consistency with Land Use Regulations – Site Plan
Chapter 153-4 of the Site Review Regulations of the City Code provides for site review by the Planning Board of new construction of various types. The proposal is required to be reviewed for consistency with this section.

STAFF RECOMMENDATION:
The Planning Department recommends that the Planning Board remove the item from the table, hear the applicant's continued presentation, consider the proposal, ask questions, make findings and make a determination on the request. Should the Board grant the amendments, staff recommends doing so with the following conditions:

SUBSEQUENT CONDITIONS TO BE MET PRIOR TO PLAN SIGNING:

1. Provide a Development Agreement that includes:
   - 1.1 Note that states: "At least 60% of units shall continue to be rented at HUD Fair Market Rent rates and that the remaining units be restricted to a monthly cost that shall conform to the HUD Fair Market Rent rates, for Dover, published annually by the New Hampshire Housing Finance Authority;"
   - 1.2 A breakdown of no more than 40% of the units can be sold or owned by entities that are not the declarant or majority unit holder.
   - 1.3 Amended references from "rental rates" to "monthly cost" if the Planning Board agrees to that intent.
   - 1.4 Outlines process in case of foreclosure/mortgage changes to the property.
2. A condominium plan for recording at SCRD is submitted indicating:
   - 1.1. Maximum amount of units at a time that can be owned by an entity other than the Declarant.
   - 1.2. Note indicating there is a deed restriction regarding the units being HUD rent-restricted or that the workforce housing units are affordable to a household with a HUD Median Family Income for a one-bedroom unit in the Portsmouth-Rochester, NH HMFA as published by the NHHFA in April of each year.
   - 1.3. A note that future modifications on units proposed to be sold would be restricted or guided by local regulations and building code requirements for tiny homes on permanent foundations;
3. Provide a draft deed restriction that includes language to ensure future owners of individual units and/or the parent parcel are aware of the cost and equity restrictions to be reviewed by the Planning Department with consultation by the City Attorney;
4. Provide a budget reserve calculation.

WAIV-2026-0014 UNCOMMON DRIVE



Property Information

Location	10-78 UNCOMMON DR
Owner	54 BRR LLC
Land Use	115R
Zoning Code	R-12
Property Id	I0006-000000

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 06/2026
Data updated Daily

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

PLAN SNAPSHOT REPORT WAIV-2026-0014
FOR CITY OF DOVER, N.H.

Plan Type:	Waiver / Extension / Amendment	**Project:**		**App Date:**	05/05/2026
Work Class:	Plan	**District:**	None	**Exp Date:**	07/09/2026
Status:	In Review	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	

Description: We are requesting an amendment to the Development Agreement that was put in place after the approval of the Project, P20-60.

Parcel:	I0006-000000 Main	**Address:**	54 Back River Rd Dover, NH Main	**Zone:**	R-12(Residential - Medium Density)

Architect	Owner	Applicant
Maggie Randolph	John Randolph	54 BRR LLC
Home: (207) 347-1504	Home: (603) 834-2317	John Randolph
Business: (207) 347-1504	Mobile: (603) 834-2317	1 Stagecoach Road
Mobile: (207) 347-1504		Durham, NH 03824
		Business: (603) 834-2317

Plan Custom Fields

Project Location	54 Back River Road	Waiver Request Type	Amendment	Project Name	The Cottages at Back River Road
Owner Phone	603-834-2317	Owner Name	54 BRR LLC	Original Plan Approval Date	Mar 10 2021 12:00AM
Owner Address	55 Briggs Way Unit O, Durham, NH 03824	Owner EMail	john@gsdnh.com	Plan ID Number	P20-60
Plan Type	Site Plan	Extension Request Detail		Condition / Portion of Plan to be Amended	Development Agreement
Amendment Request Detail	Please see attached Narrative Letter.	Site / Subdivision Portion of Plan to be Waived		Waiver Request Detail	

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_John_Randolph_5/5/2026.jpg	05/05/2026 8:12	Randolph, John		Uploaded via CSS

Invoice No.	Fee	Fee Amount	Amount Paid
INV-2026001424	Planning Waiver / Extension /Amend Application Fee	$200.00	$200.00
	Total for Invoice INV-2026001424	**$200.00**	**$200.00**
	Grand Total for Plan	**$200.00**	**$200.00**

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		05/12/2026 17:16	05/12/2026 17:16
Confirm application complete v.1	Generic Action		05/12/2026 17:16
~~Technical Review Committee Meeting Agenda v.1~~	Task		05/12/2026 17:16
~~Land Use Plan Technical Review v.1~~	Receive Submittal		05/12/2026 17:16
~~Technical Review Committee Meeting v.1~~	Hold Meeting		05/12/2026 17:16
Planning Board v.1		05/12/2026 17:16	
Planning Board Agenda v.1	Task	05/12/2026 17:16	05/12/2026 17:17
Invoice for Notices v.1	Task	05/12/2026 17:17	
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

May 05, 2026

Donna Benton, Director of Planning and Community Development

City of Dover Planning Board

288 Central Ave

Dover, NH 03820

RE: Section 170-29 Amendment Request for Approved Plan P20-60, Development Agreement, The Cottages at Back River Road

Dear Ms. Benton, Chairperson, and Members of the Dover Planning Board,

The Cottages at Back River Road is a 100% affordable housing project, with rental rates capped in perpetuity at the HUD Fair Market Rent rate. As such, the project is in compliance with Dover Code Section 170-29 G. (3) (a) [2] [a], which states that "(t)he monthly cost of said units shall conform to the HUD Fair Market Rent rates, for Dover, published annually by the New Hampshire Housing Finance Authority, and there shall be no TDR fee collected for said unit(s)." In accordance with our original approval, we executed a Development Agreement reflecting this cap, which was subsequently recorded in the Strafford County Registry of Deeds and is attached to this application.

We are respectfully requesting an amendment to the Development Agreement to allow for the sale of up to 40% of the units (a maximum of 18), provided that the monthly cost to the buyer remains capped at the HUD Fair Market Rent rate for Dover, as published by NHHFA, at the time of purchase. The project would remain in compliance with Section 170-29 G. (3) (a) [2] [a], as the ordinance does not distinguish between rental or ownership structures in defining "monthly cost." We would continue to retain ownership of the property as a whole, including the remaining 60% of units, which would continue to operate as rentals under the existing affordability framework. We would also include in the amended Development Agreement that, in perpetuity, any resale of the units would also be subject to the same cost cap, as published by NHHFA in the year of the resale.

Allowing a portion of the units to transition to homeownership creates an opportunity for residents to put down deeper roots within the community while preserving the project's commitment to affordability. For many households, the ability to own a home represents stability, pride, and a meaningful step toward long-term financial security. In addition to building equity, future homeowners at The Cottages will have the opportunity to purchase a home at a cost that is

meaningfully below what is currently available in the local market, creating a rare and attainable pathway to ownership in an otherwise constrained housing environment. Homeowners often become more engaged in their neighborhoods, contributing to a sense of connection, care, and continuity that benefits the broader community. By maintaining the Fair Market Rent cap at the time of purchase, this approach ensures that these opportunities remain accessible while continuing to support the housing needs of residents in Dover. This approach is also consistent with the City's broader housing goals to expand access to a diversity of housing types, support long-term affordability, and create stable, resilient neighborhoods.

We remain committed to the long-term success of The Cottages at Back River Road and to being thoughtful stewards of both the property and the broader community. Our goal has always been to deliver high-quality, attainable housing that responds to Dover's needs while upholding the intent of the City's regulations. This request reflects that commitment—preserving affordability, expanding opportunity, and supporting a stable, connected neighborhood. We respectfully ask the Board to consider this amendment in that spirit and welcome the opportunity to discuss it further.

Thank you,

John Randolph, Owner, 54 BRR LLC

Catherine A. Berube
Register of Deeds, Strafford County

DEVELOPMENT AGREEMENT
As Required by Dover Code Section 170-27.2

This Development Agreement is made by and between Margaret/John Randolph of 54 BRR, LLC, a New Hampshire corporation with a place of business at 1 Stagecoach Road, Durham, NH 03824 (hereinafter called the Applicant) and The City of Dover, NH, 288 Central Avenue, Dover, New Hampshire 03820 (hereinafter called the City).

Explanatory Statement

The Applicant is the owner of property located at 54 Back River Road, Dover, New Hampshire, shown on Assessor's Map I, Lot 6. The Applicant received a Conditional Site Plan approval on March 9, 2021. The approval from the Dover Planning Board authorized the purchase of 35 HUD rent restricted units and a site plan for a multiple buildings on one lot. This plan is laid out in the plan titled "Site Plan for 54 BRR, LLC Cottages at Back River Road Assessor's Map I, Lot 6,", prepared by MJS Engineering, PC.

NOW THEREFORE, intending to be legally bound, the parties agree as follows:

1. This agreement shall be recorded at the Strafford County Registry of Deeds.
2. That the Applicant shall abide by all ordinances and land use regulations of the City of Dover.
3. That the Applicant shall implement the Plan only as approved by the Planning Board and shall comply with all requirements of the current version of the Building Code and Life Safety Code, as amended.
4. That the Applicant shall obtain all necessary local, state and federal permits and shall comply with their terms.
5. That the 44 units the Applicant intends to construct shall be permanently restricted to the HUD Fair Market Rental Rate for a one bedroom unit in the Portsmouth-Rochester, NH HMFA as published by New Hampshire Housing Finance Authority in April of each year.
6. Annually, by July 1, the Applicant shall provide, in writing, to the Planning Board through the Department of Planning and Community Development, an updated and verifiable lease documenting that the monthly rental rate for the 44 units is at, or below, the HUD Fair Market Rental Rate for a one bedroom unit in the Portsmouth-Rochester, NH HMFA as published by New Hampshire Housing Finance Authority in April of each year, for the following 12 months.
7. The Applicant's obligations hereunder shall be binding upon Applicant's successors in interest.

IN WITNESS WHEREOF, the parties hereto have set their hands this 28th day of September, 2023.

APPLICANT

Witness

John Randolph of 54 BRR, LLC, OWNER

DOVER PLANNING BOARD

Witness

Gina Cruikshank, Chair of Planning Board

May 05, 2026

City of Dover Planning Board

288 Central Ave

Dover, NH 03820

Dear Chairperson,

I hereby authorize Margaret W. Randolph, RA of GSD Studios PLLC to represent me at the Dover Planning Board and submit relevant applications and documents for review. The subject parcel is shown on Tax Map I as Lot 6 located at 54 Back River Road.

Sincerely,

John Randolph, Owner, 54 BRR LLC

WAIV-2026-0014 **54 BACK RIVER ROAD**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
I0057-000000	49 BACK RIVER RD	STEVENS WALLACE B		49 BACK RIVER RD	DOVER	NH	03820
I0060-000000	55 BACK RIVER RD	STRAFFORD RENTALS LLC		225 GREEN ST	SOMERSWORTH	NH	03878
I0006-D00000	BACK RIVER RD	HELLMAN LANCE W TRUSTEE	HELLMAN LANCE W REVOCABLE TRUST	228 HIGHLAND AVENUE	PORTSMOUTH	NH	03801
I0005-000000	BACK RIVER RD	CAMPBELL WAYNE P TRUSTEE	CAMPBELL REALTY TRUST	64C HORNETOWN RD	FARMINGTON	NH	03835
I0006-A00000	50 BACK RIVER RD	PHALAK SUMIT	ANDERSON SARAH R	50 BACK RIVER RD	DOVER	NH	03820
I0006-C00000	46 BACK RIVER RD	TSAKIRIS NATHAN D TRUSTEE	NDT FREEDOM REALTY TRUST	16 SNELL RD	LEE	NH	03861
I0005-000018	20 WINGATE LN	HALPERN JUDITH ANN TRUSTEE	HALPERN JUDITH ANN LIVING TRUST	20 WINGATE LN	DOVER	NH	03820
I0005-000019	18 WINGATE LN	WALSH THOMAS JAMES		18 WINGATE LN	DOVER	NH	03820
I0005-000016	24 WINGATE LN	RINE STACY LEE	RINE ANNETTE	24 WINGATE LANE	DOVER	NH	03820
16020-017000	47 PICNIC ROCK DR	GIDDINGE LAWRENCE M	GIDDINGE DIANNE E	47 PICNIC ROCK DR	DOVER	NH	03820
16020-019000	43 PICNIC ROCK DR	HOFFMAN AARON MICHAEL &	HOFFMAN RUBY GONZALES	43 PICNIC ROCK DR	DOVER	NH	03820
I0006-C00DRV	RED BARN DR	RIDGESTONE BUILDERS & DEVELOPERS LLC	C/O JAMES GAURON	15 STARFISH DR	WELLS	ME	04090
16030-000000	50 MILL ST	GREAT BRIDGE DOVER LIMITED PARTNERSHIP	C/O STEWART PROPERTY MGMT INC	P O BOX 10540	BEDFORD	NH	03110-0540
I0006-C00006	28 RED BARN DR	HARBRON WILLIAM R &	HARBRON MARILYN	28 RED BARN DR	DOVER	NH	03820
16020-018000	45 PICNIC ROCK DR	WU ZIWEI		45 PICNIC ROCK DR	DOVER	NH	03820
I0006-C00001	8 RED BARN DR	LEBEL MCGUANE LAURALEE		8 RED BARN DR	DOVER	NH	03820
I0006-C00OPN	RED BARN DR	RIDGESTONE BUILDERS & DEVELOPERS LLC	C/O JAMES GAURON	15 STARFISH DR	WELLS	ME	04090
16020-000OPN	PICNIC ROCK DR	PICNIC RIVERS PARTNERS OF DOVER LLC	TIMOTHY RAYMOND MEMBER	3 WALT COLBY DR	DOVER	NH	03820
I0061-000000	57 BACK RIVER RD	SMITH MATTHEW J & FLEISCHMANN AMANDA A T	FLEISCHSMITH FAMILY REVOCABLE TRUST OF 2	57 BACK RIVER ROAD	DOVER	NH	03820
I0006-B00000	44 BACK RIVER RD	PELCHAT WILLIAM H &	SAUCIER LINDA M	44 BACK RIVER RD	DOVER	NH	03820
I0006-C00005	24 RED BARN DR	BLEVINS KATHERINE		24 RED BARN DR	DOVER	NH	03820
I0062-000000	58 BACK RIVER RD	MARTEL CHARLES WILLIAM		58 BACK RIVER RD	DOVER	NH	03820
16020-020000	41 PICNIC ROCK DR	HATFIELD DANIEL P &	HATFIELD ALISON L	41 PICNIC ROCK DR	DOVER	NH	03820-4709
I0006-C00003	16 RED BARN DR	YOU YIYUN		16 RED BARN DR	DOVER	NH	03820
I0059-000000	53 BACK RIVER RD	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
I0006-I00000	56 BACK RIVER RD	MARTUSCELLO EMILY		56 BACK RIVER RD	DOVER	NH	03820
16032-000000	39 MILL ST	GROSSMAN KENNETH W & HOLLY TRUSTEES	GROSSMAN FAMILY 2003 REVOCABLE TRUST; C/O DUMAIS & FERLAND	385 6TH ST	DOVER	NH	03820
I0006-C00004	20 RED BARN DR	DEOLIVEIRA SEBASTIAO H &	MERRETT-DEOLIVEIRA DEBRA A	20 RED BARN DR	DOVER	NH	03820
I0067-B00000	62 BACK RIVER RD	TOWLE JONATHAN P TRUSTEE	TOWLE JONATHAN P 2008 TRUST	62 BACK RIVER RD	DOVER	NH	03820
I0058-000000	51 BACK RIVER RD	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
I0005-000017	22 WINGATE LN	FLETCHER ROBIN G TRUSTEE	ROBIN G FLETCHER TRUST	22 WINGATE LN	DOVER	NH	03820
I0006-C00002	12 RED BARN DR	DE LEEUW JOHN P & NANCY A TRUSTEES	DE LEEUW FAMILY TRUST	12 RED BARN DR	DOVER	NH	03820
I0006-000000	10-78 UNCOMMON DR	54 BRR LLC		1 STAGECOACH RD	DURHAM	NH	03824

CHRISTOPHER G. PARKER, AICP
Assistant City Manager
Planning & Strategic Initiatives
c.parker@dover.nh.gov

288 Central Avenue
Dover, New Hampshire 03820-4169
(603) 516-6008
Fax: (603) 516-6049
www.dover.nh.gov

City of Dover, New Hampshire

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

NOTICE OF DECISION

March 10, 2021

54 BRR, LLC.
1 Stagecoach Road
Durham, NH 03824

Re: Site Review for 54 BRR, LLC., Assessor's Map I, Lot 6, zoned R-12, and located at 54 Back River Road. (Proposal is to develop an affordable housing community with 44 detached 384 s.f. one-bedroom units). (P20-60)

Dear 54 BRR, LLC.: John Maggie

Please be advised that on Tuesday, March 9, 2021 the Dover Planning Board voted to conditionally approve the above referenced Site Plan. **The specific conditions are included with this letter.**

In addition to the conditions of approval, please provide the following to the Planning Office:

- □ Four (4) full size plans and One (1) 11" x 17" plan
- □ One (1) CAD file format of the plan
- □ One (1) PDF digital version of the plan

The plans must be submitted within ninety (90) days from Planning Board approval. Upon approved receipt, the Planning Board Chair will sign them approved. Any application which is not signed by the Planning Board Chair as complete, in accordance with this section, is deemed expired, and null and void.

If you have any questions, please do not hesitate to contact my office.

Sincerely,

Christopher G. Parker, AICP
Assistant City Manager, Planning & Strategic Initiatives

EC: Building Inspection Office
Engineering Office
Assessing Office
MJS Engineering

Waiver:

	Submitted	Reviewed
Condition to Be Met Prior to the Signing of Plans:		
1. A note be added to the plan that the waiver from Section 153-14.E(2)(b) have been met and the Board found the criteria to be met.	☐	☐

Site Plan:

	Submitted	Reviewed
Conditions to Be Met Prior to the Signing of Plans:		
1. The CUP (P21-01) receive final approval.	☐	☐
2. The TDR request (P20-61) be approved.	☐	☐
3. The applicant shall provide the Planning Department: a. A digital version of the plan b. A CAD file to the satisfaction of the Asset Management Administrator. c. Documentation that Postmaster is fine with mail kiosk d. An agreement noting the location of the fence along the shared boundary with Red Shoe Barn e. Update Landscape OM plan to include the path to the wooden platform f. Revise the lease to the satisfaction of the Assistant City Manager	☐	☐
4. The applicant shall revise the plat to: a. Add the owners' signatures b. Add the Licensed Land Surveyor, Professional Engineer, and Landscape Architect stamps and signatures c. Address Engineering drainage and utility concerns d. Update note 25 with permit numbers	☐	☐
Conditions to Be Met Prior to any Construction Activity:	**Submitted**	**Reviewed**
5. A site construction sign with the contact information for the general contractor must be located and approved by the City Engineer or Assistant City Manager.	☐	☐
Conditions to Be Met Prior to Issuance of a Building Permit:	**Submitted**	**Reviewed**
6. Water and sewer investment fees shall be paid at the time of request of service.	☐	☐
7. The applicant shall provide a letter of credit or other form of security acceptable to the City for any unfinished work.	☐	☐
Condition to Be Met Prior to Occupancy:	**Submitted**	**Reviewed**
8. Issuance of a Certificate of Occupancy.	☐	☐
9. Impact fees for any new unit shall be paid per the invoice provided with the Notice of Decision.	☐	☐
10. The remainder of the property must be in a conservation easement or similar restriction with trail access provided.	☐	☐

Book: 5153 Page: 273

Doc # 230014324 12/05/2023 01:09:52 PM
Book 5153 Page 273 Page 1 of 1
Catherine A. Berube
Register of Deeds, Strafford County

DEVELOPMENT AGREEMENT
As Required by Dover Code Section 170-27.2

This Development Agreement is made by and between Margaret/John Randolph of 54 BRR, LLC, a New Hampshire corporation with a place of business at 1 Stagecoach Road, Durham, NH 03824 (hereinafter called the Applicant) and The City of Dover, NH, 288 Central Avenue, Dover, New Hampshire 03820 (hereinafter called the City).

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NOW THEREFORE, intending to be legally bound, the parties agree as follows:

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3. That the Applicant shall implement the Plan only as approved by the Planning Board and shall comply with all requirements of the current version of the Building Code and Life Safety Code, as amended.
4. That the Applicant shall obtain all necessary local, state and federal permits and shall comply with their terms.
5. That the 44 units the Applicant intends to construct shall be permanently restricted to the HUD Fair Market Rental Rate for a one bedroom unit in the Portsmouth-Rochester, NH HMFA as published by New Hampshire Housing Finance Authority in April of each year.
6. Annually, by July 1, the Applicant shall provide, in writing, to the Planning Board through the Department of Planning and Community Development, an updated and verifiable lease documenting that the monthly rental rate for the 44 units is at, or below, the HUD Fair Market Rental Rate for a one bedroom unit in the Portsmouth-Rochester, NH HMFA as published by New Hampshire Housing Finance Authority in April of each year, for the following 12 months.
7. The Applicant's obligations hereunder shall be binding upon Applicant's successors in interest.

IN WITNESS WHEREOF, the parties hereto have set their hands this 28th day of September, 2023.

APPLICANT

Witness

John Randolph of 54 BRR, LLC, OWNER

DOVER PLANNING BOARD

Witness

Gina Cruikshank, Chair of Planning Board

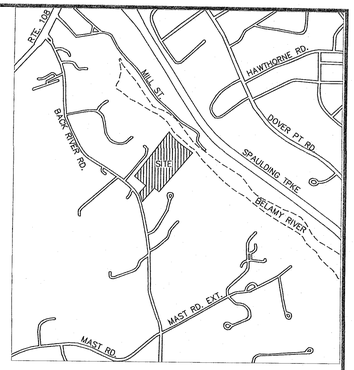
SITE PLAN

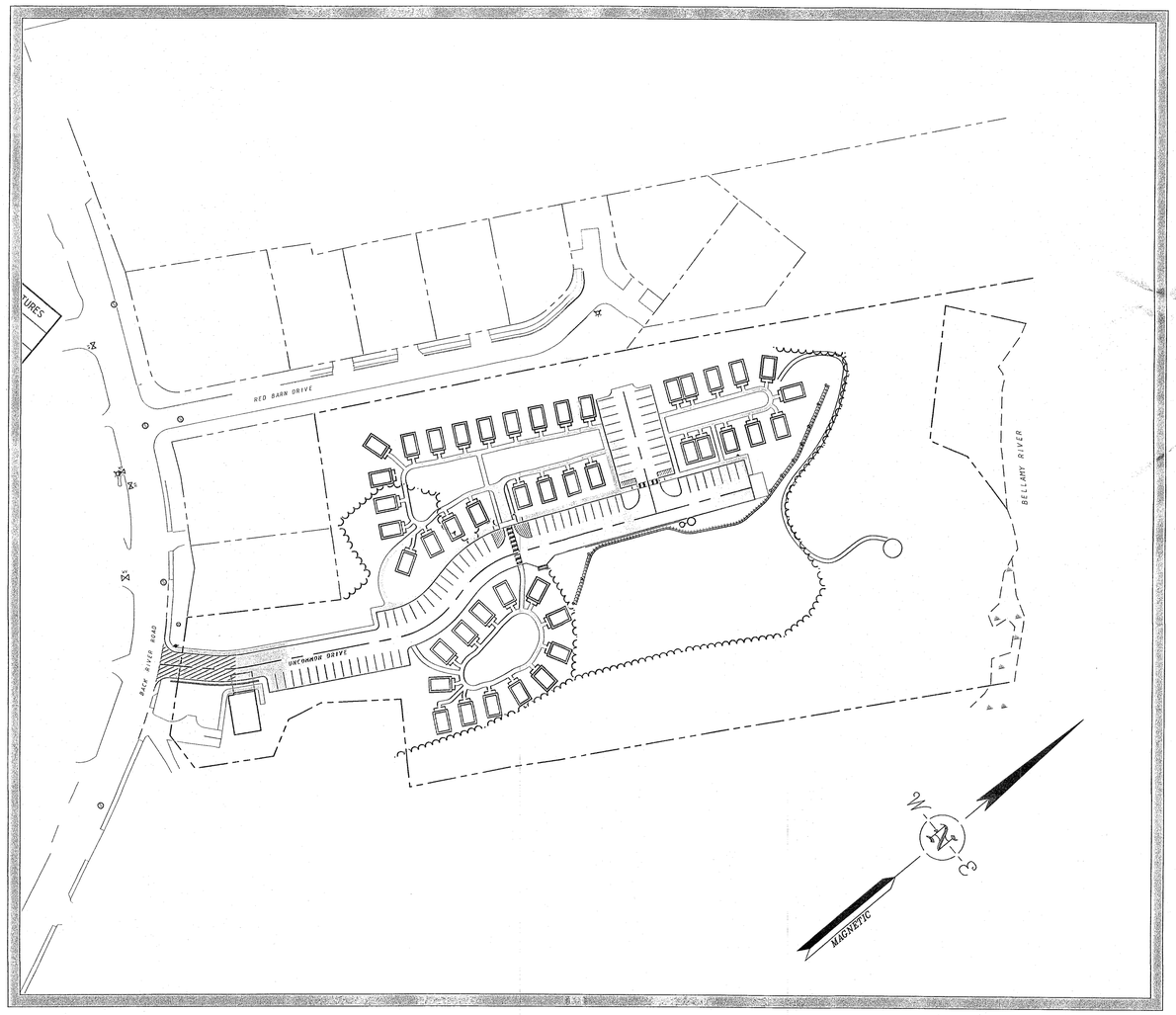
for

54 BRR, LLC

COTTAGES AT BACK RIVER ROAD

54 BACK RIVER ROAD
DOVER, NH
13 SEPTEMBER 2021





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TITLE	SHEET
EXISTING CONDITIONS PLAN	EX-1
YIELD PLAN	Y-1
SITE PLAN	C101
GRADING, DRAINAGE, AND EROSION CONTROL PLAN	C102
UTILITIES PLAN	C103
ROAD AND PROFILE PLAN	C104
SANITARY SEWER PLAN AND PROFILE	C201-203
CONSTRUCTION DETAILS	C501-509
LIGHTING PLAN	LT101
LANDSCAPING PLAN	LA101
ARCHITECTURAL PLAN	A1.1

OWNER

54 BRR, LLC
1 STAGECOACH RD
DURHAM, NH 03824

CIVIL ENGINEER

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 Railroad St., P.O. Box 359
Newmarket, NH 03857
Phone: (603) 659-4979, Fax: (603) 659-4627
E-mail: mjs@mjs-engineering.com

SURVEYOR

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3830

LANDSCAPE ARCHITECT

woodburn & company
LANDSCAPE ARCHITECTURE
103 Kent Place Newmarket, New Hampshire Phone: 603.659.5949

SOIL SCIENTIST

JOSEPH W. NOEL
P.O. BOX 174
SOUTH BERWICK, ME 03908

APPROVED
DATE 12/14/21
City of Dover, N.H.
PLANNING BOARD
CHAIRMAN / DIRECTOR

RECEIVED
Planning Office
DEC 10 2021
Dover, New Hampshire

NO.	REVISIONS	DATE	INT.
2.	REVISED PER NHDES WASTEWATER ENGINEERING BUREAU COMMENTS	9/13/21	MJS
1.	REVISED PER DOVER NOTICE OF DECISION DATED 3/10/21	9/10/21	MJS
0.	INITIAL SUBMISSION TO DOVER AND NHDES WASTEWATER DIVISION	9/17/20	MJS

(P20-60)

Drawing Name: P:\20pro\20-011\Internal\Drawing Files\NM20011_Civil_06.dwg
Tue, 14 Sep 2021 - 4:24pm

NOTES

1.) INTENT: TO SHOW THE EXISTING CONDITIONS OF DOVER TAX MAP I LOT 6.

2.) CURRENT OWNER OF RECORD: 54 BRR, LLC
1 STAGECOACH ROAD
DURHAM, N.H.

3.) SUBJECT PARCEL IS LOCATED IN THE CITY OF DOVER, COUNTY OF STRAFFORD AND THE STATE OF NEW HAMPSHIRE.

4.) TOTAL LOT AREA: 311,970 SQ.FT. – 7.162 ACRES

5.) TAX MAP I LOTS 6

6.) PROJECT DEED REFERENCE: BOOK 4764 PAGE 977

7.) ZONING: R–12

MIN. LOT SIZE: 12,000 SQ. FT.	OPEN SPACE REQUIREMENTS
MIN. FRONTAGE: 100 FT	MIN. LOT SIZE: 8,000 SQ.FT.
MIN. SETBACKS:	MIN. FRONTAGE: 20 FT
FRONT: 30 FT	MIN. SETBACKS:
SIDE: 15 FT	FRONT: 10 FT
REAR: 15 FT	SIDE: 10 FT
MAX BUILDING HEIGHT: 35 FT	REAR: 10 FT
LOT COVERAGE: 30 %	EXTERIOR BOUNDARY: 30 FT
	EXISTING STRUCTURES: 50 FT
	FRONTAGE BUFFER:100 FT

8.) THIS PROPERTY FALLS WITHIN THE FOLLOWING ZONING OVERLAY DISTRICTS: WETLANDS, CONSERVATION, TIDAL

9.) THE RAW UNADJUSTED CLOSURE OF OUR RANDOM POINT TRAVERSE WAS 1 PART IN 35,000, AND WAS ACCOMPLISHED USING A TOPCON 500 GT TOTAL STATION, DURING THE MONTH OF SEPTEMBER, 2018.

10.) IN THE MONTH OF OCTOBER, 2018 MICHAEL MARIANO, STATE OF NEW HAMPSHIRE CERTIFIED SOIL SCIENTIST, NH CERTIFIED WETLAND SCIENTIST, CONDUCTED

11.) AN ON–SITE WETLANDS DELINEATION OF THE SUBJECT PARCEL. WETLANDS WERE IDENTIFIED BASED ON THE CITY OF DOVER ZONING ORDINANCE (170–27.1) AND ON STATE & FEDERAL CRITERIA OUTLINED IN THE "CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL" (DEPT. OF THE ARMY, 1987) ON THIS SITE. WETLANDS BASED ON LOCAL CRITERIA SHARE THE SAME BOUNDARIES WITH THOSE BASED ON STATE AND FEDERAL CRITERIA. NO VERY POORLY DRAINED SOILS WERE FOUND.

PROJECT PLAN REFERENCE:

OPEN SPACE SUBDIVISION PLAN BELLAMY RIDGE 46 BACK RIVER ROAD DOVER, NEW HAMPSHIRE TRITECH ENGINEERING CORPORATION DECEMBER 24, 2014 SCRD 110–35	PLAN OF LAND OF ROBERT & MURIEL NESMAN BACK RIVER ROAD DOVER, N.H. McENEANEY & O'NEIL SURVEY ASSOCIATES MAY 6, 1988 SCRD 34–66
PLAN OF LAND OF BRUCE G. & OLIVE E. STAPLES BACK RIVER ROAD DOVER, NEW HAMPSHIRE K.E. MOORE & B.G. STAPLES JAN. 1985 SCRD 25–65	PLAN OF LAND FOR EDWARDS REALTY INC SAWYERS LOWER MILL DOVER, NEW HAMPSHIRE GRANT L. DAVIS APRIL 1954 SCRD Po 2 Fo 21 PLAN #26
BOUNDARY LINE ADJUSTMENT FOR LOUISE SWEATT DOVER, NEW HAMPSHIRE EMERY ENGINEERING SEPTEMBER 26, 1991 SCRD 39–79	SUBDIVISION PLAN FOR LOUISE M. SWEATT DOVER, NEW HAMPSHIRE EMERY ENGINEERING JUNE 6, 1991 SCRD 39–24

12.) BASIS OF BEARING: BEARING SYSTEM BASED ON GPS FIELD OBSERVATIONS ON AUGUST 21, 2018 USING TOPCON HIPER SR RECEIVERS AND OPUS CORRECTED ON AUGUST 24, 2018. DATUM BASED ON NEW HAMPSHIRE STATE PLANE COORDINATES SPC (2800 NH), (VERTICAL DATUM: NAVD 88). (DOVER GIS)

13.) A PORTION OF THE SUBJECT PARCEL IS WITHIN A FEDERALLY DESIGNATED SPECIAL FLOOD HAZARD ZONE (FLOOD HAZARD ZONE A – PANEL 0340E, MAP No. 33017C0340E, DATE: 9–30–2015).

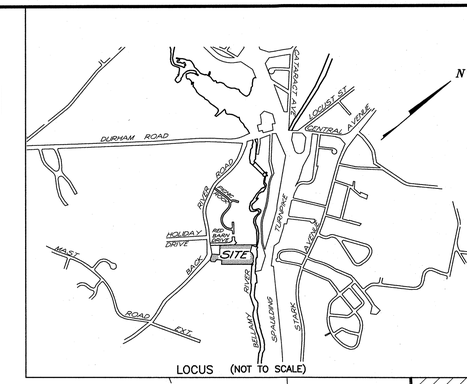
14.) MAP I LOT 6C MAY BE SUBJECT TO FLOWAGE RIGHTS AND MILL PRIVILEGE RIGHTS.

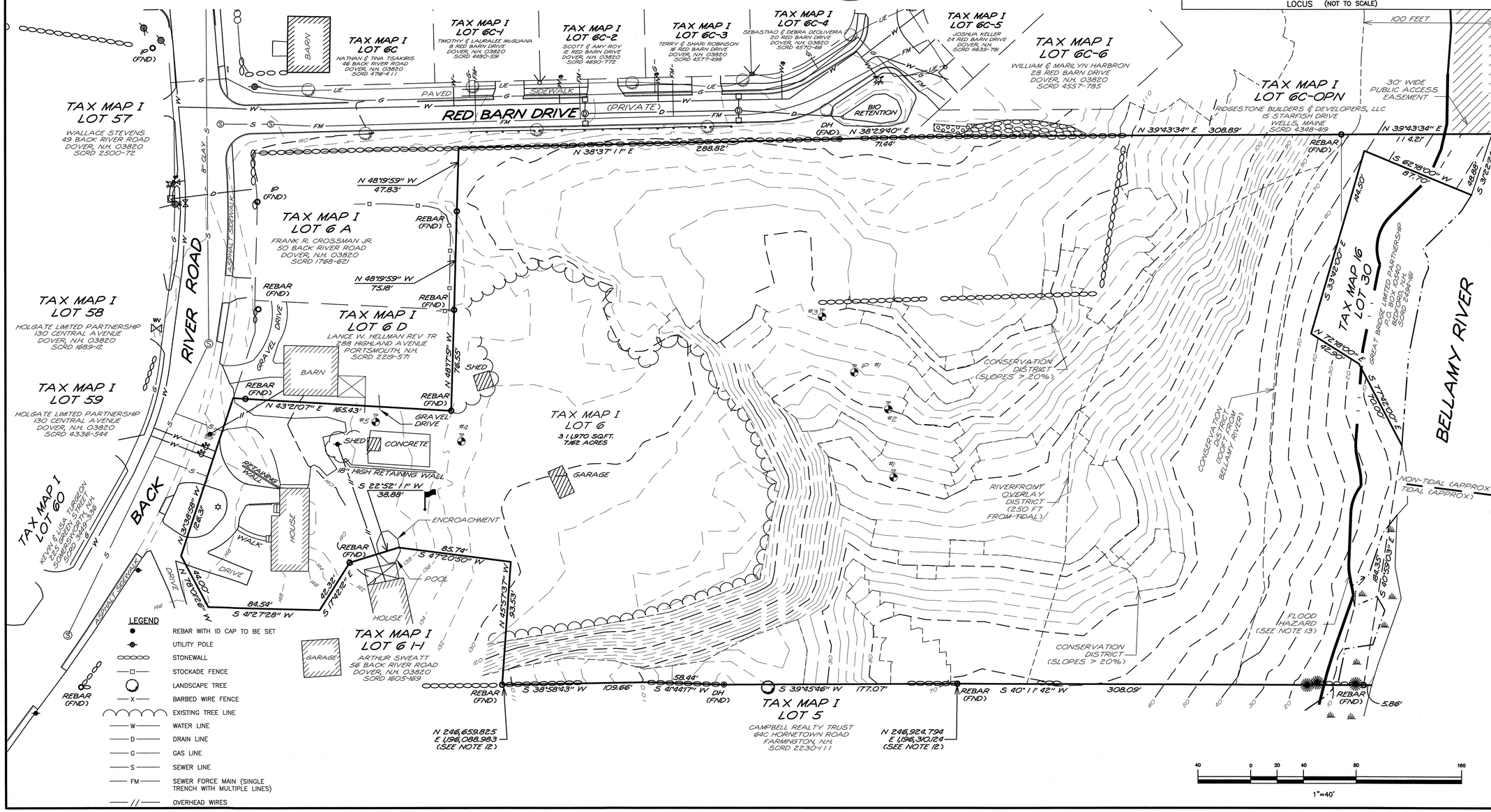
15.) LOTS ARE SERVICED BY CITY WATER AND MUNICIPAL SEWER.

16.) A PORTION OF THE BELLAMY RIVER ADJACENT TO THE SUBJECT PROPERTY IS SUBJECT TO TIDAL ACTION. THE RIVER FRONT OVERLAY DISTRICT DOES APPLY TO A PORTION OF THE SUBJECT PARCEL.

STATE OF NEW HAMPSHIRE
MICHAEL MARIANO
No. 193
CERTIFIED WETLAND SCIENTIST

TRITECH
ENGINEERING CORPORATION





TRITECH
ENGINEERING CORPORATION
765 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3930

REVISIONS
DATE: DESCRIPTION:

LICENSED LAND SURVEYOR
No. 884
ROBERT J. ROSSETTI
STATE OF NEW HAMPSHIRE

EXISTING CONDITIONS PLAN
54, BRR, LLC
54 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY

SEPTEMBER 17, 2020 JOB No. 18129
SCALE: 1" = 40'

SHEET No. EX-1

(P20-00)

NOTES

1.) INTENT: TO SHOW THE CONVENTIONAL SUBDIVISION OF DOVER TAX MAP I LOT 6.

2.) CURRENT OWNER OF RECORD: 54 BRR, LLC
1 STAGECOACH ROAD
DURHAM, N.H.

3.) SUBJECT PARCEL IS LOCATED IN THE CITY OF DOVER, COUNTY OF STRAFFORD AND THE STATE OF NEW HAMPSHIRE.

4.) TOTAL LOT AREA: 311,970 SQ.FT. – 7.162 ACRES

5.) TAX MAP I LOTS 6

6.) PROJECT DEED REFERENCE: BOOK 4764 PAGE 977

7.) ZONING: R–12

MIN. LOT SIZE: 12,000 SQ. FT.	OPEN SPACE REQUIREMENTS
MIN. FRONTAGE: 100 FT	MIN. LOT SIZE: 8,000 SQ.FT.
MIN. SETBACKS:	MIN. FRONTAGE: 20 FT
FRONT: 30 FT	MIN. SETBACKS:
SIDE: 15 FT	FRONT: 10 FT
REAR: 15 FT	SIDE: 10 FT
MAX BUILDING HEIGHT: 35 FT	REAR: 10 FT
LOT COVERAGE: 30 %	EXTERIOR BOUNDARY: 30 FT
	EXISTING STRUCTURES: 50 FT
	FRONTAGE BUFFER:100 FT

8.) THIS PROPERTY FALLS WITHIN THE FOLLOWING ZONING OVERLAY DISTRICTS: WETLANDS, CONSERVATION, TIDAL

9.) THE RAW UNADJUSTED CLOSURE OF OUR RANDOM POINT TRAVERSE WAS 1 PART IN 35,000, AND WAS ACCOMPLISHED USING A TOPCON 500 GT TOTAL STATION, DURING THE MONTH OF SEPTEMBER, 2018.

10.) IN THE MONTH OF OCTOBER, 2018 MICHAEL MARIANO, STATE OF NEW HAMPSHIRE CERTIFIED SOIL SCIENTIST, NH CERTIFIED WETLAND SCIENTIST, CONDUCTED AN ON–SITE WETLANDS DELINEATION OF THE SUBJECT PARCEL. WETLANDS WERE IDENTIFIED BASED ON THE CITY OF DOVER ZONING ORDINANCE (170–27.1) AND ON STATE & FEDERAL CRITERIA OUTLINED IN THE "CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL" (DEPT. OF THE ARMY, 1987) ON THIS SITE, WETLANDS BASED ON LOCAL CRITERIA SHARE THE SAME BOUNDARIES WITH THOSE BASED ON STATE AND FEDERAL CRITERIA. NO VERY POORLY DRAINED SOILS WERE FOUND.

11.) PROJECT PLAN REFERENCE:

OPEN SPACE SUBDIVISION PLAN BELLAMY RIDGE 46 BACK RIVER ROAD DOVER, NEW HAMPSHIRE TRITECH ENGINEERING CORPORATION DECEMBER 24, 2014 SCRD 110–35	PLAN OF LAND OF ROBERT & MURIEL NESMAN BACK RIVER ROAD DOVER, N.H. McENEANEY & O'NEIL SURVEY ASSOCIATES MAY 6, 1988 SCRD 34–66
PLAN OF LAND OF BRUCE G. & OLIVE E. STAPLES BACK RIVER ROAD DOVER, NEW HAMPSHIRE K.E. MOORE & B.G. STAPLES JAN. 1985 SCRD 25–65	PLAN OF LAND FOR EDWARDS REALTY INC SAWYERS LOWER MILL DOVER, NEW HAMPSHIRE GRANT L. DAVIS APRIL 1954 SCRD Po 2 Fo 21 PLAN #26
BOUNDARY LINE ADJUSTMENT FOR LOUISE SWEATT DOVER, NEW HAMPSHIRE EMERY ENGINEERING SEPTEMBER 26, 1991 SCRD 39–79	SUBDIVISION PLAN FOR LOUISE M. SWEATT DOVER, NEW HAMPSHIRE EMERY ENGINEERING JUNE 6, 1991 SCRD 39–24

12.) BASIS OF BEARING: BEARING SYSTEM BASED ON GPS FIELD OBSERVATIONS ON AUGUST 21, 2018 USING TOPCON HIPER SR RECEIVERS AND OPUS CORRECTED ON AUGUST 24, 2018. DATUM BASED ON NEW HAMPSHIRE STATE PLANE COORDINATES SPC (2800 NH), (VERTICAL DATUM: NAVD 88). (DOVER GIS)

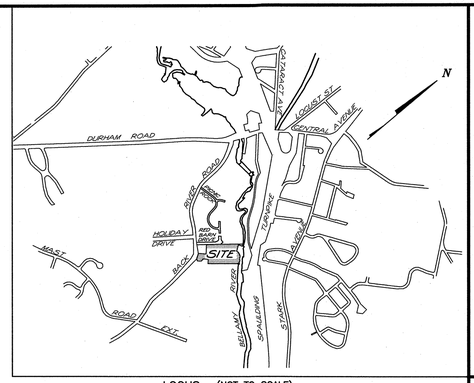
13.) A PORTION OF THE SUBJECT PARCEL IS WITHIN A FEDERALLY DESIGNATED SPECIAL FLOOD HAZARD ZONE (FLOOD HAZARD ZONE A – PANEL 0340E, MAP No. 33017C0340E, DATE: 9–30–2015).

14.) THE LOTS TO BE SERVED BY MUNICIPAL WATER AND SEWER.

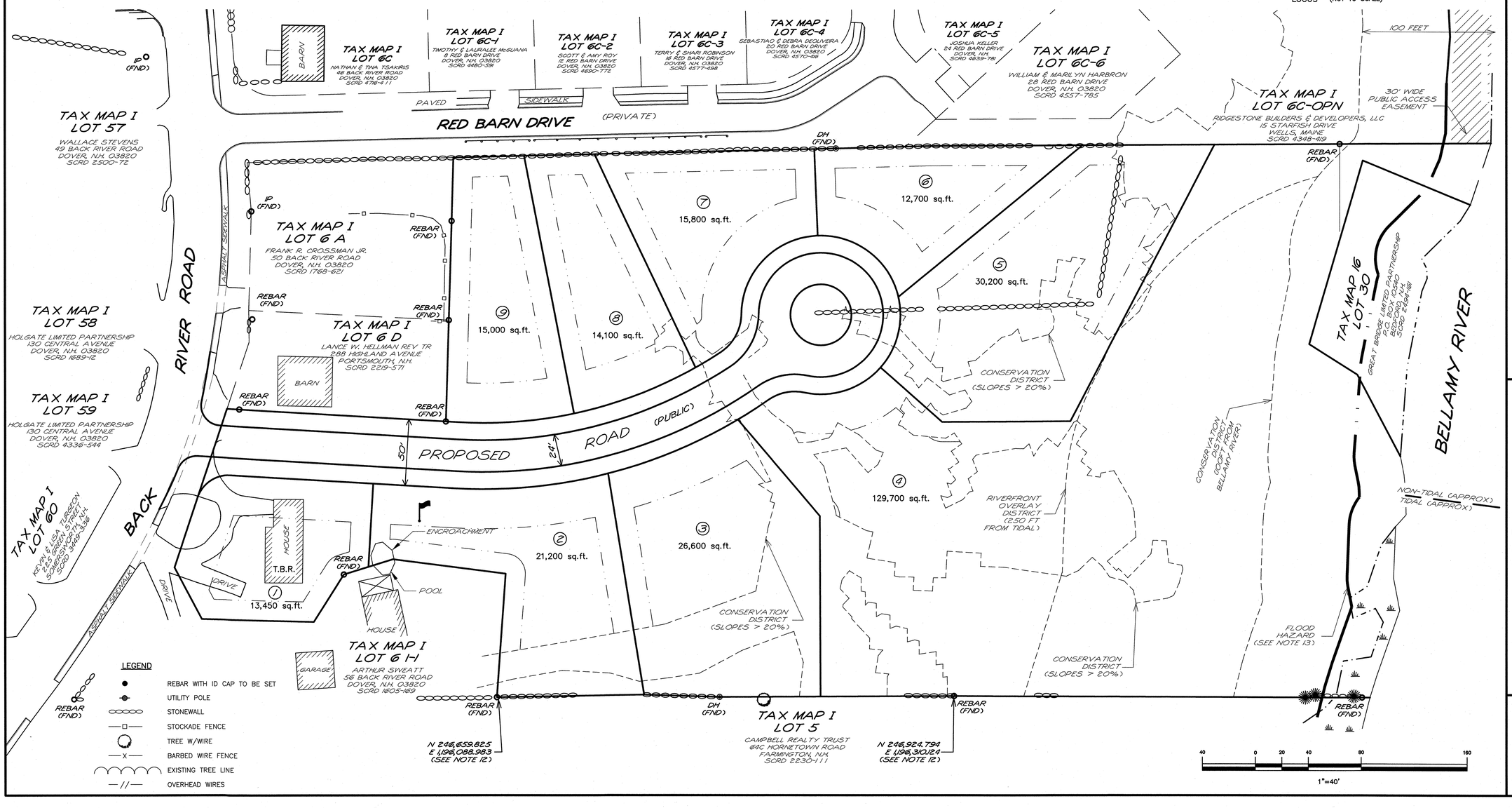
15.) ALL PROPOSED LOTS CONTAIN A MINIMUM OF 12,000 SQ.FT. OF CONTIGUOUS UPLAND, AND MORE THAN 8,000 SQ.FT. OF CONTIGUOUS NON–BUFFER UPLAND.

16.) MAP I LOT 6 MAY BE SUBJECT TO FLOWAGE RIGHTS AND MILL PRIVILEGE RIGHTS.

17.) A PORTION OF THE BELLAMY RIVER ADJACENT TO THE SUBJECT PROPERTY IS SUBJECT TO TIDAL ACTION. THE RIVER FRONT OVERLAY DISTRICT DOES APPLY TO A PORTION OF THE SUBJECT PARCEL.



LOCUS (NOT TO SCALE)



TRITECH
ENGINEERING CORPORATION
795 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3930

REVISIONS
DATE: DESCRIPTION:

YIELD PLAN
54 BRR, LLC
"COTTAGES"
54 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
SEPTEMBER 17, 2020 JOB No. 18129
SCALE: 1" = 40'

SHEET No. Y-1

P20-060

NOTES:

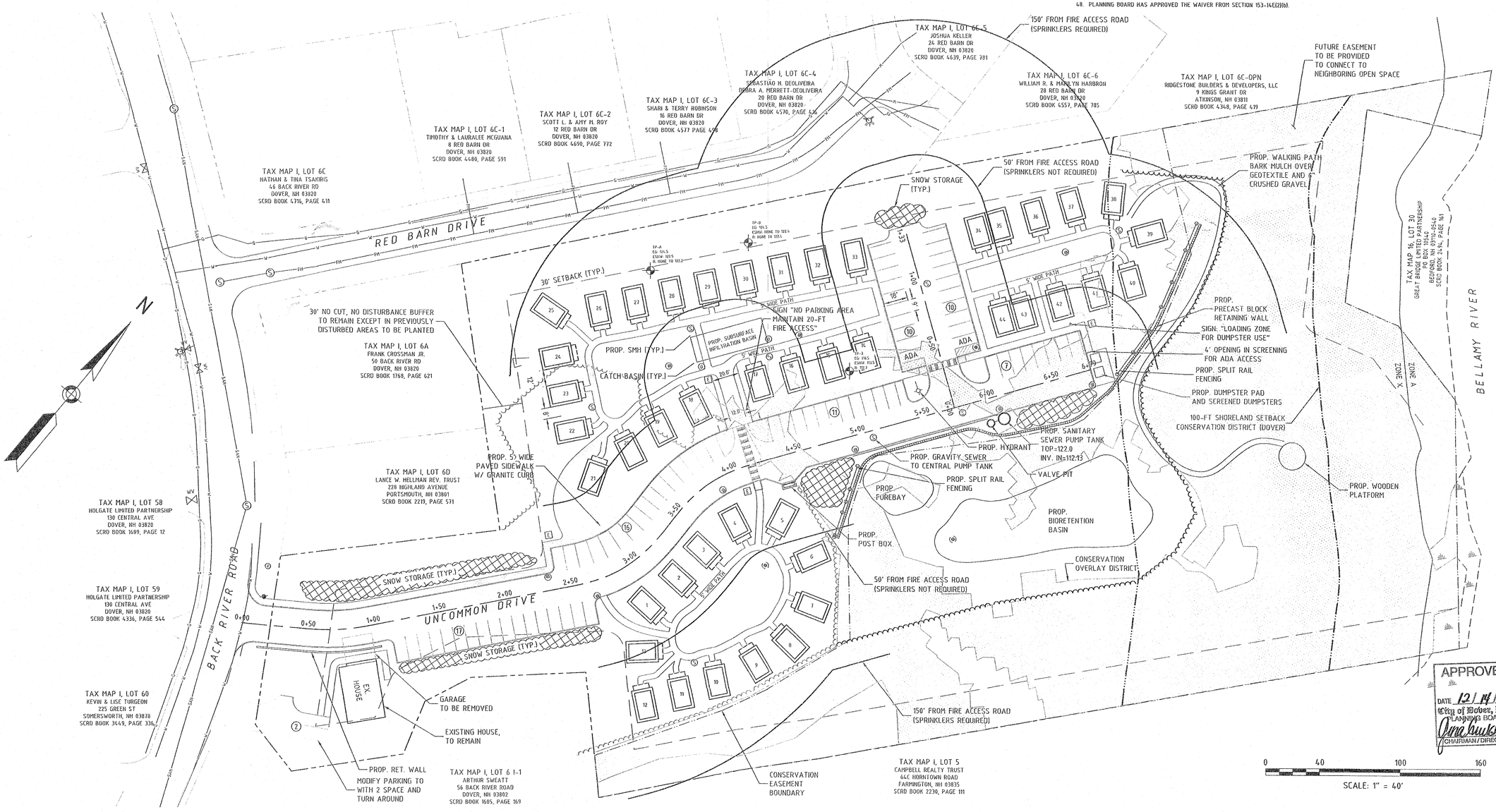
1. INTENT: TO SHOW THE PROPOSED CONDITIONS OF TAX MAP 1, LOT 6.
2. CURRENT OWNER OF RECORD: 54 BRR, LLC
   1 STAGECOACH RD
   DURHAM, NH 03824 OWNER SIGNATURE:
3. SUBJECT PARCEL IS LOCATED IN THE CITY OF DOVER, COUNTY OF STRAFFORD AND THE STATE OF NEW HAMPSHIRE.
4. TOTAL LOT AREA: 320,602 SQ. FT - 7.36 ACRES
5. TAX MAP 1, LOT 6 OF THE CITY OF DOVER TAX ASSESSOR'S MAPS.
6. PROJECT DEED REFERENCE: STRAFFORD COUNTY REGISTRY OF DEEDS BOOK NO. 1605, PAGE NO. 169
7. ZONING: R-32

MIN. LOT SIZE: 12,000 SQ. FT	OPEN SPACE REQUIREMENTS
MIN. FRONTAGE: 100 FT	MIN. LOT SIZE: 8,000 SQ. FT
MIN. SETBACKS:	MIN. SETBACKS:
FRONT: 30 FT	FRONT: 10 FT
SIDE: 15 FT	SIDE: 10 FT
REAR: 15 FT	REAR: 10 FT
MAX. BUILDING HEIGHT: 35 FT	EXTERIOR BOUNDARY: 30 FT
MAX. LOT COVERAGE: 30%	EXISTING STRUCTURES: 50 FT
	FRONTAGE BUFFER: 100 FT

8. THIS PROPERTY FALLS WITHIN THE FOLLOWING ZONING OVERLAY DISTRICTS: WETLANDS, CONSERVATION, TIDAL.
9. IN THE MONTH OF OCTOBER, 2018 MICHAEL MARIANO, STATE OF NEW HAMPSHIRE CERTIFIED SOIL SCIENTIST, NH CERTIFIED WETLAND SCIENTIST, CONDUCTED AN ON-SITE WETLANDS DELINEATION OF THE SUBJECT PARCEL. WETLANDS WERE IDENTIFIED BASED ON THE CITY OF DOVER ZONING ORDINANCE (170-27.1) AND ON STATE AND FEDERAL CRITERIA OUTLINES IN THE "CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL" (DEPT. OF THE ARMY 1987) ON THIS SITE. WETLANDS BASED ON LOCAL CRITERIA SHARE THE SAME BOUNDARIES WITH THOSE BASED ON STATE AND FEDERAL CRITERIA. NO VERY POORLY DRAINED SOILS WERE FOUND.
10. ON JUNE 22, 2020 JOSEPH W. NOEL, CERTIFIED SOIL SCIENTIST COMPLETED A SITE SPECIFIC SOIL MAP IN ACCORDANCE WITH "SITE SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT" (SOCIETY OF SOIL SCIENTISTS OF NORTHERN NEW ENGLAND, VERSION 5.0, DECEMBER 2017).
11. A PORTION OF THE SUBJECT PARCEL IS WITHIN A FEDERALLY DESIGNATED SPECIAL FLOOD HAZARD ZONE (FLOOD ZONE A - PANEL 0340E. MAP NO. 33017C0340E, DATE 9-30-2015)
12. MAP 1, LOT 6C MAY BE SUBJECT TO FLOWAGE RIGHTS AND MILL PRIVILEGE RIGHTS.
13. LOTS ARE SERVICED BY CITY WATER AND MUNICIPAL SEWER.
14. A PORTION OF THE BELLAMY RIVER ADJACENT TO THE SUBJECT PROPERTY IS SUBJECT TO TIDAL ACTION. THE RIVER FRONT OVERLAY DISTRICT DOES APPLY TO A PORTION OF THE SUBJECT PARCEL.
15. AS-BUILT PLANS OF THE SUBDIVISION 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 IF A STREET IS PROPOSED FOR CITY ACCEPTANCE. 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.
16. THE INSTALLATION OF THE ELECTRICAL POWER, CABLE TELEVISION AND TELEPHONE LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE FOR WHICH DEVELOPMENT IS PROPOSED.
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. THE LIMITS OF CONSTRUCTION DISTURBANCE THAT ARE LOCATED IN OR WITHIN THE 50 FT OF CONSERVATION AND WETLAND DISTRICTS SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS.
19. ALL TREATMENT SWALES TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS.
20. 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.
21. 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.
22. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY-FRIDAY 7 AM-6 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 ASSISTANT CITY MANAGER.
23. BUILDING ADDRESSES (INCLUDING APT/UNIT NUMBERS IF APPLICABLE) SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
24. THE PROPOSED USE FOR THE SITE IS SINGLE FAMILY COTTAGES FOR WORK FORCE HOUSING. 44 TOTAL 1 BEDROOM UNITS.
25. THE FOLLOWING FEDERAL AND STATE PERMITS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY:
    A. ALTERATION OF TERRAIN PERMIT AoT-2052
    B. NHDES SEWER DISCHARGE PERMIT D2021-0004
    C. NHDES SHORELAND IMPACT PERMIT 2021-01315
26. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM TO DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR.
27. ANY RETAINING WALL OVER FOUR FEET (4') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
28. AND FENCE TALLER THAN SEVEN FEET (7') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM INSPECTION SERVICES.
29. 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 SUFFICIENT TO PROVIDE NOTICE TO ALL PROSPECTIVE PURCHASERS TO THE REQUIREMENTS FOR MAINTENANCE AND REPORTING.
30. FIRE DEPARTMENT ACCESS ROADS SHALL BE INSTALLED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS IN ALL WEATHER CONDITIONS AT ALL TIMES.
31. MAXIMUM ALLOWED PARKING SPACE CALCULATION:

USE	UNITS	STANDARD	ALLOWED	PROVIDED
RESIDENTIAL	44	1.4 SPACES/UNIT + 0.5 GUEST SPACES/UNIT	83	73

32. EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER CHAPTER 153-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.
33. TOPOGRAPHIC SURVEY PERFORMED BY TRITECH ENGINEERING IN AUGUST, 2018.
34. ELEVATIONS ARE BASED ON NEW HAMPSHIRE STATE PLANE COORDINATES SPC (2800 NH). (VERTICAL DATUM: NAVD88). (DOVER GIS)
35. APPROVED BACKFLOW PREVENTERS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER.
36. 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.
37. EXISTING BUILDING ON BACK RIVER ROAD TO BE USED AS COMMUNITY CENTER.
38. PROPOSED COTTAGES HAVE APPROXIMATELY 12' OF SPACE BETWEEN THEM.
39. RIDESHARE PROGRAM TO BE OFFERED TO EMPLOYEES OF HARMONY HOMES ASSISTED LIVING; AN ANTICIPATED MINIMUM OF 20% OF RESIDENTS WOULD RIDESHARE OR CARPOOL. CARPOOLING IS COMMON AMONG CURRENT EMPLOYERS
40. RESIDENTS WORKING AT OTHER COMPANIES WOULD ALSO BE ABLE TO CAR POOL; COMPANIES WOULD BE ENCOURAGED TO PROVIDE RIDESHARING OPPORTUNITIES FOR THEIR EMPLOYEES AS WELL.
41. IT IS ANTICIPATED THAT APPROXIMATELY 10% OF RESIDENTS WOULD WORK FROM HOME.
42. ALL REMAINING UNDEVELOPED LAND TO THE EAST WILL BE PLACED IN CONSERVATION.
43. ANY MODIFICATION TO OWNERSHIP RIGHTS, SUCH AS THE CREATION OF CONDOMINIUMS, WOULD REQUIRE PLANNING BOARD APPROVAL.
44. ANY INTERIOR STONE WALLS WILL BE REUSED ON SITE.
45. APPLICANT SHALL COMPLETE LAND USE DEVELOPMENT TRACKING FORM, MOST RECENTLY REVISED VERSION, UTILIZING THE ONLINE POLLUTION TRACKING AND ACCOUNTING PILOT PROJECT (PTAPP) PORTAL. HTTPS://WWW.UNH.EDU/UNHSC/PTAPP.
46. THE SITE LAYOUT IS DESIGNED IN COMPLIANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. THE PROPOSED STRUCTURE WILL BE ALSO BE DESIGNED IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. (I.E. IBC, ANSI-117.1) AND NH RSA 155-A:5.
47. A FENCE, PER THE AGREEMENT WITH RED BARN DRIVE HOA, SHALL BE INSTALLED IN THE 30' BUFFER.
48. PLANNING BOARD HAS APPROVED THE WAIVER FROM SECTION 153-14E(2)(b).



APPROVED
DATE 12/14/21
City of Dover, N.H.
PLANNING BOARD
CHAIRMAN / DIRECTOR

NO.	DATE	INT.
5.	REVISED PER NHDES WASTEWATER ENGINEERING BUREAU COMMENTS	9/13/21	MCS
4.	REVISED SUBMISSION TO NHDES AoT BUREAU	8/17/21	MCS
3.	REVISED SUBMISSION PER 2/24/21 PLANNING BOARD COMMENTS	3/4/21	MCS
2.	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 1/14/21	2/1/21	MCS
1.	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 10/8/20	1/4/21	MCS
0.	PRELIMINARY SUBMISSION	11/25/20	MCS

REVISIONS

DATE ISSUED: 11/25/20
SCALE: 1"=40'
DESIGNED BY: MJS
DRAWN BY: MCS
APPROVED BY: MJS
DWG FILE: NH20011_Civil_06.dwg

SITE PLAN
prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP 1, LOT 6
54 BACK RIVER ROAD, DOVER, NH

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 Railroad St, P.O. Box 359
Newmarket, NH 03857
Phone: (603) 659-4979, Fax: (603) 659-4627
E-mail: mjs@mjs-engineering.com

JOB: 20-011

C-101

(P20-60)

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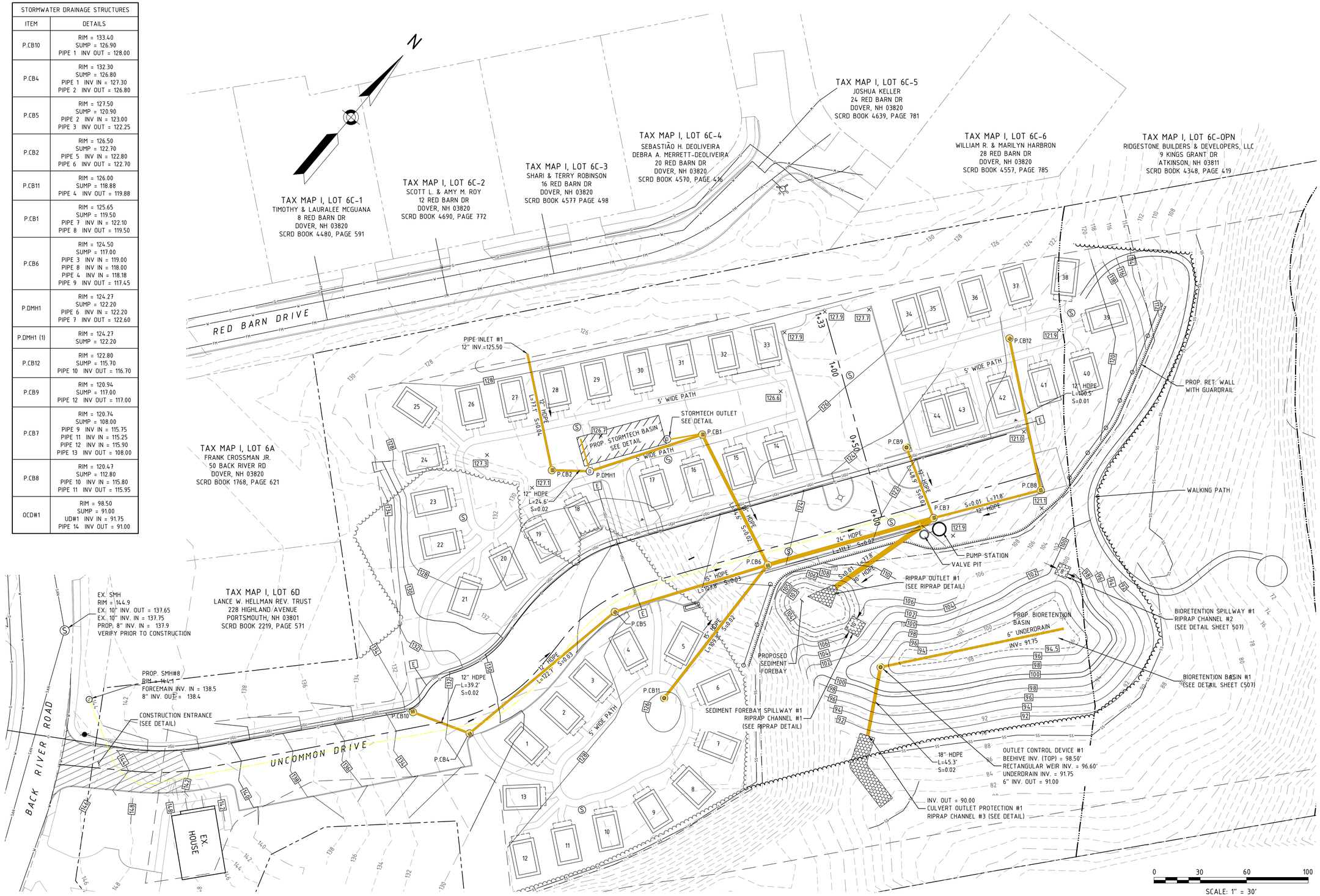
STORMWATER DRAINAGE STRUCTURES	
ITEM	DETAILS
P.CB10	RIM = 133.40 SUMP = 126.90 PIPE 1 INV OUT = 128.00
P.CB4	RIM = 132.30 SUMP = 126.80 PIPE 1 INV IN = 127.30 PIPE 2 INV OUT = 126.80
P.CB5	RIM = 127.50 SUMP = 120.90 PIPE 2 INV IN = 123.00 PIPE 3 INV OUT = 122.25
P.CB2	RIM = 126.50 SUMP = 122.70 PIPE 5 INV IN = 122.80 PIPE 6 INV OUT = 122.70
P.CB11	RIM = 126.00 SUMP = 118.88 PIPE 4 INV OUT = 119.88
P.CB1	RIM = 125.65 SUMP = 119.50 PIPE 7 INV IN = 122.10 PIPE 8 INV OUT = 119.50
P.CB6	RIM = 124.50 SUMP = 117.00 PIPE 3 INV IN = 119.00 PIPE 8 INV IN = 118.00 PIPE 4 INV IN = 118.18 PIPE 9 INV OUT = 117.45
P.DMH1	RIM = 124.27 SUMP = 122.20 PIPE 6 INV IN = 122.20 PIPE 7 INV OUT = 122.60
P.DMH1 (1)	RIM = 124.27 SUMP = 122.20
P.CB12	RIM = 122.80 SUMP = 115.70 PIPE 10 INV OUT = 116.70
P.CB9	RIM = 120.94 SUMP = 117.00 PIPE 12 INV OUT = 117.00
P.CB7	RIM = 120.74 SUMP = 108.00 PIPE 9 INV IN = 115.75 PIPE 11 INV IN = 115.25 PIPE 12 INV IN = 115.90 PIPE 13 INV OUT = 108.00
P.CB8	RIM = 120.47 SUMP = 112.80 PIPE 10 INV IN = 115.80 PIPE 11 INV OUT = 115.95
OCD#1	RIM = 98.50 SUMP = 91.00 UD#1 INV IN = 91.75 PIPE 14 INV OUT = 91.00



NO.	REVISIONS	DATE	INT.
5	REVISED PER DOVER NOTICE OF DECISION DATED 3/10/21	9/10/21	MCS
4	REVISED SUBMISSION TO WHDES AoT BUREAU	8/17/21	MCS
3	REVISED SUBMISSION PER 2/24/21 PLANNING BOARD COMMENTS	3/4/21	MCS
2	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 1/14/21	2/1/21	MCS
1	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 10/8/20	1/4/21	MCS
0	PRELIMINARY SUBMISSION	11/25/20	MCS

STATE OF NEW HAMPSHIRE
MICHAEL SHELDEST
No. 8387
LICENSED
PROFESSIONAL ENGINEER

DATE ISSUED:	11/25/20
SCALE:	1"=40'
DESIGNED BY:	MJS
DRAWN BY:	MCS
APPROVED BY:	MJS
DWG FILE:	NM20011_Civil_06.dwg

GRADING, DRAINAGE, & EROSION CONTROL PLAN

prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP I, LOT 6
54 BACK RIVER ROAD, DOVER, NH

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 Railroad St. P.O. Box 359
Newmarket, NH 03857
Phone: (603) 659-5183 Fax: (603) 659-4627
E-mail: mjs@mjs-engineering.com

JOB: 20-011

C-102

(P20-60)

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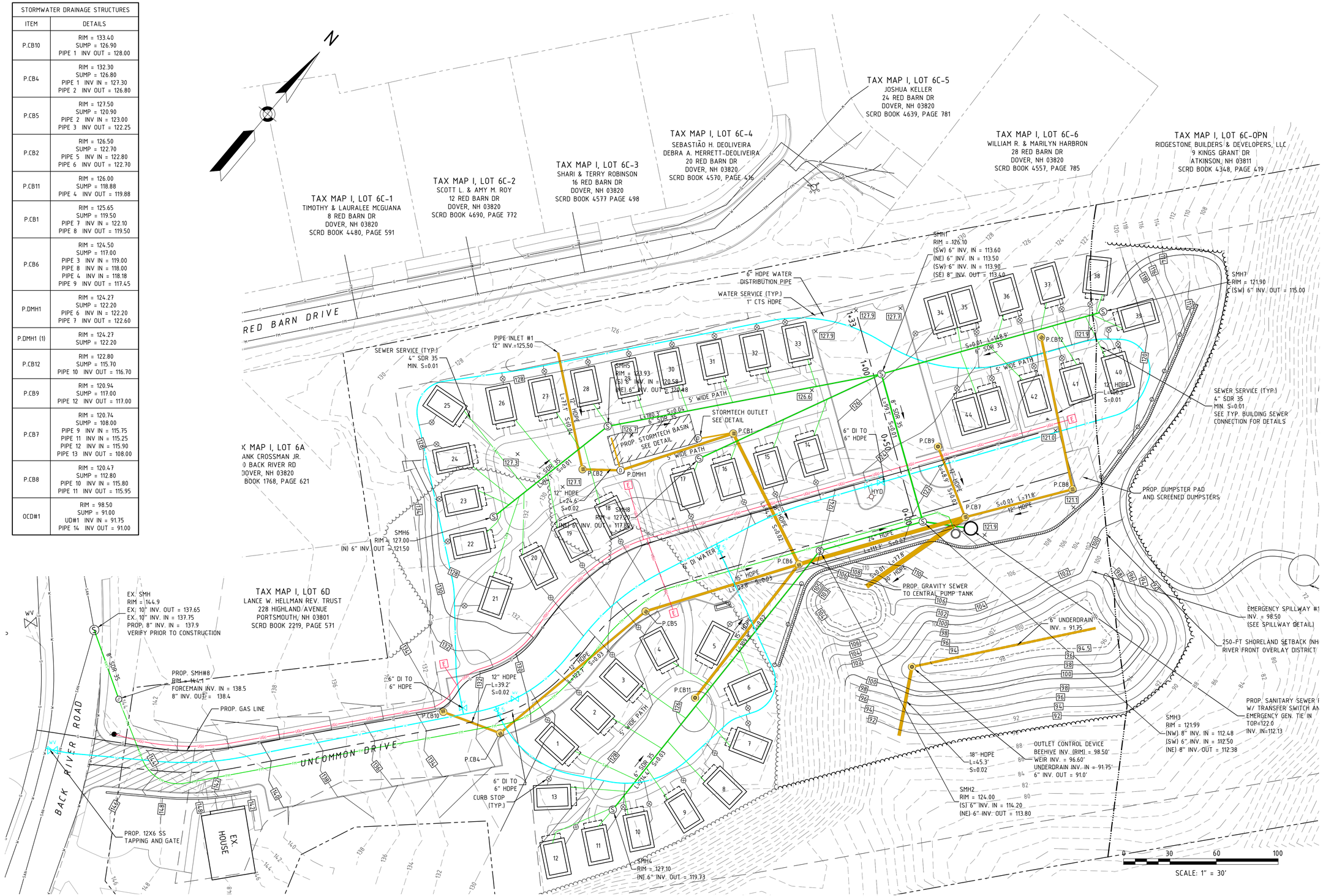
STORMWATER DRAINAGE STRUCTURES	
ITEM	DETAILS
P.CB10	RIM = 133.40 SUMP = 126.90 PIPE 1 INV OUT = 128.00
P.CB4	RIM = 132.30 SUMP = 126.80 PIPE 1 INV IN = 127.30 PIPE 2 INV OUT = 126.80
P.CB5	RIM = 127.50 SUMP = 120.90 PIPE 2 INV IN = 123.00 PIPE 3 INV OUT = 122.25
P.CB2	RIM = 126.50 SUMP = 122.70 PIPE 5 INV IN = 122.80 PIPE 6 INV OUT = 122.70
P.CB11	RIM = 126.00 SUMP = 118.88 PIPE 4 INV OUT = 119.88
P.CB1	RIM = 125.65 SUMP = 119.50 PIPE 7 INV IN = 122.10 PIPE 8 INV OUT = 119.50
P.CB6	RIM = 124.50 SUMP = 117.00 PIPE 3 INV IN = 119.00 PIPE 8 INV IN = 118.00 PIPE 4 INV IN = 118.18 PIPE 9 INV OUT = 117.45
P.DMH1	RIM = 124.27 SUMP = 122.20 PIPE 6 INV IN = 122.20 PIPE 7 INV OUT = 122.60
P.DMH1 (1)	RIM = 124.27 SUMP = 122.20
P.CB12	RIM = 122.80 SUMP = 115.70 PIPE 10 INV OUT = 116.70
P.CB9	RIM = 120.94 SUMP = 117.00 PIPE 12 INV OUT = 117.00
P.CB7	RIM = 120.74 SUMP = 108.00 PIPE 9 INV IN = 115.75 PIPE 11 INV IN = 115.25 PIPE 12 INV IN = 115.90 PIPE 13 INV OUT = 108.00
P.CB8	RIM = 120.47 SUMP = 112.80 PIPE 10 INV IN = 115.80 PIPE 11 INV OUT = 115.95
OCD#1	RIM = 98.50 SUMP = 91.00 UD#1 INV IN = 91.75 PIPE 14 INV OUT = 91.00



NO.	REVISIONS	DATE	INT.
5	REVISED PER DOVER NOTICE OF DECISION DATED 3/10/21	9/10/21	MCS
4	REVISED SUBMISSION TO WHDES AoT BUREAU	8/17/21	MCS
3	REVISED SUBMISSION PER 2/24/21 PLANNING BOARD COMMENTS	3/4/21	MCS
2	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 1/14/21	2/1/21	MCS
1	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 10/8/20	1/4/21	MCS
0	PRELIMINARY SUBMISSION	11/25/20	MCS

STATE OF NEW HAMPSHIRE MICHAEL J. SHEPERT No. 8357 LICENSED PROFESSIONAL ENGINEER

DATE ISSUED:	11/25/20
SCALE:	1"=30'
DESIGNED BY:	MJS
DRAWN BY:	MCS
APPROVED BY:	MJS
DWG FILE:	NM20011_Civil_06.dwg

UTILITIES PLAN

prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP I, LOT 6
54 BACK RIVER ROAD, DOVER, NH

MJS ENGINEERING, P.C.
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JOB: 20-011

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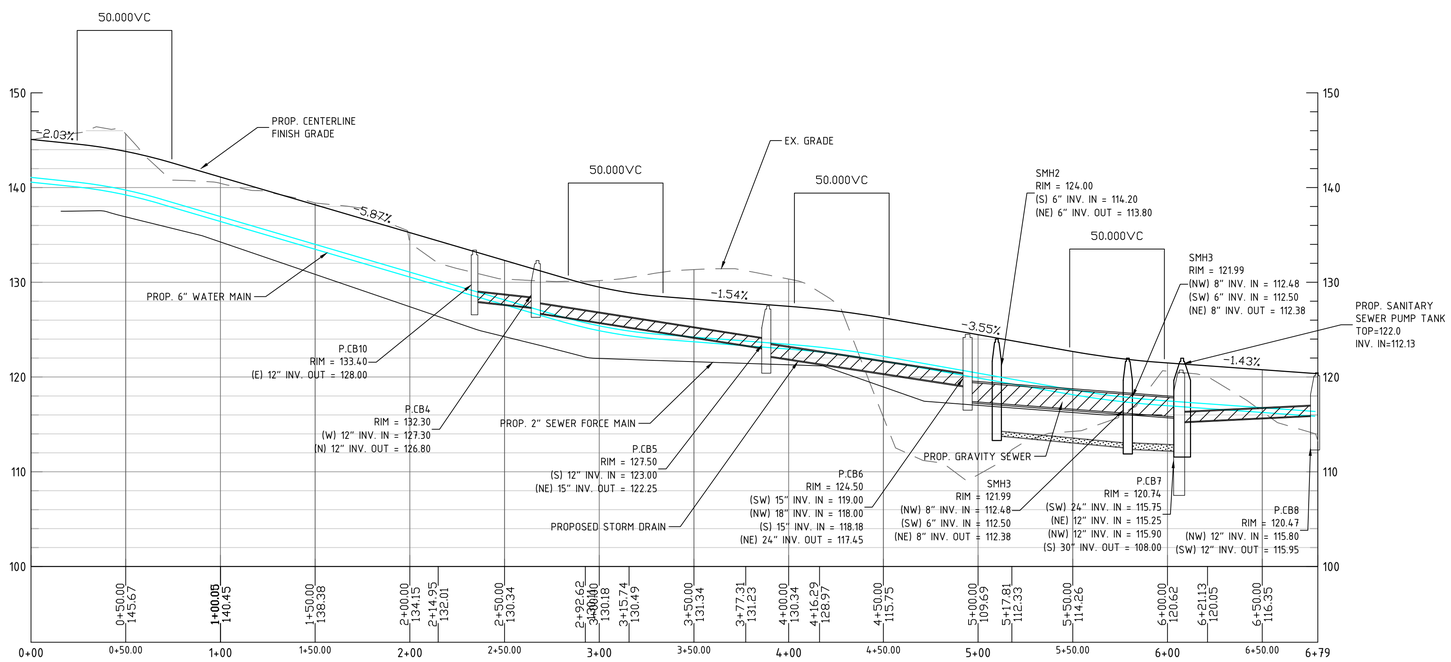
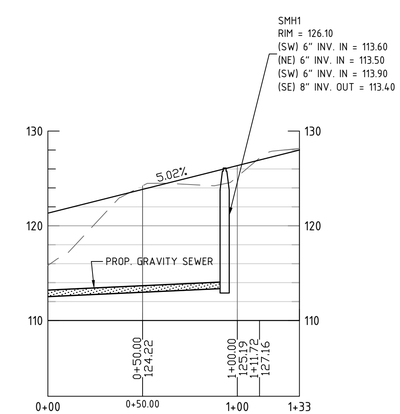


COTTAGE DRIVE PROFILE



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3	REVISED SUBMISSION PER 2/24/21 PLANNING BOARD COMMENTS	3/4/21	MCS
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1	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 10/8/20	1/4/21	MCS
0	PRELIMINARY SUBMISSION	11/25/20	MCS

REVISIONS

STATE OF NEW HAMPSHIRE
MICHAEL J. SHEFFERT
No. 8387
LICENSED PROFESSIONAL ENGINEER

DATE ISSUED:	11/25/20
SCALE:	1"=40'
DESIGNED BY:	MJS
DRAWN BY:	MCS
APPROVED BY:	MJS
DWG FILE:	NM20011_Civil_06.dwg

ROAD PLAN AND PROFILE

prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP I, LOT 6
54 BACK RIVER ROAD, DOVER, NH

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JOB: 20-011

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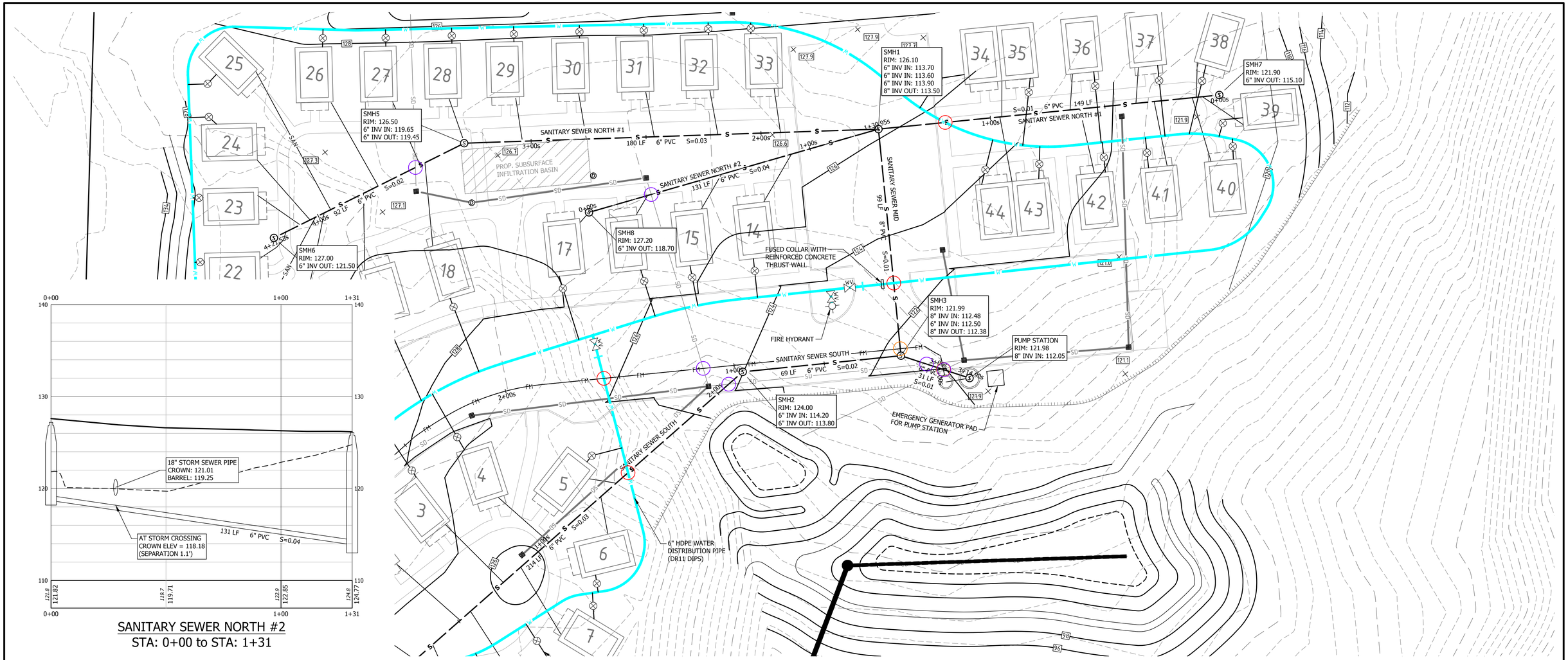
(P20-60)



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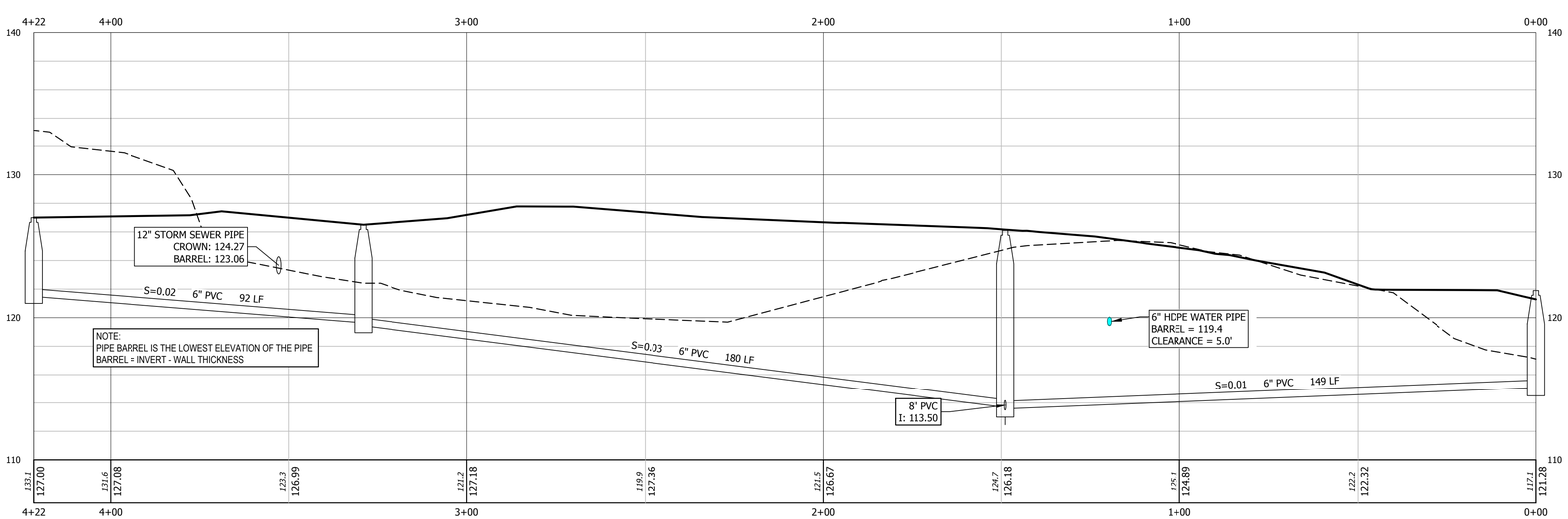

SANITARY SEWER NORTH #1
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SANITARY SEWER
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NO.	DATE	REVISION DESCRIPTION	ENG	DWG

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No. 8397
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CHECK'D BY: MJS	ARCHIVE #: H-___

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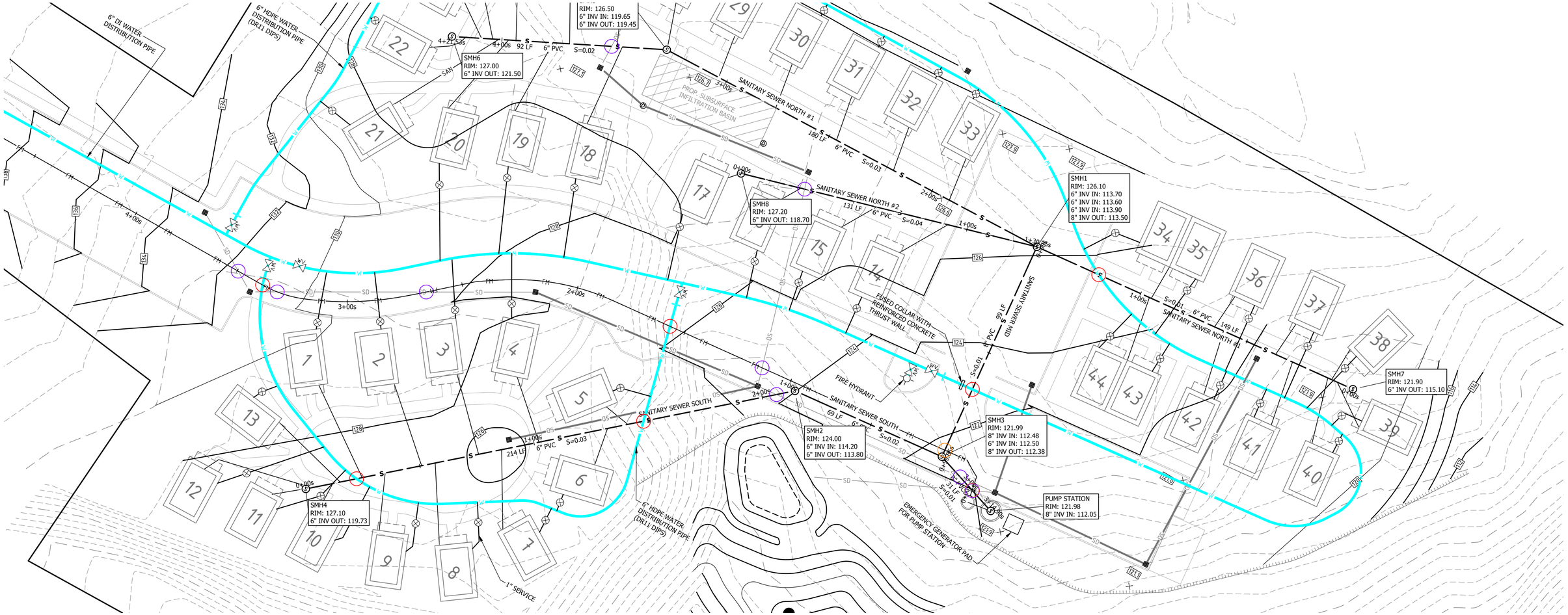

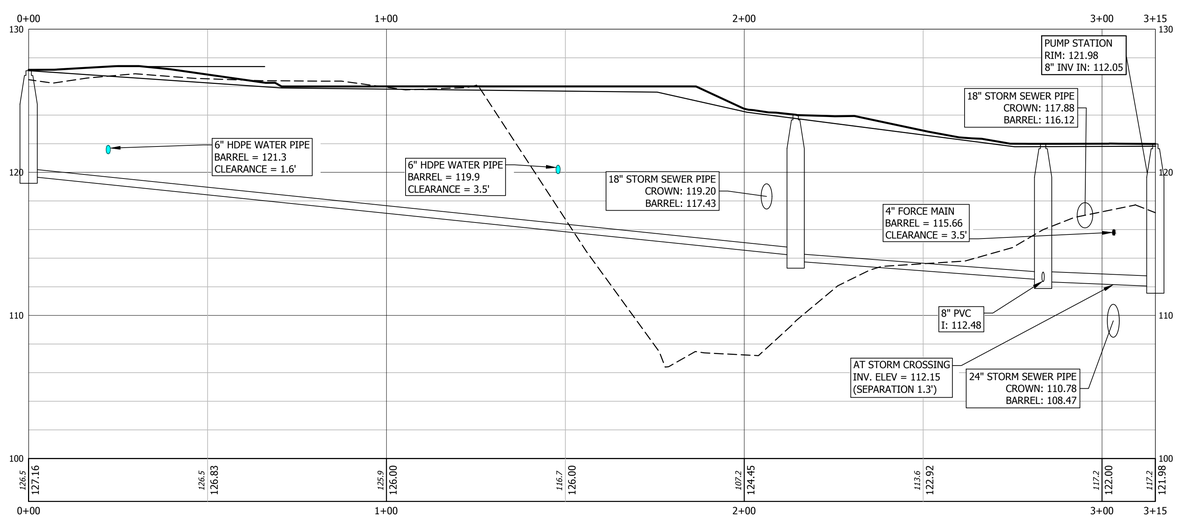

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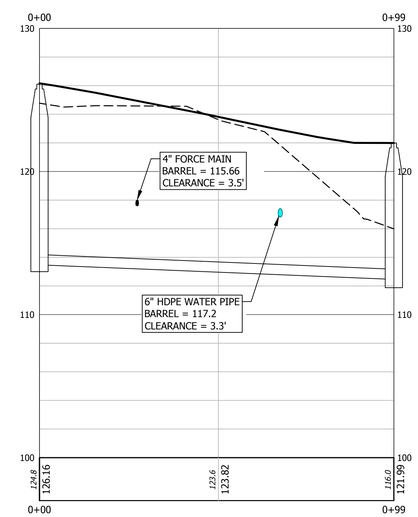

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SANITARY SEWER
PLAN AND PROFILE #2

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

STATE OF NEW HAMPSHIRE
MICHAEL J. SIEVERT
No. 8397
LICENSED
PROFESSIONAL ENGINEER

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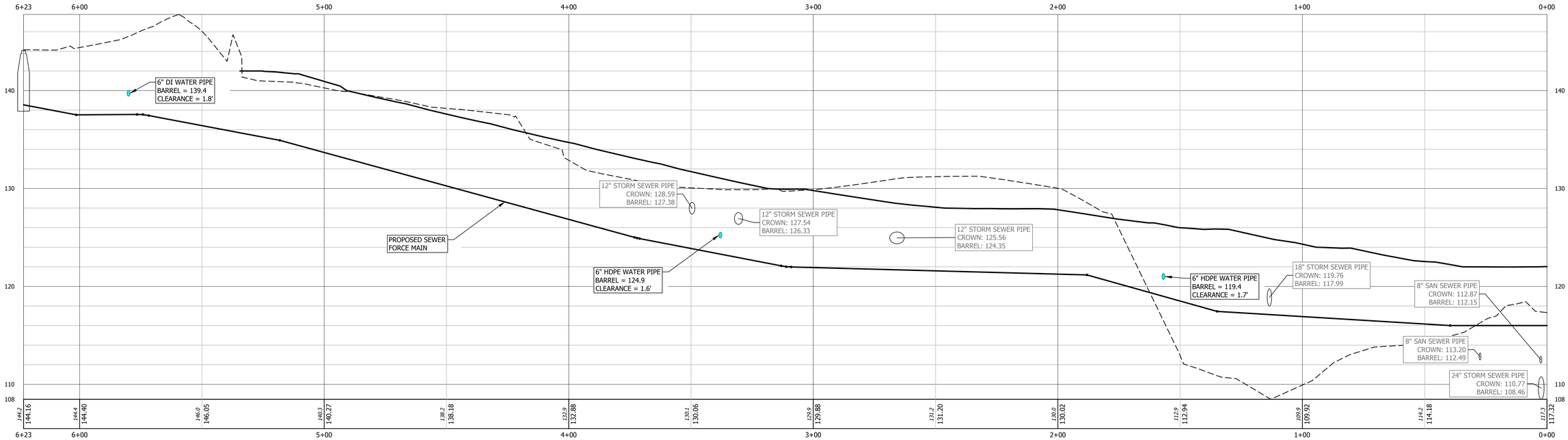

FORCE MAIN ALIGNMENT
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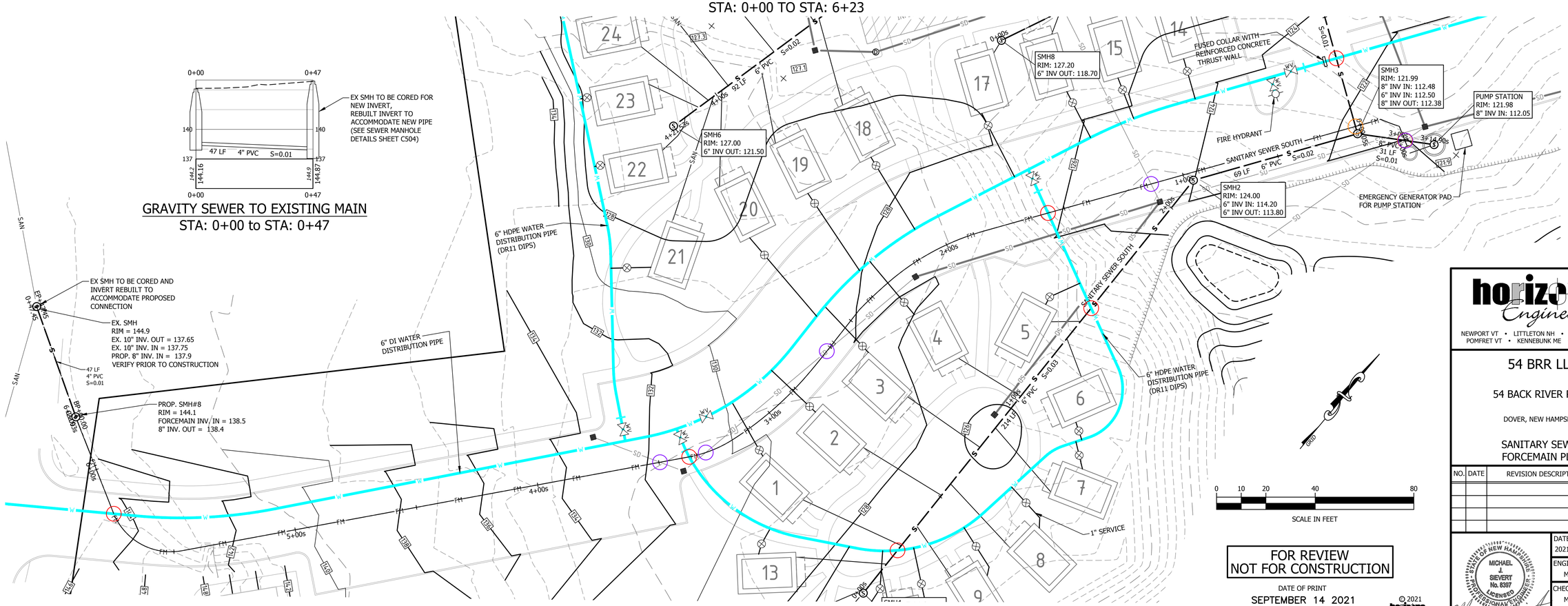

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NO.	DATE	REVISION DESCRIPTION	ENG	DWG

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MICHAEL J. SIEVERT
No. 8397
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PROFESSIONAL ENGINEER

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CONSTRUCTION SEQUENCING AND EROSION CONTROL NOTES:

AREA OF DISTURBANCE/STABILIZATION
A. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL THE AREA OF UNSTABILIZED SOIL EXCEED 5 ACRES AT ANY ONE TIME BEFORE THE AREA IS STABILIZED.
B. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
   1. IN AREAS TO BE PAVED, BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2006, ITEM NO. 304.1 OR 304.2 HAVE BEEN INSTALLED;
   2. IN AREAS NOT TO BE PAVED
      2.A. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
      2.B. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
      2.C. EROSION CONTROL BLANKETS HAVE BEEN INSTALLED IN ACCORDANCE WITH ENV-WQ 1506.03.
C. DISTURBED AREAS SHALL BE TEMPORARILY STABILIZED WITHIN 45 DAYS AND PERMANENTLY STABILIZED NO LATER THAN 3 DAYS AFTER FINAL GRADING.

EROSION CONTROL PRACTICES:
A. INSTALLATION:
   1. INSTALL ALL EROSION CONTROLS AS SHOWN ON THE GRADING PLAN, TYPICAL DETAILS, AND IN CONFORMANCE WITH THE EROSION AND SEDIMENT CONTROL NOTES ON THIS PAGE. MANUFACTURER'S SPECIFICATIONS SHALL BE FOLLOWED.
B. INSPECTION:
   1. INSPECT ALL EROSION CONTROLS WEEKLY AND AFTER EVERY RAIN EVENT OF 0.5 INCHES OR GREATER UNLESS OTHERWISE NOTED.
   2. TEMPORARY STABILIZATION PRACTICES SHALL BE INSPECTED ONCE PER WEEK DURING CONSTRUCTION UNTIL EXPOSED SURFACES ARE STABILIZED.
   3. ANY SIGNS OF RILL OR GULLY EROSION SHALL BE IMMEDIATELY REPAIRED.
C. MAINTENANCE:
   1. MAINTAIN EROSION CONTROLS PER THE TYPICAL DETAILS AND IN CONFORMANCE WITH THE EROSION AND SEDIMENT CONTROL NOTES ON THIS PAGE.
D. REMOVAL
   1. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE 85% VEGETATIVE COVER HAS BEEN ESTABLISHED.
   2. AFTER REMOVAL, ALL DISTURBED AREAS SHALL BE REGRADED, FERTILIZED, AND RESEEDED. MONITOR TO ENSURE VEGETATIVE GROWTH IS ESTABLISHED AND REPAIR AS NEEDED UNTIL MINIMUM OF 85% VEGETATIVE COVER IS ESTABLISHED.

PROTECTED SHORELAND REQUIREMENTS
A. ALL WORK SHALL CONFORM TO THE COMPREHENSIVE SHORELAND PROTECTION ACT AND CITY OF DOVER SHORELAND PROTECTION OVERLAY DISTRICT.
B. WITHIN 3 DAYS OF FINAL GRADING OR TEMPORARY SUSPENSION OF WORK IN AN AREA THAT IS IN THE PROTECTED SHORELAND, ALL EXPOSED SOIL AREAS SHALL BE STABILIZED BY:
   1. SEEDING AND MULCHING, IF DURING THE GROWING SEASON
   2. MULCHING WITH TACK OR NETTING IF NOT WITHIN THE GROWING SEASON
   3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
   4. EROSION CONTROL BLANKETS HAVE BEEN INSTALLED IN ACCORDANCE WITH ENV-WQ 1506.03.
C. FERTILIZER
   1. LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER (NOT MORE THAN 2% PHOSPHORUS AND A NITROGEN COMPONENT WHICH IS AT LEAST 50% SLOW RELEASE NITROGEN COMPONENTS) SHALL BE USED BEYOND 25 FEET FROM THE REFERENCE LINE.
   2. APPLY 10-0-10 LOW PHOSPHATE FERTILIZER AT A RATE OF 600 lb./Ac.
   3. APPLY LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS/ACRE.

COLD WEATHER SITE STABILIZATION
A. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY 30TH NOVEMBER, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
C. AFTER 15TH OCTOBER, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.

TEMPORARY VEGETATION
(REFER TO PROTECTED SHORELAND REQUIREMENTS FOR WORK WITHIN THE PROTECTED SHORELAND)
A. SITE PREPARATION
   1. INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SPECIFIED ABOVE.
   2. ENSURE RUNOFF IS DIVERTED FROM SEEDED AREA.
   3. ON SLOPES OF 4:1 OR STEEPER, CREATE HORIZONTAL GROOVES PERPENDICULAR TO THE DIRECTION OF THE SLOPE TO CATCH SEED AND REDUCE RUNOFF.
B. SEED BED PREPARATION
   1. REMOVE STONES AND TRASH FROM AREA TO BE SEEDED.
   2. COMPACTED SOIL SHALL BE LOOSENED TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME, AND SEED.
   3. APPLY FERTILIZER AT A RATE OF 600 LBS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE.
C. SEEDING
   1. SEED PER THE FOLLOWING RECOMMENDATIONS

SEASON	APPLICATION DATE	MIXTURE TYPE	QUANTITY (lb./Ac.)
EARLY SPRING	NO LATER THAN 5/15	OATS	80
LATE SPRING/ FALL	4/1 TO 6/1 & 8/15 TO 9/15	PERENNIAL RYE	30
EARLY SPRING/ FALL	4/1 TO 5/15 & 8/15 TO 9/15	ANNUAL RYE	40
FALL	8/15 TO 9/15	WINTER RYE	112

   2. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM ¼ TO ½ INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING.
   3. TEMPORARY SEEDING SHOULD TYPICALLY OCCUR PRIOR TO SEPTEMBER 15TH.
   4. AREAS SEEDED BETWEEN MAY 15TH AND AUGUST 15TH SHOULD BE COVERED WITH HAY OR STRAW MULCH.
   5. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT OTHER TEMPORARY STABILIZATION MEASURES FOR OVERWINTER PROTECTION.
D. MAINTENANCE
   1. TEMPORARY SEEDING SHOULD BE INSPECTED WEEKLY AND AFTER ANY RAINFALL EXCEEDING ½ INCH IN 24 HOURS ON ACTIVE CONSTRUCTION SITES. TEMPORARY SEEDING SHOULD ALSO BE INSPECTED JUST PRIOR TO SEPTEMBER 15, TO ASCERTAIN WHETHER ADDITIONAL SEEDING IS REQUIRED TO PROVIDE STABILIZATION OVER THE WINTER PERIOD.
   2. BASED ON INSPECTION, AREAS SHOULD BE RESEEDED TO ACHIEVE FULL STABILIZATION OF EXPOSED SOILS. IF IT IS TOO LATE IN THE PLANTING SEASON TO APPLY ADDITIONAL SEED, THEN OTHER TEMPORARY STABILIZATION MEASURES SHOULD BE IMPLEMENTED.
   3. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION.
   4. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHOULD BE MADE AND AREAS SHOULD BE RESEEDED, WITH OTHER TEMPORARY MEASURES (E.G., MULCH) USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.

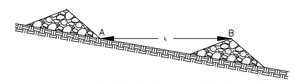
PERMANENT VEGETATION
(REFER TO PROTECTED SHORELAND REQUIREMENTS FOR WORK WITHIN THE PROTECTED SHORELAND)
A. SITE PREPARATION
   1. REFER TO SITE PREPARATION FOR TEMPORARY SEEDING.
B. SEED BED PREPARATION
   1. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
   2. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE, CLODS, LUMPS, TRASH OR OTHER UNSUITABLE MATERIAL.
   3. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED; THE AREA MUST BE TILLED AND FIRMED AS ABOVE.
   4. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
   5. APPLY FERTILIZER AT A RATE OF 600 LBS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE.
C. SEEDING
   1. UNLESS OTHERWISE NOTED, GRASS SEED MIXTURE 'C' SHALL BE APPLIED AT THE SPECIFIED RATE AS NOTED IN THE 'SEED MIXTURES FOR PERMANENT VEGETATION' TABLE.
   2. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM ¼ TO ½ INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE. SEEDING OPERATIONS SHOULD BE ON THE CONTOUR.
   3. WHERE FEASIBLE, EXCEPT WHERE EITHER A CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG.
   4. WHEN HYDROSEEDING (HYDRAULIC APPLICATION), PREPARE THE SEEDBED AS SPECIFIED ABOVE OR BY HAND RAKING TO LOOSEN AND SMOOTH THE SOIL AND TO REMOVE SURFACE STONES LARGER THAN 2 INCHES IN DIAMETER.
   5. SLOPES MUST BE NO STEEPER THAN 2 TO 1.
   6. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF FIBER MULCH ON CRITICAL AREAS IS NOT RECOMMENDED (UNLESS IT IS USED TO HOLD STRAW OR HAY). BETTER PROTECTION IS GAINED BY USING STRAW MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 POUNDS PER ACRE OF WOOD FIBER MULCH.
   7. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING.
D. MAINTENANCE
   1. PERMANENTLY SEEDED AREAS SHOULD BE INSPECTED MONTHLY.
   2. MOW SEEDED AREAS AS NECESSARY.
   3. BASED ON INSPECTION, AREAS SHOULD BE REPAIRED AND/OR RESEEDED TO ENSURE 85% OF THE SOIL SURFACE IS COVERED BY VEGETATION.

MULCHING & EROSION CONTROL MATTING
A. GENERAL
   1. APPLY PRIOR TO A STORM EVENT. CLOSELY MONITOR THE WEATHER TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.
   2. MULCHING WITHIN A SPECIFIED TIME PERIOD FROM ORIGINAL SOIL EXPOSURE
      2.A. WITHIN 100 FEET OF WETLANDS THE TIME PERIOD SHOULD BE NO GREATER THAN 7 DAYS.
      2.B. IN OTHER AREAS IT SHALL BE NO GREATER THAN 14 DAYS.
B. TEMPORARY MULCHING
   1. HAY OR STRAW MULCHES
      1.A. ORGANIC MULCHES INCLUDING HAY AND STRAW SHALL BE AIR-DRIED, FREE OF UNDESIRABLE SEEDS AND COARSE MATERIALS.
      1.B. APPLICATION RATE SHALL BE 2 BALES/1,000 SF (70-90 POUNDS) OR 1.5-2.0 TONS/ACRE TO COVER 75-90% OF THE GROUND.
      1.C. ANCHORING
         1.C.1. EROSION CONTROL BLANKETS SHALL BE OF A WOVEN ORGANIC MATERIAL SUCH AS COCO MATTING. IT SHALL NOT CONSIST OF WELDED PLASTIC OR BIODEGRADABLE NETTING. INSTALL PER MANUFACTURERS SPECIFICATIONS.
         1.C.2. TACKIFIER: APPLY POLYMER OR ORGANIC TACKIFIER TO ANCHOR HAY OR STRAW MULCH. APPLY PER MANUFACTURER'S SPECIFICATIONS. TYPICAL APPLICATION RATES ARE 40-60 LBS/ACRE FOR POLYMER MATERIAL AND 80-120 LBS/ACRE FOR ORGANIC LIQUID.
      1.D. WINTER APPLICATION: APPLY TO A DEPTH OF 4 INCHES OR DOUBLE THE ABOVE LISTED APPLICATION RATE. NOTE THAT IF SEEDING IS NECESSARY, MULCH WILL NEED TO BE REMOVED AND THE AREA SEEDED AND MULCHED IN THE SPRING.
      1.E. MAINTENANCE
         1.E.1. INSPECT PERIODICALLY AND AFTER RAIN STORMS FOR RILLS OR DISPLACEMENT OF MULCH. REPAIR AS NECESSARY. CONTINUE INSPECTIONS UNTIL 85% VEGETATIVE COVER IS ESTABLISHED.
   2. EROSION CONTROL BLANKET OR MATTING
      2.A. EROSION CONTROL BLANKETS SHALL BE OF A WOVEN ORGANIC MATERIAL SUCH AS COCO MATTING. IT SHALL NOT CONSIST OF WELDED PLASTIC OR BIODEGRADABLE NETTING.
      2.B. REFER TO PLANS FOR TYPICAL EROSION CONTROL MATTING DETAIL. INSTALL PER MANUFACTURERS SPECIFICATIONS.
      2.C. APPLICATION AND TIMING
         2.C.1. DURING THE GROWING SEASON (APRIL 15 – SEPTEMBER 15) USE ON THE BASE OF GRASSED WATERWAYS, STEEP SLOPES (15% OR GREATER), ANY DISTURBED SOIL WITHIN 100 FEET OF LAKES, STREAMS, AND WETLANDS.
         2.C.2. DURING THE LATE FALL AND WINTER (SEPTEMBER 15 – APRIL 15) IN ADDITION TO THOSE LISTED ABOVE USE ON SIDE SLOPES OF GRASSED WATERWAYS AND MODERATE SLOPES (GREATER THAN 8%).
   3. MAINTENANCE
      3.A. INSPECT PERIODICALLY AND BEFORE AND AFTER STORM EVENTS TO ENSURE CONTACT WITH THE SOIL UNTIL 85% VEGETATIVE COVER IS ESTABLISHED. REPAIR AND RESTAPLE AS NECESSARY.
C. PERMANENT MULCHING
   1. WOOD CHIPS OR GROUND BARK
      1.A. APPLY TO A THICKNESS OF 2 TO 6 INCHES. TYPICAL APPLICATION RATES ARE 10-20 TONS/ACRE OR 460-920 POUNDS/1,000 SF.
      1.B. MAINTENANCE: INSPECT ANNUALLY AND AFTER RAIN EVENTS OF 2.5 INCHES OR MORE IN A 24 HOUR PERIOD. REPAIR/REPLACE AS NECESSARY.
   2. EROSION CONTROL MIX
      2.A. COMPOSITION OF THE MIX SHALL BE AS FOLLOWS:
         2.A.1. ORGANIC MATTER CONTENT SHALL BE BETWEEN 25-65% DRY WEIGHT BASIS.
         2.A.2. PARTICLE SIZE BY WEIGHT SHOULD BE 100% PASSING THE 3" SCREEN, 90-100% PASSING THE 1" SCREEN, 70-100% PASSING THE 0.75 INCH SCREEN, AND 30-75% PASSING THE 0.25 INCH SCREEN.
         2.A.3. THE ORGANIC PORTION SHALL BE ELONGATED AND FIBROUS. IT SHALL NOT CONTAIN WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS, OR REPROCESSED WOOD PRODUCTS.
         2.A.4. THE MIX SHALL NOT CONTAIN SILTS, CLAYS, OR FINE SANDS.
         2.A.5. SOLUBLE SALTS CONTENT SHALL BE < 4.0MMHOS/CM AND A pH OF 5.0-8.0.
      2.B. PLACEMENT OF BERM
         2.B.1. PLACE BERM ALONG A LEVEL CONTOUR. BERM MUST BE A MINIMUM OF 12" HIGH ON THE UPHILL SIDE AND 2 FEET WIDE.
      2.C. MAINTENANCE: INSPECT PERIODICALLY AND AUGMENT AS NEEDED TO MAINTAIN INITIAL THICKNESS. REPLACE IF NO LONGER FUNCTIONING AS INTENDED.

SOIL STOCKPILES
A. GENERAL
1. STOCKPILES MUST BE LOCATED 50 FEET FROM DITCHES AND CULVERT INLETS.
B. PROTECTION OF STOCKPILES
1. PROTECT SOIL AND AGGREGATE STOCKPILES WITH TEMPORARY PERIMETER SEDIMENT BARRIER SUCH AS SILT FENCE OR SILT SOCK.
2. COVER ACTIVE STOCKPILES WITH ANCHORED PROTECTIVE COVERING PRIOR TO EXPECTED STORM EVENTS.
3. INACTIVE STOCKPILES SHALL BE COVERED WITH ANCHORED TARPS OR TEMPORARILY SEEDED AND MULCHED PER THE TEMPORARY VEGETATION AND MULCHING NOTES ON THIS PAGE.
4. STOCKPILES THAT ARE A SOURCE OF DUST SHALL BE COVERED.

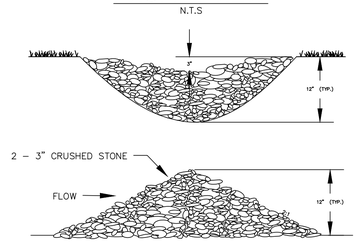
DUST CONTROL
A. DUST SHALL BE CONTROLLED ON SITE DURING CONSTRUCTION BY IMPLEMENTING THE FOLLOWING DUST CONTROL MEASURES
1. MULCHING AND VEGETATIVE COVER TO REDUCE DUST.
2. MECHANICAL SWEEPERS AND FINE WATER SPRAYS.
3. COVER SURFACES WITH CRUSHED STONE OR COARSE GRAVEL.

ADDITIONAL NOTES:
1. NO FUEL SHALL BE STORED ON SITE DURING CONSTRUCTION.
2. DURING CONSTRUCTION DUST SHALL BE PREVENTED FROM BECOMING A SAFETY OR HEALTH HAZARD BY THE IMPLEMENTATION OF ACCEPTED CONTROL METHODS SUCH AS WATERING.
3. ALL CONSTRUCTION MATERIALS THAT ARE SPILLED OR DEPOSITED ON THE PUBLIC ROADWAYS SHALL BE REMOVED BY THE CONTRACTOR.
4. DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE, AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
5. THE GENERAL CONTRACTOR IS RESPONSIBLE TO VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS AT THE SITE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.



L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION.

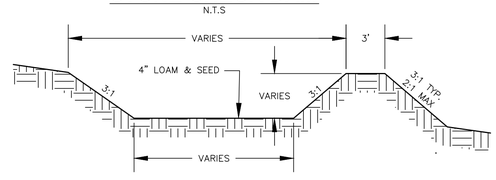
STONE CHECK DAM PROFILE VIEW
N.T.S



CONSTRUCTION SPECIFICATIONS:
1. STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
2. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION, AIR AND WATER POLLUTION WILL BE MINIMIZED.
5. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.

MAINTENANCE NOTES:
1. TEMPORARY GRADE STABILIZATION STRUCTURES SHOULD BE INSPECTED AFTER EACH STORM AND DAILY DURING PROLONGED STORM EVENTS. ANY DAMAGE TO THE STRUCTURES SHALL BE REPAIRED IMMEDIATELY.
2. PARTICULAR ATTENTION SHOULD BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE.
3. WHEN REMOVING THE STRUCTURES, THE DISTURBED AREAS SHALL BE BROUGHT UP TO EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED AND MULCHED.
4. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT REACHES 1/2 THE ORIGINAL HEIGHT OF THE STRUCTURE.

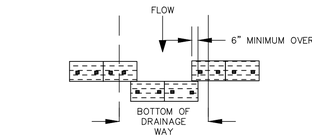
STONE CHECK DAM
N.T.S



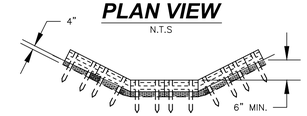
CONVEYANCE SWALE DETAIL
N.T.S

CONSTRUCTION NOTES:
1. REFER TO BERM CONSTRUCTION NOTES IN STORMWATER POND DETAIL FOR BERM CONSTRUCTION REQUIREMENTS.
2. SWALE SHALL HAVE GREATER THAN 85% VEGETATIVE GROWTH PRIOR TO RECEIVING RUNOFF.
3. REFER TO PERMANENT VEGETATION REQUIREMENTS FOR SEEDING REQUIREMENTS. SEED MIX 'C' SHALL BE APPLIED AT THE SPECIFIED RATE ON SHEET D1.

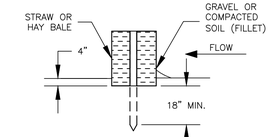
MAINTENANCE NOTES:
1. INSPECT ANNUALLY FOR EROSION, SEDIMENT ACCUMULATION, VEGETATION LOSS, AND PRESENCE OF INVASIVE SPECIES.
2. PERFORM PERIODIC MOWING. DO NOT MOW GRASS SHORTER THAN 4 INCHES.
3. REMOVE DEBRIS AND ACCUMULATED SEDIMENT BASED ON INSPECTION.
4. REPAIR ERODED AREAS, REMOVE INVASIVE SPECIES AND DEAD VEGETATION, AND RESEED WITH APPLICABLE GRASS MIX AS WARRANTED BY INSPECTION.



PLAN VIEW
N.T.S



DRAINAGE WAY CROSS-SECTION
N.T.S

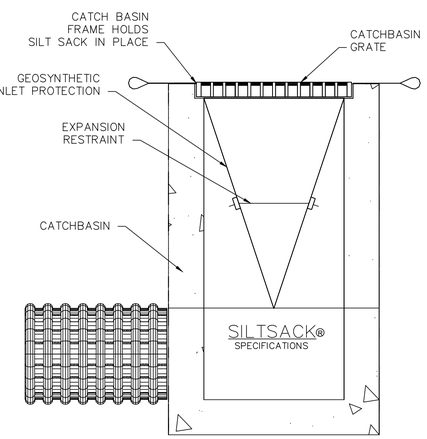


CROSS-SECTION
N.T.S

HAY BALE INLET PROTECTION DETAIL
N.T.S

CONSTRUCTION SPECIFICATIONS:
1. STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
2. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION, AIR AND WATER POLLUTION WILL BE MINIMIZED.
3. HAY BALES SHALL BE PLACED IN ROWS WITH ENDS TIGHTLY ABUTTING. WHEN PLACED IN CHANNELS BALES SHALL BE STAGGERED AND OVERLAPPED AS SHOWN IN THE DETAIL.
4. HAY BALES SHALL BE EMBEDDED ONTO THE SOIL AT LEAST 4 INCHES.
5. HAY BALES SHALL BE ANCHORED INTO THE SOIL USING 2" X 2" STAKES DRIVEN THROUGH THE BALES AT LEAST 18" INTO THE SOIL.
6. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.

MAINTENANCE NOTES:
1. TEMPORARY GRADE STABILIZATION STRUCTURES SHOULD BE INSPECTED AFTER EACH STORM AND DAILY DURING PROLONGED STORM EVENTS. ANY DAMAGE TO THE STRUCTURES SHALL BE REPAIRED IMMEDIATELY.
2. PARTICULAR ATTENTION SHOULD BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE.
3. WHEN REMOVING THE STRUCTURES, THE DISTURBED AREAS SHALL BE BROUGHT UP TO EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED AND MULCHED.
4. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT REACHES 1/2 THE ORIGINAL HEIGHT OF THE STRUCTURE.

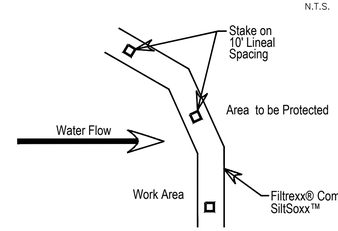


NOTES:

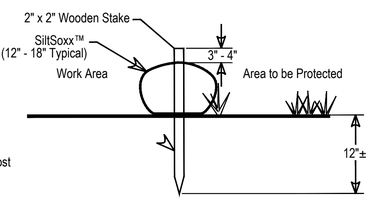
1. GEOSYNTHETIC SEDIMENT FILTER TRAP SHALL BE 'REGULAR FLOW SILTSACK®' OR APPROVED EQUAL. SPECIFICATIONS FOR SILTSACK® ARE DETAILED.

2. FILTER TRAPS SHALL BE INSPECTED AFTER EVERY RAIN EVENT OF 0.25" OR GREATER AND SEDIMENTS SHALL BE REMOVED FROM TRAP WHEN SEDIMENT HAS REACHED TWO THIRDS OF THE DEPTH OF THE TRAP, OR IF PONDING OF WATER AT SURFACE BEGINS TO OCCUR. DO NOT PUNCTURE FILTER TRAP TO MITIGATE PONDING.

CATCH BASIN GEOSYNTHETIC SEDIMENT TRAP
N.T.S.



®SiltSoxx™ Plan View



Notes:
1. All material to meet Filtrexx® specifications .
2. Compost material to be dispersed on site up slope from protected area.

SILTSOXX DETAIL
N.T.S.

NO.	REVISIONS	DATE	INT.
2.	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 1/14/21	2/1/21	MCS
1.	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 10/8/20	1/5/21	MCS
0.	INITIAL SUBMISSION TO DOVER	9/17/20	AWS

SEAL OF NEW HAMPSHIRE - SITE - PROFESSIONAL ENGINEER
MICHAEL J. SEVERT No. 9387

DATE ISSUED:	6/12/20
SCALE:	1"=40'
DESIGNED BY:	XXX
DRAWN BY:	XXX
APPROVED BY:	MJS
DWG FILE:	NM20011_Details_03.dwg

CONSTRUCTION DETAILS

prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP I, LOT 6

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 Railroad St. P.O. Box 359
Newmarket, NH 03857
Phone (603) 659-5170 Fax (603) 659-4627
E-mail: mjs@mjs-engineering.com

JOB: 20-011

C-501

(P20-60)

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SEED MIXTURE SELECTION BASED ON SOIL TYPE				
	SOIL DRAINAGE			
USE	SEEDING MIXTURE	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A B C D	FAIR POOR POOR FAIR	GOOD GOOD GOOD EXCELLENT	GOOD FAIR EXCELLENT EXCELLENT
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WTH FLOWING WATER.	A C	GOOD GOOD	GOOD EXCELLENT	GOOD EXCELLENT
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A B C	GOOD GOOD GOOD	GOOD GOOD EXCELLENT	GOOD FAIR EXCELLENT
PLAY AREAS AND ATHLETIC FIELDS. (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	E F	FAIR FAIR	EXCELLENT EXCELLENT	EXCELLENT EXCELLENT
NOTE: POORLY DRAINED SOILS ARE NOT DESIRABLE FOR USE AS PLAYING AREAS AND ATHLETIC FIELDS.				

SEED MIXTURES FOR PERMANENT VEGETATION			
MIXTURE	SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SF
A	TALL FESCUE CREEPING RED FESCUE REDTOP *TOTAL*	20 20 2 *42*	0.45 0.45 0.05 *0.95*
B	TALL FESCUE CREEPING RED FESCUE CROWN VETCH OR FLATPEA *TOTAL*	15 10 15 – 30 *40 OR 55*	0.35 0.25 0.35 – 0.75 *0.95 OR 1.35*
C	TALL FESCUE CREEPING RED FESCUE BIRDSFOOT TREFOIL *TOTAL*	20 20 8 *48*	0.45 0.45 0.20 *1.10*
D	TALL FESCUE FLATPEA *TOTAL*	20 30 *50*	0.45 0.75 *1.20*
E	CREPPING RED FESCUE KENTUCKY BLUEGRASS *TOTAL*	50 50 *100*	1.15 1.15 *2.30*
F	TALL FESCUE	*150*	*3.60*

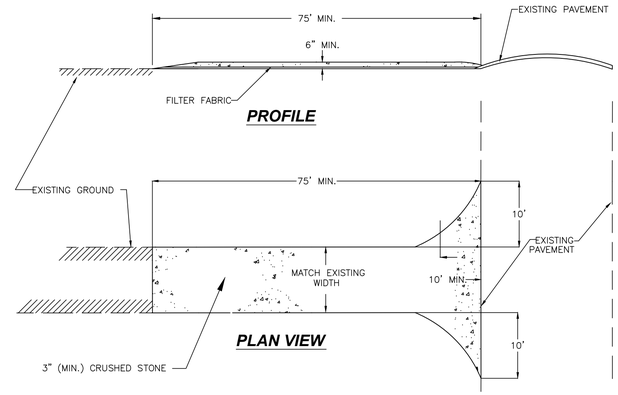
CONSTRUCTION SEQUENCING:

THE ESTIMATED START OF CONSTRUCTION IS SUMMER 2021 AND THE ESTIMATED END OF CONSTRUCTION IS SUMMER 2022. THE FOLLOWING CONSTRUCTION SEQUENCING SHALL BE FOLLOWED;

1. SCHEDULE A PRE–CONSTRUCTION MEETING WITH CITY OFFICIALS, OWNER, AND CONTRACTORS IF REQUIRED BY THE CONDITIONS OF APPROVAL PRIOR TO BEGINNING CONSTRUCTION.
2. CONTACT DIG–SAFE, INDIVIDUAL UTILITIES, AND CITY DEPARTMENTS TO GET ALL UTILITIES MARKED PRIOR TO START OF CONSTRUCTION.
3. THE OWNER OR SITE GENERAL CONTRACTOR SHALL FILE A NOTICE OF INTENT (NOI) FOR COVERAGE UNDER THE EPA'S CONSTRUCTION GENERAL PERMIT (CGP). A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE AVAILABLE ON SITE.
4. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES IN ACCORDANCE WITH THE STABILIZED CONSTRUCTION ENTRANCE DETAIL. A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT THE BACK ROAD AND MCKONE LANE ACCESS POINTS.
5. CONSTRUCT AND STABILIZE ALL TEMPORARY AND PERMANENT SEDIMENT AND EROSION CONTROLS INCLUDING SWALES AND SEDIMENT TRAPS.
   5.1. SEDIMENT AND EROSION PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS AND SHALL FULLY ENCOMPASS ALL WORK COMPLETED DURING EACH PHASE.
   5.2. INSTALL SWALES AND TEMPORARY SEDIMENT TRAPS PRIOR TO ROUGH GRADING. THE LOCATION OF THE SEDIMENT TRAPS ARE SHOWN ON THE GRADING PLANS. A SEDIMENT TRAP DETAIL, INCLUDING SIZING INFORMATION, IS SHOWN ON SHEET D2.
   5.3. CONSTRUCTION OF THE STORMWATER PONDS AND TREATMENT SWALES SHALL BEGIN AFTER ALL CONTRIBUTING DISTURBED AREAS HAVE BEEN STABILIZED.
6. THIS PROJECT SHALL BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 450:53 AND CHAPTER Agr 3800 RELATIVE TO INVASIVE SPECIES.
7. INSTALL TEMPORARY CONSTRUCTION GATE AT NEW ENTRANCE ROAD FOR SAFETY PURPOSES.
8. CLEAR AND GRUB THE ROADWAY AND PARKING AREAS, AND THE HOUSING AREA TO THE SOUTHWEST. REMOVE ORGANICS ONLY FROM THOSE AREAS THAT CAN BE WORKED AND STABILIZED WITHIN 45 DAYS OF REMOVAL. LOAM STOCKPILES SHALL BE STORED ON THE EXISTING CLEARED AREA TO THE SOUTHEAST OF THE ROADWAY. STOCKPILES SHALL BE TEMPORARILY STABILIZED WITH MULCH. STUMPS MAY BE DISPOSED OF ON OR OFFSITE IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS.
9. MINIMIZE DISTURBANCE OF PREVIOUSLY STABILIZED SOILS ON SITE, THAT ARE OUTSIDE OF THE ROADWAY AND STORMWATER CONTROL AREAS.
10. TOTAL SITE DISTURBANCE DEPICTED ON THESE PLANS IS APPROXIMATELY 197,000 SF (4.5 AC.).
    10.1. REFER TO VEGETATION AND EROSION CONTROL NOTES ON THIS PLAN DURING CONSTRUCTION.
    10.2. THE ROAD CONSTRUCTION FOR THIS PROJECT WILL BE CONSTRUCTED IN ONE PHASE.
    10.3. ALL CONSTRUCTION SHALL FOLLOW EROSION CONTROL REQUIREMENTS AND CONSTRUCTION SEQUENCE AND SHALL BE STABILIZED WITHIN 45 DAYS OF COMPLETION.

11. ROAD CONSTRUCTION
    11.1 PROCEED WITH ROAD CONSTRUCTION IN THE LOCATION AND TO GRADES AS SHOWN ON THE PLANS. EXCAVATE ROADWAY TO SUBGRADE.
    11.2 PLACE SELECT FILLS IN LOCATIONS AND TO THE GRADES SHOWN ON PLANS PER THE APPLICABLE DETAILS AND THE FOLLOWING:
    11.2.1. PLACE FILL MATERIAL MEETING THE SPECIFICATION OF NHDOT 304.1 IN MAXIMUM 12" LIFTS AND COMPACT TO 95% MAXIMUM DRY DENSITY.
    11.2.2. ALL MATERIAL SHALL BE FREE OF DELETERIOUS MATERIALS SUCH AS LOAM, STUMPS, BRUSH, AND ROCKS LARGER THAN 3/4 THE DEPTH OF THE LIFT BEING PLACED.
    11.2.3 LOAM AND SEED SLOPES WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
    11.3 BASE MATERIALS:
    11.3.1. BANK RUN AND CRUSHED GRAVEL SHALL BE PLACED IN 6" LIFTS AND COMPACTED TO 95% MAXIMUM DRY DENSITY TO THE DEPTHS SPECIFIED IN THE ROAD CROSS–SECTION DETAILS.
    11.4 PAVEMENT:
    11.4.1. PLACE AS SOON AS POSSIBLE AFTER THE SELECT MATERIALS ARE INSTALLED AND ACCEPTED TO ELIMINATE SOIL EROSION.
    11.4.2. STABILIZE ALL ROADWAYS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
    11.4.3. DRIVEWAY APRONS SHALL BE INCLUDED IF BASE GRAVELS HAVE BEEN PLACED.
12. UNDERGROUND UTILITIES SHALL BE INSTALLED WITH THE PROGRESS OF THE ROAD CONSTRUCTION. ELECTRICAL AND COMMUNICATION CONDUITS SHALL BE INSTALLED BY LICENSED PROFESSIONALS AND IN ACCORDANCE WITH THE SPECIFIC STANDARDS. THE SEWER FORCEMAIN AND WATER LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS HEREIN.
12. INSPECT, MAINTAIN, AND IF NECESSARY REPAIR ALL EROSION AND SEDIMENT CONTROL MEASURES AS STATED IN THE EROSION CONTROL NOTES ON THIS SHEET. PROVIDE AN EROSION CONTROL LOG INDICATING THE DATE INSPECTED, WHO INSPECTED, WHAT WAS FOUND, AND WHAT WAS DONE (IF ANYTHING).
13. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AFTER SITE IS STABILIZED AND RESEED ANY AREAS DISTURBED BY REMOVAL. THE APPROXIMATE DATE FOR REMOVAL OF EROSION CONTROLS IS AUGUST 2018.
14. IF NECESSARY, ALL DRAINAGE STRUCTURES AND PIPES SHALL BE FLUSHED/PUMPED FREE OF SEDIMENT AFTER STABILIZATION IS COMPLETE.
15. LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

16. UNIT CONSTRUCTION
    16.1 UNITS WILL BE CONSTRUCTED IN GROUPS OF 10–15.
    16.2 CONSTRUCTION OF UNITS WILL BEGIN ON THE GROUP ON THE EAST SIDE AND PROCEED TO THE WEST SIDE, FROM SOUTH TO NORTH.
    16.3 UTILITY CONNECTIONS SHALL BE COORDINATED WITH FOUNDATION CONSTRUCTION

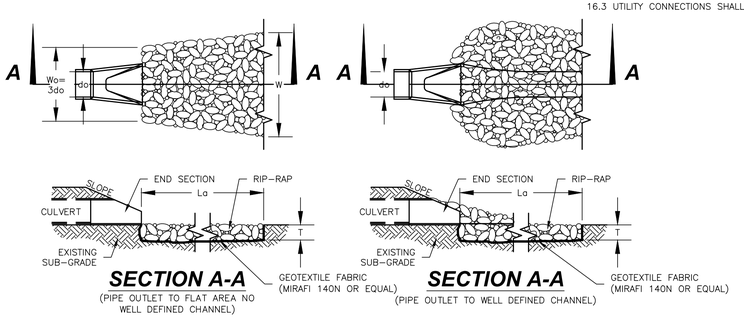


STABILIZED CONSTRUCTION ENTRANCE DETAIL

N.T.S

STABILIZED CONSTRUCTION ENTRANCE NOTES:

1. GRADE AND COMPACT ACCESS ROAD ENTRANCE AS NECESSARY. PLACE FILTER FABRIC (MIRAFI OR EQUAL) AND PLACE 6" OF 3" CRUSHED STONE TO MATCH SLOPE OF EXISTING ROAD.
2. PROVIDE NECESSARY SWALES OR DIVERSIONS TO MINIMIZE DIRECT FLOW OF WATER ONTO STONE AREA.
3. CONSTRUCTION ENTRANCE SHALL BE MAINTAINED AS NECESSARY TO REMOVE SILT FROM TIRES PRIOR TO ENTERING PUBLIC ROADS. A SMALL SWALE SHALL BE CONSTRUCTED ON THE DOWN GRADIENT SIDE TO TRAP ANY SILT WASHED FROM THE STONE ENTRANCE.



RIP-RAP GRADATION

d50=6" II	% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE (INCHES)		
	100	9	TO	12
	85	7.8	TO	10.8
	50	6	TO	9
	15	1.8	TO	3

d50=8" II	% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE (INCHES)		
	100	12	TO	16
	85	10.4	TO	14.4
	50	8	TO	12
	15	2.4	TO	4

RIP RAP DIMENSION TABLE

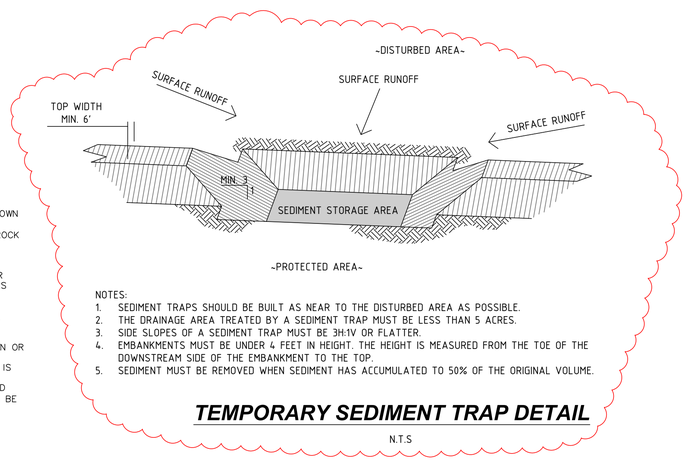
LOCATION	Wo	W	La	T	d50
RIP RAP OUTLET #1 – 30" HDPE OUTLET PIPE	3.75'	12.5'	10'	30"	9.5"
RIP RAP #1 – 15" BIORETENTION OUTLET PIPE	3.75'	9'	25'	24"	12"
RIP RAP CHANNEL #1 – BIORETENTION SPILLWAY	SEE GRADING PLAN			24"	24"
RIP RAP CHANNEL #2 – SEDIMENT FOREBAY SPILLWAY				18"	24"

CONSTRUCTION SPECIFICATIONS:
1. PREPARE THE SUB–GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP–RAP TO THE GRADES SHOWN ON THE PLANS.
2. MINIMUM 6" SAND/GRAVEL BEDDING OR GEOTEXTILE FABRIC (MIRAFI 140N OR EQUAL) REQUIRED UNDER ALL ROCK RIP–RAP.
3. THE ROCK OR GRAVEL USED FOR FILTER OR RIP–RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
4. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF ROCK RIP–RAP. 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 REPAIRS OR JOINING TWO (2) PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
5. 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.

MAINTENANCE NOTES:
1. OUTLETS SHALL BE INSPECTED AND CLEANED ANNUALLY AND AFTER ANY MAJOR STORM EVENT. ANY EROSION OR DAMAGE TO THE RIP–RAP SHALL BE REPAIRED IMMEDIATELY.
2. THE CHANNEL IMMEDIATELY DOWNSTREAM FROM THE OUTLET SHOULD BE CHECKED TO SEE THAT NO EROSION IS OCCURRING.
3. 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.

PIPE OUTLET PROTECTION DETAIL

NOT TO SCALE



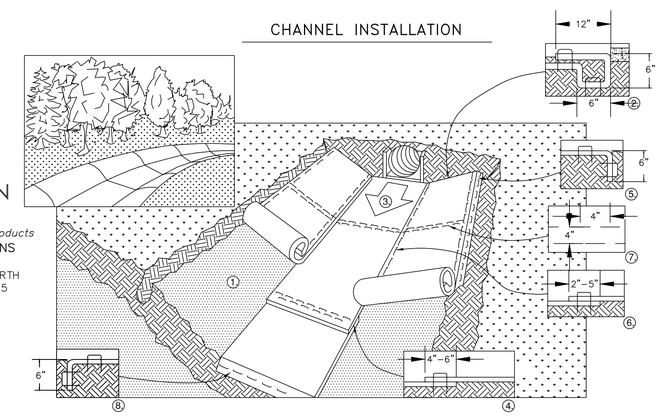
NOTES:
1. SEDIMENT TRAPS SHOULD BE BUILT AS NEAR TO THE DISTURBED AREA AS POSSIBLE.
2. THE DRAINAGE AREA TREATED BY A SEDIMENT TRAP MUST BE LESS THAN 5 ACRES.
3. SIDE SLOPES OF A SEDIMENT TRAP MUST BE 3H:1V OR FLATTER.
4. EMBANKMENTS MUST BE UNDER 4 FEET IN HEIGHT. THE HEIGHT IS MEASURED FROM THE TOE OF THE DOWNSTREAM SIDE OF THE EMBANKMENT TO THE TOP.
5. SEDIMENT MUST BE REMOVED WHEN SEDIMENT HAS ACCUMULATED TO 50% OF THE ORIGINAL VOLUME.

TEMPORARY SEDIMENT TRAP DETAIL

N.T.S

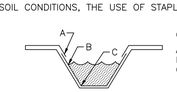
NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS
14649 HIGHWAY 41 NORTH
EVANSVILLE, IN 47725
800–772–2040
www.nagreen.com

CHANNEL INSTALLATION



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" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) 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) 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" (10 CM –15 CM) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) 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" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" – 5" (5 CM –12.5 CM) (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9 M – 12 M) INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) 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" (30 CM) APART IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) 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" (15 cm) MAY BE REQUIRED.

TYPICAL TURF REINFORCEMENT MATTING DETAIL

N.T.S

NOTES:
1. ALL SEDIMENT FOREBAY SPILLWAYS FOR TREATMENT SWALES AND ALL 2:1 SLOPES SHALL BE LINED WITH NORTH AMERICAN GREEN SC150BN EROSION CONTROL BLANKET OR APPROVED EQUAL.
2. FOR SALES CONTACT:
   E.J PRESCOTT, INC.
   210 SHEEP DAVIS RD.
   CONCORD, NH
   603–224–9545

NO.	DATE	INT.
2.	2/1/21	MCS
1.	1/5/21	MCS
0.	9/17/20	AWS

REVISIONS

1. REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 1/14/21
2. REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 10/8/20
0. INITIAL SUBMISSION TO DOVER

SEAL: STATE OF NEW HAMPSHIRE MICHAEL J. SEVERT No. 9397 LICENSED PROFESSIONAL ENGINEER

DATE ISSUED: 6/12/20
SCALE: 1"=40'
DESIGNED BY: XXX
DRAWN BY: XXX
APPROVED BY: MJS
DWG FILE: NM20011_Details_03.dwg

CONSTRUCTION DETAILS

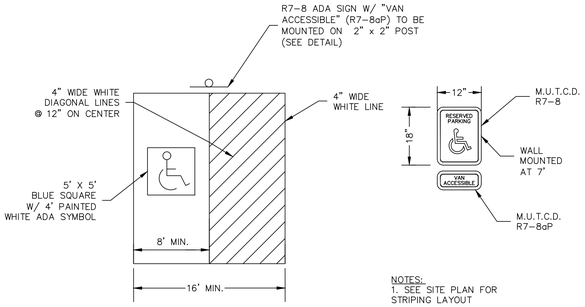
prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP I, LOT 6

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 Railroad St. P.O. Box 359
Newmarket, NH 03857
Phone: (603) 659-5255 Fax: (603) 659-4627
E-mail: mjs@mjs-engineering.com

JOB: 20-011

C-502

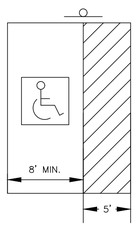
(P20-60)



NOTES:
1. SEE SITE PLAN FOR STRIPING LAYOUT

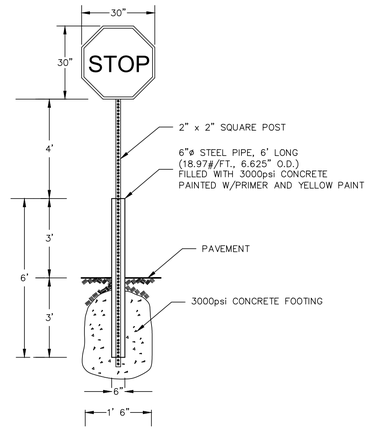
ADA STRIPING AND SIGN DETAIL

N.T.S



PAVEMENT MARKING NOTES:

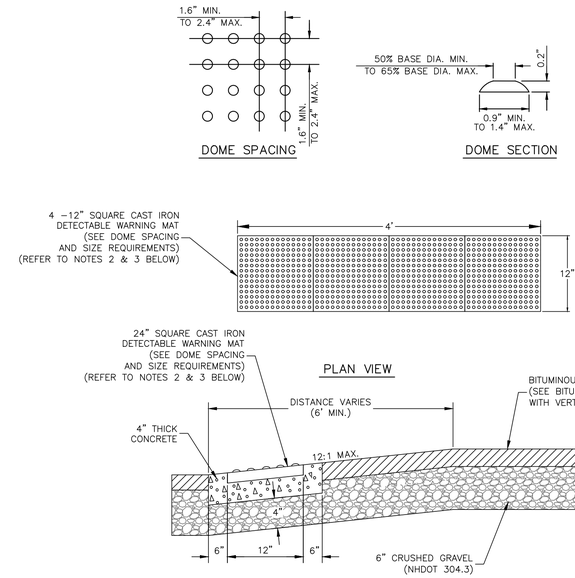
1. STRIPE PARKING AREAS AND DRIVES AS SHOWN, INCLUDING PARKING SPACES, HANDICAP SYMBOLS, AND PAINTED ISLANDS. ALL TRAFFIC PAINT SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) AND AASHTO M248 TYPE "F". MEDIAN ISLANDS AND CENTERLINES TO BE CONSTRUCTED USING YELLOW TRAFFIC PAINT.
2. ALL PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", THE "STANDARD ALPHABETS FOR HIGHWAY SIGN AND PAVEMENT MARKINGS", AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS.
3. PAINTED ISLANDS SHALL BE 4 INCH WIDE DIAGONAL LINES SPACED AT 3 FT. O.C. BORDERED BY 4 INCH WIDE LINES.
4. ALL CROSSWALKS SHALL MATCH THE CITY OF DOVER STANDARD AND SHALL BE PAINTED WITH THERMOPLASTIC PAINT.



TYPICAL SIGN DETAIL

N.T.S.

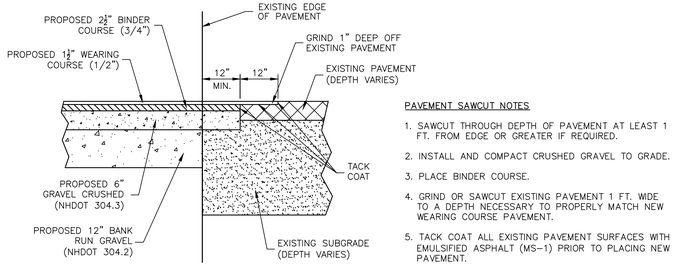
NOTES:
1. SEE PLANS FOR SIGN PLACEMENT.



DETECTABLE WARNING MAT DETAIL

N.T.S

NOTES:
1. MAXIMUM CROSS SLOPE OF SIDEWALK TO BE 2%.
2. CONCRETE TO BE 4,000 PSF.
3. REFER TO MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION OF DETECTABLE WARNING MATS.

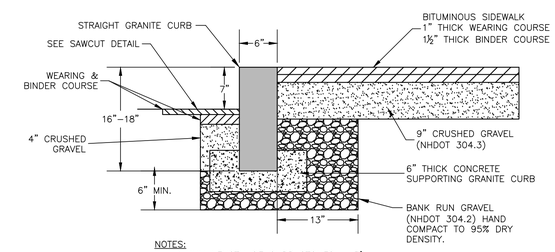


PAVEMENT SAWCUT NOTES

1. SAWCUT THROUGH DEPTH OF PAVEMENT AT LEAST 1 FT. FROM EDGE OR GREATER IF REQUIRED.
2. INSTALL AND COMPACT CRUSHED GRAVEL TO GRADE.
3. PLACE BINDER COURSE.
4. GRIND OR SAWCUT EXISTING PAVEMENT 1 FT. WIDE TO A DEPTH NECESSARY TO PROPERLY MATCH NEW WEARING COURSE PAVEMENT.
5. TACK COAT ALL EXISTING PAVEMENT SURFACES WITH EMULSIFIED ASPHALT (MS-1) PRIOR TO PLACING NEW PAVEMENT.

TYPICAL PAVEMENT SAWCUT DETAIL

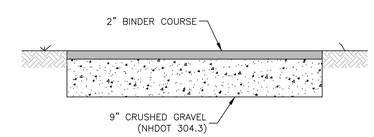
SCALE: N.T.S.



NOTES:
1. MINIMUM LENGTH OF CURB STONES = 3'
2. MAXIMUM LENGTH OF CURB STONES = 10'
3. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.

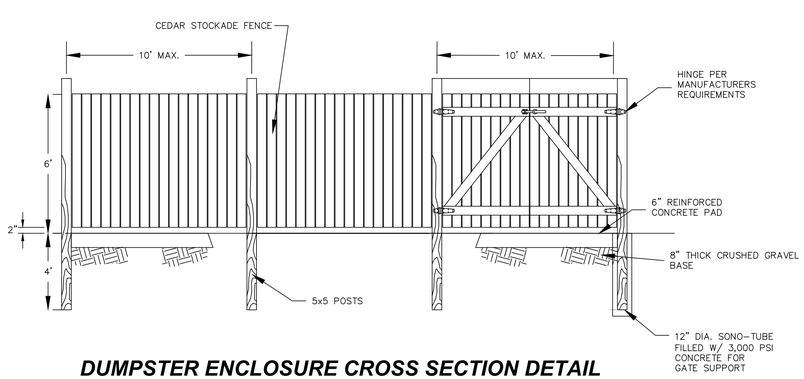
TYPICAL BITUMINOUS SIDEWALK SECTION WITH VERTICAL GRANITE CURB

N.T.S



TYPICAL WALKING PATH DETAIL

N.T.S



DUMPSTER ENCLOSURE CROSS SECTION DETAIL

N.T.S

NO.	DATE	INT.
2.	2/1/21	MCS
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0.	9/17/20	AWS

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SEAL: STATE OF NEW HAMPSHIRE MICHAEL J. SEVERT No. 9397 LICENSED PROFESSIONAL ENGINEER

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DRAWN BY: JLG
APPROVED BY: MJS
DWG FILE: NM20011_Details_03.dwg

CONSTRUCTION DETAILS

prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP I, LOT 6

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 Railroad St. P.O. Box 359
Newmarket, NH 03857
Phone: (603) 659-5929 Fax: (603) 659-4627
E-mail: mjs@mjs-engineering.com

JOB: 20-011

C-503

(P20-60)

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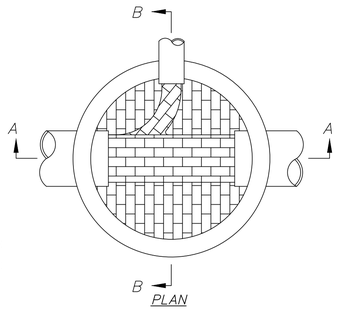
MANHOLE CONSTRUCTION MATERIAL REQUIREMENTS (PER Env-Wq 704.12 AND Env-Wq 704.13 NUMERATION)

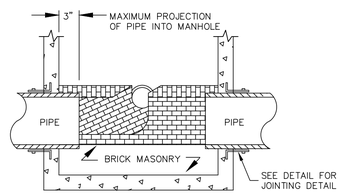
(A) ALL COMPONENT PARTS OF MANHOLE STRUCTURES SHALL HAVE THE STRENGTH, LEAK RESISTANCE, AND SPACE NECESSARY FOR THE INTENDED SERVICE.
(B) MANHOLE STRUCTURES SHALL HAVE A LIFE EXPECTANCY IN EXCESS OF 25 YEARS.
(C) MANHOLE STRUCTURES SHALL BE DESIGNED TO WITHSTAND H-20 LOADING AND SHALL NOT LEAK IN EXCESS OF 1 GPD PER VERTICAL FOOT OF MANHOLE FOR THE LIFE OF THE STRUCTURE.
(D) BARRELS AND CONE SECTIONS SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE.
(E) BASE SECTIONS SHALL BE MONOLITHIC CONSTRUCTION TO A POINT AT LEAST SIX INCHES ABOVE THE CROWN OF THE INCOMING PIPE.
(F) HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT.
(G) PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS:
(1) ELASTOMERIC, RUBBER SLEEVE WITH WATER TIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES;
(2) CAST INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS;
(3) ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING; AND
(4) NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
(H) MANHOLE CONE SECTIONS SHALL BE ECCENTRIC IN SHAPE.
(I) ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OF THE TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE OF THE WALL.
(J) MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF THE PIPE AND FLOW. AT CHANGES IN DIRECTIONS, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL.
UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. INVERTS AND SHELVES SHALL BE PLACED AFTER TESTING.
(K) MATERIALS FOR CONSTRUCTION FOR MANHOLES SHALL BE AS FOLLOWS:
(1) CONCRETE FOR CAST-IN-PLACE OR COMPLETE MANHOLES SHALL CONFORM TO THE REQUIREMENTS FOR CLASS AA CONCRETE IN THE NH DOT'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION."
(2) REINFORCING FOR CAST-IN-PLACE CONCRETE SHALL BE STEEL OR STRUCTURAL FIBERS THAT CONFORM TO THE REQUIREMENTS OF THE NH DOT'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION."
(3) PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL CONFORM TO ASTM C478-06;
(4) THE MANHOLE FRAME AND COVER SHALL PROVIDE A 30-INCH DIAMETER CLEAR OPENING;
(5) THE MANHOLE COVER SHALL HAVE THE WORD "SEWER" IN 3-INCH LETTERS CAST INTO THE TOP SURFACE;
(6) THE CASTINGS SHALL BE OF EVEN-GRAINED CAST IRON, SMOOTH, AND FREE FROM SCALE, LUMPS, BLISTERS, SAND HOLES AND DEFECTS;
(7) CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION;
(8) CASTINGS SHALL BE EQUAL TO CLASS 30, CONFORMING TO ASTM A48/48M-03;
(9) BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL COMPLY WITH ASTM C32-05, CLAY OR SHALE, FOR GRADE SS HARD BRICK;
(10) MORTAR SHALL BE COMPOSED OF PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION;
(11) PROPORTIONS IN MORTAR OF PARTS BY VOLUME SHALL BE:
(a) 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
(b) 4.5 PARTS SAND, 1.0 PART CEMENT AND 0.5 PART HYDRATED LIME;
(12) CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150-05;
(13) HYDRATED LIME SHALL BE TYPE S CONFORMING TO THE ASTM C207-06 "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES";
(14) SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO THE ASTM C33-03 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES";
(N) THE MINIMUM INTERNAL DIAMETER OF MANHOLE SHALL BE 48 INCHES.
(S) IN THE FLOW CHANNEL A DROP OF AT LEAST 0.1 FEET SHALL BE PROVIDED BETWEEN THE INGOING AND OUTGOING SEWERS ON ALL MANHOLES.

MANHOLE TESTING REQUIREMENTS (Env-Wq 704.17)

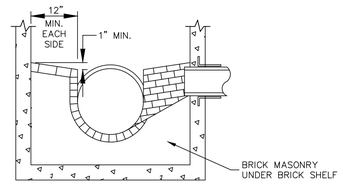
(X) MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST.*
(Y) THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:
(1) THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES Hg: AND
(2) THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR A 1-INCH Hg PRESSURE DROP TO 9 INCHES Hg SHALL BE:
(A) NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP;
(B) NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP
(Z) THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (Y) ABOVE.
*MANHOLE TESTING MUST BE CONDUCTED PRIOR TO INVERT AND SHELF PLACEMENT.



PLAN



SECTION A-A

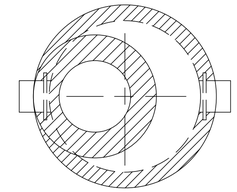


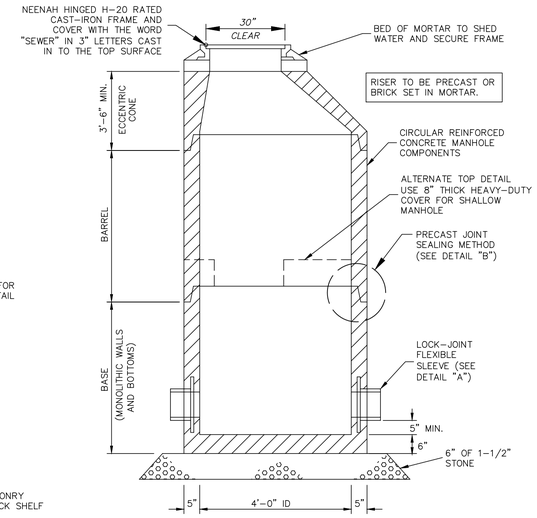
SECTION B-B

NOTE:
1. CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT. INVERT BRICKS SHALL BE LAID ON EDGE.
2. INVERT AND SHELF TO BE PLACED AFTER LEAKAGE TEST.

TYPICAL SEWER MANHOLE INVERT

N.T.S.

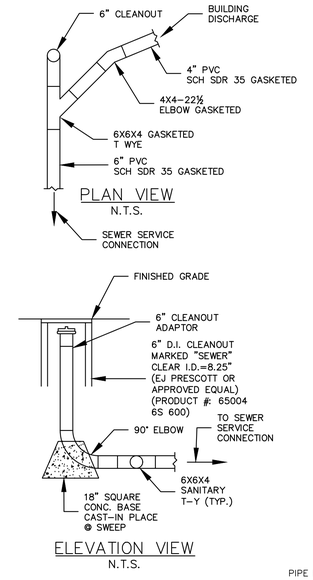

PLAN VIEW



SECTION VIEW

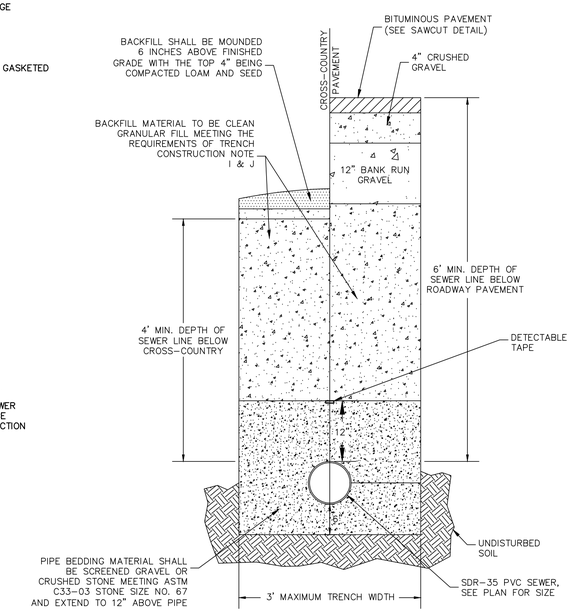
STANDARD MANHOLE

N.T.S.

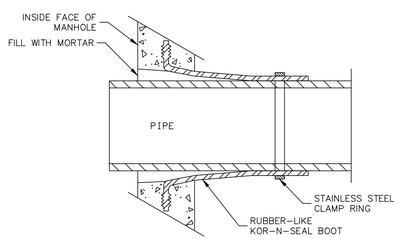


PLAN VIEW
N.T.S.
ELEVATION VIEW
N.T.S.

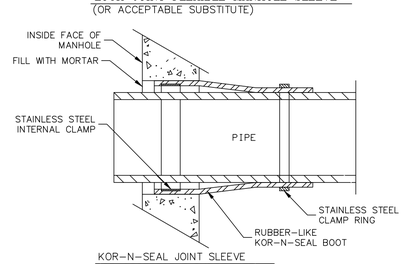
CLEANOUT DETAIL



STANDARD SEWER PIPE TRENCH



LOCK-JOINT FLEXIBLE MANHOLE SLEEVE
(OR ACCEPTABLE SUBSTITUTE)

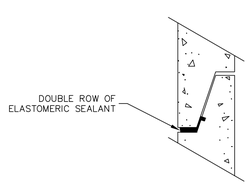


KOR-N-SEAL JOINT SLEEVE
(OR ACCEPTABLE SUBSTITUTE)

DETAIL "A" - PIPE TO MANHOLE JOINTS

N.T.S

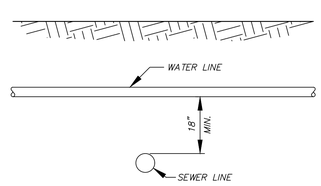
NOTES:
1. USE LOCK-JOINT FLEXIBLE MANHOLE SLEEVE FOR FACTORY INSTALLED APPLICATIONS AND KOR-N-SEAL SLEEVE FOR IN FIELD INSTALLATIONS.
2. ALL GASKETS, SEALANTS, MORTAR, ETC. SHALL BE INSTALLED IN ACCORDANCE W/ MANUFACTURERS' WRITTEN INSTRUCTIONS.



ELASTOMERIC SEALANT

NOTE:
ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS

DETAIL "B" – HORIZONTAL JOINTS
N.T.S



WATER/SEWER CROSSING

N.T.S.

SEWER NOTES:

PER THE REQUIREMENTS OF "STANDARDS OF DESIGN AND CONSTRUCTION FOR SEWERAGE AND WASTEWATER TREATMENT FACILITIES."

GRAVITY SEWER CONSTRUCTION MATERIALS (Env-Wq 704.05)

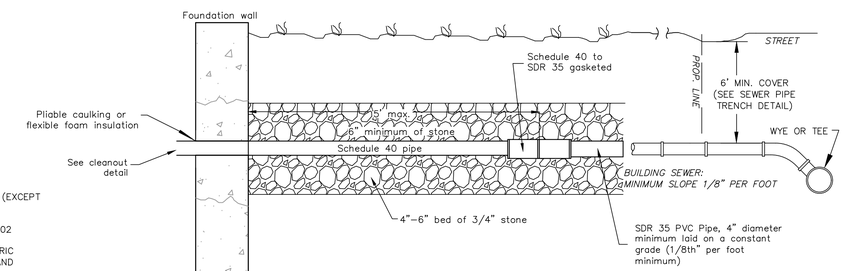
(A) PLASTIC GRAVITY SEWER PIPE AND FITTINGS SHALL BE 8 INCH PVC SDR 35 SEWER PIPE (EXCEPT SEWER SERVICE SHALL BE 6" SRD 35 PVC) AND SHALL COMPLY WITH ASTM D3034-04a.
(B) PLASTIC SEWER PIPE SHALL HAVE A PIPE STIFFNESS RATING OF AT LEAST 46 PSI AT 5 PERCENT PIPE DIAMETER DEFLECTION, AS MEASURED IN ACCORDANCE WITH ASTM D2412-02 DURING MANUFACTURE.
(C) JOINT SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D3212-96(a)(2003)e1 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.

GRAVITY SEWER PIPE TESTING REQUIREMENTS (Env-Wq 704.06)

(A) ALL NEW SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.
(B) LOW-PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH:
(1) ASTM F1417-92(2005) "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR"; OR
(2) UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE" (1998).
(C) ALL NEW GRAVITY SEWERS SHALL BE CLEANED AND VISUALLY INSPECTED AND SHALL BE TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR TO USE.
(D) ALL PLASTIC SEWER PIPE SHALL BE DEFLECTION TESTED NOT LESS THAN 30 DAYS FOLLOWING INSTALLATION.
(E) THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5 PERCENT OF AVERAGE INSIDE DIAMETER.

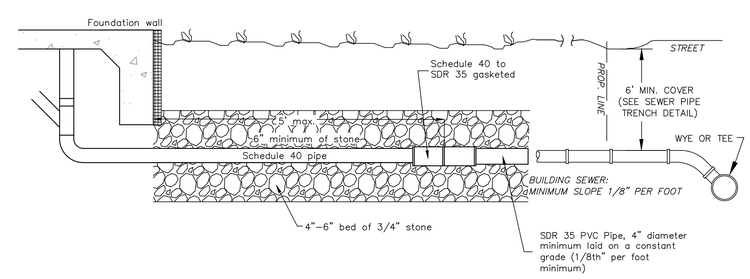
PROTECTION OF WATER SUPPLIES (Env-Wq 704.19)

(A) SEWERS SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN.
(B) A DEVIATION FROM THE SEPARATION REQUIREMENTS OF (A) ABOVE SHALL BE ALLOWED WHERE NECESSARY TO AVOID CONFLICT WITH SUBSURFACE STRUCTURES, UTILITY CHAMBERS, AND BUILDING FOUNDATIONS, PROVIDED THAT THE SEWER IS CONSTRUCTED IN ACCORDANCE WITH THE FORCE MAIN CONSTRUCTION REQUIREMENTS SPECIFIED IN Env-Wq 704.06.
(C) WHENEVER SEWERS MUST CROSS WATER MAINS, THE SEWER SHALL BE CONSTRUCTED AS FOLLOWS:
(1) VERTICAL SEPARATION OF THE SEWER AND WATER MAIN SHALL BE NOT LESS THAN 18 INCHES, WITH WATER ABOVE SEWER; AND
(2) SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATER MAIN.



TYPICAL BUILDING SEWER CONNECTION

N.T.S



TYPICAL BUILDING SEWER CONNECTION

N.T.S

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SEAL: STATE OF NEW HAMPSHIRE - MICHAEL J. SEVERT No. 6397 - PROFESSIONAL ENGINEER

DATE ISSUED:	6/12/20
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DESIGNED BY:	MJS
DRAWN BY:	JLG
APPROVED BY:	MJS
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CONSTRUCTION DETAILS

prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP I, LOT 6

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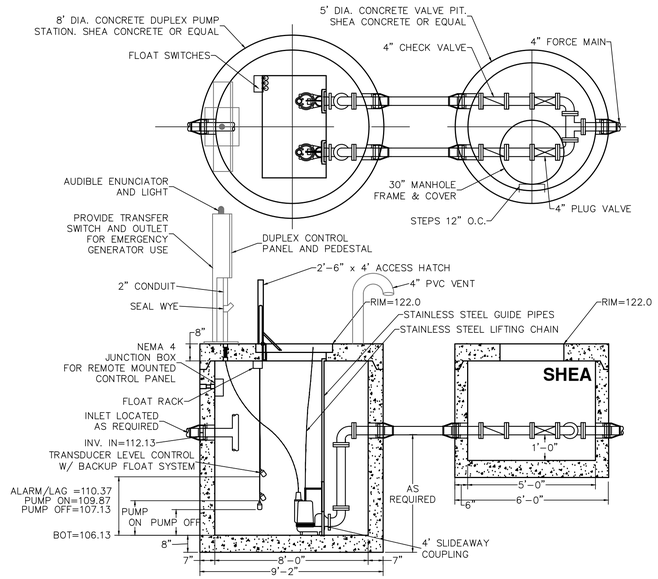
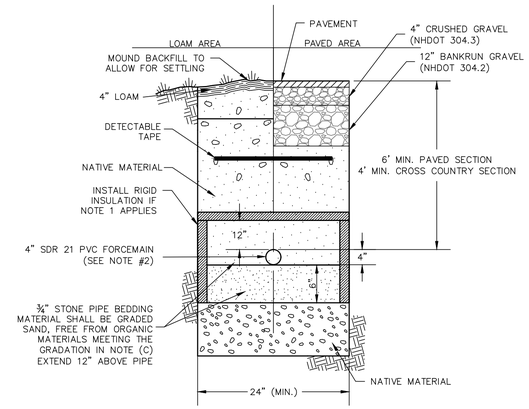


PROPOSED PUMP STATION & VALVE PIT DETAIL

NOT TO SCALE

NOTES:

1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. REINFORCED STEEL CONFORMS TO LATEST ASTM A185
3. BUTYL RESIN SECTION JOINT CONFORMS TO LATEST ASTM C990 SPEC
4. PUMP MODEL – LIBERTY 3XLM033A – 3HP MONOVANE. 3" SOLIDS HANDLING, CLASS 1, DIVISION 1
5. PUMP IMPELLER DIAMETER MUST BE 6.75 INCHES.
6. OWNER SHALL SECURE A MAINTENANCE AGREEMENT FOR THE PUMP STATION. THE ALARM SHALL BE TRANSMITTED DIRECTLY OR VIA AN ANSWERING SERVICE TO THE MAINTENANCE COMPANY.
7. STATION SHALL HAVE A RUNNING METER.
8. PROVISIONS SHALL BE MADE TO SILENCE THE AUDIBLE ALARM MANUALLY, BUT THE LIGHT SHALL CONTINUE UNTIL THE CONDITION HAS BEEN RECTIFIED.
9. SUBMERSIBLE PU,PS FOR SEWAGE PUMPING STATIONS SHALL CONFORM TO THE NEC REQUIREMENTS ADOPTED BY REFERENCE IN THE STATE BUILDING CODE PURSUANT TO RSA 155–A:1, IV, FOR INSTALLATION IN AREAS CLASSIFIED BY THE NEC AS CLASS I, DIVISION 1.
10. ELECTRICAL SYSTEMS AND COMPONENTS, INCLUDING MOTORS, LIGHTS, CABLE, CONDUITS, SWITCH BOXES, AND CONTROL CIRCUITS SHALL BE PROTECTED FROM FLOODING IN ACCORDANCE WITH ENV–WQ 705.01.
11. ELECTRICAL SYSTEMS AND COMPONENTS INCLUDING, MOTORS, LIGHTS, CABLE, CONDUITS, SWITCH BOXES, AND CONTROL CIRCUITS IN ENCLOSED OR PARTIALLY ENCLOSED SPACES WHERE FLAMMABLE MIXTURES OCCASIONALLY MAY BE PRESENT, INCLUDING RAW SEWAGE WET WELLS, SHALL BE CERTIFIED BY THEIR MANUFACTURER AS:
    A. COMPLYING WITH THE NEC REQUIREMENTS ADOPTED BY REFERENCE IN THE STATE BUILDING CODE PURSUANT TO RSA 155–A:1, IV, FOR CLASS I, DIVISION 1 LOCATIONS; OR
    B. BEING RATED FOR CLASS I DIVISION 2 REQUIREMENTS WHERE MECHANICAL VENTILATION IS PROVIDED IN ACCORDANCE WITH THE NFPA AS ADOPTED BY REFERENCE IN THE STATE FIRE CODE IN SAF–C 6000.
11. ALL ELECTRICAL EQUIPMENT AND WORK SHALL COMPLY WITH THE REQUIREMENTS OF NEC AS APOTED BY REFERENCE IN THE STATE BUILDING CODE PURSUANT TO RSA 155–A:1, IV, AND NFPA AS ADOPTED BY REFERENCE IN THE STATE FIRE CODE IN SAF–C 6000 IN EFFECT AT THE TIME OF INSTALLATION
12. WET WELL FLOOR MUST BE SLOPED TOWARDS PUMP INLETS (1:1 SLOPE). SLOPED FLOOR TO BE CONSTRUCTED IN THE FIELD.
13. EMERGENCY BACKUP GENERATOR TO BE PERMANENTLY INSTALLED AT LOCATION SHOWN ON SITE PLAN.
14. UNDERSIDE OF THE PUMP STATION HATCH MUST HAVE A SIGN BEARING THE TEXT "WARNING – HAZARDOUS AREA, ENTER ONLY WITH PROPER EQUIPMENT".

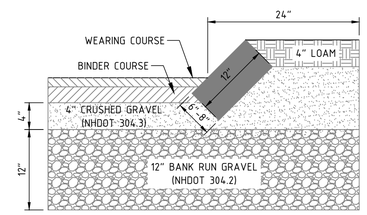


SEWER FORCEMAIN TRENCH

N.T.S

NOTES

1. USE RIGID INSULATION AS SHOWN IF PIPE COVER IS LESS THAN 6' UNDER PAVED SECTION OR 4' UNDER CROSS COUNTRY SECTION.
2. THERE SHALL BE NO GLUE JOINTS ON THE FORCEMAIN.



NOTES:

1. REMOVE LOAM TO A MINIMUM DEPTH OF 8" BELOW SELECT MATERIALS.
2. COMPACT BASE, SUBBASE, AND SUBGRADE TO 95% OF STANDARD PROCTOR.
3. SEE PLAN FOR LOCATION

TYPICAL SLOPED GRANITE CURB

NTS

TRENCH CONSTRUCTION (PER Env–Wq 704.11 NUMERATION)

(A) TRENCH DIMENSIONS SHALL BE AS FOLLOWS:
  (1) FOR SEWER PIPE LESS THAN 15" IN DIAMETER, THE ALLOWABLE TRENCH WIDTH AT A PLANE 12 INCHES ABOVE THE PIPE SHALL BE NO MORE THAN 36".
(B) PIPE TRENCH BEDDING MATERIAL AND FILL MATERIAL FOR EXCAVATION BELOW GRADE SHALL BE SCREENED GRAVEL OR CRUSHED STONE TO ASTM C33–03 STONE SIZE NO. 67.
(C) THE PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND, FREE FROM ORGANIC MATERIALS, GRADED SUCH THAT 100% PASSES THROUGH A 1/2 INCH SIEVE AND A MAXIMUM OF 15% PASSES THROUGH A #200 SIEVE.
(E) PIPE BEDDING MATERIAL SHALL EXTEND FROM A HORIZONTAL PLANE THROUGH THE PIPE AXIS TO 6 INCHES BELOW THE BOTTOM OF THE OUTSIDE SURFACE OF THE PIPE.
(F) PIPE SAND MATERIAL SHALL COVER THE PIPE A MINIMUM OF 12 INCHES ABOVE THE CROWN OF THE OUTSIDE SURFACE.
(G) COMPACTION SHALL BE IN 12 INCH LAYERS FOR BEDDING AND BLANKET MATERIALS.
(H) BACKFILL MATERIALS SHALL BE COMPACTED IN 3–FOOT LAYERS TO THE GROUND SURFACE EXCEPT FOR ROAD CONSTRUCTION (OR OTHER PAVED AREAS) WHERE THE FINAL 3 FEET SHALL BE COMPACTED IN 12–INCH LAYERS TO THE ROAD BASE SURFACE.
(I) TRENCH BACKFILL MATERIAL IN ROADWAY LOCATIONS SHALL BE NATURAL MATERIALS EXCAVATED FROM THE TRENCH DURING CONSTRUCTION, EXCLUDING: DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL WHICH AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.
(J) TRENCH BACKFILL AT CROSS–COUNTRY LOCATIONS SHALL BE AS DESCRIBED IN (I) ABOVE, EXCEPT THAT TOP SOIL, LOAM, MUCK OR PEAT, MAY BE USED PROVIDED THE COMPLETED CONSTRUCTION WILL BE STABLE, AND PROVIDED THAT ACCESS TO THE SEWER FOR MAINTENANCE AND RECONSTRUCTION IS PRESERVED.
(K) BACKFILL SHALL BE MOUNDED 6 INCHES ABOVE ORIGINAL GROUND AT CROSS–COUNTRY LOCATIONS.
(L) BASE COURSE FOR TRENCH REPAIR SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NH DOT.
(O) PRECAUTIONS SHALL BE TAKEN TO AVOID GROUNDWATER POOLING AT THE SURFACE BY PROVIDING DRAINAGE TO A SUITABLE OUTLET AT CATCH BASINS OR RUNOFF SWALES.

FORCE MAIN AND LOW PRESSURE SEWER CONSTRUCTION MATERIALS (PER Env–Wq 704.08 NUMERATION)

(A) FORCE MAINS SHALL BE CONSTRUCTED OF SDR 21 PVC MATERIAL.
(B) FORCE MAINS SHALL BE TREATED AS GRAVITY SEWERS FOR PURPOSES OF FOUNDATION BEDDING AND BACKFILL REQUIREMENTS.
(C) PVC PIPE USED FOR FORCE MAINS SHALL CONFORM TO ASTM D2241–05 OR ASTM D1785–05.

FORCE MAIN AND LOW PRESSURE SEWER TESTING (PER Env–Wq 704.09 NUMERATION)

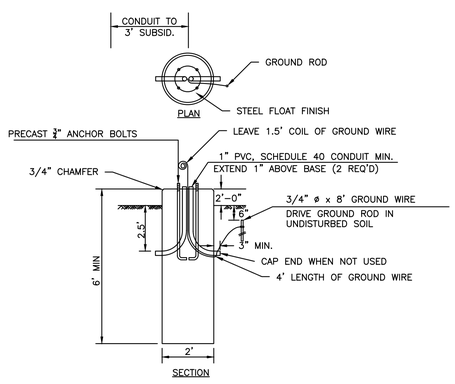
FORCE MAINS SHALL BE TESTED IN ACCORDANCE WITH SECTION 4 OF AWWA C600–05 "INSTALLATION OF CAST IRON WATER MAINS AND THEIR APPURTENANCES", AT A PRESSURE EQUAL TO THE GREATER OF 150 PERCENT OF THE DESIGN OPERATING TOTAL DYNAMIC HEAD OR AT LEAST 100 PSI.

WET WELL LEAKAGE TESTING (PER Env–Wq 705.02 NUMERATION)

THE WET WELL MUST BE HYDROSTATICALLY TESTED PER CHAPTER 2 OF ACI 350.1. THE WET WELL MUST MEET THE TIGHTNESS CRITERION HST–NML AS DEFINED BY CHAPTER 2.1 OF ACI 350.1.

PUMP STATION OPERATION & MAINTENANCE MANUAL (PER Env–Wq 705.10 NUMERATION)

A COPY OF THE PUMP STATION O&M MANUAL MUST BE SUBMITTED TO NHDES WITHIN 60 DAYS OF COMPLETION OF THE PUMP STATION CONSTRUCTION.



CONCRETE LIGHT POLE BASE

N.T.S

POLE MOUNTED LIGHTING SPECIFICATIONS:

1. ALL SITE WORK SHALL CONFORM TO TOWN OF DURHAM STANDARDS AND LOCAL AUTHORITIES HAVING JURISDICTION.
2. ALL MATERIAL WORKMANSHIP SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING STANDARDS, NEW HAMPSHIRE ELECTRIC CODE, FIRE PROTECTION ASSOCIATION, NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION.
3. ALL EXTERIOR CONDUITS FOR LIGHTING SHALL BE 1" MIN. DIAMETER PVC SCHEDULE 40. ALL ELBOWS SHALL BE SCHEDULE 40. ALL CONDUITS UNDER ROADWAYS AND PARKING AREAS SHALL HAVE MINIMUM COVER OF THREE (3) FEET.
4. ALL UNDERGROUND CONDUITS WILL HAVE NYLON PULL ROPE TO FACILITATE PULLING IN CABLES.
5. ALL EQUIPMENT TO BE LITHONIA LIGHTING – MR2–LED SERIES.
6. LUMINARIES SHALL BE LITHONIA LIGHTING – MR2–LED SERIES,
7. ALL EXTERIOR CONDUITS SHALL BE PROVIDED WITH 6" WIDE, METALIZED CONTINUOUS WARNING TAPE.
8. POLES SHALL BE LITHONIA LIGHTIN OR EQUAL.
9. PROVIDE FUSING ON ALL LUMINARIES. FUSES TO BE LOCATED AT POLE HANDHOLE. ALL LUMINARIES 277 VOLT.
10. GROUND ALL POLES. PROVIDE 3/4" x 8'–0" GROUND ROD AT EACH POLE WITH #6 AWG COPPER GROUND CONNECTION.
11. PROVIDE SHIMS AS REQUIRED AND SET ALL POLES PLUMB. PROVIDE FULL ANCHOR BOLT COVERS.
12. ALL NO. 6 WIRE AND LARGER SHALL BE TYPE THHN COPPER. NO. 8 WIRE AND SMALLER SHALL BE THWN COPPER.
13. MOUNTING HEIGHT SHALL BE 17'±.
14. USE MR2 LED 60C LEDS, WITH DRIVE CURRENT OF 700 mA DISTANCE TYPE T3M.

GENERAL LIGHTING NOTES:

1. LIGHTING SUPPLIER: VISIBLE LIGHT, INC. (603) 926–6049.
2. OWNER MAY ELECT TO USE ALTERNATIVE LIGHT FIXTURES IF FIRST APPROVED BY DESIGNER AND TOWN.
3. SITE LIGHTING WILL BE LOCATED AS SHOWN ON THE SITE PLAN.
4. ALL NON–ESSENTIAL LIGHTING WILL BE REQUIRED TO BE TURNED OFF AFTER BUSINESS HOURS, LEAVING ONLY THE NECESSARY LIGHTING FOR SECURITY.
5. ALL LIGHTING FOR SECURITY OR AESTHETICS WILL BE FULL CUT–OFF OR A SHIELDED TYPE, NOT ALLOWING ANY UPWARD DISTRIBUTION OF LIGHT.
6. PRECAST CONCRETE POLE BASE SHEA CONCRETE OR EQUAL.
7. LIGHT FIXTURE SHALL BE MOUNTED AT 16'–0" HIGH.
8. LIGHT POLE IS 12'–0".

Radean Post Top
LED Area Luminaire

Specifications

EPA:	1.02 ft² (0.105 m²)
Length:	24" (61cm)
Width:	24" (61cm)
H1 Luminaire Height:	4" (10.16cm)
H2 Luminaire Height:	26" (66.04cm)
Weight:	38lbs (17.24Kg)

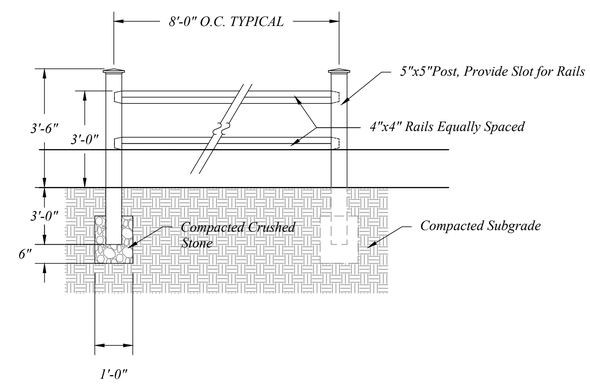
Specifications

Diameter:	D = 8.25" (20.96cm)
Height:	H = 41.5" Standard (105.41cm)
Weight (max):	20lbs (9.07Kg)

RADEAN Bollard
LED Site Luminaire

LIGHT FIXTURES

NTS



2 RAIL DIAMOND RAIL CEDAR FENCE

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REVISIONS

SEAL OF NEW HAMPSHIRE PROFESSIONAL ENGINEER MICHAEL J. SEVERT No. 9397

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CONSTRUCTION DETAILS

prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP 1, LOT 6

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JOB: 20-011

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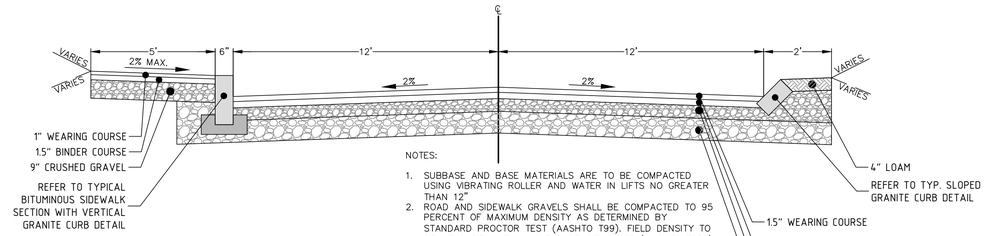

NOTES:

1. SUBBASE AND BASE MATERIALS ARE TO BE COMPACTED USING VIBRATING ROLLER AND WATER IN LIFTS NO GREATER THAN 12"
2. ROAD AND SIDEWALK GRAVELS SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY STANDARD PROCTOR TEST (AASHTO T99). FIELD DENSITY TO BE MEASURED WITH NUCLEAR DENSITY GAGE (AASHTO T238).
3. SIDEWALK MATERIALS:
   WEARING COURSE: 1"
   BINDER COURSE: 1.5"
   CRUSHED GRAVEL (NHDOT 304.3): 9"
4. ROAD MATERIALS:
   WEARING COURSE: 1.5"
   BINDER COURSE: 2.5"
   CRUSHED GRAVEL (NHDOT 304.3): 4"
   BASE GRAVEL (NHDOT 304.2): 12"

PRIVATE ROAD STA 0+00 TO STA 2+37 TRAVEL WAY AND SIDEWALK CROSS-SECTION

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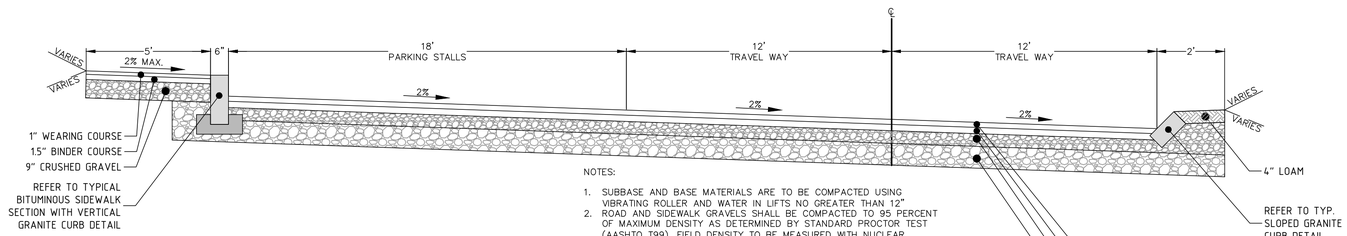

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   BASE GRAVEL (NHDOT 304.2): 12"

PRIVATE ROAD STA 2+37 TO STA 5+00 TRAVEL WAY. PARKING, AND SIDEWALK CROSS-SECTION

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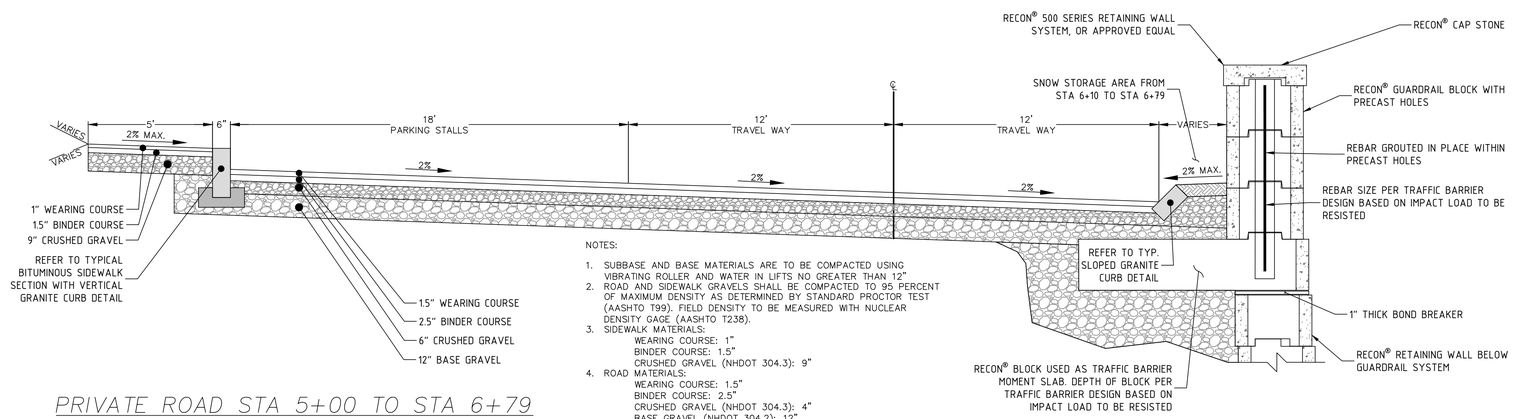

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   CRUSHED GRAVEL (NHDOT 304.3): 4"
   BASE GRAVEL (NHDOT 304.2): 12"

PRIVATE ROAD STA 5+00 TO STA 6+79 TURN AROUND ROAD PARKING STA 0+00 TO 1+33 TRAVEL WAY. PARKING, AND SIDEWALK CROSS-SECTION

NTS

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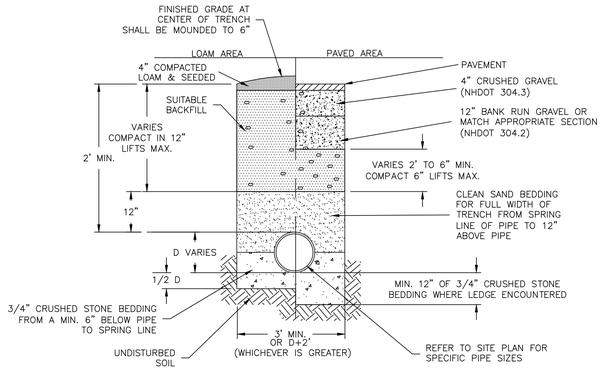

STANDARD DRAINAGE PIPE TRENCH

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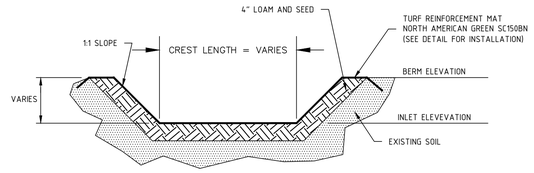


NOTES: CREST BREADTH IS WIDTH OF BERM AT SPILLWAY.

NOTE: SPILLWAY TO BE CONSTRUCTED TO THE DIMENSIONS AND SPECIFICATIONS SHOWN.

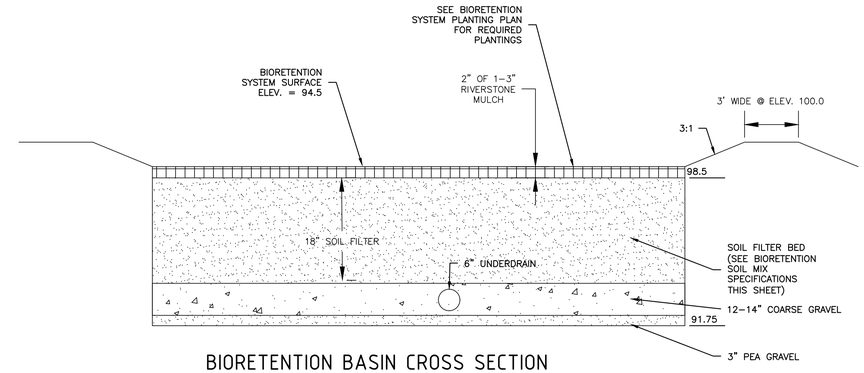
SPILLWAY DIMENSION TABLE

LOCATION	CREST ELEV.	BERM ELEV.	LENGTH*	WIDTH*
SPILLWAY #1 - SEDIMENT FOREBAY	101.2	102.1	6'	6'

*REFER TO DETAIL ABOVE FOR LOCATION OF WIDTH AND LENGTH

BIORETENTION SYSTEM SPILLWAY CROSS SECTION

NTS



BIORETENTION BASIN CROSS SECTION

CONSTRUCTION NOTES:

1. DO NOT PLACE BIORETENTION SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
2. TO PREVENT DEGRADATION OF INFILTRATION FUNCTION: DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE BIORETENTION SYSTEM DURING ANY STAGE OF CONSTRUCTION. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
3. CLEAR AND GRUB THE AREA WHERE THE BIORETENTION SYSTEM IS TO BE LOCATED. STOCKPILE LOAM FOR REUSE LATER.
4. THE FOUNDATION AREA SHALL BE SCARIFIED PRIOR TO PLACING FILL. ALL UNSUITABLE MATERIAL UNDER THE BERM SHALL BE REMOVED AND REPLACED WITH SUITABLE FOUNDATION MATERIAL.
5. THE BERM SHALL BE CONSTRUCTED BEGINNING FROM THE LOWEST POINT UNIFORMLY ALONG ITS ENTIRE LENGTH. PLACE MATERIALS IN MAXIMUM 12" LOOSE LIFTS COMPACTED TO 95% MAXIMUM MODIFIED PROCTOR DENSITY. EMBANKMENT SOIL SHALL HAVE NO ORGANIC MATTER OR FROZEN MATERIAL AND NO STONES LARGER THAN 2/3 OF THE MAXIMUM LOOSE LIFT THICKNESS. STONES AROUND ANY STRUCTURES AND/OR CONDUITS SHALL NOT EXCEED 3 INCHES. EMBANKMENT FILL MATERIAL SHALL HAVE THE FOLLOWING GRADATION:

SIEVE SIZE:	% PASSING:
#4	80-90
#40	50-80
#100	30-45
#200	15-30

6. ALL PIPE TO PIPE CONNECTIONS SHALL BE WATER-TIGHT.
7. ALL DISTURBED AREAS NOT OTHERWISE LANDSCAPED SHALL RECEIVE FOUR INCHES OF LOAM AND SEED.

GENERAL MAINTENANCE:

1. THE BIORETENTION BASIN SHALL BE INSPECTED TWICE EACH YEAR WITH PREVENTATIVE MAINTENANCE PROVIDED.
2. SYSTEMS SHALL BE INSPECTED ANNUALLY AND FOLLOWING ANY RAINFALL EVENT EXCEEDING 2.5 INCHES IN A 24 HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS WARRANTED BY SUCH INSPECTION.
3. TRASH AND DEBRIS SHOULD BE REMOVED AT EACH INSPECTION.
4. AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIORETENTION SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.
5. VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING PRUNING, REMOVAL AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.

PLANTING REQUIREMENTS

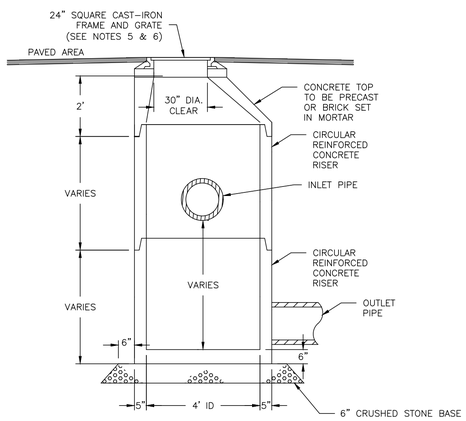
1. THE BIORETENTION BASIN AND SEDIMENT FOREBAY BERM, BOTTOM AND INTERIOR SIDE SLOPES SHALL BE PLANTED WITH A 50:50 MIX OF NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES AND NEW ENGLAND CONSERVATION/WILDLIFE MIX AT 1,500 SF/LB AVAILABLE FROM:

   NEW ENGLAND WETLAND PLANTS. INC.
   820 WEST AMHERST STREET
   AMHERST, MA 01002

BIORETENTION SYSTEM GENERAL NOTES:

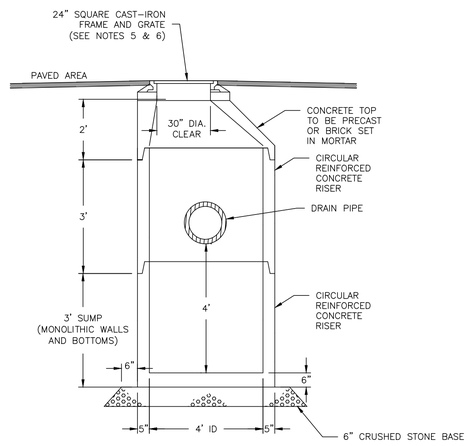
1. BIORETENTION SYSTEM FILTER SOIL MIX SHALL MEET THE FOLLOWING REQUIREMENTS OF FILTER MEDIA OPTION A OR OPTION B.

BIORETENTION SYSTEM SOIL MIX SPECIFICATIONS			
		GRADATION OF MATERIAL	
COMPONENT MATERIAL	PERCENT OF MIXTURE BY VOLUME	SIEVE NO.	% BY WEIGHT PASSING STANDARD SIEVE
FILTER MEDIA OPTION A			
ASTM C-33 CONCRETE SAND	50 TO 55		
LOAMY SAND TOPSOIL, WITH FINES AS INDICATED	20 TO 30	200	15 TO 25
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH, WITH FINES AS INDICATED	20 TO 30	200	< 5
FILTER MEDIA OPTION B			
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH, WITH FINES AS INDICATED	20 TO 30	200	< 5
LOAMY COARSE SAND	70 TO 80	10	85 TO 100
		20	70 TO 100
		60	15 TO 40
		200	8 TO 15



TYPICAL DRAIN MANHOLE

N.T.S

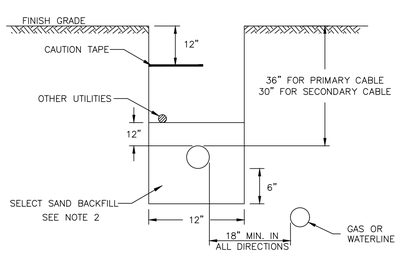


TYPICAL CATCH BASIN DETAIL

N.T.S

DRAINAGE STRUCTURE NOTES:

1. DRAINAGE STRUCTURE MATERIALS SHALL COMPLY WITH NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION 600, SECTION 604.
2. SITE CONTRACTOR SHALL BACKFILL AROUND DRAINAGE STRUCTURES IN 6 TO 8 INCH LIFTS, ATTAINING 95% MAXIMUM PROCTOR DENSITY FOR EACH LIFT.
3. PIPE OPENINGS SHALL BE FULLY MORTARED ON OUTSIDE PRIOR TO BACK FILLING. INSIDE OF PIPE OPENINGS SHALL BE MORTARED AND ALLOWED TO CURE PER MANUFACTURERS REQUIREMENTS PRIOR TO RECEIVING RUNOFF.
4. JOINTS BETWEEN ADJACENT RISERS SHALL BE FULLY SEALED WITH ELASTOMERIC SEALANT PER MANUFACTURERS REQUIREMENTS.
5. WHEN FRAME/GRATE ARE LOCATED IN A PAVED AREA, THEY SHALL BE BROUGHT TO FINISH GRADE AFTER BINDER COURSE PAVEMENT IS PLACED. THE EXCAVATION REQUIRED AROUND THE GRATE AND FRAME SHALL BE BACKFILLED FLUSH WITH THE TOP OF BINDER COURSE WITH NHDOT CLASS B CONCRETE.
6. FRAME AND GRATE:
   CATCH BASINS:
   NEENAH LIFTMATE OR PAMREX

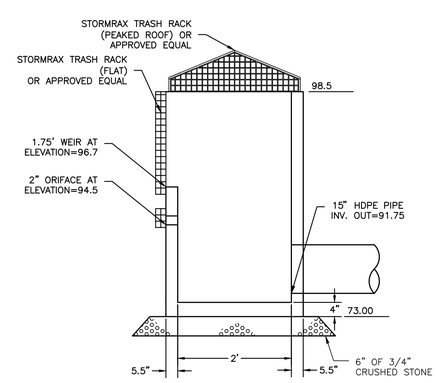


TELEPHONE & ELECTRIC TRENCH

N.T.S

NOTES:

1. CONSTRUCTION TO BE IN ACCORDANCE WITH PSNH CONSTRUCTION STANDARDS FOR NEW ELECTRICAL SERVICE WORK BY CONTRACTORS, MOST RECENT EDITION.
2. SELECT SAND BACKFILL SHALL CONSIST OF A FINE GRANULAR MATERIAL OF WHICH 100% SHALL PASS THROUGH A 1/4" SIEVE. EXCEPT NATURALLY OCCURING SMOOTH ROUND PEBBLES NO GREATER THAN 3/8" IN DIAMETER ARE PERMITTED AS LONG AS THEIR TOTAL VOLUME PER CUBIC FOOT OF SAND DOES NOT EXCEED 1%. THE SAND SHALL BE COMPLETELY FREE OF FROZEN LUMPS, ROCKS, STONES, DEBRIS AND RUBBISH. BACKFILL SHALL BE THOROUGHLY COMPACTED IN 6" LIFTS.
3. CONDUIT SIZES TO BE 5" 3-PHASE PRIMARY AND 4" 3-PHASE SECONDARY. ALL CONDUIT SIZES TO BE VERIFIED BY PSNH.
4. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND WHERE APPLICABLE THE NATIONAL ELECTRIC CODE.



MODIFIED OUTLET CONTROL STRUCTURE FOR STORMWATER POND

N.T.S

NO.	REVISIONS	DATE	INT.
2	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 1/14/21	2/1/21	MCS
1	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 10/8/20	12/29/20	MCS

SEAL: STATE OF NEW HAMPSHIRE - MICHAEL J. SEVERT No. 6397 - LICENSED PROFESSIONAL ENGINEER

DATE ISSUED: 1/5/20
SCALE: AS SHOWN
DESIGNED BY: MJS
DRAWN BY: MCS
APPROVED BY: MJS
DWG FILE:

CONSTRUCTION DETAILS
prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP 1, LOT 6
54 BACK RIVER ROAD, DOVER, NH

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JOB: 20-011

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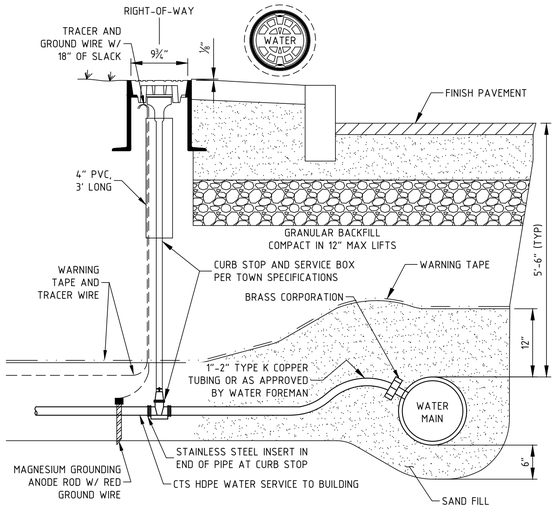
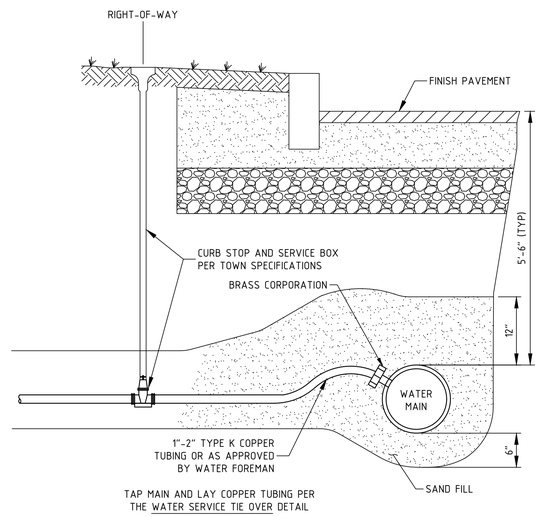


LOCATOR BOX:
1. LOCATOR BOX AND COVER SHALL BE CAST IRON.
2. LOCATOR BOXES SHALL BE SET AT 500' INTERVALS AND AT BENDS.
3. PROVIDE 18" WIRE LOOP INSIDE THE LOCATOR BOX.
4. LOCATOR BOXES SHALL BE SET AT GRADE IN CROSS COUNTRY LOCATIONS AND ⅞" BELOW PAVEMENT, TAPERED OVER 2'.

TRACER WIRE:
1. CONTINUOUS, DIRECT BURIAL RATED.
2. 12 AWG HIGH STRENGTH SOLID CORE COPPER CLAD STEEL.
3. COATING COLOR SHALL CONFORM TO THE APWA UNIFORM COLOR CODE.

REPAIRS:
1. SPLICES SHALL BE MADE WITH CORROSION PROOF, LOCKABLE WIRE CONNECTORS.

WATER SERVICE TRACER WIRE INSTALLATION
N.T.S.



WATER SERVICE INSTALLATION
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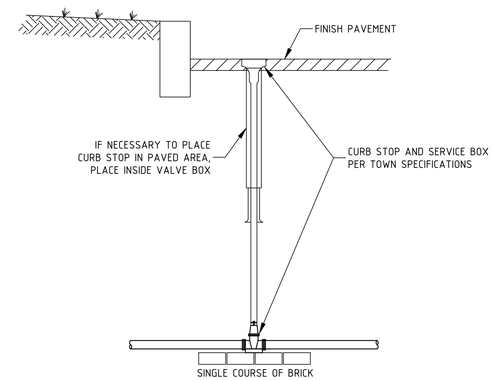

CURB STOP IN PAVEMENT
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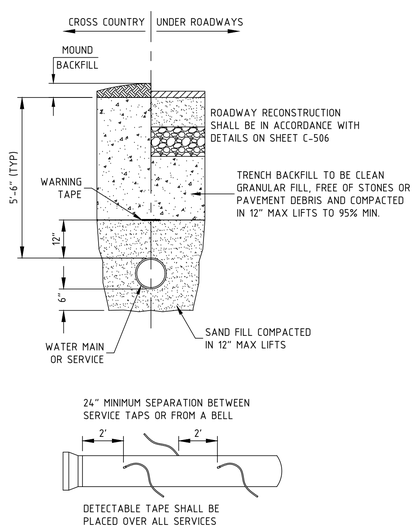

WATER MAIN TRENCH DETAIL
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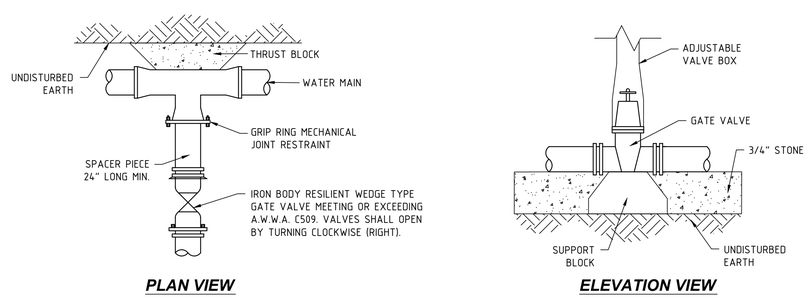

PLAN VIEW **ELEVATION VIEW**

TYPICAL VALVE CONNECTION
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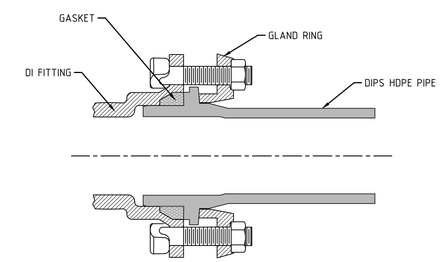

NOTES
1. FITTING MUST COMPLY WITH AWWA C153.
2. HDPE DISTRIBUTION PIPES MUST BE DIPS.
3. INSTALL FITTING FOLLOWING MANUFACTURERS INSTRUCTIONS.
4. HDPE PIPE STIFFENERS MUST BE MADE OF 316 STAINLESS STEEL.

DI PIPE TO PE PIPE CONNECTIONS
N.T.S.

NO.	REVISIONS	DATE	INT.
2.	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 1/14/21	2/1/21	MCS
1.	REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 10/8/20	1/5/21	MCS
0.	INITIAL SUBMISSION TO DOVER	9/17/20	AWS

SEAL: STATE OF NEW HAMPSHIRE - MICHAEL J. SEVERT No. 6397 - PROFESSIONAL ENGINEER

DATE ISSUED: 6/12/20
SCALE: AS SHOWN
DESIGNED BY: MJS
DRAWN BY: JLG
APPROVED BY: MJS
DWG FILE: NM20011_Details_03.dwg

CONSTRUCTION DETAILS

prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP I, LOT 6

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JOB: 20-011

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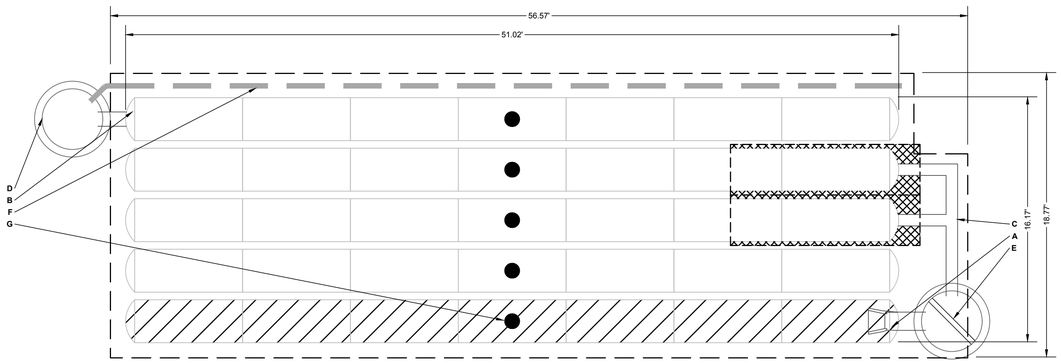
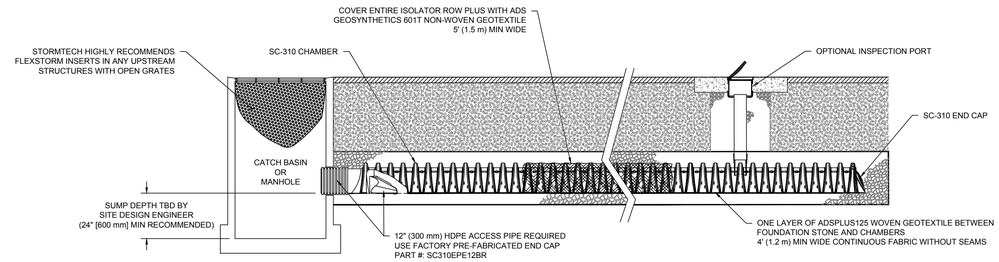
PROPOSED LAYOUT		PROPOSED ELEVATIONS	
35	STORMTECH SC-310 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	130.70
10	STORMTECH SC-310 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	124.70
6	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	124.20
12	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	124.20
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	124.20
1492	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE:	123.20
		TOP OF SC-310 CHAMBER:	122.70
		12" ISOLATOR ROW PLUS INVERT:	121.45
		10" BOTTOM CONNECTION INVERT:	121.43
1043	SYSTEM AREA (SF)	8" x 8" BOTTOM MANIFOLD INVERT:	121.42
150.7	SYSTEM PERIMETER (ft)	BOTTOM OF SC-310 CHAMBER:	121.37
		UNDERDRAIN INVERT:	120.37
		BOTTOM OF STONE:	120.37

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	12" BOTTOM PREFABRICATED END CAP, PART#: SC310EPE12BR / TYP OF ALL 12" ISOLATOR ROW PLUS CONNECTIONS	0.90"	
PREFABRICATED END CAP	B	10" BOTTOM PREFABRICATED END CAP, PART#: SC310EPE10B / TYP OF ALL 10" BOTTOM CONNECTIONS	0.70"	
MANIFOLD	C	8" x 8" BOTTOM MANIFOLD, MOLDED FITTINGS	0.60"	
CONCRETE STRUCTURE	D	OCS (DESIGN BY ENGINEER / PROVIDED BY OTHERS)		1.0 CFS OUT
CONCRETE STRUCTURE	E	(DESIGN BY ENGINEER / PROVIDED BY OTHERS)		1.8 CFS IN
W/WEIR				
UNDERDRAIN	F	4" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN		
INSPECTION PORT	G	4" SEE DETAIL (TYP 5 PLACES)		





SC-310 ISOLATOR ROW PLUS DETAIL
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INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

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

ISOLATOR ROW PLUS (SEE DETAIL)

PLACE MINIMUM 12.50' OF ADSPLUS125 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS

BED LIMITS

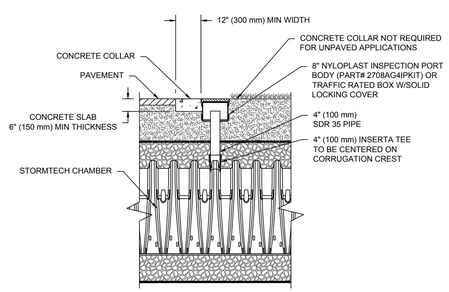
NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- **NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

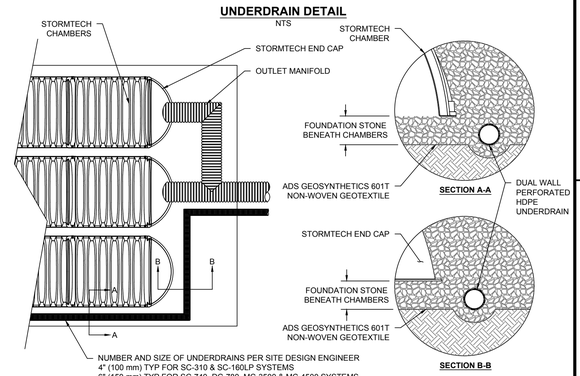
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN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

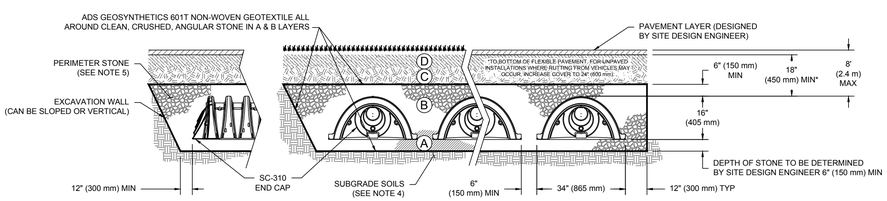


NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)
NTS

UNDERDRAIN DETAIL
NTS





NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418-16a (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

NO.	REVISIONS	DATE	INT.
	INITIAL SUBMISSION TO NHDES AoT	8/20/21	MCS

SEAL: STATE OF NEW HAMPSHIRE - MICHAEL J. SEVERT No. 9397 - LICENSED PROFESSIONAL ENGINEER

DATE ISSUED: 8/20/21
SCALE: AS SHOWN
DESIGNED BY: MJS
DRAWN BY: JLG
APPROVED BY: MJS
DWG FILE: NM20011_Details_03.dwg

CONSTRUCTION DETAILS

prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP I, LOT 6

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 Railroad St., P.O. Box 359
Newmarket, NH 03857
Phone (603) 659-5170, Fax (603) 659-4627
E-mail: mjs@mjs-engineering.com

JOB: 20-011

C-509

(P20-60)

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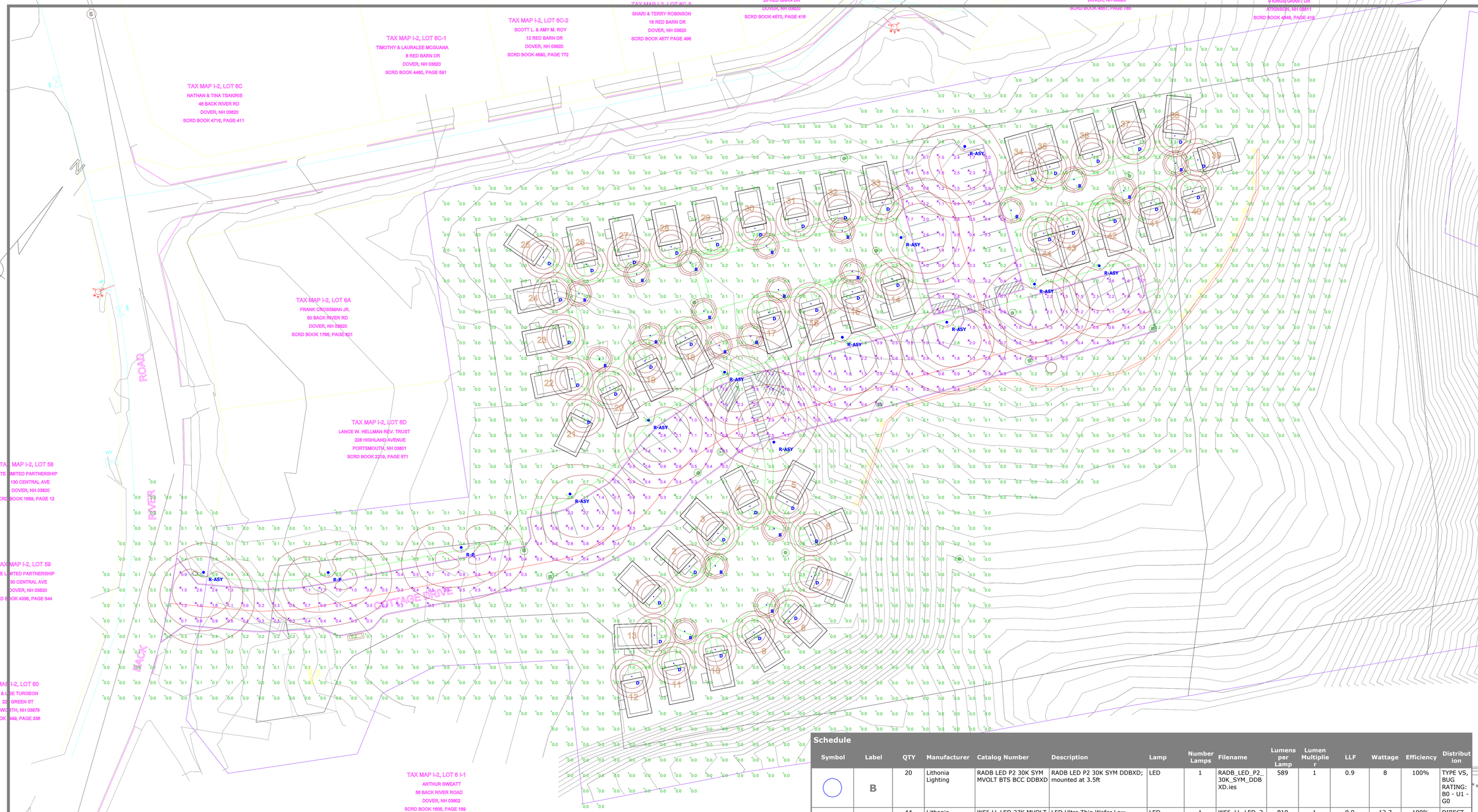
2021-09-14 03:52 pm



Plan View
Scale - 1" = 30ft

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Ground	+	0.3 fc	10.9 fc	0.0 fc	N/A	N/A
Parking Lot	✳	0.9 fc	3.1 fc	0.2 fc	15.5:1	4.5:1

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens per Lamp	Lumen Multiplier	LLF	Wattage	Efficiency	Distribution
○	B	20	Lithonia Lighting	RADB LED P2 30K SYM MVOLT BTS BCC DDBXD	RADB LED P2 30K SYM DDBXD; mounted at 3.5ft	LED	1	RADB_LED_P2_30K_SYM_DDBXD.ies	589	1	0.9	8	100%	TYPE VS, BUG RATING: B0 - U1 - G0
○	D	44	Lithonia Lighting	WF6 LL LED 27K MVOLT	LED Ultra Thin Wafer Low Lumen 2700K, 120 - 277V; mounted at 9ft	LED	1	WF6_LL_LED_27K_MVOLT.ies	819	1	0.9	12.7	100%	DIRECT, SC-0=1.24, SC-90=1.24
◠ ⊙	R-ASY	11	Lithonia Lighting	RADPT LED P2 30K ASY MVOLT RADPT20 HS DDBXD with RSS 16 4B T20 DDBXD	RADEAN Post-Top with P2 3000K Asymmetric distribution with house-side shield; mounted at 16ft	LED	1	RADPT_P2_30K_ASY_HS.ies	4205	1	0.9	38.0107	100%	TYPE IV, VERY SHORT, BUG RATING: B1 - U2 - G2
◠ ⊙	R-P	2	Lithonia Lighting	RADPT LED P2 30K PATH MVOLT RADPT20 HS DDBXD with RSS 16 4B T20 DDBXD	RADEAN Post-Top with P2 3000K Pathway distribution with house-side shield; mounted at 16ft	LED	1	RADPT_P2_30K_PATH_HS.ies	3509	1	0.9	38.0107	100%	TYPE IV, SHORT, BUG RATING: B1 - U2 - G2

VISUAL

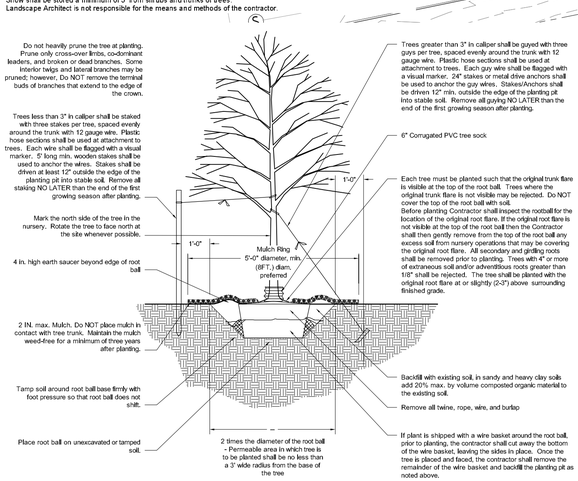
54 BACK RIVER ROAD
DOVER, NH
Site Lighting Layout

Designer
Heidi G. Connors
Visible Light, Inc.
24 Stickney Terrace
Suite 6
Hampton, NH 03842
Date
02/01/2021
Scale
1"=30'
Drawing No.

Summary

LANDSCAPE NOTES

1. Design is based on drawings by MJS Engineering, P.C. dated 03/01/21 and may require adjustment due to actual field conditions.
2. The contractor shall follow best management practices during construction and shall take all means necessary to stabilize and protect the site from erosion.
3. Erosion Control shall be in place prior to construction.
4. Erosion Control shall be staked in place between the work and Water bodies, Wetlands and/or drainage ways prior to any construction.
5. The Contractor shall verify layout and grades and inform the Landscape Architect or Client's Representative of any discrepancies or changes in layout and/or grade relationships prior to construction.
6. It is the contractor's responsibility to verify drawings provided are to the correct scale prior to any bid, estimate or installation. A graphic scale bar has been provided on each sheet for this purpose. If it is determined that the scale of the drawing is incorrect, the landscape architect will provide a set of drawings at the correct scale, at the request of the contractor.
7. Trees to Remain within the construction zone shall be protected from damage for the duration of the project by snow fence or other suitable means of protection to be approved by Landscape Architect or Client's Representative. Snow fence shall be located at the drip line at a minimum and shall include any and all surface roots. Do not fill or mulch on the trunk flare. Do not disturb roots. In order to protect the integrity of the roots, branches, trunk and bark of the tree(s) no vehicles or construction equipment shall drive or park in or on the area within the drip line(s) of the tree(s). Do not store any refuse or construction materials or portalets within the tree protection area.
8. Location, support, protection, and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor.
9. The Contractor shall verify exact location and elevation of all utilities with the respective utility owners prior to construction. Call DIGSAFE at 1-888-344-7233.
10. The Contractor shall procure any required permits prior to construction.
11. Prior to any landscape construction activities Contractor shall test all existing loam and loam from off-site intended to be used for lawns and plant beds using a thorough sampling throughout the supply. Soil testing shall indicate levels of pH, nitrates, macro and micro nutrients, texture, soluble salts, and organic matter. Contractor shall provide Landscape Architect with test results and recommendations from the testing facility along with soil amendment plans as necessary for the proposed plantings to thrive. All loam to be used on site shall be amended as approved by the Landscape Architect prior to placement.
12. Contractor shall notify landscape architect or owner's representative immediately if at any point during demolition or construction a site condition is discovered which may negatively impact the completed project. This includes, but is not limited to, unforeseen drainage problems, unknown subsurface conditions, and discrepancies between the plan and the site. If a contractor is aware of a potential issue, and does not bring it to the attention of the landscape architect or owner's representative immediately, they may be responsible for the labor and materials associated with correcting the problem.
13. The Contractor shall furnish and plant all plants shown on the drawings and listed thereon. All plants shall be nursery-grown under climatic conditions similar to those in the locality of the project. Plants shall conform to the botanical names and standards of size, culture, and quality for the highest grades and standards as adopted by the American Association of Nurserymen, Inc. in the American Standard of Nursery Stock, American Standards Institute, Inc. 230 Southern Building, Washington, D.C. 20005.
14. A complete list of plants, including a schedule of sizes, quantities, and other requirements is shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.
15. All plants shall be legibly tagged with proper botanical name.
16. The Contractor shall guarantee all plants for not less than one year from time of acceptance.
17. Owner or Owner's Representative will inspect plants upon delivery for conformity to Specification requirements. Such approval shall not affect the right of inspection and rejection during or after the progress of the work. The Owner reserves the right to inspect and/or select all trees at the place of growth and reserves the right to approve a representative sample of each type of shrub, herbaceous perennial, annual, and ground cover at the place of growth. Such sample will serve as a minimum standard for all plants of the same species used in this work.
18. No substitutions of plants may be made without prior approval of the Owner or the Owner's Representative for any reason.
19. All landscaping shall be provided with the following:
    a. Outside hose attachments spaced a maximum of 150 feet apart, and
    b. An underground irrigation system, or
    c. A temporary irrigation system designed for a two-year period of plant establishment.
20. If an automatic irrigation system is installed, all irrigation valve boxes shall be located within planting bed areas.
21. The contractor is responsible for all plant material from the time their work commences until final acceptance. This includes but is not limited to maintaining all plants in good condition, the security of the plant material once delivered to the site, and watering of plants. Plants shall be appropriately watered prior to, during and after planting. It is the contractor's responsibility to provide clean water suitable for plant health from off site, should it not be available on site.
22. All disturbed areas will be dressed with 6" of topsoil and planted as noted on the plans or seeded except plant beds. Plant beds shall be prepared to a depth of 12" with 75% loam and 25% compost.
23. Trees, ground cover, and shrub beds shall be mulched to a depth of 2" with one-year-old, well-composted, shredded native bark not longer than 4" in length and ½" in width, free of woodchips and sawdust. Mulch for ferns and herbaceous perennials shall be no longer than 1" in length. Trees in lawn areas shall be mulched in a 5' diameter min. saucer. Color of mulch shall be black.
24. In no case shall mulch touch the stem of a plant nor shall mulch ever be more than 3" thick total (including previously applied mulch) over the root ball of any plant.
25. Secondary lateral branches of deciduous trees overhanging vehicular and pedestrian travel ways shall be pruned up to a height of 6' to allow clear and safe passage of vehicles and pedestrians under tree canopy. Within the sight distance triangles at vehicle intersections the canopies shall be raised to 8' min.
26. Snow shall be stored a minimum of 5' from shrubs and trunks of trees.
27. Landscape Architect is not responsible for the means and methods of the contractor.



TREE PLANTING DETAIL

Plant List

Symbol	Botanical Name	Common Name	Quantity	Size	Comments
TREES & SHRUBS					
Ar	*Acer rubrum 'Red Sunset'*	Red Sunset Red Maple	2	2.5-3" cal.	BB
As	*Acer saccharum 'Green Mountain'*	Gree Mountain Sugar Maple	4	2.5-3" cal.	BB
Cb	*Carpinusbetulus 'Frans Fontaine'*	Frans Fontaine Hombeam	9	2.5-3" cal.	BB
Ls	*Liquidambar sytraciflua*	Sweetgum	5	2.5-3" cal.	BB
Mt	*Malus 'Tina'*	Tina Crabapple	5	2.5-3" cal.	BB
Psk	*Prunus serrulata 'Kwanzan'*	Kwanzan Cherry	1	2.5-3" cal.	BB
Qr	*Quercus rubra*	Red Oak	6	2.5-3" cal.	BB
Ua	*Ulmus americana 'Princeton'*	Princeton American Elm	5	2.5-3" cal.	BB
Hyl	*Hydrangea 'Incrediball'*	Incredibalil Hydrangea	5	5 gal	
EVERGREEN TREES FOR SCREENING					
Jv	*Juniperus virginiana 'Emerald Sentinel'*	Emerald Sentinel Eastern Red Cedar	8	7-8' ht.	BB
Pa	Picea abies	Norway Spruce	9	8-10' ht	BB
Pg	Picea glauca	White Spruce	17	8-10' ht	BB
Pp	Picea pungens 'Glauca'	Colorado Blue Spruce	4	8-10' ht	BB
Po	Picea orientails	Oriental Spruce	6	7-8' ht.	BB
Th	Thuja plicata 'Green Giant'	Green Giant Western Red Cedar	14	8-10' ht	BB
SEEDING					
Seed Mix "A"	*50% New England Roadside Matrix Upland Seed Mix/ 50% New England Conservation Mix, by New England Wetland Plants*			SF	
Lawn Areas	Pennington Smart Seed Tall Fescue Blend			SF	

woodburn & company
LANDSCAPE ARCHITECTURE
103 Kent Place Newmarket, New Hampshire Phone: 603.659.5949

NO.	DATE	INT.
3.	03/02/21	VM
2.	02/01/21	VM
1.	01/07/21	VM
0.	10/02/20	RW

REVISIONS

3. PER REVISED SITE PLAN
2. PER REVISED SITE PLAN
1. REVISED SUBMISSION TO DOVER PER TECHNICAL REVIEW 10/8/20
0. INITIAL SUBMISSION

LICENSED LANDSCAPE ARCHITECT
ROBERTA N. WOODBURN
No. 002
STATE OF NEW HAMPSHIRE

DATE ISSUED: 01/07/21
SCALE: 1"=30'
DESIGNED BY: RW
DRAWN BY: VM
APPROVED BY: RW
DWG FILE:

LANDSCAPE PLAN

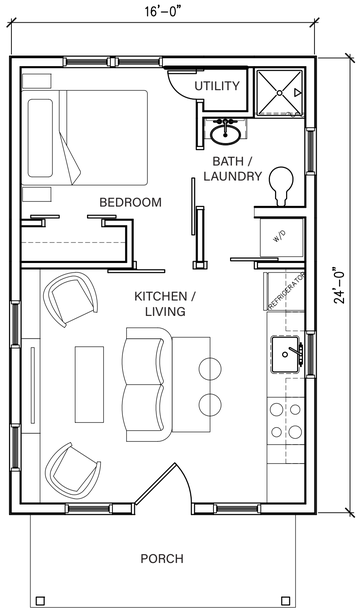
prepared for
54 BRR, LLC
JOHN RANDOLPH
TAX MAP I, LOT 6
54 BACK RIVER ROAD, DOVER, NH

MJS ENGINEERING, P.C.
CIVIL • STRUCTURAL • ENVIRONMENTAL
5 Railroad St., P.O. Box 359
Newmarket, NH 03857
Phone: (603) 659-4939 Fax: (603) 659-4627
E-mail: mjs@mjs-engineering.com

JOB: 20-011

LA101

(P20-60)



FLOOR PLAN - 384 SF (1)

SCALE: 1/4"=1'–0"

RENDERING & PROPOSED PALETTE

BLEEKER BEIGE
Benjamin Moore or similar

COPLEY GRAY
Benjamin Moore or similar

NIMBUS
Benjamin Moore or similar

NORMANDY
Benjamin Moore or similar

SAYBROOK SAGE
Benjamin Moore or similar

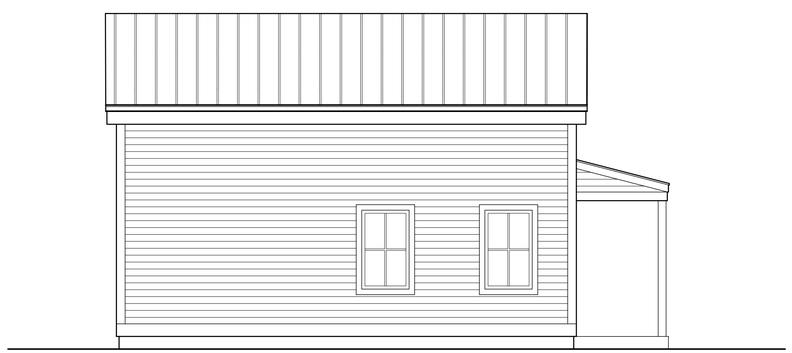
DISTANT GRAY
Benjamin Moore or similar

STONINGTON GRAY
Benjamin Moore or similar

WHALE GRAY
Benjamin Moore or similar

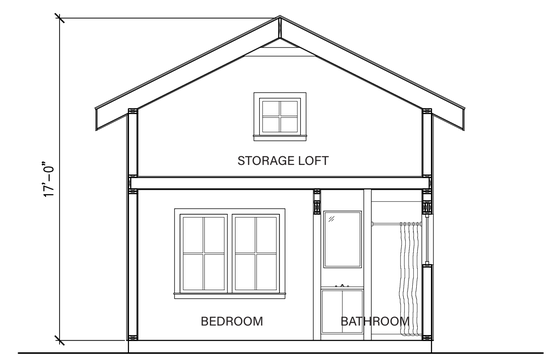
ELEVATION (2)

SCALE: 1/4"=1'–0"



ELEVATION (3)

SCALE: 1/4"=1'–0"



SECTION (4)

SCALE: 1/4"=1'–0"

NO.	DESCRIPTION	DATE

REVISIONS

NOT FOR CONSTRUCTION

SEAL

We GSD Studios
ARCHITECTURE | PLANNING
22 Jady Hill Ave
Exeter, NH 03833

DESIGNED BY: MWR
DRAWN BY: MWR

PROJECT: 200302.01

54 BACK RIVER ROAD
DOVER, NEW HAMPSHIRE

COTTAGE CONCEPT PLANS & RENDERINGS

SCALE: AS NOTED
DATE: 02.01.2021
DRAWING NO.:

A1.1

1 Bedroom

Yr	HUD Rate	Actual	P&I	Prop Tx	HOA	Purchase		Prin 22	Prin 23	Prin 24	Prin 25	Prin 26	Prin 27	Prin 28	Prin 29	Prin 30	Prin 31	Pd Dn
22	1092	1087	938	94	55	165,000		1659	1770	1889	2016	2151	2295	2448	2612	2787	2974	22601
23	1232	1235	1080	94	61	190,000			1911	2039	2175	2321	2477	2642	2820	3008	3210	22603
24	1582	1578	1405	94	79	247,000				2484	2651	2828	3018	3220	3435	3666	3911	25213
25	1517	1508	1313	125	75	231,000					2323	2479	2645	2822	3011	3213	3428	19921
26	1677	1635	1365	187.5	83	240,000						2414	2575	2748	2932	3128	3338	17135
27	1730	1761	1444	196 (5%)	86	254,000							2555	2726	2908	3103	3311	14603
28	1800(3%)	1796	1501	205 (5%)	90	264,000								2655	2833	3023	3225	11736
29	1870(3%)	1865	1558	214 (5%)	93	274,000									2756	2940	3137	8833
30	1940(3%)	1935	1615	223 (5%)	97	284,000										2856	3048	5904
31	2010(3%)	2010	1678	232 (5%)	100	295,000											2967	2967
	In 2031	Actual	P&I	Prop Tx	HOA	Mnthly Svd												
22	2010	**1270**	938	232	100	740												
23	2010	1412	1080	232	100	598												
24	2010	1720	1388	232	100	290												
25	2010	1640	1308	232	100	370												
26	2010	1697	1365	232	100	313												
27	2010	1771	1439	232	100	239												
28	2010	1833	1501	232	100	177												
29	2010	1890	1558	232	100	120												
30	2010	1947	1615	232	100	63												
31	2010	2010	1678	232	100	0												

1 Bedroom

Growth	Total
130000	152601
105000	127603
48000	73213
64000	83921
55000	72135
41000	55603
31000	42736
21000	29833
11000	16904
0	2967

DECLARATION OF CONDOMINIUM
OF
THE BACK RIVER ROAD CONDOMINIUM,
DOVER, NEW HAMPSHIRE

This Declaration is made this ___ day of _____, 2026 by 54 BRR, LLC, a New Hampshire limited liability company with a place of business at 1 Stagecoach Road, Durham, NH 03824 , and its successors or assigns, ("Declarant") for the purpose of submitting certain property described in this Declaration to condominium usage and to ownership in accordance with the provisions of the Condominium Act, New Hampshire Revised Statues Annotated, Chapter 356-B, now and as hereafter may be amended. .

ARTICLE 1
SUBMISSION OF PROPERTY

The Declarant hereby submits land located in the City of Dover, Strafford County, New Hampshire, consisting of approximately 7.36 acres, more or less, situated on the easterly side of Back River Road, and more particularly described in **Exhibit A** hereto ("Land"), together with the buildings and other improvements heretofore or hereafter constructed thereon, and all easements, rights and appurtenances thereto described in said **Exhibit A**, or as shown on plans of said land, all of which are owned by the Declarant, to the provisions of the Condominium Act, in order to create a plan of condominium ownership in such property containing up to forty four (44) units, as shown on the following plan; See plan of land entitled, "Condominium Site Plan," project for "Back River Road Condominiums, Back River road, Dover, New Hampshire 03820" prepared by MJS Engineering, P.C. **dated _____2026 and recorded in the Strafford County Registry of Deeds as Plan #D-_____.** The Condominium Units created herein shall be permanently restricted as workforce housing units that are affordable to a household with a HUD Median Family Income for a one bedroom unit in the Portsmouth-Rochester, NH HMFA as published by the New Hampshire Housing Finance Authority in April of each year.

ARTICLE 2
DEFINITIONS

As provided in Section 12, I of the Condominium Act capitalized terms not otherwise defined in this Declaration or in the Bylaws attached hereto as Exhibit B, as amended from time to time, shall have the meanings specified in Section 3 of the Condominium Act. The following terms are expressly defined herein:

(a) "Building" means any building constructed on a Unit or on the Limited Common Area assigned to a Unit as permitted herein, which Buildings shall be owned by the Unit Owner of the Unit.

(b) "Bylaws" mean the Bylaws provided for the self-government of the Condominium attached hereto, as amended from time to time.

(c) "Common Area" means all parts of the Property other than the Units, as more fully set forth in Article 5 of this Declaration and in the Site Plans, and includes the Limited Common Area.

(d) "Condominium" means "Back River Road Condominium", the condominium established by this Declaration.

(e) "Condominium Act" means Chapter 356-B of the New Hampshire Revised Statutes Annotated, as amended.

(f) "Condominium Plan" or "Plans" or "Plat" means the plan entitled Condominium Site Plan," project for, "Back River Road Condominium, Back River Road, Dover, NH 03820," prepared by MJS Engineering, P.C., **dated _____, 2026 and recorded in the Strafford County Registry of Deeds as Plan #D-_____,** and any revisions thereof, recorded in the Registry simultaneously herewith or recorded subsequently pursuant to the Condominium Act, and any updated or amended site or floor plans.

(g) Limited Common Area" means all those certain portions of the Common Area which are assigned to each Unit. Such Limited Common Area shall be restricted for use by the owner(s) of each such Unit, as more fully set forth in this Declaration and in the Plans, and additional limited common area as Declarant may determine in the future.

(k) "Majority of the Owners" means the Owners of the Units to which more than fifty one percent (51%) of the votes in the Unit Owners' Association appertain. Any specified percentage of the Owners means the Owners of Units to which the specified percentage of the votes in the Unit Owners' Association appertain.

(l) "Owner" or "Unit Owner" means any Person or Persons who holds or hold fee simple title to a Unit. No mortgagee shall be deemed to be an Owner until such mortgagee has acquired such title pursuant to foreclosure or any procedure in lieu of foreclosure.

(m) “Percentage Interest” or “Undivided Percentage Interest” means the interest of each Unit in the Common Area as set forth in **Exhibit C** of this Declaration and as may be amended hereafter, which may be expressed as a fraction.

(n) “Registry” means the Strafford County Registry of Deeds, or any then applicable real property recording office.

(o) “Property” means the Land and the buildings and all other improvements heretofore and hereafter constructed thereon, and all easements, rights and appurtenances thereto, and all articles of personal property intended for common use in connection therewith which are submitted to the Condominium by this Declaration, as amended from time to time.

(p) “Rules” means those rules and regulations adopted from time to time by the Association relative to the use of the Condominium, provided they are not in conflict with the condominium Act, the Declaration or the Bylaws, the City of Portsmouth Zoning Ordinance and the conditions on the plat approved by the Planning Board.

(q) "Site Plan" means the plat of the land submitted to the Condominium Act by this Declaration, which plat is being recorded in the Registry simultaneously herewith. Such term shall include, as appropriate, any such plat recorded in the Registry: (i) subsequently pursuant to RSA 356-B: 20, III, and 356-B:21 or any other provisions of the Condominium Act, or (ii) subsequently for the purpose of amending any previously recorded plat, as the case may be.

(r) "Unit" means a unit as defined by the Condominium Act, which is bounded and described (i) as shown on the Condominium Site Plan; (ii) Floor Plan; and (iii) as provided in Article 4, below.

(s) “Unit Owners’ Association” or “Association” means all of the Owners acting as a group in accordance with this Declaration and Bylaws.

ARTICLE 3
STATUTORY REQUIREMENTS

The following information is provided pursuant to the provisions of the Condominium Act:

(a) Name: The name of the Condominium is “Back River Road Condominium.”

(b) Location: The Condominium is located at 54 Back River Road, City of Dover, Strafford County, New Hampshire.

ARTICLE 4
DIVISION OF PROPERTY

The property, together with all buildings and improvements thereon, is hereby divided into forty four (44) separate freehold condominium units, hereinafter referred to as Units #1, #2, #3, #4, #5, #6, #7, #8, #9, #10, #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #21, #22. #23, #24,

#25, #26, #26, #28, #29, #30, #31, #32, #33, #34, #35, #36, #37, #38, #39, #40, #41, #42, #42, #44 and #44. The layout, numerical designation, dimensions and area of each Unit are shown on the Condominium Site Plan.

(a) The boundaries of the Units are defined as follows:

For each Unit the identification number, location, and Unit area are shown on the plans.

Each unit includes the following items:

i. All interior spaces and partitions, interior doors, the sliding glass door (if any), and interior stairways within the unit, if any;

ii. Finished flooring, floor coverings, carpeting and the like, and finished wall and ceiling coverings (including paint, wallpaper, paneling, tile and any other materials constituting any part of the finished surfaces thereof), fixtures, hardware and equipment servicing that unit;

iii. Windows, skylights (if any), doors and garage doors (if any), providing access to the common elements, including their screens, storm windows, locks and hardware, and the screens forming part of the screened porch, if any;

iv. Bathroom fixtures and kitchen fixtures, and surface mounted and recessed medicine or other cabinets and appliances and their water and waste connections;

v. The hot water heater, space heating equipment and air-conditioning equipment (whether located inside or outside the unit), if any, servicing each unit and the controls appurtenant thereto;

vi. Electrical, telephone and cable wiring, equipment, outlets and lighting devices from the point where the feed wire enters the unit's circuit breaker distribution box inwards, the oil tank (if any) and related pipes, equipment and appurtenances, utility lines, pipes and equipment serving only that unit and located within its general boundary lines as hereinafter described; and

vii. The exterior building envelope of each freestanding dwelling.

(b) Unit Boundaries. The boundaries of each Unit, and the garage attached to each unit (if any), is

i. Horizontal Boundaries: the exterior surface of the building envelope of each freestanding dwelling, including, without limitation, the exterior roof.

ii. Vertical Boundaries: the most exterior surface of the walls, and outer finished surface of doors, windows, skylights.

iii. Each Unit includes all yard, joists, columns, studs, beams, and rafters.

(c) Upon completion of any and all structures constructed within the unit boundaries the unit owner shall record a floor plans pursuant to RSA 356-B:20.

ARTICLE 5
DESCRIPTION OF COMMON AREAS

Common Areas are set forth on the Condominium Plan Common Areas include, but are not limited to, the following:

SECTION A. All open space, common utilities, walkways, and paths.

SECTION B. All roadways servicing the Condominium and shown on the Plat shall be private and shall be maintained as Common Area by the Association.

ARTICLE 6
DESCRIPTION OF LIMITED COMMON AREA

Limited Common Area (herein "LCA") is defined as a portion of the Common Area which has been reserved for the exclusive use of the specific Unit or Units to which the Limited Common Area is assigned.

Limited Common Area shall be assigned as set forth in these Condominium Instruments. The "Condominium Instruments" is a term collectively referring to the Declaration, the By-Laws, and the Condominium Site Plan, and the building envelopes depicted on the Condominium Site Plan and recorded pursuant to the provisions of the Condominium Act. To the extent there is a conflict within the Condominium Instruments regarding the assignment of the Limited Common Area to a specific Unit, the assignment of Limited Common Area as set forth on the Condominium Plan shall control.

Reassignment of the LCA is expressly permitted if the reassignment complies with the Condominium Instruments and RSA 356-B, as amended. However, LCA may not be reassigned without the express written permission of the Unit Owner(s) who possesses the exclusive use of the LCA. Any reassignment of the LCA must be recorded in the Strafford Registry of Deeds to be effective.

It is the intention of the Declarant that the following portions of the Common Area shall be exclusively assigned as LCA:

1. The land shown on the Condominium Plan and which includes any shared septic system serving the appurtenant units and the appurtenant driveways.

2. All piping, wiring, cable, facilities, improvements, utilities, propane tanks, septic tank or other portions of the Common Area contained within any Limited Common Area shall be exclusively assigned to such appurtenant Units, except the piping, duct work or other improvements which serve the condominium as a whole.

SECTION A. Subject to the restrictions, easements, covenants, conditions, and terms set forth in these Condominium Instruments, the Condominium Act, the ordinance of the City of Dover, and any documents of record, the Owner of the Unit which possesses the assignment and exclusive use of Limited Common Area shall be permitted to encroach upon, use and possess the Limited Common Area. The Declarant shall provide for lawn mowing, landscape maintenance, operation and maintenance of the septic systems, driveway plowing, and front walkway snow shoveling within the Limited Common Areas and Unit (collectively referred to as "Maintenance"). Each Unit Owner shall be responsible for using ice melt on driveways and walkways. The Board of Directors shall be responsible for the Maintenance when its takes control of the Association.

The exterior of Units shall be kept in good repair by the Unit Owner and maintained to the aesthetic and repair standards set forth in this Declaration and By-Laws. Failure of a Unit owner to maintain its Unit to such standards shall give cause to the Association to enter the Limited Common Area to effectuate such repairs or maintenance and to invoice the Unit Owner for the expense thereof.

SECTION B. The LCA, including any improvements or developments, shall run with and be appurtenant to the Unit to which it is assigned and shall automatically pass with the title to the Unit whether or not the LCA is expressly conveyed.

SECTION C. Unit Owners shall be permitted to enhance the landscaping within their LCA with plants, small shrubs and flowers only within the existing landscaping beds installed by the Declarant. Hardscapes raised landscaping beds, additional planting beds, gardens, trees, and any other yard enhancements shall require approval from the Board of Directors and the maintenance and upkeep of these enhancements shall be the responsibility and costs of the homeowner, not the Association.

ARTICLE 7
ALLOCATION OF UNDIVIDED INTERESTS ("COMMON INTERESTS")

There is hereby allocated to each Unit an undivided interest in the Common Areas as set forth on **Exhibit C** attached hereto and made a part hereof, under the column "Common Interest". Said undivided interest appurtenant to each Unit is herein called the "common interest". The interest appurtenant to each Unit are shown on **Exhibit C**. The common interest appurtenant to each Unit will have a permanent character and shall not be altered without the consent of the owner of each Unit affected thereby. The common interest appurtenant to each Unit will not be separated from said Unit even though not expressly mentioned or described in the conveyance or other instrument. The Common Areas will remain equal and undivided and no right shall exist to partition or divide any part thereof except as may be provided in the New Hampshire Condominium Law.

ARTICLE 8
PARKING

Subject to regulation by the Association of Unit Owners (as set forth in the Condominium By-Laws to be recorded with this Declaration as well as Rules and Regulations to be adopted) the Unit owners shall have the exclusive right to park vehicles in the portion of the Limited Common Area associated with his/her Unit as shown on the Plan.

ARTICLE 9
EASEMENTS

SECTION A. Each Unit shall have appurtenant thereto non-exclusive easements in the Common Areas designed for such purposes for ingress to, egress from, and utility services for such Unit, and in the other Common Areas for their use according to their respective purposes, subject always to the exclusive or limited use of the Limited Common Areas as herein provided. These non-exclusive easement rights include, but are not limited to, the right to for the purposes of maintenance or repair of same and any Common Area. If any Unit or Common Area encroaches on any other Unit or Common Area, a valid easement for such encroachment and the maintenance and use thereof so long as it continues shall exist.

SECTION B. To the extent permitted by New Hampshire Revised Statutes Annotated Section 356-B:42 II, as amended from time to time or any successor statute, the Association of Unit Owners shall have the irrevocable power as attorney in fact on behalf of all of the Unit Owners and their successors in title to grant easements through the Common Areas and accept easements benefiting the condominium or any portion thereof;

SECTION C. Declarant hereby expressly reserves the right to grant easements to the owners of abutting property, as well as to the City of Dover, private utilities, electric utilities or gas line utilities, telephone utilities or cable utilities, and any other utilities over, under and through the common and Limited Common Areas of the Condominium for whatever use may be made thereof.

ARTICLE 10
STATEMENT OF PURPOSES, USE, AND RESTRICTIONS.

The Units, Common Areas, and Limited Common Areas shall be occupied subject to the following rules and restrictions:

SECTION A. The Developer shall have the right to transact any business on the Condominium property necessary to consummate sales of Condominium units; including, but not limited to the right to maintain models, having signs identifying units, maintaining employees in the offices, use of the Common Areas and facilities on the Condominium property, and to show units for sale. All furniture and furnishings and equipment in the model units, signs, and all items pertaining to sales shall not be considered Common Areas and facilities and shall remain the property of the Developer. In the event there are unsold Condominium units, Developer's right as the owner of said unsold units shall be the same as all other unit owners in the Condominium; and

the Developer, as the owner of the Condominium units, shall contribute the common expenses in the same manner as other Condominium unit owners once an Occupancy Permit has been issued and the Developer, as the owner of the Condominium units, shall have a vote in the Association for each unsold Condominium unit.

SECTION B. None of the forty four (44) residential units shall be used for any purpose except residential purposes.

SECTION C. Nothing shall be done or kept in any unit or in the Common Areas or Limited Common Areas, which will increase the rate of insurance in those areas without the prior written consent of the Owners' Association. No owner shall permit anything to be done or kept in his Unit or in the Common Areas or Limited Common Areas which will result in the cancellation of insurance of any unit or any part of the Common Areas or Limited Common Areas, which would be in violation of any law. No waste will be permitted in the Common Areas or the Limited Common Areas.

SECTION D. Units shall be used solely for residential purposes and for uses accessory thereto as may be permitted from time to time by the zoning ordinances of the City of Dover. Notwithstanding the restrictions of this paragraph, the Declarant and its successors in interest may, until all of the residential Units shall have been sold by the Declarant or such successor(s), use unsold Units as models for purposes of promoting the sale or leasing of Units.

SECTION E. DESIGN AND PLAN APPROVAL.

(a) All buildings and structures shall be architecturally designed in keeping with traditional styles as determined by the Declarant. The Declarant, at Declarant's sole discretion, subject to federal, state, and/or municipal approvals, if applicable, reserves the right to approve the plans and specifications of all residences and other structures for as long as the Declarant is the owner of any Unit in the condominium. At such time as the Declarant relinquishes its control to the Association, the responsibility and/or authority for any architectural approvals in accordance with the Declaration and By-Laws shall become the responsibility of the Board of Directors of the Association or any subcommittee of the Association appointed to perform that task. The Declarant reserves the right to turn over responsibility for architectural approvals to the Association at any time prior to its conveyance of the last Unit it owns.

(b) No construction of any kind shall be commenced on any Unit nor shall any exterior addition or change or alteration be made to any structure nor shall utility lines be erected or installed until plans for the foregoing have been approved in writing by the Declarant at Declarant's sole discretion, subject to federal, state, and/or municipal approvals, if applicable. A copy of such plans shall be provided to the Association for its records.

(c) The architectural integrity of the buildings and the Units shall be preserved, and to that end, no awnings, antennas, and no exterior change, addition, structure, projection, decoration or other feature which is visible from the exterior of a Unit, shall be erected or placed upon or attached to the buildings or any Unit, or any part of either, unless previously approved by the Declarant, at Declarant's sole discretion, subject to federal, state, and/or municipal approvals, if

applicable,. This subparagraph, however, shall not restrict the right of the Owner(s) of each Unit to decorate the interiors of the Unit as said Owner(s) may desire;

SECTION F. ARCHITECTURAL FEATURES

(a) Renovations of the Units must be in keeping with the architectural character of the condominium.

(b) Without limiting the generality of the foregoing, all renovations, including the painting, repairing and replacing of exterior doors, door frames, windows, window frames, roofs, siding, porches, decks, entries and other exterior features of the buildings shall be subject to the review and approval of the Board of Directors or its subcommittee established for this purpose prior to commencement of the work.

SECTION G. No animals, livestock, or poultry, except a maximum of two (2) domesticated household pets (dog and/or cat), not raised for food or egg production, without the prior written approval of the Board, shall be kept anywhere within the Condominium. All domesticated household pets shall be tendered by his or her owner and shall be on a leash not to exceed twenty five (25') feet in length when outside of the unit. No domesticated household pet shall be tethered or tied to a fixed point in the common area or to the unit when outside of the unit. No exotic pets are allowed. Pets shall be kept under control of their owners at all times and shall not be allowed to run loose except in the presence and under the control of their owner. The board of directors may make further provisions in the Rules for the control and regulation of household pets on the property. The owner of a unit where a pet is kept or maintained shall be responsible for the maintenance of said pet, and any costs incurred by the association in enforcing the rules prescribed or to be prescribed by the Board of Directors for the control and regulation of pets and each such owner, by electing to keep a pet, shall be deemed to indemnify and hold the Board harmless against such loss or liability resulting from said pet. Owner shall comply with all town ordinances related to pets and pet laws.

SECTION H. The Declarant has adopted and the Association Board may amend from time to time detailed rules and regulations for the use and enjoyment of the Common Areas, for avoiding noxious or offensive activity which may disturb the occupants of any Unit, and for the occupants of any Unit, and for the general governing of the Condominium, consistent with, and not in conflict with, this Declaration and the Bylaws. All Owners and their tenants, guests and licensees will strictly comply with said rules and regulations.

SECTION I. Units may be rented. All rental agreements shall be documented by a written lease for a term of not less than six (6) months. The lease shall be subject to the Declaration, Bylaws and Rules and Regulations of the Condominium.

SECTION J. The Declarant shall be responsible for arranging for snow plowing and lawn mowing within the Common Areas and Limited Common Areas as a Common Expense, together with the maintenance of all drainage improvements. This includes arranging for the maintenance of the road.

SECTION K. Declarant reserves the right to make use of unsold Units as may facilitate the completion, construction or sale of the Condominium, including the right to enter all Units, and Limited Common Areas, upon reasonable notice to the Owner thereof, or Common Areas for construction purposes. Declarant reserves the right to store materials, to maintain a sales office or a rental office in any unsold Units, to show such Units for sale or lease, and to display appropriate signs, at Declarant's sole discretion, in conjunction therewith, on unsold buildings or building envelopes, and has the right to implement any other marketing signage anywhere in the entire development.

SECTION L. SIGNS. No sign of any kind, towels, blankets or laundry of any kind, shall be displayed to the public view on or from any unit without the prior written consent of the Board of Directors. No commercial or advertising signs of any kind shall be erected, placed, permitted or maintained on any common area or limited common area or improvement except such signs as may be approved by the Association for the operation of the condominium or for the sale of Units within the condominium. Declarant shall be permitted, at Declarant's sole discretion, to place signs advertising the sale or lease of units, along with development signage, entrance way signage, directional and temporary signage. Display of the United States Flag shall be regulated by RSA 356-B:47-a and rules and regulations adopted thereunder by the Owners' Association and any applicable Zoning and Planning Regulations of the City of Dover.

SECTION M. MOBILE HOMES AND TEMPORARY STRUCTURES. Mobile homes or structures of any kind or character, whether temporary or otherwise, shall not be permitted on any common area or limited common area. However, Declarant, at Declarant's sole discretion, may maintain a trailer for development purposes.

SECTION N. NO VEHICLE STORAGE. No commercial vehicles, pleasure or commercial boats or vessels of any kind, motor homes, campers, trailers, school buses, all-terrain vehicles, off road vehicles or snow mobiles shall be used in the condominium nor shall they be stored within the common area or limited common area, including, but not limited to parking areas and trails. Golf carts may be allowed on the premises subject to the approval of the Declarant, at Declarant's sole discretion, and subject to the approval of the Association after the Declarant relinquishes control. None of the above referenced vehicles may be kept on the premises except out of sight of the roadway, behind the structure or properly screened from the roadway and abutters or if the same be kept stored in a garage or outbuilding conforming to these covenants. Unregistered or uninspected automobiles or automobiles being repaired, refinished, restored or otherwise brought onto the premises for a period of more than seven (7) days shall be stored in a garage or other enclosed structure.

SECTION O. TREE REMOVAL. Only the Declarant shall be permitted to cut trees on the property. No unit owner shall be permitted to cut any tree(s) without the express written permission of the Declarant. All clearing shall comply with the City of Dover's land use regulations and ordinances.

SECTION P. No noxious or offensive activities shall be carried on in any unit or in the Common Areas or Limited Common Areas, nor shall anything be done therein which may become an annoyance or nuisance to the other unit owners.

SECTION Q. There shall be no violation of the rules of the use of the units, Common Area, or Limited Common Area as adopted by the Owners' Association and furnished in writing to the owners. The Declarant, until such time as the Owners' Association is formed, and thereafter the Owners' Association are authorized to adopt such rules.

SECTION R. Insofar as may be necessary, the Developer and persons that they may select shall have the right of ingress and egress over, upon, and across the Common Area and Limited Common Area and the right to store materials thereon and to make such other use thereof as may be reasonable, necessary, and incidental to construction and complete development and sale of the project, but the Declarant and the persons to whom he has granted this permission shall not unduly interfere with the unit owners or persons living in the units and their rights to use the Common Area and Limited Common Area and facilities.

SECTION S. No unit owner shall paint or otherwise decorate or change the appearance or the type of exterior siding of any portion of the exterior of his/her unit.

SECTION T. No unit owner shall make any alterations to his/her unit; provided, however, any unit owner shall have the right to make interior decorating improvements or any interior changes which do not affect any facilities, which are shared with the other units.

SECTION U. ADDITIONAL PROVISIONS.

The following are prohibited:

(1) Clotheslines;

(2) Swimming pools;

(3) Fences;

(4) Antennas or satellite dishes with diameters larger than 24 inches;

(5) Additions or outbuildings or appurtenances unless prior approval has been obtained in writing;

(6) Any basketball hoops, soccer nets or other personal property in the right-of-way;

ARTICLE 11

ENFORCEMENT OF RESTRICTIONS

If any person or entity shall violate or attempt to violate any of the rules or restrictions set forth in this Declaration, in the By-Laws or in any rules or regulations adopted by the Association of Unit Owners, the Association may commence legal action against said person or entity or against the owner(s) of any Units within which such violation are occurring, either to prevent or abate such violation, or to recover damages caused by such violation or both. In the event of a successful prosecution, the Association of Unit Owners will be entitled to receive its costs, including reasonable attorney's fees, as part of its judgment against the defendant.

If the Association of Unit Owners shall fail to enforce this or any one or more of the covenants set forth in this Declaration or any rule contained in the By-Laws or any rules of the Association of Unit Owners after receiving written request to do so from any Unit Owner within the condominium, then any such Unit Owner may attempt to enforce said requirements by giving ten (10) days' prior written notice to the person violating them, followed by legal proceedings either to enjoin the violation or to recover damages or other compensation, including reasonable collection costs and attorney's fees if the court deems it appropriate under the circumstances.

Notwithstanding anything in this Declaration or in the By-Laws to the contrary, no Unit Owner shall be liable for any violations except such as occur during his or her Unit ownership.

ARTICLE 12
INSURANCE

1. Insurance Required. Pursuant to Section 43 of the Condominium Act, the Board of Directors shall obtain (i) a master casualty policy affording fire and extended coverage in an amount equal to the full replacement value of the common structures within the Condominium; (ii) a master liability policy covering the Association, the Board, the Manager and agents or employees of the foregoing with respect to the Condominium, and all Owners and other persons entitled to occupy any portion of the Condominium; and (iii) such other policies as specified hereinbelow; which insurance shall be governed by the following provisions to the extent obtainable or possible:

(a) Fire insurance with standard extended coverage endorsement, vandalism and malicious mischief endorsements insuring all the common buildings in the Condominium including without limitation all portions of the interior of such buildings are for insurance purposes normally deemed to constitute part of the building and customarily covered by such insurance, such as heating and air conditioning and other service machinery, interior walls, all finished wall surfaces, ceiling and floor surfaces including any wall to wall floor coverings, bathroom and kitchen cabinets and heating and lighting fixtures, except for improvements which exceed a total value of One Thousand Dollars ($1,000.00) and are not reported to the insurer, such insurance to be in an amount at least equal to the replacement value of the buildings and to be payable to the board as trustee for the Owners and their mortgagees as their respective interests may appear.

(b) Public liability insurance in such amounts as the Board may from time to time determine, but in no event shall the limits of liability be less than One Million Dollars

($1,000,000.00) for bodily injury and property damage per occurrence, insuring the Association and all individuals referred to in Section I (ii) above, against any liability to anyone, and with cross liability coverage with respect to liability claims of anyone insured thereunder against any other insured thereunder. The insurance, however, shall not insure against individual liability for negligence occurring within a Unit or within the Limited Common Area to which a Unit has exclusive use.

(c) Workmen's compensation insurance as required by law.

(d) Such other insurance as the Board may determine.

2. General Insurance Provisions.

(a) The Board shall deal with the insurer or insurance agent in connection with the adjusting of all claims under insurance policies provided for under Paragraph 1 above and shall review with the insurer or insurance agent, at least annually, the coverage under said policies, said review to include an appraisal of improvements within the Condominium, and shall make any necessary changes in the policy provided for under Paragraph 1 (a) above (prior to the expiration date set forth in any agreed amount endorsement contained in said policy) in order to meet the coverage requirements of such Paragraph.

(b) The Board shall be required to make every effort to see that all policies of physical damage insurance provide for under Paragraph 1 above : (i) shall contain waivers of subrogation by the insurer as to claims against the Association, its employees and agents, members of the Board, the Manager, Owners and members of the family of any Owner who reside with said Owner, except in cases of arson and fraud; (ii) shall contain a waiver of defense of invalidity or prejudice on account of the conduct of any of the Owners over which the Association has "no control"; (iii) shall contain a waiver of defense of invalidity or prejudice by failure of the insured, or Owners collectively, to comply with any warranty or condition with regard to any portion of the Condominium over which the insured, or Owners collectively, have no control; (iv) shall provide that such policies may not be canceled or substantially modified without at least thirty (30) days written notice to all of the insureds thereunder and all mortgagees of Units in the Condominium; (v) shall provide that in no event shall the insurance under said policies be brought into contribution with insurance purchased individually by Owners or their mortgagees; (vi) shall exclude policies obtained by individual Owners for consideration under any "no other insurance" clause; and (vii) shall provide that until the expiration of thirty (30) days after the insurer gives notice in writing to the mortgagee of any Unit, the mortgagee's insurance coverage will not be affected or jeopardized by any act or conduct of the Owner of such Unit, the other Owners, the Board of Directors, or any of their agents, employees or household members, nor canceled for non-payment of premiums.

3. Individual Policies. All Owners shall obtain, at his own expense, insurance insuring his own unit and all buildings thereon and insurance against loss or damage to personal property used or incidental to the occupancy of the Unit, additional living expense, vandalism or malicious mischief, theft, personal liability and the like.

(a) Each Owner shall obtain additional insurance for his own benefit and at his own expense. No such policy shall be written so as to decrease the coverage under any of the policies obtained by the Board pursuant to paragraph 1(a) above, and each Owner hereby assigns to the Board the proceeds to be applied pursuant to the terms hereof as if produced by such coverage. Copies of all such policies (except policies covering only personal property, owned or supplied by individual Owners) shall be filed with the Association.

(b) Each Owner shall obtain insurance for his own benefit and at his own expense insuring all personal property presently or hereafter located in his Unit or Limited Common Area, any floor coverings, appliances and other personal property not covered in the master policy, and any insurance deductible that the unit may be assessed and all improvements.

(c) Each Owner, prior to commencement of construction of such improvements, shall notify the Board of all improvements to his Unit (except personal property other than fixtures) which exceed a total value of One Thousand Dollars ($1,000.00).

(a) Each Owner shall obtain liability insurance with respect to his ownership and/or use of his Unit.

4. Notice to Unit Owners. When any policy of insurance has been obtained on behalf of the Association, written notice of the obtainment thereof and of any subsequent changes therein or termination thereof shall be promptly furnished to each Unit Owner by the Secretary of the Association. Such notice shall be sent by U.S. Mail, return receipt requested, to all Unit Owners of record at the address of their respective Units and to such other addresses as any of them may have designated to the Secretary; or such notice may be hand delivered by the Secretary or Manager obtains a receipt of acceptance of such notice from the Unit Owner.

ARTICLE 13
CONDEMNATION

If part of the project shall be taken or condemned by any authority having the power of eminent domain such that no Unit or any part thereof is taken, then all compensation and damages for on account of the taking or the common elements, exclusive of compensation for consequential damages to certain affected Units, shall be payable to the President of the Association as Trustee for all Unit Owners and Mortgagees according to the loss or damage to their respective interests in such common elements. The Association shall have the right to act on behalf of the Unit Owners with respect to all issues related to the taking and compensation affecting the common elements. Such proceeds shall, subject to the prior rights of such mortgagees, become a part of the reserve funds of the Association.

If any Unit or a part thereof is taken, the Unit Owners directly affected by such taking and their respective mortgagees shall represent and negotiate for themselves with respect to the damages affecting their respective Units. The awards so made shall, subject to the prior rights of mortgagees, be used and distributed by the Trustee first to restore the Units on the remaining land of the project in the same manner as provided for restoration under Section 13 hereof to the extent possible, attempting to rebuild the building, containing new units of the same number, size and

basic plan as the units taken, with any excess award distributed in accordance with the provisions of this section.

ARTICLE 14
REVIEW OF INSURANCE

The Association will review not less frequently than annually the adequacy of its insurance program and will, if requested by Unit Owners report to each Unit Owner in writing the Association's conclusions and actions taken, from time to time. Such review shall include an appraisal of all improvements to the project by a representative of the insurance carrier writing the Master Policy. Also, the Association shall provide each Unit Owner with notices describing each new policy of insurance and all amendments and terminations thereof, as and when occurring, in the same manner as it provides notices of Association meetings as set forth in the By-Laws, all as required by New Hampshire Revised Statutes Annotated, Section 356-B:43 II, or any successor statute.

ARTICLE 15
AMENDMENTS TO THE CONDOMINIUM AND TERMINATION

This Declaration, the By-Laws, the Floor Plan, the Condominium Plan or any other condominium instruments (as defined by New Hampshire Revised Statutes Annotated Chapter 356-B) may be amended from time to time, or this condominium may be terminated, only in strict compliance with New Hampshire Revised Statutes Annotated Section 356-B:34, as amended from time to time, or any successor statute. In no event shall such amendments be made without the consent of at least 2/3 of the Unit Owners.

ARTICLE 16
DEFINITIONS

All terms and expressions used in this Declaration which are defined in New Hampshire Revised Statutes Annotated Chapter 356-B shall have the same meanings here unless the context otherwise requires.

ARTICLE 17
PARTIAL INVALIDITY

The invalidity of any provision of this Declaration shall not impair or affect the validity of the remainder of this Declaration and all valid provisions shall remain enforceable and in effect notwithstanding such invalidity.

ARTICLE 18
MORTGAGES

1. Notice to Board. An Owner who mortgages his Condominium Unit shall notify the Board of the name and address of his mortgagee and shall file a conformed copy

of the mortgage with the Board. The Board shall maintain suitable records pertaining to such mortgages.

2. Notice of Action. Upon written request to the Unit Owners' Association, identifying the name and address of the holder, insurer or guarantor and the Unit number or address, any such Eligible Mortgage Holder or Eligible Insurer or Guarantor will be entitled to timely written notice of:

(a) Any condemnation loss or any casualty loss which affects a material portion of the Condominium or any Unit on which there is a first mortgage held, insured, or guaranteed by such Eligible Mortgage holder or Eligible Insurer or Guarantor, as applicable;

(b) Any delinquency in the payment of assessments or charges owed by an Owner of a Unit subject to a first mortgage held, insured or guaranteed by such Eligible Mortgage Holder or Eligible Insurer or Guarantor, which remains uncured for a period of 60 days.

(c) Any lapse, cancellation or material modification of any insurance policy or fidelity bond maintained by the Owners' Association;

(d) Any proposed action which the Declaration, these Bylaws or the Condominium Act, requires the consent of a specified percentage of mortgage holders.

3. Notice of Default. The Board shall give written notice to an owner of any default by the Owner in the performance of any obligations under the Act, Declaration or Bylaws and, if such default is not cured within thirty (30) days, shall send a copy of such notice to each holder of a mortgage covering such Unit whose name and address has theretofore been furnished to the Board. No suit or other proceeding may be brought to foreclose the lien for any assessment levied pursuant to the Declaration or these Bylaws except after ten (10) days written notice to the holder of the first mortgage on the Unit which is the subject matter of such suit or proceeding.

4. Notice of Damage. The Board of Directors shall notify (i) the mortgagee of a Unit whenever damage to the Unit covered by the mortgage exceeds One Thousand Dollars ($1,000.00) and the Board is made aware of such damage; and (ii) all the mortgagees whenever damage to the Common Area exceeds Ten Thousand Dollars ($10,000.00).

5. Examination of Books. Each Owner and each mortgagee shall be permitted to examine the books on account of the Condominium at reasonable times, on business days, but, with respect to Owners, not more often than once a month.

DECLARATION OF THE BACK RIVER ROAD CONDOMINIUM EXECUTED as of the day and year first above written.

54 BBR, LLC

_____ By: _____

Witness John Randolph, Member
Duly Authorized

STATE OF NEW HAMPSHIRE
COUNTY OF STRAFFORD, ss.

This instrument was acknowledged before me on _____, 2026, by John Randolphn, Member of 54 BBR, LLC.

_____
Notary Public
Printed Name: _____
My Commission Expires: _____

EXHIBIT A

LEGAL DESCRIPTION

A certain parcel of land situated on the easterly sideline of Back River Road in Dover, County of Strafford and State of New Hampshire, more particularly bounded and described as follows:

Said lot containing 7.36 acres, more or less.

EXHIBIT B

BYLAWS
OF
THE BACK RIVER ROAD CONDOMINIUM
OWNERS ASSOCIATION

1. PURPOSE AND DEFINITIONS

Purpose. The administration of The Back River Road Condominium (the "Condominium") shall be governed by these By-Laws which are annexed to the Declaration of Back River Road Condominium (the "Declaration") and are made a part thereof.

Definitions. Certain of the terms used in these By-Laws have been defined in the Declaration and, when used herein, shall have the same meaning as set forth in the Declaration, unless the context clearly indicates a different meaning therefor.

Applicability of By-Laws. The provisions of these By-Laws are applicable to all of the property which now constitutes or hereafter may be added to the Condominium, and to the use and occupancy thereof.

2. MEMBERS AND MEETINGS

A. Members and Voting Rights. Each unit owner and the Declarant, until such time as all of the Declarant's development rights have expired or been terminated (each an "Owner" and collectively the "Owners") shall be a member of Back River Road Condominium Owner's Association. The membership of the Association shall consist of all of the Owners. The Owner of each Unit shall be entitled to one (1) vote.

B. Transfer of Membership. Membership in the Association may be transferred only as an incident to the transfer of title to a Unit and shall become effective upon recordation of a deed of conveyance to the said Unit.

C. Annual Meeting. The annual meeting of the members shall be held on the second Monday of March, for the purpose of electing officers and for the transaction of such other business as may come before the meeting.

D. Regular Meetings. Regular meetings of the Board of Directors shall be held in accordance with the provisions of RSA 356-B: 37-c at such time and place as shall be determined, from time to time, by a majority of the directors, but at least quarterly meetings shall be held during each twelve month period after the annual meeting of the Unit Owners' Association. Notice of regular meetings of the Board of Directors shall be posted to the community and given to each director, personally or by mail, e-mail, telephone or telegraph, at least five (5) business days prior to the day named for such meeting, except that no notice shall be required for a regular meeting

held immediately after, and at the same place as the annual meeting of the Association. Directors may attend vote and participate at meetings by telephone or E-Mail pursuant to RSA 356-B:37-b. Pursuant to RSA 356-B:37-c (II) at least once per quarter the Board shall hold open regular meeting to afford owners an opportunity to common on any matter affecting the Association. Notice of the meeting and any materials distributed to the Board shall be available to the owner pursuant to RSA 356-B:37 (c) (III) and (IV).

E. Special Meetings. Special meetings of the Owners may be called at any time for the purpose of considering matters which, by the terms of the Declaration, these By-Laws, or the Condominium Act, (the "Act"), require the approval of the Owners, or for any other reasonable purposes. Special meetings shall be called by the President upon at least three (3) days written notice prior to the date of the meeting.

F. Contents of Notice. Pursuant to RSA 356-B:37 (I) and 356-B:37-a, it shall be the duty of the clerk or secretary, to send to all owners of record, at least twenty-one (21) days in advance of any meeting notice of any meeting. Said Notice shall state the time, place and purpose of the meeting and shall be sent to the unit owners at the addresses on file with the Association. The clerk or secretary shall attest that the notice was sent to the list of owners attached to the affidavit at the addresses on file with the association in the manner conforming with RSA 356-B: 37-a.Any such notice shall be deemed waived by any Owner who expressly waives the same in writing or who is present in person or by proxy at any such meeting.

G. Quorum. The presence in person or by proxy at the commencement of any meeting of the Association of Unit Owners of two thirds of the Unit Owners shall constitute a quorum at all meetings of the Unit Owners. In determining a quorum, the term "all Unit Owners" in this paragraph will not include Units the title of which is held by the Association. Pursuant to RSA 356-B: 38 (III) if a quorum is not met for an annual meeting, the board shall reschedule the meeting within sixty days and provide proper notice and proxies.

H. (1). Number of Directors and Initial Selection of Board. The Board of Directors shall be composed of three (3) persons. Until the election of the Board of Directors takes place at the first annual meeting of the Unit Owners' Association, the Board of Directors shall consist of such persons as shall have been designated by the Declarant. Thereafter, anything in these Bylaws to the contrary notwithstanding, until seven (7) years after the date of recordation of this Declaration, or until ninety percent (90%) of the Units have been conveyed by the Declarant, whichever occurs later, the members of the Board of Directors shall be selected and designated by the Declarant. The Declarant shall have the right in its sole discretion to replace such Directors as may be so selected and designated by it, and to select and designated their successors. The Declarant may relinquish its rights hereunder at any prior time. Directors shall consist only of Owners or spouses of Owners, or, where a Person which is an Owner is not a natural person, any natural person having authority to execute deeds on behalf of such person.

(2). Election and Term of Office. The initial Board of Directors shall be elected to staggered terms of one, two and three years. Thereafter, each Director shall serve a three (3) year term and one Director shall be elected at every annual meeting. At the expiration of the initial term

of office of each director, his successor shall serve a term of three (3) years and each director shall hold office until his successor has been appointed or elected as appropriate.

I. Voting and Minutes. At any meeting of the Association, the Owners shall be entitled to cast their votes for each condominium unit owned as provided in the Declaration. The majority vote of all Unit Owners shall be required to adopt decisions at any meeting of the Association. Any Owner may attend and vote at such meeting in person or by proxy. The provisions of the Condominium Act shall govern all votes (including proxy votes and the votes of units owned by more than one person) at meetings of the Association. Pursuant to RSA 356-B: 37 (VI) the Board of Directors shall make copies of the minutes of all meetings available to the unit owners within 60 days of the date of the meeting or 15 days of the date the minutes are approved by the Board whichever occurs first. The association may opt to provide the minutes electronically or post them on the association website in which case the owners shall be informed of the web address.

J. Budget Ratification. Pursuant to RSA 356-B:40-c (I) the board of directors shall annually adopt a budget for the unit owners' association for consideration by the unit owners at a meeting. The board of directors shall, within 30 days of adoption of the proposed budget, provide the owners a summary of the budget, including any reserves and a statement of the basis on which any reserves are calculated and funded. The board of directors shall set a date not less than 10 days or more than 60 days after providing the budget summary to consider the ratification of the budget. Unless at that meeting, 2/3 of all unit owners reject the budget the budget is ratified whether or not a quorum is present. If no budget is proposed or the proposed budget is rejected, the last budget ratified by the owners shall be in effect until a new budget is ratified by the owners. Pursuant to RSA 356-B:40-c (II) the board of directors at any time may propose a special assessment which shall be ratified by the owners. The assessment shall be in accordance with the provisions of RSA 356-B:40-c (III).

3. POWERS

Powers and Duties. The Association shall have all of the powers and responsibilities assigned by the New Hampshire Condominium Act, RSA 356-B, as amended from time to time or any successor statute. Without limiting the generality of the preceding sentence, the Association will have all of the powers and duties necessary for the administration of the affairs of the condominium. Said powers and duties shall include, but not be limited to, the following:

A. Operation, care, upkeep and maintenance of the common areas;

B. The employment, dismissal and replacement of agents and employees to facilitate the operation, care, upkeep and maintenance of the common areas;

C. To make or cause to be made additional improvements on and as part of the common areas (subject to Article VII, Section 2 below);

D. To acquire, hold, manage, convey and encumber title to real property (including but not limited to condominium Units conveyed to or acquired by the Association) in the name of and on behalf of the Association;

E. To grant easements through the common areas and to accept easements benefitting the condominium or any portion thereof;

F. The assessment and collection of the common expenses from the Unit Owners, and the enforcement of liens to secure unpaid assessments, pursuant to RSA Section 356-B:46, as amended from time to time, or any successor statute;

G. The adoption and amendment of rules and regulations covering the details of the operation and use of the condominium, the common areas or any portion thereof;

H. Opening of bank accounts on behalf of the Association and designating the signatories required for such accounts;

I. Obtaining and administering insurance for the condominium as set forth in the Declaration;

J. Repairing, restoring or replacing common areas after damage or destruction, or as a result of eminent domain proceedings, as provided in the By-Laws;

K. Procuring legal and accounting services necessary or proper in the operation of the condominium or the enforcement of these By-Laws;

L. The assessment of costs or damages against any Unit Owner whose actions have proximately caused damages to the common areas;

M. Payment of any amount necessary to discharge any lien or encumbrance levied against the entire condominium or any part thereof which may in the opinion of the Association constitute a lien against the condominium or against the common areas, rather than merely against the interests of particular Unit Owners (where one or more Owners are responsible for the existence of such lien, they shall be jointly and severally liable for the cost of discharging it and the costs incurred by the Association by reason of said lien or liens);

N. All other powers granted by the Declaration or these By-Laws, permitted by law or enjoyed by associations of this kind.

4. OFFICERS

A. Officers. The officers of the Association shall be a president, a treasurer and a secretary, all of whom shall be appointed by the Unit Owners. Such other officers and assistant officers as may be deemed necessary may be appointed by the Association. Any two or more offices may be held by the same person. Pursuant to RSA 356-B:35 (II), the board of directors/officers shall have a fiduciary relationship to members of the unit owners' association.

B. Appointment and Term of Office. The officers of the Association shall be appointed at the annual meeting. If the appointment of officers shall not be made at such meeting,

such appointment shall be made as soon thereafter as conveniently may be. Each officer shall hold office until his successor shall have been duly appointed and shall have qualified or until his death or until he shall resign or shall have been removed in the manner hereinafter provided.

C. Removal. Any officer or agent may be removed by the Association whenever, in its judgment, the best interests of the Association will be served thereby, but such removal shall be without prejudice to the contract rights, if any, of the person so removed. Appointment of an officer or agent shall not in and of itself create contract rights. Removal of officers or directors shall be by a vote held in accordance with RSA 356-B: 40-b.

D. Vacancies. A vacancy in any office because of death, resignation, removal, disqualification, or otherwise may be filled by the Association for the unexpired portion of the term.

E. President. The president shall be the principal executive officer of the Association and shall in general supervise and control all of the business and affairs of the corporation. He shall, when present, preside at all meetings of the unit owners at meetings of the Association. He may sign with the secretary or with any other proper officer of the Association, deeds, mortgages, bonds, contracts, or other instruments which the Association has authorized to be executed, except in cases where the signing and execution thereof shall be expressly delegated by the Association or by these bylaws to some other officer or agent of the Association, or which is required by law to be otherwise signed or executed; and in general shall perform all duties incident to the office of president and such other duties as may be prescribed by the Association from time to time.

F. The Secretary. The secretary shall: (a) keep the minutes of the proceedings of the annual meeting in one or more books provided for that purpose; (b) see that all notices are duly given in accordance with the provisions of these bylaws or as required by law; (c) be custodian of the Unit Owner records of the Association; (d) keep a register of the post office address of each Unit Owner which shall be furnished to the secretary by such Unit Owner; (e) have general charge of the books of the Association; and (f) in general perform all duties incident to the office of secretary and such other duties as from time to time may be assigned to him by the president or by the Association.

G. The Treasurer. The treasurer if any is appointed and, if none, then the president shall: (a) have charge and custody of and be responsible for all funds and securities of the Association; (b) receive and give receipts for monies due and payable to the Association from any source whatsoever and deposit all such monies in the name of the Association in such banks, trust companies, or other depositories as may be authorized by the Association; (c) in general perform all of the duties incident to the office of treasurer and such other duties as from time to time may be assigned to him by the president or by the Association.

H. Execution of Instruments. All checks, drafts, notes, deeds, acceptances, conveyances, contracts or other instruments shall be signed on behalf of the Association by such person or persons as shall be provided authority by general or special resolution of the Association or, in the absence of any such resolution applicable to such instrument, by the President and by the Treasurer.

5. INTERIM MANAGEMENT BY DECLARANT

From and after the date of the recording of these By-Laws, the Declarant shall exercise all powers and responsibilities assigned by these By-Laws, the Declaration and by the New Hampshire Condominium Act to the Association of Unit Owners, and the Officers until such time as it turns over said powers and responsibilities to the Unit Owners. Said transfer of said powers and responsibilities shall in no event occur later than the first to occur of (1) the time at which the Declarants have completed the passing of title to third party purchasers of Units to which are assigned a total of 90% of the undivided interest in the common areas, or (2) the expiration of five (5) years from the date of the incorporation of the Association. No contract binding the Association of Unit Owners, or the Unit Owners as a group, which shall have been entered into during the period of Declarant's control as described in this Article shall be binding after the termination of the Declarant's control unless ratified or renewed with the consent or affirmative vote of Unit Owners of a majority of the Units in the Association of Unit Owners.

6. COMMON EXPENSES

A. Common Expenses. The Owner of each Unit shall be liable for and shall pay as and when assessed a share of common expenses in proportion to his or her common interest. Common expenses will include all charges, costs and expenses of every kind incurred by or on behalf of the Association for and in connection with the administration of the condominium, including without limitation all charges for taxes (except real property taxes or other such taxes which are or may hereafter be assessed separately on each Unit and the common interest appurtenant thereto or the personal property or any other interest of a Unit Owner) assessments, insurance, liability for loss or damage arising out of or in connection with the common areas or any fire, accident or nuisance thereon, the cost of repair, reinstatement, rebuilding and replacement of facilities in the common areas, wages, accounting and legal fees, management fees and all other necessary expenses of upkeep, maintenance, management and operation incurred on or for the common areas. The common expenses may also include such amount as the Association may deem proper to make up any deficit in the reserve. Common expenses will also include all common expense assessments against all Units, title to which is held by the Association.

B. Capital Improvements. Whenever in the judgment of the Association the common areas should be improved by new construction, any such new or replacement construction may be made by the Association only after obtaining approval of all Units. If such approval is so obtained, the cost thereof shall constitute a part of the common expenses.

C. Reserves. The Association shall assess as a common expense an amount or amounts on a monthly basis for the purpose of establishing and maintaining a general operating reserve and general replacement reserve, against anticipated future outlays for operations or for maintenance or replacement of facilities within the common areas or equipment or other property held by the Association in connection with the condominium. The size of any such reserve shall be reviewed at each annual meeting of the Association. The funds will be deposited in a

responsible bank and may be intermingled with the Association's general operating account, or segregated in a separate account, in the Association's discretion.

Any such reserve may be used at the discretion of the Association to meet any deficiencies in operating funds from time to time resulting from higher than expected operating expenses and maintenance costs, or any delinquency by any Unit Owner or Owners in the payment of assessment for common expenses. Said reserve shall not operate to exempt any Owner from liability to contribute his or her proportionate share of such expenses or to pay any such assessments thereof and any funds withdrawn from said reserve for the purpose of making up any delinquency shall be reimbursed upon the payment of such delinquent assessments. The proportionate interest of each Owner in said reserve shall not be withdrawn or assigned separately but shall be deemed to be transferred with each Unit even though not mentioned or described expressly in the instrument of transfer.

D. Expenses for Limited Common Areas. Common expenses relating to the limited common areas shall be charged in accordance with Article 6, Section A of the Declaration.

i. Maintenance and Repair. The Board of Directors shall be responsible for the maintenance, repair and replacement (unless necessitated by the negligence, misuse or neglect of an Owner, or of a person gaining access with said Owner's actual or implied consent, in which case such expenses shall be charged to such Owner) of all Limited Common Area, whether located inside or outside of the Units, the costs of which shall be charged to all Owners as a Common Expense except the cost of repairing and replacing Limited Common Area shall be assessed to the units assigned such Limited Common Area.

E. Books. The Association will maintain books of account for common expenses for the common areas, general operating reserves and replacement reserves, in accordance with generally recognized accounting practices, and will have such books of account available for inspection by each Owner or his authorized representative at reasonable business hours. The Association will not less frequently than annually render or cause to be rendered a statement to each Owner of all receipts and disbursements during the preceding year and the balances of the various accounts.

F. Enforcement. The Association of Unit Owners shall have a lien on every Unit for unpaid assessments of common expenses levied against the Unit, which may be applicable to said Unit, in accordance with the provisions of the New Hampshire Condominium Act. Reference is made to RSA Section 356-B:46, as amended from time to time, and any successor statute, describing the enforcement of the Association's lien rights.

G. Delinquent Assessments. In the event an assessment is not paid within thirty (30) days of the date it is due and payable, the Association, through its Board of Directors, may proceed to enforce and collect the said assessment, with interest at the maximum lawful rate of eighteen percent (18%) per annum, whichever is greater, against the unit Owner owing the same in the manner set forth in RSA 356-B:46. Each delinquent unit Owner shall be responsible for attorney's

fees, interest and costs incurred by the Association incident to the collection of such delinquent assessments or enforcement of any lien held by the Association for unpaid assessments.

H. Assessments. The Association shall determine the amounts and frequency of assessments for common expenses. In determining the amount, the Association shall in its discretion set a figure for a reasonable prospective period (up to one year) sufficient to accumulate and pay when due the anticipated common expenses for that period. In determining the frequency of the payments, the Association has full discretion to levy the assessments on a quarterly basis or as otherwise determined by the Association. If at the end of any assessment period it is determined that the assessments were estimated too low, the deficiency may be forthwith assessed by the Association and paid by the Unit Owners as a special assessment or assessments.

I. Expense to Unit Owner. No one shall obstruct, commit any waste in or otherwise cause any damage beyond reasonable wear and tear to the Common Area and anyone causing such damage shall pay the expense incurred by the Association in repairing same.

8. GENERAL PROVISIONS

A. Violations. In the event of a violation other than non-payment violation of the Declaration, these By-Laws, or the applicable portions of the Act, the Association, by direction of its Board of Directors, may notify the unit owner by written notice of such breach, and if such violation shall continue for a period of thirty (30) days from the date of this notice, the Association, through its Board of Directors, shall have the right to treat such violation as an intentional and inexcusable and material breach of the Declaration, the By-Laws, or the pertinent provisions of the Condominium Act, and the Association may then, at its option, have the following election: (a) an action at law to recover for its damage on behalf of the Association or on behalf of the other unit owners; (b) an action in equity to enforce performance on the part of the unit owner; or (c) an action in equity for such equitable relief as may be necessary under the circumstances, including injunctive relief. Failure on the part of the Association to maintain such an action at law or in equity within ninety (90) days from date of a written request, signed by a unit owner, sent to the Board of Directors, shall authorize any unit Owner to bring an action in equity or suit at law on account of the violation. Any violations which are deemed by the Board of Directors to be a hazard to public health may be corrected immediately as an emergency matter. The Association shall be entitled to collect all legal fees incurred as a result of any such action or any action instituted for collection of any unpaid assessments.

B. Waiver. The failure of the Association of Unit Owners to insist in any one or more instances upon strict performance of or compliance with any of the covenants of the Owner hereunder, or to exercise any right or option herein contained or to serve any notice, or to institute any action or summary proceeding, shall not be construed as a waiver or a relinquishment for the future, of such covenant or option or right, but such covenant or option or right shall continue and remain in full force and effect.

C. Notices. All notices to Unit Owners shall be deemed given if hand delivered or sent by Registered or Certified Mail, Return Receipt Requested, to the Owner, addressed to the Owner's address appearing on the records of the Association. Any notice given or mailed to one

co-Owner shall be presumed to have been properly given to any other co-Owner, regardless of whether a separate notice was given or sent to said other co-Owner. When any policy of insurance has been obtained on behalf of the Association, written notice of the obtainment thereof and of any subsequent changes therein or termination thereof shall be promptly furnished to each Unit Owner by the Secretary of the Association. Pursuant to the provisions of RSA 356-B:43 (II) all notices shall be sent in accordance with the provisions of the last sentence of RSA 356-B:37-a.

D. Amendment. Except as otherwise provided in the Condominium Act and this Declaration and Bylaws, this Declaration and Bylaws may only be amended by agreement of at least two thirds (2/3) of the Owners, provided, however, that (i) any such amendment shall be executed by such two thirds (2/3) of the Owners or by the President and Treasurer of the Association accompanied by a certification of vote of the Secretary; (ii) evidence of such amendment shall be duly recorded at the Registry pursuant to Section 34 IV, of the Condominium Act; (iii) no amendment to the Declaration shall be adopted that could interfere with the construction, sale, lease or other disposition or use of such Units; (iv) no such amendment shall be contrary to the provisions of the Condominium Act. Any approval of amendments by Mortgagees shall be subject to the provisions of and limitations of RSA 356-B.

E. Resale by Purchaser. In the event of any resale of a unit or any interest therein by any person (other than the Declarant or its successors in interest) the prospective Unit Owner shall have the right to obtain from the Association, prior to the contract date of the disposition, the following:

i. A statement of any capital expenditures and major maintenance expenditures anticipated by the Association within the current or succeeding two fiscal years;

ii. A statement of the status and amount of any reserve for the major maintenance or replacement fund, and any portion of such fund earmarked for any specified project by the Association;

iii. A copy of the income statement and balance sheet of the Association for the last fiscal year for which such statement is available;

iv. A statement of the status of any pending suits or judgments in which the Association is a defendant;

v. A statement setting forth what insurance coverage is provided for all Unit Owners by the Association and what additional insurance coverage would normally be secured by each individual Unit Owner;

vi. A statement that any improvements or alterations made to the Unit or the limited common area assigned thereto by the prior Unit Owner are not known to be in violation of the Declaration.

vii. A copy of the condominium declaration, by-laws, and any formal rules of the association.

viii. A statement of the amount of monthly and annual fees, and any special assessments made within the last three (3) years.

ix. A recordable statement setting for the amount of unpaid assessments currently levied against the unit.

The President of the Association or any other Officer of the Association shall furnish such statements upon written request of any prospective Unit Owner within ten (10) days of the receipt of such request.

Said statement once issued shall be binding upon the Association, and every other Unit Owner. The Association may establish a fee to be charged to the Unit Owner in consideration of issuing said statement, which fee shall not exceed $10.00 for each request, unless a higher amount is permitted by law.

F. Notices to or from Mortgagees

i. Notice to Board. A Unit Owner who mortgages his condominium unit shall notify the Board of the name and address of his mortgagee and the principal amount of such mortgage. The Board shall maintain suitable records pertaining to such mortgages.

ii. Reporting. The Board, whenever so requested in writing by a mortgagee of a condominium unit, shall promptly report any then unpaid assessments for common expenses due from, or any other default by, the Owner of the mortgaged condominium unit. The Board shall be entitled to require a fee of Ten Dollars ($10.00) for each report provided a mortgagee.

iii. Default. The Board shall give written notice to an Owner of any default by the Owner in the performance of any obligations under the Condominium Instruments and, if such default is not cured within thirty (30) days, shall send a copy of such notice to each holder of a mortgage covering such unit whose name and address has theretofore been furnished to the Board. No suit or other proceeding may be brought to foreclose the lien for any assessment levied pursuant to the Declaration or these By-Laws except after ten (10) days written notice to the holder of the first mortgage on the unit which is the subject matter of such suit or proceeding.

Dated this ____ day of _____, 2026.

54 BBR, LLC

_____ By: _____

Witness

John Randolph, Maember
Duly Authorized

STATE OF NEW HAMPSHIRE
COUNTY OF STRAFFORD, ss.

This instrument was acknowledged before me on _____, 2026, by John Randolph, Member of 54 BBR, LLC, a New Hampshire limited liability company.

_____
Notary Public
Printed Name: _____
My Commission Expires: _____

EXHIBIT C

COMMON INTEREST

Unit No.	Common Interest
1	1/44
2	1/44
3	1/44
4	1/44
5	1/44
6	1/44
7	1/44
8	1/44
9	1/44
10	1/44
11	1/44
12	1/44
13	1/44
14	1/44
15	1/44
16	1/44
17	1/44
18	1/44
19	1/44
20	1/44
21	1/44
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27	1/44
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31	1/44
32	1/44
33	1/44
34	1/44
35	1/44
36	1/44
37	1/44
38	1/44

39	1/44
40	1/44
41	1/44
42	1/44
43	1/44
44	1/44

EXHIBIT D

From: Your Mom <duhyourmom@gmail.com>
Sent: Sunday, May 24, 2026 2:58 PM
To: City of Dover - Planning <Dover-Planning@dover.nh.gov>
Subject: Concerns from a current resident about the Proposed Sale of Tiny Homes-#WAIV 2026 0014

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

Good afternoon,

I would like to remain anonymous because I fear jeopardizing my housing situation.

As a resident of one of the tiny homes, I am deeply concerned about the proposal to sell these homes. Even with tenants receiving the first option to purchase, the numbers simply do not work for the people who currently live here.

At a sale price of approximately $240,000, combined with current interest rates around 6.5%, property taxes of roughly $3,750 per year, insurance, and the addition of an HOA fee, monthly housing costs would likely exceed $2,200 per month. This particular estimate also assumes a 5% down payment of around $12,000, which many residents do not have available. Paying over $2,200 per month for a 524-square-foot home is unrealistic for the working people these homes were intended to support. And in addition, in the winter months we average about $175-$275/mo for electricity and electric heat.

The result is obvious: very few current tenants would be able to buy. Most residents would ultimately lose their housing, while the homes would likely be purchased by higher-income buyers, investors, or seasonal residents. The people displaced would be local workers who rely on these homes as one of the only affordable ways to remain near their jobs in Dover.

This community was created for working people like healthcare workers, educators, public safety employees, bank employees, and others who contribute to Dover every day but cannot afford traditional housing in the area. Selling these homes at prices far beyond affordability defeats the original purpose entirely.

Even the current rent of $1,677 per month is extremely difficult for many residents, but it remains more attainable than ownership at these projected costs. To keep housing costs near the current level, (as the Randolphs have stated they want to) these homes would need to be sold closer to $170,000–$190,000, with either no HOA or strict long-term limits on HOA fees. Otherwise, future HOA increases could make the homes unaffordable even for buyers who initially qualify.

The only way to preserve the integrity and purpose of this community is either:

1-to prevent the sale of the homes entirely, or
2-to impose strict affordability protections, including substantially lower sale prices offered to residents and permanent HOA limitations perhaps controlled by the owners themselves.

At current projected pricing, the development could generate millions in sales while displacing many of the very people it was created to help. Residents would lose their homes, and Dover would lose an important source of workforce housing.

Please take these concerns very seriously. Good, hardworking, quiet people live here and contribute enormously to this community through healthcare, education, public service, and other essential work. They deserve housing they can realistically afford.

Thank you for your time and consideration. Please vote to protect us! We need you. Thank you for looking out for Dover residents.

Please consider conserving our natural resources before printing this e-mail and/or any attachments.

PLANNING BOARD - STAFF MEMO FILE #COND-2026-0027

CITY OF DOVER

Application Type:	Conditional Use Permit
Applicant(s):	David & Elizabeth Cash
Owner(s):	David & Elizabeth Cash
Location:	7 Church St. (Map 9, Lot 91)
Meeting Date:	July 28, 2026

INTENT: Proposal is for a Conditional Use Permit (CUP) to construct an attached two-car garage within the 10' rear setback.

AGENDA ITEM #: 3-B

FILE: COND-2026-0027

LOTS/UNITS PROPOSED: N/A (No change)

OWNER/APPLICANT: David & Elizabeth Cash

LOCATION: 7 Church St. (Map 9, Lot 91)

ACREAGE: ±0.24 ac. (±10,251 s.f.)

ZONING DISTRICT: Central Business District Mixed Use Sub-District (CBD-M)

EXISTING/PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential, School, Church

WAIVERS REQUESTED: None.

ZBA ACTION: None

PERMITS REQUIRED: City of Dover CUP for rear setback relief.

CONSERVATION COMMISSION: N/A

TECHNICAL REVIEW COMMITTEE: N/A

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

NOTICES SENT: Abutter notices were sent by certified mail for this meeting as well as the previous meeting

ATTACHMENTS: CUP plan and application materials.

Summary of Request and Background

The applicant is proposing to build an attached 1-car garage with portico 0 to 3 feet into the north (rear) 10-foot setback of the property. The garage would have about 195 s.f. of conditioned bonus space above the 370 s.f. garage.

Being located in the Central Business District Mixed-Use sub-district, relief of a rear setback would be through a conditional use permit.

As a Conditional Use Permit application, the Technical Review Committee did not review this application.

The Planning Board accepted the item for review, declared no regional impact, and held a public hearing at the June 23rd, 2026 regular meeting. The Board then discussed, tried to issue a final decision but the motion did not pass with a 4-4- vote so the Board hasn't yet taken final action on this request. Therefore, staff placed the item on the next available Planning Board agenda for discussion to resume, a public hearing to be re-opened and another vote to occur. The Board must have a vote that does not result in a tie in order to make a decision on the application as it's required to do per RSA 674:43 and RSA 676:4.

Consistency with Land Use Regulations

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

See reverse →

advanced by the proposed building and/or use.

(j) That if the relief is granted, the surrounding neighborhood is not negatively impacted.

Staff agrees with the applicant that the above 10 criteria have been met.

Consistency with Land Use Regulations – Central Business District

Chapter 170-20.B(2) outlines the criteria for granting a Conditional Use Permit for relief within the CBD. 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.

Staff agrees with the applicant that the above three criteria have been met.

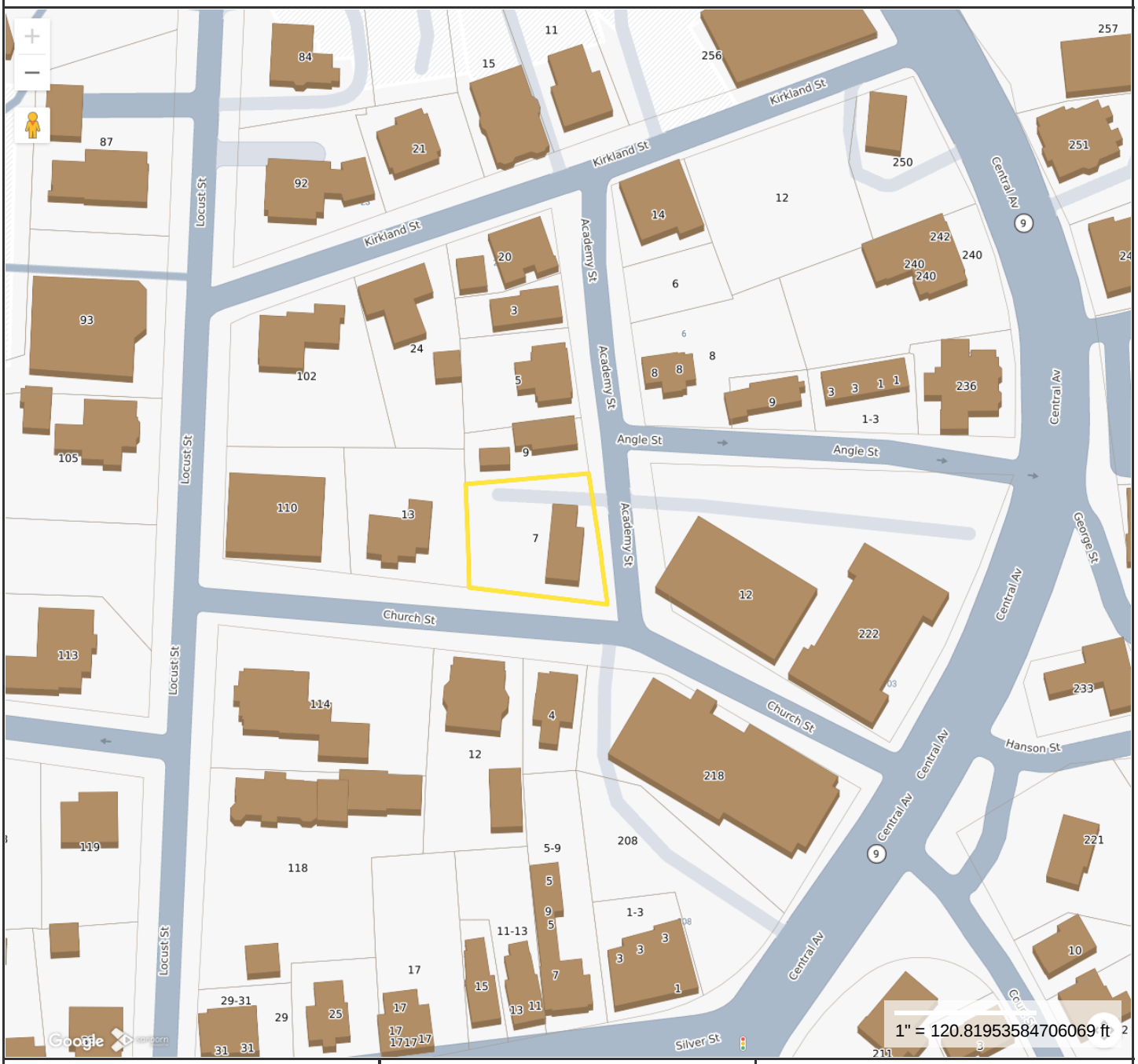
Staff Recommendation:

The Planning Department recommends that the Planning Board re-open a public hearing, close the public hearing, make the necessary and supporting findings of fact, and re-vote to approve the Conditional Use Permit with the following conditions:

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

1. Provide physical and digital copies (including CAD) of complete plan set, which additionally shall include:
   1.1. The owner's signatures;
   1.2. The Planning File #COND-2026-0024;
   1.3. Revise plan to Academy St.;
   1.4. A note that a foundation certification will need to be provided; and
2. Work with the Planning Department to endorse a development agreement per Chapter 170-20B(3) and then record at SCRD.

COND-2026-0027 7 CHURCH STREET



Property Information

Location	7 CHURCH ST
Owner	CASH DAVID PATRICK
Land Use	013R
Zoning Code	CBD-M
Property Id	09091-000000

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 06/2026
Data updated Daily

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

PERMIT SNAPSHOT REPORT COND-2026-0027
FOR CITY OF DOVER, N.H.

Permit Type	Conditional Use	**Project:**		**App Date:**	05/12/2026
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: For a 2 car attached garage build 2 to 5 feet into the north 10 foot setback.

Parcel:	09091-000000 Main	**Address:**	7 Church St Dover, NH Main	**Zone:**	

Plan Preparer	Owner	Applicant
Martin Ryan	David Cash	David Cash
Home: (603) 502-8635	7 Church St	7 Church St
Mobile: (603) 502-8635	Mobile: (512) 632-5721	Mobile: (512) 632-5721

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)	2448	Work	Please refer to attached CUP application narrative.
permitstatefed	N/A				

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_David_Cash_5/12/2026.jpg	05/12/2026 17:07	Cash, David		Uploaded via CSS
Permit Snapshot Report.pdf	05/12/2026 17:08	Service, EnerGov		Attached by IO - ATTACH: Initial Permit Snapshot

Invoice No.	Fee	Fee Amount	Amount Paid
INV-2026001576	Planning Impervious Paved Area Fee	$171.36	$171.36
	Planning General Application Fee	$200.00	$200.00
	Total for Invoice INV-2026001576	**$371.36**	**$371.36**
	Grand Total for Permit	**$371.36**	**$371.36**

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1			
Confirm application complete v.1	Generic Action		05/20/2026 12:08
Conditional Use Review v.1	Receive Submittal		
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	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

To: Dover Planning Board
From: David and Elizabeth Cash
Date: May 12, 2026
Subject: Conditional Use Permit Narrative – **7 Church Street, Dover, NH 03820**

1. Project Description and Purpose

This CUP application is a request to build an attached 1-car garage with portico 0 to 3 feet into the north 10-foot setback of the property.

The proposed project is the addition of an attached 1-car garage with portico and a conditioned bonus space above the garage. The structure will be attached to the back (north) side of the home. The floor area of the 1-car garage is approximately 370 SF, the portico approximately 260 SF, and the conditioned bonus space is 195 SF. The bonus space is accessible only from the home's interior.

The home is listed as the "Samuel Wyatt House" with the National Register of Historic Places. The home used to have an attached garage in the same location as the proposed new garage. The new garage/portico will not be directly visible from the front of the house facing Church Street. Cars will access the garage/portico from the east off of Academy Street.

2. Compliance with Conditional Use Criteria

A. Compatibility

The north property line abuts the neighboring property's driveway. There will be no changes to the essential characteristics of the surrounding neighborhood; the garage/portico addition may also lift the value of surrounding properties, as relative to the open parking that now exists, it creates a more ordered, traditional Greek Revival structure to house automobiles and other machines. A traditional style single family structure with an attached garage is consistent with the neighborhood land use pattern and quality and character of the existing structures in the neighborhood. The location of the two cars, driveway, and garage door is minimized to the rear of the property. No landscaping will be eliminated. In fact, the location of the garage/portico allows for the elimination of approximately 1500 SF of asphalt (a former parking lot) that will be replaced by new landscaping (lawn, trees, and plantings) to the west side of the house. The new west landscaping is also contiguous with similar landscaping west of the subject property, creating a generous green space.

B. Traffic and Safety

If the CUP is granted, no public health, safety, or welfare will be threatened. Building slightly into the north setback will create no traffic congestion and will not impair pedestrian safety. There is a planting bed in the north setback. There

will be space in front of the garage/portico (on Academy Street) for visitor parking that will not impede pedestrians on the adjacent sidewalk.

C. Noise and Odor

The garage/portico is for the conventional use of housing two cars. The garage/portico provides—for both occupant and neighbors—a more private, quiet separation, relative to the open driveway/parking that now exists.

The bonus space is accessible only from the home's interior and is designed for conventional, quiet residential use.

3. Conclusion

As owners of 7 Church St, we take pride in the extensive improvements we have made to the property since purchasing it in December of 24. In every detail possible, our sensibility has been one of restoration, not just renovation. Our proposed garage/portico addition, is no different. We have worked closely with our architect to create a modern, functional version of a carriage house that is both in keeping with the Greek Revival character of the home and sensitive to the boundary with our neighbor. The build slightly into the north setback will comply with the required criteria for a non-environmental CUP and will help the home reach its highest and best modern use without negatively impacting the immediate neighborhood.

CITY OF DOVER, NEW HAMPSHIRE
PLANNING APPLICATION OWNER AUTHORIZATION

OWNER AUTHORIZATION

I/We hereby submit this application to the City of Dover / 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.

Property Owner Name: David Cash

Signature(s) of Property Owner(s): _____ Date: 2026-05-12

Signature of Applicant: _____ Date: _____
if different from owner

AUTHORIZATION TO ENTER SUBJECT PROPERTY

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..

Property Owner Name: David Cash

Signature(s) of Property Owner(s): _____ Date: 2026-05-12

Signature of Applicant: _____ Date: _____
if different from owner

IF SIGN PERMIT, SIGN PERMIT APPLICATION INFORMATION

If the sign permit applicant is not the property owner, this form must be completed and included as part of application submission.

I have read this application and state that, to the best of my knowledge, the information provided is true and that the proposed sign(s) will comply with all applicable regulations in Section 170-32 of the Zoning Ordinance of the City of Dover and shall conform to the submitted materials and designs. Furthermore, after 90 days, any application still waiting information will be denied.

Address of Sign Location: _____

Sign Permit Application Type:
(check one)

- ☐ Permanent Sign
- ☐ Temporary Sign
- ☐ Community Sign

COND-2026-0027 **7 CHURCH STREET**

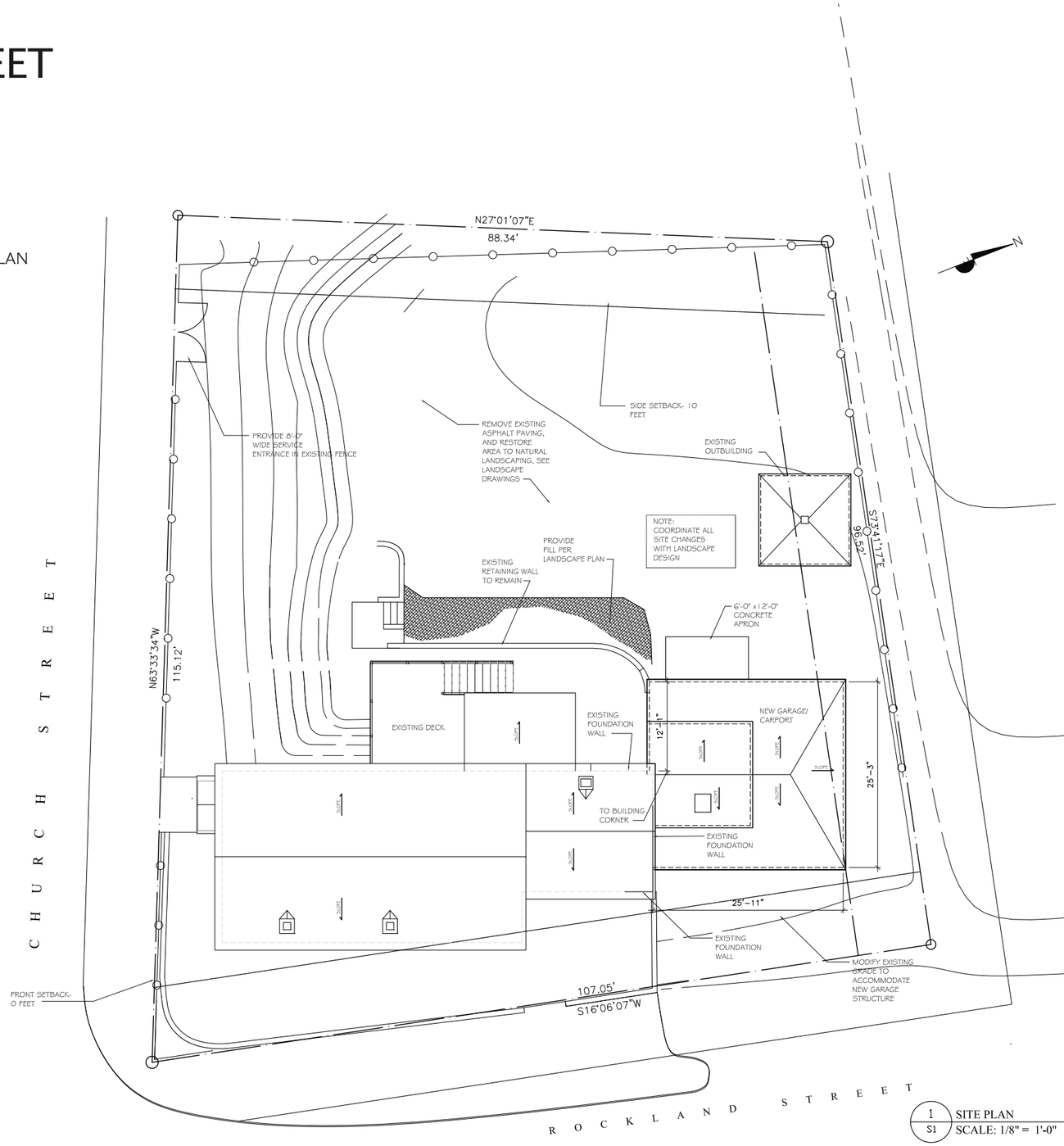
Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
09085-000000	4 CHURCH ST	NBCS LLC		25 HIGHLAND ST	DOVER	NH	03820
09099-000000	8 ACADEMY ST	TOLWOOD REALTY GROUP LLC		242 CENTRAL AVE	DOVER	NH	03820
09096-000000	24 KIRKLAND ST	RICHARD PAUL &	GLIDDEN BOBBIE J	24 KIRKLAND ST	DOVER	NH	03820
09093-000000	5 ACADEMY ST	PAULSEN CHRISTIAN E & ANJA W TRUSTEES	PAULSEN FAMILY REVOCABLE TRUST OF 2017	55 THORNTON ST	PORTSMOUTH	NH	03801-3678
09095-000000	20 KIRKLAND ST	ZHENG JASON		6036 GERMAN RD	PIPERSVILLE	PA	18947
09100-000000	9 ANGLE ST	MARINO JOSEPH A		370 BACK RD	DOVER	NH	03820
09081-000000	9 SILVER ST	THREE OF A KIND INVESTMENTS LLC		281 SAGAMORE AVE	PORTSMOUTH	NH	03801
09103-000000	240-242 CENTRAL AV	TOLWOOD REALTY GROUP LLC		242 CENTRAL AVE	DOVER	NH	03820-4130
09088-000000	118 LOCUST ST	118 LOCUST ST LLC		6 LIBERTY SQUARE PMB 349	BOSTON	MA	02109
09099-A00000	6 ACADEMY ST	FELICITA INC		300 CENTRAL AVE	DOVER	NH	03820
09084-000000	218 CENTRAL AV	FIRST PARISH CHURCH CONGREGATIONAL		218 CENTRAL AVE	DOVER	NH	03820
09105-000000	12 KIRKLAND ST	FELICITA INC		300 CENTRAL AVE	DOVER	NH	03820
09106-000000	KIRKLAND ST	FELICITA INC		300 CENTRAL AVE	DOVER	NH	03820
09087-000000	114 LOCUST ST	WORK OPPORTUNITIES UNLIMITED INC		114 LOCUST ST	DOVER	NH	03820
09101-000000	1 ANGLE ST	COONS BENJAMIN C & KOURTNEY L TTS	ANGLE TRUST	20 PORTSMOUTH AVE STE 1 #299	STRATHAM	NH	03885
09090-000000	13 CHURCH ST	FARRELL ALEXANDER E	SHIMEL EDITH E	13 CHURCH ST	DOVER	NH	03820-3724
09094-000000	3 ACADEMY ST	FLYNN SHAUN M &	FLYNN SIMONE V	85 WISWALL RD	DURHAM	NH	03824-4420
09098-000000	222 CENTRAL AV	ST MARY'S SCHOOL		222 CENTRAL AVE	DOVER	NH	03820
09083-000000	208 CENTRAL AV	FIRST PARISH CHURCH		218 CENTRAL AVE	DOVER	NH	03820
09089-000000	110 LOCUST ST	ROMAN CATHOLIC BISHOP		153 ASH ST	MANCHESTER	NH	03104
09086-000000	12 CHURCH ST	BRUM FELICIA M		14 CHURCH ST APT 1	DOVER	NH	03820
09092-000000	9 ACADEMY ST	ROHR CHRISTOPHER K		9 ACADEMY ST	DOVER	NH	03820
09097-000000	102 LOCUST ST	102 LOCUST STREET LLC		171 MIDDLE ST	PORTSMOUTH	NH	03801
09091-000000	7 CHURCH ST	CASH DAVID PATRICK	CASH ELIZABETH ANN	7 CHURCH ST	DOVER	NH	03820

7 CHURCH STREET

GARAGE ADDITION

DOVER, NH

NO	TITLE
S1	SITE PLAN
D1	BASEMENT REMOVALS PLAN
D2	1ST & 2ND FLOOR REMOVALS PLAN
D3	ELEVATIONS REMOVALS
A1	BASEMENT FLOOR PLAN
A2	FIRST FLOOR PLAN
A3	SECOND FLOOR PLAN & WEST ELEVATION
A4	NORTH & EAST ELEVATIONS, GARAGE SECTION
A5	GARAGE DETAILS



1 / S1 SITE PLAN
SCALE: 1/8" = 1'-0"

NOTE: ALL DIMENSIONS AND CONDITIONS ARE APPROXIMATE AND MUST BE FIELD VERIFIED BY THE CONTRACTOR

SITE NOTES:

OWNER OF RECORD: CASH DAVID PATRICK, CASH ELIZABETH ANN

7 CHURCH ST.
DOVER, NEW HAMPSHIRE

ZONING: CBD-M

THIS PARCEL IS SHOWN AS LOT #91, MAP #9 OF THE CITY OF DOVER TAX ASSESSOR'S MAPS

PARCEL AREA = 10,251 SF = 0.24 ACRES

ZONING DIMENSIONS AND DENSITY REQUIREMENTS:

	ALLOWABLE	EXISTING	PROPOSED
A) ZONING DISTRICT		CBD-M	UNCHANGED
B) MIN. LOT SIZE-	10,000 SF	10,251 SF	UNCHANGED
C) MIN. LOT FRONTAGE-	100 FT	115.12 FT	UNCHANGED
D) MIN. FRONT SETBACK-	0 FT	6 FT	UNCHANGED
E) MIN. SIDE SETBACKS-	10 FT	8 FT	UNCHANGED
F) MIN. REAR SETBACK-	10 FT	31 FT	3'-10-1/2"*
G) MAX. LOT COVERAGE-	5,126 SF	1,487 SF	2,448 SF

(*) REQUESTING CUP

SITE DATA OBTAINED FROM SITE SURVEY OF MAY 27, 1997 AND FIELD MEASUREMENTS.
(*) REQUESTING CUP

10,221 SF - SITE AREA
2,448 SF - BUILDING FOOTPRINT AREAS

NOTE: WITH ANY MAJOR GROUND DISTURBANCE CONTACT DIG SAFE SYSTEM, INC. CALL 811 or 888-344-7233

NOTE: LANDSCAPE DESIGN BY OTHERS

NOTE: FIELD VERIFY ALL EXISTING CONDITIONS- THE CONTRACTOR SHALL FIELD VERIFY ALL DRAWINGS AND DIMENSIONS, AND REPORT ANY DISCREPANCY(IES) TO THE ARCHITECT. THE CONTRACTOR SHALL PROCEED WITH THE WORK ONLY AFTER THE DISCREPANCY(IES) HAS(HAVE) BEEN RESOLVED.

REVISED 06-05-26

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

MARTIN RYAN ARCHITECT
221 Woodbury Ave
Portsmouth, NH 03801
603-502-8635

LICENSED ARCHITECT MARTIN C. RYAN No. 2808 STATE OF NEW HAMPSHIRE

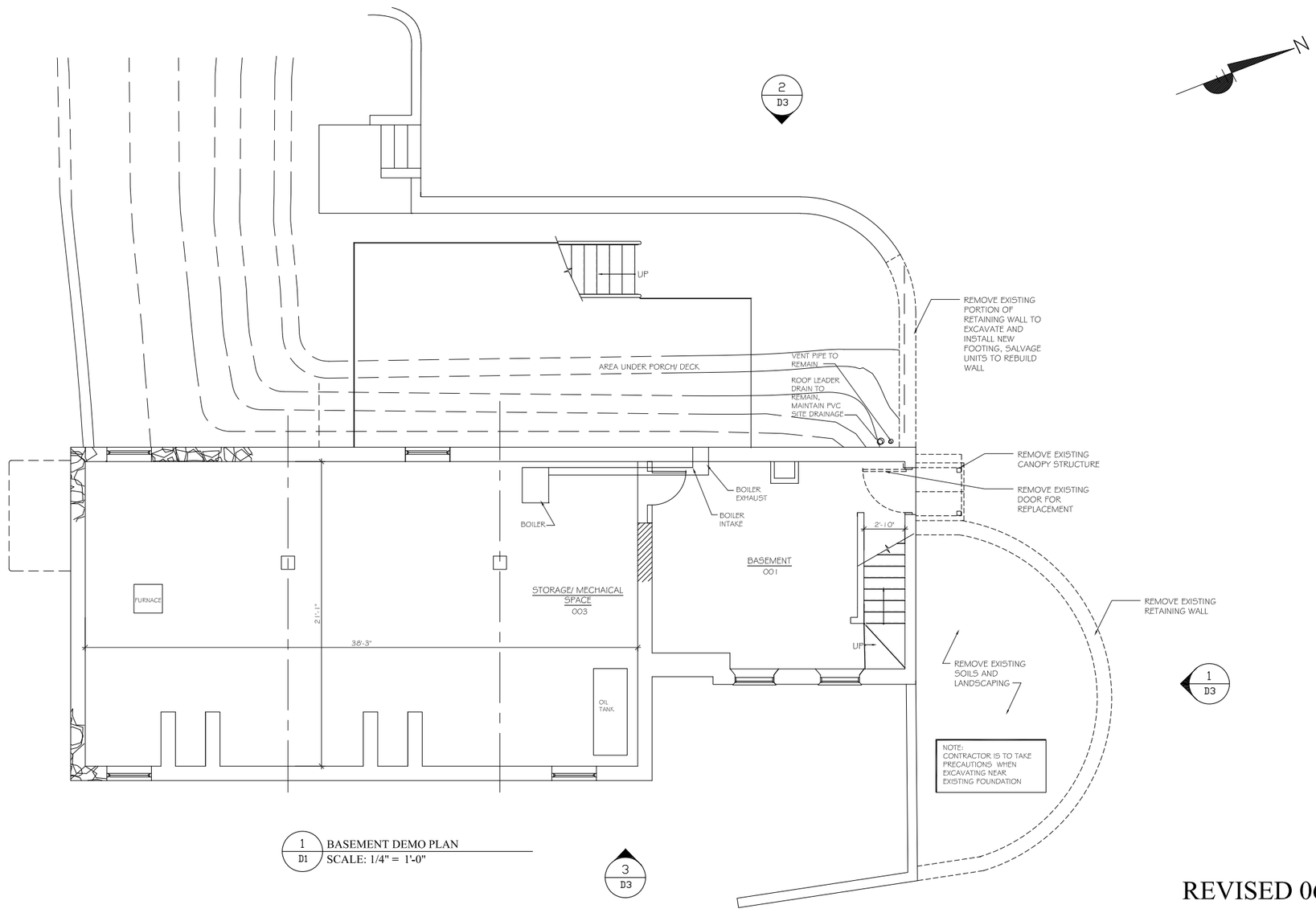
PERMIT SET
05 JUNE 2026

7 CHURCH STRRET
GARAGE ADDITION
DOVER
NEW HAMPSHIRE

DATE: –
DESIGN: –
DRAWN: MLR
CHECKED:XX
SCALE:
JOB:

SITE PLAN

S1



1 / D1 BASEMENT DEMO PLAN
SCALE: 1/4" = 1'-0"

NOTE: ALL DIMENSIONS AND CONDITIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD.

GENERAL DEMOLITION NOTES:

DEMOLISH AND REMOVE FROM SITE THOSE ITEMS AS INDICATED ON THE DRAWINGS. THE DRAWINGS ARE INTENDED TO BE SCHEMATIC AND DO NOT SHOW EVERY AREA OR ITEM INTENDED FOR DEMOLITION.

QUALITY ASSURANCE
A. USE ADEQUATE NUMBERS OF SKILLED WORKERS WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK OF THIS SECTION.

B. ALL APPLICABLE REGULATIONS SHALL BE OBSERVED THROUGHOUT THE DEMOLITION WORK, INCLUDING THOSE RELATING TO ENVIRONMENTAL PROTECTION AND JOB SAFETY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL COMPLIANCE WITH APPLICABLE REGULATIONS.

SURFACE CONDITIONS
A. EXAMINE THE AREAS AND CONDITIONS UNDER WHICH WORK OF THIS SECTION WILL BE PERFORMED. BRING TO THE ATTENTION OF THE OWNER AND CONDITIONS DETRIMENTAL TO TIMELY AND PROPER COMPLETION OF THE WORK. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS ARE CORRECTED.

DEMOLITION BY CONTRACTOR
IN COMPANY WITH THE OWNER, VISIT THE SITE AND VERIFY THE EXTENT OF DEMOLITION TO BE PERFORMED UNDER THIS CONTRACT. THE CONTRACTOR IS REQUIRED TO PROVIDE A COMPLETE SCOPE OF DEMOLITION WORK FOR APPROVAL BY THE OWNER BEFORE PROCEEDING WITH THE WORK.

USING ONLY THE MEANS AND EQUIPMENT APPROVED FOR THIS PURPOSE BY GOVERNMENTAL AGENCIES HAVING JURISDICTION.

SECURE THE SITE FROM UNAUTHORIZED PERSONNEL.

PROVIDE ADEQUATE PROTECTION OF NEIGHBORING PROPERTIES, CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROTECTION OF ADJOINING PROPERTY AND MATERIAL DURING THE WORK.

DEMOLISH AND COMPLETELY REMOVE FROM THE JOB SITE THE EXISTING CONSTRUCTION DESIGNATED TO BE REMOVED. REMOVE AND SALVAGE ITEMS AS NOTED ON DRAWING SET.

SHUT OFF, CAP AND OTHERWISE PROTECT PUBLIC UTILITY LINES IN ACCORDANCE WITH THE REQUIREMENTS OF THE PUBLIC AGENCY OF UTILITY HAVE JURISDICTION. WHERE THE OWNER IS PROVIDING THE WORK, THE CONTRACTOR SHALL CONFIRM THAT THE WORK HAS BEEN DONE.

PROVIDE ADEQUATE SHORING OR BRACING TO PROTECT PROPERTY ON SITE AND ADJACENT PROPERTIES. IF UNSURE OF WHERE SHORING MAY BE REQUIRED, CONSULT WITH THE OWNER BEFORE PROCEEDING.

DEMOLISHED MATERIAL SHALL BE CONSIDERED TO BE PROPERTY OF THE CONTRACTOR AND SHALL BE COMPLETELY REMOVED FROM THE JOB SITE, EXCEPT THOSE ITEMS INDICATED OR OTHERWISE AGREED BETWEEN OWNER AND CONTRACTOR.

ALL MATERIAL INDICATED FOR REMOVAL SHALL BE DISPOSED OF IN A LEGAL MANNER. CONTRACTOR SHALL PROVIDE OWNER WITH ALL DISPOSAL TICKETS INDICATING THAT MATERIAL HAS BEEN PROPERLY DISPOSED OF, IF SO REQUESTED BY OWNER.

LOCATE ALL REMOVAL TRUCKS AND DUMPSTERS IN COORDINATION WITH THE OWNER TO ALLOW TRAFFIC TO CONTINUE AND TO AVOID A NUISANCE.

WITH ANY MAJOR GROUND DISTURBANCE CONTACT DIG SAFE SYSTEM, INC. CALL 811 or 888-344-7233

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REVISED 06-05-26

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SCALE 1/4" = 1'-0"

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221 Woodbury Ave
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603-502-8335

LICENSED ARCHITECT MARTIN L RYAN No. 2808 STATE OF NEW HAMPSHIRE

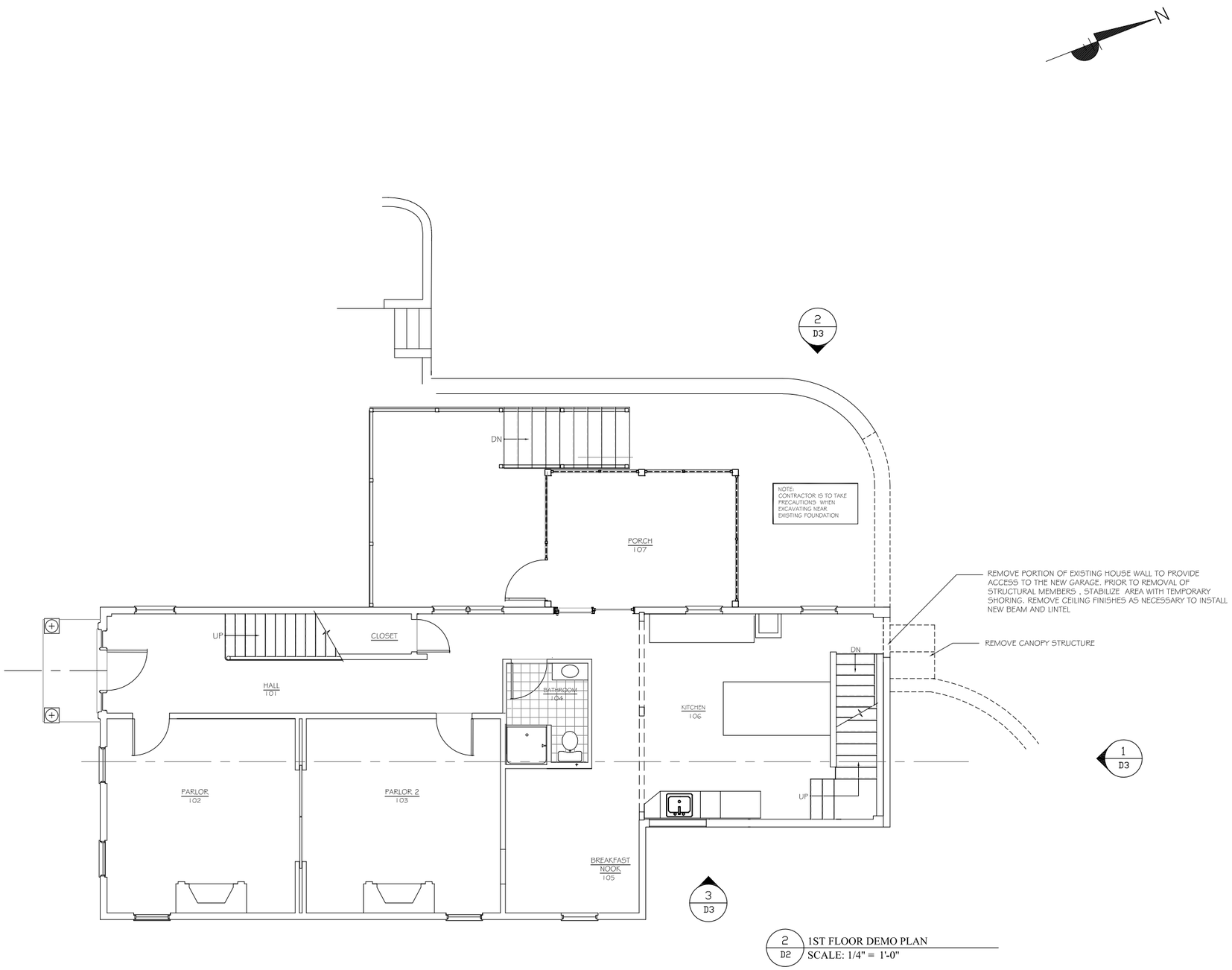
PERMIT SET
05 JUNE 2026

7 CHURCH STRREET
GARAGE ADDITION
DOVER
NEW HAMPSHIRE

DATE: –
DESIGN: –
DRAWN: MLR
CHECKED: XX
SCALE:
JOB:

BASEMENT
REMOVALS PLAN

D1



2 / D2 1ST FLOOR DEMO PLAN
SCALE: 1/4" = 1'-0"

REVISED 06-05-26

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B. ALL APPLICABLE REGULATIONS SHALL BE OBSERVED THROUGHOUT THE DEMOLITION WORK, INCLUDING THOSE RELATING TO ENVIRONMENTAL PROTECTION AND JOB SAFETY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL COMPLIANCE WITH APPLICABLE REGULATIONS.

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LOCATE ALL REMOVAL TRUCKS AND DUMPSTERS IN COORDINATION WITH THE OWNER TO ALLOW TRAFFIC TO CONTINUE AND TO AVOID A NUISANCE.

WITH ANY MAJOR GROUND DISTURBANCE CONTACT DIG SAFE SYSTEM, INC. CALL 811 or 888-344-7233

NOTE: FIELD VERIFY ALL EXISTING CONDITIONS- THE CONTRACTOR SHALL FIELD VERIFY ALL DRAWINGS AND DIMENSIONS, AND REPORT ANY DISCREPANCY(IES) TO THE ARCHITECT. THE CONTRACTOR SHALL PROCEED WITH THE WORK ONLY AFTER THE DISCREPANCY(IES) HAS(HAVE) BEEN RESOLVED.

GRAPHIC SCALE
0 1' 4' 8'
SCALE 1/4" = 1'-0"

MARTIN RYAN ARCHITECT
221 Woodbury Ave
Portsmouth, NH 03801
603-502-0035

LICENSED ARCHITECT MARTIN L RYAN No. 2808 STATE OF NEW HAMPSHIRE

PERMIT SET
05 JUNE 2026

7 CHURCH STRREET
GARAGE ADDITION
DOVER
NEW HAMPSHIRE

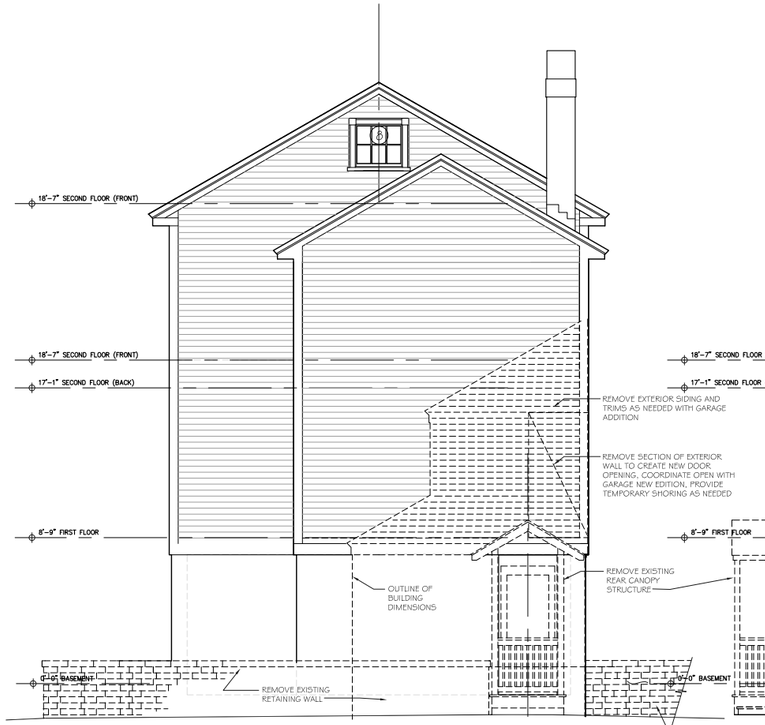
DATE: –
DESIGN: –
DRAWN: MLR
CHECKED:-XX
SCALE:
JOB:

SECOND
FLOOR REMOVALS PLANS

D2

NOTE: ALL DIMENSIONS AND CONDITIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD.

NOTE: THESE DRAWINGS ARE NOT INTENDED FOR CONSTRUCTION PURPOSES.



1 / D3 EXIST NORTH ELEVATION
SCALE: 1/4" = 1'-0"

2 / D3 EXIST WEST ELEVATION
SCALE: 1/4" = 1'-0"

3 / D3 EXIST EAST ELEVATION
SCALE: 1/4" = 1'-0"

NOTE: FIELD VERIFY ALL EXISTING CONDITIONS- THE CONTRACTOR SHALL FIELD VERIFY ALL DRAWINGS AND DIMENSIONS, AND REPORT ANY DISCREPANCY(IES) TO THE ARCHITECT. THE CONTRACTOR SHALL PROCEED WITH THE WORK ONLY AFTER THE DISCREPANCY(IES) HAS(HAVE) BEEN RESOLVED.

REVISED 06-05-26

GRAPHIC SCALE
0 1' 4' 8'
SCALE 1/4" = 1'-0"

MARTIN RYAN ARCHITECT
221 Woodbury Ave
Portsmouth, NH 03801
603-502-8635

LICENSED ARCHITECT MARTIN L. RYAN No. 2808 STATE OF NEW HAMPSHIRE

PERMIT SET
05 JUNE 2026

7 CHURCH STRREET
GARAGE ADDITION
DOVER
NEW HAMPSHIRE

DATE:	–
DESIGN:	–
DRAWN:	MLR
CHECKED:	XX
SCALE:	
JOB:	

EXISTING ELEVATIONS & DEMO NOTES

D3

ELECTRICAL NOTES:

1. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICIAN AND DONE IN A WORKMANLIKE MANNER TO COMPLY WITH NECA 1-2006, STANDARD FOR GOOD WORKMANSHIP IN ELECTRICAL CONSTRUCTION.

2. ALL ELECTRICAL WORK SHALL BE IN COMPLIANCE WITH NFPA 70 (NEC) AND REQUIREMENTS CONTAINED HEREIN.

3. DRAWINGS ARE INTENDED TO INDICATE THE EXTENT OF WORK TO BE PERFORMED UNDER THIS CONTRACT. DRAWINGS ARE NOT MEANT TO FULLY DEFINE ALL ELEMENTS OF WORK TO PROVIDE A COMPLETE AND USEABLE PRODUCT. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL CONDITIONS, DIMENSIONS, LAYOUTS, AND OTHER FEATURES OF WORK PRIOR TO DEMOLITION AND CONSTRUCTION TO PROVIDE A COMPLETE AND USEABLE PRODUCT. REFERENCES TO OUTLETS AND LIGHTING ARE SHOWN FOR CONCEPTUAL PURPOSES AND WILL REQUIRE A FULLY ENGINEERED SOLUTION.

4. ALL LABELS SHALL BE PERMANENTLY ATTACHED TO EQUIPMENT.

GENERAL CONSTRUCTION NOTES

1. ALL WORK INCLUDED IN THIS CONTRACT SHALL CONFORM TO ALL STATE, NATIONAL AND OTHER CODES AND ORDINANCES WHICH APPLY TO THIS PROJECT.

2. THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT, THE CONTRACTOR SHALL PROCEED WITH THE WORK ONLY AFTER THE DISCREPANCIES HAVE BEEN RESOLVED BY THE ARCHITECT.

3. CARE SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SYSTEMS AND SURFACES TO REMAIN. ALL DAMAGE RESULTING FROM THE CONTRACTORS OPERATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY AS APPROVED BY THE OWNER AT NO ADDITIONAL COST TO THE OWNER.

4. AT THE END OF EACH WORKING DAY, THE CONSTRUCTION SITE SHALL BE LEFT IN A NEAT AND CLEAN MANNER.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS WHICH ARE REQUIRED FOR THE SATISFACTORY COMPLETION OF THE WORK.

6. THE CONTRACTOR SHALL DISPOSE OF AND/OR RECYCLE ANY CONSTRUCTION DEBRIS FROM THE PROJECT SITE AS REQUIRED BY THE STATE OF NEW HAMPSHIRE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING DISPOSAL PERMITS WHICH ARE REQUIRED.

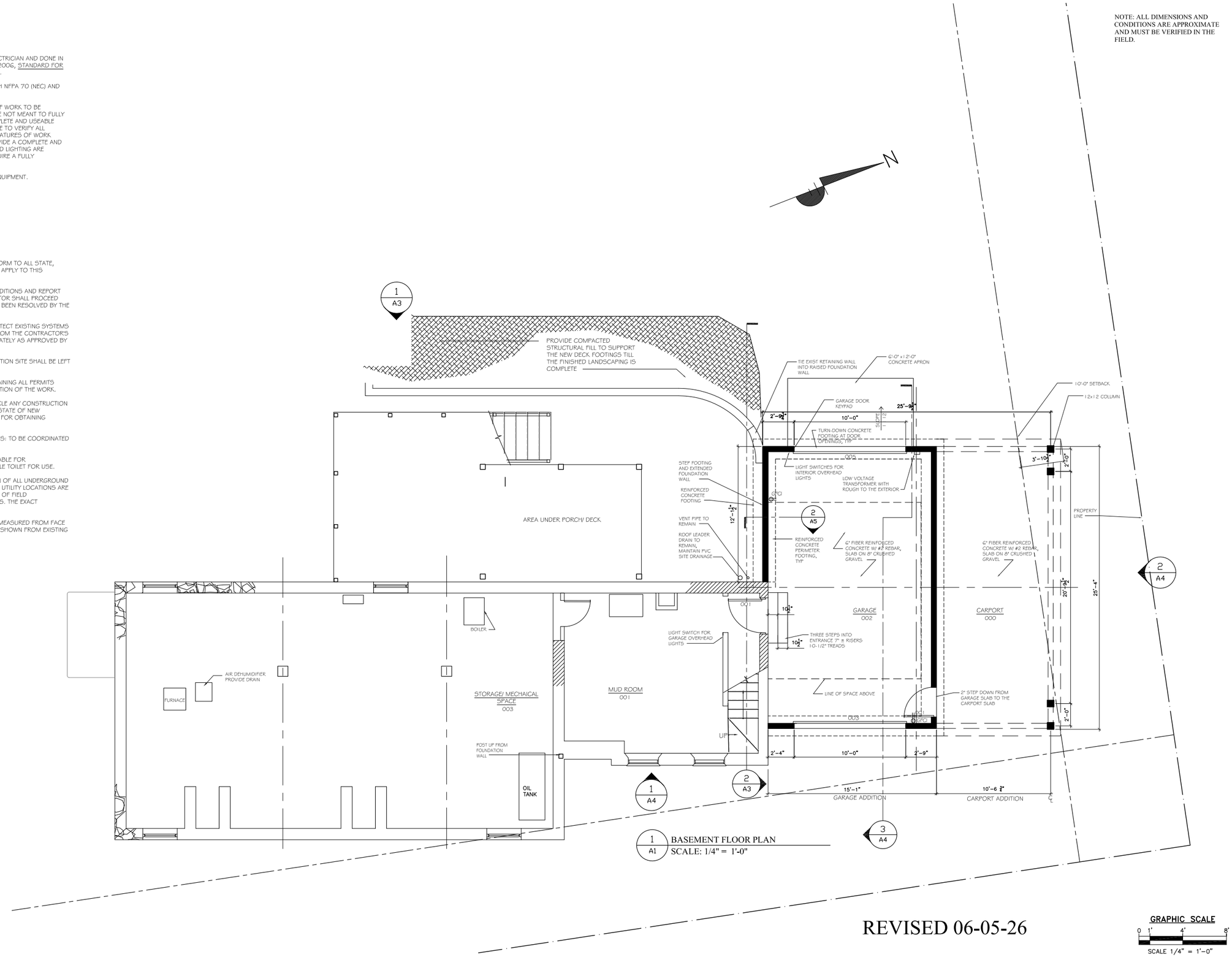
7. MOBILIZATION, LAY DOWN AND DUMPSTER LOCATIONS: TO BE COORDINATED AT SITE WITH OWNER.

8. THE EXISTING TOILET FACILITIES SHALL NOT BE AVAILABLE FOR CONTRACTOR'S USE. CONTRACTOR TO OBTAIN PORTABLE TOILET FOR USE.

9. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES BEFORE COMMENCING WORK. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE. LOCATIONS SHOWN ARE A COMPILATION OF FIELD INVESTIGATIONS AND EXISTING BASE RECORD DRAWINGS. THE EXACT LOCATIONS CAN ONLY BE DETERMINED BY EXCAVATION.

10. ALL DIMENSION LINES AT NEW CONSTRUCTION ARE MEASURED FROM FACE OF STUD UNLESS NOTED OTHERWISE. ALL DIMENSIONS SHOWN FROM EXISTING CONSTRUCTION ARE FROM FACE OF FINISHED WALL.

NOTE: ALL DIMENSIONS AND CONDITIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD.



1 / A1 BASEMENT FLOOR PLAN
SCALE: 1/4" = 1'-0"

REVISED 06-05-26

GRAPHIC SCALE
0 1' 4' 8'
SCALE 1/4" = 1'-0"

MARTIN RYAN ARCHITECT
221 Woodbury Ave
Portsmouth, NH 03801
603-502-9635

LICENSED ARCHITECT MARTIN L. RYAN No. 2805 STATE OF NEW HAMPSHIRE

PERMIT SET
05 JUNE 2026

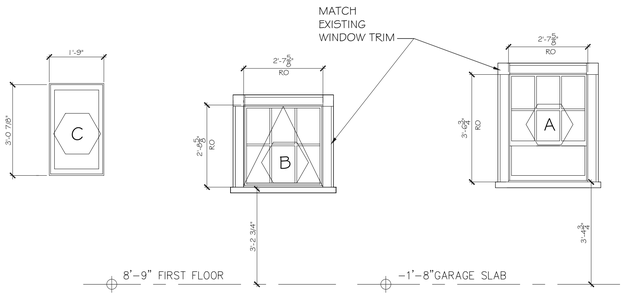
7 CHURCH STREET
GARAGE ADDITION
DOVER
NEW HAMPSHIRE

DATE: –
DESIGN: –
DRAWN: MLR
CHECKED: XX
SCALE:
JOB:

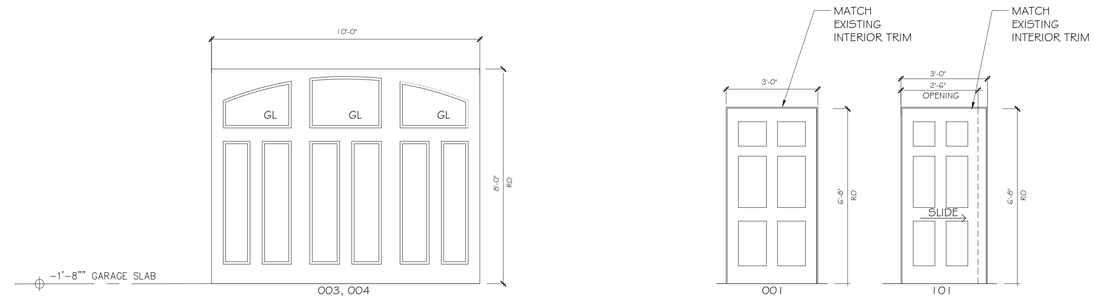
BASEMENT FLOOR PLAN

A1

NOTE: ALL DIMENSIONS AND CONDITIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD.



3 / A2 WINDOW TYPES
SCALE: NTS



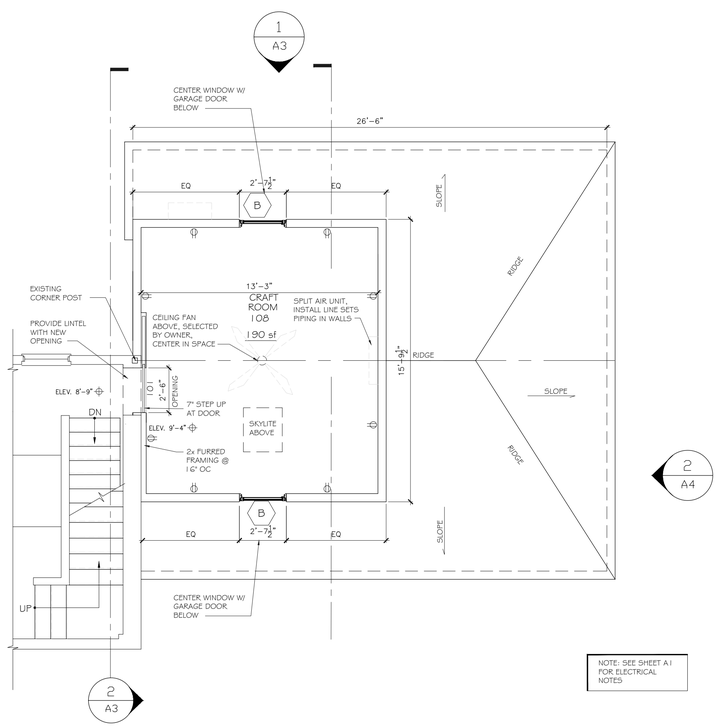
4 / A2 DOOR TYPES
SCALE: NTS"

WINDOW SCHEDULE (TYPES)

WINDOW NUMBER	TYPE	PANES	OPERATION	QUANTITY	MANF.	SIZE	NOTES
A	NEW	6/1	DH	1	ANDERSON 400 WOODWRIGHT	2'-7 5/8" x 3'-6 3/4"	NEW WINDOWS
B	NEW	6	AWNING	2	ANDERSON 400 WOODWRIGHT	2'-7 5/8" x 2'-8 5/8"	NEW WINDOWS
C	NEW SKYLIGHT	1	FIXED	1	VELUX- DECK MOUNTED	C04 21" x 37-7/8"	FIXED SKYLIGHTS

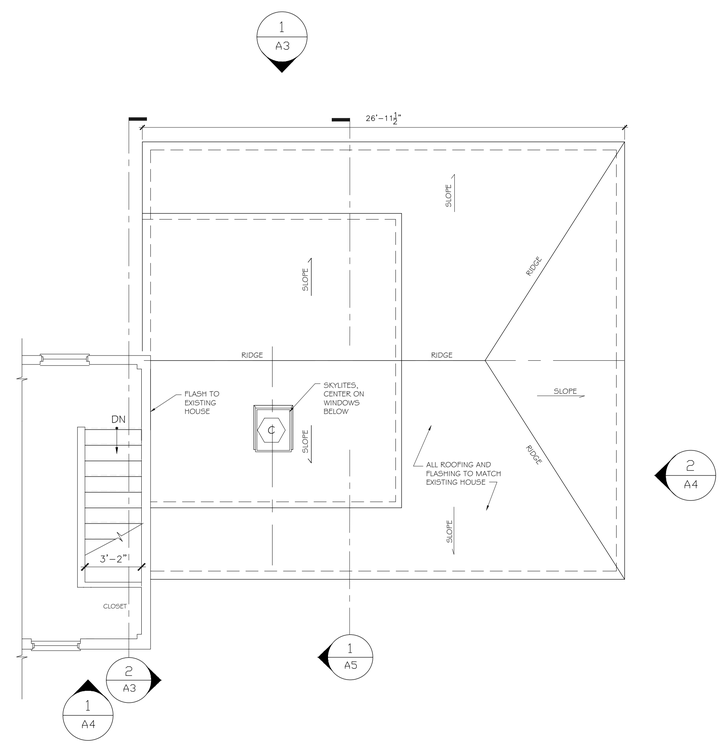
DOOR SCHEDULE

NO.	LOCATION	DOOR TYPE WIDTH	HEIGHT	THICKNESS	MATERIAL	FIRE RATING	REMARKS	ACCESS
001	ENTRANCE DOOR	3'-0"	6'-8"	1-3/4"	-	20 MINUTE	ENTRANCE HARDWARE, REPLACEMENT DOOR, VERIFY EXISTING FRAME AND OPENING	-
101	POCKET DOOR	2'-6"	6'-8"	-	WD		-	
002	ENTRANCE DOOR	3'-0"	6'-8"	1-3/4"	-		ENTRANCE HARDWARE, SELECTED BY OWNER	CHAIN DRIVE
003	GARAGE	10'-0"	8'-0"	-	-			CHAIN DRIVE
004	GARAGE	10'-0"	8'-0"	-	-		-	CHAIN DRIVE
							-	-



NOTE: SEE SHEET A1 FOR ELECTRICAL NOTES

1 / A2 PARTIAL 2ND FLOOR PLAN PLAN
SCALE: 1/4" = 1'-0"



2 / A2 GARAGE ROOF PLAN
SCALE: 1/4" = 1'-0"

GENERAL CONSTRUCTION NOTES

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3. CARE SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SYSTEMS AND SURFACES TO REMAIN. ALL DAMAGE RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY AS APPROVED BY THE OWNER AT NO ADDITIONAL COST TO THE OWNER.

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7. MOBILIZATION, LAY DOWN AND DUMPSTER LOCATIONS: TO BE COORDINATED AT SITE WITH OWNER.

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10. ALL DIMENSION LINES AT NEW CONSTRUCTION ARE MEASURED FROM FACE OF STUD UNLESS NOTED OTHERWISE. ALL DIMENSIONS SHOWN FROM EXISTING CONSTRUCTION ARE FROM FACE OF FINISH WALL.

REVISED 06-05-26

GRAPHIC SCALE
0 1' 4' 8'
SCALE 1/4" = 1'-0"

MARTIN RYAN ARCHITECT
221 Woodbury Ave
Portsmouth, NH 03801
603-502-8535

LICENSED ARCHITECT
MARTIN L. RYAN
No. 2808
STATE OF NEW HAMPSHIRE

PERMIT SET
05 JUNE 2026

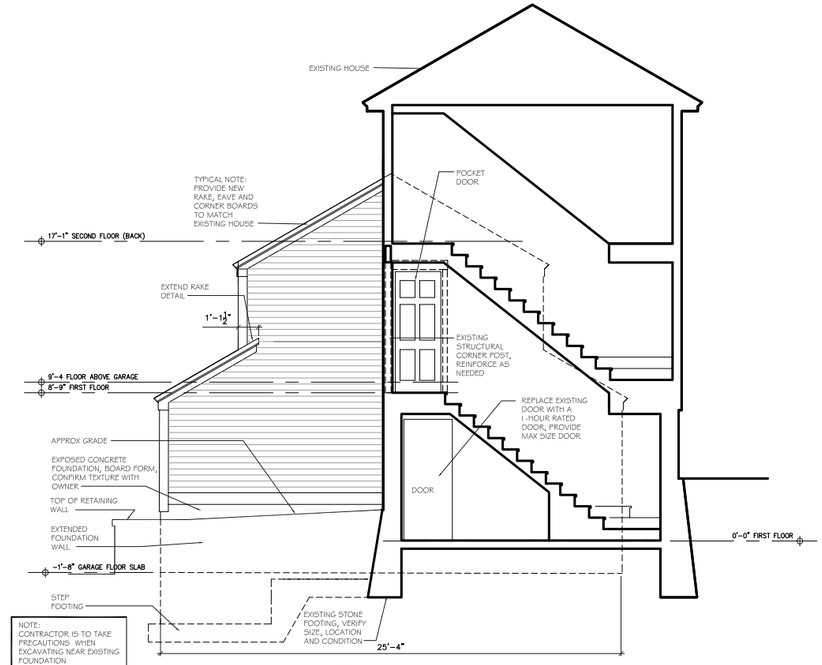
7 CHURCH STRRET
GARAGE ADDITION
DOVER
NEW HAMPSHIRE

DATE: –
DESIGN: –
DRAWN: MLR
CHECKED: XX
SCALE:
JOB:

FIRST FLOOR & ROOF PLAN
SCHEDULES

A2

NOTE: ALL DIMENSIONS AND CONDITIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD.



2 / A3 SECTION AT STAIRS
SCALE: 1/4" = 1'-0"

1 / A3 WEST ELEVATION
SCALE: 1/4" = 1'-0"

REVISED 06-05-26

GRAPHIC SCALE
0 1' 4' 8'
SCALE 1/4" = 1'-0"

MARTIN RYAN ARCHITECT
221 Woodbury Ave
Portsmouth, NH 03801
603-502-9635

LICENSED ARCHITECT MARTIN L. RYAN No. 2868 STATE OF NEW HAMPSHIRE

PERMIT SET
05 JUNE 2026

7 CHURCH STRREET
GARAGE ADDITION
DOVER
NEW HAMPSHIRE

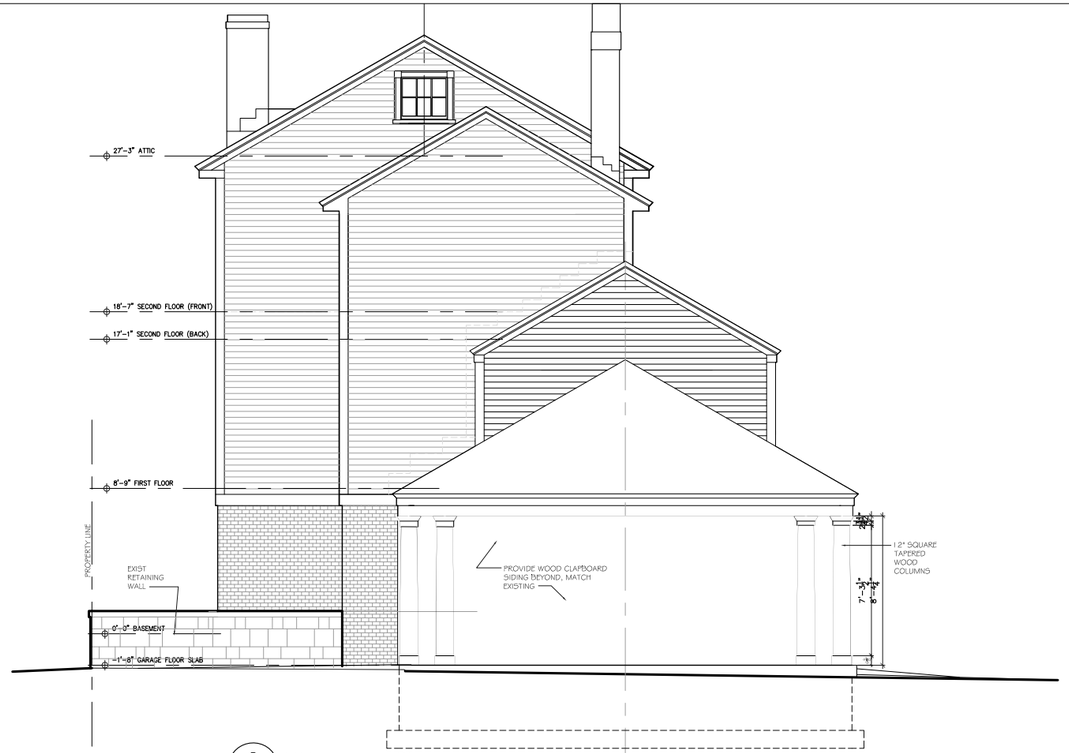
DATE:	–
DESIGN:	–
DRAWN:	MLR
CHECKED:	XX
SCALE:	
JOB:	

WEST ELEVATION & BUILDING SECTION

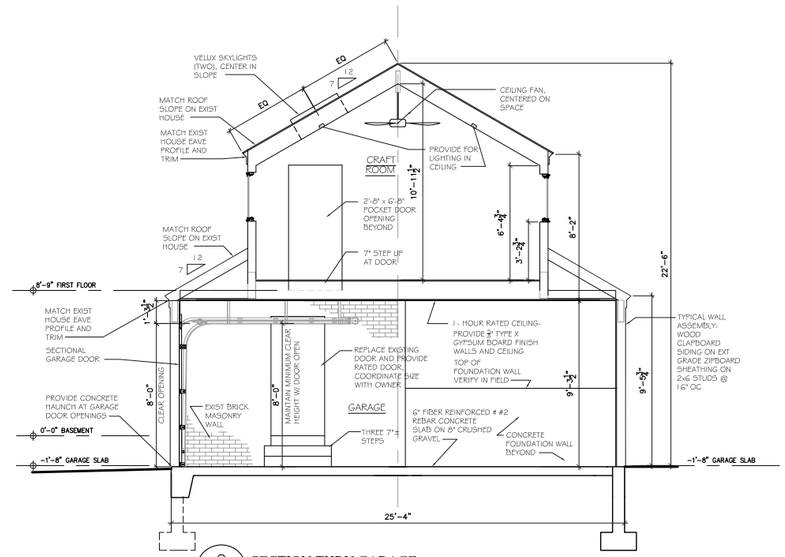
A3

NOTE: ALL FRAMING AND STRUCTURAL MEMBERS TO BE CONFIRMED BY A LICENSED STRUCTURAL ENGINEER. THIS INCLUDES THE SIZING OF STRUCTURAL FRAMING MEMBERS SUCH AS BEAMS, COLUMNS, JOIST, POSTS, FOOTING AND SLABS.

NOTE: ALL DIMENSIONS AND CONDITIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD.



2 / A4 NORTH ELEVATION
SCALE: 1/4" = 1'-0"



3 / A4 SECTION THRU GARAGE
SCALE: 1/4" = 1'-0"

1 / A4 EAST ELEVATION
SCALE: 1/4" = 1'-0"

REVISED 06-05-26

GRAPHIC SCALE
0 1' 4' 8'
SCALE 1/4" = 1'-0"

MARTIN RYAN ARCHITECT
221 Woodbury Ave
Portsmouth, NH 03801
603-502-6533

LICENSED ARCHITECT MARTIN RYAN No. 2806 STATE OF NEW HAMPSHIRE

PERMIT SET
05 JUNE 2026

7 CHURCH STREET
GARAGE ADDITION
DOVER
NEW HAMPSHIRE

DATE: –
DESIGN: –
DRAWN: MLR
CHECKED: XX
SCALE:
JOB:

NORTH & EAST ELEVATIONS
GARAGE SECTION

A4

FOUNDATION NOTES

FOOTING AND SLABS HAVE BEEN DESIGNED TO BEAR ON SOILS WITH A MINUMUM ALLOWABLE PRESUMPTIVE BEARING CAPACITY OF 2000 PSF.

EXCAVATION, FILL PLACEMENT AND COMPACTION IS TO BE PERFORMED IN THE DRY AND IN UNFROZEN GROUND. THE CONTRACTOR SHALL PERFORM DE-WATERING AS REQUIRED TO MAINTAIN THE GROUNDWATER LEVEL BELOW THE BOTTOM OF THE EXCAVATION. CONTACT THE ENGINEER IF UNSTABLE, SATURATED OR WEAVING SOILS ARE ENCOUNTERED.

REMOVE ALL DELETERIOUS MATERIALS, TOP SOIL, BOULDERS, STUMPS AND OTHER ORGANICS FROM BENEATH NEW SLABS AND FOOTINGS. CARE SHALL BE TAKEN NOT TO DISTURB SOILS BELOW LINES AND GRADES REQUIRED FOR STRUCTURAL FILL PLACEMENT OR FOOT BEARING.

MAINTAIN A MINIMUM OF 4 FEET FROM GRADE TO BOTTOM OF FOOTINGS. THE CONTRACTOR SHALL PROTECT FOOTING AND SLAB SURFACES FROM FREEZING.

PRIOR TO FILL PLACEMENT AND FOOTING CASTING, COMPACT THE EXISTING MATERIAL TO 95% DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 1557 METHOD C. NOTIFY THE ENGINEER IF NOTICEABLE DEPRESSIONS OCCUR DURING COMPACTION.

FILL REQUIRED WITHIN THE BUILDING FOOTPRINT SHALL BE CRUSHED GRAVEL MEETING THE REQUIREMENTS OF NHDOT SPECIFICATIONS ITEM NUMBER 304.3 MODIFIED CRUSHED GRAVEL. PLACE AND COMPACT MATERIAL IN 6 TO 12 INCH LIFTS, DEPENDING ON EQUIPMENT USED FOR COMPACTION. COMPACT MATERIAL TO 95% DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 1557 METHOD C.

FOOTINGS ARE TO BE CENTERED UNDER WALLS AND COLUMNS UNLESS NOTED OTHERWISE.

FOUNDATION WALLS SHALL BE BACKFILLED SUCH THAT THE TOP OF THE FILL DOES NOT VARY MORE THAN 16 INCHES FROM ONE SIDE TO THE OTHER. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PREVENT MOVEMENT OF FOUNDATION WALLS WHILE BACKFILLING. DO NOT BACKFILL WALLS UNTIL THE FIRST FLOOR DECK AND STEEL BRACED FRAME ARE IN PLACE.

CONCRETE AND REINFORCING STEEL NOTES

ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH ACI 301-99 "SPECIFICATIONS FOR STRUCTURAL CONCRETE"

CONCRETE DESIGN MIXES SHALL BE PREPARED IN ACCORDANCE WITH ACI 211, ACI 318, THE PROJECT SPECIFICATIONS AND SHALL HAVE THE FOLLOWING STRENGTHS AND PROPERTIES:

LOCATION	STRENGTH AT 28 DAYS (f'c)
CONCRETE SLABS	4000 PSI
ALL OTHER CONCRETE	3000 PSI

(f'c)	CEMENT/YD	MAX W/C RATIO BY WT
4000 PSI	611 POUNDS	0.45
3500 PSI	564 POUNDS	0.45
3000 PSI	517 POUNDS	0.55

CONCRETE FOR EXTERIOR WALLS AND EXTERIOR SLABS SHALL BE AIR ENTRAINED TO 6(+/- 1)%.

MAXIMUM SLUMP SHALL BE SET FORTH IN THE APPROVED CONCRETE DESIGN MIX.

REINFORCING STEEL SHALL CONFORM TO ASTM A 615 GRADE 60 SPECIFICATIONS, FABRICATED IN ACCORDANCE WITH THE MANUAL OF STANDARD PRACTICE OF THE CONCRETE REINFORCING STEEL INSTITUTE AND PLACED IN ACCORDANCE WITH ACI 315 AND ACI MANUAL OF STANDARD PRACTICE.

WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 GRADE 65 AND BE FURNISHED IN FLAT SHEETS. LAP ALL WWF EDGES TWO SQUARES.

SUPPORT WWF USING STANDARD CONCRETE BRICKS AT 3 FEET ON CENTER TO MAINTAIN THE WWF AT THE CENTER OF THE SLAB, UNLESS SHOWN OTHERWISE.

MAINTAIN THE FOLLOWING CONCRETE COVER OVER REINFORCING UNO:

CONCRETE CAST AGAINST EARTH	3"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER	2"
COLUMNS AND BEAMS NOT EXPOSED TO EARTH OR WEATHER	1½"
SLABS AND WALLS NOT EXPOSED TO EARTH OR WEATHER	¾"

PROVIDE CORNER BARS TO MATCH SIZE AND SPACING OF ALL DISCONTINUOUS REINFORCING IN WALLS AND FOOTINGS.

REINFORCING SHALL BE SPLICED AND EMBEDDED AS FOLLOWS:

BAR SIZE	SPLICE LENGTH	STRAIGHT BAR EMBEDDMENT LENGTH
#3	1'-6"	1'-0"
#4	2'-0"	1'-4"
#5	2'-6"	1'-6"
#6	3'-0"	2'-0"

WOOD FRAMING NOTES

UNLESS NOTED OTHERWISE, ALL FRAMING LIMBER SHALL HAVE THE FOLLOWING CHARACTERISTICS:
Fb = 1,000 psi Fv = 75 psi E = 1,400,000 psi

CONTRACTOR TO CONFIRM THE SIZE, SPACING AND STRESS CHARACTERISTICS OF ALL FRAMING AND STRUCTURAL MEMBERS TO MEET THE LOCAL CODE REQUIREMENTS.

WALL BRACING METHOD ASSUMED AS CS-WSP.

HOLE SIZES AND LOCATIONS IN GLULAM OR LAMINATED VENEERED LUMBER MEMBERS ARE TO BE CONFIRMED BY PROFESSIONAL ENGINEER.

ANY STRUCTURAL MEMBERS OR FRAMING MEMBERS NOT INDICATED ON THE PLAN ARE TO BE SIZED BY THE CONTRACTOR.

DOUBLE FLOOR JOISTS UNDER ALL PARTITION WALLS, UNLESS NOTED OTHERWISE.

ALL SUB-FLOORING IS ASSUMED TO BE ¾" THICK, GLUED & NAILED.

ALL NEW EXTERIOR WALLS ARE DIMENSIONED TO OUTER FACE OF STUD.

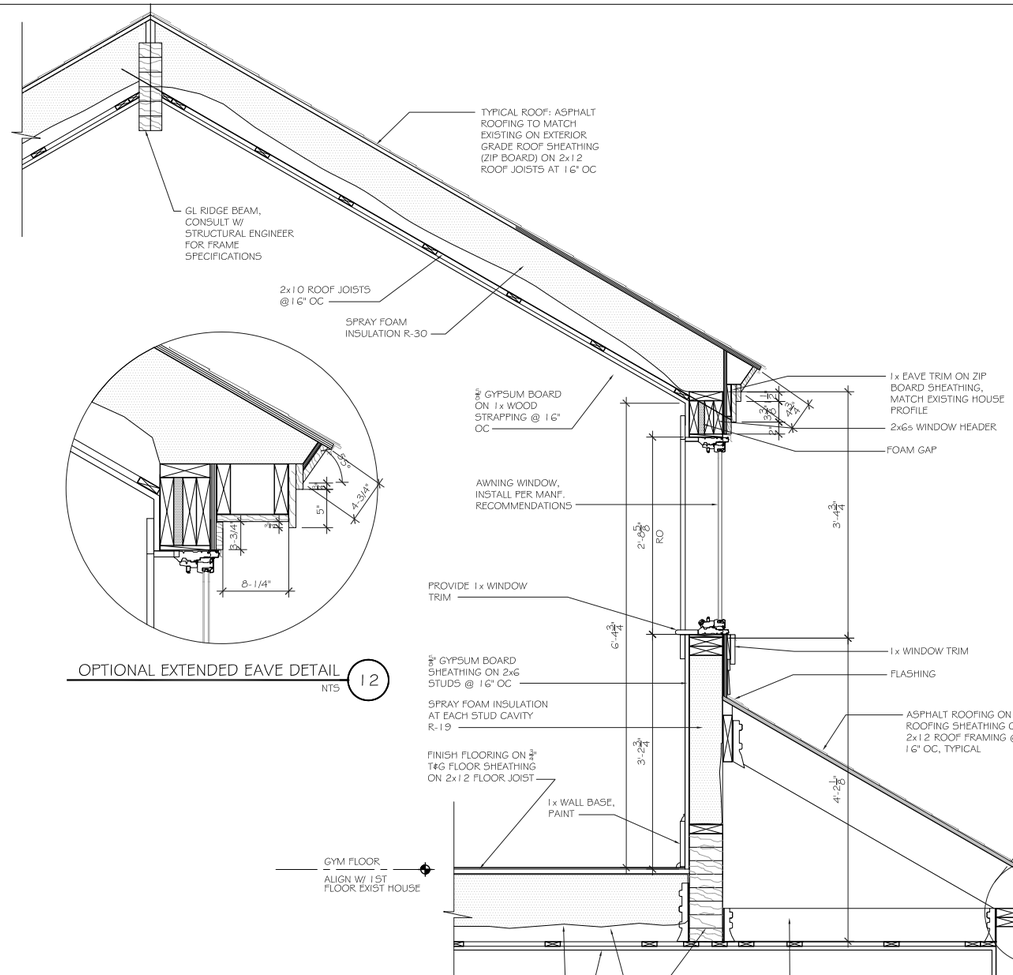
UNLESS NOTED OTHERWISE, ABOVE ALL OPENINGS THAT ARE:
1. LOAD BEARING AND LESS THAN OR EQUAL TO 3'-0"- USE 4x6 FRAMING.
2. LOAD BEARING AND MORE THAN 3'-0", USE (2) 2x12s W/ 4-PLY SHEATHING BETWEEN.
3. NON-LOAD BEARING AND LESS THAN OR EQUAL TO 6'-0", USE 4X6.
4. NON-LOAD BEARING AND MORE THAN 6'-0", USE (2) 2x12s W/ 4-PLY SHEATHING BETWEEN.
5. ALL EXTERIOR OPENINGS USE (2) 2x12s W/ 4-PLY SHEATHING BETWEEN.

ALL TRUSSES TO BE ENGINEERED BY TRUSS MANUFACTURER ACCORDING TO THE LOADING INDICATED ON THIS PLAN.

ALL EXTERIOR CORNERS SHALL BE BRACED IN EACH DIRECTION WITH LET-IN DIAGONAL BRACING OR PLYWOOD.

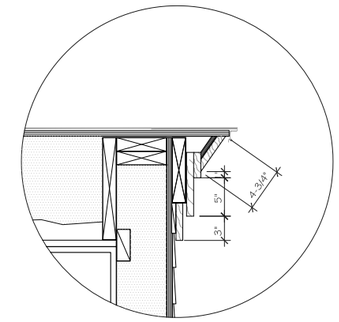
PLACE (1) ROW 1" x 3" CROSS-BRIDGING ON ALL SPANS OVER 8'-0" AND (2) ROWS OF 1" x 3" CROSS-BRIDGING ON ALL SPANS OVER 16'-0"

NOTE: ALL DIMENSIONS AND CONDITIONS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD.

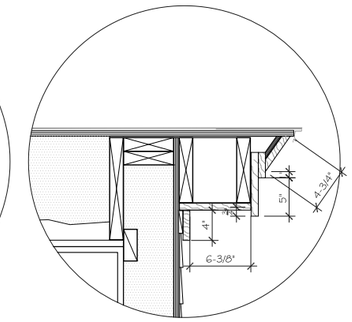


NOTE- PROVIDE FIRE SEALANT WHERE TYPE-X GYPSUM BOARD IS PENETRATED

OPTIONAL EXTENDED EAVE DETAIL 12
NTS



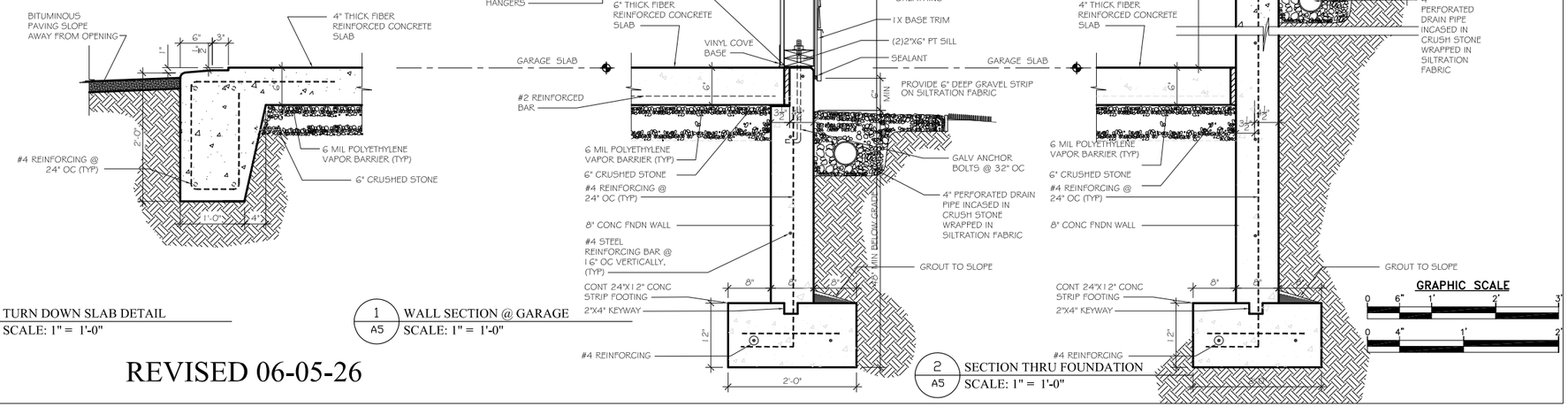
4 A5 TYPICAL RAKE DETAIL
SCALE: NTS



5 A5 OPTIONAL RAKE DETAIL
SCALE: NTS

NOTE: ALL FRAMING AND STRUCTURAL MEMBERS TO BE CONFIRMED BY A LICENSED STRUCTURAL ENGINEER. THIS INCLUDES THE SIZING OF STRUCTURAL FRAMING MEMBERS SUCH AS BEAMS, COLUMNS, JOIST, POSTS, FOOTING AND SLABS.

3 A5 TURN DOWN SLAB DETAIL
SCALE: 1" = 1'-0"



1 A5 WALL SECTION @ GARAGE
SCALE: 1" = 1'-0"

2 A5 SECTION THRU FOUNDATION
SCALE: 1" = 1'-0"

REVISED 06-05-26

MARTIN RYAN ARCHITECT
221 Windham Ave
Portsmouth, NH 03801
603-502-9035

LICENSED ARCHITECT MARTIN RYAN No. 2806 STATE OF NEW HAMPSHIRE

PERMIT SET
05 JUNE 2026

7 CHURCH STRRET
GARAGE ADDITION
DOVER
NEW HAMPSHIRE

DATE: –
DESIGN: –
DRAWN: MLR
CHECKED: XX
SCALE:
JOB:

PARTIAL SECTION AT GARAGE & DETAILS

A5

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #SUBM-2026-0002

Application Type:	Minor Subdivision
Applicant(s):	Daniel G. Gabriel, Trustee
Owner(s):	Daniel G. Gabriel Trust
Location:	260 Dover Point Rd. (Assessor's Map L, Lot 98-A)
Meeting Date:	July 28, 2026

INTENT: Proposal is to subdivide the parcel to make one (1) new lot for a total of two (2) lots.

AGENDA ITEM #: 4-A

FILE: SUBM-2026-0002

OWNER/APPLICANT: Daniel G. Gabriel Trust / Daniel G. Gabriel, Trustee

LOCATION: 260 Dover Point Rd. (Assessor's Map L, Lot 98-A)

LOTS/UNITS PROPOSED: One new lot

ACREAGE:
Existing Acreage: ±0.935 ac. (±40,728 s.f.)

Proposed adjustment to Map L, Lot 98A:
20,216± sq. ft. /0.464± ac.

Proposed new lot, Map L, Lot 98A-1:
20,512± sq. ft. /0.471 ± ac.

ZONING DISTRICT: Low-Density Residential (R-20) District

EXISTING/PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential

WAIVERS REQUESTED: None

ZBA ACTION: 5/21/2026, Variances granted for frontage relief for parent and proposed parcel, and for front build-to-line relief on proposed parcel.

PERMITS REQUIRED: N/A

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

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

ATTACHMENTS: Application, Subdivision Plan

Summary of Request and Background:
The applicant proposes subdividing the parent parcel located 260 Dover Point Road (Assessor's Map L, Lot 98-A), creating one (1) new lot directly south of the parent parcel, with the newly proposed lot totaling approximately 20,512± square feet, or 0.471± acres.

Prior to this subdivision request, the Applicant appealed to the Zoning Board of Adjustment for frontage relief for both the parent lot and the new lot post-subdivision, as each proposed approximately 100' of road frontage where 120' is required via underlying zoning. The Applicant also sought a third variance for front build-to line relief on the newly-created parcel as they wished to keep the existing driveway, which as you can see on their plan, traverses both parcels, necessitating any structure on the new lot be situated well past the underlying build-to range.

The ZBA granted these variances, enabling the subdivision request before you now.

As this proposal only involves a Minor Subdivision, no review was required by the Technical Review Committee.

Consistency with Land Use Regulations:
Staff confirms this plan is consistent with §157-14 of the City of Dover's Land Subdivision Regulations, which provides for subdivision of existing lots.

Considering the granted variance relief detailed above (two variances for 100' frontages, and one variance for front-build-to line relief on the new parcel) each lot complies with underlying zoning's dimensional requirements.

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 minor subdivision with the following subsequent conditions:

Subsequent Conditions to be Met Prior to Signing of Plans:

1. Provide physical and digital copies (including CAD) of complete plan set for recording at Strafford Country Registry of Deeds, which additionally shall include:
   - 1.1. The owner's signatures;
   - 1.2. The Planning File #SUBM-2026-0002;
   - 1.3. The stamp and signature of the LLS on the final plans;
   - 1.4. Confirm lot numbering with City Assessor and include approved numbering on plan set.

SUBM-2026-0002 260 Dover Point Road

Property Information

Location	260 DOVER POINT RD
Owner	GABRIEL DANIEL G TRUSTEE
Land Use	101R
Zoning Code	R-20
Property Id	L0098-A00000

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 06/2026
Data updated Daily

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

PLAN SNAPSHOT REPORT SUBM-2026-0002
FOR CITY OF DOVER, N.H.

Plan Type:	Subdivision Plan - Minor	**Project:**		**App Date:**	07/07/2026
Work Class:	New Construction	**District:**	None	**Exp Date:**	09/10/2026
Status:	In Review	**Square Feet:**	40,728.00	**Completed:**	NOT COMPLETED
Valuation:	$439,600.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	
Description:					

Parcel:	L0098-A00000 Main	**Address:**	260 Dover Point Rd Dover, NH Main	**Zone:**	R-20(Residential - Low Density)

Owner
Daniel Gabriel
Business: (603) 749-4529

Applicant
McEneaney Survey Associates
P.O. Box 1166
DOVER, NH 03821
Business: (603) 742-0911

Plan Custom Fields

Proposed Number of New Lots	1	Existing Number of Lots	1	Parcel Map/Lot	L/98-A
Parcel Zoning Overlay		Select Subdivision Type	Conventional	Parcel Zoning	R-20
Property Address	260 Dover Point Road Dover, NH 03820	Existing Parcel Size (Ac)	0.935	Existing Parcel Size (sqft)	40728.6
Proposed Use Detail		Owner Name	Daniel G. Gabriel	Deed Page	647
Deed Book	5201	Owner Address	P.O. Box 727 Dover, NH 03821	Deed Date	
Refuse Removal	Public	Owner Phone	603-767-9163	Parcel Feedback	
Owner EMail	dgabriel90@aol.com	Existing Use Detail	Single family residential.	TDR Detail	
subdroadtype	Municipal	Water Source?	Municipal	Distance to City Water (ft)	50
Distance to City Sewer (ft)	50	Sewer Service?	Municipal	Subdivision Regulations section(s) to be waived	
Justification for waiver request(s)					

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Kevin_McEneaney_7/7/2026.jpg	07/07/2026 8:56	McEneaney, Kevin		Uploaded via CSS

Invoice No.	Fee	Fee Amount	Amount Paid
INV-2026002545	Planning Subdivision Application Fee	$200.00	$0.00
	Planning Subdivision Lot Fee	$200.00	$0.00
	Total for Invoice INV-2026002545	$400.00	$0.00
	Grand Total for Plan	**$400.00**	**$0.00**

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		07/07/2026 9:54	07/07/2026 9:54
Confirm application complete v.1	Generic Action		07/07/2026 9:54
Planning Board v.1		07/07/2026 9:54	
Planning Board Agenda v.1	Task	07/07/2026 9:54	
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 Final Review v.1	Receive Submittal
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
Create/Link to Records v.1	
Create / Link to Permit - Building Major v.1	Create Sub Permit

City of Dover, New Hampshire
MINOR SUBDIVISION APPLICATION

[Revision Date: July 1, 2021]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: Daniel G. Gabriel Revocable Trust Daniel G. Gabriel, Trustee Telephone # 603-767-9163

Address of Applicant: P.O. Box 727 Dover, NH 03821

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

Address of Property Owner: _____

E-Mail Address: dgabriel90@aol.com

PROPERTY INFORMATION

Address of Property: 260 Dover Point Road

Assessor's Map # L Lot(s) # 98-A

Zoning District(s) R-20 Low Density Residential Overlay District(s) _____

Size of Parcel: 40,728 S.F (.935 AC) Property Deed: Book 5201 Page: 647

Existing Use of Property: Single family residential.

SUBDIVISION INFORMATION

Existing Number of Lots: 1 Proposed Number of Lots: 2

TDR Relief sought (Check All That Apply): □ Lot Size □ Frontage □ Setback □ 30' Buffer □ Purchase ____ units

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

_____

_____

_____

Circle one for each category:

Water: City / Well (circle one) How far is city water from the property? 50 feet

Sewer: City / Septic (circle one) How far is city sewer from the property? 50 feet

Highway Access: City Street / State Highway (circle one) | Roadway: Public or Private Road (circle one)

Refuse removal: Public / Private (circle one) | Estimated Length of Proposed Road: N/A feet

Estimated value of construction: N/A New impervious area (in s.f.): N/A

WAIVER REQUESTS

Subdivision Regulations section(s) to be waived: N/A

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

_____

SURVEYOR INFORMATION

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

Address P.O. Box 1166 Dover, NH 03821 Telephone #: 603-749-0443

Professional License #: NH LLS # 661 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 P.O. Box 1166 Dover, NH 03821 Telephone #: 603-749-0443

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

LANDSCAPE ARCHITECT INFORMATION

Name of Landscape Architect and Company (Licensed in N.H.) _____

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

SOIL SCIENTIST INFORMATION

Name of Soil Scientist and Company (Licensed in N.H.) _____

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

CONSERVATION EASEMENT HOLDER

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: _____

Signature of Applicant (*if different from owner*): _____ Date: _____

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: _____

AUTHORIZATION TO COMPLETE THE PROJECT ON SUBJECT PROPERTY

I, and my successors, hereby authorize the City of Dover and 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: _____

Signature of Applicant (*if different from owner*): _____ Date: _____

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: _____

Signature of Applicant (*if different from owner*): _____ Date: _____

CERTIFICATION OF PUBLIC ROADWAY ACCEPTANCE

I, and my successors, hereby certify that I understand that the acceptance of a roadway as a public road is an action of the City Council in its sole and complete discretion. In order for the City Council to consider accepting a road as public, it must be free of encumbrances. No roadway with private utility easements shall be accepted as a public road by the City unless the easements are expunged prior to the transfer of land to the City. License agreements for any and all private utilities within the right of way may be granted by the City upon acceptance of the unencumbered roadway consistent with applicable state law.

Signature of Property Owner: _____ Date: _____

Signature of Applicant (*if different from owner*): _____ Date: _____

CITY OF DOVER SUBDIVISION
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
L	98-A	Daniel G. Gabriel Revocable Trust	P.O. Box 727 Dover, NH 03821

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
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

PLANNING BOARD FEE SCHEDULE/INVOICE

(Revised July 24, 2023)

Below are the fees associated with plan review and are subject to a nonrefundable application fee to cover administrative expenses. Please complete the information below and provide payment with your application submittal. **Plan review fees shall be paid prior to technical review committee (TRC) being scheduled.** For plans not requiring TRC review, **fees are due 21 days prior** to the Planning Board meeting. Staff will coordinate abutter/notice fees, which will be invoiced and must be paid 28 hours before the Planning Board meeting for an application to be heard. Fees shall be paid by cash or check made payable to "City of Dover".

A. Plan Review Fees

1. Application fee for the following (SELECT ALL THAT APPLY):

- ☑ SUBDIVISION Application fee $200.00 + $150.00 x # __1__ new lots created = $__350.00__
- ☐ LOT LINE ADJUSTMENT Application fee $200.00 + $100.00 X # ___ of lots involved = $_____
- ☐ TRANSFER OF DEVELOPMENT RIGHTS Application fee $200.00 = $_____
- ☐ SITE REVIEW – RESIDENTIAL Application fee $200.00+ $100.00 x # __ per dwelling unit =$_____
- ☐ SITE REVIEW – NON-RESIDENTIAL Application fee $200.00 + (not to exceed $10,000)
  - New construction $.15 sq. ft. x # _____ sq. ft.= $_____
  - Additions (new floor space) $.10 per sq. ft. x # _____sq. ft.= $_____
- ☐ MOTEL/HOTEL $35.00 x # ___ per lodging unit= $_____
- ☐ CHANGE OF USE Application fee $200.00 + (not to exceed $5,000)
  - Existing floor spaces $.10 per sq. ft. x # _____ sq. ft. = $_____
- ☐ CONDITIONAL USE PERMIT Application fee $200.00 x # _____ per Application = $_____
- ☐ GRAVEL PIT/ EXCAVATIONS
  - Application fee $50.00= $_____
  - Permit fee $75.00= $_____
- ☐ EXTENSIONS/AMENDMENTS/WAIVERS FOR AN APPROVED PLAN Application fee $200.00 = $_____
- ☐ REQUEST FOR REZONING Application fee $200.00 = $_____
- ☐ DRIVEWAY WAIVER Application fee $200.00 = $_____
- ☐ **TOTAL IMPERVIOUS PAVED AREA** (for new development, roadways or additions to existing parking lots, (not to exceed $10,000)) Application fee of $200.00 is N/A if it is part of a Site Review or Subdivision Plan. $200.00 + $.07 per sq. ft. x # _____ sq. ft. = $_____

SUBTOTAL PLAN REVIEW FEE = $__350.00__

AND

B. Abutter Notification/Mailing Labels - this office will create and print the abutter list and provide labels in triplicate for each abutter. The applicant/owner will review the list for accuracy and provide to us the engineer, architect, licensed land surveyor (LLS), licensed landscape architect (LLA) and/or soil scientist whose professional seal appears on the plan with names and addresses for notices.

- ☐ Applicant & Owner, engineer, architect, LLS, LLA and/or soil scientist
  - Certified letters fee # _____ of x $10.00= $_____
- ☐ Certified letters fee: # of abutters _____ X $10.00= $_____
- ☐ First Class Mail fee (for individual owner of units within a condominium or other collective form of ownership): # of abutters _____ X $1.00= $_____
- ☐ Creating/Printing Abutter Labels in triplicate per sheet _____ x $10.00= $_____

C. Foster's newspaper public notice fee $120.00 x # _____ applications = $_____

SUBTOTAL = $_____

TOTAL INVOICE AMOUNT = $_____

PLAN REVIEW FEE COLLECTED/PAID = $ _____

BALANCE DUE = $ _____

The amount due must be paid 28 hours prior to the Planning Board Meeting, to be heard.

City of Dover, New Hampshire
MINOR SUBDIVISION SUBMISSION CHECKLIST

[Revision Date: May 18, 2019]

This review checklist is intended to assist the applicant in the planning process of preparing a Subdivision 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.

Plan Review Fees are due along with three (3) full size and twelve (12) half size (11x17), folded, copies of the plan set and materials, 3 weeks prior to the Planning Board meeting. Abutter/Notice Fees will be invoiced and are due 28 hours prior to Planning Board.

The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all subdivision requirements. Please refer to the Subdivision Regulations for full details.

APPLICANT: Daniel G. Gabriel Revocable Trust
Daniel G. Gabriel, Trustee _____ File Number: _____

PROJECT TITLE: _____

PROPERTY LOCATION: 260 Dover Point Road _____ Tax Map: L ___ Lot: 98-A

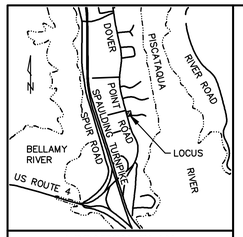
	Where/How Provided	Reviewed
1. Completed and signed Application form	✓	
2. Plan Review Fees are provided	✓	
3. Electronic copy of the surveyed plat layout	✓	
4. Electronic copy of supplementary materials and application	✓	
5. Waiver requests to the Subdivision Regulations, with written justification	N/A	
6. Conditional Use Permit applications	N/A	
7. Fifteen folded copies of subdivision plan w/scale of not less than 1"=50' or 1"=100' for larger subdivisions. Plans shall contain the following items as appropriate:	✓	
Location map at appropriate scale	✓	
Proposed subdivision name and title and Planning File #	✓	
Date, north arrow and scale	✓	
Names of all abutting property owners	✓	
Name and address of owners and/or applicants	✓	
Signature & stamp of NH licensed land surveyor and/or engineer	✓	
Zoning District boundaries, including any special or overlay districts	✓	
Location of Conservation District areas	N/A	
Location, names and widths of existing and proposed streets, including pavement widths, grades, curbs and crosswalks	✓	
Location and widths of existing & proposed easements & right of ways	✓	
Location and widths of existing and proposed sidewalks	N/A	
Existing and proposed property lines with dimensions and bearings tied into Dover's Geographic Information System coordinate system	✓	
Existing and proposed lot areas in square feet	✓	
Existing and proposed topographic information at two foot intervals	✓	
Existing and proposed buildings and structure locations	✓	
Minimum building setbacks or build to lines on all lots	✓	
Location and size of existing and proposed electric, telephone, gas cable and other underground utilities	✓	

	Explain How Provided	Reviewed
Existing and proposed water lines and fire hydrants, including materials and capacity needed	✓	
Location and materials of sanitary sewage facilities within project site and projected additional peak hour sewer load	N/A	
Existing and proposed septic system, including test pit locations and results and NHDES subdivision permit number	N/A	
Existing and proposed stormwater lines and facilities	N/A	
Location of Flood Hazard Zone	N/A	
Location of all bodies of water and watercourses	N/A	
Location of wetlands and buffers	N/A	
Existing natural features and/or significant vegetation on property	✓	
Soil types	✓	
Map and lot numbers for existing and proposed lots as assigned by Tax Assessor	✓	
Location of all land offered for dedication for public use or land to be held in common by property owners of the subdivision	N/A	
Location, material and size of existing and proposed permanent monuments	✓	
Existing railroad lines	N/A	
Note regarding solid waste disposal		
All applicable Dover Common Subdivision notes	✓	
8. Construction Detail Sheets shall contain the following information (if appropriate): N/A		
Profiles showing existing & proposed elevations along the center lines of proposed streets & within 100' of intersections with existing streets		
Profiles showing the locations & a typical cross-section detail of streets		
Location of street trees, street lighting poles and street signs		
Location, size and invert elevations of existing and proposed sanitary sewers, stormwater drains and fire hydrants		
Location and size of all water, gas and other underground utilities		
9. Additional Information if appropriate N/A		
Stormwater Management Plan depicting the existing and proposed storm drainage system and engineered drainage analysis		
Stormwater Management System Operation and Maintenance Plan		
Letter to Serve from Public and Private Utilities		
Erosion and Sedimentation Control Plan		
Proposed restrictive covenants or homeowners association documents		
Dates and permit numbers of all required state and federal permits		
If wetland buffer, indicate placards locations, as applicable		
Provide additional exhibits/technical data determined appropriate by the Planning Board or its staff as required		

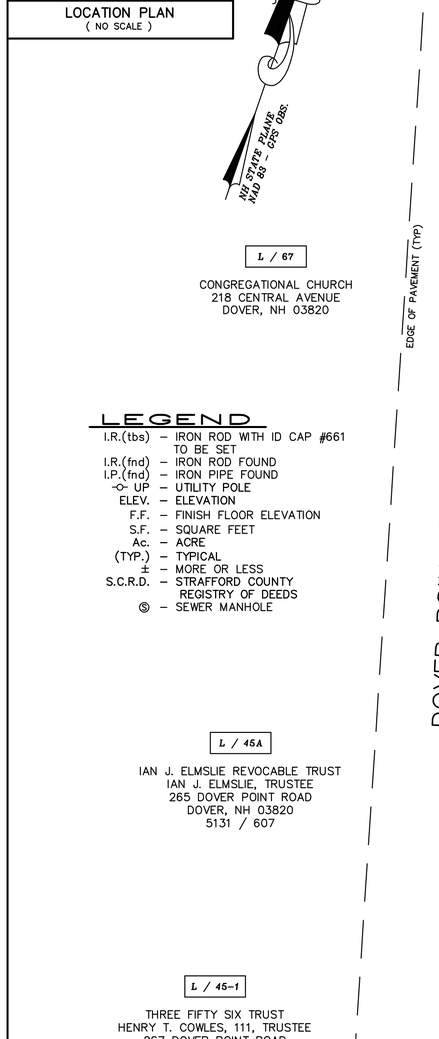
REVIEWED BY: _____ DATE_____

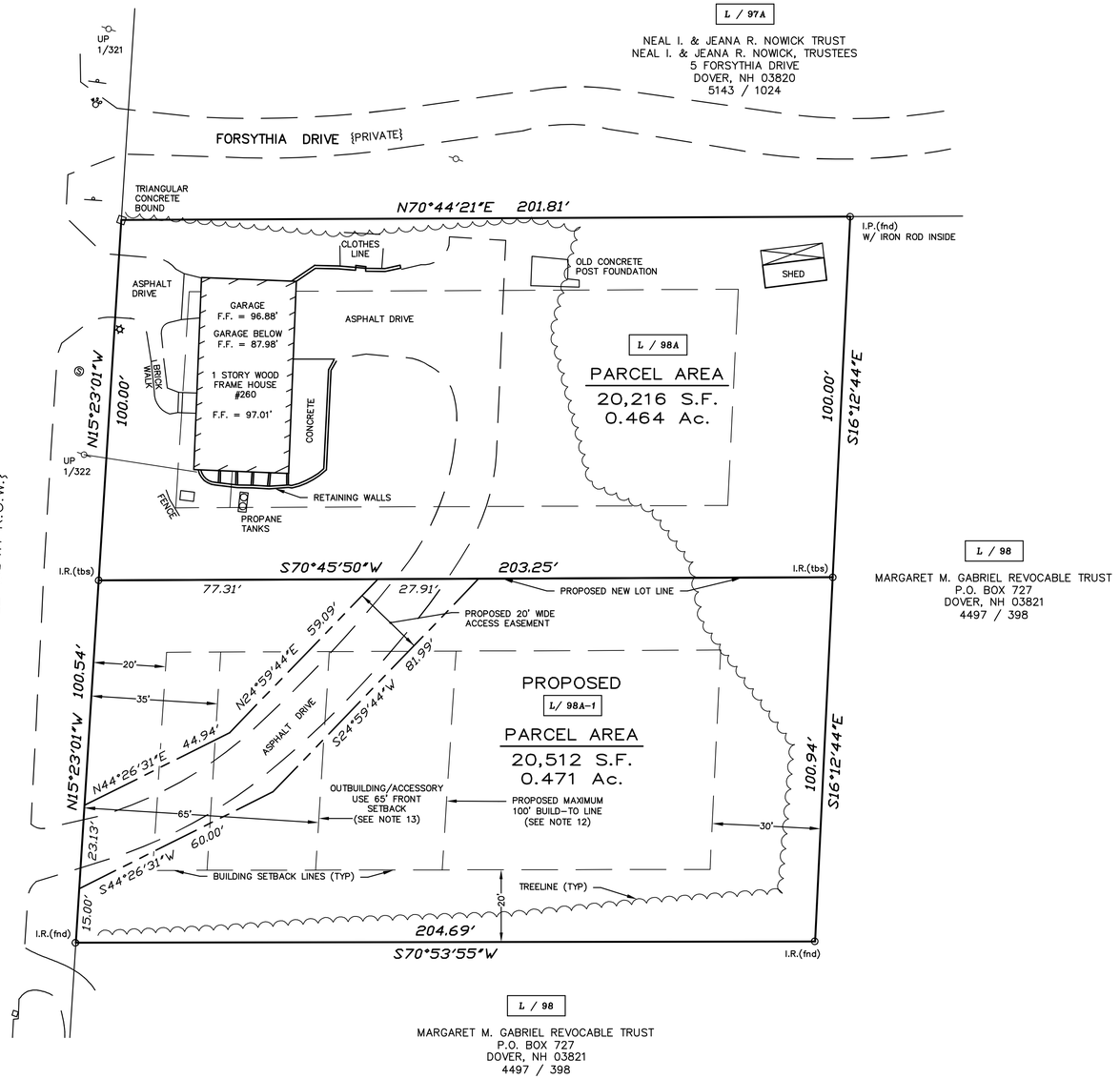
SUBM-2026-0002 **260 DOVER POINT ROAD**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
L0097-A00000	5 FORSYTHIA DR	NOWICK NEAL I & JEANA R TTS	NOWICK NEAL I & JEANA R TRUST	5 FORSYTHIA DR	DOVER	NH	03820
L0098-000000	262 DOVER POINT RD	GABRIEL MARGARET M TRUSTEE	GABRIEL MARGARET M REVOCABLE TRUST	PO BOX 727	DOVER	NH	03821-0727
L0098-B00000	264 DOVER POINT RD	MORIN RICHARD J TRUSTEE MORIN RICHARD REVOCABLE TRUST	MORIN VERNIEL B TRUSTEE MORIN VERNIEL REVOCABLE TRUST	264 DOVER POINT RD	DOVER	NH	03820
L0045-001000	267 DOVER POINT RD	COWLES HENRY T III TRUSTEE	THREE FIFTY SIX TRUST	267 DOVER POINT RD	DOVER	NH	03820-4606
L0045-A00000	265 DOVER POINT RD	ELMSLIE IAN J TTS	ELMSLIE IAN J REV TRUST 2023	265 DOVER POINT RD	DOVER	NH	03820-4606
L0096-K00000	256 DOVER POINT RD	PERIN VICTOR TRUSTEE	PERIN VICTOR TRUST	256A DOVER POINT RD	DOVER	NH	03820
L0066-000000	1 BELANGER DR	TON TRI VAN		1 BELANGER DR	DOVER	NH	03820
L0067-000000	DOVER POINT RD	CONGREGATIONAL CHURCH		218 CENTRAL AVENUE	DOVER	NH	03820
L0045-001A00	3 BELANGER DR	PASHBY JOHN &	VAN HORN KIMBERLY	3 BELANGER DR	DOVER	NH	03820
L0097-000000	258 DOVER POINT RD	GAROFANO DONNA M	GAROFANO MICHAEL	PO BOX 2	GREENLAND	NH	03840
		KEVIN MCENEANEY, LLC & STEPHEN HAIGHT, PE	MCENEANEY SURVEY ASSOCIATES	PO BOX 1166	DOVER	NH	03821
L0098-A00000	260 DOVER POINT RD	GABRIEL DANIEL G TRUSTEE	GABRIEL DANIEL G REVOCABLE TRUST	PO BOX 727	DOVER	NH	03821



LOCATION PLAN
(NO SCALE)





LEGEND

I.R.(tbs)	– IRON ROD WITH ID CAP #661 TO BE SET
I.R.(fnd)	– IRON ROD FOUND
I.P.(fnd)	– IRON PIPE FOUND
-O- UP	– UTILITY POLE
ELEV.	– ELEVATION
F.F.	– FINISH FLOOR ELEVATION
S.F.	– SQUARE FEET
Ac.	– ACRE
(TYP.)	– TYPICAL
±	– MORE OR LESS
S.C.R.D.	– STRAFFORD COUNTY REGISTRY OF DEEDS
Ⓢ	– SEWER MANHOLE

NOTES:

1.) OWNER OF RECORD:
DANIEL G. GABRIEL, TRUSTEE
DANIEL G. GABRIEL REVOCABLE TRUST
P.O. BOX 727
DOVER, NEW HAMPSHIRE 03821
S.C.R.D. VOLUME 5201, PAGE 647

OWNER SIGNATURES

2.) L / 98A – DENOTES TAX MAP AND PARCEL NUMBER.

3.) OVERALL PARCEL AREA = 40,728 S.F. / 0.935 Ac.

4.) THE INTENT OF THIS PLAN IS TO SUBDIVIDE THE SUBJECT PARCEL INTO TWO (2) LOTS.

5.) ZONING DISTRICT IS LOW DENSITY RESIDENTIAL (R–20)

DIMENSIONAL REQUIREMENTS:	
MINIMUM LOT SIZE	= 20,000 S.F.
MAXIMUM LOT COVERAGE	= 30 PERCENT
MINIMUM FRONTAGE	= 125 FEET (SEE NOTE #14)
BUILDING SETBACK REQUIREMENTS:	
FRONT BUILD–TO	= 20 FEET MINIMUM, 35 FEET MAXIMUM
SIDE SETBACK	= 20 FEET
REAR SETBACK	= 30 FEET
MAXIMUM BUILDING HEIGHT	= 35 FEET

6.) THE SUBJECT PARCEL IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE AS SHOWN ON FLOOD INSURANCE RATE MAP (FIRM) 33017C0340E, EFFECTIVE DATE 9/30/2015.

7.) BASIS OF BEARING IS NH STATE PLANE (NAD83) AND VERTICAL DATUM IS NAVD88 BASED ON GPS OBSERVATION DATED NOVEMBER 18, 2024.

8.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES, INC. ON NOVEMBER 18, 2024 WITH AN ERROR NOT GREATER THAN 1 IN 10,000.

9.) THE SOIL TYPES ON THE SITE ARE:
HoB HINCKLEY LOAMY SAND 3–8% SLOPES
THE SOURCE FOR THE SOIL TYPE DATA IS
http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

10.) THERE ARE NO WETLANDS ON THE SUBJECT PARCEL

11.) THE LOTS ARE SERVICED BY MUNICIPAL SEWER AND WATER.

12.) FOR PROPOSED LOT L/98A–1, THE MAXIMUM BUILD–TO LINE FOR THE PRIMARY STRUCTURE IS 100 FEET. FUTURE ADDITIONS TO THE PRIMARY STRUCTURE SHALL BE AT LEAST 100 FEET FROM THE FRONT PROPERTY LINE.

13.) FOR PROPOSED LOT L/98A–1, THE OUTBUILDINGS/ACCESSORY USE STRUCTURES, EXCLUDING SHEDS UNDER 200 S.F., SHALL BE SETBACK AT LEAST 65 FEET FROM THE FRONT PROPERTY LINE.

14.) ON MAY 21, 2026 A VARIANCE WAS APPROVED BY THE DOVER ZONING BOARD OF ADJUSTMENT, ZONE–2026–0011 260 DOVER POINT ROAD, GRANTING RELIEF FROM SECTION 170–12(B), R–20 TABLE OF USES, TO SUBDIVIDE THE PARCEL FOR THE CONSTRUCTION OF A SINGLE–FAMILY DWELLING, WITH BOTH PROPOSED LOTS HAVING A FRONTAGE OF APPROXIMATELY ONE–HUNDRED (100) FEET WHERE ONE–HUNDRED AND TWENTY–FIVE (125) FEET IS REQUIRED, IN ADDITION TO SEEKING RELIEF FOR THE MAXIMUM BUILD–TO LINE OF ONE–HUNDRED (100) FEET WHERE THIRTY–FIVE (35) FEET IS THE MAXIMUM PERMITTED.

REFERENCE PLANS:

1.) PLAN OF LOT LINE ADJUSTMENTS PREPARED FOR THE MARGARET M. GABRIEL REVOCABLE TRUST, TAX MAP L, LOT No. 98, JEFFREY P. & KAREN L. WILLS, TAX MAP L, LOT No. 98C, THE MARGARET M. GABRIEL REVOCABLE TRUST, TAX MAP L, LOT No. 101, DOVER POINT ROAD, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE; SCALE: 1" = 50'; DATED: JUNE 25, 2019, REVISED THROUGH 8–6–19; BY: McENEANEY SURVEY ASSOCIATES, INC.; RECORDED S.C.R.D. PLAN 11957.

"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."

NO.	DATE	DESCRIPTION	BY	CHK
24–2652		REVISIONS		

26076	SUBDIVISION	24–12	43–45
PROJECT NO	TYPE	FIELDBOOK & PAGES	

SUBDIVISION PLAN
PREPARED FOR
DANIEL G. GABRIEL REVOCABLE TRUST
TAX MAP L, LOT No. 98A
260 DOVER POINT ROAD
CITY OF DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DOVER PLANNING FILE No.

DRAWN BY: KJF	FILE: M\2652\S\D\2652 SUB
SCALE: 1" = 20'	DATE: JULY 2, 2026

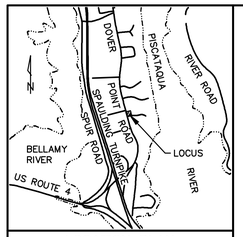
20 10 0 10 20 40 60 80

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

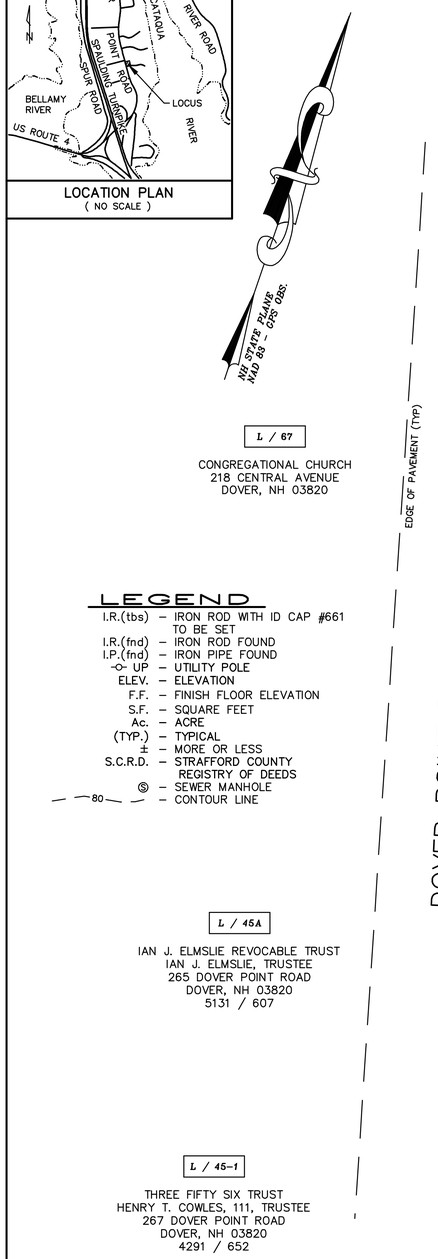
McEneaney Survey Associates of NEW ENGLAND
P.O. Box 1166 – 181 WATSON ROAD
DOVER, NH 03821 (603) 742–0911

SURVEYING – PLANNING – CONSULTING

7/6/2026 14:32:26 File: M:\2652\Drawings\2652 SUBDIVISION.dwg Layout: SUBDIVISION

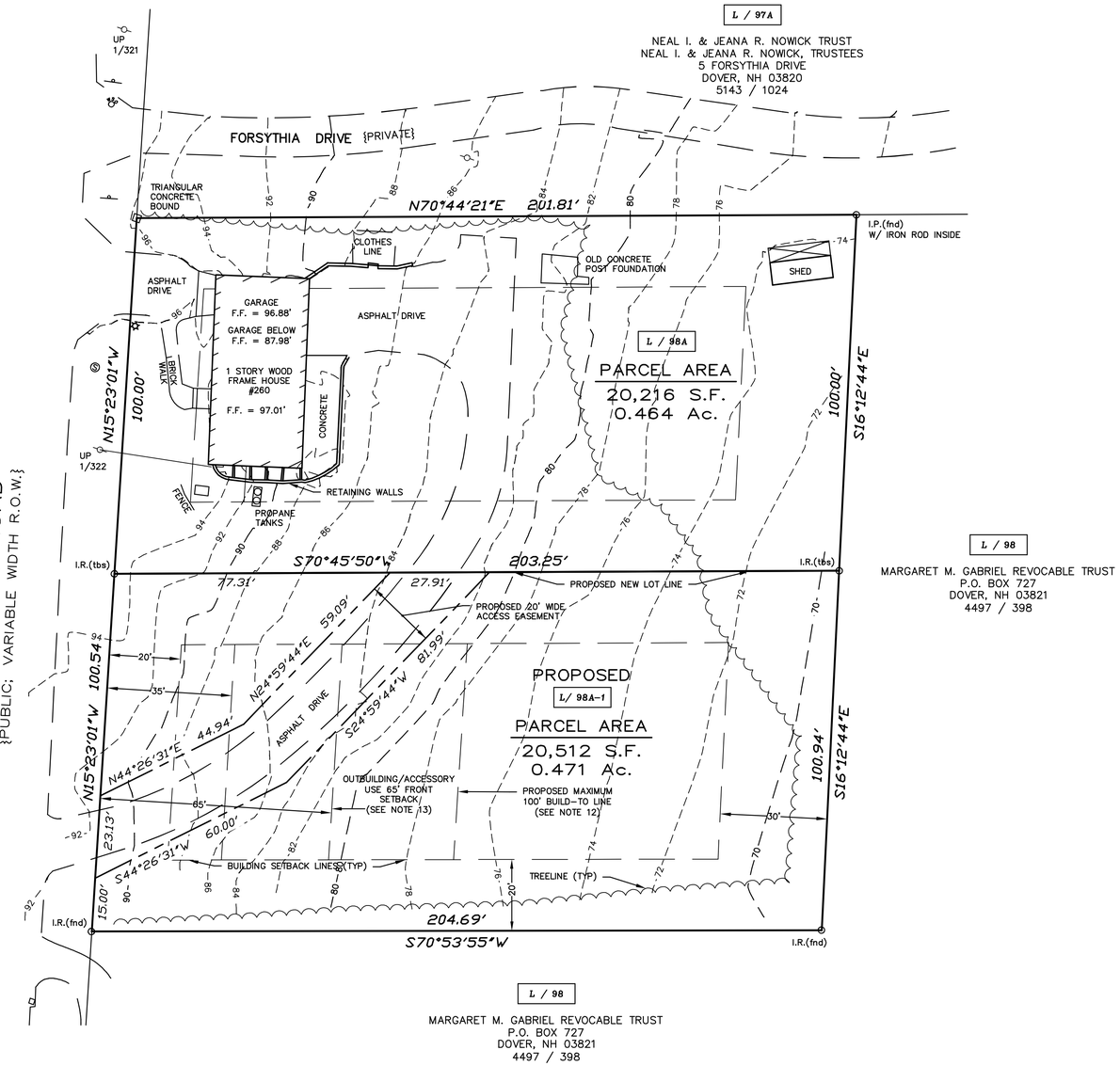


LOCATION PLAN
(NO SCALE)



LEGEND

- I.R.(tbs) – IRON ROD WITH ID CAP #661 TO BE SET
- I.R.(fnd) – IRON ROD FOUND
- I.P.(fnd) – IRON PIPE FOUND
- -O- UP – UTILITY POLE
- ELEV. – ELEVATION
- F.F. – FINISH FLOOR ELEVATION
- S.F. – SQUARE FEET
- Ac. – ACRE
- (TYP.) – TYPICAL
- ± – MORE OR LESS
- S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
- Ⓢ – SEWER MANHOLE
- 80 – CONTOUR LINE



NOTES:

1.) OWNER OF RECORD:
DANIEL G. GABRIEL, TRUSTEE
DANIEL G. GABRIEL REVOCABLE TRUST
P.O. BOX 727
DOVER, NEW HAMPSHIRE 03821
S.C.R.D. VOLUME 5201, PAGE 647

OWNER SIGNATURES

2.) L / 98A – DENOTES TAX MAP AND PARCEL NUMBER.

3.) OVERALL PARCEL AREA = 40,728 S.F. / 0.935 Ac.

4.) THE INTENT OF THIS PLAN IS TO SUBDIVIDE THE SUBJECT PARCEL INTO TWO (2) LOTS.

5.) ZONING DISTRICT IS LOW DENSITY RESIDENTIAL (R–20)

DIMENSIONAL REQUIREMENTS:	
MINIMUM LOT SIZE	= 20,000 S.F.
MAXIMUM LOT COVERAGE	= 30 PERCENT
MINIMUM FRONTAGE	= 125 FEET (SEE NOTE #14)
BUILDING SETBACK REQUIREMENTS:	
FRONT BUILD–TO	= 20 FEET MINIMUM, 35 FEET MAXIMUM
SIDE SETBACK	= 20 FEET
REAR SETBACK	= 30 FEET
MAXIMUM BUILDING HEIGHT	= 35 FEET

6.) THE SUBJECT PARCEL IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE AS SHOWN ON FLOOD INSURANCE RATE MAP (FIRM) 33017C0340E, EFFECTIVE DATE 9/30/2015.

7.) BASIS OF BEARING IS NH STATE PLANE (NAD83) AND VERTICAL DATUM IS NAVD88 BASED ON GPS OBSERVATION DATED NOVEMBER 18, 2024.

8.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES, INC. ON NOVEMBER 18, 2024 WITH AN ERROR NOT GREATER THAN 1 IN 10,000.

9.) THE SOIL TYPES ON THE SITE ARE:
HoB HINCKLEY LOAMY SAND 3–8% SLOPES
THE SOURCE FOR THE SOIL TYPE DATA IS
http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

10.) THERE ARE NO WETLANDS ON THE SUBJECT PARCEL

11.) THE LOTS ARE SERVICED BY MUNICIPAL SEWER AND WATER.

12.) FOR PROPOSED LOT L/98A–1, THE MAXIMUM BUILD–TO LINE FOR THE PRIMARY STRUCTURE IS 100 FEET. FUTURE ADDITIONS TO THE PRIMARY STRUCTURE SHALL BE AT LEAST 100 FEET FROM THE FRONT PROPERTY LINE.

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15.) TOPOGRAPHIC SURVEY PERFORMED BY THIS OFFICE ON NOVEMBER 18, 2024, CONTOUR INTERVAL IS TWO (2) FEET.

REFERENCE PLANS:

1.) PLAN OF LOT LINE ADJUSTMENTS PREPARED FOR THE MARGARET M. GABRIEL REVOCABLE TRUST, TAX MAP L, LOT No. 98, JEFFREY P. & KAREN L. WILLS, TAX MAP L, LOT No. 98C, THE MARGARET M. GABRIEL REVOCABLE TRUST, TAX MAP L, LOT No. 101, DOVER POINT ROAD, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE; SCALE: 1" = 50'; DATED: JUNE 25, 2019, REVISED THROUGH 8–6–19; BY: McENEANEY SURVEY ASSOCIATES, INC.; RECORDED S.C.R.D. PLAN 11957.

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NO.	DATE	DESCRIPTION	BY	CHK
24–2652		REVISIONS		

26076	SUBDIVISION	24–12	43–45
PROJECT NO	TYPE	FIELDBOOK & PAGES	

TOPOGRAPHIC SUBDIVISION PLAN
PREPARED FOR
DANIEL G. GABRIEL REVOCABLE TRUST
TAX MAP L, LOT No. 98A
260 DOVER POINT ROAD
CITY OF DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DOVER PLANNING FILE No.

DRAWN BY: *KJF*	FILE: M\2652\S\D\2652 SUB
SCALE: 1" = 20'	DATE: JULY 2, 2026

20 10 0 10 20 40 60 80

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

McEneaney Survey Associates of NEW ENGLAND
P.O. Box 1166 – 181 WATSON ROAD
DOVER, NH 03821 (603) 742–0911
SURVEYING – PLANNING – CONSULTING

7/6/2026 14:33:00 File: M:\2652\Drawings\2652 SUBDIVISION.dwg Layout: TOPO

CITY OF DOVER	PLANNING BOARD - STAFF MEMO FILE #SITE-2026-0008	
	Application Type:	Site Review
	Applicant(s):	Corey MacKoul
	Owner(s):	Corey MacKoul
	Location:	89 Stark Ave. (Assessor's Map 17, Lot 38)
	Meeting Date:	July 28, 2026

INTENT: Proposal is to construct two (2) single-family homes utilizing TDR with site improvements. The site plan proposal was reviewed and endorsed by the TRC on June 11, 2026. The TDR was conditionally endorsed by the Planning Board on April 28, 2026.

AGENDA ITEM #: 4-B

FILE: SITE-2026-0008

LOTS/UNITS PROPOSED: One existing unit, two TDR units proposed in addition.

OWNER/APPLICANT: Corey MacKoul

LOCATION: 89 Stark Ave. (Map 17, Lot 38)

ACREAGE: ±0.88 ac. (±38,452 s.f.)

ZONING DISTRICT: Medium-Density Residential (R-12) District

EXISTING/PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential

WAIVERS REQUESTED: Relief requested from §153-13.A(17) – Colored Streetscape Rendering and §157-31.F – Block length.

PERMITS REQUIRED: N/A

ZBA ACTION: None.

TECHNICAL REVIEW COMMITTEE: Reviewed on June 11, 2026

CONSERVATION COMMISSION: N/A

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

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

ATTACHMENTS: Site Plan and Application Materials.

Summary of Request and Background
The applicant is proposing the renovation of the property's existing single-family home, with two additional single-family homes being proposed, with one to be purchased through the TDR ordinance.

To that end, on April 28, 2026, this Board conditionally approved the Applicant's request to purchase one (1) TDR unit for up to three (3) total units on the site.

The two additional single-family homes will each have a two-car garage attached, while the existing single-family home is to be provided two exterior parking spaces and a walkway per the plan.

The Technical Review Committee reviewed this application at their June 11, 2026 meeting. Part of the TRC discussion and review focused on items related to stormwater management, traffic and sight distances on Stark Ave., and on-site emergency vehicle access. *(minutes attached)*

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

1. §153-13.A(17), relief requested from required streetscape rendering; and
2. §157-31.F, relief requested from required block length;

Consistency with Land Use Regulations –Waivers/Relief
§153-21 of the Site Plan Review Regulations, and §157-51 of the Land Subdivision Regulations, state the "Planning Board may waive specific provisions of these regulations [this chapter]." 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 rationale for the requested waivers meets criterion (1), and granting such relief is not contrary to the spirit or intent of the ordinance. The applicant has requested relief from the above listed sections of Chapter 153 and 157 due to the location of the site's main improvements (roughly 100' away from the street) and the lot's physical inability to accommodate the minimum block length required.

STAFF RECOMMENDATION - Waivers/Relief:
The Planning Department recommends that the Planning Board vote to accept the application and determine it not to have regional impact, hold a public hearing, make the necessary and supporting findings of fact, and vote to grant the waivers 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 and Chapter 157-51 have been met and the Board approved the following waivers:

§153-13.A(17), relief requested from required streetscape rendering; and
§157-31.F, relief requested from required block length;

Consistency with Land Use Regulations – Site Plan

§153-13 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. Provide physical and digital copies (including CAD) of complete plan set for final Planning Board signature which additionally shall include:
   - 1.1. Permit File #SITE-2026-0008;
   - 1.2. Owner's signatures;
   - 1.3. Professional stamps and signatures;
   - 1.4. The following notes:
     - a. "This site plan uses the Transfer of Development Rights ordinance which allows for relief to the setbacks, lot area, frontage, density and intensity of the development. The Board granted TDR relief to purchase one unit for a maximum of three units on the subject lot.;
     - b. Add note to site plan to use best management practices during construction to ensure the existing 37' spruce and any other existing landscaping along the southerly boundary line is protected;
     - c. "Planning Board approval is required to convert any structure into a two-family dwelling."

Subsequent Conditions to Be Met Prior to Construction:

2. A pre-construction meeting to be held with City staff;
3. 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;

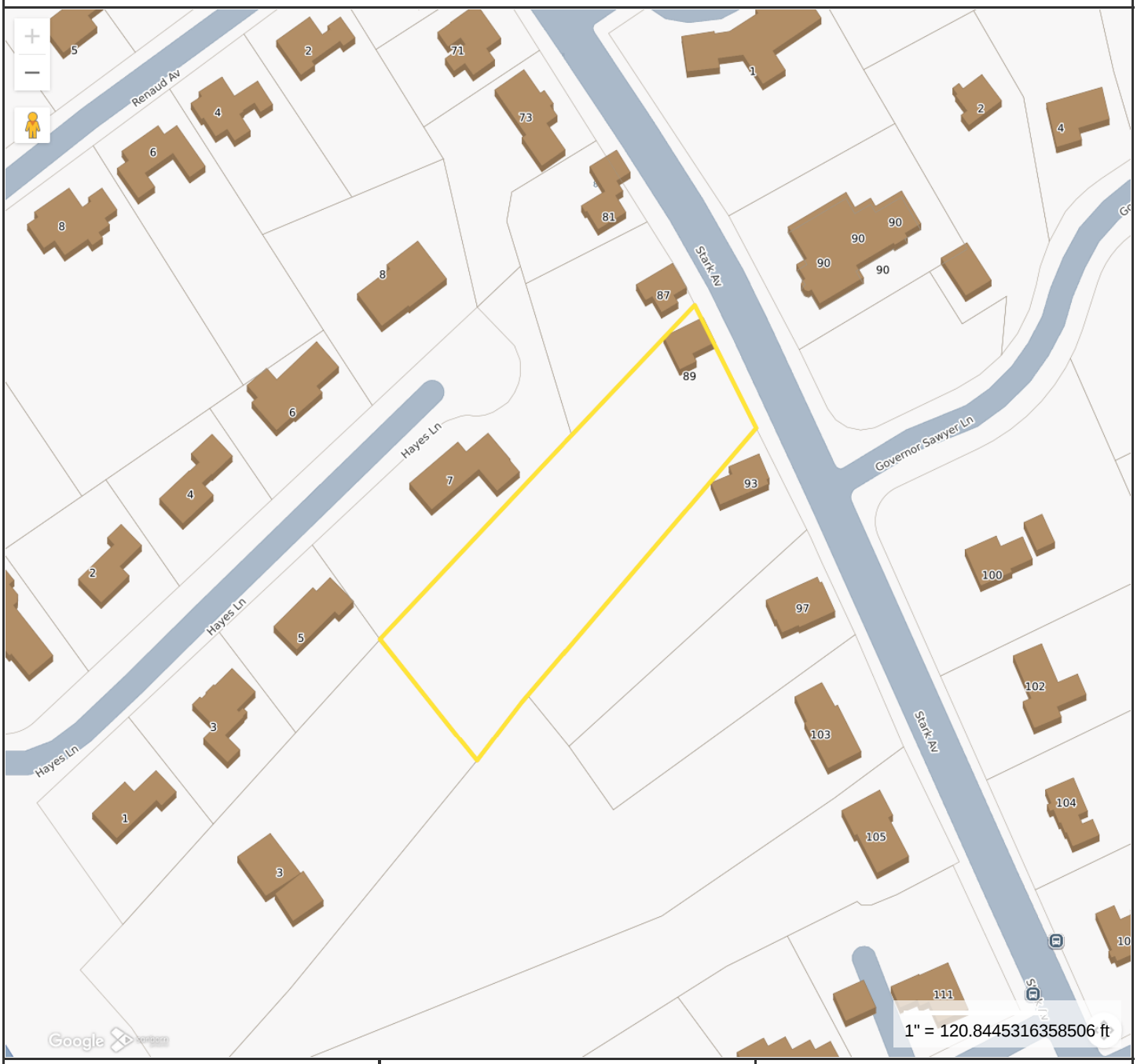
Subsequent Condition to Be Met Prior to Building Permit:

4. Payment of Water and Sewer Investment Fees, if applicable, at time of request of service;

Subsequent Conditions to Be Met Prior to Occupancy:

5. Issuance of Certificate of Occupancy;
6. Surety or other form of security acceptable to the City is provided for any unfinished work;
7. 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-2026-0008 89 STARK AVE



Property Information

Location	89 STARK AV
Owner	MACKOUL COREY
Land Use	101R
Zoning Code	R-12
Property Id	17038-000000

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 06/2026
Data updated Daily

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

PLAN SNAPSHOT REPORT SITE-2026-0008
FOR CITY OF DOVER, N.H.

Plan Type:	Site Plan - Major	**Project:**		**App Date:**	05/14/2026
Work Class:	New Construction	**District:**	None	**Exp Date:**	07/18/2026
Status:	Fees Due	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	

Description: The applicant proposed to construction of 2 single family homes and associated site improvements to 89 Stark Avenue which has an existing home.

Parcel:	17038-000000 Main	**Address:**	89 Stark Av Dover, NH Main	**Zone:**	

Applicant
Tritech Engineering Corp.
755 Central Avenue
Dover, NH 03820
Business: (603) 742-8107

Owner
Koul Contracting LLC
Corey MacKoul
8 HULL AV
DOVER, 03820
Mobile: (603) 630-4113

Plan Custom Fields

Total2	0	Total3	0	Total	0
Total5	0	Total4	0	Total6	0
Total7	0	Total9	0	Total8	0
Street Classification Type	Municipal	Recording Number		Net Change in # Parking Spaces (+/-)	4
Water Service	Municipal	Sewer Service	Municipal	Deed Book	5248
Total Acres (GIS)	0.833	Deed Page	342	Total SQFT	36285.5
Deed Date	03-07-2025	Proposed Property Use	3 Single Family Homes	Area of Parcel to be Developed (SQFT)	0.833
Number of Parking Spaces Existing	2	Number of Parking Spaces Proposed	6	Distance to City Water	0
Distance to City Sewer	0	Type of Building to be Built	2 Wood frame Single Family Homes	Estimated Construction Value	850000.00
Refuse Removal	Public	Existing Conservation Easement Details		Total of Impact Fees to be Assessed	0.00
TotalImpactFeeSDTOD	0.00	Sub Total Residential	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	TotalImpactFeeRIRCTOD	0.00	Sub Total Non-Residential	0.00
TotalImpactFeeOCSTOD	0.00	TotalImpactFeeITWCTOD	0.00	TotalImpactFeeNHALTOD	0.00
TotalImpactFeeOIUTOD	0.00	TotalImpactFeeAFAOTOD	0.00		

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Robert_Stowell_5/14/2026.jpg	05/14/2026 11:34	Stowell, Robert		Uploaded via CSS
2026.06.11_PlanningTechnicalReviewCommittee.Agenda.Rev.pdf	06/01/2026 10:12	Blonigen, Rachel		Revised TRC Agenda
2026.06.11_PlanningTechnicalReviewCommittee.89 Stark _SITE-2026-0008.pdf	06/18/2026 15:00	Blonigen, Rachel		TRC Minutes Draft

Invoice No.	Fee	Fee Amount	Amount Paid
INV-2026001666	Planning General Application Fee	$200.00	$0.00
	Total for Invoice INV-2026001666	$200.00	$0.00

Grand Total for Plan	**$200.00**	**$0.00**

Meeting Type	Location	Scheduled Date	Subject
Technical Review Committee Meeting v.1	City Hall, Second Floor Conference Room	06/11/2026	Technical Review Committee Meeting

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	In Review	05/20/2026	06/10/2026		No	No

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Business Development	Business Development	Burdin, James	Approved	05/20/2026	06/17/2026	06/04/2026

Comments: No Comments

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
City Engineer	Community Services - Engineering	Semprini, Jillian	In Review	05/20/2026	06/10/2026	

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Bassegio, Erin	In Review	05/20/2026	06/17/2026	

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Zoning Administrator	Planning	Crouser, Paul	In Review	05/20/2026	06/10/2026	

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
IS Building Official	Planning / Inspection Services	Maxfield, Jim	Requires Re-submit	05/20/2026	06/10/2026	05/27/2026

Comments: 1) Provide distance from Stark Avenue to each dwelling unit door.
2) It appears a fire apparatus turnaround is required for NFPA 1 compliance.
3) Provide a proposed street name

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Traffic	Police	Mitrushi, Alex	Approved	05/20/2026	06/10/2026	06/04/2026

Comments: JM for AM no comments

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		05/15/2026 13:01	
Confirm application complete v.1	Generic Action		05/15/2026 13:01
Technical Review Committee Meeting Agenda v.1	Task	05/15/2026 13:01	05/20/2026 13:22
Land Use Plan Technical Review v.1	Receive Submittal	05/20/2026 0:00	
Technical Review Committee Meeting v.1	Hold Meeting	05/20/2026 13:25	
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
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: Corey MacKoul Telephone # 603-630-4113

Address of Applicant: 8 Hull Avenue, Dover, NH

E-Mail Address: corey@koulcontracting.com

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

Address of Property Owner: _____

PROPERTY INFORMATION

Address of Property: 89 Stark Ave

Assessor's Map # 17 Lot(s) # 38

Zoning District(s) R-12 Overlay District(s) _____

Size of Parcel: 38,452 sq. ft. 0.833 ac. Property Deed: Book 5248 Page: 342

Existing Use of Property: Single family residential

SITE PLAN INFORMATION

Describe Proposed Use: construct an additional 2 single family units.

Area of Parcel to be Developed: 30,185 sq. ft.

If Multi-family Residential: Number of Units 2 & Buildings Proposed 2

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

Number of Parking Spaces: Existing 2 Proposed 6

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

Number of Employees Total: _____ In Maximum Shift: _____

Disposition of Parcel:

Building Footprint Varies sq. ft.

Total Building Area 3,945 sq. ft.

Paved Area 4,000 sq. ft.

Building Setbacks:

Front Yard 12.3 ft.

Rear Yard 114 ft.

Side Yard: Right 19.5 ft. Left 26.7 ft.

City Water? X Yes ___ No How far is city water from the property? At property line

City Sewer? X Yes ___ No How far is city sewer from the property? At property line

TRANSFER OF DEVELOPMENT RIGHTS INFORMATION

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 1 units

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

The applicant proposes the construction of 2 single family homes. The base density is 2 units, therefore, the applicant proposes to purchase one additional unit through the TDR ordinance.

BUILDING INFORMATION

Type of Building to be Built: Wood frame

Height of Building: Varies Finished Floor Elevation: Varies

Number of Seats (where applicable) N/A

Estimated value of construction: $850,000 Refuse removal: Public/Private (circle one)

WAIVER REQUESTS

Site Review Regulations section(s) to be waived: 153-14.D.6(a) & (c)

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

See attachment.

SURVEYOR INFORMATION

Name of Surveyor and Company (Licensed in N.H.) Robert Stowell; Tritech Engineering Corp.

Address 755 Central Ave. Dover, NH Telephone #: 603 742 8107

Professional License #: 884 E-mail address: rjs@tritecheng.com

ENGINEER INFORMATION

Name of Engineer and Company (Licensed in N.H.) Robert Stowell; Tritech Engineering Corp.

Address 755 Central Ave. Dover, NH Telephone #: 603 742 8107

Professional License #: 884 E-mail address: rjs@tritecheng.com

ARCHITECT INFORMATION

Name of Architect and Company (Licensed in N.H.) _____

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

LANDSCAPE ARCHITECT INFORMATION

Name of Landscape Architect and Company (Licensed in N.H.) Romy N. Maurer; Terrain Planning & Design

Address 311 Kost Hill Rd. Hopkinton, NH 03229 Telephone #: 603 746 3512

Professional License #: 086 E-mail address: romy@terrainplanning.com

SOIL SCIENTIST INFORMATION

Name of Soil Scientist and Company (Licensed in N.H.) Michael Mariano; Highland Soil Services

Address 75 Prospect St. Somersworth, NH Telephone #: 609 692 4457

Professional License #: 76 E-mail address: highlandsoilservices@comcast.net

CONSERVATION EASEMENT HOLDER

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: 5/12/26

Signature of Applicant (*if different from owner*): _____ Date: _____

Signature of Agent: _____, PRESIDENT Date: 05/12/26

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: 5/12/26

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: 5/12/26

Signature of Applicant (*if different from owner*): _____ Date: _____

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: 5/12/26

Signature of Applicant (*if different from owner*): _____ Date: _____

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
17	38	Corey MacKoul	8 Hull Avenue, Dover, NH

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
Robert J. Stowell	Tritech Engineering Corp.	755 Central Ave, Dover NH 03820
Michael Mariano	Highland Soil Services	75 Prospect St. Somersworth NH 03878
Romy N. Maurer	Terrain Planning & Design	311 Kost Hill Road, Hopkinton NH 03229

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

PLANNING BOARD FEE SCHEDULE/INVOICE

(Revised July 24, 2023)

Below are the fees associated with plan review and are subject to a nonrefundable application fee to cover administrative expenses. Please complete the information below and provide payment with your application submittal. **Plan review fees shall be paid prior to technical review committee (TRC) being scheduled.** For plans not requiring TRC review, **fees are due 21 days prior** to the Planning Board meeting. Staff will coordinate abutter/notice fees, which will be invoiced and must be paid 28 hours before the Planning Board meeting for an application to be heard. Fees shall be paid by cash or check made payable to "City of Dover".

A. Plan Review Fees

1. Application fee for the following (SELECT ALL THAT APPLY):

- ☐ SUBDIVISION Application fee $200.00 + $150.00 x # _____ new lots created = $_____
- ☐ LOT LINE ADJUSTMENT Application fee $200.00 + $100.00 X # ___ of lots involved = $_____
- ☐ TRANSFER OF DEVELOPMENT RIGHTS Application fee $200.00 = $_____
- ☒ SITE REVIEW – RESIDENTIAL Application fee $200.00+ $100.00 x # 2 per dwelling unit =$ 400.00
- ☐ SITE REVIEW – NON-RESIDENTIAL Application fee $200.00 + (not to exceed $10,000)
  - New construction $.15 sq. ft. x # _____ sq. ft.= $_____
  - Additions (new floor space) $.10 per sq. ft. x # _____sq. ft.= $_____
- ☐ MOTEL/HOTEL $35.00 x # ___ per lodging unit= $_____
- ☐ CHANGE OF USE Application fee $200.00 + (not to exceed $5,000)
  - Existing floor spaces $.10 per sq. ft. x # _____ sq. ft. = $_____
- ☐ CONDITIONAL USE PERMIT Application fee $200.00 x # _____ per Application = $_____
- ☐ GRAVEL PIT/ EXCAVATIONS
  - Application fee $50.00= $_____
  - Permit fee $75.00= $_____
- ☐ EXTENSIONS/AMENDMENTS/WAIVERS FOR AN APPROVED PLAN Application fee $200.00 = $_____
- ☐ REQUEST FOR REZONING Application fee $200.00 = $_____
- ☐ DRIVEWAY WAIVER Application fee $200.00 = $_____
- ☐ **TOTAL IMPERVIOUS PAVED AREA** (for new development, roadways or additions to existing parking lots, (not to exceed $10,000)) Application fee of $200.00 is N/A if it is part of a Site Review or Subdivision Plan. $200.00 + $.07 per sq. ft. x # _____ sq. ft. = $_____

SUBTOTAL PLAN REVIEW FEE = $ 400.00

AND

B. Abutter Notification/Mailing Labels - this office will create and print the abutter list and provide labels in triplicate for each abutter. The applicant/owner will review the list for accuracy and provide to us the engineer, architect, licensed land surveyor (LLS), licensed landscape architect (LLA) and/or soil scientist whose professional seal appears on the plan with names and addresses for notices.

- ☐ Applicant & Owner, engineer, architect, LLS, LLA and/or soil scientist
  - Certified letters fee # _____ of x $10.00= $_____
- ☐ Certified letters fee: # of abutters _____ X $10.00= $_____
- ☐ First Class Mail fee (for individual owner of units within a condominium or other collective form of ownership): # of abutters _____ X $1.00= $_____
- ☐ Creating/Printing Abutter Labels in triplicate per sheet _____ x $10.00= $_____

C. Foster's newspaper public notice fee $120.00 x # _____ applications = $_____

SUBTOTAL = $_____

TOTAL INVOICE AMOUNT = $_____

PLAN REVIEW FEE COLLECTED/PAID = $ _____

BALANCE DUE = $ _____

The amount due must be paid 28 hours prior to the Planning Board Meeting, to be heard.

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: Corey MacKoul File Number: _____

PROJECT TITLE: Corey MacKoul

PROPERTY LOCATION: 89 Stark Ave Tax Map: 17 Lot: 38

	Where/How Provided	Reviewed
1. Completed and signed Application form	Attached	
2. Plan Review Fees are provided	Hand delivered	
3. Electronic copy of the engineered/surveyed plan layout	Via portal	
4. Electronic copy of supplementary materials and application	Via portal	
5. Traffic Impact Assessment and Analysis (Standard or Advanced)	Attached	
6. Waiver requests to the Site Plan Review Regulations, with written justification	Attached	
7. Conditional Use Permit applications	N/A	
8. A colored rendering of the streetscape that will be created along the existing public right-of-way	Architectural plans	
9. A colored architectural plan showing all sides of buildings	Architectural plans	
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:	Attached	
Location map at appropriate scale	Sheet EX-1 Locus Map	
Proposed Project name and title and Planning File #	Title Block	
Date, north arrow and scale	All applicable sheets	
Names of all abutting property owners	Sheet EX-1	
Name and address of owners and/or applicants	Sheet EX-1	
Signature & stamp of NH licensed land surveyor and/or engineer	All applicable sheets	
Zoning District boundaries, including any special or overlay districts	Sheet SP-1	
Location of Conservation District areas	N/A	
Location, names and widths of existing and proposed streets, including pavement widths, grades, curbs and crosswalks	Sheet SP-1	
Location and widths of existing & proposed easements & right of ways	Sheet SP-1	
Location and width of existing and proposed access/egress ways	Sheet SP-1	

	Explain How Provided	Reviewed
Depict pedestrian walkways and accessible access	Sheet SP-1	
Existing and proposed property lines with dimensions and bearings tied into Dover's Geographic Information System coordinate system	Sheet EX-1	
Existing and proposed topographic information at two foot intervals	Sheet SP-4	
Existing and proposed buildings and structure locations	Sheet SP-1	
Minimum building setbacks or build to lines on all lots	Sheet SP-1	
Location and size of existing and proposed electric, telephone, gas cable and other underground utilities	Sheet SP-3	
Existing and proposed water lines and fire hydrants, including materials and capacity needed	Sheet SP-3	
Location and materials of sanitary sewage facilities within project site and projected additional peak hour sewer load	Sheet SP-3	
Existing and proposed stormwater lines and facilities	Sheet SP-5	
Lighting plan depicting all existing and proposed exterior light fixtures and a lighting level analysis for parking lots	N/A	
Location of Flood Hazard Zone	Sheet SP-1	
Location of all bodies of water and watercourses	N/A	
Location of wetlands and buffers	N/A	
Neighborhood plan with aerial underlay showing how project relates to abutting uses within the plan set	Sheet T-2	
Existing natural features and/or significant vegetation on property	Sheet EX-1	
Depict existing contours up to 100 ft. beyond project limits	Sheet EX-1	
Landscape plan depicting existing and proposed landscaping, prepared by a licensed Professional Landscape Architect	Sheet LA-1	
Location of parking layout delineating spaces and arrangement; note addressing maximum required spaces	Sheet SP-2	
Location, material and size of existing and proposed pavement area	Sheet SP-2	
Location of proposed fire lanes	Sheet SP-2	
Specify finished floor elevations of buildings	Sheet SP-2	
Location of solid waste disposal facilities (dumpster, pad and screening, etc.), including required screening	Sheet LA-1	
Depict all service, storage, loading bays and utility areas	N/A	
All applicable Dover Common Site Plan notes	Sheet SN-1	
11. Additional Information if appropriate		
Stormwater Management Plan depicting the existing & proposed storm drainage system and engineered drainage analysis	Drainage Report	
Stormwater Management System Operation and Maintenance Plan	Stormwater Mgmt., Maintenance & Insp. Plan	
Letter to Serve from Public and Private Utilities	Pending	
Erosion and Sedimentation Control Plan	Drainage Report	
Landscape Operation and Maintenance Plan	Landscape O&M Plan	
Proposed restrictive covenants or homeowners association documents	Pending	
Dates and permit numbers of all required state and federal permits	N/A	
If wetland buffer, indicate placards locations, as applicable	N/A	
Depict test boring locations, groundwater elevations and soil profiles and/or soils types call-outs	Sheet SSS-1	
Location of proposed drive-in facilities	N/A	
Provide additional exhibits/technical data determined appropriate by the Planning Board or its staff as required	N/A	

REVIEWED BY: _____ DATE_____ TRC DATE_____

SITE-2026-0008 **89 STARK AVENUE**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
17037-C00000	4 HAYES LN	SEUBERT WILLIAM I &	PIETRAK SIDNEY	4 HAYES LN	DOVER	NH	03820
17041-000000	93 STARK AV	LANZER ROBERT A	LANZER KRISTEN A	93 STARK AVENUE	DOVER	NH	03820
17117-000000	2 GOVERNOR SAWYER LN	FUGARAZZO JAMES S		2 GOVERNOR SAWYER LN UNIT A	DOVER	NH	03820
17116-000000	90 STARK AV	GOVERNOR SAWYER HOUSE CONDOMINIUM	C/O XAVIER GUAY	90 STARK AVE # 3	DOVER	NH	03820
17037-A00000	1 HAYES LN	BOOS JAMES J JR & JENNIFER M TRUSTEES	BOOS JAMES AND JENNIFER M REVOCABLE TRUS	1 HAYES LANE	DOVER	NH	03820
17037-B00000	3 HAYES LN	POULIN ERIC A &	RANAURO EMILY K	3 HAYES LN	DOVER	NH	03820
17037-H00000	5 HAYES LN	NASBERG ALAN D		5 HAYES LANE	DOVER	NH	03820-4216
17037-G00000	6 HAYES LN	FORD BRUCE A & PAULA M CO-TRUSTEES	FORD BRUCE & PAULA REVOCABLE TRUST 2021	6 HAYES LN	DOVER	NH	03820
17038-A00000	3 KEATING AV	TRUFANT ERIC CARL &	TRUFANT TARA LEE	3 KEATING AVE	DOVER	NH	03820
17113-000000	1 WOODLAND RD	CUMMINGS JENNA B	CUMMINGS DAMON L & THERESA E	1 WOODLAND RD	DOVER	NH	03820
17116-000001	90 STARK AV	PAQUETTE CHRISTOPHER	BELLOTTIE VALERIE	90 STARK AVE UNIT 1	DOVER	NH	03820
17116-000003	90 STARK AV	GUAY XAVIER		90 3 STARK AV	DOVER	NH	03820
17039-001000	105 STARK AV	PYE PHILLIP RAYMOND JR		105 STARK AV	DOVER	NH	03820
17116-000004	90 STARK AV	RILEY BRITTANY		90 STARK AV APT 4	DOVER	NH	03820-4296
17040-000000	97 STARK AV	DAY GEORGE P		97 STARK AVENUE	DOVER	NH	03820
17042-000000	87 STARK AV	EASTER JOHN O		87 STARK AVENUE	DOVER	NH	03820
17043-000000	81 STARK AV	GRAY DUSTIN &	GRAY DANA	76 UPPER FACTORY RD	DOVER	NH	03820-5802
17037-F00000	2 HAYES LN	GERACI PAUL P &	GERACI DIANE E	2 HAYES LN	DOVER	NH	03820-4213
17117-001000	STARK AV	INFINGER SCOTT		99 TEN ROD RD	ROCHESTER	NH	03866
17039-000000	103 STARK AV	CARLONI TRAVIS R &	CARLONI MELISSA A	103 STARK AV	DOVER	NH	03820
17044-000000	73 STARK AV	CORRINGHAM JOSHUA S		12 BRIARWOOD LN	DOVER	NH	03820
17118-000000	100 STARK AV	MURPHY KEVIN J WITH RTODD	MURPHY PAMELA S WITH RTODD	100 STARK AV	DOVER	NH	03820
17116-000002	90 STARK AV	VANBENSCHOTEN NANCY L		90 STARK AVE UNIT 2	DOVER	NH	03820-4253
17034-A00000	8 HAYES LN	MURPHY PATRICK J	MURPHY KARA A	8 HAYES LN	DOVER	NH	03820
17037-D00000	7 HAYES LN	KNIGHT GREGORY J & GRETCHEN M TRUSTEES	KNIGHT FAMILY REVOCABLE TRUST OF 2017	7 HAYES LN	DOVER	NH	03820
17038-000000	89 STARK AV	MACKOUL COREY		8 HULL AVE	DOVER	NH	03820
		ROBERT STOWELL	TRITECH ENGINEERING CORP/	755 CENTRAL AVENUE	DOVER	NH	03820
		ROMY N MAURER	TERRAIN PLANNING & DESIGN	311 KOST HILL ROAD	HOPKINGTON	NH	03229
		MICHAEL MARIANO	HIGHLAND SOIL SERVICES	75 PROSPECT STREET	SOMERSWOF	NH	03878

TECHNICAL REVIEW COMMITTEE MINUTES – SITE-2026-0008

CITY OF DOVER

Application Type:	Site Plan
Applicant(s):	Corey MacKoul
Owner(s):	Corey MacKoul
Location:	89 Stark Ave. (Assessor's Map 17, Lot 38)
Date:	June 11, 2026

INTENT: Proposal is to construct two (2) single-family homes.

LOTS/UNITS PROPOSED: Two new units proposed, one unit existing (three units total)

AGENDA ITEM #: 2

ACREAGE: ±0.88 acres (±38,452 s.f.)

ZONING DISTRICT: R-12

EXISTING/PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential

ZBA ACTION: None.

PERMITS REQUIRED: None.

WAIVERS NEEDED: Relief required from §157-31F, block length less than 500', and §153-13A(17), a colored streetscape rendering

ATTENDANCE:
Donna Benton, Planning
Paul Crouser, Zoning
Jill Semprini, Engineering
Craig Chabot, Fire Department
Alex Mitrushi, Police Department
James Burdin, Business Development
Tom Clark, Planning Board

Others:
Erin Bassegio, City Planner
Bob Stowell, Tritech Engineering

Meeting resumed at: 10:44 a.m.

PLAN REVIEW:
Planning:

- Reminder: water/sewer investment fees
- Owner/professional signatures on final plan set
- What's the road length?
  - Per §157-31F, block length less than 500' requires a waiver request.
- Are the two parking spaces in the front of the property dedicated to the existing house?
- Streetscape rendering not provided.
- Waivers requested from aisle width standards that are not applicable, per §153-14C(2), 0-4 residential units require private driveways/internal roads with a 16' minimum.
- Condo association declaration and bylaws and reserve calculation would need to be reviewed as a condition of approval.
- Mail kiosk approved by Post Master?
- Mitigation efforts for saving trees indicated by Planning Board? Tree protection barrier shown on construction set in addition to landscaping plan.
- What is the plan for trash/recycling?
- Indicate transformer screening on landscape plan.
- Fire truck turnaround needed.
- Add landscaping maintenance to ensure sight distance.

Engineering:

- Recommend providing pedestrian walkway from unit 1 parking to unit 1
- Water Note 6 not described
- Water Note 7 and 8 reference incorrect drawing
- Pump stations for sewer force main to be identified
- Legend showing 6" CLDI conflicts with plan on SP-3
- Existing water main is 10" AC
- Show existing utilities for Unit 1
- Confirm if stormwater from bio basin will be discharged on abutting property
- Identify where chimney detail is proposed to be used

Police:

- No comments.

DRAFT

Application Type:	Site Plan
Applicant(s):	Corey MacKoul
Owner(s):	Corey MacKoul
Location:	89 Stark Ave. (Assessor's Map 17, Lot 38)
Date:	June 11, 2026

Inspection Services:

- Provide distance from Stark Avenue to each dwelling unit door.
- It appears a fire apparatus turnaround is required for NFPA 1 compliance.

Fire Department:

- Will review NFPA 1 compliance for truck turnaround requirement.

Business Development:

- No comments.

Planning Board:

- Proposed driveway sight distance is dangerous, shrubbery needs to be removed.
- How will the property be addressed?

Next Steps: Revise plans per comments above and resubmit for unofficial TRC.

Meeting Paused: 10:57 a.m.

DRAFT

TRITECH
ENGINEERING CORPORATION

755 Central Avenue
Dover, New Hampshire 03820

Telephone 603.742.8107
Facsimile 603.742.3830

June 18, 2026

Donna Benton, AICP
Director of Planning & Community Development
City of Dover, Planning Department
288 Central Avenue
Dover, New Hampshire 03820

Subject: TRC Response Latter
Corey MacKoul
Dover Tax Map 17 Lot 38
89 Stark Ave
Dover, New Hampshire
Job No. 25136

Dear Donna:

At their meeting on June 11, 2026 the Dover Technical Review Committee (TRC) offered the following comments. Our response to each of their comments are identified in blue text.

PLANNING

- Reminder: water/sewer investment fees

  The applicant is aware of this requirement.

- Owner/professional signatures on final plan set

  The professional signatures have been added to all sheets. The owner will sign the final plan set.

- What's the road length?
  - Per §157-31F, block length less than 500' requires a waiver request.

  The road length is 104'. A waiver to 157-31F is attached.

- Are the two parking spaces in the front of the property dedicated to the existing house?

  Yes, the two parking spaces on the north side of the beginning of the road are dedicated to the existing house (Unit 1). Signage is to be installed in accordance with Note C-14 on Sheet SP-2.

- Streetscape rendering not provided.

  A waiver for the requirement of streetscape renderings is attached.

- Waivers requested from aisle width standards that are not applicable, per §153-14C(2), 0-4 residential units require private driveways/internal roads with a 16' minimum.

  The waiver to the aisle width standards has been withdrawn.

- Condo association declaration and bylaws and reserve calculation would need to be reviewed as a condition of approval.

  The applicant is aware of this requirement.

- Mail kiosk approved by Post Master?

  On June 16, 2026, the mail kiosk location and style was approved by the postmaster.

- Mitigation efforts for saving trees indicated by Planning Board? Tree protection barrier shown on construction set in addition to landscaping plan.

  The tree protection barrier has been added to the construction plans. Note C-18 has been added to Sheet SP-2.

- What is the plan for trash/recycling?

  Trash removal will be provided by the Dover curbside collection system. Units 2 & 3 toters will be stored within the building and Unit 1 will store the toters behind the unit. This has been added as Note C-15 on Sheet SP-2.

- Indicate transformer screening on landscape plan.

  Transformer screening has been added to Sheet La-1.

- Fire truck turnaround needed.

  After further review with the Building Official, Jim Maxfield, it was determined a fire truck turnaround is not required.

- Add landscaping maintenance to ensure sight distance.

  The construction plans identify vegetation to be removed to ensure sight distance. Note C-17 on Sheet SP-2 has been added. This has also been added to the ongoing Landscape Operation and Maintenance Manual.

ENGINEERING

- Recommend providing pedestrian walkway from unit 1 parking to unit 1

  A pedestrian walkway from Unit 1 to the parking for Unit 1 has been provided. The walkway is shown on the construction plans as well as Note C-16 on Sheet SP-2.

- Water Note 6 not described

  Water Note 6 is not used.

- Water Note 7 and 8 reference incorrect drawing

  Water Notes 7 & 8 have been revised to reference Detail 9 on Sheet SP-8.

- Pump stations for sewer force main to be identified

  Pump station specifications have been added as Note S-4 on Sheet SP-3.

- Legend showing 6" CLDI conflicts with plan on SP-3

  The legend for the water lines have been revised to be 2" plastic water services.

- Existing water main is 10" AC

  The existing water main is now labeled on Sheet SP-3.

- Show existing utilities for Unit 1

  The existing utilities for Unit 1 have been added to applicable plans.

- Confirm if stormwater from bio basin will be discharged on abutting property

  No, it is only in the 50-year storm that 0.25 cfs will be discharged to the downslope abutting property which is less than pre-construction conditions.

- Identify where chimney detail is proposed to be used

  The chimney detail on Sheet SP-10 has been removed from the plan set.

Project Submittal

Attached please find the supporting documentation:

- Seven (7) Copies of this Technical Review Committee Response Letter.
- One (1) Copy of the Full Size Updated Site Development Plan set.
- Six (6) Copies of the Half Size Updated Site Development Plan set.
- Seven (7) Copies of the Waiver Requests (block length and streetscape renderings).
- Seven (7) Copies of the Landscape Operation & Maintenance Plan.

We look forward to meeting with the Technical Review Committee at their July 2, 2026 meeting and discussing these revised development plans.

Please advise should you have any questions.

Very truly yours,

TRITECH ENGINEERING CORP.

Robert J. Stowell, P.E., L.L.S.
President

RJS / cmp

Enclosures

\\MacKoul TRC Response Letter.docx

WAIVER REQUEST

Land Subdivision Regulations §157-31F
Street Layout Standards

for

COREY MACKOUL

89 Stark Ave
Dover, New Hampshire
June 2026

In accordance with Land Subdivision Regulations Article 157-51, Waivers, the applicant formally requests a waiver from Section 157-31F regarding the street layout design standards for block size.

The 89 Stark Ave development project consists of a driveway for access & parking for the existing single family house and the two proposed units. We have proposed a road length of 104 feet where 157-31F requires block length to be between 500 and 1,200 feet. The lot has a depth of 345 feet and a width of 117 feet.

157-51 Waivers

A. The Planning Board may waive specific provisions of this Chapter. 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

The proposed road for the development will be private and is 104' long. The spirit and intent of the regulation is to provide longer block lengths to create a neighborhood layout which promoted a safe, connected and walkable community. Pedestrians in the development will be able to access pedestrian routes to downtown. The proposed roadway will be private so the city will not have to spend resources maintaining the roadway.

(2) Specific circumstances relative to the subdivision, or conditions of the land in such subdivision, indicate that the waiver will properly carry out the spirit and intent of the regulations.

The lot depth does not allow for a block length of 500 feet and strict conformity would pose an unnecessary hardship to the applicant.

WAIVER REQUEST

Site Review Regulations §153-13A(17)
Site Development Plan

for

COREY MACKOUL

89 Stark Ave
Dover, New Hampshire
June 2026

In accordance with Site Review Regulations Article 153-21, Waivers, the applicant formally requests a waiver from Section 153-13A(17) regarding the requirement for colored streetscape renderings.

157-21 Waivers

A. The Planning Board may waive specific provisions of this Chapter. 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

The spirit and intent of the regulation is to provide a visual representation of the completed site. The nearest proposed structure is almost 100 feet from the edge of pavement on Stark Ave. Building elevations have been provided to give a sense of what the proposed development will look like when completed. This requirement would pose an unnecessary hardship to the applicant due to the simplicity of the proposed layout.

(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.

Building elevations have been provided to give a sense of what the proposed development will look like when completed.

LANDSCAPE
OPERATION & MAINTENANCE PLAN

for

COREY MACKOUL

89 Stark Ave
Dover, New Hampshire
May 2026
Revised June 2026

Prior to Construction

1. Remove shrubs and brush from the northern corner of the site to ensure adequate site distance. The shrubs to be removed are shown on Sheet La-1.

Weekly Tasks

1. Mow and edge lawns if needed. Lawns to be cut to 3.5" height.
2. Prune back any shrubs overhanging curbs or sidewalks.
3. Prune back any groundcover overhanging curbs or sidewalks.
4. Remove litter and leaves from plants, planters, and parking lots.
5. Remove any broken or fallen branches from trees. Remove sucker growth from tree trunks.
6. Remove any weeds larger than 2 inches (5 cm) high or wide from planters. Weeds 2 inches (5 cm) and larger must be removed, not just killed.
7. Replace bark mulch which has been knocked or washed out of planters. Smooth mulch layer if it has been disturbed.
8. Replace decorative rock which has been knocked or washed out of drip strips. Smooth decorative rock surface if it has been disturbed.
9. Check plants for signs of stress, pests or disease. Request authorization to replace other dead or missing plants. Note: Maintenance contractor must request authorization to make replacements within one week of the damage becoming evident.
10. Sweep or blow clean all walkways, curbs, and gutters.
11. Treat for any signs of disease or pest infestation.
12. Complete any items required on the Monthly Checklist.
13. Hand water any plants that are dry and stressed.
14. Check the irrigation system (if there is a system). Make emergency repairs as needed or request authorization to make major repairs. Note: Maintenance contractor must request authorization for repairs within one week of the damage becoming evident.
15. Adjust the irrigation controllers for current water needs of plants.
16. **Gently prune shrubs at appropriate time of year based on species, for shape and form. DO NOT shear.**

Yearly Tasks

Early Spring

1. Prune any tree branches that interfere with public safety. Prune all parking lot and street trees yearly to encourage strong growth.
2. Apply granular fertilizer to shrubs beds and lawns. Be sure to make application prior to a moderate rainfall in drip-irrigated planters so the rain will wash the fertilizer in.

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3. Submit receipts to owner's authorized representative as proof of fertilizer purchase.
4. Trim any perennial foliage left in the fall for winter interest to within six inches of the ground.
5. Add new mulch to planters where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch depth shall not exceed 2". Additional mulch not required where shrubs or groundcover completely hide the soil surface from view.
6. Where there is irrigation and after threat of frost is gone, flush out irrigation systems as needed and check for proper operation of each valve zone. Clean or replace plugged sprinkler nozzles. Replace plugged drip emitters.
7. Replace irrigation controller program back-up batteries.

June:

No additional items

July:

No additional items

August:

No additional items

September:

1. Inventory all plant materials. Inventory shall include an exact count of all shrubs and trees, itemized by planter. Replace any dead or missing plants.

October:

1. Prepare irrigation system for winter. Make sure backflow preventer is well insulated or drained prior to first freeze. Blow out pipes using compressed air in areas where freezing could result in breakage.
2. Mow field areas.

November:

1. "WILT-PRUF" broadleaf evergreens when temperature permits.

December:

1. Prune any tree branches that interfere with public safety. Prune all parking lot and street trees yearly to encourage strong growth.

   Specifically: trees and shrubs in front of the existing house will be maintained to allow for maximum sight distance.

WAIVER REQUEST

Land Subdivision Regulations §157-31F
Street Layout Standards

for

COREY MACKOUL

89 Stark Ave
Dover, New Hampshire
June 2026

In accordance with Land Subdivision Regulations Article 157-51, Waivers, the applicant formally requests a waiver from Section 157-31F regarding the street layout design standards for block size.

The 89 Stark Ave development project consists of a driveway for access & parking for the existing single family house and the two proposed units. We have proposed a road length of 104 feet where 157-31F requires block length to be between 500 and 1,200 feet. The lot has a depth of 345 feet and a width of 117 feet.

157-51 Waivers

A. The Planning Board may waive specific provisions of this Chapter. 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

The proposed road for the development will be private and is 104' long. The spirit and intent of the regulation is to provide longer block lengths to create a neighborhood layout which promoted a safe, connected and walkable community. Pedestrians in the development will be able to access pedestrian routes to downtown. The proposed roadway will be private so the city will not have to spend resources maintaining the roadway.

(2) Specific circumstances relative to the subdivision, or conditions of the land in such subdivision, indicate that the waiver will properly carry out the spirit and intent of the regulations.

The lot depth does not allow for a block length of 500 feet and strict conformity would pose an unnecessary hardship to the applicant.

WAIVER REQUEST

Site Review Regulations §153-13A(17)
Site Development Plan

for

COREY MACKOUL

89 Stark Ave
Dover, New Hampshire
June 2026

In accordance with Site Review Regulations Article 153-21, Waivers, the applicant formally requests a waiver from Section 153-13A(17) regarding the requirement for colored streetscape renderings.

157-21 Waivers

A. The Planning Board may waive specific provisions of this Chapter. 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

The spirit and intent of the regulation is to provide a visual representation of the completed site. The nearest proposed structure is almost 100 feet from the edge of pavement on Stark Ave. Building elevations have been provided to give a sense of what the proposed development will look like when completed. This requirement would pose an unnecessary hardship to the applicant due to the simplicity of the proposed layout.

(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.

Building elevations have been provided to give a sense of what the proposed development will look like when completed.

WAIVER REQUEST

Site Review Regulations §153-14.D.6(a) &(c)
Parking Lot Design Standards

for

COREY MACKOUL

89 Stark Ave
Dover, New Hampshire
May 2025

In accordance with Site Review Regulations Article 153.21.A, Waiver, the applicant formally requests a waiver from Section 153-14.D.6 (a) & (c) regarding the parking lot design standards for aisle width.

The 89 Stark Ave development project consists of a driveway for access & parking for the proposed 2-unit development. We have proposed 20-foot-wide travel ways / aisle ways where 153-14.D.6(a) requires an aisle width of 22 feet and 153-14.D.6(b) requires an aisle width of 24 feet.

153.21 Waivers

A. The PLANNING BOARD may waive specific provisions of this Chapter. 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

The spirit and intent of the regulation is to provide safe access the residents and guest of the proposed project. We respectfully submit that the 20-foot-wide pavement width will achieve this intent.
Our Traffic-Assessment Memorandum calculated weekday vehicle-trips due to the projectas:

- ***daily, 18 (total of in and out)***
- ***AM-street-peak hour, 1 (1 in and 0 out)***
- ***PM-street-peak hour, 2 (1 in and 1 out)***

A 20-foot-wide travel way is more than adequate for the 2 peak hour trip generated by the proposed development. American Association of State Highway and Transportation Officials (AASHTO), A Policy on Geometric Design of Highways and Street, 7th Edition (Washington, DC, 2018) allows for Urban Local Street to have a lane width of Nine (9) feet.

(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.

The spirit and intent of the regulation is to provide safe access the residents and guest of the proposed project. We respectfully submit that the 20-foot-wide pavement width will achieve this intent. A 20-foot-wide travel way is more than adequate for the 2 peak hour trip generated by the proposed development. American Association of State Highway and Transportation Officials (AASHTO), A Policy on Geometric Design of Highways and Street, 7th Edition (Washington, DC, 2018) allows for Urban Local Street to have a lane width of Nine (9) feet.

LANDSCAPE
OPERATION & MAINTENANCE PLAN

for

COREY MACKOUL

89 Stark Ave
Dover, New Hampshire
May 2026
Revised June 2026

Prior to Construction

1. Remove shrubs and brush from the northern corner of the site to ensure adequate site distance. The shrubs to be removed are shown on Sheet La-1.

Weekly Tasks

1. Mow and edge lawns if needed. Lawns to be cut to 3.5" height.
2. Prune back any shrubs overhanging curbs or sidewalks.
3. Prune back any groundcover overhanging curbs or sidewalks.
4. Remove litter and leaves from plants, planters, and parking lots.
5. Remove any broken or fallen branches from trees. Remove sucker growth from tree trunks.
6. Remove any weeds larger than 2 inches (5 cm) high or wide from planters. Weeds 2 inches (5 cm) and larger must be removed, not just killed.
7. Replace bark mulch which has been knocked or washed out of planters. Smooth mulch layer if it has been disturbed.
8. Replace decorative rock which has been knocked or washed out of drip strips. Smooth decorative rock surface if it has been disturbed.
9. Check plants for signs of stress, pests or disease. Request authorization to replace other dead or missing plants. Note: Maintenance contractor must request authorization to make replacements within one week of the damage becoming evident.
10. Sweep or blow clean all walkways, curbs, and gutters.
11. Treat for any signs of disease or pest infestation.
12. Complete any items required on the Monthly Checklist.
13. Hand water any plants that are dry and stressed.
14. Check the irrigation system (if there is a system). Make emergency repairs as needed or request authorization to make major repairs. Note: Maintenance contractor must request authorization for repairs within one week of the damage becoming evident.
15. Adjust the irrigation controllers for current water needs of plants.
16. **Gently prune shrubs at appropriate time of year based on species, for shape and form. DO NOT shear.**

Yearly Tasks

Early Spring

1. Prune any tree branches that interfere with public safety. Prune all parking lot and street trees yearly to encourage strong growth.
2. Apply granular fertilizer to shrubs beds and lawns. Be sure to make application prior to a moderate rainfall in drip-irrigated planters so the rain will wash the fertilizer in.

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3. Submit receipts to owner's authorized representative as proof of fertilizer purchase.
4. Trim any perennial foliage left in the fall for winter interest to within six inches of the ground.
5. Add new mulch to planters where the mulch depth has been reduced to less than 2 inches (5 cm) thick. Mulch depth shall not exceed 2". Additional mulch not required where shrubs or groundcover completely hide the soil surface from view.
6. Where there is irrigation and after threat of frost is gone, flush out irrigation systems as needed and check for proper operation of each valve zone. Clean or replace plugged sprinkler nozzles. Replace plugged drip emitters.
7. Replace irrigation controller program back-up batteries.

June:

No additional items

July:

No additional items

August:

No additional items

September:

1. Inventory all plant materials. Inventory shall include an exact count of all shrubs and trees, itemized by planter. Replace any dead or missing plants.

October:

1. Prepare irrigation system for winter. Make sure backflow preventer is well insulated or drained prior to first freeze. Blow out pipes using compressed air in areas where freezing could result in breakage.
2. Mow field areas.

November:

1. "WILT-PRUF" broadleaf evergreens when temperature permits.

December:

1. Prune any tree branches that interfere with public safety. Prune all parking lot and street trees yearly to encourage strong growth.

   Specifically: trees and shrubs in front of the existing house will be maintained to allow for maximum sight distance.

STORMWATER ANALYSIS

and

Erosion & Sediment Control Plan

NARRATIVE

for

COREY MACKOUL

89 Stark Ave
Dover, New Hampshire
May 2026

PREPARED FOR

COREY MACKOUL

8 HULL AVE

DOVER, NH 03820

PREPARED BY

TRITECH ENGINEERING CORPORATION

755 CENTRAL AVENUE

DOVER, NEW HAMPSHIRE 03820

STORMWATER ANALYSIS

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for

COREY MACKOUL

8 Hull Ave
Dover, New Hampshire
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STORMWATER ANALYSIS

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COREY MACKOUL

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Dover, New Hampshire
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SECTION I

NARRATIVE

STORMWATER ANALYSIS

and

Erosion & Sediment Control Plan

NARRATIVE

for

COREY MACKOUL

8 Hull Ave
Dover, New Hampshire
May 2026

1. PROJECT DESCRIPTION

The attached Site Plans are for Corey MacKoul and show the development of an approximately 0.883-acre parcel with an existing single family house. This site is located on the Southwestern side of Stark Ave in Dover, New Hampshire. The site is identified on Dover Property as Map 17 Lot 38.

The project consists of renovation of the existing single family house and the construction of two single family houses. The project will be constructed under Dover's Transfer of Development Rights Ordinance. The development will include associated infrastructure such as an access road, all utilities, and stormwater management.

Included in the stormwater management system is the construction of a Bioretention Area. The Bioretention Area is shown on the construction plans and provide permanent stormwater quality and quantity treatment, prior to the stormwater exiting the site.

Proposed site development details are shown on the Site Development Plans for Corey MacKoul as prepared by Tritech Engineering Corporation. Site and Construction plans are based upon an actual on-ground survey performed by Tritech Engineering Corporation, and on-site Wetland & Site Specific Soil delineation performed by Highland Soil Services.

2. METHODOLOGY

This stormwater runoff analysis and drainage design was accomplished using SCS TR-20 Methodology a third party computer software program was used in the facilitation of this analysis. This software is HydroCAD Stormwater Modeling System Version 10.20-8a, by Applied Microcomputer Systems. Analysis and design were performed for the Two-Year, Ten-Year, Twenty-Five Year and Fifty Year Storm Events.

STORMWATER ANALYSIS
and
Erosion & Sediment Control Plan
NARRATIVE
for
COREY MACKOUL
8 Hull Ave
Dover, New Hampshire
May 2026

3. STORMWATER HYDROLOGIC REVIEW

EXISTING CONDITIONS

Table A – Existing Conditions (2, 10, 25, and 50-year storm events)

Watershed	**Pre Development Volume (af)**	**Pre-Development Peak Flows (cfs)**			
Analysis Point	**2-yr**	**2-yr**	**10-yr**	**25-yr**	**50-yr**
1	0.000	0.00	0.02	0.16	0.45
2	0.000	0.00	0.00	0.00	0.00

DEVELOPED CONDITIONS

Table B – Developed Conditions (2, 10, 25, and 50-year storm events)

Watershed	**Post Development Volume (af)**	**Post Development Peak Flows (cfs)**			
Analysis Point	**2-yr**	**2-yr**	**10-yr**	**25-yr**	**50-yr**
1	0.000	0.00	0.00	0.00	0.25
2	0.000	0.00	0.00	0.00	0.01

HYDROLOGIC COMPARISON

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)**			
Analysis Point	**2-yr**	**2-yr**	**10-yr**	**25-yr**	**50-yr**
1	0.000/**0.000**	0.00/**0.00**	0.02/**0.00**	0.16/**0.00**	0.45/**0.25**
2	0.000/**0.000**	0.00/**0.00**	0.00/**0.00**	0.00/**0.00**	0.00/**0.01**

STORMWATER ANALYSIS

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for

COREY MACKOUL

8 Hull Ave
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4. STORMWATER RUNOFF QUALITY

Stormwater runoff from the site is collected in a system of open drainage swales, and catch basins, pretreated via deep sump catch basins and treated, detained, and infiltrated via the Bioretention area.

5. CONCLUSIONS

Treatment of drainage occurs in deep sump catch basins and a Bioretention practice. This Stormwater Management System effectively treats and detains the runoff from the Site Development, while maintaining the down gradient water quality through treatment.The development of this project will result in no adverse impacts to downstream properties.

6. SOIL TYPES

On site Test Pits indicate the entirety of the site contains Windsor soil.

7. RAINFALL DATA

As part of the 2007 Alteration of Terrain rules update, New Hampshire began using “extreme precipitation” in lieu of the previously accepted standard UDSA SCS rainfall distribution.

We have used the interactive web tool for extreme precipitation analysis published by Cornell University. On April 7, 2026, we submitted our site location (longitude 70.870° West, Latitude 43.179° North). A table with the resulting rainfall data is provided in the appendix.

STORMWATER ANALYSIS

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COREY MACKOUL

8 Hull Ave
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8. WETLANDS & SITE SPECIFIC SOILS MAP

Highland Soil Services, Michael Mariano, Certified Wetland #183 and Soil Scientist #76, conducted an on site wetlands deliniation investigation of the subject parcel. There are no wetlands located on the site. Highland Soil Services also completed a site-specific soil survey, the results of which are depicted on sheet SSS-1, D-1, & D-2

9. ADJACENT AREA

The site is zoned R-12. The site is bounded to the north by Stark Ave and to the east, south and west by residential properties.

10. CRITICAL AREAS

Anywhere on the site that existing vegetation is to be removed will require immediate erosion control treatment.

11. EXISTING CONDITIONS

The site is currently a single family residential property.

STORMWATER ANALYSIS

and

Erosion & Sediment Control Plan

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May 2026

12. EROSION AND SEDIMENT CONTROL PRACTICES

Erosion and sediment control practices will include the use of permanent grass ditches, vegetated filter strips, & Silt Soxx. All erosion control practices will be constructed and maintained according to the minimum standards and specifications contained in the "Erosion and Sediment Control Design Handbook for Developing Areas of New Hampshire".

A. Erosion and Sediment Control Measures

1. The erosion control procedures shall conform to Section 645 of the "Standard Specifications for Road and Bridge Construction" of the NH DOT, and the "Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire.
2. During Construction and thereafter, erosion control measures are to be implemented as noted. The smallest practical area of land should be exposed at any one time during development.
3. During grading operations, install hay bale barriers at 50 foot intervals in drainage swales and at drain inlets where shown. Barriers are to be maintained and cleaned until disturbed areas are stabilized.
4. Any disturbed areas which are to be left temporarily, and which will be regarded later during construction shall be machine hay mulched and seeded with rye grass to prevent erosion.
5. Silt Soxx shall be periodically inspected during the life of the project and after each storm. All damaged Silt Soxx shall be repaired. Sediment deposits shall periodically be removed.
6. Avoid the use of future open spaces (loam and seed areas) wherever possible during the construction. Construction traffic shall use the roadbeds of future roads and parking areas.
7. Topsoil required for the establishment of vegetation shall be stock piled in amounts necessary to complete finished grading of all exposed areas.
8. Areas to be filled shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots or other objectionable material. Stumps shall be disposed by grinding or fill in an approved facility.
9. All fills shall be placed and compacted to reduce erosion, slippage settlement, subsidence or other related problems.
10. All fill shall be placed and compacted in layers not to exceed 8 inches in thickness.

11. Frozen material or soft, mucky or highly compressible material shall not be incorporated into fills.
12. Fill material shall not be placed on a frozen foundation subgrade.
13. Disturbed areas shall be seeded immediately following finished grading.
14. At no time shall any disturbed area remain unstabilized for longer than thirty days. All areas where construction is not completed within thirty days of the initial disturbance shall be machine hay mulched and seeded with rye grass to prevent erosion.
15. Dewatering: Where groundwater is encountered during excavation, the contractor shall use a mechanical pump, pumping the water to a Dirt Bag™ or equivalent prior to discharge. Alternate systems must meet applicable sections of the 2017 CGP and NHDES requirements, and be approved by Tritech. Avoid allowing water to flow over disturbed or newly vegetated areas.

B. <u>Vegetative Practice</u>

1. All disturbed areas shall be loamed (4") and limed. Lime shall be thoroughly incorporated into the loam layer at a rate of 2 tons per acre.
2. Fertilizer shall be spread on the top layer of loam and worked into the surface. Fertilizer application rate shall be 500 pounds per acre of 10-20-20 fertilizers.
3. Seed shall be 48 lbs. per acre, SCS mixture "C".
   Immediately before seeding, the soil shall be lightly raked. One half the seed shall be sown in one direction and the other half at right angles to the original direction. It shall be lightly raked into the soil to a depth not over 1/4 inch and rolled with a hand roller weighing not over 100 pounds per linear foot of width.
4. Hay mulch shall be applied immediately after seeding at a rate of 1.5 to 2 tons per acre and shall be held in place using appropriate techniques from the Erosion and Sediment Control Handbook.
5. The surface shall be watered and kept moist with a fine spray as required, without washing away the soil, until the grass is well established. Any areas which are not satisfactorily covered with grass shall be reseeded, and all noxious weeds removed.

STORMWATER ANALYSIS

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for

COREY MACKOUL

8 Hull Ave
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13. CONSTRUCTION SEQUENCE

A. Do not begin construction until all local, state and federal permits have been applied for and received.

B. Install Silt Soxx and hay bale barriers necessary to control erosion and prevent sediment contamination of wetlands prior to any earth moving activities.

C. Cut and remove all trees, shrubs, saplings, brush, vines and other debris and rubbish as required. Remove unsuitable materials as required.

D. Care shall be taken to preserve the infiltration capacity of the infiltrating soil. Seet the New Hampshire Stormwater Manual for additional information.

E. Construct Stormwater Bioretention Basin #1. Do not direct runoff to the practice until the practice and contributing areas are fully stabilized.

F. Constuct of buildings, driveways, parking, & utilities.

G. Loam and seed disturbed areas in accordance with vegetative practice and general construction notes. Cut and fill slopes shall be seeded immediately after their construction.

H. Land leveling operations for buildings and other structures shall be completed along with off road storm sewer systems and utilities.

I. Maintain disturbed areas as necessary.

14. MAINTENANCE

During the period of construction and/or until long term vegetation is established:

A. Seeded areas will be fertilized and reseeded as necessary to insure vegetative establishment.

B. The ditches will be checked after each significant rainfall and cleaned of sediment as needed to retain flow capacity.

C. The ditches will be checked weekly and repaired when necessary until adequate vegetation is established.

D. The silt fence barriers will be checked regularly. Necessary repairs will be made to correct undermining or deterioration of the structures.

CITY OF DOVER

SITE DEVELOPMENT DESIGN CRITERIA

Site Review Regulations §153-14A – Stormwater Management

NARRATIVE

for

COREY MACKOUL

89 Stark Ave

Dover, New Hampshire

May 2026

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 projects stormwater analysis, design, plans and supporting documentation have been prepared in accordance with The City of Dover Site Review Regulations and the NH Stormwater Manual (December 2008).

The project design provides for storm attenuation, stormwater treatment and groundwater recharge in accordance with these regulations and standards.

(b) Minimizing the contribution of a pollutant for which a water body is impaired to the maximum extent practicable (MEP).

The project utilizes the appropriate BMP's to compensate for the pollutants that may be generated by new development to the maximum extent practicable.

(c) Causing no discharge of runoff to an adjacent property in excess of runoff discharge in the existing developed or undeveloped condition.

The proposed development post construction runoff does not exceed pre construction conditions. There will be no increase in runoff to the City's drainage system.

(d) Encouraging the use of low-impact development (LID) strategies.

The project utilizes a bioretention practice for stormwater treatment and infiltration for groundwater recharge.

(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:

[1] The minimum protections and management standards shall apply to all projects.

This narrative is prepared in conjunction with a Site Plan Review application for which the "new development standards" apply to the stormwater management and site design of the proposed development.

[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.

This narrative is prepared in conjunction with a Site Plan Review application for which the "new development standards" apply to the stormwater management and site design of the proposed development.

[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 proposed project does not meet the standards for a "redevelopment" 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.

As this project proposes disturbance of less than 100,000 square feet and less than one (1) acre it does not require a NH DES Alteration of Terrain (AoT) permit or the submittal of a Notice of Intent (NOI) application with the EPA as required by National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP).

(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 subject property does not contain surface waters, wetlands or associated buffer setback.

[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.

LID strategies were implemented to the maximum extent practicable. The project utilizes a bioretention practice for stormwater treatment as well as infiltration for groundwater recharge.

[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 stormwater BMPs are designed in accordance with New Hampshire Stormwater Manual Volume 2 current version (December 2008 revision 1.0).

[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 provide for 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 Stormwater Management, Maintenance & Inspection Plan 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.

[8] Impervious surfaces for parking areas and roads shall be minimized to the extent possible.

The project design has minimized the impervious areas to the maximum extent possible. The number of parking spaces, travel way widths and vehicle maneuvering areas have been minimized for this specific project/use.

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[9] Stormwater runoff from new impervious surfaces shall be directed to a best management practice for flow mitigation, treatment and/or infiltration.

The project design utilizes a bioretention practice for stormwater treatment & flow mitigation as well as infiltration for groundwater recharge & flow mitigation.

(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 project design utilizes a bioretention practice for treatment of impervious areas. This bioretention practice system provides 90% removal of TSS and 65% removal of total nitrogen and phosphorous per the NH Stormwater Manual.

[2] Rainfall amount shall be based on current extreme precipitation estimates obtained from the Northeast Regional Climate Center.

The project stormwater analysis and design utilizes the NRCC extreme precipitation.

[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 two-year, ten-year, twenty-five-year and the fifty-year in a 24-Hour storm event.

[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.

On April 29th, 2026 Tritech performed on-site infiltration testing using Geulph Permeameter in accordance with NHDES Analysis Method. The analysis of this data determined the K_{sat} value to be used in the HydroCAD Stormwater Model.

We performed this testing at one location on the property. The testing location was located next to Test Pit #1. The results of the test determined a 13.75 in/hr. K_{sat} value to be used in the HydroCAD stormwater model.

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[5] Infiltration rates for designing groundwater recharge practices shall be determined in accordance with Section Env-Wq 1504.14.

On April 29th, 2026 Tritech performed on-site infiltration testing using Geulph Permeameter in accordance with NHDES Analysis Method. The analysis of this data determined the K_{sat} value to be used in the HydroCAD Stormwater Model.

We performed this testing at one location on the property. The testing location was located next to Test Pit #1. The results of the test determined a 13.75 in/hr. K_{sat} value to be used in the HydroCAD stormwater model.

[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.

The project's Stormwater infrastructure is designed to convey a 50-year, 24-hour storm event without overtopping and does not cause flooding on the property. See Stormwater Analysis.

[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 does not add 10 acres or greater of impervious cover and is not located in a federally designated floodplain.

[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 involves very little upstream or upgradient runoff, however, the project stormwater calculations, stormwater infrastructure design and site grading all accounted for this runoff.

[9] Seasonal high-water table elevations must be accounted for in all BMP design criteria.

A Site-Specific Soil Plan, Sheet SSS-1, is included in our Site Development Plan Set and Stormwater Analysis. This plan was prepared by Michael Mariano of Highland Soil Service. In conjunction with this plan preparation Mr. Mariano logged two (2) test pits on the subject property. The ESHWT and overall soil types factor into the placement and design of the project BMPs.

[10] Access for maintenance of stormwater facilities must be included as part of the design, where necessary. Access easements may be required.

Stormwater facilities are included on site and the site will be solely owned by the applicant. Stormwater access easements are not required for this project.

[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.

Sheet La-1 was prepared by Romy Maurer a licensed Landscape Architect with Terrain Planning & Design, LLC. We have also provided a Landscape Operation & Maintenance Plan to ensure the functionality of the BMPs.

(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 requirements to be classified as redevelopment project, therefore this section in not applicable.

[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.

[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:

[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.

[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.

As this project proposes disturbance of less than 100,000 square feet and less than one (1) acre it does not require a NH DES Alteration of Terrain (AoT) permit or the submittal of a Notice of Intent (NOI) application with the EPA as required by National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP).

SWPPP inspections are not required for this development.

[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 & Sediment Control Notes, Detail 12 on Sheet SP-7 in the project plan set indicates that the smallest practical area shall be disturbed during construction.

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[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 & Sediment Control Notes, Detail 12 on Sheet SP-7 in the project plan set indicates 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.

The Erosion & Sediment Control Notes, Detail 12 on Sheet SP-7 in the project plan set indicates that stormwater conveyance practices shall be stabilized prior to receiving stormwater runoff.

[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.

The Erosion & Sediment Control Notes, Detail 12 on Sheet SP-7 in the project plan set details the Construction Sequencing. Dover scheduling and inspections will be discussed with Community Services prior to the start of construction.

[7] Perimeter site controls shall not be placed within wetland areas, stream channels or wetland buffers.

This project does not propose any work in a wetland or a wetland buffer.

[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 Erosion & Sediment Control Notes, Detail 12 on Sheet SP-7 in the project plan set identifies this requirement.

[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.

As this project proposes disturbance of less than 100,000 square feet and less than one (1) acre it does not require a NH DES Alteration of Terrain (AoT) permit or the submittal of a Notice of Intent (NOI) application with the EPA as required by National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). SWPPP inspections are not required for this development.

[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 NHDES AoT winter construction notes are identified in The Erosion & Sediment Control Notes, Detail 12 on Sheet SP-7 in the project plan set.

[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. Sheet SP-7 notes are provided in the project 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.

The Erosion & Sediment Control Notes, Detail 12 on Sheet SP-7 in the project plan set identifies this requirement.

[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 basin can be sized to provide 3,600 cubic feet 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 Sediment Trap is not proposed.

[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.

A Sediment Trap is not proposed.

(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.

The owner/applicant is aware of this requirement.

[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 owner/applicant is aware of the Community Services Department inspection scheduling requirements.

[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.

The owner/applicant is aware of this requirement.

[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.

SWPPP inspections are not required for this project.

[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 owner/applicant is aware of this requirement.

(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.

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[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.

The Erosion & Sediment Control Notes, Detail 12 on Sheet SP-7 in the project plan set describes this information.

[b] Proposed changes in impervious cover areas and any changes in pre- and post-development drainage patterns.

The proposed development post construction runoff does not exceed pre construction conditions. The proposed development does not directs any stormwater runoff to the City of Dover closed stormwater system.

[c] Description of LID proposed measures.

The project utilizes a bioretention practice for stormwater treatment as well as an infiltration practice for groundwater recharge.

[2] For projects requiring new development or redevelopment standards, a drainage report that contains the following items shall be submitted:

[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.

The Erosion & Sediment Control Notes, Detail 12 on Sheet SP-7 in the project plan set describes this information.

[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.

The Stormwater Analysis includes the above requirements.

[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.

A Site-Specific Soil Plan, Sheet SSS-1, is included in our Site Development Plan Set and Stormwater Analysis. This plan was prepared by Michael Mariano of Highland Soil Service. In conjunction with this plan preparation Mr. Mariano logged three (3) test pits on the subject property. The ESHWT and overall soil types factor into the placement and design of the project BMPs.

[d] Description of existing drainage patterns, receiving water bodies or drainage infrastructure and soil types for recharge potential.

The Stormwater Analysis includes the above requirements.

[e] Watershed area limits, including any off-site and upstream areas contributing flow to shared drainage channels and/or infrastructure.

The Stormwater Analysis includes the above requirements.

[f] Description of proposed changes in impervious cover areas and any changes in pre- and post-development drainage patterns.

The Stormwater Analysis includes the above requirements.

[g] Methods and assumptions used to calculate pre- and post-development runoff volume, peak discharge, and discharge velocity for the specified design storm events.

The Stormwater Analysis includes the above requirements.

[h] Methods and assumptions used to calculate the pollutant load removal.

The Stormwater Analysis includes the above requirements.

[i] Description of LID measures that are proposed to limit the development footprint, preserve existing vegetation and mimic existing hydrology to the extent feasible.

The project utilizes a bioretention practice for stormwater treatment as well as an infiltration practice for groundwater recharge.

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

LID measures have been incorporated in the design of the project.

[k] Describe measures and calculations for proposed practices used to achieve no net increase in runoff volumes leaving the site.

The Stormwater Analysis includes the above requirements.

[l] Provide calculations for the infiltration or exfiltration system.

The Stormwater Analysis includes the above requirements.

[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 stormwater analysis indicates there will no increase in the post-development runoff volumes.

[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.

The Site Development plan set includes the above requirements.

[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.

No changes are anticipated.

[p] Proposed schedule for the inspection and maintenance of all erosion control measures on site prior to achieving final site stabilization.

The Erosion & Sediment Control Notes, Detail 12 on Sheet SP-7 in the project plan set identifies this requirement.

[q] Describe procedures for removing temporary erosion control measures and removal of accumulated sediment captured by such measures.

The Erosion & Sediment Control Notes, Detail 12 on Sheet SP-7 in the project plan set identifies this requirement.

[r] Any other specific study, calculation, or investigation as requested by the city.

Additional information shall be provided as requested and may include traffic studies, structural designs, sewer designs, geotechnical reports, etc.

[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 Management, Maintenance and Inspection Plan 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.

[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 Management, Maintenance and Inspection Plan (I&M) is included in the Stormwater Analysis provided as part of this submittal.

[u] Provide copies of pertinent state and federal permits.

Copies of permits will be provided to the City of Dover, as applicable.

(g) Long-term operation and maintenance. The owner shall be responsible for continued inspection and maintenance requirements.

A Stormwater Management, Maintenance and Inspection Plan (M&I) is included in the Stormwater Analysis provided as part of this submittal.

[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 Stormwater Management, Maintenance and Inspection Plan.

[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 Stormwater Management, Maintenance and Inspection Plan.

[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 Stormwater Management, Maintenance and Inspection Plan requires the use of a Green SnoPro contractor.

[d] Deicing log to track amount and type of deicing material applied.

The Stormwater Management, Maintenance and Inspection Plan 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 Site Development Plan Set is included as part of the Stormwater Management, Maintenance and Inspection Plan.

[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 Stormwater Management, Maintenance and Inspection Plan 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.

The applicant is aware of this requirement.

STORMWATER ANALYSIS

and

Erosion & Sediment Control Plan

NARRATIVE

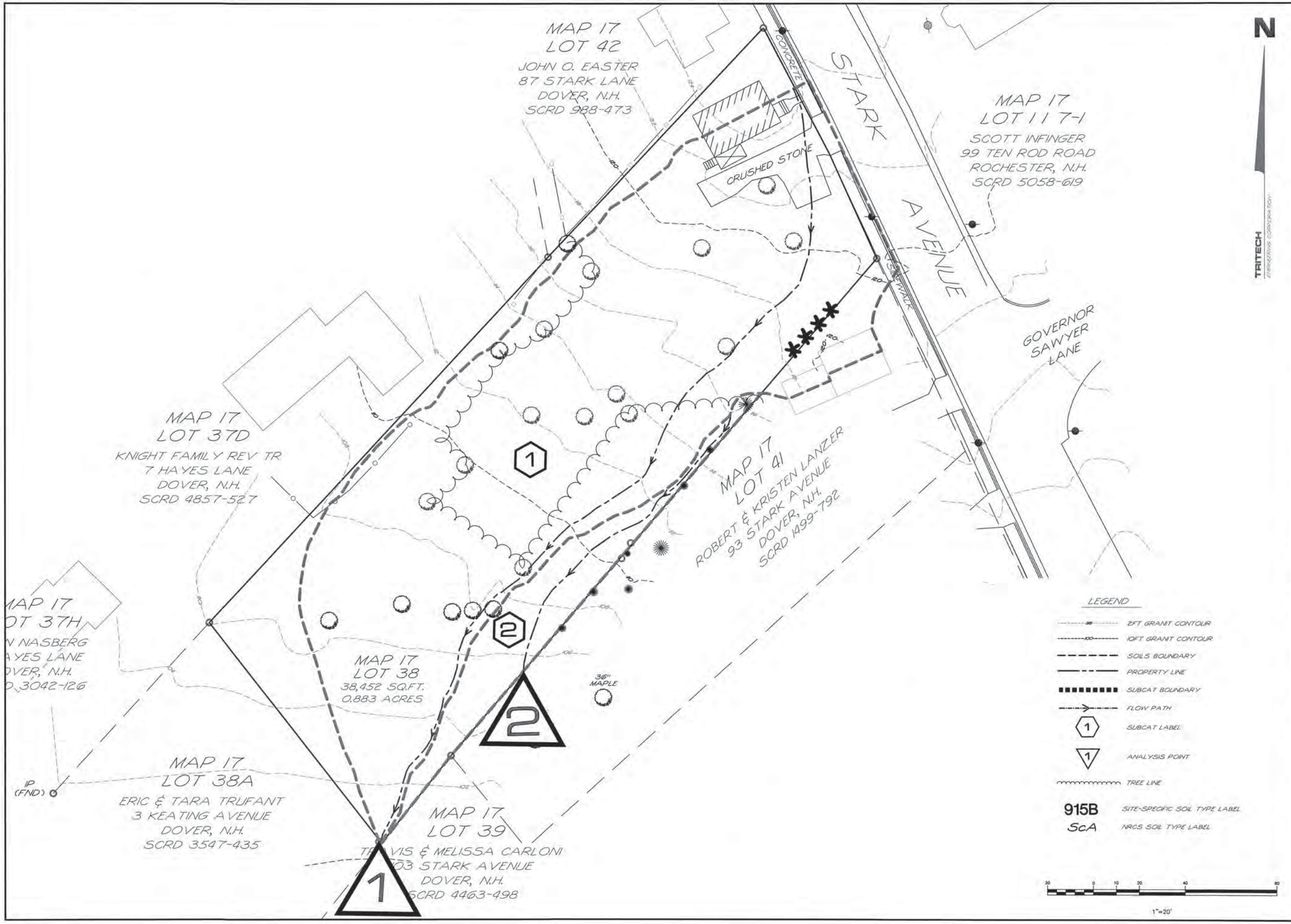
for

COREY MACKOUL

8 Hull Ave
Dover, New Hampshire
May 2026

SECTION II

COMPUTATIONS



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REVISIONS
DATE: DESCRIPTION:

STATE OF NEW HAMPSHIRE - ROBERT J. STOCKELL JR. - 3820 - PROFESSIONAL ENGINEER

PRE-CONSTRUCTION DRAINAGE PLAN

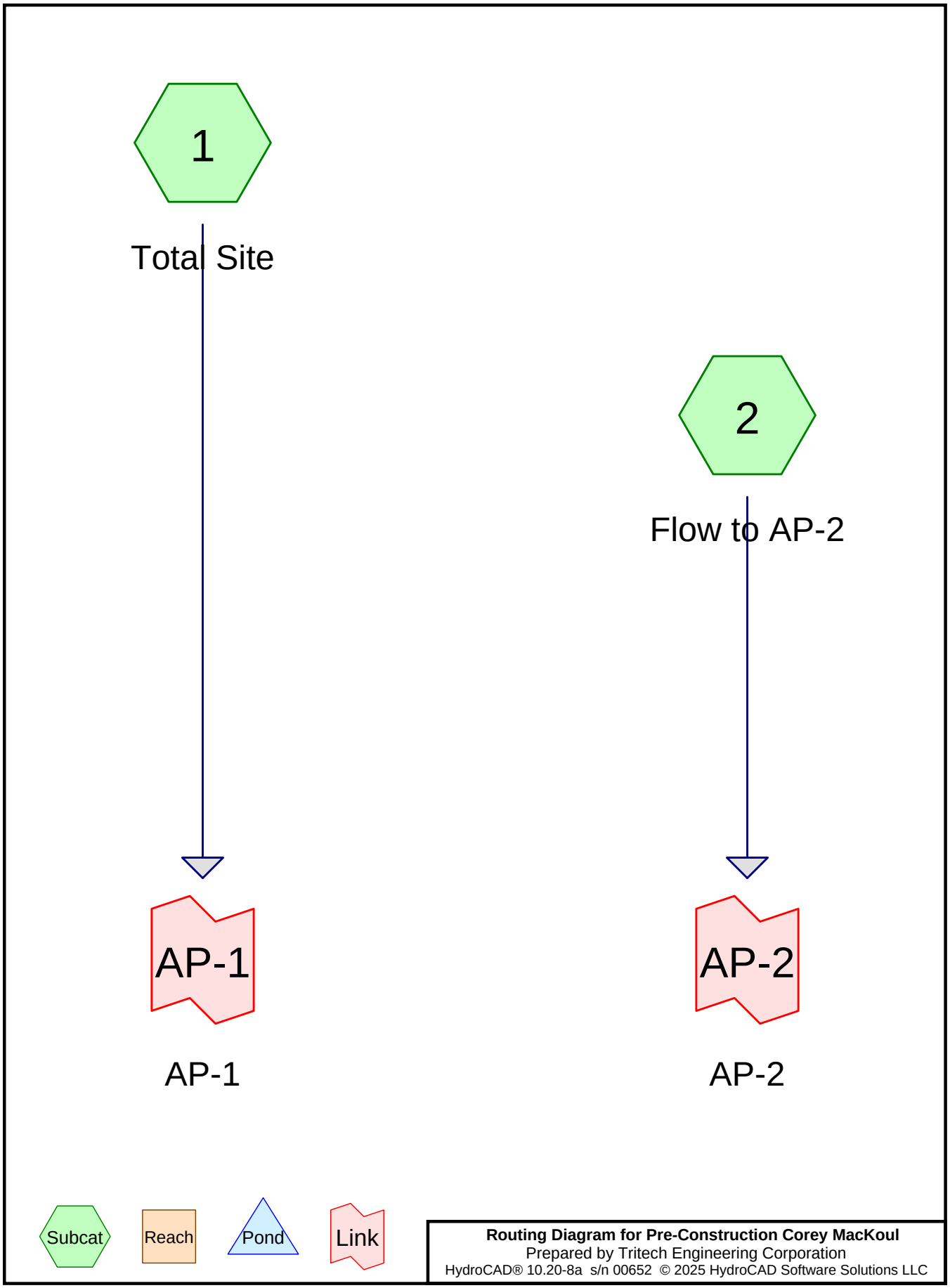
COREY MACKOUL

89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY

MAY 14, 2026 JOB No. 251.36

SCALE: 1" = 20'

SHEET No. D-1



Routing Diagram for Pre-Construction Corey MacKoul
Prepared by Tritech Engineering Corporation
HydroCAD® 10.20-8a s/n 00652 © 2025 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.361	39	>75% Grass cover, Good, HSG A (1)
0.021	96	Gravel surface, HSG A (1)
0.015	98	Paved parking, HSG A (1)
0.019	98	Roofs, HSG A (1)
0.387	30	Woods, Good, HSG A (1, 2)
0.804	**39**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.804	HSG A	1, 2
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
0.804		**TOTAL AREA**

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
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 1: Total Site Runoff Area=31,645 sf 4.70% Impervious Runoff Depth=0.00"
Tc=6.0 min CN=40 Runoff=0.00 cfs 0.000 af

Subcatchment 2: Flow to AP-2 Runoff Area=3,374 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=150' Tc=23.5 min CN=30 Runoff=0.00 cfs 0.000 af

Link AP-1: AP-1 Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link AP-2: AP-2 Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 0.804 ac Runoff Volume = 0.000 af Average Runoff Depth = 0.00"
95.75% Pervious = 0.770 ac 4.25% Impervious = 0.034 ac

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
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 1: Total Site Runoff Area=31,645 sf 4.70% Impervious Runoff Depth=0.18"
Tc=6.0 min CN=40 Runoff=0.02 cfs 0.011 af

Subcatchment 2: Flow to AP-2 Runoff Area=3,374 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=150' Tc=23.5 min CN=30 Runoff=0.00 cfs 0.000 af

Link AP-1: AP-1 Inflow=0.02 cfs 0.011 af
Primary=0.02 cfs 0.011 af

Link AP-2: AP-2 Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 0.804 ac Runoff Volume = 0.011 af Average Runoff Depth = 0.17"
95.75% Pervious = 0.770 ac 4.25% Impervious = 0.034 ac

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
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 1: Total Site Runoff Area=31,645 sf 4.70% Impervious Runoff Depth=0.51"
Tc=6.0 min CN=40 Runoff=0.16 cfs 0.031 af

Subcatchment 2: Flow to AP-2 Runoff Area=3,374 sf 0.00% Impervious Runoff Depth=0.07"
Flow Length=150' Tc=23.5 min CN=30 Runoff=0.00 cfs 0.000 af

Link AP-1: AP-1 Inflow=0.16 cfs 0.031 af
Primary=0.16 cfs 0.031 af

Link AP-2: AP-2 Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 0.804 ac Runoff Volume = 0.031 af Average Runoff Depth = 0.46"
95.75% Pervious = 0.770 ac 4.25% Impervious = 0.034 ac

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
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 1: Total Site Runoff Area=31,645 sf 4.70% Impervious Runoff Depth=0.91"
Tc=6.0 min CN=40 Runoff=0.45 cfs 0.055 af

Subcatchment 2: Flow to AP-2 Runoff Area=3,374 sf 0.00% Impervious Runoff Depth=0.25"
Flow Length=150' Tc=23.5 min CN=30 Runoff=0.00 cfs 0.002 af

Link AP-1: AP-1 Inflow=0.45 cfs 0.055 af
Primary=0.45 cfs 0.055 af

Link AP-2: AP-2 Inflow=0.00 cfs 0.002 af
Primary=0.00 cfs 0.002 af

Total Runoff Area = 0.804 ac Runoff Volume = 0.057 af Average Runoff Depth = 0.85"
95.75% Pervious = 0.770 ac 4.25% Impervious = 0.034 ac

Summary for Subcatchment 1: Total Site

Runoff = 0.02 cfs @ 12.48 hrs, Volume= 0.011 af, Depth= 0.18"
Routed to Link AP-1 : AP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Extreme Rainfall=4.76"

Area (sf)	CN	Description
843	98	Roofs, HSG A
13,487	30	Woods, Good, HSG A
15,735	39	>75% Grass cover, Good, HSG A
935	96	Gravel surface, HSG A
645	98	Paved parking, HSG A
31,645	40	Weighted Average
30,157		95.30% Pervious Area
1,488		4.70% Impervious Area

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

Summary for Subcatchment 2: Flow to AP-2

Runoff = 0.00 cfs @ 24.09 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Link AP-2 : AP-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Extreme Rainfall=4.76"

Area (sf)	CN	Description
3,374	30	Woods, Good, HSG A
3,374		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.8	100	0.0700	0.07		**Sheet Flow, Sheet Flow Woods** Woods: Dense underbrush n= 0.800 P2= 3.15"
0.7	50	0.0600	1.22		**Shallow Concentrated Flow, SC Woods** Woodland Kv= 5.0 fps
23.5	150	Total			

Summary for Link AP-1: AP-1

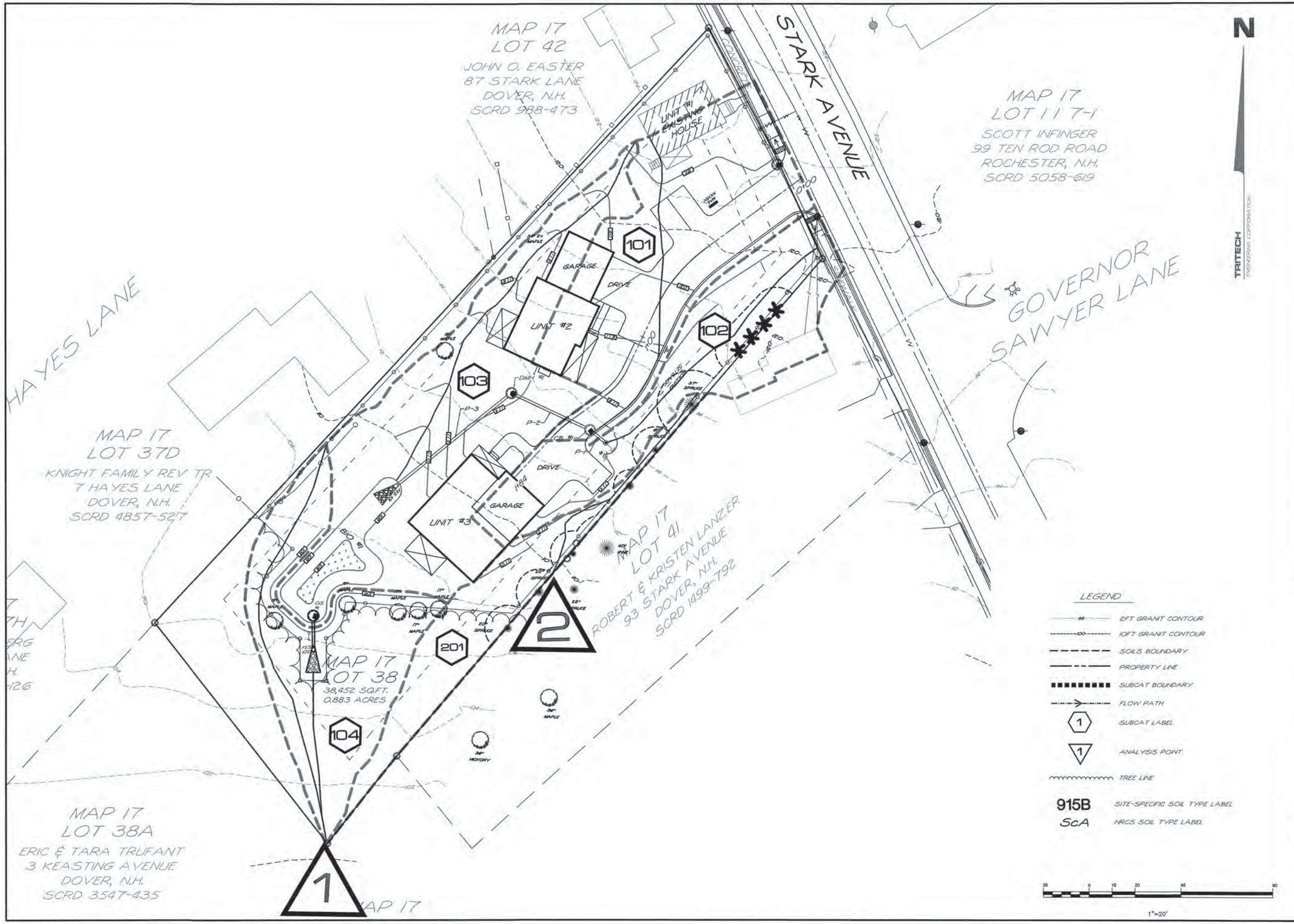
Inflow Area = 0.726 ac, 4.70% Impervious, Inflow Depth = 0.18" for 10-YR Extreme event
Inflow = 0.02 cfs @ 12.48 hrs, Volume= 0.011 af
Primary = 0.02 cfs @ 12.48 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Summary for Link AP-2: AP-2

Inflow Area = 0.077 ac, 0.00% Impervious, Inflow Depth = 0.00" for 10-YR Extreme event
Inflow = 0.00 cfs @ 24.09 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 24.09 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs



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TRITECH ENGINEERING CORPORATION

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785 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 2830

REVISIONS
DATE: DESCRIPTION:

STATE OF NEW HAMPSHIRE - ROBERT STOWELL MORRISON

POST-CONSTRUCTION DRAINAGE PLAN

COREY MACKOUL

89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY

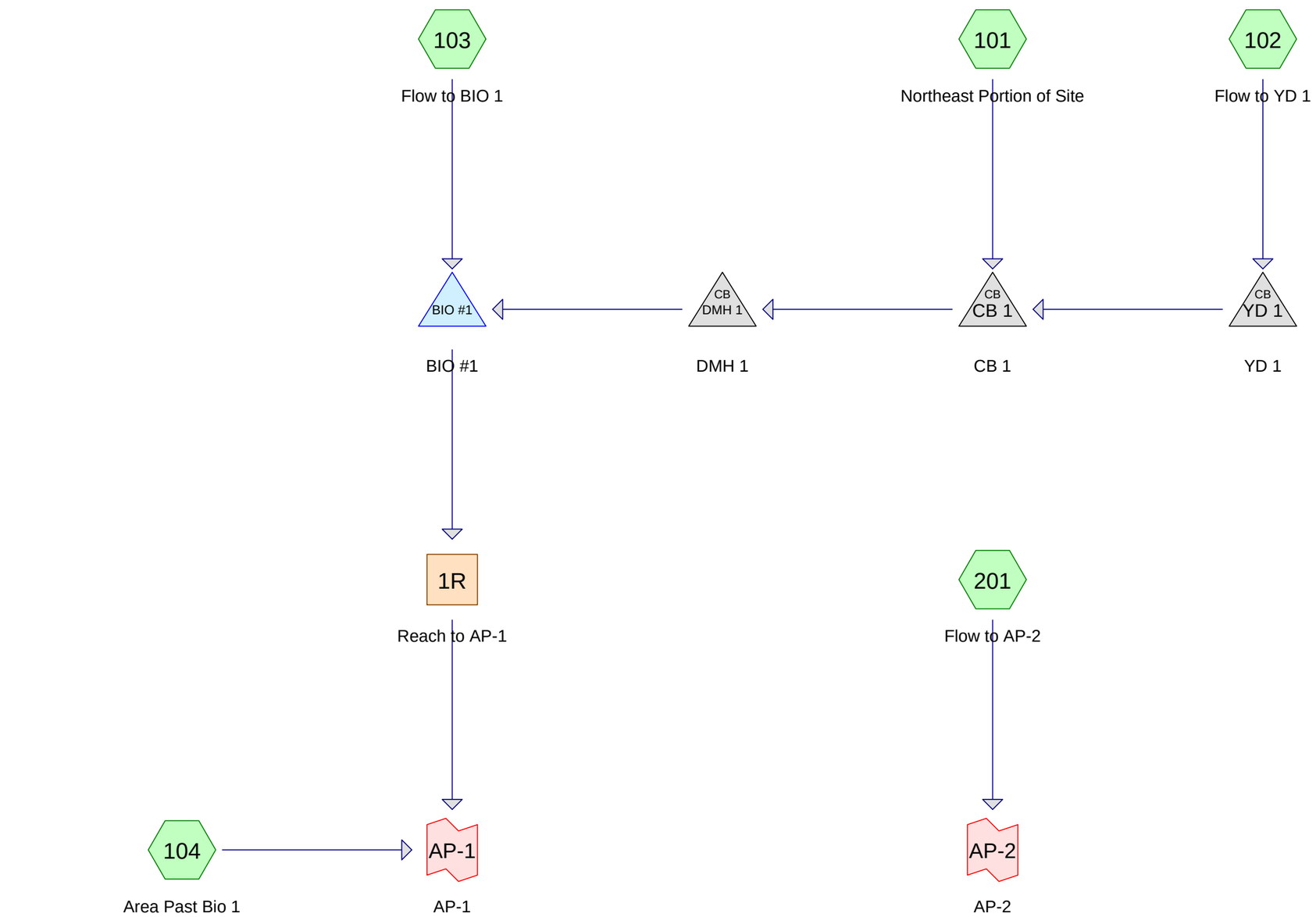
MAY 14, 2026

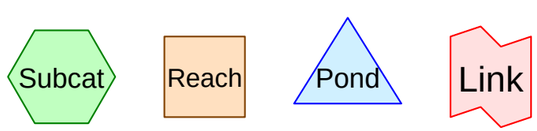
JOB No. 25136

SCALE: 1" = 20'

SHEET No.

D-2





Routing Diagram for Post-Construction Corey MacKoul

Prepared by Tritech Engineering Corporation

HydroCAD® 10.20-8a s/n 00652 © 2025 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.454	39	>75% Grass cover, Good, HSG A (101, 102, 103, 104, 201)
0.113	98	Paved parking, HSG A (101, 102, 103)
0.097	98	Roofs, HSG A (101, 102, 103)
0.139	30	Woods, Good, HSG A (104, 201)
0.804	**53**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.804	HSG A	101, 102, 103, 104, 201
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
0.804		**TOTAL AREA**

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
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 101: Northeast Portion of Site Runoff Area=8,415 sf 62.31% Impervious Runoff Depth=1.12"
Tc=6.0 min CN=76 Runoff=0.24 cfs 0.018 af

Subcatchment 102: Flow to YD 1 Runoff Area=6,018 sf 30.62% Impervious Runoff Depth=0.29"
Flow Length=128' Tc=7.4 min CN=57 Runoff=0.02 cfs 0.003 af

Subcatchment 103: Flow to BIO 1 Runoff Area=11,179 sf 18.67% Impervious Runoff Depth=0.12"
Flow Length=190' Tc=6.1 min CN=50 Runoff=0.00 cfs 0.003 af

Subcatchment 104: Area Past Bio 1 Runoff Area=6,033 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=185' Tc=19.1 min CN=33 Runoff=0.00 cfs 0.000 af

Subcatchment 201: Flow to AP-2 Runoff Area=3,375 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=100' Slope=0.0700 '/' Tc=22.8 min CN=34 Runoff=0.00 cfs 0.000 af

Reach 1R: Reach to AP-1 Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
n=0.800 L=75.0' S=0.0667 '/' Capacity=0.42 cfs Outflow=0.00 cfs 0.000 af

Pond BIO #1: BIO #1 Peak Elev=106.04' Storage=103 cf Inflow=0.25 cfs 0.024 af
Discarded=0.12 cfs 0.024 af Primary=0.00 cfs 0.000 af Outflow=0.12 cfs 0.024 af

Pond CB 1: CB 1 Peak Elev=109.85' Inflow=0.25 cfs 0.021 af
12.0" Round Culvert n=0.012 L=38.0' S=0.0105 '/' Outflow=0.25 cfs 0.021 af

Pond DMH 1: DMH 1 Peak Elev=109.35' Inflow=0.25 cfs 0.021 af
12.0" Round Culvert n=0.012 L=63.0' S=0.0175 '/' Outflow=0.25 cfs 0.021 af

Pond YD 1: YD 1 Peak Elev=109.87' Inflow=0.02 cfs 0.003 af
12.0" Round Culvert n=0.012 L=6.0' S=0.0167 '/' Outflow=0.02 cfs 0.003 af

Link AP-1: AP-1 Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link AP-2: AP-2 Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 0.804 ac Runoff Volume = 0.024 af Average Runoff Depth = 0.36"
73.81% Pervious = 0.593 ac 26.19% Impervious = 0.211 ac

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
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 101: Northeast Portion of Site Runoff Area=8,415 sf 62.31% Impervious Runoff Depth=2.34"
Tc=6.0 min CN=76 Runoff=0.53 cfs 0.038 af

Subcatchment 102: Flow to YD 1 Runoff Area=6,018 sf 30.62% Impervious Runoff Depth=0.98"
Flow Length=128' Tc=7.4 min CN=57 Runoff=0.12 cfs 0.011 af

Subcatchment 103: Flow to BIO 1 Runoff Area=11,179 sf 18.67% Impervious Runoff Depth=0.60"
Flow Length=190' Tc=6.1 min CN=50 Runoff=0.10 cfs 0.013 af

Subcatchment 104: Area Past Bio 1 Runoff Area=6,033 sf 0.00% Impervious Runoff Depth=0.02"
Flow Length=185' Tc=19.1 min CN=33 Runoff=0.00 cfs 0.000 af

Subcatchment 201: Flow to AP-2 Runoff Area=3,375 sf 0.00% Impervious Runoff Depth=0.04"
Flow Length=100' Slope=0.0700 '/' Tc=22.8 min CN=34 Runoff=0.00 cfs 0.000 af

Reach 1R: Reach to AP-1 Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
n=0.800 L=75.0' S=0.0667 '/' Capacity=0.42 cfs Outflow=0.00 cfs 0.000 af

Pond BIO #1: BIO #1 Peak Elev=107.01' Storage=537 cf Inflow=0.74 cfs 0.062 af
Discarded=0.24 cfs 0.062 af Primary=0.00 cfs 0.000 af Outflow=0.24 cfs 0.062 af

Pond CB 1: CB 1 Peak Elev=110.00' Inflow=0.64 cfs 0.049 af
12.0" Round Culvert n=0.012 L=38.0' S=0.0105 '/' Outflow=0.64 cfs 0.049 af

Pond DMH 1: DMH 1 Peak Elev=109.50' Inflow=0.64 cfs 0.049 af
12.0" Round Culvert n=0.012 L=63.0' S=0.0175 '/' Outflow=0.64 cfs 0.049 af

Pond YD 1: YD 1 Peak Elev=110.05' Inflow=0.12 cfs 0.011 af
12.0" Round Culvert n=0.012 L=6.0' S=0.0167 '/' Outflow=0.12 cfs 0.011 af

Link AP-1: AP-1 Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link AP-2: AP-2 Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 0.804 ac Runoff Volume = 0.062 af Average Runoff Depth = 0.93"
73.81% Pervious = 0.593 ac 26.19% Impervious = 0.211 ac

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
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 101: Northeast Portion of Site Runoff Area=8,415 sf 62.31% Impervious Runoff Depth=3.40"
Tc=6.0 min CN=76 Runoff=0.77 cfs 0.055 af

Subcatchment 102: Flow to YD 1 Runoff Area=6,018 sf 30.62% Impervious Runoff Depth=1.69"
Flow Length=128' Tc=7.4 min CN=57 Runoff=0.24 cfs 0.019 af

Subcatchment 103: Flow to BIO 1 Runoff Area=11,179 sf 18.67% Impervious Runoff Depth=1.15"
Flow Length=190' Tc=6.1 min CN=50 Runoff=0.27 cfs 0.025 af

Subcatchment 104: Area Past Bio 1 Runoff Area=6,033 sf 0.00% Impervious Runoff Depth=0.17"
Flow Length=185' Tc=19.1 min CN=33 Runoff=0.00 cfs 0.002 af

Subcatchment 201: Flow to AP-2 Runoff Area=3,375 sf 0.00% Impervious Runoff Depth=0.21"
Flow Length=100' Slope=0.0700 '/' Tc=22.8 min CN=34 Runoff=0.00 cfs 0.001 af

Reach 1R: Reach to AP-1 Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
n=0.800 L=75.0' S=0.0667 '/' Capacity=0.42 cfs Outflow=0.00 cfs 0.000 af

Pond BIO #1: BIO #1 Peak Elev=107.63' Storage=1,058 cf Inflow=1.27 cfs 0.099 af
Discarded=0.36 cfs 0.099 af Primary=0.00 cfs 0.000 af Outflow=0.36 cfs 0.099 af

Pond CB 1: CB 1 Peak Elev=110.13' Inflow=1.00 cfs 0.074 af
12.0" Round Culvert n=0.012 L=38.0' S=0.0105 '/' Outflow=1.00 cfs 0.074 af

Pond DMH 1: DMH 1 Peak Elev=109.62' Inflow=1.00 cfs 0.074 af
12.0" Round Culvert n=0.012 L=63.0' S=0.0175 '/' Outflow=1.00 cfs 0.074 af

Pond YD 1: YD 1 Peak Elev=110.17' Inflow=0.24 cfs 0.019 af
12.0" Round Culvert n=0.012 L=6.0' S=0.0167 '/' Outflow=0.24 cfs 0.019 af

Link AP-1: AP-1 Inflow=0.00 cfs 0.002 af
Primary=0.00 cfs 0.002 af

Link AP-2: AP-2 Inflow=0.00 cfs 0.001 af
Primary=0.00 cfs 0.001 af

Total Runoff Area = 0.804 ac Runoff Volume = 0.102 af Average Runoff Depth = 1.52"
73.81% Pervious = 0.593 ac 26.19% Impervious = 0.211 ac

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
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 101: Northeast Portion of Site Runoff Area=8,415 sf 62.31% Impervious Runoff Depth=4.43"
Tc=6.0 min CN=76 Runoff=1.00 cfs 0.071 af

Subcatchment 102: Flow to YD 1 Runoff Area=6,018 sf 30.62% Impervious Runoff Depth=2.44"
Flow Length=128' Tc=7.4 min CN=57 Runoff=0.36 cfs 0.028 af

Subcatchment 103: Flow to BIO 1 Runoff Area=11,179 sf 18.67% Impervious Runoff Depth=1.77"
Flow Length=190' Tc=6.1 min CN=50 Runoff=0.47 cfs 0.038 af

Subcatchment 104: Area Past Bio 1 Runoff Area=6,033 sf 0.00% Impervious Runoff Depth=0.42"
Flow Length=185' Tc=19.1 min CN=33 Runoff=0.02 cfs 0.005 af

Subcatchment 201: Flow to AP-2 Runoff Area=3,375 sf 0.00% Impervious Runoff Depth=0.48"
Flow Length=100' Slope=0.0700 '/' Tc=22.8 min CN=34 Runoff=0.01 cfs 0.003 af

Reach 1R: Reach to AP-1 Avg. Flow Depth=0.27' Max Vel=0.15 fps Inflow=0.45 cfs 0.006 af
n=0.800 L=75.0' S=0.0667 '/' Capacity=0.42 cfs Outflow=0.24 cfs 0.006 af

Pond BIO #1: BIO #1 Peak Elev=107.97' Storage=1,435 cf Inflow=1.81 cfs 0.137 af
Discarded=0.43 cfs 0.131 af Primary=0.45 cfs 0.006 af Outflow=0.88 cfs 0.137 af

Pond CB 1: CB 1 Peak Elev=110.24' Inflow=1.35 cfs 0.099 af
12.0" Round Culvert n=0.012 L=38.0' S=0.0105 '/' Outflow=1.35 cfs 0.099 af

Pond DMH 1: DMH 1 Peak Elev=109.71' Inflow=1.35 cfs 0.099 af
12.0" Round Culvert n=0.012 L=63.0' S=0.0175 '/' Outflow=1.35 cfs 0.099 af

Pond YD 1: YD 1 Peak Elev=110.29' Inflow=0.36 cfs 0.028 af
12.0" Round Culvert n=0.012 L=6.0' S=0.0167 '/' Outflow=0.36 cfs 0.028 af

Link AP-1: AP-1 Inflow=0.25 cfs 0.011 af
Primary=0.25 cfs 0.011 af

Link AP-2: AP-2 Inflow=0.01 cfs 0.003 af
Primary=0.01 cfs 0.003 af

Total Runoff Area = 0.804 ac Runoff Volume = 0.145 af Average Runoff Depth = 2.17"
73.81% Pervious = 0.593 ac 26.19% Impervious = 0.211 ac

Summary for Subcatchment 101: Northeast Portion of Site

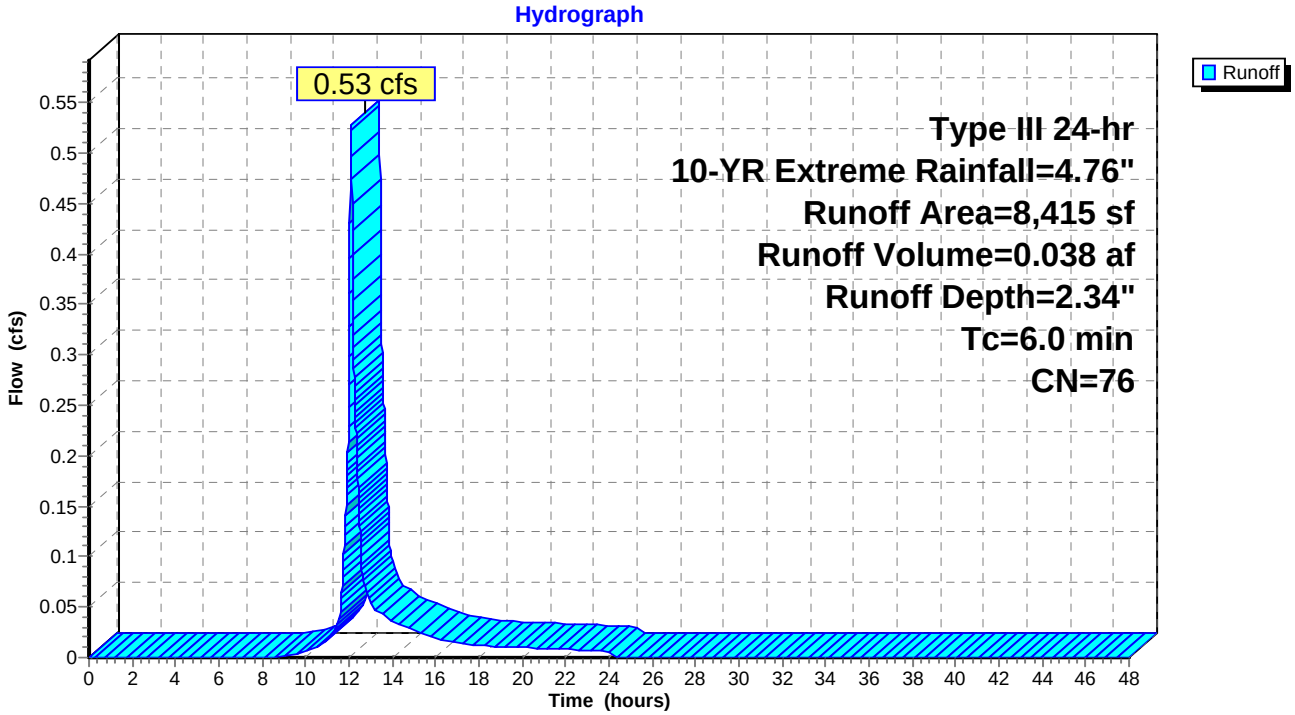
Runoff = 0.53 cfs @ 12.09 hrs, Volume= 0.038 af, Depth= 2.34"
Routed to Pond CB 1 : CB 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Extreme Rainfall=4.76"

Area (sf)	CN	Description
1,323	98	Roofs, HSG A
3,172	39	>75% Grass cover, Good, HSG A
3,920	98	Paved parking, HSG A
8,415	76	Weighted Average
3,172		37.69% Pervious Area
5,243		62.31% Impervious Area

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

Subcatchment 101: Northeast Portion of Site



Summary for Subcatchment 102: Flow to YD 1

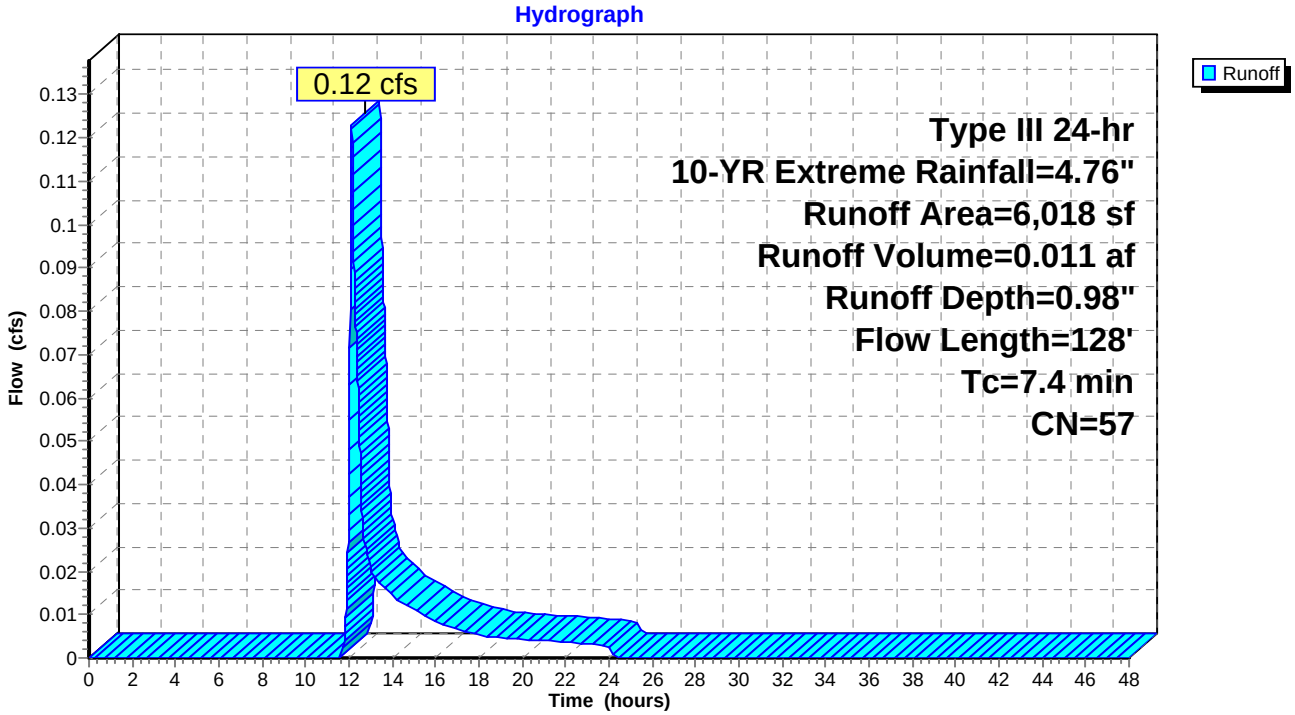
Runoff = 0.12 cfs @ 12.13 hrs, Volume= 0.011 af, Depth= 0.98"
Routed to Pond YD 1 : YD 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Extreme Rainfall=4.76"

Area (sf)	CN	Description
938	98	Roofs, HSG A
905	98	Paved parking, HSG A
4,175	39	>75% Grass cover, Good, HSG A
6,018	57	Weighted Average
4,175		69.38% Pervious Area
1,843		30.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.1	100	0.0450	0.23		**Sheet Flow, Sheet Grass** Grass: Short n= 0.150 P2= 3.15"
0.3	28	0.0600	1.71		**Shallow Concentrated Flow, SC Grass** Short Grass Pasture Kv= 7.0 fps
7.4	128	Total			

Subcatchment 102: Flow to YD 1



Summary for Subcatchment 103: Flow to BIO 1

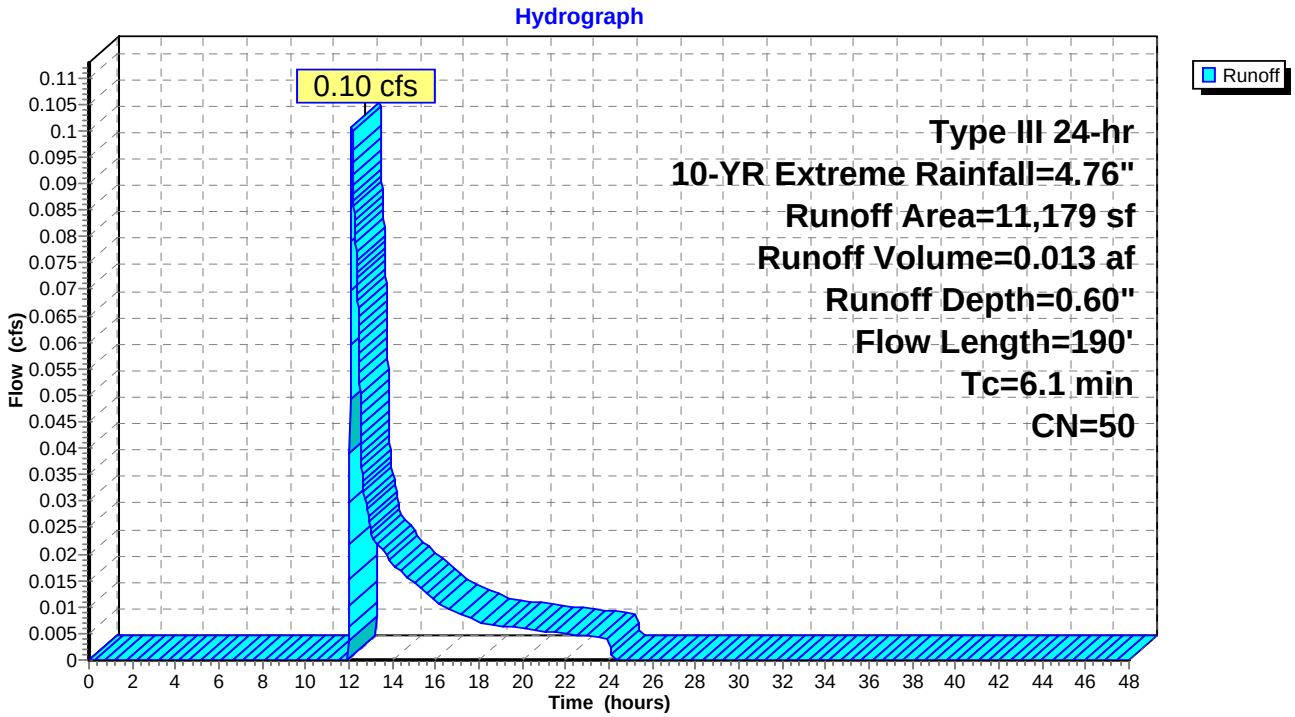
Runoff = 0.10 cfs @ 12.13 hrs, Volume= 0.013 af, Depth= 0.60"
Routed to Pond BIO #1 : BIO #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Extreme Rainfall=4.76"

Area (sf)	CN	Description
1,970	98	Roofs, HSG A
9,092	39	>75% Grass cover, Good, HSG A
117	98	Paved parking, HSG A
11,179	50	Weighted Average
9,092		81.33% Pervious Area
2,087		18.67% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	100	0.0800	1.98		**Shallow Concentrated Flow, SC Grass** Short Grass Pasture Kv= 7.0 fps
5.3	90	0.0780	0.28		**Sheet Flow, Sheet Grass** Grass: Short n= 0.150 P2= 3.15"
6.1	190	Total			

Subcatchment 103: Flow to BIO 1



Summary for Subcatchment 104: Area Past Bio 1

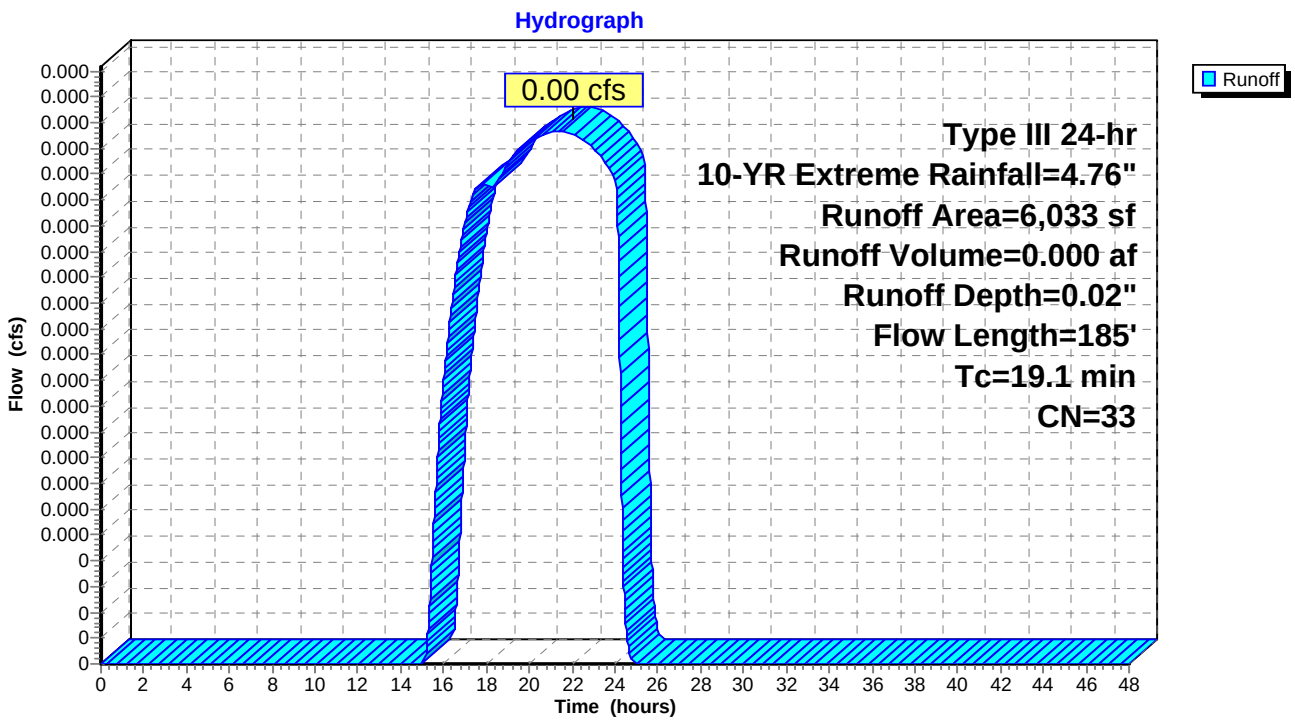
Runoff = 0.00 cfs @ 21.37 hrs, Volume= 0.000 af, Depth= 0.02"
Routed to Link AP-1 : AP-1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Extreme Rainfall=4.76"

Area (sf)	CN	Description
1,690	39	>75% Grass cover, Good, HSG A
4,343	30	Woods, Good, HSG A
6,033	33	Weighted Average
6,033		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	50	0.0300	1.21		**Shallow Concentrated Flow, SC Grass** Short Grass Pasture Kv= 7.0 fps
18.4	135	0.0550	0.12		**Sheet Flow, Sheet Woods** Woods: Light underbrush n= 0.400 P2= 3.15"
19.1	185	Total			

Subcatchment 104: Area Past Bio 1



Summary for Subcatchment 201: Flow to AP-2

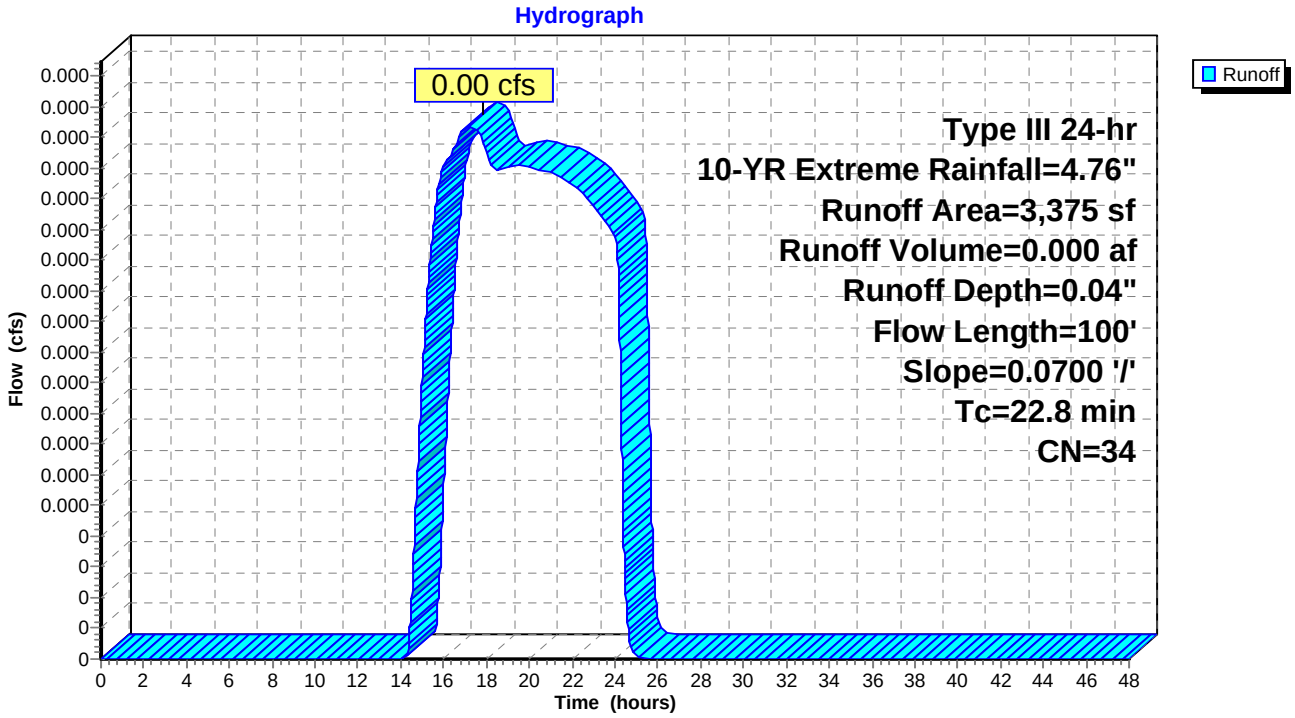
Runoff = 0.00 cfs @ 17.20 hrs, Volume= 0.000 af, Depth= 0.04"
Routed to Link AP-2 : AP-2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YR Extreme Rainfall=4.76"

Area (sf)	CN	Description
1,655	39	>75% Grass cover, Good, HSG A
1,720	30	Woods, Good, HSG A
3,375	34	Weighted Average
3,375		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
22.8	100	0.0700	0.07		**Sheet Flow, Sheet Woods** Woods: Dense underbrush n= 0.800 P2= 3.15"

Subcatchment 201: Flow to AP-2



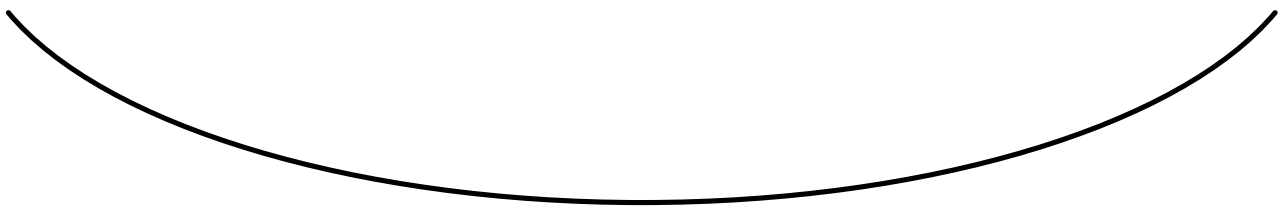
Summary for Reach 1R: Reach to AP-1

Inflow Area = 0.588 ac, 35.82% Impervious, Inflow Depth = 0.00" for 10-YR Extreme event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Routed to Link AP-1 : AP-1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.35' Flow Area= 2.3 sf, Capacity= 0.42 cfs

10.00' x 0.35' deep Parabolic Channel, n= 0.800 Sheet flow: Woods+dense brush
Length= 75.0' Slope= 0.0667 '/'
Inlet Invert= 105.50', Outlet Invert= 100.50'



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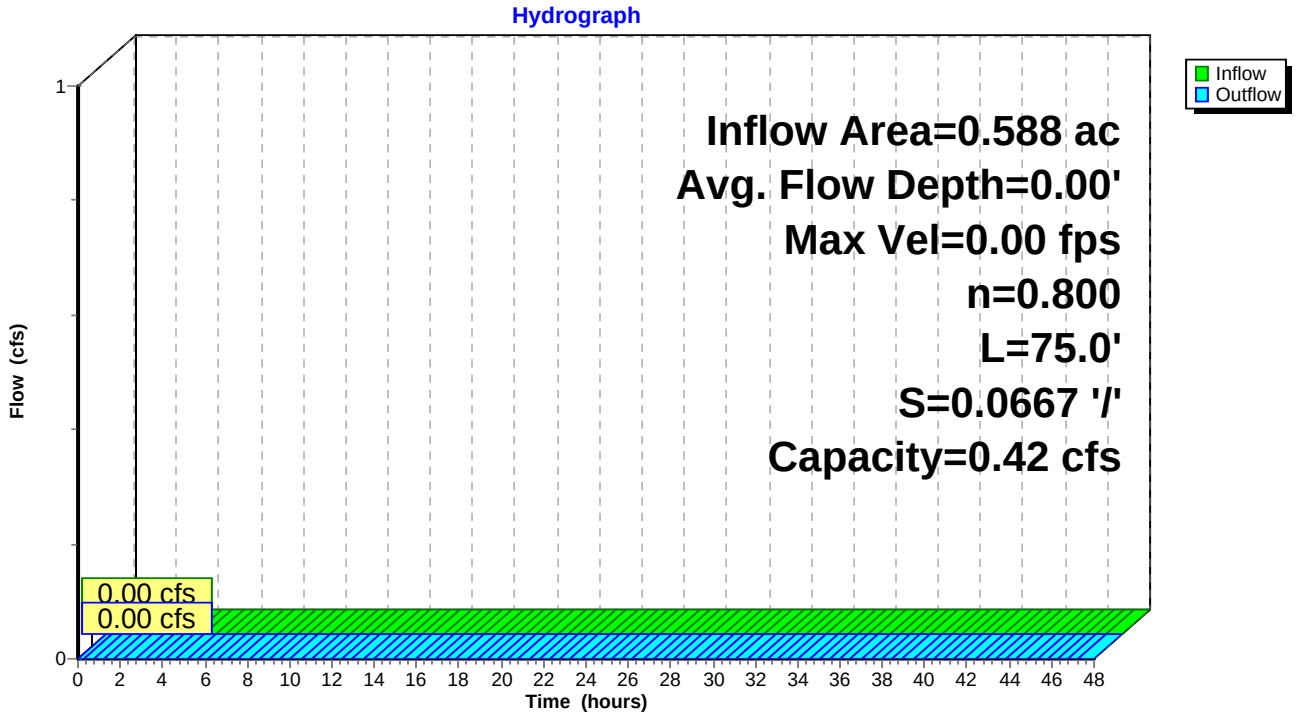
Reach 1R: Reach to AP-1



Summary for Pond BIO #1: BIO #1

Inflow Area = 0.588 ac, 35.82% Impervious, Inflow Depth = 1.26" for 10-YR Extreme event
Inflow = 0.74 cfs @ 12.10 hrs, Volume= 0.062 af
Outflow = 0.24 cfs @ 12.49 hrs, Volume= 0.062 af, Atten= 67%, Lag= 23.1 min
Discarded = 0.24 cfs @ 12.49 hrs, Volume= 0.062 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach 1R : Reach to AP-1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 107.01' @ 12.49 hrs Surf.Area= 662 sf Storage= 537 cf
Flood Elev= 108.00' Surf.Area= 1,250 sf Storage= 1,471 cf

Plug-Flow detention time= 15.5 min calculated for 0.062 af (100% of inflow)
Center-of-Mass det. time= 15.5 min (878.5 - 862.9)

Volume	Invert	Avail.Storage	Storage Description
#1	104.25'	1,471 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

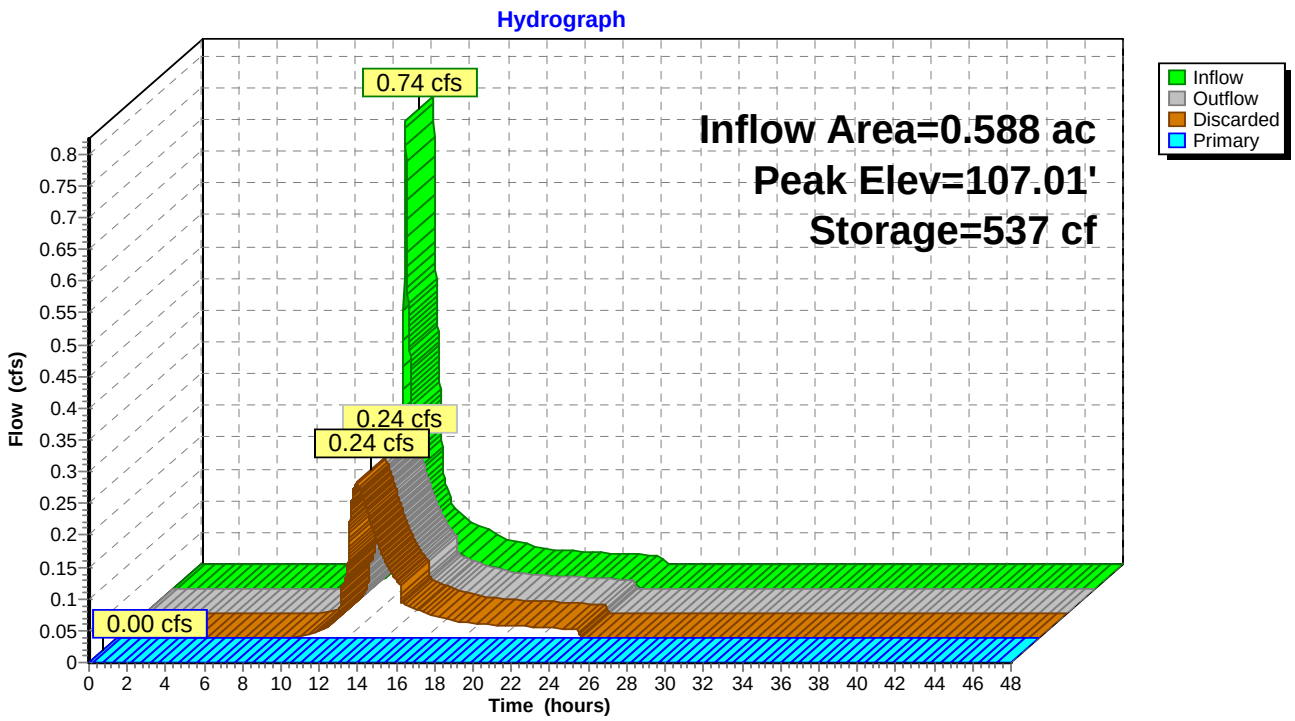
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
104.25	255	0.0	0	0	255
104.26	255	20.0	1	1	256
104.50	255	20.0	12	13	269
105.99	255	20.0	76	89	353
106.00	255	100.0	3	91	354
108.00	1,250	100.0	1,380	1,471	1,366

Device	Routing	Invert	Outlet Devices
#1	Discarded	104.25'	**13.750 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Device 3	107.95'	**0.5" x 4.5" Horiz. Orifice/ Grate Overflow X 14.00 columns** X 4 rows C= 0.600 Limited to weir flow at low heads
#3	Primary	106.00'	**6.0" Round 12" HDPE (P-4)** L= 10.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 106.00' / 105.90' S= 0.0100 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.20 sf

Discarded OutFlow Max=0.24 cfs @ 12.49 hrs HW=107.01' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.24 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=104.25' TW=105.50' (Dynamic Tailwater)
└─**3=12" HDPE (P-4)** (Controls 0.00 cfs)
└─**2=Orifice/ Grate Overflow** (Controls 0.00 cfs)

Pond BIO #1: BIO #1



Summary for Pond CB 1: CB 1

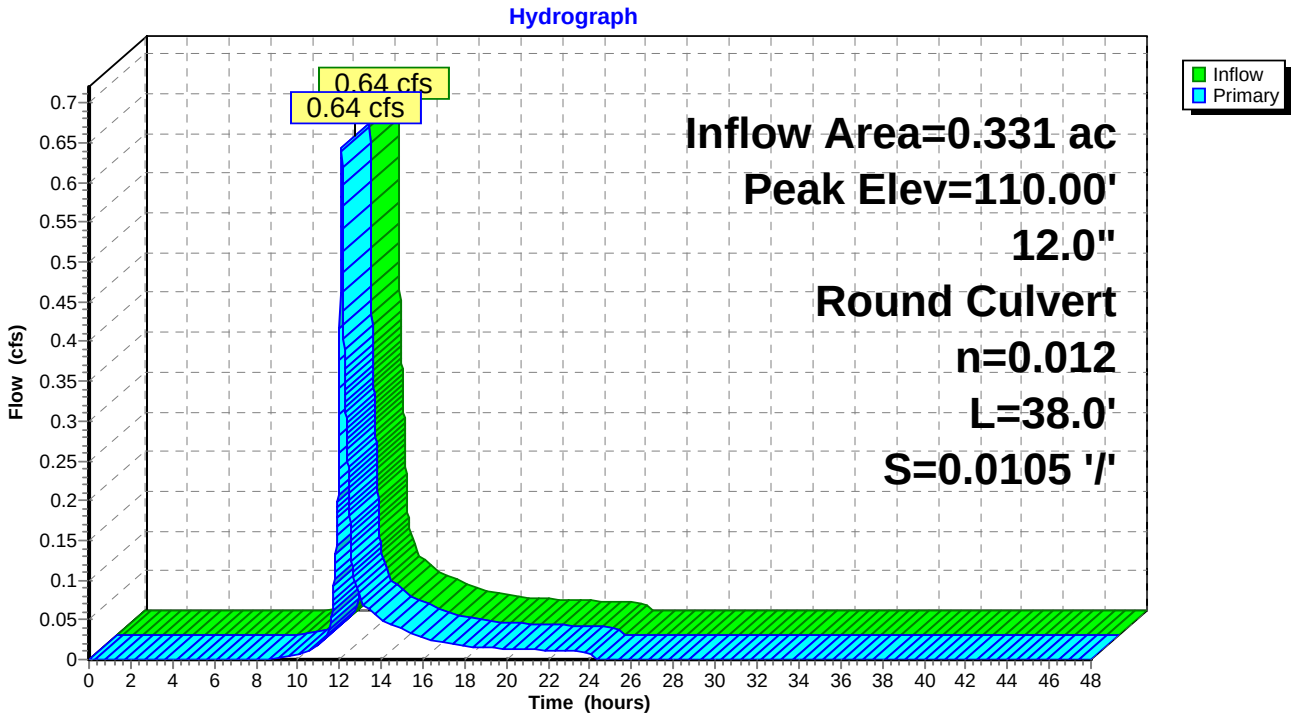
Inflow Area = 0.331 ac, 49.10% Impervious, Inflow Depth = 1.77" for 10-YR Extreme event
Inflow = 0.64 cfs @ 12.10 hrs, Volume= 0.049 af
Outflow = 0.64 cfs @ 12.10 hrs, Volume= 0.049 af, Atten= 0%, Lag= 0.0 min
Primary = 0.64 cfs @ 12.10 hrs, Volume= 0.049 af
Routed to Pond DMH 1 : DMH 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 110.00' @ 12.10 hrs
Flood Elev= 115.40'

Device	Routing	Invert	Outlet Devices
#1	Primary	109.60'	**12.0" Round P-2** L= 38.0' CMP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 109.60' / 109.20' S= 0.0105 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.64 cfs @ 12.10 hrs HW=110.00' TW=109.50' (Dynamic Tailwater)
└**1=P-2** (Outlet Controls 0.64 cfs @ 3.19 fps)

Pond CB 1: CB 1



Summary for Pond DMH 1: DMH 1

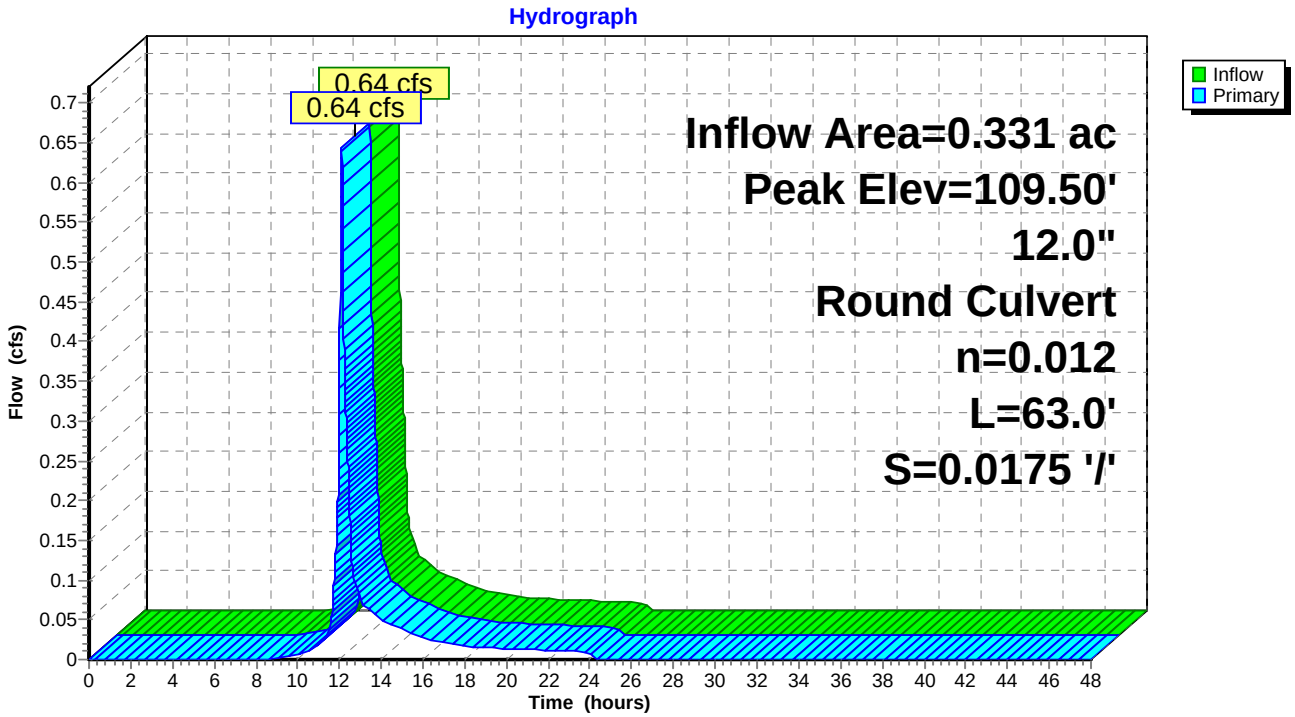
Inflow Area = 0.331 ac, 49.10% Impervious, Inflow Depth = 1.77" for 10-YR Extreme event
Inflow = 0.64 cfs @ 12.10 hrs, Volume= 0.049 af
Outflow = 0.64 cfs @ 12.10 hrs, Volume= 0.049 af, Atten= 0%, Lag= 0.0 min
Primary = 0.64 cfs @ 12.10 hrs, Volume= 0.049 af
Routed to Pond BIO #1 : BIO #1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 109.50' @ 12.10 hrs
Flood Elev= 113.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	109.10'	**12.0" Round P-3** L= 63.0' CMP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 109.10' / 108.00' S= 0.0175 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.64 cfs @ 12.10 hrs HW=109.50' TW=106.43' (Dynamic Tailwater)
└**1=P-3** (Inlet Controls 0.64 cfs @ 2.16 fps)

Pond DMH 1: DMH 1



Summary for Pond YD 1: YD 1

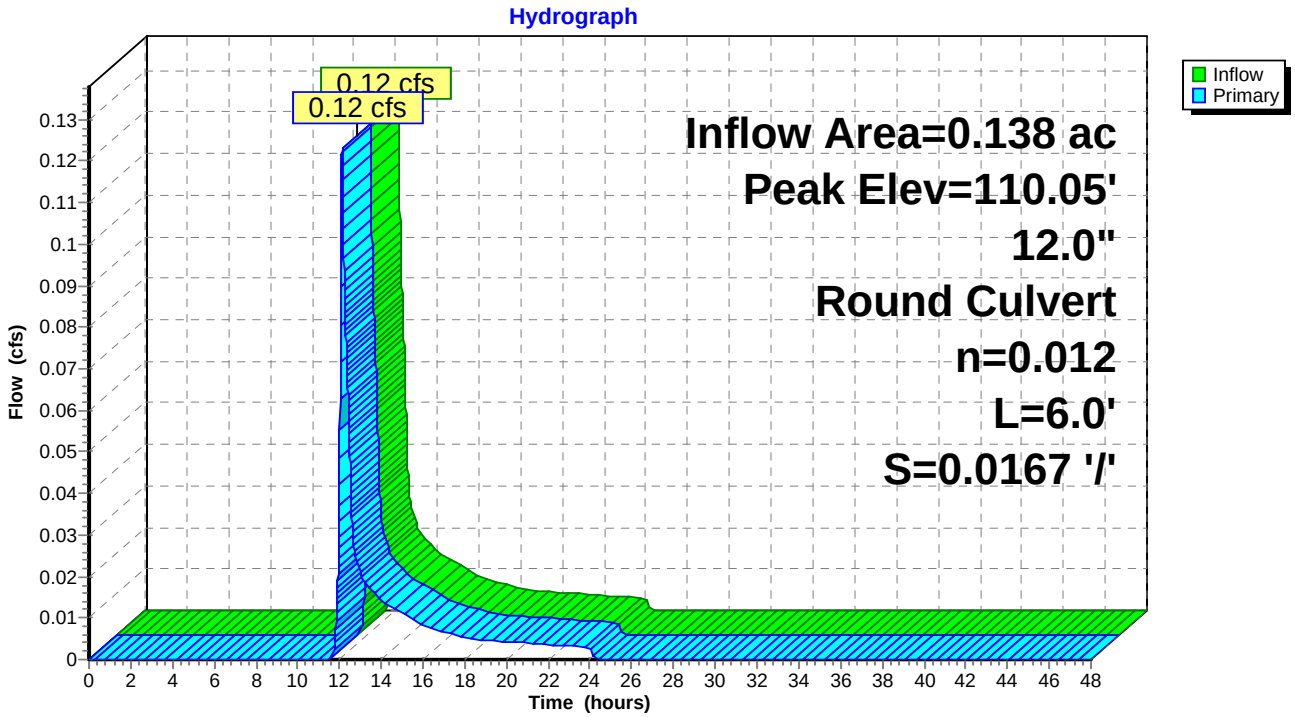
Inflow Area = 0.138 ac, 30.62% Impervious, Inflow Depth = 0.98" for 10-YR Extreme event
Inflow = 0.12 cfs @ 12.13 hrs, Volume= 0.011 af
Outflow = 0.12 cfs @ 12.13 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.0 min
Primary = 0.12 cfs @ 12.13 hrs, Volume= 0.011 af
Routed to Pond CB 1 : CB 1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 110.05' @ 12.10 hrs
Flood Elev= 113.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	109.80'	**12.0" Round P-1** L= 6.0' CMP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 109.80' / 109.70' S= 0.0167 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.12 cfs @ 12.13 hrs HW=110.04' TW=109.99' (Dynamic Tailwater)
└**1=P-1** (Outlet Controls 0.12 cfs @ 1.27 fps)

Pond YD 1: YD 1

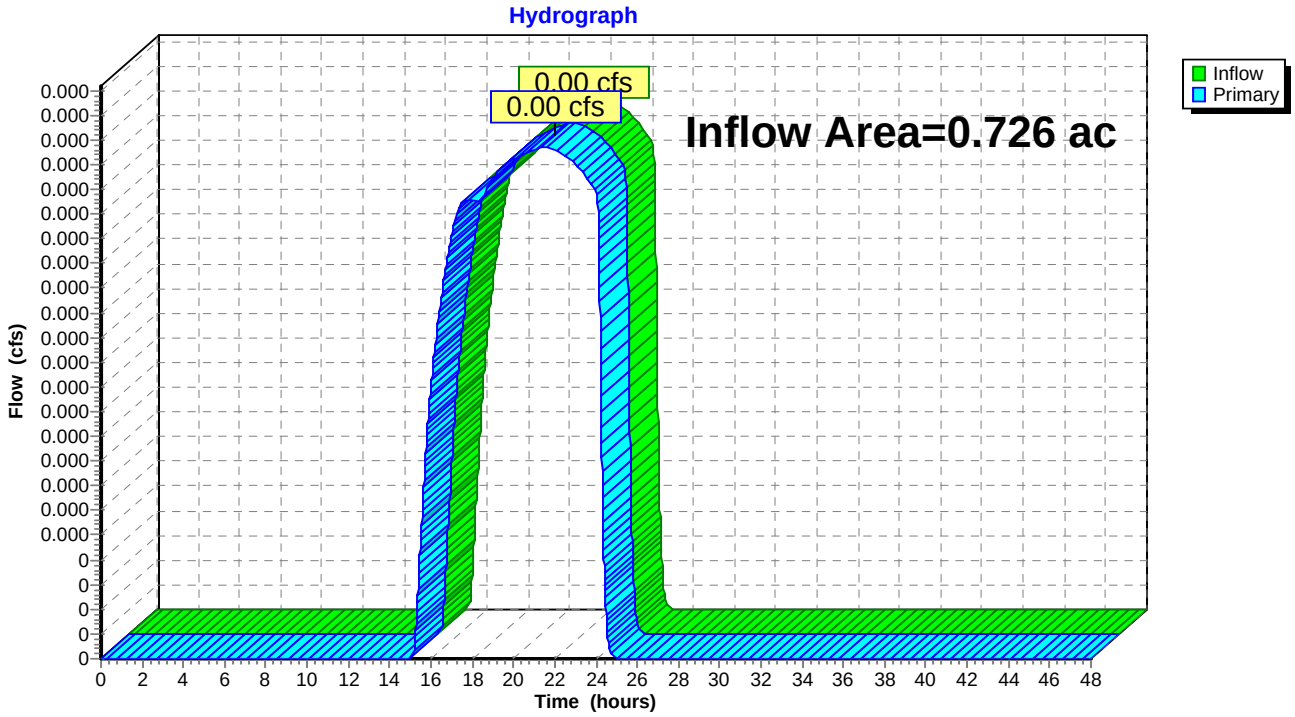


Summary for Link AP-1: AP-1

Inflow Area = 0.726 ac, 28.99% Impervious, Inflow Depth = 0.00" for 10-YR Extreme event
Inflow = 0.00 cfs @ 21.37 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 21.37 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link AP-1: AP-1

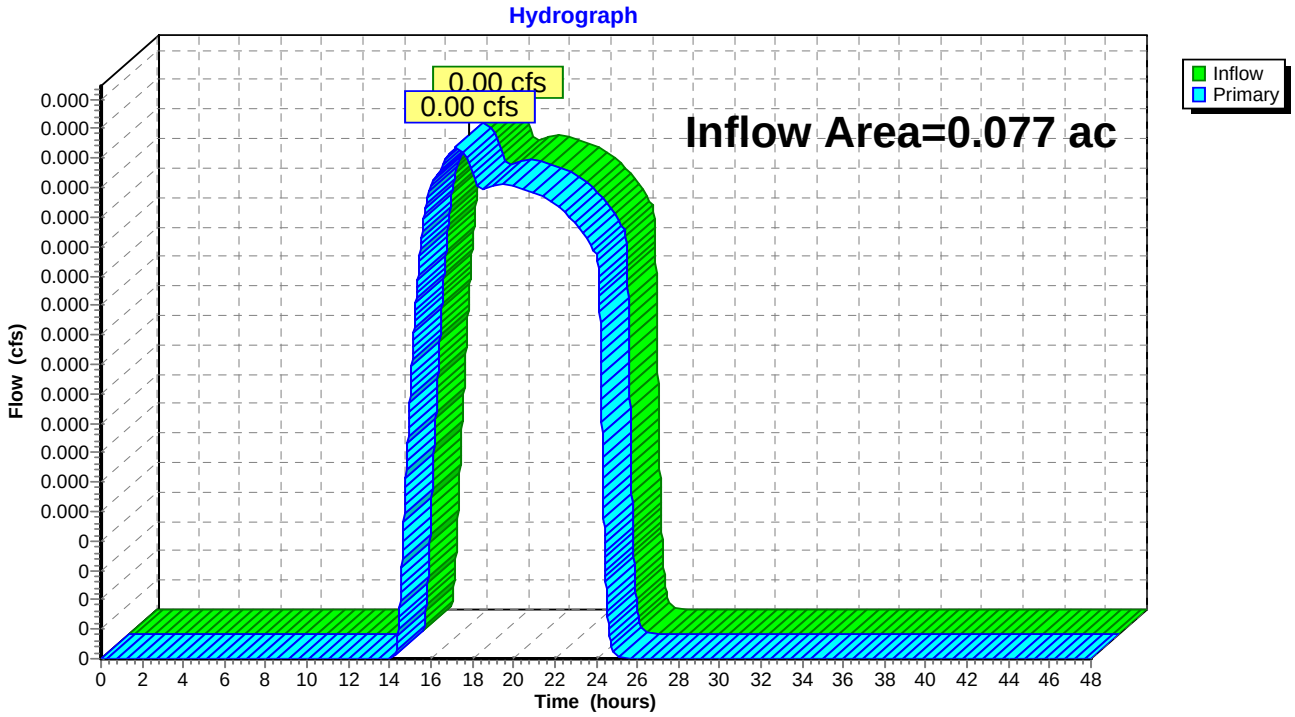


Summary for Link AP-2: AP-2

Inflow Area = 0.077 ac, 0.00% Impervious, Inflow Depth = 0.04" for 10-YR Extreme event
Inflow = 0.00 cfs @ 17.20 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 17.20 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link AP-2: AP-2



STORMWATER ANALYSIS

and

Erosion & Sediment Control Plan

NARRATIVE

for

COREY MACKOUL

8 Hull Ave
Dover, New Hampshire
May 2026

SECTION III

EXHIBITS

NOTE:

THIS PLAN SHOWS PORTIONS OF THE U.S.G.S.: DOVER QUADRANGLE, NEW HAMPSHIRE 7.5 MINUTE SERIES 2021 MAP. SITE LOCATION IS APPROXIMATE.

1000 0 500 1000 2000 4000

SHEET NO.	USGS PLAN COREY MACKOUL 89 STARK AVE TAX MAP 17, LOT 38 DOVER, NEW HAMPSHIRE APRIL 13, 2026 JOB No. 25136 SCALE: 1" : 1,000'	TRITECH ENGINEERING CORPORATION
LOCUS-1		755 CENTRAL AVENUE DOVER, NEW HAMPSHIRE 03820 TELEPHONE 603 742 6107 FAX 603 742 3830

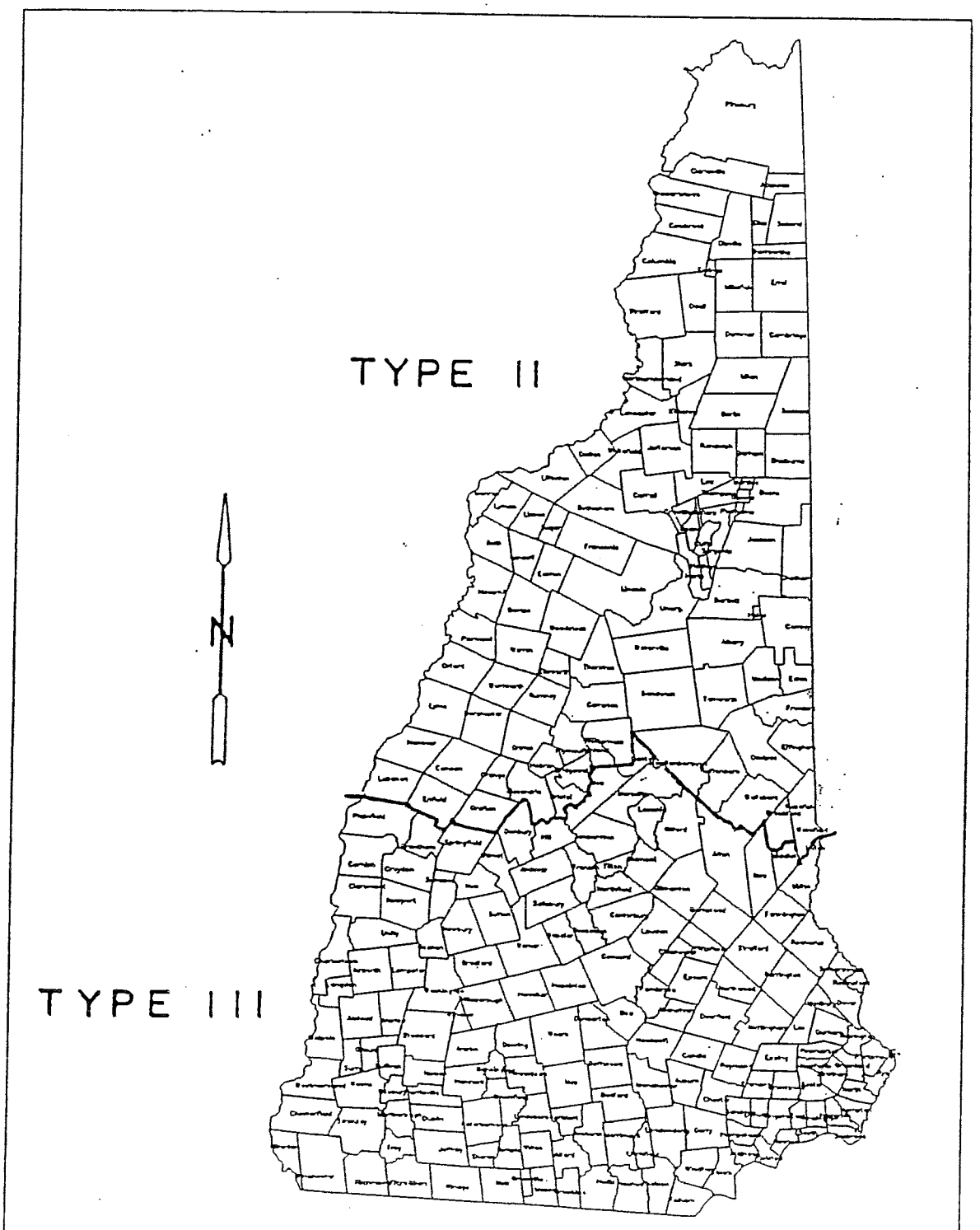


FIGURE 6-5 -- BOUNDARY FOR SCS RAINFALL DISTRIBUTION

Source: USDA Soil Conservation Service

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	43.179 degrees North
Longitude	70.87 degrees West
Elevation	30 feet
Date/Time	Tue Apr 07 2026 14:52:11 GMT-0400 (Eastern Daylight Time)

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.65	0.81	1.03	**1yr**	0.70	0.98	1.20	1.55	2.00	2.61	2.87	**1yr**	2.31	2.76	3.16	3.88	4.45	**1yr**
2yr	0.32	0.49	0.61	0.81	1.01	1.29	**2yr**	0.88	1.17	1.50	1.91	2.45	3.15	3.51	**2yr**	2.79	3.37	3.87	4.60	5.24	**2yr**
5yr	0.37	0.57	0.72	0.96	1.23	1.58	**5yr**	1.06	1.44	1.85	2.39	3.08	3.98	4.49	**5yr**	3.53	4.32	4.94	5.81	6.57	**5yr**
10yr	0.40	0.63	0.80	1.09	1.42	1.85	**10yr**	1.22	1.69	2.18	2.83	3.67	4.76	5.42	**10yr**	4.21	5.21	5.95	6.94	7.81	**10yr**
25yr	0.46	0.74	0.94	1.30	1.72	2.27	**25yr**	1.49	2.09	2.70	3.53	4.62	6.02	6.96	**25yr**	5.33	6.69	7.61	8.78	9.82	**25yr**
50yr	0.52	0.83	1.06	1.49	2.00	2.67	**50yr**	1.73	2.46	3.18	4.19	5.50	7.19	8.40	**50yr**	6.37	8.08	9.18	10.50	11.67	**50yr**
100yr	0.58	0.94	1.21	1.71	2.32	3.13	**100yr**	2.00	2.89	3.75	4.96	6.54	8.60	10.16	**100yr**	7.61	9.77	11.07	12.55	13.89	**100yr**
200yr	0.64	1.05	1.36	1.95	2.70	3.67	**200yr**	2.33	3.40	4.43	5.90	7.81	10.29	12.28	**200yr**	9.11	11.80	13.35	15.02	16.53	**200yr**
500yr	0.76	1.24	1.62	2.36	3.30	4.54	**500yr**	2.85	4.22	5.50	7.39	9.84	13.05	15.78	**500yr**	11.55	15.17	17.11	19.04	20.83	**500yr**

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.24	0.37	0.45	0.60	0.74	0.90	**1yr**	0.64	0.88	0.92	1.26	1.59	2.14	2.46	**1yr**	1.90	2.36	2.87	3.33	4.01	**1yr**
2yr	0.31	0.49	0.60	0.81	1.00	1.18	**2yr**	0.86	1.16	1.36	1.83	2.36	3.04	3.40	**2yr**	2.69	3.27	3.75	4.47	5.04	**2yr**
5yr	0.35	0.54	0.67	0.91	1.16	1.40	**5yr**	1.00	1.37	1.61	2.15	2.77	3.72	4.13	**5yr**	3.29	3.97	4.61	5.42	6.12	**5yr**
10yr	0.38	0.59	0.73	1.02	1.31	1.60	**10yr**	1.13	1.56	1.81	2.44	3.12	4.28	4.79	**10yr**	3.79	4.60	5.32	6.25	7.03	**10yr**
25yr	0.44	0.66	0.82	1.18	1.55	1.91	**25yr**	1.34	1.86	2.11	2.84	3.64	4.91	5.79	**25yr**	4.34	5.57	6.49	7.57	8.44	**25yr**
50yr	0.48	0.73	0.91	1.31	1.76	2.18	**50yr**	1.52	2.13	2.35	3.19	4.09	5.59	6.68	**50yr**	4.95	6.42	7.53	8.73	9.69	**50yr**
100yr	0.53	0.81	1.01	1.46	2.00	2.50	**100yr**	1.73	2.44	2.63	3.57	4.56	6.36	7.70	**100yr**	5.62	7.41	8.74	10.08	11.11	**100yr**
200yr	0.59	0.89	1.13	1.63	2.28	2.86	**200yr**	1.97	2.79	2.93	3.99	5.08	7.22	8.88	**200yr**	6.39	8.54	10.14	11.65	12.75	**200yr**
500yr	0.69	1.03	1.32	1.92	2.73	3.44	**500yr**	2.35	3.36	3.40	4.62	5.89	8.52	10.70	**500yr**	7.54	10.29	12.33	14.12	15.26	**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	1.24	1.74	2.22	2.89	3.09	**1yr**	2.56	2.97	3.44	4.24	4.83	**1yr**
2yr	0.33	0.51	0.62	0.85	1.04	1.25	**2yr**	0.90	1.22	1.48	1.96	2.51	3.30	3.63	**2yr**	2.92	3.49	4.00	4.75	5.46	**2yr**
5yr	0.39	0.61	0.75	1.03	1.31	1.59	**5yr**	1.13	1.55	1.86	2.50	3.21	4.25	4.86	**5yr**	3.76	4.67	5.28	6.24	7.00	**5yr**
10yr	0.46	0.70	0.87	1.22	1.57	1.92	**10yr**	1.36	1.88	2.24	3.05	3.87	5.22	6.07	**10yr**	4.62	5.83	6.66	7.66	8.54	**10yr**
25yr	0.56	0.85	1.05	1.50	1.98	2.48	**25yr**	1.71	2.43	2.89	3.98	4.98	7.14	8.15	**25yr**	6.32	7.84	8.91	10.08	11.14	**25yr**
50yr	0.64	0.98	1.22	1.75	2.36	3.00	**50yr**	2.03	2.93	3.50	4.85	6.05	8.83	10.21	**50yr**	7.82	9.82	11.13	12.40	13.62	**50yr**
100yr	0.75	1.13	1.42	2.05	2.81	3.63	**100yr**	2.42	3.55	4.25	5.94	7.36	10.93	12.80	**100yr**	9.68	12.30	13.90	15.28	16.67	**100yr**
200yr	0.87	1.31	1.66	2.40	3.34	4.40	**200yr**	2.89	4.30	5.17	7.27	8.95	13.57	16.05	**200yr**	12.01	15.44	17.37	18.82	20.42	**200yr**
500yr	1.06	1.58	2.04	2.96	4.21	5.66	**500yr**	3.63	5.54	6.68	9.52	11.61	18.07	21.67	**500yr**	15.99	20.84	23.34	24.81	26.73	**500yr**

Powered by ACIS
Northeast Regional Climate Center

INFILTRATION PRACTICE CRITERIA
(Env-Wq 1508.07)

Type/Node Name: **Corey MacKoul Bio #1**

Enter the type of infiltration practice (such as basin, trench) and the node name in the drainage analysis, if applicable.

Yes		Have you reviewed Env-Wq 1508.07(a) to ensure that infiltration is allowed?	**← yes**
0.59	ac	A = Area draining to the practice	
0.21	ac	A_I = Impervious area draining to the practice	
0.36	decimal	I = Percent impervious area draining to the practice, in decimal form	
0.37	unitless	Rv = Runoff coefficient = 0.05 + (0.9 x I)	
0.22	ac-in	WQV= 1" x Rv x A	
793	cf	WQV conversion (ac-in x 43,560 sf/ac x 1ft/12")	
198	cf	25% x WQV (check calc for sediment forebay volume)	
Deep Sump CB's		Method of pretreatment? (not required for clean or roof runoff)	
	cf	V_{SED} = Sediment forebay volume, if used for pretreatment	**≥ 25%WQV**
1,409	cf	V = Volume[1] (attach a stage-storage table)	**≥ WQV**
255	sf	A_{SA} = Surface area of the bottom of the pond	
13.75	iph	$Ksat_{DESIGN}$ = Design infiltration rate[2]	
2.7	hours	T_{DRAIN} = Drain time = V / (A_{SA} * I_{DESIGN})	**≤ 72-hrs**
106.00	feet	E_{BTM} = Elevation of the bottom of the basin	
103.80	feet	E_{SHWT} = Elevation of SHWT (if none found, enter the lowest elevation of the test pit)	
103.00	feet	E_{ROCK} = Elevation of bedrock (if none found, enter the lowest elevation of the test pit)	
2.20	feet	D_{SHWT} = Separation from SHWT	**≥ *[3]**
3.0	feet	D_{ROCK} = Separation from bedrock	**≥ *[3]**
1.5	ft	D_{amend} = Depth of amended soil, if applicable due high infiltation rate	**≥ 24"**
	ft	D_T = Depth of trench, if trench proposed	**4 - 10 ft**
no	Yes/No	If a trench or underground system is proposed, has observation well been provided?	**←yes**
		If a trench is proposed, does material meet Env-Wq 1508.07(k)(2) requirements.[4]	**← yes**
yes	Yes/No	If a basin is proposed, Is the perimeter curvilinear, and basin floor flat?	**← yes**
3.0	:1	If a basin is proposed, pond side slopes.	**≥3:1**
107.01	ft	Peak elevation of the 10-year storm event (infiltration can be used in analysis)	
107.97	ft	Peak elevation of the 50-year storm event (infiltration can be used in analysis)	
108.00	ft	Elevation of the top of the practice (if a basin, this is the elevation of the berm)	
YES		10 peak elevation ≤ Elevation of the top of the trench?[5]	**← yes**
YES		If a basin is proposed, 50-year peak elevation ≤ Elevation of berm?	**← yes**

1. Volume below the lowest invert of the outlet structure and excludes forebay volume
2. $Ksat_{DESIGN}$ includes a factor of safety. See Env-Wq 1504.14 for requirements for determining the infiltr. rate
3. 1' separation if treatment not required; 4' for treatment in GPAs & WSIPAs; & 3' in all other areas.
4. Clean, washed well graded diameter of 1.5 to 3 inches above the in-situ soil.
5. If 50-year peak elevation exceeds top of trench, the overflow must be routed in HydroCAD as secondary discharge.

Designer's Notes:

Summary for Pond BIO #1: BIO #1

Inflow Area = 0.588 ac, 35.82% Impervious, Inflow Depth = 1.26" for 10-YR Extreme event
Inflow = 0.74 cfs @ 12.10 hrs, Volume= 0.062 af
Outflow = 0.24 cfs @ 12.49 hrs, Volume= 0.062 af, Atten= 67%, Lag= 23.1 min
Discarded = 0.24 cfs @ 12.49 hrs, Volume= 0.062 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach 1R : Reach to AP-1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 107.01' @ 12.49 hrs Surf.Area= 662 sf Storage= 537 cf
Flood Elev= 108.00' Surf.Area= 1,250 sf Storage= 1,471 cf

Plug-Flow detention time= 15.5 min calculated for 0.062 af (100% of inflow)
Center-of-Mass det. time= 15.5 min (878.5 - 862.9)

Volume	Invert	Avail.Storage	Storage Description
#1	104.25'	1,471 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
104.25	255	0.0	0	0	255
104.26	255	20.0	1	1	256
104.50	255	20.0	12	13	269
105.99	255	20.0	76	89	353
106.00	255	100.0	3	91	354
108.00	1,250	100.0	1,380	1,471	1,366

Device	Routing	Invert	Outlet Devices
#1	Discarded	104.25'	**13.750 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Device 3	107.95'	**0.5" x 4.5" Horiz. Orifice/ Grate Overflow X 14.00 columns** X 4 rows C= 0.600 Limited to weir flow at low heads
#3	Primary	106.00'	**6.0" Round 12" HDPE (P-4)** L= 10.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 106.00' / 105.90' S= 0.0100 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.20 sf

Discarded OutFlow Max=0.24 cfs @ 12.49 hrs HW=107.01' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.24 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=104.25' TW=105.50' (Dynamic Tailwater)
└─**3=12" HDPE (P-4)** (Controls 0.00 cfs)
└─**2=Orifice/ Grate Overflow** (Controls 0.00 cfs)

Summary for Pond BIO #1: BIO #1

Inflow Area = 0.588 ac, 35.82% Impervious, Inflow Depth = 2.80" for 50-YR Extreme event
Inflow = 1.81 cfs @ 12.10 hrs, Volume= 0.137 af
Outflow = 0.88 cfs @ 12.30 hrs, Volume= 0.137 af, Atten= 52%, Lag= 12.5 min
Discarded = 0.43 cfs @ 12.30 hrs, Volume= 0.131 af
Primary = 0.45 cfs @ 12.30 hrs, Volume= 0.006 af
Routed to Reach 1R : Reach to AP-1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 107.97' @ 12.30 hrs Surf.Area= 1,230 sf Storage= 1,435 cf
Flood Elev= 108.00' Surf.Area= 1,250 sf Storage= 1,471 cf

Plug-Flow detention time= 28.6 min calculated for 0.137 af (100% of inflow)
Center-of-Mass det. time= 28.6 min (871.2 - 842.6)

Volume	Invert	Avail.Storage	Storage Description
#1	104.25'	1,471 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
104.25	255	0.0	0	0	255
104.26	255	20.0	1	1	256
104.50	255	20.0	12	13	269
105.99	255	20.0	76	89	353
106.00	255	100.0	3	91	354
108.00	1,250	100.0	1,380	1,471	1,366

Device	Routing	Invert	Outlet Devices
#1	Discarded	104.25'	**13.750 in/hr Exfiltration over Wetted area** Phase-In= 0.01'
#2	Device 3	107.95'	**0.5" x 4.5" Horiz. Orifice/ Grate Overflow X 14.00 columns** X 4 rows C= 0.600 Limited to weir flow at low heads
#3	Primary	106.00'	**6.0" Round 12" HDPE (P-4)** L= 10.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 106.00' / 105.90' S= 0.0100 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.20 sf

Discarded OutFlow Max=0.43 cfs @ 12.30 hrs HW=107.97' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.43 cfs)

Primary OutFlow Max=0.45 cfs @ 12.30 hrs HW=107.97' TW=105.63' (Dynamic Tailwater)
└─**3=12" HDPE (P-4)** (Passes 0.45 cfs of 1.24 cfs potential flow)
└─**2=Orifice/ Grate Overflow** (Weir Controls 0.45 cfs @ 0.47 fps)

Stage-Area-Storage for Pond BIO #1: BIO #1 (continued)

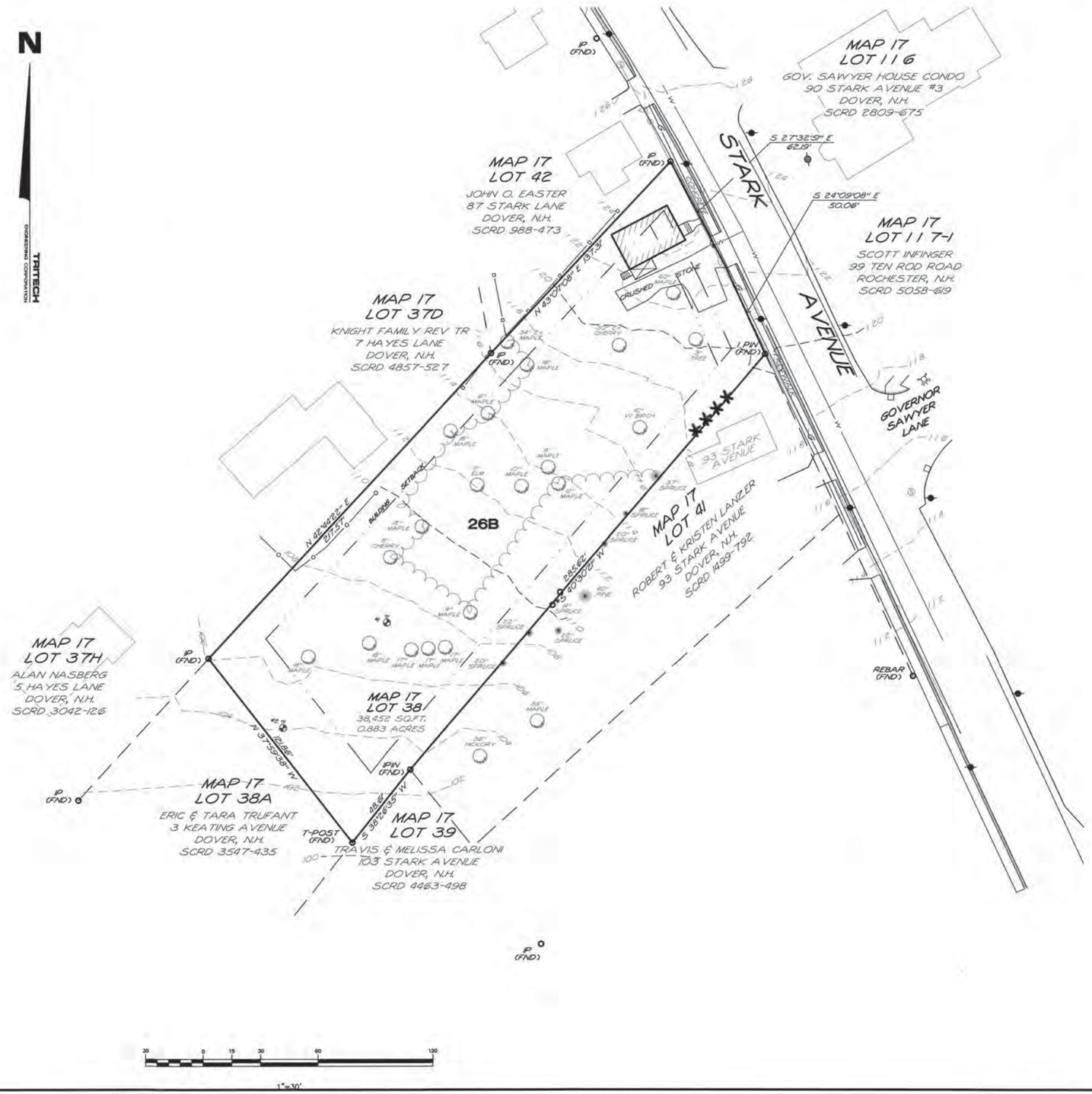
Elevation (feet)	Surface (sq-ft)	Wetted (sq-ft)	Storage (cubic-feet)
107.43	890	999	864
107.44	896	1,005	873
107.45	901	1,011	882
107.46	907	1,017	891
107.47	913	1,023	900
107.48	919	1,029	909
107.49	925	1,035	918
107.50	931	1,041	928
107.51	937	1,047	937
107.52	943	1,053	947
107.53	949	1,059	956
107.54	955	1,065	965
107.55	961	1,071	975
107.56	967	1,077	985
107.57	973	1,084	994
107.58	979	1,090	1,004
107.59	985	1,096	1,014
107.60	991	1,102	1,024
107.61	997	1,108	1,034
107.62	1,003	1,115	1,044
107.63	1,009	1,121	1,054
107.64	1,015	1,127	1,064
107.65	1,022	1,133	1,074
107.66	1,028	1,140	1,084
107.67	1,034	1,146	1,095
107.68	1,040	1,152	1,105
107.69	1,047	1,159	1,116
107.70	1,053	1,165	1,126
107.71	1,059	1,172	1,137
107.72	1,065	1,178	1,147
107.73	1,072	1,184	1,158
107.74	1,078	1,191	1,169
107.75	1,085	1,197	1,179
107.76	1,091	1,204	1,190
107.77	1,097	1,210	1,201
107.78	1,104	1,217	1,212
107.79	1,110	1,223	1,223
107.80	1,117	1,230	1,234
107.81	1,123	1,237	1,246
107.82	1,130	1,243	1,257
107.83	1,136	1,250	1,268
107.84	1,143	1,257	1,280
107.85	1,149	1,263	1,291
107.86	1,156	1,270	1,303
107.87	1,162	1,277	1,314
107.88	1,169	1,283	1,326
107.89	1,176	1,290	1,338
107.90	1,182	1,297	1,349
107.91	1,189	1,304	1,361
107.92	1,196	1,310	1,373
107.93	1,202	1,317	1,385
107.94	1,209	1,324	1,397
107.95	1,216	1,331	1,409

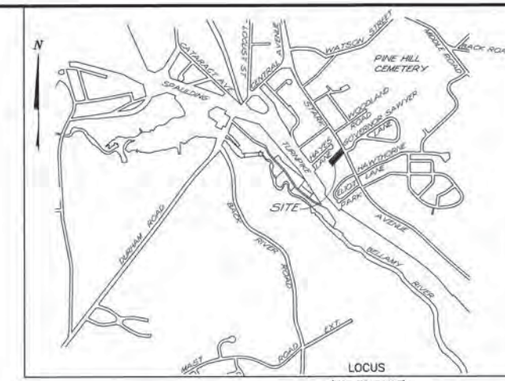
GROUNDWATER RECHARGE VOLUME (GRV)
(Env-Wq 1504.12)

0.16	ac	Area of HSG A soil that was replaced by impervious cover	0.40"
-	ac	Area of HSG B soil that was replaced by impervious cover	0.25"
-	ac	Area of HSG C soil that was replaced by impervious cover	0.10"
-	ac	Area of HSG D soil or impervious cover that was replaced by impervious cover	0.0"
0.40	inches	Rd = Weighted groundwater recharge depth	
0.062	ac-in	GRV = AI * Rd	
225	cf	GRV conversion (ac-in x 43,560 sf/ac x 1ft/12”)	
	← Y/N	Is a stage-storage table attached showing that the GRV can be stored below the lowest invert of the outlet structure (if applicable)? Multiple stormwater control measures may be used to meet the GRV requirements.	

Provide calculations/discussion below showing that the project meets the groundwater recharge requirements (Env-Wq 1507.04):

Infiltration from Bio #1 = 1,409 cubic feet





TRITECH
ENGINEERING CORPORATION
785 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3890

SOILS NOTES

1.) SITE-SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT. SSSNNE SPECIAL PUBLICATION NO. 3, VERSION 7.0, JULY 2021. THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PRODUCT, INTENDED FOR THE SUBMISSION TO NH DES ALTERATION OF TERRAIN. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCE CONSERVATION SERVICE.

2.) WETLANDS WERE INVESTIGATED IN JANUARY 2026 BY MICHAEL MARIANO, NH CERTIFIED WETLAND SCIENTIST #183 IN ACCORDANCE WITH THE 1987 U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE 2012 REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0. HYDRIC SOILS WERE IDENTIFIED BY FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4, MAY 2017. A ROUTINE DETERMINATION, AS DESCRIBED IN THE MANUAL, WAS FOLLOWED. NO WETLAND WERE FOUND.

3.) TEST PITS WERE OBSERVED AND DESCRIBED IN APRIL OF 2026.

LEGEND

26	WINDSOR

SLOPE CLASS

A	0 - 3%
B	3 - 8%
C	8 - 15%

LEGEND

- REBAR WITH ID CAP TO BE SET
- UTILITY POLE
- SEWER MANHOLE
- DRAIN MANHOLE
- CATCH BASIN
- D — DRAIN LINE
- G — GAS LINE
- W — WATER LINE
- VINYL STOCKADE FENCE
- X — WOOD RAIL FENCE
- CHAIN LINK FENCE
- METAL RAIL FENCE
- SPECIMEN TREE
- ARBORVITAE

REVISIONS
DATE: DESCRIPTION:

STATE OF NEW HAMPSHIRE - MICHAEL MARIANO - No. 76 - CERTIFIED SOIL SCIENTIST

SITE SPECIFIC SOILS PLAN

COREY MACKOUL

89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY

MAY 14, 2026 JOB No. 25136
SCALE: 1" = 30'

SHEET No. **SSS-1**

(P26-0000)

SOIL REPORT

April 23, 2026

89 Stark Ave
Dover NH
Map 17 Lot 38
0.88 acres

Landscape: Nearly uniform NE to SW slope of approximately 6 percent Mostly lawn and lightly wooded.

Wetlands: There are no wetlands on the property or within 50' of any property line. The area was observed in March 2026 by Michael Mariano, NH Certified Wetland Scientist #183.

Soils: Windsor soils are the only soil on the property

Purpose: The site-specific soil map was prepared for a proposed residential construction with city water and sewer.

Methodology: The soil map was prepared in accordance with the Site-Specific Soil Mapping Standards for New Hampshire and Vermont, July 2021 by the Society of Soil Scientists of Northern New England and standards established by the National Cooperative Soil Survey. The soil survey was prepared by Michael Mariano, NH Certified Soil Scientist #076.

A plan provided by Tritech Engineering, Dover NH at 1" = 30' with 2' contours was used as a base map. Existing monumentation, survey transects, and topographic features were used as control. Two pits were dug by an excavator to classify soils at the series level. Pits were located Tritech Engineering.

The identification of soils is based on the New Hampshire State-Wide Numerical Soils Legend.

Map Unit Purity:

Consociations: Map units will contain 75 percent or more of pedons that fit within the range of the taxon that provides the name for the map unit or are in a similar taxon. No one similar soil is greater than the named reference taxa. The total amount of dissimilar inclusions will not exceed 25 percent. No single dissimilar soil will make up more than 10 percent of the map unit. Limiting inclusions do not exceed 15 percent of the map unit. More intensive separation of dissimilar inclusions within a map unit can be made at the discretion of the Soil Scientist.

Complexes: There are no soil complexes on the property

Drainage Classes: Soil series names added for soils on this property.

***Very Poorly Drained*:** There are no very poorly drained soils mapped on this property.

Poorly Drained: **There** are no poorly drained soils mapped on this property.

***Somewhat Poorly Drained**:* There are no somewhat poorly drained soils on this property.

Moderately Well Drained: There are no moderately well drained soils on the property

Well Drained: There are no well drained soils on the property.

***Excessively Drained*:** Windsor. Water is removed very rapidly. The occurrence of internal free water commonly is very rare or very deep. The soils are commonly coarse textured and have very high hydrologic conductivity.

Soils with textures of very fine sand or coarser in all horizons within the control section

Soil Map Legend

26 Windsor

Slope Classes

A 0-3%
B 3-8%
C 8-15%

This map product is within the technical standards of the National Cooperative Soil Survey and produced in accordance with the Society of Soil Scientists of Northern New England Publication Site-Specific Soil Mapping Standards for New Hampshire and Vermont, July 2021 It was produced by a professional soil scientist, and is not a product of the USDA Natural Resources Conservation Service. There is a map that accompanies this report.

Windsor

NH Numerical Soil Legend: 26

Setting

Parent Material:	Glacial outwash
Landform:	Outwash plains
Position on Landscape:	Highest elevations
Slope Range:	3 to 8 percent

Composition and Soil Characteristics

Drainage Class:	Somewhat excessively drained; seasonal high water table at >40 inches
Hydrologic Group:	A
Surface Runoff	Moderate
Permeability	Rapid
Depth to Bedrock	> 40 inches
Hydric conditions	No

Inclusions Within Mapping Unit

Similar:	None
Contrasting:	None

Use and Management

This soil is well suited to development. Droughtiness is the limiting factor. See Test Pit 3 for a typical description.

Test Pit Descriptions

89 Stark Ave
Dover NH
Map 17 Lot 38
Described: 03-31-2026

Test Pit 1:

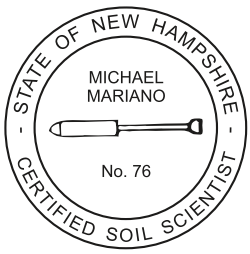
00 - 10”	Dark brown (10YR4/3) sandy loam; weak fine granular structure; moist, friable
10 - 23”	Strong brown (7.5YR5/8) sand; single grain, moist, loose
23 - 45”	Yellowish brown (10YR5/6) sand; single grain; moist, loose
45 - 66”	Light olive brown (2.5Y5/4) & strong brown (7.5YR5/8) sand; few redox features in 10YR6/1; single grain; moist, loose.

Series: Windsor
Estimated seasonal high water table: 45”
Observed water: none
Restrictive layer: none
Soil Hydrologic Group A

Test Pit 2:

00 - 08”	Dark brown (10YR4/3) sandy loam; weak fine granular structure; moist, friable
08 - 25”	Strong brown (7.5YR5/8) sand; single grain, moist, loose
25 - 50”	Yellowish brown (10YR5/6) sand; single grain; moist, loose
50 - 66”	Light olive brown (2.5Y5/4) & strong brown (7.5YR5/8) sand; few redox features in 10YR6/1; single grain; moist, loose.

Series: Windsor
Estimated seasonal high water table: 50”
Observed water: none
Restrictive layer: none
Soil Hydrologic Group A



Infiltration Feasibility Analysis

Site Plan Application

Corey MacKoul

89 Stark Ave

Tax Map 17 Lot 38

Dover, New Hampshire

Job No.:25136

This infiltration test is being performed in conjunction with the development of 89 Stark Ave. This on-site testing was completed to determine the rate of infiltration to be used in the stormwater system design.

Tritech performed this testing using a Geulph Permeameter in accordance with NHDES Analysis Method. In addition to the summary below, we have provided the raw data and the spreadsheet used in analysis of the raw data and determine the K_{sat} value to be used in the HydroCAD Stormwater Model.

We performed this testing at one location on the property. The location of the test was performed at Test Pit #1 in the Windsor soil to determine the K_{sat} value to be used in the HydroCAD stormwater model.

The borehole was prepared into the receiving soil & above the water table using a 6 cm Dutch Sand Auger. The bore hole was then sized and squared using a 6 cm Bayonet Auger, then the bore hole was brushed with a 6 cm prep brush to remove any smearing from the sides of the hole that may have been left by the Bayonet Auger.

Attached please find the raw data summaries for the tests performed. The raw data was entered into the spreadsheet supplied by Soilmoisture Equipment Corp., the permeameter supplier.

Test Pit #1 Results:
K_{sat} 0.459 in./min. or 27.52 in./hour

Field Infiltration Testing Results			
Location	Material	Depth (in.)	K_{sat} Rate (in./hr)
Test Pit #1	Strong brown sand; single grain, moist, loose	17"	27.52

The results above are the direct value from the field testing and a safety factor of 2 has been added resulting in a K_{sat} value of 13.75 in./hr. used in the design.

STATE OF NEW HAMPSHIRE
ROBERT J. STOWELL
No. 9903
LICENSED
PROFESSIONAL ENGINEER

Infiltration Testing
Site Plan Application

Corey MacKoul

89 Stark Ave
Tax Map 17, Lot 38
Dover, New Hampshire
Job No.: 25136

Project Name:	Corey MacKoul	Test Performed By: Andrew J. Stowell	
Project Location:	89 Stark Ave, Dover	Test Date: April 29, 2026	
Test Location:	At Test Pit #1	Test Weather: 55 Degrees	
Reservoir Constants			
Combined Reservoirs (x)	35.22 cm²	Well Depth = 15 cm	Depth of Well from Existing Grade: 17"
Inner Reservoir (y) =	2.15 cm²	Well Radius = 3 cm	Soil Type: Windsor

Test #1

Water Level in Well = 5 cm

Time (Min)	**Time Interval Δt (min)**	**Water Level In Resevoir *h* (cm)**	**Water Level Change Δh (cm)**	**Rate of Water Change R1 (cm/min)**
0	0	0.5	-	-
1	1.0	18.0	17.5	17.5
2	1.0	29.0	11.0	11.0
3	1.0	40.0	11.0	11.0
4	1.0	51.0	11.0	11.0
5	1.0	62.0	11.0	11.0
6	1.0	73.0	11.0	11.0
Steady State Rate; Average 11.0 cm/min				

Guelph Permeameter Calculations

Input

Result

Support: ali@soilmoisture.com

89 Stark Ave- Infiltration Test at Test Pit #1

Reservoir Type (enter "1" for Combined and "2" for Inner reservoir):	1
Enter water Head Height ("H" in cm):	5
Enter the Borehole Radius ("a" in cm):	3
Enter the soil texture-structure category (enter one of the below numbers):	4

1. Compacted, Structure-less, clayey or silty materials such as landfill caps and liners, lacustrine or marine sediments, etc.
2. Soils which are both fine textured (clayey or silty) and unstructured; may also include some fine sands.
3. Most structured soils from clays through loams; also includes unstructured medium and fine sands. The category most frequently applicable for agricultural soils.
4. Coarse and gravely sands; may also include some highly structured soils with large and/or numerous cracks, macropors, etc

Steady State Rate of Water Level Change ("R" in cm/min):	11.0000

Res Type	35.22
H	5
a	3
H/a	1.667
a*	0.36
C0.01	0.809
C0.04	0.842
C0.12	0.803
C0.36	0.803
C	0.803
R	11.000
Q	6.457
pi	3.142

$\alpha^* =$	0.36	(cm^{-1})
$C =$	0.803154	
$Q =$	6.457	
$K_{fs} =$	1.94E-02	cm/sec
	1.17E+00	cm/min
	1.94E-04	m/sec
	4.59E-01	inch/min
	7.65E-03	inch/sec
$\phi_m =$	5.39E-02	(cm^2/min)

27.52396788 In./Hr.

Calculation formulas related to shape factor (C). Where H_1 is the first water head height (cm), H_2 is the second water head height (cm), a is borehole radius (cm) and α^* is microscopic capillary length factor which is decided according to the soil texture-structure category. For one-head method, only C_1 needs to be calculated while for two-head method, C_1 and C_2 are calculated (Zang et al., 1998).

Soil Texture-Structure Category	$\alpha^*(cm^{-1})$	Shape Factor
Compacted, Structure-less, clayey or silty materials such as landfill caps and liners, lacustrine or marine sediments, etc.	0.01	$C_1 = \left(\frac{H_1/a}{2.102 + 0.118(H_1/a)}\right)^{0.655}$ $C_2 = \left(\frac{H_2/a}{2.102 + 0.118(H_2/a)}\right)^{0.655}$
Soils which are both fine textured (clayey or silty) and unstructured; may also include some fine sands.	0.04	$C_1 = \left(\frac{H_1/a}{1.992 + 0.091(H_1/a)}\right)^{0.683}$ $C_2 = \left(\frac{H_2/a}{1.992 + 0.091(H_2/a)}\right)^{0.683}$
Most structured soils from clays through loams; also includes unstructured medium and fine sands. The category most frequently applicable for agricultural soils.	0.12	$C_1 = \left(\frac{H_1/a}{2.074 + 0.093(H_1/a)}\right)^{0.754}$ $C_2 = \left(\frac{H_2/a}{2.074 + 0.093(H_2/a)}\right)^{0.754}$
Coarse and gravely sands; may also include some highly structured soils with large and/or numerous cracks, macro pores, etc.	0.36	$C_1 = \left(\frac{H_1/a}{2.074 + 0.093(H_1/a)}\right)^{0.754}$ $C_2 = \left(\frac{H_2/a}{2.074 + 0.093(H_2/a)}\right)^{0.754}$

Calculation formulas related to one-head and two-head methods. Where R is steady-state rate of fall of water in reservoir (cm/s), K_{fs} is Soil saturated hydraulic conductivity (cm/s), ϕ_m is Soil matric flux potential (cm^2/s), α^* is Macroscopic capillary length parameter (from Table 2), a is Borehole radius (cm), H_1 is the first head of water established in borehole (cm) , H_2 is the second head of water established in borehole (cm) and C is Shape factor (from Table 2).

One Head, Combined Reservoir	$Q_1 = \bar{R}_1 \times 35.22$	$K_{fs} = \frac{C_1 \times Q_1}{2\pi H_1^2 + \pi a^2 C_1 + 2\pi\left(\frac{H_1}{\alpha^*}\right)}$ $\phi_m = \frac{C_1 \times Q_1}{(2\pi H_1^2 + \pi a^2 C_1)\alpha^* + 2\pi H_1}$
One Head, Inner Reservoir	$Q_1 = \bar{R}_1 \times 2.16$	
Two Head, Combined Reservoir	$Q_1 = \bar{R}_1 \times 35.22$ $Q_2 = \bar{R}_2 \times 35.22$	$G_1 = \frac{H_2 C_1}{\pi(2H_1H_2(H_2 - H_1) + a^2(H_1C_2 - H_2C_1))}$ $G_2 = \frac{H_1 C_2}{\pi(2H_1H_2(H_2 - H_1) + a^2(H_1C_2 - H_2C_1))}$ $K_{fs} = G_2Q_2 - G_1Q_1$ $G_3 = \frac{(2H_2^2 + a^2C_2)C_1}{2\pi(2H_1H_2(H_2 - H_1) + a^2(H_1C_2 - H_2C_1))}$ $G_4 = \frac{(2H_1^2 + a^2C_1)C_2}{2\pi(2H_1H_2(H_2 - H_1) + a^2(H_1C_2 - H_2C_1))}$ $\phi_m = G_3Q_1 - G_4Q_2$
Two Head, Inner Reservoir	$Q_1 = \bar{R}_1 \times 2.16$ $Q_2 = \bar{R}_2 \times 2.16$	

Pollutant Removal Efficiencies for Best Management Practices for Use in Pollutant Loading Analysis				Values Accepted for Loading Analyses		
BMP Type	**BMP**	**Notes**	**Lit. Ref.**	**TSS**	**TN**	**TP**
Stormwater Ponds	Wet Pond		B, F	70%	35%	45%
	Wet Extended Detention Pond		A, B	80%	55%	68%
	Micropool Extended Detention Pond	TBA				
	Multiple Pond System	TBA				
	Pocket Pond	TBA				
Stormwater Wetlands	Shallow Wetland		A, B, F, I	80%	55%	45%
	Extended Detention Wetland		A, B, F, I	80%	55%	45%
	Pond/Wetland System	TBA				
	Gravel Wetland		H	95%	85%	64%
Infiltration Practices	Infiltration Trench (≥75 ft from surface water)		B, D, I	90%	55%	60%
	Infiltration Trench (<75 ft from surface water)		B, D, I	90%	10%	60%
	Infiltration Basin (≥75 ft from surface water)		A, F, B, D, I	90%	60%	65%
	Infiltration Basin (<75 ft from surface water)		A, F, B, D, I	90%	10%	65%
	Dry Wells			90%	55%	60%
	Drip Edges			90%	55%	60%
Filtering Practices	Aboveground or Underground Sand Filter that infiltrates WQV (≥75 ft from surface water)		A, F, B, D, I	90%	60%	65%
	Aboveground or Underground Sand Filter that infiltrates WQV (<75 ft from surface water)		A, F, B, D, I	90%	10%	65%
	Aboveground or Underground Sand Filter with underdrain		A, I, F, G, H	85%	10%	45%
	Tree Box Filter	TBA				
	Bioretention System		I, G, H	90%	65%	65%
	Permeable Pavement that infiltrates WQV (≥75 ft from surface water)		A, F, B, D, I	90%	60%	65%
	Permeable Pavement that infiltrates WQV (<75 ft from surface water)		A, F, B, D, I	90%	10%	65%
	Permeable Pavement with underdrain		Use TN and TP values for sand filter w/ underdrain and outlet pipe	90%	10%	45%

TABLE B

SOIL SERIES

Soil Series	legend number	Ksat low - B in/hr	Ksat high - B in/hr	Ksat low - C in/hr	Ksat high - C in/hr	Hyd. Grp.	Group	Land Form	Temp.	Soil Textures	Spodosol ?	Other
Abenaki	501	0.6	2.0	6.00	99.0	B	2	Outwash and Stream Terraces	frigid	loamy over sandy-skeletal	no	loamy over gravelly
Acton	146	2.0	20.0	2.00	20.0	B	3	Loose till, sandy textures	mesic	sandy-skeletal	no	cobbly loamy sand
Adams	36	6.0	20.0	20.00	99.0	A	1	Outwash and Stream Terraces	frigid	sandy	yes	
Agawam	24	6.0	20.0	20.00	100.0	B	2	Outwash and Stream Terraces	mesic	loamy over sandy	no	loamy over sand/gravel
Allagash	127	0.6	2.0	6.00	20.0	B	2	Outwash and Stream Terraces	frigid	loamy over sandy	yes	loamy over sandy
Au Gres	516					B	5	Outwash and Stream Terraces	frigid	sandy	yes	single grain, loose
Bangor	572	0.6	2.0	0.60	2.0	B	2	Friable till, silty, schist & phyllite	frigid	loamy	yes	silt loam
Becket	56	0.6	2.0	0.06	0.6	C	3	Firm, platy, sandy till	frigid	loamy	yes	gravelly sandy loam in Cd
Belgrade	532	0.6	2.0	0.06	2.0	B	3	Terraces and glacial lake plains	mesic	silty	no	strata of fine sand
Bemis	224	0.6	0.2	0.00	0.2	C	5	Firm, platy, loamy till	cryic	loamy	no	
Berkshire	72	0.6	6.0	0.60	6.0	B	2	Loose till, loamy textures	frigid	loamy	yes	fine sandy loam
Bernardston	330	0.6	2.0	0.06	0.2	C	3	Firm, platy, silty till, schist & phyllite	mesic	loamy	no	channery silt loam in Cd
Bice	226	0.6	6.0	0.60	6.0	B	2	Loose till, loamy textures	frigid	loamy	no	sandy loam
Biddeford	234	0.0	0.2	0.00	0.2	D	6	Silt and Clay Deposits	frigid	fine	no	organic over clay
Binghamville	534	0.2	2.0	0.06	0.2	D	5	Terraces and glacial lake plains	mesic	silty	no	
Boscawen	220	6.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	frigid	sandy-skeletal	no	loamy cap
Boxford	32	0.1	0.2	0.00	0.2	C	3	Silt and Clay Deposits	mesic	fine	no	silty clay loam
Brayton	240	0.6	2.0	0.06	0.6	C	5	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	
Buckland	237	0.6	2.0	0.06	0.2	C	3	Firm, platy, loamy till	frigid	loamy	no	loam in Cd
Bucksport	895					D	6	Organic Materials - Freshwater	frigid	sapric	no	deep organic
Burnham	131	0.2	6.0	0.02	0.2	D	6	Firm, platy, silty till, schist & phylitte	frigid	loamy	no	organic over silt
Buxton	232	0.1	0.6	0.00	0.2	C	3	Silt and Clay Deposits	frigid	fine	no	silty clay
Cabot	589	0.6	2.0	0.06	0.2	D	5	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	
Caesar	526	20.0	100.0	20.00	100.0	A	1	Outwash and Stream Terraces	mesic	coarse sand	no	
Canaan	663	2.0	20.0	2.00	20.0	C	4	Weathered Bedrock Till	frigid	loamy-skeletal	yes	less than 20 in. deep
Canterbury	166	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	no	loam in Cd
Canton	42	2.0	6.0	6.00	20.0	B	2	Loose till, sandy textures	mesic	loamy over sandy	no	loamy over loamy sand
Cardigan	357	0.6	2.0	0.60	2.0	B	4	Friable till, silty, schist & phyllite	mesic	loamy	no	20 to 40 in. deep
Catden	296					A/D	6	Organic Materials - Freshwater	mesic	sapric	no	deep organic
Champlain	35	6.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	frigid	gravelly sand	no	
Charles	209	0.6	100.0	0.60	100.0	C	5	Flood Plain (Bottom Land)	frigid	silty	no	
Charlton	62	0.6	6.0	0.60	6.0	B	2	Loose till, loamy textures	mesic	loamy	no	fine sandy loam
Chatfield	89	0.6	6.0	0.60	6.0	B	4	Loose till, bedrock	mesic	loamy	no	20 to 40 in. deep
Chatfield Var.	289	0.6	6.0	0.60	6.0	B	3	Loose till, bedrock	mesic	loamy	no	mwd to swpd
Chesuncook	126	0.6	2.0	0.02	0.2	C	3	Firm, platy, silty till, schist & phyllite	frigid	loamy	yes	channery silt loam in Cd
Chichester	442	0.6	2.0	2.00	6.0	B		Loose till, sandy textures	frigid	loamy over sandy	no	loamy over loamy sand
Chocorua	395			6.00	20.0	D	6	Organic Materials - Freshwater	frigid	sandy or sandy-skeletal	no	organic over sand
Cohas	505	0.6	2.0	0.60	100.0	C	5	Flood Plain (Bottom Land)	frigid	co. loamy over sandy (skeletal)	no	
Colonel	927	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	yes	loam in Cd
Colton	22	6.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	
Colton, gravelly	21	6.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	gravelly surface
Croghan	613	20.0	100.0	20.00	100.0	B	3	Outwash and Stream Terraces	frigid	sandy	yes	single grain in C
Dartmouth	132	0.6	2.0	0.06	0.6	B	3	Terraces and glacial lake plains	mesic	silty	no	thin strata silty clay loam
Deerfield	313	6.0	20.0	20.00	100.0	B	3	Outwash and Stream Terraces	mesic	sandy	no	single grain in C
Dixfield	378	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	yes	fine sandy loam in Cd
Dixmont	578	0.6	2.0	0.60	2.0	C	3	Friable till, silty, schist & phyllite	frigid	loamy	yes	silt loam, platy in C
Duane	413	6.0	20.0	6.00	20.0	B	3	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	cemented (ortstein)
Dutchess	366	0.6	2.0	0.60	2.0	B	2	Friable till, silty, schist & phyllite	mesic	loamy	no	very channery
Eldridge	38	6.0	20.0	0.06	0.6	C	3	Sandy/loamy over silt/clay	mesic	sandy over loamy	no	
Elliottsville	128	0.6	2.0	0.60	2.0	B	4	Friable till, silty, schist & phyllite	frigid	loamy	yes	20 to 40 in. deep
Elmridge	238	2.0	6.0	0.00	0.2	C	3	Sandy/loamy over silt/clay	mesic	loamy over clayey	no	
Elmwood	338	2.0	6.0	0.00	0.2	C	3	Sandy/loamy over silt/clay	frigid	loamy over clayey	no	
Finch	116					C	3	Outwash and Stream Terraces	frigid	sandy	yes	cemented (ortstein)

Soil Series	legend number	Ksat low - B in/hr	Ksat high - B in/hr	Ksat low - C in/hr	Ksat high - C in/hr	Hyd. Grp.	Group	Land Form	Temp.	Soil Textures	Spodosol ?	Other
Fryeburg	208	0.6	2.0	2.00	6.0	B	2	Flood Plain (Bottom Land)	frigid	silty	no	very fine sandy loam
Gilmanton	478	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	no	fine sandy loam in Cd
Glebe	671	2.0	6.0	2.00	6.0	C	4	Loose till, bedrock	cryic	loamy	yes	20 to 40 in. deep
Gloucester	11	6.0	20.0	6.00	20.0	A	1	Sandy Till	mesic	sandy-skeletal	no	loamy cap
Glover	NA	0.6	2.0	0.60	2	D	4	Friable till, silty, schist & phyllite	frigid	loamy	no	less than 20 in. deep
Grange	433	0.6	2.0	0.60	2.0	C	5	Outwash and Stream Terraces	frigid	co. loamy over sandy (skeletal)	no	
Greenwood	295					A/D	6	Organic Materials - Freshwater	frigid	hemic	no	deep organic
Groveton	27	0.6	2.0	0.60	6.0	B	2	Outwash and Stream Terraces	frigid	loamy	yes	loamy over sandy
Hadley	8	0.6	2.0	0.60	6.0	B	2	Flood Plain (Bottom Land)	mesic	silty	no	strata of fine sand
Hadley	108	0.6	2.0	0.60	6.0	B	2	Flood Plain (Bottom Land)	mesic	silty	no	strata of fine sand, occ flooded
Hartland	31	0.6	2.0	0.20	2.0	B	2	Terraces and glacial lake plains	mesic	silty	no	very fine sandy loam
Haven	410	0.6	2.0	20.00	100.0	B	2	Outwash and Stream Terraces	mesic	loamy over sandy	no	loamy over sand/gravel
Henniker	46	0.6	2.0	0.06	0.6	C	3	Firm, platy, sandy till	frigid	loamy	no	loamy sand in Cd
Hermon	55	2.0	20.0	6.00	20.0	A	1	Sandy Till	frigid	sandy-skeletal	yes	loamy cap
Hinckley	12	6.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	mesic	sandy-skeletal	no	
Hitchcock	130	0.6	2.0	0.06	0.6	B	3	Terraces and glacial lake plains	mesic	silty	no	silt loam to silt in C
Hogback	91	2.0	6.0	2.00	6.0	C	4	Loose till, bedrock	frigid	loamy	yes	less than 20 in. deep
Hollis	86	0.6	6.0	0.60	6.0	C/D	4	Loose till, bedrock	mesic	loamy	no	less than 20 in. deep
Hoosic	510	2.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	mesic	sandy-skeletal	no	slate, loamy cap
Houghtonville	795	0.6	6.0	0.60	6.0	B	2	Loose till, loamy textures	frigid	loamy	yes	cobbly fine sandy loam
Howland	566	0.6	2.0	0.06	0.2	C	3	Firm, platy, silty till, schist & phyllite	frigid	loamy	yes	silt loam, platy in Cd
Ipswich	397					D	6	Tidal Flat	mesic	hemic/sapric	no	deep organic
Kearsarge	359	0.6	2.0	0.60	2.0	B	4	Friable till, silty, schist & phyllite	mesic	loamy	no	less than 20 in. deep
Kinsman	614	6.0	20.0	6.00	20.0	C	5	Outwash and Stream Terraces	frigid	sandy	yes	
Lanesboro	228	0.6	2.0	0.06	0.2	C	3	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	channery silt loam in Cd
Leicester	514	0.6	6.0	0.60	20.0	C	5	Loose till, loamy textures	mesic	loamy	no	
Lim	3	0.6	2.0	6.00	20.0	C	5	Flood Plain (Bottom Land)	mesic	loamy	no	
Limerick	109	0.6	2.0	0.60	2.0	C	5	Flood Plain (Bottom Land)	mesic	silty	no	
Lombard	259	0.6	6.0	2.00	20.0	C/D	2	Weathered bedrock, phyllite	frigid	loamy	no	very channery
Lovewell	307	0.6	2.0	0.60	2.0	B	3	Flood Plain (Bottom Land)	frigid	silty	no	very fine sandy loam
Lyman	92	2.0	6.0	2.00	6.0	A/D	4	Loose till, bedrock	frigid	loamy	yes	less than 20 in. deep
Lyme	246	0.6	6.0	0.60	6.0	C	5	Loose till, sandy textures	frigid	loamy	no	
Machias	520	2.0	6.0	6.00	20.0	B	3	Outwash and Stream Terraces	frigid	sandy or sandy-skeletal	yes	strata sand/gravel in C
Macomber	252	0.6	2.0	0.60	2.0	C	4	Friable till, silty, schist & phyllite	frigid	loamy-skeletal	yes	20 to 40 in. deep
Madawaska	28	0.6	2.0	6.00	20.0	B	3	Outwash and Stream Terraces	frigid	loamy over sandy	yes	sandy or sandy-skeletal
ladawaska, aquer	48	0.6	2.0	6.00	20.0	B	3	Outwash and Stream Terraces	frigid	loamy over sandy	yes	sandy or sandy-skeletal
Marlow	76	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	yes	fine sandy loam in Cd
Masardis	23	6.0	20.0	6.00	20.0	A	1	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	slate, loamy cap
Mashpee	315	6.0	20.0	6.00	20.0	B	5	Outwash and Stream Terraces	mesic	sandy	yes	
Matunuck	797			20.00	100.0	D	6	Tidal Flat	mesic	sandy	no	organic over sand
Maybid	134	0.0	0.2	0.00	0.2	D	6	Silt and Clay Deposits	mesic	fine	no	silt over clay
Meadowsedge	894					D	6	Organic Materials - Freshwater	frigid	peat	no	deep organic
Medomak	406	0.6	2.0	0.60	2.0	D	6	Flood Plain (Bottom Land)	frigid	silty	no	organic over silt
Melrose	37	2.0	6.0	0.00	0.2	C	3	Sandy/loamy over silt/clay	frigid	loamy over clayey	no	silty clay loam in C
Merrimac	10	2.0	20.0	6.00	20.0	A	1	Outwash and Stream Terraces	mesic	gravelly sand	no	loamy cap
Metacomet	458	0.6	2.0	0.06	0.6	C	3	Firm, platy, sandy till	frigid	loamy	no	loamy sand in Cd
Metallak	404	6.0	100.0	6.00	100.0	B	3	Flood Plain (Bottom Land)	frigid	loamy over sandy	no	sandy or sandy-skeletal
Millis	39					C	3	Firm, platy, sandy till	frigid	loamy	yes	loamy sand in Cd
Millsite	251	0.6	6.0	0.60	6.0	C	4	Loose till, bedrock	frigid	loamy	no	20 to 40 in. deep
Monadnock	142	0.6	2.0	2.00	6.0	B	2	Loose till, sandy textures	frigid	oamy over sandy, sandy-skeleta	yes	gravelly loamy sand in C
Monarda	569	0.2	2.0	0.02	0.2	D	5	Firm, platy, silty till, schist & phyllite	frigid	loamy	no	
Monson	133	0.6	2.0	0.60	2.0	D	4	Friable till, silty, schist & phyllite	frigid	loamy	yes	less than 20 in. deep
Montauk	44	0.6	6.0	0.06	0.6	C	3	Firm, platy, sandy till	mesic	loamy	no	loamy sand in Cd
Moosilauke	414	6.0	20.0	6.00	20.0	C	5	Loose till, sandy textures	frigid	sandy	no	

Soil Series	legend number	Ksat low - B in/hr	Ksat high - B in/hr	Ksat low - C in/hr	Ksat high - C in/hr	Hyd. Grp.	Group	Land Form	Temp.	Soil Textures	Spodosol ?	Other
Mundal	610	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	yes	gravelly sandy loam in Cd
Natchaug	496			0.20	2.0	D	6	Organic Materials - Freshwater	mesic	loamy	no	organic over loam
Naumburg	214	6.0	20.0	6.00	20.0	C	5	Outwash and Stream Terraces	frigid	sandy	yes	
Newfields	444	0.6	2.0	0.60	2.0	B	3	Loose till, sandy textures	mesic	loamy over sandy	no	sandy or sandy-skeletal
Nicholville	632	0.6	2.0	0.60	2.0	C	3	Terraces and glacial lake plains	frigid	silty	yes	very fine sandy loam
Ninigret	513	0.6	6.0	6.00	20.0	B	3	Outwash and Stream Terraces	mesic	loamy over sandy	no	sandy or sandy-skeletal
Occum	1	0.6	2.0	6.00	20.0	B	2	Flood Plain (Bottom Land)	mesic	loamy	no	loamy over loamy sand
Ondawa	101	0.6	6.0	6.00	20.0	B	2	Flood Plain (Bottom Land)	frigid	loamy	no	loamy over loamy sand
Ondawa	201	0.6	6.0	6.00	20.0	B	2	Flood Plain (Bottom Land)	frigid	loamy	no	occ flood, loamy over l. sand
Ossipee	495			0.20	2.0	D	6	Organic Materials - Freshwater	frigid	loamy	no	organic over loam
Pawcatuck	497			20.00	100.0	D	6	Tidal Flat	mesic	sandy or sandy-skeletal	no	organic over sand
Paxton	66	0.6	2.0	0.00	0.2	C	3	Firm, platy, loamy till	mesic	loamy	no	
Peacham	549	0.6	2.0	0.00	0.2	D	6	Firm, platy, silty till, schist & phylitte	frigid	loamy	no	organic over loam
Pemi	633	0.6	2.0	0.06	0.6	C	5	Terraces and glacial lake plains	frigid	silty	no	
Pennichuck	460	0.6	2.0	0.60	2.0	B	4	Friable till, silty, schist & phyllite	mesic	loamy-skeletal	no	20 to 40 in. deep
Peru	78	0.6	2.0	0.06	0.6	C	3	Firm, platy, loamy till	frigid	loamy	yes	
Pillsbury	646	0.6	2.0	0.06	0.2	C	5	Firm, platy, loamy till	frigid	silty	no	
Pipestone	314					B	5	Outwash and Stream Terraces	mesic	sandy	yes	
Pittstown	334	0.6	2.0	0.06	0.2	C	3	Firm, platy, silty till, schist & phyllite	mesic	loamy	no	channery silt loam in Cd
Plaisted	563	0.6	2.0	0.06	0.6	C	3	Firm, platy, silty till, schist & phyllite	frigid	loamy	yes	channery silt loam in Cd
Podunk	104	0.6	6.0	6.00	20.0	B	3	Flood Plain (Bottom Land)	frigid	loamy	no	loamy to coarse sand in C
Pondicherry	992			6.00	20.0	D	6	Organic Materials - Freshwater	frigid	sandy or sandy-skeletal	no	organic over sand
Poocham	230	0.6	2.0	0.20	2.0	B	3	Terraces and glacial lake plains	mesic	silty	no	silt loam in C
Pootatuck	4	0.6	6.0	6.00	20.0	B	3	Flood Plain (Bottom Land)	mesic	loamy	no	single grain in C
Quonset	310	2.0	20.0	20.00	100.0	A	1	Outwash and Stream Terraces	mesic	sandy-skeletal	no	shale
Rawsonville	98	0.6	6.0	0.60	6.0	C	4	Loose till, bedrock	frigid	loamy	yes	20 to 40 in. deep
Raynham	533	0.2	2.0	0.06	0.2	C	5	Terraces and glacial lake plains	mesic	silty	no	
Raypol	540	0.6	2.0	6.00	100.0	D	5	Outwash and Stream Terraces	mesic	co. loamy over sandy (skeletal)	no	
Redstone	665	2.0	6.0	6.00	20.0	A	1	Weathered Bedrock Till	frigid	fragmental	yes	loamy cap
Ricker	674	2.0	6.0	2.00	6.0	A	4	rganic over bedrock (up to 4" of minera	cryic	fibric to hemic	no	well drained, less than 20 in. deep
Ridgebury	656	0.6	6.0	0.00	0.2	C	5	Firm, platy, loamy till	mesic	loamy	no	
Rippowam	5	0.6	6.0	6.00	20.0	C	5	Flood Plain (Bottom Land)	mesic	loamy	no	
Roundabout	333	0.2	2.0	0.06	0.6	C	5	Terraces and glacial lake plains	frigid	silty	no	silt loam in the C
Rumney	105	0.6	6.0	6.00	20.0	C	5	Flood Plain (Bottom Land)	frigid	loamy	no	
Saco	6	0.6	2.0	6.00	20.0	D	6	Flood Plain (Bottom Land)	mesic	silty	no	strata
Saddleback	673	0.6	2.0	0.60	2.0	C/D	4	Loose till, bedrock	cryic	loamy	yes	less than 20 in. deep
Salmon	630	0.6	2.0	0.60	2.0	B	2	Terraces and glacial lake plains	frigid	silty	yes	very fine sandy loam
Saugatuck	16	0.06	0.2	6.00	20.0	C	5	Outwash and Stream Terraces	mesic	sandy	yes	ortstein
Scantic	233	0.0	0.2	0.00	0.2	D	5	Silt and Clay Deposits	frigid	fine	no	
Scarboro	115	6.0	20.0	6.00	20.0	D	6	Outwash and Stream Terraces	mesic	sandy	no	organic over sand, non stony
Scio	531	0.6	2.0	0.60	2.0	B	3	Terraces and glacial lake plains	mesic	silty	no	gravelly sand in 2C
Scitico	33	0.0	0.2	0.00	0.2	C	5	Silt and Clay Deposits	mesic	fine	no	
Scituate	448	0.6	2.0	0.06	0.2	C	3	Firm, platy, sandy till	mesic	loamy	no	loamy sand in Cd
Searsport	15	6.0	20.0	6.00	20.0	D	6	Outwash and Stream Terraces	frigid	sandy	no	organic over sand
Shaker	439	2.0	6.0	0.00	0.2	C	5	Sandy/loamy over silt/clay	mesic	co. loamy over clayey	no	
Shapleigh	136					C/D	4	Sandy Till	mesic	sandy	yes	less than 20 in. deep
Sheepscot	14	6.0	20.0	6.00	20.0	B	3	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	gravelly coarse sand
Sisk	667	0.6	2.0	0.00	0.6	C	3	Firm, platy, loamy till	cryic	loamy	yes	sandy loam in Cd
Skerry	558	0.6	2.0	0.06	0.6	C	3	Firm, platy, sandy till	frigid	loamy	yes	loamy sand in Cd
Squamscott	538	6.0	20.0	0.06	0.6	C	5	Sandy/loamy over silt/clay	mesic	sandy over loamy	yes	
Stetson	523	0.6	6.0	6.00	20.0	B	2	Outwash and Stream Terraces	frigid	sandy-skeletal	yes	loamy over gravelly
Stissing	340	0.6	2.0	0.06	0.2	C	5	Firm, platy, silty till, schist & phyllite	mesic	loamy	no	
Success	154	2.0	6.0	6.00	20.0	A	1	Sandy Till	frigid	sandy-skeletal	yes	cemented
Sudbury	118	2.0	6.0	2.00	20.0	B	3	Outwash and Stream Terraces	mesic	sandy	no	loam over gravelly sand

Soil Series	legend number	Ksat low - B in/hr	Ksat high - B in/hr	Ksat low - C in/hr	Ksat high - C in/hr	Hyd. Grp.	Group	Land Form	Temp.	Soil Textures	Spodosol ?	Other
Suffield	536	0.6	2.0	0.00	0.2	C	3	Sandy/loamy over silt/clay	mesic	silty over clayey	no	deep to clay C
Sunapee	168	0.6	2.0	0.60	6.0	B	3	Loose till, loamy textures	frigid	loamy	yes	
Sunapee var	269	0.6	2.0	0.60	6.0	B	3	Loose till, loamy textures	frigid	loamy	yes	frigid dystrudept
Suncook	2	6.0	20.0	6.00	20.0	A	1	Flood Plain (Bottomland)	mesic	sandy	no	occasionally flooded
Suncook	402	6.0	20.0	6.00	20.0	A	1	Flood Plain (Bottomland)	mesic	sandy	no	frequent flooding
Sunday	102	6.0	20.0	6.00	20.0	A	1	Flood Plain (Bottomland)	frigid	sandy	no	occasionally flooded
Sunday	202	6.0	20.0	6.00	20.0	A	1	Flood Plain (Bottomland)	frigid	sandy	no	frequently flooded
Surplus	669	0.6	2.0	0.00	0.6	C	3	Firm, platy, loamy till	cryic	loamy	yes	mwd, sandy loam in Cd
Sutton	68	0.6	6.0	0.60	6.0	B	3	Loose till, loamy textures	mesic	loamy	no	
Swanton	438	2.0	6.0	0.00	0.2	C	5	Sandy/loamy over silt/clay	frigid	co. loamy over clayey	no	
Telos	123	0.6	2.0	0.02	0.2	C	3	Firm, platy, silty till, schist & phyllite	frigid	loamy	yes	channery silt loam in Cd
Thorndike	84	0.6	2.0	0.60	2.0	C/D	4	Friable till, silty, schist & phyllite	frigid	loamy-skeletal	yes	less than 20 in. deep
Timakwa	393			6.00	100.0	D	6	Organic Materials - Freshwater	mesic	sandy or sandy-skeletal	no	organic over sand
Tunbridge	99	0.6	6.0	0.60	6.0	C	4	Loose till, bedrock	frigid	loamy	yes	20 to 40 in. deep
Unadilla	30	0.6	2.0	2.00	20.0	B	2	Terraces and glacial lake plains	mesic	silty	no	silty over gravelly
Vassalboro	150					D	6	Organic Materials - Freshwater	frigid	peat	no	deep organic
Walpole	546	2.0	6.0	6.00	20.0	C	5	Outwash and Stream Terraces	mesic	sandy	no	
Wareham	34	6.0	20.0	6.00	20.0	C	5	Outwash and Stream Terraces	mesic	sandy	no	
Warwick	210	2.0	6.0	20.00	100.0	A	1	Outwash and Stream Terraces	mesic	loamy-skeletal	no	loamy over slate gravel
Waskish	195					D	6	Organic Materials - Freshwater	frigid	peat	no	deep organic
Waumbeck	58	2.0	20.0	6.00	20.0	B	3	Loose till, sandy textures	frigid	sandy-skeletal	yes	very cobbly loamy sand
Westbrook	597			0.00	2.0	D	6	Tidal Flat	mesic	loamy	no	organic over loam
Whitman	49	0.0	0.2	0.00	0.2	D	6	Firm, platy, loamy till	mesic	loamy	no	mucky loam
Windsor	26	6.0	20.0	6.00	20.0	A	1	Outwash and Stream Terraces	mesic	sandy	no	
Winnecook	88	0.6	2.0	0.60	2.0	C	4	Friable till, silty, schist & phyllite	frigid	loamy-skeletal	yes	20 to 40 in. deep
Winooski	9	0.6	6.0	0.60	6.0	B		Flood Plain (Bottom Land)	mesic	silty over loamy	no	
Winooski	103	0.6	6.0	0.60	6.0	B	3	Flood Plain (Bottom Land)	mesic	silty	no	very fine sandy loam
Wonsqueak	995			0.20	2.0	D	6	Organic Materials - Freshwater	frigid	loamy	no	organic over loam
Woodbridge	29	0.6	2.0	0.00	0.6	C	3	Firm, platy, loamy till	mesic	loamy	no	sandy loam in Cd
Woodstock	93	2.0	6.0	2.00	6.0	C/D	4	Loose till, bedrock	frigid	loamy	no	less than 20 in. deep

no longer recognized

organic materials

TABLE 6-4.1 -- RUNOFF CURVE NUMBERS (Average Watershed Condition)

COVER DESCRIPTION Cover type and hydrologic condition	Average percent impervious area[2]	CURVE NUMBERS FOR HYDROLOGIC SOIL GROUP A	B	C	D
FULLY DEVELOPED URBAN AREAS[1] (Vegetation Established)					
Lawns, open spaces, parks, golf courses, cemeteries, etc.					
good condition; grass cover on 75% or more of the area		39	61	74	80
fair condition; grass cover on 50% to 75% of the area		49	69	79	84
poor condition; grass cover on 50% or less of the area		68	79	86	89
Paved parking lots, roofs, driveways, etc.		98	98	98	98
Streets and roads;					
paved with curbs and storm sewers		98	98	98	98
gravel		76	85	89	91
dirt		72	82	87	89
paved with open ditches		83	89	92	93
Commercial and business areas	85	89	92	94	95
Industrial districts	72	81	88	91	93
Row houses, town houses, and residential with lot sizes 1/8 acre or less	65	77	85	90	92
Residential					
Average lot size					
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acre	12	46	65	77	82
DEVELOPING URBAN AREAS[3] (No vegetation Established)					
Newly graded area		77	86	91	94

1. For land uses with impervious areas, curve numbers are computed assuming that 100% of runoff from impervious areas is directly connected to the drainage system. Pervious areas (lawn) are considered to be equivalent to lawns in good condition and the impervious areas have an RCN of 98.

2. Includes paved streets.

3. Use for the design of temporary measures during grading and construction. Impervious area percent for urban areas under development vary considerably. The user will determine the percent impervious. Then using the newly graded area RCN and Table 6-4, the composite RCN can be computed for any degree of development.

Source: USDA Soil Conservation Service

TABLE 6-4.2 -- RUNOFF CURVE NUMBERS (Average Watershed Condition)

COVER DESCRIPTION		Hydrologic condition[4]	CURVE NUMBERS FOR HYDROLOGIC SOIL GROUP			
Cover type and hydrologic condition			A	B	C	D
CULTIVATED AGRICULTURAL LAND						
Fallow	Bare soil		77	86	91	94
	Crop residue cover (CR)	poor	76	85	90	93
	CR	good	74	83	88	90
Row crops	Straight row (SR)	poor	72	81	88	91
	SR	good	67	78	85	89
	SR & CR	poor	71	80	87	90
	SR & CR	good	64	75	82	85
	Contoured (C)	poor	70	79	84	88
	C	good	65	75	82	86
	C & CR	poor	69	78	83	87
	C & CR	good	64	74	81	85
	Contoured & Terraces (C&T)	poor	66	74	80	82
	C&T	good	62	71	78	81
	C&T & CR	poor	65	73	79	81
	C&T & CR	good	61	70	77	80
Small grain	SR	poor	65	76	84	88
	SR	good	63	75	83	87
	SR & CR	poor	64	75	83	86
	SR & CR	good	60	72	80	84
	C	poor	63	74	82	85
	C	good	61	73	81	84
	C & CR	poor	62	73	81	84
	C & CR	good	60	72	80	83
	C&T	poor	61	72	79	82
	C&T	good	59	70	78	81
	C&T & CR	poor	60	71	78	81
	C&T & CR	good	58	69	77	80
Close-seeded Legumes or Rotation Meadow[5]	SR	poor	66	77	85	89
	SR	good	58	72	81	85
	C	poor	64	75	83	85
	C	good	55	69	78	83
	C&T	poor	63	73	80	83
	C&T	good	51	67	76	80

4. For conservation tillage poor hydrologic condition, 5 to 20 percent of the surface is covered with residue (less than 750 #/acre row crops or 300#/acre small grain).
   For conservation tillage good hydrologic condition, more than 20 percent of the surface is covered with residue (greater than 750 #/acre row crops or 300 #/acre small grain).
5. Close-drilled or broadcast.

Source: USDA Soil Conservation Service

TABLE 6-4.3 -- RUNOFF CURVE NUMBERS (Average Watershed Condition)

COVER DESCRIPTION Cover type and hydrologic condition	Hydrologic condition[6]	CURVE NUMBERS FOR HYDROLOGIC SOIL GROUP A	B	C	D
NON-CULTIVATED AGRICULTURAL LAND					
Pasture, grassland, or range - continuous forage for grazing	poor	68	79	86	89
	fair	49	69	79	84
	good	39	61	74	80
Meadow - continuous grass, protected from grazing and generally mowed for hay	---	30	58	71	78
Woods-grass combination (orchard or tree farm)	poor	57	73	82	86
	fair	43	65	76	82
	good	32	58	72	79
Brush - brush-weed-grass mixture with brush the major element	poor	48	67	77	83
	fair	35	56	70	77
	good	30	48	65	73
Woods	poor	45	66	77	83
	fair	36	60	73	79
	good	30	55	70	77
Farmsteads - buildings, lanes, driveways, and surrounding lots	---	59	74	82	86

6. Poor hydrologic condition has less than 50 percent ground cover density.
Fair hydrologic condition has between 50 and 75 percent ground cover density.
Good hydrologic condition has more than 75 percent ground cover density.

Source: USDA Soil Conservation Service

VALUES OF THE ROUGHNESS COEFFICIENT *n*
(Boldface figures are values generally recommended in design)

Type of channel and description	Minimum	Normal	Maximum
A. CLOSED CONDUITS FLOWING PARTLY FULL			
A-1. Metal			
a. Brass, smooth	0.009	**0.010**	0.013
b. Steel			
1. Lockbar and welded	0.010	0.012	0.014
2. Riveted and spiral	0.013	0.016	0.017
c. Cast iron			
1. Coated	0.010	0.013	0.014
2. Uncoated	0.011	0.014	0.016
d. Wrought iron			
1. Black	0.012	0.014	0.015
2. Galvanized	0.013	0.016	0.017
e. Corrugated metal			
1. Subdrain	0.017	0.019	0.021
2. Storm drain	0.021	**0.024**	0.030
A-2. Nonmetal			
a. Lucite	0.008	0.009	0.010
b. Glass	0.009	**0.010**	0.013
c. Cement			
1. Neat, surface	0.010	0.011	0.013
2. Mortar	0.011	0.013	0.015
d. Concrete			
1. Culvert, straight and free of debris	0.010	0.011	0.013
2. Culvert with bends, connections, and some debris	0.011	**0.013**	0.014
3. Finished	0.011	0.012	0.014
4. Sewer with manholes, inlet, etc., straight	0.013	0.015	0.017
5. Unfinished, steel form	0.012	0.013	0.014
6. Unfinished, smooth wood form	0.012	**0.014**	0.016
7. Unfinished, rough wood form	0.015	0.017	0.020
e. Wood			
1. Stave	0.010	0.012	0.014
2. Laminated, treated	0.015	0.017	0.020
f. Clay			
1. Common drainage tile	0.011	**0.013**	0.017
2. Vitrified sewer	0.011	0.014	0.017
3. Vitrified sewer with manholes, inlet, etc.	0.013	0.015	0.017
4. Vitrified subdrain with open joint	0.014	0.016	0.018
g. Brickwork			
1. Glazed	0.011	0.013	0.015
2. Lined with cement mortar	0.012	0.015	0.017
h. Sanitary sewers coated with sewage slimes, with bends and connections	0.012	0.013	0.016
i. Paved invert, sewer, smooth bottom	0.016	0.019	0.020
j. Rubble masonry, cemented	0.018	0.025	0.030

VALUES OF THE ROUGHNESS COEFFICIENT *n* (*continued*)

Type of channel and description	Minimum	Normal	Maximum
B. LINED OR BUILT-UP CHANNELS			
B-1. Metal			
a. Smooth steel surface			
1. Unpainted	0.011	**0.012**	0.014
2. Painted	0.012	0.013	0.017
b. Corrugated	0.021	0.025	0.030
B-2. Nonmetal			
a. Cement			
1. Neat, surface	0.010	0.011	0.013
2. Mortar	0.011	0.013	0.015
b. Wood			
1. Planed, untreated	0.010	0.012	0.014
2. Planed, creosoted	0.011	0.012	0.015
3. Unplaned	0.011	0.013	0.015
4. Plank with battens	0.012	0.015	0.018
5. Lined with roofing paper	0.010	0.014	0.017
c. Concrete			
1. Trowel finish	0.011	**0.013**	0.015
2. Float finish	0.013	0.015	0.016
3. Finished, with gravel on bottom	0.015	0.017	0.020
4. Unfinished	0.014	0.017	0.020
5. Gunite, good section	0.016	0.019	0.023
6. Gunite, wavy section	0.018	0.022	0.025
7. On good excavated rock	0.017	0.020	
8. On irregular excavated rock	0.022	0.027	
d. Concrete bottom float finished with sides of			
1. Dressed stone in mortar	0.015	0.017	0.020
2. Random stone in mortar	0.017	0.020	0.024
3. Cement rubble masonry, plastered	0.016	0.020	0.024
4. Cement rubble masonry	0.020	0.025	0.030
5. Dry rubble or riprap	0.020	0.030	0.035
e. Gravel bottom with sides of			
1. Formed concrete	0.017	0.020	0.025
2. Random stone in mortar	0.020	0.023	0.026
3. Dry rubble or riprap	0.023	0.033	0.036
f. Brick			
1. Glazed	0.011	**0.013**	0.015
2. In cement mortar	0.012	**0.015**	0.018
g. Masonry			
1. Cemented rubble	0.017	0.025	0.030
2. Dry rubble	0.023	0.032	0.035
h. Dressed ashlar	0.013	0.015	0.017
i. Asphalt			
1. Smooth	0.013	0.013	
2. Rough	0.016	0.016	
j. Vegetal lining	0.030	.....	0.500

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VALUES OF THE ROUGHNESS COEFFICIENT *n* (*continued*)

Type of channel and description	Minimum	Normal	Maximum
C. EXCAVATED OR DREDGED			
a. Earth, straight and uniform			
1. Clean, recently completed	0.016	0.018	0.020
2. Clean, after weathering	0.018	0.022	0.025
3. Gravel, uniform section, clean	0.022	0.025	0.030
4. With short grass, few weeds	0.022	0.027	0.033
b. Earth, winding and sluggish			
1. No vegetation	0.023	0.025	0.030
2. Grass, some weeds	0.025	0.030	0.033
3. Dense weeds or aquatic plants in deep channels	0.030	0.035	0.040
4. Earth bottom and rubble sides	0.028	0.030	0.035
5. Stony bottom and weedy banks	0.025	0.035	0.040
6. Cobble bottom and clean sides	0.030	0.040	0.050
c. Dragline-excavated or dredged			
1. No vegetation	0.025	0.028	0.033
2. Light brush on banks	0.035	0.050	0.060
d. Rock cuts			
1. Smooth and uniform	0.025	0.035	0.040
2. Jagged and irregular	0.035	0.040	0.050
e. Channels not maintained, weeds and brush uncut			
1. Dense weeds, high as flow depth	0.050	0.080	0.120
2. Clean bottom, brush on sides	0.040	0.050	0.080
3. Same, highest stage of flow	0.045	0.070	0.110
4. Dense brush, high stage	0.080	0.100	0.140
D. NATURAL STREAMS			
D-1. Minor streams (top width at flood stage <100 ft)			
a. Streams on plain			
1. Clean, straight, full stage, no rifts or deep pools	0.025	0.030	0.033
2. Same as above, but more stones and weeds	0.030	0.035	0.040
3. Clean, winding, some pools and shoals	0.033	0.040	0.045
4. Same as above, but some weeds and stones	0.035	0.045	0.050
5. Same as above, lower stages, more ineffective slopes and sections	0.040	0.048	0.055
6. Same as 4, but more stones	0.045	0.050	0.060
7. Sluggish reaches, weedy, deep pools	0.050	0.070	0.080
8. Very weedy reaches, deep pools, or floodways with heavy stand of timber and underbrush	0.075	0.100	0.150

VALUES OF THE ROUGHNESS COEFFICIENT *n* (*continued*)

Type of channel and description	Minimum	Normal	Maximum
b. Mountain streams, no vegetation in channel, banks usually steep, trees and brush along banks submerged at high stages			
1. Bottom: gravels, cobbles, and few boulders	0.030	0.040	0.050
2. Bottom: cobbles with large boulders	0.040	0.050	0.070
D-2. Flood plains			
a. Pasture, no brush			
1. Short grass	0.025	0.030	0.035
2. High grass	0.030	0.035	0.050
b. Cultivated areas			
1. No crop	0.020	0.030	0.040
2. Mature row crops	0.025	0.035	0.045
3. Mature field crops	0.030	0.040	0.050
c. Brush			
1. Scattered brush, heavy weeds	0.035	0.050	0.070
2. Light brush and trees, in winter	0.035	0.050	0.060
3. Light brush and trees, in summer	0.040	0.060	0.080
4. Medium to dense brush, in winter	0.045	0.070	0.110
5. Medium to dense brush, in summer	0.070	0.100	0.160
d. Trees			
1. Dense willows, summer, straight	0.110	0.150	0.200
2. Cleared land with tree stumps, no sprouts	0.030	0.040	0.050
3. Same as above, but with heavy growth of sprouts	0.050	0.060	0.080
4. Heavy stand of timber, a few down trees, little undergrowth, flood stage below branches	0.080	0.100	0.120
5. Same as above, but with flood stage reaching branches	0.100	0.120	0.160
D-3. Major streams (top width at flood stage >100 ft). The *n* value is less than that for minor streams of similar description, because banks offer less effective resistance.			
a. Regular section with no boulders or brush	0.025	.....	0.060
b. Irregular and rough section	0.035	.....	0.100

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Appendix D1: Broad-Crested Weir Coefficients for Sharp-Edged Crests

The following table lists *English* weir coefficients for broad crested weirs with a sharp-edged crest of various breadths. These coefficients are automatically entered into the lookup table for a broad crested weir whenever a crest breadth is entered as described on page 89. If breadth falls between two listed values, interpolated coefficients are automatically used. Breadths outside the listed range will use the first or last coefficient values without extrapolation. Values are automatically converted to the current input units as described on page 43.

	Weir Breadth--(ft)										
Head	0.50	0.75	1.00	1.50	2.00	2.50	3.00	4.00	5.00	10.0	15.0
0.2	2.80	2.75	2.69	2.62	2.54	2.48	2.44	2.38	2.34	2.49	2.68
0.4	2.92	2.80	2.72	2.64	2.61	2.60	2.58	2.54	2.50	2.56	2.70
0.6	3.08	2.89	2.75	2.64	2.61	2.60	2.68	2.69	2.70	2.70	2.70
0.8	3.30	3.04	2.85	2.68	2.60	2.60	2.67	2.68	2.68	2.69	2.64
1.0	3.32	3.14	2.98	2.75	2.66	2.64	2.65	2.67	2.68	2.68	2.63
1.2	3.32	3.20	3.08	2.86	2.70	2.65	2.64	2.67	2.66	2.69	2.64
1.4	3.32	3.26	3.20	2.92	2.77	2.68	2.64	2.65	2.65	2.67	2.64
1.6	3.32	3.29	3.28	3.07	2.89	2.75	2.68	2.66	2.65	2.64	2.63
1.8	3.32	3.32	3.31	3.07	2.88	2.74	2.68	2.66	2.65	2.64	2.63
2.0	3.32	3.31	3.30	3.03	2.85	2.76	2.72	2.68	2.65	2.64	2.63
2.5	3.32	3.32	3.31	3.28	3.07	2.89	2.81	2.72	2.67	2.64	2.63
3.0	3.32	3.32	3.32	3.32	3.20	3.05	2.92	2.73	2.66	2.64	2.63
3.5	3.32	3.32	3.32	3.32	3.32	3.19	2.97	2.76	2.68	2.64	2.63
4.0	3.32	3.32	3.32	3.32	3.32	3.32	3.07	2.79	2.70	2.64	2.63
4.5	3.32	3.32	3.32	3.32	3.32	3.32	3.32	2.88	2.74	2.64	2.63
5.0	3.32	3.32	3.32	3.32	3.32	3.32	3.32	3.07	2.79	2.64	2.63
5.5	3.32	3.32	3.32	3.32	3.32	3.32	3.32	3.32	2.88	2.64	2.63

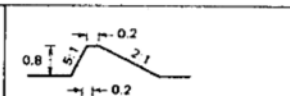
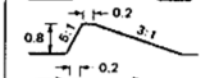
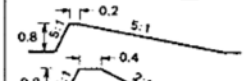
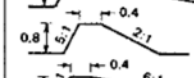
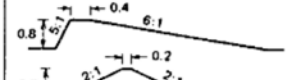
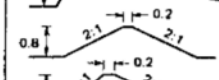
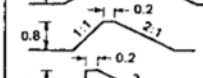
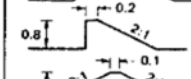
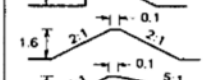
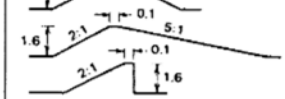
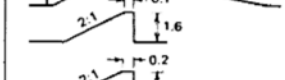
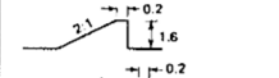
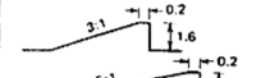
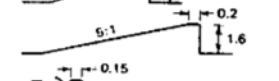
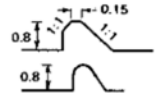
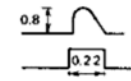
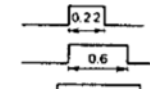
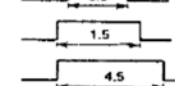
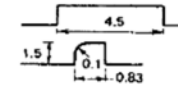
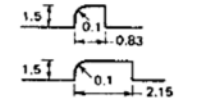
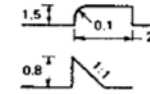
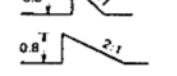
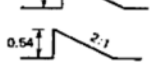
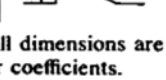
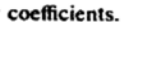
This table was derived from information in HANDBOOK OF HYDRAULICS by Brater and King, 1976.

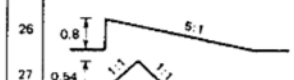
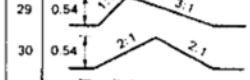
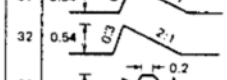
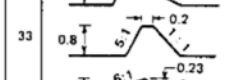
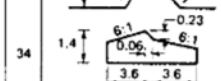
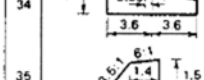
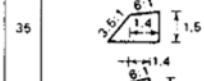
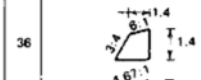
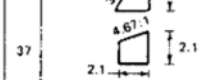
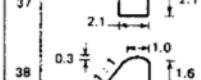
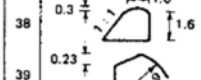
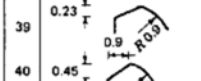
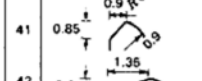
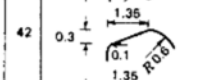
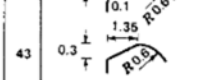
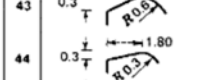
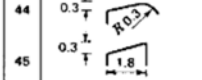
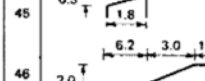
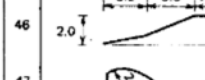
Appendix D2: Broad-Crested Weir Coefficients for Assorted Profiles

Coefficients for the following weirs may be entered automatically by specifying the appropriate Profile ID number on the HydroCAD weir screen.

Note: This table contains *metric* weir coefficients. To obtain English coefficients **multiply the values in this table by 1.811** as described on page 43.

Discharge Coefficients for Broad-Crested Weirs

	Cross section	Upstream head h [m]							
		0.15	0.30	0.45	0.60	0.75	0.90	1.20	1.50
1		1.61	1.86	1.98					
2		1.60	1.80	1.90					
3		1.58	1.75	1.79					
4		1.53	1.64	1.77					
5		1.54	1.62	1.69					
6		1.72	1.88	1.98					
7		1.65	1.88	2.00					
8		1.53	1.80	1.93					
9					1.96	1.96	1.97	1.99	2.02
10					1.94	1.92	1.89	1.92	1.97
11			2.12	2.10	2.08	2.08	2.06	2.04	2.00
12			1.88	1.96	2.01	2.04	2.05	2.05	2.05
13					1.96	1.96	1.96	1.96	1.96
14					1.86	1.86	1.86	1.86	1.86
15		1.81	2.00						
16		2.10	2.35						
17		1.57	1.73	1.80	1.82	1.83	1.83		
18		1.44	1.46	1.55	1.56	1.69	1.76	1.84	
19		1.43	1.47	1.45	1.46	1.47	1.46	1.48	1.59
20		1.48	1.45	1.44	1.44				
21			1.56	1.60	1.65	1.70	1.74	1.84	1.92
22			1.56	1.56	1.55	1.55	1.55	1.55	1.54
23		2.13	2.13	2.13					
24		1.93	1.94	1.94					
25		1.94	1.98	1.97					

	Cross section	Upstream head h [m]							
		0.15	0.30	0.45	0.60	0.75	0.90	1.20	1.50
26		1.69	1.73	1.73					
27		2.28	2.25	2.06					
28		2.08	2.12	2.12					
29		1.92	1.93	1.92					
30		2.10	2.13	2.13					
31		2.03	2.03	2.01					
32		2.03	2.03	2.01					
33		1.65	1.94	2.10					
34			1.72	1.76	1.76	1.76	1.76	1.76	1.76
35				1.87	1.84	1.81	1.82	1.82	1.85
36			1.91	1.90	1.87	1.84	1.83	1.86	1.90
37						1.89	1.87	1.87	1.88
38			1.81	1.81	1.82	1.86	1.90	1.97	2.01
39		1.13	1.82 1.89	1.83 1.90	1.85 1.88	1.87 1.88	1.88 1.90	1.95	2.05
40		1.76	1.86 1.92	1.90 1.98	1.93 2.06	1.96 2.04	1.97 2.04	2.03	2.11
41		1.72	1.90	2.00	2.06	2.10	2.13		
42		1.78	1.84	1.89	1.93	1.97	2.00		
43		1.75	1.81	1.85	1.88	1.90	1.92	1.95	
44		1.80	1.92	1.95	1.94	1.85	1.82		
45		1.94	1.94	1.95	1.92	1.85	1.81	1.79	
46		1.72	1.72	1.70	1.72	1.76	1.79	1.85	
47		1.70	1.71	1.82					
48			2.09						

*All dimensions are in meters. Tabulated values represent metric weir coefficients.

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Appendix E: Culvert Entrance Loss Coefficients

The following table lists entrance loss coefficients for concrete, corrugated metal, and box culverts. These values are automatically provided by HydroCAD when the corresponding entrance description is selected for a given culvert.

Although comparable data is not available for corrugated plastic pipe, it is believed to be similar to corrugated metal, and the same entries are listed for "CPP" in the internal lookup table.

Entrance Loss Coefficients.

Type of Structure and Design of Entrance	Coefficient, k_e
Pipe, Concrete	
Projecting from fill, groove end	0.2
Projecting from fill, sq. cut end	0.5
Headwall or headwall and wingwalls	
Groove end of pipe	0.2
Square-edge	0.5
Rounded (radius = 1/12D)	0.1
Mitered to conform to fill slope	0.7
End-Section conforming to fill slope*	0.5
Pipe, or Pipe-Arch, Corrugated Metal	
Projecting from fill (no headwall)	0.9
Headwall or headwall end wingwalls	
Square-edge	0.5
Mitered to conform to fill slope	0.7
End-Section conforming to fill slope*	0.5
Box, Reinforced Concrete	
Headwall parallel to embankment (no wingwalls)	
Square-edged on 3 edges	0.5
Rounded on 3 edges to radius of 1/12 barrel dimension	0.2
Wingwalls at 30° to 75° to barrel	
Square-edged at crown	0.4
Crown edge rounded to radius of 1/12 barrel dimension	0.2
Wingwalls at 10° to 30° to barrel	
Square-edged at crown	0.5
Wingwalls parallel (extension of sides)	
Square-edged at crown	0.7

*Note: "End Section conforming to fill slope", made of either metal or concrete, are the sections commonly available from manufacturers. From limited hydraulic tests they are equivalent in operation to a headwall in both inlet and outlet control. Some end sections, incorporating a closed taper have a superior hydraulic performance.

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Appendix F: Sheet Flow Roughness Coefficients

HydroCAD provides the following table of roughness coefficients for use with the Sheet Flow procedure (see page 54). This information is taken directly from NEH Table 15-1, with slight abbreviation of the descriptions. If you decide to substitute other roughness coefficients, note that these values are specifically for sheet flow, and are generally larger than the regular Manning's numbers for comparable surfaces.

Surface Description	n
Smooth surfaces	.011
Fallow	.05
Cultivated: Residue<=20%	.06
Cultivated: Residue>20%	.17
Grass: Short	.15
Grass: Dense	.24
Grass: Bermuda	.41
Range	.13
Woods: Light underbrush	.40
Woods: Dense underbrush	.80

Note: These coefficients may also be appropriate when using a reach to model artificially created sheet flow (as from a level spreader) as long as the depth of flow is limited to approximately 1/10 foot.

Appendix G: Velocity Factors

The Shallow Concentrated Flow procedure (a.k.a. Upland Method) uses a *velocity factor*, K_V, as listed below. The first two surfaces (paved and unpaved) are the basis for TR-55 Figure 3-1, and the factors were originally obtained from TR-55 Appendix F. The remaining surfaces were taken from NEH-4 Figure 15.2, with the factors derived from that chart. Subsequent revisions to NEH Part 630 provide *numerical* K_V values which are in good agreement with the original chart, except for "Grassed Waterways", which appears to have changed from 15.0 to 16.13, making it the same as the TR-55 "Unpaved" condition. For compatibility with previous calculations, the HydroCAD lookup table continues to supply the original K_V values as listed below. If different values are required for any reason, HydroCAD allows direct K_V entry instead of using the lookup table. See page 55 for further details on Shallow Concentrated Flow.

Surface Description	K_V [ft/sec]	K_V [m/sec]
Paved	20.33	6.2
Unpaved	16.13	4.92
Grassed Waterway	15.0	4.57
Nearly Bare & Untilled	10.0	3.05
Cultivated Straight Rows	9.0	2.74
Short Grass Pasture	7.0	2.13
Woodland	5.0	1.52
Forest w/Heavy Litter	2.5	0.76

Some descriptions have been abbreviated. Velocity factors have the same units as a velocity, and may be converted between English and metric as described on page 43.

H y d r o C A D ®

Stormwater Modeling System

Version 10

Owner's Manual

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ISBN 978-0-913633-15-1

6182 rev. 7/27/11

COREY MACKOUL

Stormwater Management, Maintenance & Inspection Plan

89 Stark Ave
Dover, New Hampshire

May 2026

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Prepared by: Tritech Engineering Corporation
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Dover, New Hampshire 03820

Introduction

Tritech Engineering Corporation has prepared the following Stormwater Management System Inspection & Maintenance Plan for 89 Stark Ave, located on southern side of Stark Ave, Dover, New Hampshire. The intent of this plan is to provide Corey MacKoul with a list of procedures that document the inspection and maintenance requirements of the Stormwater Management System for this development.

The following inspection and maintenance program is necessary in order to keep the Stormwater Management System functioning properly. By following the enclosed procedures, Corey MacKoul, 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.

Corey MacKoul, or its successors, heirs and assigns, will be responsible for implementing the required inspections and reporting over the expected life of the system.

Stormwater Management System Components

The 89 Stark Ave Stormwater Management System is designed to mitigate both the quantity and quality of site-generated stormwater runoff. As a result, its design includes the following elements:

Non-Structural BMP's

Non-Structural best management practices (BMP's) are designed to minimize and/or remove contaminants before they enter the stormwater collection system. Several of these BMP's have been incorporated into the Stormwater Management System including pavement sweeping, reduced use of road salt, and litter/trash removal. These types of BMP's are a highly effective initial treatment measure for reducing stormwater pollutant loading.

Closed Drainage Collection and Piping System

The closed drainage system is designed to collect and convey stormwater runoff from the roof paved areas and infiltrate stormwater back into the water table. Stormwater is collected in deep sump hooded catch basins for pre-treatment before being routed to the Bioretention area for treatment and infiltration.

Drainage Swales

The drainage swales are designed to collect and convey stormwater runoff from the roof paved areas and infiltrate stormwater back into the water table. Stormwater is collected in drainage swales before being routed to the Bioretention area for treatment and infiltration.

Bioretention Basins

Bioretention Basins collect stormwater from ground runoff, as well as roadway runoff after pretreatment in deep sump hooded catch basins, and allow contaminants and sedimentation to be contained. Bio Retention Pond allows rainwater to be infiltrated and recharge groundwater on the side, and treated excess water is allowed to exit pond through rectangular weir spillway.

Inspection & Maintenance Plan

By implementing the following procedures, Corey MacKoul 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.

Pavement Sweeping:	Sweep Pavement Area at least three times per year or more as necessary. Spring pavement sweeping shall be performed as early as possible.
Litter/Trash Removal:	Routinely inspect all dumpster locations for spillage and clean as necessary.
Deicing Agents:	Use sand as the primary agent for parking lot safety during ice and snow conditions. Minimize the use of road salt (sodium chloride) 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. A deicing log (attached) must be maintained throughout the winter season.
Closed Drainage	Inspect all catch basins monthly for floatable objects and remove as required.
Drainage Swales:	Mow grass to maintain a height of 3 to 4 inches as needed. Remove sediment buildup from bottom of swale if accumulation reaches 25% of original design volume. Remove accumulated trash and debris as needed.
Bioretention Basins	Inspect detention basins twice annually for floatables and remove as required. Inspect detention basins, outlet structure, and outlet weir twice annually and remove accumulated sand and sediment. At least once annually, the system should be inspected for drawdown time. If the bioretention system does not drain within 72 hours following a rainfall event, then a qualified professional should assess the condition of the facility to determine measures required to restore filtration function, including but not limited to removal of sediments, or reconstruction of the filter media. At least once annually, vegetation should be inspected and maintained in a healthy condition, including pruning, removal and replacement of dead or diseased vegetation, and removal of invasive species.
Invasive Species:	During maintenance and inspection activities, check for the presence of invasive species and dispose of in accordance with the procedures contained herein.

Annual Report: Submit an annual Inspection & Maintenance Report to the City of Dover's Planning Department by July 1st of each year. The report should include a summary of the system's maintenance requirements and repairs, and copies of the Inspection & Maintenance Log Sheets as well as the Deicing Log Sheets.

Each inspection shall include photographs of each the BMP being inspected

Additionally, Inspection and Maintenance Records must be provided to NHDES upon request.

Inspection & Maintenance Checklist/Log

The following pages contain an Inspection & Maintenance Checklist and blank copy of the Stormwater Management System's Inspection & Maintenance Log. These forms are provided to Corey MacKoul with the inspection and maintenance of the 89 Stark Ave Stormwater Management System.

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 is not addressed.

Woody Plants	Method of Reproducing	Methods of Disposal
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)*	**Fruit and Seeds**	**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.
		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.
oriental bittersweet *(Celastrus orbiculatus)* multiflora rose *(Rosa multiflora)*	**Fruits, Seeds, Plant Fragments**	**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.
		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.

Non-Woody Plants	Method of Reproducing	Methods of Disposal
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)*	**Fruits and Seeds**	**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.
		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.
common reed (*Phragmites australis*) Japanese knotweed *(Polygonum cuspidatum)* Bohemian knotweed *(Polygonum x bohemicum)*	**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.	**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.

Stormwater Management System

Inspection & Maintenance Checklist

89 Stark Ave

BMP/System Component	Minimum Inspection Frequency	Minimum Inspection Requirements	Maintenance/Cleanout Threshold
Pavement Sweeping	3 times per year	N/A	N/A
Litter/Trash Removal	Routinely	Inspect outdoor waste receptacles areas for spillage.	Clean as required.
Deicing Agents	N/A	N/A	Use sand as primary agent for parking lot safety during winter.
Closed Drainage System			
Catch Basins	2 times per year 1 time per month	Check for sediment accumulation in sump and on sock. Check for floatable contaminants.	≥ 2 ft. sediment depth. ≥ 3 in. floatable depth.
Drainage Pipes	1 time per 2 years	Check for sediment accumulation/clogging.	≥ 2 in. sediment depth.
Drainage Swales	Per mowing	Maintain grass height of 3-4 inches. Remove sediment accumulation from bottom of swale. Remove accumulated trash and debris as needed.	Sediment accumulation reaches 25% of design volume. Grass height exceeds 4 inches.
Bioretention System	2 times per year	Check for sediment accumulation Check for floatables If system does not drain within 72 hours, actions must be taken to restore infiltration capabilities.	≥ 2 ft. sediment depth in forebay. ≥ 3 in. floatable depth in forebay.
Annual Report	1 time per year	Submit Annual Report, including all Inspection & Maintenance Logs, to the Somersworth Planning Department.	N/A

Stormwater Management System

Inspection & Maintenance Log

89 Stark Ave

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

Stormwater Management System

Deicing Log

Corey MacKoul

Date	Amount Applied	Performed By	Date	Amount Applied	Performed By

CERTIFICATE OF UNDERSTANDING

Stormwater Management, Maintenance
& Inspection Plan

Project: 89 Stark Ave
Dover, New Hampshire
April 2026

Owner: Corey MacKoul
8 Hull Ave
Dover, New Hampshire 03820

Engineer: Tritech Engineering Corporation
755 Central Avenue
Dover, New Hampshire 03820

Project Reference Plans:

Site Development Plans for:
Corey MacKoul
89 Stark Ave
Dover, New Hampshire
Dated May 14, 2026

Specifically:
T-1, T-2, EX-1, SSS-1, SN-1, C-1, SP-1 through SP-10, LA-1 & TR-1.

Project Drainage Analysis References:

Drainage Analysis, Erosion and Sedimentation Control, & Site Development Plan for:
Corey MacKoul
89 Stark Ave
Dover, New Hampshire
Dated May 2026

Site Plan Review Approval was granted by the Dover Planning Board Pending

I, Corey MacKoul , the property owner, am familiar with the references above and understand this Stormwater Management, Maintenance, and Inspection Plan, and my responsibilities identified herein. If ownership of the property is transferred, the new property owner(s) shall become the responsible party(ies).

_____ _____

Corey MacKoul, Owner Date

Water and Sewer Demand &
Pipe Analysis Summary

for

Corey MacKoul

89 Stark Ave
Dover, New Hampshire
May 2026

Water and Sewer Demand for 89 Stark Ave Dover, NH

2 Proposed 3 Bedroom Houses:

2 Houses X 3 Bedrooms each x 150 gal/day per BDR =

900 gal/day

Estimated Design Flow = **900 gal/day**

**This design flow rate is based on NHDES Env.Wq 1008.03 Table 1008-1 Unit Design Flow Figures*

TEPP LLC TRANSPORTATION ENGINEERING, PLANNING, AND POLICY

MEMORANDUM

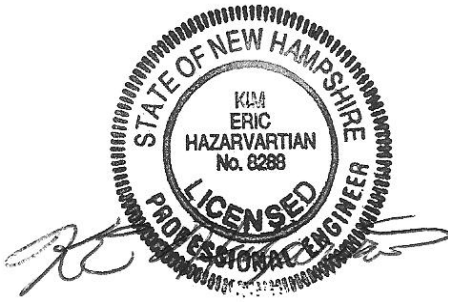
93 Stiles Road, Suite 201, Salem, New Hampshire 03079 USA
800 Turnpike Street, Suite 300, North Andover, Massachusetts 01845 USA
Phone (603) 212-9133 and Fax (603) 226-4108
Email tepp@teppllc.com and Web www.teppllc.com

Ref: 1784

Subject: Traffic-Assessment Memorandum
89 Stark Avenue
Dover, New Hampshire

From: Kim Eric Hazarvartian, Ph.D., P.E., PTOE
Principal
keh@teppllc.com

Date: May 14, 2026



INTRODUCTION

Tritech Engineering Corporation has retained TEPP LLC to prepare this traffic-assessment memorandum (TAM). This TAM regards the proposed redevelopment at 89 Stark Avenue in the City of Dover, New Hampshire.

This TAM includes:

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

This TAM concludes that:

- relevant sight distances at the Stark Avenue/proposed access intersection are appropriate
- the proposed project is not anticipated to add significant new traffic to the area

EXISTING SITE DESCRIPTION

The existing site:

- is along the west side of Stark Avenue
- has an area of about 0.883 acres
- includes one single-family-detached house
- has one driveway along the west side of Stark Avenue
- is bounded on the east by Stark Avenue
- is otherwise bounded by residential development

PROPOSED PROJECT DESCRIPTION

The project will:

- retain the existing dwelling unit
- add two proposed single-family-detached dwelling units
- remove the existing driveway
- provide a proposed access, south of the existing driveway location, for the three dwelling units

ROAD DESCRIPTION

Stark Avenue:

- is a north-south minor-arterial street under the jurisdiction of the City of Dover
- provides connections, to and from the north, with Central Avenue, a minor-arterial street, and with central Dover
- provides connections, to and from the south, with Dover Point Road, a minor-arterial street, and with southern Dover
- has a horizontal alignment with minor-to-moderate curvature
- has a vertical alignment with minor grades
- has a speed limit of 30 miles per hour (mph)
- has asphalt-cement-concrete pavement in overall good condition
- has one travel lane per direction
- has pavement markings including double-yellow lines, separating traffic directions, and single-white edge lines
- near the site, has a sidewalk on the west side
- near the site, has utility poles on the west side, including one pole with a luminaire along the site frontage

PUBLIC TRANSIT

Cooperative Alliance for Seacoast Transportation bus-transit system Route 13 runs along Stark Avenue near the site. A southbound stop is near 67 Stark Avenue, and a northbound stop is north of 34 Stark Avenue.

The route connects with:

- to the north, central Dover and the Dover Transportation Center
- to the south, the City of Portsmouth and Hanover Station

SIGHT DISTANCES

Table 1 presents a sight-distance summary for the Stark Avenue/proposed access intersection. Table 1 shows that available sight distances provide for approach speeds on Stark Avenue that are greater than the speed limit.

Table 1. Sight-distance summary.

	Geometry[a]		Speeds (mph)	
Intersection and View	Approach Grade (%)	Available Sight Distance (ft)	Limit	SSD[b]
Stark Avenue/Proposed Access Intersection				
Stark Avenue to/from North	Down 3±	325±	30	40+
Stark Avenue to/from South	Up 4 ±	400±	30	40+

[a] Provided by Tritech Engineering Corporation.

[b] SSD design speed that available sight distance provides. AASHTO, pages 3-2 to 3-6.

TRIP GENERATION

The Institute of Transportation Engineers (ITE) publishes trip-generation information in the authoritative *Trip Generation Manual*.[1] This information is based on empirical data for a variety of land uses, including land use 210, single-family-detached housing, based on dwelling units.[2]

Table 2 shows changes in calculated weekday vehicle-trips due to the project as:

- daily, 18 (total of in and out)
- AM-street-peak hour, 1 (1 in and 0 out)

[1] ITE, *Trip Generation Manual*, 12th Edition (Washington DC, August 2025).

[2] ITE, *Trip Generation Manual*, Volume 3, pages 230 to 248.

	Weekday Vehicle-Trips[a]						
		AM-Street-Peak Hour			PM-Street-Peak Hour		
	Daily	Total	In	Out	Total	In	Out
Existing One Dwelling Unit	9	1	0	1	1	1	0
Proposed Three Total Dwelling Units	27	2	1	1	3	2	1
Differences Due to Project	18	1	1	0	2	1	1

[a] Based on ITE, *Trip Generation Manual*, land use 210, single-family-detached housing.

- PM-street-peak hour, 2 (1 in and 1 out)

TRIP DISTRIBUTION/ASSIGNMENT

Calculated trip generation is so low that area traffic operations will not be sensitive to trip distribution/assignment. Trips will be split along Stark Avenue to/from the north and south and further split beyond the immediate project area.

POTENTIAL TRAFFIC IMPACTS

ITE suggests that land developments generating at least 100 peak-hour vehicle trips, in the busier direction, are candidates for consideration of traffic impact analysis.[3] Tabulated peak-hour trip generation of the project is well below this national ITE level. The project is not anticipated to add significant new traffic to the area.

CONCLUSION

This TAM concludes that.

- relevant sight distances at the Stark Avenue/proposed access intersection are appropriate
- the proposed project is not anticipated to add significant new traffic to the area

[3] ITE, *Manual of Transportation Engineering Studies* (Prentice Hall: Englewood Cliffs, New Jersey, 2000), page 144.

SITE DEVELOPMENT PLANS

COREY MACKOUL

89 STARK AVENUE
DOVER, NEW HAMPSHIRE

LIST OF PLANS

T-1 - TITLE SHEET
T-2 - NEIGHBORHOOD PLAN
EX-1 - EXISTING CONDITIONS PLAN (1"=30')
SSS-1 - SITE SPECIFIC SOILS PLAN (1"=30')
SN-1 - STANDARD NOTES PLAN
C-1 - ROADWAY PLAN AND PROFILE (1"=20')
SP-1 - GENERAL SITE PLAN (1"=20')
SP-2 - SITE CONSTRUCTION PLAN (1"=20')
SP-3 - UTILITY PLAN (1"=10')
SP-4 - GRADING AND DRAINAGE PLAN (1"=20')
SP-5 - BIORETENSION DETAILS
SP-6 - CONSTRUCTION DETAILS
SP-7 - CONSTRUCTION DETAILS
SP-8 - CONSTRUCTION DETAILS
SP-9 - SEWER DETAILS
SP-10 - SEWER DETAILS
SD-1 - SIGHT DISTANCE PLAN & PROFILE LOOKING NORTH (1"=20')
SD-2 - SIGHT DISTANCE PLAN & PROFILE LOOKING SOUTH (1"=20')
La-1 - LANDSCAPE PLAN
TR-1 - FIRE TRUCK TURNING PLAN

OWNER / APPLICANT
COREY MACKOUL
8 HULL AVENUE
DOVER, NEW HAMPSHIRE

CIVIL ENGINEER - SURVEYOR
TRITECH ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE

WETLAND & SOIL SCIENTIST
HIGHLAND SOILS SERVICES
75 PROSPECT STREET
SOMERSWORTH, NEW HAMPSHIRE

LANDSCAPE ARCHITECT
TERRAIN
PLANNING & DESIGN LLC
31 KAST HILL ROAD
HOPKINTON, NEW HAMPSHIRE

TRAFFIC ENGINEER
TEPP, LLC.
93 STILES ROAD, SUITE 201
SALEM, NEW HAMPSHIRE

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8127
FAX 603 742 3830

ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

REVISIONS

DATE:	DESCRIPTION:
6/18/26	REVISED PER TRC COMMENTS

STATE OF NEW HAMPSHIRE - ROBERT STOWELL No. 9903 - PROFESSIONAL ENGINEER

STATE OF NEW HAMPSHIRE - LICENSED LAND SURVEYOR - NO. 864 - ROBERT STOWELL

TITLE SHEET
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136

SHEET No. T-1

(P26-0000)

TRITECH
ENGINEERING CORPORATION

735 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3630

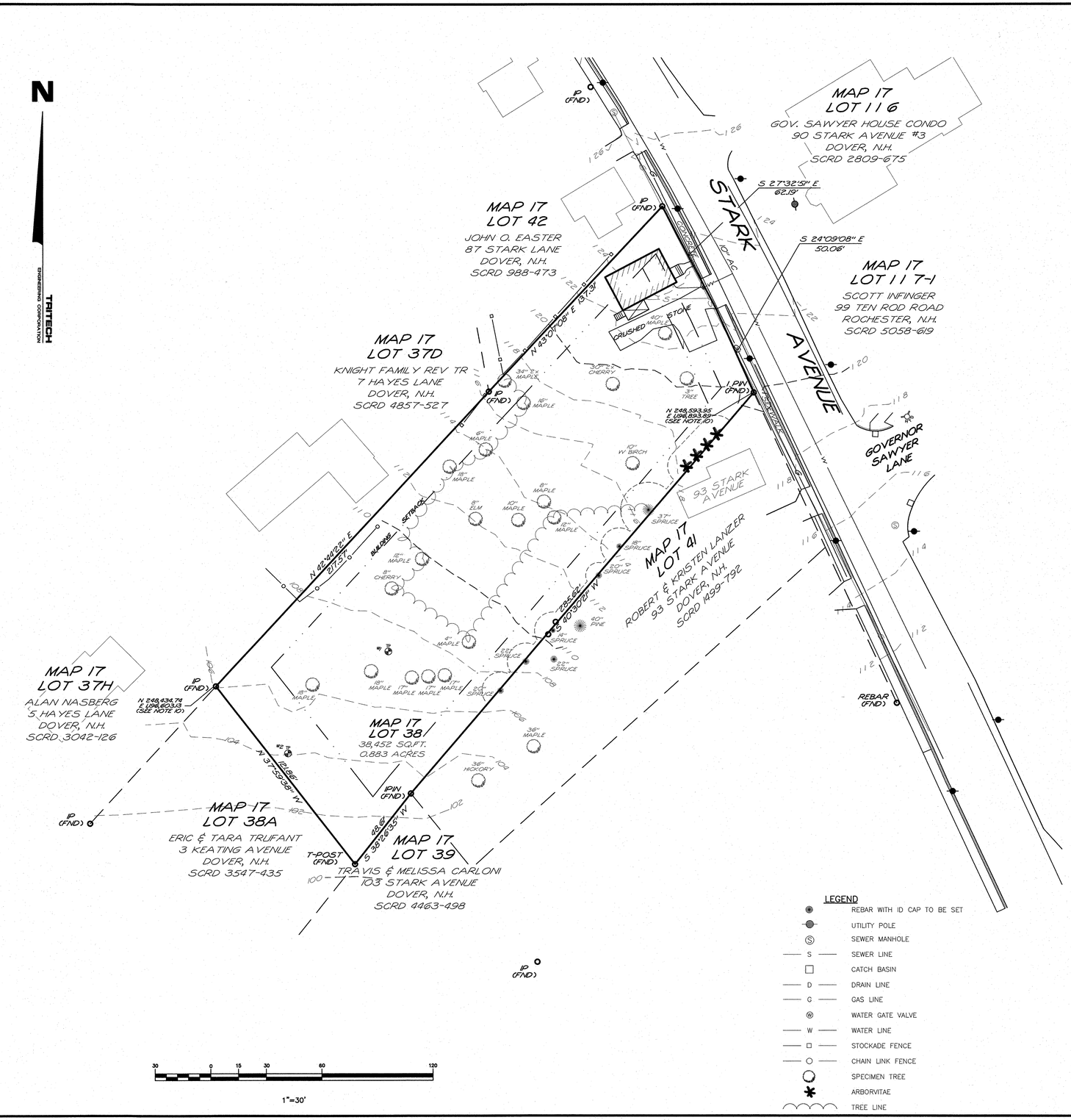
ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

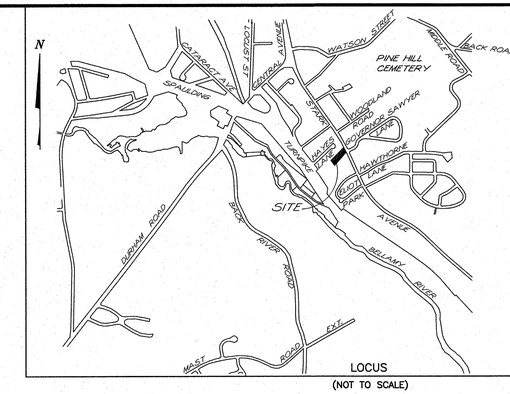
REVISIONS
DATE: DESCRIPTION:

NEIGHBORHOOD PLAN
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136
SCALE: 1" = 60'

SHEET No.
T-2

(P26-0000)





NOTES

1.) INTENT: TO SHOW THE EXISTING CONDITIONS OF DOVER MAP 17 LOT 38.

2.) CURRENT OWNER OF RECORD: COREY MACKOUL
8 HULL AVENUE
DOVER, N.H.

3.) SUBJECT PARCEL IS LOCATED IS THE CITY OF DOVER, COUNTY OF STRAFFORD AND THE STATE OF NEW HAMPSHIRE.

4.) TOTAL LOT AREA: 38,452 SQ.FT. – 0.883 ACRES

5.) TAX MAP 17 LOT 38

6.) PROJECT DEED REFERENCE: BOOK 5248 PAGE 342

7.) ZONING: R–12
MIN. LOT SIZE: 12,000 SQ.FT.
MIN. FRONTAGE: 100 FT
MIN. SETBACKS:
FRONT: 15 FT TO 25 FT
SIDE: 15 FT
REAR: 30 FT
MAX. COVERAGE: 30 %
MAX. BUILDING HEIGHT: 35 FT

8.) PROJECT PLAN REFERENCE: PROPOSED SUBDIVISION
LAND OF
TRI–CITY BUILDERS
103 STARK AVENUE
DOVER, NEW HAMPSHIRE
BERRY SURVEYING & ENGINEERING
MAY 6, 2003 SCRD 71–89

SUBDIVISION OF LAND
FOR CLARA FISHER
ON STARK AVENUE & KEATING AVENUE
IN DOVER, N.H.
BRUCE POHOPEK
MAY 30, 1995 SCRD 41A–84A

PLAN OF LOTS
ROBERT LABRIE
DOVER, N.H.
GRANT L DAVIS
AUGUST 1949
POCKET #3, FOLDER #1, PLAN #28

9.) THE RAW UNADJUSTED CLOSURE OF OUR RANDOM POINT TRAVERSE WAS 1 PART IN 35,000, AND WAS ACCOMPLISHED USING A TOPCON GT 503 TOTAL STATION, DURING THE MONTH OF JANUARY, 2026.

10.) BASIS OF BEARING: BEARING SYSTEM BASED ON GPS FIELD OBSERVATIONS ON JANUARY 13, 2026 USING TOPCON HIPER SR RECEIVERS AND OPUS CORRECTED ON JANUARY 15, 2026. DATUM BASED ON NEW HAMPSHIRE STATE PLANE COORDINATES SPC (2800 NH), (VERTICAL DATUM: NAVD 88).

11.) SUBJECT PARCEL IS NOT WITHIN A FEDERALLY DESIGNATED SPECIAL FLOOD HAZARD ZONE (FLOOD HAZARD ZONE A – PANEL 330145, MAP No. 33017C0340E, DATE: 9–30–2015).

12.) ON JANUARY 14, 2026, MICHAEL MARIANO, STATE OF NEW HAMPSHIRE CERTIFIED SOIL SCIENTIST #76, NH CERTIFIED WETLAND SCIENTIST #183, CONDUCTED AN ON–SITE WETLANDS DELINEATION OF THE SUBJECT PARCEL. WETLANDS WERE EVALUATED BASED ON THE CITY OF DOVER ZONING ORDINANCE (170–27.1) AND ON STATE & FEDERAL CRITERIA OUTLINED IN THE "CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL" (DEPT. OF THE ARMY, 1987). ON THIS SITE, WETLANDS BASED ON LOCAL CRITERIA SHARE THE SAME BOUNDARIES WITH THOSE BASED ON STATE AND FEDERAL CRITERIA. NO WETLANDS WERE OBSERVED ON THIS SITE.

LEGEND

- REBAR WITH ID CAP TO BE SET
- UTILITY POLE
- SEWER MANHOLE
- S — SEWER LINE
- CATCH BASIN
- D — DRAIN LINE
- G — GAS LINE
- WATER GATE VALVE
- W — WATER LINE
- STOCKADE FENCE
- CHAIN LINK FENCE
- SPECIMEN TREE
- ARBORVITAE
- TREE LINE

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3830

ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

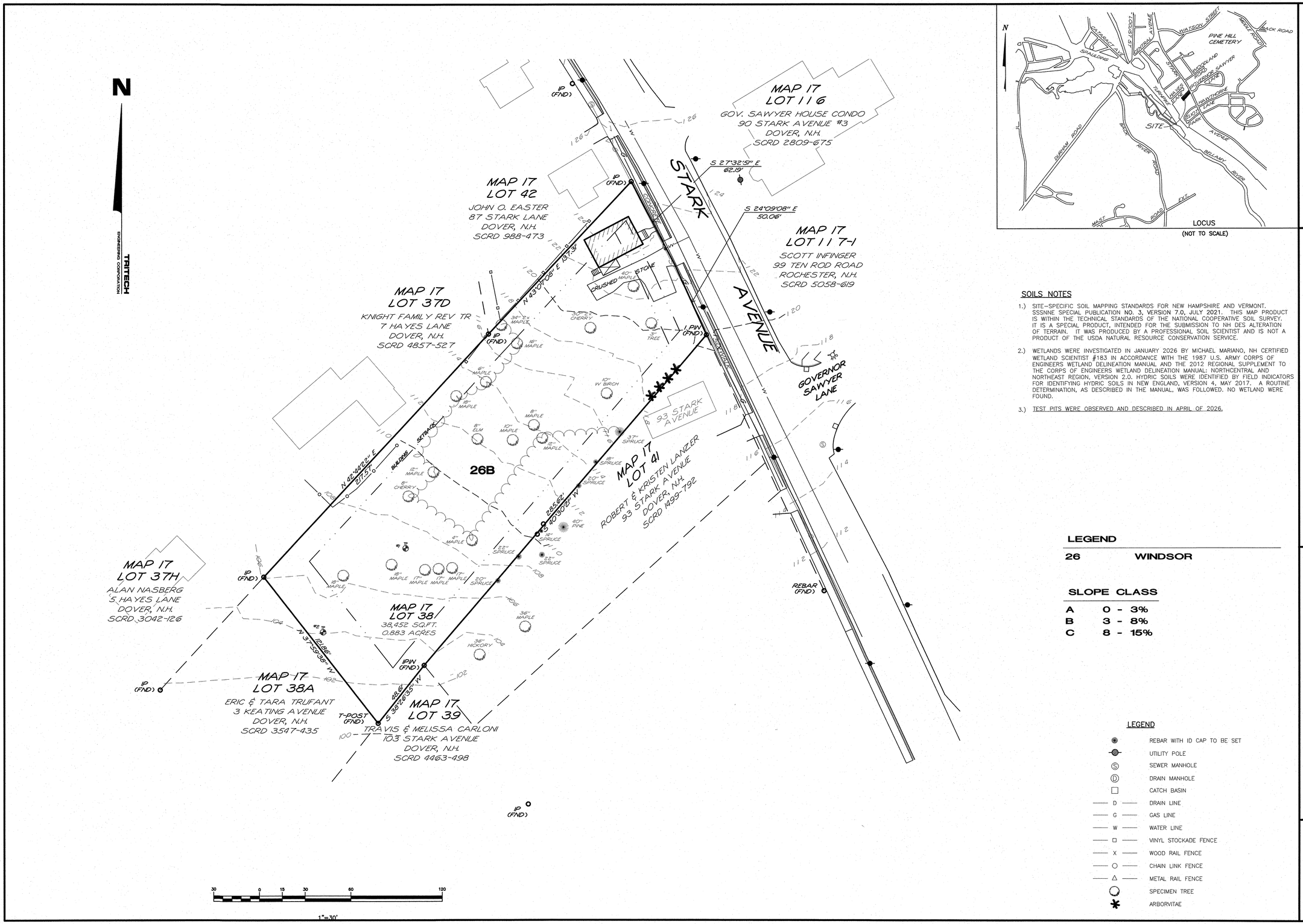
REVISIONS DATE:	DESCRIPTION:
6/18/26	REVISED PER TRC COMMENTS

LICENSED LAND SURVEYOR
No. 884
ROBERT L. STOWELL
STATE OF NEW HAMPSHIRE

EXISTING CONDITIONS PLAN
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136
SCALE: 1" = 30'

SHEET No.
EX-1

(P26-0000)



SOILS NOTES

1.) SITE-SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT. SSSNNE SPECIAL PUBLICATION NO. 3, VERSION 7.0, JULY 2021. THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PRODUCT, INTENDED FOR THE SUBMISSION TO NH DES ALTERATION OF TERRAIN. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCE CONSERVATION SERVICE.

2.) WETLANDS WERE INVESTIGATED IN JANUARY 2026 BY MICHAEL MARIANO, NH CERTIFIED WETLAND SCIENTIST #183 IN ACCORDANCE WITH THE 1987 U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE 2012 REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0. HYDRIC SOILS WERE IDENTIFIED BY FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4, MAY 2017. A ROUTINE DETERMINATION, AS DESCRIBED IN THE MANUAL, WAS FOLLOWED. NO WETLAND WERE FOUND.

3.) TEST PITS WERE OBSERVED AND DESCRIBED IN APRIL OF 2026.

LEGEND

26	WINDSOR

SLOPE CLASS

A	0 - 3%
B	3 - 8%
C	8 - 15%

LEGEND

- REBAR WITH ID CAP TO BE SET
- UTILITY POLE
- SEWER MANHOLE
- DRAIN MANHOLE
- CATCH BASIN
- D — DRAIN LINE
- G — GAS LINE
- W — WATER LINE
- VINYL STOCKADE FENCE
- X — WOOD RAIL FENCE
- CHAIN LINK FENCE
- METAL RAIL FENCE
- SPECIMEN TREE
- ARBORVITAE

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 9107
FAX 603 742 3830

ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

REVISIONS
DATE:
DESCRIPTION:

STATE OF NEW HAMPSHIRE · MICHAEL MARIANO · No. 76 · CERTIFIED SOIL SCIENTIST

SITE SPECIFIC SOILS PLAN
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136
SCALE: 1" = 30'

SHEET No.
SSS-1

(P26-0000)

DOVER SITE PLAN REVIEW NOTES:

1. PLAN INTENT: TO FURTHER DEVELOP DOVER TAX MAP 17 LOT 38. THIS DEVELOPMENT WILL INCLUDE THE RENOVATION OF THE EXISTING SINGLE FAMILY HOUSE (1 BASE UNIT). THE DEVELOPMENT WILL ALSO INCLUDE THE CONSTRUCTION OF 2 SINGLE FAMILY HOMES, ONE BASE UNIT AND ONE UNIT PURCHASED UNDER THE TDR ORDINANCE. 2 BASE UNITS AND THE PURCHASE OF ONE UNIT.

2. OWNERS OF RECORD: COREY MACKOUL
8 HULL AVENUE
DOVER, N.H. 03820

3. THE PARCEL IS SHOWN AS:
LOT 38, MAP 17 OF THE CITY OF DOVER TAX ASSESSOR'S MAPS.

4. THE SUBJECT PARCEL CONTAINS 0.883 ACRES (38,452 SQ. FT.) OF LAND. 0 ACRES ARE CURRENTLY IN CURRENT USE.

5. TITLE REFERENCE FOR THE PROJECT PARCEL(S) IS THE STRAFFORD COUNTY REGISTRY OF DEEDS, BOOK NO. 5248, PAGE NO. 342.

6. REFERENCE PLANS:
PROPOSED SUBDIVISION, LAND OF TRI-CITY BUILDERS, 103 STARK AVENUE, DOVER, N.H., BERRY SURVEYING & ENGINEERING, MAY 6, 2003, SCRD 71-89
SUBDIVISION OF LAND, FOR CLARA FISHER, ON STARK AVENUE & KEATING AVENUE, IN DIVER, N.H., BRUCE POHOPEK, MAY 30, 1995, SCRD 41A-84A
PLAN OF LOTS, ROBERT LABRIE, DOVER, N.H., GRANT L DAVIS, AUGUST 1949, PO 3, FO 1, PLAN #28

7. ALL APPLICABLE RIGHT-OF-WAY, CONSERVATION, SLOPE, CONSTRUCTION, POWER LINE, CROSS TRAVEL, OR OTHER EASEMENTS SHALL BE REFERENCED IN A NOTE AND SHOWN ON THE PLAN.

8. CURRENT ZONING DIMENSIONAL AND DENSITY REQUIREMENTS:

ZONING DISTRICT:	R-12	
SUB-DISTRICT:	NONE	
ZONING OVERLAY DISTRICTS:	NONE	
DIMENSIONAL REQUIREMENTS:	REQUIRED:	PROVIDED:
MINIMUM LOT SIZE:	12,000 SQ. FT.	12,000 SQ. FT.
MINIMUM LOT FRONTAGE:	100 FT.	100 FT.
MINIMUM YARD SETBACKS/BUILD-TO-LINES:		
FRONT	15 TO 25 FT.	15 TO 25 FT.
SIDE	15 FT.	15 FT.
REAR	30 FT.	30 FT.
ABUT-A-STREET	15 TO 25 FT.	15 TO 25 FT.
MAXIMUM/MINIMUM LOT COVERAGE	30%	30 %
MINIMUM/MAXIMUM BLDG. HEIGHT	35 FT.	35 FT.

9. OFF STREET PARKING REQUIREMENTS:

	MAXIMUM:	PROVIDED:
PARKING DIMENSIONS:	9'x18'	9'x18'
AISLE DIMENSIONS:	24'	20'
MAXIMUM PARKING ALLOWED	6	6
ACCESSIBLE PARKING:	1	0

10. SEE SHEET SP-1 FOR TDR BASE DENSITY CALCULATION THAT DETERMINED A BASE DENSITY OF 2 UNITS. THE PROJECT CONTAINS A TOTAL OF 3 UNITS. THE EXISTING HOUSE (1 UNIT). THE 2 NEW SINGLE FAMILY HOMES. TWO BASE UNITS AND ONE UNIT OBTAINED BY TDR.

11. VARIANCES OR SPECIAL EXCEPTIONS GRANTED BY THE ZONING BOARD OF ADJUSTMENT INCLUDING THE CASE NUMBER AND DATE OF DECISION AND ANY CONDITIONS ARE AS FOLLOWS: NONE GRANTED

12. 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 ARE AS FOLLOWS: NONE GRANTED

13. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY TRITECH ENGINEERING CORPORATION IN JANUARY, 2026 WITH AN ERROR NOT GREATER THAN 1 IN 35,000.

14. AS-BUILT PLANS OF THE PROJECT SHALL BE SUBMITTED ON PAPER AND IN DIGITAL FORMAT AUTOCAD DWG, AUTOCAD DXF OR ESRI FORMAT TO THE CITY OF DOVER CITY 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. SUBJECT PARCEL IS (IS NOT) LOCATED WITHIN A FEDERALLY DESIGNATED FLOOD HAZARD AREA (COMMUNITY PANEL NUMBER 33017C 0340E, EFFECTIVE DATE: SEPTEMBER 30, 2015.

16. TOPOGRAPHIC SURVEY PERFORMED BY TRITECH ENGINEERING CORPORATION DURING JANUARY 2026.

17. ELEVATIONS ARE BASED ON U.S.G.S. NVD 1988 DATUM.

18. WETLANDS WERE DELINEATED BY MICHAEL MARIANO, CERTIFIED WETLANDS SCIENTIST, CERTIFICATION NUMBER 183, IN ACCORDANCE WITH CHAPTER 170-27.1 OF THE ZONING ORDINANCE, IN JANUARY, 2026. NO WETLANDS WERE OBSERVED.

19. THE INSTALLATION OF ELECTRIC POWER, CABLE TELEVISION AND TELEPHONE LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE FOR WHICH DEVELOPMENT IS PROPOSED.

20. THE SUBJECT PARCEL IS SERVED BY MUNICIPAL WATER AND MUNICIPAL SEWER.

21. 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.

22. CONTRACTOR SHALL FOLLOW TO THE CONSTRUCTION SEQUENCING IDENTIFIED WITHIN THE PLANNING BOARD APPROVED PLAN SET. ANY DEVIATION FROM THAT SEQUENCING SHALL BE APPROVED BY THE CITY ENGINEER.

23. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH DISTURBANCE AND BE PROVIDED FOR CONSTRUCTION SEQUENCING INCLUDING TEMPORARY MEASURES.

24. CONTRACTOR SHALL FOLLOW THE PERMANENT STABILIZATION MEASURES 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 AS NOTED WITHIN THE PLANNING BOARD APPROVED PLANS. ANY DEVIATION FROM THAT SEQUENCING SHALL BE APPROVED BY THE CITY ENGINEER.

25. THE LIMITS OF CONSTRUCTION DISTURBANCE THAT ARE LOCATED IN OR WITHIN THE 50 FT. OF CONSERVATION AND WETLAND DISTRICTS SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR ANY EARTH DISTURBING ACTIVITY OCCURS.

26. ANY PERMANENT TREATMENT SWALES TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS.

27. A LETTER OF CREDIT FOR THE COST OF REVEGETATING ALL DISTURBED AREAS ON THE SITE SHALL BE SUBMITTED PRIOR TO COMMENCING EARTH DISTURBANCE.

28. A CITY ENGINEER APPROVED CONSTRUCTION SIGN SHALL BE INSTALLED PRIOR TO COMMENCING EARTH DISTURBANCE. SAID SIGNAGE MUST BE LOCATED AND APPROVED BY THE CITY ENGINEER OR PLANNING DIRECTOR.

29. 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.

30. HOURS OF SITE WORK MUST BE DOCUMENTED ON A SITE CONSTRUCTION SIGN ALONG WITH THE CONTACT INFORMATION FOR THE GENERAL CONTRACTOR. SITE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY-FRIDAY 7 AM - 6 PM, NO SATURDAY OR SUNDAY. NO SITE WORK SHALL BE DONE ON FEDERAL HOLIDAYS.

31. BUILDING ADDRESSES, INCLUDING APT AND UNIT NUMBERS (IF APPLICABLE), SHALL BE ASSIGNED BY THE BUILDING OFFICIAL AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.

32. THE PROPOSED USE FOR THE SITE IS SINGLE FAMILY RESIDENTIAL.

33. THE FOLLOWING FEDERAL AND STATE PERMITS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY: NONE

34. COMMERCIAL VEHICLE ROUTE DURING CONSTRUCTION SHALL CONFORM TO THE DOVER CITY CODE OR BE COORDINATED WITH THE COMMUNITY SERVICES DIRECTOR OR THEIR DESIGNEE.

35. ANY RETAINING WALL TALLER THAN FOUR FEET (4') REQUIRES ISSUANCE OF A BUILDING PERMIT FROM THE CITY OF DOVER INSPECTION SERVICES.

36. ANY FENCE TALLER THAN SEVEN FEET (7') REQUIRES THE ISSUANCE OF A BUILDING PERMIT FROM THE CITY OF DOVER INSPECTION SERVICES.

37. APPLICANT SHALL COMPLETE LAND USE DEVELOPMENT TRACKING FORM, MOST RECENTLY REVISED VERSION, UTILIZING THE ONLINE POLLUTION TRACKING AND ACCOUNTING PROJECT (PTAP) PORTAL PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. HTTPS://EXTENSION.UNH.EDU/STORMWATER-CENTER/PTAP

38. 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.

39. FIRE DEPARTMENT ACCESS ROAD(S) SHALL BE INSTALLED AND MAINTAINED, IN ACCORDANCE WITH ALL APPLICABLE CODES, TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS IN ALL WEATHER CONDITIONS AT ALL TIMES.

40. EXTERIOR LIGHTING SHALL BE CUT-OFF TYPE FIXTURES PER CHAPTER 153-14-E AND SHALL PROVIDE LIGHTING DIRECTED ON-SITE ONLY.

41. IF A BUSINESS ESTABLISHMENT OR MULTI-FAMILY DWELLING CONTAINED IN A NEW, ALTERED OR REPAIRED STRUCTURE, A SECURITY SYSTEM SHALL BE INSTALLED AS REQUIRED BY CHAPTER 45, ARTICLE I, SECTION 45-2 OF THE CODE OF THE CITY OF DOVER.

42. APPROVED BACKFLOW PREVENTERS SHALL BE PROVIDED FOR BOTH FIRE AND DOMESTIC WATER LINES.

43. THE (EXISTING OR PROPOSED) STRUCTURE SHALL BE SERVED BY A SPRINKLER SYSTEM, IF REQUIRED, BY CHAPTER 81- 30 OF THE CODE OF THE CITY OF DOVER AND THE ADOPTED STATE OF NH BUILDING AND FIRE CODES.

44. 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 THE CITY OF DOVER INSPECTION SERVICES PRIOR TO CONNECTION OF THE BACKFLOW DEVICE.

45. 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.

46. THE SITE LAYOUT IS DESIGNED IN COMPLIANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. THE PROPOSED STRUCTURE WILL BE ALSO BE DESIGNED IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY REGULATIONS. (I.E. IBC, ANSI-117.1) AND NH RSA 155-A:5.

47. APPLICANT SHALL SUBMIT A LETTER CERTIFYING THE TIE IN LOCATIONS OR DISCHARGE POINTS FOR ALL SUMP PUMPS AND ROOF LEADERS FOR EXISTING STRUCTURES ON THE PROPERTY PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

48. DESIGN ENGINEER OF RECORD OR SHALL PROVIDE SIGNED LETTER TO CITY ENGINEER CERTIFYING THAT THE STORMWATER MANAGEMENT SYSTEM HAS BEEN INSTALLED IN ACCORDANCE WITH APPROVED PLANS.

49. THE APPLICANT SHALL PROVIDE THE CITY OF DOVER AN EASEMENT TO ACCESS WATERLINE AND HYDRANTS TO MAINTAIN WATER QUALITY PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

PLAN SET LEGEND

- WETLAND
- WETLAND BOUNDARY
- IRON PIPE
- UTILITY POLE
- TP — TEST PIT
- D — EXISTING STREET LIGHT
- G — EXISTING STONEWALL
- EXISTING 2 FT CONTOUR
- EXISTING 10 FT CONTOUR
- G — EXISTING GAS LINE
- W — EXISTING WATER LINE OR SERVICE
- EXISTING WATER SHUTOFF
- WV — EXISTING WATER GATE VALVE
- PROPOSED PROPERTY LINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED EDGE OF GRAVEL
- 800 — PROPOSED CONTOUR
- PROPOSED HYDRANT
- W — PROPOSED END CAP WITH THRUST BLOCK
- PROPOSED WATER GATE VALVE
- WV — PROPOSED WATER SHUTOFF
- W — PROPOSED WATER LINE OR SERVICE
- PROPOSED VINYL STOCKADE FENCE
- U E&T — PROPOSED UNDERGROUND ELECTRIC & TELEPHONE
- // — PROPOSED OVERHEAD ELECTRIC & TELEPHONE
- PROPOSED ELECTRICAL TRANSFORMER
- PROPOSED ELECTRICAL JUNCTION BOX
- PROPOSED STREET LIGHT
- PROPOSED UTILITY POLE
- D — PROPOSED DRAIN LINE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE
- UD — PROPOSED UNDERDRAIN
- PROPOSED FLARED END SECTION
- PROPOSED RIP RAP
- PROPOSED EASEMENT
- PROPOSED GUARDRAIL
- PROPOSED SILT FENCE OR SILT SOCK
- PROPOSED CONSTRUCTION FENCE
- PROPOSED SILT SOCK WITH ORANGE CONSTRUCTION FENCE OR ORANGE SILT FENCE
- PROPOSED STREET SIGN
- PROPOSED STOP SIGN
- PROPOSED STOP BAR
- PROPOSED STREET TREE
- PROPOSED TREELINE

TRITECH
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DOVER, NEW HAMPSHIRE 03820
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ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

REVISIONS
DATE: DESCRIPTION:

GENERAL NOTES PLAN
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136

SHEET NO.
SN-1

(P26-0000)

HORIZONTAL SCALE 1" = 20'
VERTICAL SCALE 1" = 4'

1"=20'

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
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ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

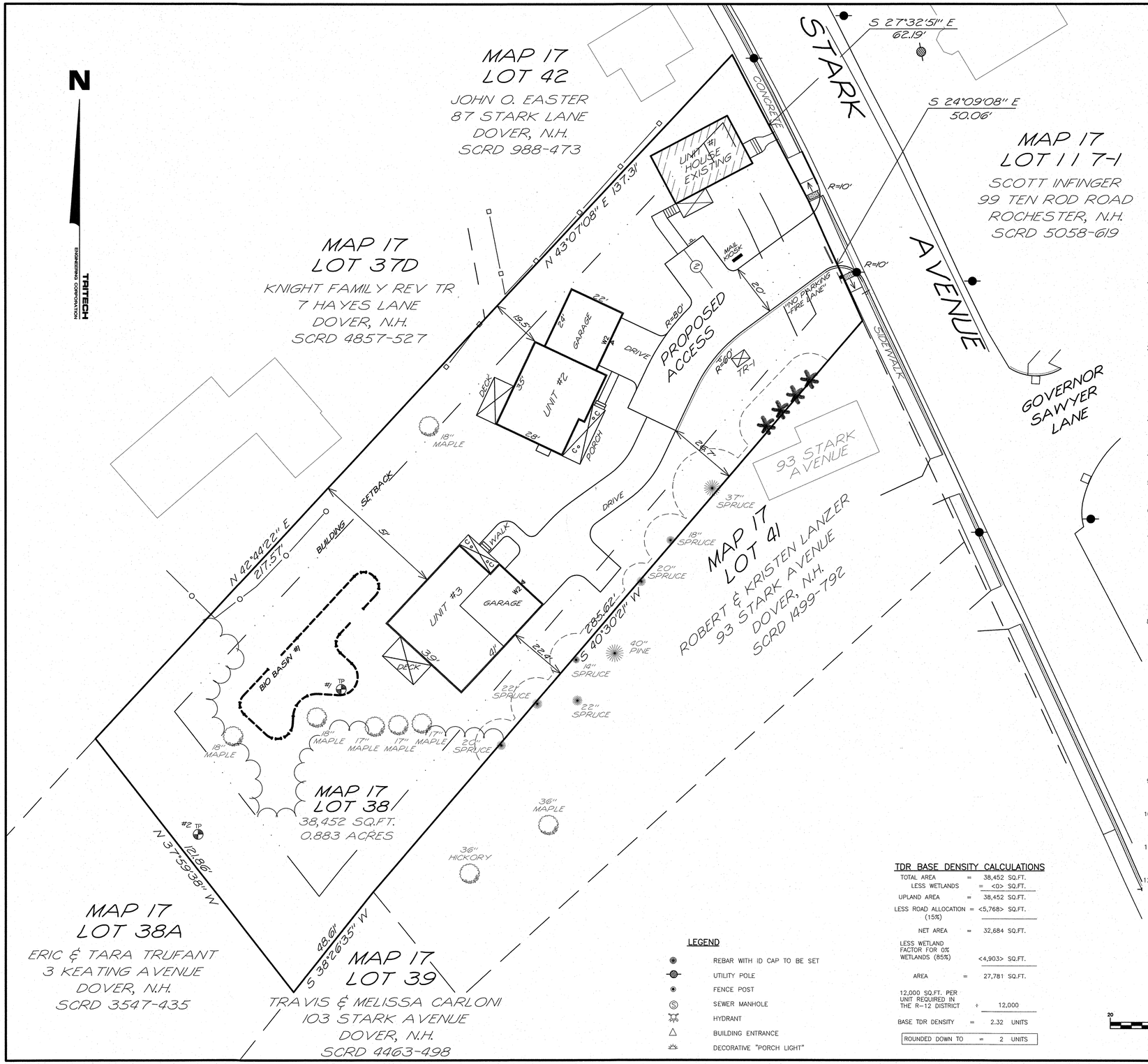
REVISIONS

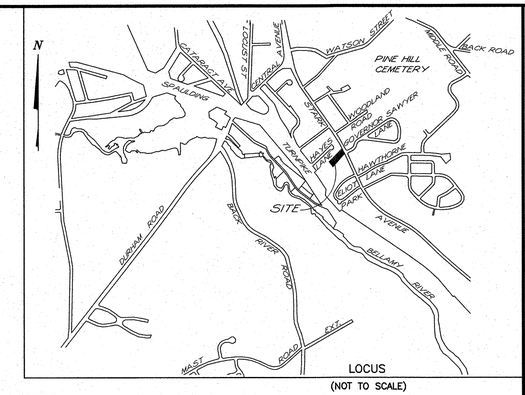
DATE:	DESCRIPTION:
6/18/26	REVISED PER TRC COMMENTS

STATE OF NEW HAMPSHIRE - PROFESSIONAL ENGINEER
ROBERT J. STOWELL
No. 9863

ROADWAY PLAN & PROFILE
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136
SCALE: 1" = 20'

SHEET No.
C-1





NOTES

1.) INTENT: TO FURTHER DEVELOP DOVER TAX MAP 17 LOT 38. THIS DEVELOPMENT WILL INCLUDE THE RENOVATION OF THE EXISTING SINGLE FAMILY HOUSE. THE DEVELOPMENT WILL ALSO INCLUDE THE CONSTRUCTION OF 2 SINGLE FAMILY HOMES. ONE OF THESE HOMES WILL BE CONSTRUCTED UNDER THE TDR ORDINANCE. 2 BASE UNITS AND THE PURCHASE OF ONE UNIT.

2.) CURRENT OWNER OF RECORD: COREY MACKOUL
8 HULL AVENUE
DOVER, N.H.

OWNER'S SIGNATURE

3.) SUBJECT PARCEL IS LOCATED IS THE CITY OF DOVER, COUNTY OF STRAFFORD AND THE STATE OF NEW HAMPSHIRE.

4.) TOTAL LOT AREA: 38,452 SQ.FT. – 0.883 ACRES

5.) TAX MAP 17 LOT 38

6.) PROJECT DEED REFERENCE: BOOK 5248 PAGE 342

7.) ZONING: R–12
MIN. LOT SIZE: 12,000 SQ.FT.
MIN. FRONTAGE: 100 FT
MIN. SETBACKS:
FRONT: 15 FT TO 25 FT
SIDE: 15 FT
REAR: 30 FT
MAX. COVERAGE: 30 %
MAX. BUILDING HEIGHT: 35 FT

8.) PROJECT PLAN REFERENCE: PROPOSED SUBDIVISION
LAND OF
TRI–CITY BUILDERS
103 STARK AVENUE
DOVER, NEW HAMPSHIRE
BERRY SURVEYING & ENGINEERING
MAY 6, 2003 SCRD 71–89

SUBDIVISION OF LAND
FOR CLARA FISHER
ON STARK AVENUE & KEATING AVENUE
IN DOVER, N.H.
BRUCE POHOPEK
MAY 30, 1995 SCRD 41A–84A

PLAN OF LOTS
ROBERT LABRIE
DOVER, N.H.
GRANT L DAVIS
AUGUST 1949
POCKET #3, FOLDER #1, PLAN #28

9.) THE RAW UNADJUSTED CLOSURE OF OUR RANDOM POINT TRAVERSE WAS 1 PART IN 35,000, AND WAS ACCOMPLISHED USING A TOPCON GT 503 TOTAL STATION, DURING THE MONTH OF JANUARY, 2026.

10.) BASIS OF BEARING: BEARING SYSTEM BASED ON GPS FIELD OBSERVATIONS ON JANUARY 13, 2026 USING TOPCON HIPER SR RECEIVERS AND OPUS CORRECTED ON JANUARY 15, 2026. DATUM BASED ON NEW HAMPSHIRE STATE PLANE COORDINATES SPC (2800 NH), (VERTICAL DATUM: NAVD 88).

11.) SUBJECT PARCEL IS NOT WITHIN A FEDERALLY DESIGNATED SPECIAL FLOOD HAZARD ZONE (FLOOD HAZARD ZONE A – PANEL 330145, MAP No. 33017C0340E, DATE: 9–30–2015).

12.) ON JANUARY 14, 2026, MICHAEL MARIANO, STATE OF NEW HAMPSHIRE CERTIFIED SOIL SCIENTIST #76, NH CERTIFIED WETLAND SCIENTIST #183, CONDUCTED AN ON–SITE WETLANDS DELINEATION OF THE SUBJECT PARCEL. WETLANDS WERE EVALUATED BASED ON THE CITY OF DOVER ZONING ORDINANCE (170–27.1) AND ON STATE & FEDERAL CRITERIA OUTLINED IN THE "CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL" (DEPT. OF THE ARMY, 1987). ON THIS SITE, WETLANDS BASED ON LOCAL CRITERIA SHARE THE SAME BOUNDARIES WITH THOSE BASED ON STATE AND FEDERAL CRITERIA. NO WETLANDS WERE OBSERVED ON THIS SITE.

TDR BASE DENSITY CALCULATIONS

TOTAL AREA	=	38,452 SQ.FT.
LESS WETLANDS	=	<0> SQ.FT.
UPLAND AREA	=	38,452 SQ.FT.
LESS ROAD ALLOCATION (15%)	=	<5,768> SQ.FT.
NET AREA	=	32,684 SQ.FT.
LESS WETLAND FACTOR FOR 0% WETLANDS (85%)		<4,903> SQ.FT.
AREA	=	27,781 SQ.FT.
12,000 SQ.FT. PER UNIT REQUIRED IN THE R–12 DISTRICT	÷	12,000
BASE TDR DENSITY	=	2.32 UNITS
ROUNDED DOWN TO	=	2 UNITS

LEGEND

- REBAR WITH ID CAP TO BE SET
- UTILITY POLE
- FENCE POST
- SEWER MANHOLE
- HYDRANT
- BUILDING ENTRANCE
- DECORATIVE "PORCH LIGHT"

20 0 10 20 40 80
1"=20'

TRITECH
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ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

REVISIONS

DATE:	DESCRIPTION:
6/16/26	REVISED PER TRC COMMENTS

STATE OF NEW HAMPSHIRE – ROBERT J. STOWELL No. 9803 – PROFESSIONAL ENGINEER

GENERAL SITE PLAN

COREY MACKOUL

89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY

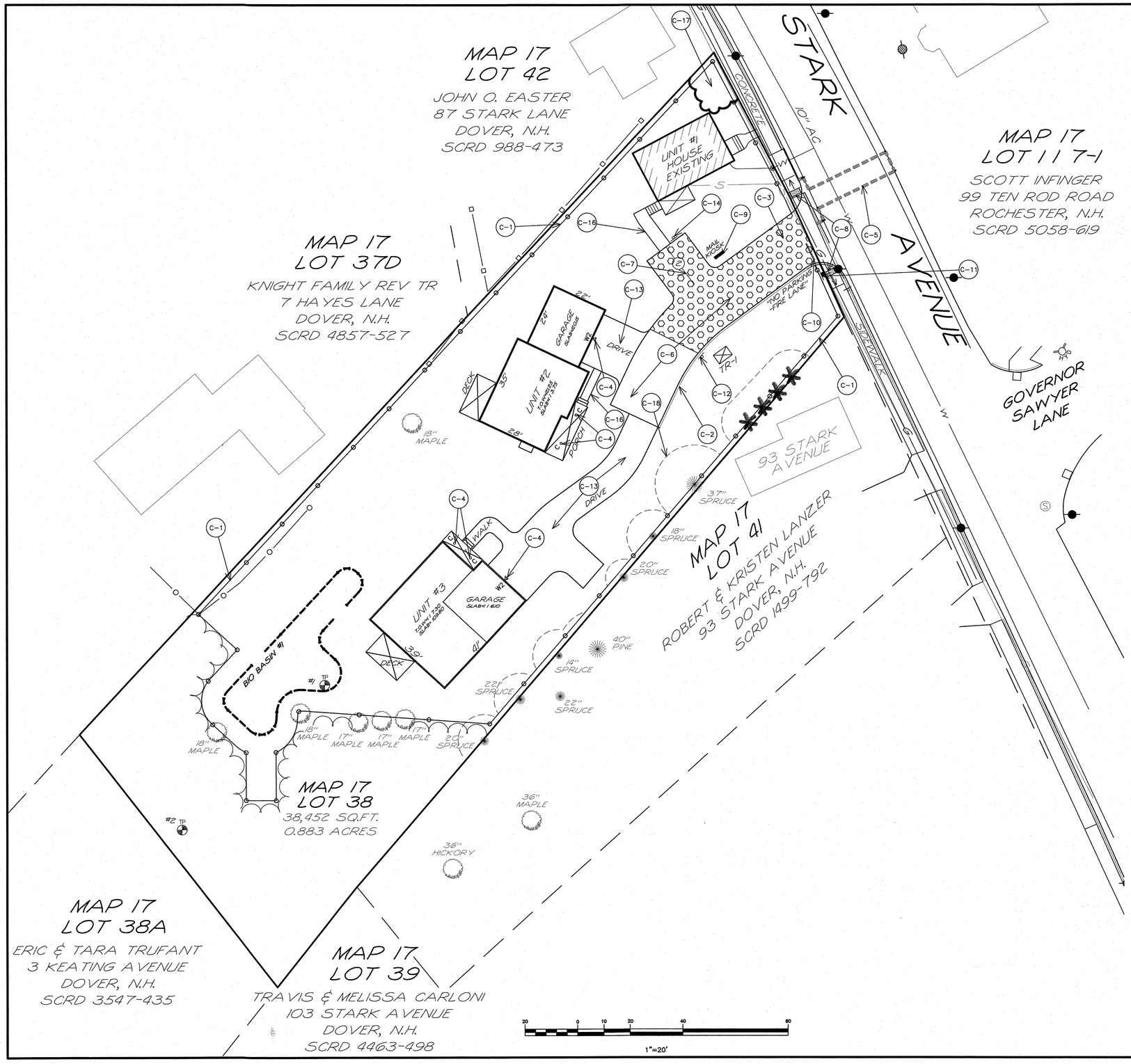
MAY 14, 2026

JOB No. 25136

SCALE: 1" = 20'

SHEET No. SP-1

(P26-0000)



CONSTRUCTION NOTES:

1. INSTALL EROSION CONTROL MEASURE. "SILT FENCE" PER DETAIL 1, SHEET SP-7 OR "SILT SOXX" PER DETAIL 9, SHEET SP-7 OR "EROSION CONTROL BERM" PER DETAIL 11, SHEET SP-7, MAY BE USED AT THE SITE WORK CONTRACTOR DISCRETION. PERIMETER CONTROLS MUST BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
2. INSTALL SLOPED GRANITE CURB PER DETAIL 4, SHEET SP-6.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE PER DETAIL 5, SHEET SP-7.
4. INSTALL BUILDING MOUNTED LIGHT (TYPICAL).
5. SAWCUT PAVEMENT, PATCH AND MATCH EXISTING PAVEMENT PER DETAIL 1, SHEET SP-8.
6. INSTALL ASPHALT PAVEMENT PER DETAIL 1, SHEET SP-6.
7. YELLOW OR WHITE PAVEMENT MARKINGS.
8. INSTALL (2) WHEEL CHAIR RAMPS PER DETAIL 11, SHEET SP-6.
9. INSTALL MAIL KIOSK.
10. INSTALL STOP BAR.
11. INSTALL "STOP" SIGN PER DETAIL 8, SHEET SP-6.
12. INSTALL "NO PARKING – FINE LANE" SIGN PER DETAIL 5, SHEET SP-6.
13. INSTALL ASPHALT PAVEMENT PER DETAIL 2, SHEET SP-8.
14. INSTALL "RESERVED SPACES FOR UNIT #1" SIGN PER DETAIL 7, SHEET SP-8.
15. TRASH REMOVAL WILL BE PROVIDED BY A PRIVATE REFUSE HAULING COMPANY. UNITS #2 & #3. TOTERS WILL BE STORED WITHIN THE BUILDING. UNIT #1 WILL STORE THE TOTERS WILL BE STORED BEHIND THE UNIT.
16. INSTALL ASPHALT PAVEMENT PER DETAIL ON SHEET SP-9.
17. REMOVE EXISTING BRUSH AND SHRUBS TO FACILITATE SIGHT DISTANCE.
18. INSTALL TREE PROTECTION BARRIER PER NOTES BELOW:

TREE PROTECTION NOTES:

1. TREE PROTECTION SHALL BE INSTALLED TO THE MAXIMUM EXTENT POSSIBLE AS SHOWN ON THE PLAN. MAKE SURE ALL WORKERS KNOW NOT TO DISTURB THE AREA WITHIN THE FENCE AND LEAVE THEM UP UNTIL WORK IS COMPLETE.
2. TEMPORARY 4FT HIGH ORANGE CONSTRUCTION FENCING SHALL BE PLACED AS SHOWN ON THE PLAN AROUND THE TREE(S) TO BE SAVED. FENCE SHALL COMPLETELY ENCIRCLE THE TREE(S). TO INSTALL FENCE POSTS, AVOID DRIVING POSTS OR STAKES INTO MAJOR ROOTS.
3. DEAD TREES, SCRUB, OR UNDERGROWTH SHALL BE CUT FLUSH WITH ADJACENT GRADE. THERE WILL BE NO SOIL DISTURBANCE UNDER THE DRIP LINE OF TREES TO BE PRESERVED.
4. PLACE 6 INCHES OF BARK MULCH AT AREAS NOT PROTECTED BY BARRIER.
5. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER ONE INCH IN DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHOULD BE TEMPORARILY COVERED WITH DAMP BURLAP AND COVERED WITH SOIL OR MULCH AS SOON AS POSSIBLE TO PREVENT DRYING.
6. NO EQUIPMENT OR MACHINERY SHALL BE USED WITHIN THE PROTECTION FENCE. WORK WITHIN THE PROTECTION ZONE SHALL BE DONE MANUALLY. NO WASHING OF EQUIPMENT OR DUMPING OF CHEMICALS BY THE ROOT ZONE.
7. WATER THE TREE THROUGHOUT CONSTRUCTION WHEN THERE IS LESS THAN 1" OF RAINFALL IN A WEEK, AERATE & FERTILIZE THE TREE IF NECESSARY.
8. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE IS ALLOWED WITHIN THE LIMIT OF FENCING.

TRITECH
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ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

REVISIONS DATE:	DESCRIPTION:
6/18/26	REVISED PER TRC COMMENTS

STATE OF NEW HAMPSHIRE – ROBERT J. STOWELL – No. 13963 – PROFESSIONAL ENGINEER

SITE DEVELOPMENT PLAN

COREY MACKOUL

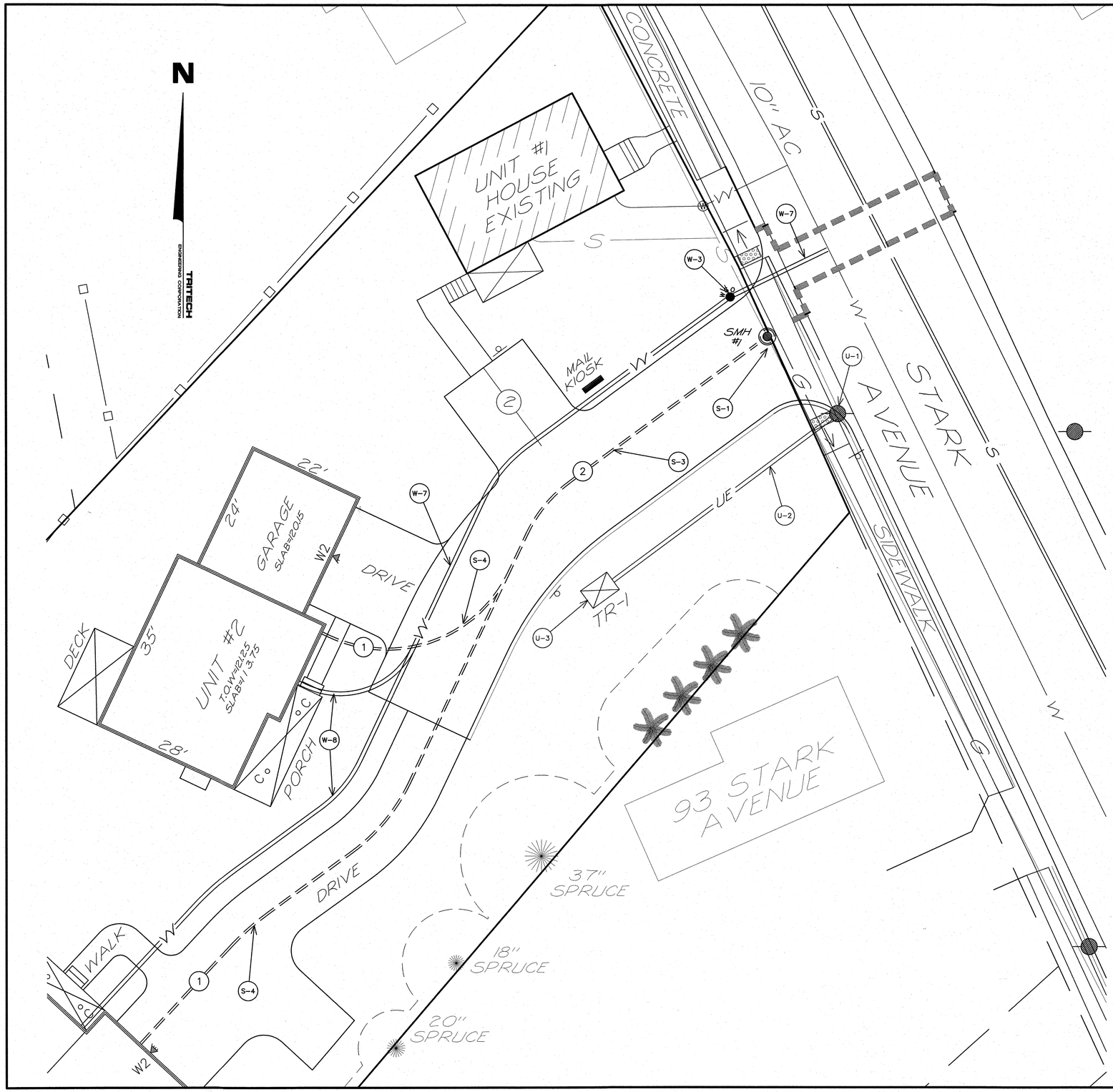
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY

MAY 14, 2026 JOB No. 25136

SCALE: 1" = 20'

SHEET No. **SP-2**

(P26-0000)



WATER NOTES:

1. WATERLINE AND APPENDITURES, INSTALLATION, AND MATERIALS SHALL CONFORM WITH THE CITY OF DOVER, NH AND AMERICAN WATER WORKS STANDARDS. ALL VALVES SHALL REQUIRE RESTRAINED MECHANICAL JOINTS USING EITHER MEGA-LUG, GRIP RINGS, OR OTHER METHODS OF RESTRAIN ACCEPTABLE TO THE CITY OF DOVER WATER DEPARTMENT, IN ADDITION TO USE OF CONCRETE THRUST BLOCKS.
2. PRESSURE AND LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST STANDARDS OF AAWA. CHLORINATING AND FLUSHING SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST STANDARDS OF AAWA, STATE AND LOCAL REGULATIONS.
3. INSTALL (2) 2" WATER SHUT-OFFS PER DETAIL 9, SHEET SP-8.
4. BACKFLOW PREVENTORS SHALL BE PROVIDED FOR ALL WATER LINES.
5. NOT USED.
6. NOT USED.
7. INSTALL (2) 2" PLASTIC WATER SERVICE FROM WATER MAIN SPLIT TO BUILDING. CONNECT PER DETAIL 9, SHEET SP-8.
8. INSTALL (1) 2" PLASTIC WATER SERVICE FROM WATER MAIN SPLIT TO BUILDING. CONNECT PER DETAIL 9, SHEET SP-8.
9. DOMESTIC WATER AND LANDSCAPING WATER SHALL BE METERED SEPARATELY.

SEWER NOTES:

1. INSTALL SMH AT STA. 0+07 2'L INLINE WITH EXISTING SEWER LINE
   RIM ELEV. AT GRADE APPROXIMATELY AT 121.80'
   INVERT IN EL=115.00' (8" VCP)
   INVERT IN EL=115.00' (8" SDR 35)
   INVERT OUT EL=114.90' (8" VCP)
2. SEWER MANHOLE COVER SHALL BE NEENAH LIFTMATE R-1743-LM.
3. INSTALL (2) 2" SDR 26 SEWER PIPE FROM SMH #1 TO SPLIT TO BUILDING.
4. INSTALL (1) 2" PVC INDIVIDUAL HOUSE SEWER DISCHARGE PIPES FROM SPLIT TO PROPOSED HOUSES. UNITS #2 & #3 WILL HAVE A E/ONE EXTREME MODEL IH091 ("INDOOR STATION") GRINDER PUMP STATION. SPECIFICATIONS TO BE PROVIDED WITH BUILDING PERMIT APPLICATION.

UTILITY NOTES:

1. CONNECT TO EXISTING UTILITY POLE IN ACCORDANCE WITH EVERSOURCE STANDARDS & DETAIL 4, (TRENCH "A"), SHEET SP-9. (PRIMARY POWER)
2. INSTALL 50 FT OF UNDERGROUND CONDUIT IN ACCORDANCE WITH EVERSOURCE STANDARDS & DETAIL 4, (TRENCH "A"), SHEET SP-9 FROM EXISTING UTILITY POLE TO PROPOSED TRANSFORMER (TR-1). (PRIMARY POWER)
3. INSTALL TRANSFORMER (TR-1) IN ACCORDANCE WITH EVERSOURCE STANDARDS & DETAIL 4, (TRENCH "B"), SHEET SP-9.

LEGEND

- EXISTING UTILITY POLE
- EXISTING WATER LINE (10" AC)
- EXISTING HYDRANT
- EXISTING WATER GATE VALVE
- PROPOSED CATCH BASIN (CB)
- PROPOSED 2" PLASTIC WATER SERVICE
- PROPOSED UNDERGROUND ELECTRICAL, TELEPHONE & CATV.
- PROPOSED TRANSFORMER PAD
- PROPOSED DRAIN LINE
- PROPOSED WATER GATE VALVE
- PROPOSED THRUST BLOCK
- PROPOSED HYDRANT
- PROPOSED FINISH CONTOUR
- PROPOSED FINISH GRADE
- STOP SIGN & STOP BAR
- PROPOSED STONE DRIP EDGE

10 0 5 10 20 40

1"=10'

TRITECH
ENGINEERING CORPORATION
785 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8127
FAX 603 742 3830

ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

REVISIONS	
DATE:	DESCRIPTION:
6/18/26	REVISED PER TRC COMMENTS

STATE OF NEW HAMPSHIRE - ROBERT J. STOWELL No. 9903 - PROFESSIONAL ENGINEER

UTILITIES PLAN

COREY MACKOUL

89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY

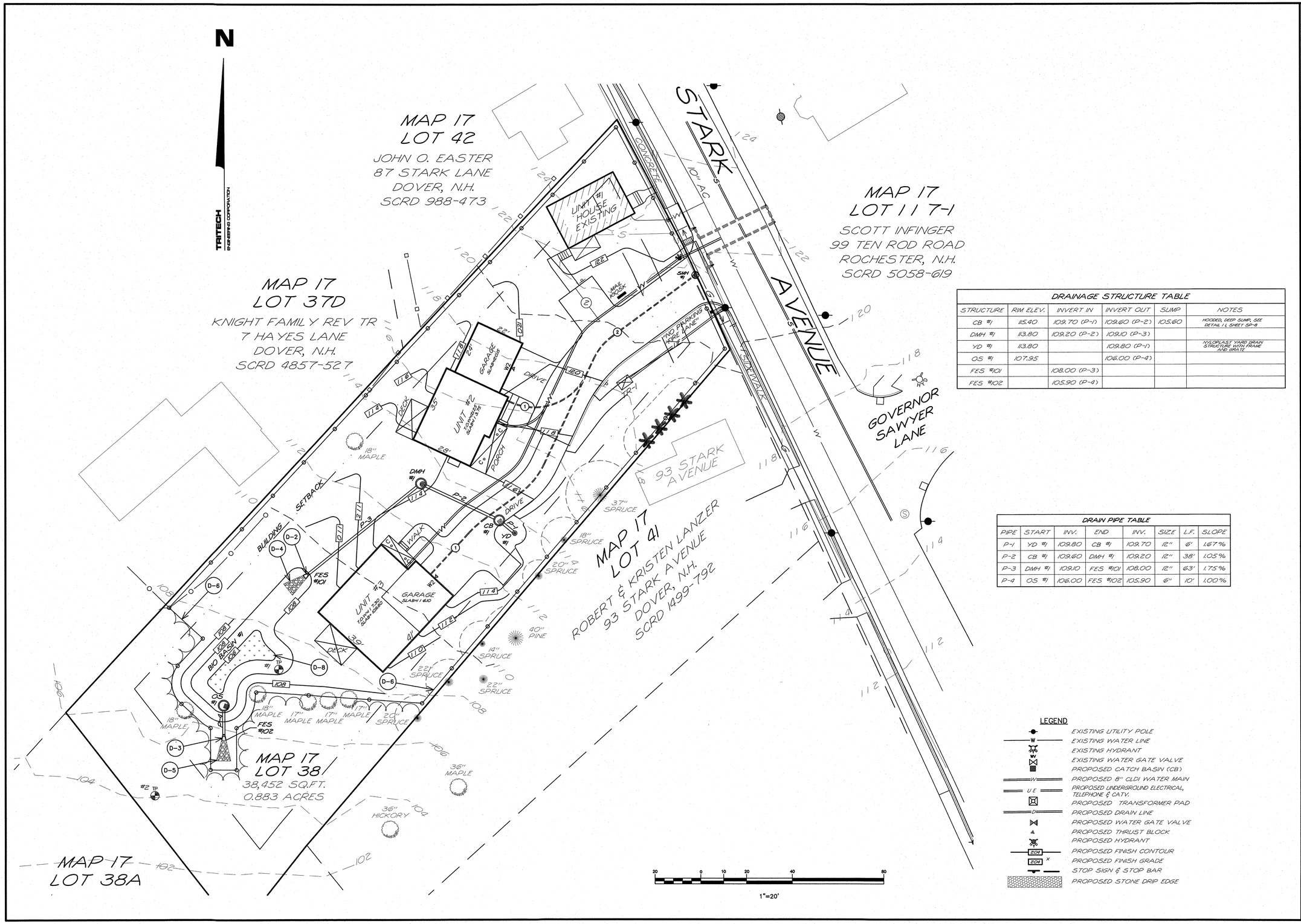
MAY 14, 2026

JOB No. 25136

SCALE: 1" = 10'

SHEET No. **SP-3**

(P26-0000)



DRAINAGE STRUCTURE TABLE

STRUCTURE	RIM ELEV.	INVERT IN	INVERT OUT	SUMP	NOTES
CB #1	115.40	109.70 (P-1)	109.60 (P-2)	105.60	HOODED, DEEP SUMP, SEE DETAIL 1, SHEET SP-8
DMH #1	113.80	109.20 (P-2)	109.10 (P-3)		
YD #1	113.80		109.80 (P-1)		NYLOPLAST YARD DRAIN STRUCTURE WITH FRAME AND GRATE
OS #1	107.95		106.00 (P-4)		
FES #101		108.00 (P-3)			
FES #102		105.90 (P-4)			

DRAIN PIPE TABLE

PIPE	START	INV.	END	INV.	SIZE	L.F.	SLOPE
P-1	YD #1	109.80	CB #1	109.70	12"	6'	1.67%
P-2	CB #1	109.60	DMH #1	109.20	12"	38'	1.05%
P-3	DMH #1	109.10	FES #101	108.00	12"	63'	1.75%
P-4	OS #1	106.00	FES #102	105.90	6"	10'	1.00%

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ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

REVISIONS

DATE:	DESCRIPTION:
6/18/26	REVISED PER TRC COMMENTS

STATE OF NEW HAMPSHIRE - ROBERT J. STOWELL No. 9863 - LICENSED PROFESSIONAL ENGINEER

GRADING AND DRAINAGE PLAN

COREY MACKOUL

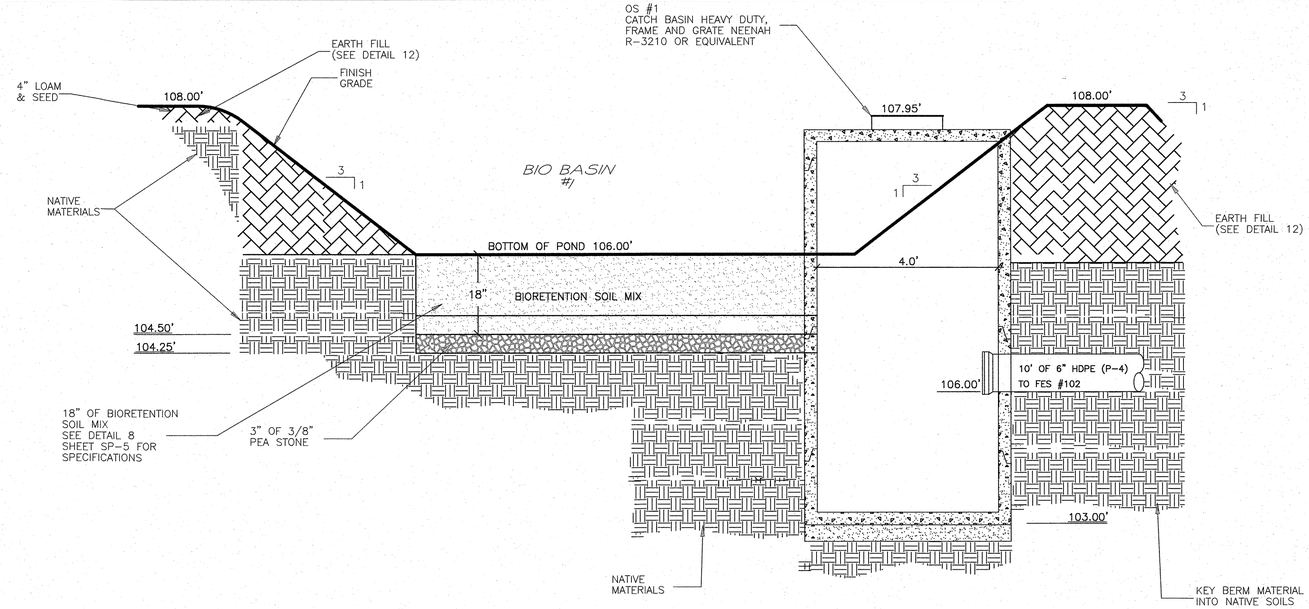
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY

MAY 14, 2026 JOB No. 25136

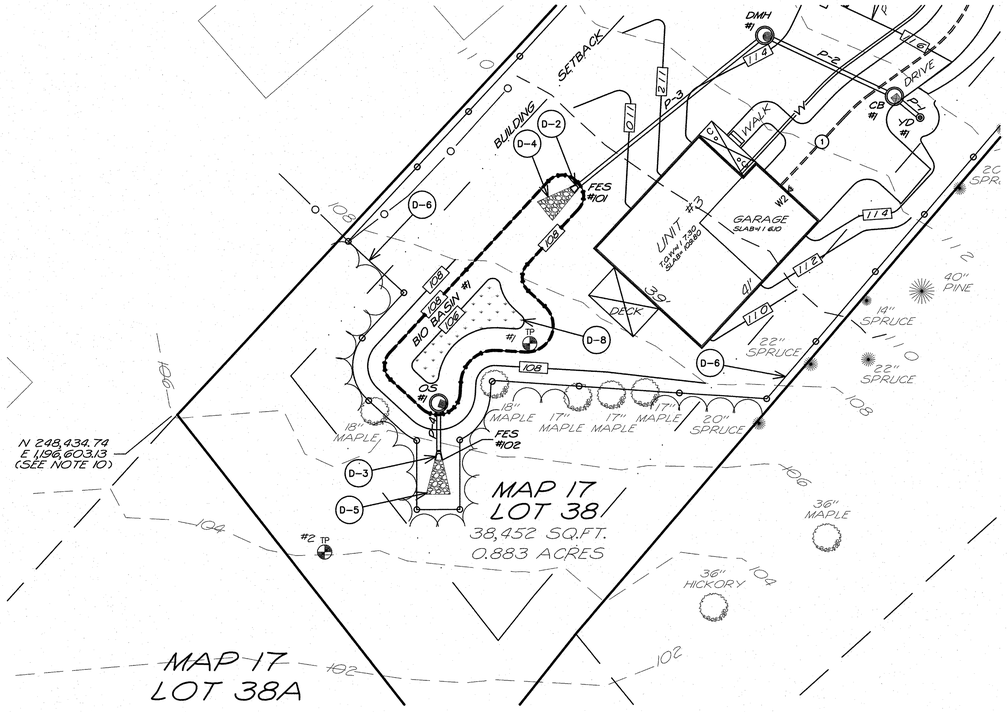
SCALE: 1" = 20'

SHEET No. **SP-4**

(P26-0000)



1 BIO-RETENTION #1 CROSS SECTION WITH OUTLET STRUCTURE
NOT TO SCALE



5 BIORETENTION BASIN #1
SCALE: 1" = 20'

DRAINAGE NOTES

1. INSTALL HI VIS HI FLOW SILT SACK PER DETAIL 2, SHEET SP-7 AT ALL PROPOSED CATCH BASINS.
2. INSTALL FLARED END SECTION #1 PER DETAIL 12, SHEET SP-8.
3. INSTALL FLARED END SECTION #2 PER DETAIL 12, SHEET SP-8.
4. INSTALL RIP RAP PER DETAIL 8, SHEET SP-8. Wo=3.0', Ws=8.7', La=12.3', D=12", D(50)=6"
5. INSTALL RIP RAP PER DETAIL 8, SHEET SP-8. Wo=3.0', Ws=86.8', La=9.4', D=12", D(50)=6"
6. INSTALL EROSION CONTROL MEASURE "SILT FENCE" PER DETAIL 1, SHEET SP-7 OR "SILT SOX" PER DETAIL 9, SHEET SP-7 OR "EROSION CONTROL BERM" PER DETAIL 11, SHEET SP-7, MAY BE USED AT THE SITE WORK CONTRACTOR DISCRETION PERIMETER CONTROLS MUST BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
7. ALL PROPOSED STORMWATER PIPE SHALL BE HDPE.
8. LIMITS OF BIO-MEDIA & STONE.

20 0 10 20 40 80
1"=20'

NEW ENGLAND WETLAND PLANTS INC.
NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES

THE MIX MAY BE APPLIED BY HAND, BY MECHANICAL SPREADER, OR BY HYDRO-SEEDER. AFTER SOWING, LIGHTLY RAKE, ROLL, OR CULTIPACK TO INSURE GOOD SEED-TO-SOIL CONTACT. BEST RESULTS ARE OBTAINED WITH A SPRING OR LATE SUMMER SEEDING. LATE FALL AND WINTER DORMANT SEEDING REQUIRES AN INCREASE IN THE APPLICATION RATE. A LIGHT MULCHING OF CLEAN, WEED-FREE STRAW IS RECOMMENDED.

NEW ENGLAND WETLAND PLANTS INC.
NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DRY SITES

THE NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DRY SITES MAY BE APPLIED BY HYDRO SEEDING, BY MECHANICAL SPREADER, OR ON SMALL SITES IT CAN BE SPREAD BY HAND. LIGHTLY RAKE, OR ROLL TO ENSURE PROPER SOIL-SEED CONTACT. BEST RESULTS ARE OBTAINED WITH A SPRING OR LATE SUMMER SEEDING. LATE SPRING THROUGH MID-SUMMER SEEDING WILL BENEFIT FROM A LIGHT MULCHING OF WEED-FREE STRAW TO CONSERVE MOISTURE. IF CONDITIONS ARE DRIER THAN USUAL, WATERING WILL BE REQUIRED. FERTILIZATION IS NOT REQUIRED UNLESS THE SOILS ARE PARTICULARLY INFERTILE. PREPARATION OF A CLEAN WEED FREE SEED BASE IS NECESSARY FOR OPTIMAL RESULTS.

ANYWHERE ON THE SITE THAT EXISTING VEGETATION IS TO BE REMOVED WILL REQUIRE IMMEDIATE EROSION CONTROL TREATMENT. SPECIAL CARE SHOULD BE TAKEN WHERE RUNOFF ENTERS WETLANDS. ALL STORM WATER AREAS SHALL BE STABILIZED PRIOR TO DIRECTING STORM WATER TO THEM; SPECIFICALLY ALL BIORETENTION BASINS AND ALL INFILTRATION AREAS.

SEEDING LEGEND

– 50/50 BLEND OF NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DRY SITES AND NEW ENGLAND EROSION CONTROL/RESTORATION MIX

FOR DETENTION BASINS AND MOIST SITES.

BOTH MIXES FROM NEW ENGLAND WETLAND PLANTS INC.
APPLY: 35 LBS/ACRE : 1250 SQ FT/LB

– LIMITS OF BIORETENTION SOIL MIX

4 BIORETENTION SEEDING
NOT TO SCALE

1. PARTICLE SIZE DISTRIBUTION BY SEPARATES:
   a. EXCLUDE ANY MATERIAL >4.76MM – 0%
   b. VERY COARSE SAND/GRAVEL: GRAVEL (2.0 TO 4.76 mm) 5% MAXIMUM (% BY DRY WEIGHT)
   c. SAND (0.42 TO 2.0 mm) 60% MAX (% BY DRY WEIGHT)
   d. SILT (0.075 TO 0.42 mm) 20% MAXIMUM (% BY DRY WEIGHT)
   e. CLAY (LESS THAN 0.075mm) 5% MAXIMUM (% BY DRY WEIGHT)
   f. BARK MULCH (LESS THAN 5% PASSING #200) 15% MAX (% BY DRY WEIGHT)
   g. LOAM (LESS THAN 5% PASSING #200) 20% TO 40% (% BY DRY WEIGHT)

ACCEPTABLE PARTICLE SIZE DISTRIBUTION OF FINAL BIORETENTION SOIL MIX:

SIEVE	% PASSING
#4	100
#10	95
#40	40 – 15
#200	10 – 20
<#200	0 – 5

2. FRAGMENT SIZE DISTRIBUTION:
   a. STICKS AND ROOTS: SHOULD BE MINIMIZED AND PREFERABLY LIMITED TO NOTHING LARGER THAN 4.76mm
   b. DEBRIS AND OTHER FOREIGN MATERIALS: SHOULD BE MINIMIZED
3. PERCENTAGE ORGANIC MATTER: MINIMUM 3% BY VOLUME AND MAXIMUM 8% BY VOLUME
4. SOIL REACTION: pH OF 6 TO 7
5. CEC OF TOTAL SOIL: MINIMUM 10 meq/100mL AT pH OF 7.0
6. BASIS-OF-DESIGN PRODUCT: SUBJECT TO COMPLIANCE WITH REQUIREMENTS INDICATED ON DRAWINGS
7. BASIC PROPERTIES: MANUFACTURED SOIL SHALL NOT CONTAIN THE FOLLOWING:
   a. UNACCEPTABLE MATERIALS: CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, BUILDING DEBRIS, ASPHALT, BRICKS, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, ACID, SOLID WASTE, AND OTHER EXTRANEOUS MATERIALS THAT ARE HARMFUL TO PLANT GROWTH.
   b. UNSUITABLE MATERIALS: STONES, ROOTS, PLANTS, SOD, CLAY LUMPS, AND POCKETS OF COARSE SAND THAT EXCEED A COMBINED MAXIMUM OF 5% BY DRY WEIGHT OF THE MANUFACTURED SOIL.
   c. LARGE MATERIALS: STONES, CLODS, ROOTS, CLAY LUMPS, AND POCKETS OF COARSE SAND EXCEEDING 0.187 INCHES (4.76mm) IN ANY DIMENSION

ACCEPTABLE SOIL AMENDMENTS
A. NO COMPOST SHOULD BE USED IN THE PLANTING MIX
B. SPHAGNUM PEAT: PARTIALLY DECOMPOSED SPHAGNUM PEAT MOSS, FINELY DIVIDED OR OF GRANULAR TEXTURE WITH 100% PASSING THROUGH THE 1/2-INCH (13mm) SIEVE, A pH OF 3.4 TO 4.8
C. WOOD DERIVATIVES: SHREDDED WOOD, WOOD CHIPS, GROUND BARK, OR WOOD WASTE; OF UNIFORM TEXTURE AND FREE OF STONES, STICKS, SOIL, OR TOXIC MATERIALS.
D. MEDIA AMENDMENTS SUCH AS ZERO-VALENT IRON AND/OR DRINKING WATER TREATMENT RESIDUALS (ALUM) TO ENHANCE PHOSPHORUS SORPTION AS SPECIFIED BY ENGINEER.

8 BIORETENTION SOIL MIX
NOT TO SCALE

FILL MATERIAL SHOULD BE TAKEN FROM AN APPROVED, DESIGNATED BORROW AREA. IT SHOULD BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, STONES GREATER THAN 6 INCHES, AND FROZEN OR OTHER OBJECTIONABLE MATERIALS.

AREAS ON WHICH FILL IS TO BE PLACED SHOULD BE SCARIFIED BEFORE PLACEMENT. FILL MATERIAL SHOULD BE PLACED IN LAYERS A MAXIMUM OF 8 INCHES THICK (BEFORE COMPACTION), WHICH SHOULD BE CONTINUOUS OVER THE ENTIRE LENGTH OF THE FILL.

FILL MATERIAL SHOULD BE COMPACTED WITH APPROPRIATE COMPACTION EQUIPMENT SUCH AS SHEEPSFOOT, RUBBER-TIRED, OR VIBRATORY ROLLER.

A MINIMUM REQUIRED DENSITY IS 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN 2% OF THE OPTIMUM. EACH LAYER OF THE FILL SHOULD BE COMPACTED AS NECESSARY TO OBTAIN MINIMUM DENSITY.

12 EARTH FILL
NOT TO SCALE

TRITECH
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785 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 749 9157
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ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

REVISIONS
DATE: DESCRIPTION:

STATE OF NEW HAMPSHIRE – ROBERT J. STOWELL No. 9795 – PROFESSIONAL ENGINEER

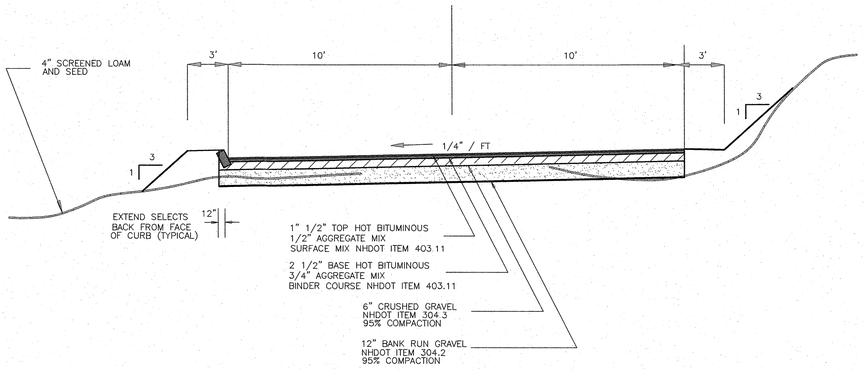
BIORETENTION DETAILS

COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY

MAY 14, 2026 JOB No. 25136
SCALE: 1" = 10'

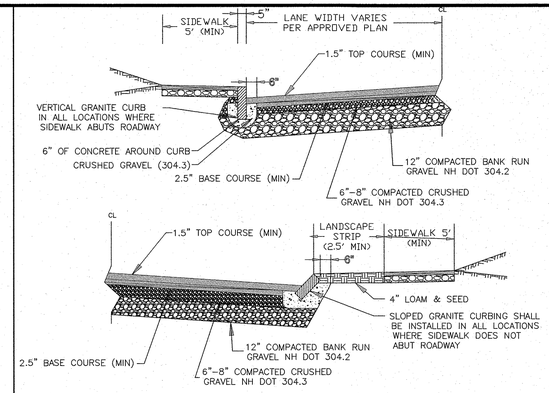
SHEET No. SP-5

(P26-0000)



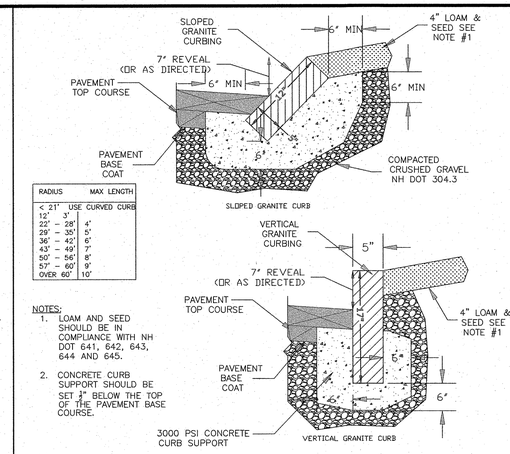
1. TACKIFIER TO BE APPLIED BETWEEN BINDER COURSE AND SURFACE COURSE, (BLACKLIDGE ULTRATACK OR EQUAL).
2. JOINT SEALANT TO BE APPLIED AT LANE JOINTS (SEALANT "C" PAVEMENT JOINT ADHESIVE).
3. SEE DOVER STANDARD DETAILS D-5 FOR ADDITIONAL INFO.
4. SEE DOVER STANDARD DETAILS D-8 FOR ADDITIONAL CURBING INFO.

1 TYPICAL DRIVEWAY-1 CROSS SECTION
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.

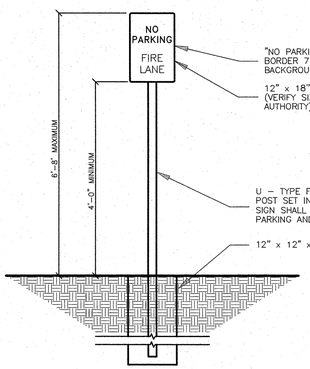
3 DOVER STD. D-5 Roadway Cross Section
NOT TO SCALE



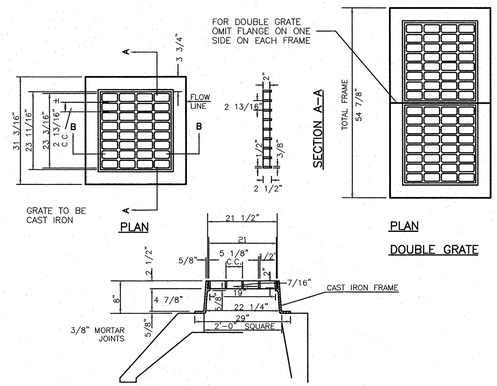
RADIUS	MAX LENGTH
< 21'	USE CURVED CURB
12'	3'
22' - 28'	4'
29' - 35'	5'
36' - 42'	6'
43' - 49'	7'
50' - 56'	8'
57' - 60'	9'
OVER 60'	10'

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 ¾" BELOW THE TOP OF THE PAVEMENT BASE COURSE.

4 DOVER STD. D-8 Granite Curb
NOT TO SCALE

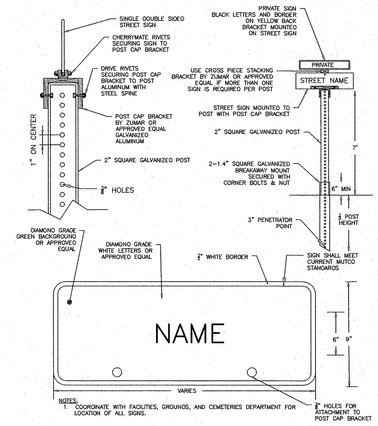


5 NO PARKING - FIRE LANE SIGN
NOT TO SCALE



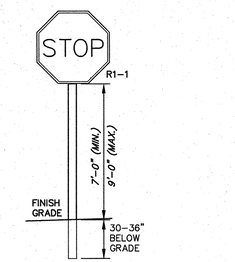
NOTES
1.) USE NEENAH R-3570
2.) FOR SHALLOW INVERTS, USE NEENAH R-3570-A.

9 CATCH BASIN FRAME & GRATE
NOT TO SCALE



NOTES:
1. COORDINATE WITH FACILITIES, GROUNDS, AND CEMETERIES DEPARTMENT FOR LOCATION OF ALL SIGNS.

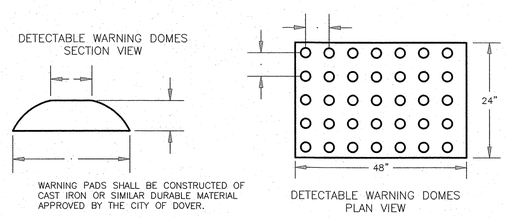
7 DOVER STD. D-1 Street Sign
NOT TO SCALE

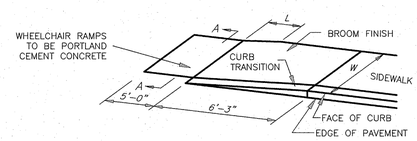


SEE SHEET SP-1 FOR LOCATION OF THIS SIGN.
(SET 2.0' HORIZONTALLY TO FACE OF CURBING OF THE STREET)

TYPICAL SIGNS
NOT TO SCALE

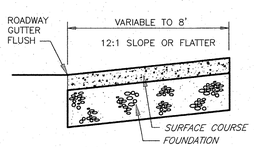
8 STOP SIGN
NOT TO SCALE





4. INSTALL ACCESSIBLE REINFORCED CONCRETE RAMP (MAXIMUM SLOPE = 1" IN 12") FROM PAVEMENT GRADE TO SIDEWALK GRADE IN COMPLIANCE WITH ALL A.D.A. STANDARDS, PER DETAIL 6, SHEET SP-5.

NOTES:
1. THE DIMENSIONS SHOWN AT ROADWAY EDGE ARE FIXED DISTANCES.
2. RAMP CROSS SECTION TO BE SAME AS ADJACENT SIDEWALK; I.E., DEPTH OF SURFACE AND FOUNDATION.
3. PORTLAND CEMENT CONCRETE RAMPS ARE TO BE TEXTURED BY BROOMING IN A DIRECTION PARALLEL TO THE LENGTH OF THE RAMP.
4. SIDEWALKS THAT CROSS DRIVEWAYS SHALL BE RAMPED TO MEET THE GRADE OF DRIVEWAY
5. THESE DIMENSIONS ARE SUBJECT TO CHANGE IN THE FIELD IF EXISTING APPURTENANCES OR CONDITIONS WILL MAKE THE RAMP LOCATIONS IMPRACTICAL OR UNSAFE.
6. DETECTABLE WARNINGS TO BE INSTALLED 6" FROM EDGE OF RAMP
7. DETECTABLE WARNINGS PADS SHALL BE CONSTRUCTED OF CAST IRON OR SIMILAR DURABLE MATERIAL APPROVED BY THE CITY OF DOVER



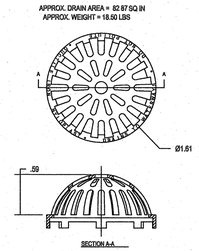
SECTION A-A

W	L	S.Y.
5'-0"	2'-9"±	6.3
6'-0"	2'-0"±	7.2
7'-0"	1'-3"±	8.0
8'-0"	0'-0"	8.1

11 WHEEL CHAIR RAMP
NOT TO SCALE

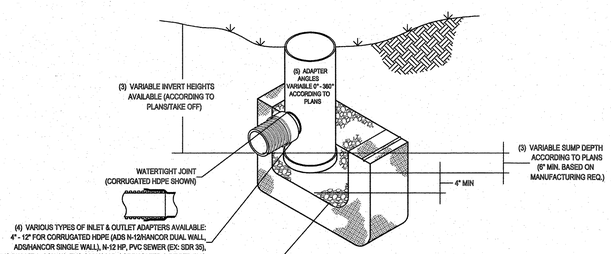
1299CGD

APPROX. DRAIN AREA = 82.87 SQ IN
APPROX. WEIGHT = 18.50 LBS



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST

NYLOPLAST 12" DRAIN BASIN: 2812AG _ _ X



1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05, WITH THE EXCEPTION OF THE BRONZE GRATE.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-005
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360° TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.

11 ADS NYLOPLAST DRAIN BASIN & GRATE DETAIL
NOT TO SCALE

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755 CENTRAL AVENUE
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ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

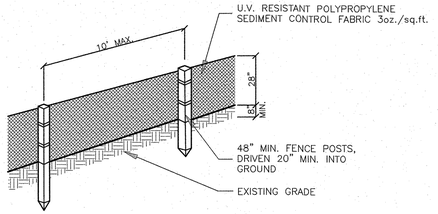
REVISIONS DATE:	DESCRIPTION:

STATE OF NEW HAMPSHIRE - ROBERT J. STOWELL No. 9363 - PROFESSIONAL ENGINEER

CONSTRUCTION DETAILS
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136

SHEET No. SP-6

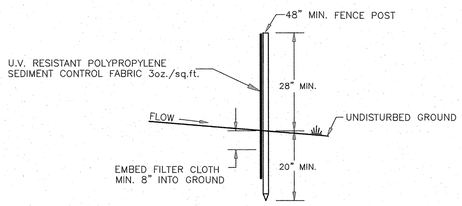
(P26-0000)



PERSPECTIVE VIEW

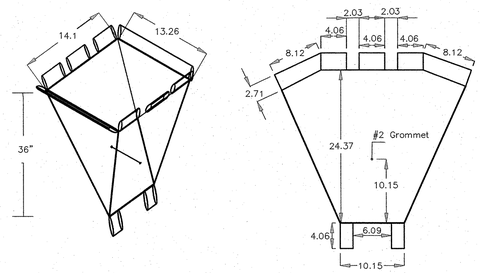
NOTES

1. THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR BEST MANAGEMENT PRACTICE FOR SILT FENCES, OF THE "STORMWATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE" PREPARED BY ROCKINGHAM COUNTY CONSERVATION DISTRICT, DATED AUGUST 1992.
2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
4. FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 20 INCHES INTO THE GROUND. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQ.IN..
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED TO PREVENT BULGES IN THE SILT FENCE DUE TO DEPOSITION OF SEDIMENT.
6. REMOVE BY HAND AND PROPERLY DISPOSE OF ALL SEDIMENT PRIOR TO REMOVING FENCE.



SECTION

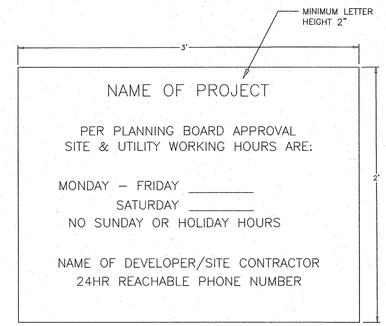
1 SILT FENCE
NOT TO SCALE



Specifications:

a) Fabric used should not be laminated.
b) Silt sack to have two #2 grommets, one on each of the two sides, 15" from the bottom of the silt sack
c) Tie 1/4" wide yellow rope 19" long through the grommets on two sides of the silt sack.

2 Hi Vis Hi Flow Silt Sack
NOT TO SCALE

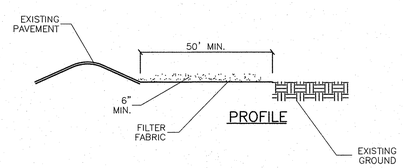


NOTES:

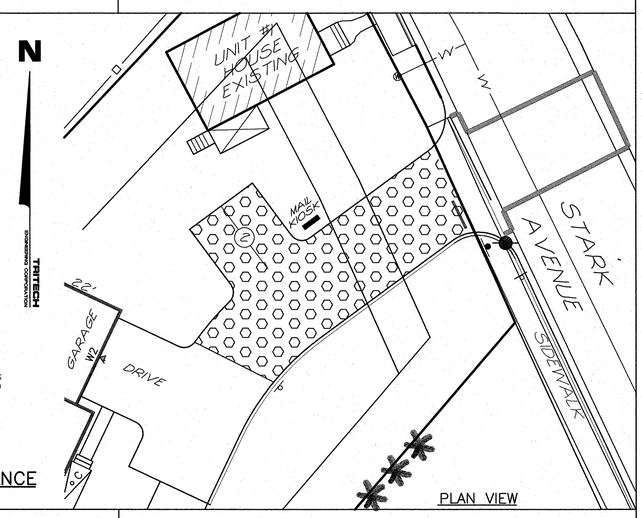
1. SIGN SHALL HAVE BLACK LETTERS ON A WHITE BACKGROUND
2. SIGN SHALL BE WEATHER RESISTANT AND SECURED TO THE GROUND
3. HOURS ON THE SIGN SHALL COMPLY WITH ALL PLANNING BOARD CONDITIONS OF APPROVAL.

3 DOVER STD. D-2 Construction Sign
NOT TO SCALE

1. GRADE AND COMPACT ACCESS ROAD ENTRANCE AS NECESSARY. PLACE FILTER FABRIC (MIRAFI OR EQUAL) AND PLACE 6" OF 1" – 2" STONE TO MATCH SLOPE OF EXISTING ROAD
2. PROVIDE NECESSARY SWALES OR DIVERSIONS TO MINIMIZE DIRECT FLOW OF WATER ONTO STONE AREA.
3. CONSTRUCTION ENTRANCE SHALL BE MAINTAINED AS NECESSARY TO REMOVE SILT FROM TIRES PRIOR TO ENTERING PUBLIC ROADS. A SMALL SWALE SHALL BE CONSTRUCTED ON THE DOWN GRADIENT SIDE TO TRAP ANY SILT WASHED FROM THE STONE.
4. HAYBALES OR SILT FENCE SHALL BE PLACED ON THE DOWN GRADIENT SIDE AS SHOWN ON THE EROSION CONTROL PLAN.



5 STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



PLAN VIEW

1. THE PROJECT SHALL BE MANAGED TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
2. FUGITIVE DUST SHALL BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000.

CRITICAL AREAS

Anywhere on the site that existing vegetation is to be removed will require immediate erosion control treatment. Special care should be taken where runoff enters wetlands. All storm water practices areas shall be stabilized prior to directing storm water to them; specifically all bioretntion basins and all infiltration practices.

EROSION AND SEDIMENT CONTROL PRACTICES

Erosion and sediment control practices will include the use of rip-rap, and silt fence check dams. All erosion and sediment control practices will be constructed and maintained according to the minimum standards and specifications contained in the "New Hampshire Stormwater Manual, Volume 2".

A. Erosion and Sediment Control Measures

1. The erosion control procedures shall conform to Section 645 of the "Standard Specifications for Road and Bridge Construction" of the NH DOT, and the "New Hampshire Stormwater Manual."
2. During Construction and thereafter, erosion control measures are to be implemented as noted. The smallest practical area of land should be exposed at any one time during development. The amount of exposed areas which are temporarily stabilized without permanent stabilization shall be limited to 5 acres.
3. During grading operations, install stone check dams at 50 foot intervals in drainage swales and at drain inlets where shown. Barriers are to be maintained and cleaned until disturbed areas are stabilized.
4. Any disturbed areas which are to be left temporarily, and which will be regraded later during construction shall be machine hay mulched and seeded with rye grass to prevent erosion.
5. Silt fences and other erosion control measures shall be inspected weekly and after every 0.25" rainfall event during the life of the project. All damaged silt fences shall be repaired. Sediment deposits shall periodically be removed.
6. Avoid the use of future open spaces (loam and seed areas) wherever possible during the construction. Construction traffic shall use the roadbeds of future roads and parking areas.
7. Topsoil required for the establishment of vegetation shall be stock piled in amounts necessary to complete finished grading of all exposed areas.
8. Areas to be filled shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots or other objectionable material. Stumps shall be disposed by grinding or fill in an approved facility.
9. All fills shall be placed and compacted to reduce erosion, slippage settlement, subsidence or other related problems.
10. All fill shall be placed and compacted in layers not to exceed 8 inches in thickness.
11. Frozen material or soft, mucky or highly compressible material shall not be incorporated into fills.
12. Fill material shall not be placed on a frozen foundation subgrade.
13. Disturbed areas shall be seeded immediately following finished grading.
14. Limit of exposed area that is temporarily stabilized without permanent stabilization is 5 acres or less.
15. All areas not stabilized by Nov. 1st must be protected by Erosion Control Blankets or equivalent and mulched/seeded with winter rye or oats.
16. All disturbed areas must be seed and mulched within 3 days of final grading,, permanently stabilized within 15 days of final grading or temporarily stabilized within 45 days of initial disturbance.
17. All ditches and swales are to be stabilized prior to directing runoff to these features.
18. All cut and fill slopes shall be seeded immediately.
19. An area shall be considered stable if one of the following has occurred:
    a.) Base course gravels are installed in areas to be paved
    b.) A minimum of 85% vegetated growth has been established
    c.) A minimum of 3" of non-erosive material such as stone or riprap has been installed
    d.) Erosion control blankets have been properly installed.

B. Vegetative Practice

All ground areas opened up for construction will be regraded, loamed, seeded and mulched in the shortest practical time. All Temporary and Permanent Seeding must be applied prior to October 1st. Employ temporary erosion and sedimentation control devices as detailed in this plan as necessary until adequate stabilization has been assured.

A. Temporary Seeding & Hay Mulching

1. At no time shall any disturbed area remain unstabilized for longer than 30 days. All areas where construction is not completed within 30 days of the initial disturbance shall receive temporary seeding measures.
2. Fertilizer shall be spread on the top layer of loam and worked into the surface. Fertilizer application rate shall be 300 pounds per acre of 10-10-10 fertilizer.
3. Seed shall be Winter Rye, 112 LBS. per acre.
4. Remove stones and trash that will interfere with seeding the area. Where feasible, till the soil to a depth of about 3 inches to prepare a seedbed and mix fertilizer into the soil. The seedbed should be left in a firm and smooth condition. The last tillage operation should be performed across the slope whenever practical.
5. If seeding between May 15th and August 15th, hay mulch shall be applied immediately after seeding at a rate of 1.5 to 2 tons per acre and shall be held in place using appropriate techniques from the Erosion and Sediment Control Handbook.
6. The surface shall be watered and kept moist with a fine spray as required without washing away the soil, until the grass is well established. Any areas which are not satisfactorily covered with grass shall be reseeded, and all noxious weeds are removed.

B. Permanent Seeding & Hay Mulching

1. All disturbed areas shall be loamed (4") and limed. Lime shall be thoroughly incorporated into the loam layer at a rate of 2 tons per acre.
2. Fertilizer shall be spread on the top layer of loam and worked into then surface. Fertilizer application rate shall be 500 pounds per acre of 10-20-20 fertilizer.
3. Seed shall be 48 lbs. per acre, SCS mixture "c" (20 lbs tall fescue, 20 lbs. creeping red fescue and 8 lbs. birds foot trefoil = 48 lbs total.) The soil shall be lightly raked immediately before seeding. One half the seed shall be sown in one direction and the other half at right angles to the original direction. It shall be lightly raked in to the soil to a depth not over 1/4 inch and rolled with hand roller weighing not over 100 points per linear foat to width.
4. Hay mulch shall be applied immediately after seeding at a rate of 1.5 to 2 tons per acre and shall be held in place using appropriate techniques from the Erosion and Sediment Control Handbook. The surface shall be watered and kept moist with a fine spray as required, without washing away the soil, until the grass is well established. Any areas which are not satisfactorily covered with grass shall be reseeded, and all noxious weeds removed.

CONSTRUCTION SEQUENCE

1. Do not begin construction until all local, state and federal permits have been applied for and received.
2. Install silt fences filtrex sock as necessary to control erosion and prevent sediment contamination prior to any earth moving activities.
3. Cut and remove trees, shrubs, saplings, brush, vines and other debris and rubbish as specified for construction.
4. Care shall be taken to preserve the infiltration capacity of the infiltrating soil. See the New Hampshire Stormwater Manual far additional information.
5. Construct stormwater Bioretention Practice #1. Do not direct runoff to these practices until the practice and contributing areas are fully stabilized.
6. Building construction may begin.
7. Construct driveways, parking and utilities.
8. Loam and seed disturbed areas in accordance with vegetative practice and general construction notes. Cut and fill slopes shall be seeded immediately after their construction.
9. All areas receiving runoff, including but not limited to the stormwater infiltration shall be stabilized prior to directing runoff to them.
10. All soils that are finish graded must be stabilized within 72 hours of disturbance.
11. Maintain disturbed areas as necessary.

MAINTENANCE

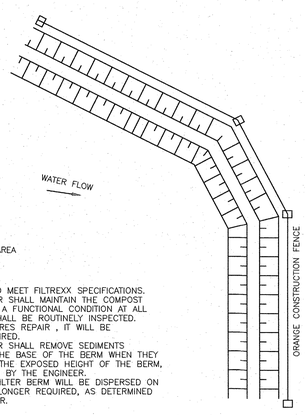
During the period of construction and/or until long term vegetation is established:

1. Seeded areas will be fertilized and reseeded as necessary to insure vegetative establishment.
2. The side slopes will be checked after each significant rainfall.
3. The side slopes will be checked weekly and repaired when necessary until adequate vegetation is established.
4. The silt fence barriers will be checked regularly. Necessary repairs will be made to correct undermining or deterioration of the structures.

WINTER CONSTRUCTION NOTES

1. All proposed vegetated areas which do not exhibit a minimum of 85% vegetation growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting, elsewhere. The installation of erosion control blankets or mulch and netting shall not occur over accumulated snow or on frozen ground and shall be completed in advance of thaw or spring melts.
2. All ditches or swales which do not exhibit a minimum of 85% vegetation growth by October 15th, ar which are disturbed after October 15th, shall be stabilized temporarily with stone ar erosion control blankets appropriate for the design flow conditions.
3. After November 15th, incomplete road or parking surfaces, where work has stopped for the winter season, shall be protected with a minimum of 3 inches of crushed gravel per NHDOT item 304.3.

12 EROSION AND SEDIMENT CONTROL NOTES

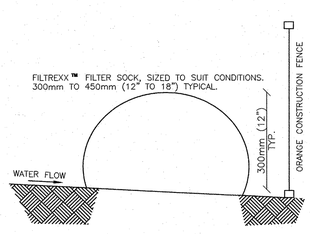


TYPICAL BERM FOR MINIMAL GRADES SHOWN. FOR STEEPER GRADES, I.E. 2:1 SLOPES INCREASE BERM SIZE AS DETERMINED ON SITE BY ENGINEER.

NOTES

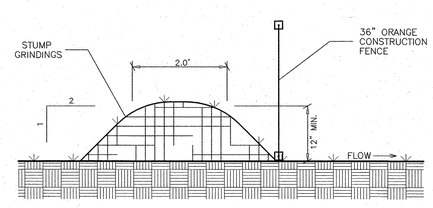
1.) ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2.) THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTER BERM IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
3.) WHERE IT REQUIRES REPAIR , IT WILL BE ROUTINELY REPAIRED.
4.) THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE BERM WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE BERM, OR AS DIRECTED BY THE ENGINEER.
5.) WHERE IT REQUIRES REPAIR , IT WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

9 FILTREXX SOCK – SILT FENCE
NOT TO SCALE



FILTER COMPOST MATERIAL AS PER SPECIFICATIONS.

1. BERMS SHALL BE USED IN AREAS WHERE EROSION WILL OCCUR ONLY IN THE FORM OF SHEET EROSION AND THERE WILL BE NO CONCENTRATION OF WATER IN A CHANNEL OR DRAINAGE WAY ABOVE THE BERM.
2. THE BERMS SHALL BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSE AS POSSIBLE.
3. THE BERMS SHALL BE INSTALLED ON SLOPES OF LESS THAN 5%.
4. THE MIX SHALL HAVE AN ORGANIC PORTION BETWEEN 80 AND 100%, DRY MASS WEIGHT BASIS, AND BE FIBEROUS AND ELONGATED SUCH AS FROM SHREDDED BARK, STUMP GRINDINGS, COMPOSED BARK, OR EQUIVALENT MANUFACTURED PRODUCTS.
5. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS, OR REPROCESSED WOOD PRODUCTS SHALL NOT BE USED AS ORGANIC MATERIALS.
6. THE MIX SHALL NOT CONTAIN SILTS, CLAY OR FINE SANDS.
7. THE MIX SHALL HAVE A PARTICLE SIZE BY WEIGHT OF 70 TO 85% PASSING A 6-INCH SCREEN AND A MAXIMUM OF 85% PASSING THE 0.75-INCH SCREEN.



11 EROSION CONTROL MULCH BERM
NOT TO SCALE

TRITECH
ENGINEERING CORPORATION
7166 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3830

ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

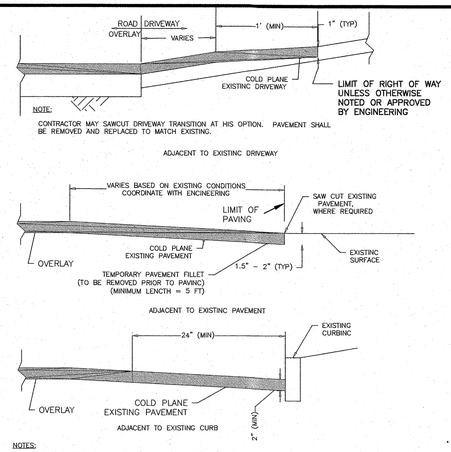
REVISIONS DATE:	DESCRIPTION:

STATE OF NEW HAMPSHIRE – ROBERT J. STOWELL No. 9893 – PROFESSIONAL ENGINEER

CONSTRUCTION DETAILS
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136
SCALE: 1" = 30'

SHEET No. SP-7

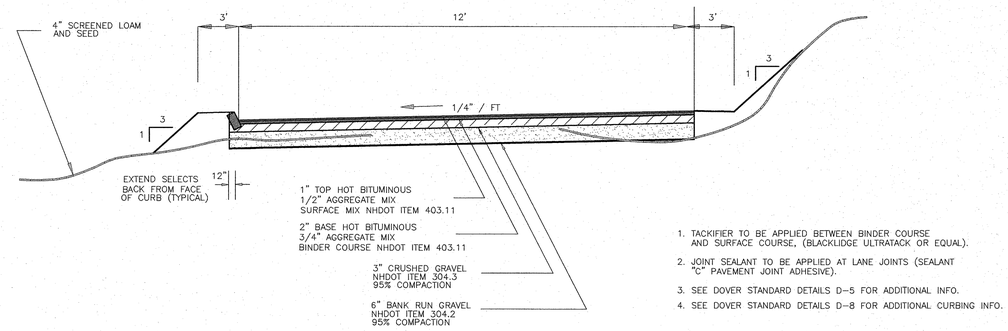
(P26-0000)



NOTES:

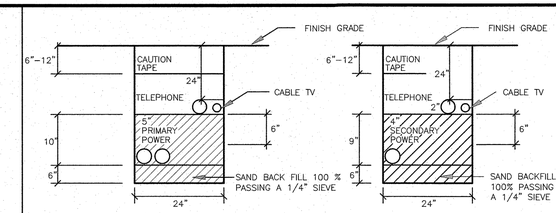
1. THE LENGTH OF THE TAPER MAY BE ADJUSTED AS ORDERED TO PROVIDE FOR VARYING FIELD CONDITIONS OR CHANGES IN SINGLE COURSE DEPTH.

1 DOVER STD. D-12 Pavement Overlay Details
NOT TO SCALE



1. TACKIFIER TO BE APPLIED BETWEEN BINDER COURSE AND SURFACE COURSE, (BLACKLIDGE ULTRATACK OR EQUAL).
2. JOINT SEALANT TO BE APPLIED AT LANE JOINTS (SEALANT "C" PAVEMENT JOINT ADHESIVE).
3. SEE DOVER STANDARD DETAILS D-5 FOR ADDITIONAL INFO.
4. SEE DOVER STANDARD DETAILS D-8 FOR ADDITIONAL CURBING INFO.

2 TYPICAL DRIVEWAY-2 CROSS SECTION
NOT TO SCALE



ELECTRICAL TRENCH "A"
NOT TO SCALE

ELECTRICAL TRENCH "B"
NOT TO SCALE

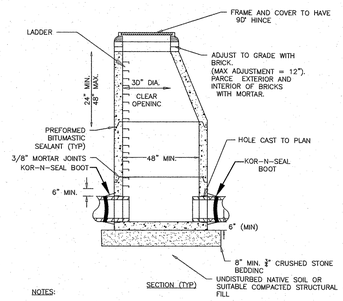
1.) TELEPHONE CONDUIT SHALL BE 3" SCHEDULE 40 PVC, WITH STEEL SWEEPS AT RISER POLE, 90° BENDS AND AT BUILDING.

2.) LEAVE PULL ROPE IN ALL CONDUITS FOR CABLE INSTALLATION.

3.) FOR COMPLETE SPECIFICATION SEE "PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE CONSTRUCTION SPECIFICATIONS FOR UNDERGROUND CONDUIT SYSTEMS".

4.) CONTRACTOR SHOULD VERIFY THE NUMBER & SIZE OF CONDUIT WITH THE APPROPRIATE UTILITIES.

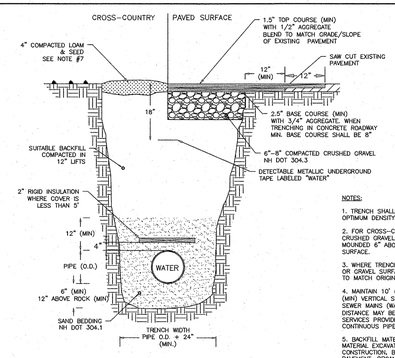
4 ELECTRICAL TRENCH
NOT TO SCALE



NOTES:

1. CORINGS TO BE SEPARATED BY 6" (MINIMUM) OF MONOLITHIC SECTION

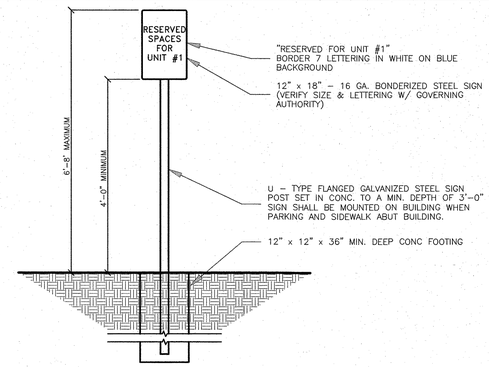
5 DOVER STD. D-20 DRAIN MANHOLE
NOT TO SCALE



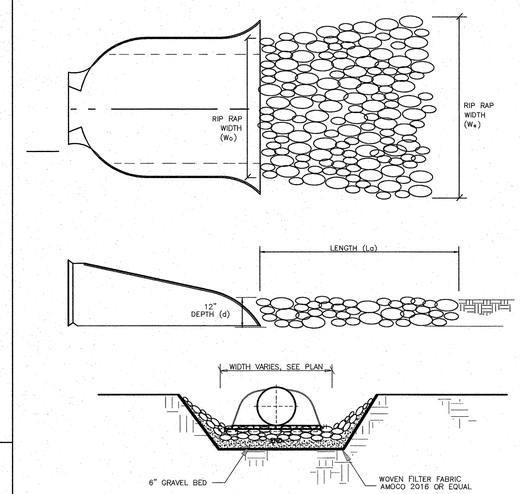
NOTES:

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.

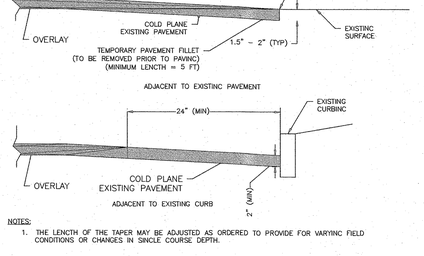
6 DOVER STD. D-4 Water Trench
NOT TO SCALE



7 RESERVED SPACES FOR UNIT #1
NOT TO SCALE



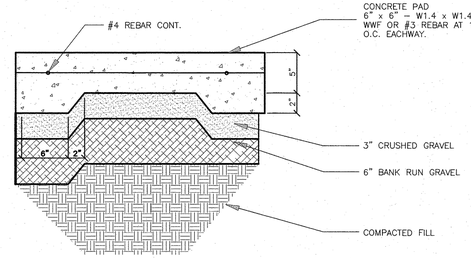
8 RIPRAP DETAIL
NOT TO SCALE



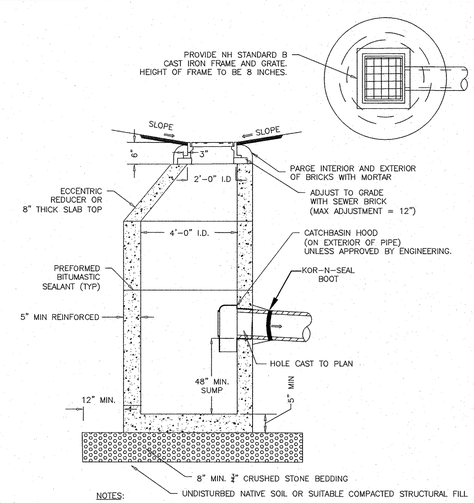
NOTES:

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. APPROVED WATER SERVICE MATERIALS INCLUDE:
   ¾"- 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.

9 DOVER STD. D-13 WATER SERVICE CONNECTION
NOT TO SCALE



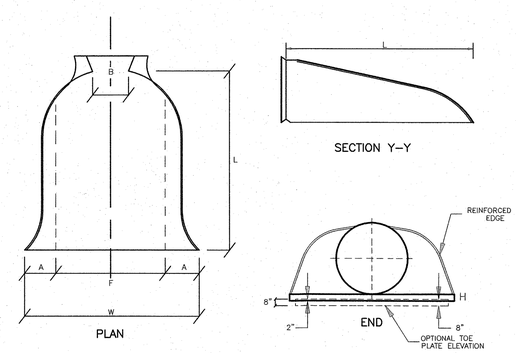
10 CONCRETE PAD DETAIL
NOT TO SCALE



NOTES:

1. ENTIRE STRUCTURE SHALL BE H-20 LOAD RATED. PROVIDE MANUFACTURER REINFORCEMENT DETAILS TO THE CITY ENGINEER UPON REQUEST.
2. CONTRACTOR SHALL HAVE OPTION TO USE 6" OR 8" PRECAST GRADE RINGS TO ADJUST GRADE.

11 DOVER STD. D-19 CATCH BASIN
NOT TO SCALE



DIA	A	B	H	F	L	W
12"	5"	7"	6"	22"	21"	44"

12 CMP FLARED END SECTION
NOT TO SCALE

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 9830

ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

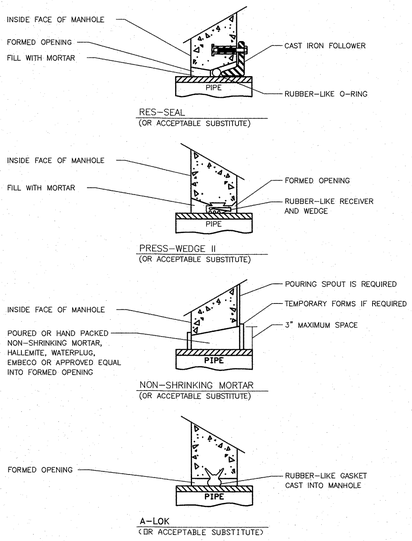
REVISIONS DATE:	DESCRIPTION:
6/18/26	REVISED PER TRC COMMENTS

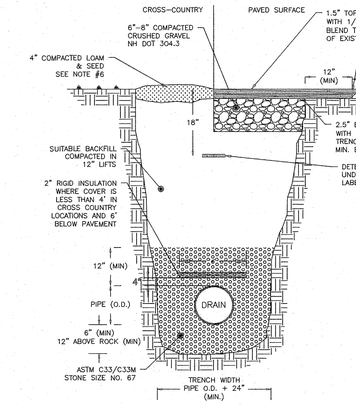
STATE OF NEW HAMPSHIRE - ROBERT J. STOWELL - NO. 9398 - PROFESSIONAL ENGINEER

CONSTRUCTION DETAILS
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136

SHEET No.
SP-8

(P26-0000)





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.

1 DOVER STD. D-3 Drainage Trench

NOT TO SCALE

GENERAL NOTES

1) IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAK PROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS(H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.

2) BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE, OR POURED IN PLACE REINFORCED CONCRETE.

3) PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478.

4) LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS.

5) INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED OR PRECAST CONCRETE SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF THE PIPE AND FLOW. AT CHANGES IN DIRECTIONS, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY OR PRECAST CONCRETE.

6) FRAMES AND COVERS: MANHOLES FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) WORD "SEWER" FOR SEWERS AND "DRAIN" FOR DRAINS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER

7) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33, SIZE NUMBER 67.
100% PASSING 1 INCH SCREEN 0-10% PASSING #4 SIEVE
90-100% PASSING INCH SCREEN 0-5% PASSING #8 SIEVE
20-55% PASSING INCH SCREEN
WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE INCH TO 1 INCH SHALL BE USED.

8) FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDE WITHIN THE FOLLOWING DISTANCES: RCP & CI PIPE - ALL SIZES - 48"

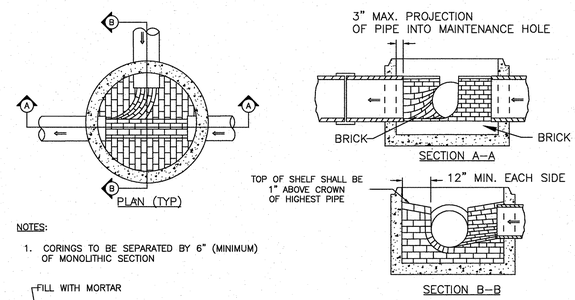
9) SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.

10) MANHOLE STEPS MAY BE PERMITTED UPON REQUEST BY THE OWNER AS SECONDARY ADDITIONAL SAFETY FEATURE SUPPLEMENTARY TO THE PRIMARY PORTABLE LADDER ENTRY AND WHEN INSTALLED UNDER THE FOLLOWING CONDITIONS:

1. THE STEPS SHALL BE MANUFACTURED OF PLASTIC COVERED STEEL. THEY SHALL BE SHAPED SO THEY CANNOT BE PULLED OUT OF THE CONCRETE WALL IN WHICH THEY ARE EMBEDDED.
2. THE STEPS SHALL BE EMBEDDED IN THE CONCRETE BY THE MANUFACTURER DURING MANUFACTURE OR IMMEDIATELY FOLLOWING REMOVAL OF FORMS. SECURING THE STEPS WITH MORTAR IN DRILLED OR CAST HOLES, WILL NOT BE ACCEPTABLE.
3. THE STEPS SHALL BE OF THE DROP TYPE WITH A DEPRESSED SECTION FOR HANDHOLD. APPROXIMATELY 14"X10" IN DIMENSION.

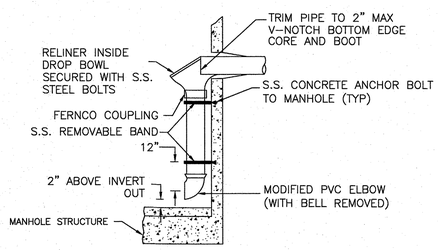
11) HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL, IN GENERAL, DEPEND FOR WATERTIGHTNESS UPON AN ELASTOMERIC OR MASTIC-LIKE GASKET. APPROVED ELASTOMERIC SEALANTS ARE: RAM-NEK
KENT SEAL NO.2
EZ

12) PIPE TO MANHOLE JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER AND IN GENERAL, WILL DEPEND FOR WATERTIGHTNESS UPON EITHER AN APPROVED NON-SHRINKING MORTAR OR ELASTOMERIC SEALANT.



NOTES:

1. CORINGS TO BE SEPARATED BY 6" (MINIMUM) OF MONOLITHIC SECTION



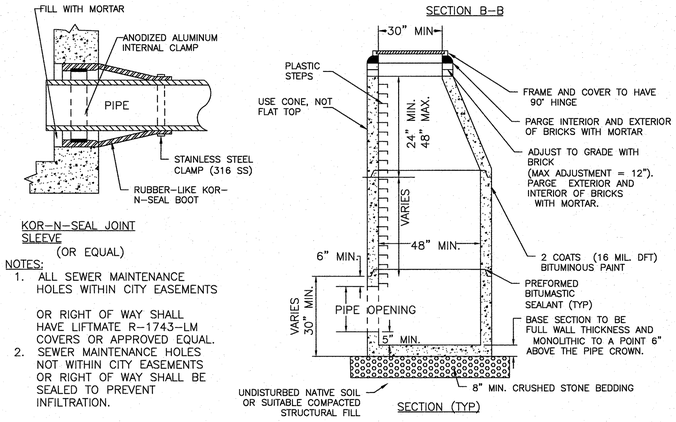
INTERNAL DROP

NOTES:

1. INTERNAL DROPS ARE PROHIBITED UNLESS APPROVED BY THE CITY ENGINEER.
2. A MINIMUM 5 FT DIAMETER MANHOLE IS REQUIRED FOR AN INTERNAL DROP.
3. IF A DROP IS PROPOSED FOR AN EXISTING MANHOLE, THE BRICK SHELF SHALL BE REWORKED TO FORM A NEW CHANNEL, FOR NEW DROP CONNECTIONS. IF STRUCTURE IS LESS THAN 5 FT IN DIAMETER, A NEW PRECAST MANHOLE SHALL BE INSTALLED.
4. BRICK INVERT NOT SHOWN ON DETAIL.
5. EXTERNAL DROPS ARE NOT PERMITTED UNLESS AUTHORIZED IN WRITING BY COMMUNITY SERVICES.

DOVER STD. D-18 MH DROP INLET

NOT TO SCALE



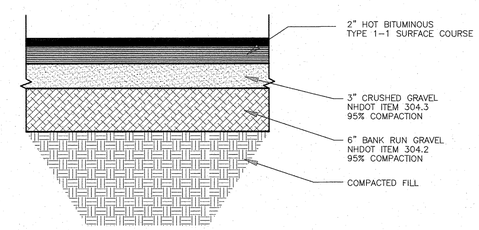
NOTES:

1. ALL SEWER MAINTENANCE HOLES WITHIN CITY EASEMENTS

   OR RIGHT OF WAY SHALL HAVE LIFTMATE R-1743-LM COVERS OR APPROVED EQUAL.
2. SEWER MAINTENANCE HOLES NOT WITHIN CITY EASEMENTS OR RIGHT OF WAY SHALL BE SEALED TO PREVENT INFILTRATION.

DOVER STD. D-16 SEWER MAIN

NOT TO SCALE



GENERAL MATERIALS NOTES - APPLIES TO ALL DETAILS UNLESS NOTED.

1.) MATERIALS & CONSTRUCTION METHODS SHALL CONFORM TO THE STATE OF NEW HAMPSHIRE STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION.
2.) COMPACTED FILL UNDER PAVEMENT OR CONCRETE AREAS SHALL BE FREE OF ORGANIC MATERIAL & COMPACTED IN 6" LIFTS TO NOT LESS THAN 95% OPTIMUM DENSITY.

	SIEVE	PERCENT PASSING
3.) BANK RUN GRAVEL SHALL BE:	6"	100%
	#4	25 - 70%
	#200	≤ 12% OF PASSING #4
4.) CRUSHED GRAVEL SHALL BE:	SIEVE	PERCENT PASSING
	3"	100%
	2"	95 - 100%
	1"	55 - 85%
	#4	27 -52%
	#200	0 - 12%

5.) BASE COURSE OF PAVEMENT SHALL BE 3/4" DIA. TYPE I-1 HOT BITUMINOUS CONCRETE (225 LBS/SQ.YD.)
6.) WEARING COURSE OF PAVEMENT SHALL BE 1/2" DIA. TYPE I-1 HOT BITUMINOUS CONCRETE (115 LBS/SQ.YD.)

TYPICAL ASPHALT SIDEWALK SECTION

NOT TO SCALE

TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3830

ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

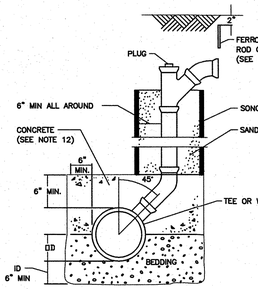
REVISIONS DATE:	DESCRIPTION:
6/18/26	REVISED PER TRC COMMENTS

STATE OF NEW HAMPSHIRE - ROBERT J. STOWELL No. 9393 - PROFESSIONAL ENGINEER

SEWER DETAILS
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136

SHEET No. SP-9

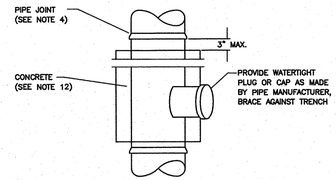
(P26-0000)



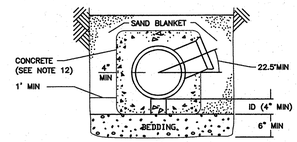
NO BACKFILLING BEFORE CONCRETE HAS TAKEN INITIAL SET (7 HRS. MIN.). BACKFILLING TO BE BROUGHT UP EVENLY ON ALL SIDES.

CHIMNEY (SEE NOTE 13)

NOT TO SCALE



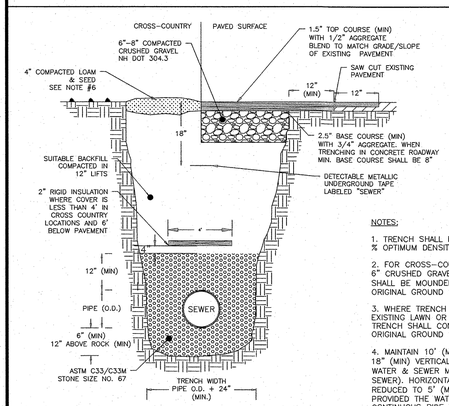
PLAN



SECTION

CONCRETE FULL ENCASEMENT

NOT TO SCALE

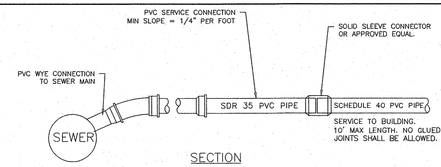


NOTES:

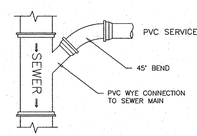
1. TRENCH SHALL BE COMPACTED TO 95 % OPTIMUM DENSITY FOR EACH MATERIAL.
2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE.
3. WHERE TRENCH IS LOCATED ON EXISTING LAWN OR GRAVEL SURFACE, TRENCH SHALL CONFORM TO MATCH ORIGINAL GROUND 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.

DOVER STD. D-3 Sewer Trench

NOT TO SCALE



SECTION



PLAN

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

DOVER STD. D-17 SEWER SERVICE

NOT TO SCALE

GENERAL NOTES

1) MINIMUM SIZE PIPE FOR HOUSE SERVICE SHALL BE FOUR INCHES.

2) PIPE AND JOINT MATERIALS:

A. PLASTIC SEWER PIPE

1. PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

ASTM STANDARDS	GENERIC PIPE MATERIAL	SIZES APPROVED
D3034	*PVC (SOLID WALL)	8" THROUGH 15" (SDR 35)
F679	PVC (SOLID WALL)	18" THROUGH 27" (T-1 & T-2)
F789	PVC (SOLID WALL)	4" THROUGH 18" (T-1 TO T-3)
F794	PVC (RIBBED WALL)	8" THROUGH 36"
D2680	*ABS (COMPOSITES WALL)	8" THROUGH 15"

*PVC: POLY VINYL CHLORIDE
*ABS: ACRYLONITRILE-BUTADIENE-STYRENE

2. JOINTS SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.

ABS TRUSS PIPE AND FITTINGS SHALL CONFORM TO ASTM D-2680, POLYMER COMPOUNDING SHALL BE TO ASTM D-1788 (CLASS 322).

JOINTS FOR ABS TRUSS PIPE SHALL BE CHEMICAL WELDED COUPLINGS TYPE SC IN ACCORDANCE WITH ASTM D-2680, FORMING A CHEMICAL WELDED JOINT.

B. DUCTILE-IRON PIPE, FITTINGS AND JOINTS.

1. DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE UNITED STATES OF AMERICA STANDARDS INSTITUTE:
   A21.50 THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A-536 DUCTILE IRON CASTINGS.
   A21.51 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.

2. JOINTS SHALL BE OF THE MECHANICAL OR PUSH-ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO:
   A21.11 RUBBER GASKETS JOINTS FOR CAST IRON PRESSURE PIPE & FITTINGS

3) DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.

4) JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER-TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.

5) TEES AND WYES: WHERE A TEE OR WYE IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE, FOLLOWING MANUFACTURERS' INSTRUCTIONS USING A BOLTED, CLAMPED OR EPOXY-CEMENTED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR SAWN OPENING IN THE SEWER. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH OR OTHER SUCH MATERIAL AROUND THE JOINT, OR APPLYING MORTAR TO HOLD THE CONNECTION, AND ANY OTHER SIMILAR CRUDE PRACTICES OR INEPT OR HASTY IMPROVISATIONS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED AS SHOWN IN THE DETAIL UP TO AND INCLUDING 15" DIAMETER.

6) HOUSE SEWER INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND RE-FILL FOR DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES.

THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE FOUNDATION AT A GRADE OF NOT LESS THAN INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.

7) TESTING: THE COMPLETED HOUSE SEWER SHALL BE SUBJECTED TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS: (PRIOR TO BACKFILLING)

A. AN OBSERVATION TEE SHALL BE INSTALLED AS SHOWN AND WHEN READY FOR TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE. AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.

B. THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER, TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS OR, IF TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. INSPECTIONS FOR LEAKS SHALL BE MADE THROUGH THE CLEANOUT WITH A FLASHLIGHT.

C. DRY FLUORESCENCE DYES SHALL BE SPRINKLED INTO THE TRENCH AND HOSED OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER, OR IF THE TRENCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST DOWN-STREAM MANHOLE.

LEAKAGE OBSERVED IN ANY ONE OF THE ABOVE ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP IF NECESSARY AND RE-LAID SO AS TO ASSURE WATER TIGHTNESS.

8) ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM HOUSE TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR OTHER SIMILAR CONNECTIONS CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.

9) HOUSE WATER SERVICE SHALL NOT BE LAID IN SAME TRENCH AS SEWER SERVICE.

10) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33-67.

100% PASSING	1 INCH SCREEN
90%-100% PASSING	3/4 INCH SCREEN
20%- 55% PASSING	3/8 INCH SCREEN
0%- 10% PASSING	#4 SIEVE
0%- 5% PASSING	#8 SIEVE

WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1 1/2 INCH SHALL BE USED.

11) LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE TEE OR WYE AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPEFINDER.

12) CONCRETE: CONCRETE SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 PSI) CONCRETE OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARDS SPECIFICATIONS AS FOLLOWS:

CEMENT: 6.0 BAGS PER CUBIC YARD
WATER: 5.75 GALLONS PER BAG CEMENT
MAXIMUM SIZE OF AGGREGATE: 1 INCH

13) CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.

14) MAINTAIN A 10' HORIZONTAL SEPARATION BETWEEN SEWER LINES AND WATER LINES, AND AN 18" VERTICAL SEPARATION AT SEWER AND WATER CROSSINGS, WITH WATER OVER SEWER.

15) GRAVITY SEWER PIPE TESTING SPECIFICATIONS PER ENV.WQ 704.06

GRAVITY SEWER PIPE TESTING

(A) ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.
(B) LOW-PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH THE FOLLOWING TESTING STANDARDS IN EFFECT AT THE TIME IS CONDUCTED:
   (1) ASTM F1417 "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR", AVAILABLE AS NOTED IN APPENDIX D; OR
   (2) UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE", AVAILABLE AS NOTED IN APPENDIX D.
(C) ALL NEW GRAVITY SEWERS SHALL BE:
   (1) CLEANED AND VISUALLY INSPECTED USING A LAMP TEST AND BY INTRODUCING WATER TO DETERMINE THAT THERE IS NO STANDING WATER IN THE SEWER; AND
   (2) TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR TO USE.
(D) ALL PLASTIC SEWER PIPE SHALL BE VISUALLY INSPECTED AND DEFLECTION TESTED NOT LESS THAN 30 DAYS NOR MORE THAN 90 DAYS FOLLOWING INSTALLATION.
(E) THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5% PERCENT OF AVERAGE INSIDE DIAMETER. A RIGID BALL OR MANDREL WITH A DIAMETER OF AT LEAST 95% OF THE AVERAGE INSIDE PIPE DIAMETER SHALL BE USED FOR TESTING PIPE DEFLECTION. THE DEFLECTION TEST SHALL BE CONDUCTED WITHOUT MECHANICAL PULLING DEVISES.

GENERAL NOTES

1) ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. FOR TRENCH WIDTH SEE NOTE 7.

2) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33 STONE SIZE NO. 67.

100% PASSING	1 INCH SCREEN
90%-100% PASSING	3/4 INCH SCREEN
20%- 55% PASSING	3/8 INCH SCREEN
0%- 10% PASSING	#4 SIEVE
0%- 5% PASSING	#8 SIEVE

WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1 1/2 INCH SHALL BE USED.

3) SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER SO GRADED THAT 90%-100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAT 15% WILL PASS A #200 SIEVE. BLANKET MAY BE OMITTED FOR DUCTILE IRON AND REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2 INCHES IS IN CONTACT WITH THE PIPE.

4) SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALK-WAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX 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.

IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WHEN NECESSARY WILL BE PRESERVED.

5) BASE COURSE, IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE:
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION.

6) WOOD SHEETING, IF REQUIRED. WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.

7) W= MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES, FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.

8) FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

9) CONCRETE FOR ENCASEMENT SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 LB) CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS: CEMENT: 6.0 BAGS PER CUBIC YARD
WATER: 5.75 GALLONS PER BAG CEMENT
MAXIMUM SIZE OF AGGREGATE: 1 INCH

10) IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MIN.) BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.

TRITECH
ENGINEERING CORPORATION
795 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3830

ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

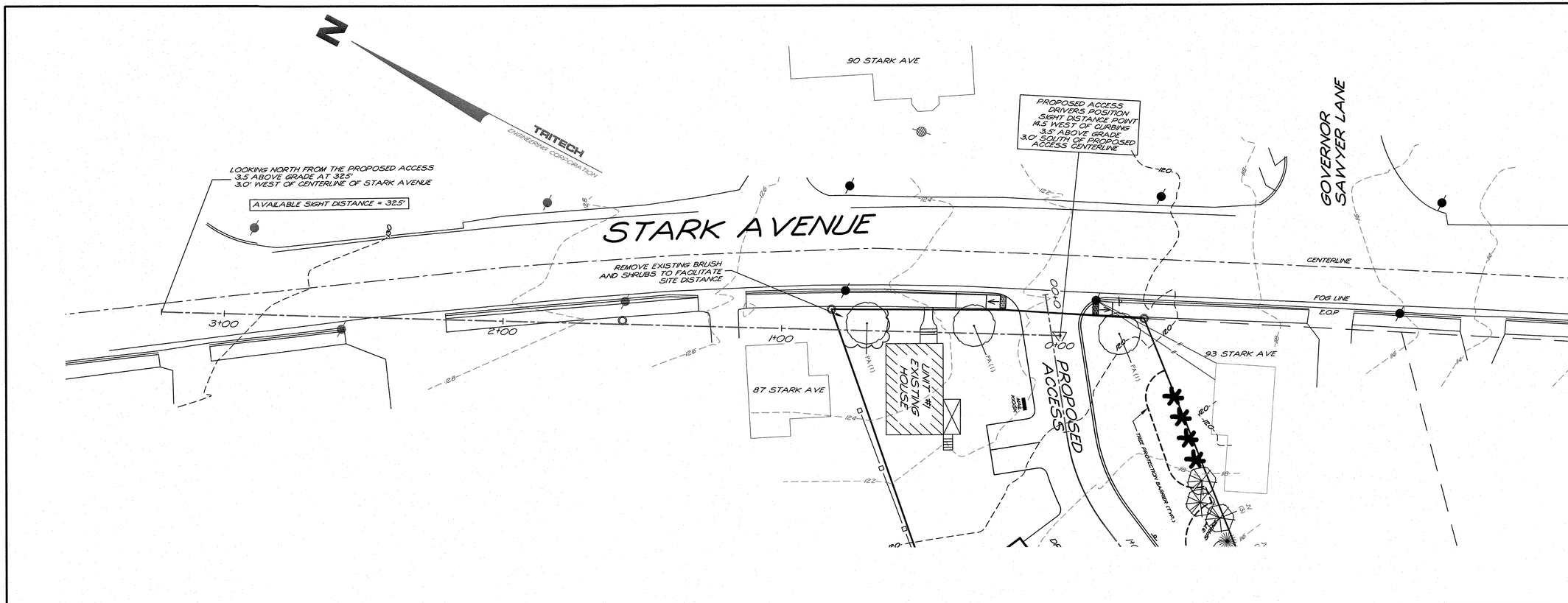
REVISIONS DATE:	DESCRIPTION:

STATE OF NEW HAMPSHIRE ROBERT STOWELL NH 8305 PROFESSIONAL ENGINEER

SEWER DETAILS
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136

SHEET No. SP-10

(P26-0000)



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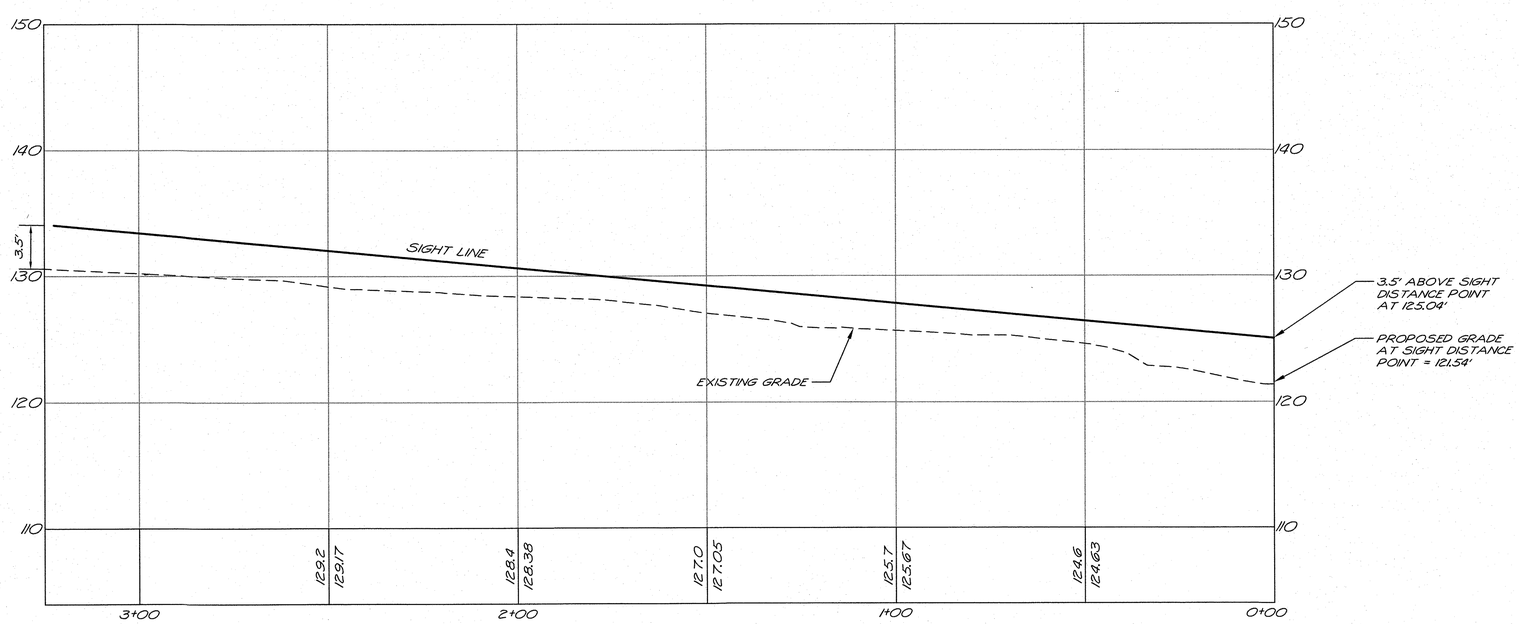
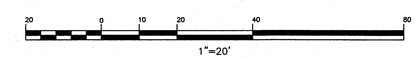
VERTICAL SCALE 1" = 6'





TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3630

ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

REVISIONS

DATE:	DESCRIPTION:
6/18/26	REVISED PER TRC COMMENTS

STATE OF NEW HAMPSHIRE - ROBERT J. STOWELL No. 7920 - LICENSED PROFESSIONAL ENGINEER

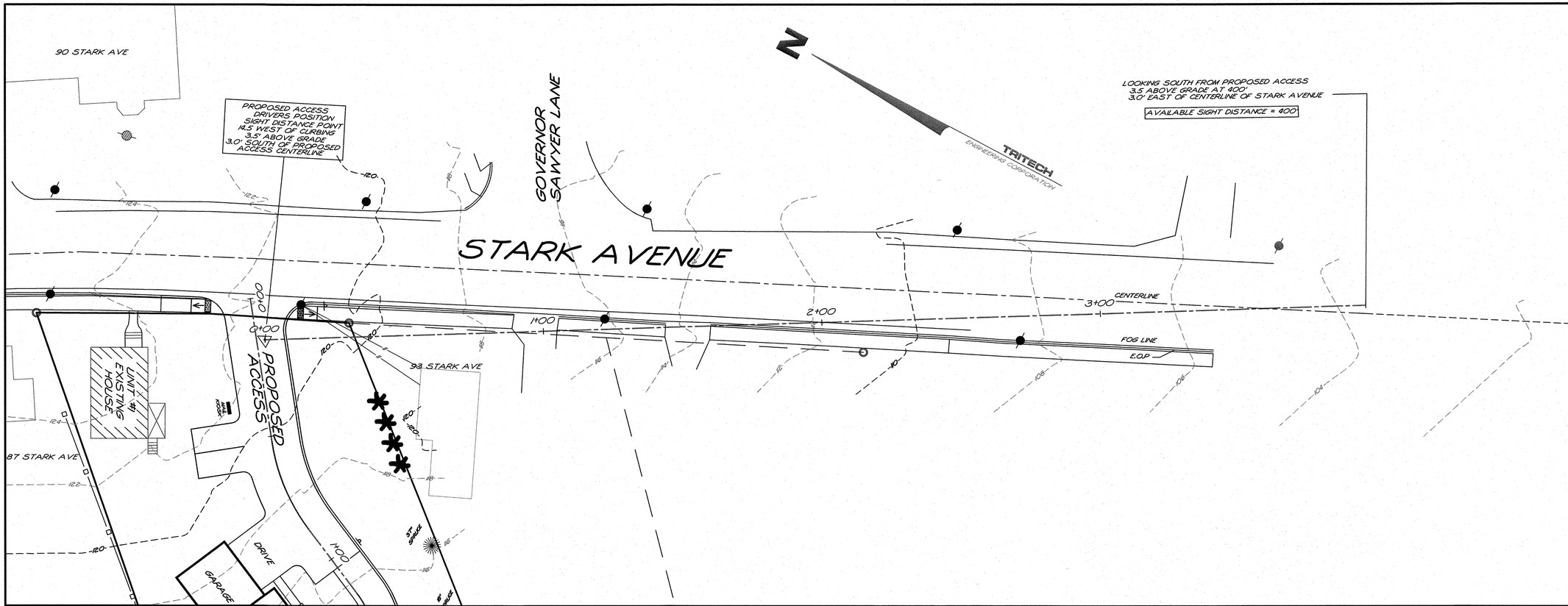
SIGHT DISTANCE PLAN & PROFILE
LOOKING NORTH

COREY MACKOUL

89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY

MAY 14, 2026
JOB No. 25136
SCALE: 1" = 20'

SHEET No.
SD-1



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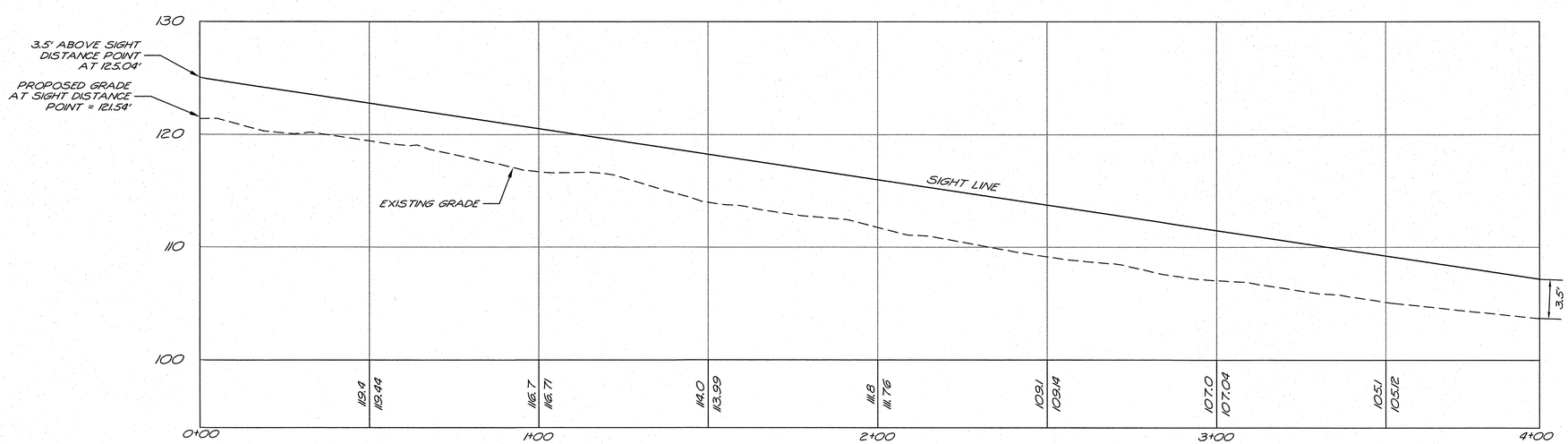
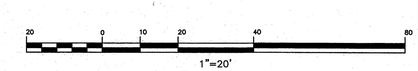
VERTICAL SCALE 1" = 6'





TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3630

ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

REVISIONS
DATE: DESCRIPTION:

STATE OF NEW HAMPSHIRE - ROBERT J. STOWELL No. 9603 - PROFESSIONAL ENGINEER

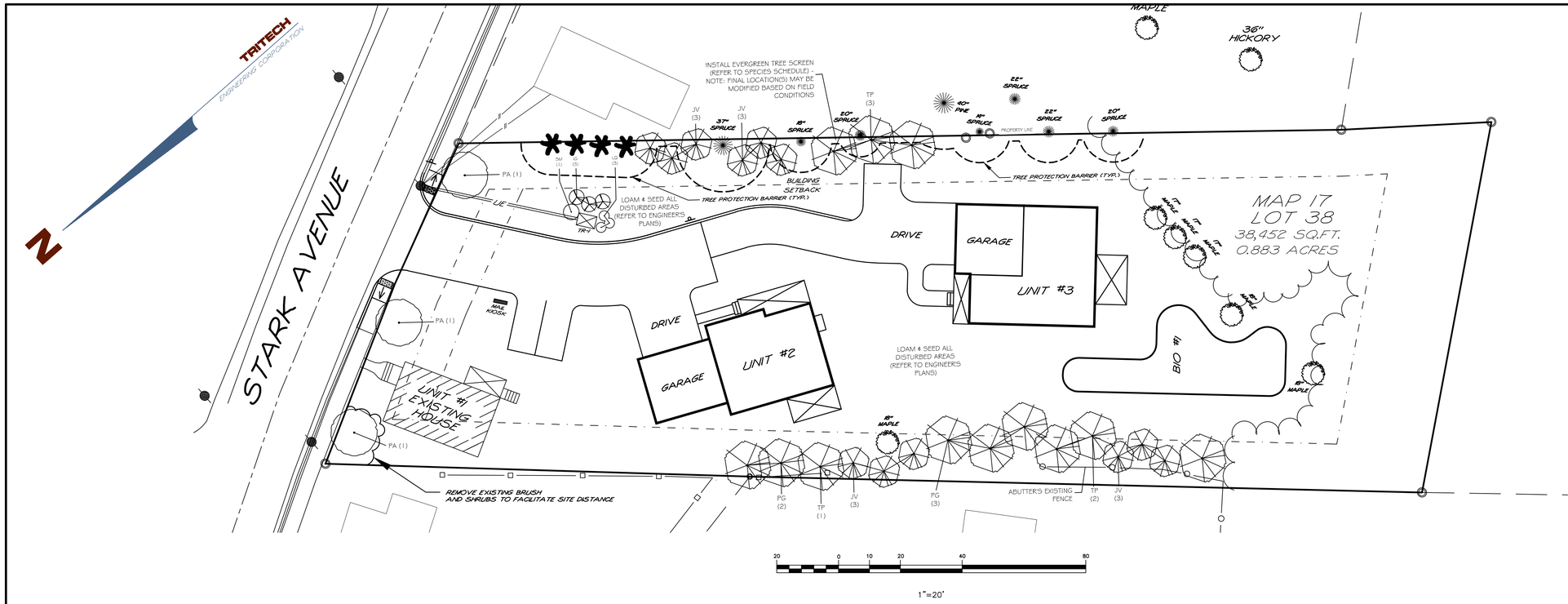
SIGHT DISTANCE PLAN & PROFILE
LOOKING WEST

COREY MACKOUL

89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY

MAY 14, 2026
JOB No. 25136
SCALE: 1" = 20'

SHEET No.
SD-2



terrain
planning & design llc
311 kast hill road
hopkinton nh 03229
603. 746. 3512
terrainplanning.com

TRITECH
ENGINEERING CORPORATION
735 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3630

DIG SAFE
CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION

STATE OF NEW HAMPSHIRE
086
4/17/26

ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

REVISIONS

DATE:	DESCRIPTION:
6/18/26	REVISED PER TRC COMMENTS

GENERAL NOTES

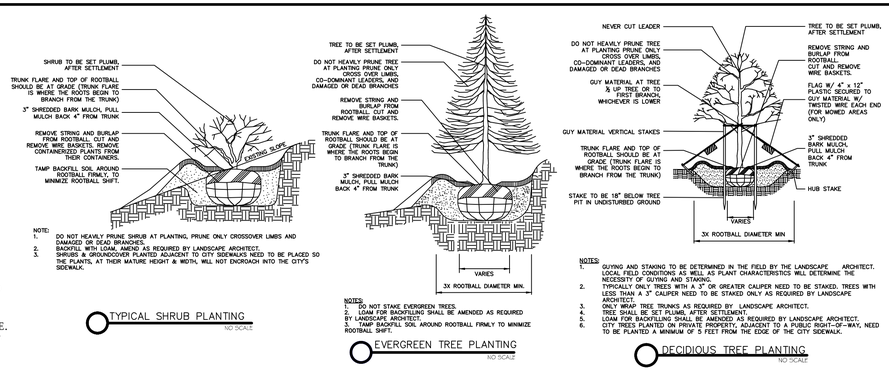
1. BASE PLAN DEVELOPED FROM INFORMATION PROVIDED BY TRITECH ENGINEERING CORPORATION, DRAWING TITLE: "CONCEPTUAL SITE PLAN," DATED: MARCH 31, 2026.
2. VERIFY LOCATIONS, ELEVATIONS, AND DIMENSIONS IN THE FIELD, PRIOR TO CONSTRUCTION. VERIFY FIELD CONDITIONS RELATING TO WORK TO BE INSTALLED. NOTIFY LANDSCAPE ARCHITECT OF ANY UNUSUAL OR DIFFICULT CONDITIONS IN A TIMELY FASHION PRIOR TO CONSTRUCTION CONCERNING THE CONDITION IN QUESTION.
3. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF DOVER AND STATE OF NEW HAMPSHIRE. NOTIFY APPROPRIATE AGENCIES AT LEAST 48 HOURS PRIOR TO PERFORMING THE WORK UNDER THEIR JURISDICTION.
4. CONTRACTOR IS RESPONSIBLE FOR SECURING AND PAYING FOR ALL CONSTRUCTION PERMITS AND LICENSES REQUIRED TO COMPLETE SITE WORK. CONTRACTOR IS RESPONSIBLE FOR ALL APPROPRIATE INSPECTIONS OF HIS/HER WORK.
5. ALL WORK SHALL BE OF WORKMANLIKE QUALITY AND IN CONFORMANCE WITH ALL APPLICABLE CODES. CONTRACTOR SHALL READ ALL ZONING AND ENVIRONMENTAL PERMITS WHICH PERTAIN TO THE PROJECT AND SHALL COMPLY WITH ALL THE CONDITIONS THEREIN.
6. NOTIFY LANDSCAPE ARCHITECT AT LEAST 72 HOURS PRIOR TO ANY ROUTINE REQUIRED FIELD OBSERVATION. OBTAIN LANDSCAPE ARCHITECT'S APPROVAL OF THE LAYOUT OF ALL IMPROVEMENTS PRIOR TO CONSTRUCTION.
7. CONTRACTOR IS RESPONSIBLE FOR REPAIR OF DAMAGE OR DISTURBANCE TO OTHER AREAS WHICH MAY OCCUR AS THE RESULT OF HIS/HER WORK WHETHER WITHIN OR OUTSIDE OF THE CONTRACT LIMIT LINES.
8. CONSTRUCTION SHALL FOLLOW THE SEQUENCES AND CONDITIONS ESTABLISHED IN THE SPECIFICATIONS AND PERMITS.
9. IT IS INTENDED THAT THE WORK BE EXECUTED IN ACCORDANCE WITH THE BEST CUSTOMARY BUILDING PRACTICES. IF WORK IS REQUIRED IN A MANNER TO MAKE IT IMPOSSIBLE TO PRODUCE FIRST-CLASS WORK OR IF ERRORS, CONFLICTS OR DISCREPANCIES APPEAR AMONG THE CONTRACT DOCUMENTS, INFORM THE LANDSCAPE ARCHITECT IMMEDIATELY AND REQUEST INTERPRETATION BEFORE PROCEEDING WITH THE WORK.
10. IF CONTRACTOR FAILS TO MAKE SUCH A STATEMENT AND REQUEST, NO EXCUSE WILL THEREAFTER BE ENTERTAINED, NOR ADDITIONAL EXPENSE BE ACCEPTED, FOR FAILURE TO CARRY OUT WORK IN A SATISFACTORY MANNER. SHOULD CONFLICT OCCUR IN OR BETWEEN DRAWINGS AND SPECIFICATIONS, CONTRACTOR IS DEEMED TO HAVE ESTIMATED ON THE MORE EXPENSIVE WAY OF DOING WORK UNLESS HE/SHE SHALL HAVE OBTAINED A WRITTEN DECISION, BEFORE SUBMITTING HIS BID, AS TO WHICH METHOD OR MATERIALS WILL BE REQUIRED.
11. CONTRACTOR IS RESPONSIBLE FOR ALL MATERIALS AND EQUIPMENT STORED AT SITE.
12. EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY WORK.
13. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR DIRECTION AND RESOLUTION PRIOR TO ANY FURTHER WORK.
14. VISIBLE EXISTING CONDITIONS WHERE FIELD LOCATED, AND UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE. SITE SUBCONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS, DIMENSIONS, AND GRADES PRIOR TO START OF ANY FOUNDATION OR UTILITY WORK.
15. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
16. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TERRAIN PLANNING & DESIGN LLC, DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR,ENGINEER OR LANDSCAPE ARCHITECT HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
17. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF HIS INTENTIONS AT LEAST 48 HOURS IN ADVANCE.
18. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL LANDSCAPE ARCHITECT. TERRAIN PLANNING & DESIGN LLC ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT OF RECORD.
19. TERRAIN PLANNING & DESIGN LLC ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE LANDSCAPE ARCHITECT OF RECORD.
20. SITE CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG SAFE PRIOR TO ANY EXCAVATION, 1-888-DIG-SAFE.

PLANTING NOTES

1. CONTRACTOR SHALL OBTAIN APPROVAL FROM LANDSCAPE ARCHITECT PRIOR TO PURCHASING AND/OR INSTALLING SUBSTITUTE PLANT MATERIAL PRIOR TO PURCHASE OF ANY SUBSTITUTE MATERIALS.
2. CONSTRUCTION ACCESS WILL BE AS DIRECTED BY LANDSCAPE ARCHITECT. CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ACCESS ROUTE AND ALL AREAS DISTURBED BY PLANTING OPERATIONS UPON COMPLETION OF CONSTRUCTION OPERATIONS, AT NO ADDITIONAL COST TO THE OWNER.
3. LAYOUT OF ALL PLANTING BEDS AND LOCATION OF PLANTS TO BE APPROVED BY LANDSCAPE ARCHITECT ON SITE PRIOR TO CONSTRUCTION AND INSTALLATION.
4. CONTRACTOR TO REMOVE ALL DEBRIS GENERATED BY PLANT INSTALLATION. DEBRIS TO BE DISPOSED OF IN A LEGAL MANNER.
5. ALL PLANT MATERIAL SHALL BE GUARANTEED TO BE IN GOOD, HEALTHY AND FLOURISHING CONDITION FOR ONE YEAR FROM THE DATE OF FINAL INSTALLATION APPROVAL BY LANDSCAPE ARCHITECT. CONTRACTOR SHALL REPLACE, WITHOUT COST TO OWNER, AND AS SOON AS WEATHER CONDITIONS PERMIT, ALL DEAD AND NON-FLOURISHING PLANTS AS DETERMINED BY THE LANDSCAPE ARCHITECT. REPLACEMENT PLANTS SHALL BE BE GUARANTEED IDENTICALLY TO ORIGINAL PLANTS, TIME PERIOD COMMENCING FROM DATE OF REPLACEMENT PLANTING APPROVAL BY LANDSCAPE ARCHITECT.
6. ALL BEDS TO BE MULCHED WITH 4" DEPTH SHREDDED BARK MULCH UNLESS NOTED OTHERWISE.
7. CONTRACTOR TO PROVIDE NECESSARY TEMPORARY IRRIGATION IF NEEDED BASED ON TIME OF YEAR THE PROJECT IS IMPLEMENTED.

TREE PROTECTION NOTES:

1. TREE PROTECTION SHALL BE INSTALLED TO THE MAXIMUM EXTENT POSSIBLE AS SHOWN ON THE PLAN. MAKE SURE ALL WORKERS KNOW NOT TO DISTURB THE AREA WITHIN THE FENCE AND LEAVE THEM UP UNTIL WORK IS COMPLETE.
2. TEMPORARY 4FT HIGH ORANGE CONSTRUCTION FENCING SHALL BE PLACED AS SHOWN ON THE PLAN AROUND THE TREE(S) TO BE SAVED. FENCE SHALL COMPLETELY ENCIRCLE THE TREE(S). TO INSTALL FENCE POSTS, AVOID DRIVING POSTS OR STAKES INTO MAJOR ROOTS.
3. DEAD TREES, SCRUB, OR UNDERGROWTH SHALL BE CUT FLUSH WITH ADJACENT GRADE. THERE WILL BE NO SOIL DISTURBANCE UNDER THE DRIP LINE OF TREES TO BE PRESERVED.
4. PLACE 6 INCHES OF BARK MULCH AT AREAS NOT PROTECTED BY BARRIER.
5. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER ONE INCH IN DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHOULD BE TEMPORARILY COVERED WITH DAMP BURLAP AND COVERED WITH SOIL OR MULCH AS SOON AS POSSIBLE TO PREVENT DRYING.
6. NO EQUIPMENT OR MACHINERY SHALL BE USED WITHIN THE PROTECTION FENCE. WORK WITHIN THE PROTECTION ZONE SHALL BE DONE MANUALLY. NO WASHING OF EQUIPMENT OR DUMPING OF CHEMICALS BY THE ROOT ZONE.
7. WATER THE TREE THROUGHOUT CONSTRUCTION WHEN THERE IS LESS THAN 1" OF RAINFALL IN A WEEK, AERATE & FERTILIZE THE TREE IF NECESSARY.
8. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE IS ALLOWED WITHIN THE LIMIT OF FENCING.



PLANTING SCHEDULE

TREES	SIZE	SYMBOL	QTY
Juniperus virginiana 'Emerald Sentinel' / Emerald Sentinal Eastern Red Cedar	6-8' B&B	JV	12
Picea glauca / White Spruce	6-8' B&B	PG	5
Platanus x acerifolia 'Exclamation' / Exclamation Planetree	3-3.5" CAL.	PA	3
Thuja plicata 'Green Giant' / Green Giant Arborvitae	6-8' B&B	TP	6
SHRUBS			
Hydrangea paniculata 'Little Quick Fire' / Little Quick Fire Panicle Hydrangea	#3	LQ	3
Ilex glabra 'Compacta' / Compact Inkberry	2-2.5' B&B	IG	3
Syringa meyeri 'Palibin' / Dwarf Korean Lilac	2.5-3' B&B	SM	1

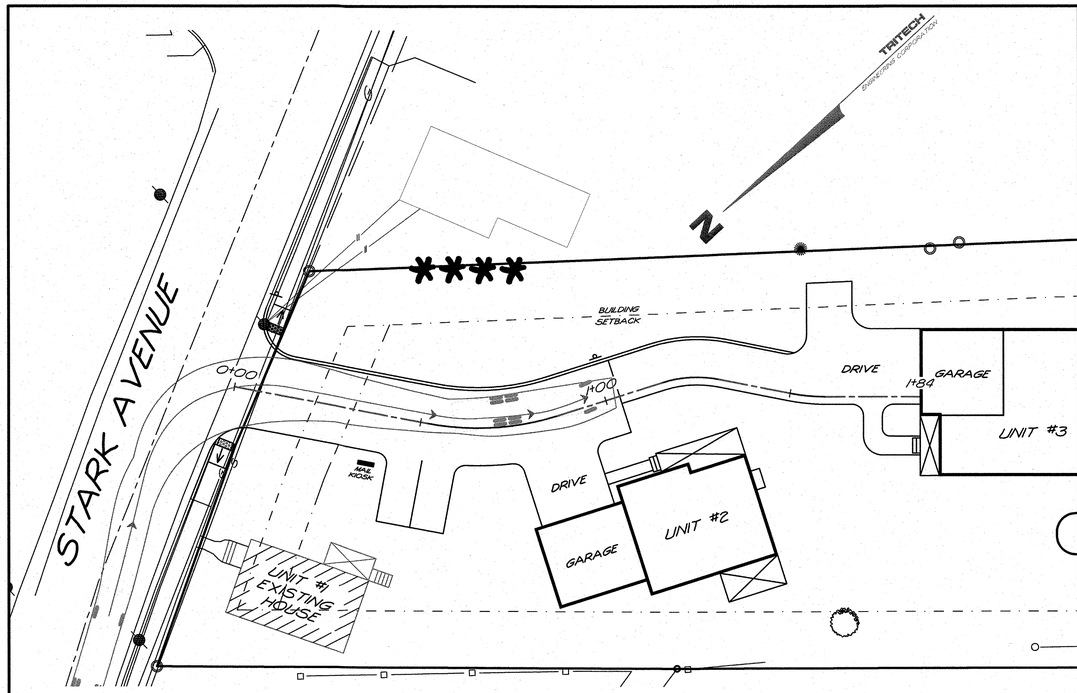
LANDSCAPE CALCULATIONS:

INTERIOR PARKING LOT LANDSCAPING:
NOT REQUIRED FOR PARKING LOTS WITH 0-20 SPACES

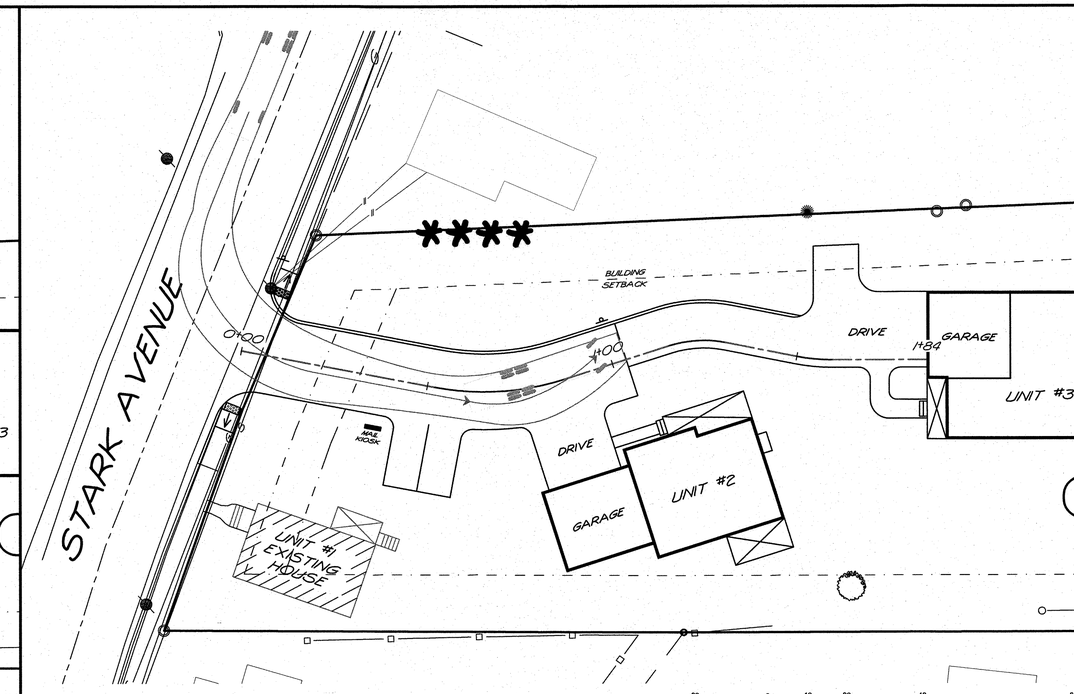
STREETSCAPE LANDSCAPING:
REQUIRED: 1 STREET TREE / 35' LINEAR FEET OF ADJACENT ROADWAY
112 L.F.OF ADJACENT ROADWAY (STARK AVENUE) / 35 = 3.2
= 3 STREET TREES REQUIRED
PROVIDED: 3 STREET TREES PROPOSED ALONG STARK AVENUE

LANDSCAPE PLAN
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136
SCALE: 1" = 20'

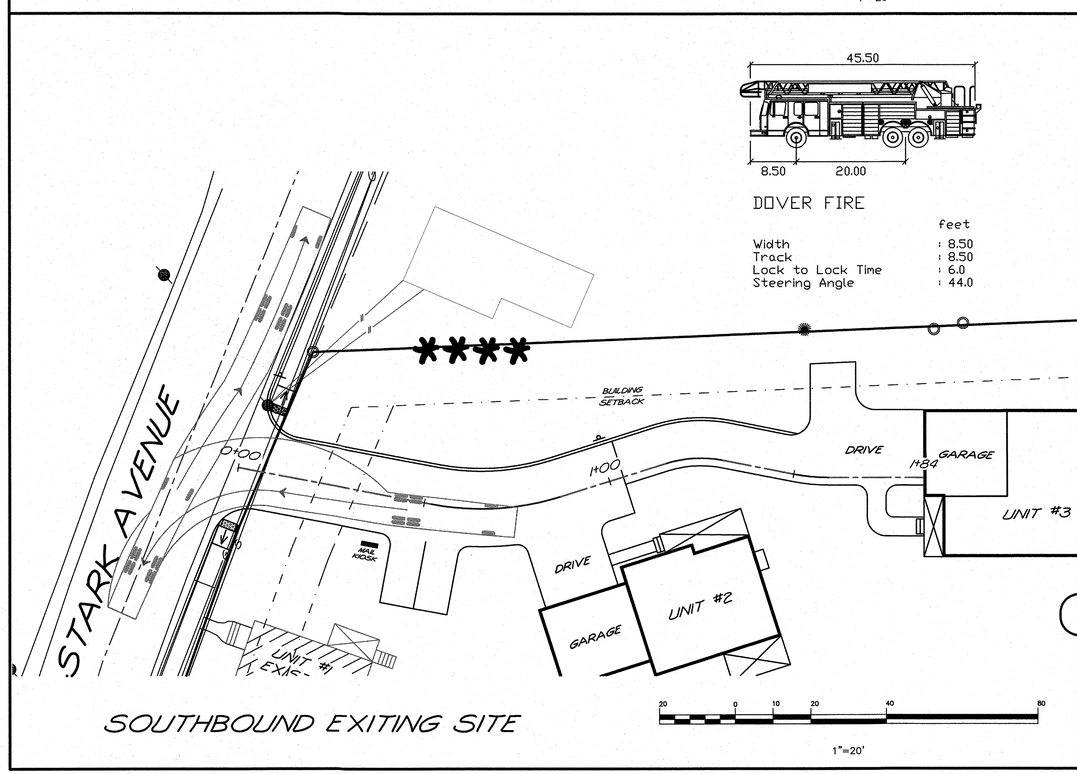
SHEET No.
LA-1



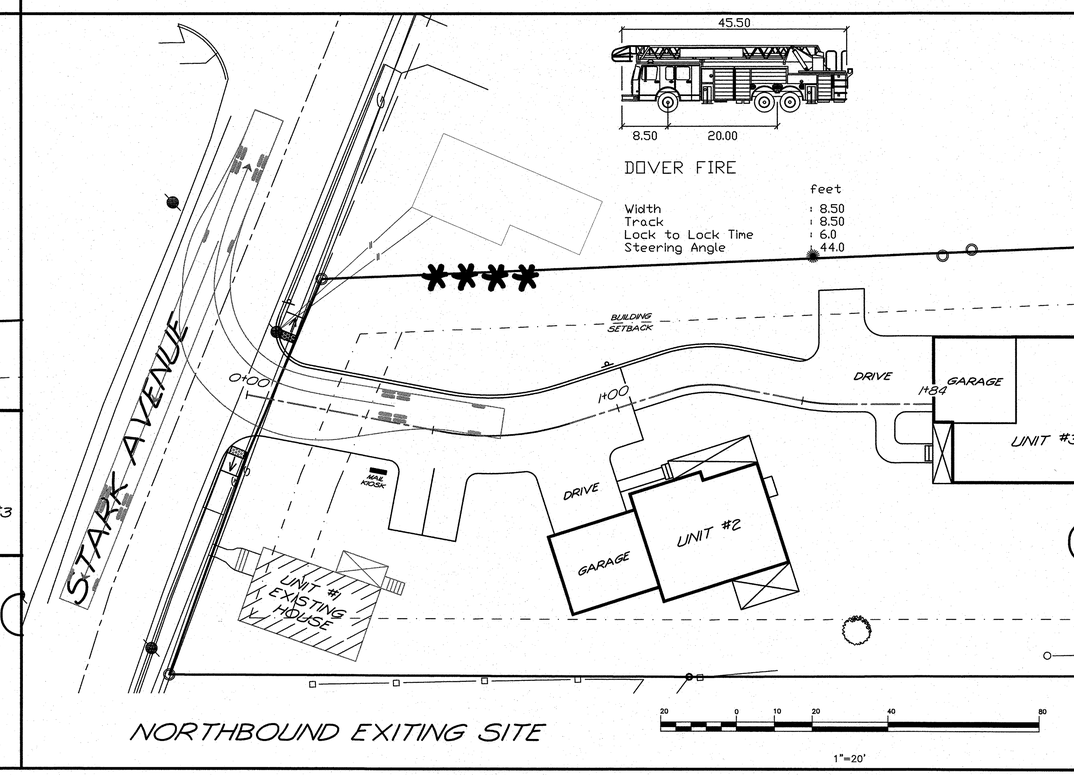
SOUTHBOUND ENTERING SITE



NORTHBOUND ENTERING SITE



SOUTHBOUND EXITING SITE



NORTHBOUND EXITING SITE

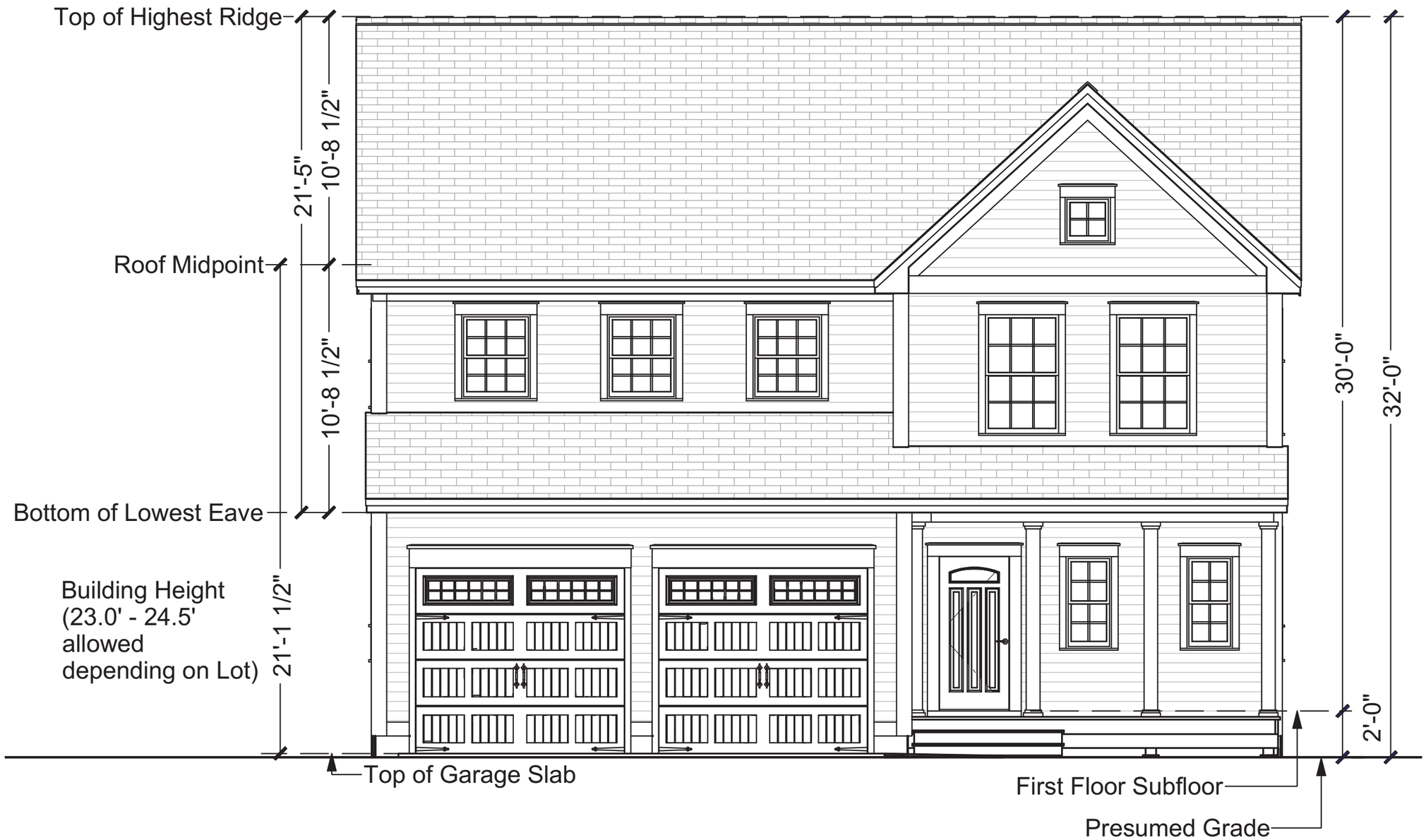
TRITECH
ENGINEERING CORPORATION
755 CENTRAL AVENUE
DOVER, NEW HAMPSHIRE 03820
TELEPHONE 603 742 8107
FAX 603 742 3630

ISSUED FOR PLANNING BOARD REVIEW
July 7, 2026

REVISIONS
DATE: DESCRIPTION:

FIRE TRUCK TURNING EXHIBIT
COREY MACKOUL
89 STARK AVENUE
DOVER, NEW HAMPSHIRE
STRAFFORD COUNTY
MAY 14, 2026
JOB No. 25136
SCALE: 1" = 20'

SHEET No.
TR-1


Top of Highest Ridge
21'-5"
10'-8 1/2"
Roof Midpoint
10'-8 1/2"
Bottom of Lowest Eave
Building Height
(23.0' - 24.5'
allowed
depending on Lot)
21'-1 1/2"
Top of Garage Slab
30'-0"
32'-0"
2'-0"
First Floor Subfloor
Presumed Grade

32'-0"
30'-1"
1'-11"
First Floor Subfloor
Presumed Grade

CITY OF DOVER	PLANNING BOARD - STAFF MEMO FILE #TRAN-2026-0007	
	Application Type:	Transfer of Development Rights
	Applicant(s):	Wyatt Peoples
	Owner(s):	Charles L Millette Revocable Trust, Charles Millette Trustee
	Location:	116 Silver Street, Map 12, Lot 149
	Meeting Date:	July 28, 2026

INTENT: Proposal for a residential project requesting 4 units through TDR for a total of 6 residential units total.
AGENDA ITEM #: 4-C

FILE: TRAN-2026-0007

LOTS/UNITS PROPOSED: Four units through TDR, 6 units total

OWNER/APPLICANT: Charles L Millette Revocable Trust, Charles Millette Trustee / Wyatt Peoples

LOCATION: 116 Silver Street (Assessor's Map 12, Lot 149)

ACREAGE: 0.84± ac. (36,578 ± sq. ft.)

ZONING DISTRICT: Heritage Residential (HR)

EXISTING/PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential

WAIVERS REQUESTED: N/A

ZBA ACTION: N/A

PERMITS REQUIRED: N/A

TECHNICAL REVIEW COMMITTEE: N/A

CONSERVATION COMMISSION: N/A

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

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

ATTACHMENTS: TDR Plan, Application Materials.

Summary of Request and Background:
The subject parcel, 116 Silver St., Assessor's Map 12, Lot 149, is located within the Heritage Residential (HR) District. The HR District allows for a mix of commercial and residential uses. The property currently holds an existing two-family dwelling.

The applicant submitted a TDR plan for a residential project in which the existing two-family structure is to be converted into four dwelling units, with a duplex to be added in the rear of the site for a total of six units.

Utilizing TDR's Single Family Detached method, the applicant calculated that the site's base density to be two units by-right, which is also the maximum permitted via underlying zoning in the HR District. Within the HR District, a 3-4 family structure is possible, but only via Conditional Use Permit if certain criteria have been met. As such, the applicant intends to purchase four unrestricted TDR units on top of the calculated base density of two units for a total of six.

Consistency with Land Use Regulations - TDR
§170-29 provides for additional density to be purchased through Transfer of Development Rights, provided that four criteria are met: The proposal is consistent with the Master Plan; is compatible with the land uses on neighboring lots; is created on property served by public water and sanitary sewer; and is not seeking relief caused by additional density.

Staff notes that the applicant has demonstrated consistency with relevant goals of the Master Plan, specifically citing an emphasis on increasing density for underdeveloped parcels and maintaining an attractive streetscape and a cohesive neighborhood.

The property currently meets all underlying zoning dimensional requirements including setbacks and lot coverage.

The lot is served by municipal water and sewer services and does not indicate any impacts to protected wetlands, wetland buffers, or Conservation District Areas, and does not fall within the Groundwater Protection District.

STAFF RECOMMENDATION - TDR:
Staff is neutral as to this request. The site is an appropriate location for additional residential density given its size, walkable neighborhood setting, proximity to downtown destinations, and access to nearby transit routes. However, the Historic Residential (HR) District carries a higher level of architectural and open space expectation, and any increase in density must be carefully designed to respect the established historic character of Silver Street and its surroundings. Because three or more units in the HR District

See reverse →

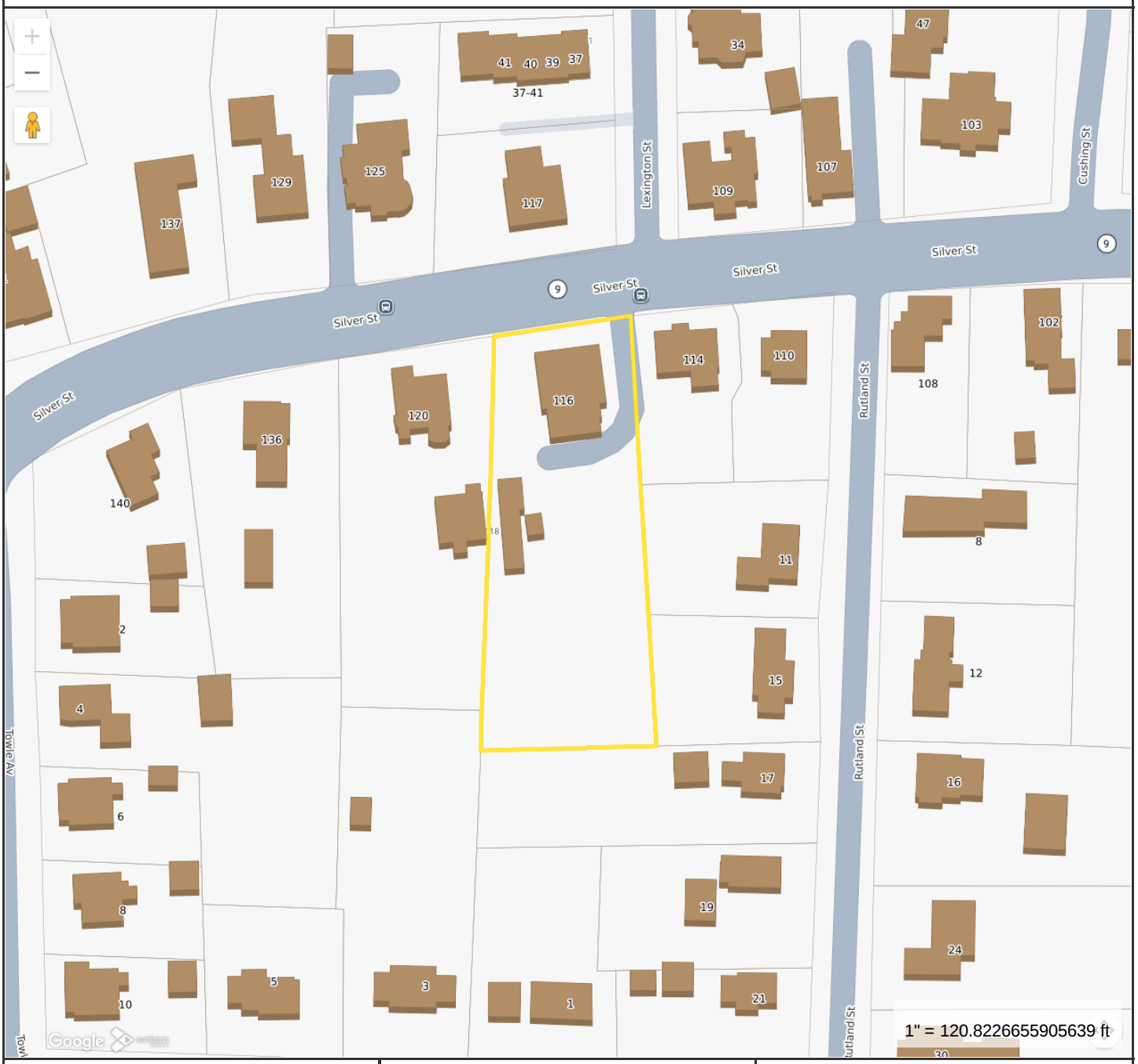
typically requires a Conditional Use Permit, staff would expect this application to adhere closely to the CUP criteria, demonstrating clear compliance with standards related to neighborhood compatibility, architectural integration, site design, and mitigation of impacts associated with increased intensity of use.

Should the Board vote to endorse the TDR request, staff would recommend doing so with the following subsequent conditions:

Subsequent Conditions to be Met Prior to Granting TDR:

1. A Site Plan application is required to be submitted for review and approval by the TRC and Planning Board, and density may be reduced by the Planning Board after review of a fully engineered site plan;
2. Payment of TDR fees;
3. Payment of water/sewer investment fees at time of request for service;
4. Revise and submit complete site development plan per Chapter 153-13 to include:
   - 4.1. Owners' Signatures;
   - 4.2. The following note:
     - 4.2.1. This site plan uses the Transfer of Development Rights ordinance which allows for relief to die setbacks, lot area, frontage, density and intensity of the development. The Board granted TDR relief to purchase four units for a maximum total of six units on the subject lot."
5. Narrative with supporting evidence accompanying Site Plan application detailing how project complies with CUP criteria for conversions of 3-4 families.

TRAN-2026-0007 116 SILVER STREET



Property Information

Location	116 SILVER ST
Owner	MILLETTE CHARLES L REV TRUST
Land Use	104R
Zoning Code	HR
Property Id	12149-000000

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 06/2026
Data updated Daily

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

To: Steve Haight, Civilworks
CC: Wyatt Peoples
From: Donna Benton, AICP
Date: July 21, 2026
Re: TDR 116 Silver Street

ISSUE:
In February 2020, the Board recommended amendments to the Transfer of Development Rights (TDR) Ordinance. In June 2020, the Planning Board approved the amendments and on July 22, 2020, the City Council ratified them. One element is the requirement for staff to draft a review statement on the need for a sketch plan. Since then the criteria for TDR has also been amended.

INTENT:
This memo will serve as part of the staff report.

GOALS:
Provide background on balancing development vs. conservation needs and current housing shortage, and describe the TDR applications in Dover.

Background
As the applicant, you submitted a TDR plan for a residential project consisting of six total units, two to be added to the existing two-family dwelling for a total of four units in the existing structure, and two within a proposed duplex in the rear of the parcel.

The subject parcel, 116 Silver St., Assessor's Map 12, Lot 149, is located within the Heritage Residential (HR) District. The HR District allows for a mix of commercial and residential uses.

Per §170-29G(3), as the property is located within a residential district, the base density is derived from the single-family detached method formula, which in this case yielded the applicant a figure of 2.64, which rounded to the lowest whole number is a total of two units as the property's base density.

Within the HR District, a maximum of two units is permitted by right, with 3-4 family structures being permitted only via Conditional Use Permit. As such, the applicant intends on purchasing four (4) unrestricted TDR units on top of the calculated base density of two (2) units for a total of six (6).

Staff performed this review based upon the information below, and is now providing the required staff report (Chapter 170-29 E(4)a).

Project Information

Project:	116 Central Ave., TDR
Where:	116 Central Ave. (Assessor's Map 12, Lot 149)
What:	Six (6) units total. Four (4) units requested to be purchased through TDR.
Acres:	0.84± ac. (36,578± sq. ft.)
Zone:	HR District
Public Water:	Lot is served by municipal water.
Public Sewer:	Lot is served by municipal sewer.
Units:	Six (6) total units are proposed, with two (2) unit currently existing. As the proposal is within a residential district, the base density was derived from the formula, with a yield of two (2) base units, requiring the purchase of four (4) TDR units.
Relief:	To be determined

Staff Comment
When reviewing projects, staff review the context, discuss options with the applicant, and advise on the feasibility of requesting the purchase or exchange before or after designing a fully laid out plan.

In reviewing this project, staff notes:

- Traffic
  - Located directly on Silver Street, a well-traveled collector road linking Knox Marsh Rd to Central Avenue and the downtown core with multiple residential neighborhoods. Daily volumes are steady with predictable peak-hour activity tied to school, commuter, and neighborhood traffic.
  - Property has access via two existing (2) curb cuts along Silver Street; turning movements may require review for sight distance and spacing relative to nearby driveways.

    - COAST service and Wildcat Transit operate along Silver Street including a bus stop directly in front of the existing building and diagonally across the street., providing modest transit accessibility for residential and small-office uses.
    - Access to the Community Trail is provided less than 600 ft to the east by a staircase at the Silver St. Trailhead near 98 Silver St.
    - Adjacent residential properties, nearby multi-family buildings, and proximity to the downtown core contribute to moderate traffic activity throughout the day.

- Layout/topography
    - The 0.84-acre parcel is spacious and deep for a lot in this area, offering flexibility for small-scale infill.
    - Topography in this portion of Silver Street is generally flat to gently sloped, supporting straightforward grading and site design.
    - The development pattern along Silver Street is predominantly residential, with a mix of single-family, two-family, and small multi-family structures.
    - The existing building footprint (1890 structure) sits forward on the lot, consistent with historic neighborhood form.

- Environmental
    - The lot is absent of wetland and conservation district areas and does not fall within any Groundwater Protection District.

Staff Recommendation

Staff is neutral as to this request. The site is an appropriate location for additional residential density given its size, walkable neighborhood setting, proximity to downtown destinations, and access to nearby transit routes. However, the Historic Residential (HR) District carries a higher level of architectural expectation, and any increase in density must be carefully designed to respect the established historic character of Silver Street and its surroundings. Because three or more units in the HR District typically requires a Conditional Use Permit, staff would expect this application to adhere closely to the CUP criteria, demonstrating clear compliance with standards related to neighborhood compatibility, open space, architectural integration, site design, and mitigation of impacts associated with increased intensity of use. The addition of four units to this parcel adds to the traffic existing on Silver Street. Typically, only one curb cut per lot is permitted but the proposal would need the two curb cuts to remain.

PLAN SNAPSHOT REPORT TRAN-2026-0007
FOR CITY OF DOVER, N.H.

Plan Type:	Transfer	**Project:**		**App Date:**	07/07/2026
Work Class:	Transfer of Development Rights	**District:**	None	**Exp Date:**	09/10/2026
Status:	In Review	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	
Description:	Residential to increase by 4 units.				

Parcel:	**Address:** 116 Silver St Dover, NH 03820 Main	**Zone:**

Owner	Applicant	Applicant
Charles Millette 9 Market Street Portsmouth, NH 03801 Home: (207) 838-8794	Wyatt Peoples 13 FIRST ST DOVER, 03820 Home: (207) 838-8794	McEneaney Survey Associates P.O. Box 1166 DOVER, NH 03821 Business: (603) 742-0911

Plan Custom Fields

Parcel Map/Lot	12/149	Parcel Zoning Overlay		Parcel Zoning	HR
trandevdetail		Deed Book	2668	Deed Page	601
Property Address	116 Silver Street Dover NH	Deed Date		Owner Name	Charles L. Millette
Existing Parcel Size (Ac)	0.84	Owner Address	9 Market Street Portsmouth, NH 03801	Owner Phone	
Existing Parcel Size (sqft)	36590.4	Owner EMail		Parcel Feedback	
Reference Plan ID Number:		Request Type	Residential	trandevpermits	
Project Zone	Residential	Relief Sought	Unit increase		

Attachment File Name	Added On	Added By	Attachment Group	Notes
1) TDR Application - Signed 2026-07-07.pdf	07/07/2026 11:43	McEneaney, Kevin		Uploaded via Dover, NH - Permits Plans Licensing
2) Narrative for TDR Application - 116 Silver Street Dover NH.pdf	07/07/2026 11:43	McEneaney, Kevin		Uploaded via Dover, NH - Permits Plans Licensing
3) 26132 TDR sketch 2026-07-07.pdf	07/07/2026 11:43	McEneaney, Kevin		Uploaded via Dover, NH - Permits Plans Licensing
4) 26132 TDR sketch AERIAL 2026-07-07.pdf	07/07/2026 11:43	McEneaney, Kevin		Uploaded via Dover, NH - Permits Plans Licensing
Signature_Kevin_McEneaney_7/7/2026.jpg	07/07/2026 11:43	McEneaney, Kevin		Uploaded via CSS

Invoice No.	Fee	Fee Amount	Amount Paid
INV-2026002559	Planning Transfer of Dev Rights Application Fee	$250.00	$0.00
	Total for Invoice INV-2026002559	$250.00	$0.00
	Grand Total for Plan	**$250.00**	**$0.00**

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		07/07/2026 14:44	07/07/2026 14:44
Confirm application complete v.1	Generic Action		07/07/2026 14:44
~~Technical Review Committee Meeting Agenda v.1~~	Task		07/07/2026 14:44
~~Land Use Plan Technical Review v.1~~	Receive Submittal		07/07/2026 14:44
~~Technical Review Committee Meeting v.1~~	Hold Meeting		07/07/2026 14:44
Planning Board v.1		07/07/2026 14:44	
Planning Board Agenda v.1	Task	07/07/2026 14:44	

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
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
TRANSFER OF DEVELOPMENT RIGHTS APPLICATION

[Revision Date: September 26, 2024]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: Wyatt Peoples Telephone # 207-838-8794

Address of Applicant: 15 First Street Dover, NH 03820

E-Mail Address: wyatt@cbcfinancial.com

Name of Property Owner (if different from applicant): Charles L. Millette Revocable Trust Telephone #_____

Address of Property Owner: 9 Market Street Portsmouth, NH 03801

PROPERTY INFORMATION

Assessor's Map # 12 Lot(s) # 149

Address of Property: 116 Silver Street

Zoning District(s) HR Overlay District(s) _____

Existing Use of Property: Residential

New impervious area (in s.f.): _____

TRANSFER OF DEVELOPMENT RIGHTS INFORMATION

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 ☑ Increase by 4 units

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

This plan proposes 2 additional apartment units added to the existing house, and a duplex located behind the existing home; in the same location currently occupied by the carriage house. The plan also includes shared parking located between the existing home and proposed duplex.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: _____

_____

Name of Professional That Prepared TDR Plans: Kevin McEneaney, LLS - McEneaney Survey Associates

Address P.O. Box 1166 Dover, NH 03821 Telephone #: 603-749-0443

Professional License #: NH LLS # 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: Charles L. Millette Date: 7/7/2026
Charles L. Millette

Signature of Applicant (if different from owner): Wyatt B. Peoples Date: 7/7/26
Wyatt Peoples

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: Charles L. Millette Date: 7/7/26
Charles L. Millette

CITY OF DOVER TRANSFER OF DEVELOPMENT RIGHTS
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
12	149	Wyatt Peoples	15 First Street Dover, NH 03820

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS
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

TRAN-2026-0007 **116 SILVER STREET**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
12151-000000	120 SILVER ST	WARACH RACHEL TRUSTEE	WARACH JONATHAN B FAMILY TRUST	53 BUCKS HILL RD	DURHAM	NH	03824-3208
10169-A00003	39 LEXINGTON ST	CARNEY WILLIAM Q		39 LEXINGTON ST	DOVER	NH	03820-3628
12130-A00000	12 RUTLAND ST	KELSCH ALBERT L & JUDITH E TRUSTEES	KELSCH FAMILY TRUST	12 RUTLAND ST	DOVER	NH	03820
12147-000000	11 RUTLAND ST	ANDRECYK GREGORY P		11 RUTLAND ST	DOVER	NH	03820
12131-000000	16 RUTLAND ST	CEYLAN BAKI &	MCCALLUM JUSTINE	409 PORTLAND ST	ROCHESTER	NH	03867-2303
12148-000000	114 SILVER ST	114 SILVER STREET GROUP LLC		10 DURHAM ROAD	DOVER	NH	03820
12155-000000	4 TOWLE AV	MILLS RYAN	DURAN ALLISON	4 TOWLE AV	DOVER	NH	03820
12144-000000	21 RUTLAND ST	FLECKENSTEIN DANIEL L		21 RUTLAND ST	DOVER	NH	03820
12144-A00000	1 CLIFFORD ST	MARTIN MICHAEL A &	MARTIN MARY E	1 CLIFFORD ST	DOVER	NH	03820
12129-000000	108 SILVER ST	NELSON THOMAS M	NELSON JILL M	108 SILVER ST	DOVER	NH	03820
10169-A00002	40 LEXINGTON ST	PAOLINI DAVID TRUSTEE	GRANT REALTY TRUST	242 CENTRAL AVE	DOVER	NH	03820
10169-A00001	41 LEXINGTON ST	PAOLINI DAVID		242 CENTRAL AVE	DOVER	NH	03820
12147-A00000	15 RUTLAND ST	O'CONNELL HALEY	O'CONNELL THOMAS	15 RUTLAND ST	DOVER	NH	03820
12152-000000	136 SILVER ST	MCDONNELL TERESA H TRUSTEE	MCDONNELL ANCESTRAL GRANTOR TRUST	136 SILVER ST	DOVER	NH	03820
12160-000000	3 CLIFFORD ST	HOPKINS FRANCES & WILLIAM III TRUSTEES	3 CLIFFORD ST IRREVOCABLE TRUST	3 CLIFFORD ST	DOVER	NH	03820
10169-A00000	37 LEXINGTON ST	LEXINGTON GARDEN CONDOMINIUMS		LEXINGTON ST	DOVER	NH	03820
10167-000000	129 SILVER ST	COLBATH WILLIAM C TRUSTEE	COLBATH FAMILY REVOCABLE TRUST 2010	129 SILVER ST	DOVER	NH	03820
12146-000000	17 RUTLAND ST	MURPHY KRISTEN & RICKMAN BRYAN TTS	MURPHY-RICKMAN FAMILY REV TRUST	17 RUTLAND ST	DOVER	NH	03820
10114-000000	34 LEXINGTON ST	MORENO CHARLES A TRUSTEE	MORENO CHARLES 2008 REVOCABLE TRUST	PO BOX 60	CENTER STRAFFORD	NH	03815
10168-000000	125 SILVER ST	LAWRENCE REALTY GROUP SILVER STREET LLC		25 NEW HAMPSHIRE AVE STE 276	PORTSMOUTH	NH	03801
12159-000000	5 CLIFFORD ST	MEZQUITA MEGHAN ELIZABETH &	MEZQUITA DAVID ANTHONY	5 CLIFFORD ST	DOVER	NH	03820
12145-000000	19 RUTLAND ST	LEAVITT RICHARD GORDON &	LEAVITT DEBORAH ADAMS	19 RUTLAND ST	DOVER	NH	03820
10115-000000	109 SILVER ST	CBA PROPERTIES LLC		PO BOX 801	NEW CASTLE	NH	03854
10116-000000	107 SILVER ST	PERRINE GEORGE E & GLORIA J ET AL TRUSTE	PERRINE FAMILY REVOCABLE TRUST	67 A MAPLE ST	SOMERSWORTH	NH	03878
10169-000000	117 SILVER ST	SESSLER GREGG F & LAWRENCE CHRISTINA L T	LAWRENCE-SESSLER FAMILY REVOCABLE TRUST	117 SILVER ST	DOVER	NH	03820
10169-A00004	37 LEXINGTON ST	DORAN CAROLYN R TRUSTEE	DORAN CAROLYN R 2003 REVOCABLE TRUST	37 LEXINGTON ST	DOVER	NH	03820
12130-000000	8 RUTLAND ST	CHILD THOMAS L & DEBORAH M TRUSTEES	THOMAS L CHILD REVOCABLE TRUST &; DEBORAH M CHILD REVOCABLE	8 RUTLAND ST	DOVER	NH	03820
12149-000000	116 SILVER ST	MILLETTE CHARLES L REV TRUST	MILLETTE CHARLES TRUSTEE	9 MARKET ST	PORTSMOUTH	NH	03801-3702
		KEVIN MCENEANEY, LLC	MCENEANEY SURVEY ASSOCIATES	PO BOX 1166	DOVER	NH	03821

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

TDR NARRATIVE

116 SILVER STREET
TAX MAP 12, LOT 149

A TDR development is proposed at 116 Silver Street, located in the HR Zoning District. This property is 36,578 s.f. and is currently occupied by a home containing 2 residential apartments. The proposed development is for 2 additional apartment units and a duplex located behind the existing home.

The TDR unit calculations are based on the Single-Family Method.

Total Parcel Area		36,578 s.f.
Unsuitable Area	-	0 s.f.
		36,578 s.f.
Deduct for Roadways		x .85%
		31,091 s.f.
Wetland Factor (0-20%)		x .85%
		26,428 s.f.
/10,000 per Base Unit		10,000
Units by Right	=	2

Density Result: 2 unit(s) allowed by right, 4 additional units to be purchased.

170-29.G. Transfer of Development Rights, Residential Performance Standards

(8) Regardless of the method utilized, any other provision in this chapter to the contrary, the density or intensity of development of a receiving parcel may be increased by the transfer of development rights so long as the increase in density or intensity meets the following criteria and a narrative is submitted indicating how those criteria are met:

(a) Is consistent with the Master Plan.

The proposed project follows the Master Plan Land Use Goal (LU 2.1) which encourages increased density for vacant and underdeveloped parcels in areas that are currently well developed to promote the goal of maintaining more rural areas for the community.

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

(b) Is compatible with the land uses on neighboring lots (e.g., a multifamily building fits in within a single-family neighborhood). The applicant shall provide in their narrative an explanation of their neighborhood analysis.

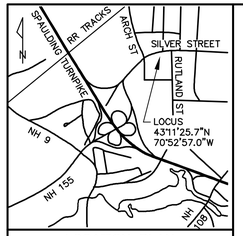
The abutting parcels to the subject lot are all located within the HR Zoning District and consist of both single family and multi-family residential units.

(c) Is created on property served by public water and sanitary sewer.

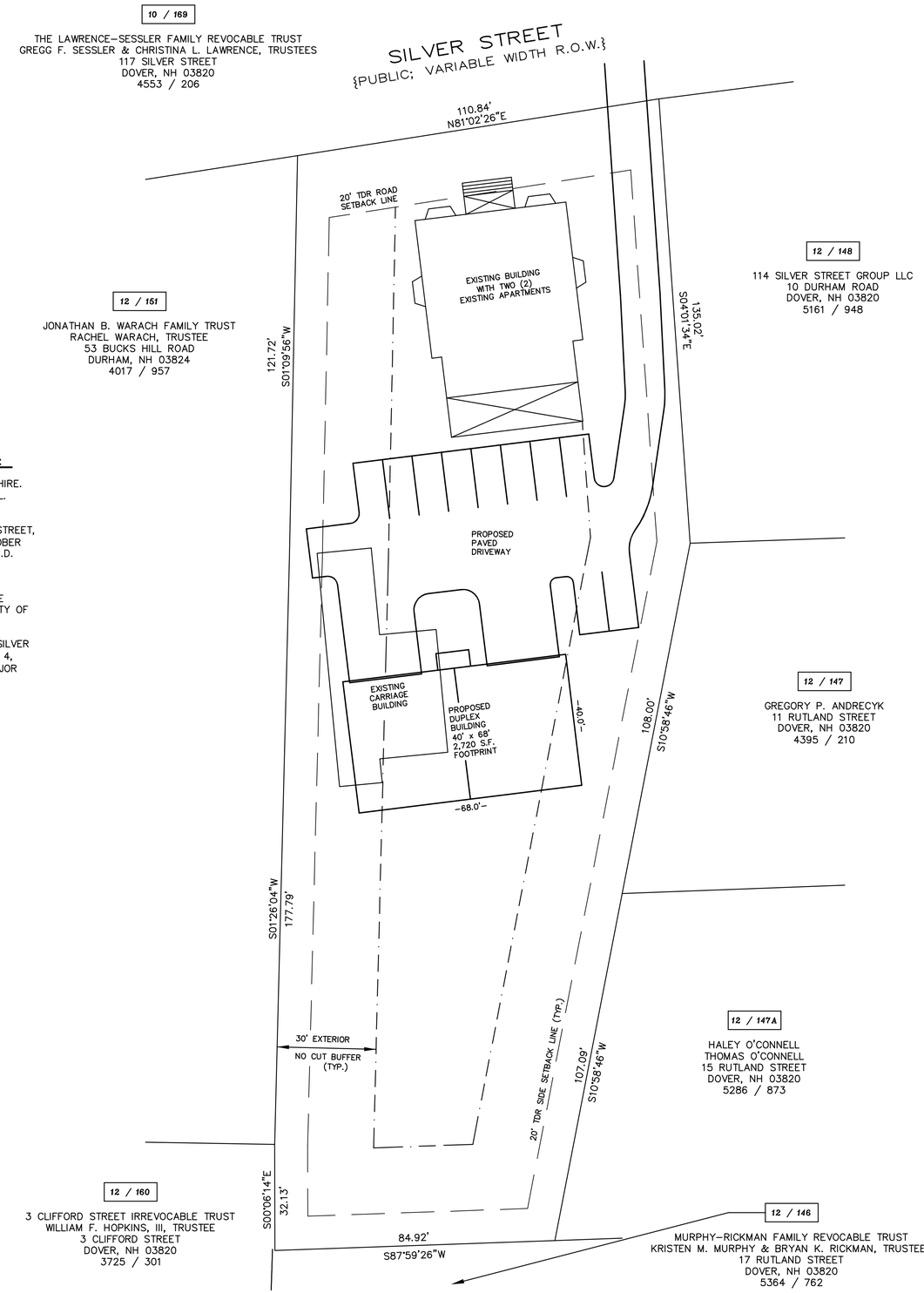
Municipal water and sewer services are available to this property location.

(d) Any relief sought should not be caused by the additional density.

There will be no relief sought from the City regulations that are directly caused by the additional density.



LOCATION PLAN
(NO SCALE)



OWNER SIGNATURE

NOTES:

1.) OWNER OF RECORD:

CHARLES L. MILLETTE REVOCABLE TRUST
CHARLES L. MILLETTE, TRUSTEE
9 MARKET STREET 2668 / 601
PORTSMOUTH, NEW HAMPSHIRE 03801
S.C.R.D. VOLUME 2668, PAGE 601

2.) 12 / 149 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) PARCEL AREA = 36,578 S.F.± / 0.84 Ac. ±

4.) THE INTENT OF THIS PLAN IS TO DEPICT A PROPOSED TDR PLAN, INCLUDING ONE (1) DUPLEX DWELLING (EXISTING) TO BE CONVERTED TO A MULTI–UNIT (4 UNITS) AND A PROPOSED NEW DUPLEX CONTAINING TWO (2) SINGLE FAMILY DWELLINGS. THE PROJECT APPLICANT SHALL PAY THE TDR FEES.

5.) ZONING DISTRICT: HERITAGE RESIDENTIAL (HR)

DIMENSIONAL REQUIREMENTS:	
MINIMUM LOT SIZE	= 10,000 S.F.
MAXIMUM LOT COVERAGE	= 40 PERCENT
MINIMUM FRONTAGE	= 80 FEET
BUILDING SETBACK REQUIREMENTS:	
FRONT BUILD TO LINE	= AVERAGE FRONT SETBACKS WITHIN ZONE
SIDE SETBACK	= 15 FEET
REAR SETBACK	= 30 FEET
BUILDING HEIGHT	= 24 FEET MIN. / 40 FEET MAX.
TRANSFER OF DEVELOPMENT RIGHTS REGULATIONS:	
ABUTTING A ROAD SETBACK	= 20 FEET
ABUTTING A LOT LINE SETBACK	= 10 FEET
STREET SIDES OF UNITS	= 20 FEET
ABUTTING STRUCTURES	= 20 FEET
NO CUT BUFFER FROM EXTERIOR LOT LINE	= 30 FEET

6.) THE SUBJECT PARCEL IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA (SFHA), AS SHOWN ON FLOOD INSURANCE RATE MAP 33017C0310E, EFFECTIVE DATE 9/30/2015.

7.) BASIS OF BEARING IS NH STATE PLANE (NAD83) AND VERTICAL DATUM IS NAVD88.

8.) TDR UNIT CALCULATIONS:

A)	36,578 S.F.–CONSERVATION (0 S.F.)	= 36,578 S.F.
B)	36,578 x 0.85	= 31,091 S.F.
C)	31,091 x 0.85	= 26,428 S.F.
D)	26,428 / 10,000	= 2 UNITS

E) THE EXISTING DUPLEX BUILDING TO BE CONVERTED TO FOUR UNITS. A PROPOSED DUPLEX IS TO BE CONSTRUCTED. UNITS ARE TO BE PURCHASED UNDER THE TDR REGULATIONS TO FULFILL THE TOTAL DENSITY REQUEST OF 4 UNRESTRICTED UNITS. NO ADDITIONAL UNITS MAY BE CREATED WITHOUT REVIEW AND APPROVAL OF THE PLANNING DEPARTMENT AND/OR PLANNING BOARD, WHICHEVER IS APPLICABLE..

9.) PARCEL IS SERVICED BY MUNICIPAL SEWER AND WATER.

10.) THE SOIL TYPE ON THE SITE IS:
WfB WINDSOR LOAMY FINE SAND, CLAY SUBSOIL VARIANT, 0 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

11.) THIS SITE PLAN USES THE TRANSFER OF DEVELOPMENT RIGHTS ORDINANCE WHICH ALLOWS FOR RELIEF TO THE SETBACKS, LOT AREA, FRONTAGE, DENSITY AND INTENSITY OF DEVELOPMENT.

12.) THE FOUR (4) PROPOSED UNITS WILL BE PURCHASED AS UNRESTRICTED UNITS THROUGH THE TDR ORDINANCE.

13.) BOUNDARY INFORMATION IS TAKEN FROM REFERENCE PLANS #1 AND #2.

REFERENCE PLANS:

1.) PLAN OF LAND HARRY L. FARNHAM, DOVER, NEW HAMPSHIRE. SCALE" 1" = 50'; DATED: NOVEMBER 1955; BY: GRANT L. DAVIS. RECORDED S.C.R.D. VOLUME 655, PAGE 305.

2.) PLAN OF SUBDIVISION FOR IRENE R. CARRIER, RUTLAND STREET, DOVER, NEW HAMPSHIRE. SCALE: 1" = 40'; DATED: OCTOBER 1978; BY: K.E. MOORE & B.G. STAPLES. RECORDED S.C.R.D. PLAN 17C–89.

3.) LOT LINE ADJUSTMENT PLAN PREPARED FOR ROBERT MACDONALD, TAX MAP 12, LOT Nos. 155 & 160, 4 TOWLE AVENUE AND 3 CLIFFORD STREET, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE.

4.) SUBDIVISION PLAN OF LAND, TAX MAP 12 LOT 148, 114 SILVER STREET, DOVER, NH. SCALE: 1" = 20'; DATED: OCTOBER 4, 2024, REVISED THROUGH 02/07/2025; BY: ALLEN & MAJOR ASSOCIATES, INC. RECORDED S.C.R.D. PLAN 13500.

LEGEND

S.F. – SQUARE FEET
Ac. – ACRE
(TYP.) – TYPICAL
± – MORE OR LESS
ø – DIAMETER
S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS

NO.	DATE	DESCRIPTION	BY	CHK
1	7/10/26	REVISE NOTE 8E PER PLANNING OMMENTS	RJM	KMM

REVISIONS

PROJECT NO	TYPE	FIELDBOOK & PAGES	
26132	CONCEPT TDR	–	–

TDR CONCEPT PLAN
PREPARED FOR
WYATT PEOPLES
TAX MAP 12, LOT No. 149
116 SILVER STREET
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

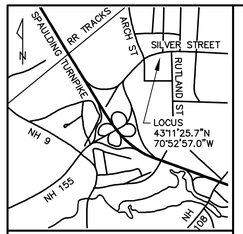
DRAWN BY: RJM	FILE: P:\26132\S\D\26132SK
SCALE: 1" = 20'	DATE: JULY 6, 2026

20 10 0 10 20 40 60 80

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 03821 (603) 742–0911
SURVEYING – PLANNING – CONSULTING

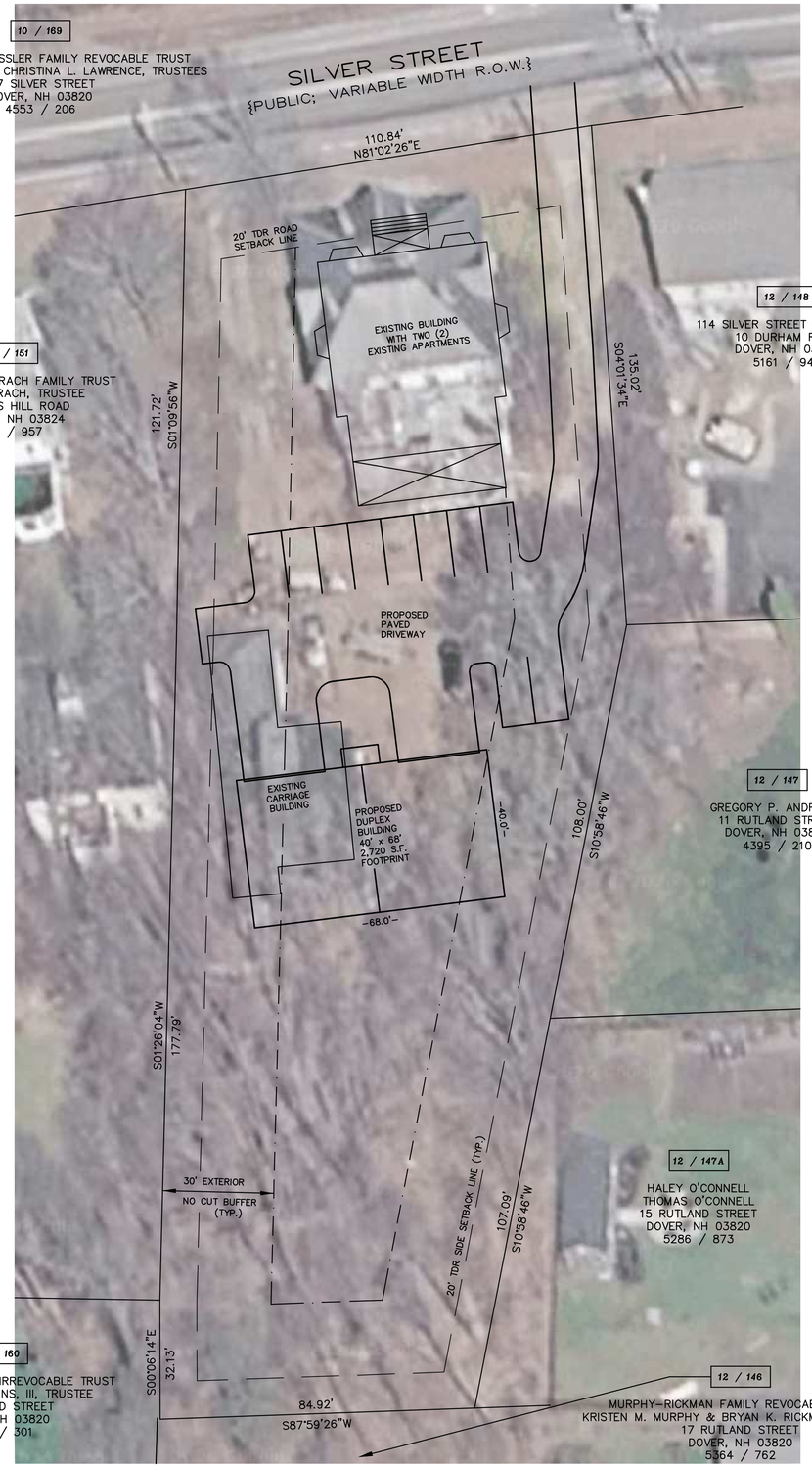
7/10/2026 09:43:12 File: P:\26132 - 116-118 Silver Street Dover NH\Wyatt Peoples\Survey\Drawings\26132 sketch.dwg Layout: 22x34



LOCATION PLAN
(NO SCALE)

N

NH STATE PLANE
NAD 83 - GPS OBS.



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4.) SUBDIVISION PLAN OF LAND, TAX MAP 12 LOT 148, 114 SILVER STREET, DOVER, NH. SCALE: 1" = 20'; DATED: OCTOBER 4, 2024, REVISED THROUGH 02/07/2025; BY: ALLEN & MAJOR ASSOCIATES, INC. RECORDED S.C.R.D. PLAN 13500.

LEGEND

S.F. - SQUARE FEET
Ac. - ACRE
(TYP.) - TYPICAL
± - MORE OR LESS
ø - DIAMETER
S.C.R.D. - STRAFFORD COUNTY REGISTRY OF DEEDS

NO.	DATE	DESCRIPTION	BY	CHK
1	7/10/26	REVISE NOTE 8E PER PLANNING OMMENTS	RJM	KMM

REVISIONS

PROJECT NO	TYPE	FIELDBOOK & PAGES	
26132	CONCEPT TDR	-	-

OWNER SIGNATURE

NOTES:

1.) OWNER OF RECORD:

CHARLES L. MILLETTE REVOCABLE TRUST
CHARLES L. MILLETTE, TRUSTEE
9 MARKET STREET 2668 / 601
PORTSMOUTH, NEW HAMPSHIRE 03801
S.C.R.D. VOLUME 2668, PAGE 601

2.) 12 / 149 - DENOTES TAX MAP AND PARCEL NUMBER.

3.) PARCEL AREA = 36,578 S.F.± / 0.84 Ac. ±

4.) THE INTENT OF THIS PLAN IS TO DEPICT A PROPOSED TDR PLAN, INCLUDING ONE (1) DUPLEX DWELLING (EXISTING) TO BE CONVERTED TO A MULTI-UNIT (4 UNITS) AND A PROPOSED NEW DUPLEX CONTAINING TWO (2) SINGLE FAMILY DWELLINGS. THE PROJECT APPLICANT SHALL PAY THE TDR FEES.

5.) ZONING DISTRICT: HERITAGE RESIDENTIAL (HR)

DIMENSIONAL REQUIREMENTS:	
MINIMUM LOT SIZE	= 10,000 S.F.
MAXIMUM LOT COVERAGE	= 40 PERCENT
MINIMUM FRONTAGE	= 80 FEET
BUILDING SETBACK REQUIREMENTS:	
FRONT BUILD TO LINE	= AVERAGE FRONT SETBACKS WITHIN ZONE
SIDE SETBACK	= 15 FEET
REAR SETBACK	= 30 FEET
BUILDING HEIGHT	= 24 FEET MIN. / 40 FEET MAX.
TRANSFER OF DEVELOPMENT RIGHTS REGULATIONS:	
ABUTTING A ROAD SETBACK	= 20 FEET
ABUTTING A LOT LINE SETBACK	= 10 FEET
STREET SIDES OF UNITS	= 20 FEET
ABUTTING STRUCTURES	= 20 FEET
NO CUT BUFFER FROM EXTERIOR LOT LINE	= 30 FEET

6.) THE SUBJECT PARCEL IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA (SFHA), AS SHOWN ON FLOOD INSURANCE RATE MAP 33017C0310E, EFFECTIVE DATE 9/30/2015.

7.) BASIS OF BEARING IS NH STATE PLANE (NAD83) AND VERTICAL DATUM IS NAVD88.

8.) TDR UNIT CALCULATIONS:

A)	36,578 S.F.-CONSERVATION (0 S.F.)	= 36,578 S.F.
B)	36,578 x 0.85	= 31,091 S.F.
C)	31,091 x 0.85	= 26,428 S.F.
D)	26,428 / 10,000	= 2 UNITS

E) THE EXISTING DUPLEX BUILDING TO BE CONVERTED TO FOUR UNITS. A PROPOSED DUPLEX IS TO BE CONSTRUCTED. UNITS ARE TO BE PURCHASED UNDER THE TDR REGULATIONS TO FULFILL THE TOTAL DENSITY REQUEST OF 4 UNRESTRICTED UNITS. NO ADDITIONAL UNITS MAY BE CREATED WITHOUT REVIEW AND APPROVAL OF THE PLANNING DEPARTMENT AND/OR PLANNING BOARD, WHICHEVER IS APPLICABLE..

9.) PARCEL IS SERVICED BY MUNICIPAL SEWER AND WATER.

10.) THE SOIL TYPE ON THE SITE IS:
WfB WINDSOR LOAMY FINE SAND, CLAY SUBSOIL VARIANT, 0 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

11.) THIS SITE PLAN USES THE TRANSFER OF DEVELOPMENT RIGHTS ORDINANCE WHICH ALLOWS FOR RELIEF TO THE SETBACKS, LOT AREA, FRONTAGE, DENSITY AND INTENSITY OF DEVELOPMENT.

12.) THE FOUR (4) PROPOSED UNITS WILL BE PURCHASED AS UNRESTRICTED UNITS THROUGH THE TDR ORDINANCE.

13.) BOUNDARY INFORMATION IS TAKEN FROM REFERENCE PLANS #1 AND #2.

TDR CONCEPT PLAN
PREPARED FOR
WYATT PEOPLES
TAX MAP 12, LOT No. 149
116 SILVER STREET
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DRAWN BY: RJM	FILE: P:\26132\S\D\26132SK
SCALE: 1" = 20'	DATE: JULY 6, 2026

20 10 0 10 20 40 60 80

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 03821 (603) 742-0911

SURVEYING - PLANNING - CONSULTING

7/10/2026 09:44:46 File: P:\26132 - 116-118 Silver Street Dover NH \Wyatt Peoples\Survey\Drawings\26132 sketch.dwg Layout: AERIAL

From: Sally Drescher <sallydrescher@gmail.com>
Sent: Friday, July 24, 2026 9:49 PM
To: City of Dover - Planning <Dover-Planning@dover.nh.gov>
Subject: Comments on 116 Silver Street for 7/28 Meeting

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

Dear Members of the Dover Planning Board,

I am writing as a resident of Dover regarding the proposal to redevelop the property at 116 Silver Street, several houses down from my home. I respectfully ask the Board not to approve this application in its current form.

I recognize that Dover needs additional housing, and I support thoughtful development that strengthens our community. However, I do not believe this proposal achieves that balance.

The existing Victorian home is one of the properties that contributes to the character of our neighborhood. While I understand that it has been neglected and requires investment, I am concerned that converting it into four units, constructing a large parking area, and adding a separate two-unit building will substantially alter the property's historic character and the feel of the surrounding neighborhood.

I am also concerned about the intensity of the proposed development on a relatively small parcel. The increase in density, parking, traffic, and overall scale appears inconsistent with the established pattern of nearby homes. Once changes of this magnitude are approved, they permanently reshape the neighborhood.

Although I understand that the Planning Board cannot control whether future units are rented or owner-occupied, I hope the Board will consider the broader context in which this project is being proposed. Dover has experienced numerous redevelopment projects in which single-family or historic properties are converted into multi-unit rental housing that is ultimately owned by investment or property management companies. While these projects increase the number of housing units, they do little to expand opportunities for homeownership or help residents build long-term roots in the community.

My concern is not with renters themselves. Renters are an important part of Dover's community. Rather, I am concerned about the continued loss of historic homes and owner-occupied housing in favor of increasingly dense developments that change the character of established neighborhoods without creating opportunities for individuals and families to purchase homes.

I respectfully ask the Board to carefully evaluate whether this proposal truly meets the intent of Dover's planning goals and whether the scale, design, and site layout are appropriate for this location. If the project does move forward, I encourage the Board to require the strongest possible measures to preserve the architectural character of the existing Victorian home, minimize the visual impact of the new construction and parking areas, provide substantial landscaping and buffering, and ensure the development is compatible with the surrounding neighborhood.

Thank you for your time, your service to the City of Dover, and your careful consideration of this application.

Sincerely,

Sally Drescher

137 Silver Street

Dover, New Hampshire

--
Sally Drescher
sallydrescher@gmail.com
Mobile: 603-387-5851

TO: Planning Board
FROM: Donna Benton, AICP Director of Planning and Community Development
DATE: July 22, 2026
Re: Recommendations of Proposed Amendments to Chapter 170-29 – Transfer of Development Rights (TDR) Ordinance from the sub-committee formed to review and provide recommendations for potential amendments to the TDR ordinance.

ISSUE:
The TDR Review Subcommittee was tasked with evaluating the efficacy of the current Transfer of Development Rights (TDR) ordinance, identifying barriers to implementation, and recommending targeted amendments.

INTENT:
This memo will serve as the Committee Report.

GOALS:
Provide background on the purpose of the sub-committee, its goals, its process, and recommendations.

Background:

On March 11, 2025 after reviewing applications, the Planning Board Chair appointed the following individuals to serve on a sub-committee to review the Transfer of Development Rights Ordinance:

Doug Glennon
Kyle Pimental
Leslie Herd
Jan Nedelka
Christopher Berry

The Subcommittee met 14 times between April 2025 and July 2026. The goals were to align the TDR ordinance to better meet the community values and vision, to allow the Planning Board to have more detailed criteria to help its decision making, and to help the development community and staff have a better sense of what makes a TDR request reasonable. Public input was received and reviewed throughout the committee's duration.

Recommended Ordinance Amendments

The TDR ordinance amendments proposed by the subcommittee can be found within the Zoning Amendment Document for the Planning Board to review at the July 28th, 2026 meeting for possible posting.

The amendments clarify the process, add zoning district specific criteria, discuss how the TDR ordinance interacts with other zoning tools in the Zoning Ordinance, outlines the relief mechanisms, clarifies buffer and screening requirements, and makes other improvements as requested by the Board, sub-committee, and public.

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, Word usage and definitions, by amending the definition of "Personal Service Establishment":

   "PERSONAL SERVICE ESTABLISHMENT — A commercial establishment rendering services including accessory retail sales of products related to the services offered. Examples include beauty and barber shops, nail salons, tanning salons, tailors, shoe repair, and NH OPLC licensed massage therapists. A personal service establishment shall not be construed to include a gasoline service station.
   ~~the primary concern of which is the rendering of services rather than the sale of products. "Primary concern" shall mean less than 50% of the revenues from such commercial use shall be gained from the sale of products.~~ A personal service establishment shall not be construed to include a gasoline service station."

3. **AMENDMENT**
   Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-6, Word usage and definitions, by amending the definition of "Conversion to a Duplex", to clarify ordinance intent and to differentiate the redevelopment of single-family homes into to accommodate more than one dwelling unit from the creation of new structures designed to house two dwelling units:

   "CONVERSION TO A 2 Family Dwelling - A conversion to a 2 Family Dwelling is the reconfiguration of an existing single-family dwelling which has been occupied for at least 5 years, into a two-unit residential structure through primarily interior modification with limited exterior alteration. A conversion largely maintains the original building's overall massing, footprint, and structural framework, allowing a second dwelling unit to be created primarily within the existing envelope. Physical expansion of the single-family home shall be limited to no more than 25% of the existing structure's footprint."

4. **AMENDMENT**
   Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-6, Word usage and definitions, by amending the definition of "Flood Insurance Rate Map (FIRM)" to refer to the most current FIRM Map approved and issued by FEMA:

   "FLOOD INSURANCE RATE MAP (FIRM) — ~~An~~ The official map incorporated within this chapter on which FEMA, as amended by FEMA, has delineated both the areas of special flood hazard and the risk premium zones that are applicable to the City of Dover."

5. **AMENDMENT**
   Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-6, Word usage and definitions, by amending the definition of "Transfer of Development Rights (TDR)" to reflect the TDR Subcommittee's revisions:

"TRANSFER OF DEVELOPMENT RIGHTS (TDR) — ~~The conveyance of the development rights of a parcel of land by deed or other legal instrument approved by the Planning Board to the developer of another parcel. Said legal instrument shall be recorded at the Strafford County Registry of Deeds~~ A mutually beneficial regulatory program whereby there is either a conveyance of the development rights of a parcel of land by deed or other legal instrument approved by the Planning Board and/or the contribution of funds with which the City may acquire and manage conservation land, provided by an owner in exchange for alternative beneficial land use requirements. Said legal instrument, be it a deed, development agreement, approved plan, and/or other enforceable instrument, shall be recorded at the Strafford County Registry of Deeds."

6. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-6, Word usage and definitions, by adding the definition of "Undeveloped area" to reflect the TDR Subcommittee's revisions:

"UNDEVELOPED AREA – See definition of OPEN SPACE. Not intended to be subject to any percentage cap on land within a protected overlay zone."

7. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-6, Word usage and definitions, by amending the definition of "Dwelling, Multifamily" to reflect recent state legislation (2026 NH HB1010):

"DWELLING, MULTIFAMILY — A building containing more than ~~four~~ two dwelling units"

8. 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 amending the Gateway Table of Uses to allow flexibility to existing residential-only property owners units from the Gateway's underlying Build-to Line requirements:

"**Dimensional Regulations***

Principal Building	
Lot Size	N/A
Lot coverage	50% max
Frontage build-out	60% min
Front primary build-to line	5 ft. min – 20 ft. max
Front secondary build-to line	5 ft. min – 20 ft. max
Side setback	10 ft. min
Rear setback	15 ft. min
Outbuilding	
Front setback	20 ft. min + bldg. setback

Side setback	10 ft. min
Rear setback	15 ft. min
Private Frontages	
Common yard	Permitted
Porch and fence	Permitted
Terrace/lightwell	Permitted
Stoop	Permitted
Shopfront/awning	Permitted
Gallery	Not permitted
Height of Building	
Principal building	4 story max, 2 story min#
Outbuilding/accessory	2 story max

*CUP (§170-20B) may be used to adjust standards.
*Build-out percentage min is waived for residential properties with two (2) or less dwelling units.
*Residential properties with two (2) or less dwelling units have 10' front setback in lieu of build-to line."

9. **AMENDMENT**
Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12, Gateway District (G) Table of Uses, by amending the solar/green roof standards under Required Building Standards, to eliminate forced installation of solar or green roofs while upholding the solar readiness standard:

"Solar/Green Roof Standard:
• All buildings ~~must~~ shall be constructed to be solar ready, ensuring that future installation of solar energy systems can be easily and effectively accommodated.
• ~~Commercial and mixed use buildings that are 25,000 sq ft or more must also incorporate solar panels and/or a green roof on at least 30 percent of the roof area.~~"

10. **AMENDMENT**
Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12, Cochecho Waterfront District (CWD) Table of Uses, by amending the solar/green roof standards under Required Building Standards, to eliminate forced installation of solar or green roofs while upholding the solar readiness standard:

"Solar/Green Roof Standard:
• All buildings ~~must~~ shall be constructed to be solar ready, ensuring that future installation of solar energy systems can be easily and effectively accommodated.
• ~~Commercial and mixed use buildings that are 25,000 sq ft or more must also incorporate solar panels and/or a green roof on at least 30 percent of the roof area.~~
• Solar shall not affect the view of the river for nearby properties or rights-of-way."

11. **AMENDMENT**
Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12, Rural Residential (R-40) Table of Uses, by adding the Transfer of Development Rights as an

approved use with footnote specifying compliance with TDR-specific regulations detailed within the table:

"Transfer of Development Rights [13]

[13] Use permitted subject to conditions specified below in addition to Planning Board approval.

Transfer of Development Rights: Projects utilizing TDR within this zoning district are subject to the following conditions.

*	Underlying	TDR (Fee Simple)	TDR (Common Area)
Lot Size	40K	20K per unit	20K per unit
Frontage	150	75 per lot	100 for parent parcel, or, 80% of neighboring parcel frontages within 100' radius, whichever is less
Front Setback	40	40	20
2nd/Street Setback	40	40	20
Side Setback	25	25	12' separation between structures
Rear Setback	30	30	30' to abutting parcels
Height	35	35	35
Subject to Planning Board approval, visual screening, whether fencing, vegetation, or a combination thereof, shall be required to provide separation between the TDR development and abutting parcels			
All TDR projects shall provide an amount of Undeveloped Area which is no less than 10 percentage points below of the district's average (R-40 = 95%), or which is no less than 10 percentage points below the average amount of Undeveloped Area on neighboring lots within 200' in both directions from the subject parcel).			
If the site does not have immediate access, water and Sewer infrastructure may be extended, at the applicant's cost, up to a distance not to exceed 75 linear feet from the existing service to the nearest point of lot frontage. Extensions on the applicant's own property and frontage shall not be included in the 75' maximum.			
The architectural style of any proposals shall maintain similar facade and vernacular style as befits buildings of similar or better build quality to adjoining properties both on the same and opposite sides of the street.			

**TDR CUP (170-29K) may be used to adjust standards"*

12.

AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12, Low Density Residential (R-20) Table of Uses, by adding the Transfer of Development Rights as

an approved use with footnote specifying compliance with TDR-specific regulations detailed within the table:

"Transfer of Development Rights [14]

[14] Use permitted subject to conditions specified below in addition to Planning Board approval.

Transfer of Development Rights: Projects utilizing TDR within this zoning district are subject to the following conditions.

*	**Underlying**	**TDR (Fee Simple)**	**TDR (Common Area)**
Lot Size	20K	10K per unit	10K per unit
Frontage	125	60 per lot	85 for parent parcel, or, 80% of neighboring parcel frontages within 100' radius, whichever is less
Front Setback	20	20	10
2nd/Street Setback	20	20	10
Side Setback	20	20	12' separation between structures
Rear Setback	30	30	30
Height	35	35	35
Subject to Planning Board approval, visual screening, whether fencing, vegetation, or a combination thereof, shall be required to provide separation between the TDR development and abutting parcels			
All TDR projects shall provide an amount of Undeveloped Area which is no less than 10 percentage points below of the district's average (R-20 = 90%), or which is no less than 10 percentage points below the average amount of Undeveloped Area on neighboring lots within 200' in both directions from the subject parcel).			
If the site does not have immediate access, water and Sewer infrastructure may be extended, at the applicant's cost, up to a distance not to exceed 50 linear feet from the existing service to the nearest point of lot frontage. Extensions on the applicant's own property and frontage shall not be included in the 50' maximum.			
The architectural style of any proposals shall maintain similar facade and vernacular style as befits buildings of similar or better build quality to adjoining properties both on the same and opposite sides of the street.			

**TDR CUP (170-29K) may be used to adjust standards"*

13. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12, Medium Density Residential (R-12) Table of Uses, by adding the Transfer of Development Rights as an approved use with footnote specifying compliance with TDR-specific regulations detailed within the table:

"Transfer of Development Rights [13]

[13] Use permitted subject to conditions specified below in addition to Planning Board approval.

Transfer of Development Rights: Projects utilizing TDR within this zoning district are subject to the following conditions.

*	**Underlying**	**TDR (Fee Simple)**	**TDR (Common Area)**
Lot Size	12K	6K per unit	6K per unit
Frontage	100	50 per lot	60 for parent parcel, or 80% of neighboring parcel frontages within 100' radius, whichever is less
Front Setback	15	10	10
2nd/Street Setback	15	10	10
Side Setback	15	15	12' separation between structures
Rear Setback	30	30	20
Height	35	35	35
Subject to Planning Board approval, visual screening, whether fencing, vegetation, or a combination thereof, shall be required to provide separation between the TDR development and abutting parcels.			
All TDR projects shall provide an amount of Undeveloped Area which is no less than 10 percentage points below of the district's average (R-12 = 85%), or which is no less than 10 percentage points below the average amount of Undeveloped Area on neighboring lots within 200' in both directions from the subject parcel).			
If the site does not have immediate access, water and Sewer infrastructure may be extended, at the applicant's cost, up to a distance not to exceed 30 linear feet from the existing service to the nearest point of lot frontage. Extensions on the applicant's own property and frontage shall not be included in the 30' maximum.			
The architectural style of any proposals shall maintain similar facade and vernacular style as befits buildings of similar or better build quality to adjoining properties both on the same and opposite sides of the street.			

**TDR CUP (170-29K) may be used to adjust standards"*

14. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12, Suburban Density Multi-Residential (RM-SU) Table of Uses, by adding the Transfer of Development Rights as an approved use with footnote specifying compliance with TDR-specific regulations detailed within the table:

"Transfer of Development Rights [10]

[10] Use permitted subject to conditions specified below in addition to Planning Board approval.

Transfer of Development Rights: Projects utilizing TDR within this zoning district are subject to the following conditions.

*	**Underlying**	**TDR (Fee Simple)**	**TDR (Common Area)**
Lot Size	12K	6K per unit	6K per unit
Frontage	100	50 per lot	60 for parent parcel, or 80% of neighboring parcel frontages within 100' radius, whichever is less
Front Setback	15	10	10
2nd/Street Setback	15	10	10
Side Setback	15	15	12' separation between structures
Rear Setback	30	30	20
Height	35	35	35
Subject to Planning Board approval, visual screening, whether fencing, vegetation, or a combination thereof, shall be required to provide separation between the TDR development and abutting parcels.			
All TDR projects shall provide an amount of Undeveloped Area which is no less than 10 percentage points below of the district's average (R-12 = 85%), or which is no less than 10 percentage points below the average amount of Undeveloped Area on neighboring lots within 200' in both directions from the subject parcel).			
If the site does not have immediate access, water and Sewer infrastructure may be extended, at the applicant's cost, up to a distance not to exceed 30 linear feet from the existing service to the nearest point of lot frontage. Extensions on the applicant's own property and frontage shall not be included in the 30' maximum.			
The architectural style of any proposals shall maintain similar facade and vernacular style as befits buildings of similar or better build quality to adjoining properties both on the same and opposite sides of the street.			

**TDR CUP (170-29K) may be used to adjust standards"*

15. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12, Urban Density Multi-Residential (RM-U) Table of Uses, by adding the Transfer of Development Rights as an approved use with footnote specifying compliance with TDR-specific regulations detailed within the table:

"Transfer of Development Rights [8]

[8] Use permitted subject to conditions specified below in addition to Planning Board approval.

Transfer of Development Rights: Projects utilizing TDR within this zoning district are subject to the following conditions.

*	**Underlying**	**TDR (Fee Simple)**	**TDR (Common Area)**
Lot Size	10K	5K per unit	5K per unit
Frontage	80	40 per lot	60 for parent parcel, or 80% of neighboring parcel frontages within 100' radius, whichever is less
Front Setback	[3]	[3]	10
2nd/Street Setback	[3]	[3]	10
Side Setback	10	10	12' separation between structures
Rear Setback	10	10	10
Height	40	40	40
Subject to Planning Board approval, visual screening, whether fencing, vegetation, or a combination thereof, shall be required to provide separation between the TDR development and abutting parcels.			
All TDR projects shall provide an amount of Undeveloped Area which is no less than 10 percentage points below of the district's average (RM-U = 70%), or which is no less than 10 percentage points below the average amount of Undeveloped Area on neighboring lots within 200' in both directions from the subject parcel).			
If the site does not have immediate access, water and Sewer infrastructure may be extended, at the applicant's cost, up to a distance not to exceed 30 linear feet from the existing service to the nearest point of lot frontage. Extensions on the applicant's own property and frontage shall not be included in the 30' maximum.			
The architectural style of any proposals shall maintain similar facade and vernacular style as befits buildings of similar or better build quality to adjoining properties both on the same and opposite sides of the street.			

**TDR CUP (170-29K) may be used to adjust standards"*

16. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12, Hospital (H) Table of Uses, by adding the Transfer of Development Rights as an approved use with footnote specifying compliance with TDR-specific regulations detailed within the table:

"Transfer of Development Rights [7]

[7] Use permitted subject to conditions specified below in addition to Planning Board approval.

Transfer of Development Rights: Projects utilizing TDR within this zoning district are subject to the following conditions.

*	Underlying	TDR (Fee Simple)	TDR (Common Area)
Lot Size	10K	5K per unit	5K per unit
Frontage	100	50 per lot	75 for parent parcel, or 80% of neighboring parcel frontages within 100' radius, whichever is less
Front Setback	12	12	12
2nd/Street Setback	12	12	12
Side Setback	10	10	12' separation between structures
Rear Setback	15	15	10
Height	65	65	65
Subject to Planning Board approval, visual screening, whether fencing, vegetation, or a combination thereof, shall be required to provide separation between the TDR development and abutting parcels.			
All TDR projects shall provide an amount of Undeveloped Area which is no less than 10 percentage points below of the district's average (H = 90%), or which is no less than 10 percentage points below the average amount of Undeveloped Area on neighboring lots within 200' in both directions from the subject parcel).			
If the site does not have immediate access, water and Sewer infrastructure may be extended, at the applicant's cost, up to a distance not to exceed 50 linear feet from the existing service to the nearest point of lot frontage. Extensions on the applicant's own property and frontage shall not be included in the 50' maximum.			
The architectural style of any proposals shall maintain similar facade and vernacular style as befits buildings of similar or better build quality to adjoining properties both on the same and opposite sides of the street.			

**TDR CUP (170-29K) may be used to adjust standards"*

17. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-12, Office (O) Table of Uses, by adding the Transfer of Development Rights as an approved use with footnote specifying compliance with TDR-specific regulations detailed within the table:

"Transfer of Development Rights [7]

[7] Use permitted subject to conditions specified below in addition to Planning Board approval.

Transfer of Development Rights: Projects utilizing TDR within this zoning district are subject to the following conditions.

*	Underlying	TDR (Fee Simple)	TDR (Common Area)
Lot Size	10K	5K per unit	5K per unit
Frontage	100	50 per lot	70 for parent parcel, or 80% of neighboring parcel frontages within 100' radius, whichever is less
Front Setback	12	12	10
2nd/Street Setback	12	12	10
Side Setback	12	12	12' separation between structures
Rear Setback	15	15	10
Height	40	40	40
Subject to Planning Board approval, visual screening, whether fencing, vegetation, or a combination thereof, shall be required to provide separation between the TDR development and abutting parcels.			
All TDR projects shall provide an amount of Undeveloped Area which is no less than 10 percentage points below of the district's average (O = 82%), or which is no less than 10 percentage points below the average amount of Undeveloped Area on neighboring lots within 200' in both directions from the subject parcel).			
If the site does not have immediate access, water and Sewer infrastructure may be extended, at the applicant's cost, up to a distance not to exceed 30 linear feet from the existing service to the nearest point of lot frontage. Extensions on the applicant's own property and frontage shall not be included in the 30' maximum.			
The architectural style of any proposals shall maintain similar facade and vernacular style as befits buildings of similar or better build quality to adjoining properties both on the same and opposite sides of the street.			

**TDR CUP (170-29K) may be used to adjust standards"*

18. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-15, Recreation space and separation between use requirements, by extending the requirement to mixed-use developments requiring site plan approval:

"**§ 170-15. Recreation space and separation between use requirements.**

A. For each bedroom of any development which cumulatively contains ten (10) or more dwelling units ~~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 comply with any and all applicable regulations as specified in the currently-adopted Fire Code.

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.

G. All recreation space requirements pursuant to this section shall not be binding in the CBD–General, TOD and CWD districts."

19. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-16, Swimming pools, by including alternative security methods approved by state building code:

"§ 170-16 Swimming pools.

In districts allowing one-family dwellings, two-family dwellings, and three- to four-family dwellings, pools for swimming or bathing shall be in conformity with the following regulations:

A. ~~Every outdoor swimming pool shall be completely surrounded by a fence or wall not less than four feet in height, which shall be so constructed as not to have openings, holes or gaps larger than four inches in any dimension, except for doors and gates, and if a fence is erected or maintained, the horizontal dimension shall not exceed four inches. A primary dwelling or accessory building or structure may be used as part of the enclosure.~~
Every outdoor swimming pool shall be protected by either a fence or wall not less than four feet in height, constructed so as not to have openings, holes, or gaps larger than four inches in any dimension, except for doors and gates. A primary dwelling or accessory building or structure may be used as part of the enclosure; or

A powered safety cover complying with ASTM F1346, installed and operated in accordance with the NH Swimming Pool and Spa Code as adopted by the State Building Code.

B. Gates. All gates or door openings through such enclosure shall be equipped with a self-closing and self-latching device for keeping the gates or door securely closed at all times when not in actual use, except that the door of any dwelling which forms a part of the enclosure need not be so equipped.

C. Applicability. The requirements of this chapter shall be applicable to all new swimming pools hereafter constructed, other than indoor pools and temporary wading pools less than 22 inches deep or eight feet in diameter (whichever is more restrictive), and shall apply to all existing pools which have a minimum depth of 22 inches of water. No person in possession of land within the City, either as owner, purchaser, lessee, tenant or a licensee, upon which is situated a swimming pool having a minimum depth of 22 inches shall fail to provide and maintain ~~such fence or wall as herein provided~~ either a compliant fence or wall, or a powered safety cover meeting ASTM F1346, as provided in Subsection A.

D. Appeals and hearings. The Board of Adjustment, after public hearing, may make modifications in individual cases, upon a showing of good cause, with respect to the height, nature or location of the fence, wall, gates or latches or the necessity therefor, provided that the protection as sought hereunder is not reduced thereby. The Board of Adjustment may permit other protective devices or structures to be used so long as the degree of protection afforded by the substitute devices or structures is not less than the protection afforded by the wall, fence, gate and latch described herein.

E. State requirements. Swimming pools shall conform to all requirements of the New Hampshire Department of Health and Human Services.

F. Option to fence regulation. When not in attendance, access ladders or slide ladders to pool shall be removed or raised and locked or otherwise made inaccessible from the outside to small children.

G. Consistency with State Building Code. This section shall be interpreted consistent with the NH Swimming Pool and Spa Code and the State Building Code. In the event of a conflict, the State Building Code shall govern."

20. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-18, Customary home occupations, by amending the section to remove ambiguity and to come into compliance with recent state legislation:

"§ 170-18 **Customary home occupations.**

A customary home occupation is a permitted as an accessory use wherever a legally-established primary residential use exists.~~in all residential districts.~~ The following conditions apply:

A. "Home occupation" shall include not more than one of the following uses, provided that such uses are clearly incidental and secondary to residential purposes: dressmaker, artist, arts and crafts, writer, teacher, provided that not more than eight pupils simultaneously occupy the building, musician, antique dealer, hairdresser, home-based agricultural activities, lawyer, doctor, photographer, dentist, architect, engineer or practitioner of any other profession or similar occupation which may be unobtrusively pursued in a residential area.

B. No more than one nonresident shall be employed therein.

C. The use is carried on strictly by the ~~occupant~~ resident of the principal building.

D. No more than 25% of the existing net floor area of the principal and any accessory structure not to exceed 600 square feet is devoted to such use.

E. ~~There shall be no display of goods or wares visible from the street.~~ Street displays of goods or wares shall be restricted to one 10 square foot area and be located outside of the public right-of-way.

F. There shall be no advertising on the premises other than a small, nonilluminated sign not to exceed two square feet in area ~~and carrying only the occupant's name and his occupation~~.

G. The buildings or premises occupied shall not be rendered objectionable or detrimental to the residential character of the neighborhood because of the exterior appearance, traffic emission of odor, gas, smoke, dust, noise, electrical disturbance, light emissions, or in any other way. In a multifamily dwelling, the use shall in no way become objectionable or detrimental to any residential use within the multifamily structure.

(1) No rallying of employees for off-site work shall be conducted.

(2) If the home is occupied by a tradesman, craftsman or contractor, there may be incidental storage. Said storage shall be screened from abutters and the right-of-way, with either a solid fence or vegetation, and must be fully enclosed and limited to 400 s.f. or less. On-site storage of construction equipment or vehicles is not permitted.

H. Any such building shall include no feature of design not customary in buildings for residential use. The following uses, by nature of the investment or operation, have a potential to rapidly increase beyond the limits specified above for home occupations and impair the use, value and quiet enjoyment of adjacent residential properties. Therefore, uses such as ~~retail~~, clinic, landscaping, freight, trucking or shipping, painting of vehicles, trailers ~~and~~ or boats, restaurants, caterers ~~or bakeries~~, taxi service, tool or equipment rental, veterinary hospital or kennel and others of a similar nature shall not be considered as home occupations. Only food operations producing non-potentially hazardous as defined in RSA 143-A:12, I(b) may be permitted as home occupations. Such food-producing uses must not generate traffic or food use in excess of normal residential use.

I. ~~A minimum of two off-street parking spaces shall be provided.~~ Adequate provision shall be made for off-street parking for any commercial vehicle, employee, or client visits to the site under normal business operations. All driveways to be used in connection with such occupations shall conform to Chapter **153**, Site Review Regulations, or Chapter **157**, Land Subdivision Regulations, as appropriate.

J. Not more than one commercial vehicle in connection with such home occupation shall be stored on the premises.

K. A certificate of use for the proposed home occupation is issued by the Zoning Administrator, verifying conformance with the preceding standards. Said certificate shall be renewed annually. Applications to renew the certificate of use shall be due by January 1 following the date of approval of the certificate of use and then by every January 1 thereafter for so long as the customary home occupation continues. Fees shall be levied as set forth in the City of Dover adopted Schedule of Fees, as amended annually, for customary home occupation certificates of use and renewals.

L. The use of a room in a dwelling or accessory building as a home office by a resident/occupant is a permitted use and does not require a certificate of use, provided that the use does not generate any traffic, such as deliveries or pickup of supplies or materials in excess of normal residential use or clients coming to the property. The use of one personal vehicle by a transportation network company (TNC) driver, as those terms are defined by RSA 359:U, shall not be regulated under this section."

21. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-19, Non-environmental conditional use permit criteria, by amending the criteria to meet more empiric standards and to remove ambiguity around intent:

"§ 170-19 Non-environmental conditional use permit criteria.

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, § 153-17C, shall apply to any use as defined in § 170-11B of this chapter.

B. 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.~~
   ~~(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.~~

(a) Character and Neighborhood Compatibility

1. Any use permitted via this section shall be consistent with the intended character of the zoning district in which it resides. At a minimum, this shall mean that the proposed use shall not generate any major impacts on the neighborhood as a whole, when compared to conforming uses which surround the site, or uses which are permitted by-right.
2. Compatibility shall be evaluated through the following:
    a. Building scale and massing;
    b. Proposed dwelling units compared to surrounding area;
    c. Site size and layout;
    d. Structure and parking setbacks;
    e. Landscaping and existing tree preservation;
    f. Visual buffer of adjacent properties.

(b) Proportion and Balance of Uses

1. For sites that are a part of a residential neighborhood, which shall mean any property which directly abuts a residential zoning district, or, directly abuts two conforming residential properties, the proposed use and/or structure must not significantly reduce the residential appearance and function of the area.
2. Evaluation shall include:
    a. Ratio of residential vs. non-residential uses in the immediate area;
    b. Scale of the proposed structure relative to surrounding properties;

(c) Livability Impacts

1. The proposal must avoid significant adverse impact on nearby residential properties.
2. Impacts to be evaluated shall include:
    a. Noise;

b. Odors;
c. Generation of traffic;
d. Lighting/Glare;
e. Hours of operation (if commercial use is proposed)

(d) Transportation and Parking Adequacy

1. The proposed development must not adversely impact available parking or transportation systems.
2. Evaluation of the available parking and transportation system shall include the following:
   a. Number of on-site parking spaces provided;
   b. Street capacity;
   c. Site access safety and compatibility with the supporting street;
   d. Connectivity with neighboring streets;
   e. Available public transportation;
   f. Available pedestrian and bicycle networks;
   g. Neighborhood traffic impacts
3. If transportation-related impacts occur due to the proposal, the applicant must propose proportional mitigation, such as:
   a. Intersection or signal improvements;
   b. Pedestrian/bicycle network improvements;
   c. Transit-related improvements;
   d. Connectivity improvements.
4. Required transportation improvements must be already available or made available by the time of the development (or phase) is completed.

(e) Public Services Adequacy

1. Existing public or private utility services must be capable of serving the proposed use/development.
2. Utility capacity evaluation shall include:
   a. Water supply;
   b. Sanitary sewer;
   c. Police and fire protection;
   d. Stormwater disposal.

~~(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.~~
~~(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.~~

2. 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."

3. Where specific standards or criteria are set forth in this ordinance for the particular use permitted by Conditional Use Permit, those standards and criteria shall apply in lieu of the general standards set forth in 170-19.B.

22. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-24, Accessory dwelling units, by including a definition for how the size of ADUs are to be measured and by permitting discrete electric services, per state legislation:

"**§ 170-24. Accessory dwelling units.**

Where permitted, an accessory dwelling unit shall comply with the following:

A. A maximum of one accessory dwelling unit (ADU) per property is permitted. In residential districts other than the R-40, more than one ADU may be allowed provided the second unit meets HUD Fair Market Rent rates, for Dover, published annually by the New Hampshire Housing Finance Authority. An ADU shall not be permitted on property where more than one dwelling unit currently exists.

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 structure which are required for access to the accessory dwelling unit shall be located to the side or rear of the building whenever possible.

C. An ADU shall have an area of no less than 300 square feet and no greater than 950 square feet. If located in a detached accessory structure, the accessory dwelling unit may be located on either floor of the structure. The area of an ADU shall mean the size of the unit based upon the exterior dimensions of the unit itself, excluding unconditioned spaces such as stairwells and utility rooms. Bathrooms, laundry rooms, and kitchens all count towards the cumulative area of an ADU.

D. A minimum of one dedicated off-street parking space shall be provided for the ADU.

E. The single-family dwelling (and detached accessory structure, when applicable) and lot shall not be converted to a condominium or any other form of legal ownership distinct from the ownership of the single-family dwelling. In order to ensure compliance with this requirement, the property owners at the time the ADU is established shall be required to execute a restrictive covenant running in favor of the City, which shall be recorded in the Strafford County Registry of Deeds, and a copy of which shall be provided to the Planning and Community Development Department and the City Assessor prior to the issuance of a certificate of occupancy.

F. The property owner must occupy one of the two dwelling units. ~~Electric, w~~Water and sewer utilities shall be metered on a single bill.

G. Where municipal sewer service is not provided, the septic system shall meet New Hampshire Department of Environmental Services, Water Division, requirements for the combined system demand for total occupancy of the premises.

H. A certificate of use issued by the Zoning Administrator is required to verify conformance with the preceding standards. Said certificate shall be renewed annually. Applications to renew the certificate of use shall be due by January 1 following the date of approval of the certificate of use and then by every January 1 thereafter for so long as the accessory dwelling unit continues. Fees shall be levied as set forth in the City of Dover Fee Schedule, as amended annually, for accessory dwelling unit certificates of use and renewals."

23. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-29, Transfer of Development Rights (TDR), by amending the section to resolve issues highlighted by the public and to reflect the TDR Subcommittee's revisions:

"§ 170-29. Transfer of development rights. [Amended 8-22-2018 by Ord. No. 2018.08.08-009; 9-11-2019 by Ord. No. **2019.08.28-012; 7-22-2020 by Ord. No. 2020.07.08-007; 10-13-2021 by Ord. No. 2021.09.08-006; 8-9-2023 by Ord. No. 2023.07.12-008; 10-8-2025 by Ord. No. 2025.09.24-2]**

~~[a]~~A. Authority. By the authority granted under RSA 674:21, this section is an innovative land use control that creates overlay district(s) for the purpose of transferring development rights (TDR) within said districts. This ordinance is a voluntary, opt-in form of regulation and any applicant seeking and obtaining relief under this ordinance will be conclusively deemed to have accepted the provisions, conditions, and limitations set forth in this ordinance.

B. Purpose and intent. Within the City of Dover, there are certain lands that possess significant conservation features, including but not limited to unsuitable development areas, groundwater recharge zones, forested areas, wildlife habitat, farmland, scenic view sheds, historic landmarks, and linkages to other such areas. Because of their unique assemblages of flora and fauna and their significant contribution to the ecological system and/or the cultural identity of our community, these lands are worthy of special protection. The City of Dover~~, furthermore,~~ has a ~~limited supply~~finite inventory of land suitable for development. The Master Plan identifies the need to balance expanding housing diversity, including units that are affordable and attainable to a broad range of Dover residents, supporting the workforce needs of local industry and businesses, and preservation of open spaces.

~~[b]~~(1) The purpose of this overriding district is to promote intensive development on the developable land possessing the least conservation value and to permanently protect lands possessing significant conservation features that provide unique values in their undisturbed condition. Additionally, it is recognized that the City of Dover has an Open Lands Committee and Conservation Commission which is active in protecting and preserving open space. Applicants are strongly cautioned against attempted use of this ordinance for the sole or primary purpose of evading normal zoning requirements, rather than for the intended purposes of this ordinance as stated above. **[Amended 10-13-2021 by Ord. 2021.09.08-006]**

~~[c]~~C. Applicability. Upon request by an applicant for development approval and as prescribed in Subsection J, at the discretion of the Planning Board, the provisions of this section may apply to the district(s) defined in Subsection D below.

~~[d]~~D. Districts ~~**defined.**~~**.2019.08.28-012]**

~~**The Industrial TDR District is hereby determined to be any IT or CM Zoning District as shown on**~~**The districts defined** below refer to the Zoning Map for the City of Dover, New Hampshire, adopted September 11, 2019.

(1) The Industrial TDR District is permitted where noted on the non-residential/mixed use Zoning District Tables of Uses and Dimensions.

~~a.~~(a) The "sending area" is defined to be open space and related setbacks as defined by the City of Dover Wetland Protection District, ~~§~~Dover Code Section 170-28, which are located in any C, IT or CM Zoning District. ~~The "receiving area" is defined to be all remaining land in be any IT or CM Zoning District.~~

(b) The "receiving area" is defined to be permitted as listed per the Zoning Districts' Tables of Uses and Dimensions. **[Amended 7-22-2020 by Ord. 2020.07.08-007]**

(2) The Residential TDR District is hereby ~~determined to be residential districts~~permitted where noted ~~or displayed~~ on the residential Zoning ~~Map for the City~~Districts' Tables of ~~Dover, New Hampshire, adopted September 11, 2019.~~ Uses and Dimensions.

~~b.~~(a) The "sending area" is defined to be any land preserved by the City of Dover through conservation programs primarily in the R-40 or R-20 residential zoning districts~~. The "receiving area" is defined~~ but may extend to ~~be all non-R-40 or -R-20~~any other zoning ~~districts east of the Spaulding Turnpike which allow residential development.~~district.

(b) ~~If the units created are purchased, the~~ The "receiving area~~ may~~" is defined to be ~~any~~all zoning ~~district that allows~~districts which allow residential development and which meet the criteria of Subsection J (9) and all criteria detailed within the TDR section of the Zoning District Tables of Uses and Dimensions.

~~i.~~[1] The "receiving area" excludes any parcel(s) within 250 feet of a tidal river and the Heritage Residential District.

~~[e]~~E. Procedural requirements.

(1) ~~At the discretion of the Planning Board, an~~An applicant ~~for~~seeking development approval within ~~the~~a receiving area of the ~~defined Industrial~~ TDR district ~~may~~shall apply the performance standards specified as follows:

~~a.~~(a) Additional performance standards for Industrial TDR districts are outlined in Subsection F ~~below in return for the acquisition of land or development rights from the sending area within the same TDR district. The~~.

(b) Additional performance standards for the Residential TDR district are outlined in Subsection G ~~below.~~.

~~b.~~(2) ~~A~~For proposals requiring the preservation of land, a certified boundary survey of the associated land in the sending area shall be submitted as a supplement to the site plan or subdivision plan for development within the receiving area. **[Amended 8-22-2018 by Ord. 2018.08.08-009]**

~~c.~~(a) The owner of the subject open space, within the sending area of the TDR district, shall sign all application materials as a co-applicant of the development application. ~~For residential application, proof~~Proof of an agreement to sell development rights must be provided by the Conservation Commission.

~~d.~~(3) ~~A sketch plan estimating layout of the development site and identifying the open space associated with the plan may be submitted to the Planning Board for review at a regularly scheduled meeting. The Planning Board, within 30 days of its review of the sketch plan, shall determine if waivers will be granted as allowed in Subsections F and G below. Waivers shall be reviewed using the same criteria as are used for site plan waivers. Following this decision, a final application is prepared. The final~~The application for development approval shall be reviewed in accordance with the standard plan review process and subjected to all applicable development regulations, except as provided in this section. **[Amended 8-22-2018 by Ord. No. 2018.08.08-009; 7-22-2020 by Ord. No. 2020.07.08-007; 8-9-2023 by Ord. No. 2023.07.12-008]**

~~(a) The determination of whether a proposed TDR project requires a sketch plan review shall be made by the Director of Planning and Community Development based on initial discussions with the applicant. The determination, made in writing, shall be made prior to the submittal of any plans and shall specify the Director's reasoning, including a review of known conditions, including: traffic, existing layout/topography, environmental. This determination shall be included in the staff report to the Board. If the applicant does not agree with the Director's determination, they may appeal the decision to the Board at its next meeting.~~

(a) Applicants may choose to first seek Planning Board preliminary endorsement of TDR maximum density. They shall submit application materials including but not limited to:

[1] A boundary plan indicating approximate location of existing buildings, lot lines, or limited common area lines, parking areas, driveway, wetlands, wetland buffers, conservation districts, burial grounds, drainage infrastructure areas, buffers, and natural features.

[2] A sketch plan estimating layout of the development site and identifying the open space associated with the plan. This may be submitted to the Planning Board for review at a regularly scheduled meeting by following normal submission deadlines.

~~i.~~(i) If the sketch plan requires an environmental conditional use permit ~~to develop homes~~per other sections of Zoning Ordinance in the creation of additional dwelling units, the applicant must appear before the Conservation Commission for review and endorsement prior to ~~the~~any Planning Board's review. Such endorsement by the Conservation Commission requires a finding that the applicable Conditional Use Permit criteria have been met.

~~A~~

[3] The Planning Board, within 60 days of its review of the sketch plan, shall determine if relief, in the form of a TDR Conditional Use Permit, will be granted as allowed in Subsections F and G below. Relief requests shall be reviewed using the criteria set forth in Subsection K. Although the Planning Board may grant relief from specific requirements of this section, including provisions related to project intensity or density, the fundamental purpose and intent of the Zoning Ordinance, Site Review Regulations, and Subdivision Regulations—particularly those governing open space subdivisions—shall be preserved. Any

such relief shall remain consistent with the spirit and intent of the Master Plan, protect public health and safety, and be consistent with the neighborhood context.

[4] Once preliminary endorsement has been granted, full Planning Board review of the development plan following procedures set forth in Dover Code Section 153 and/or 157 shall be completed as well as Section 170-29.

[5] Preliminary endorsement of the use of TDR in no way guarantees subsequent Planning Board approval of the preliminarily endorsed TDR site, layout, or dwelling unit count. The TDR preliminary endorsement merely allows for use of TDR in a subsequent site or subdivision plan, pursuant to Dover Code Chapters 153 or 157.

[6] If no formal site plan or subdivision is submitted to and voted upon by the Planning Board pursuant to Dover Code Chapters 153 and 157, respectively, within four (4) years, then the Planning Board TDR endorsement shall be null and void.

(b) Applicants may elect to submit applications for site plan review or subdivision plat approval concurrently with a Transfer of Development Rights (TDR) request. In such cases, the review and approval procedures set forth in Dover Code Sections 153 and/or 157 shall govern. As part of the staff memo for the Planning Board's review of a TDR request, the Planning Department should discuss traffic, existing layout/topography, environmental, and neighborhood context.

(c) Review by the Technical Review Committee (TRC) shall occur for all projects.

[1] For projects resulting in four (4) or fewer new dwelling units, Planning Board review and approval shall not be required unless relief is necessary or the TRC determines that such review is necessary.

[2] For five (5) or more new dwelling units, applicants must obtain TDR endorsement by the Planning Board, TRC review and approval, and Planning Board review and approval per Dover Code Sections 153 or 157. Only once all three approvals are in place, may an applicant apply for building permits.

~~e.~~(4) If not utilizing the purchase option (as noted in Section 170-29.G), a perpetual easement or restrictive covenant shall be recorded at the Strafford County Registry of Deeds that preserves the designated open space within the sending area. Said easement or covenant may allow for the continuance of existing residential and agricultural activities, and may allow for utility and access crossings in accordance with Subsection H below. The designation of the land protection agency to hold the easement shall be approved by the Planning Board.

(5) The development plan shall be laid out in a design that meets the requirements for block length and cul-de-sac length unless relief per Chapters 153 and/or 157 is granted. Private driveways serving four (4) or fewer units are exempt from this provision but need to meet the current fire and building codes.

~~[f]~~F. Industrial performance standards.

~~a.~~(1) Land within a sending area, when surveyed, approved by the Planning Board and preserved by easement or covenant as specified in Subsection E, above, may be counted for the open space requirement for a development site in a receiving area. The amount of land preserved in a sending area shall equal or exceed the open space requirement for the development site, but in no case be less than one acre. ~~Notwithstanding,~~

(a) Notwithstanding the above, development sites within the IT and CM Zoning Districts shall maintain open space or landscaped area on at least 10% of the site. The design of the development site shall locate the open space or landscaped area to maximize the aesthetic value of the site. **[Amended 7-22-2020 by Ord. No. 2020.07.08-007]**

~~b.~~(2) The minimum lot size requirement may be ~~waived~~relieved by Conditional Use Permit pursuant to Subsection K below granted by the Planning Board for land subjected to the transfer of development rights.

~~c.~~(3) The minimum frontage requirement may be ~~waived~~relieved by Conditional Use Permit pursuant to Subsection K below granted by the Planning Board for land subjected to the transfer of development rights, provided that paved access to all developed areas suitable for emergency vehicles is approved by the Planning Board.

~~d.~~(4) Setbacks for parking, paved areas, and buildings may be ~~waived~~relieved by Conditional Use Permit pursuant to Subsection K below granted by the Planning Board and be consistent with the intent to promote intensive development of suitable development sites. Notwithstanding, buildings shall be at least 150 feet from residential structures that exist on the date of enactment of the IT and CM Zoning Districts, and 75 feet from the lot line of a disagreeing residential abutter. **[Amended 7-22-2020 by Ord. No. 2020.07.08-007]**

~~e.~~(5) The developer shall record covenants that address architectural considerations for structures, signage and lighting that are designed to promote the highest possible aesthetic quality of the development site.

~~f.~~(6) A landscaping plan shall be submitted with a development application that depicts landscaping or open space around the perimeter of the site, near the proposed buildings, and within the parking lot that promotes the highest possible aesthetic quality of the development.

~~[g]~~G. Residential performance standards. **[Amended 8-22-2018 by Ord. No. 2018.08.08-009]**

(1) ~~Annually~~A residential transfer of development rights applicant may either pursue a request to purchase density credits or conserve an acre of land per credit transferring development rights or follow the industrial option for residential density as outlined in 170-29. H(4).

(2) Each January, the City shall ~~update a document identifying~~calculate the ~~cost~~value per acre ~~spent~~ to preserve open space within the City of Dover~~.~~ within a reasonable historic timeframe and factor in an inflation rate to the cost of land. This list shall be kept on file in the Department of Planning and Community Development and ~~coordinated with~~reported to the Conservation Commission.

~~a.~~(a) This cost shall ~~become the value at which development rights may~~ be ~~purchased~~included in the proposed Schedule of Fees approved by the City Council.

~~b.~~(3) Proceeds from the purchase of development rights shall be placed into the Conservation Fund to be used to reimburse the City for previous conservation efforts, purchase future property or easements, or monitor and/or maintain easements on other conserved land, and not into the general fund for general expenditures outside of conservation purposes.

~~(2) A residential transfer of development rights applicant may pursue one of the following methods for transferring development rights.~~

~~(a) Single-family detached method.~~

(4) ~~An applicant shall develop a~~Baseline density calculations are determined based upon the underlying zone. In all cases, any unsuitable areas and any areas within 250' of a tidal river, shall be subtracted from the original parent lot size.

(a) Regardless of the calculation method used below, if the base yield plan requires an environmental conditional use permit per other sections of Zoning Ordinance for the creation of additional

dwelling units, the applicant must appear before the Conservation Commission for review and endorsement prior to any Planning Board's review.

(b) For applications proposed on mixed-use or non-residential zoned lots, the base density shall be calculated utilizing the density as set forth in the current zoning table, and not density gained for a specific property by Special Exceptions or Conditional Use Permits or Variances.

[1] A realistic yield plan, as defined in Dover Code Chapter 157, shall set the baseline density. The dwelling type used in the calculation shall be the type of structure constructed (i.e., if using two-family density, two family structures shall be constructed, if proposing HUD Fair Market rent restricted units for the density, then perpetual HUD Fair Market rent restricted units shall be constructed).

[2] If converting a single-family to a two-family in an existing building is allowed by right and intended to count towards future density, then the conversion shall occur prior to the additional units being calculated in the transfer request and shall be included in the yield plan or calculation.

A.(c) For applications proposed in primarily residential zoned areas, the baseline yield for the lot to be developed throughusing the following formula:

[a] The square footage of the parent lot minus unsuitable areas is the base lot size.

(1)[1] The base lot size is then reduced by 15% to account for roadway; this creates the net area.

(2)[2] The net area is then multiplied by a factor determined by the amount of unsuitable development area over the parent lot. This is the developable area.

Percentage of Parcel That Is Unsuitable Development Area	Factor
0% to < 10%	0.85
10% to < 20%	0.8
20% to < 30%	0.75
30% or greater	0.7

(3)[3] The developable area is then divided by the minimum lot size, and the whole number value is the base number, with no rounding.decimals and no rounding.

[Amended 7-22-2020 by Ord. No. 2020.07.08-007]

[i] This base number is not required to be restricted by the requirements in Subsection G(3)(a)[3], unless the formula defined in Subsection G[2][a] is utilized.

[b] The development plan shall be laid out in a design that meets the requirements for block length and cul-de-sac length.

(d) If a TDR is requested for a lot located within the RCM Overlay District, the yield plan shall be prepared using the density permitted under the RCM regulations, inclusive of the required non-residential components. A revised Conditional Use Permit (CUP) application shall be submitted pursuant to Subsection K below for review, and the Planning Board must determine, by majority vote, that the applicable criteria have been satisfied. In addition, an agreement pursuant to Section 170-32 (2)B shall be executed to ensure continued compliance with the required non-residential proportions. Open space shall be provided in accordance with the applicable provisions of Chapter 153, 157, or 170, as determined by the nature of the application.

(e) Where a subject lot contains land within more than one zoning district, also referred to as being split-zoned, the density of the most restrictive district shall apply to the entire site. Alternatively, density may be calculated separately for each zoning district, provided that such density is confined to the portion of the lot within each respective district boundary and does not rely on the provisions of Section 170-10.E.

[1] The Planning Board may, by majority vote, grant a TDR Conditional Use Permit to allow density to be distributed across zoning district boundaries upon a finding that the proposed layout is appropriate to the context of the project.

~~B.~~H. The allowed transfer of development rights granted to an applicant shall equate to one of the following calculations:

~~[c] For construction of units no larger than 600 square feet of total living area, including the base calculated units, there shall be no density limit. The monthly cost of said units shall conform to the HUD Fair Market Rent rates, for Dover, published annually by the New Hampshire Housing Finance Authority, and there shall be no TDR fee collected for said~~One unit~~(s).~~

~~[d] For construction of units no larger than 1,000 square feet of total living area, two units~~ per ~~development right purchased shall be allowed.~~

~~[e] For construction of units no larger than 1,400 square feet of total living area, one unit per development right purchased shall be allowed. The unit count shall be the whole number value and not rounded up.~~

~~[i] Total living area shall mean the size of the home (in square feet) based upon the exterior dimensions, excluding unconditioned spaces.~~

~~[2] The units created through the~~ one acre conserved is the result of a transfer ~~must be:~~

~~[a] Limited to the square footage originally constructed.~~

~~[3] A note shall be placed on the approved plan, and any building permit shall note the adherence to this section of the Code.~~

~~C.~~(1) A note shall be placed in the property/unit deed citing the restrictions listed above.

~~[4] The plan shall be considered a subdivision application. Prior to submission, a determination by the Director of Planning and Community Development shall be made whether to follow the minor or major subdivision regulations.~~

~~(b) Single-family, two-family, three-family, and four or more method.~~

~~[1]~~(1) ~~The transfer may be~~ made through the purchase of development rights, as described in Subsection G (1), or through the protection of land via a permanent conservation easement as per Subsection E (5~~).~~); or

~~[a] In mixed-use or multifamily zones, the base density shall be derived from the underlying zoning, and not through a formula.~~

(2) One market rate or for sale unit per one density credit paid into the Conservation Fund.

~~[a]~~(a) If the ~~additional unit(s) resulting from TDR is restricted so that the~~monthly rent ~~of said~~for any unit~~(s) conforms~~ created through the TDR process shall perpetually conform to the HUD Fair Market Rent rates~~,~~ for Dover, as published annually by the New Hampshire Housing Finance Authority, ~~there~~no TDR fee shall be ~~no fee collected~~assessed for ~~said~~any such restricted unit(s~~).~~); or

~~[2]~~(3) ~~The~~If development plan is a village-themed residential/non-residential project, whereby 35% of the total square footage being created is non-residential and which

fosters a more compact, walkable development, the transfer shall equate to one unit per ~~acre~~ 4,000 square feet preserved or purchased~~. If the end result is a village-themed residential/nonresidential project, whereby 35% of the square footage being created is nonresidential, the transfer shall equate to one unit per 2,500 square feet preserved or purchased.~~; or

(4) Any non-residential development approved by the Planning Board~~ after July 1, 2020,~~ which will create a manufacturing or assembly facility over 40,000 square feet may create and transfer one unit per 2,000 square feet of building approved, above the 40,000 square foot base.

~~[3]~~(a) The transfer shall not be completed prior to the issuance of the certificate of occupancy for the additional ~~space~~manufacturing or assembly space. If the units are to be placed upon the same lot, the layout must be shown on the site plan for the development.

I. Amendments to previous projects that had a size restriction require an application and amendment that is reviewed and approved by the Planning Board, with necessary updates to any association documents, plan sets, or deeds.

J. The grant of special permission, at the discretion of the Planning Board, to allow additional density through a transfer of development rights requires that the applicant and any successors or assigns comply with the following additional, applicable conditions and restrictions associated with such approval:

(1) A note shall be placed on the approved development plan, and any building permit certifying the adherence to this section of the Code.

~~D.~~(2) A note shall be placed in the property/unit deed citing the restrictions listed above.

~~[b] If the units are to be placed upon the same lot, the layout must be shown on the site plan for the development.~~

(3) The plan shall be ~~treated as~~considered a subdivision application if fee simple lot lines are to be used. The plan shall be considered a site plan ~~application, unless otherwise determined~~if a condominium or multiple principal buildings are placed on a lot.

~~[4]~~(a) Prior to submission, a determination, in writing, by the Director of Planning and Community Development~~, prior to final submission.~~ shall be made whether to follow the minor or major subdivision regulations.

(4) Any Transfer of Development Rights approval with size or HUD Fair Market rent restrictions before XX, 2026 shall follow said restriction unless a subsequent TDR application is approved by the Planning Board. HUD Fair Market and size restrictions shall follow the intent of the application including but not limited to: presentation to Planning Board, notes on plan, development agreements, and/or deed restrictions.

~~c.~~(5) Regardless of the method utilized, the minimum lot size requirement may be ~~waived~~relieved by the Planning Board for land subjected to the transfer of development rights.

~~d.~~(6) Regardless of the method utilized, the setbacks shall be~~:~~ as stated on the TDR Criteria section of the Zoning District Tables of Uses and Dimensions or if none are listed, then a minimum of: **[Amended 7-22-2020 by Ord. No. 2020.07.08-007]**

Minimum Building Setbacks for Subdivision Lots		
Abutting a Street	Abutting a Side Lot Line	Abutting a Rear Lot Line
20 feet	10 feet	30 feet

~~(3)~~ Regardless of the method utilized, the minimum frontage requirement may be ~~waived~~

(7) relieved by the Planning Board, to no less than 40 feet. ~~Paved access~~Access to all developed areas shall be suitable for emergency vehicles. **[Amended 7-22-2020 by Ord. No. 2020.07.08-007]**

~~(4) A continuous visual buffer shall be created along the perimeter of the parent parcel, which shall include a thirty-foot no cut, no disturb buffer.~~

(8) The development shall provide adequate screening from abutting side and rear properties through fencing, no-cut/no-disturb buffers of existing vegetation, supplemental landscaping, or a combination thereof, as approved by the Planning Board. Screening shall be consistent with the requirements set forth in the TDR section of the Zoning District Tables of Uses and Dimensions and shall reflect the prevailing character of neighborhood lots within 250 feet in each direction, or within a 500-foot radius, as applicable based on the lot's location This requirement may be relieved by the Planning Board in part or whole. **[Amended 7-22-2020 by Ord. No. 2020.07.08-007]**

(a) A note shall be added to any/all deeds regarding the nature of the screening and need to perpetually maintain it.

~~e.~~(9) Regardless of the method utilized, any other provision in this chapter to the contrary, the density or intensity of development of a receiving parcel may be increased by the transfer of development rights so long as the increase in density or intensity meets the following criteria and ~~a~~any TDR criteria listed on the Zoning District Tables of Uses and Dimensions. A narrative ~~is~~shall be submitted indicating how ~~those~~the following criteria are met: **[Amended 7-22-2020 by Ord. No. 2020.07.08-007; 8-9-2023 by Ord. No. 2023.07.12-008]**

~~i.~~(a) ~~Is~~The request is consistent with the Vision Chapter of the Master Plan regarding housing diversity in the city or conservation of natural areas.

~~ii.~~(b) ~~Is~~The request is compatible with the aesthetic and functional character of land uses on neighboring lots (e.g., a ~~multifamily~~multi-family building ~~fits~~/parking areas blending in within a single-family neighborhood). The applicant shall provide in their narrative an explanation of their neighborhood analysis.

~~(a) Is created on property served by public water and sanitary sewer.~~

~~(b) Any relief sought should not be caused by the additional density.~~**1**

(c) ~~**1. Editor's Note: Original § 170-27.2H of the 2013 Code, Conditional uses, which immediately followed this subsection, was repealed 8-22-2018 by Ord.**~~ The proposed development shall be located on property currently served by public drinking water and sanitary sewer, or shall connect to such public utilities within the maximum extension distance measured from the original subject property line as specified in the applicable Zoning District Tables of Uses and Dimensions. The Planning Board may authorize but is not obligated to authorize a greater extension distance upon granting a TDR Conditional Use Permit pursuant to Subsection K below. For avoidance of doubt, however:

[1] Water and sewer investment fees will still be assessed, unless the applicant obtains relief as set forth below.

[2] If a waiver or payment (or services) tendered in lieu of either water or sewer investment fees is requested, the Dover Utilities Commission must review and endorse followed by the City Council's review and approval, prior to Planning Board review.

(d) Adequate parking shall be provided, averaging one parking space per unit with more or less allowed at the discretion of the Planning Board or Director of Planning and Community Development if no Planning Board review is required. Walkability, proximity to transit,

market studies, or intended residents would be reviewed in increases or decreases in amount of parking provided.

(e) Any other criteria noted on the Zoning District's Table of Use and Dimensions.

(f) Regardless of the method utilized, a note will be added to the plan set stating and requiring that any conversions to a duplex requires Planning Board review and approval.

K. Where a conditional use permit is being requested for relief of standards set forth in §170-29, the following criteria shall be met.

A. Notwithstanding any other language herein, the relief granted in Chapter 153, Site Review Regulations, § 153-17C, shall apply to any use as defined in § 170-11B of this chapter.

1) Neighborhood Compatibility

(a) The scale, massing, and height of the proposed development, as increased through TDR, does not substantially deviate from the established character of the surrounding neighborhood;

(b) Adequate transitions, screening, or step-downs are provided where the project abuts lower-intensity residential areas; and

(c) Development impacts, including traffic, lighting, noise, and service functions, are mitigated to avoid adverse effects on nearby properties.

2) Architectural and Site Design

(a) The project incorporates architectural design features, including materials, façade articulation and roofline variation to fit in with the surrounding neighborhood;

(b) Service areas, mechanical equipment, and parking are effectively screened from public view and adjacent properties;

(c) The development advances pedestrian walkability.

3) Site Characteristics and Environmental Response

(a) The development respects the site's natural and built features, including topography, mature vegetation, stone walls, wetlands, wetland buffers, conservation districts, and historic elements;

(b) Stormwater management, grading, and drainage are designed to avoid off-site impacts and incorporate low-impact development practices where feasible.

(c) Building placement and massing avoid unreasonable shadowing or loss of solar access on adjacent properties.

4) Consistency with TDR Ordinance Intent

(a) The development is consistent with the Master Plan and future neighborhood or corridor plans;

(b) The development advances goals of housing diversity, housing availability, and attainable housing; and

(c) The development advances the ability to conserve in areas of environmental importance and provide density in areas that are more urban and have the capacity for the density.

5) Compliance with Applicable Regulations

(a) The project complies with all other applicable zoning, site plan, and overlay district requirements, except where expressly modified by the TDR provisions or received a Conditional Use Permit or applicable relief to satisfy.**No. ~~2018.08.08-009.~~"**

24. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-32.F, Residential-Commercial Mixed-Use (RCM) Overlay District, §F, Standards and regulations, by amending parking regulations to reflect recent state legislation:

"F. Standards and regulations.

(1) Internal roads. As part of the approval of the conditional use permit, the Planning Board shall determine whether internal roads shall be public or private. If a road is determined to be private, no municipal services shall be provided other than public safety, utilities, maintenance, and regulatory services. Unless noted below, roadways shall conform to the street design criteria laid out in the Code.

(a) Minimum internal right-of-way.
1. Maximum residential: 35 feet.
2. Maximum nonresidential: 50 feet.

(b) Minimum pavement width.
1. Minimum residential: 20 feet.
2. Minimum nonresidential: 28 feet.
3. Minimum sidewalk pavement width: five feet.
4. Minimum bike/Segway®/golf cart path width: five feet.

(c) Minimum tangent length at intersections: 75 feet.
(d) Maximum street angle at intersections: 60°.
(e) Minimum center-line radius: 100 feet.
(f) Minimum tangent length between reverse curves: 50 feet.

(2) Dimensional requirements.

(a) Nonresidential/mixed-use buildings.
1. Minimum structure setback from external lot line: 50 feet. Expanding existing nonresidential uses are not held to this setback.
2. Minimum structure setback from external right-of-way: 50 feet.
3. Maximum nonresidential building height: 55 feet.
4. For all other dimensional requirements for nonresidential structures and parking setbacks refer to the underlying zone.

(b) Residential dwellings.
1. Minimum structure and parking setback from external lot line: 50 feet.
2. Minimum structure and parking setback from external row: 100 feet.
3. Maximum residential building height: 35 feet.

4. Minimum frontage on internal road: 40 feet.
5. Minimum setbacks:
   a. Front yard setbacks: 20 feet.
   b. Distance between buildings: 24 feet.
   c. There shall be no minimum lot size or frontage for internal lots created.

(3) Parking.
   (a) All dwelling units shall require ~~two~~ one independently accessible parking spaces per unit, except that the congregate-care and nursing-home requirements shall be as otherwise defined by this chapter. Nonresidential uses shall comply with parking requirements defined by this chapter.
   (b) Overnight parking shall not be permitted on internal roadways.
   (c) Parking shall be utilized and available to all components of the development plan, through the recording of access and parking easements."

25. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-33, Groundwater protection, §D(5), Standards and regulations, by restricting Conditional Use Standards to commercial developments, or developments resulting in three (3) or more units:

"(5) In soils that are excessively drained, well-drained, moderately well-drained or somewhat poorly drained, as defined by a site specific soil survey completed in accordance with the standards of the Society of Soil Scientists of Northern New England, the development shall not make impervious to water more than 20% of the area of said soils except as provided for below. Any commercial/mixed-use development, or any development which proposes three (3) or more dwelling units in the secondary groundwater protection zone that proposes a total impervious surface greater than 20% shall only be permitted if the Planning Board grants a conditional use permit per Subsection E(4). In reviewing a conditional use permit application filed under this provision, the Planning Board shall require that the proposed development plan incorporates a stormwater drainage plan, approved by the Planning Board and prepared by a professional engineer certified to practice in the State of New Hampshire. The plan shall provide for the retention and percolation within the secondary. groundwater protection zone of all development-generated stormwater runoff from a ten-year storm. Furthermore, the stormwater drainage plan shall provide for the removal of oil and gasoline from parking lot runoff by use of treatment swales, oil/gas separators or other device, prior to retention and percolation of the runoff."

26. AMENDMENT

Chapter 170 of the Code of the City of Dover, entitled Zoning, is hereby amended by revising Chapter 170-46, Waivers, an ordinance which governs relief granted to excavation sites, by changing the need for a "waiver" to that of a non-environmental CUP:

"§ 170-46 ~~Waivers~~Relief.

Due to the diverse nature of excavation operations that vary in scale and scope, and due to the varying conditions of the land to be excavated, the Planning Board may, upon application and following a duly noticed hearing, may grant ~~any waiver~~ a Conditional Use Permit in relief of~~, in~~

~~writing, to~~ the standards contained in §§ 170-42, 170-43, 170-44 and 170-45 for good cause shown. The ~~written decision shall state specifically what requirements are being waived and include any reasonable alternatives~~ conditional use permit application shall include all relief being sought, the site's physical attributes which make the relief necessary, and any actionable alternatives available."

27. 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: Josh Wyatt, 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, Dennis Shanahan		
Deputy Mayor Lindsey Williams		
Councilor S. April Richer, Ward 1		
Councilor Lucas Veitch, Ward 2		
Councilor Anthony Retrosi, Ward 3		
Councilor Timothy Granfield, Ward 4		
Councilor Richard Robison, Ward 5		
Councilor Fergus Cullen, Ward 6		
Councilor Bret Carmichael, At Large		
Total Votes:		