CITY OF DOVER

DOVER PLANNING BOARD – AGENDA

REVISED

Meeting Type: Regular Meeting
Meeting Location: Council Chambers, City Hall, 288 Central Avenue, Dover, NH 03820
Meeting Date: **Tuesday, October 22, 2024**
Meeting Time: **7:00 pm**

1. **CITIZENS' FORUM**
2. **APPROVAL OF THE PRIOR MINUTES**
   - October 8, 2024 Regular Meeting Minutes
3. **OLD BUSINESS**
4. **NEW BUSINESS**
   A. Consideration and acceptance of a Site Plan amendment for Wooden Ruler, LLC Assessor's Map 6, Lot 40, zoned CBD-G, located at 42-44 Third Street. (Proposal is to amend design of the building and amend conditions regarding parking provided.) *(WAIV-2024-0012)

   B. ~~Consideration and acceptance of a Transfer of Development Rights for True North Development, LLC, Assessor's Map 7, Lot 14, zoned R-20, located at 35 Boston Harbor Road. (Proposal is to purchase one (1) additional unit through TDR for a total of three (3) non-restricted units.) *(TRAN-2024-0013)~~ [*This item has requested a continuance.*]

   C. Consideration and acceptance of a Conditional Use Permit for 17-19 Summer Street Properties, LLC, Assessor's Map 12, Lot 35-1, zoned HR, located at Locust Street. (Proposal is to build a 2,400 s.f. four (4) unit building in the Heritage District.) *(COND-2024-0020)

   D. Consideration and acceptance of a Site Review for 17-19 Summer Street Properties, LLC, Assessor's Map 12, Lot 35-1, zoned HR, located at Locust Street. (Proposal is to build a 2,400 s.f. residential building consisting of four (4), two-bedroom units, improved driveway access, parking, utilities and drainage improvements.) *(SITE-2024-0003)

   E. Consideration and acceptance of a Transfer of Development Rights for Fergus & Jennifer Cullen, Assessor's Map B, Lot 4-F, zoned R-40, located at 566 Sixth Street. (Proposal is to purchase three (3) units through TDR for a total of five (5) units.) *(TRAN-2024-0014)

   F. Consideration and acceptance of a Minor Subdivision for Fergus & Jennifer Cullen, Assessor's Map B, Lot 4-F, zoned R-40, located at 566 Sixth Street. (Proposal is to subdivide one (1) lot into three (3) lots through TDR.) *(SUBM-2024-0005)

   G. Public hearing and possible recommendation on the City's proposed Capital Improvements Plan (CIP) FY 2026-2031. The CIP can be found on the City website at www.dover.nh.gov and in the Library, City Clerk's office, and the Planning Department. *
5. **STAFF COMMENT**
6. **MEMBER COMMENTS**
7. **ADJOURNMENT**

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

CITY OF DOVER

DOVER PLANNING BOARD – MINUTES

Meeting Type:	Regular Meeting
Meeting Location:	Council Chambers, City Hall, 288 Central Ave, Dover, NH.
Meeting Date:	**Tuesday, October 8, 2024**
Meeting Time:	**7:00 pm**

Members Present: Gina Cruikshank (Chair), Mark Speidel (Vice Chair), Tom Clark, Ken Mavrogeorge, George DeBoer, Melina Gambino, Fergus Cullen (Councilor), Jeff Sanborn (Alternate), Mallory Strange (Alternate)
Members Not Present (excused): Kyle Pimental
Staff Present: Donna Benton, Planning Director

Gina Cruikshank (Chair) called the meeting to order at 7p.m. and noted J. Sanborn is sitting for the vacant seat and M. Strange is sitting for K. Pimental. Also, Items D and E will not be heard tonight.

1. CITIZENS' FORUM

Citizens Forum Open
Eric Leaver, 42 Main st Apt 26 expressed concerns about the C & J bus terminal and parking proposal which was presented at the last meeting. He sent the board a letter and highlighted his submitted concerns. Concerns are related to bicycle parking and pedestrian and bicycle access to the lot.

Aaron Williams, 51 Sixth St Apt A supported Mr. Leaver's comments and suggestion for pedestrian path.
Citizens Forum Closed

2. APPROVAL OF THE PRIOR MINUTES

- September 24, 2024 Regular Meeting Minutes

Motion: G. DeBoer moved to approve the regular meeting minutes of September 24, 2024 as submitted. Seconded by: T. Clark. Vote: U/A

3. OLD BUSINESS

4. NEW BUSINESS

A. Consideration and acceptance of a Lot Line Adjustment for Theodore V. & Phyllis J. Baillargeon and Constance E. Moxley, Assessor's Map I, Lots 1-F & 1-I, zoned RM-SU, located at 5 and 7 McKenna Street. *(LOTA-2024-0012)

D. Benton explained that the applicant is proposing a lot line adjustment to revise the lot lines between abutting properties, located at 5 and 7 McKenna Street, adding approximately 3,030 square feet from 7 McKenna St. to 5 McKenna St. For both lots, the frontage and compliance with the underlying RM-SU zoning regulations will remain the same.

As a Lot Line Adjustment, this application did not appear before the TRC.

Kevin McEneaney, McEneaney Survey represented the application and explained the request for the lot line revision along with historical information.

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

Public hearing opened.
No one spoke
Public hearing closed.

DRAFT

STAFF RECOMMENDATION- Lot Line Adjustment:
Chapter 157-17 of the Land Subdivision Regulations of the City Code provides for the adjustment of existing lot lines between two or more lots. This plan is consistent with those regulations.

The Planning Department recommends the Planning Board make findings, and vote to approve the application 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 County Registry of Deeds which additionally shall include:
   a. Planning File Number #LOTA-2024-0012
   b. The owner's signatures
   c. The LLS stamp and signature

Motion: M. Speidel moved to approve the Lot Line Adjustment as it is consistent with land use regulations of City code. Seconded by T. Clark. Vote: U/A

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

B. Consideration and acceptance of a Conditional Use Permit for Our Place, Inc., Assessor's Map H, Lot 6-4, zoned R-20, located at 105 Durham Road. (Proposal is to remove an existing gravel lot and revegetate the majority of the area creating 7,800 s.f. of impact while reducing the impervious area by 4,000 square feet in the 50-foot wetland buffer.) *(COND-2024-0007)

C. Consideration and acceptance of a Site Review for Our Place, Inc., Assessor's Map H, Lot 6-4, zoned R-20, located at 105 Durham Road. (Proposal is to provide a 9-unit group housing facility for adults with Intellectual Developmental Disabilities (IDD) with associated parking, drainage and landscaping.) *(SITE-2024-0004)

D. Benton explained that the applicant is proposing the construction of a 9-unit group housing facility for adults with Intellectual Developmental Disabilities (IDD).

The proposal involves a renovation of the existing structure and a 3,140± square foot addition with associated parking, drainage, and landscaping. An existing gravel lot will be removed and the majority of the area will be revegetated. The project will create 7,800± square feet of impact to the 50-foot wetland buffer while reducing the impervious area by 4,000± square feet.

The Zoning Board of Adjustment (ZBA) granted a Variance to allow for multi-family use on the subject property on December 21, 2023.

The nine housing units were granted by Planning Board through Transfer of Development Rights (TDR) on January 18, 2024.

Three waivers are being proposed as part of this project requesting relief from a signed landscape plan, bicycle racks, and the requirement for a certified soil scientist to delineate soil types as part of the stormwater management plan.

The Technical Review Committee reviewed the application at their May 30, 2024 and July 11, 2024 meetings.

The Conservation Commission reviewed and endorsed the application at their August 12, 2024 meeting.

Cory Belden, Altus Engineering represented the application and explained additional details of the request. He explained the site and the proposed changes. He explained the reasons for the waiver requests.

The applicant clarified information for board members about the number of units/ residents/ staff; bicycle rack waiver; landscaping details; and snow storage in the wetland buffer.

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

Public hearing opened.
No one spoke
Public hearing closed.

STAFF RECOMMENDATION: Conditional Use Permit
The Wetlands Protection District ordinance §170.27.1.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 §170-27.1.F per their narrative. The proposal minimizes wetland buffer impacts and avoid direct wetland impacts and includes the removal of an existing gravel lot in the buffer. The proposed project does not require state mitigation, does not require NHDES review, and the project has been reviewed and endorsed by the Conservation Commission.

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

Subsequent Condition to Be Met Prior to Issuance of a Conditional Use Permit:
1. Approval of SITE-2024-0004.

Motion: M. Speidel moved to approve the Conditional Use Permit with the subsequent condition as it's consistent with regulations and reduces impervious surfaces on site. Seconded by T. Clark. Vote: U/A

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

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

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

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:
   §153-14(A.3.f), Stormwater management, soil type delineation
   §153-14 (D.1.c.2), Bicycle Racks
   §153-14 (A.12), Landscape Plan prepared by LLA

Motion: M. Speidel moved to grant the waiver requests with subsequent condition set by staff as it meets criteria for relief. Seconded by: T. Clark. Vote: U/A

STAFF RECOMMENDATION- Site Plan:
Chapter 153-13 outlines Site development plan. This plan meets those standards outlined. Therefore, the Planning Department recommends that the Planning Board make the necessary and supporting findings of fact, and vote to approve the Site Plan with the following subsequent conditions:

Subsequent Conditions to Be Met Prior to Signing of the Plans:

1. Revise plan (and CAD) and resubmit for final Planning Board signature with the following:
   1.1. Add Owner's signatures;
   1.2. PE, LLS, CWS stamps and signatures;
   1.3. Note the width of driveway on C-1;
   1.4. Revise Note 14 on C-4 to read: "Contractor will coordinate with Community Services Department to verify existing utilities for location and condition prior to construction;"
   1.5. Confirm 22' wide driveway to meet minimum road width, as determined by NFPA 1;
2. Approval of COND-2024-0007;

Subsequent Condition to Be Met Prior to Construction:

3. A 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 or request of service;
5. Provide classification of generator system and screening placement for review by City Building Official;

Subsequent Conditions to Be Met Prior to Occupancy:

6. Issuance of Certificate of Occupancy;
7. Surety or other form of security acceptable to the City is provided for any unfinished work;
8. 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.

Motion: M. Speidel moved to approve the Site Plan with subsequent conditions set by staff as it meets criteria. Seconded by: T. Clark. Vote: U/A

The Chair announced Items 4D & E would be continued to a future meeting.

D. Consideration and acceptance of a Conditional Use Permit for 17-19 Summer Street Properties, LLC, Assessor's Map 12, Lot 35-1, zoned HR, located at Locust Street. (Proposal is to build a 2,400 s.f. four (4) unit building in the Heritage District.) *(COND-2024-0020) *[This item may be continued to a future meeting]*

E. Consideration and acceptance of a Site Review for 17-19 Summer Street Properties, LLC, Assessor's Map 12, Lot 35-1, zoned HR, located at Locust Street. (Proposal is to build a 2,400 s.f. residential building consisting of (4) four, (2) two-bedroom units, improved driveway access, parking, utilities and drainage improvements.) *(SITE-2024-0003) *[This item may be continued to a future meeting]*

Motion: T. Clark moved to continue this to October 22, 2024 at 7pm. Seconded by: M. Gambino. Vote: U/A

5. STAFF COMMENTS

- D. Benton addressed citizen's forum comments re: bike racks at the bus station
- D. Benton went over the Draft Impact fee policy direction.
    - Board members gave feedback

Motion: T. Clark moved any project approved or reapproved in 2024 has no impact fees unless they already paid them. Seconded by: M. Speidel. Vote: U/A

- Save the date for CIP release on Oct. 16. 7pm over in the McConnell Center
- Thanked Mark Speidel for his time on the Board.
- TRCs since last meeting:
    - (Sept. 26th) Site Review for 103 Court Street. Proposal is to convert the existing home into a duplex, construct a second duplex, and construct five new single-family homes for a total of nine dwelling units.
    - (Oct. 3rd) Site Review for 306 Dover Point Rd. Proposal is to construct two duplexes and one single-family dwelling.
- Upcoming TRCs:
    - (Oct. 17th) Review of TDR Subdivision for 566 Sixth Street. Proposal is to subdivide one lot into three lots and purchase three units through TDR, resulting in a total of five units across the three lots.

6. MEMBER COMMENTS

- The Chair signed the following:
    - Minor Subdivision for 48 Old Rochester Rd.
- M. Speidel make comments about his time on the board.

7. ADJOURNMENT

Motion: M. Speidel moved to adjourn at 7:45pm. Seconded by G. DeBoer. Vote: U/A

DRAFT

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE # WAIV-2024-0012

Application Type:	Site Plan Amendment
Applicant(s):	Wooden Ruler Realty, LLC
Owner(s):	Wooden Ruler Realty, LLC
Location:	42-44 Third St., Assessor's Map 6, Lot 40
Meeting Date:	October 22, 2024

INTENT: The Board previously approved a Site Plan and Conditional Use Permit (CUP) on Nov. 8, 2022, for a mixed-use building with commercial use on the first floor, below grade parking, and 58 residential units. The Applicant now seeks to amend the Architectural plans and modify Conditions 13 & 19 to allow for alternative parking arrangements.

UNITS PROPOSED: 58 residential units, 4 commercial retail units, and 10 office suites.

AGENDA ITEM #: 4-A

ACREAGE: 0.51± acres

ZONING DISTRICT: CBD-G

EXISTING USE: Vacant

PROPOSED USE: Mixed Use

SURROUNDING USES: Mixed-Use, Residential, Commercial

ZBA ACTION: None

PERMITS REQUIRED:
- City of Dover CUP
- NHDES Sewer Discharge

WAIVERS REQUIRED:
- Chapter 153-14(D)(4)(C) for off-site parking for CBD-G Zone within the CBD-TOD Zone
- *Chapter 153-14(A)(3)(f)(2)(C) for Site Specific Soils previously granted*
- *153-14(D)(6)(a) for Parking Aisle width in Garage previously granted*

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

NOTICES SENT: Abutter notices were sent by certified mail.

TRC: Reviewed by TRC on 8/25/22 and 10/13/22

ATTACHMENTS: Site Plan, Parking Lease Plan

Summary of Request and Background

On November 8, 2022 the Board approved a Site Plan and Conditional Use Permit (CUP) for a mixed-use building with commercial use on the first floor, below grade parking (39 spaces), and 58 residential units. The Applicant now seeks to amend the Architectural plans and modify Conditions 13 & 19 to allow for alternative parking arrangements.

In the previously-approved plan (P22-60) the applicant proposed constructing a parking garage at 35 Third St. to accommodate overflow residential parking from the site. Therefore, there was a condition of approval (#13) which stated, prior to Issuance of a Building Permit for this subject project. "Issuance of a Building Permit for a parking garage on Grove St." was required. The Applicant now seeks to direct overflow parking from 42-44 Third St. to two surface parking lots. One is located at 35 Third St. and another at 5 Grove St as shown in their "Parking Demonstration plan" dated October 9, 2024. No garage would be constructed. The Parking Demonstration plan indicates that 18 of the 34 units at 42-44 Third Street will be given a parking pass at 35 Third Street, 16 of the 34 units at 42-44 Third Street will be given a parking pass at 5 Grove St. and 24 out of 24 units at 2 Grove Street will be given a parking pass at 1 Grove St. The applicant has also recently been in front of the board for site plan approval for a parking lot at 1 Grove St (see SITE-2024-0007).

As part of this amendment, the applicant is also seeking to amend the design of the building reducing the footprint of the 3rd-5th stories so that it is not the full dimensions of the first two stories as shown in the attached renderings.

Consistency with Land Use Regulations –Waivers/Relief

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

(1) Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulations; or

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

Consistency with Land Use Regulations

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. This plan is consistent with those regulations if the waiver for off-street parking location is granted.

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE # WAIV-2024-0012

Application Type:	Site Plan Amendment
Applicant(s):	Wooden Ruler Realty, LLC
Owner(s):	Wooden Ruler Realty, LLC
Location:	42-44 Third St., Assessor's Map 6, Lot 40
Meeting Date:	October 22, 2024

STAFF RECOMMENDATION-Waiver:
The Planning Department recommends the Planning Board accept the application, open the public hearing, make findings, and vote to approve the Site Plan Amendment with the following subsequent conditions:

Subsequent Conditions of Approval Prior to Signing of the Plans:

1. Provide a decorative fence (eg wrought iron) along parking lots of 5 Grove St and 35 Third St to help screen the parking as a note on the plan.
2. Add a note that if ownership changes for lots 3/22, 31/12, 31/11, 06/40 that a parking easement must be recorded at the SCRD that shows same allocated amounts as the Parking Demonstration plan or a revised parking lease shall be submitted to the City of Dover's Planning Department indicating the same terms for parking per the revised plan set.
3. Add note to plan that Property owner shall maintain parking permit management system including files that may be reviewed by the City Staff at any time during business hours to ensure the number of permits given out do not exceed parking spaces per Parking Demonstration plan.

STAFF RECOMMENDATION-Site Plan:
The Planning Department recommends the Planning Board make findings, and vote to approve the Site Plan Amendment with the following subsequent conditions:

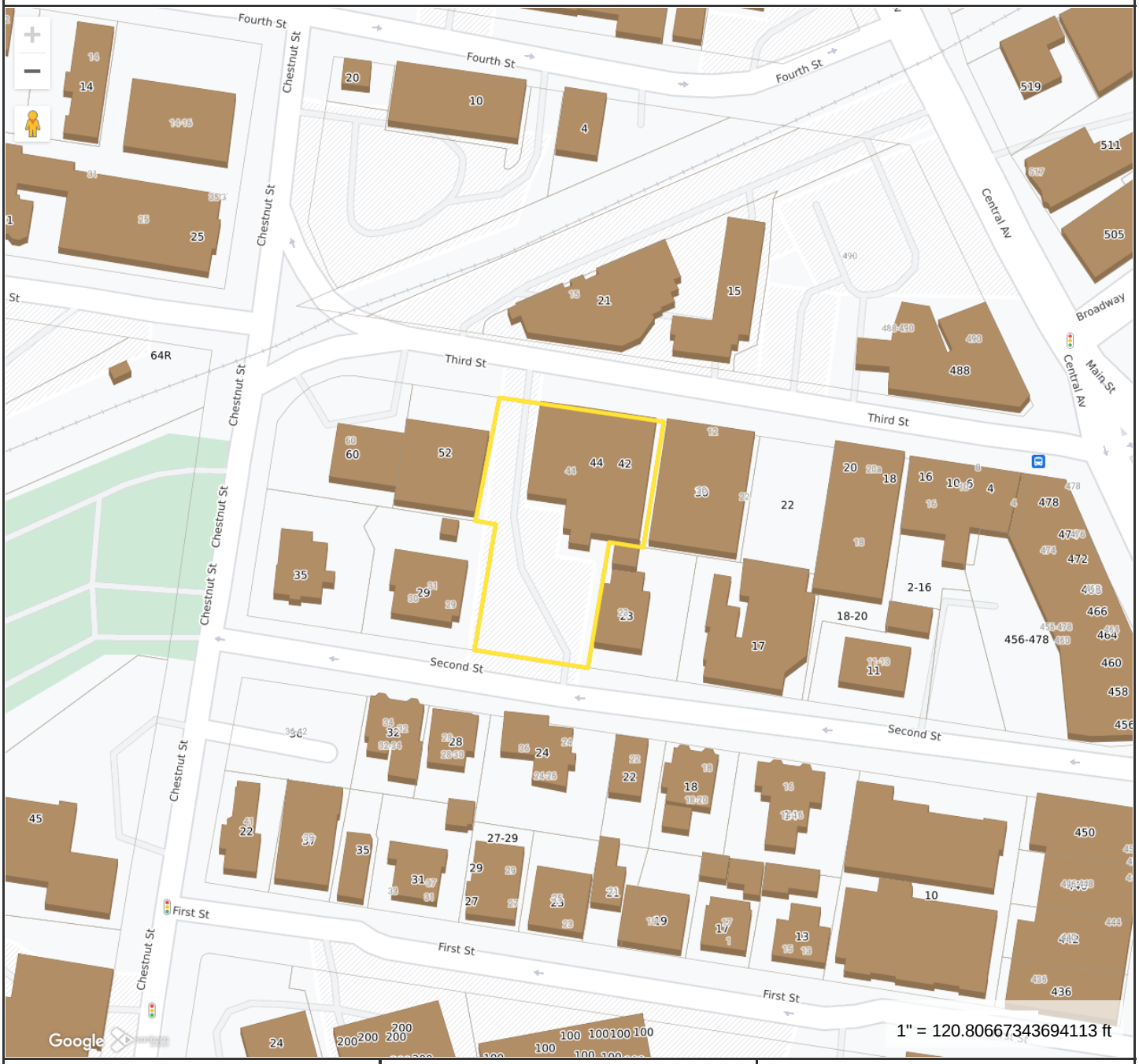
Subsequent Conditions of Approval Prior to Signing of the Plans:

1. Same conditions of the original approval (P22-60) still apply, sans Conditions 13 & 19.
2. Parking lots A and B shall conform with:
   2.1. Parking Lot design standards per Chapter 153-14(D)(6)
   2.2. Parking Lot lighting standards per Chapter 153-14(E)(2)
   2.3. Parking Lot Interior landscaping per Chapter 153-14(G)(2)
3. Revise previously approved plan set to:
   7.1. Add revised permit plan package to previous approved plan with note indicating that that this revised plan package supersedes the previously approved plan package (P22-60).
   7.2 Add Parking Demonstration Plan to plan set described in condition #2.
   7.3 Add note that the parking lease agreement is in perpetuity or until an amended is approved by the Planning Board.
   7.4 Add file number (WAIV-2024-0012).
   7.5 Note re: compliance with Chapter 153-14(D) (parking lot design), (E) (parking lighting), and (G) (parking landscaping).
   7.6 Add note that two (2) additional parking spaces in either Parking Lot A, B, or combination thereof, shall conform with ESVE readiness per Chapter 153-14(D)(3).
   7.7 Add notes regarding waiver granted and conditions of waiver to revised site plan package.
   7.8 Add note that any amendments to any of the lots (3/22, 31/12, 31/11, 06/40) will need to be reviewed by City Staff and in compliance with the Parking Demonstration Plan.

Subsequent Conditions of Approval Prior to Occupancy:

8. (All other conditions per P22-60)
9. A parking lease or easement plan shall be recorded at SCRD prior to occupancy of first unit at 42-44 Third St aka Map 6, lot 40.

WAIV-2024-0012 42 44 THIRD STREET



Property Information

Location	44 THIRD ST
Owner	WOODEN RULER REALTY LLC
Land Use	
Zoning Code	CBD-G
Property Id	06040-000000

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

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

Geometry updated 10/30/2023
Data updated Daily

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

PLAN SNAPSHOT REPORT WAIV-2024-0012
FOR CITY OF DOVER, N.H.

Plan Type:	Waiver / Extension / Amendment	**Project:**		**App Date:**	08/07/2024
Work Class:	Plan	**District:**	None	**Exp Date:**	10/11/2024
Status:	Fees Due	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	

Description: Modification to approved architecture and modification to two conditions of approval.

Parcel:	06040-000000 Main	**Address:**	42 Third St Main Dover, NH	**Zone:**

Owner	Applicant	Engineer
Bill Goldstein	Berry Surveying & Engineering	Berry Surveying & Engineering
35 THIRD ST	335 Second Crown Point Road	335 Second Crown Point Road
DOVER, 03820	Barrington, NH 03825	Barrington, NH 03825
Business: (603) 742-5300	Business: (603) 332-2863	Business: (603) 332-2863
	Mobile: (603) 781-3403	Mobile: (603) 781-3403

Plan Custom Fields

Project Location	42-44 Third Street	Waiver Request Type	Amendment	Project Name	42-44 Third Street
Owner Phone	603-742-5300	Owner Name	Wooden Ruler LLC	Original Plan Approval Date	Nov 8 2022 12:00AM
Owner Address	8 Grove Street, Dover, NH 03820	Owner EMail	Billtgolds@aol.com	Plan ID Number	
Plan Type	Site Plan	Extension Request Detail		Condition / Portion of Plan to be Amended	Conditions 13 & 19
Amendment Request Detail	Amend Architectural plans and modify condition 13 & 19 to include the option for other parking arrangements.	Site / Subdivision Portion of Plan to be Waived		Waiver Request Detail	

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Chris_Berry_8/7/2024.jpg	08/07/2024 15:07	Berry, Chris		Uploaded via CSS
2024.08.27_PlanningBoard.Agenda.pdf	08/14/2024 14:49	Blonigen, Rachel		PB Agenda
2024.10.22_PlanningBoard.Agenda.pdf	10/08/2024 10:56	Blonigen, Rachel		PB Agenda

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00008902	Planning Waiver / Extension /Amend Application Fee	$200.00	$0.00
	Total for Invoice INV-00008902	$200.00	$0.00
INV-00008985	Planning Certified Mailing to Abutters	$260.00	$0.00
	Planning Creation / Printing of Abutter Labels	$30.00	$0.00
	Planning Public Notice in Newspaper	$120.00	$0.00
	Total for Invoice INV-00008985	$410.00	$0.00
	Grand Total for Plan	**$610.00**	**$0.00**

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		08/14/2024 15:43	08/14/2024 15:44
Confirm application complete v.1	Generic Action		08/14/2024 15:44
Technical Review Committee Meeting Agenda v.1	Task		08/14/2024 15:43
Land Use Plan Technical Review v.1	Receive Submittal		08/14/2024 15:44
Technical Review Committee Meeting v.1	Hold Meeting		08/14/2024 15:44
Planning Board v.1		08/14/2024 15:44	
Planning Board Agenda v.1	Task	08/14/2024 15:44	08/14/2024 15:44

PLAN SNAPSHOT REPORT (WAIV-2024-0012)

Planning Board Agenda v.1	Task	10/08/2024 10:54	10/08/2024 10:56
Invoice for Notices v.1	Task	08/14/2024 15:44	10/08/2024 10:56
Send Notices v.1	Task	10/08/2024 10:55	
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
APPLICATION FOR EXTENSION OF/ AMENDMENT TO OR WAIVER FOR PLAN/ DRIVEWAY

[Revised August 20, 2020]

Office Use Only	Amount Paid: _____	Date/Time Received: _____

APPLICANT INFORMATION

Name of Applicant: Wooden Ruler Realty LLC Telephone # 603-742-5300

Address of Applicant: 8 Grove Street E-Mail Billtgolds@aol.com

Project Name: 42-44 Third Street Project Location: 42-44 Third Street

Planning File Number: 22-060 Date of Original Approval November 8, 2022

File Type: Conditional Use _____ Site Plan Review x Subdivision _____

EXTENSION INFORMATION (*Note: notification of abutters required for first time extensions under Sec. 153-9.B and Sec. 157-23.B only)*

Extension type requested *(check one)*: ___Sec. 153-8.A ___Sec. 153-9.B ___Sec. 157-13.A ___Sec. 157-23.B

Current deadline date: _____ Number of Extensions Previously granted by Board _____

Reason(s) for extension/comments (*attach additional sheets as needed*):_____

_____

AMENDMENT INFORMATION

Condition(s) or portion of plan to be amended: Modify Building Design and Amend Conditions 13 & 19

Reason(s) for amendment/comments (*attach additional sheets as needed*):_____

To increase construction and building efficiency and to permit the applicant to utilize other parking opportunities

_____

WAIVER INFORMATION

Site Review/Subdivision Regulations section(s) to be waived: _____

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

_____

_____

SIGNATURES

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

Signature of Property Owner: _____ Date: 8-6-24

Signature of Applicant (*if different from owner*): _____ Date: _____

Signature of Agent: _____ Date: 8-6-24

APPLICATION FOR EXTENSION OF/ AMENDMENT TO OR WAIVER FOR PLAN/ DRIVEWAY
LIST OF ABUTTERS

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

Owner:

TAX MAP	LOT #	PROPERTY OWNER	MAILING ADDRESS

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS

Surveyor and/or Engineer/Professional Agent:

NAME	COMPANY	MAILING ADDRESS

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

WAIV-2024-0012 **42-44 THIRD STREET**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
06010-000000	22 CHESTNUT ST	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
06010-A00000	37 39 FIRST ST	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
06011-000000	35 FIRST ST	R&M HOLDINGS LLC		8 BLEVENS DR	BOW	NH	03304
06012-000000	31 33 FIRST ST	31-33 FIRST STREET LLC		496 WALLIS RD	RYE	NH	03870
06014-000000	27 29 FIRST ST	29 FIRST STREET LLC		43 NELSON ST	DOVER	NH	03820
06015-000000	23 25 FIRST ST	KAB REALTY MANAGEMENT LLC		8 GROVE ST STE 100	DOVER	NH	03820
06016-000000	21 FIRST ST	ZARBA JANNELL D & LEPITO ERIK W TRUSTEES	21 FIRST STREET REALTY TRUST	21 FIRST ST	DOVER	NH	03820
06017-000000	19 FIRST ST	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
06018-000000	17 FIRST ST	SOUDAKIM LLC	C/O REAL PROPERTY MANAGEMENT	13152 WINSTANLEY WAY	SAN DIEGO	CA	92130
06022-000000	14 16 SECOND ST	WEST CONCORD INVESTMENTS LLC		222 CASS ST	PORTSMOUTH	NH	03801-4945
06024-000000	18 20 SECOND ST	CAMIRE DAVID R &	CAMIRE STACEY LEE	281 WASHINGTON ST	DOVER	NH	03820
06025-000000	22 SECOND ST	CAMIRE DAVID R &	CAMIRE STACEY LEE	281 WASHINGTON ST	DOVER	NH	03820-3608
06026-000000	24 26 SECOND ST	FREEBOARD PROPERTIES LLC		PO BOX 1818	DOVER	NH	03821-1818
06027-000000	28 30 SECOND ST	REDDY INFOSYS INC	ATTN OFFICE BERLIN PROPERTIES	295 PRINCETON HGHTS TWN #11354	PRINCETON	NJ	08550
06028-000000	32 34 SECOND ST	KMTM CAPITAL LLC		43 NELSON ST	DOVER	NH	03820
06029-000000	36 42 SECOND ST	HOLGATE LIMITED PARTNERSHIP		130 CENTRAL AVE	DOVER	NH	03820
06030-000000	35 SECOND ST	BROCKELBANK SCOTT MICHAEL JR		164 MORGAN ST	MANCHESTER	NH	03102
06031-000000	29 31 SECOND ST	SECOND STREET DOVER LLC		2 NUTE RD	DOVER	NH	03820
06033-000000	23 SECOND ST	ROSS FURNITURE COMPANY INC		38 THIRD STREET	DOVER	NH	03820
06034-000000	17 19 SECOND ST	17-19 SECOND ST LLC		43 NELSON STREET OFFICE	DOVER	NH	03820
06035-000000	11 13 SECOND ST	SOUDAKIM LLC	C/O REAL PROPERTY MANAGEMENT	13152 WINSTANLEY WAY	SAN DIEGO	CA	92130
06036-A00000	4 THIRD ST	BAMFORD INVESTMENT CO LLC		466 CENTRAL AVE SUITE 12	DOVER	NH	03820
06037-000000	18 THIRD ST	ANBELWOLD LLC		101 MILL RD	DURHAM	NH	03824-2910
06038-000000	22 THIRD ST	ROSS FURNITURE COMPANY INC		38 THIRD STREET	DOVER	NH	03820
06039-000000	30 THIRD ST	ROSS FURNITURE COMPANY INC		38 THIRD STREET	DOVER	NH	03820
06043-000000	52 THIRD ST	VARNEY LINDA S	VARNEY JAMES W	88 COUNTY FARM ROAD	DOVER	NH	03820
06044-000000	60 THIRD ST	VARNEY JAMES & LINDA TRUSTEES	VARNEY JAMES LIVING REVOCABLE TRUST	88 COUNTY FARM ROAD	DOVER	NH	03820
06046-000000	488 490 CENTRAL AV	BAMFORD FLAT IRON GROUP LLC		466 CENTRAL AVENUE SUITE 12	DOVER	NH	03820
06054-000000	THIRD ST	BOSTON & MAINE RR	IRON HORSE PARK	HIGH STREET	NORTH BILLERICA	MA	01862
06054-A00000	THIRD ST	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
06054-A00001	15 21 THIRD ST	CARNEGIE HOLDINGS LLC		42 J DOVER POINT RD	DOVER	NH	03820
06054-C00000	CHESTNUT ST	CITY OF DOVER		288 CENTRAL AVE	DOVER	NH	03820
06054-D00000	10 FOURTH ST	FOURTH STREET DEPOT LLC		PO BOX 372	GREENLAND	NH	03840
06054-E00000	4 FOURTH ST	CARRIER IRENE R TRUSTEE	CARRIER IRENE R REV TRUST 98	50 FW HARTFORD DR	PORTSMOUTH	NH	03801
06040-000000	44 THIRD ST	WOODEN RULER REALTY LLC		8 GROVE ST # 100	DOVER	NH	03820-3383
		BERRY SURVEYING & ENGINEERING	CHRISTOPHER BERRY	335 SECOND CROWN POINT ROAD	BARRINGTON	NH	03825

BERRY SURVEYING & ENGINEERING
335 Second Crown Point Road
Barrington, NH 03825
Phone: (603) 332-2863
Fax: (603) 335-4623
www.BerrySurveying.Com
October 9, 2024

City of Dover Planning Board
Attention: Donna Benton, Director of Planning and Community Development
288 Central Ave
Dover, NH 03820

Re: Mixed Use Site Plan CBD-General District
Wooden Ruler Realty, LLC
42-44 Third Street
Tax Map 6, Lots 32 & 40

Chairperson & Members of the Dover Planning Board:

In accordance with the Site Review Regulations, the following waiver is hereby requested:

1. **Identification of Waiver Request**: 153.14 D 4 (c)
   - Parking spaces for a project in the CBD-G zone are within the CBD-TO Zone.

2. **Explanation:**

A comprehensive parking plan has been established to allow the residents of the 42-44 Third Street to park in the parking lot a 35 Third Street and also 5 Grove Street, which is directly across Third Street from the 35 Third Street location. The 5 Grove Street parking lot is located within the CBD-TO zone, whereas the zone line is the center of Third Street.

3. Waiver Justification:

a. Granting the waiver will properly carry out the purpose and intent of the regulations.

The intent of this regulation is to ensure there is proper parking within a reasonable distance of the project site. In this case there is no substantial difference from one side of the Zoning line to the other.

b. Strict conformity to the regulations would pose an unnecessary hardship to the applicant.

Strict conformity would require the applicant to seek additional parking within the CBD-G zone, when the applicant already owns parking within the CBD-TO Zone which is the same proximity to the project site.

Thank you for your time and attention to this matter and we hope you look favorably upon the request.

BERRY SURVEYING & ENGINEERING

Christopher R. Berry
Principal, President



GIS SKETCH
DOVER, NH
SCALE: 1" = 100' ±

Project Generating Demand	Demand	Offsite Requirement		Placement
8 Grove Street	39 Spaces Onsite (See Approved Site Plan #16-332)(DB 2016-090)	0	0	0
The Station	89 Spaces Required, 69 Onsite, 20 offsite (See Approved Site Plan P20 56)(By Others)	20 4 (Loss Due to 1 Grove)	24	1 Grove Street 23 Spaces
42-44 Third Street	74 Spaces Required, 39 Onsite, 34 Offsite (See Approved Site Plan P22 60/Site 2022 0012)	34	34	35 Third 18 Spaces 5 Grove 16-23 Spaces Total = 36-43 Spaces

PARKING REQUIREMENTS:

39 SPACES PROPOSED ON SITE.

1 SPACE IS REQUIRED FOR EACH RESIDENTIAL UNIT (39). 0 SPACES WILL BE REQUIRED TO BE LEASED FROM THE CITY OR OTHER SURROUNDING LOTS. THE PLANNING DEPARTMENT AS REVIEWED THE PARKING DESIGN AND QUANTITY AND HAS FOUND IT TO BE SUFFICIENT.

OFF-STREET PARKING SUMMARY

	MAX ALLOWED CALCULATION	MAX ALLOWED	MIN REQUIRED	TOTAL PROVIDED
RESIDENTIAL (NON-CBD-G)	1.4 SPACES PER UNIT + 0.25 VISITOR SPACES PER UNIT (4 X 0.25) UNITS = 0.25 X 39 UNITS	165	87	89

NOTE: TOTAL PARKING PROVIDED INCLUDES 69 ONSITE PARKING SPACES AND 20 EXISTING OFFSITE PARKING SPACES ON THE 5 GROVE STREET PROPERTY.

PARKING REQUIREMENTS:

CHAPTER 153-140 PARKING TABLE

- RESIDENTIAL (CBD-G)
  - 1.25 SPACES PER UNIT + 0.4 VISITOR SPACE PER UNIT
    - MIN. CALCULATION: 58 UNITS x 1.25 SPACES = 73 SPACES
    - MAX. CALCULATION: 58 UNITS x 1.65 SPACES = 96 SPACES

TOTAL PROPOSED PARKING SPACES = 39 SPACES
34 ADDITIONAL PARKING SPACES WILL BE PROVIDED OFF SITE AT 35 THIRD STREET

MIN. REQUIRED PARKING SPACES: 73 SPACES
MAX. ALLOWED PARKING SPACES: 96 SPACES
PROPOSED PARKING SPACES: 73 SPACES
5% BICYCLE RACK STORAGE = 4 SPACES REQ. 7 SPACES PROVIDED
5% EV SPACE REQ. = 2 SPACES REQ. 2 SPACES PROVIDED
THE PROJECT LOSES 1 SPACE FROM SECOND STREET (DUE TO REQUIRED RESTRIPING) AND ADDS 3 SPACES ON THIRD STREET.

PROJECT SITES GENERATING THE NEED FOR PARKING

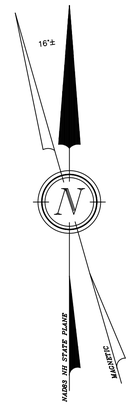
PROJECT SITES PROVIDING PARKING

PARKING ASSIGNMENT

18 OF THE 34 UNITS AT 42-44 THIRD STREET WILL BE GIVEN A PARKING PASS AT 35 THIRD STREET SHOWN AS PARKING LOT "A"

16 OF THE 34 UNITS AT 42-44 THIRD STREET WILL BE GIVEN A PARKING PASS AT 5 GROVE STREET SHOWN AS PARKING LOT "B"

24 OF THE 24 UNITS AT 2 GROVE STREET WILL BE GIVEN A PARKING PASS AT 1 GROVE STREET SHOWN AS PARKING LOT "C"



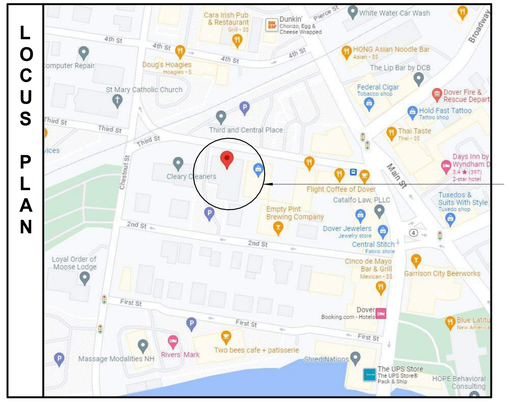
REVISION	DATE	DESCRIPTION

PARKING DEMONSTRATION PLAN
WOODEN RULER REALTY, LLC
42 & 44 THIRD STREET
DOVER, N.H.
TAX MAP 6, LOTS 32 & 40

BERRY SURVEYING & ENGINEERING
335 SECOND CROWN POINT ROAD
BARRINGTON, NH 03825 (603)332-2863

SCALE : AS SHOWN
DATE : OCTOBER 9, 2024
FILE NO. : DB 2022 - 037

LOCUS PLAN



SITE

MIXED USE

APARTMENT BUILDING

42-44 THIRD STREET

DOVER, NH

SYMBOLS LEGEND

1 VIEW NAME / SCALE	TITLE	ROOM NAME / 101 — ROOM DESCRIPTION, ROOM NUMBER	ROOM TITLE
1 / A4.01 — DETAIL NUMBER, SHEET NUMBER	BUILDING SECTION	LG 3.0 A	PARTITION TYPE TAGS
1 / A4.10 — DETAIL NUMBER, SHEET NUMBER	WALL SECTION	101 DOOR; W1 WINDOW; ST01 STOREFRONT	DOOR WINDOW STOREFRONT TAGS
1 / A4.20 — DETAIL NUMBER, SHEET NUMBER	DETAIL	GYP.BD. / 9' - 0" — CEILING DESCRIPTION, CEILING HIEGHT	CEILING TAGS
1 / 4 A3.01 2 / 3	EXTERIOR ELEVATION	FIRST FLOOR ELEV. = 100'-0"; FS FACE OF STUD; CENTERLINE	MISC. SYMBOLS
1 / 4 A2.01 2 / 3	INTERIOR ELEVATION		



SYMBOLS LEGEND

- DISTURBED EARTH
- CONCRETE
- SAND/GROUT
- GRAVEL
- COMPACTED FILL
- STONE
- WOOD FINISH
- WOOD DIMENSIONAL LUMBER
- WOOD BLOCKING/SHIM
- PLYWOOD
- INSULATION RIGID
- INSULATION BLOWN IN
- INSULATION BATT
- MASONRY BRICK
- MASONRY BLOCK
- EIFS
- STEEL
- ASAPHALT PAVING

DRAWING LIST

SHEET NUMBER	SHEET NAME
A0.01	WALL ASSEMBLIES - NON COMBUSTIBLE
A0.02	WALL ASSEMBLIES - COMBUSTIBLE
A0.03	FLOOR, CEILING AND COLUMN ASSEMBLIES
A0.10	ASSEMBLY DETAILS
A0.11	RATED PENETRATION DETAILS
A0.12	TYPICAL MOUNTING HEIGHTS
A1.00	OVERALL GARAGE PLAN
A1.01	OVERALL FIRST FLOOR
A1.02	OVERALL SECOND FLOOR
A1.03	OVERALL THIRD FLOOR
A1.04	OVERALL FOURTH FLOOR
A1.05	OVERALL FIFTH FLOOR
A1.06	OVERALL ROOF PLAN
A2.24	ENLARGED UNIT - 1 BEDROOM
A2.25	ENLARGED UNIT - 1 BEDROOM
A2.26	ENLARGED UNIT - 2 BEDROOM
A2.27	ENLARGED UNIT - 2 BEDROOM
A3.01	EXTERIOR ELEVATIONS
A3.02	EXTERIOR ELEVATIONS
A3.03	EXTERIOR PERSPECTIVES
A4.01	BUILDING SECTIONS
A4.02	BUILDING SECTIONS
A4.03	BUILDING SECTIONS
CS1	COVER SHEET
CS.2	CODE
LS0	LIFE SAFETY PLAN - PARKING GARAGE
LS1	LIFE SAFETY PLAN - FIRST FLOOR
LS2	LIFE SAFETY PLAN - SECOND FLOOR
LS3	LIFE SAFETY PLAN - THIRD FLOOR
LS4	LIFE SAFETY PLAN - FOURTH FLOOR
LS5	LIFE SAFETY PLAN - FIFTH FLOOR
A5.30	CORNICE DETAILS
A6.11	STOREFRONT DETAILS
RT1220.2	Unnamed
A6.12	STOREFRONT DETAILS
A6.13	STOREFRONT DETAILS
A6.14	STOREFRONT DETAILS

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	CMU	CONCRETE MASONRY UNIT	EXT	EXTERIOR	GL	GLASS	LPT	LOW POINT	PRELIM	PRELIMINARY	TEL	TELEPHONE
AFG	ABOVE FINISHED GRADE	CONSTR	CONSTRUCTION	FOC	FACE OF CONCRETE	GB	GRAB BAR	MFR	MANUFACTURER	PREP	PREPARATION	TV	TELEVISION
ACC	ACCESSIBLE	CD	CONTRACT DOCUMENTS	FO FIN	FACE OF FINISH	GMP	GUARANTEED MAXIMUM PRICE	MO	MASONRY OPENING	PL	PROPERTY LINE	TSTAT	THERMOSTAT
ACT	ACOUSTICAL CEILING TILE	CTRL	CONTROL	FOM	FACE OF MASONRY	GYP	GYPSUM	MATL	MATERIAL	REC	RECESSED	THK	THICKNESS
ADJ	ADJACENT	CJ	CONTROL JOINT	FOS	FACE OF STUD	GYP BD	GYPSUM BOARD	MAX	MAXIMUM	RCP	REFLECTED CEILING PLAN	TOB	TOP OF BEAM
ALT	ALTERNATE	CORR	CORRIDOR	FT	FEET	HC	HANDICAP	MECH	MECHANICAL	REF	REFRIGERATOR	TOC	TOP OF CONCRETE
ALUM	ALUMINUM	CNTR	COUNTER	FIN	FINISH	HNDRL	HANDRAIL	MTL	METAL	REINF	REINFORCE	TFF	TOP OF FINISH FLOOR
ADA	AMERICANS WITH DISABILITIES ACT	DEMO	DEMOLITION	FF	FINISH FLOOR	HDWR	HARDWARE	MLWK	MILLWORK	REQD	REQUIRED	TO FDN	TOP OF FOUNDATION
AB	ANCHOR BOLT	DET	DETAIL	FF EL	FINISH FLOOR ELEVATION	HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	MIN	MINIMUM	RESIL	RESILIENT	TOT	TOP OF TRUSS
APPROX	APPROXIMATE	DIAG	DIAGONAL	FA	FIRE ALARM	HT	HEIGHT	MISC	MISCELLANEOUS	RF	RESILIENT FLOORING	TOW	TOP OF WALL
ARCH	ARCHITECT	DIA	DIAMETER	FACP	FIRE ALARM CONTROL PANEL	HO	HOLD OPEN	MTD	MOUNTED	REV	REVISION	XFMR	TRANSFORMER
A/E	ARCHITECT/ENGINEER	DIM	DIMENSION	FE	FIRE EXTINGUISHER	HC	HOLLOW CORE	NA	NOT APPLICABLE	RH	RIGHT HAND	TYP	TYPICAL
AHJ	AUTHORITY HAVING JURISDICTION	DW	DISHWASHER	FEC	FIRE EXTINGUISHER CABINET	HM	HOLLOW METAL	NIC	NOT IN CONTRACT	RD	ROOF DRAIN	UL	UNDERWRITERS LABORATORIES
AVG	AVERAGE	DIV	DIVISION	FHC	FIRE HOSE CABINET	HORIZ	HORIZONTAL	NTS	NOT TO SCALE	RTU	ROOF TOP UNIT	UNO	UNLESS NOTED OTHERWISE
BOF	BOTTOM OF FOOTING	DOC	DOCUMENT	FR	FIRE RATING	HB	HOSE BIBB	OFF	OFFICE	RM	ROOM	VB	VAPOR BARRIER
BLDG	BUILDING	DR OPNG	DOOR OPENING	FIXT	FIXTURE	IIC	IMPACT ISOLATION CLASS	OC	ON CENTER	RO	ROUGH OPENING	VIF	VERIFY IN FIELD
CAB	CABINET	DBL	DOUBLE	FLR	FLOOR	INCL	INCLUDED	OPNG	OPENING	SCHED	SCHEDULE	VEST	VESTIBULE
CPT	CARPET	DH	DOUBLE HUNG (DOOR, WINDOW)	FD	FLOOR DRAIN	INSUL	INSULATION	OPP	OPPOSITE	SIM	SIMILAR	VCT	VINYL COMPOSITION TILE
CLG	CEILING	DN	DOWN	FLR FIN	FLOOR FINISH	INT	INTERIOR	OD	OUTSIDE DIAMETER	SD	SMOKE DETECTOR	VWC	VINYL WALL COVERING
CTR	CENTER	DS	DOWNSPOUT	FLUOR	FLUORESCENT	ID	INTERIOR DESIGN	PT	PAINT	SC	SOLID CORE	WC	WALL COVERING
CL	CENTER LINE	DWG	DRAWING	FC	FOOTCANDLE	JAN CLO	JANITOR CLOSET	PNL	PANEL	STC	SOUND TRANSMISSION CLASS	WC	WATER CLOSET
CT	CERAMIC TILE	EA	EACH	FTG	FOOTING	KD	KILN DRIED	PERIM	PERIMETER	SPEC	SPECIFICATION	WP	WATERPROOFING
CO	CERTIFICATE OF OCCUPANCY	ELEC	ELECTRIC	FDTN	FOUNDATION	LAM	LAMINATE	PLAM	PLASTIC LAMINATE	SPKLR	SPRINKLER	WT	WEIGHT
CO	CLEANOUT	EL	ELEVATION	FURN	FURNITURE	LAV	LAVATORY	PLYWD	PLYWOOD	SS	STAINLESS STEEL	W/O	WITHOUT
CLR	CLEAR	EMER	EMERGENCY	FF&E	FURNITURE, FIXTURE, AND EQUIPMENT	LDR	LEADER	LBS	POUND	STD	STANDARD	WD	WOOD
CW	COLD WATER PIPING	ENGR	ENGINEER	GA	GAGE	LH	LEFT HAND	PSF	POUNDS PER SQUARE FOOT	STA	STATION		
CFMF	COLD-FORMED METAL FRAMING	EQUIP	EQUIPMENT	GALV	GALVANIZED	LT WT	LIGHTWEIGHT	PSI	POUNDS PER SQUARE INCH	STOR	STORAGE		
COL	COLUMN	EXIST	EXISTING	GALV STL	GALVANIZED STEEL	LIN	LINEAR	PREFAB	PREFABRICATE	STRUCT	STRUCTURAL		
CONC	CONCRETE	EJ	EXPANSION JOINT	GC	GENERAL CONTRACTOR	LF	LINEAR FEET (FOOT)	PREFIN	PREFINISH	SUSP	SUSPEND		

PERMIT SET
NOT FOR CONSTRUCTION

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MECHANICAL & PLUMBING
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Address
Phone
Fax
e-mail

ELECTRICAL
Address
Address
Phone
Fax
e-mail

No.	Description	Date

42-44 3rd Street
Dover, NH

COVER SHEET

Project number	-
Date	06.14.24
Drawn by	NI
Checked by	NI

CS1

Scale

6/14/2024 4:02:55 PM

Basic Code and Fire Rating Information per IBC 2018, NFPA 101 2018 and IECC 2018

Per New Hampshire law NFPA 101 and IBC are compared for Means of Egress and the most restrictive governs. This code study shows the more restrictive code references where applicable.
Accessibility is in compliance with 2018 IBC Chapter 11 w/ NH Amendments, ANSI NH RSA 155-A: 5, and ICC A117.1 - 2009.
Construction shall conform to the adopted State of NH Fire and Building Codes with Amendments.

General Project Description

This project will consist of a new five-story multi-use building in the location of the former Asia Restaurant building. The basement level will be used for parking, the first floor will have four commercial retail spaces and a 20-room hotel, and the remaining four floors will contain 58 residential apartments. The top floor will have a fitness room and an outside deck in addition to the residential units.

To conform with IBC height limitations, the basement (a "story below grade") and the first story will be designed within a Type 1-A "podium", with a 3-hour "horizontal fire wall" at the second floor level and 3-hour supporting structure below. The first floor, between the basement parking and retail/hotel levels, will be a 2-hour horizontal intermediate separation within the podium. All construction above the podium will be Type 5-A wood frame construction with 1-hour ratings (see table at right).

The building will be protected throughout by an NFPA-13 automatic sprinkler system.

Building Data :

Occupancies:	M (Mercantile), R-1 (Hotel), R-2 (Apartments) and S-2 (enclosed parking garage)
Building height in feet:	59'-9" average grade to highest "flat" roof
Number stories above grade :	5 stories (with a one-level basement below grade plane)
Footprint area:	18,882 SF
Construction type:	Type 1 (basement level and first story), Type 5A (stories 2 through 5)
Excess street frontage:	Not required for area limitation compliance
Sprinkler system:	NFPA-13 system throughout

Height and Area Limitations: (Sprinkled type 5-A construction on a 3-hour 1-A podium with an R-2 occupancy above podium)

Height limitation:	4 stories, starting at top of podium, 70' above grade plane	IBC tables 504.3 and 504.4
Footprint area limitation:		
Basic area limitation:	36,000 SF based on most restrictive R occupancies.	IBC table 506.2
Street frontage increase:	Not required for area limitation compliance, therefore not calculated.	IBC table 506.3
Adjusted area limitation:	36,000 SF	

Means of Egress

Occupant load:		NFPA 101 table 7.3.1.2
Basement (parking garage):	18,882 SF / 1 person per 200 SF gross = 95 persons	
First floor mercantile areas (combined):	6,343 / 1 person per 60 SF gross = 106 persons (note 3)	Total 1st = 163 persons
First floor hotel areas:	11,307 SF / 1 person per 200 SF gross = 57 persons	
Second floor (apartments):	15,101 SF / 1 person per 200 SF gross = 76 persons	
Third floor (apartments):	15,101 SF / 1 person per 200 SF gross = 76 persons	
Fourth floor (apartments):	15,101 SF / 1 person per 200 SF gross = 76 persons	
Fifth floor apartments areas:	10,402 SF / 1 person per 200 SF gross = 53 persons	Total 5th = 123 persons
Fifth floor exercise room with equipment:	1,097 SF / 1 person per 50 gross = 22 persons	
Fifth floor outside roof patio:	720 SF / 1 person per 15 SF gross = 48 persons	
Total building occupant load:	609 persons	
Egress Capacity:		
Min. overall required capacity at stairs per floor:	Worst case 1st floor 124 persons x 0.3" per person = 37.2" (88" provided)(note 2)	NFPA 101 table 7.3.3.1
Min. required width at individual stairs:	44" (44" provided)	NFPA 101 table 7.2.2.2.1.2(B)
Min. overall capacity at exit doors for occ. load served:	Worst case 1st floor 124 persons x 0.2" per person = 24.8" (66" provided)(note 2)	NFPA 101 table 7.3.3.1
Min. required width at individual exit doors:	32" clear opening width (note 4)	NFPA 101 section 7.2.1.2.3.2
Min. required width at corridors:	44" (72" provided)	IBC table 1020.2
Minimum number of required exits:	Two from each level	NFPA 101 section 7.4.1.1
Stair A discharge within building:	Allowed per 50% rule	IBC section 1028.1 exception 1
Minimum exit access remoteness:	1/3 diagonal with sprinkler system (note 3)	NFPA 101 section 7.5.1.3.3
Maximum length common path of travel:	50' at R-1, R-2 and S-2. 100' at M	NFPA 101 Table A7.6
Maximum length dead-end corridor:	50' all occupancies	NFPA 101 Table A7.6
Maximum exit access travel distance:	200' at S-2 (NFPA) , 250' at M, R-1 and R-2 (IBC)	IBC table 1017.2 (most restrict.)

Accessibility:

1. Accessible route to be provided from accessible parking to accessible entrance.
2. Sixty percent of public building entrances to be accessible per IBC section 1105.1.
3. Main entrance to have push-button operated automatic door.
4. All interior spaces, other than utility spaces, to be accessible unless noted otherwise.
5. See details for accessible toilet room and bathroom fixtures.
6. Accessible signage to be provided in accordance with IBC section 1111 and ICC A117.1.
7. Five percent of the twenty hotel sleeping rooms to be accessible (one unit).
8. Type A and B dwelling units provided in accordance with IBC section 1107 and ICC A117.1. With a total of 58 apartments, two units (2% of total, rounded up) to be Type A units and the remainder to be Type B units.

Fire Ratings

Basic building elements for Podium (Type 1-A construction):	Fire rating:	Code reference:
Structural Frame:	3 hours	IBC table 601
Exterior bearing walls:	3 hours	"
Top of podium (second floor/ceiling horizontal assembly):	3 hours	IBC section 501.2
Interior bearing walls:	3 hours	"
Interior non-bearing walls:	See drawings	"
Floor construction (first floor/ceiling horizontal assembly):	2 hours	"
Roof construction (second floor roofs outboard of central main bldg.):	1-1/2 hours	"
Basic building elements above Podium (Type 5-A construction):	Fire rating:	Code reference:
Structural Frame:	1 hour	IBC table 601
Exterior bearing walls:	1 hour	"
Interior bearing walls:	1 hour	"
Interior non-bearing walls:	See drawings	"
Floor construction:	1 hour	"
Roof construction (main roof at central building):	1 hour	"
Interior fire separations:	Fire rating:	Code reference:
Stair (vertical exit enclosure) walls:	2 hour fire barrier	IBC section 1023.2
Elevator hoistway:	2 hour fire barrier	IBC section 713
Elevator machine room (if there are openings to hoistway):	2 hour fire barrier	IBC section 3006.4
Exit access corridor walls (all in residential spaces and all load bearing):	1 hour fire partition (note 5)	IBC table 1020.1
Dwelling unit/unit separations (walls):	1 hour fire partition (note 5)	IBC section 708.3 ex. 2
Dwelling unit/corridor separations:	1 hour fire partition (note 5)	IBC table 1020.1
Dwelling unit/unit separations (floor/ceiling assemblies):	1 hour horizontal ass'y (note 6)	IBC section 711.2.4.3 ex.
Electrical room:	1 hour fire barrier	
Opening protectives:	Fire rating:	Code reference:
Exit access (stairway/corridor) doors:	1-1/2 hour	IBC table 716.1(2)
Elevator doors:	1-1/2 hour	"
Elevator machine room doors:	1-1/2 hour	"
Dwelling unit/corridor doors:	1/3 hour	"
Doors from non-residential uses into residential corridors:	3/4 hour	"
Electrical room:	3/4 hour	"
Doors from retail spaces to commercial corridor:	0 hour	"

Interior finishes (based on worst-case residential uses where applicable)	Finish Classification:	Code reference:
Stairway walls and ceilings:	Class A or B	NFPA-101 Table 10.2.2
Exit access corridor walls & ceilings:	Class A, B or C	"
Room walls and ceilings:	Class A, B or C	"
Stairway and corridor floors:	No minimum requirement	"
Room floors:	No minimum requirement	"

Life Safety Systems:

1. Fire, smoke, heat, and CO detection, alarm and notification systems to be provided as required by IBC section 907 and 915 as well as NFPA 72. Designs to be by qualified persons registered in the State of New Hampshire.
2. Emergency lighting and signage to be provided in accordance with IBC section 1008 and NFPA 101 section 7.9.
3. Portable fire extinguishers must be sized and located per IBC section 906 and NFPA 10.

Energy Efficiency

See accompanying COMcheck/REScheck certificate for compliance based on overall building performance.

Notes:

1. Doors in fire rated walls to have fire ratings as shown on floor plans and shall have closers and latches.
2. First floor taken as "worst case" due to convergence of half of basement occupants (48 persons) with all of second floor occupants (76 persons) at that level. First floor retail spaces all exit directly to the exterior and therefore are not included in the tally.
3. First floor retail areas shown with one exit must have occupant loads of 49 persons or fewer.
4. For code review purposes, 36" nominal doors are assumed to have a 33" net clear width and therefore a capacity of 165 persons each.
5. Exit access corridors walls and unit demising walls (all in residential spaces) are load bearing and therefore require a 1-hour rating due to 5-A construction type.
6. Floor/ceiling assemblies separating dwelling units 1-hour rated due to 5-A construction type.

CODE SUMMARY

SCALE: 12" = 1'-0"

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No.	Description	Date

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Dover, NH

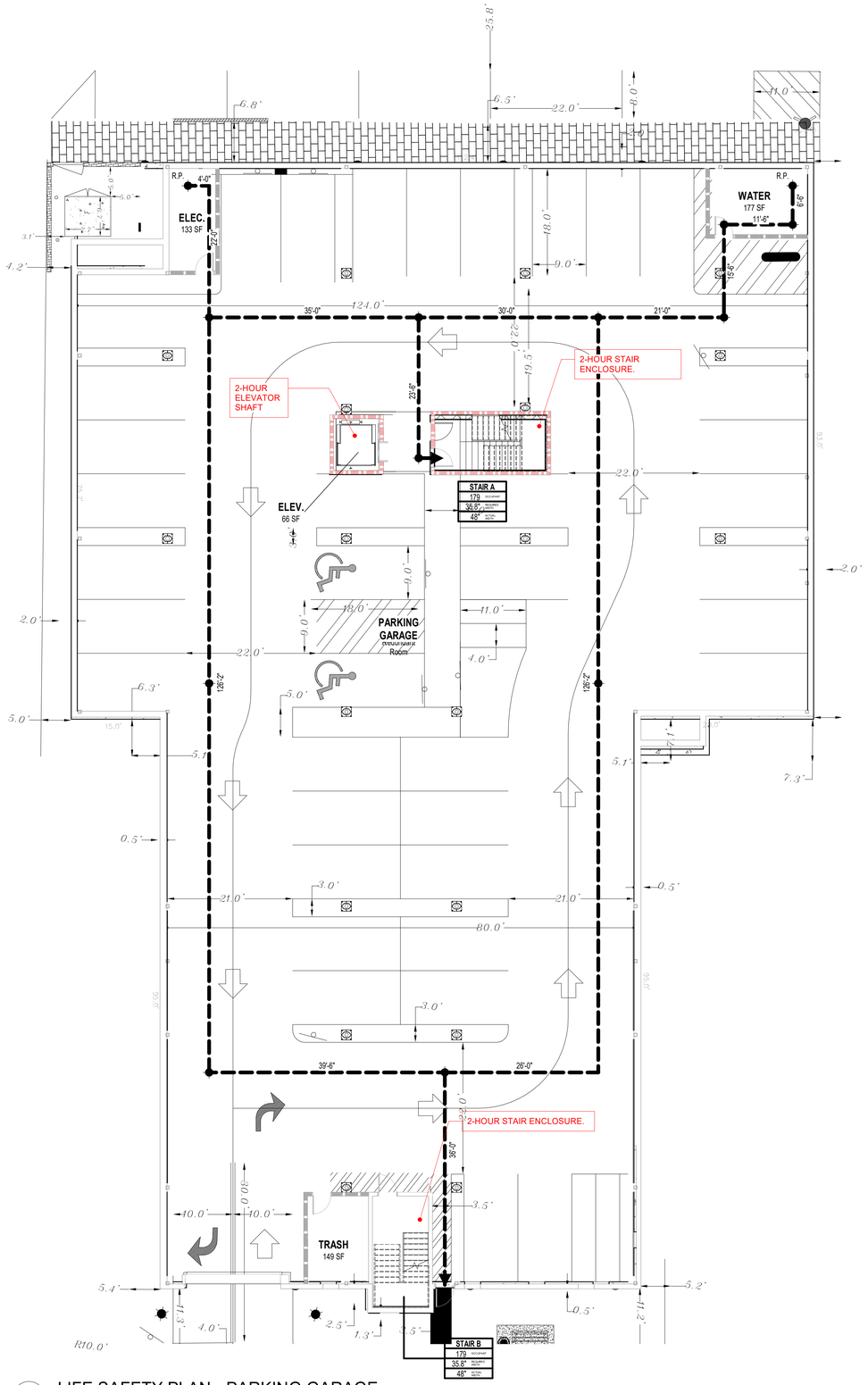
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CS.2

Scale 12" = 1'-0"

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1 LIFE SAFETY PLAN - PARKING GARAGE

SCALE: 3/32" = 1'-0" REF SHEET: 1 / A3.01

GENERAL LIFE SAFETY PLAN NOTES

1. FOR WALL RATED ASSEMBLIES, REFER TO SHEETS A0.1 & A0.2.
2. FOR FLOOR PLANS, REFER TO A1 SERIES OF DRAWINGS.
3. FOR DOOR & WINDOW FIRE RESISTANCE RATINGS, REFER TO A6 SERIES OF DRAWINGS.
4. ALL RESIDENT UNITS SHALL BE SEPARATED FROM CORRIDORS, OTHER RESIDENT UNITS, ETC W/ MIN. 1HR FIRE RESISTIVE WALLS, FLOORS AND CEILING. REFER TO "A0" SERIES OF DRAWINGS.
5. REFER TO RCP'S & ELEC. DWG'S FOR EXIT SIGNS.

LIFE SAFETY LEGEND

EXIT#4 / 123 OCCUPANTS / 75" REQUIRED EGRESS WIDTH / 128" ACTUAL WIDTH	=EGRESS COMPONENT DESIGNATION =REQUIRED EGRESS COMPONENT CAPACITY =REQUIRED CLEAR WIDTH CALCULATION =ACTUAL CLEAR WIDTH CALCULATION
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100'	=EGRESS PATH, DIRECTION & CUMULATIVE TRAVEL DISTANCE
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COM	=2 WAY COMMUNICATION PER IBC SECTION 1007.8 EXCEPTION 1. INCLUDES DIRECTION SIGNAGE PER 1007.8.2. FINAL TEXT AND/OR PICTOGRAMS TO BE APPROVED BY LOCAL A.H.J.
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FEC/FVC	=FEC = FIRE EXTINGUISHER CABINET =FVC = FIRE EXTINGUISHER AND GATE VALVE CABINET
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	=2 HOUR ASSEMBLY FIRE RESISTIVE RATING
	=2 HOUR FIRE WALL
	=SMOKE BARRIER
	=MECHANICAL SHAFT W/ 1 HOUR FIRE RESISTIVE RATING
	=MECHANICAL SHAFT W/ 2 HOUR FIRE RESISTIVE RATING
	=MECHANICAL SHAFT W/ 2 HOUR FIRE RESISTIVE RATING

MAX FLOOR AREA ALLOWANCES PER OCCUPANT

USE	FLOOR AREA/OCC.
RESIDENT UNIT	200/GSF
MAINTENANCE, STORAGE	300/GSF
BUSINESS	100/GSF
CONCENTRATED ASSEMBLY	7/NSF
UN-CONCENTRATED ASSEMBLY	15/NSF
EXERCISE	50/GSF

COMMON PATH, DEAD END & TRAVEL DISTANCE LIMITS WITH SPRINKLER

USE	COMMON PATH LIMIT	DEAD END LIMIT	TRAVEL DISTANCE LIMIT
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B	100'	50'	300'
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R-2	125'	50'	250'

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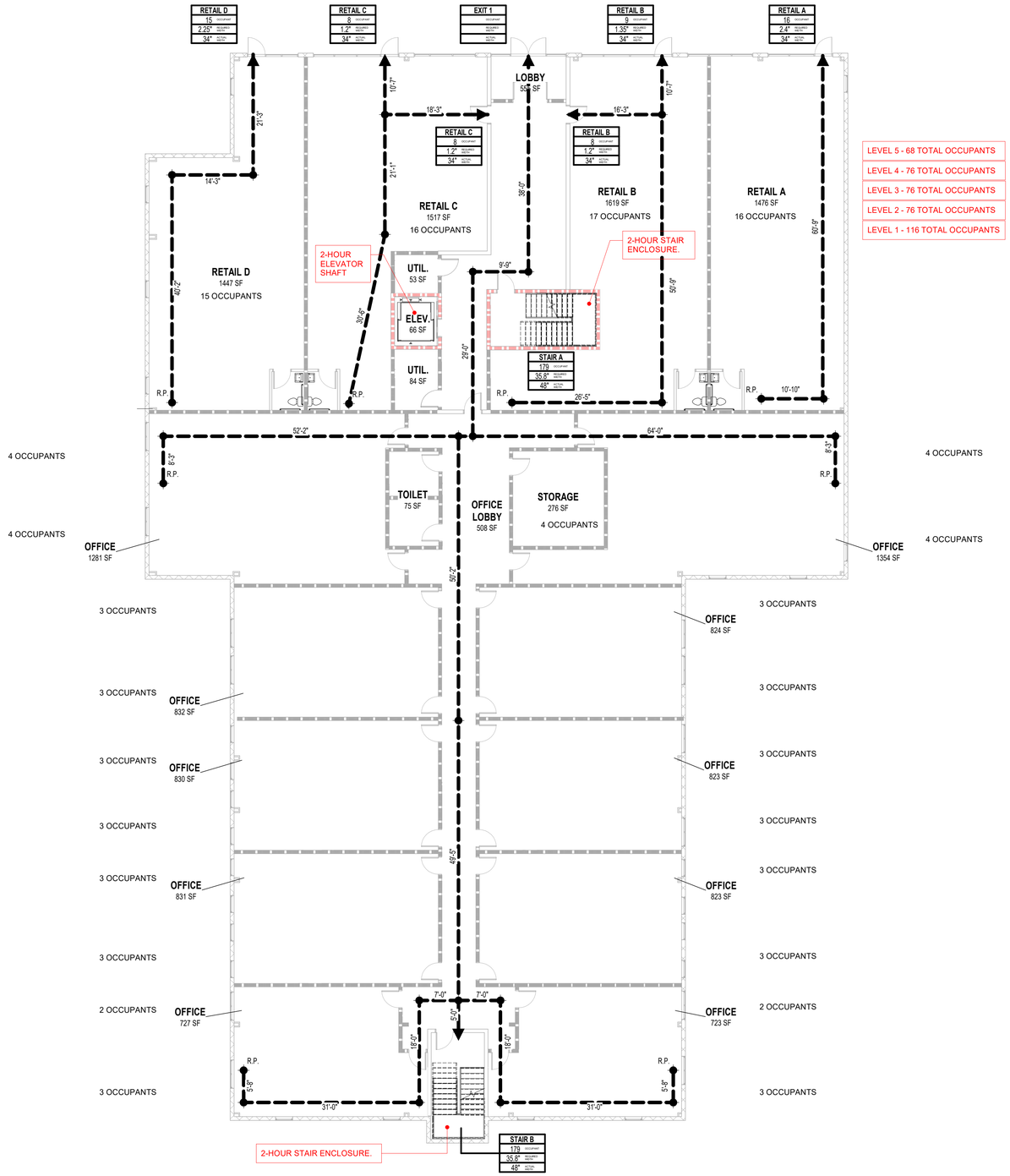
LIFE SAFETY PLAN - PARKING GARAGE

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Scale 3/32" = 1'-0"

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1 LIFE SAFETY PLAN - FIRST FLOOR

SCALE: 3/32" = 1'-0" REF SHEET: 1 / A3.01

GENERAL LIFE SAFETY PLAN NOTES

1. FOR WALL RATED ASSEMBLIES, REFER TO SHEETS A0.1 & A0.2.
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MAX FLOOR AREA ALLOWANCES PER OCCUPANT

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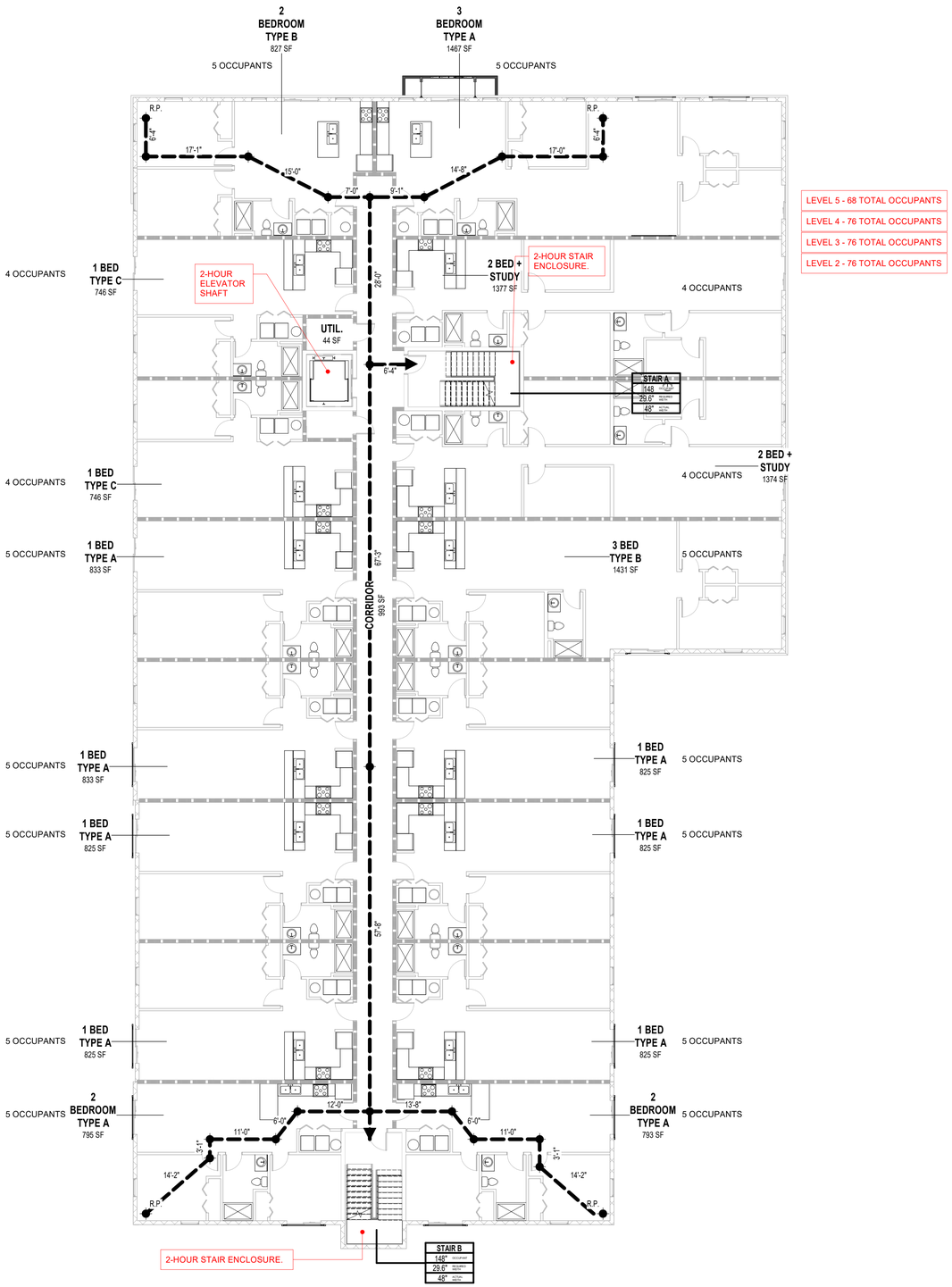
LIFE SAFETY PLAN - FIRST FLOOR

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1 LIFE SAFETY PLAN - SECOND FLOOR

SCALE: 3/32" = 1'-0" REF SHEET: 1 / A3.01

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MAX FLOOR AREA ALLOWANCES PER OCCUPANT

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BUSINESS	100/GSF
CONCENTRATED ASSEMBLY	7/NSF
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EXERCISE	50/GSF

COMMON PATH, DEAD END & TRAVEL DISTANCE LIMITS WITH SPRINKLER

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R-2	125'	50'	250'

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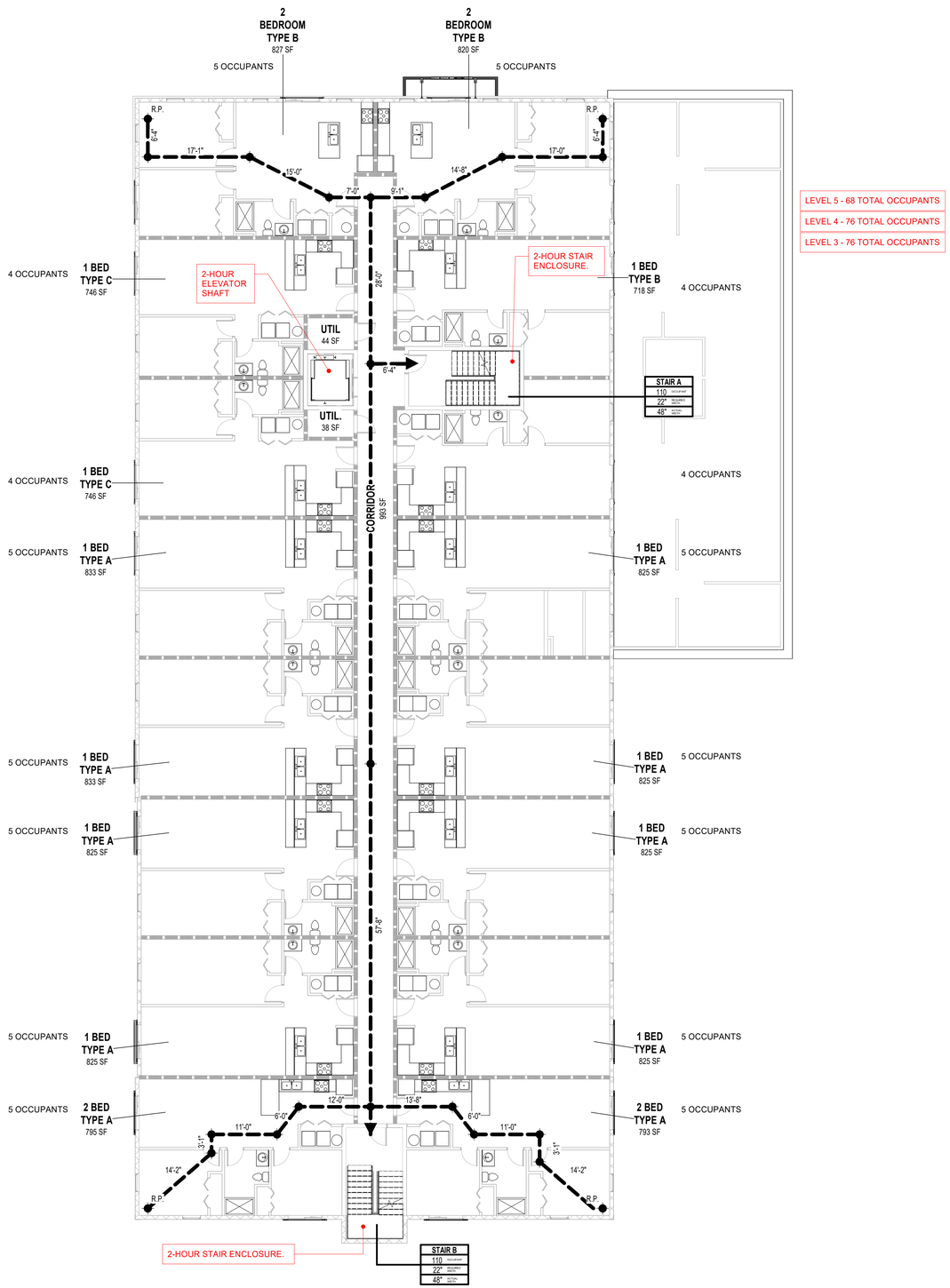
LIFE SAFETY PLAN - SECOND FLOOR

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1 LIFE SAFETY PLAN - THIRD FLOOR

SCALE: 3/32" = 1'-0" REF SHEET: 1 / A3.01

GENERAL LIFE SAFETY PLAN NOTES

1. FOR WALL RATED ASSEMBLIES, REFER TO SHEETS A0.1 & A0.2.
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MAX FLOOR AREA ALLOWANCES PER OCCUPANT

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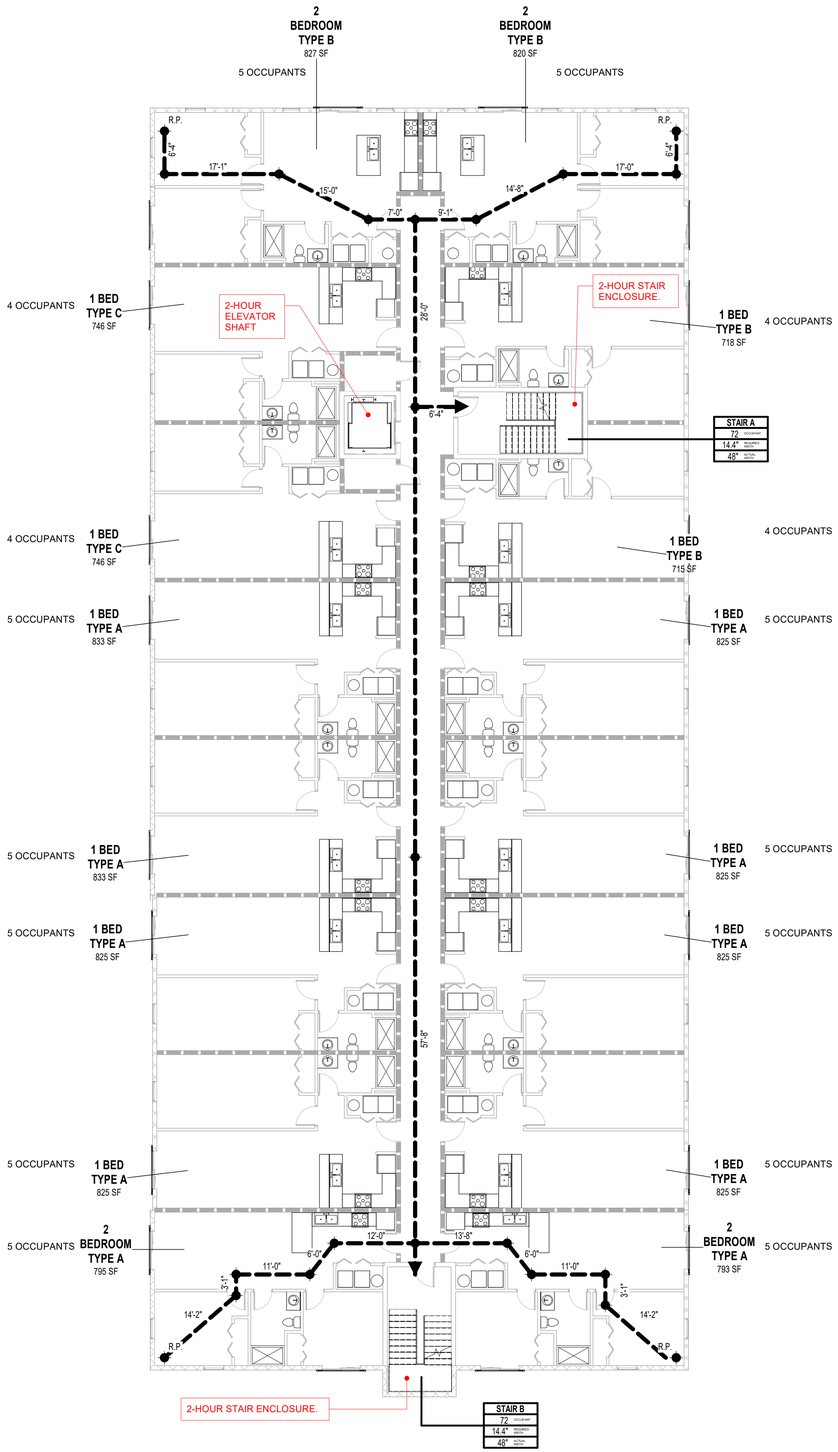
LIFE SAFETY PLAN - THIRD FLOOR

Project number	-
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1 LIFE SAFETY PLAN - FOURTH FLOOR

SCALE: 3/32" = 1'-0" REF SHEET: 1 / A3.01

LEVEL 5 - 68 TOTAL OCCUPANTS

LEVEL 4 - 76 TOTAL OCCUPANTS

GENERAL LIFE SAFETY PLAN NOTES

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LIFE SAFETY LEGEND

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	=1 HOUR ASSEMBLY FIRE RESISTIVE RATING
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	=2 HOUR FIRE WALL
	=SMOKE BARRIER
	=MECHANICAL SHAFT W/ 1 HOUR FIRE RESISTIVE RATING
	=MECHANICAL SHAFT W/ 2 HOUR FIRE RESISTIVE RATING
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MAX FLOOR AREA ALLOWANCES PER OCCUPANT

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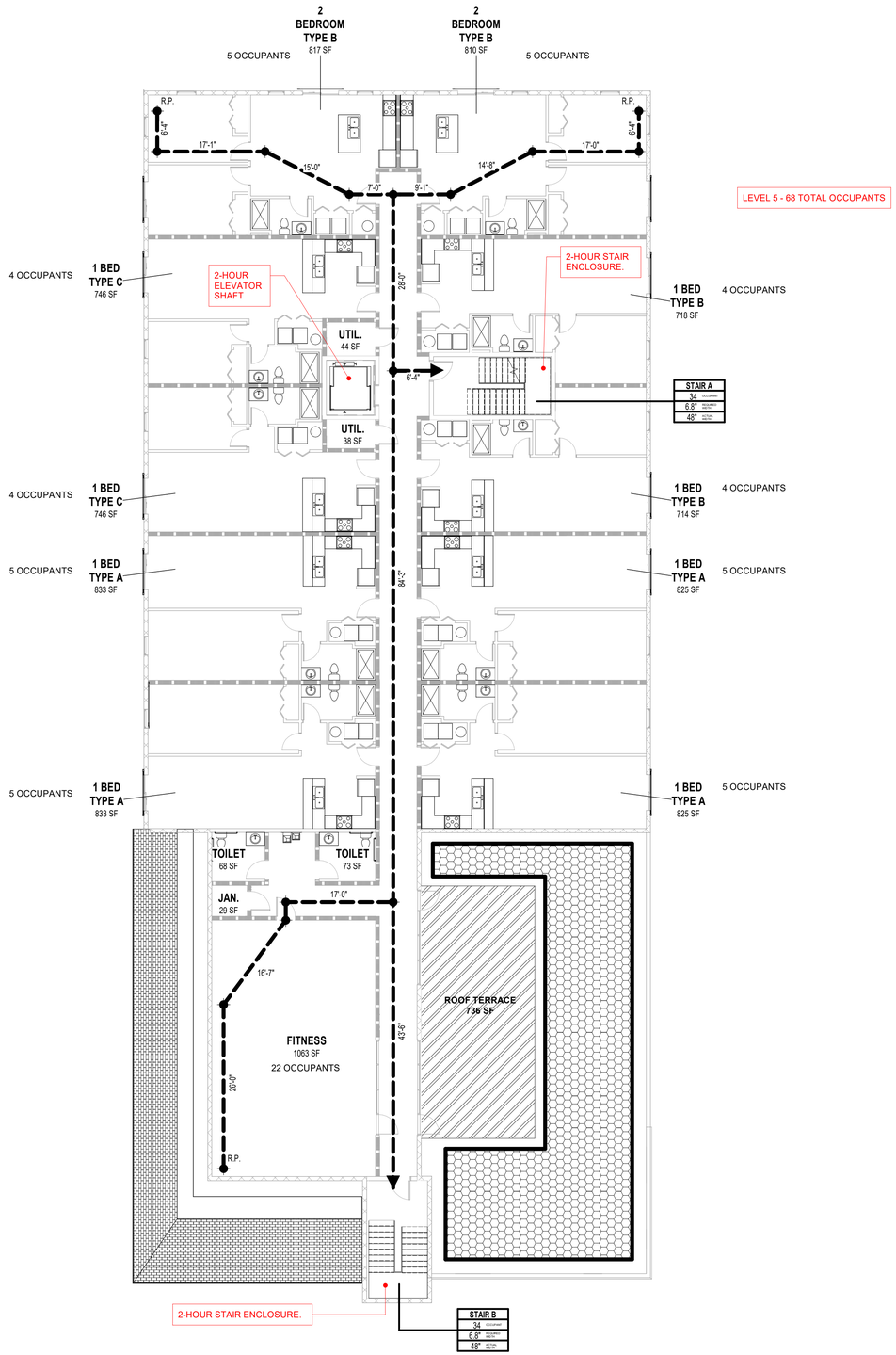
LIFE SAFETY PLAN - FOURTH FLOOR

Project number	-
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1 LIFE SAFETY PLAN - FIFTH FLOOR

SCALE: 3/32" = 1'-0" REF SHEET: 1 / A3.01

GENERAL LIFE SAFETY PLAN NOTES

1. FOR WALL RATED ASSEMBLIES, REFER TO SHEETS A0.1 & A0.2.
2. FOR FLOOR PLANS, REFER TO A1 SERIES OF DRAWINGS.
3. FOR DOOR & WINDOW FIRE RESISTANCE RATINGS, REFER TO A6 SERIES OF DRAWINGS.
4. ALL RESIDENT UNITS SHALL BE SEPARATED FROM CORRIDORS, OTHER RESIDENT UNITS, ETC W/ MIN. 1HR FIRE RESISTIVE WALLS, FLOORS AND CEILING. REFER TO "A0" SERIES OF DRAWINGS.
5. REFER TO RCP'S & ELEC. DWG'S FOR EXIT SIGNS.

LIFE SAFETY LEGEND

EXIT#4 / 123 OCCUPANTS / 75" REQUIRED WIDTH / 128" ACTUAL WIDTH	=EGRESS COMPONENT DESIGNATION =REQUIRED EGRESS COMPONENT CAPACITY =REQUIRED CLEAR WIDTH CALCULATION =ACTUAL CLEAR WIDTH CALCULATION
OFFICE / 100	=ROOM NAME =ROOM NUMBER
100'	=EGRESS PATH, DIRECTION & CUMULATIVE TRAVEL DISTANCE
R.P.	=REMOTE POINT
COM	=2 WAY COMMUNICATION PER IBC SECTION 1007.8 EXCEPTION 1. INCLUDES DIRECTION SIGNAGE PER 1007.8.2. FINAL TEXT AND/OR PICTOGRAMS TO BE APPROVED BY LOCAL A.H.J.
FACP	=FIRE ALARM CONTROL PANEL
FEC/FVC	=FEC = FIRE EXTINGUISHER CABINET =FVC = FIRE EXTINGUISHER AND GATE VALVE CABINET
	=1 HOUR ASSEMBLY FIRE RESISTIVE RATING
	=2 HOUR ASSEMBLY FIRE RESISTIVE RATING
	=2 HOUR FIRE WALL
	=SMOKE BARRIER
	=MECHANICAL SHAFT W/ 1 HOUR FIRE RESISTIVE RATING
	=MECHANICAL SHAFT W/ 2 HOUR FIRE RESISTIVE RATING
	=MECHANICAL SHAFT W/ 2 HOUR FIRE RESISTIVE RATING

MAX FLOOR AREA ALLOWANCES PER OCCUPANT

USE	FLOOR AREA/OCC.
RESIDENT UNIT	200/GSF
MAINTENANCE, STORAGE	300/GSF
BUSINESS	100/GSF
CONCENTRATED ASSEMBLY	7/NSF
UN-CONCENTRATED ASSEMBLY	15/NSF
EXERCISE	50/GSF

COMMON PATH, DEAD END & TRAVEL DISTANCE LIMITS WITH SPRINKLER

USE	COMMON PATH LIMIT	DEAD END LIMIT	TRAVEL DISTANCE LIMIT
M	75'	50'	250'
B	100'	50'	300'
R-1	75'	50'	250'
R-2	125'	50'	250'

PERMIT SET

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MECHANICAL & PLUMBING
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ELECTRICAL
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No.	Description	Date

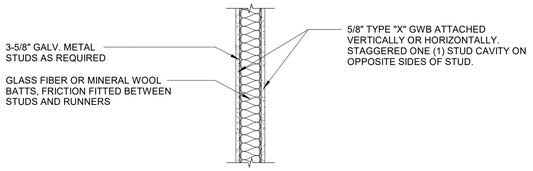
42-44 3rd Street
Dover, NH

LIFE SAFETY PLAN - FIFTH FLOOR

Project number	-
Date	06.14.24
Drawn by	Author
Checked by	Checker
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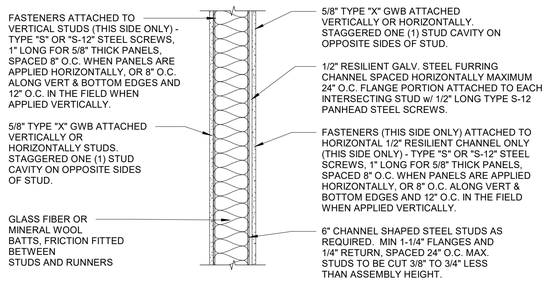
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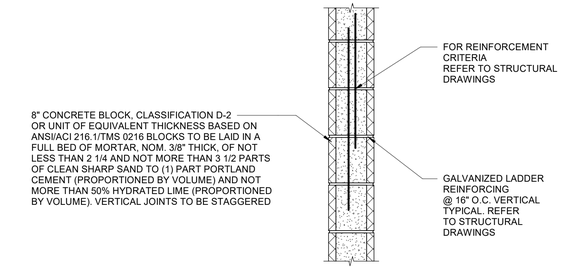
INTERIOR PARTITION - NON RATED LIGHT GAUGE

LG.3.0.A	FIRE RATING: N/A/	DESIGN: N/A	STC RATING: N/A/	NON-LOAD BEARING
LG.3.0.B	FIRE RATING: N/A/	DESIGN: N/A	STC RATING: N/A/	NON-LOAD BEARING
	SAME AS LG.3.0.A, ADD 1/2" RESILIENT CHANNEL ONE SIDE ONLY			
LG.1.0.A	FIRE RATING: N/A/	DESIGN: N/A	STC RATING: N/A/	NON-LOAD BEARING
	SAME AS LG.3.0.A, BUT 1 5/8" METAL STUD AS REQUIRED			
LG.1.0.B	FIRE RATING: N/A/	DESIGN: N/A	STC RATING: N/A/	NON-LOAD BEARING
	SAME AS LG.3.0.B, BUT 1 5/8" METAL STUD AS REQUIRED			
LG.1.0.C	FIRE RATING: N/A/	DESIGN: N/A	STC RATING: N/A/	NON-LOAD BEARING
	SAME AS LG.3.0.C, BUT 1 5/8" METAL STUD AS REQUIRED			
LG.2.0.A	FIRE RATING: N/A/	DESIGN: N/A	STC RATING: N/A/	NON-LOAD BEARING
	SAME AS LG.3.0.A, BUT 2 1/2" METAL STUD AS REQUIRED			
LG.2.0.B	FIRE RATING: N/A/	DESIGN: N/A	STC RATING: N/A/	NON-LOAD BEARING
	SAME AS LG.3.0.B, BUT 2 1/2" METAL STUD AS REQUIRED			
LG.2.0.C	FIRE RATING: N/A/	DESIGN: N/A	STC RATING: N/A/	NON-LOAD BEARING
	SAME AS LG.3.0.C, BUT 2 1/2" METAL STUD AS REQUIRED			
LG.6.0.A	FIRE RATING: N/A/	DESIGN: N/A	STC RATING: N/A/	NON-LOAD BEARING
	SAME AS LG.3.0.A, BUT 6" METAL STUD AS REQUIRED			
LG.6.0.B	FIRE RATING: N/A/	DESIGN: N/A	STC RATING: N/A/	NON-LOAD BEARING
	SAME AS LG.3.0.B, BUT 6" METAL STUD AS REQUIRED			
LG.6.0.C	FIRE RATING: N/A/	DESIGN: N/A	STC RATING: N/A/	NON-LOAD BEARING
	SAME AS LG.3.0.C, BUT 6" METAL STUD AS REQUIRED			



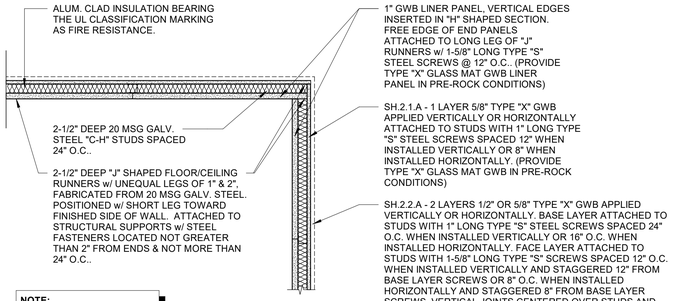
INTERIOR PARTITION - 1HR RATED LIGHT GAUGE

LG.6.1.A	FIRE RATING: 1 HR	DESIGN: UL #U-419	STC RATING:	NON-LOAD BEARING
LG.6.1.B	FIRE RATING: 1 HR	DESIGN: UL #U-419	STC RATING:	NON-LOAD BEARING
	SAME AS LG.6.1.A, BUT NO RESILIENT CHANNEL			
LG.6.1.C	FIRE RATING: 1 HR	DESIGN: UL #U-419	STC RATING:	NON-LOAD BEARING
	SAME AS LG.6.1.A, BUT 1/2" GWB IN PLACE OF RESILIENT CHANNEL			
LG.3.1.A	FIRE RATING: 1 HR	DESIGN: UL #U-419	STC RATING:	NON-LOAD BEARING
	SAME AS LG.6.1.A, BUT 3 5/8" METAL STUD AS REQUIRED			
LG.3.1.B	FIRE RATING: 1 HR	DESIGN: UL #U-419	STC RATING:	NON-LOAD BEARING
	SAME AS LG.6.1.B, BUT 3 5/8" METAL STUD AS REQUIRED			



INTERIOR PARTITION - 2HR RATED MASONRY

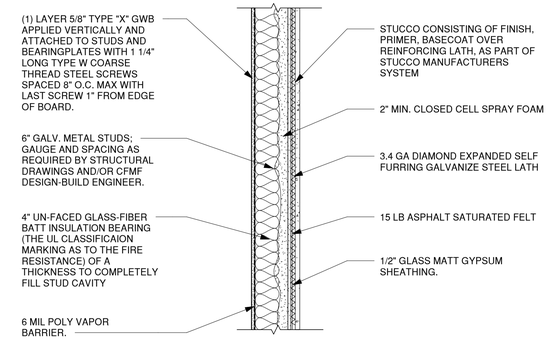
MA.8.2.A	FIRE RATING: 2 HOUR	DESIGN: UL# U-906	S.T.C. RATING: N/A	LOAD BEARING
MA.8.2.B	FIRE RATING: 2 HOUR	DESIGN: UL# U-906	S.T.C. RATING: N/A	LOAD BEARING
	SAME AS MA.8.2.A, BUT 7/8" FURRING CHANNEL & 5/8" GYP ONE SIDE ONLY			
MA.12.2.A	FIRE RATING: 2 HOUR	DESIGN: UL# U-906	S.T.C. RATING: N/A	LOAD BEARING
	SAME AS MA.8.2.A, BUT 12" CMU			



NOTE:
THIS WALL TYPE IS DRAWN IN "PLAN" VIEW NOT SECTION

INTERIOR PARTITION - RATED SHAFTWALL

SH.2.1.A	FIRE RATING: 1 HOUR	DESIGN: UL# U-415 (A)	S.T.C. RATING: N/A	NON-LOAD BEARING
SH.2.2.A	FIRE RATING: 2 HOUR	DESIGN: UL# U-415 (B)	S.T.C. RATING: N/A	NON-LOAD BEARING
	SAME AS SH.2.1.A, BUT (2) LAYERS OF GYPSUM BOARD ON FINISHED SIDE			



COLD FORMED NON-RATED EXTERIOR WALL WITH STUCCO BRICK

XB.CF.6.0.A	FIRE RATING: NA	DESIGN: NA	STC RATING: -	NONLOAD BEARING

CFMF 1HR RATED EXTERIOR WALL WITH FIBER CEMENT

XF.CF.6.0.A	FIRE RATING: NA	DESIGN: - UL# NA	STC RATING: -	LOAD BEARING

WALL TYPES GENERAL NOTES

1.) REFER TO STRUCTURAL PLANS FOR LOCATION OF ALL BRACE FRAME LOCATIONS.

2.) ALL INTERIOR NON LOAD BEARING PARTITIONS SHALL BE CONSTRUCTED OF METAL STUDS THAT CONTINUE TO DECK ABOVE UNLESS OTHERWISE NOTED. U.O.N. STUD GAUGE AND SPACING SHALL BE DETERMINED BY MANUFACTURER'S LIMITING HEIGHT TABLE. BUT IN NO CASE SHALL BE LESS THAN 20 GAUGE (33 MILS) @ FIRST FLOOR AND 25 GAUGE (18 MILS) @ UPPER FLOORS. MAX SPACED 24" O.C. REFER TO TYPICAL DETAILS FOR SOUND PROOFING.

3.) ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES BOTH HORIZONTALLY AND VERTICALLY SHALL BE SEALED WITH FIREPROOFING MATERIALS TO MAINTAIN THE INTEGRITY OF THE ASSEMBLY RATING.

4.) ALL WOOD BLOCKING REQUIRED AT METAL FRAMING SHALL BE FURNISHED AND INSTALLED BY THE METAL FRAMING SUBCONTRACTOR.

5.) WHERE A TESTING LAB DESIGN NUMBER IS DESIGNATED (ie. UL, GYPSUM ASSOC., ETC.) PARTITIONS MUST BE CONSTRUCTED IN STRICT ACCORDANCE w/ THE TESTED DESIGN ASSEMBLY. REFER TO THE TESTING LABORATORY'S DIRECTORY (ie. UL FIRE RESISTANCE DIRECTORY - 2013, GYPSUM ASSOC. GA-600-12 ADDITION, ETC.) FOR DETAIL ON MATERIALS AND FASTENER REQUIREMENTS.

6.) REFER TO TESTING AGENCY REFERENCED FOR FASTENING CRITERIA AND BACK-BLOCKING OF GWB JOINTS. ALL JOINTS AND SCREW HEADS FINISHED.

7.) COORDINATE LOCATIONS OF WIRING AND PLUMBING WITHIN THE FRAMING.

8.) PROVIDE "MOLD-TOUGH" 5/8" AT GWB WALLS & CEILINGS FINISH AT ALL RESIDENT BATHS, PUBLIC TOILETS, LAUNDRY, RESIDENT LAUNDRY, JANITOR'S, COMMERCIAL KITCHEN SERVERIES, AND WATER ROOMS. REFER TO WALL & FLOOR ASSEMBLIES FOR RATINGS.

9.) REFER TO SHEETS A0.1 THROUGH A0.3 FOR ADDITIONAL FIRE RATED ASSEMBLIES.

11.) METAL FRAMING CONTRACTOR SHALL INSTALL SHIMS AS REQUIRED BEHIND ALL RESILIENT CHANNELS OF CORRIDOR WALLS TO CORRECT ANY ISSUES WITH THE WALL PANEL BEING OUT OF LINE.

12.) WHERE THERE IS AN ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING OR ATTIC SPACE; FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING IN THE CONCEALED SPACE. SUCH IDENTIFICATION SHALL BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG WALL. SUCH IDENTIFICATION SHALL INCLUDE LETTERING NOT LESS THAN 3 INCHES IN HEIGHT WITH A MINIMUM 3/8" STROKE IN A CONTRASTING COLOR INCORPORATING THE SUGGESTED WORDING, "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS".

13.) REFER TO LIFE SAFETY PLANS FOR LOCATIONS OF RATED WALL ASSEMBLIES.

14.) FOR ALL TYPE "X" GWB CONDITIONS, TYPE "X" GLASS MAT GWB MUST BE USED IN PRE-ROCK CONDITIONS. FOR ALL TYPE "C" GWB CONDITIONS, DENSARMOR PLUS FIREGUARD C GWB MUST BE USED IN PRE-ROCK CONDITIONS.

EXTERIOR WALL ASSEMBLY TAG KEY

EXTERIOR WALL ABBREVIATION LIST

LG: LIGHT GAUGE METAL STUD
MA: MASONRY
XF: FIBER CEMENT
XP: FIBER CEMENT PANEL
XS: STONE VENEER
XV: VINYL SIDING

PERMIT SET
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STRUCTURAL
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e-mail

MECHANICAL & PLUMBING
Address
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e-mail

ELECTRICAL
Address
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Phone
Fax
e-mail

No.	Description	Date

42-44 3rd Street
Dover, NH

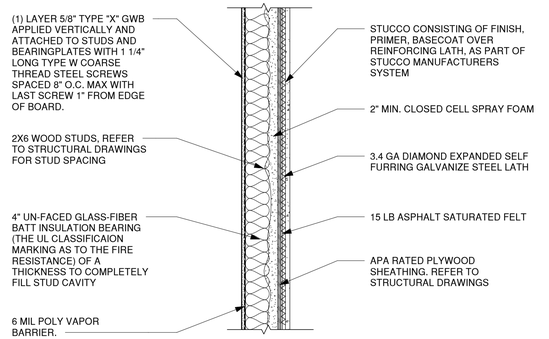
WALL ASSEMBLIES - NON COMBUSTIBLE

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Date	06.14.24
Drawn by	Author
Checked by	Checker

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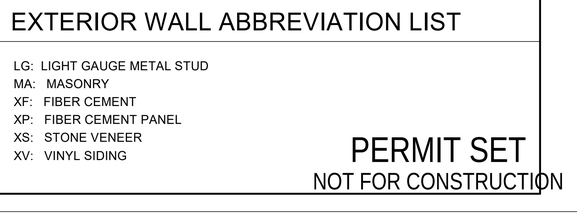
Scale 1" = 1'-0"

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WOOD BEARING 1HR RATED EXTERIOR WALL WITH STUCCO BRICK

XB.WD.6.1.A	FIRE RATING: 1HR	DESIGN: -UL# U-356 (6E)	STC RATING: -	NONLOAD BEARING



CFMF 1HR RATED EXTERIOR WALL WITH FIBER CEMENT

XF.WD.6.1.A	FIRE RATING: NA	DESIGN: - UL# NA	STC RATING: -	LOAD BEARING

WALL TYPES GENERAL NOTES

1.) REFER TO STRUCTURAL PLANS FOR LOCATION OF ALL BRACE FRAME LOCATIONS.

2.) ALL INTERIOR NON LOAD BEARING PARTITIONS SHALL BE CONSTRUCTED OF METAL STUDS THAT CONTINUE TO DECK ABOVE UNLESS OTHERWISE NOTED. U.O.N. STUD GAUGE AND SPACING SHALL BE DETERMINED BY MANUFACTURER'S LIMITING HEIGHT TABLE. BUT IN NO CASE SHALL BE LESS THAN 20 GAUGE (33 MILS) @ FIRST FLOOR AND 25 GAUGE (18 MILS) @ UPPER FLOORS. MAX SPACED 24" O.C. REFER TO TYPICAL DETAILS FOR SOUND PROOFING.

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4.) ALL WOOD BLOCKING REQUIRED AT METAL FRAMING SHALL BE FURNISHED AND INSTALLED BY THE METAL FRAMING SUBCONTRACTOR.

5.) WHERE A TESTING LAB DESIGN NUMBER IS DESIGNATED (ie. UL, GYPSUM ASSOC., ETC.) PARTITIONS MUST BE CONSTRUCTED IN STRICT ACCORDANCE w/ THE TESTED DESIGN ASSEMBLY. REFER TO THE TESTING LABORATORY'S DIRECTORY (ie. UL FIRE RESISTANCE DIRECTORY - 2013, GYPSUM ASSOC. GA-600-12 ADDITION, ETC.) FOR DETAIL ON MATERIALS AND FASTENER REQUIREMENTS.

6.) REFER TO TESTING AGENCY REFERENCED FOR FASTENING CRITERIA AND BACK-BLOCKING OF GWB JOINTS. ALL JOINTS AND SCREW HEADS FINISHED.

7.) COORDINATE LOCATIONS OF WIRING AND PLUMBING WITHIN THE FRAMING.

8.) PROVIDE "MOLD-TOUGH" 5/8" AT GWB WALLS & CEILINGS FINISH AT ALL RESIDENT BATHS, PUBLIC TOILETS, LAUNDRY, RESIDENT LAUNDRY, JANITOR'S, COMMERCIAL KITCHEN SERVERIES, AND WATER ROOMS. REFER TO WALL & FLOOR ASSEMBLIES FOR RATINGS.

9.) REFER TO SHEETS A0.1 THROUGH A0.3 FOR ADDITIONAL FIRE RATED ASSEMBLIES.

11.) METAL FRAMING CONTRACTOR SHALL INSTALL SHIMS AS REQUIRED BEHIND ALL RESILIENT CHANNELS OF CORRIDOR WALLS TO CORRECT ANY ISSUES WITH THE WALL PANEL BEING OUT OF LINE.

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13.) REFER TO LIFE SAFETY PLANS FOR LOCATIONS OF RATED WALL ASSEMBLIES.

14.) FOR ALL TYPE "X" GWB CONDITIONS, TYPE "X" GLASS MAT GWB MUST BE USED IN PRE-ROCK CONDITIONS. FOR ALL TYPE "C" GWB CONDITIONS, DENSARMOR PLUS FIREGUARD C GWB MUST BE USED IN PRE-ROCK CONDITIONS.

EXTERIOR WALL ASSEMBLY TAG KEY



EXTERIOR WALL ABBREVIATION LIST

LG: LIGHT GAUGE METAL STUD
MA: MASONRY
XF: FIBER CEMENT
XP: FIBER CEMENT PANEL
XS: STONE VENEER
XV: VINYL SIDING

PERMIT SET
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MECHANICAL & PLUMBING
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e-mail

ELECTRICAL
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Fax
e-mail

No.	Description	Date

42-44 3rd Street
Dover, NH

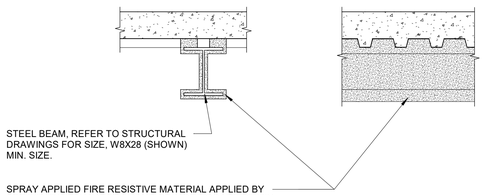
WALL ASSEMBLIES - COMBUSTIBLE

Project number	-
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Drawn by	MJH
Checked by	NI

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Scale 1" = 1'-0"

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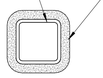
STEEL BEAM, REFER TO STRUCTURAL DRAWINGS FOR SIZE, W8X28 (SHOWN) MIN. SIZE.

SPRAY APPLIED FIRE RESISTIVE MATERIAL APPLIED BY SPRAYING WITH WATER IN ONE OR MORE COATS TO MIN. THICKNESS OF 1-1/4", TO STEEL SURFACES WHICH ARE FREE OF DIRT, OIL OR SCALE. MIN. AVG. AND IN DENSITIES OF 13 AND 11 pcf, RESPECTIVELY, FOR TYPE II.

RATED STEEL BEAM @ FLOOR/ CEILING ASSEMBLY

BM.S.3	FIRE RATING: 3 HOUR	DESIGN: UL# N-823	S.T.C. RATING: N/A	LOAD BEARING

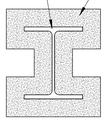
STEEL COLUMNS, REFER TO STRUCTURAL DRAWINGS FOR SIZES. (HSS 5X5X1/4 SHOWN)



SPRAY APPLIED FIRE RESISTIVE MATERIAL - SPRAY APPLIED
WITH WATER TO FINAL THICKNESS INDICATED IN UL ASSEMBLY
BASED ON COLUMN SIZE.
APPLY TO STEEL SURFACES WHICH SHALL BE CLEAN AND FREE
OF DIRT, LOOSE SCALE AND OIL. MIN. AVG. DENSITY OF 13 PCF
WITH MIN IN. DENSITY OF 11 PCF.

TUBE STEEL COLUMN

STEEL COLUMN, REFER TO STRUCTURAL DRAWINGS FOR SIZES. (W8X28 SHOWN)



SPRAY APPLIED FIRE RESISTIVE MATERIAL APPLIED BY SPRAYING WATER, IN ONE OR MORE UNTAMPED COATS AT A MIN. THICKNESS AS INDICATED IN UL ASSEMBLY BASED ON COLUMN SIZE.
APPLY TO STEEL SURFACES WHICH SHALL BE FREE OF DIRT, OIL OR SCALE. MIN. AVG. UNTAMPED DENSITY OF 13 PCF W MIN. UNTAMPED DENSITY OF 11 PCF.

THE ENTIRE COLUMN SHALL BE PROVIDED WITH INDIVIDUAL ENCASEMENT PROTECTION THE FULL LENGTH OF THE COLUMN ON ALL SIDES INCLUDING TOP OF COLUMN AND CONNECTIONS TO OTHER STRUCTURAL MEMBERS.

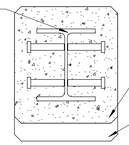
WIDE FLANGE STEEL COLUMN

RATED STEEL COLUMN

CL.3.A	FIRE RATING: 3 HOUR	DESIGN: UL# X-829 WF, X-827 TUBE SHAPES	S.T.C. RATING: N/A	LOAD BEARING
	-			

STEEL COLUMN, REFER TO STRUCTURAL DRAWINGS FOR SIZE, W8X28 (SHOWN) MIN. SIZE.

NOTE:
REFER TO IBC 2015 TABLE 721.5.1(7) FOR MINIMUM COVERAGE PER COLUMN SIZES.



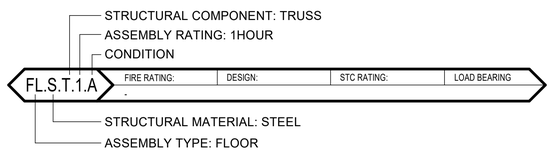
CAST-IN-PLACE CONCRETE, ENCASE COLUMN COMPLETE.

PROVIDE ADDITIONAL 2" CONCRETE COVERAGE WHERE COLUMN FACES DIRECTION OF TRAFFIC TRAVEL

3HR RATED STEEL COLUMN

CL.3.B	FIRE RATING: 3 HOUR	DESIGN: IBC 2015 TABLE 721.5.1	S.T.C. RATING: N/A	LOAD BEARING

FLOOR, ROOF ASSEMBLY TAG KEY



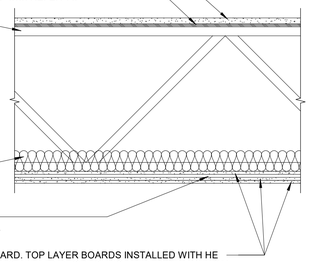
ABBREVIATION LIST

FL: FLOOR	S: STEEL	T: TRUSS
RF: ROOF		J: JOIST
		B: BEAM

3/4" "GYP-CRETE." COMP. STRENGTH TO BE 2500 PSI MIN.

APA RATED EXPOSURE 1 SHEATHING APPLIED PERPENDICULAR TO TOP OF TRUSSES WITH END JOINTS STAGGERED 4'-0". APPLY TO JOISTS WITH EXTERIOR GLUE & 6d RINGED SHANK NAILS 12" O.C. REFER TO STRUCTURAL.

2X4 WOOD FLOOR TRUSSES @ 24" O.C. MAX. WITH .040" THICK GALV. STEEL CONNECTOR PLATES WITH 5/16" LONG TEETH PROJECTING PERPENDICULAR TO PLANE OF PLATE. PLATE DESIGN VALUE SHALL BE BASED UPON A SAFETY FACTOR OF "4."



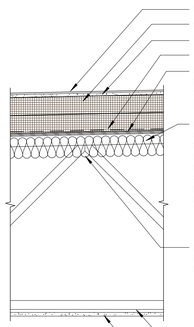
3-1/2" SOUND ATTENUATION BATT INSULATION. BATT INSULATION DRAPED OVER FURRING & GYPSUM PANEL MEMBRANE.

1/2" 25 GA. RESILIENT FURRING CHANNELS SPACED 12" O.C. PERPENDICULAR TO JOISTS.

(3) LAYERS OF 5/8" THICK 4' WIDE GYPSUM BOARD. TOP LAYER BOARDS INSTALLED WITH HE LONG DIMENSION PERPENDICULAR TO TRUSSES WITH END JOINTS LOCATED UNDER BOTTOM OF TRUSSES. END JOINTS IN ADJACENT ROWS SHALL BE STAGGERED ON ADJACENT TRUSSES. TOP LAYER BOARDS SECURED TO BOTTOM CHORD OF TRUSSES WITH 1 5/8" LONG TYPE S-12 BUGLE HEAD SCREWS, SPACED MAX. 8" OC SCREWS LOCATED 1-1/2" TO 2" AND 3/4" FROM SIDE AND END JOINTS, RESPECTIVELY. BOTTOM TWO LAYERS OF GYPSUM BOARD INSTALLED PERPENDICULAR TO FURRING CHANNELS WITH END JOINTS CENTERED ON FURRING CHANNELS. MIDDLE LAYER BOARDS SECURED TO EACH FURRING CHANNEL WITH 1 OR 1 1/4" LONG TYPE S-12 BUGLE HEAD STEEL SCREWS SPACED MAX. 8" OC SCREWS LOCATED 1 1/2" TO 2" AND 5/8" TO 3/4" FROM SIDE AND END JOINTS, RESPECTIVELY. END JOINTS AND SIDE JOINTS OF THE FACE LAYER BOARDS SHALL BE STAGGERED A MIN. OF 16" FROM THE JOINTS IN THE MIDDLE LAYER. IF END JOINTS OF THE FACE LAYER BOARDS ARE NOT CENTERED ON THE FURRING CHANNELS, THE END OF BOARDS AT THE END JOINT SHALL BE ATTACHED TO THE MIDDLE LAYER BOARDS WITH 1 1/2" LONG TYPE G STEEL SCREWS SPACED 8" OC AND LOCATED 1 1/2" FROM THE END JOINT.

2 HOUR RATED FLOOR

FL.W.T.2.X	FIRE RATING: 2 HR	DESIGN: UL L-577	STC RATING: N/A	LOAD BEARING



FULLY ADHERED SINGLE-PLY ROOFING SYSTEM

(2) LAYERS 3" RIGID INSULATION

1/2" DENS DECK PRIME

10 MIL POLY VAPOR RETARDER

APA RATED EXPOSURE 1 SHEATHING APPLIED PERPENDICULAR TO TOP OF TRUSSES WITH END JOINTS STAGGERED 4'-0". APPLY TO TRUSSES WITH EXTERIOR GLUE & 6d RINGED SHANK NAILS 12" O.C. REFER TO STRUCTURAL.

PITCHED TOP CHORD 2X4 WOOD ROOF TRUSSES @ 24" O.C. MAX. SECURE TRUSSES TOGETHER WITH NO. 20 MSG GALV. STEEL TRUSS PLATES. PLATES HAVE T/16" LONG TEETH PROJECTING PERPENDICULAR TO PLANE OF PLATE. THE TEETH ARE IN PAIRS FACING EACH OTHER, FORMING A PLIT-TOOTH-TYPE PLATE. THE PAIRS ARE REPEATED ON APPROX. 7/8" CENTERS WITH 4 ROWS OF TEETH PER INCH OR PLATE WIDTH.

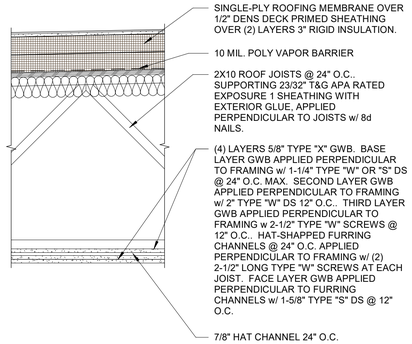
MIN 24" AROUND PERIMETER R-21 UNFACED FIBERGLASS INSULATION, MECHANICALLY FASTENED TO DECK.

1/2" RESILIENT FURRING CHANNELS SPACED 16" O.C. MAX (12 " O.C. IF INSULATION DRAPED OVER CHANNELS) CHANNELS SECURED TO EACH TRUSS WITH 1-1/4" LONG TYPE "S" STEEL SCREWS. CHANNELS OVERLAPPED 4" AT SPLICES. CHANNELS ORIENTATED OPPOSITE AT WALL BOARD END JOINTS (SPACED 6" O.C..)

5/8" TYPE "C" GWB FACE LAYER, ATTACHED WITH LONG DIMENSION PERPENDICULAR TO RESILIENT CHANNELS WITH 1"LONG TYPE "S" DWS SPACED 8" O.C. AND LOCATED A MIN. OF 1/2" FROM SIDE JOINTS AND 3" FROM END JOINTS. AT END JOINTS, TWO RESILIENT CHANNEL ARE USED, EXTENDING A MIN. OF 6" BEYOND BOTH ENDS OF THE JOINT.

1HR RATED ROOF

RF.W.T.1.A	FIRE RATING: 1 HOUR	DESIGN: UL# P-522	S.T.C. RATING: N/A	LOAD BEARING



SINGLE-PLY ROOFING MEMBRANE OVER 1/2" DENS DECK PRIMED SHEATHING OVER (2) LAYERS 3" RIGID INSULATION.

10 MIL. POLY VAPOR BARRIER

2X10 ROOF JOISTS @ 24" O.C.. SUPPORTING 23/32" T&G APA RATED EXPOSURE 1 SHEATHING WITH EXTERIOR GLUE, APPLIED PERPENDICULAR TO JOISTS w/ 8d NAILS.

(4) LAYERS 5/8" TYPE "X" GWB. BASE LAYER GWB APPLIED PERPENDICULAR TO FRAMING w/ 1-1/4" TYPE "W" OR "S" DS @ 24" O.C. MAX. SECOND LAYER GWB APPLIED PERPENDICULAR TO FRAMING w/ 2" TYPE "W" DS 12" O.C.. THIRD LAYER GWB APPLIED PERPENDICULAR TO FRAMING w 2-1/2" TYPE "W" SCREWS @ 12" O.C.. HAT-SHAPPED FURRING CHANNELS @ 24" O.C. APPLIED PERPENDICULAR TO FRAMING w/ (2) 2-1/2" LONG TYPE "W" SCREWS AT EACH JOIST. FACE LAYER GWB APPLIED PERPENDICULAR TO FURRING CHANNELS w/ 1-5/8" TYPE "S" DS @ 12" O.C.

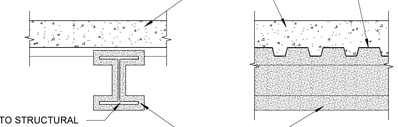
7/8" HAT CHANNEL 24" O.C.

2 HOUR RATED ROOF

RF.W.J.2.X	FIRE RATING: 2 HOUR	DESIGN: GA RC 2750	S.T.C. RATING	LOAD BEARING

STEEL FLOOR DECK - COMPOSITE 1-1/2" DEEP GALVANIZED FLUTED UNITS. MINIMUM GAUGES ARE 22 MSG FOR FLUTED DECK. UNITS WELDED TO SUPPORTS A MAX. OF 12" O.C. UNLESS NOTED OTHERWISE. ADJACENT UNITS BUTTON-PUNCHED OR WELDED TOGETHER 36" O.C. MAX. AT SIDE JOINTS. REFER TO STRUCTURAL DRAWINGS.

LIGHT WEIGHT CONCRETE, EXPANDED SHALE OR SHALE AGGREGATE, 114 TO 120 PCF, 3000 PSI COMPRESSIVE STRENGTH, VIBRATED, 4%-7% AIR ENTRAINED



STEEL BEAM, REFER TO STRUCTURAL DRAWINGS FOR SIZE, W8X28 (SHOWN) MIN. SIZE.

SPRAY APPLIED FIRE RESISTIVE MATERIAL APPLIED BY SPRAYING WITH WATER IN ONE OR MORE COATS TO MIN. THICKNESS AS INDICATED, TO STEEL SURFACES WHICH ARE FREE OF DIRT, OIL OR SCALE. NO TAMPING REQUIRED. ADHESIVES ARE REQUIRED FOR 22 GA. FLUTED UNITS, MIN. AVG. DENSITY OF FIBER IS 13 pcf AND THE MIN. IN VALUE IS 11 pfc FOR TYPES II AND D-C/F. MIN. AVG. AND IN DENSITIES OF 22 AND 19 pcf, RESPECTIVELY, FOR TYPE HP.

FLOOR/CEILING ASSEMBLY

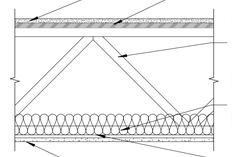
RATED FLOOR

FL.S.B.3.A	FIRE RATING: 3 HOUR	DESIGN: UL#D-902 (6)	S.T.C. RATING	LOAD BEARING

FL.S.B 2.A	FIRE RATING: 2 HOUR	DESIGN: UL#D-902 (6)	S.T.C. RATING	LOAD BEARING

3/4" "GYP-CRETE." COMP. STRENGTH TO BE 2500 PSI MIN.

APA RATED EXPOSURE 1 SHEATHING APPLIED PERPENDICULAR TO TOP OF TRUSSES WITH END JOINTS STAGGERED 4'-0". APPLY TO TRUSSES WITH EXTERIOR GLUE & 6d RINGED SHANK NAILS 12" O.C. REFER TO STRUCTURAL.



2X4 WOOD FLOOR TRUSSES @ 24" O.C. MAX. WITH .040" THICK GALV. STEEL CONNECTOR PLATES WITH 5/16" LONG TEETH PROJECTING PERPENDICULAR TO PLANE OF PLATE. PLATE DESIGN VALUE SHALL BE BASED UPON A SAFETY FACTOR OF "4."

3-1/2" SOUND ATTENUATION BATT INSULATION. BATT INSULATION DRAPED OVER FURRING & FRICTION FIT BETWEEN TRUSSES.

1/2" RESILIENT FURRING CHANNELS SPACED 12" O.C. MAX. CHANNELS SECURED TO EACH TRUSS WITH 1-1/4" LONG TYPE "S" STEEL SCREWS. CHANNELS OVERLAPPED 4" AT SPLICES. CHANNELS ORIENTATED OPPOSITE AT WALL BOARD END JOINTS (SPACED 6" O.C..)

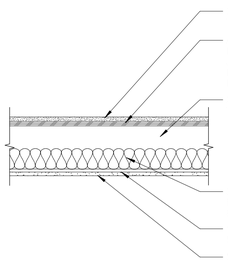
5/8" TYPE "C" GWB FACE LAYER, ATTACHED WITH LONG DIMENSION PERPENDICULAR TO 1/2" RESILIENT FURRING CHANNELS;S WITH 1"LONG TYPE "S" DW;S SPACED 8" O.C. AND LOCATED A MIN. OF 1/2" FROM SIDE JOINTS AND 3" FROM END JOINTS. AT END JOINTS, TWO RESILIENT CHANNEL ARE USED, EXTENDING A MIN. OF 6" BEYOND BOTH ENDS OF THE JOINT.

NOTE:
1. AT "MOLD-TOUGH" AREA CEILINGS
   A. USE "MOLD-TOUGH" 5/8" TYPE "C" GWB

1HR RATED FLOOR

FL.W.T.1.A	FIRE RATING: 1 HOUR	DESIGN: UL# L-521	S.T.C. RATING: MIN 54	LOAD BEARING
	IIC RATING: MIN 50			

FLOOR / CEILING ASSEMBLY RATING



3/4" "GYP-CRETE." COMP. STRENGTH TO BE 2500 PSI MIN.	10 MIN.
APA RATED EXPOSURE 1 SHEATHING APPLIED PERPENDICULAR TO TOP OF TRUSSES WITH END JOINTS STAGGERED 4'-0". APPLY TO TRUSSES WITH EXTERIOR GLUE & 6d RINGED SHANK NAILS 12" O.C. REFER TO STRUCTURAL.	15 MIN.
2X8 (MIN.) FLOOR JOISTS @ 16" O.C. REFER TO STRUCTURAL	10 MIN.
3-1/2" SOUND ATTENUATION BATT INSULATION BATT INSULATION (MAX.) DRAPED OVER FURRING & FRICTION FIT BETWEEN TRUSSES.	
1/2" 25 GA. RESILIENT FURRING CHANNELS SPACED 12" O.C. PERPENDICULAR TO JOISTS.	
5/8" TYPE "C" GWB INSTALLED WITH LONG DIM. PERPENDICULAR TO JOISTS WITH STAGGERED JOINTS. (INSTALL 5/8" DENS ARMOR PLUS IN PRE-ROCK CONDITIONS.)	40 MIN.
	TOTAL = 75 MIN

1HE RATED FLOOR

FL.W.J.1.A	FIRE RATING: 1 HOUR	DESIGN: PRESCRIPTIVE PER IBC SECTION 721.6	S.T.C. RATING: MIN 54	LOAD BEARING
	IIC RATING: MIN. 50			

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No.	Description	Date

42-44 3rd Street
Dover, NH

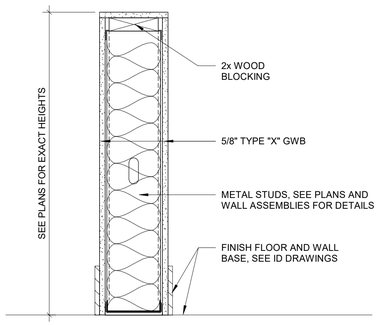
FLOOR, CEILING AND COLUMN ASSEMBLIES

Project number	-
Date	06.14.24
Drawn by	Author
Checked by	Checker

A0.03

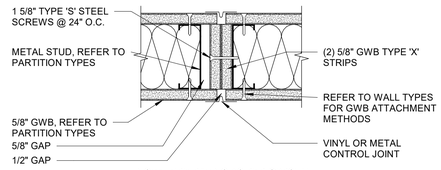
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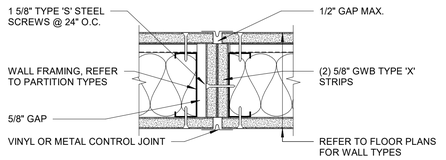
9 HALF WALL

SCALE: 1 1/2" = 1'-0"



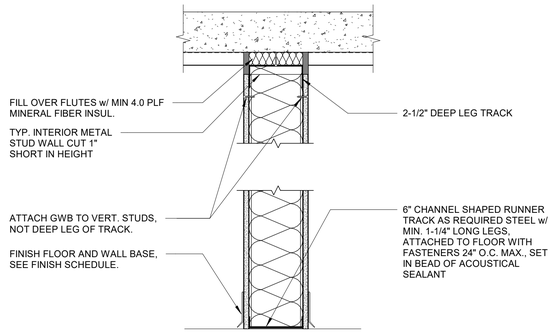
8 GYPSUM CONTROL JOINT AT WALL

SCALE: 3" = 1'-0"



4 GYPSUM CONTROL JOINT AT METAL WALL W/ RESILIANT

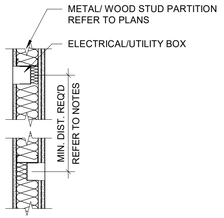
SCALE: 3" = 1'-0"



UNRATED

10 RESILIANT CHANNEL DETAIL

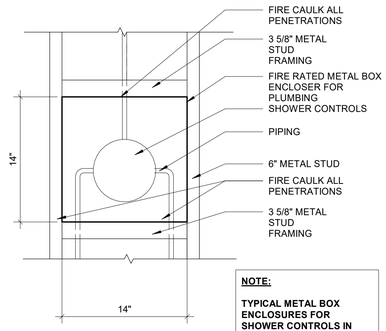
SCALE: 3" = 1'-0"



NOTES:
1. STACK MULTIPLE BOXES VERTICALLY WHEN ON SAME SIDE OF WALL AS REQUIRED BY INTERIOR ELEVATIONS.
2. BOXES LOCATED ON OPPOSITE SIDES OF 1 & 2 HOUR RATED WALLS OR PARTITIONS SHALL BE SEPARATED BY A MINIMUM HORIZONTAL DISTANCE OF 24". THE MINIMUM SEPARATION DISTANCE MAY BE REDUCED WHEN "WALL OPENING PROTECTIVE MATERIALS" ARE INSTALLED ACCORDING TO THE REQUIREMENTS OF UL "CLIV" ASSEMBLY CLASSIFICATIONS. THE SURFACE AREA OF THE INDIVIDUAL BOXES SHALL NOT EXCEED 16 SQ. IN. THE AGGREGATE SURFACE AREA OF THE BOXES SHALL NOT EXCEED 100 SQ. IN. PER 100 S.F. OF WALL SURFACE.
3. IN ADDITION TO THE REQUIREMENTS OF NOTE 2, PUTTY PADS SHALL BE INSTALLED IN ACCORDANCE WITH UL "CLIV" ASSEMBLY CLASSIFICATIONS AT ALL ELECTRICAL/UTILITY BOXES LOCATED IN GUEST ROOM AND RESIDENT UNIT DEMISING WALLS, UNIT CORRIDOR WALLS, UNIT CEILINGS, OFFICE WALLS AND MEETING ROOM WALLS FOR SOUND ATTENUATION PURPOSES.

7 ELECTRICAL OUTLET PLAN DETAIL

SCALE: 1" = 1'-0"

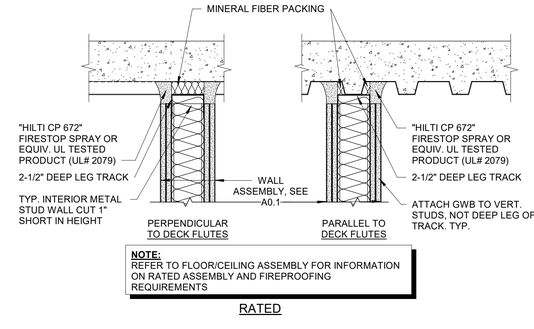


NOTE:

TYPICAL METAL BOX ENCLOSURES FOR SHOWER CONTROLS IN RATED WALLS ONLY.

5 SHOWER CONTROL AT RATED WALL

SCALE: 1 1/2" = 1'-0"

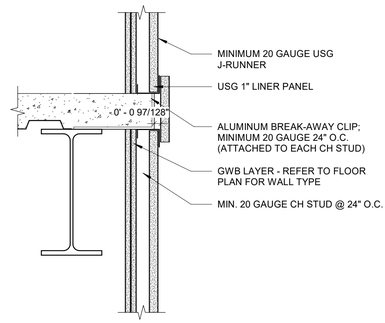


NOTE:
REFER TO FLOOR/CEILING ASSEMBLY FOR INFORMATION ON RATED ASSEMBLY AND FIREPROOFING REQUIREMENTS

RATED

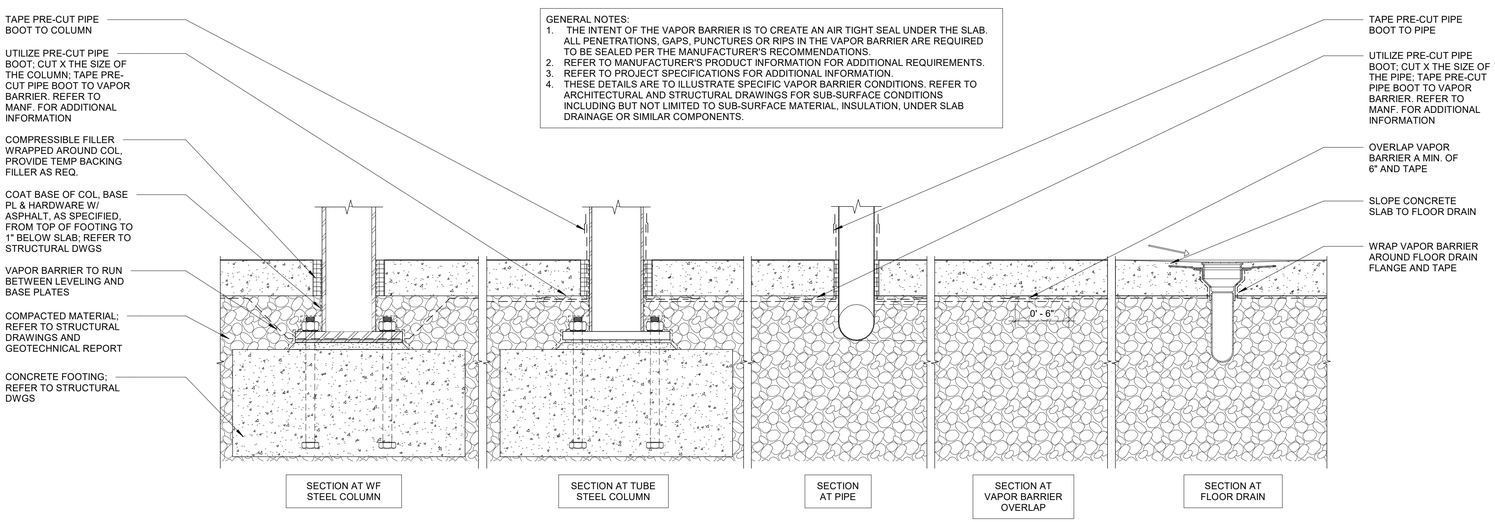
1 ASSEMBLY - LIGHT GAUGE UNRATED TO CONCRETE DECK

SCALE: 1 1/2" = 1'-0"



2 TYPICAL LIGHT GAUGE RATED WALL TO CONCRETE DECK

SCALE: 1 1/2" = 1'-0"



6 SEC DTL - SOG VAPOR BARRIER TRANSITIONS

SCALE: 1 1/2" = 1'-0"

3 SHAFTWALL AT CONCRETE FLOOR

SCALE: 1 1/2" = 1'-0"

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ELECTRICAL
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Address
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e-mail

No.	Description	Date

42-44 3rd Street
Dover, NH

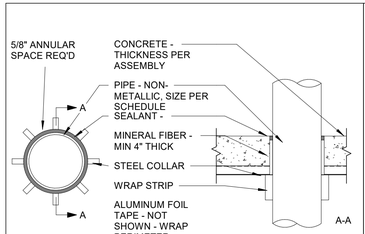
ASSEMBLY DETAILS

Project number	-
Date	06.14.24
Drawn by	MJH
Checked by	Checker

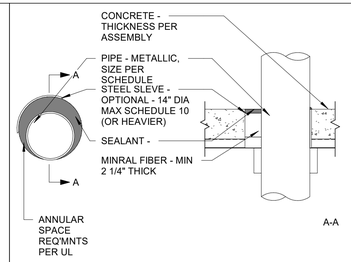
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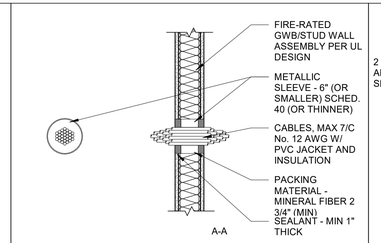
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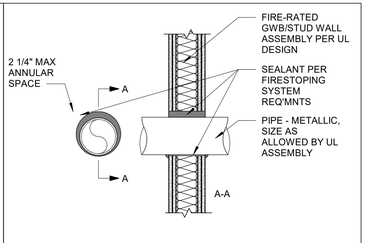
RATING: 2 HR	PENETRANT - PIPE - NON-METALLIC @ FLOOR ASSEMBLY
UL#: C-AJ-2362	



RATING: 3 HR	PENETRANT - PIPE - NON-METALLIC @ FLOOR ASSEMBLY
UL#: C-AJ-1353	

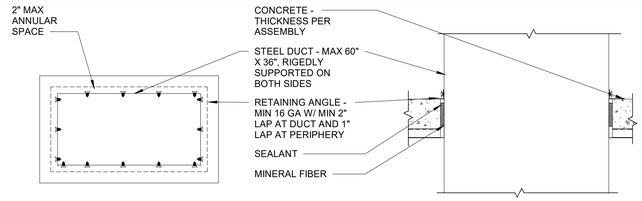


RATING: 1 HR	PENETRANT - CABLES @ RATED PARTITIOM / WALL
UL#: W-L-3046	

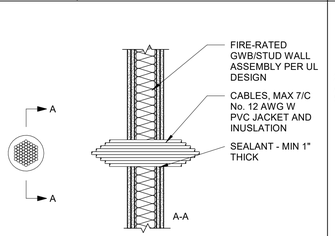


NOTE: FOR 2 HOUR ASSEMBLY ADDITIONAL LAYER OF GWB PER UL PARTITION DESIGN

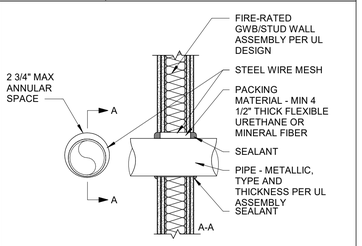
RATING: 1 OR 2 HR	PENETRANT - PIPE - NON-METALLIC @ RATED PARTITION / WALL
UL#: W-L-1054	



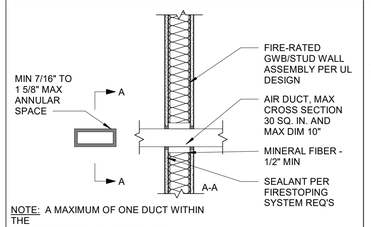
RATING: 1&2 HR	PENETRANT - PIPE - NON-METALLIC @ RATED PARTITION / WALL
UL#: W-L-2098	



RATING: 2 HR	PENETRANT - CABLES @ RATED PARTITIOM / WALL
UL#: W-L-3047	



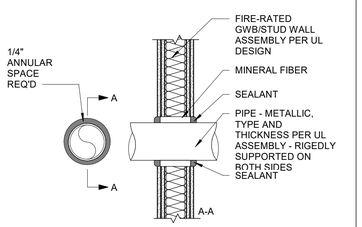
RATING: 2 HR	PENETRANT - PIPE - NON-METALLIC @ RATED PARTITION / WALL
UL#: W-L-1058	



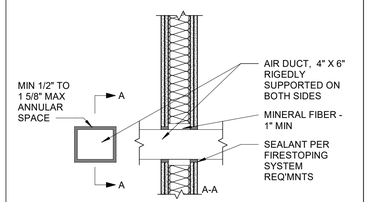
NOTE: A MAXIMUM OF ONE DUCT WITHIN THE THROUGH OPENING. VERIFY MAX. OPENING SIZE OF DUCT METAL GAUGE. WITH MANUFACTURES PRINTED MATERIAL

PROVIDE FIRE DAMPERS AS REQ'D.

RATING: 1 HR	PENETRANT - METAL DUCT @ RATED PARTITION / WALL
UL#: W-L-7001	



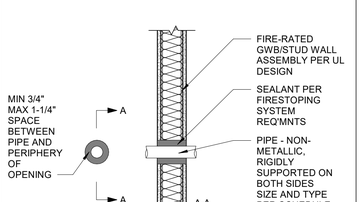
RATING: 2 HR	PENETRANT - PIPE - NON-METALLIC @ RATED PARTITION / WALL
UL#: W-L-1068	



NOTE: A MAXIMUM OF ONE DUCT WITHIN THE THROUGH OPENING. VERIFY MAX. OPENING SIZE OF DUCT METAL GAUGE. WITH MANUFACTURES PRINTED MATERIAL

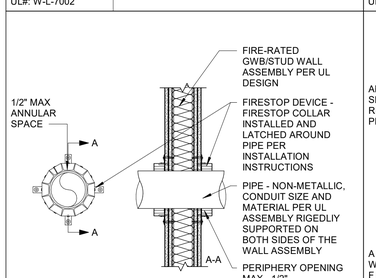
PROVIDE FIRE DAMPERS AS REQ'D.

RATING: 2 HR	PENETRANT - METAL DUCT @ RATED PARTITION / WALL
UL#: W-L-7002	

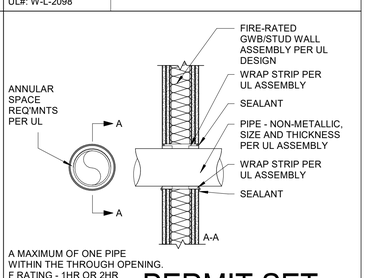


NOTE: FOR 2 HOUR ASSEMBLY ADDITIONAL LAYER OF GWB PER UL PARTITION DESIGN

RATING: 1&2 HR	PENETRANT - PIPE - NON-METALLIC @ RATED PARTITION / WALL
UL#: W-L-2098	



RATING: 1&2 HR	PENETRANT - PIPE - NON-METALLIC @ RATED PARTITION / WALL
UL#: W-L-2078	



A MAXIMUM OF ONE PIPE WITHIN THE THROUGH OPENING.
F RATING - 1HR OR 2HR
T RATING - 0HR

RATING: 1&2 HR	PENETRANT - PIPE - NON-METALLIC @ RATED PARTITION / WALL
UL#: W-L-2406	

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ELECTRICAL
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No.	Description	Date

42-44 3rd Street
Dover, NH

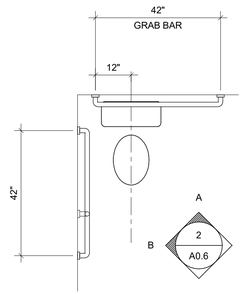
RATED PENETRATION DETAILS

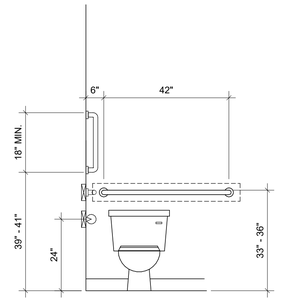
Project number	-
Date	06.14.24
Drawn by	Author
Checked by	Checker

A0.11

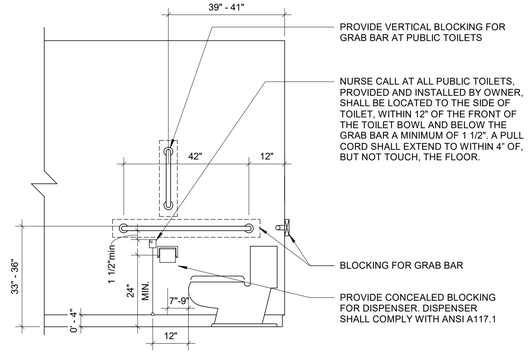
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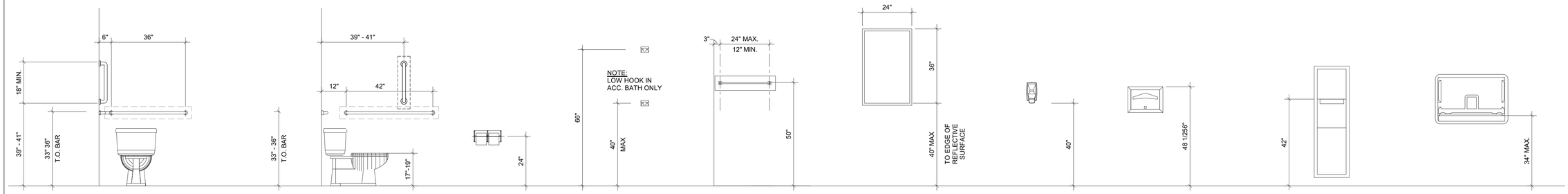
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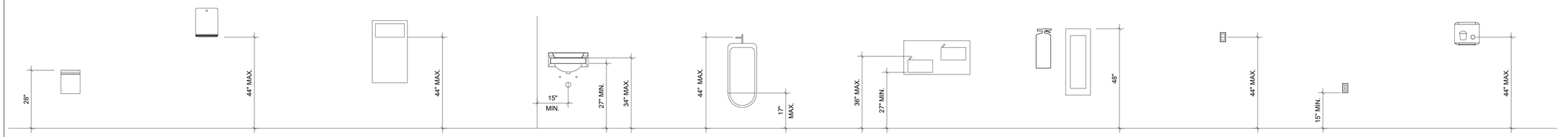
B

1 TYPICAL GRAB BAR BLOCKING & MOUNTING AT PUBLIC TOILETS

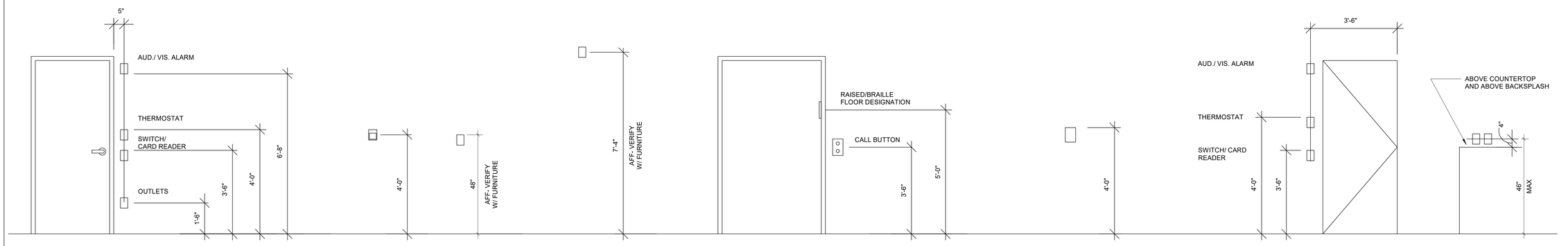
SCALE: 1/2" = 1'-0"



36" SHORT SURFACE MOUNTED GRAB BAR | 42" LONG SURFACE MOUNTED GRAB BAR | TOILET PAPER DISPENSER | SURFACE MOUNTED ROBE HOOKS | TOWEL BAR SURFACE MOUNTED | SURFACE MOUNTED MIRROR WITH SS FRAME | WALL MOUNTED SOAP DISPENSOR | SEAT COVER DISP | PAPER TOWEL TRASH RECEPTACLE | WALL MOUNTED BABY CHANGING STATION



SANITARY NAPKIN DISPOSAL | PAPER TOWEL DISPENSER | SURFACE MOUNTED TRASH RECEPTACLE | ACCESSIBLE WALL MOUNTED SINK | ACCESSIBLE WALL MOUNTED URINAL | ACCESSIBLE WALL MOUNTED DRINKING FOUNTAIN | TYPICAL FIRE EXTINGUISHER & CABINET | TYPICAL WALL SWITCH | TYPICAL RECEPTACLE | SURFACE MOUNTED HAND DRYER



MISCELLANEOUS CONTROLS | KEY PAD | FURNITURE/ TV/ DESK/ PWR/ DATA | POWER/ DUPLEX OUTLET FOR FURN. LIGHTING | ELEVATOR | FIRE ALARM PULL STATION | DOOR IN OPEN POSITION | OUTLETS @ COUNTERTOPS

2 DIAGRAM OF TYPICAL MOUNTING HEIGHT OF ACCCESSORIES AND DEVICES

SCALE: 1/2" = 1'-0"

PERMIT SET

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No.	Description	Date

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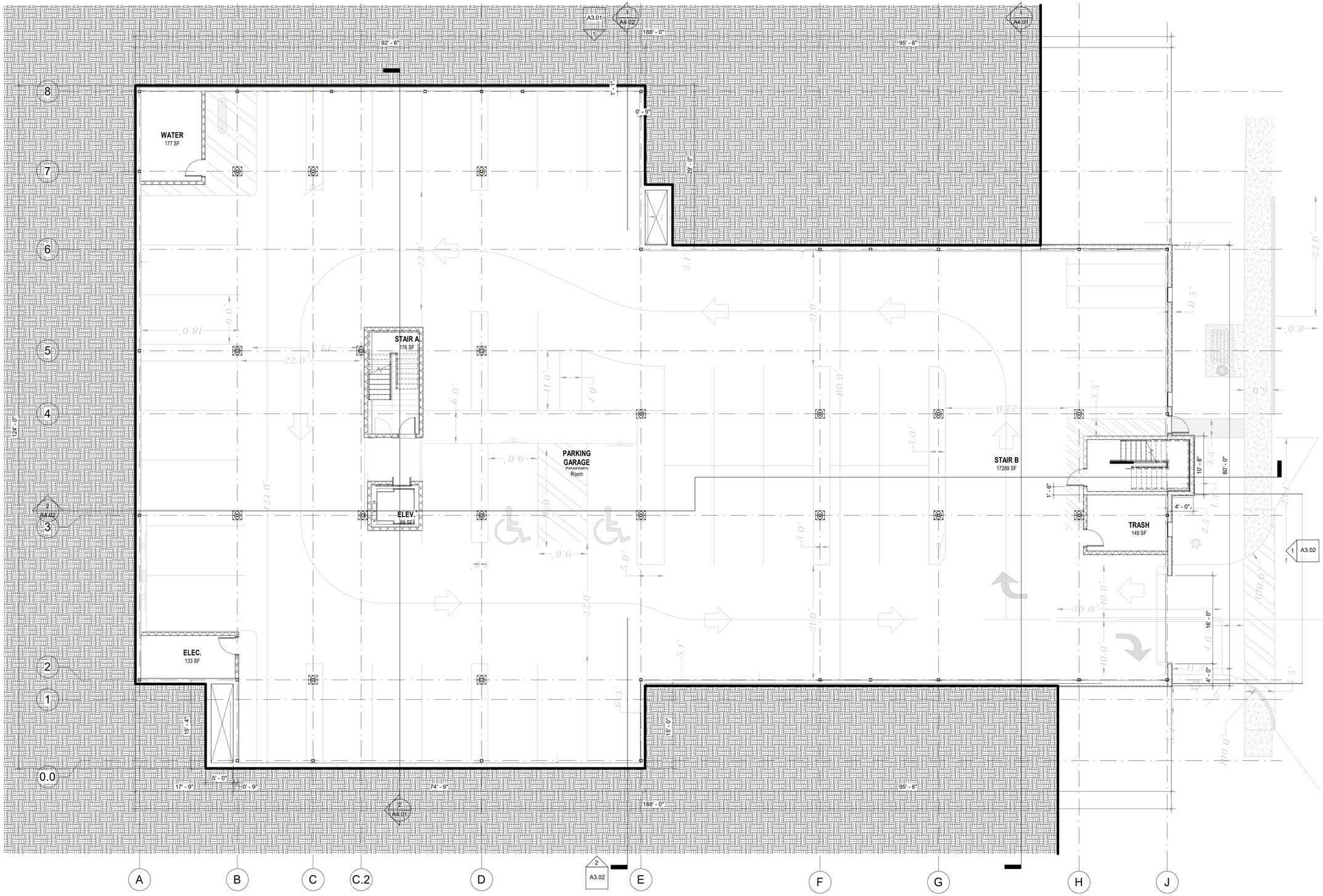
TYPICAL MOUNTING HEIGHTS

Project number	-
Date	06.14.24
Drawn by	Author
Checked by	Checker

A0.12

Scale	1/2" = 1'-0"

6/14/2024 4:03:04 PM



1 OVERALL FLOOR PLAN -0 PARKING GARAGE

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A3.01

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ELECTRICAL
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No.	Description	Date

42-44 3rd Street
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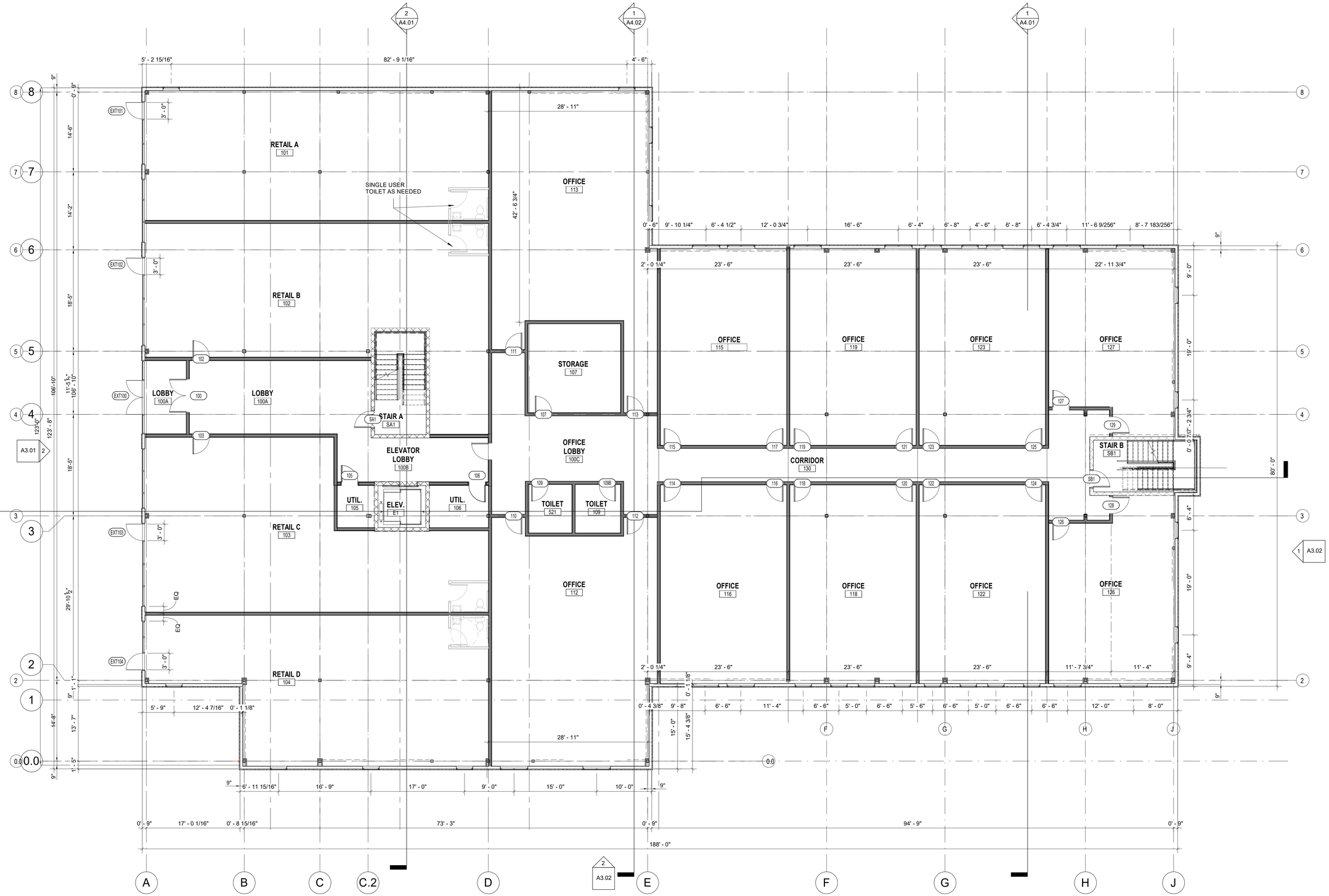
OVERALL
GARAGE PLAN

Project number	-
Date	06.14.24
Drawn by	MJH
Checked by	Checker

A1.00

Scale 1/8" = 1'-0"

6/14/2024 4:03:04 PM



1 OVERALL FLOOR PLAN - 1ST FLOOR

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A3.01

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No.	Description	Date

42-44 3rd Street
Dover, NH

OVERALL FIRST FLOOR

Project number	-
Date	06.14.24
Drawn by	NI
Checked by	Checker

A1.01

Scale 1/8" = 1'-0"

6/14/2024 4:03:05 PM



2 OVERALL FLOOR PLAN - 2ND FLOOR

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A3.01

PERMIT SET

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No.	Description	Date

42-44 3rd Street
Dover, NH

OVERALL
SECOND FLOOR

Project number	-
Date	06.14.24
Drawn by	NI
Checked by	Checker

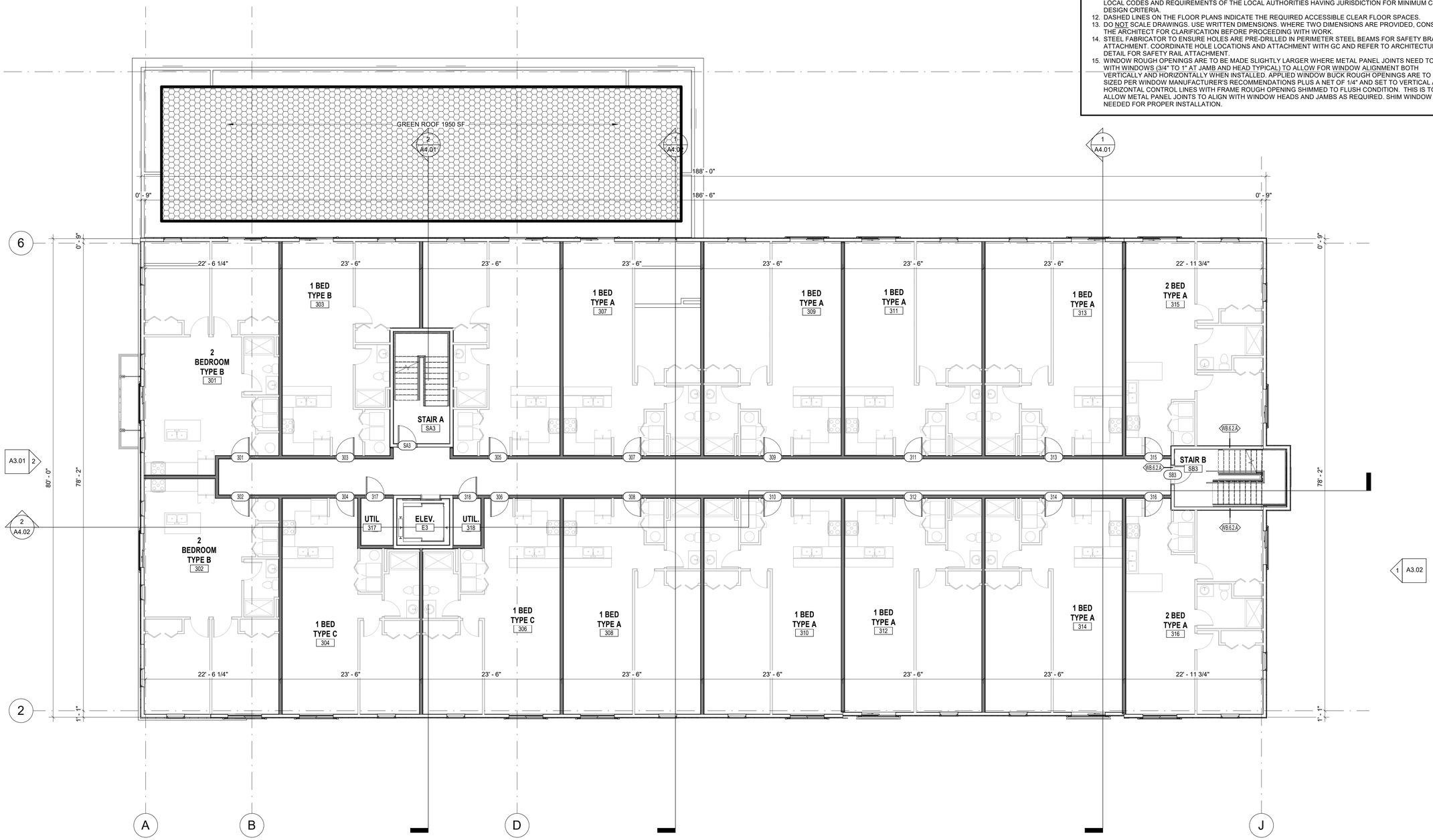
A1.02

Scale 1/8" = 1'-0"

6/14/2024 4:03:06 PM

GENERAL NOTES - FLOOR PLAN

1. FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. PROMPTLY NOTIFY THE ARCHITECT OF ANY ERRORS, OMISSIONS, INCONSISTENCIES OR OTHER PROBLEMS IMMEDIATELY UPON DISCOVERY, AND BEFORE PROCEEDING WITH WORK.
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4. FOR ENLARGED AREAS AND UNIT PLANS REFER TO SHEETS A2 SERIES OF DRAWINGS.
5. FOR ASSEMBLIES REFER TO SHEETS A0 SERIES OF DRAWINGS.
6. FOR DOOR AND WINDOW SCHEDULES AND DETAILS REFER TO SHEETS A6 SERIES OF DRAWINGS.
7. PROVIDE MOISTURE RESISTANT GYP. BOARD AT ALL BATHROOM WET WALLS AND CEILINGS, TYPICAL.
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12. DASHED LINES ON THE FLOOR PLANS INDICATE THE REQUIRED ACCESSIBLE CLEAR FLOOR SPACES.
13. DO NOT SCALE DRAWINGS. USE WRITTEN DIMENSIONS. WHERE TWO DIMENSIONS ARE PROVIDED, CONSULT THE ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING WITH WORK.
14. STEEL FABRICATOR TO ENSURE HOLES ARE PRE-DRILLED IN PERIMETER STEEL BEAMS FOR SAFETY BRACKET ATTACHMENT. COORDINATE HOLE LOCATIONS AND ATTACHMENT WITH GC AND REFER TO ARCHITECTURAL DETAIL FOR SAFETY RAIL ATTACHMENT.
15. WINDOW ROUGH OPENINGS ARE TO BE MADE SLIGHTLY LARGER WHERE METAL PANEL JOINTS NEED TO ALIGN WITH WINDOWS (3/4" TO 1" AT JAMB AND HEAD TYPICAL) TO ALLOW FOR WINDOW ALIGNMENT BOTH VERTICALLY AND HORIZONTALLY WHEN INSTALLED. APPLIED WINDOW BUCK ROUGH OPENINGS ARE TO BE SIZED PER WINDOW MANUFACTURER'S RECOMMENDATIONS PLUS A NET OF 1/4" AND SET TO VERTICAL AND HORIZONTAL CONTROL LINES WITH FRAME ROUGH OPENING SHIMMED TO FLUSH CONDITION. THIS IS TO ALLOW METAL PANEL JOINTS TO ALIGN WITH WINDOW HEADS AND JAMBS AS REQUIRED. SHIM WINDOW AS NEEDED FOR PROPER INSTALLATION.



1 OVERALL FLOOR PLAN - 3RD FLOOR

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A3.01

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No.	Description	Date

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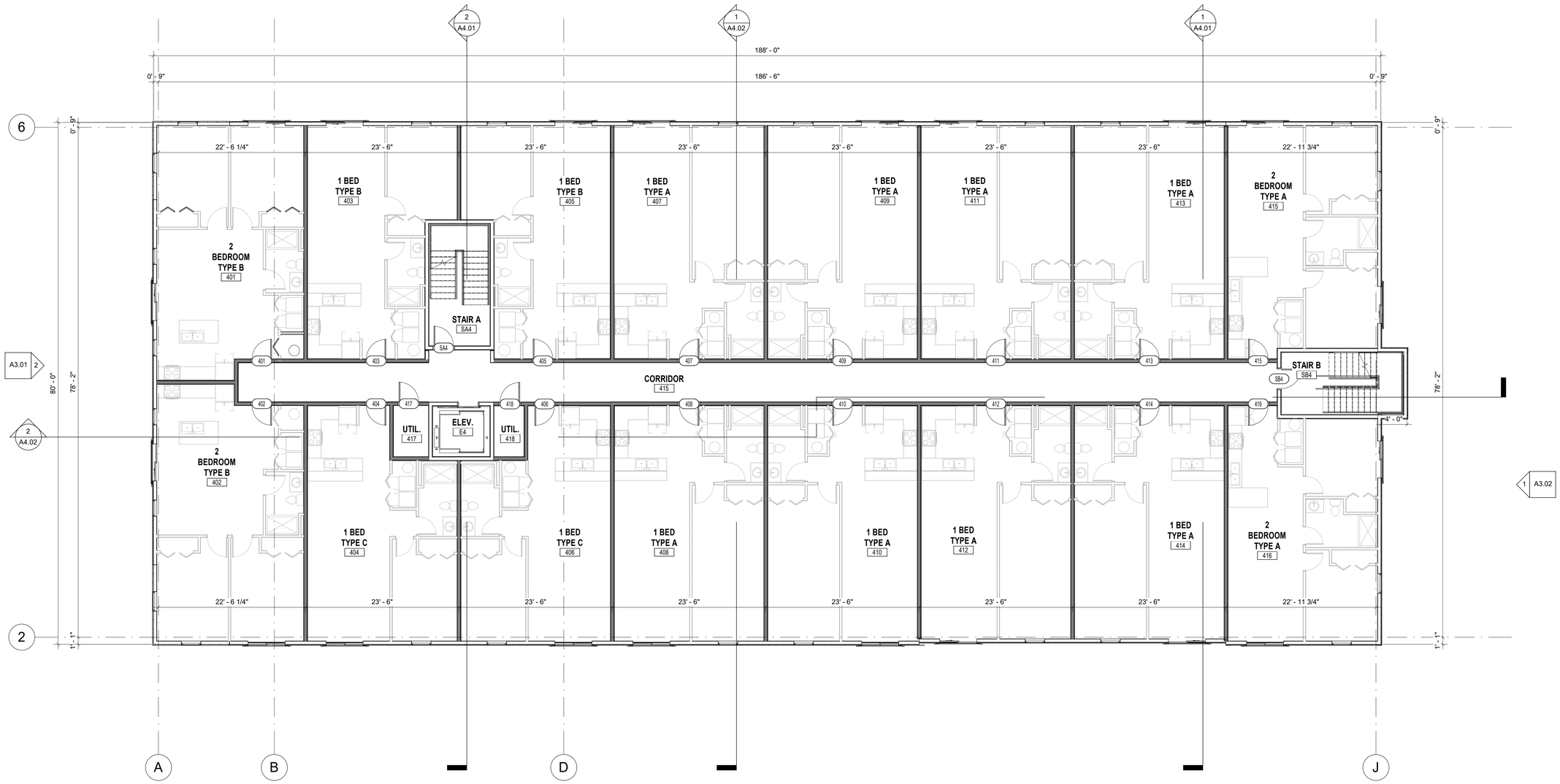
OVERALL THIRD FLOOR

Project number	-
Date	06.14.24
Drawn by	MJH
Checked by	NI
A1.03	
Scale	1/8" = 1'-0"

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GENERAL NOTES - FLOOR PLAN

1. FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. PROMPTLY NOTIFY THE ARCHITECT OF ANY ERRORS, OMISSIONS, INCONSISTENCIES OR OTHER PROBLEMS IMMEDIATELY UPON DISCOVERY, AND BEFORE PROCEEDING WITH WORK.
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1 OVERALL FLOOR PLAN - 4TH FLOOR

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A3.01

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ELECTRICAL
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Fax
e-mail

No.	Description	Date

42-44 3rd Street
Dover, NH

OVERALL
FOURTH FLOOR

Project number	-
Date	06.14.24
Drawn by	MJH
Checked by	NI

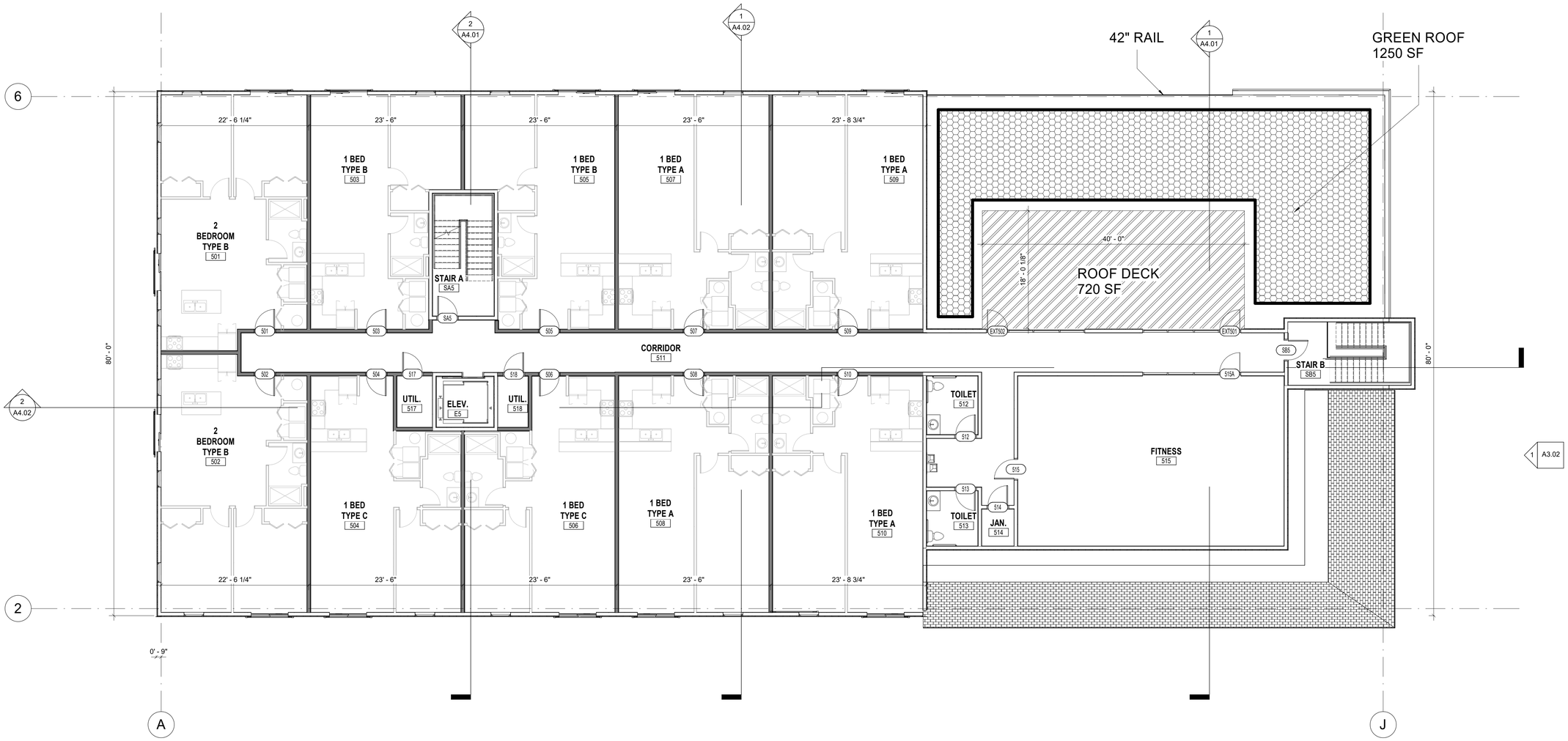
A1.04

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11. DESIGN ENGINEERS, SUB-CONTRACTORS AND THE GENERAL CONTRACTOR SHALL VERIFY COMPLIANCE WITH LOCAL CODES AND REQUIREMENTS OF THE LOCAL AUTHORITIES HAVING JURISDICTION FOR MINIMUM CODE DESIGN CRITERIA.
12. DASHED LINES ON THE FLOOR PLANS INDICATE THE REQUIRED ACCESSIBLE CLEAR FLOOR SPACES.
13. DO NOT SCALE DRAWINGS. USE WRITTEN DIMENSIONS. WHERE TWO DIMENSIONS ARE PROVIDED, CONSULT THE ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING WITH WORK.
14. STEEL FABRICATOR TO ENSURE HOLES ARE PRE-DRILLED IN PERIMETER STEEL BEAMS FOR SAFETY BRACKET ATTACHMENT. COORDINATE HOLE LOCATIONS AND ATTACHMENT WITH GC AND REFER TO ARCHITECTURAL DETAIL FOR SAFETY RAIL ATTACHMENT.
15. WINDOW ROUGH OPENINGS ARE TO BE MADE SLIGHTLY LARGER WHERE METAL PANEL JOINTS NEED TO ALIGN WITH WINDOWS (3/4" TO 1" AT JAMB AND HEAD TYPICAL) TO ALLOW FOR WINDOW ALIGNMENT BOTH VERTICALLY AND HORIZONTALLY WHEN INSTALLED. APPLIED WINDOW BUCK ROUGH OPENINGS ARE TO BE SIZED PER WINDOW MANUFACTURER'S RECOMMENDATIONS PLUS A NET OF 1/4" AND SET TO VERTICAL AND HORIZONTAL CONTROL LINES WITH FRAME ROUGH OPENING SHIMMED TO FLUSH CONDITION. THIS IS TO ALLOW METAL PANEL JOINTS TO ALIGN WITH WINDOW HEADS AND JAMBS AS REQUIRED. SHIM WINDOW AS NEEDED FOR PROPER INSTALLATION.



1 OVERALL FLOOR PLAN - 5TH FLOOR

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A3.01

PERMIT SET

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ELECTRICAL
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Phone
Fax
e-mail

No.	Description	Date

42-44 3rd Street
Dover, NH

OVERALL FIFTH FLOOR

Project number	-
Date	06.14.24
Drawn by	MJH
Checked by	NI

A1.05

Scale 1/8" = 1'-0"

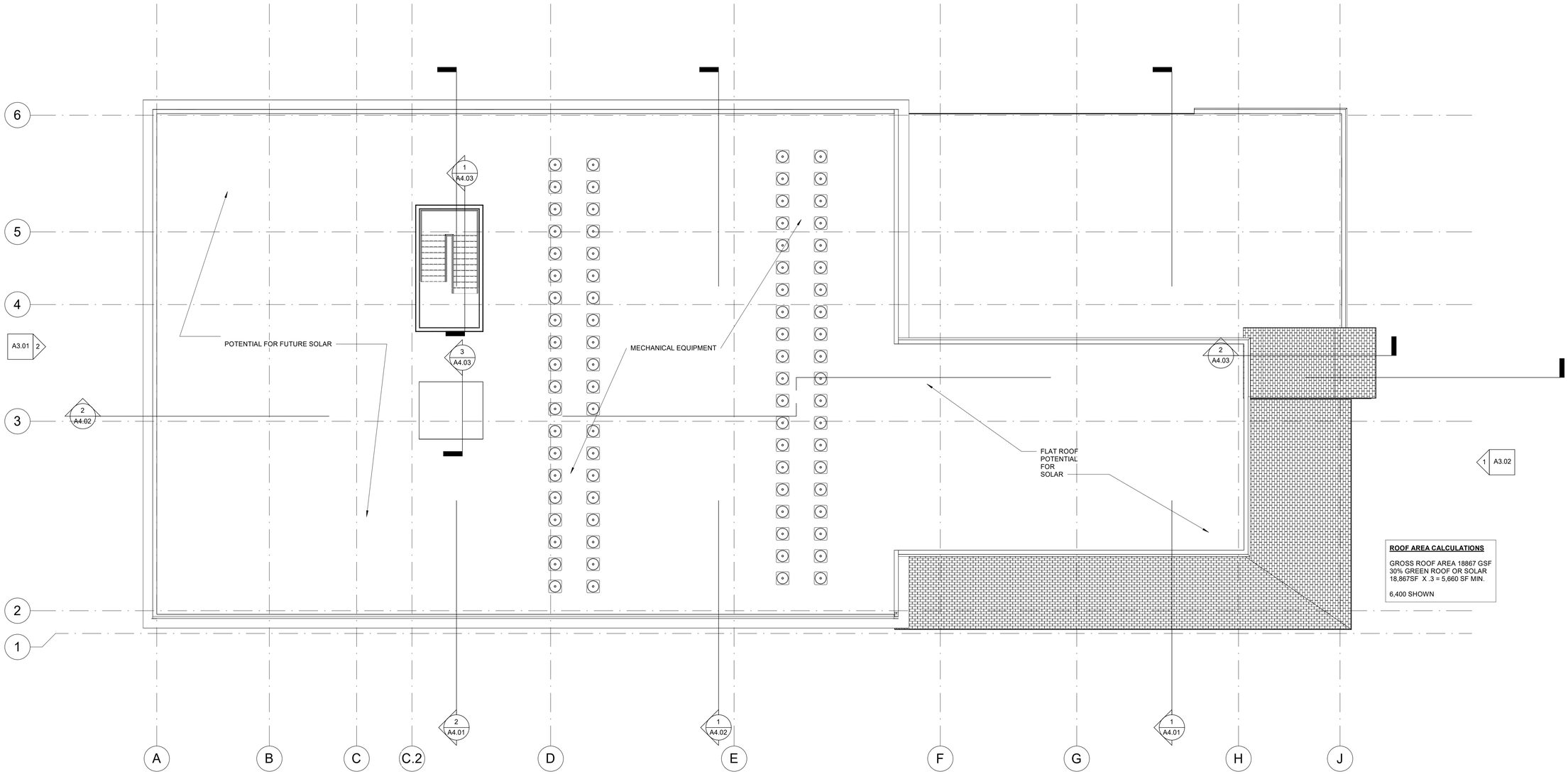
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GENERAL NOTES - ROOF PLAN

1. PLAN DOES NOT INDICATE ALL REQUIRED ROOF PENETRATIONS (VENTS, EXHAUST, ETC.).PENETRATIONS ARE TO BE LOCATED ON THE "BACK SIDE" OF ROOF SLOPE. VERIFY LOCATIONS WITH ARCHITECT. ALL PENETRATIONS SHALL BE PAINTED TO MATCH ROOF COLOR.
2. PLUMBING SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE SIZING OF ROOF DRAINS. OVERFLOW DRAINS AND RAIN WATER LEADER/DOWNSPOUTS, BASED UPON THE TRIBUTARY ROOF AREA AND THE LOCAL RAINFALL INTENSITY DESIGN CRITERIA. DRAINS SHALL TIE INTO THE STORM DRAINAGE SYSTEM. COORD WITH CIVIL DRAWINGS.
3. PITCH TOP CHORD OF ROOF TRUSS AS INDICATED FOR DRAINAGE. SEE STRUCTURAL AND ARCHITECTURAL DRAWINGS.
4. SEE EXTERIOR ELEVATIONS FOR TERMINATIONS OF ALL OVERFLOW DRAIN SCUPPERS.
5. PLAN SHOWS APPROXIMATE LOCATION OF MECHANICAL ROOF TOP UNITS; FINAL LOCATION TO BE COORDINATED WITH CONTRACTOR AND APPROVED BY STRUCTURAL ENGINEER AND ARCHITECT.
6. OBLIQUE ROOF SCUPPER DRAIN SHALL BE ZURN #2187, TERMINATION OF MEMBRANE PER MANUFACTURER'S REQUIREMENTS.
7. ALL HORIZONTAL PIPE RUNS FOR RAIN LEADERS OF BOTH MAIN ROOF DRAINS AND OVERFLOW DRAINS SHALL BE INSULATED W/ MIN 1" FIBERGLASS INSULATION W/ INTEGRAL VAPOR BARRIER. SEE DETAIL FOR MORE INFORMATION.
8. FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. PROMPTLY NOTIFY THE ARCHITECT OF ANY ERRORS, OMISSIONS, INCONSISTENCIES OR OTHER PROBLEMS IMMEDIATELY UPON DISCOVERY, AND BEFORE PROCEEDING WITH WORK.
9. ALL INDICATIONS AND NOTATIONS ON THESE DRAWINGS APPLYING TO ONE AREA, COMPONENT OR CONDITION SHALL APPLY TO ALL OTHER SIMILAR AREAS AND COMPONENTS UNLESS CLEARLY INDICATED OTHERWISE.
10. ROOF ASSEMBLIES - REFER TO A0 SERIES AND ALL BUILDING AND WALL SECTIONS.
11. REFER TO MEP DRAWINGS FOR ALL ROOFTOP EQUIPMENT QUANTITIES AND LOCATIONS.
12. PROVIDE WALKWAY PADS FROM ROOF ACCESS HATCH TO ALL 4 SIDES OF EACH PIECE OF ROOF MOUNTED EQUIPMENT, INCLUDING BUT NOT LIMITED TO EXTERIOR ROOF ACCESS LADDERS, EXHAUST FANS, RTU'S AND EXTERIOR MOUNTED DUCTWORK.
13. DIMENSIONS SHOWN FOR ROOF DRAIN LOCATIONS ARE APPROXIMATE, COORDINATE EXACT LOCATION WITH TRUSS LOCATIONS AND OTHER OBSTRUCTIONS BELOW.

ROOF PLAN LEGEND

R.D. — PRIMARY ROOF DRAIN, REFER TO TYPICAL ROOF DRAIN DETAIL IN A4.40 SERIES. SEE FLOOR PLANS FOR LEADER OR DOWNSPOUT LOCATIONS.	ROOF BALLAST
O.R.D. — OVERFLOW ROOF DRAIN, REFER TO TYPICAL ROOF DRAIN DETAIL IN A4.40 SERIES. SEE EXTERIOR ELEVATIONS FOR EXIT DISCHARGE	ICE AND WATER SHIELD - 6'-0" AT VALLEY AND DORMER - 3'-0" AT EAVE, GABLE AND RIDGE
WALKWAY PADS, REFER TO GENERAL NOTES FOR REQUIREMENTS	EPICHLOROHYDRIN PROTECTIVE SHEET
TAPERED INSULATION OVER REQUIRED INSULATION TO PROVIDE POSITIVE DRAINAGE BETWEEN DRAINAGE AND TO DIVERT FLOW OF WATER AROUND OBSTACLES	RA — ROOF ANCHOR, REFER TO TYPICAL ROOF DRAIN DETAIL IN A4.40 SERIES
	° D.S. — APPROXIMATE DOWN SPOUT LOCATION, REFER TO EXTERIOR ELEVATIONS



ROOF AREA CALCULATIONS

GROSS ROOF AREA 18867 GSF
30% GREEN ROOF OR SOLAR
18,867SF X .3 = 5,660 SF MIN.

6,400 SHOWN

1 OVERALL FLOOR PLAN - ROOF
SCALE: 1/8" = 1'-0" REF SHEET: 1 / A3.01

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No.	Description	Date

42-44 3rd Street
Dover, NH

OVERALL ROOF PLAN

Project number	-
Date	06.14.24
Drawn by	Author
Checked by	Checker

A1.06

Scale	1/8" = 1'-0"

6/14/2024 4:03:10 PM



1 East Elevation

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A1.00

EXTERIOR OPENINGS ARE LESS THAN 15%



2 North Elevation - 3rd Street

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A1.01

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No.	Description	Date

42-44 3rd Street
Dover, NH

EXTERIOR ELEVATIONS

Project number	-
Date	06.14.24
Drawn by	NI
Checked by	Checker

A3.01

Scale 1/8" = 1'-0"

6/14/2024 4:03:17 PM



2 West Elevation

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A1.00

EXTERIOR OPENINGS ARE LESS THAN 15%



1 South Elevation - 2nd Street

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A1.00

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No.	Description	Date

42-44 3rd Street
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EXTERIOR ELEVATIONS

Project number	-
Date	06.14.24
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Checked by	Checker

A3.02

Scale 1/8" = 1'-0"

6/14/2024 4:03:24 PM



2 3rd NW
SCALE:



1 3rd NE
SCALE:



3 2nd St. SW
SCALE:



4 2nd St. SE
SCALE:

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No.	Description	Date

42-44 3rd Street
Dover, NH

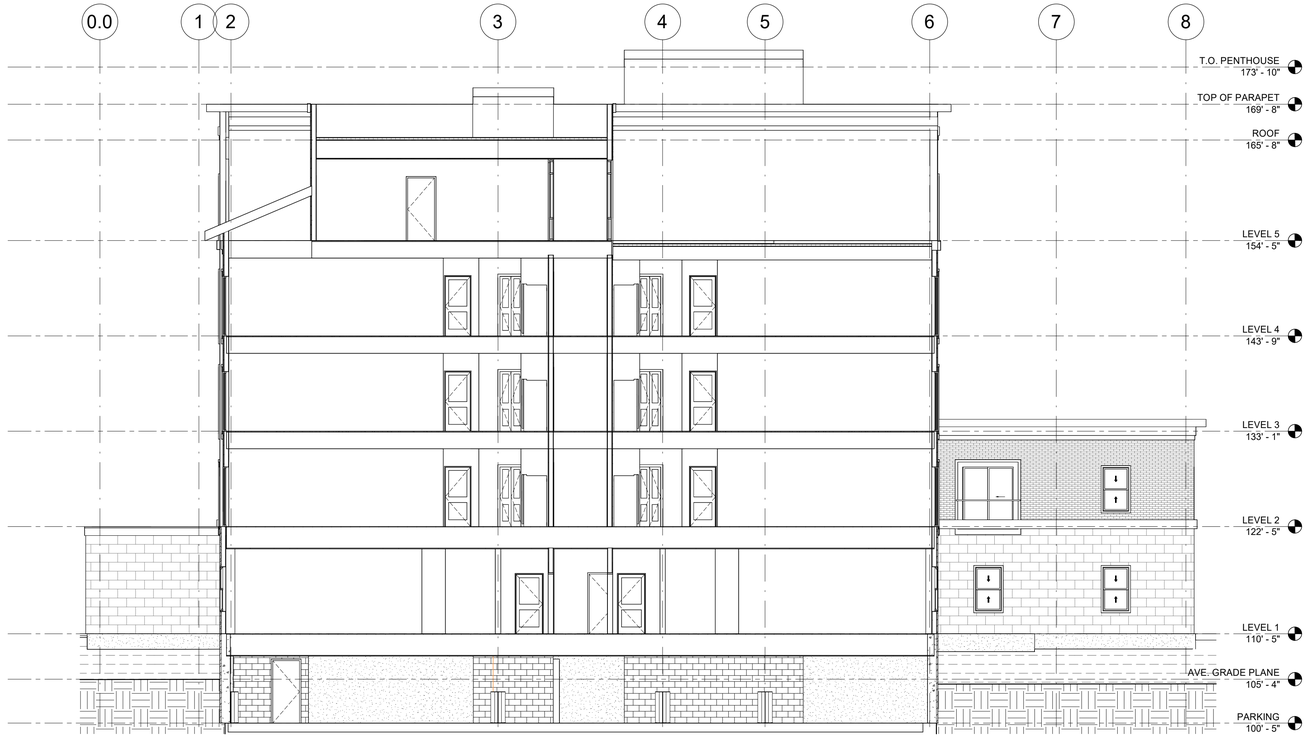
EXTERIOR
PERSPECTIVES

Project number	-
Date	06.14.24
Drawn by	NI
Checked by	Checker

A3.03

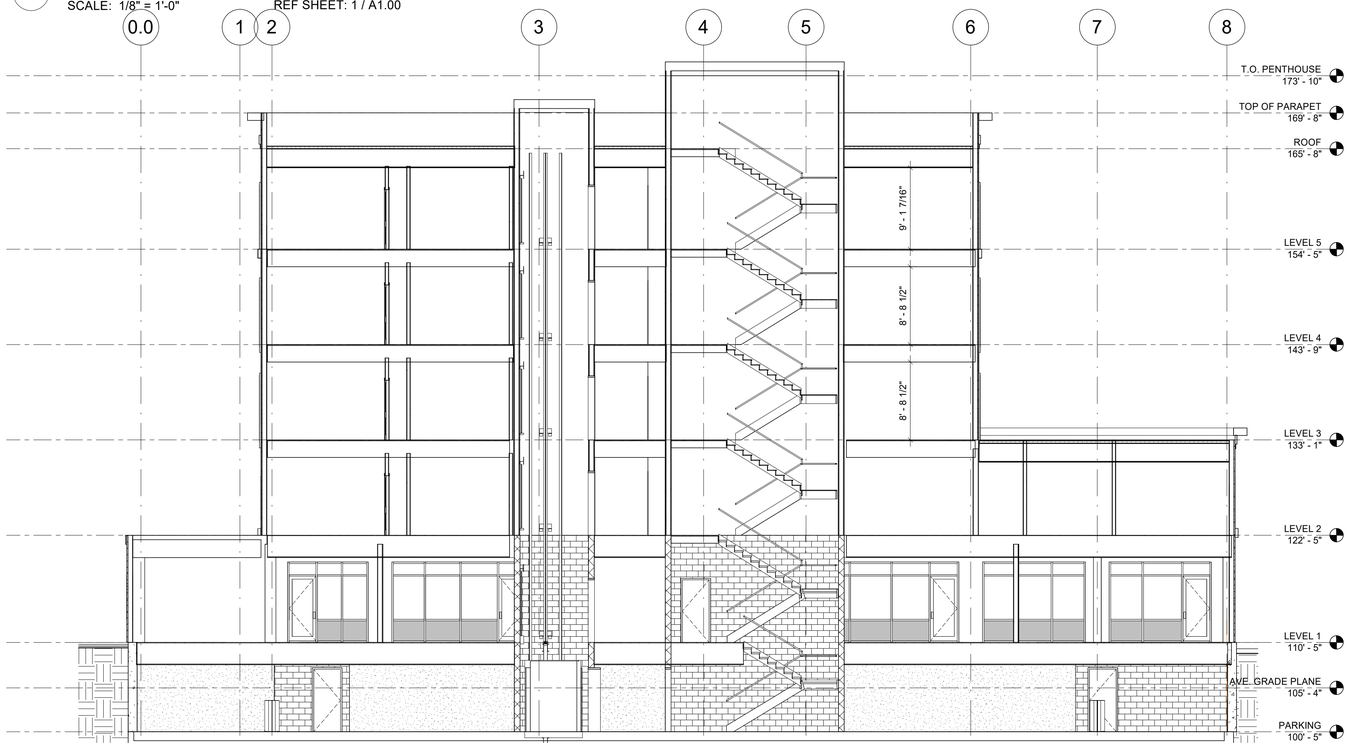
Scale

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1 BUILDING LATERAL SECTION 1

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A1.00



2 BUILDING LATERAL SECTION 2

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A1.00

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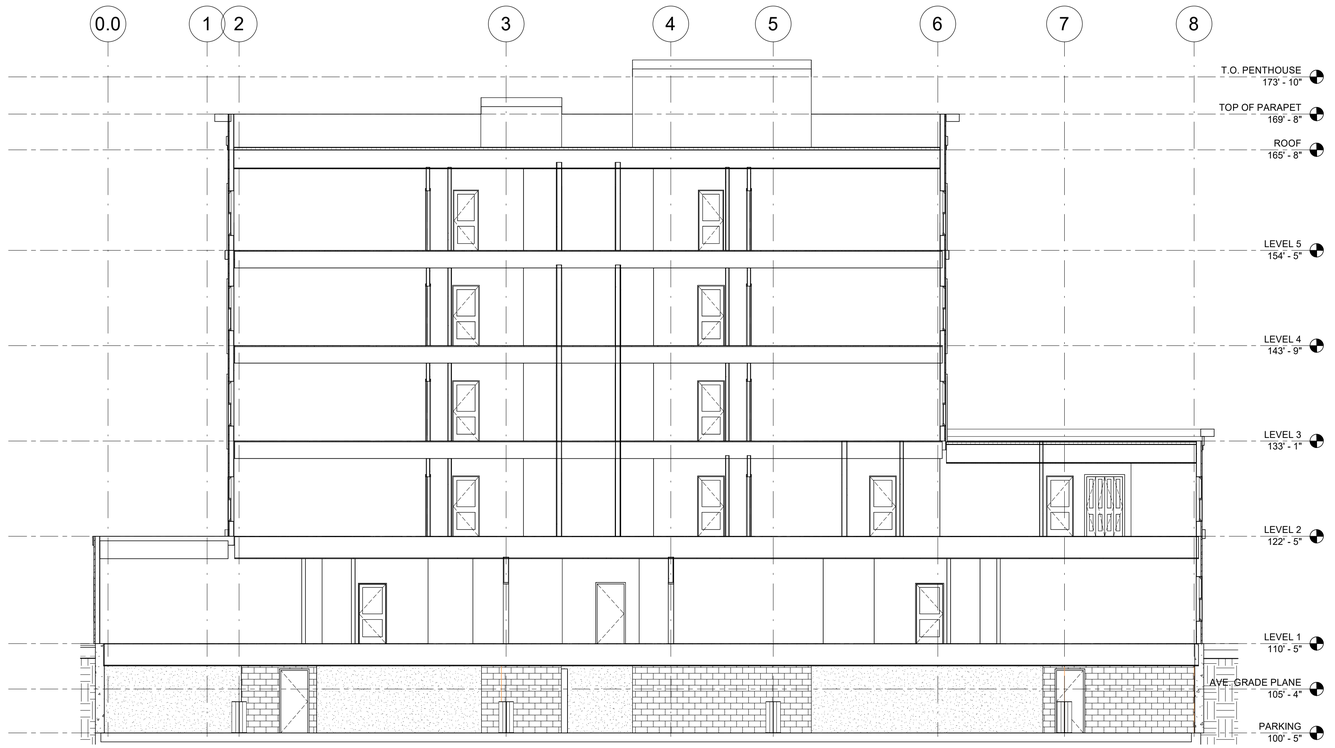
BUILDING SECTIONS

Project number	-
Date	06.14.24
Drawn by	Author
Checked by	Checker

A4.01

Scale 1/8" = 1'-0"

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1 BUILDING LATERAL SECTION 3

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A1.00



2 BUILDING LONG SECTION 1

SCALE: 1/8" = 1'-0" REF SHEET: 1 / A1.00

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No.	Description	Date

42-44 3rd Street
Dover, NH

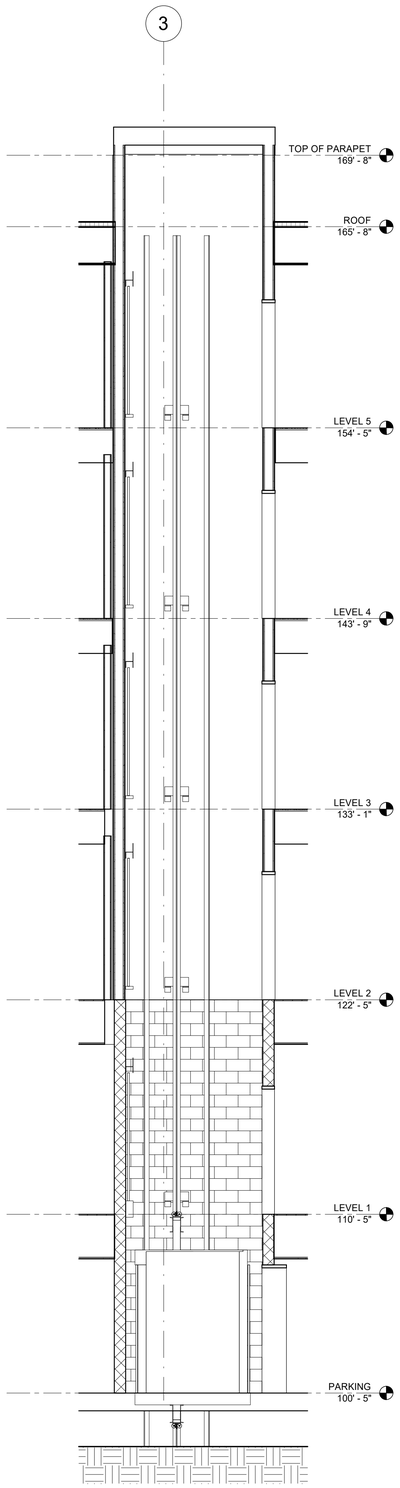
BUILDING
SECTIONS

Project number	-
Date	06.14.24
Drawn by	Author
Checked by	Checker

A4.02

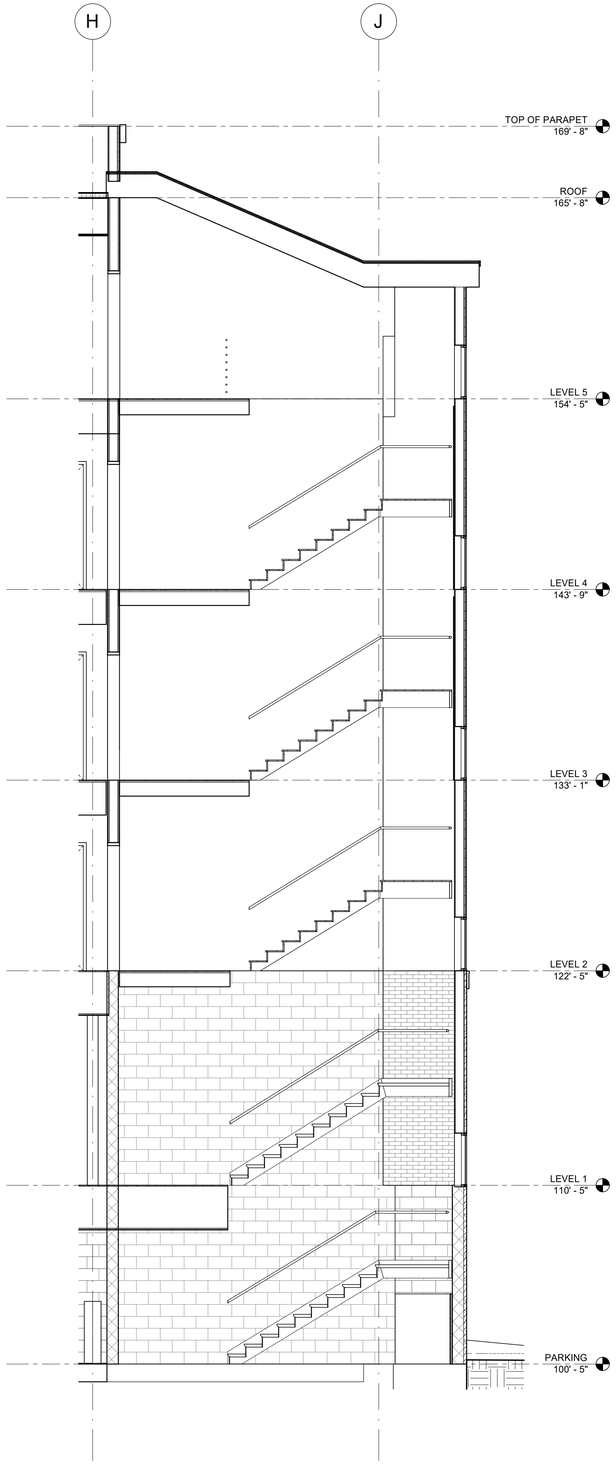
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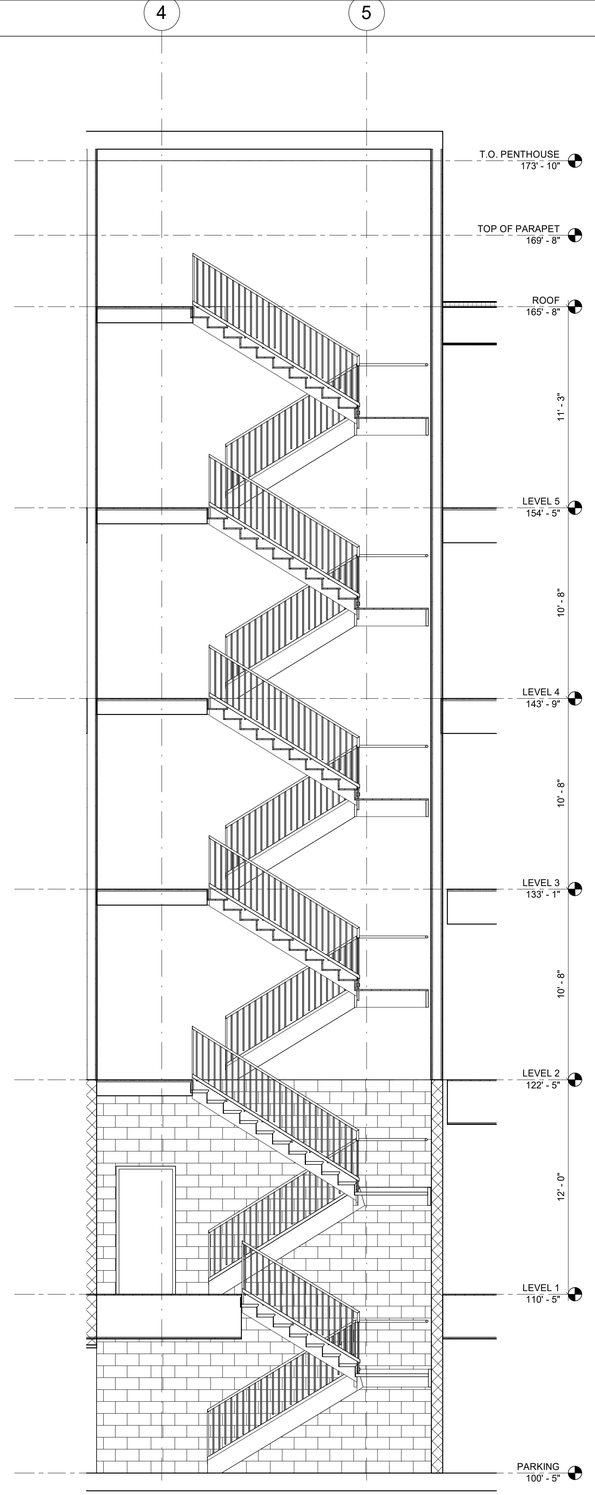
3 ELEVATOR

SCALE: 1/4" = 1'-0" REF SHEET: 1 / A1.06



2 STAIR B SECTION

SCALE: 1/4" = 1'-0" REF SHEET: 1 / A1.06



1 STAIR A SECTION

SCALE: 1/4" = 1'-0" REF SHEET: 1 / A1.06

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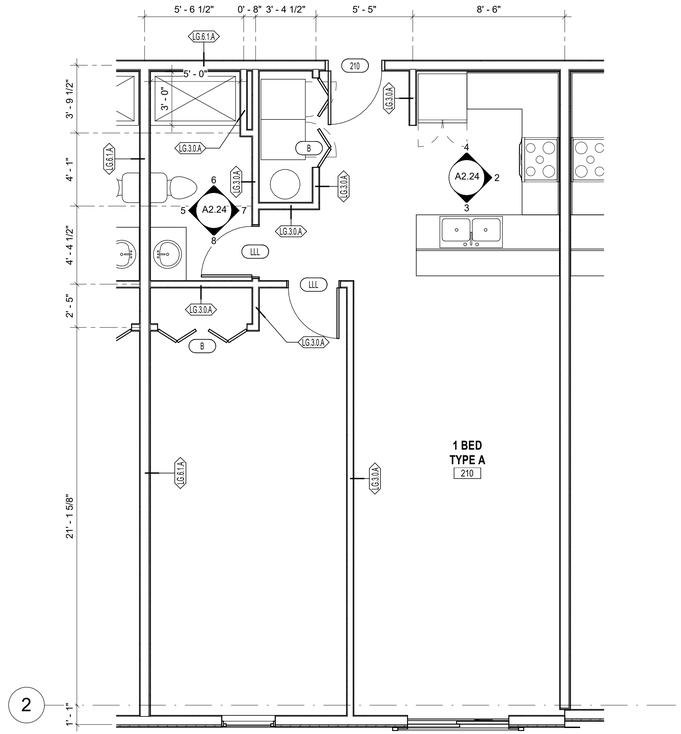
42-44 3rd Street
Dover, NH

BUILDING SECTIONS

Project number	-
Date	06.14.24
Drawn by	Author
Checked by	Checker
	A4.03
Scale	1/4" = 1'-0"

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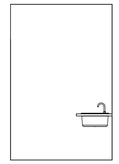
ENLARGED UNIT RCP HERE



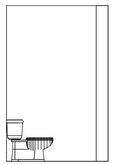
1 ENLARGED UNIT PLAN - 1 BEDROOM TYPE A
SCALE: 1/4" = 1'-0" REF SHEET: 2 / A1.02

GENERAL NOTE - ENLARGED UNIT PLANS

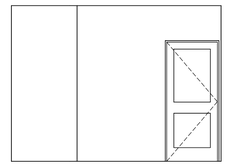
1. FIELD VERIFY ALL DIMENSIONS AND CONDITIONS. PROMPTLY NOTIFY THE ARCHITECT OF ANY ERRORS, OMISSIONS, INCONSISTENCIES OR OTHER PROBLEMS IMMEDIATELY UPON DISCOVERY, AND BEFORE PROCEEDING WITH WORK.
2. ALL INDICATIONS AND NOTATIONS ON THE DRAWINGS APPLYING TO ONE AREA, COMPONENT OR CONDITION, SHALL APPLY TO ALL OTHER SIMILAR AREAS UNLESS INDICATED OTHERWISE.
3. OWNER SHALL FURNISH EQUIPMENT CUTS AND UTILITY CONNECTION REQUIREMENTS FOR THE SPECIFIC EQUIPMENT TO BE PROVIDED WITHIN THE PROJECT AT THE TIME OF MEP/FP DESIGN.
4. DESIGN ENGINEERS, SUB-CONTRACTORS AND PRIME CONTRACTOR SHALL VERIFY COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL CODES, REQUIREMENTS & REGULATIONS WITH AUTHORITIES HAVING JURISDICTION FOR MINIMUM CODE DESIGN CRITERIA.
5. DIMENSIONS ARE TAKEN FROM COLUMN CENTER LINE AND FROM STUD CENTERLINE, U.O.N. CLEAR DIMENSIONS ARE TO THE FINISHED FACE OF THE NEW CONSTRUCTION AND SHALL TAKE PRECEDENCE OVER ANY OTHER DIMENSION.
6. DO NOT SCALE DRAWINGS. USE WRITTEN DIMENSIONS. WHERE NO DIMENSIONS ARE PROVIDED, CONSULT THE ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING WITH WORK.
7. FURNITURE SHOWN IS FOR REFERENCE ONLY, NOT IN CONTRACT.
8. ALL FURNITURE TO BE PROVIDED BY OWNER, UNLESS OTHERWISE NOTED.
9. REFER TO OVERALL PLANS FOR CORRIDOR WALL TYPES.
10. REFER TO OVERALL PLANS FOR DEMISING WALL TYPES.
11. WALL PARTITIONS TYPES: REFER TO WALL ASSEMBLY SHEETS A0 SERIES.
12. WINDOW AND DOOR SCHEDULES AND DETAILS: REFER TO SHEETS A6 SERIES.
13. PROVIDE MOISTURE RESISTANT GYPSUM WALL BOARD AT ALL BATHROOM WALLS AND CEILINGS, TYPICAL.
14. PROVIDE BLOCKING AT ALL BATHROOM ACCESSORIES INCLUDING BUT NOT LIMITED TO: TOILET PAPER HOLDERS,TOWEL BARS, MIRRORS, ETC., INSTALL BLOCKING IN WALLS FOR ALL CABINETS & MILLWORK, COORDINATE LOCATIONS WITH INTERIOR DESIGN DETAILS.
15. INSTALL NECESSARY BLOCKING IN BATHROOM WALLS FOR CURRENT AND FUTURE GRAB BARS.
16. BLOCKING CAN BE SOLID WOOD OR PLYWOOD.
17. PROVIDE JUNCTION BOX AT ALL GUEST BATHROOMS ABOVE VANITY FOR HARD-WIRED LIGHTED MIRROR. COORDINATE LIGHTED MIRROR CONTROL WITH OWNER.
18. INTERIOR DOORS ADJACENT TO CORNER OF ROOM - DIMENSION FROM FACE OF GYPSUM BOARD TO FRAME TO BE 4" (TYPICAL UNLESS DIMENSIONED OTHERWISE).
19. WALL OUTLETS SHALL NOT OCCUR IN SAME WALL CAVITY OF ADJACENT GUESTROOMS. REFER TO A0 SERIES OF DRAWINGS IF UNAVOIDABLE, PROVIDE PUTTY PACKS AROUND ELECTRICAL AND LV BOX.



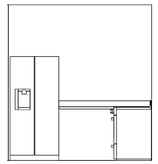
8 BATHROOM ELEVATION 4D
1/4" = 1'-0"



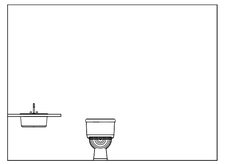
6 BATHROOM ELEVATION 2D
1/4" = 1'-0"



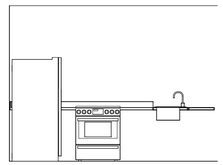
7 BATHROOM ELEVATION 3D
1/4" = 1'-0"



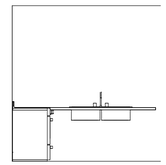
4 KITCHEN ELEVATION 3D
1/4" = 1'-0"



5 BATHROOM ELEVATION 1D
1/4" = 1'-0"



2 KITCHEN ELEVATION 1D
1/4" = 1'-0"



3 KITCHEN ELEVATION 2D
1/4" = 1'-0"

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MECHANICAL & PLUMBING
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e-mail

ELECTRICAL
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e-mail

No.	Description	Date

42-44 3rd Street
Dover, NH

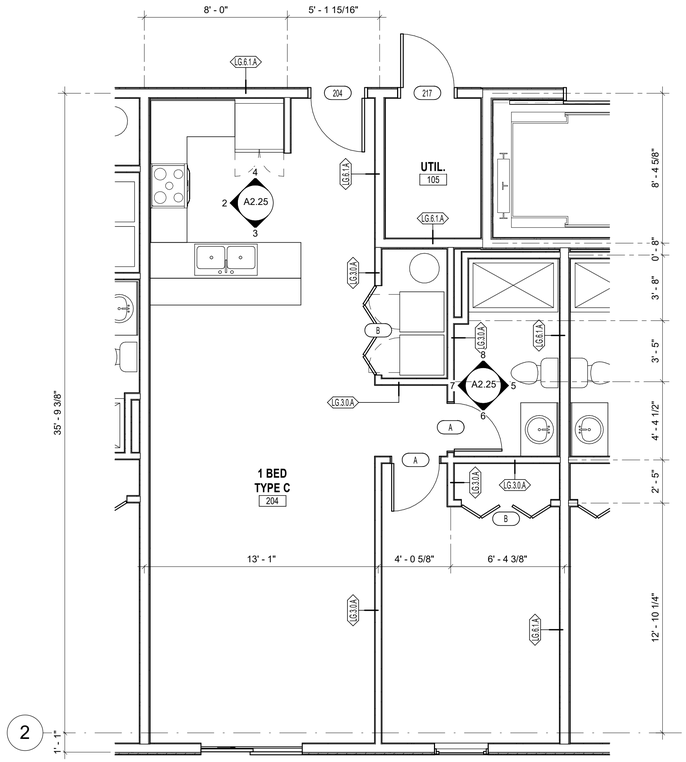
ENLARGED UNIT - 1 BEDROOM

Project number	-
Date	06.14.24
Drawn by	MJH
Checked by	NI
Scale	1/4" = 1'-0"

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ENLARGED UNIT RCP HERE



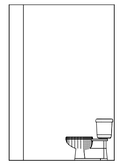
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1 ENLARGED UNIT PLAN - 1 BEDROOM TYPE C

SCALE: 1/4" = 1'-0" REF SHEET: 2 / A1.02

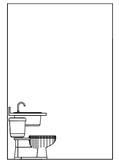
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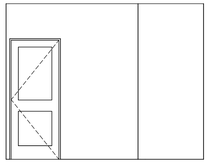
8 BATHROOM ELEVATION 4E

1/4" = 1'-0"



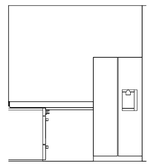
6 BATHROOM ELEVATION 2E

1/4" = 1'-0"



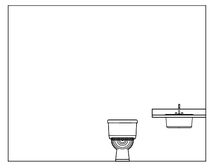
7 BATHROOM ELEVATION 3E

1/4" = 1'-0"



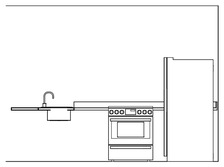
4 KITCHEN ELEVATION 3E

1/4" = 1'-0"



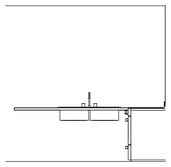
5 BATHROOM ELEVATION 1E

1/4" = 1'-0"



2 KITCHEN ELEVATION 1E

1/4" = 1'-0"



3 KITCHEN ELEVATION 2E

1/4" = 1'-0"

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URBAN DESIGN
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NICK@ISAAKDESIGN.COM

www.isaakdesign.com

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No.	Description	Date

42-44 3rd Street
Dover, NH

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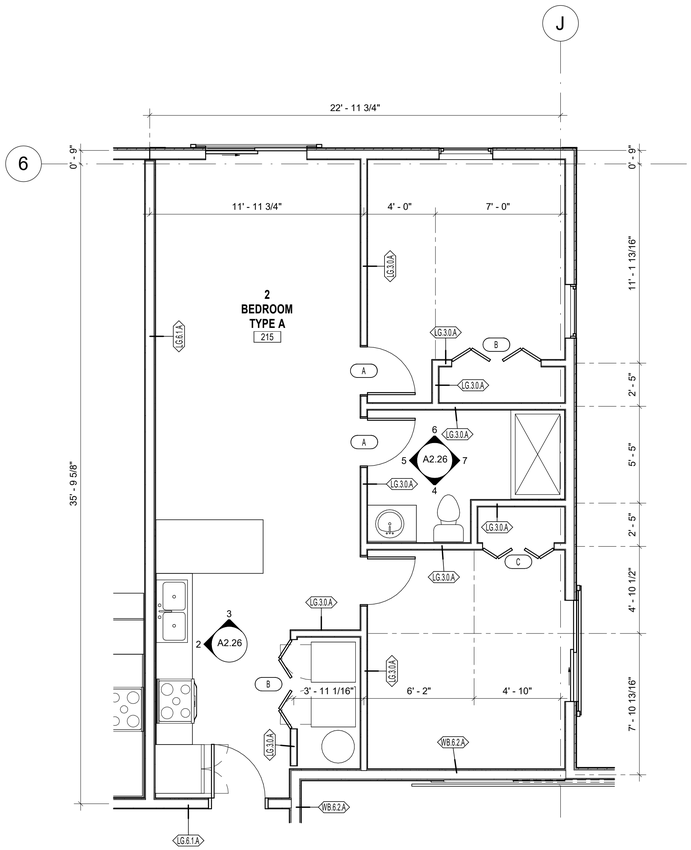
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Checked by	NI

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Scale 1/4" = 1'-0"

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ENLARGED UNIT RCP HERE



1 ENLARGED UNIT PLAN - 2 BEDROOM TYPE A

SCALE: 1/4" = 1'-0" REF SHEET: 2 / A1.02

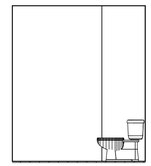
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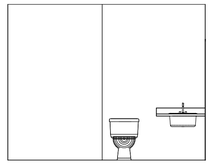
6 BATHROOM ELEVATION 3F

1/4" = 1'-0"



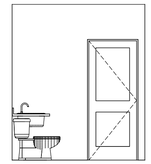
7 BATHROOM ELEVATION 4F

1/4" = 1'-0"



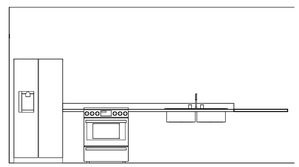
4 BATHROOM ELEVATION 1F

1/4" = 1'-0"



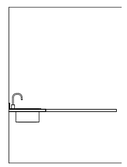
5 BATHROOM ELEVATION 2F

1/4" = 1'-0"



2 KITCHEN ELEVATION 1F

1/4" = 1'-0"



3 KITCHEN ELEVATION 2F

1/4" = 1'-0"

PERMIT SET

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No.	Description	Date

42-44 3rd Street
Dover, NH

ENLARGED UNIT - 2 BEDROOM

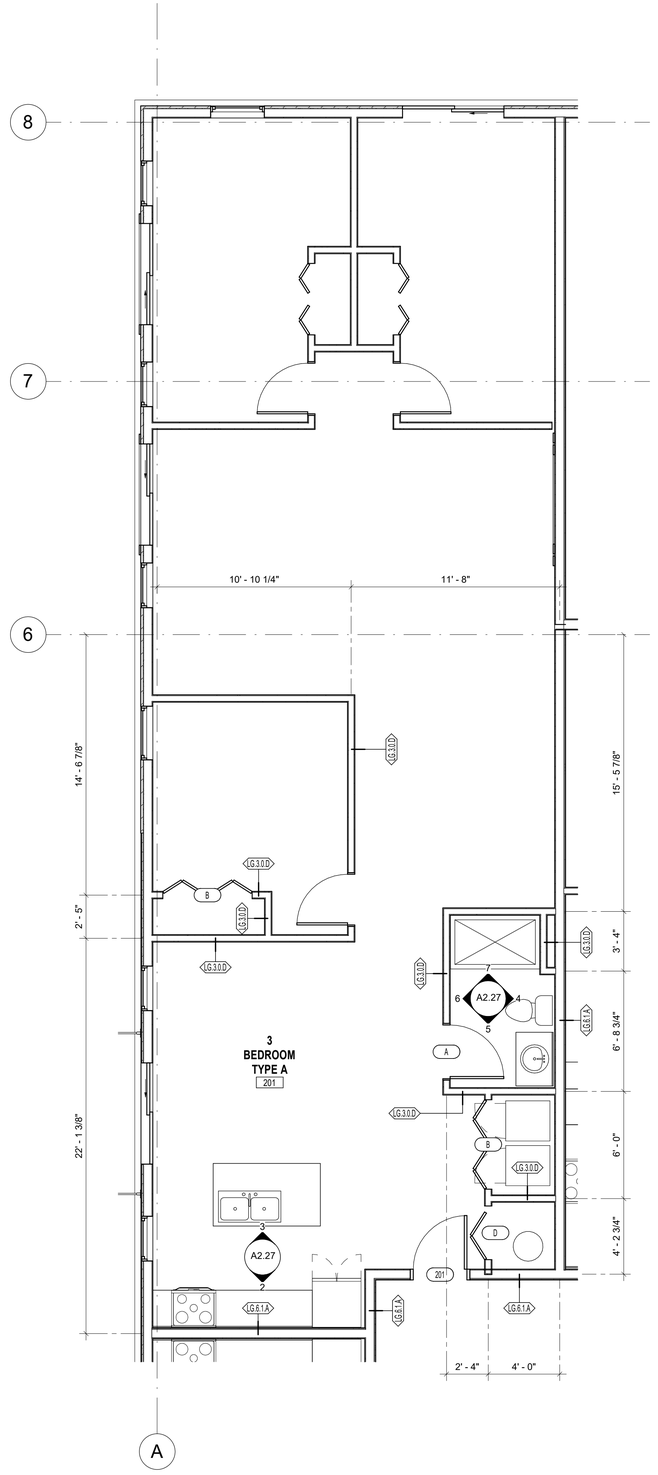
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Checked by	NI

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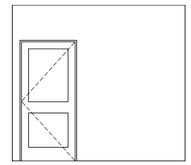
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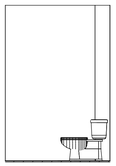
1 ENLARGED UNIT PLAN - 2 BEDROOM TYPE B
SCALE: 1/4" = 1'-0" REF SHEET: 2 / A1.02

GENERAL NOTE - ENLARGED UNIT PLANS

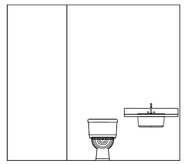
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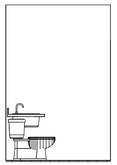
6 BATHROOM ELEVATION 3G
1/4" = 1'-0"



7 BATHROOM ELEVATION 4G
1/4" = 1'-0"



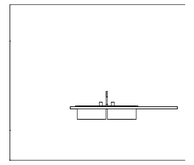
4 BATHROOM ELEVATION 1G
1/4" = 1'-0"



5 BATHROOM ELEVATION 2G
1/4" = 1'-0"



2 KITCHEN ELEVATION 1G
1/4" = 1'-0"



3 KITCHEN ELEVATION 2G
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No.	Description	Date

42-44 3rd Street
Dover, NH

ENLARGED UNIT - 2 BEDROOM

Project number	-
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CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #TRAN-2024-0013

Application Type:	Conditional Use Permit
Applicant(s):	True North Development, LLC
Owner(s):	True North Development, LLC
Location:	35 Boston Harbor Road (Assessor's Map 7, Lot 14)
Meeting Date:	October 22, 2024

**This item has requested to be continued to the Planning Board meeting on Tuesday, November 12*

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #COND-2024-0020

Application Type:	Conditional Use Permit
Applicant(s):	17-19 Summer Street Properties, LLC
Owner(s):	17-19 Summer Street Properties, LLC
Location:	Locust Street (Vacant Lot) (Assessor's Map 12, Lot 35-1)
Meeting Date:	October 22, 2024

INTENT: Proposal is for a Conditional Use Permit (CUP) to allow for the construction of a four-unit structure.

AGENDA ITEM #: 4-C

FILE: COND-2024-0020

APPLICANT/OWNER: 17-19 Summer Street Properties, LLC

LOCATION: Locust Street (Vacant Lot) (Assessor's Map 12, Lot 35-1)

UNITS PROPOSED: 4

ACREAGE: 0.22± acres

ZONING DISTRICT: Heritage Residential (HR)

EXISTING USE: Vacant Lot

PROPOSED USE: Residential

SURROUNDING USE: Residential, Mixed Use

PERMITS:
Planning Board Site Review

WAIVERS REQUESTED: N/A

APPLICATION IS COMPLETE?: Yes

REGIONAL IMPACT?: No

NOTICES SENT: Notices sent by certified mail to all abutters for a previous meeting

ZBA ACTION:
1. 7/18/24 – Variance granted in relief of parking lot setback CUP requirement
2. 8/15/24 – Variance granted to correct scrivener's error in 7/18/24 variance
3. 9/10/24 – Request for rehearing granted pursuant to 8/15/24 variance
4. 9/19/24 – Appeals of three (3) administrative decisions denied
5. 10/17/24 – Rehearing of 8/15/24 Variance

CONSERVATION COMMISSION: N/A

TRC: Reviewed by TRC on 3/28/24 and 5/9/24

ATTACHMENTS: Application materials including site plan and Variance Approval

Summary of Request and Background
The Applicant is proposing the construction of an approximately 2,400 s.f., 2-½ story, four-unit structure on a vacant lot on Locust Street, abutting 17 Summer Street directly to the north. The lot in question, however, resides within the Heritage Residential zoning district, which requires a CUP for the construction or conversion of any structure housing 3-4 dwelling units.

Consistency with Land Use Regulations
Chapter 170-20.B(1) Zoning Ordinance allows for 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:

Conversion to, or creation of Dwelling, 3-4 Family: Three- or four-family dwellings and conversions of existing dwellings to three (3) or four (4) units shall be subject to the following regulations:

A. The specific site must have an amount of open space, either landscaped or left natural, at least equal to the average amount of open space on all developed lots in the HR District that are wholly or partly within two hundred (200) feet of the subject parcel. Existing parking areas, either gravel, paved or unpaved, shall not be considered to be open space.

B. Off-street parking, in accordance with Chapter 153, Site Review, shall be provided as to avoid vehicles backing into the street. Two (2) parking spaces per unit shall be required.

C. Parking lots shall be at least five (5) feet from a side property line and ten (10) feet from a front property line.

D. Parking areas shall be screened from the street and from abutting lots.

E. Structures shall be at least twenty (20) feet from a front property line, thirty (30) feet from a rear property line and fifteen (15) from a side property line unless abutting a street, in which case, the distance from the side property line shall be twenty (20) feet.

F. For new construction, the building must be designed to look like a SINGLE FAMILY DWELLING. At a minimum, this shall mean that only one entrance shall be visible from a public street. For conversions, the building must retain its appearance as a SINGLE FAMILY DWELLING or a 2 family dwelling, whichever is the current use. Notwithstanding any other provision of Chapter 170, a legal or legal non-conforming accessory structure existing as of the effective date of these regulations may be converted into one or more residential units, provided that the building shall not be enlarged, nor shall any exterior improvements be made to alter its appearance as an accessory structure.

STAFF RECOMMENDATION:
Planning Staff feels that the Applicant considered and met all of the criteria as specified in the HR District's requirements for the creation of a 3-4 Family Dwelling, with the exception of criterion C, which the Applicant appropriately obtained variance relief from based upon the

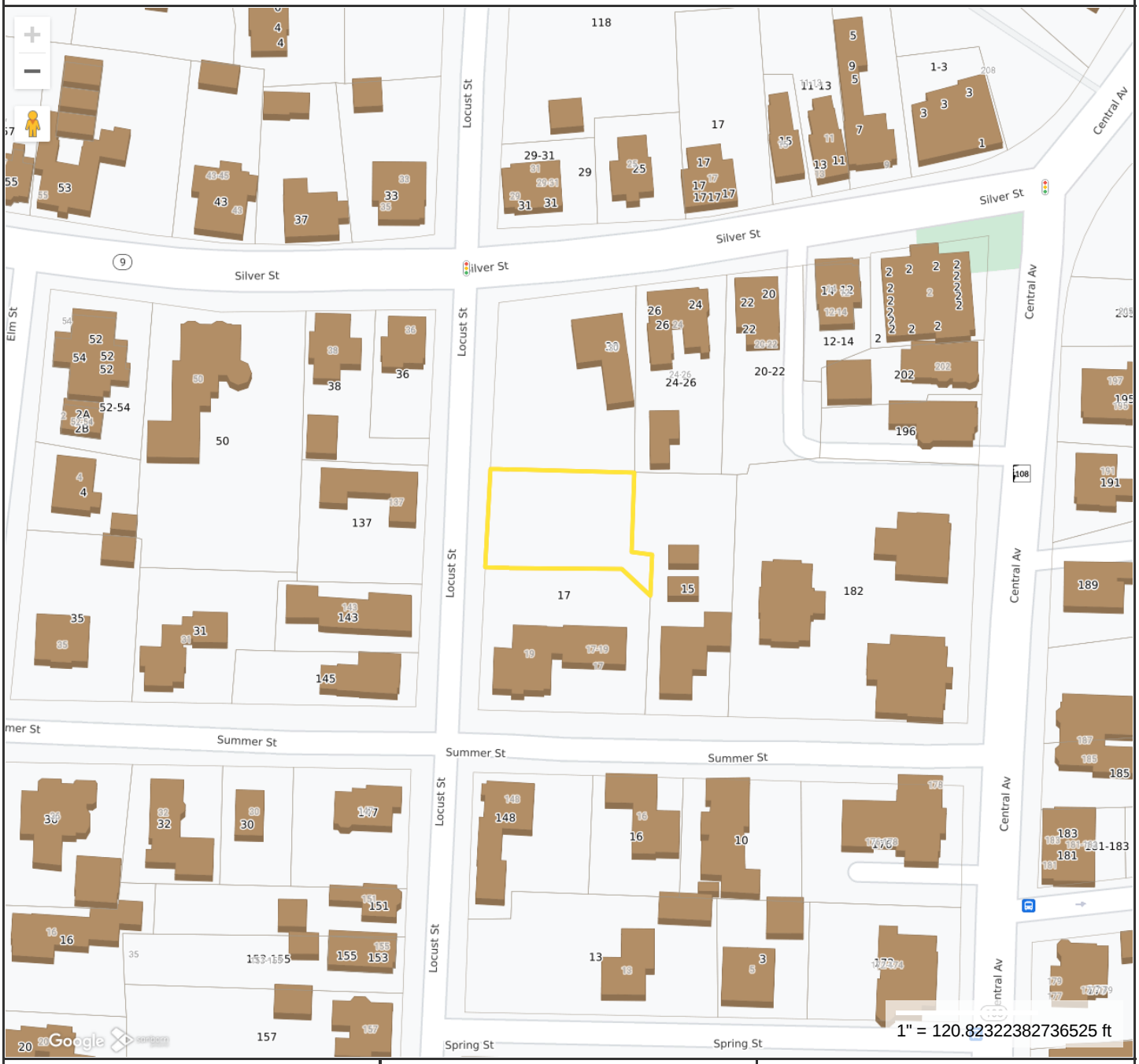
CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #COND-2024-0020

Application Type:	Conditional Use Permit
Applicant(s):	17-19 Summer Street Properties, LLC
Owner(s):	17-19 Summer Street Properties, LLC
Location:	Locust Street (Vacant Lot) (Assessor's Map 12, Lot 35-1)
Meeting Date:	October 22, 2024

Applicant's narrative submitted. Staff recommends that the Planning Board accept the application as complete, note it is not of regional impact, hold a public hearing, make the necessary and supporting findings of fact, and vote to approve the Conditional Use Permit.

COND-2024-0020 LOCUST STREET



Property Information

Location	LOCUST ST
Owner	17-19 SUMMER STREET PROPERTIES LLC
Land Use	
Zoning Code	HR
Property Id	12035-001000

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

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

Geometry updated 10/30/2023
Data updated Daily

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

CITY OF DOVER

PLANNING BOARD

Please bring previous materials from August 27th, 2024 meeting.

PERMIT SNAPSHOT REPORT COND-2024-0020
FOR CITY OF DOVER, N.H.

Permit Type	Conditional Use	**Project:**		**App Date:**	08/02/2024
Work Class:	Non-Environmental	**District:**	None	**Exp Date:**	NOT AVAILABLE
Status:	Fees Due	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	

Description: To allow a 4-unit building in the Heritage Residential District as permitted by Conditional Use Permit per Dover Zoning Regulations.

Parcel: 12035-001000 Main	**Address:** Locust St Main Dover, NH	**Zone:** HR(Residential - Heritage)

Plan Preparer
Civilworks New England/
Haight Engineering, PLLC
Stephen J. Haight, P.E.
Business: (603) 749-0443

Surveyor
McEneaney Survey
Associates
P.O. Box 1166
DOVER, NH 03821
Business: (603) 742-0911

Owner
Benjamin Perez
Mobile: (603) 944-0516

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

Permit Custom Fields

Select Permit Type	Heritage Residential District	General Purpose	New Construction	Project Zone	Residential
What is the parcel zoned?	HR	Work	To allow a 4-unit building in the Heritage Residential District as permitted by Conditional Use Permit per Dover Zoning Regulations.	permitstatefed	

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Steve_Haight_8/2/2024.jpg	08/02/2024 16:10	Haight, Steve		Uploaded via CSS
Permit Snapshot Report.pdf	08/02/2024 16:10	Service, EnerGov		Attached by IO - ATTACH: Initial Permit Snapshot
2024.08.27_PlanningBoard.AgendaREV.pdf	08/23/2024 14:33	Blonigen, Rachel		PB Agenda
PB08-27-2024 COND-2024-0020.pdf	08/23/2024 14:33	Blonigen, Rachel		PB Staff Memo
2024.08.27_PlanningBoard.Minutes.pdf	09/03/2024 15:43	Blonigen, Rachel		Draft PB Minutes
2024.10.08_PlanningBoard.Agenda.pdf	09/26/2024 15:44	Blonigen, Rachel		PB Agenda
Continuance Request.pdf	10/03/2024 16:24	Blonigen, Rachel		
PB10-08-2024 COND-2024-0020.pdf	10/03/2024 16:24	Blonigen, Rachel		Staff Memo
2024.10.22_PlanningBoard.Agenda.pdf	10/08/2024 11:27	Blonigen, Rachel		PB Agenda

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00008852	Planning General Application Fee	$200.00	$0.00
	Total for Invoice INV-00008852	$200.00	$0.00
INV-00008977	Planning Creation / Printing of Abutter Labels	$20.00	$0.00
	Planning Public Notice in Newspaper	$120.00	$0.00
	Planning Certified Mailing to Abutters	$220.00	$0.00
	Total for Invoice INV-00008977	$360.00	$0.00
	Grand Total for Permit	**$560.00**	**$0.00**

Activity Type	Activity Number	Name	Workflow Action Name	User	Created On
Recommendation to Planning Board (Permit)	RCMND-000055-2024		Planner Creates Staff Recommendations v.1.00	Rachel Blonigen	08/23/2024

Activity Custom Fields

Agenda Item	4-H	Application Complete?	Yes	Attachments	INTENT: Proposal is for a

Conditional Use Permit (CUP) to allow for the construction of a four-unit structure.
AGENDA ITEM #: 4-H
FILE: COND-2024-0020
APPLICANT/OWNER: 17-19 Summer Street Properties, LLC
LOCATION: Locust Street (Vacant Lot) (Assessor's Map 12, Lot 35-1)

UNITS PROPOSED: 4
ACREAGE: 0.22± acres
ZONING DISTRICT: Heritag Residential (HR)
EXISTING USE: Vacant Lot
PROPOSED USE: Residential
SURROUNDING USE: Residential, Mixed Use
PERMITS:
Planning Board Site Review
WAIVERS REQUESTED: N/A
ZBA ACTION: Yes, variance approved on 7/18/24 (subsequently amended and approved on 8/15/24) for HR District 3-4 Family CUP, Criterion C – parking lot setback values.
CONSERVATION COMMISSION: N/A
TRC: Reviewed by TRC on 3/28/24 and 5/9/24
ATTACHMENTS:
Application materials including site plan and Variance Approval

Summary of Request and Background
The Applicant is proposing the construction of an approximately 2,400 s.f., 2-½ story, four-unit structure on a vacant lot on Locust Street, abutting 17 Summer Street directly to the north. The lot in question, however, resides within the Heritage Residential zoning district, which requires a CUP for the construction or conversion of any structure housing 3-4 dwelling units.
Consistency with Land Use Regulations
Chapter 170-20.B(1) Zoning Ordinance allows for 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:
Conversion to, or creation of Dwelling, 3-4 Family: Three- or four-family dwellings and conversions of existing dwellings to three (3) or four (4) units shall be subject to the following regulations:
A. The specific site must have an amount of open space, either landscaped or left natural, at least equal to the average amount of open space on all developed lots in the HR District that are wholly or partly within two hundred (200) feet of the subject parcel. Existing parking areas, either gravel, paved or unpaved, shall not be considered to be open space.
B. Off-street parking, in accordance with Chapter 153, Site Review, shall be provided as to avoid vehicles backing into the street. Two (2) parking spaces per unit shall be required.
C. Parking lots shall be at least five (5) feet from a side property line and ten (10) feet from a front property line.
D. Parking areas shall be screened from the street and from abutting lots.
E. Structures shall be at least twenty (20) feet from a front property line, thirty (30) feet from a rear property line and fifteen (15) from a side property line unless abutting a street, in which case, the distance from the side property line shall be twenty (20) feet.
F. For new construction, the building must be designed to look like a SINGLE FAMILY DWELLING. At a minimum, this shall mean that only one entrance shall be visible from a public street. For conversions, the building must retain its appearance as a SINGLE FAMILY DWELLING or a 2 family dwelling, whichever is the current use.
Notwithstanding any other provision of Chapter 170, a legal or legal non-conforming accessory structure existing as of the effective date of these regulations may be converted into one or more residential units, provided that the building shall not be enlarged, nor shall any exterior improvements be made to alter its appearance as an accessory structure.

STAFF RECOMMENDATION:
Planning Staff feels that the Applicant considered and met all of the criteria as specified in the HR District's requirements for the creation of a 3-4 Family Dwelling, with the exception of criterion C, which the Applicant appropriately obtained variance relief from. Staff recommends that the Planning Board accept the application as complete, note it is not of regional impact, hold a public hearing, make the necessary and supporting findings of fact, and vote to approve t

PERMIT SNAPSHOT REPORT (COND-2024-0020)

Summary Request & Background	The Applicant is proposing the construction of an approximately 2,400 s.f., 2-½ story, four-unit structure on a vacant lot on Locust Street, abutting 17 Summer Street directly to the north. The lot in question, however, resides within the Heritage Residential zoning district, which requires a CUP for the construction or conversion of any structure housing 3-4 dwelling units.

Planning Board Decision	DEC-000058-2024	Planning Board Decision v.1.00	Rachel Blonigen	09/03/2024

Activity Custom Fields

Planning Board Decision2	Tabled

Hearing Type	Location	Scheduled Date	Status	Subject
Planning Board Hearing v.1	Council Chambers	08/27/2024	Continued	CUP

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Conditional Use Review v.1	Approved	08/05/2024	09/02/2024	08/05/2024	No	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Bassegio, Erin	Approved	08/05/2024	09/02/2024	08/05/2024

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		08/05/2024 10:33	08/05/2024 10:33
Confirm application complete v.1	Generic Action		08/05/2024 10:33
Conditional Use Review v.1	Receive Submittal	08/05/2024 0:00	08/05/2024 10:33
Planning Board v.1		08/05/2024 10:33	
Planning Board Agenda v.1	Task	10/08/2024 11:27	10/08/2024 11:27
Planning Board Agenda v.1	Task	08/05/2024 10:33	08/23/2024 14:30
Planning Board Agenda v.1	Task	09/23/2024 11:30	09/26/2024 16:04
Invoice for Notices v.1	Task	08/23/2024 14:16	08/23/2024 14:30
Send Notices v.1	Task	08/23/2024 14:17	08/23/2024 14:30
Planner Creates Staff Recommendations v.1	Permit Activity		
Planner Creates Staff Recommendations v.1	Permit Activity	08/23/2024 14:24	08/23/2024 14:30
Distribute Planning Board Materials v.1	Task	08/23/2024 14:29	08/23/2024 14:30
Planning Board Hearing v.1	Hold Hearing	08/23/2024 14:30	08/23/2024 14:30
Planning Board Decision v.1	Permit Activity	09/03/2024 15:44	09/23/2024 11:33
NOD Sent to Applicant v.1	Create Report		
Issue Permit v.1			
Verify Fees Prior to Permit v.1	Generic Action		
Issue and Review Permit v.1	Generic Action		
Print and Email Permit v.1	Generic Action		
Plans uploaded to Treeno v.1	Generic Action		
Internal Notification of Plan Completion v.1	Generic Action		
Recording v.1	Task		

City of Dover, New Hampshire
CONDITIONAL USE PERMIT APPLICATION

[Revision Date: October 19, 2020]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: 17-19 Summer Street Properties, LLC Telephone # 603-944-0516

Address of Applicant: 71 Lafayette Road Hampton Falls, NH 03844

E-Mail Address: ben@bostonnorthdevelopment.com

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

Address of Property Owner: Same

PROPERTY INFORMATION

Assessor's Map # 12 Lot(s) # 35-1

Address of Property: Locust Street

Zoning District(s) HR - Heritage Residential Overlay District(s) N/A

Existing Use of Property: Vacant

CONDITIONAL USE PERMIT INFORMATION

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

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

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

To allow a 4-unit building in the Heritage Residential District as permitted by Conditional Use Permit per Dover Zoning Regulations.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: N/A

Name of Professional That Prepared Plans: Stephen Haight - 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

SIGNATURES

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

Signature of Property Owner: _____ Date: 3/5/2024

Signature of Applicant (if different from owner): _____ Date: 3/5/2024

Signature of Agent: _____ Date: 3/5/2024

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: 3/5/2024

CITY OF DOVER CONDITIONAL USE
LIST OF ABUTTERS

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

Owner:

TAX MAP	LOT #	PROPERTY OWNER	MAILING ADDRESS
12	35-1	17-19 Summer Street Properties, LLC	71 Lafayette Road Hampton Falls, NH 03844

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS

Surveyor and/or Engineer/Professional Agent:

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

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

17-19 Summer Street Properties, LLC
71 Lafayette Road
Hampton, NH 03844

March 6, 2024

City of Dover
Planning Board
288 Central Avenue
Dover, NH 03820

Re: 17-19 Summer Street Properties, LLC
Tax Map 12, Lot 35-1
Locust Street - Dover, NH

LETTER OF AUTHORIZATION

As the Owner of the above referenced parcel, I, Ben Perez, Member of 17-19 Summer Street Properties, LLC, hereby authorize Civilworks New England to represent all applications before the City of Dover Planning Board and any other Dover Boards or Committees, and the State of NH, if necessary, to obtain the required permits and/or approvals relative to this development project.

Respectfully,

Ben Perez, Member
17-19 Summer Street Properties, LLC

COND-2024-0020 **LOCUST STREET**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
09047-000000	33 35 SILVER ST	CALAGUIRO JOSHUA MICHAEL TRUSTEE	CALAGUIRO JOSHUA M REVOCABLE LIV TRUST	33 35 SILVER ST	DOVER	NH	03820
09076-000000	29 31 SILVER ST	TNT SILVER STREET GROUP LLC		10 DURHAM RD	DOVER	NH	03820
09077-000000	25 SILVER ST	WOTTON KATHLEEN D		25 SILVER STREET	DOVER	NH	03820
12021-000000	176 178 CENTRAL AV	HOLGATE LIMITED PARTNERSHIP	HOPKINS WILLIAM F JR TRUSTEE	130 CENTRAL AVE	DOVER	NH	03820
12022-000000	10 SUMMER ST	ALGO OPPORTUNITY ZONE FUND I LLC		8 MERRILL LN	HOLLIS	NH	03049-6594
12023-000000	16 SUMMER ST	LAPOINT KEVIN &	MAZARAS TIFFANY	16 SUMMER ST	DOVER	NH	03820
12024-000000	148 LOCUST ST	TREACY HILL SARA G REVOCABLE TRUST	TREACY HILL SARA G TRUSTEE	148 LOCUST STREET	DOVER	NH	03820
12025-000000	182 CENTRAL AV	WOODMAN ANNIE E INSTITUTE		PO BOX 1916	DOVER	NH	03821-1916
12026-000000	196 CENTRAL AV	CENTRAL AVE OWNER LLC	C/O CONDOR PROPERTY MANAGEMENT	PO BOX 571	GREENLAND	NH	03840
12027-000000	202 CENTRAL AV	CENTRAL AVE OWNER LLC	C/O CONDOR PROPERTY MANAGEMENT	PO BOX 571	GREENLAND	NH	03840
12030-000000	12 14 SILVER ST	ALLEN TYLER D		14 SILVER ST	DOVER	NH	03820
12030-000001	12 SILVER ST	ALLEN TYLER D		14 SILVER ST	DOVER	NH	03820
12030-000002	14 SILVER ST	ALLEN TYLER D		14 SILVER ST	DOVER	NH	03820
12031-000000	20 22 SILVER ST	20-22 SILVER ST LLC		862 FRANKLIN PIERCE HWY	BARRINGTON	NH	03825
12032-000000	24 26 SILVER ST	CURTIS SHANNON		24 26 SILVER ST	DOVER	NH	03820
12033-000000	30 SILVER ST	SANBORN JEFFREY MARTIN &	SANBORN MAUREEN	30 SILVER ST	DOVER	NH	03820
12035-000000	17 19 SUMMER ST	17-19 SUMMER STREET PROPERTIES LLC		71 LAFAYETTE RD	HAMPTON FALLS	NH	03844
12036-000000	15 SUMMER ST	WOODMAN ANNIE E INSTITUTE		PO BOX 1916	DOVER	NH	03821-1916
12037-000000	143 LOCUST ST	AL HOJERRY KEENAN & BASHITI ALIA	BASHITI ALAA	143 LOCUST STREET	DOVER	NH	03820
12038-000000	137 LOCUST ST	KUZIOMKO FROST VIRGINIA J &	KUZIOMKO HENRY C	310 DOVER POINT RD	DOVER	NH	03820-4666
12039-000000	36 SILVER ST	DUGDALE MARY &	SWIDER KEITH	36 SILVER ST	DOVER	NH	03820
12040-000000	38 SILVER ST	STENDER SARAH	STENDER NEIL	38 SILVER ST	DOVER	NH	03820
12041-000000	50 SILVER ST	BREWITT DARCY D		50 SILVER ST	DOVER	NH	03820-3950
12045-000000	31 SUMMER ST	WINTERS GARY & LOIS TRUSTEES	WINTERS FAMILY TRUST	31 SUMMER ST	DOVER	NH	03820
12046-000000	145 LOCUST ST	SUSSLIN RYAN	MASSON GABRIELLE ANNA	145 LOCUST ST UNIT 1	DOVER	NH	03820
12071-000000	147 LOCUST ST	O BRIEN EDMUND J JR		147 LOCUST STREET	DOVER	NH	03820
12035-001000	LOCUST ST	17-19 SUMMER STREET PROPERTIES LLC		71 LAFAYETTE RD	HAMPTON FALLS	NH	03844

CONDITIONAL USE NARRATIVE
§170-20.B(2) & B(3)
HERITAGE RESIDENTIAL DISTRICT
for
LOCUST STREET RESIDENTIAL DEVELOPMENT
LOCUST STREET
Tax Map 12, Lot 35-1

Per the Heritage Residential (HR) District Regulations creation of a 4-family dwelling in the HR District is allowed with a Conditional Use Permit that meets the requirements of §170-20.B(2) and B(3).

(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.

The surrounding neighborhood has several multi-family dwellings. The buildings architecture is designed to maintain the traditional look of the neighborhood. The project also proposes the replacement of the existing concrete sidewalk with a traditional brick sidewalk in front of the lot to better fit the character of the neighborhood.

(b) The requested use will not create undue traffic congestion, or unduly impair pedestrian safety.

The proposed project will not create undue traffic congestion or impair pedestrian safety in the vicinity. The project proposes improvements to the area by providing off-street parking for the proposed 4 – unit building and will also include improved off-street parking for 2 of the units in the existing 4 – unit building located on the abutting parcel. The two parcels will share the combined off-street parking which will prevent vehicles from having to back out onto Locust Street.

(c) The requested use will not result in objectionable noise or odor which would constitute a NUISANCE.

The proposed project is residential, is consistent with the uses of surrounding properties, and will not result in objectional noises or odors.

(3) Conditional use approval shall be subject to a formal agreement between the PLANNING BOARD and the APPLICANT. Said agreement shall be recorded at the Strafford County Registry of Deeds.

A development agreement between the City and the Owner shall be recorded with the Strafford County Registry of Deeds.

Conversion to, or creation of Dwelling, 3-4 Family: Three- or four-family dwellings and conversions of existing dwellings to three (3) or four (4) units shall be subject to the following regulations:

A. The specific site must have an amount of open space, either landscaped or left natural, at least equal to the average amount of open space on all developed lots in the HR District that are wholly or partly within two hundred (200) feet of the subject parcel. Existing parking areas, either gravel, paved or unpaved, shall not be considered to be open space.

Open space calculations were performed for all developed lots within the HR District and wholly or partially located within 200 feet of the subject parcel. The calculation indicates that the neighborhood has an average open space of approximately 57%. The project proposes an open space area of 63.4% which is greater than the neighborhood average.

B. Off-street parking, in accordance with Chapter 153, Site Review, shall be provided to avoid vehicles backing into the street. Two (2) parking spaces per unit shall be required.

The project proposes improvements to the area by providing off-street parking for the proposed 4 – unit building and will also include improved off-street parking for 2 of the units in the existing 4 – unit building located on the abutting parcel. The two parcels will share the combined off-street parking which will prevent vehicles from having to back out onto Locust Street. Off-street parking is in accordance with Chapter 153 of the Site Review regulations.

C. Parking lots shall be at least five (5) feet from a side property line and ten (10) feet from a front property line.

The proposed parking area is greater than 10 feet from the front property line. The shared parking lot crosses over the side property line and will be identified with the appropriate easements. As well, a variance was pursued for side parking setback, the Zoning Board of Adjustments found "the criteria of the variance were met, which allows for where parking lots are required to be at least five (5) feet from the side property line." Allowing parking in the 5-foot parking lot side setback.

D. Parking areas shall be screened from the street and from abutting lots.

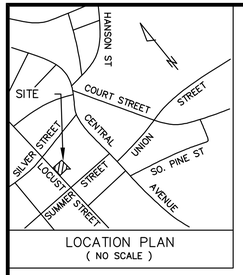
The parking area is screened from the street with existing hedgerows and additional landscaping.

E. Structures shall be at least twenty (20) feet from a front property line, thirty (30) feet from a rear property line and fifteen (15) from a side property line unless abutting a street, in which case, the distance from the side property line shall be twenty (20) feet.

The building meets the necessary setback requirements.

F. For new construction, the building must be designed to look like a SINGLE-FAMILY DWELLING. At a minimum, this shall mean that only one entrance shall be visible from a public street. For conversions, the building must retain its appearance as a SINGLE-FAMILY DWELLING or a 2-family dwelling, whichever is the current use. Notwithstanding any other provision of Chapter 170, a legal or legal non-conforming accessory structure existing as of the effective date of these regulations may be converted into one or more residential units, provided that the building shall not be enlarged, nor shall any exterior improvements be made to alter its appearance as an accessory structure.

The architectural plans are provided to indicate conformance with these requirements.



LOCATION PLAN
(NO SCALE)

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

PROPOSED 2-1/2 STORY 4 UNIT BUILDING

PROPOSED STAIRS
PROPOSED 6' HIGH WOODEN FENCE (SEE DETAIL)
PROPOSED STAIRS
PROPOSED BASEMENT WINDOW EGRESS WELL (TYP)
PROPOSED BRICK SIDEWALK MATCH EXISTING WIDTH
PROPOSED RETAINING WALL
PROPOSED 5' WALK
PROPOSED PORCH
PROPOSED 5' WIDE SIDEWALK
PROPOSED STAIRS
PROPOSED STAIRS
EXISTING SHRUBS
PROPOSED 5' WIDE SIDEWALK
PROPOSED ASPHALT ADA RAMP
PROPOSED STAIRS
PROPOSED ACCESSIBLE PARKING "R7-8a" SIGN
PROPOSED EASEMENT (TYP.)
PROPOSED ASPHALT DRIVE ENTRANCE
PROPOSED SNOW STORAGE
PROPOSED STONE APRON (SEE DETAIL)
PROPOSED LIGHT POLE BASE
PROPOSED SNOW STORAGE
PROPOSED ASPHALT ADA RAMP
EXISTING SHRUBS
PROPOSED EASEMENT (TYP.)
EXISTING 4 UNIT RESIDENTIAL BUILDING

16"ø HEMLOCK
18"ø HEMLOCK
38"ø HEMLOCK
16"ø HEMLOCK
18"ø HEMLOCK
36"ø HEMLOCK

BRICK SIDEWALK
VGC
D'YL
SWL
3'R
9' TYP
18' (TYP)
24'
18'
15'
30'
20'
9'
5'
8'
8'
9'
9'

SITE PARKING CALCULATIONS
HERITAGE RESIDENTIAL DISTRICT
PARKING REQUIREMENTS FOR 4-UNITS MULTIFAMILY DWELLINGS "OFF-SITE PARKING, IN ACCORDANCE WITH CHAPTER 153, SITE REVIEW, SHALL BE PROVIDED AS TO AVOID VEHICLE BACKING INTO THE STREET. TWO (2) PARKING SPACES PER UNIT SHALL BE REQUIRED."REQUIRES 2 OFF STREET PARKING SPACES PER UNIT.

USES:	REQUIRED	PROPOSED
PROPOSED 4-UNIT BUILDING	8	8
EXISTING 3-UNITS BUILDING (2 UNITS WILL SHARE ACCESS)	4	4
TOTAL	12	12
ACCESSIBLE PARKING	0	1 (VAN)

SNOW STORAGE CALCULATIONS
4,675 SF PAVEMENT $\frac{1 \text{ SF STORAGE}}{10 \text{ SF PAVEMENT}}$ = ±467.5 SF

SNOW STORAGE AREA PROVIDED ±1,949 SF.

SITE EASEMENT NOTE
1. PARCELS 12/35-1 AND 12/35 WILL SHARE THE COMMON ACCESS FROM LOCUST STREET AND WILL SHARE THE COMMON PARKING AREA CONTAINED ON BOTH PARCELS. THE CROSS EASEMENT LANGUAGE WILL BE PROVIDED TO PLANNING FOR REVIEW PRIOR TO RECORDING AT THE REGISTRY OF DEEDS.

NH STATE PLANE
NAD 83 - CPS OBS.

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)

PLANNING FILE NO.: SITE-2024-0003

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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

NO.	REVISION	APP'D	DATE
3	REVISION PER TRC COMMENTS #2	SJH	8-06-24
2	REVISED LOT 35 BLD UNIT COUNT	SJH	7-22-24
1	REVISION PER TRC COMMENTS	SJH	4-25-24

DATE: 2-29-24
SCALE: 1"=10'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:23029
FILE: SITE.DWG

SITE PLAN

17-19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

6

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #SITE-2024-0003

Application Type:	Site Plan
Applicant(s):	17-19 Summer Street Properties, LLC
Owner(s):	17-19 Summer Street Properties, LLC
Location:	Locust Street (Vacant Lot) (Assessor's Map 12, Lot 35-1)
Meeting Date:	October 22, 2024

INTENT: The Applicant is proposing the construction of an approximately 2,400 s.f., 2-½ story, four-unit structure on a vacant lot on Locust Street.

AGENDA ITEM #: 4-D

FILE: SITE-2023-0003

APPLICANT: 17-19 Summer Street Properties, LLC

OWNER: Same

LOCATION: Locust Street (Vacant Lot) (Assessor's Map 12, Lot 35-1)

UNITS PROPOSED: 4 residential units

ACREAGE: Total: 0.22± acres

ZONING DISTRICT: Heritage Residential (HR)

EXISTING USE: Vacant Lot

PROPOSED USE: Residential

SURROUNDING USE: Residential, Mixed Use

PERMITS:
- Conditional Use Permit- Parking lot setbacks

WAIVERS REQUESTED:
- Waiver from §153.14.E (2) – Parking Lot Lighting. Applicant seeks to minimize lighting to prevent illuminating abutting residential lots

APPLICATION IS COMPLETE?: Yes

REGIONAL IMPACT?: No

NOTICES SENT: Notices sent by certified mail to all abutters for a previous meeting

ZBA ACTION:
1. 7/18/24 – Variance granted in relief of parking lot setback CUP requirement
2. 8/15/24 – Variance granted to correct scrivener's error in 7/18/24 variance
3. 9/10/24 – Request for rehearing granted pursuant to 8/15/24 variance
4. 9/19/24 – Appeals of three (3) administrative decisions denied
5. 10/17/24 – Rehearing of 8/15/24 variance

CONSERVATION COMMISSION: N/A

TRC: Reviewed by TRC on 3/28/24 and 5/9/24

ATTACHMENTS: Application materials including site plan, CUP Application, Variance Approval

Summary of Request and Background
The applicant is proposing the construction of an approximately 2,400 s.f., 2-½ story, four-unit structure on a vacant lot on Locust Street with associated parking and landscaping.

The project proposes access to the site through a shared 24' wide driveway located on Locust Street. The driveway location is on the abutting parcel, Tax Map 12, Lot 35, and will utilize the existing driveway cut for the abutting property. The shared access drive will provide the necessary parking for the proposed 4-unit multi-family dwelling, providing 8 parking spots, while also providing 4 parking spots for the existing 4-unit on 17 Summer St. The project will be granting easements to allow for access and parking on the abutting lot.

A Conditional Use Permit (CUP) is being proposed as part of this project (COND-2024-0020) to allow for the creation of a 4-unit dwelling structure within the Heritage Residential (HR) District. The Technical Review Committee reviewed the application at their March 28, 2024 and May 9, 2024 meetings. *(minutes attached)*

Summary of Waiver Requests:
The applicant is seeking one (1) waiver as part of this proposal which is from §153.14.E (2) – Parking Lot Lighting, in order to reduce light spillover onto adjacent residential prperties.

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

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

STAFF RECOMMENDATION - Waivers/Relief:
Planning Staff believes the applicant's rational for the waivers meets criterion (2) and waiving such standards and requirements will properly carry out the spirit and intent of the regulations.

The Planning Department recommends that the Planning Board accept the application as complete, note it is not of regional impact, hold a public hearing, make the necessary and supporting findings of fact, and vote to grant the waiver with the following subsequent condition:

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #SITE-2024-0003

Application Type:	Site Plan
Applicant(s):	17-19 Summer Street Properties, LLC
Owner(s):	17-19 Summer Street Properties, LLC
Location:	Locust Street (Vacant Lot) (Assessor's Map 12, Lot 35-1)
Meeting Date:	October 22, 2024

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

1. Add a note that the Planning Board approved a waiver for §153.14.E (2) to allow for less parking lot lighting than what is required, and that the Board found the criteria of Chapter 153-21 have been met.

Consistency with Land Use Regulations – Site Plan

§153-4 of the Site Review Regulations of the City Code provides for site review by the Technical Review Committee and Planning Board of new construction of various types. This plan is beyond consistent with those regulations as the regulations only require a Conditional Use Permit for a four-unit dwelling. Staff and the TRC voted to have this go to Planning Board because of the sensitivity of the neighborhood and proximity to the urban core.

STAFF RECOMMENDATION- Site Plan:

The Planning Department recommends that the Planning Board make the necessary and supporting findings of fact, and vote to approve the Site Plan with the following subsequent conditions:

Subsequent Conditions to Be Met Prior to Signing of the Plans:

1. Add owner's signatures.
2. Add PE, LLS, and LLA stamp and signature.
3. Approval of CUP (COND-2024-0020);
4. Remove note referencing sought waiver for §153.14.B(3) from plans;
5. Submit final plans (including CAD) with owner's signature and all professional stamps and signatures.
6. Pest control specialist review the site and indicate whether pest control plan is needed. If determined that a pest control plan is needed, the plan must be followed per Chapter 153-10.G.

Subsequent Conditions to Be Met Prior to Construction:

7. A site construction sign with the contact information for the general contractor and indication of level of noise, vibration expected, must be displayed in a location approved by the City Engineer or Planning Director;

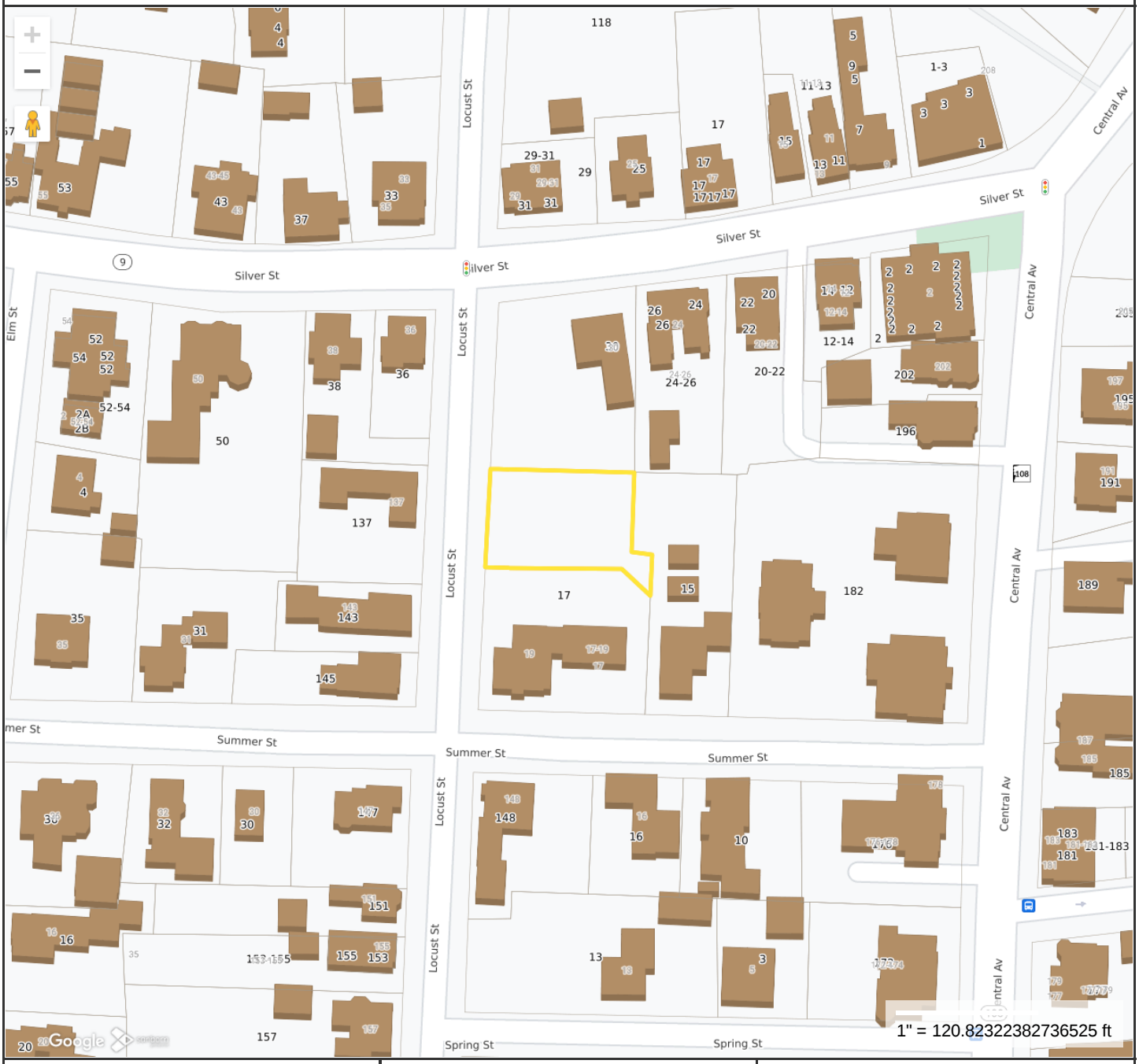
Subsequent Conditions to Be Met Prior to Building Permit:

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

Subsequent Conditions to Be Met Prior to Occupancy:

9. Issuance of Certificate of Occupancy;
10. Surety or other form of security acceptable to the City is provided for any unfinished work.
11. 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-2024-0003 LOCUST STREET



Property Information

Location	LOCUST ST
Owner	17-19 SUMMER STREET PROPERTIES LLC
Land Use	
Zoning Code	HR
Property Id	12035-001000

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

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

Geometry updated 10/30/2023
Data updated Daily

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

CITY OF DOVER

PLANNING BOARD

Please bring previous materials from August 27th, 2024 meeting.

PLAN SNAPSHOT REPORT SITE-2024-0003
FOR CITY OF DOVER, N.H.

Plan Type:	Site Plan - Major	**Project:**		**App Date:**	03/07/2024
Work Class:	New Construction	**District:**	None	**Exp Date:**	05/11/2024
Status:	Review Expired	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	

Description: Multi-Unit Building with 4 two bedroom units, improved driveway access, parking, utilities and drainage improvements.

Parcel:	12035-001000	Main	**Address:** 136 Locust Street Unit 101,102, 103, & 104 Dover, NH	Main	**Zone:** HR(Residential - Heritage)

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

Applicant
Ben Perez
Mobile: (603) 944-0516

Plan Custom Fields

Total	0	Total2	0	Total3	1060
Total4	0	Total5	0	Total6	4
Total7	0	Total8	0	Total9	2395
Street Classification Type	Municipal	Net Change in # Parking Spaces (+/-)	9	Water Service	Municipal
Recording Number		Sewer Service	Municipal	Deed Book	
Total SQFT	0	Deed Page		Deed Date	
Proposed Property Use	Multi-Unit Residential	Area of Parcel to be Developed (SQFT)	14500	Number of Parking Spaces Existing	0
Number of Parking Spaces Proposed	9	Type of Building to be Built	Wood Frame, Clapboard Siding, Asphalt Shingle Roof	Estimated Construction Value	950000.00
Refuse Removal	Private	Is there an existing Conservation Easement?	No	Existing Conservation Easement Details	
TotalImpactFeeSDTOD	0.00	TotalImpactFeeTHTOD	0.00	TotalImpactFee23FTOD	0.00
TotalImpactFeeA4TOD	0.00	TotalImpactFeeMHTOD	0.00	TotalImpactFeeADUTOD	0.00
TotalImpactFeeAONRTOD	0.00	TotalImpactFeeAR55TOD	0.00	TotalImpactFeeAR62TOD	0.00
Sub Total Residential	0.00	TotalImpactFeeRIRCTOD	0.00	TotalImpactFeeOCSTOD	0.00
TotalImpactFeeITWCTOD	0.00	TotalImpactFeeNHALTOD	0.00	TotalImpactFeeOIUTOD	0.00
TotalImpactFeeAFAOTOD	0.00	Sub Total Non-Residential	0.00	Total of Impact Fees to be Assessed	0.00

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Steve_Haight_3/7/2024.jpg	03/07/2024 10:08	Haight, Steve		Uploaded via CSS
2024.03.28_PlanningTechnicalReviewCommittee.Agenda.pdf	03/13/2024 14:27	Blonigen, Rachel		TRC Agenda
2024.05.09_PlanningTechnicalReviewCommittee.Agenda.pdf	04/29/2024 10:56	Blonigen, Rachel		TRC Agenda
2024.03.28_PlanningTechnicalReviewCommittee.Locust	05/13/2024 11:44	Blonigen, Rachel		Final TRC Minutes

Street_SITE-2024-0003.pdf					
0 Cover Letter (rev 4-25-24)_v2.pdf	05/14/2024	14:45	Haight, Steve		
1 Response to TRC Comments dated 3-28-24_v1.pdf	05/14/2024	14:45	Blonigen, Rachel		
10 Stormwater Management Narrative_v2.pdf	05/14/2024	14:45	Haight, Steve		
12 Will Serve Requests-Letters (Dover, Eversource, Unitil) 4-25-24_v2.pdf	05/14/2024	14:45	Haight, Steve		
13 PEREZ STREET SCAPE_v3.pdf	05/14/2024	14:45	Glidden, Jean		
13 Traffic Assessment Memorandum_v2.pdf	05/14/2024	14:45	Haight, Steve	Available Online	
14 Landscape Operation & Maintenance Plan_v2.pdf	05/14/2024	14:45	Haight, Steve		
15 Stormwater Inspection & Maintenance Manual_v2.pdf	05/14/2024	14:45	Haight, Steve		
16 SITE PLAN SET (5-2-24) complete_v3.pdf	05/14/2024	14:45	Glidden, Jean		
17 Drainage Analysis (rev)_v2.pdf	05/14/2024	14:45	Haight, Steve		
2 Site Review Application_v2.pdf	05/14/2024	14:45	Haight, Steve		
5 Conditional Use Permit Application_v2.pdf	05/14/2024	14:45	Haight, Steve		
6 Owner-Applicant Letter of Authorization_v2.pdf	05/14/2024	14:45	Haight, Steve	Available Online	
8 Project Narrative_v2.pdf	05/14/2024	14:45	Haight, Steve		
9 Conditional Use Narrative_v2.pdf	05/14/2024	14:45	Haight, Steve		
Locust street Revised per TRC-1 4-25-2024-2_v2.pdf	05/14/2024	14:45	Haight, Steve		
2024.05.09_PlanningTechnicalReviewCommittee.Locust Street_SITE-2024-0003.pdf	08/09/2024	10:29	Blonigen, Rachel		Approved TRC Minutes
2024.08.27_PlanningBoard.Agenda.pdf	08/14/2024	14:11	Blonigen, Rachel		PB Agenda
PB08-27-2024 SITE-2024-0003.pdf	08/23/2024	14:42	Blonigen, Rachel		Staff Memo
3 Renaud Ave Abutter Letter.pdf	08/27/2024	14:56	Blonigen, Rachel		
Abutter Letter 104 Belknap Street.pdf	08/27/2024	14:56	Blonigen, Rachel		
Dover Planning Board Letter 135 Locust St 7.21.24.pdf	08/27/2024	14:56	Blonigen, Rachel		
2024.08.27_PlanningBoard.Minutes.pdf	09/03/2024	15:44	Blonigen, Rachel		Draft PB Minutes
2024.10.08_PlanningBoard.Agenda.pdf	09/26/2024	16:06	Blonigen, Rachel		PB Agenda
Continuance Request.pdf	10/03/2024	16:26	Blonigen, Rachel		
PB10-08-2024 SITE-2024-00003.pdf	10/03/2024	16:26	Blonigen, Rachel		Staff Memo
Continuance Request.pdf	10/03/2024	16:27	Blonigen, Rachel		
PB10-08-2024 SITE-2024-00003.pdf	10/03/2024	16:27	Blonigen, Rachel		Staff Memo

Invoice No.	Fee		Fee Amount	Amount Paid
INV-00007010	Planning General Application Fee		$200.00	$200.00
		Total for Invoice INV-00007010	**$200.00**	**$200.00**
INV-00007018	Planning Impervious Paved Area Fee		$74.20	$74.20
	Planning Residential Fee		$400.00	$400.00
		Total for Invoice INV-00007018	**$474.20**	**$474.20**
INV-00009070	Planning Public Notice in Newspaper		$120.00	$120.00
		Total for Invoice INV-00009070	**$120.00**	**$120.00**
		Grand Total for Plan	**$794.20**	**$794.20**

Activity Type	Activity Number	Name	Workflow Action Name	User	Created On
Recommendation to Planning Board	RCMND-000058-2024		Planner Creates Staff	Rachel Blonigen	08/23/2024

Recommendations v.1.00

Activity Custom Fields

Agenda Item	4-I	Application Complete?	Yes	Attachments	INTENT: The Applicant is proposing the construction of an approximately 2,400 s.f., 2-½ story, four-unit structure on a vacant lot on Locust Street. AGENDA ITEM #: 4-I FILE: SITE-2023-0003 APPLICANT: 17-19 Summe Street Properties, LLC OWNER: Same LOCATION: Locust Street (Vacant Lot) (Assessor's Map 12, Lot 35-1) UNITS PROPOSED: 4 residential units ACREAGE: Total: 0.22± acres ZONING DISTRICT: Heritag Residential (HR) EXISTING USE: Vacant Lot PROPOSED USE: Residential SURROUNDING USE: Residential, Mixed Use PERMITS: • Conditional Use Permit- Parking lot setbacks WAIVERS REQUESTED: • Waiver from §153.14.E (2) – Parking Lot Lighting. Applicant seeks to minimize lighting to prevent illuminating abutting residential lots ZBA ACTION: Yes, variance approved on 7/18/24 (subsequently amended and approved on 8/15/24) for HR District 3-4 Family CUP, Criterion C – parking lot setback values. CONSERVATION COMMISSION: N/A TRC: Reviewed by TRC on 3/28/24 and 5/9/24 ATTACHMENTS: Application materials including site plan, CUP Application, Variance Approval. Summary of Request and Background The applicant is proposing the construction of an approximately 2,400 s.f.,

	2-½ story, four-unit structure on a vacant lot on Locust Street with associated parking and landscaping. The project proposes access to the site through a shared 24' wide driveway located on Locust Street. The driveway location is on the abutting parcel, Tax Map 12, Lot 35, and will utilize the existing driveway cut for the abutting property. The shared access drive will provide the necessary parking for the proposed 4-unit multi-family dwelling, providing 8 parking spots, while also providing 4 parking spots for the existing 4-unit on 17 Summer St. The project will be granting easements to allow for access and parking on the abutting lot. A Conditional Use Permit (CUP) is being proposed as part of this project (COND-2024-0020) to allow for the creation of a 4 unit dwelling structure within the Heritage Residential (HR) District. The Technical Review Committee reviewed the application at their March 28, 2024 and May 9, 2024 meetings. (minutes attached) Summary of Waiver Requests: The applicant is seeking one (1) waiver as part of this proposal which is from §153.14.E (2) – Parking Lot Lighting, in order to reduce light spillover onto adjacent residential prperties. Consistency with Land Use Regulations – Site Plan §153-4 of the Site Review Regulations of the City Code provides for site review by the Technical Review Committee and Planning Board of new construction of various types. This plan is consistent with those regulations.
	Consistency with Land Use Regulations –Waivers/Relief §153-21 of the Site Plan Review Regulations state the "Planning Board may waive specific provisions of these regulations. The Planning Board may only grant a waiver if the Planning Board finds, by majority vote, that: (1) Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulations; or (2) Specific circumstances relative to the subdivision, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations. STAFF RECOMMENDATIO - Waivers/Relief: Planning Staff believes the applicant's rational for the waivers meets criterion (1) and waiving such standards and requirements is not contrary to the spirit or intent of the ordinance. The Planning Department recommends that the Planning Board accept the application as complete, note it is not of regional impact, hold a public hearing, make the necessary and supporting findings of fact, and vote to grant the waiver with the following subsequent condition: Subsequent Condition to be Met Prior to the Signing of the Plans: 1. Add a note that the Planning Board approved a waiver for §153.14.E (2) to allow for less parking lot lighting than what is required, and that the Board foun
Summary Request & Background	Summary of Request and Background The applicant is proposing the construction of an approximately 2,400 s.f., 2-½ story, four-unit structure on a vacant lot on Locust Street with associated parking and landscaping. The project proposes access to the site through a shared 24' wide driveway located on Locust Street. The driveway location is on the abutting parcel, Tax Map 12, Lot 35, and will utilize the existing driveway cut for the abutting property. The shared access drive will provide the necessary parking for the proposed 4-unit multi-family dwelling, providing 8 parking spots, while also providing 4 parking spots for the existing 4-unit on 17 Summer St. The project will be granting easements to allow for access and parking on the abutting lot. A Conditional Use Permit (CUP) is being proposed as part of this project (COND-2024-0020) to allow for the creation of a 4 unit dwelling structure within the Heritage Residential (HR) District. The Technical Review Committee reviewed the application at their March 28, 2024 and May 9, 2024 meetings. (minutes attached)

PLAN SNAPSHOT REPORT (SITE-2024-0003)

Planning Board Decision	DEC-000063-2024	Planning Board Decision v.1.00	Rachel Blonigen	09/03/2024

Activity Custom Fields

Documents	Provide one PDF, one CAD and two paper plan sets.	Planning Board Decision	Tabled

Hearing Type	Location	Scheduled Date	Status	Subject
Planning Board Hearing v.1	Council Chambers	08/27/2024	Scheduled	Site Review

Meeting Type	Location	Scheduled Date	Subject
Technical Review Committee Meeting v.1	City Hall, Second Floor Conference Room	03/28/2024	Technical Review Committee Meeting

Meeting Custom Fields

TRC Meeting Next Steps	Resubmit for 2nd TRC

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	Requires Re-submit	03/13/2024	04/10/2024	04/01/2024	Yes	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Business Development	Business Development	Burdin, James	Requires Re-submit	03/13/2024	04/10/2024	04/01/2024

Comments: Locust Street

- The building looks attractive and both the building and use appear consistent with the surrounding area.

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
City Engineer	Community Services - Engineering	Mavrogeorge, Kenneth	Requires Re-submit	03/13/2024	04/10/2024	04/01/2024

Comments: Project: SITE-2024-0003: Locust Street Residential Properties
TRC Meeting: March 28, 2024 (Meeting 1)
Reviewer: Kenneth Mavrogeorge, PE
Checked by: Engineering Staff
R:\Divisions\Engineering\00_Standards\06_Review Checklists\00_Dover Planning - TRC\2023_City of Dover Project Review Checklist.docx
Comments:
- General Comment:
o Applicant and Contractor shall review the Dover Construction Guidelines prior to scheduling a Preconstruction meeting with City staff. The guidelines can be found on the City of Dover Website on the Engineering page. Engineering is currently in the final stages of updating this document. The Applicant should be prepared to conform to the currently adopted guidelines when they are adopted. https://www.dover.nh.gov/Assets/government/city-operations/1form/community-services/engineering/engineering-documents/Construction%20Guidelines.pdf
o Provide detail for City of Dover Construction Sign
o Are any of the Units ADA accessible?
o Are ADA spaces provided and signed?
o Engineering requests a letter certifying the tie in locations or discharge points for all sump pumps and roof leaders for existing structures on the property.
o Confirm if the driveway easement will be modified to include the parking spaces.
o A Landscaping Plan should be provided.
- Sheet 4:
o Dover Notes 24 and 25 appear to be missing. Confirm that all relevant notes are on the notes sheet.
o Site Note 13 indicates that there is land owned by DIBDA. Please confirm what this is in reference to.
- Sheet 6:
o The driveway apron should be paved and is the responsibility of the property owner not the City.
o There are stairs on all sides of the building but no pathways to connect them. Please confirm that accessible or clear paths are not required by fire code. Provide as necessary.
- Sheet 7:
o Show inverts for all proposed structure on the plan not just the detail sheet.
- Sheet 8:
o CTS may be used from the curb stop to the building for water services.
o Will the building have submeters monitored by the Applicant? As proposed the building will receive one meter from the City.
- Sheet 12:
o The driveway apron should be paved and is the responsibility of the property owner not the City.
o Recommend a 12” thick dumpster pad.
- Sheet 16:
o Will the building have lighting on the exterior? If so, include it in the calculation as the points of egress around the building appear to have zero lighting.
- Landscape O&M:
o Plan notes that snow shall not be stored in rain gardens which conflicts with the snow storage provided on the plans. Please adjust snow storage accordingly

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Benton, Donna	Requires Re-submit	03/13/2024	04/10/2024	04/01/2024

Comments: Resubmit for 2nd TRC

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Zoning Administrator	Planning	Crouser, Paul	Requires Re-submit	03/13/2024	04/10/2024	04/01/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
IS Building Official	Planning / Inspection Services	Maxfield, Jim	Requires Re-submit	03/13/2024	04/10/2024	04/01/2024

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Traffic Bureau	Police	Speidel, Marn	Requires Re-submit	03/13/2024	04/10/2024	04/01/2024

Comments: • Is the proposed new residential structure subject to requirement for underground electrical connection? Overhead connection is shown on plan.
• Any walkways or patios connected to proposed staircases on N, S and E sides of building? Or do these lead directly to lawn space?
• Building official will set address, but DPD supports a Locust Street address for units in the new proposed building. Some of the letters-to-serve reference “135 Locust Street” but this is incongruent with the even/odd side numbering.

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.2	Approved	04/29/2024	05/10/2024	05/14/2024	No	Yes

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Business Development	Business Development	Burdin, James	Approved	04/29/2024	05/27/2024	05/01/2024

Comments: No further comments or questions

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
City Engineer	Community Services - Engineering	Mavrogeorge, Kenneth	Approved	04/29/2024	05/10/2024	05/09/2024

Comments: General Comment:
o Response to TRC Comments not available online in the portal. Please provide.
Sheet 6:
o Snow storage appears to conflict with landscaping on the left side of the driveway as you enter.
Sheet 7:
o Check the spot grades around PYD1. It appears that the yard drain is not the low point and that water is being directed to the parking area.
Sheet L1.0:
o General Note 2 should be revised to add the phrase “and the City’s Planning Department” after Landscape Architect.

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Crouser, Paul	Approved	04/29/2024	05/27/2024	05/09/2024

Comments: • Reminder: Impact fees, Water and sewer investment fees
• Have Landscape architect review abutters trees to see if root system will be impacted.
• Revise plans:
Use latest common notes
Keep 16” hardwood?
Add note intent is to keep in place but if impacted, will be replaced.
Location/width of proposed easement

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Zoning Administrator	Planning	Crouser, Paul	Approved	04/29/2024	05/10/2024	05/09/2024

Comments: HR Requirements from back of HR table shall be included in narrative including:
-Parking side setback
Parking does not meet CUP criteria- variance is needed, though staff will support.
Verify parking lot setback from front boundary line

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
IS Building Official	Planning / Inspection Services	Maxfield, Jim	Approved	04/29/2024	05/10/2024	05/02/2024

Comments: Previous comments resolved.
Structure will be 136 Locust Street

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Traffic Bureau	Police	Speidel, Marn	Approved	04/29/2024	05/10/2024	05/09/2024

Comments: Previous comments resolved.

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		03/13/2024 12:38	05/14/2024 14:51
Confirm application complete v.1	Generic Action		03/13/2024 12:39
Technical Review Committee Meeting Agenda v.1	Task	03/13/2024 12:39	03/13/2024 12:39
Land Use Plan Technical Review v.1	Receive Submittal	03/13/2024 0:00	04/01/2024 12:33
Land Use Plan Technical Review v.2	Receive Submittal	04/29/2024 0:00	05/14/2024 14:51
Technical Review Committee Meeting v.1	Hold Meeting	04/01/2024 12:31	04/01/2024 12:33
Planning Board v.1		08/02/2024 10:35	
Planning Board Agenda v.1	Task	08/02/2024 10:35	08/14/2024 14:11
Planning Board Agenda v.1	Task	10/08/2024 11:30	10/08/2024 11:30
Invoice for Notices v.1	Task	08/14/2024 14:11	08/23/2024 14:42

Send Notices v.1	Task	08/23/2024 14:38	08/23/2024 14:42
Planner Creates Staff Recommendations v.1	Plan Activity	08/23/2024 14:38	08/23/2024 14:42
Planner Creates Staff Recommendations v.1	Plan Activity		
Distribute Planning Board Materials v.1	Task	08/23/2024 14:40	08/23/2024 14:42
Planning Board Hearing v.1	Hold Hearing	08/23/2024 14:41	09/03/2024 15:45
Planning Board Decision v.1	Plan Activity	09/03/2024 15:45	
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: 17-19 Summer Street Properties, LLC Telephone # 603-944-0516

Address of Applicant: 71 Lafayette Road Hampton Falls, NH 03844

E-Mail Address: ben@bostonnorthdevelopment.com

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

Address of Property Owner: same

PROPERTY INFORMATION

Address of Property: Locust Street

Assessor's Map # 12 Lot(s) # 35-1

Zoning District(s) HR - Heritage Residential Overlay District(s) N/A

Size of Parcel: 10,000 sq. ft. .22 ac. Property Deed: Book 4925 Page: 399

Existing Use of Property: vacant

SITE PLAN INFORMATION

Describe Proposed Use: 4 (two bedroom) Unit Building w/Parking & Driveway Easement

Area of Parcel to be Developed: 9,200± sq. ft.

If Multi-family Residential: Number of Units 4 & Buildings Proposed 1

If lodging: Number of Units N/A & number of Buildings N/A

Number of Parking Spaces: Existing 0 Proposed 8

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

Number of Employees Total: N/A In Maximum Shift: N/A

Disposition of Parcel:

Building Footprint 2,410± sq. ft.

Total Building Area 4,847± sq. ft.

Paved Area 619± sq. ft.

Building Setbacks:

Front Yard 20 ft.

Rear Yard 30 ft.

Side Yard: Right 15 ft. Left 15 ft.

City Water? ✓Yes ___ No How far is city water from the property? stubbed on site

City Sewer? ✓Yes ___ No How far is city sewer from the property? stubbed on site

TRANSFER OF DEVELOPMENT RIGHTS INFORMATION N/A

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

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

Relief sought (Check All That Apply):

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

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

BUILDING INFORMATION

Type of Building to be Built: Wood frame, clapboard siding, asphalt shingle roof

Height of Building: 34±' Finished Floor Elevation: 102.2'

Number of Seats (where applicable) N/A

Estimated value of construction: $950,000 Refuse removal: Public/Private (circle one)

WAIVER REQUESTS

Site Review Regulations section(s) to be waived: Article IV, Section B.(3) & Article IV, Section E.(2)(b)

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

See attached Waiver Reqest(s)

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 #: 603-742-0911

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

ARCHITECT INFORMATION

Name of Architect and Company (Licensed in N.H.) Samia Touma - Distinction by Design

Address 49 Oak Street Dover, NH 03820 Telephone #: 603-401-7294

Professional License #: _____ E-mail address: samia.distinction@gmail.com

LANDSCAPE ARCHITECT INFORMATION

Name of Landscape Architect and Company (Licensed in N.H.) Jeffrey R. Hyland
Ironwood Design Group, LLC

Address P.O. Box 873 Exeter, NH 03833 Telephone #: 603-772-0590

Professional License #: NH #0026 E-mail address: jhyland@fewood.com

SOIL SCIENTIST INFORMATION

Name of Soil Scientist and Company (Licensed in N.H.) Strafford County NH Web Soil Survey Data

Address N/A Telephone #: N/A

Professional License #: N/A E-mail address: N/A

CONSERVATION EASEMENT HOLDER N/A

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: 3/5/2024

Signature of Applicant (*if different from owner*): _____ Date: _____

Signature of Agent: _____ Date: 3/5/24

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: 3/5/2024

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: 3/5/2024

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: 3/5/2024

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
12	35-1	17-19 Summer Street Properties, LLC	71 Lafayette Road Hampton Falls, NH 03844

Applicant (if different from owner):

APPLICANT NAME	APPLICANT COMPANY	MAILING ADDRESS
Same		

Surveyor and/or Engineer/Professional Agent:

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

Conservation Easement Holder: N/A

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

City of Dover, New Hampshire
SITE PLAN REVIEW SUBMISSION CHECKLIST

[Revision Date: June 4, 2019]

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

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

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

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

APPLICANT: 17-19 Summer Street Properties, LLC File Number: SITE-2024-003

PROJECT TITLE: Locust Street Residential Development

PROPERTY LOCATION: Locust Street Tax Map: 12 Lot: 35-1

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

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

REVIEWED BY: _____ DATE_____ TRC DATE_____

SITE-2024-0003 **LOCUST STREET**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
09047-000000	33 35 SILVER ST	CALAGUIRO JOSHUA MICHAEL TRUSTEE	CALAGUIRO JOSHUA M REVOCABLE LIV TRUST	33 35 SILVER ST	DOVER	NH	03820
09076-000000	29 31 SILVER ST	TNT SILVER STREET GROUP LLC		10 DURHAM RD	DOVER	NH	03820
09077-000000	25 SILVER ST	WOTTON KATHLEEN D		25 SILVER STREET	DOVER	NH	03820
12021-000000	176 178 CENTRAL AV	HOLGATE LIMITED PARTNERSHIP	HOPKINS WILLIAM F JR TRUSTEE	130 CENTRAL AVE	DOVER	NH	03820
12022-000000	10 SUMMER ST	ALGO OPPORTUNITY ZONE FUND I LLC		8 MERRILL LN	HOLLIS	NH	03049-6594
12023-000000	16 SUMMER ST	LAPOINT KEVIN &	MAZARAS TIFFANY	16 SUMMER ST	DOVER	NH	03820
12024-000000	148 LOCUST ST	TREACY HILL SARA G REVOCABLE TRUST	TREACY HILL SARA G TRUSTEE	148 LOCUST STREET	DOVER	NH	03820
12025-000000	182 CENTRAL AV	WOODMAN ANNIE E INSTITUTE		PO BOX 1916	DOVER	NH	03821-1916
12026-000000	196 CENTRAL AV	CENTRAL AVE OWNER LLC	C/O CONDOR PROPERTY MANAGEMENT	PO BOX 571	GREENLAND	NH	03840
12027-000000	202 CENTRAL AV	CENTRAL AVE OWNER LLC	C/O CONDOR PROPERTY MANAGEMENT	PO BOX 571	GREENLAND	NH	03840
12030-000000	12 14 SILVER ST	ALLEN TYLER D		14 SILVER ST	DOVER	NH	03820
12030-000001	12 SILVER ST	ALLEN TYLER D		14 SILVER ST	DOVER	NH	03820
12030-000002	14 SILVER ST	ALLEN TYLER D		14 SILVER ST	DOVER	NH	03820
12031-000000	20 22 SILVER ST	20-22 SILVER ST LLC		862 FRANKLIN PIERCE HWY	BARRINGTON	NH	03825
12032-000000	24 26 SILVER ST	CURTIS SHANNON		24 26 SILVER ST	DOVER	NH	03820
12033-000000	30 SILVER ST	SANBORN JEFFREY MARTIN &	SANBORN MAUREEN	30 SILVER ST	DOVER	NH	03820
12035-000000	17 19 SUMMER ST	17-19 SUMMER STREET PROPERTIES LLC		71 LAFAYETTE RD	HAMPTON FALLS	NH	03844
12036-000000	15 SUMMER ST	WOODMAN ANNIE E INSTITUTE		PO BOX 1916	DOVER	NH	03821-1916
12037-000000	143 LOCUST ST	AL HOJERRY KEENAN & BASHITI ALIA	BASHITI ALAA	143 LOCUST STREET	DOVER	NH	03820
12038-000000	137 LOCUST ST	KUZIOMKO FROST VIRGINIA J &	KUZIOMKO HENRY C	310 DOVER POINT RD	DOVER	NH	03820-4666
12039-000000	36 SILVER ST	DUGDALE MARY &	SWIDER KEITH	36 SILVER ST	DOVER	NH	03820
12040-000000	38 SILVER ST	STENDER SARAH	STENDER NEIL	38 SILVER ST	DOVER	NH	03820
12041-000000	50 SILVER ST	BREWITT DARCY D		50 SILVER ST	DOVER	NH	03820-3950
12045-000000	31 SUMMER ST	WINTERS GARY & LOIS TRUSTEES	WINTERS FAMILY TRUST	31 SUMMER ST	DOVER	NH	03820
12046-000000	145 LOCUST ST	SUSSLIN RYAN	MASSON GABRIELLE ANNA	145 LOCUST ST UNIT 1	DOVER	NH	03820
12071-000000	147 LOCUST ST	O BRIEN EDMUND J JR		147 LOCUST STREET	DOVER	NH	03820
12035-001000	LOCUST ST	17-19 SUMMER STREET PROPERTIES LLC		71 LAFAYETTE RD	HAMPTON FALLS	NH	03844

CITY OF DOVER

TECHNICAL REVIEW COMMITTEE MINUTES – SITE-2024-0003

Application Type:	Site Review
Applicant(s):	17-19 Summer Street Properties, LLC
Owner(s):	17-19 Summer Street Properties, LLC
Location:	Locust Street (Assessor's Map 12, Lot 35-1)
Date:	May 9, 2024

INTENT: Proposal is to build a 2,400 square foot residential building consisting of four (4), two (2) bedroom units, improved driveway access, parking, utilities and drainage improvements. *[This item was previously heard by the Planning Technical Review Committee on March 28, 2024]*

UNITS PROPOSED: 4 units

AGENDA ITEM #: 1

ACREAGE: 0.22± ac.

ZONING DISTRICT: HR

EXISTING LAND USE: Vacant

PROPOSED LAND USE: Multi-family residential

SURROUNDING LAND USE: Mixed residential

ZBA ACTION: None

PERMITS REQUIRED:

- CUP for the construction of a four-family dwelling, must meet the requirements of §170-20.B(2) and B(3).

WAIVERS REQUESTED:

- § 153-14B(3)- Overhead utility lines
- § 153-14E(2- Parking lot lighting

ATTENDANCE:
Donna Benton, Planning
Paul Crouser, Zoning
Marn Speidel, Police
Ken Mavrogeorge, Engineering
Jim Maxfield, Inspection Services
James Burdin, Business Development
Craig Chabot, Fire Department
Tom Clark, Planning Board

Others:
Erin Bassegio, Assistant City Planner
Joe Griffin, Civilworks NE

Approval of minutes from April 25, 2024:
J. Burdin moved to approve the April 25, 2024 minutes. Seconded by M. Speidel. Vote: U/A.

PLAN REVIEW:
Planning:

- *Reminder: Impact fees, Water and sewer investment fees*
- *HR Requirements from back of HR table shall be included in narrative including:*
  - Parking side setback
- Parking does not meet CUP criteria- variance is needed, though staff will support.
- Verify parking lot setback from front boundary line
- Have Landscape architect review abutters trees to see if root system will be impacted.
- *Revise plans:*
  - *Use latest common notes*
  - *Keep 16" hardwood?*
    - Add note intent is to keep in place but if impacted, will be replaced.
  - *Location/width of proposed easement*

Engineering:

- General Comment:
  - Response to TRC Comments not available online in the portal. Please provide.
- Sheet 6:
  - Snow storage appears to conflict with landscaping on the left side of the driveway as you enter.
- Sheet 7:
  - Check the spot grades around PYD1. It appears that the yard drain is not the low point and that water is being directed to the parking area.
- Sheet L1.0:
  - General Note 2 should be revised to add the phrase "and the City's Planning Department" after Landscape Architect.

Police:

- Previous comments resolved.

Inspection Services:

- Previous comments resolved.
- Structure will be 136 Locust Street.

Fire:

- No further comments.

Business Development:

- No further comments or questions.

Planning Board:

- None.

Next Steps: Revise plans per comments above. Submit to ZBA for Variance request for parking side setback and then to Planning Board.

Adjournment: P. Crouser moved to adjourn the meeting at 10:41 a.m. Seconded by K. Mavrogeorge. Vote: U/A

CIVILWORKS NEW ENGLAND

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

August 1, 2024

Dover Planning Board
288 Central Avenue
Dover, NH 03820

Attn: Technical Review Committee

Re: 17-19 Summer Street Properties, LLC
Locust Street - Residential Development
Assessor's Map 12, Lot 35-1

Technical Review Committee Minutes –
SITE-2024-0003, dated May 9, 2024

Dear Planning Board:

In response to Technical Review Committee Minutes – SITE-2024-0003, dated May 9, 2024, we submit the following responses in bold beneath the review comments in italic.

Planning:

1. *Reminder: Impact fees, water and sewer investment fees.*
   The client has been made aware of all impact fees and investment fees.
2. *HR Requirements from back of HR table shall be included in narrative including:*
   CUP Narrative has been updated.
   a. *Parking side setbacks.*
      An additional note has been added to C of the Conditional Use Narrative that states "As well, a variance was pursued for side parking setback, the Zoning Board of Adjustments found "the criteria of the variance were met, which allows for where parking lots are required to be at least five (5) feet from the side property line." Allowing parking in the 5-foot parking lot side setback."
3. *Parking does not meet CUP criteria – variance is needed, though staff will support.*
   A Zoning Variance has been pursued, ZONE-2024-0028 has been approved. Please see attached Zoning Board of Adjustment Notice of Decision.
4. *Verify parking lot setback from front boundary line.*
   Parking lot setback has been verified; parking lot is greater than 10 feet from the front boundary.
5. *Have Landscape architect review abutters trees to see if root system will be impacted.*
   Jeffrey Hyland the Landscape Architect indicated that the foundation and grading will not affect the root systems of the existing trees. With regard to grading along the property line, he states, "The surficial grading activities being proposed within the existing tree root zones should not significantly impact the long-term health of these trees." It has been found that many of the trees along the north property line are on the subject parcel. The tree's health will be monitored by the owner and in the event a tree becomes ill it will

be removed from the property. As indicated by the Landscape Architect, a majority of the trees along the north property line are Norway Maple, this is an invasive species as defined by NH Dept of Agricultures, but mature Norway Maple trees are not required to be removed.

6. *Revise plans:*
    a. *Use latest common notes*
    The plans have been updated accordingly.
    b. *Keep 16" hardwood?*
        - *Add note intent is to keep in place but if impacted, will be replaced.*
        The Demolition plan has been updated accordingly; a note has been added that states "tree to be removed". This tree must be removed for construction of drainage structures, utilities, and the entrance drive. The tree will be replaced with two Autumn Brilliance Serviceberry. The trunk of the tree will be less than 2' away from the proposed edge of pavement, excavation for the subgrade of the driveway will occur beyond the base of the of the trunk, this will extensively damage the core of the root system, and could cause the tree to fall in a major storm event.
    c. *Location/ width of proposed easement.*
    The plans have been updated accordingly, including the parking lot easement on all plans.

Engineering:

1. *General Comment:*
    a. *Response to TRC comments not available online in portal. Please provide.*
    Acknowledged, verified that all documents in the portal are up to date.

2. *Sheet 6:*
    a. *Snow storage appears to conflict with landscaping in the left side of the driveway as you enter.*
    The intent of the snow storage is to put the snow under the 2 proposed Autumn Brilliance Serviceberry. The trunks are 25 ft apart which will provide ample distance to plow snow around the trees. Additionally, the site provides more than the required amount of snow storage in the east snow storage area, this additional snow storage area is for excess beyond the east snow storage area.
3. *Sheet 7:*
    a. *Check the spot grades around PYD1. It appears that the yard drain is not the low point and that water is being directed to the parking area.*
    This proposed yard drain has a solid cover and is not intended to collect water. This yard drain will be utilized as a clean out and to re-direct the pipes. The intent of the swale is to direct water to the pond.
4. *Sheet L1.0:*
    a. *General Note 2 should be revised to add the phrase "and the City's Planning Department" after landscape architect.*
    The plans have been updated accordingly.

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

Inspection Services:

1. *Structure will be 136 Locust Street*
   Acknowledged.

CIVILWORKS NEW ENGLAND

Sincerely,



Stephen J Haight, PE

PROJECT NARRATIVE

for

17-19 Summer Street Properties, LLC

Site Plan Review & Conditional Use Permit

Locust Street Residential Development

Tax Map 12, Lot 35-1

PROJECT OVERVIEW & SITE CHARACTERISTICS

The proposed project is for a multi-unit residential development on a 0.22-acre undeveloped parcel of land located on the easterly side of Locust Street located in the Heritage Residential (HR) District. The proposed site design includes the construction of a four-unit building, each unit consisting of 2 bedrooms, a shared driveway and parking area and the associated utility and drainage improvements in support of the project. Four-unit dwellings are permitted in the HR District with an approved Condition Use Permit. A Conditional Use Permit application has been submitted with the application materials. The project also proposes shared access and parking with the abutting parcel, Tax Map 12, Lot 35, which includes an existing four-unit dwelling.

The architectural design of the proposed building, the replacement of concrete sidewalk with a brick sidewalk, and improved landscaping ensure the development fits the character of the existing neighborhood.

The proposed site will include public water and sewer connections, electric and communication service, natural gas service (is accessible), and associated drainage improvements.

The project site consists of the following general improvements:

- Clear the site, as necessary, for construction.
- Construction of 1 building containing 4 units, associated parking, and landscaping.
- Construction of on-site stormwater detention and treatment system, grading, and other drainage requirements.
- Site utility construction & installation.
- Stabilize remaining areas with loam and seed.

DRIVEWAY AND PARKING LOT

The project proposes access to the site through a shared 24’ wide driveway located on Locust Street. The driveway location is on the abutting parcel, Tax Map 12, Lot 35, and will utilize the existing driveway cut for the abutting property. The shared access drive will provide the necessary parking for the proposed 4-unit multi-family dwelling, providing 8 parking spots. While the parking area will provide 4 parking spots for the existing 4-unit will have. The parking area is designed to prevent vehicles from having to back out into Locust Street. The existing 4-unit building has separate off-street parking, which is located on Summer Street. The project provides 12 combined parking spaces for the proposed 4-unit and existing 4-unit multi-family dwellings. The project will be granted easements to allow for access and parking on the abutting

parcel. The parking area lighting will consist of a pole mounted LED fixture that is dark sky compliant.

WETLAND SETBACK IMPACT TYPE

There are no wetlands present on this site.

DRAINAGE

The parcel is located on the east side of Locust Street, approximately mid-way between the intersections of Locust Street with Silver Street and with Summer Street. The parcel is bound by a residential property to the north, a multi-family dwelling to the south, the Woodman Institute to the east and Locust Street to the west. The parcel has an existing 12" HDPE drain line stubbed to the property; it is connected to the City's existing closed drainage system located in Locust Street. The site is undeveloped and primarily consists of lawn, landscaped areas, and a few mature trees. The parcel is fairly level and slightly slopes away from Locust St. towards the abutting parcel. There are no wetlands onsite and soils are identified as Windsor loamy fine sand, clay subvariant. Field data from the site includes 3 test pits and 3 borehole infiltration tests. Review of this data concluded that the onsite soil is not conducive to infiltration based best management practices nor is it capable of meeting the groundwater recharge requirements of the City of Dover.

The 0.45± acre hydrologic analysis includes the subject parcel as well as 0.23± acres from the abutting property to the south. The analysis of the existing conditions incorporated the onsite grassed areas as well as offsite areas of grass, gravel, and roof. In the existing condition, stormwater from the site, from the edge of Locust Street, and a portion of the abutting parcel, drain easterly to an abutting parcel. Once exiting the site, the discharge continues through the property of the Woodman Institute and then discharges into the City's closed drainage system located in Central Avenue.

The project proposes the construction of a four-unit multi family dwelling, an improved entrance and parking area (that will be shared with the abutting four-family multi family dwelling), and the associated utility and drainage improvements. The project does not meet the requirements associated with a re-development project and as such, the City's new development standards apply. The stormwater design captures 100% of the proposed onsite and 100% of the offsite impervious area (that flows onto the site) and directs it to a best management practice that provides pollutant removal that exceeds the City's requirements. This project effectively treats 3,500± SF of previously untreated predevelopment impervious area. The site's poor soil characteristics are not conducive to infiltration and as such the project proposes increase to volume and flow of stormwater from the proposed site. The stormwater design maximizes the amount of onsite storage to minimize the increase in flow and captures the stormwater so as to redirect it into the City's closed drainage system as opposed to overland to the abutter. The proposed development of the site will have minimal impact on the watershed.

TRAFFIC

A traffic assessment was completed for the project and is attached as a report to this submittal. Overall, and as expected, there is a minimal increase in traffic as a result of the proposed development.

UTILITIES

The proposed project will connect to existing City of Dover water and sewer lines that have been stubbed to the property line. The property also has an existing 12" HDPE drainage pipe stubbed to the site that connects to the existing closed drainage system located in Locust Street. Existing electric and communication services as well as a natural gas line are currently located on Locust Street. Building and utility connections will be made per the City's Community Services Utility Division and Fire Department requirements and standards.

WAIVER REQUEST

for

17-19 Summer Street Properties, LLC

SITE REVIEW APPLICATION

Tax Map 12, Lot 35-1

Locust Street

CITY OF DOVER
SITE PLAN REVIEW REGULATIONS
ARTICLE IV

§ 153-14. E. Outdoor lighting.

(2) Parking lot lighting. Parking lot lighting shall be designed to provide the minimum lighting necessary to ensure adequate vision and safety in parking areas, and to not cause glare or direct illumination onto adjacent properties or streets.

Parking lot lighting has been minimized to avoid site lighting from being visible from abutting residential properties. The proposed lighting sufficiently illuminates the parking area towards the rear of the subject lot, while the existing street lighting will provide some lighting for the parking area towards the front of the lot. This minimization will still provide adequate vision and safety in the parking area.

CONDITIONAL USE NARRATIVE
§170-20.B(2) & B(3)
HERITAGE RESIDENTIAL DISTRICT
for
LOCUST STREET RESIDENTIAL DEVELOPMENT
LOCUST STREET
Tax Map 12, Lot 35-1

Per the Heritage Residential (HR) District Regulations creation of a 4-family dwelling in the HR District is allowed with a Conditional Use Permit that meets the requirements of §170-20.B(2) and B(3).

(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.

The surrounding neighborhood has several multi-family dwellings. The buildings architecture is designed to maintain the traditional look of the neighborhood. The project also proposes the replacement of the existing concrete sidewalk with a traditional brick sidewalk in front of the lot to better fit the character of the neighborhood.

(b) The requested use will not create undue traffic congestion, or unduly impair pedestrian safety.

The proposed project will not create undue traffic congestion or impair pedestrian safety in the vicinity. The project proposes improvements to the area by providing off-street parking for the proposed 4 – unit building and will also include improved off-street parking for 2 of the units in the existing 4 – unit building located on the abutting parcel. The two parcels will share the combined off-street parking which will prevent vehicles from having to back out onto Locust Street.

(c) The requested use will not result in objectionable noise or odor which would constitute a NUISANCE.

The proposed project is residential, is consistent with the uses of surrounding properties, and will not result in objectional noises or odors.

(3) Conditional use approval shall be subject to a formal agreement between the PLANNING BOARD and the APPLICANT. Said agreement shall be recorded at the Strafford County Registry of Deeds.

A development agreement between the City and the Owner shall be recorded with the Strafford County Registry of Deeds.

Conversion to, or creation of Dwelling, 3-4 Family: Three- or four-family dwellings and conversions of existing dwellings to three (3) or four (4) units shall be subject to the following regulations:

A. The specific site must have an amount of open space, either landscaped or left natural, at least equal to the average amount of open space on all developed lots in the HR District that are wholly or partly within two hundred (200) feet of the subject parcel. Existing parking areas, either gravel, paved or unpaved, shall not be considered to be open space.

Open space calculations were performed for all developed lots within the HR District and wholly or partially located within 200 feet of the subject parcel. The calculation indicates that the neighborhood has an average open space of approximately 57%. The project proposes an open space area of 63.4% which is greater than the neighborhood average.

B. Off-street parking, in accordance with Chapter 153, Site Review, shall be provided to avoid vehicles backing into the street. Two (2) parking spaces per unit shall be required.

The project proposes improvements to the area by providing off-street parking for the proposed 4 – unit building and will also include improved off-street parking for 2 of the units in the existing 4 – unit building located on the abutting parcel. The two parcels will share the combined off-street parking which will prevent vehicles from having to back out onto Locust Street. Off-street parking is in accordance with Chapter 153 of the Site Review regulations.

C. Parking lots shall be at least five (5) feet from a side property line and ten (10) feet from a front property line.

The proposed parking area is greater than 10 feet from the front property line. The shared parking lot crosses over the side property line and will be identified with the appropriate easements. As well, a variance was pursued for side parking setback, the Zoning Board of Adjustments found "the criteria of the variance were met, which allows for where parking lots are required to be at least five (5) feet from the side property line." Allowing parking in the 5-foot parking lot side setback.

D. Parking areas shall be screened from the street and from abutting lots.

The parking area is screened from the street with existing hedgerows and additional landscaping.

E. Structures shall be at least twenty (20) feet from a front property line, thirty (30) feet from a rear property line and fifteen (15) from a side property line unless abutting a street, in which case, the distance from the side property line shall be twenty (20) feet.

The building meets the necessary setback requirements.

F. For new construction, the building must be designed to look like a SINGLE-FAMILY DWELLING. At a minimum, this shall mean that only one entrance shall be visible from a public street. For conversions, the building must retain its appearance as a SINGLE-FAMILY DWELLING or a 2-family dwelling, whichever is the current use. Notwithstanding any other provision of Chapter 170, a legal or legal non-conforming accessory structure existing as of the effective date of these regulations may be converted into one or more residential units, provided that the building shall not be enlarged, nor shall any exterior improvements be made to alter its appearance as an accessory structure.

The architectural plans are provided to indicate conformance with these requirements.

SITE DEVELOPMENT DESIGN CRITERIA NARRATIVE
§153-14
STORMWATER MANAGEMENT
for
Locust Street Residential Development
Locust Street
Tax Map 12, Lot 35-1

A. Stormwater management, erosion control and flood hazards.

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

(a) Managing stormwater runoff to protect water quality and quantity. **The proposed development has been designed in accordance with NH DES AoT permitting requirements to include the treatment and mitigation of stormwater runoff from the site. Site limitations prevent the infiltration of stormwater and as such the project proposes minimal increases in volume and flow.**

(b) Minimizing the contribution of a pollutant for which a water body is impaired to the maximum extent practicable (MEP). **The proposed development has been designed in accordance with NH DES AoT permitting requirements to include the treatment of stormwater runoff from all impervious areas of the site as well as the effective treatment of 3,500+/- sf of offsite predevelopment area to minimize pollutant runoff.**

(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 proposes a minimal increase in volume and the 2- and 10-year flow. The proposed development redirects all stormwater runoff from an abutting parcel to the City's closed stormwater system.**

(d) Encouraging the use of low-impact development (LID) strategies. **The project proposes the use of a bioretention practice for stormwater treatment.**

(2) Applicability of the stormwater standards.

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

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

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

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

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

(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 project does not propose any work in a wetland or wetland buffer zone.**

[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 site was evaluated for infiltration practices but the site characteristics and depth to the SHWT prevent the use of infiltration practices.**

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

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

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

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

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

[9] Stormwater runoff from new impervious surfaces shall be directed to a best management practice for flow mitigation, treatment and/or infiltration. **The proposed development has been designed in accordance with NH DES AoT permitting requirements to include the treatment of stormwater runoff from all impervious areas of the site as well as the effective treatment of 3,500+/- sf of offsite predevelopment area to minimize pollutant runoff.**

(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 utilizes a bioretention basin for treatment of all impervious areas on site and the areas of offsite impervious that flow through the watershed. This system provides 90% removal of TSS and 65% removal of both 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 design incorporates NRCC precipitation amounts and the associated storm distribution data.**

[3] Measures shall be taken to control the post-development peak rate runoff so that it does not exceed predevelopment runoff for the two-, ten-, twenty-five- and fifty-year, twenty-four-hour storm events. **The proposed design mitigates post-development peak rate runoff of the 25- and 50-year storm events. The site limitations, including poor soil characteristics and inadequate space for stormwater retention, prevent the project from being able to mitigate an increase in flow for the 2- and 10-year storm events. The project proposes minimal increases of 0.2 and 0.1 cfs during the 2- and 10-year storm events respectively. The proposed increases will not negatively affect the system.**

[4] Measures shall be taken to control the post-development surface water runoff volume so that it does not exceed predevelopment runoff for the two-, ten-, twenty-five- and fifty-year, twenty-four-hour storm events. For sites where infiltration/recharge is limited or not practicable, the owner/applicant must demonstrate that the project will not cause or contribute to flooding or functional impairments to streets, adjacent properties, and downstream properties. **The site was evaluated for the inclusion of infiltration practices but the poor soil characteristics and depth to seasonal high-water tables, prevent incorporating infiltration practices. The project proposes an increase in the volume of runoff from the site of less than 0.03 acre-feet. The small increase in volume of runoff will be discharged directly to the closed drainage system to prevent additional volume being discharged to the abutting lot. The increase in volume will not cause flooding to adjacent or downstream properties and will not cause functional impairments to the closed drainage system in Locust Street.**

[5] Infiltration rates for designing groundwater recharge practices shall be determined in accordance with Section Env-Wq 1504.14. **The site was not feasible for infiltration practices and as such infiltration rates were not calculated.**

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

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

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

[9] Seasonal high-water table elevations must be accounted for in all BMP design criteria. **Test pit information and design intent (underdrained system) were utilized in determining the SHWT associated with the bioretention basin design.**

[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. **A licensed Landscape Architect has produced a site-specific planting plan and O&M document in support of site revegetation including the stormwater BMP(s).**

(c) Stormwater management for redevelopment. In order to determine the stormwater requirements for redevelopment projects, the percentage of the site covered by existing impervious areas must be calculated. Stormwater requirements for redevelopment will vary based upon the amount of site surface area that is covered by existing impervious surfaces. **The project does not meet redevelopment requirements and this section is Not Applicable (N/A).**

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

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

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

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

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

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

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

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

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

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

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

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

[2] When a project requires a stormwater permit from the EPA Construction General Permit (CGP) Program, copies of the stormwater pollution prevention plan (SWPPP) inspections shall be provided to the Community Services Department. **A SWPPP will not be required as the project will not meet the area of disturbance criteria.**

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

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

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

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

[7] Perimeter site controls shall not be placed within wetland areas, stream channels or wetland buffers. **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 definitions of, and direction for, stabilization of the site is provided on the Erosion Control Notes sheet provided as part of this submittal.**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[2] For projects requiring new development or redevelopment standards, a drainage report that contains the following items shall be submitted: **The SWMP documents include the proposed information when applicable.**

[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 SWMP documents include the proposed information when applicable.**

[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 SWMP documents include the proposed information when applicable.**

[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. **The SWMP documents include the proposed information when applicable.**

[d] Description of existing drainage patterns, receiving water bodies or drainage infrastructure and soil types for recharge potential. **The SWMP documents include the proposed information when applicable.**

[e] Watershed area limits, including any off-site and upstream areas contributing flow to shared drainage channels and/or infrastructure. **The SWMP documents include the proposed information when applicable.**

[f] Description of proposed changes in impervious cover areas and any changes in pre- and post-development drainage patterns. **The SWMP documents include the proposed information when applicable.**

[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 SWMP documents include the proposed information when applicable.**

[h] Methods and assumptions used to calculate the pollutant load removal. **The SWMP documents include the proposed information when applicable.**

[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 SWMP documents include the proposed information when applicable.**

[j] If not used, provide rationale why LID measures are not practical for the site. **The SWMP documents include the proposed information when applicable.**

[k] Describe measures and calculations for proposed practices used to achieve no net increase in runoff volumes leaving the site. **The SWMP documents include the proposed information when applicable.**

[l] Provide calculations for the infiltration or exfiltration system. **The SWMP documents include the proposed information when applicable.**

[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 SWMP documents include the proposed information when applicable.**

[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 SWMP documents include the proposed information when applicable.**

[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. **The SWMP documents include the proposed information when applicable.**

[p] Proposed schedule for the inspection and maintenance of all erosion control measures on site prior to achieving final site stabilization. **The SWMP documents include the proposed information when applicable.**

[q] Describe procedures for removing temporary erosion control measures and removal of accumulated sediment captured by such measures. **The SWMP documents include the proposed information when applicable.**

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

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

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

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

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

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

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

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

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

[d] Deicing log to track amount and type of deicing material applied. **The I&M Manual requires the implementation of a salt minimization plan that also requires the owner or operator to track salt usage onsite through a quantity usage log.**

[e] A site plan clearly identifying the locations of all stormwater practices to be inspected and maintained. **The approved Grading and Drainage Plan accompanies the I&M Manual.**

[f] Inspection and maintenance log to be submitted to the City of Dover Community Services Department on an annual basis. Documents shall be submitted no later than December 15 of each year. **The I&M Manual identifies this requirement.**

[2] The owner of record shall record at the Registry of Deeds documentation sufficient to provide notice to all persons that may acquire any property subject to the requirements and responsibilities described in the approved stormwater management plan. The notice shall comply with the applicable requirements for recording contained in RSA 477 and 478. The notice need not set forth the requirements at length, so long as it is sufficient to provide notice to prospective purchasers of the requirements for maintenance and reporting. **Not Applicable.**

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

Zoning Board of Adjustment
NOTICE OF DECISION

July 22, 2024

17-19 Summer Street Properties, LLC
71 Lafayette Road
Hampton Falls, NH 03844

Re: **ZONE-2024-0028 – Locust Street (Tax Map 12, Lot 35-1)**

Dear 17-19 Summer Street, LLC:

Please be advised that after a public hearing on Thursday July 18, 2024, the Zoning Board of Adjustment ("ZBA") voted *5-0 to* ***APPROVE*** your request pursuant to **Section 170-12, HR District 3-4 Family Dwelling Creation/Conversion CUP criterion D.** The ZBA found the criteria of the Variance were met, which allows for where parking lots are required to be at least five (5) feet from ta side property line.

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

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

Sincerely,

Paul R. Crouser
Zoning Administrator, Assistant City Planner

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

FIRST AMENDMENT TO
EXHIBIT B

ATTACHMENT TO VARIANCE APPLICATION

17-19 Summer Street Properties LLC (the "**Applicant**") is submitting this **Exhibit B** as part of its Application for Variance as to property located on Locust Street, City of Dover, State of New Hampshire, and further identified as Assessor's Map # 12, Lot # 35-1.

A. Existing Conditions

On June 30, 2021, the Applicant by Warranty Deed took Title to the vacant property, which is the subject of this Application for Variance, and as shown as Assessor's Map # 12, Lot # 35-1 (the "**Lot 35-1**"). At the same time, Applicant took Title to the abutting property to the South and located at 17-19 Summer Street, shown as Assessor's Map # 12, Lot # 35 (the "**Lot 35**"). Both parcels were the subject of a Subdivision approved by the City of Dover Planning Board, on April 14, 2020.

Lot 35-1 has remained a vacant parcel since Subdivision Approval in April of 2020. There is an existing 4-unit multi-family dwelling on Lot 35.

B. Project Proposal

The Applicant proposes to build a 2,400 square foot residential building consisting of four (4) 2-bedroom units on Lot 35-1 (the "**Project**"). The Applicant proposes to access Lot 35-1 by Easement through a 24-foot-wide driveway located on Lot 35 and will utilize the existing driveway cut for both properties. The shared driveway will provide access to the necessary parking area for the proposed 4-unit multi-family dwelling as well as parking for the existing 4-unit multi-family dwelling and will prevent vehicles having to back out into Locust Street. The existing 4-unit building on Lot 35 has separate on-site parking as well as off-street parking which are located on Summer Street. The Project will provide 12-combined parking spaces for the proposed 4-unit multi-family building and the existing 4-unit multi-family dwelling. Lot 35 will grant an easement to Lot 35-1 to allow for access and parking as is set out herein. See page 6 of the Site Plan, which is included as part of this **Exhibit B**.

C. Brief Procedural History

A Conditional Use Permit Application was filed with the City of Dover Planning Board on March 5, 2024. The Technical Review Committee ("**TRC**") issued preliminary comments on March 28, 2024. The Applicant, through Stephen Haight of Civilworks New England, then submitted additional materials for a second review by the TRC on April 25, 2024. At the request of the City of Dover Planning Department, the Project will include an Easement from Lot 35 to Lot 35-1 to provide for a common 24-foot-wide driveway and parking between the two lots. The

City of Dover Planning Department then requested the Applicant to petition for a Variance to allow parking on Lot 35-1 to be within five (5) feet of the side yard property line, consistent with the Easement to be granted to Lot 35-1 by Lot 35. This ZBA Application for Variance follows that request.

D. Relief Requested

The Applicant requests relief from Section 170-20 of the Zoning Ordinance to grant a Variance from HR District-Conditional Use Permit, Criteria-C, that requires parking to be at least five (5) feet from a side yard property line. See **Exhibit A** attached to the Application.

E. Statutory Variance Criteria

Pursuant to RSA 674:33, to obtain a Variance in Dover, an applicant must meet the five (5) variance criteria set out in Section B of the Application.

Because the Applicant's Project will not be inconsistent with the essential character of the surrounding area, will not compromise the public health in any way, will provide substantial justice, will not compromise the property values of surrounding properties, and because there is no rational connection between the intent of the underlying ordinance provisions and their application to the Property under the unique circumstances of this case, as outlined below, we respectfully request that the Variance be granted.

F. Analysis

1. The variance will not be contrary to the public interest.

The New Hampshire Supreme Court has indicated that the requirement that a variance not be "contrary to the public interest" is coextensive and related to the requirement that a variance be consistent with the spirit of the ordinance. See Chester Rod & Gun Club v. Town of Chester, 152 N.H. 577, 580 (2005); Malachy Glen Associates. Inc. v. Town of Chichester, 155 N.H. 102, 105-06 (2007); and Farrar v. City of Keene, 158 N.H. 684, 691 (2009). A variance is contrary to the public interest only if it "unduly, and in a marked degree conflicts with the ordinance such that it violates the ordinance's basic zoning objectives." Chester Rod & Gun Club, 152 N.H. at 581; Farrar, 158 N.H. at 691. See also Harborside Associates. L.P. v. Parade Residence Hotel, LLC, 162 N.H. 508, 514 (2011) ("[m]ere conflict with the terms of the ordinance is insufficient."). Moreover, these cases instruct boards of adjustment to make the determination as to whether a variance application "unduly" conflicts with the zoning objectives of the ordinance "to a marked degree" by analyzing whether granting the variance would "alter the essential character of the neighborhood" or "threaten the public health, safety or welfare" and to make that determination by examining, where possible, the language of the Zoning Ordinance.

Criteria-C of the Conditional Use Permit, that requires parking to be five (5) feet from a side yard property line, does not have an express purpose provision. However, the implied purpose of this Section should be consistent with the general purposes of the Dover Zoning Ordinance as set out in Section 170-3. Section 170-3 provides:

> This Chapter is an element of the Dover Comprehensive Development Plan and is designed to promote the health, safety, and the general welfare of Dover's residents by serving to facilitate the adequate provision of transportation, water, sewer, schools, parks and other public requirements; to encourage the maintenance of Dover's economic and aesthetic quality of life; and to encourage the most appropriate use of land throughout the City of Dover.

As a foundational point, the Applicant's Project does not conflict with the Zoning Ordinance, as a three-to-four family dwelling is specifically permitted by Conditional Use Permit in the HR District. As a result, the Project will preserve the aesthetic and character of the neighborhood and will promote the general health and welfare of the City by facilitating the reasonable investment in a vacant parcel of property. In other words, not only will the Project not unduly, or in a marked degree conflict with the Zoning Ordinance provision in question, it will advance those purposes beyond what exists on the Property today.

The Project also satisfies the applicable case law standards because the essential character of the neighborhood will not be affected by the development of this vacant lot into a four-unit dwelling as permitted by Conditional Use Permit. The new four-family dwelling will be aesthetically and architecturally consistent with the ongoing redevelopment of many of the properties on and will make the Property more consistent with the neighborhood and consistent with other properties in the area. The four-family dwelling will be consistent with several other multi-family dwellings in the immediate area.

The Applicant's Project will also not threaten the public health and safety. On the contrary, the vacant lot to be developed, Lot 35-1, has the same ownership as the abutting lot to the South, Lot 35. Lot 35 consists of a four-unit dwelling and the Applicant proposes to build a 2,400 square foot residential building consisting of four (4) 2-bedroom units (the "**Project**"). The Applicant proposes to access Lot 35-1 by Easement through a shared 24-foot-wide driveway located on Locust Street. The driveway location is on the abutting parcel, Lot 35, and will utilize the existing driveway cut for both properties. The shared access driveway will provide the necessary parking for the proposed 4-unit multi-family dwelling as well as parking for the existing 4-unit multi-family dwelling and will prevent vehicles having to back out into Locust Street. The existing 4-unit building on Lot 35 has separate on-site parking as well as off-street parking which are located on Summer Street. The Project will provide 12-combined parking spaces for the proposed 4-unit multi-family building and the existing 4-unit multi-family dwelling. Lot 35 will grant an easement to Lot 35-1 to allow for access and parking as is set out herein. See page 6 of the Site Plan, which is included as part of this **Exhibit B**.

As the Applicant's Project will be consistent with the general intent of the Zoning Ordinance, and because the Project will not alter the essential character of the neighborhood or threaten the public health or safety, it would be reasonable and appropriate for the ZBA to conclude that granting the Applicant's Variance request will satisfy the public interest prong of the Variance criteria.

2. The spirit of the Ordinance is observed.

As referenced above, the requested Variance observe the spirit of the Zoning Ordinance and New Hampshire jurisprudence regarding the "public interest" prong of the variance criteria because the Applicant's Project will be consistent with the general and implied purposes of the Zoning Ordinances in this case. Further, the Project will not compromise the character of the neighborhood or threaten the public health, safety, or welfare. As the New Hampshire Supreme Court has indicated in both Chester Rod & Gun Club and in Malachy Glen, the requirement that the variance not be "contrary to the public interest" is coextensive and is related to the requirement that the variance be consistent with the spirit of the ordinance. See Chester Rod & Gun Club, 152 N.H. at 580. A variance is contrary to the spirit of the ordinance only if it "unduly, and in a marked degree conflicts with the ordinance such that it violates the ordinance's basic zoning objectives." Chester Rod & Gun Club, 152 N.H. at 581; Farrar, 158 N.H. at 691. As discussed above, the requested Variance is consistent with the general spirit of the Zoning Ordinance, and in support of the Conditional Use Permit, to develop a four-family dwelling as permitted in the HR District.

As a result, for the reasons stated above, the Applicant respectfully asserts that it would be reasonable and appropriate for the ZBA to conclude that the requested Variance will observe the spirit of the Zoning Ordinance.

3. Substantial justice is done.

As noted in Malachy Glen, supra, "'perhaps the only guiding rule [on this factor] is that any loss to the individual that is not outweighed by a gain to the general public is an injustice.'" Malachy Glen, supra. citing 15 P. Loughlin, New Hampshire Practice. Land Use Planning and Zoning § 24.11, at 308 (2000) (quoting New Hampshire Office of State Planning, The Board of Adjustment in New Hampshire, A Handbook for Local Officials (1997)). In short, there must be some gain to the general public from denying the variance that outweighs the loss to the applicant from its denial.

In this case, the public does not gain anything by denying the requested Variance because the Applicant's Project will not conflict with the basic zoning objectives implicated by this application, as discussed above. On the contrary, the Project will facilitate the reasonable use of both Lot 35-1 (and Lot 35), by providing access to both parcels through the existing 24-foot-wide driveway, providing parking both off-street and on street, and allow vehicles to enter Locust Street without backing out. The public benefits from the reasonable use of this vacant lot, and from the Applicant's investment in the Property, which redevelopment will generate additional tax revenue. On the contrary, the public does not benefit at all from the arbitrary Application of the Zoning Ordinance which would prohibit the Project under the circumstances of this case.

Certainly, the Applicant will benefit from the Variance as it will be able to reasonably use Lot 35-1 in a manner consistent with the neighborhood and does not practically conflict with the objectives of the underlying Zoning Ordinances.

The Application presents a true win/win whereby the neighborhood, the City, and the Applicant all benefit from granting the Variance.

As the requested Variance benefits the Applicant, it is not detriment the public, there is no gain to the general public from denying the request, denying the request would not outweigh the loss to the Applicant, this prong of the variance criteria is satisfied.

4. The proposal will not diminish surrounding property values.

Given the nature of the existing and proposed conditions of the neighborhood, the Applicant's Project will not diminish surrounding property values. On the contrary, the development of the vacant lot, Lot 35-1, and the development of the four-family dwelling permitted by Conditional Use Permit in the HR District, will enhance the value of surrounding properties.

By providing for the access to Lot 35-1 by Easement, through a shared 24-foot-wide driveway on Lot 35, along with the necessary off-street parking, only adds value to the surrounding properties.

Finally, common sense dictates that the Project will increase the value of Lot 35-1 and will similarly increase the value of surrounding properties. On such evidence, the Applicant submits that the fourth prong of the Variance criteria is satisfied.

5. Literal enforcement of the provisions of the ordinance would result in an unnecessary hardship.

a. Legal Standard

As set forth in the provisions of RSA 674:33, I, there are two options by which the Board of Adjustment can find that an unnecessary hardship exists:

> (A) For purposes of this subparagraph, "unnecessary hardship" means that, owing to special conditions of the property that distinguish it from other properties in the area:
> (i) No fair and substantial relationship exists between the general public purposes of the ordinance provision and the specific application of that provision to the property; and
> (ii) The Proposed use is a reasonable one.

(the "First Hardship Test")

or,

> (B) If the criteria in subparagraph (A) are not established, an unnecessary hardship will be deemed to exist if, and only if, owing to special conditions of the property that distinguish it from other properties in the area, the property cannot be reasonably used in strict conformance with the ordinance, and a variance is therefore necessary to enable a reasonable use of it. (the "Section Hardship Test").

The Applicant respectfully remind the ZBA that the mere fact that the Applicant is seeking Variance from the express provisions of the Zoning Ordinance is not a valid reason for denying the variance. See Malachy Glen Associates, Inc. v. Town of Chichester, 155 N.H. 102, 107 (2007); see also Harborside Associates, 162 N.H. at 2011 ("mere conflict with the terms of the ordinance is insufficient").

b. Summary of Applicable Legal Standard

The first prong of the First Hardship Test requires the Board to determine whether there are special conditions on the underlying property which is the subject of a variance request. This requirement finds its origins in the Standard State Zoning Enabling Act of the 1920s "since it is the existence of those 'special conditions' which causes the application of the zoning ordinance to apply unfairly to a particular property, requiring that variance relief be available to prevent a taking."3 The Supreme Court has determined that the physical improvements on a property can constitute the "special conditions" which are the subject of the first prong of the First Hardship Test. Harborside, 162 N.H. at 518 (the size and scale of the buildings on the lot could be considered special conditions); *Cf* Farrar, 158, N.H. 689 (where variance sought to convert large, historical single use residence to mixed use of two residence and office space, size of residence was relevant to determining whether property was unique in its environment).

The second prong of the First Hardship Test analysis, pertaining to the relationship between the public purpose of the ordinance provision in question, and its application to the specific property in question, is the codified vestige of a New Hampshire Supreme Court case called Simplex Technologies, Inc. v. City of Newington ("Simplex"). To summarize, the ZBA' s obligation in this portion of its hardship analysis is to determine the purpose of the regulation from which relief is being sought and if there is no specific purpose identified in the regulation, then to consider the general-purpose statements of the ordinance as a whole, so that the ZBA can determine whether the purpose of said ordinance is advanced by applying it to the property in question.

The final prong of the First Hardship Test analysis is whether the proposed use is "reasonable."

The Applicant respectfully reminds the ZBA of the New Hampshire Supreme Court's substantive pivot in Simplex. The Simplex case constituted a "sharp change in the New Hampshire Supreme Court's treatment of the necessary hardship requirement." The Simplex Court noted that under the unnecessary hardship standard, as it had been developed by the Court up until that time, Variance were very difficult to obtain unless the evidence established that the property owner could not use his or her property in any reasonable manner." This standard is no longer the required standard in New Hampshire. The Applicant does not have an obligation to affirmatively prove that the underlying Property cannot be reasonably used without the requested variance modification. Rather, the critical question under the First Hardship Test is whether the purpose of the Zoning Ordinance is fairly and substantially advanced by applying it to the Applicant's Property considering the Property's unique setting and environment. This approach is consistent with the

Supreme Court's pivot away from the overly restrictive pre-Simplex hardship analysis "to be more considerate of the constitutional right to enjoy property."

c. Analysis

The first prong of the First Hardship Test requires the Board to determine whether there are special conditions on the underlying Property which distinguish it from others in the area and the Board may consider the Property's existing conditions in this context. See Harborside. Here, Lot 35-1, is a vacant lot that does not currently have street access. The lot is unique in that it was created by Subdivision approved by the Planning Board on April 14, 2020, subdividing what was Lot 35, into Lots 35 and 35-1. The Subdivision provided a single 24-foot-wide driveway access off of Locust Street for both Lots 35-1 and 35. Additionally, both Lots 35 and 35-1 have common ownership. Finally, the Project provides for an Easement to allow a common driveway and off-street parking with rights to pass and repass between Lots 35 and 35-1. All of these characteristics make the Property unique.

As there are special conditions of the Property, the first prong of the First Hardship Test is satisfied.

The second prong of the First Hardship Test pertains to the relationship between the public purpose of the ordinance provisions in question, and their application to the specific property in question. To summarize, the ZBA must determine whether the purposes of the underlying ordinances are advanced by applying it to the property in question.

Here, as discussed above, the implied purpose of the Zoning Ordinance is to promote the health, safety, and general welfare of Dover residents, by serving to facilitate the adequate provision of transportation, and encourage the most appropriate use of land. See Zoning Ordinance, Section 170-3.

Accordingly, the relevant question is whether or not denying the Applicant's Variance request would advance the purpose of the Zoning Ordinance. As outlined above, it would not. Denying the Applicant's Variance request would not serve to promote the general health, safety, and welfare of Dover residents, and the appropriate use of the vacant lot identified as Lot 35-1.

The Project to develop a four-family dwelling permitting by Conditional Use Permit in the HR District, will enhance the neighborhood and surrounding property values. The Applicant's Project will ensure that the Property is substantially consistent and similar to other properties in the neighborhood. Similarly, denying the Variance will not safeguard the health or welfare of the City. Rather, a denial would prevent the reasonable development of Lot 35-1 in a way that protects and preserves the public health and safety by complying with all other Conditional Use Permit requirements except for the parking lot side setback requirement. However, because the parking lot side setback is an internal setback between Lot 35-1 and Lot 35, which are in common ownership, and will be the subject of an Easement between the properties, granting the Variance will advance the general and implied purposes of the Zoning Ordinance.

As explained above, far from conflicting with the implied purposes of the ordinances in question, the Applicant's proposal would advance the general and implied purposes of the Zoning Ordinance for all the reasons detailed in this narrative. As such, the second prong of the hardship criteria is satisfied in this case.

The final analysis under the First Hardship Test is to determine whether the proposed use is reasonable. Here the proposed use, for all the reasons set out above, and the development of Lot 35-1, consistent with the Conditional Use Permit, is more than reasonable. Moreover, the Easement to be granted by the abutting Lot 35, will provide for a single driveway access with parking is more than a reasonable request and benefits the surrounding properties.

On these facts, the Applicant respectfully submits that its Variance request satisfies the final prong of the statutory Variance criteria.

Because the Applicant has met the three prongs as required in Section 5(a) of the Application, the Applicant does not address the Second Hardship Test requirements of Section 5(b) of the Application.

G. Conclusion

The Applicant respectfully submits that it has satisfied the statutory Variance criteria in this matter and their Application should be approved.

From: Mark Beaudry
Sent: February 29, 2024
To: Mavrogeorge, Kenneth <K.Mavrogeorge@dover.nh.gov>
Cc: Steve Haight <shaight@civilworksne.com>; Joseph Griffin <jgriffin@civilworksne.com>
Subject: CNE 23029 – 135 Locust Street, Dover, NH 03820
Attachments: 23029 – 135 Locust St, Dover – Locus and Utility Plans Draft (2-23-24).pdf

Hello Ken: The developer for 135 Locust Street is proposing to build four two-bedroom residential apartments in a single building. Attached is a 2-sheet PDF containing our locus and utility plans that depicts the location, site layout of the buildings and anticipated utility services.

The project total design flow is estimated to be as follows:

- 4 Apartment Units x 2 Bedrooms/ unit = 8 bedrooms total
- 8 Bedrooms x 150 GPD/bedroom = 1,200 GPD Total

This design flow rate is based on NHDES Env-Wq 1008.03 Table 1008-1 *Unit Design Flow Figures*.

Please provide us with correspondence that states as required, that the City can provide water and wastewater service to this building.

If you have any questions or require more information, please do not hesitate to get back to us.

Thank you for your assistance on these projects.

Mark

_____

Mark Beaudry, PE
Senior Associate/Sr. Project Manager
Civilworks New England
C: (413) 325-3384
O: (603) 749-0443 x113

EVERSOURCE ENERGY

April 1, 2024

1700 Lafayette Road
Portsmouth, NH 03801

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

Mark E. Beaudry, PE
Civilworks New England
181 Watson Road, P.O. Box 1166
Dover, NH 03821

Dear Mark:

I am responding to your request to confirm the availability of electric service for the proposed residential project located in Dover NH being constructed for/by 17–19 Summer Street Properties, LLC.

The proposed project consists of a single 3-story building (including attic bonus space), with four (4) residential units. The proposed development will be constructed along 135 Locust Street.

The developer will be responsible for the installation of all underground/overhead facilities and infrastructure required to service the new building. The service will be as shown on attached marked up plan titled "Utility Plan - Locust Street Residential Development" dated 2/29/2024 prepared by Civilworks New England". The proposed building service will be fed from Locust Street as at a location determined by Eversource Engineering. The developer will work with Eversource to obtain all necessary easements and licenses for the proposed underground/overhead facilities listed above.

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

The attached Utility Plan shows the electric service information, including any transformer location(s), to service your proposed project.

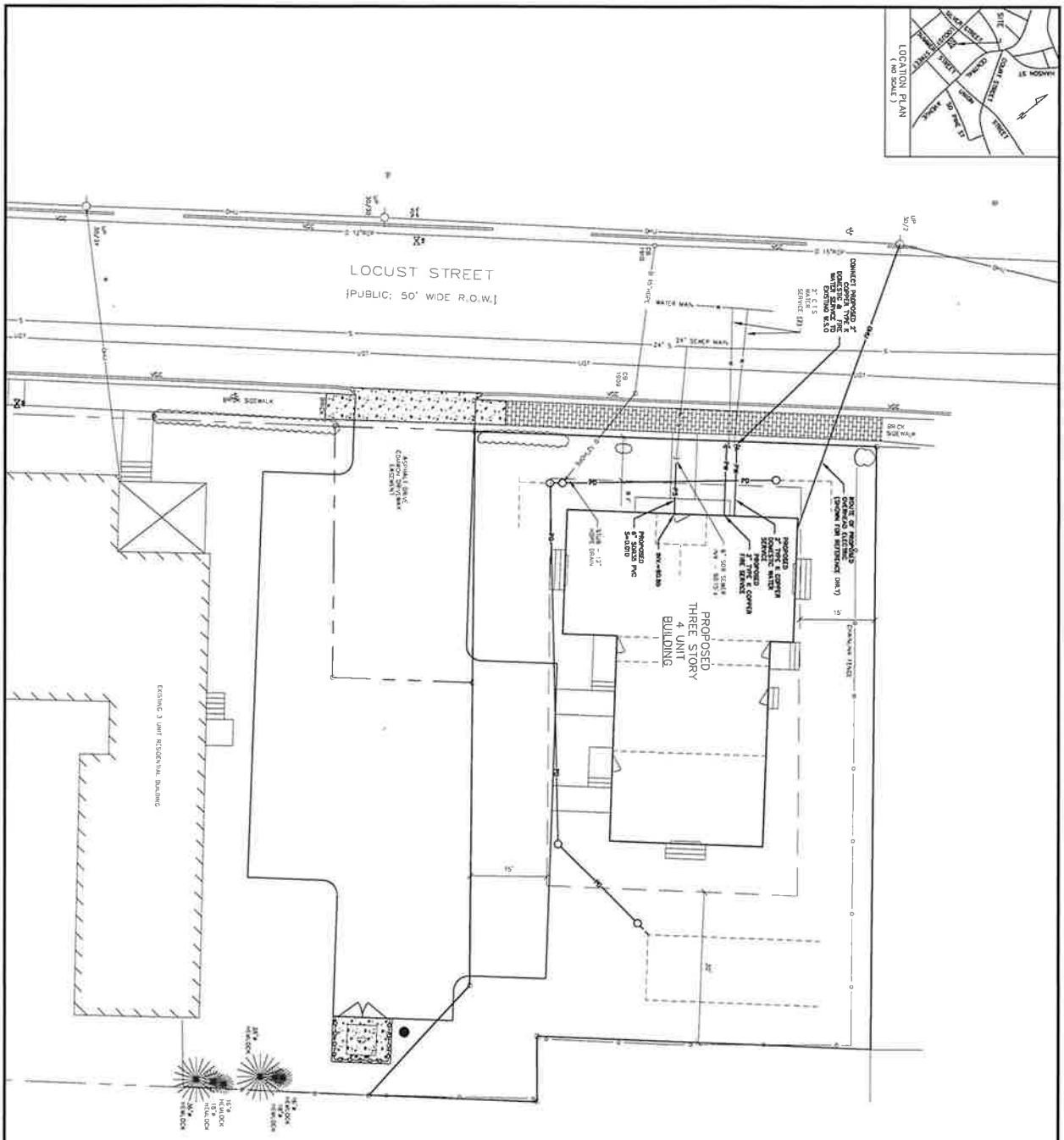
Eversource approves the locations shown; assuming the final installed locations meet all clearances, physical protection, and access requirements as outlined in Eversource's "Information & Requirements For Electric Supply" (https://www.eversource.com/content/docs/default-source/pdfs/requirements-for-electric-service-connections.pdf?sfvrsn=2).

If you require additional information or I can be of further assistance please do not hesitate to contact me at our Rochester Office, 603-332-7515

Respectfully.

Trevor Emmons
Eastern Regional Engineer, Eversource

cc: Michael J. Busby, PE, Eastern Regional Engineering and Design Manager, Eversource
Thomas Boulter, Eastern Region Operations Manager, Eversource
Nickolai Kosko, Field Supervisor, Electric Design, Eversource


LOCATION PLAN
(NO SCALE)
LOCUST STREET
(PUBLIC; 50' WIDE R.O.W.)
PROPOSED THREE STORY 4 UNIT BUILDING
EXISTING 3 UNIT RESIDENTIAL BUILDING
SIDEWALK
WATER MAIN
24" SEWER MAIN
CONNECT PROPOSED 2" COPPER TYPE K DOMESTIC & FIRE WATER SERVICE TO EXISTING 6" D.I.
PROPOSED 2" TYPE K COPPER DOMESTIC WATER SERVICE
PROPOSED 6" TYPE K COPPER FIRE SERVICE
ROUTE OF PROPOSED UNDERGROUND UTILITIES (SHOWN FOR REFERENCE ONLY)
PROPOSED 6" SDR 35 SEWER
PROPOSED 4" PVC SUBDRAIN
PROPOSED DRIVEWAY
EXISTING STONE WALL
EXISTING CHAIN LINK FENCE
EXISTING TREE LINE
EXISTING TREE
EXISTING SHRUB
EXISTING BUSH
EXISTING HEDGE
EXISTING UTILITY POLE
EXISTING GUY WIRE
EXISTING GAS GATE
EXISTING GAS LINE
EXISTING OVERHEAD UTILITY
EXISTING UNDERGROUND UTILITY
EXISTING GAS METER
EXISTING ELECTRIC METER
EXISTING ELECTRIC BOX
EXISTING TELEPHONE BOX
EXISTING CABLE BOX
EXISTING GAS BOX
EXISTING WATER VALVE
EXISTING WATER BOX
EXISTING SEWER MANHOLE
EXISTING DRAIN MANHOLE
EXISTING CATCH BASIN
EXISTING DRAIN LINE
EXISTING SEWER LINE
EXISTING WATER LINE
EXISTING GAS LINE
EXISTING ELECTRIC LINE
EXISTING TELEPHONE LINE
EXISTING CABLE LINE
EXISTING FIRE HYDRANT
EXISTING GAS VALVE
EXISTING WATER VALVE

Unitil
Northern Utilities, Inc.

March, 4th, 2024

Mark Beaudry, PE
Senior Associate/Sr. Project Manager
Civilworks New England

Natural Gas to 135 Locust Street in Dover NH

Hi Mark,

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

Unitil hereby confirms that natural gas is available for the proposed building at 135 Locust Street in Dover NH

If you have any questions, please contact me at 603-534-2379.

Sincerely,

Dave MacLean
Senior Business Development Rep
Unitil

T 603.294.5261
M 603.534.2379
F 603.294.5264
Email macleand@unitil.com

Landscape Best Management Practices
Operations and Maintenance Plan

Locust Street Residential Development

Dover, New Hampshire 03820

January 4, 2024

Prepared for

Civilworks New England/Haight Engineering, PLLC
181 Watson Road
PO Box 1166
Dover, New Hampshire 03821

Prepared by

Ironwood Design Group, LLC
PO Box 873
Exeter, New Hampshire 03833



Landscape Maintenance

Introduction

The landscape enhancements proposed for the Locust Street Residential Development project will require modest maintenance at various times throughout the year. For the site plantings, maintenance is most important during the first 1-2 years following installation when plants are becoming established. Anyone involved in the upkeep of the facility should become familiar with the landscape and its features. Identified below are basic, at minimum, maintenance tasks:

Weekly Tasks

1. Prune back any shrubs overhanging curbs or sidewalks.
2. Remove litter from plants bed.
3. Remove broken or fallen branches from trees.
4. Prune sucker growth from tree trunks.
5. Remove weeds larger than 2 inches high or wide from plant beds. Weeds two inches and larger must be removed, not just killed. **The application of herbicides such as Roundup is discouraged.**
6. Any invasive species seedlings observed should be removed and disposed of properly.
7. Replace bark mulch that may have been washed out of planting beds. Smooth mulch layer if it has been disturbed.
8. Check plants for signs of stress, pests or disease and notify Owner for authorization to replace.
9. If a significant decline in plant health is attributed to an insect pest, **apply an organic product and/or process** to control the pest.
10. Water plants that are dry and stressed.
11. Notify Owner for authorization to replace dead plants at the appropriate time (see annual tasks, September).
12. Identify other tasks listed on the Annual and Monthly checklist of tasks.

Annual Tasks

Early Spring

1. Prune winter damage such as broken tree branches that interfere with public safety.
2. Trim dead perennial foliage left in the fall for winter interest to within six inches of the ground.
3. Add new mulch to plant beds where the mulch depth has been reduced to less than 2 inches. Mulch depth shall not exceed two inches (top dressed). Mulch is not required where shrubs or groundcover completely hide the soil surface from view.
4. Gently prune shrubs, at appropriate time of year based on species, for shape and form. **Do not shear.**
5. Conduct a soil test to measure at a minimum pH, phosphorus, potassium, calcium, and magnesium. Follow the recommendations provided with the soil test results.
6. Apply fertilizer only when required. A single application of fertilizer per year before Memorial Day is encouraged.

Monthly Tasks

June

No additional items

July

No additional items

August

No additional items

September

1. Inventory all plant materials, including an exact count of all shrubs and trees.
2. Replace any dead or missing plants.
3. Aerate lawn areas.
4. Apply pelletized lime at a rate of 80 lbs/1,000 square feet or as soil test dictates.

October

No additional items

November

1. Remove leaves from lawn areas and planting beds.
2. Remove perennial vegetation that has died back for the season.
3. Apply “WILT-PRUF” to broadleaf evergreens, according to label instructions, to protect shrubs from winter die back.

December

1. Prune any tree branches that interfere with public safety.
2. Prune deciduous trees yearly to encourage strong growth the following growing season. Trees adjacent to pedestrian sidewalks shall have branches pruned to 6-foot height.

Management Task or Activity	Time or Frequency						
	Weekly	Monthly	Spring	Summer	Fall	Winter	After Major Rain Events
Replace dead or dying plants			X		X		
Remove weeds	X		X	X	X		
Remove accumulated leaves, litter, and plant debris		X					X

Rain Gardens

The rain gardens will attenuate flow and treat stormwater. The rain gardens consist of a basin and swales seeded with native, adaptable, and rugged perennial grasses, and sometimes other flowering plants. There are maintenance tasks associated with rain garden care.

Erosion

The soil in the facility and in areas draining to the rain garden shall be inspected for erosion. Eroded areas shall be filled with soil or mulch and seeded with the mix specified in the plans.

Sediment Accumulation and Clogging

The accumulation of sediment within the rain garden may reduce its infiltration capacity. The rain garden shall be inspected for accumulation of sediment, and if found, excessive sediment shall be removed from the area, re-mulched, and replanted as appropriate and necessary.

Debris and Litter

Debris and litter should be removed from the rain garden monthly to maintain aesthetic appearance and public acceptance.

Plant Maintenance

Healthy vegetation contributes to the optimal operation of the stormwater facility. Planting area maintenance tasks include the removal of accumulated leaves, litter, and plant debris as needed. During the first 1-2 years after planting, the facility should be monitored for invasive species and weeded as needed and appropriate. Well-established rain garden vegetation shall be pruned back each fall.

Snow Storage

Snow shall not be dumped directly onto the rain gardens.

Chlorides

The rain gardens are not suitable for treating chlorides. Chloride use on source surface areas tributary to the facility should be avoided if possible. In these locations, it would be prudent to eliminate or reduce application of chloride-containing deicing compounds, use alternative deicers, or apply clean sand as needed.

Management Task or Activity	Time or Frequency						
	Weekly	Monthly	Spring	Summer	Fall	Winter	After Major Rain Events
Inspect for erosion. Rake and redistribute/replenish any soil, rap, or mulch that has eroded		X					X
Inspect for standing water							X
Remove accumulated leaves, litter, and plant debris		X					X
Weed plant material		X					
Prune back dying plant material					X		

Stormwater Management System Inspection & Maintenance Plan

Prepared for:

LOCUST STREET RESIDENTIAL DEVELOPMENT
Map 12, Lot 35-1

Locust Street
Dover, New Hampshire
Strafford County

February 2024

Owner of Record:

17 – 19 SUMMER STREET PROPERTIES, LLC
71 Lafayette Road
Hampton Falls, New Hampshire 03844

Prepared By:

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

Introduction

Civilworks New England, has prepared the following Stormwater Management System Inspection & Maintenance Plan for **17 – 19 Summer Street Properties, LLC.** The intent of this plan is to provide a list of procedures that document the inspection and maintenance requirements of the Stormwater Management System for this site.

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

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

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

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

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

Owner:

17 – 19 Summer Street Properties, LLC
71 Lafayette Road
Hampton Falls, NH 03844

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

Contact / Responsible Party:

17 – 19 Summer Street Properties, LLC
71 Lafayette Road
Hampton Falls, NH 03844

Ben Perez
Phone: (603) 944-0516
Email: Ben@bostonnorthdevelopment.com

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

Management Company:

17 – 19 Summer Street Properties, LLC
71 Lafayette Road
Hampton Falls, NH 03844

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

Inspection Schedule / Record Retention

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

Stormwater Management System Components

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

- Pipes/Culverts
- Outlet Structures
- Sediment Forebay
- Yard Drains
- Bioretention Basins
- Grassed Lined Conveyance Swale
- Pavement
- Litter / Trash Removal

Design elements are identified in the design plans, a copy of which shall be maintained with this Inspection and Maintenance Plan.

Control of Invasive Species

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

Inspection and Maintenance Plan

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

PIPES/CULVERTS:

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

OUTLET STRUCTURES:

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

SEDIMENT FOREBAY:

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

YARD DRAINS:

- Inspect once per year.
- Inspect for floatables, sediment accumulation, and hydrocarbons (oils and grease).
- Remove all floatables immediately and sediment accumulations ≥ 1 foot.
- Hydrocarbons shall be removed immediately by skimming, absorbent materials, or other methods and should be disposed of in accordance with applicable State and Federal regulations.

BIORETENTION BASINS:

- Inspection, by a **qualified professional**, of the Bioretention Basin at least twice annually, and following any rainfall event exceeding 2.5 inches in a 24-hour period, with maintenance or rehabilitation conducted as warranted by such inspection. If the Bioretention Basin systems do not drain within 72-hours following a rainfall event, a qualified professional should assess the condition and determine measures required to restore filtration practice (as applicable).
- Embankments and spillways should be inspected by a **qualified professional** for settlement, erosion, seepage, animal burrows, woody vegetation, and other conditions that could degrade the embankment and reduce its stability for impounding water. Immediate corrective action should be implemented if any such conditions are found.
- Inlet and outlet pipes, inlet and outlet structures, energy dissipation structures or practices, and other structural appurtenances should be inspected by a **qualified professional**, and corrective action implemented (e.g., maintenance, repairs, or replacement) as indicated by such inspection.
- The bottoms, interior and exterior side slopes, and crest of earthen detention basins should be mowed, and the vegetation maintained in healthy condition, as appropriate to the function of the facility and type of vegetation.

- Vegetated embankments that serve as “berms” or “dams” that impound water should be mowed at least once annually to prevent the establishment of woody vegetation.
- Trash and debris should be removed from the pond and any inlet or outlet structures whenever observed.
- Accumulated sediment should be removed when it significantly affects pond capacity.

GRASS LINED CONVEYANCE SWALE:

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

PAVEMENT:

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

LITTER / TRASH REMOVAL:

- Routinely patrol site for litter pick-up.

DE-ICING AGENTS:

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

ANTI-ICING AND SALT MINIMIZATION:

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

Inspection & Maintenance Table

System Component / BMP	Minimum Inspection Frequency	Minimum Inspection Requirements	Maintenance / Cleanout Threshold
Pipes/Culverts	Annually	• Check for clogging • Check for sediment accumulation	Remove when noticed Clean when necessary
Outlet Structures	Annually	• Inspect once per year. • Inspect for clogging and sediment accumulation. • Remove all debris immediately and sediment accumulations ≥ 2 inches.	≥ 2 in. sediment Remove immediately
Sediment Forebay	Annually	• Check for sediment accumulation • Check for woody vegetation growth • Check for debris • Vegetated areas shall be mowed to maintain a 4" start of vegetative growth.	Remove/Dispose of accordingly Mow twice per year Remove/Dispose of accordingly
Yard Drains	Annually	• Check for sediment accumulation • Check for floatable contaminants • Check for hydrocarbons (oils and grease)	≥ 1 ft. sediment depth Remove all floatables Remove immediately
Bioretention Basins • Outlet Structure • Inlet/Outlet Piping • Embankments • Pond Sediment • Trash/Debris • Vegetation (Veg.)	Bi-Annually " " " " Periodically " " " "	• See Outlet Structure (OS) Req. • Check for erosion, settlement, seepage, etc. • Check for sediment accumulation in pond • Check for trash (in pond and structures) • Maintain 95% veg. (pond & slopes) • Maintain healthy stand of veg.	See OS Req. Repair immediately ≥ 2 in. sediment Remove all trash/debris Restore veg. in-kind Mow when ≥ 6 in
Grass Lined Conveyance Swale	Annually	• Check for sediment accumulation • Check for erosion • Ensure swale is stabilized • Maintain healthy stand of veg., 4" minimum • Inspect for invasive species	≥ 1 in. sediment Repair immediately Restore vegetation in-kind Mow twice per year Remove/Dispose of accordingly
Pavement: • Sanding • Salt Applications • Sweep/Vacuum • Trash/Debris	Limit use As required 1 - 2 x's Year Periodically	• Minimize use to prevent tracking issues • RECORD APPLICATION RATES • Sweep or vacuum to prevent tracking issues • Check for trash/debris	Sweep to prevent issues Minimize (as required) Sweep/Vac as needed Remove when noticed
Litter / Trash Removal	Periodically	• Check for litter and trash	Remove when noticed

Inspection & Maintenance Checklist/Log

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

Stormwater Management System's Inspection & Maintenance Log

Date of Inspection/Maintenance_____ Inspector:_____

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

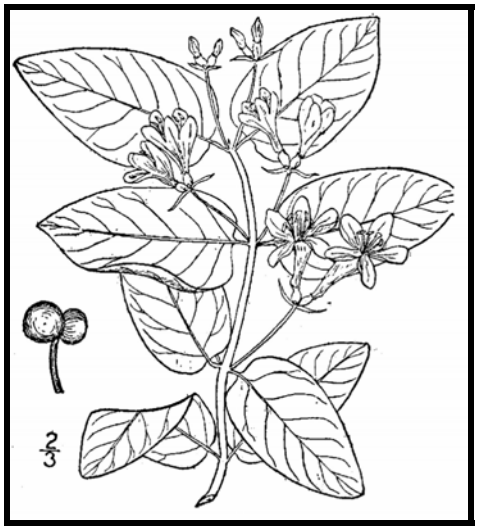
Deicing Salt Quantity Use Log

Date	Amount of Material Applied	Comments

University of New Hampshire Cooperative Extension

Methods for Disposing Non-Native Invasive Plants

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



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

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

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

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

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

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

New Hampshire Regulations

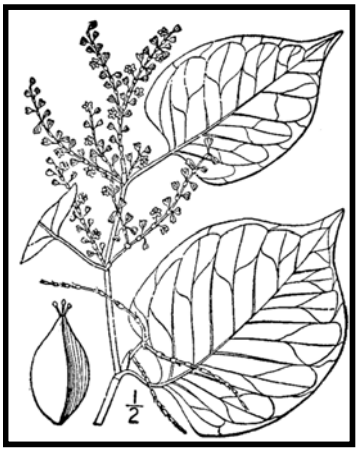
Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

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

How and When to Dispose of Invasives?

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

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



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

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

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

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

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

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

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

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

Suggested Disposal Methods for Non-Native Invasive Plants

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

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

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.

January 2010

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DRAINAGE ANALYSIS

LOCUST STREET RESIDENTIAL DEVELOPMENT
TAX MAP 12, LOT 35-1

Locust Street
Dover, New Hampshire
Strafford County

February 2024
Revised: April 2024
Revised: August 2024

Prepared For:

17 – 19 Summer Street Properties, LLC
71 Lafayette Road
Hampton Falls, NH 03844

Prepared By:

Civilworks NE
PO Box 1166
181 Watson Road
Dover, NH 03820

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1.0 INTRODUCTION

This is a hydrologic analysis of the subject parcel located on Locust Street in Dover, NH. The 0.229± acre lot is identified as Tax Map 12, Lot 35-1. This 0.445± acre hydrologic analysis includes the subject parcel and approximately 0.215± acres of offsite runoff from lawn, an existing gravel parking area, and roof runoff that flows through the parcel. The site is undeveloped and primarily consists of lawn with minimal landscaping and trees. The parcel is fairly level and slightly slopes away from Locust St to an abutting parcel. The parcel is bound by Locust Street to the west, a private residence to the north, multi-family housing to the south and the Woodman Institute to the east. The parcel is serviced by an existing 12" HDPE drain which ties into the closed drainage system located in Locust St. and has been stubbed to the site.

The project proposes the construction of a 4-unit multi-family house and an improved parking area that will be shared with the abutting 4-unit multi-family home. The project does not qualify as a redevelopment project, and as such, the stormwater design captures and treats the stormwater runoff from all impervious surfaces within the watershed. The proposed drainage system incorporates a bio-retention basin to treat stormwater. The basin is also sized to maximize the amount of onsite storage available to help buffer the increase in runoff from the proposed site. Test pits and infiltration testing indicate poor soil characteristics and ground water recharge is not feasible, as such, the bioretention pond is underdrained. Closed and open drainage systems consisting of pipes, a yard drain, and swales, are utilized for the conveyance of post construction stormwater. The proposed stormwater system captures, treats, and stores the stormwater runoff from the site and redirects it to the existing onsite closed drainage system. The proposed stormwater drainage structures (yard drain, pipes, basins, outlet structure, etc.) will be maintained by the project proponent as outlined within the Stormwater Management System Inspection & Maintenance Manual (Stormwater I&M Manual) in Appendix C.

The predevelopment watershed is identified as discharge point A. Discharge point A drains easterly from the edge of Locust Street overland through the parcel to an abutting parcel. Once exiting the site, the discharge continues through the property owned by the Woodman Institute then discharges into the City's closed drainage system located in Central Ave.

Post development analysis includes a single watershed to accurately model the proposed drainage system. This analysis indicates that the proposed stormwater measures and stormwater management plan will treat runoff in accordance with ENV-Wq 1500 of the New Hampshire Code of Administrative Rules and the City of Dover's Subdivision Regulations. The proposed site characteristics are not conducive to infiltration and as such the project proposes minor increase to the volume and flow of stormwater from the proposed site. The stormwater design maximizes the amount of onsite storage to minimize an increase in flow and also captures the stormwater on site and discharges it to the City's closed drainage system as opposed to allowing the water to flow to an abutting parcel. The proposed development of the site in conjunction with the implementation of the Stormwater I&M Manual will have minimal impact on the watersheds.

2.0 DRAINAGE ANALYSIS

A comprehensive hydrologic study of this site has been performed utilizing nationally recognized runoff estimating techniques developed by the USDA, Soil Conservation Services (SCS). The technique and runoff models are described in various SCS publications and references as follows:

"Stormwater Management and Erosion Sediment Control Handbook for Urban and Developing Areas in New Hampshire"

"New Hampshire Stormwater Manual Volume 2 - Post-Construction Best Management Practices Selection & Design"

"Civil Engineering Reference Manual, Fifth Edition"

"Open-Channel Hydraulics" Chow.

"Stormwater Modeling System" HydroCAD Ver. 10.10

2.1 DRAINAGE DESIGN PARAMETERS

A brief review of the procedures and parameters used in the drainage study follows:

2.1.1 Watersheds

The watershed was delineated using on site topographic and as built survey data field located by McEneaney Survey Associates of New England.

2.1.2 Soils

Soil types were determined utilizing the NRCS Web Soil Survey (WSS) mapping tool at http://websoilsurvey.nrcs.usda.gov. The soil survey area is Strafford County, NH, the soil survey data is Version 23, dated Sep 9th, 2022 and the aerial images are dated June 19th to September 20th, 2020.

Hydrologic Drainage Class A:

Map Unit Symbol	Slopes	Map Unit Name
WfB	0 to 8 %	Windsor Loamy Fine Sand, Clay Subvariant

2.1.3 Rainfall Data

Extreme precipitation estimate values from the Northeast Regional Climate Center were utilized in this analysis. The analysis has been performed for the 2-year, 10-year, 25-year, and 50-year storm events with 3.15", 4.75", 6.01", and 7.18" rainfall depths respectively.

2.1.4 Runoff Curve Numbers

The SCS runoff curve numbers were used and are summarized within each sub-catchment drainage summary in Appendix A.

2.2 EXISTING CONDITIONS

For the purposes of this analysis, the subject parcel was analyzed as a single watershed that discharges to an abutting property in the predevelopment condition.

2.2.1 Table A – Existing Conditions (2, 10, 25, and 50-year storm events)

Watershed	**Pre-Development Volume (af)**	**Pre Development Peak Flows (cfs)**			
Discharge Point	**2-yr**	**2-yr**	**10-yr**	**25-yr**	**50-yr**
A	0.00	0.0	0.1	0.3	0.5

2.3 DEVELOPED CONDITIONS

The post development model analyzes runoff to the post development discharge point, which is the closed drainage system in Locust Street.

2.3.1 Table B – Developed Conditions (2, 10, 25, and 50-year storm events)

Watershed	**Post-Development Volume (af)**	**Post Development Peak Flows (cfs)**			
Discharge Point	**2-yr**	**2-yr**	**10-yr**	**25-yr**	**50-yr**
A1	0.03	0.2	0.2	0.3	0.3

2.4 HYDROLOGIC COMPARISON

The analysis indicates that the proposed project will have negligible impact on the watershed.

2.4.1 Table C – Pre/Post Development Comparison (2, 10, 25, and 50-year storm events)

Watershed	Pre/**Post-Development Volume (af)**	Pre/**Post Development Peak Flows (cfs)**			
Discharge Point	**2-yr**	**2-yr**	**10-yr**	**25-yr**	**50-yr**
A	0.00/**0.03**	0.0/**0.2**	0.1/**0.2**	0.3/**0.3**	0.5/**0.3**

2.5 STORMWATER DESIGN

The project incorporates best management practices to mitigate runoff as well as treat and convey stormwater.

2.5.1 Stormwater Best Management Practices

The project incorporates a bio-retention basin to mitigate flow and water quality from the proposed development. Pre-treatment for the large bio-retention basin includes a sediment forebay and grassed swales. See Appendix B-1 for Best Management Practice Design forms.

2.5.2 Pollutant Removal

The site stormwater design captures 100% of the proposed onsite and 100% of the offsite impervious area (that flows onto the site) and directs it to the best management practices that provide pollutant removal. This project effectively treats 3,500+/- SF of previously untreated predevelopment impervious area. The project incorporates the following practices and associated pollutant removal efficacies as identified in the New Hampshire Stormwater Management Manual Volume 1, Appendix E:

	TSS	TN	TP
Bio-Retention Basin:	90%	65%	65%

The pollutant removal meets or exceeds The City of Dover's, Site Review Regulations. See Appendix B-2 for the removal efficiency data as provided in Volume 1.

2.5.3 Groundwater Recharge

Test pits (3) and borehole infiltration testing (3 locations) were performed on October 2nd, 2023. The results of these tests indicate soils are a silty or sandy loam with layers of silty clay. Seasonal high water tables varied between 22 and 32 inches. Borehole infiltration testing failed at borehole locations #1 and #2 during the first iteration of testing and in the second iteration for location #3. The site is not conducive to infiltration based best management practices nor is it capable of meeting the groundwater recharge requirements of the City of Dover's Site Review Regulations. See Appendix B-3 for test pit and borehole test information.

APPENDIX A

HYDROLOGIC CALCULATIONS

Extreme Precipitation in New York & New England

An Interactive Web Tool for Extreme Precipitation Analysis

About this Project | Data & Products | Daily Monitoring | Documentation

Select Product

- Extreme Precipitation Tables - HTML
- Extreme Precipitation Tables - Text/CSV
- Partial Duration Series - by Point
- Partial Duration Series - by Station
- Distribution Curves - Graphical
- Distribution Curves - Text/TBL
- Intensity Frequency Duration Graphs
- Precipitation Frequency Duration Graphs
- GIS Data Files
- Regional/State Maps

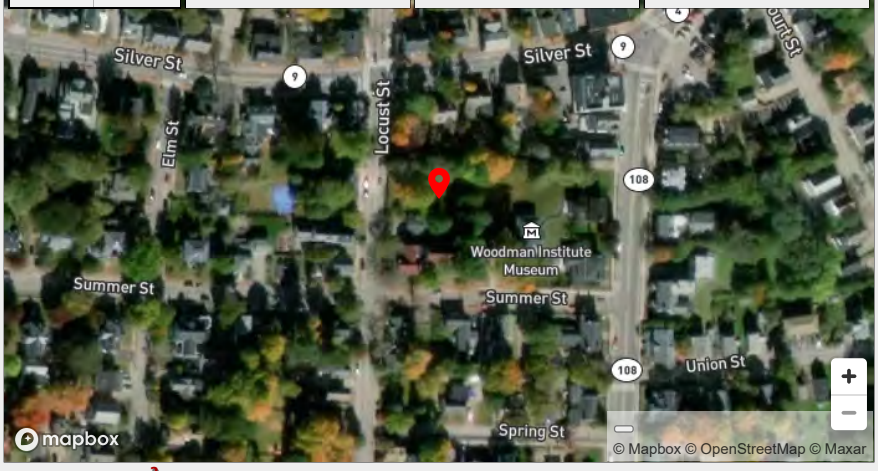
Select Location *Double-click map to place a marker, or enter address or latitude/longitude.*

Hybrid | Map | Satellite | Terrain

Locate by Address

Locate by Lat/Lon: 43.18° N -70.87° W

Locate by State/County



Select Options

Smoothing	Delivery
Yes	Popup

Submit

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This project is a joint collaboration between:

Northeast Regional Climate Center (NRCC) | Natural Resources Conservation Service (NRCS)

Contact: precip@cornell.edu

Extreme Precipitation Tables

Northeast Regional Climate Center

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

Metadata for Point

Smoothing	Yes
State	New Hampshire
Location	New Hampshire, United States
Latitude	43.190 degrees North
Longitude	70.875 degrees West
Elevation	20 feet
Date/Time	Mon Sep 18 2023 15:41:12 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	1.54	2.00	2.60	2.87	**1yr**	2.31	2.76	3.15	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	3.50	**2yr**	2.79	3.37	3.86	4.60	5.23	**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**	3.52	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	3.66	4.75	5.42	**10yr**	4.20	5.21	5.95	6.93	7.80	**10yr**
25yr	0.46	0.74	0.94	1.30	1.72	2.27	**25yr**	1.49	2.09	2.70	3.53	4.61	6.01	6.95	**25yr**	5.32	6.68	7.61	8.77	9.80	**25yr**
50yr	0.52	0.83	1.06	1.48	2.00	2.67	**50yr**	1.73	2.46	3.18	4.19	5.49	7.18	8.39	**50yr**	6.35	8.07	9.17	10.48	11.65	**50yr**
100yr	0.58	0.94	1.21	1.71	2.32	3.12	**100yr**	2.00	2.89	3.75	4.96	6.53	8.58	10.14	**100yr**	7.60	9.75	11.06	12.53	13.86	**100yr**
200yr	0.64	1.05	1.36	1.95	2.70	3.67	**200yr**	2.33	3.40	4.43	5.89	7.79	10.26	12.26	**200yr**	9.08	11.79	13.34	14.98	16.49	**200yr**
500yr	0.76	1.24	1.62	2.36	3.30	4.54	**500yr**	2.85	4.22	5.50	7.37	9.82	13.01	15.75	**500yr**	11.51	15.15	17.10	18.99	20.77	**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	1.57	2.12	2.46	**1yr**	1.88	2.36	2.88	3.35	4.03	**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	5.05	**2yr**
5yr	0.35	0.54	0.67	0.91	1.16	1.40	**5yr**	1.00	1.37	1.61	2.15	2.78	3.71	4.12	**5yr**	3.28	3.97	4.61	5.41	6.11	**5yr**
10yr	0.38	0.59	0.73	1.02	1.31	1.60	**10yr**	1.13	1.56	1.81	2.44	3.13	4.27	4.78	**10yr**	3.78	4.60	5.32	6.24	7.01	**10yr**
25yr	0.44	0.66	0.82	1.18	1.55	1.91	**25yr**	1.34	1.87	2.11	2.84	3.65	4.94	5.79	**25yr**	4.37	5.57	6.48	7.55	8.42	**25yr**
50yr	0.48	0.73	0.91	1.31	1.76	2.19	**50yr**	1.52	2.14	2.35	3.19	4.09	5.64	6.68	**50yr**	4.99	6.42	7.53	8.71	9.66	**50yr**
100yr	0.54	0.81	1.01	1.46	2.01	2.51	**100yr**	1.73	2.45	2.63	3.57	4.57	6.42	7.69	**100yr**	5.68	7.40	8.74	10.06	11.07	**100yr**
200yr	0.59	0.89	1.13	1.64	2.29	2.87	**200yr**	1.97	2.80	2.93	4.00	5.10	7.31	8.87	**200yr**	6.47	8.53	10.14	11.61	12.70	**200yr**
500yr	0.69	1.03	1.33	1.93	2.74	3.45	**500yr**	2.36	3.37	3.40	4.63	5.92	8.64	10.68	**500yr**	7.65	10.27	12.33	14.06	15.18	**500yr**

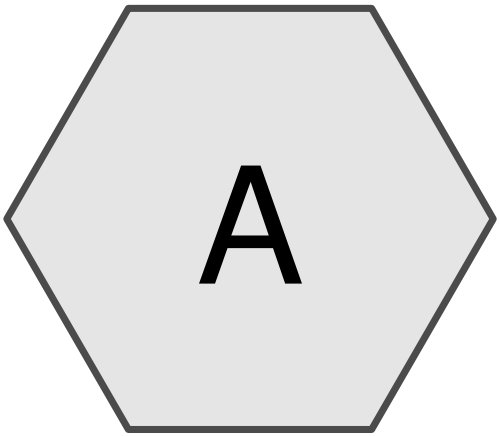
Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.43	0.53	0.71	0.87	1.08	**1yr**	0.75	1.05	1.23	1.74	2.21	2.87	3.08	**1yr**	2.54	2.97	3.43	4.22	4.81	**1yr**
2yr	0.33	0.51	0.62	0.85	1.04	1.25	**2yr**	0.90	1.22	1.48	1.95	2.51	3.29	3.62	**2yr**	2.91	3.49	4.00	4.75	5.45	**2yr**
5yr	0.39	0.61	0.75	1.03	1.31	1.58	**5yr**	1.13	1.55	1.86	2.50	3.20	4.24	4.85	**5yr**	3.75	4.67	5.28	6.23	7.00	**5yr**
10yr	0.46	0.70	0.87	1.22	1.57	1.92	**10yr**	1.36	1.88	2.23	3.05	3.86	5.21	6.06	**10yr**	4.62	5.83	6.65	7.65	8.53	**10yr**
25yr	0.56	0.84	1.05	1.50	1.97	2.48	**25yr**	1.70	2.42	2.88	3.97	4.96	7.07	8.14	**25yr**	6.26	7.82	8.90	10.07	11.12	**25yr**
50yr	0.64	0.98	1.22	1.75	2.35	2.99	**50yr**	2.03	2.93	3.49	4.83	6.03	8.74	10.20	**50yr**	7.74	9.80	11.12	12.38	13.59	**50yr**
100yr	0.75	1.13	1.42	2.04	2.80	3.62	**100yr**	2.42	3.54	4.24	5.92	7.33	10.81	12.78	**100yr**	9.56	12.28	13.88	15.25	16.63	**100yr**
200yr	0.87	1.30	1.65	2.39	3.34	4.39	**200yr**	2.88	4.29	5.16	7.24	8.90	13.39	16.03	**200yr**	11.85	15.41	17.35	18.78	20.38	**200yr**
500yr	1.06	1.58	2.03	2.95	4.19	5.64	**500yr**	3.62	5.51	6.66	9.47	11.54	17.81	21.63	**500yr**	15.76	20.80	23.31	24.76	26.67	**500yr**

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EXISTING WATERSHEDS



A

Subcat Reach Pond Link

Routing Diagram for 23029 - Pre
Prepared by Civilworks New England, Printed 4/16/2024
HydroCAD® 10.10-5a s/n 03240 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.365	39	>75% Grass cover, Good, HSG A (A)
0.011	96	Gravel surface, HSG A (A)
0.026	98	Paved parking, HSG A (A)
0.043	98	Roofs, HSG A (A)

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.445	HSG A	A
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.365	0.000	0.000	0.000	0.000	0.365	>75% Grass cover, Good	A
0.011	0.000	0.000	0.000	0.000	0.011	Gravel surface	A
0.026	0.000	0.000	0.000	0.000	0.026	Paved parking	A
0.043	0.000	0.000	0.000	0.000	0.043	Roofs	A

A – 1

NODE LISTING – 2-YR

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: A Runoff Area=19,378 sf 15.48% Impervious Runoff Depth=0.12"
Flow Length=126' Slope=0.0400 '/' Tc=9.0 min CN=50 Runoff=0.0 cfs 0.00 af

Total Runoff Area = 0.445 ac Runoff Volume = 0.00 af Average Runoff Depth = 0.12"
84.52% Pervious = 0.376 ac 15.48% Impervious = 0.069 ac

A – 1

NODE LISTING – 10-YR

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: A Runoff Area=19,378 sf 15.48% Impervious Runoff Depth=0.59"
Flow Length=126' Slope=0.0400 '/' Tc=9.0 min CN=50 Runoff=0.1 cfs 0.02 af

Total Runoff Area = 0.445 ac Runoff Volume = 0.02 af Average Runoff Depth = 0.59"
84.52% Pervious = 0.376 ac 15.48% Impervious = 0.069 ac

A – 1

10-YR STORM SUMMARY

Summary for Subcatchment A: A

Runoff = 0.1 cfs @ 12.12 hrs, Volume= 0.02 af, Depth= 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
23029 24-hr S1 10-yr Rainfall=4.75"

Area (sf)	CN	Description
15,888	39	>75% Grass cover, Good, HSG A
491	96	Gravel surface, HSG A
1,122	98	Paved parking, HSG A
1,877	98	Roofs, HSG A
19,378	50	Weighted Average
16,379		84.52% Pervious Area
2,999		15.48% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.0	126	0.0400	0.23		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.15"

A – 1

NODE LISTING – 25-YR

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: A Runoff Area=19,378 sf 15.48% Impervious Runoff Depth=1.15"
Flow Length=126' Slope=0.0400 '/' Tc=9.0 min CN=50 Runoff=0.3 cfs 0.04 af

Total Runoff Area = 0.445 ac Runoff Volume = 0.04 af Average Runoff Depth = 1.15"
84.52% Pervious = 0.376 ac 15.48% Impervious = 0.069 ac

A – 1

NODE LISTING – 50-YR

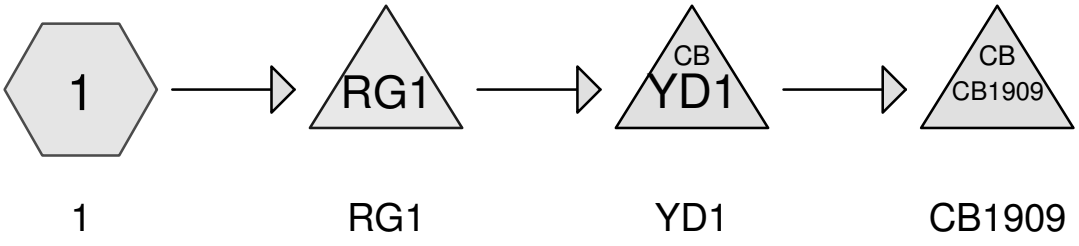
Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A: A Runoff Area=19,378 sf 15.48% Impervious Runoff Depth=1.77"
Flow Length=126' Slope=0.0400 '/' Tc=9.0 min CN=50 Runoff=0.5 cfs 0.07 af

Total Runoff Area = 0.445 ac Runoff Volume = 0.07 af Average Runoff Depth = 1.77"
84.52% Pervious = 0.376 ac 15.48% Impervious = 0.069 ac

A – 2

DEVELOPED WATERSHEDS



Subcat Reach Pond Link

Routing Diagram for 23029 - Post
Prepared by Civilworks New England, Printed 4/16/2024
HydroCAD® 10.10-5a s/n 03240 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.222	39	>75% Grass cover, Good, HSG A (1)
0.002	96	Gravel surface, HSG A (1)
0.114	98	Paved parking, HSG A (1)
0.107	98	Roofs, HSG A (1)
0.445	**69**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.445	HSG A	1
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
0.445		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.222	0.000	0.000	0.000	0.000	0.222	>75% Grass cover, Good	1
0.002	0.000	0.000	0.000	0.000	0.002	Gravel surface	1
0.114	0.000	0.000	0.000	0.000	0.114	Paved parking	1
0.107	0.000	0.000	0.000	0.000	0.107	Roofs	1
0.445	**0.000**	**0.000**	**0.000**	**0.000**	**0.445**	**TOTAL AREA**	

A – 2

NODE LISTING – 2-YR

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: 1 Runoff Area=19,378 sf 49.77% Impervious Runoff Depth=0.75"
Flow Length=85' Slope=0.0310 '/' Tc=7.3 min CN=69 Runoff=0.3 cfs 0.03 af

Pond CB1909: CB1909 Peak Elev=92.39' Inflow=0.2 cfs 0.03 af
15.0" Round Culvert n=0.012 L=26.0' S=0.0000 '/' Outflow=0.2 cfs 0.03 af

Pond RG1: RG1 Peak Elev=93.90' Storage=212 cf Inflow=0.3 cfs 0.03 af
Outflow=0.2 cfs 0.03 af

Pond YD1: YD1 Peak Elev=92.88' Inflow=0.2 cfs 0.03 af
12.0" Round Culvert n=0.012 L=28.0' S=0.0100 '/' Outflow=0.2 cfs 0.03 af

Total Runoff Area = 0.445 ac Runoff Volume = 0.03 af Average Runoff Depth = 0.75"
50.23% Pervious = 0.223 ac 49.77% Impervious = 0.221 ac

A – 2

NODE LISTING – 10-YR

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: 1 Runoff Area=19,378 sf 49.77% Impervious Runoff Depth=1.78"
Flow Length=85' Slope=0.0310 '/' Tc=7.3 min CN=69 Runoff=0.7 cfs 0.07 af

Pond CB1909: CB1909 Peak Elev=92.44' Inflow=0.2 cfs 0.07 af
15.0" Round Culvert n=0.012 L=26.0' S=0.0000 '/' Outflow=0.2 cfs 0.07 af

Pond RG1: RG1 Peak Elev=96.05' Storage=513 cf Inflow=0.7 cfs 0.07 af
Outflow=0.2 cfs 0.07 af

Pond YD1: YD1 Peak Elev=92.93' Inflow=0.2 cfs 0.07 af
12.0" Round Culvert n=0.012 L=28.0' S=0.0100 '/' Outflow=0.2 cfs 0.07 af

Total Runoff Area = 0.445 ac Runoff Volume = 0.07 af Average Runoff Depth = 1.78"
50.23% Pervious = 0.223 ac 49.77% Impervious = 0.221 ac

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10-YR STORM SUMMARY

Summary for Subcatchment 1: 1

Runoff = 0.7 cfs @ 12.06 hrs, Volume= 0.07 af, Depth= 1.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
23029 24-hr S1 10-yr Rainfall=4.75"

Area (sf)	CN	Description
9,659	39	>75% Grass cover, Good, HSG A
74	96	Gravel surface, HSG A
4,972	98	Paved parking, HSG A
4,673	98	Roofs, HSG A
19,378	69	Weighted Average
9,733		50.23% Pervious Area
9,645		49.77% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.3	85	0.0310	0.19		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.15"

Summary for Pond CB1909: CB1909

Inflow Area = 0.445 ac, 49.77% Impervious, Inflow Depth > 1.78" for 10-yr event
Inflow = 0.2 cfs @ 12.33 hrs, Volume= 0.07 af
Outflow = 0.2 cfs @ 12.33 hrs, Volume= 0.07 af, Atten= 0%, Lag= 0.0 min
Primary = 0.2 cfs @ 12.33 hrs, Volume= 0.07 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 92.44' @ 12.33 hrs
Flood Elev= 100.92'

Device	Routing	Invert	Outlet Devices
#1	Primary	92.10'	**15.0" Round Culvert** L= 26.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 92.10' / 92.10' S= 0.0000 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.2 cfs @ 12.33 hrs HW=92.44' (Free Discharge)
↑—**1=Culvert** (Barrel Controls 0.2 cfs @ 1.38 fps)

Summary for Pond RG1: RG1

Inflow Area = 0.445 ac, 49.77% Impervious, Inflow Depth = 1.78" for 10-yr event
Inflow = 0.7 cfs @ 12.06 hrs, Volume= 0.07 af
Outflow = 0.2 cfs @ 12.33 hrs, Volume= 0.07 af, Atten= 65%, Lag= 16.3 min
Primary = 0.2 cfs @ 12.33 hrs, Volume= 0.07 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Starting Elev= 93.42' Surf.Area= 742 sf Storage= 88 cf
Peak Elev= 96.05' @ 12.33 hrs Surf.Area= 1,062 sf Storage= 513 cf (425 cf above start)
Flood Elev= 97.15' Surf.Area= 2,127 sf Storage= 2,128 cf (2,040 cf above start)

Plug-Flow detention time= 48.6 min calculated for 0.06 af (97% of inflow)
Center-of-Mass det. time= 23.4 min (920.5 - 897.1)

Volume	Invert	Avail.Storage	Storage Description
#1	96.00'	477 cf	**Sediment Forebay (Irregular)** Listed below (Recalc)
#2	93.08'	1,651 cf	**Rain Garden 1 (Irregular)** Listed below
		2,128 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
96.00	287	68.4	0	0	287
96.60	408	78.8	207	207	417
97.00	529	90.2	187	394	574
97.15	575	93.4	83	477	622

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
93.08	742	150.8	0.0	0	0	742
94.25	742	150.8	35.0	304	304	918
94.50	742	150.8	20.0	37	341	956
96.00	742	150.8	10.0	111	452	1,182
96.60	1,013	169.1	100.0	524	977	1,658
97.00	1,297	204.7	100.0	461	1,437	2,720
97.15	1,552	213.9	100.0	213	1,651	3,028

Device	Routing	Invert	Outlet Devices
#1	Primary	93.42'	**12.0" Round Culvert** L= 85.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 93.42' / 92.68' S= 0.0087 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	93.42'	**6.0" Round Culvert** L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 93.42' / 93.42' S= 0.0000 '/' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf
#3	Device 2	93.08'	**10.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#4	Device 1	96.60'	**18.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.2 cfs @ 12.33 hrs HW=96.05' TW=92.93' (Dynamic Tailwater)
- **1=Culvert** (Passes 0.2 cfs of 5.0 cfs potential flow)
  - **2=Culvert** (Passes 0.2 cfs of 1.2 cfs potential flow)
    - **3=Exfiltration** (Exfiltration Controls 0.2 cfs)
  - **4=Orifice/Grate** (Controls 0.0 cfs)

Summary for Pond YD1: YD1

Inflow Area = 0.445 ac, 49.77% Impervious, Inflow Depth = 1.78" for 10-yr event
Inflow = 0.2 cfs @ 12.33 hrs, Volume= 0.07 af
Outflow = 0.2 cfs @ 12.33 hrs, Volume= 0.07 af, Atten= 0%, Lag= 0.0 min
Primary = 0.2 cfs @ 12.33 hrs, Volume= 0.07 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Peak Elev= 92.93' @ 12.33 hrs
Flood Elev= 100.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	92.68'	**12.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 92.68' / 92.40' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.2 cfs @ 12.33 hrs HW=92.93' TW=92.44' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 0.2 cfs @ 2.45 fps)

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NODE LISTING – 25-YR

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: 1 Runoff Area=19,378 sf 49.77% Impervious Runoff Depth=2.72"
Flow Length=85' Slope=0.0310 '/' Tc=7.3 min CN=69 Runoff=1.0 cfs 0.10 af

Pond CB1909: CB1909 Peak Elev=92.46' Inflow=0.3 cfs 0.10 af
15.0" Round Culvert n=0.012 L=26.0' S=0.0000 '/' Outflow=0.3 cfs 0.10 af

Pond RG1: RG1 Peak Elev=96.32' Storage=831 cf Inflow=1.0 cfs 0.10 af
Outflow=0.3 cfs 0.10 af

Pond YD1: YD1 Peak Elev=92.95' Inflow=0.3 cfs 0.10 af
12.0" Round Culvert n=0.012 L=28.0' S=0.0100 '/' Outflow=0.3 cfs 0.10 af

Total Runoff Area = 0.445 ac Runoff Volume = 0.10 af Average Runoff Depth = 2.72"
50.23% Pervious = 0.223 ac 49.77% Impervious = 0.221 ac

A – 2

NODE LISTING – 50-YR

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: 1 Runoff Area=19,378 sf 49.77% Impervious Runoff Depth=3.66"
Flow Length=85' Slope=0.0310 '/' Tc=7.3 min CN=69 Runoff=1.3 cfs 0.14 af

Pond CB1909: CB1909 Peak Elev=92.49' Inflow=0.3 cfs 0.14 af
15.0" Round Culvert n=0.012 L=26.0' S=0.0000 '/' Outflow=0.3 cfs 0.14 af

Pond RG1: RG1 Peak Elev=96.61' Storage=1,197 cf Inflow=1.3 cfs 0.14 af
Outflow=0.3 cfs 0.14 af

Pond YD1: YD1 Peak Elev=92.98' Inflow=0.3 cfs 0.14 af
12.0" Round Culvert n=0.012 L=28.0' S=0.0100 '/' Outflow=0.3 cfs 0.14 af

Total Runoff Area = 0.445 ac Runoff Volume = 0.14 af Average Runoff Depth = 3.66"
50.23% Pervious = 0.223 ac 49.77% Impervious = 0.221 ac

APPENDIX B

DESIGN

B – 1

STORMWATER BEST MANAGEMENT PRACTICES

FILTRATION PRACTICE DESIGN CRITERIA
(Env-Wq 1508.07)

Type/Node Name: **Rain Garden 1 (RG1)**

Enter the type of filtration practice (e.g., bioretention system) and the node name in the drainage analysis, if applicable.

YES		Check if you reviewed the restrictions on unlined systems outlined in Env-Wq 1508.07(a).	
0.44	ac	A = Area draining to the practice	
0.22	ac	A_I = Impervious area draining to the practice	
0.50	decimal	I = Percent impervious area draining to the practice, in decimal form	
0.50	unitless	Rv = Runoff coefficient = 0.05 + (0.9 x I)	
0.22	ac-in	WQV= 1" x Rv x A	
804	cf	WQV conversion (ac-in x 43,560 sf/ac x 1ft/12")	
201	cf	25% x WQV (check calc for sediment forebay volume)	
603	cf	75% x WQV (check calc for surface sand filter volume)	
Sediment Forebay		Method of Pretreatment? (not required for clean or roof runoff)	
394	cf	V_{SED} = Sediment forebay volume, if used for pretreatment	**≥ 25%WQV**
Calculate time to drain if system IS NOT underdrained:			
	sf	A_{SA} = Surface area of the practice	
	iph	$Ksat_{DESIGN}$ = Design infiltration rate[1]	
		If Ksat (prior to factor of safety) is < 0.50 iph, has an underdrain been provided?	
	Yes/No	(Use the calculations below)	
-	hours	T_{DRAIN} = Drain time = V / (A_{SA} * I_{DESIGN})	**≤ 72-hrs**
Calculate time to drain if system IS underdrained:			
96.60	ft	E_{WQV} = Elevation of WQV (attach stage-storage table)	
0.30	cfs	Q_{WQV} = Discharge at the E_{WQV} (attach stage-discharge table)	
1.49	hours	T_{DRAIN} = Drain time = 2WQV/Q_{WQV}	**≤ 72-hrs**
94.50	feet	E_{FC} = Elevation of the bottom of the filter course material[2]	
93.42	feet	E_{UD} = Invert elevation of the underdrain (UD), if applicable	
93.42	feet	E_{SHWT} = Elevation of SHWT (if none found, enter the lowest elevation of the test pit)	
92.60	feet	E_{ROCK} = Elevation of bedrock (if none found, enter the lowest elevation of the test pit)	
1.08	feet	$D_{FC\ to\ UD}$ = Depth to UD from the bottom of the filter course	**≥ 1'**
1.90	feet	$D_{FC\ to\ ROCK}$ = Depth to bedrock from the bottom of the filter course	**≥ 1'**
1.08	feet	$D_{FC\ to\ SHWT}$ = Depth to SHWT from the bottom of the filter course	**≥ 1'**
96.61	ft	Peak elevation of the 50-year storm event (infiltration can be used in analysis)	
97.15	ft	Elevation of the top of the practice	
YES		50 peak elevation ≤ Elevation of the top of the practice	**← yes**
If a surface sand filter or underground sand filter is proposed:			
YES	ac	Drainage Area check.	**< 10 ac**
	cf	V = Volume of storage[3] (attach a stage-storage table)	**≥ 75%WQV**
	inches	D_{FC} = Filter course thickness	**18", or 24" if within GPA**
Sheet		Note what sheet in the plan set contains the filter course specification.	
	Yes/No	Access grate provided?	**← yes**

If a bioretention area is proposed:			
YES	ac	Drainage Area no larger than 5 ac?	**← yes**
842	cf	V = Volume of storage[3] (attach a stage-storage table)	**≥ WQV**
18.0	inches	D_{FC} = Filter course thickness	**18", or 24" if within GPA**
Sheet	14	Note what sheet in the plan set contains the filter course specification	
3.0	:1	Pond side slopes	**≥ 3:1**
Sheet	L1.0	Note what sheet in the plan set contains the planting plans and surface cover	
If porous pavement is proposed:			
		Type of pavement proposed (Concrete? Asphalt? Pavers? Etc.)	
	acres	A_{SA} = Surface area of the pervious pavement	
	:1	Ratio of the contributing area to the pervious surface area	**≤ 5:1**
	inches	D_{FC} = Filter course thickness	**12", or 18" if within GPA mod. 304.1 (see spec)**
Sheet		Note what sheet in the plan set contains the filter course spec.	

1. Rate of the limiting layer (either the filter course or the underlying soil). $Ksat_{design}$ includes factor of safey. See Env-Wq 1504.14 for guidance on determining the infiltration rate.

2. See lines 34, 40 and 48 for required depths of filter media.

3. Volume without depending on infiltration. The volume includes the storage above the filter (but below the invert of the outlet stucture, if any), the filter media voids, and the pretreatment area. The storage above the filter media shall not include the volume above the outlet structure, if any.

Designer's Notes:

Summary for Pond RG1: RG1

Inflow Area = 0.445 ac, 49.77% Impervious, Inflow Depth = 3.66" for 50-yr event
Inflow = 1.3 cfs @ 12.05 hrs, Volume= 0.14 af
Outflow = 0.3 cfs @ 12.53 hrs, Volume= 0.14 af, Atten= 74%, Lag= 28.8 min
Primary = 0.3 cfs @ 12.53 hrs, Volume= 0.14 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Starting Elev= 93.42' Surf.Area= 742 sf Storage= 88 cf
Peak Elev= 96.61' @ 12.53 hrs Surf.Area= 1,429 sf Storage= 1,197 cf (1,108 cf above start)
Flood Elev= 97.15' Surf.Area= 2,127 sf Storage= 2,128 cf (2,040 cf above start)

Plug-Flow detention time= 44.1 min calculated for 0.13 af (98% of inflow)
Center-of-Mass det. time= 29.4 min (901.0 - 871.6)

Volume	Invert	Avail.Storage	Storage Description
#1	96.00'	477 cf	**Sediment Forebay (Irregular)** Listed below (Recalc)
#2	93.08'	1,651 cf	**Rain Garden 1 (Irregular)** Listed below
		2,128 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
96.00	287	68.4	0	0	287
96.60	408	78.8	207	207	417
97.00	529	90.2	187	394	574
97.15	575	93.4	83	477	622

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
93.08	742	150.8	0.0	0	0	742
94.25	742	150.8	35.0	304	304	918
94.50	742	150.8	20.0	37	341	956
96.00	742	150.8	10.0	111	452	1,182
96.60	1,013	169.1	100.0	524	977	1,658
97.00	1,297	204.7	100.0	461	1,437	2,720
97.15	1,552	213.9	100.0	213	1,651	3,028

Storage provided = 524 + 111 + 207 = 842 CF

Device	Routing	Invert	Outlet Devices
#1	Primary	93.42'	**12.0" Round Culvert** L= 85.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 93.42' / 92.68' S= 0.0087 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	93.42'	**6.0" Round Culvert** L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 93.42' / 93.42' S= 0.0000 '/' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf
#3	Device 2	93.08'	**10.000 in/hr Exfiltration over Surface area** Phase-In= 0.01'
#4	Device 1	96.60'	**18.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.3 cfs @ 12.53 hrs HW=96.61' TW=92.98' (Dynamic Tailwater)
└─**1=Culvert** (Passes 0.3 cfs of 5.6 cfs potential flow)
  ├─**2=Culvert** (Passes 0.3 cfs of 1.3 cfs potential flow)
  │ └─**3=Exfiltration** (Exfiltration Controls 0.3 cfs)
  └─**4=Orifice/Grate** (Weir Controls 0.0 cfs @ 0.29 fps)

Stage-Discharge for Pond RG1: RG1

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
93.08	0.0	95.78	0.2
93.13	0.0	95.83	0.2
93.18	0.0	95.88	0.2
93.23	0.0	95.93	0.2
93.28	0.0	95.98	0.2
93.33	0.0	96.03	0.2
93.38	0.0	96.08	0.3
93.43	0.0	96.13	0.3
93.48	0.0	96.18	0.3
93.53	0.0	96.23	0.3
93.58	0.0	96.28	0.3
93.63	0.0	96.33	0.3
93.68	0.1	96.38	0.3
93.73	0.1	96.43	0.3
93.78	0.1	96.48	0.3
93.83	0.2	96.53	0.3
93.88	0.2	96.58	0.3
93.93	0.2	96.63	0.4
93.98	0.2	96.68	0.7
94.03	0.2	96.73	1.1
94.08	0.2	96.78	1.5
94.13	0.2	96.83	2.1
94.18	0.2	96.88	2.7
94.23	0.2	96.93	3.3
94.28	0.2	96.98	4.0
94.33	0.2	97.03	4.8
94.38	0.2	97.08	5.6
94.43	0.2	97.13	**6.0**
94.48	0.2		
94.53	0.2		
94.58	0.2		
94.63	0.2		
94.68	0.2		
94.73	0.2		
94.78	0.2		
94.83	0.2		
94.88	0.2		
94.93	0.2		
94.98	0.2		
95.03	0.2		
95.08	0.2		
95.13	0.2		
95.18	0.2		
95.23	0.2		
95.28	0.2		
95.33	0.2		
95.38	0.2		
95.43	0.2		
95.48	0.2		
95.53	0.2		
95.58	0.2		
95.63	0.2		
95.68	0.2		
95.73	0.2		

Ele. 99.6' ~ 0.3 cfs

Stage-Area-Storage for Pond RG1: RG1

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
93.08	742	0
93.13	742	13
93.18	742	26
93.23	742	39
93.28	742	52
93.33	742	65
93.38	742	78
93.43	742	91
93.48	742	104
93.53	742	117
93.58	742	130
93.63	742	143
93.68	742	156
93.73	742	169
93.78	742	182
93.83	742	195
93.88	742	208
93.93	742	221
93.98	742	234
94.03	742	247
94.08	742	260
94.13	742	273
94.18	742	286
94.23	742	299
94.28	742	308
94.33	742	316
94.38	742	323
94.43	742	331
94.48	742	338
94.53	742	343
94.58	742	347
94.63	742	351
94.68	742	354
94.73	742	358
94.78	742	362
94.83	742	365
94.88	742	369
94.93	742	373
94.98	742	377
95.03	742	380
95.08	742	384
95.13	742	388
95.18	742	391
95.23	742	395
95.28	742	399
95.33	742	403
95.38	742	406
95.43	742	410
95.48	742	414
95.53	742	417
95.58	742	421
95.63	742	425
95.68	742	429
95.73	742	432
95.78	742	436
95.83	742	440
95.88	742	443
95.93	742	447
95.98	742	451
96.03	1,048	487
96.08	1,080	546
96.13	1,112	605
96.18	1,144	664
96.23	1,177	724
96.28	1,209	785
96.33	1,242	846
96.38	1,275	907
96.43	1,308	969
96.48	1,341	1,032
96.53	1,374	1,095
96.58	1,408	1,158
96.63	1,451	1,231
96.68	1,501	1,310
96.73	1,551	1,389
96.78	1,601	1,470
96.83	1,652	1,551
96.88	1,703	1,632
96.93	1,754	1,715
96.98	1,805	1,798
97.03	1,886	1,890
97.08	1,986	1,989
97.13	**2,087**	**2,088**

96.6' ~ 1,183 cf

94.5' ~ 341 cf

Storage provided = 1,183 cf - 341 cf = 842 cf

B – 2

POLLUTANT REMOVAL

Appendix E. BMP Pollutant Removal Efficiency

Pollutant Removal Efficiencies for Best Management Practices for Use in Pollutant Loading Analysis

Best Management Practice (BMP) removal efficiencies for pollutant loading analysis for total suspended solids (TSS), total nitrogen (TN), and total phosphorus (TP) are presented in the table below. These removal efficiencies were developed by reviewing various literature sources and using best professional judgment based on literature values and general expectation of how values for different BMPS should relate to one another. The intent is to update this information and add BMPs and removal efficiencies for other parameters as more information/data becomes available in the future.

NHDES will consider other BMP removal efficiencies if sufficient documentation is provided.

Please note that all BMPs must be designed in accordance with the specifications in the Alteration of Terrain (AoT) Program Administrative Rules (Env-Wq 1500). If BMPs are not designed in accordance with the AoT Rules, NHDES may require lower removal efficiencies to be used in the analysis.

BMP in Series: When BMPs are placed in series, the BMP with the highest removal efficiency shall be the efficiency used in the model for computing annual loadings. Adding efficiencies together is generally not allowed because removals typically decrease rapidly with decreasing influent concentration and, in the case of primary BMPs (i.e., stormwater ponds, infiltration and filtering practices), pre-treatment is usually part of the design and is therefore, most likely already accounted for in the efficiencies cited for these BMPs.

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%

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**
Treatment Swales	Flow Through Treatment Swale	TBA				
Vegetated Buffers	Vegetated Buffers		A, B, I	73%	40%	45%
Pre-Treatment Practices	Sediment Forebay	TBA				
	Vegetated Filter Strip		A, B, I	73%	40%	45%
	Vegetated Swale		A, B, C, F, H, I	65%	20%	25%
	Flow-Through Device - Hydrodynamic Separator		A, B, G, H	35%	10%	5%
	Flow-Through Device - ADS Underground Multichamber Water Quality Unit (WQU)		G, H	72%	10%	9%
	Other Flow-Through Devices	TBA				
	Off-line Deep Sump Catch Basin		J, K, L, M	15%	5%	5%

B – 3

GROUNDWATER RECHARGE

Job CNE#23029 - Perez
Conducted By: Michael Menary
Witnessed By: Douglas LaRosa
Date: 10/2/2023

Test Pit: 1 **Date:** 10/2/2023

Depth (in)	Color	Texture	Structure	Consistence	Redox Features	Notes
0-10"	10YR 4/4	FINE SANDY LOAM	MASSIVE	FRIABLE		
10"-24"	10YR 5/3	SILTY LOAM	MASSIVE	FRIABLE	5YR 6/4 2% @ 24"	ROOTS @ 24" MANY FINE
24"-48"	2.5Y 6/4	SILTY CLAY	PLATTY	FIRM		

Seasonal High Water (in): 24"
Observed Water (in): NONE
Restrictive Layer (in): NONE
Bedrock/Refusal (in): NONE

Soil Series:
NHDES Soil Group:
Hydrologic Soil Group:

Depth Perc Test Inches Per Hour

Notes:

Test Pit: 2 **Date:** 10/2/2023

Depth (in)	Color	Texture	Structure	Consistence	Redox Features	Notes
0-10"	10YR 3/4	FINE SANDY LOAM	MASSIVE	FRIABLE		
10"-22"	10YR 4/4	SANDY LOAM	MASSIVE	FRIABLE	5YR 6/4 2% @ 22"	
22"-38"	2.5Y 6/2	SILTY CLAY	BLOCKY	FRIABLE		

Seasonal High Water (in): 22"
Observed Water (in): NONE
Restrictive Layer (in): NONE
Bedrock/Refusal (in): NONE

Soil Series:
NHDES Soil Group:
Hydrologic Soil Group:

Percolation Test
Depth Perc Test Inches Per Hour

Notes:

NEW HAMPSHIRE
Designer
of
Subsurface Disposal
Systems
* * *
Douglas J. LaRosa
No. 849
Department of Environmental Services

Test Pit: 3 **Date:** 10/2/2023

Depth (in)	Color	Texture	Structure	Consistence	Redox Features	Notes
0-14"	10YR 3/3	FINE SANDY LOAM	MASSIVE	FRIABLE		
14-32"	5 YR 5/6	FINE SANDY LOAM	MASSIVE	FRIABLE		
32-48"	2.5Y 4/3	SILTY LOAM	MASSIVE	FRIABLE	5YR 6/4 2% @ 32"	

Seasonal High Water (in): 32
Observed Water (in): NONE
Restrictive Layer (in): NONE
Bedrock/Refusal (in): NONE

Soil Series:
NHDES Soil Group:
Hydrologic Soil Group:

Percolation Test
Depth Perc Test Inches Per Hour

Notes:

Test Pit: **Date:**

Depth (in)	Color	Texture	Structure	Consistence	Redox Features	Notes

Seasonal High Water (in):
Observed Water (in):
Restrictive Layer (in):
Bedrock/Refusal (in):

Soil Series:
NHDES Soil Group:
Hydrologic Soil Group:

Percolation Test
Depth Perc Test Inches Per Hour

Notes:

NEW HAMPSHIRE
Designer
of
Subsurface Disposal
Systems
★ ★ ★
Douglas J. LaRosa
No. 849
Department of Environmental Services

Stormwater Infiltration Testing Log

Project Name:	CNE#23029 - Perez	**Date:**	10/2/2023
Project Address:	Locus Street	**Weather:**	Sunny, 78°
Testing Company:	Civilworks NE	**Tester's Name:**	**Michael Menary**
Phone Number:	(603) 749-0443	**Email Address:**	mmenary@civilworksne.com

Test Number:	1	**Test Pit/Boring Hole Number:**	BH1	**Test Method:**	Borehole Infiltration Test
Test Depth (feet):	4 (92.7)	**Surface Elevation (feet):**	96.7	**Instrument Diameter (inches):**	4

Soil Characterization (See Test Pit Logs)

Depth (inches):	Soil Texture:	Limiting Layers Type and Depth (feet):

Presoak (Presoaked on 10/1/2023)

Time:	Time Interval (HRS):	Measurement, (inches):	Drop in water level, (inches):
10:00AM	**0**	**24**	**0**
10:00AM	**24**	**0**	**24**

Infiltration Testing

Time 1:	Time 2:	Measurement, (inches):	Drop in water level, (inches):	Infiltration rate (inches per hour):	Remarks:
10:05AM	**10:20AM**	**24**			**Start**
10:20AM	**10:35AM**	**9**			
10:35AM	**10:50AM**	**5.5**			
10:50AM	**11:05AM**	**5.5**			
11:05AM		**5.5**			**Finish**
				Failed	

Stabilized Infiltration Testing Rate (inches per hour):

Notes:

Pond Area

Stormwater Infiltration Testing Log

Project Name:	CNE#23029 - Perez	**Date:**	10/2/2023
Project Address:	Locus Street	**Weather:**	Sunny, 78°
Testing Company:	Civilworks NE	**Tester's Name:**	**Michael Menary**
Phone Number:	(603) 749-0443	**Email Address:**	mmenary@civilworksne.com

Test Number:	2	**Test Pit/Boring Hole Number:**	BH1	**Test Method:**	Borehole Infiltration Test
Test Depth (feet):	4 (92.7)	**Surface Elevation (feet):**	96.7	**Instrument Diameter (inches):**	4

Soil Characterization (See Test Pit Logs)

Depth (inches):	Soil Texture:	Limiting Layers Type and Depth (feet):

Presoak (Presoaked on 10/1/2023)

Time:	Time Interval (HRS):	Measurement, (inches):	Drop in water level, (inches):
10:00AM	**0**	**24**	**0**
10:00AM	**24**	**0**	**24**

Infiltration Testing

Time 1:	Time 2:	Measurement, (inches):	Drop in water level, (inches):	Infiltration rate (inches per hour):	Remarks:
11:05AM	**11:20AM**	**24**			**Start**
11:20AM	**11:35AM**	**6**			
11:35AM	**11:50AM**	**6**			
11:50AM	**12:05PM**	**6**			
12:05PM		**6**			**Finish**

Stormwater Infiltration Testing Log

Project Name:	CNE#23029 - Perez	**Date:**	10/2/2023
Project Address:	Locus Street	**Weather:**	Sunny, 78°
Testing Company:	Civilworks NE	**Tester's Name:**	**Michael Menary**
Phone Number:	(603) 749-0443	**Email Address:**	mmenary@civilworksne.com

Test Number:	3	**Test Pit/Boring Hole Number:**	BH1	**Test Method:**	Borehole Infiltration Test
Test Depth (feet):	4 (92.7)	**Surface Elevation (feet):**	96.7	**Instrument Diameter (inches):**	4

Soil Characterization (See Test Pit Logs)

Depth (inches):	Soil Texture:	Limiting Layers Type and Depth (feet):

Presoak (Presoaked on 10/1/2023)

Time:	Time Interval (HRS):	Measurement, (inches):	Drop in water level, (inches):
10:00AM	**0**	**24**	**0**
10:00AM	**24**	**0**	**24**

Infiltration Testing

Time 1:	Time 2:	Measurement, (inches):	Drop in water level, (inches):	Infiltration rate (inches per hour):	Remarks:
12:05PM	**12:20PM**	**24**			**Start**
12:20PM	**12:35PM**	**9**			
12:35PM	**12:50PM**	**9**			
12:50PM	**1:05PM**	**9**			
1:05PM		**9**			**Finish**
Stabilized Infiltration Testing Rate (inches per hour):				**Failed**	

Notes:

Pond Area

Stormwater Infiltration Testing Log

Project Name:	CNE#23029 - Perez	**Date:**	10/2/2023
Project Address:	Locus Street	**Weather:**	Sunny, 78°
Testing Company:	Civilworks NE	**Tester's Name:**	**Michael Menary**
Phone Number:	(603) 749-0443	**Email Address:**	mmenary@civilworksne.com

Test Number:	1	**Test Pit/Boring Hole Number:**	BH2	**Test Method:**	Borehole Infiltration Test
Test Depth (feet):	4 (94.4)	**Surface Elevation (feet):**	98.4	**Instrument Diameter (inches):**	4

Soil Characterization (See Test Pit Logs)

Depth (inches):	Soil Texture:	Limiting Layers Type and Depth (feet):

Presoak (Presoaked on 10/1/2023)

Time:	Time Interval (HRS):	Measurement, (inches):	Drop in water level, (inches):
10:45AM	**0**	**24**	**0**
10:45AM	**24**	**0**	**24**

Infiltration Testing

Time 1:	Time 2:	Measurement, (inches):	Drop in water level, (inches):	Infiltration rate (inches per hour):	Remarks:
11:45AM	**12:00PM**	**24**			**Start**
12:00PM	**12:15PM**	**9.5**			
12:15PM	**12:30PM**	**9.5**			
12:30PM	**12:45PM**	**9.5**			
12:45PM		**9.5**			**Finish**
				Failed	

Stabilized Infiltration Testing Rate (inches per hour):

Notes:

Parking Area

Stormwater Infiltration Testing Log

Project Name:	CNE#23029 - Perez	**Date:**	10/2/2023
Project Address:	Locus Street	**Weather:**	Sunny, 78°
Testing Company:	Civilworks NE	**Tester's Name:**	**Michael Menary**
Phone Number:	(603) 749-0443	**Email Address:**	mmenary@civilworksne.com

Test Number:	1	**Test Pit/Boring Hole Number:**	BH3	**Test Method:**	Borehole Infiltration Test
Test Depth (feet):	4 (95.25)	**Surface Elevation (feet):**	99.25	**Instrument Diameter (inches):**	4

Soil Characterization (See Test Pit Logs)

Depth (inches):	Soil Texture:	Limiting Layers Type and Depth (feet):

Presoak (Presoaked on 10/1/2023)

Time:	Time Interval (HRS):	Measurement, (inches):	Drop in water level, (inches):
10:45AM	**0**	**24**	**0**
10:45AM	**24**	**0**	**24**

Infiltration Testing

Time 1:	Time 2:	Measurement, (inches):	Drop in water level, (inches):	Infiltration rate (inches per hour):	Remarks:
12:15AM	**12:30PM**	**24**			**Start**
12:30PM	**12:45PM**	**12**			
12:45PM	**1:00PM**	**10.5**			
1:00PM	**1:15PM**	**9.25**			
1:15PM		**8.25**	**15.75**	**15.75**	**Finish**
Stabilized Infiltration Testing Rate (inches per hour):				**Failed**	Use Test 2

Notes:

Parking Area

Stormwater Infiltration Testing Log

Project Name:	CNE#23029 - Perez	**Date:**	10/2/2023
Project Address:	Locus Street	**Weather:**	Sunny, 78°
Testing Company:	Civilworks NE	**Tester's Name:**	**Michael Menary**
Phone Number:	(603) 749-0443	**Email Address:**	mmenary@civilworksne.com

Test Number:	2	**Test Pit/Boring Hole Number:**	BH3	**Test Method:**	Borehole Infiltration Test
Test Depth (feet):	4 (95.25)	**Surface Elevation (feet):**	99.25	**Instrument Diameter (inches):**	4

Soil Characterization (See Test Pit Logs)

Depth (inches):	Soil Texture:	Limiting Layers Type and Depth (feet):

Presoak (Presoaked on 10/1/2023)

Time:	Time Interval (HRS):	Measurement, (inches):	Drop in water level, (inches):
10:45AM	**0**	**24**	**0**
10:45AM	**24**	**0**	**24**

Infiltration Testing

Time 1:	Time 2:	Measurement, (inches):	Drop in water level, (inches):	Infiltration rate (inches per hour):	Remarks:
12:15AM	**12:30PM**	**24**			**Start**
12:30PM	**12:45PM**	**12.5**			
12:45PM	**1:00PM**	**12**			
1:00PM	**1:15PM**	**12**			
1:15PM		**12**			**Finish**
Stabilized Infiltration Testing Rate (inches per hour):				**Failed**	

Notes:

Parking Area

APPENDIX C

INSPECTION AND MAINTENANCE

C – 1

STORMWATER MANAGEMENT SYSTEM INSPECTION & MAINTENANCE PLAN

Stormwater Management System Inspection & Maintenance Plan

Prepared for:

LOCUST STREET RESIDENTIAL DEVELOPMENT
Map 12, Lot 35-1

Locust Street
Dover, New Hampshire
Strafford County

February 2024

Owner of Record:

17 – 19 SUMMER STREET PROPERTIES, LLC
71 Lafayette Road
Hampton Falls, New Hampshire 03844

Prepared By:

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

Introduction

Civilworks New England, has prepared the following Stormwater Management System Inspection & Maintenance Plan for **17 – 19 Summer Street Properties, LLC.** The intent of this plan is to provide a list of procedures that document the inspection and maintenance requirements of the Stormwater Management System for this site.

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

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

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

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

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

Owner:

17 – 19 Summer Street Properties, LLC
71 Lafayette Road
Hampton Falls, NH 03844

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

Contact / Responsible Party:

17 – 19 Summer Street Properties, LLC
71 Lafayette Road
Hampton Falls, NH 03844

Ben Perez
Phone: (603) 944-0516
Email: Ben@bostonnorthdevelopment.com

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

Management Company:

17 – 19 Summer Street Properties, LLC
71 Lafayette Road
Hampton Falls, NH 03844

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

Inspection Schedule / Record Retention

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

Stormwater Management System Components

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

- Pipes/Culverts
- Outlet Structures
- Sediment Forebay
- Yard Drains
- Bioretention Basins
- Grassed Lined Conveyance Swale
- Pavement
- Litter / Trash Removal

Design elements are identified in the design plans, a copy of which shall be maintained with this Inspection and Maintenance Plan.

Control of Invasive Species

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

Inspection and Maintenance Plan

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

PIPES/CULVERTS:

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

OUTLET STRUCTURES:

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

SEDIMENT FOREBAY:

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

YARD DRAINS:

- Inspect once per year.
- Inspect for floatables, sediment accumulation, and hydrocarbons (oils and grease).
- Remove all floatables immediately and sediment accumulations ≥ 1 foot.
- Hydrocarbons shall be removed immediately by skimming, absorbent materials, or other methods and should be disposed of in accordance with applicable State and Federal regulations.

BIORETENTION BASINS:

- Inspection, by a **qualified professional**, of the Bioretention Basin at least twice annually, and following any rainfall event exceeding 2.5 inches in a 24-hour period, with maintenance or rehabilitation conducted as warranted by such inspection. If the Bioretention Basin systems do not drain within 72-hours following a rainfall event, a qualified professional should assess the condition and determine measures required to restore filtration practice (as applicable).
- Embankments and spillways should be inspected by a **qualified professional** for settlement, erosion, seepage, animal burrows, woody vegetation, and other conditions that could degrade the embankment and reduce its stability for impounding water. Immediate corrective action should be implemented if any such conditions are found.
- Inlet and outlet pipes, inlet and outlet structures, energy dissipation structures or practices, and other structural appurtenances should be inspected by a **qualified professional**, and corrective action implemented (e.g., maintenance, repairs, or replacement) as indicated by such inspection.
- The bottoms, interior and exterior side slopes, and crest of earthen detention basins should be mowed, and the vegetation maintained in healthy condition, as appropriate to the function of the facility and type of vegetation.

- Vegetated embankments that serve as “berms” or “dams” that impound water should be mowed at least once annually to prevent the establishment of woody vegetation.
- Trash and debris should be removed from the pond and any inlet or outlet structures whenever observed.
- Accumulated sediment should be removed when it significantly affects pond capacity.

GRASS LINED CONVEYANCE SWALE:

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

PAVEMENT:

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

LITTER / TRASH REMOVAL:

- Routinely patrol site for litter pick-up.

DE-ICING AGENTS:

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

ANTI-ICING AND SALT MINIMIZATION:

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

Inspection & Maintenance Table

System Component / BMP	Minimum Inspection Frequency	Minimum Inspection Requirements	Maintenance / Cleanout Threshold
Pipes/Culverts	Annually	• Check for clogging • Check for sediment accumulation	Remove when noticed Clean when necessary
Outlet Structures	Annually	• Inspect once per year. • Inspect for clogging and sediment accumulation. • Remove all debris immediately and sediment accumulations ≥ 2 inches.	≥ 2 in. sediment Remove immediately
Sediment Forebay	Annually	• Check for sediment accumulation • Check for woody vegetation growth • Check for debris • Vegetated areas shall be mowed to maintain a 4" start of vegetative growth.	Remove/Dispose of accordingly Mow twice per year Remove/Dispose of accordingly
Yard Drains	Annually	• Check for sediment accumulation • Check for floatable contaminants • Check for hydrocarbons (oils and grease)	≥ 1 ft. sediment depth Remove all floatables Remove immediately
Bioretention Basins • Outlet Structure • Inlet/Outlet Piping • Embankments • Pond Sediment • Trash/Debris • Vegetation (Veg.)	Bi-Annually " " " " Periodically " " " "	• See Outlet Structure (OS) Req. • Check for erosion, settlement, seepage, etc. • Check for sediment accumulation in pond • Check for trash (in pond and structures) • Maintain 95% veg. (pond & slopes) • Maintain healthy stand of veg.	See OS Req. Repair immediately ≥ 2 in. sediment Remove all trash/debris Restore veg. in-kind Mow when ≥ 6 in
Grass Lined Conveyance Swale	Annually	• Check for sediment accumulation • Check for erosion • Ensure swale is stabilized • Maintain healthy stand of veg., 4" minimum • Inspect for invasive species	≥ 1 in. sediment Repair immediately Restore vegetation in-kind Mow twice per year Remove/Dispose of accordingly
Pavement: • Sanding • Salt Applications • Sweep/Vacuum • Trash/Debris	Limit use As required 1 - 2 x's Year Periodically	• Minimize use to prevent tracking issues • RECORD APPLICATION RATES • Sweep or vacuum to prevent tracking issues • Check for trash/debris	Sweep to prevent issues Minimize (as required) Sweep/Vac as needed Remove when noticed
Litter / Trash Removal	Periodically	• Check for litter and trash	Remove when noticed

Inspection & Maintenance Checklist/Log

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

Stormwater Management System's Inspection & Maintenance Log

Date of Inspection/Maintenance_____ Inspector:_____

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

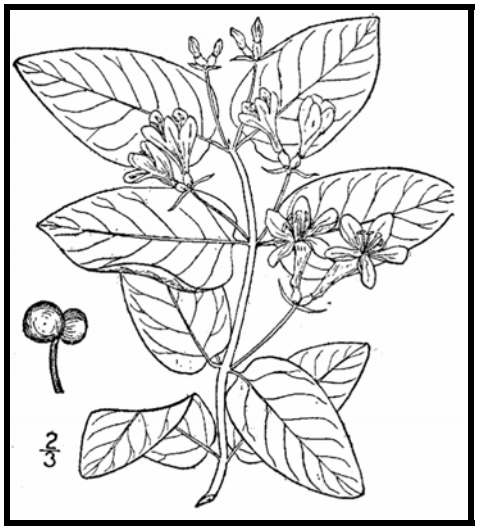
Deicing Salt Quantity Use Log

Date	Amount of Material Applied	Comments

University of New Hampshire Cooperative Extension

Methods for Disposing Non-Native Invasive Plants

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



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

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

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

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

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

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

New Hampshire Regulations

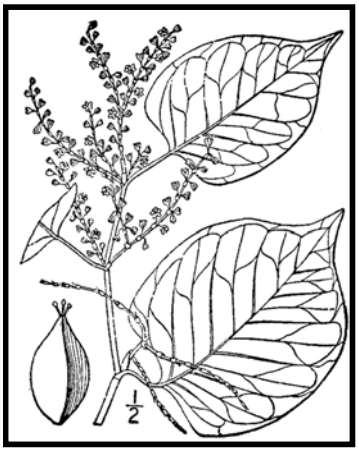
Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

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

How and When to Dispose of Invasives?

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

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



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

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

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

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

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

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

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

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

Suggested Disposal Methods for Non-Native Invasive Plants

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

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

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

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

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

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

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

January 2010

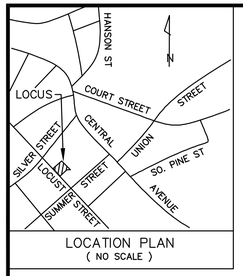
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APPENDIX D

WATERSHED PLANS

D – 1

PRE-DEVELOPMENT CONDITIONS



LOCATION PLAN
(NO SCALE)



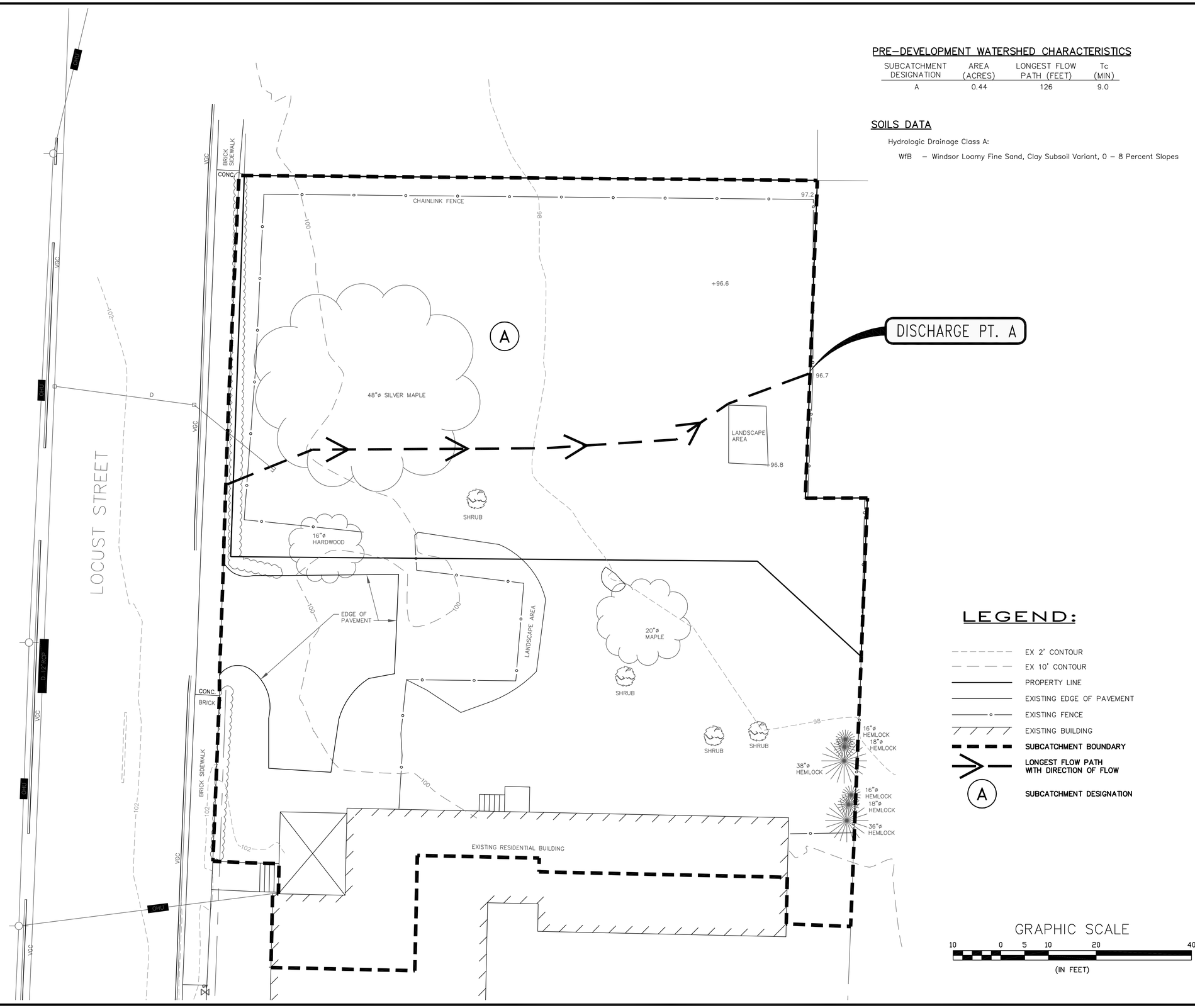
PRE-DEVELOPMENT WATERSHED CHARACTERISTICS

SUBCATCHMENT DESIGNATION	AREA (ACRES)	LONGEST FLOW PATH (FEET)	Tc (MIN)
A	0.44	126	9.0

SOILS DATA

Hydrologic Drainage Class A:

WfB – Windsor Loamy Fine Sand, Clay Subsoil Variant, 0 – 8 Percent Slopes



LEGEND:

- EX 2' CONTOUR
- EX 10' CONTOUR
- PROPERTY LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING FENCE
- EXISTING BUILDING
- SUBCATCHMENT BOUNDARY
- LONGEST FLOW PATH WITH DIRECTION OF FLOW
- (A) SUBCATCHMENT DESIGNATION

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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

NO.	REVISION	APP'D	DATE
1	REVISED PER TRC COMMENTS	SJH	4-30-24

DATE: 2-29-24
SCALE: 1"=10'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:23029
FILE: 23029 - Dm

PRE-DEVELOPMENT WATERSHED PLAN

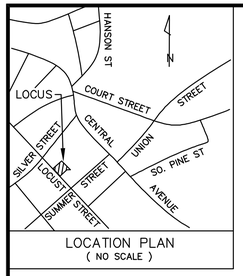
17-19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

WS-1

D – 2

POST-DEVELOPMENT CONDITIONS



LOCATION PLAN
(NO SCALE)

POST–DEVELOPMENT WATERSHED CHARACTERISTICS

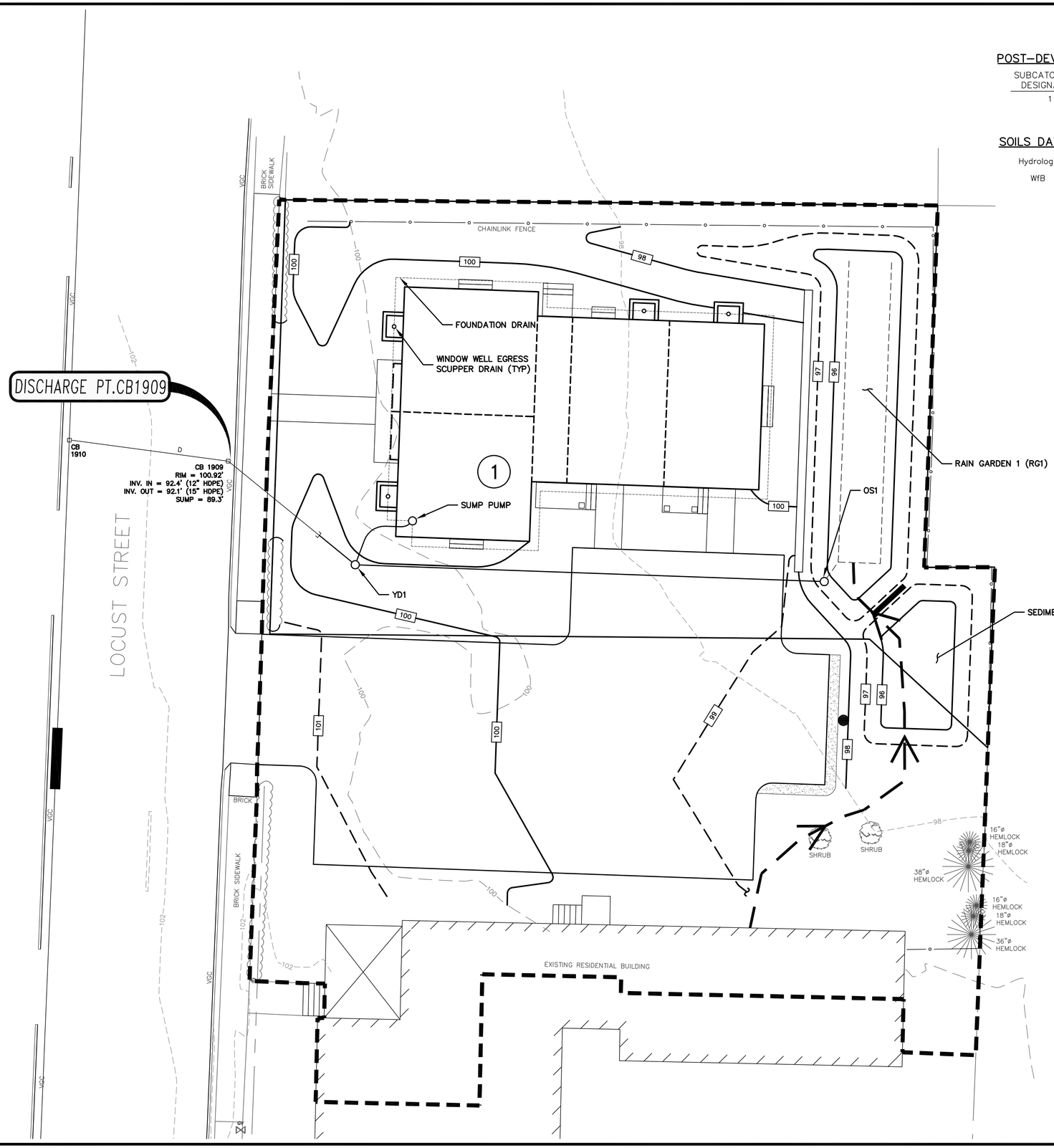
SUBCATCHMENT DESIGNATION	AREA (ACRES)	LONGEST FLOW PATH (FEET)	Tc (MIN)
1	0.44	85	7.3

SOILS DATA

Hydrologic Drainage Class A:

WfB – Windsor Loamy Fine Sand, Clay Subsoil Variant, 0 – 8 Percent Slopes





LEGEND:

- EX 2' CONTOUR
- EX 10' CONTOUR
- PROPERTY LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING FENCE
- EXISTING BUILDING
- PROPOSED EDGE OF PAVEMENT
- PROPOSED BUILDING
- SUBCATCHMENT BOUNDARY
- LONGEST FLOW PATH WITH DIRECTION OF FLOW
- (1) SUBCATCHMENT DESIGNATION

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)

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

NO.	REVISION	APP'D	DATE
1	REVISED PER TRC COMMENTS	SJH	4–30–24

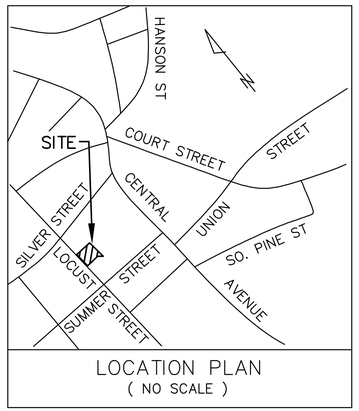
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SCALE: 1"=10'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:23029
FILE: 23029 – Drn

POST–DEVELOPMENT WATERSHED PLAN

17–19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

WS–2



SITE PLAN
FOR
LOCUST STREET RESIDENTIAL DEVELOPMENT

TAX MAP 12, LOT 35-1

LOCUST STREET

DOVER, NH

FEBRUARY 29, 2024

REV. APRIL 25, 2024

REV. JULY 22, 2024

REV. AUGUST 6, 2024

_____ DATE

OWNER/APPLICANT
17–19 SUMMER STREET PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

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

LAND SURVEYOR
MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND
P.O. BOX 1166
181 WATSON ROAD
DOVER, NH 03821
(603) 742–0911

ARCHITECT
DISTINCTION BY DESIGN
49 OAK STREET
DOVER, NH 03820
(603) 401–7294

LANDSCAPE ARCHITECT
JEFFREY R. HYLAND, LANDSCAPE ARCHITECT #00026
IRONWOOD DESIGN GROUP, LLC
PO BOX 873
EXETER, NH 03822
(603) 772–0590

SHEET INDEX	SHEET
COVER SHEET	1
NEIGHBORHOOD PLAN	2
EXISTING CONDITIONS PLAN (BY MCENEANEY SURVEY)	3
NOTE SHEET	4
DEMOLITION PLAN	5
SITE PLAN	6
GRADING, DRAINAGE & EROSION CONTROL PLAN	7
UTILITY PLAN	8
EROSION CONTROL NOTES	9
EROSION CONTROL DETAILS	10-11
DETAIL SHEETS	12-15
LIGHTING PLAN	16
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ARCHITECTURAL PLANS	
BASEMENT PLAN	A1.0
FIRST FLOOR PLAN	A1.1
SECOND FLOOR PLAN	A1.2
ATTIC PLAN	A1.3
EXTERIOR ELEVATIONS/ STREET VIEW	A2.0
EXTERIOR ELEVATIONS	A2.1
STREET SCAPE PLAN	A2.2
LANDSCAPE PLANS	
LANDSCAPE PLAN	L1.0
LANDSCAPE DETAILS	L2.0

PLANNING FILE NO.: SITE–2024–0003

ABUTTERS LIST (WITHIN 200 FT)

TAX MAP	LOT NO.	NAME & ADDRESS
9	47	CALAGUIRO JOSHUA 35 A SILVER ST DOVER NH 03820
9	76	TNT SILVER STREET GROUP LLC 10 DURHAM RD DOVER NH 03820
9	77	WOTTON KATHLEEN D 25 SILVER STREET DOVER NH 03820
9	78	JJI PROPERTIES LLC C/O JENNY ISHII 33 BAXTER ST MEDFORD MA 02155
12	41	BREWITT DARCY D 50 SILVER ST DOVER NH 03820-3950
12	40	STENDER SARAH STENDER NEIL 38 SILVER STREET DOVER, NH 03820
12	39	DUGDALE MARY & SWIDER KEITH 36 SILVER STREET DOVER, NH 03820
12	33	SANBORN JEFFERY MARTIN & SANBORN MAUREEN 30 SILVER STREET DOVER, NH 03820
12	32	CURTIS SHANNON 24 26 SILVER STREET DOVER, NH 03820
12	31	20-22 SILVER ST LLC 862 FRANKLIN PIERCE HWY BARRINGTON NH 03825
12	30	ALLEN TYLER D 14 SILVER ST DOVER NH 03820
12	28	FIRST-RATE REAL ESTATE GROUP LLC 290 HERITAGE AVE PORTSMOUTH NH 03801-5680
12	27	CENTRAL AVE OWNER LLC 889 ELM STREET 6TH FLOOR MANCHESTER NH 03101
12	26	CENTRAL AVE OWNER LLC 889 ELM STREET 6TH FLOOR MANCHESTER NH 03101
12	38	KUZIOMKO FROST VIRGINIA J & KUZIOMKO HENRY C 310 DOVER POINT ROAD DOVER, NH 03820
12	37	BEDNARZ PAUL 143 LOCUST STREET DOVER, NH 03820
12	36	WOODMAN ANNIE E INSTITUTE P.O. BOX 1916 DOVER, NH 03821-1916
12	35-1	17-19 SUMER STREET PROPERTIES LLC 71 LAFAYETTE ROAD HAMPTON FALLS, NH 03844
12	35	17-19 SUMMER STREET PROPERTIES, LLC 71 LAFAYETTE ROAD HAMPTON FALLS, NH 03844
12	25	WOODMAN ANNIE E INSTITUTE PO BOX 1916 DOVER NH 03821-1916
12	45	WINTERS GARY & LOIS TRUSTEES WINTERS FAMILY TRUST 31 SUMMER ST DOVER NH 03820
12	46	BRATT JUSTIN M BRATT JASON L 4 GOVERNOR POWELL RD HAMPTON FALLS NH 03844
12	71	O BRIEN EDMUND J JR 147 LOCUST STREET DOVER NH 03820
12	24	TREACY HILL SARA G REVOCABLE TRUST TREACY HILL SARA G TRUSTEE 148 LOCUST STREET DOVER NH 03820
12	23	LAPOINT KEVIN & MAZARAS TIFFANY 16 SUMMER ST DOVER NH 03820
12	22	ALGO OPPORTUNITY ZONE FUND I LLC 8 MERRILL LN HOLLIS NH 03049-6594
12	21	HOLGATE LIMITED PARTNERSHIP HOPKINS WILLIAM F JR TRUSTEE 130 CENTRAL AVE DOVER NH 03820

D / 11 TAX MAP LOT NUMBER

PLANNING FILE NO.: SITE-2024-0003

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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

NO.	REVISION	APP'D	DATE
1	REVISION PER TRC COMMENTS	SJH	4-25-24
2	REVISION PER TRC COMMENTS #2	SJH	8-06-24

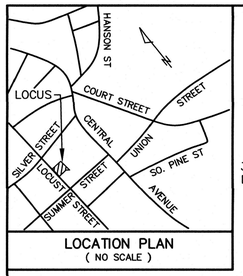
DESIGN BY: SRD
DRAWN BY: SRD
SCALE: 1"=40'
DATE: 2-29-24
PROJECT NO: 23029
APPROVED BY: SJH
FILE: SITE.DWG

NEIGHBORHOOD PLAN

17-19 SUMMER STREET PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

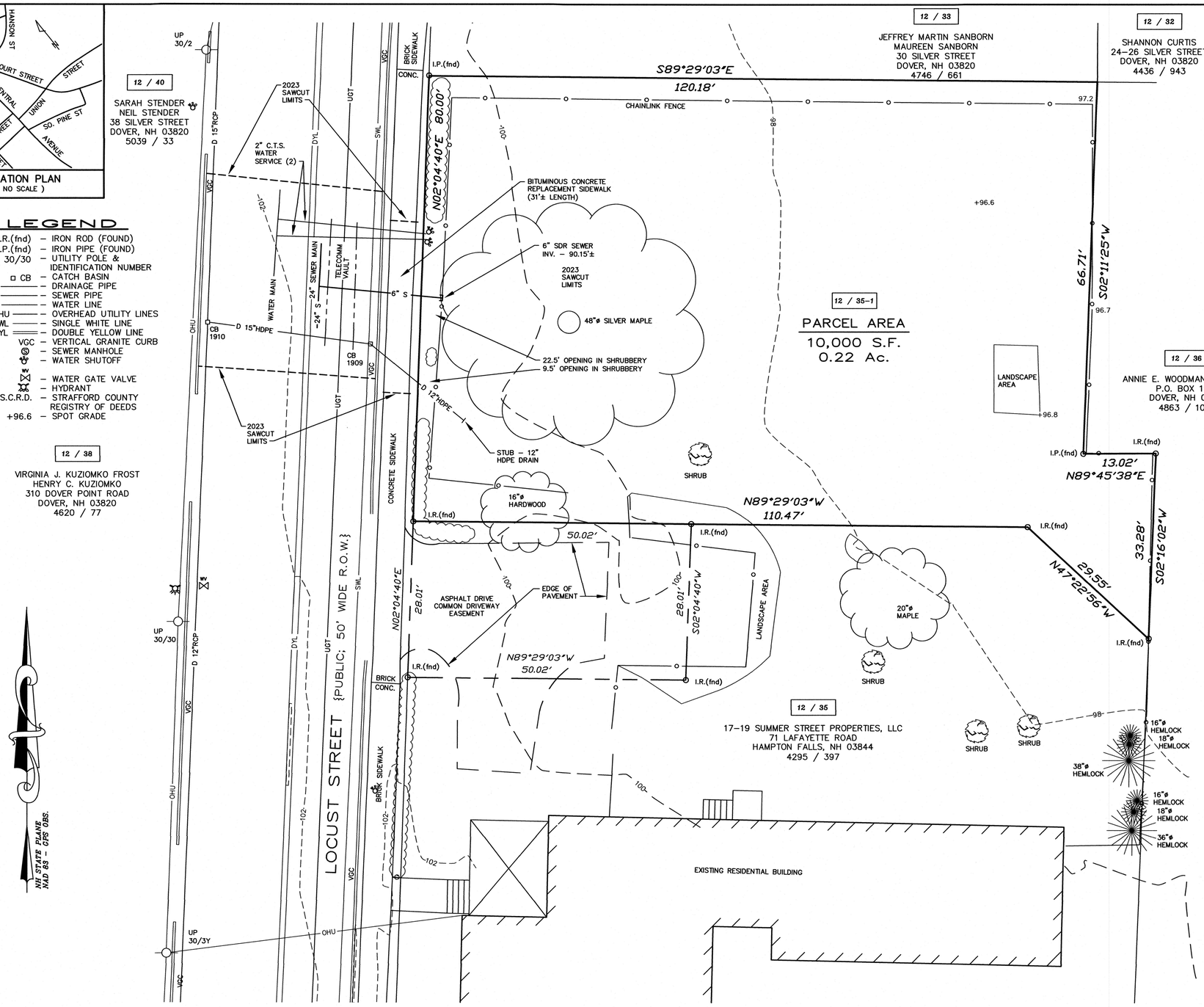
2



LOCATION PLAN
(NO SCALE)

LEGEND

I.R.(fnd) – IRON ROD (FOUND)
I.P.(fnd) – IRON PIPE (FOUND)
UP 30/30 – UTILITY POLE & IDENTIFICATION NUMBER
CB – CATCH BASIN
D – DRAINAGE PIPE
S – SEWER PIPE
W – WATER LINE
OHU – OVERHEAD UTILITY LINES
SWL – SINGLE WHITE LINE
DYL – DOUBLE YELLOW LINE
VGC – VERTICAL GRANITE CURB
S – SEWER MANHOLE
WATER SHUTOFF
WATER GATE VALVE
HYDRANT
S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
+96.6 – SPOT GRADE



NOTES:

1.) OWNER OF RECORD:
17–19 SUMMER STREET PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NEW HAMPSHIRE 03844
S.C.R.D. VOLUME 4925, PAGE 399

2.) K / 19 – DENOTES TAX MAP AND PARCEL NUMBER.

3.) PARCEL AREA: 10,000 S.F. / 0.22 Ac.

4.) THE INTENT OF THIS PLAN IS TO DEPICT THE PARCEL BOUNDARIES AND EXISTING SITE CONDITIONS AS OF MAY 24, 2023; AND TO SHOW NOVEMBER 2023 UTILITY AND DRAINAGE IMPROVEMENTS WITHIN THE LOCUST STREET RIGHT OF WAY.

5.) ZONING DISTRICT: HERITAGE RESIDENTIAL

DIMENSIONAL REQUIREMENTS:

MINIMUM LOT SIZE	= 10,000 S.F.
MAXIMIMUM LOT COVERAGE	= 40 PERCENT
MINIMUM FRONTAGE	= 80 FEET
BUILDING SETBACK REQUIREMENTS:	
FRONT SETBACK	= 8.7 FEET ±5 FEET
SIDE SETBACK	= 15 FEET
REAR SETBACK	= 30 FEET
MAXIMUM BUILDING HEIGHT	= 40 FEET

6.) THE SUBJECT PARCEL IS NOT LOCATED WITHIN THE SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1 PERCENT ANNUAL CHANCE FLOOD, AS SHOWN ON FLOOD INSURANCE RATE MAP 33017C0330E, EFFECTIVE DATE SEPTEMBER 30, 2015.

7.) BASIS OF BEARING IS NH STATE PLANE (NAD83) BASED REFERENCE PLAN #1. VERTICAL DATUM IS NAVD88 BASED ON GPS OBSERVATION DATED MAY 24, 2023. CONTOUR INTERVAL IS TWO (2) FEET.

8.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM REFERENCE PLAN #1.

9.) ACCESS NOTE: THE PARCEL IS TO BE ACCESSED FROM LOCUST STREET OVER A COMMON DRIVEWAY ACCESS EASEMENT LOT 12/35.

10.) THE IMPROVEMENTS AND UTILITIES SHOWN ARE FROM OBSERVATIONS MADE IN THE FIELD OR REFERENCE PLANS. LOCATIONS OF UNDERGROUND UTILITIES NOT MARKED ON THE SURFACE WERE NOT LOCATED. ALL VISIBLE UTILITIES ARE SHOWN.

2023 DRAINAGE STRUCTURE SCHEDULE

CB 1909 (REPLACE CB 1826)
RIM = 100.92'
INV. IN 12" HDPE = 92.4' (SITE)
INV. OUT 15" HDPE = 92.1' (CB 1910)
SUMP = 89.3'

CB 1910 (REPLACE CB 1827)
RIM = 100.97'
INV. IN 15" HDPE = 92.1' (CB 1909)
INV. IN 12" RCP = 91.7'
INV. OUT 15" RCP = 91.7'
SUMP = 89.8'

NO.	DATE	DESCRIPTION	BY	CHK
2	2/13/24	CORRECT PIPE INVERT TO 92.1' OUT	RJM	KMM
1	12/1/23	UPDATE TO 2023 UTILITY CONSTRUCTION AS–BUILT	RJM	KMM

REVISIONS

PROJECT NO	TYPE	FIELDBOOK & PAGES	
23–2508	EXIST. COND.	23–04	52–57

REFERENCE PLANS:

1.) SUBDIVISION PLAN LAND OF KEVIN P. MCLEAN & ANGELA M. LAZZARO, 17/19 SUMMER STREET, DOVER, N.H., TAX MAP 12, LOT 35; SCALE: 1" = 20'; DATED: NOVEMBER 19, 2019, REVISED THROUGH 2–25–2020; BY: BERRY SURVEYING & ENGINEERING; RECORDED S.C.R.D. PLAN 12090.

EXISTING CONDITIONS PLAN
PREPARED FOR
17–19 SUMMER STREET PROPERTIES, LLC
TAX MAP 12, LOT No. 35–1
LOCUST STREET
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DRAWN BY: KJF, RJM | FILE: MSA\2508\D\23–2508
SCALE: 1" = 10' | DATE: MAY 31, 2023

10 5 0 5 10 20 30 40

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

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

2/13/2024 10:24:15 File: M:\2508\Drawings\23-2508 EC UTILITY AS-BUILT.dwg Layout: EC

DOVER SITE PLAN REVIEW NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED CONSTRUCTION OF A ±2,400 S.F. 4 UNIT RESIDENTIAL BUILDING WITH ASSOCIATED SITE IMPROVEMENTS.
2. OWNER(S) OF RECORD:
   17-19 SUMMER STREET PROPERTIES, LLC
   71 LAFAYETTE ROADHAMPTON FALLS, NEW HAMPSHIRE 03844
   SEE COVER SHEET FOR AUTHORIZED SIGNATURE
3. THE PARCEL IS SHOWN ON CITY OF DOVER ASSESSOR'S MAP 12, LOT 35-1.
4. THE SUBJECT PARCEL(S) CONTAIN(S) 0.22 ACRES (10,000 SQ. FT.) OF LAND. THERE ARE NO ACRES CURRENTLY IN CURRENT USE.
5. TITLE REFERENCE FOR THE PROJECT PARCEL(S) IS THE STRAFFORD COUNTY REGISTRY OF DEEDS, BOOK NO. 4925, PAGE NO. 399.
6. REFERENCE PLANS:
   SUBDIVISION PLAN OF LAND OF KEVIN P. MCLEAN & ANGELA M. LAZZARO, 17/19 SUMMER STREET, DOVER, N.H.; TAX MAP 12, LOT 35; SCALE: 1"= 20'; DATED: NOVEMBER 19, 2019, REVISED THROUGH 2-25-2020; BY: BERRY SURVEYING & ENGINEERING; RECORDED S.C.R.D. PLAN 12090.
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. ACCESS EASEMENT TBD
8. CURRENT ZONING DIMENSIONAL AND DENSITY REQUIREMENTS:
   ZONING DISTRICT: HERITAGE RESIDENTIAL
   SUB-DISTRICT: N/A
   ZONING OVERLAY DISTRICTS: N/A

DIMENSIONAL REQUIREMENTS:	REQUIRED	PROVIDED
MINIMUM LOT SIZE	10,000 SF	10,000 SF
MINIMUM LOT FRONTAGE	80 FT.	80 FT.
MINIMUM YARD SETBACKS/BUILD-TO-LINES:		
FRONT	8.7'±5 FT.	21± FT.
SIDE	15 FT.	15.8± FT.
REAR	30 FT.	31± FT.
ABUT-A-STREET	20 FT.	N/A
MAXIMUM/MINIMUM LOT COVERAGE	40%	24.4±%
MINIMUM/MAXIMUM BLDG. HEIGHT	24/40 FT.	24/37± FT.
DIMENSIONAL REQUIREMENTS -3-4 FAMILY:		
MINIMUM LOT SIZE	10,000 SF	10,000 SF
MINIMUM LOT FRONTAGE	80 FT.	80 FT.
MINIMUM YARD SETBACKS/BUILD-TO-LINES:		
FRONT	20 FT.	21± FT.
SIDE	15 FT.	15.8± FT.
REAR	30 FT.	31± FT.
ABUT-A-STREET	20 FT.	N/A
MINIMUM OPEN SPACE	56.7%	63.4%
MINIMUM/MAXIMUM BLDG. HEIGHT	24/40 FT.	24/37± FT.
PARKING SETBACKS:		
FRONT	10 FT.	10.2± FT.
SIDE	5 FT.	0 FT.*

   *EASEMENT PROVIDES A SHARED ACCESS AND PARKING LOT BETWEEN THE TWO PROPERTIES.

9. OFF STREET PARKING REQUIREMENTS:	MAXIMUM	PROVIDED
PARKING DIMENSIONS	9 X 18	9 X 18
AISLE DIMENSIONS	24 FT.	24 FT.

   SEE SITE PLAN FOR PARKING CALCULATION TABLE.
10. THE PROJECT INCLUDES THE FOLLOWING TWO WAIVER REQUESTS FROM THE BOARD:
    153.14.B (3) RELIEF FROM INSTALLING UNDERGROUND UTILITIES.
    153.14.E.(2) RELIEF FROM PARKING LOT LIGHTING COVERAGE.
11. THE PROJECT DOES REQUIRE VARIANCES OR SPECIAL EXCEPTIONS TO BE GRANTED BY THE ZONING BOARD. SEE "PROJECT VARIANCE / PERMIT SUMMARY" SECTION IF APPLICABLE.
12. THE PROJECT REQUIRES A CONDITIONAL USE PERMIT TO ALLOW 4-UNITS IN THE HR DISTRICT PER 170-20.B. (2), (3). SEE "PROJECT VARIANCE / PERMIT SUMMARY" SECTION IF APPLICABLE.
13. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM REFERENCE PLAN 1.
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. THE SUBJECT PARCEL IS NOT LOCATED WITHIN A FEDERALLY DESIGNATED FLOOD HAZARD AREA AS SHOWN ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 33017C0330E, EFFECTIVE DATE, SEPTEMBER 30, 2015.
16. TOPOGRAPHIC SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND ON MAY 24, 2023.
17. ELEVATIONS ARE BASED ON U.S.G.S. NAVD 1988 DATUM BASED ON GPS OBSERVATION DATED MAY 24, 2023.
18. THERE ARE NO WETLANDS ON THE SUBJECT PARCEL.
19. THE INSTALLATION OF ELECTRIC POWER, CABLE TELEVISION AND TELEPHONE LINES SHALL BE UNDERGROUND THROUGHOUT THE SITE FOR WHICH DEVELOPMENT IS PROPOSED. SEE WAIVER REQUEST TO ALLOW OVERHEAD UTILITIES.
20. THE SUBJECT PARCEL IS SERVED BY MUNICIPAL WATER AND 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 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, SATURDAY 9 AM- 4 PM. 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 (STRUCTURE) IS MULTI-FAMILY.
33. THE PROJECT DOES NOT REQUIRE FEDERAL OR STATE PERMITS.SEE "PROJECT VARIANCE / PERMIT SUMMARY" SECTION IF APPLICABLE.
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.

DOVER NOTES CONTINUED:

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, AS 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 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 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.

DEMOLITION NOTES:

1. COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
2. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY DEMOLITION/ CONSTRUCTION ACTIVITIES. (811).
4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, UTILITIES AND PAVEMENT ON THE SITE TO THE LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
6. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS NOT ALREADY OBTAINED BY THE OWNER AND ARRANGE AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
8. STONES FROM REMOVED STONEWALLS SHALL REMAIN ON-SITE. STONES SHALL BE REPURPOSED ON-SITE AND SHALL NOT BE USED AS FILL.
9. THE LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATION IS NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
10. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES, AND CODES.

SITE NOTES

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO APPLICABLE CITY AND STATE CODES.
3. ALL CONSTRUCTION LAYOUT SHALL BE DONE BY A LICENSED SURVEYOR UNDER CONTRACT WITH THE CONTRACTOR.
4. SEE DETAILS FOR SIGN LEGENDS.
5. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", AND THE AMERICAN WITH DISABILITIES ACT, LATEST EDITIONS.
6. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE FACILITIES AND THEIR COMPONENTS DURING DEMOLITION AND CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE OWNERS REPRESENTATIVE. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIE-DOWNS. SUCH MATERIALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AT THE COMPLETION OF THE PROJECT.
7. METHODS OF DEMOLITION, CONSTRUCTION AND ERECTION ARE THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE AND MUNICIPAL REGULATIONS AND PERMITS. ENVIRONMENTAL CONTROLS SHALL INCLUDE BUT SHALL NOT BE LIMITED TO DUST CONTROL AND SILT BARRIERS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO STRUCTURES OR UTILITIES OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION PHASE CAUSED BY HIMSELF, HIS EMPLOYEES, HIS SUBCONTRACTORS OR EMPLOYEES OF SAME. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL TEMPORARY FACILITIES FOR THE PROTECTION OF THE WORK, WORKERS AND PUBLIC SAFETY.
9. THE SITE SHALL BE MAINTAINED TO PROVIDE ACCESSIBILITY IN ALL WEATHER CONDITIONS.
10. REFUSE PICKUP WILL BE BY PRIVATE CONTRACTOR AND WILL BE VIA DUMPSTER ON-SITE.
11. SNOW STORAGE WILL BE ACCORDING TO THE OPERATION AND MAINTENANCE PLAN AND WITHIN AREAS AS INDICATED. ON-SITE SNOW STORAGE SHALL OCCUR ALONG THE EDGES OF PROPOSED PAVEMENT.
12. ALL EXTERIOR DOORS ARE MANUAL AND OPENED FROM THE INTERIOR BY PANIC HARDWARE. ALL EXTERIOR DOORS SHALL COMPLY WITH ADA AND ALL LOCAL BUILDING CODE REQUIREMENTS.

GRADING NOTES:

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. CONTRACTOR SHALL RETAIN A GEOTECHNICAL ENGINEERING CONSULTANT APPROVED BY THE OWNER, TO CONDUCT COMPACTION TESTING AND FILL GRADATION MONITORING.
3. SEE EROSION CONTROL NOTES & DETAIL SHEET FOR TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
4. ALL DRAINAGE PIPES SHALL BE HDPE OR APPROVED EQUAL UNLESS OTHERWISE NOTED.
5. ALL DISTURBED AREAS NOT OTHERWISE CALLED FOR SURFACE TREATMENT SHALL RECEIVE 6" OF HIGH QUALITY LOAM AND SHALL BE SEEDED WITH GRASS.
6. ALL SITEWORK CONSTRUCTION SHALL BE ADVANCED USING "BEST MANAGEMENT PRACTICES" SANCTIONED BY THE USDA, SCS AND NHDES.
7. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED, UTILIZED AND MAINTAINED UNTIL BASE MATERIALS ARE CONSTRUCTED.
8. CONTRACTOR SHALL PROVIDE A FINISH GRADED SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE AND UNDER RAISED STRUCTURES.
9. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND AS SHOWN ON PLAN. MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED AND UPSTREAM AREAS HAVE BEEN STABILIZED.
10. INSPECT SILT BARRIERS AFTER EACH RAIN STORM OF 1/4 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF THE FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
11. LIMIT TREE CLEARING TO ONLY THE EXTENT NECESSARY FOR CONSTRUCTION.
12. CONTRACTOR SHALL NOTIFY THE CITY OF DOVER AND THE DESIGN ENGINEER 48 HOURS PRIOR TO THE INSTALLATION OF PERMANENT STORMWATER BMP'S TO PROVIDE THE CITY AND THE ENGINEER THE OPPORTUNITY TO WITNESS THE CONSTRUCTION AND MATERIALS.
13. DENSITY REQUIREMENTS:

LOCATION	MINIMUM DENSITY
BELOW PAVED OR CONCRETE AREAS	95%
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL	95%
BELOW LOAM AND SEED AREA	90%

    *ALL PERCENTAGES SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH AASHTO STANDARD 180, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH AASHTO STANDARD T-191, T-204, OR T-238 AND T-239.

PROJECT VARIANCE / PERMIT SUMMARY:

1. FEDERAL AND STATE PERMITS ARE NOT APPLICABLE.
2. LIST ANY VARIANCES OR SPECIAL EXCEPTIONS GRANTED BY THE ZONING BOARD OF ADJUSTMENT OR CONDITIONAL USE PERMITS GRANTED BY THE PLANNING BOARD FOR THE PROPOSED USE OR STRUCTURE, INCLUDING THE CASE NUMBER AND DATE OF DECISION AND ANY CONDITIONS.

   ZONING VARIANCE: ZONE-2024-0028 - APPROVED 7-18-24

   SITE PLAN: SITE-2024-0003 - PENDING

   CONDITIONAL USE PERMIT: CUP-2024-_____ - PENDING

UTILITY NOTES

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
3. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.
4. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
5. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
6. ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, DOUBLE CEMENT LINED DUCTILE IRON PIPE OR TYPE "K" COPPER, OR CITY APPROVED MATERIAL.
7. ALL WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION PRIOR TO ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE CHLORINATION AND TESTING WITH THE CITY OF DOVER WATER DEPARTMENT.
8. ALL GRAVITY SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE NOTED AND CONFORM TO THE REQUIREMENTS OF THE CITY OF DOVER SEWER DEPARTMENT STANDARDS.
9. EXISTING UTILITIES TO BE REMOVED SHALL BE CAPPED AT THE MAIN AND MEET THE CITY OF DOVER COMMUNITY SERVICES DEPARTMENT STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES.
10. ALL ELECTRICAL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
11. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE UTILITY COMPANIES.
12. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
13. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO THE COMPLETION OF THIS PROJECT.
14. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
15. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES. COORDINATE WITH GAS COMPANY.
16. A 10-FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS.
17. THE CONTRACTOR SHALL CONTACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL TIMES.
18. SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
19. GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF DOVER.
20. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF DOVER.
21. CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.
22. CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION, PARTICULARLY WATER MAIN AND GAS MAIN CONSTRUCTION AS TO MAINTAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES. CONTRACTOR SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
23. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PREPARED BY THE PROJECT ELECTRICAL ENGINEER.
24. THE PROPOSED STRUCTURE SHALL COMPLY WITH CHAPTER 81, ARTICLE IV, SECTION 81-27 AND THE STATE BUILDING CODES OF THE CODE OF THE CITY OF DOVER.
25. FIRE SUPPRESSION PLANS SHALL BE PROVIDED TO THE FIRE/INSPECTION DEPARTMENT PRIOR TO INSTALLATION.
26. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
27. SEWAGE LOADING (PER NHDES ENV-WQ 1008.03)
    APARTMENT - 2 OR MORE BEDROOM
    4 APARTMENT x 2 BEDROOM/APARTMENT x 150 GPD/BEDROOM
    = 1,200 GPD.

UTILITY CONTACTS

WATER & SEWER: -	CITY OF DOVER COMMUNITY SERVICES DEPARTMENT PUBLIC WORKS & UTILITIES
CONTACT:	KEN MAVROGEORGE, PE 271 MAST ROAD DOVER, NH 03820 TEL: (603)-516-6450 EMAIL: K.MAVROGEORGE@DOVER.NH.GOV
ELECTRIC: -	EVERSOURCE
CONTACT:	TREVER EMMONS 4 OLD DOVER ROAD ROCHESTER, NH 03867 TEL: (603)-332-7515 EMAIL: TREVER.EMMONS@EVERSOURCE.COM

LEGEND

S.F.	SQUARE FEET	©	EXISTING DRAINAGE MANHOLE	-PS-	PROPOSED SEWER
Ac.	ACRE	⬦	EXISTING CATCHBASIN	-PW-	PROPOSED WATER
±	MORE OR LESS	5'R	PAVEMENT RADIUS	-PE-	PROPOSED ELECTRIC
(TYP.)	TYPICAL	VGC	VERTICAL GRANITE CURB	-PD-	PROPOSED DRAIN LINE
S.C.R.D.	STRAFFORD REGISTRY OF DEEDS	x 74.00	EXISTING SPOT GRADE	-FD-	PROPOSED FOUNDATION DRAIN LINE
NHHD	NEW HAMPSHIRE HIGHWAY DEPT.			-PUD-	PROPOSED UNDERDRAIN LINE
TBR	TO BE REMOVED	--94--	EXISTING GRADE	○	PROPOSED YARDDRAIN/ OUTLET STRUCTURE
ELEV.	ELEVATION	-OHW-	OVERHEAD UTILITIES		INLET PROTECTION
INV.	INVERT	-E-	EXISTING ELECTRIC		
R.O.W.	RIGHT-OF-WAY	-W-	EXISTING WATER LINE		PROPOSED BRICK
	EXISTING UTILITY POLE	-S-	EXISTING SEWER LINE		
	EXISTING SIGN	-D-	EXISTING DRAINAGE LINE		
	EXISTING WATER SHUT-OFF	-UGT-	EXISTING UNDERGROUND TELEPHONE		PROPOSED BITUMINOUS SIDEWALK
	EXISTING WATER VALVE	74	PROPOSED FINISH GRADE	TP#3	
	EXISTING GAS VALVE	x 74.00	PROPOSED SPOT GRADE		TEST PIT
	EXISTING HYDRANT		PAVEMENT WITH CURB		
	EXISTING LIGHT/SIGNAL POLE		SILT BARRIER	BH#3	
	EXISTING SEWER MANHOLE				BORE HOLE

PLANNING FILE NO.: SITE-2024-0003

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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

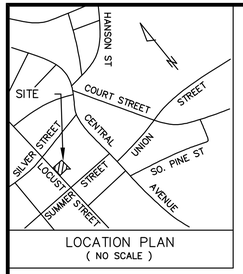
NO.	REVISION	DATE	APP'D
2	REVISION PER TRC COMMENTS #2	8-06-24	SJH
1	REVISION PER TRC COMMENTS	4-25-24	SJH

DATE: 2-29-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:23029
FILE: SITE.DWG

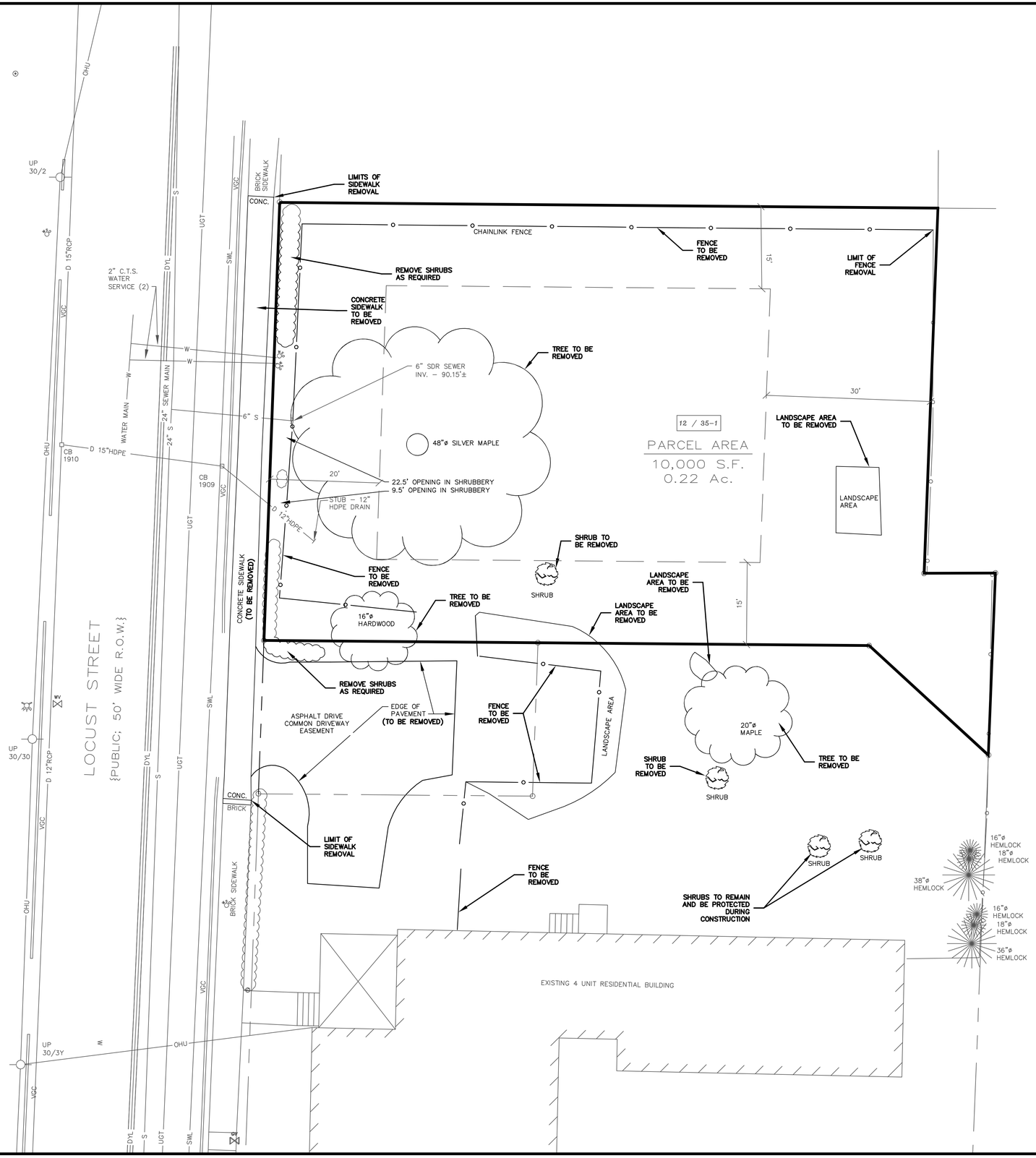
NOTE SHEET

17-19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH



LOCATION PLAN
(NO SCALE)



2023 DRAINAGE STRUCTURE SCHEDULE

CB 1909 (REPLACE CB 1826)
RIM=100.92'
INV.IN 12" HDPE=92.4' (SITE)
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GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)

PLANNING FILE NO.: SITE-2024-0003

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

NO.	REVISION	DATE	APP'D
3	REVISION PER TRC COMMENTS #2	8-06-24	SJH
2	REVISED LOT 35 BLD UNIT COUNT	7-22-24	SJH
1	REVISION PER TRC COMMENTS	4-25-24	SJH

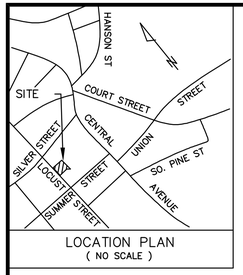
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DEMOLITION PLAN

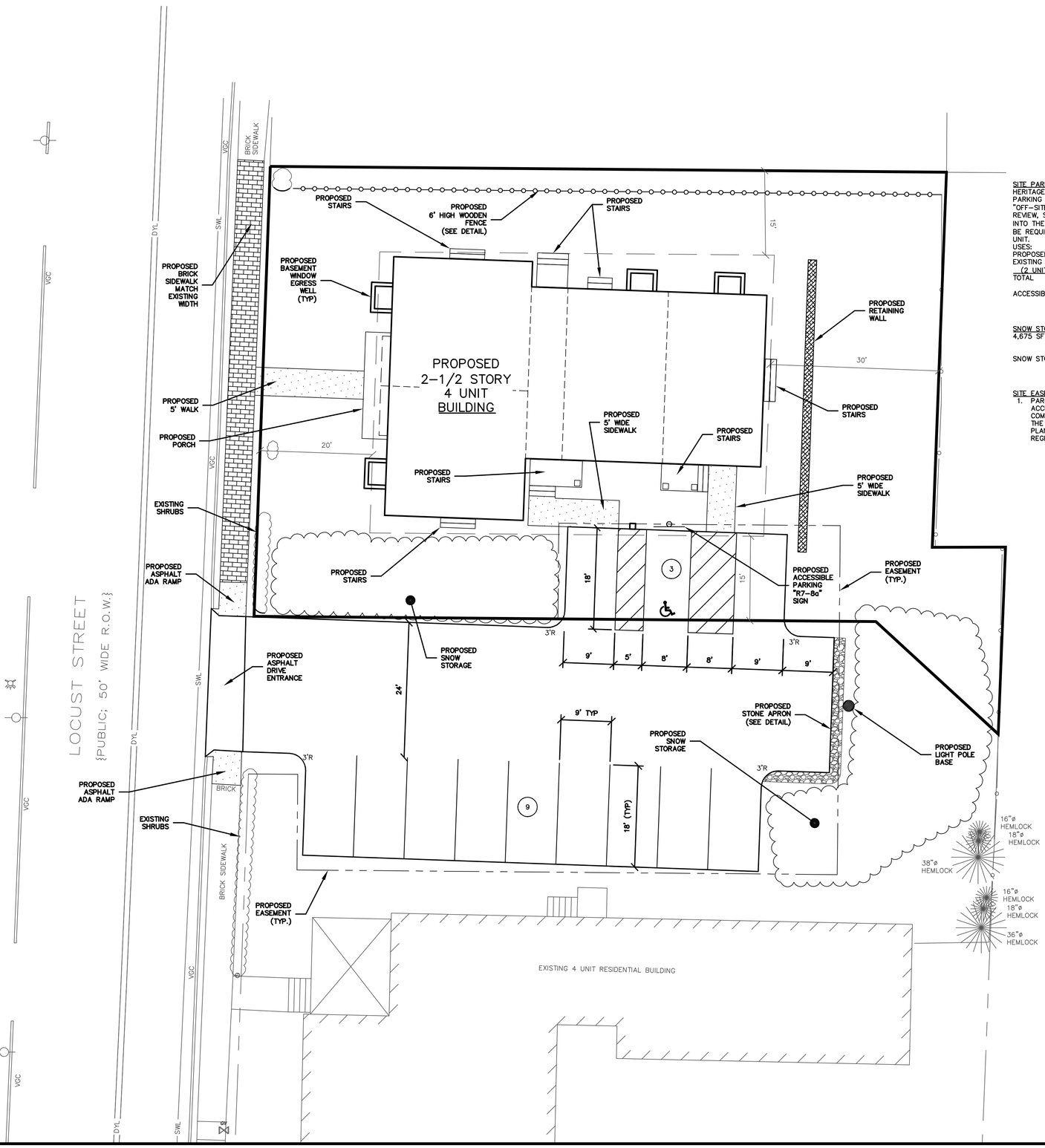
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LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

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LOCATION PLAN
(NO SCALE)



SITE PARKING CALCULATIONS
HERITAGE RESIDENTIAL DISTRICT
PARKING REQUIREMENTS FOR 4-UNITS MULTIFAMILY DWELLINGS "OFF-SITE PARKING, IN ACCORDANCE WITH CHAPTER 153, SITE REVIEW, SHALL BE PROVIDED AS TO AVOID VEHICLE BACKING INTO THE STREET. TWO (2) PARKING SPACES PER UNIT SHALL BE REQUIRED."REQUIRES 2 OFF STREET PARKING SPACES PER UNIT.

USES:	REQUIRED	PROPOSED
PROPOSED 4-UNIT BUILDING	8	8
EXISTING 3-UNITS BUILDING (2 UNITS WILL SHARE ACCESS)	4	4
TOTAL	12	12
ACCESSIBLE PARKING	0	1 (VAN)

SNOW STORAGE CALCULATIONS
4,675 SF PAVEMENT $\frac{1 \text{ SF STORAGE}}{10 \text{ SF PAVEMENT}}$ = ±467.5 SF

SNOW STORAGE AREA PROVIDED ±1,949 SF.

SITE EASEMENT NOTE
1. PARCELS 12/35-1 AND 12/35 WILL SHARE THE COMMON ACCESS FROM LOCUST STREET AND WILL SHARE THE COMMON PARKING AREA CONTAINED ON BOTH PARCELS. THE CROSS EASEMENT LANGUAGE WILL BE PROVIDED TO PLANNING FOR REVIEW PRIOR TO RECORDING AT THE REGISTRY OF DEEDS.

NH STATE PLANE
NAD 83 - GPS OBS.

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)

PLANNING FILE NO.: SITE-2024-0003

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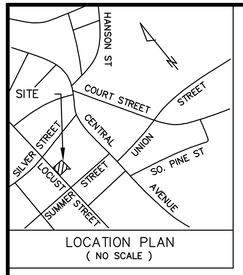
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SITE PLAN

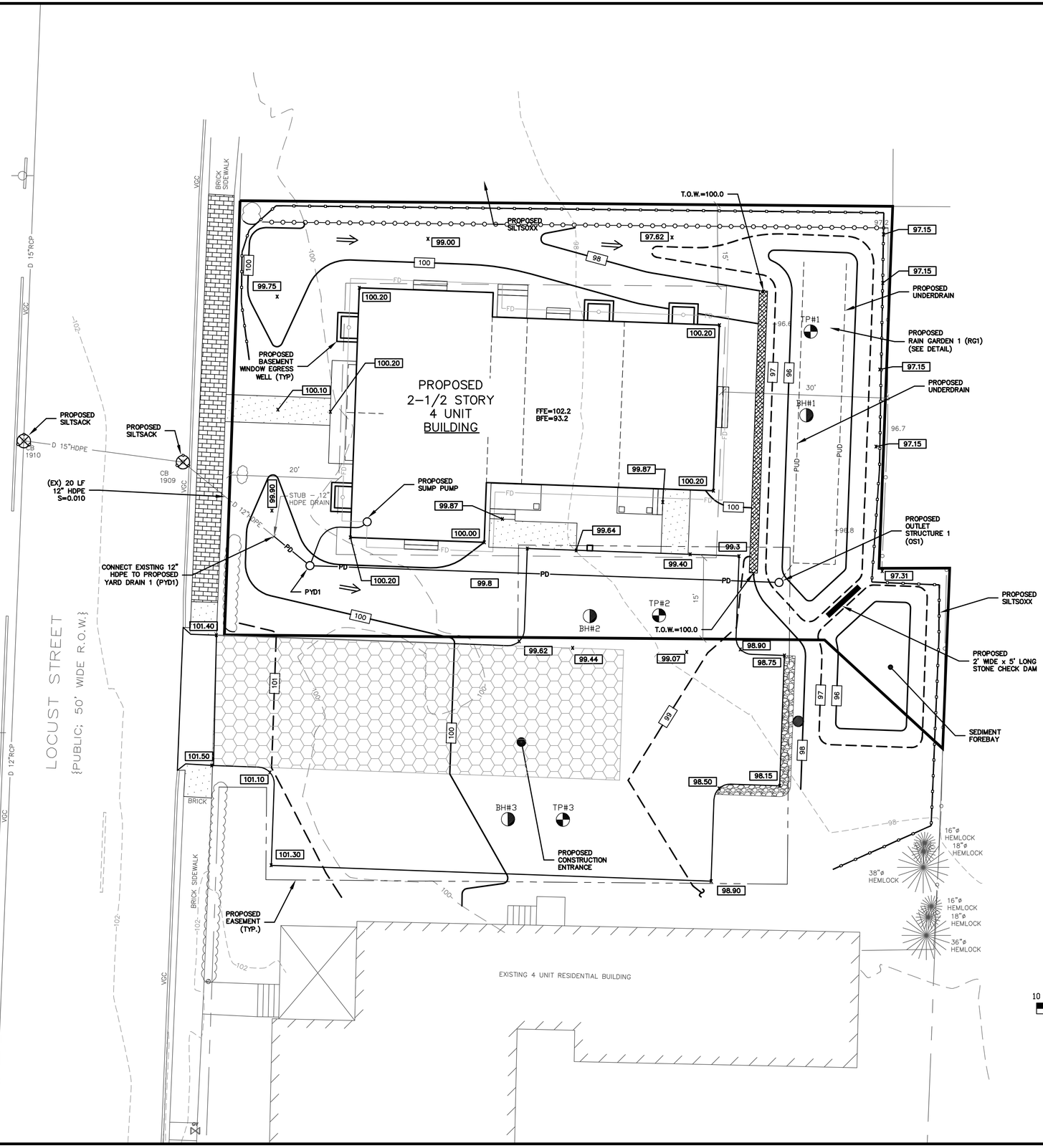
17-19 SUMMER STREET
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LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

6



LOCATION PLAN
(NO SCALE)



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PYD1
RIM=99.90
INV.IN=94.75 (1 1/2")
INV.IN=92.68 (12")
INV.OUT=92.68 (12")

OS1
RIM=96.60
INV.IN=93.42 (6")
INV.OUT=93.42 (12")

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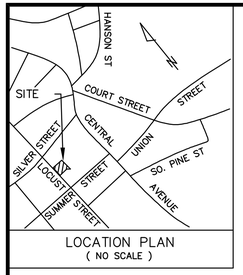
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GRADING, DRAINAGE & EROSION CONTROL PLAN

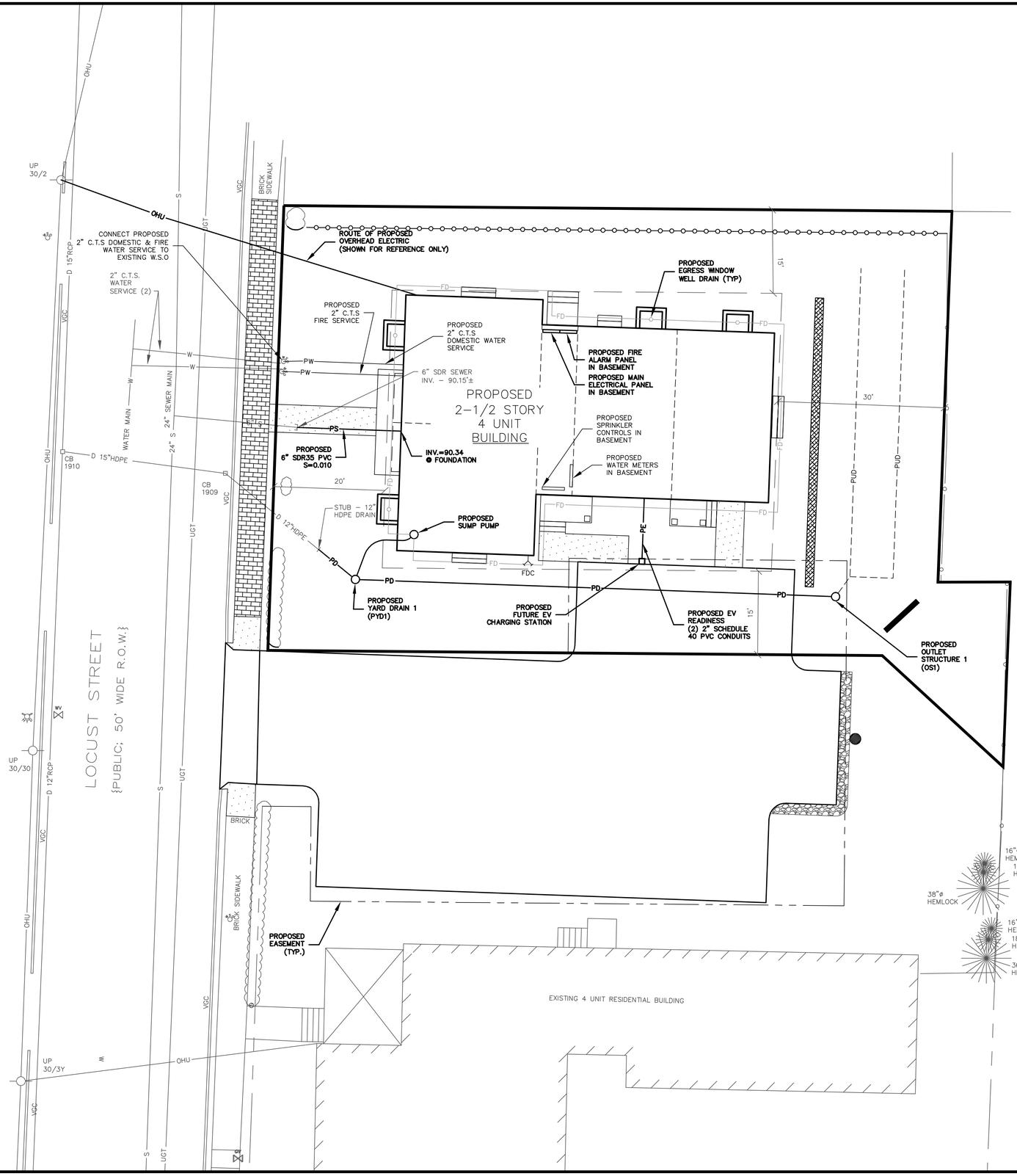
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LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

7



LOCATION PLAN
(NO SCALE)



GRAPHIC SCALE

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UTILITY PLAN

17-19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

8

DESCRIPTION

1. THE INTENT OF THIS PLAN IS TO SHOW SITE IMPROVEMENTS ASSOCIATED WITH THE CONSTRUCTION OF A 2,400 S.F. 4 UNIT RESIDENTIAL BUILDING WITH ASSOCIATED DRAINAGE, UTILITY IMPROVEMENTS AND SITE ACCESS.

PROJECT NAME AND LOCATION

17-19 SUMMER STREET PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NEW HAMPSHIRE 03844

LATITUDE N43° 11' 23"
LONGITUDE W70° 52' 31"

DISTURBED AREA

±14,500 S.F.

NOTES:

1. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY TIME BEFORE DISTURBED AREAS ARE STABILIZED
2. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

SEQUENCE OF MAJOR ACTIVITIES

1. CONTRACTOR SHALL PREPARE THE SWPPP, FILE FOR AND OBTAIN THE NOI A MINIMUM OF 2 WEEKS PRIOR TO COMMENCEMENT OF SITE WORK.
2. PLACE TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S PRIOR TO EARTH MOVING ACTIVITIES.
3. ALL EROSION CONTROL AND PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO COMMENCING EARTH MOVING OPERATIONS.
4. SELECTIVE DEMOLITION.
5. REGRADE SITE TO SUBGRADE.
6. TEMPORARY WATER DIVERSION (SWALES, BASINS) MUST BE USED AS NECCESSARY UNTIL AREAS ARE STABILIZED.
7. SWALES AND PONDS (AS APPLICABLE) SHALL BE CONSTRUCTED EARLY ON IN THE CONSTRUCTION SEQUENCE AND BEFORE ROUGH GRADING OF THE SITE AND ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
8. INSTALL DRAINAGE STRUCTURES AND CONTROLS.
9. INSTALL FOUNDATION FOOTINGS AND WALLS.
10. INSTALL UTILITIES.
11. PLACE GRAVELS AND FINE GRADE.
12. STABILIZE ROADWAYS AND PARKING AREAS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
13. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED (AS APPLICABLE) WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
14. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY 1/2" OF RAINFALL.
15. IN ALL CASES THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION AND IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
16. WHEN ALL SITE WORK IS COMPLETE AND ALL DISTURBED AREAS ARE STABILIZED REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND FILE THE EPA – N.O.T.

DEFINITIONS

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWNG HAS OCCURRED.

1. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED; OR
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED

INSTALLATION, MAINTENANCE, AND INSPECTION PROCEDURES OF EROSION AND SEDIMENT CONTROLS

A. SILT BARRIER

1. INSTALLATION
   a. USE SILT BARRIER AS PERIMETER CONTROLS, PARTICULARLY AT THE LOWER OR DOWN SLOPE EDGE OF A DISTURBED AREA.
   b. LEAVE SPACE FOR MAINTENANCE BETWEEN TOE AND SLOPE OF SILT BARRIER.
   c. TRENCH IN THE SILT BARRIER ON THE UPHILL SIDE (6 INCHES DEEP BY 6 INCHES WIDE).
   d. INSTALL STAKES ON THE DOWNHILL SIDE OF THE SILT BARRIER.
   e. CURVE THE END OF THE SILT BARRIER UP-GRADIENT TO HELP IT CONTAIN RUNOFF.
2. SEQUENCE OF INSTALLATION
   a. SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
3. MAINTENANCE
   a. SILT BARRIERS SHOULD BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
   b. SILT BARRIERS HAVE A USEFUL LIFE OF ONE SEASON. ON LONGER CONSTRUCTION PROJECTS, SILT BARRIERS SHOULD BE REPLACED PERIODICALLY TO MAINTAIN EFFECTIVENESS.
   c. REMOVE SEDIMENT WHEN IT REACHES ONE-THIRD (1/3) THE HEIGHT OF THE SILT BARRIER.
   d. REPLACE THE SILT BARRIERS WHERE THEY ARE TORN, WORN, OR OTHERWISED DAMAGED AND MONITOR PERFORMANCE TO ENSURE EFFECTIVE PERFORMANCE.
   e. RETRENCH OR REPLACE ANY SILT BARRIER THAT IS NOT PROPERLY ANCHORED TO THE GROUND.
   f. IF THERE IS EVIDENCE OF END FLOW ON PROPERLY INSTALLED BARRIERS, EXTEND BARRIERS UPHILL OR CONSIDER REPLACING THEM WITH OTHER MEASURES, SUCH AS TEMPORARY DIVERSIONS AND SEDIMENT TRAPS.
   g. SILT BARRIERS SHOULD BE REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SILT BARRIERS SHOULD BE REPLACED WITH A TEMPORARY CHECK DAM.

B. MULCHING

1. TIMING
   a. APPLY MULCH PRIOR TO ANY STORM EVENT. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.
   b. IN OTHER AREAS, THE TIME PERIOD CAN RANGE FROM 14 TO 30 DAYS OF INACTIVITY ON A AREA. THE LENGTH OF TIME VARYING WITH SITE CONDITIONS. PROFESSIONAL JUDGEMENT SHALL BE USED TO EVALUATE THE INTERACTION OF SITE CONDITIONS (SOIL ERODIBILITY, SEASON OF YEAR, EXTENT OF DISTURBANCE, PROXIMITY TO SENSITIVE RESOURCES, ETC.) AND THE POTENTIAL IMPACT OF EROSION ON ADJACENT AREAS TO CHOOSE AN APPROPRIATE TIME RESTRICTION.
   c. WITHIN 100 FEET OF RIVERS, STREAMS, WETLANDS, AND IN LAKE AND POND WATERSHEDS, THE TIME PERIOD OF WHICH MULCHING SHOULD TAKE OCCUR SHOULD BE NO GREATER THAN SEVEN (7) DAYS. THIS SEVEN DAY LIMIT SHOULD BE REDUCED FURTHER DURING WET WEATHER PERIODS.
2. APPLICATION RATE
   a. MULCH SHALL BE APPLIED AT A RATE OF BETWEEN 1.5 TO 2 TONS PER ACRE, OR 70 TO 90 POUNDS PER 1000 SQUARE FEET.
   b. GUIDELINES FOR WINTER MULCH APPLICATION. WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWNG SEASON) IT SHALL BE AT A RATE OF 150-200 POUNDS OF HAY OR STRAW PER ACRE WITH ABOUT 4 INCHES IN DEPTH. A TACKIFIER MAY BE ADDED TO THE MULCH.
3. MAINTENANCE
   a. ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS. CHECK FOR SIGNS OF EROSION OR DISPLACEMENT OF THE MULCH. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED.
   b. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE AND SHOULD BE REPAIRED AS NECCESSARY.
   c. INSPECTIONS SHOULD TAKE PLACE UNTIL THE SITE IS ESTABLISHED.
   d. EROSION CONTROL MIX MULCH USED FOR TEMPORARY STABILIZATION SHOULD BE LEFT IN PLACE. VEGETATION ADDS STABILITY AND SHOULD BE PROMOTED.

C. TEMPORARY SEEDING

1. SEEDBED PREPARATION
   a. STONES AND TRASH SHOULD BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
   b. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
   c. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS.
      i) APPLY FERTILIZER AT A RATE OF 600 POUNDS PER ACRE OR 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER OR EQUIVALENT.
      ii) APPLY LIMESTONE AT A RATE OF 3 TONS PER ACRE OR 138 POUNDS PER 1,000 SQUARE FEET.
2. SEEDING
   a. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SUMMARY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   b. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
   c. TEMPORARY SEEDING BETWEEN MAY 15TH AND AUGUST 15TH SHOULD BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE.
   d. VEGETATED GROWTH COVERING 85% OF THE DISTURBED AREA SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH.
3. MAINTENANCE
   a. TEMPORARY SEEDING SHALL BE INSPECTED PERIODICALLY. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER FABRICS, CHECK DAMS, ETC.).

D. PERMANENT SEEDING

1. BEDDING – STONES LARGER THAN 2 INCHES, TRASH, ROOTS, AND OTHER DEBRIS INTERFERRING WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA SHOULD BE REMOVED. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF 4" TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL.
2. FERTILIZER
   a. LIME AND FERTILIZER SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 4 INCHES USING A DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT PRIOR TO OR AT THE SAME TIME OF SEEDING.
   b. FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITORGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER.
   c. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
      AGRICULTURAL LIMESTONE @ 138 LBS. PER 1,000 S.F.
      LOW PHOSPHATE (N-P205-K20) FERTILIZER @ 13.8 LBS. PER 1,000 S.F.
3. SEED MIXTURE (RECOMMENDED)

RATE: TYPE	LBS. PER ACRE	LBS. PER 1,000 S.F.
TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDSFOOT TREFOIL	8	0.20
TOTAL	48	1.10

4. SEEDING
   a. SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES. PERMANENT SEEDING SHOULD BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST.
   b. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   c. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT TEMPORARY STABILIZATION MEASURES FOR OVERWINTER PROTECTION.
5. HYDROSEEDING
   a. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF STRAW MULCH ON CRITICAL AREAS IS PREFERRED SINCE IT GRANTS BETTER SLOPE PROTECTION BY USING ADHESIVE MATERIALS.
   b. SLOPES MUST BE NO STEEPER THAN 2 TO 1 (2 FEET HORIZONTALLY TO 1 FOOT VERTICALLY).
   c. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
6. MAINTENANCE
   a. PERMANENT SEEDED AREAS SHOULD BE INSPECTED AT LEAST MONTHLY DURING THE COURSE OF CONSTRUCTION. INSPECTIONS, MAINTENANCE, AND CORRECTIVE ACTIONS SHOULD CONTINUE UNTIL THE OWNER ASSUMES PERMANENT OPERATION OF THE SITE.
   b. SEEDED AREAS SHOULD BE MOWED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION, WITH MOWING HEIGHT AND FREQUENCY DEPENDENT ON TYPE OF GRASS COVER.
   c. BASED ON INSPECTION, AREAS SHOULD BE RESEEDED TO ACHIEVE FULL STABALIZATION OF EXPOSED SOILS.
   d. IF EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHOULD BE MADE AND AREAS RESEEDED. WITH OTHER TEMPORARY MEASURES USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.
   e. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION.

E. STORM DRAIN INLET PROTECTION

1. SPECIFICATIONS
   a. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE BARRIER SHOULD BE LESS THAN ONE ACRE.
   b. ANY RESULTANT PONDING OF STORMWATER MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.
2. INSTALLATION
   a. INSTALL INLET PROTECTION AS SOON AS STORM DRAIN INLETS ARE INSTALLED AND BEFORE LAND-DISTURBANCE ACTIVITIES BEGIN IN AREAS WITH EXISTING STORM DRAIN SYSTEMS.
   b. PROTECT ALL INLETS THAT COULD RECEIVE STORMWATER FROM YOUR CONSTRUCTION PROJECT.
   c. USE IN CONJUNCTION WITH OTHER EROSION PREVENTION AND SEDIMENT CONTROL BMPS.
   d. DESIGN YOUR INLET PROTECTION TO HANDLE THE VOLUME OF WATER FROM THE AREA BEING DRAINED. ENSURE THAT THE DESIGN IS SIZED APPROPRIATELY.
3. MAINTENANCE
   a. INSPECT INLETS BARRIERS FREQUENTLY, BEFORE AND AFTER EACH RAINFALL EVENT AND REPAIR WHEN NECESSARY.
   b. SEDIMENT SHOULD BE REMOVED AND THE STORM DRAIN SEDIMENT BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE BARRIER.
   c. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   d. SWEEP STREETS, SIDEWALKS, AND OTHER PAVED AREAS REGULARLY.
   e. ALL CATCH BASINS AND STORM DRAIN INLETS MUST BE CLEANED AT THE END OF CONSTRUCTION AND AFTER THE SITE HAS BEEN FULLY STABILIZED

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES THE SILT BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING ANY CLEARING OR GRADING OF THE SITE. STRUCTURAL CONTROLS SHALL BE INSTALLED CONCURRENTLY WITH THE APPLICABLE ACTIVITY. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN TWENTY ONE (21) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN FOURTEEN (14) DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, SILT FENCES AND ANY EARTH/DIKES WILL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED. ALL AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.

WASTE DISPOSAL

a. WASTE MATERIALS
   ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN A DUMPSTER. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON SITE. ALL PERSONEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
b. HAZARDOUS WASTE
   ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
c. SANITARY WASTE
   ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

MAINTENACE OF STORMWATER MANAGEMENT FACILITIES

THE PROJECT PROPONENT IS RESPONSIBLE FOR THE MAINTENANCE OF ALL STORMWATER FACILITIES DURING CONSTRUCTION AND THE PROPERTY OWNER IS RESPONSIBLE AFTER CONSTRUCTION IS COMPLETE.

CATCH BASINS & STORMWATER TREATMENT STRUCTURES

1. CATCH BASINS & STORMWATER TREATMENT STRUCTURES SHOULD BE INSPECTED ON A MONTHLY BASIS AND/OR AFTER A MAJOR RAINFALL EVENT TO ASSURE THAT DEBRIS OR SEDIMENTS DO NOT REDUCE THE EFFECTIVENESS OF THE SYSTEM.

SPILL PREVENTION

A. MATERIAL MANAGEMENT PRACTICES
   THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL SANITARY EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
   GOOD HOUSEKEEPING:
   THE FOLLOWING GOOD HOUSEKEEPING PRACTICES THAT WILL BE FOLLOWED ON SITE DURING
   1. THE CONSTRUCTION PROJECT:
      a. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.
      b. ALL MATERIALS STORED ON SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
      c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
      d. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.
      e. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
      f. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
   2. HAZARDOUS PRODUCTS:
      a. THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
      b. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
      c. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.
      d. SURPLUS PRODUCT THAT MUST BE DISPOSED OF WILL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

B. PRODUCT SPECIFICATION PRACTICES
   THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:
   1. PETROLEUM PRODUCTS:
      a. ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENACE TO REDUCE LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
   2. FERTILIZERS:
      a. FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
   3. PAINTS:
      a. ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE DISPOSED OF PROPERLY ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
   4. CONCRETE TRUCKS:
      a. CONCRETE TRUCKS WILL DISCHARGE AND WASH OUT SURPLUS CONCRETE OR DRUM WASH WATER IN A CONTAINED AREA ON SITE.

C. SPILL CONTROL PRACTICES
   IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
   a. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
   b. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
   c. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
   d. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
   e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OF LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
   f. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECURRING AND HOW TO CLEANUP THE SPILL IF IT OCCURS. A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.
   g. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.

THE PROJECT PROPONENT IS REQUIRED TO MANAGE CONSTRUCTION TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO CONTROLLING INVASIVE SPECIES AND CONTROLLING FUGITIVE DUST IN ACCORDANCE WITH ENV-A 1002.

AGR 3800 PROHIBITED INVASIVE PLANT SPECIES RULES

THE RULE, AGR 3800, STATES: NO PERSON SHALL COLLECT, TRANSPORT, IMPORT, EXPORT, MOVE, BUY SELL, DISTRIBUTE, PROPAGATE OR TRANSPLANT ANY LIVING AND VIABLE PORTION OF ANY PLANT SPECIES, WHICH INCLUDED ALL OF THEIR CULTIVARS AND VARIETIES, LISTED IN TABLE 3800.1, NEW HAMPSHIRE PROHIBITED INVASIVE SPECIES LIST". A COMPLETE COPY OF THE RULES CAN BE ACCESSED ON THE INTERNET AT HTTP://AGRICULTURE.NH.GOV/TOPICS/PLANTS_INSECTS.HTM.

ENV-A 1002 FUGITIVE DUST: PRECAUTIONS TO PREVENT, ABATE, AND CONTROL FUGITIVE DUST.

a. ANY PERSON ENGAGED IN ANY ACTIVITY WITHIN THE STATE EMITS FUGITIVE DUST, OTHER THAT THOSE LISTED IN ENV-A 1002.02 (b), SHALL TAKE PRECAUTIONS THROUGHOUT THE DURATION OF THE ACTIVITY IN ORDER TO PREVENT, ABATE, AND CONTROL THE EMISSION OF FUGITIVE DUST.
b. PRECUATIONS REQUIRED BY (a) ABOVE, SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
   i) THE USE OF WATER OR HYDROPHILIC MATERIAL ON OPERATIONS OR SURFACES, OR BOTH;
   ii) THE APPLICATION OF ASPHALT, WATER, OR HYDROPHILIC MATERIAL, OR TARPS OR OTHER SUCH COVERS TO MATERIAL STOCKPILES;
   iii) THE USE OF HOODS, FANS, FABRIC FILTERS, OR OTHER DEVICES TO ENCLOSE AND VENT AREAS WHERE MATERIALS PRONE TO PRODUCING FUGITIVE DUST ARE HANDLED;
   iv) THE USE OF CONTAINMENT METHODS FOR SANDBLASTING OR SIMILAR OPERATIONS; AND
   v) THE USE OF VACUUMS OR OTHER SUCTION DEVICES TO COLLECT AIRBORNE PARTICULATE MATTER.

WINTER CONSTRUCTION NOTES

1. ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT.
2. ALL DITCHES & SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS.
3. AFTER OCTOBER 15TH, INCOMPLETE ROAD AND PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

PLANNING FILE NO.: SITE-2024-0003

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

NO.	REVISION	DATE	APP'D
1	REVISION PER TRC COMMENTS	4-25-24	SJH
2	REVISION PER TRC COMMENTS #2	8-06-24	SJH

DESIGN BY: SRD
DRAWN BY: SRD
SCALE: AS SHOWN
DATE: 2-29-24
PROJECT NO: 23029
FILE: SITE.DWG

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

17-19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

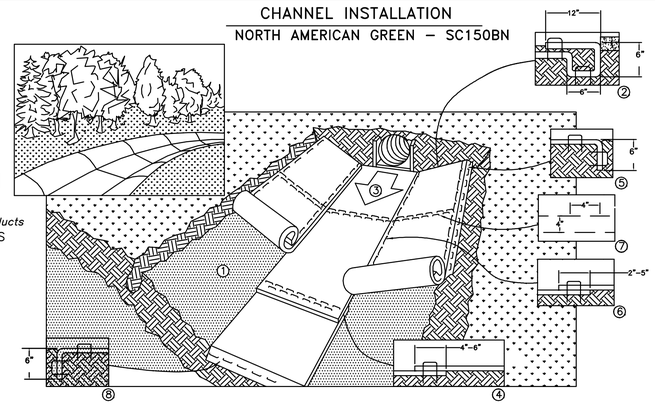
LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

EROSION CONTROL NOTES

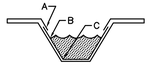
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CHANNEL INSTALLATION
NORTH AMERICAN GREEN – SC150BN

NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL–O–SEED DO NOT SEED PREPARED AREA. CELL–O–SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4" – 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" – 5" (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. NOTE: * IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.



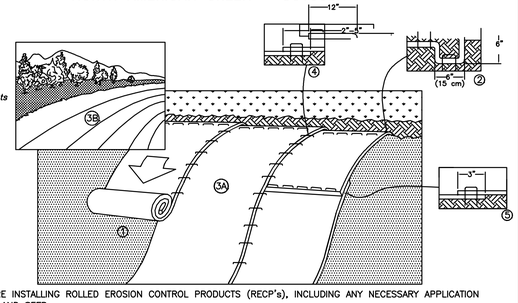
CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

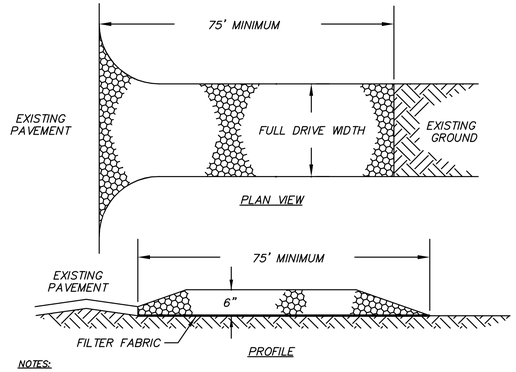
SLOPE INSTALLATION
NORTH AMERICAN GREEN – SC150BN

NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
   NOTE: WHEN USING CELL–O–SEED DO NOT SEED PREPARED AREA. CELL–O–SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF RECP's EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™ , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" – 5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH.
   NOTE:
   *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.

NOTE: THE USE OF WELDED PLASTIC OR BIODEGRADABLE PLASTIC NETTING OR THREAD IN EROSION CONTROL MATTING IS PROHIBITED. THE USE OF WILDLIFE FRIENDLY ORGANIC MATERIALS IS RECOMMENDED.



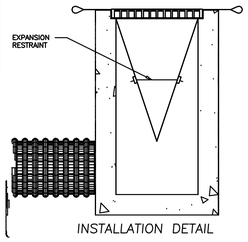
NOTES:
1. SEE EROSION CONTROL NOTES BELOW FOR MATERIAL, INSTALLATION AND MAINTENANCE REQUIREMENTS.
2. TO BE INSTALLED AT EACH POINT OF EGRESS FROM THE WORK AREA.

STABILIZED CONSTRUCTION ENTRANCE

1. SPECIFICATIONS
   A. AGGREGATE SIZE: USE THREE (3) INCHES STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
   B. AGGREGATE THICKNESS: NOT LESS THAN SIX (6) INCHES.
   C. WIDTH TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH OF POINTS WHERE INGRESS OR EGRESS OCCURS.
   D. LENGTH: AS REQUIRED, BUT NOT LESS THAN SEVENTY–FIVE (75) FEET. PIPING OF SURFACE WATER UNDER ENTRANCE SHALL BE PROVIDED AS REQUIRED.
   E. GEOTEXTILE: TO BE PLACED OVER THE ENTIRE AREA TO BE COVERED WITH AGGREGATE.
   F. CRITERIA FOR GEOTEXTILE: THE FABRICS SHALL BE TREVIA SPUNBOND 1135, MIRAFI 600X OR EQUAL.

2. MAINTENANCE
   THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



INSTALLATION DETAIL

SILTSACK®
SPECIFICATIONS

NOTE: THE SILTSACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS. AS SUPPLIED BY AH HARRIS OF PORTSMOUTH OR APPROVED EQUAL

REGULAR FLOW SILTSACK®
(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN–OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D–4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D–4632	20 %
PUNCTURE	ASTM D–4833	120 LBS
MULLEN BURST	ASTM D–3786	800 PSI
TRAPEZOID TEAR	ASTM D–4533	120 LBS
UV RESISTANCE	ASTM D–4355	80 %
APPARENT OPENING SIZE	ASTM D–4751	40 US SIEVE
FLOW RATE	ASTM D–4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D–4491	0.55 SEC –1

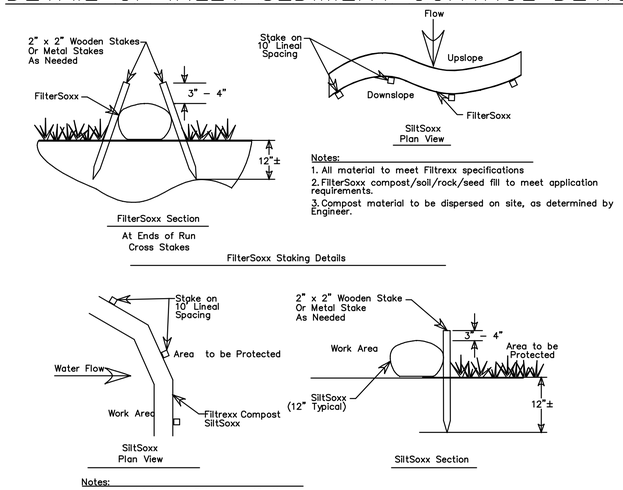
HI–FLOW SILTSACK®
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN–OFF)

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D–4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D–4632	20 %
PUNCTURE	ASTM D–4833	135 LBS
MULLEN BURST	ASTM D–3786	420 PSI
TRAPEZOID TEAR	ASTM D–4533	45 LBS
UV RESISTANCE	ASTM D–4355	90 %
APPARENT OPENING SIZE	ASTM D–4751	20 US SIEVE
FLOW RATE	ASTM D–4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D–4491	1.5 SEC –1

OIL–ABSORBANT SILTSACK®

(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN–OFF OR SPILLS)
DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK® CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AN OIL–ABSORBANT PILLOW INSERT OR, MADE COMPLETELY FROM AN OIL–ABSORBANT SILTSACK®, WITH A WOVEN PILLOW INSERT.

DETAIL OF INLET SEDIMENT CONTROL DEVICE



Notes:
1. All material to meet Filtrexx specifications
2. FilterSoxx compost/soil/rock/seed fill to meet application requirements.
3. Compost material to be dispersed on site, as determined by Engineer.

Notes:
1. All material to meet Filtrexx specifications
2. SiltSoxx compost/soil/rock/seed fill to meet application requirements.
3. SiltSoxx depicted is for minimum slopes. Greater slopes may require larger socks per the Engineer.
4. Compost material to be dispersed on site, as determined by Engineer.

SILTSOXX DETAILS
NOT TO SCALE

PLANNING FILE NO.: SITE–2024–0003
NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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

NO.	REVISION	DATE	APP'D
1	REVISION PER TRC COMMENTS	4–25–24	SJH
2	REVISION PER TRC COMMENTS #2	8–06–24	SJH

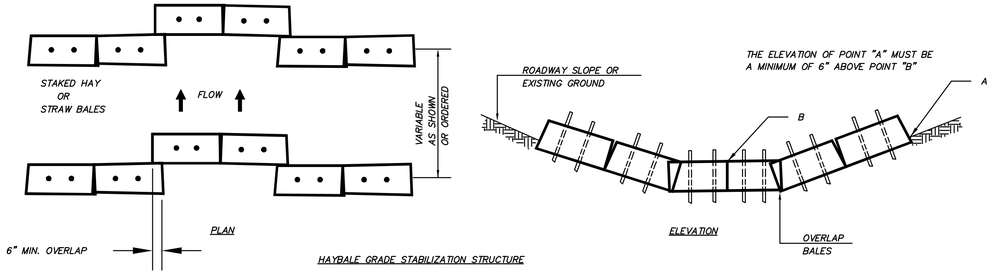
DATE: 2–29–24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY: SJH
PROJECT NO: 23029
FILE: SITE.DWG

EROSION CONTROL DETAILS

17–19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

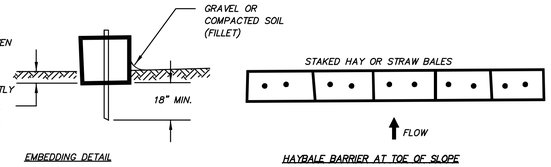
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HAYBALE GRADE STABILIZATION STRUCTURE

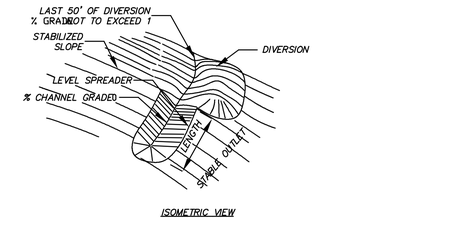
CONSTRUCTION SPECIFICATIONS

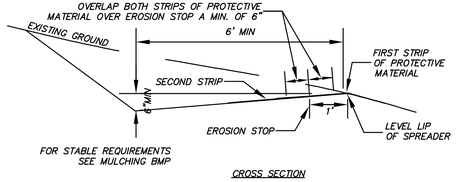
1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY 2" x 2" STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
6. REMOVE AND PROPERLY DISPOSE OF ALL SEDIMENT PRIOR TO REMOVING HAYBALES.



HAYBALE NOTES AND DETAILS

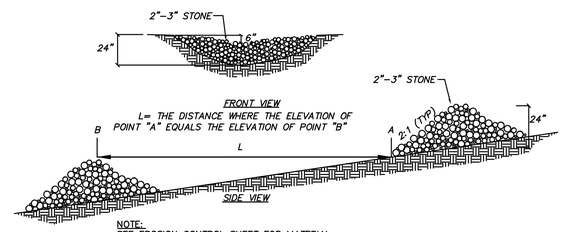
NOT TO SCALE





LEVEL SPREADER DETAIL

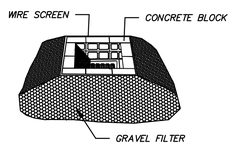
NOT TO SCALE

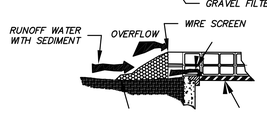


NOTE:
SEE EROSION CONTROL SHEET FOR MATERIAL, INSTALLATION AND MAINTENANCE REQUIREMENTS.

STONE CHECK DAM

NOT TO SCALE

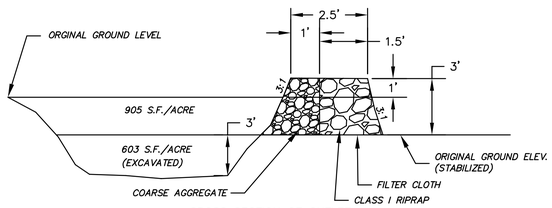




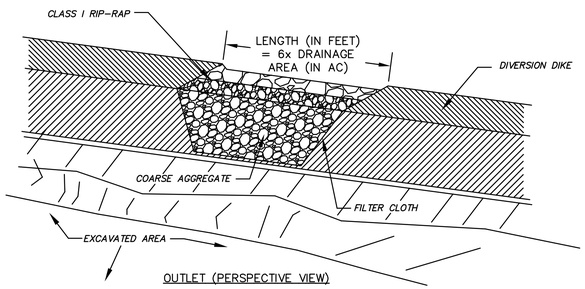
NORMAL USE AROUND CATCH BASINS

TEMPORARY EROSION CONTROL

NOT TO SCALE



CROSS SECTION OF OUTLET

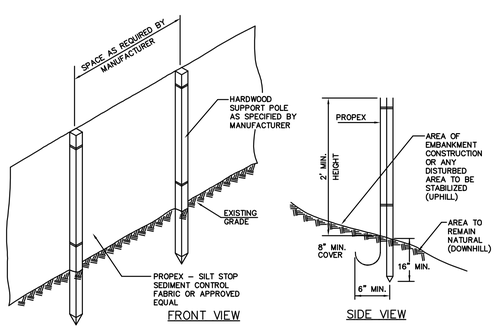


OUTLET (PERSPECTIVE VIEW)

NOTES:
1. COARSE AGGREGATE SHALL MEET NHDOT 304.5 SPECIFICATIONS AND SHALL NOT CONTAIN MORE THAN 5% FINES PASSING THE #200 SIEVE.
2. FILTER CLOTH SHALL BE MIRAFI 700X OR APPROVED EQUAL.
3. CLASS I RIPRAP SHALL MEET NHDOT 583 SS SPECIFICATIONS.
4. THE MAXIMUM CONTRIBUTING AREA TO THE TRAP SHALL BE LESS THAN 5 AC.
5. THE TRAP SHALL BE CLEANED WHEN 50% OF THE ORIGINAL VOLUME IS FILLED.
6. MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.

TEMPORARY SEDIMENT TRAP

NOT TO SCALE



SILT FENCE DETAIL

NOT TO SCALE

PLANNING FILE NO.: SITE-2024-0003

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181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	DATE	APP'D
2	REVISION PER TRC COMMENTS #2	8-06-24	SJH
1	REVISION PER TRC COMMENTS	4-25-24	SJH

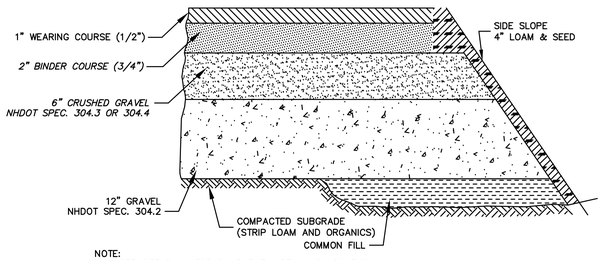
DESIGN BY: SRD
DRAWN BY: SRD
SCALE: AS SHOWN
DATE: 2-29-24
PROJECT NO: 23029
FILE: SITE.DWG
APPROVED BY: SJH

EROSION CONTROL DETAILS

17-19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

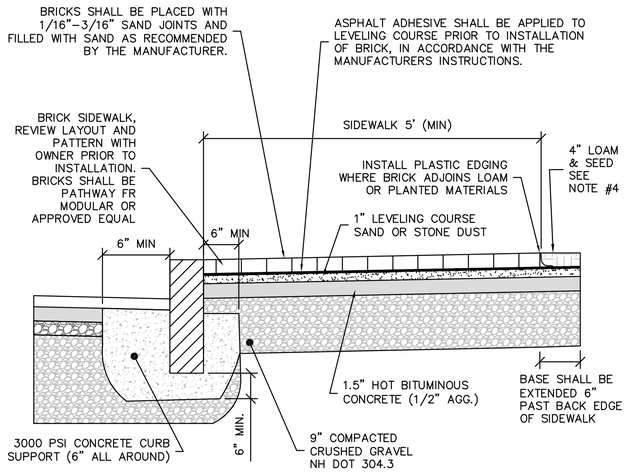
11



NOTE:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
3. GEOTEXTILE FABRIC MAYBE REQUIRED UNDER THE ROADWAY AND /OR THE PARKING AREAS AS REQUIRED BY THE ENGINEER BASED UPON SITE CONDITIONS.

TYPICAL PAVEMENT SECTION

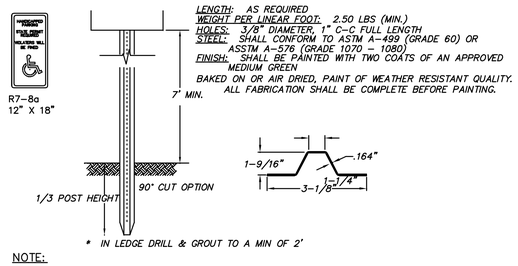
NOT TO SCALE



NOTES:
1. MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF DOVER STANDARDS SPECIFICATIONS.
2. SIDEWALK AND DRIVEWAY WIDTHS SHALL BE EQUAL TO EXISTING WIDTHS OR AS APPROVED AND SHALL SLOPE TO MATCH EXISTING ELEVATIONS.
3. BASE FOR THE SIDEWALKS AND DRIVEWAYS SHALL BE 9-INCHES OF CRUSHED GRAVEL.
4. LOAM AND SEED SHOULD BE IN COMPLIANCE WITH NH DOT 641, 642, 643, 644 AND 645.

CITY OF DOVER D-7
BRICK WALKWAY/SIDEWALK

NOT TO SCALE

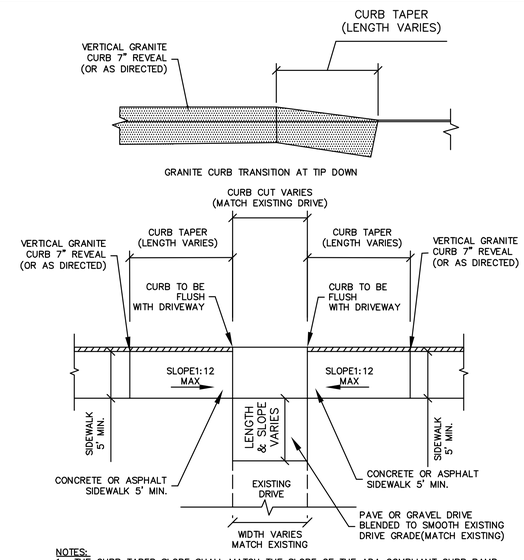


NOTE:

ALL SIGNS TO BE INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

SIGN LEGEND & SIGN POST

NOT TO SCALE

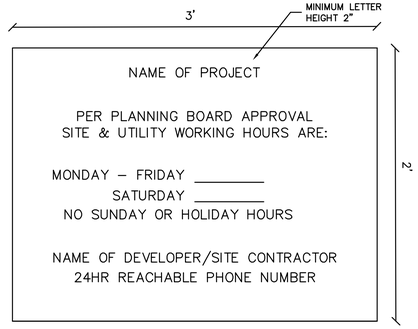


NOTES:
1. THE CURB TAPER SLOPE SHALL MATCH THE SLOPE OF THE ADA COMPLIANT CURB RAMP.
2. THE DRIVEWAY APRON AND TIP DOWNS ARE THE OWNERS RESPONSIBILITY.

DRIVEWAY PLAN WITH SIDEWALK TIP DOWNS

CITY OF DOVER D-9
SIDEWALK TIP DOWN AT DRIVEWAY

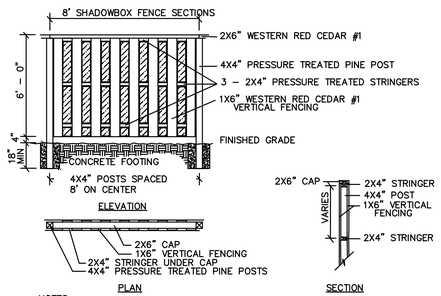
NOT TO SCALE



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.

CITY OF DOVER D-2
CONSTRUCTION SIGN

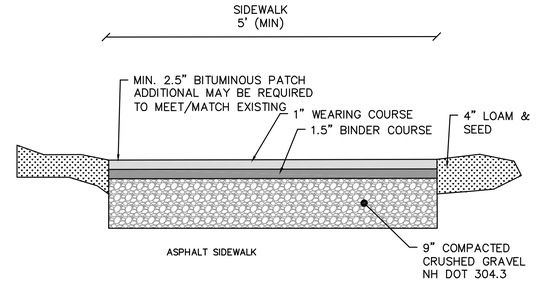
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NOTES:
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FENCE DETAIL

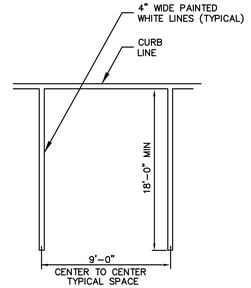
NOT TO SCALE



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3. BASE FOR THE SIDEWALKS AND DRIVEWAYS SHALL BE 9-INCHES OF CRUSHED GRAVEL.

CITY OF DOVER D-6
ASPHALT & CONCRETE SIDEWALK DETAIL

NOT TO SCALE



STANDARD
PARKING STALL

NOT TO SCALE

-chargepoint+

CT4000 Family

ChargePoint® Level 2 Commercial Charging Stations

The CT4000 family is the latest generation of ChargePoint commercial charging stations. Refined yet rugged, these stations set the industry standard for functionality and aesthetics.

The CT4000 full motion color LCD display instructs drivers and supports dynamic updates of custom branded videos and advertisements.

Intelligent power management options double the number of parking spaces served by allowing two charging ports to share a single circuit. Sites with single port EV stations can upgrade to dual port stations without requiring additional electrical services.

The CT4000 is the first ENERGY STAR® certified EV charger because it charges efficiently and conserves power when not charging. As an ENERGY STAR certified EV charger, the CT4000 uses significantly less energy than a standard EV charger when in standby mode to help you save money on your utility bill.

All CT4000 models offer one or two standard SAE J1772™ Level 2 charging ports with locking holsters, each port supplying up to 7.2kW. With this standard connector, ChargePoint level 2 stations can charge any EV.

Stations are available in bollard and wall mount configurations for easy installation anywhere. All stations are fully software upgradeable remotely over the air.

Stations come in both 6' and 8' tall models with 18' and 23' cords, respectively. With multiple options for size and cord reach, your station can service up to four parking spaces, reach all car models regardless of parking style or car sizes and increase the usability of your EV spots.

Driver Friendly User Interface

- Instructional video shows how to use the station
- Multi-language: English, French, Spanish
- Touch button interface; works in rain, ice and with gloves
- Backed by ChargePoint's world class 24/7 driver phone support

Easily Communicate with Your Drivers

Whether you're a retail establishment wanting to advertise your latest product, a workplace looking to communicate with employees or a municipality wanting to welcome visitors, ChargePoint's prominent LCD screen makes it easy to reach EV drivers:

- Daylight readable, with auto brightness control
- 640 X 480 resolution active matrix
- Full motion 30fps video support
- Upload up to 60 seconds of high quality video on a color LCD screen to individual stations as often as desired
- Brand your charging stations to communicate with drivers
- Instructional video in English, Spanish or French



The First ENERGY STAR® Certified EV Charger

EV CHARGING STATION

NOT TO SCALE

PLANNING FILE NO.: SITE-2024-0003

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CIVIL & WATERFRONT ENGINEERING
181 Watson Road, PO Box 1166
Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	DATE	APP'D
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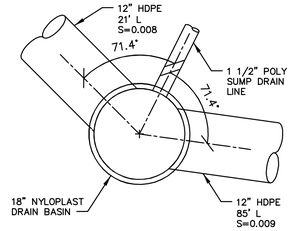
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DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO: 23029
FILE: SITE.DWG

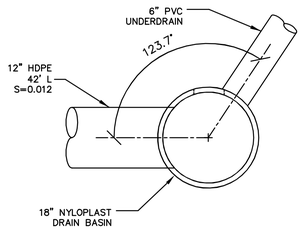
17-19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

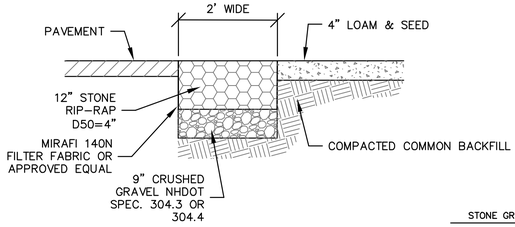
LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

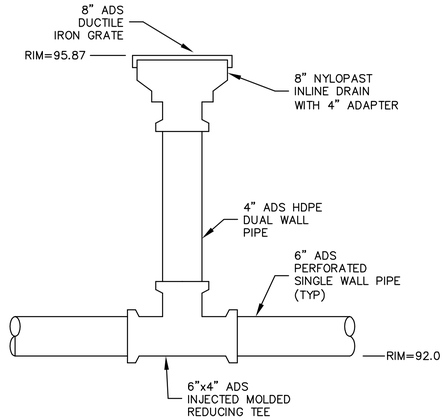
DETAILS

12

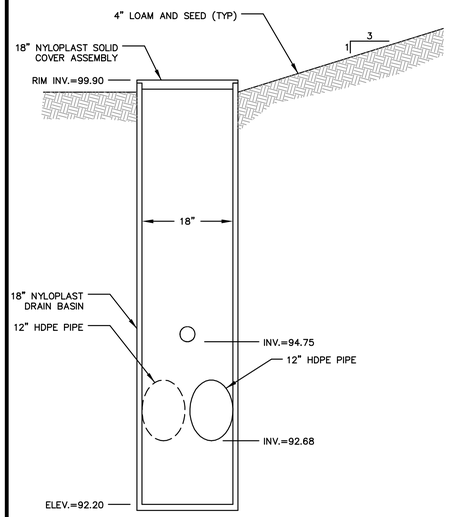




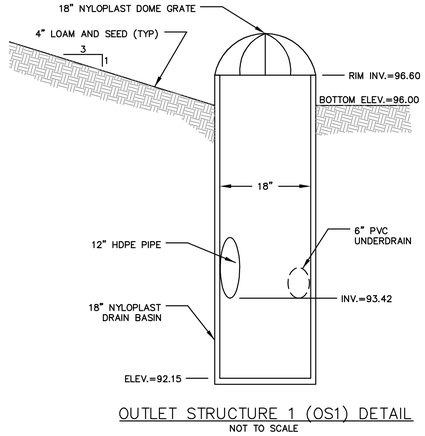




WINDOW WELL/FOUNDATION DRAIN DETAIL
NOT TO SCALE



YARD DRAIN 1 (YD1) DETAIL
NOT TO SCALE



OUTLET STRUCTURE 1 (OS1) DETAIL
NOT TO SCALE

MAINTENANCE

THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE AREA IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

STONE GRADATION

% OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE
100	1.5 TO 2.0 D50
85	1.3 TO 1.8 D50
50	1.0 TO 1.5 D50
15	0.3 TO 0.5 D50

CONSTRUCTION SPECIFICATIONS

1. THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIPRAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE ROCK OR GRAVEL USED FOR FILTER OR RIPRAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIPRAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

STONE APRON DETAIL
NOT TO SCALE

PLANNING FILE NO.: SITE-2024-0003

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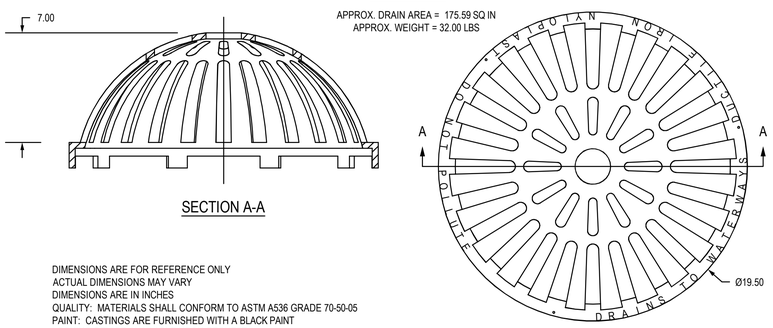
LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

DETAILS

13

1899CGD

APPROX. DRAIN AREA = 175.59 SQ IN
APPROX. WEIGHT = 32.00 LBS

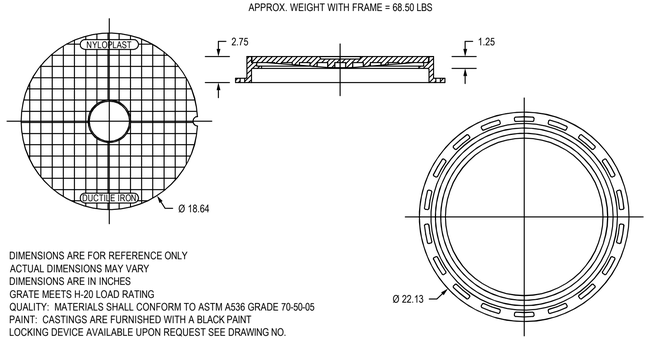


DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST

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1899CGC

APPROX. WEIGHT WITH FRAME = 68.50 LBS

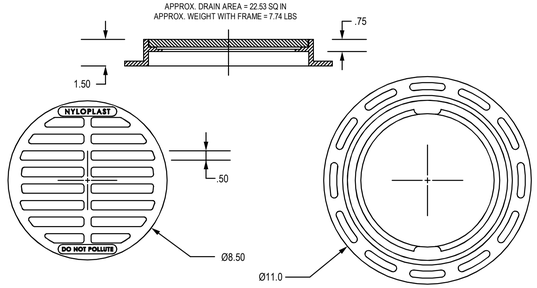


DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE MEETS H-20 LOAD RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO.
7001-110-027

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0899CGSF

APPROX. DRAIN AREA = 22.53 SQ IN
APPROX. WEIGHT WITH FRAME = 7.74 LBS

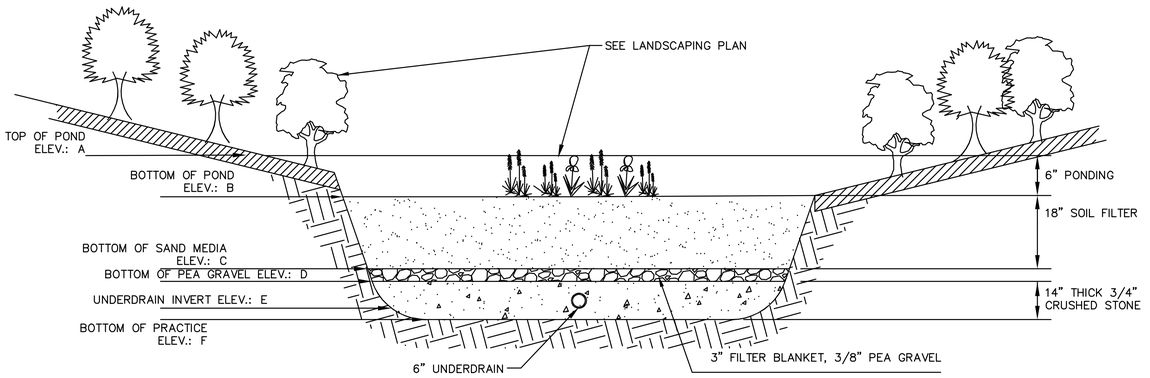


DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
GRATE HAS LIGHT DUTY RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
SIZE OF OPENING MEETS REQUIREMENTS OF AMERICAN DISABILITY ACT AS STATED IN FEDERAL REGISTER PART III, DEPARTMENT OF JUSTICE, 28 CFR PART 36.
LOCKING DEVICE AVAILABLE UPON REQUEST

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NOTES:

1. DO NOT BEGIN CONSTRUCTION OF THE BIORETENTION AREAS UNTIL LAWN AREA ON THE ENTIRE SITE IS ESTABLISHED WITH AT LEAST 80 PERCENT TURF. PREVENT SILTATION INTO THE BIORETENTION AREA.
2. THE RAIN GARDEN SUBGRADE SHALL BE EXCAVATED TO THE DESIGN DEPTH PLUS TWO (2) INCHES. AT THAT DEPTH FOUR (4) INCHES OF COMPOST SHALL BE TILLED INTO THE EXISTING SOILS SUCH THAT THE SOILS ARE WELL MIXED.
3. DO NOT DRIVE CONSTRUCTION EQUIPMENT ON FILTER SUBGRADE NOR ON THE FILTER MATERIAL. INSTALL FILTER MATERIAL BY MEANS OF AN EXCAVATOR LOCATED ADJACENT TO THE FILTER AREA.
4. MATERIALS: CRUSHED STONE LAYER SHALL MEET NHDOT 304.4. PEA STONE SHALL CONTAIN NO MORE THAN 5% FINES PASSING THE #200 SIEVE. TOPSOIL SHALL CONTAIN 15 TO 25% FINES PASSING THE #200 SIEVE. MULCH SHALL BE SHREDDED HARDWOOD, AGED IN A STOCKPILE OR STORED FOR AT LEAST 12 MONTHS. UNDERDRAIN SHALL BE PERFORATED 6" PVC OR TRIPLE WALL PE PIPE.
5. REFER TO LANDSCAPE DRAWINGS FOR GRASS SEED MIXES AND PLANTINGS. FERTILIZATION OF THE FILTER AREA SHALL BE AVOIDED UNLESS ABSOLUTELY NECESSARY TO ESTABLISH VEGETATION.
6. INITIAL ESTABLISHMENT: DURING THE FIRST 2–3 MONTHS OF ESTABLISHMENT WATER THE GRASS ON A WEEKLY BASIS (TO SUPPLEMENT RAINFALL FOR TOTAL OF 1 INCH PER WEEK).
7. ANNUAL MAINTENANCE: IN THE SPRING OF EACH YEAR, ANY DEAD VEGETATION SHALL BE REMOVED TO ALLOW FOR NEW GROWTH, AND ANY ACCUMULATED SEDIMENT (NORMALLY AT THE ENTRANCE TO THE GARDEN) SHALL ALSO BE REMOVED. DURING THE GROWING SEASON THE RAIN GARDEN SHALL BE WEEDED TWO (2) TIMES. TURF AT FILTER SHALL BE MOWED NO MORE THAN 3 TIMES PER GROWING SEASON. IF WATER PONDS ON THE SURFACE FOR MORE THAN 24 HOURS DURING THE FIRST YEAR OR 72 HOURS THEREAFTER, THE FILTER SURFACE SHALL BE AERATED WITH DEEP TINES OR THE SURFACE REPLACED.
8. GRASS SEED SHALL BE NATIVE NON–INVASIVE SPECIES, SEE LANDSCAPE ARCHITECT DRAWINGS.
9. ALL MATERIALS SHALL BE SUBMITTED TO, AND APPROVED BY, THE DESIGN ENGINEER PRIOR TO CONSTRUCTION.

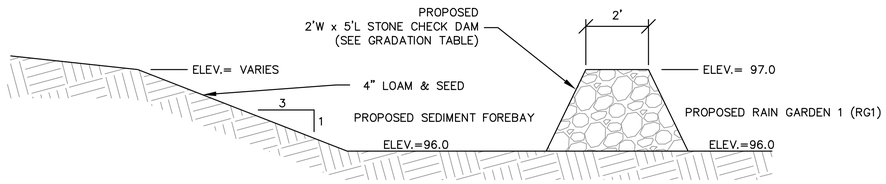


BIORETENTION POND SYSTEM CHART

POND	POND ELEVATION					
	A	B	C	D	E	F
RG1	97.15	96.00	94.50	94.25	93.42	93.08

BIORETENTION FILTER MEDIA SPECIFICATIONS			
COMPONENT MATERIAL	PERCENT OF MIXTURE BY VOLUME	GRADATION OF MATERIAL	
		SIEVE NO.	PERCENT 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

RAIN GARDEN DETAIL
NOT TO SCALE



STONE CHECK DAM GRADATION

SIEVE DESIGNATION	PERCENT BY WEIGHT PASSING SQUARE MESH SIEVE
12–INCH	100%
6–INCH	84%–100%
3–INCH	68%–83%
1–INCH	42%–55%
NO.4	8%–12%

STONE CHECK DAM DETAIL
NOT TO SCALE

PLANNING FILE NO.: SITE–2024–0003

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

NO.	REVISION	DATE	APP'D
2	REVISION PER TRC COMMENTS #2	8–06–24	SJH
1	REVISION PER TRC COMMENTS	4–25–24	SJH

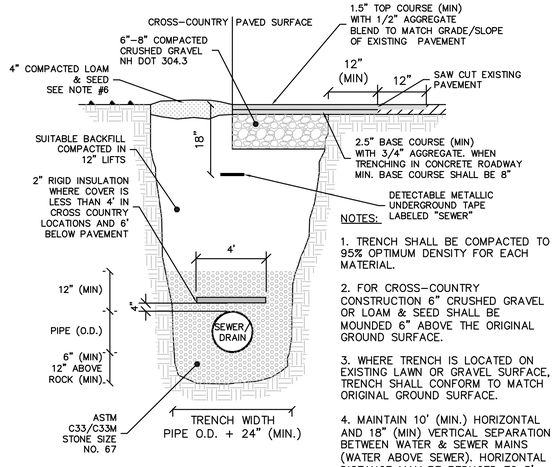
DATE: 2–29–24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO:23029
FILE: SITE.DWG

DETAILS

17–19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

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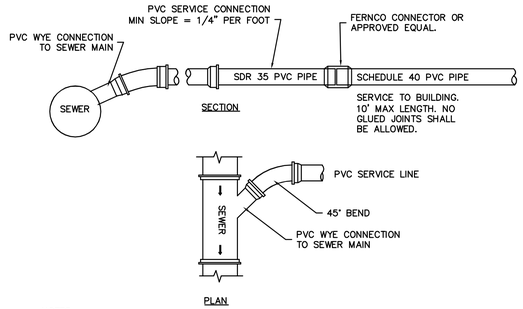


CITY OF DOVER D-3
SEWER TRENCH DETAIL

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.

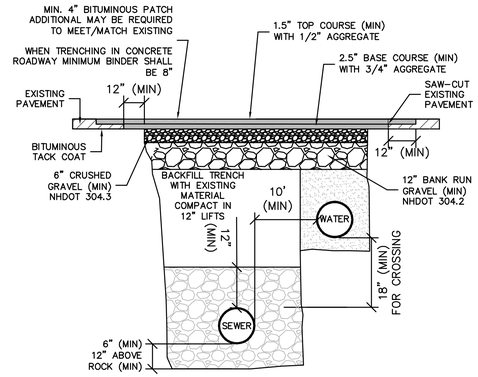


NOTES:

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

CITY OF DOVER D-17
SEWER SERVICE DETAIL

NOT TO SCALE

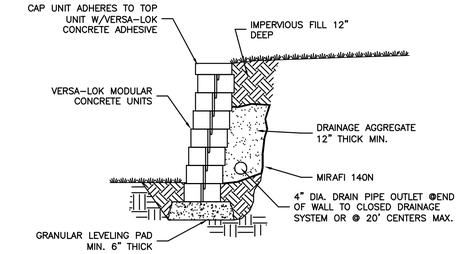


NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY.
2. ALL WORK SHALL COMPLY WITH THE CITY OF DOVER CONSTRUCTION GUIDELINES AND PROCEDURES
3. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.

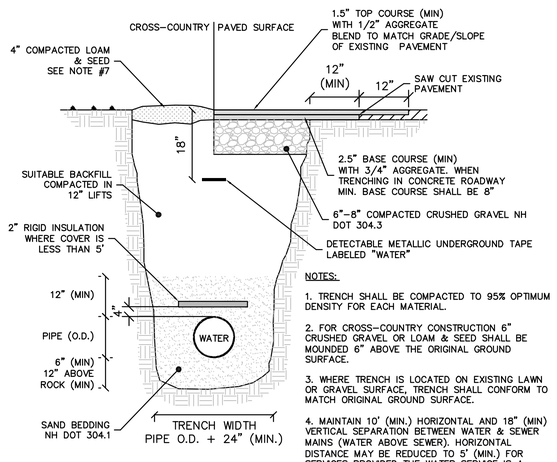
CITY OF DOVER
TYPICAL TRENCH DETAIL

NOT TO SCALE



TYPICAL SECTION
UNREINFORCED RETAINING WALL

NOT TO SCALE

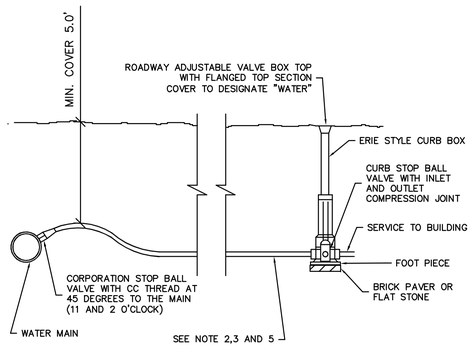


CITY OF DOVER D-4
WATER TRENCH DETAIL

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.

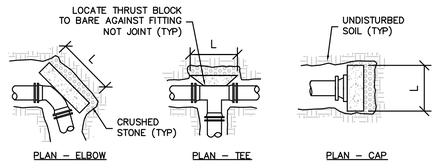


NOTES:

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. 3/4"- COPPER, CTS
   1"- COPPER, CTS
   2"- CTS, HDPE, IPS

CITY OF DOVER D-13
WATER SERVICE CONNECTION DETAIL

NOT TO SCALE



THRUST BLOCK SCHEDULE
MINIMUM BEARING AREA (SQUARE FEET)

	PIPE SIZE					
Nominal Dia. (in)	4	6	8	10	12	16
Pipe Fittings	*	*	5.18	7.96	11.43	20.29
90 Degree Bends	*	4.11	7.33	11.26	16.17	28.69
45 Degree Bends	*	*	*	6.10	8.75	15.53
22-1/2 Degree Bends	*	*	*	*	4.46	7.92
11-1/4 Degree Bends	*	*	*	*	*	*
*SEE NOTE 2	System Pressure: 125 psi Safety Factor: 1.5 Soil Bearing Capacity: 2,000 psf					

NOTES:

1. ALL THRUST BLOCKS SHALL BE PRE-CAST CONCRETE UNLESS APPROVED BY THE CITY ENGINEER.
2. 2'X2'X2' MINIMUM THRUST BLOCK REQUIRED. ANY BEARING AREA OVER 4SF REQUIRES THRUST BLOCKS, RESTRAINED JOINTS AND CALCULATIONS ASSOCIATED WITH THE JOINT.
3. THE MINIMUM BEARING AREAS SHOWN IN THE THRUST BLOCK SCHEDULE ARE BASED ON A SYSTEM PRESSURE OF 125 PSI. IF THE SYSTEM PRESSURE IS ABOVE 125 PSI, INCREASE THE NOTED AREAS PROPORTIONALLY TO THE ACTUAL SYSTEM PRESSURE.
4. FOR MINIMUM BEARING AREAS OVER 4 SF, THE LENGTH (L) OF THE BLOCK IS APPROXIMATELY TWICE AS LONG AS THE HEIGHT (H).
5. PLACE CRUSHED STONE BEHIND THRUST BLOCK AGAINST UNDISTURBED SOIL.
6. PLACE THRUST BLOCK ALONG MAXIMUM LENGTH OF THE FITTING TO MAXIMIZE BEARING AREA.
7. CONCRETE COMPRESSIVE STRENGTH: 2,000 PSI MINIMUM.
8. USE OF THRUST BLOCKS DOES NOT ELIMINATE THE REQUIREMENT OF OTHER RESTRAINTS OR VICE VERSA.

CITY OF DOVER D-15
THRUST BLOCK DETAIL

NOT TO SCALE

PLANNING FILE NO.: SITE-2024-0003

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CIVIL & WATERFRONT ENGINEERING
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Dover, New Hampshire 03821
603.749.0443

NO.	REVISION	DATE	APP'D
2	REVISION PER TRC COMMENTS #2	8-06-24	SJH
1	REVISION PER TRC COMMENTS	4-25-24	SJH

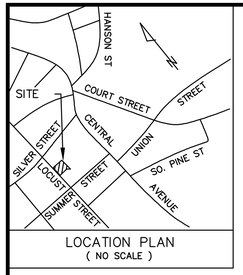
DATE: 2-29-24
SCALE: AS SHOWN
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO: 23029
FILE: SITE.DWG

17-19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

DETAILS

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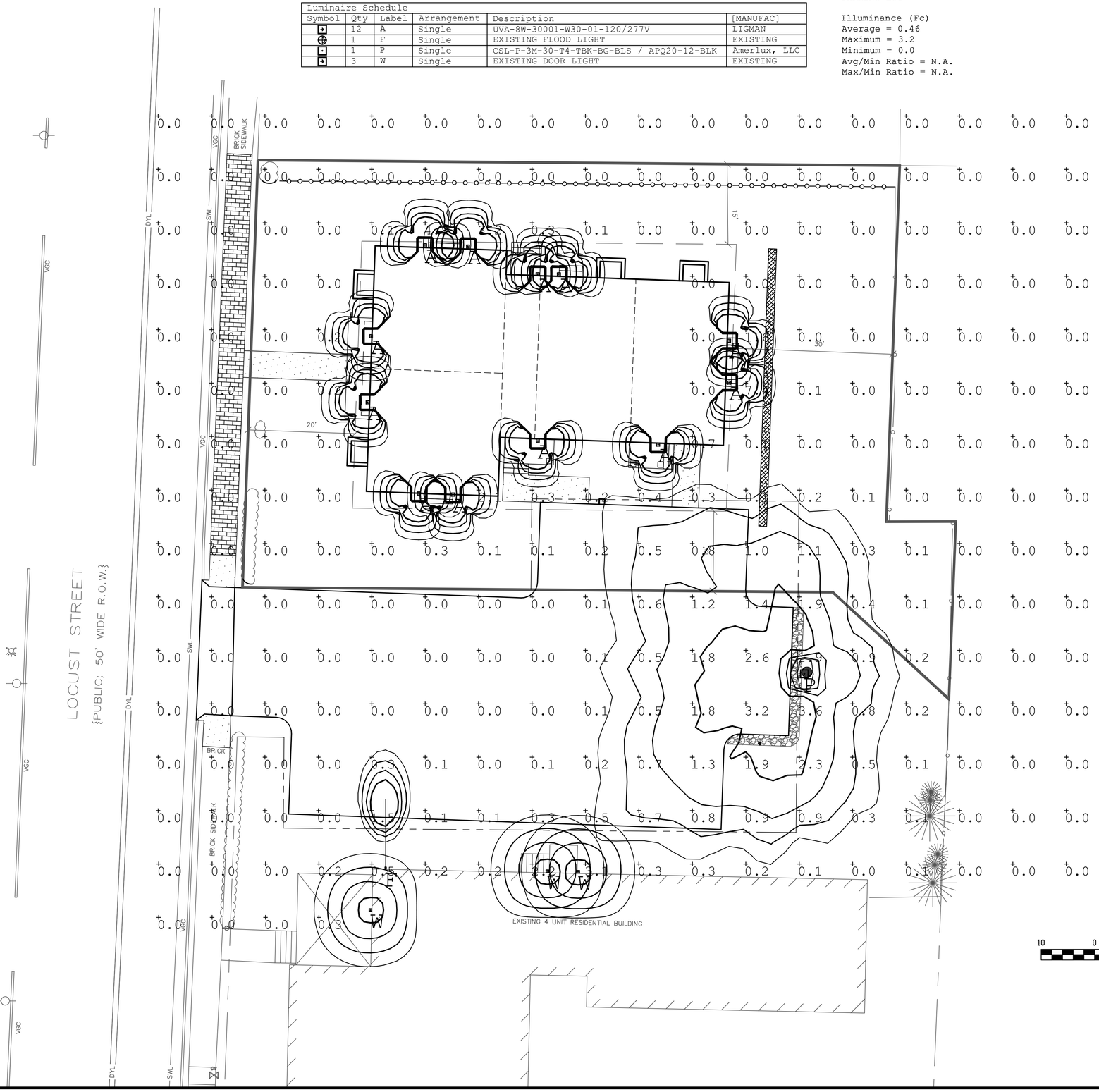


LOCATION PLAN
(NO SCALE)

Luminaire Schedule					
Symbol	Qty	Label	Arrangement	Description	[MANUFAC]
	12	A	Single	UVA-8W-30001-W30-01-120/277V	LIGMAN
	1	F	Single	EXISTING FLOOD LIGHT	EXISTING
	1	P	Single	CSL-P-3M-30-T4-TBK-BG-BLS / APQ20-12-BLK	Amerlux, LLC
	3	W	Single	EXISTING DOOR LIGHT	EXISTING

PARKING LOT

Illuminance (Fc)
Average = 0.46
Maximum = 3.2
Minimum = 0.0
Avg/Min Ratio = N.A.
Max/Min Ratio = N.A.



GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)

PLANNING FILE NO.: SITE-2024-0003

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NO.	REVISION	APP'D	DATE
3	REVISION PER TRC COMMENTS #2	SJH	8-06-24
2	REVISED LOT 35 BLD UNIT COUNT	SJH	7-22-24
1	REVISION PER TRC COMMENTS	SJH	4-25-24

DATE: 2-29-24
SCALE: 1"=10'
DRAWN BY: SRD
DESIGN BY: SRD
APPROVED BY:SJH
PROJECT NO: 23029
FILE: SITE.DWG

LIGHTING PLAN

17-19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

16

COACH STYLE LANTERN

Post Top Mount



amerlux
A Delta Group Company

Coach Style Lantern - Post Top (CSL-P)

Features

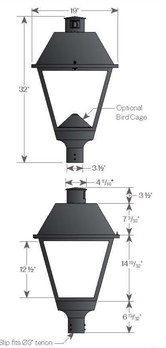
The Coach Style Lantern - Post Top (CSL-P) luminaire is a classically styled post-top lantern that offers a choice of several optical systems. Optional controls available.

Product Overview

Wattage:	24W, 44W, 60W, 79W
Lumen Output :	9,374 lm (79W, T2, 4000K)
Color Temp:	3000K, 4000K
Dimming:	0-10V dimming
Luminaire Weight (approx.):	18 lbs (8.1 kg)
Shipping Weight (approx.):	24 lbs (10.8 kg)

PROJECT:

TYPE:



Certain Restrictions Apply

5 year limited warranty

Construction:
Die-cast aluminum housing ensures rigidity and longevity in application. The rooftop casting is hinged to the cage and utilizes tool-less hardware for ease of installation and maintenance.

Optical Module:
The luminaire utilizes up to four IP66 sealed optical modules consisting of a high performance LED board with an acrylic (TIR) lens to deliver maximum spacing and uniformity. A choice of Type 2 (T2), Type 3 (T3), Type 4 (T4), or Type 5 (T5), IES distributions are available with the scalability to meet application criteria. Custom configurations available.

Electrical:
- 12 LEDs per module
- LED Board Drive Current 530mA (Custom drive currents available)
- Universal input voltage 120-277 VAC (50/60Hz)
- Operational Temp. -40°C/40°C
- Power consumption up to 79W
- Series wired 20kV/10kA surge protector (Per ANSI C82.77-5-2015)
- 0-10V dimming is standard
- A 347V/480V option is available
- DLC listed

Light Distribution:
- Type II (**T2**)
- Type III (**T3**)
- Type IV (**T4**)
- Type V (**T5**)

CCT:
- 3,000K (**30**)
- 4,000K (**40**)

Photo Control:
A 3-pin twistlock photocell receptacle is standard.
- An optional rotatable 7-pin (**7P**) twistlock photocell receptacle is available.
- The 3-pin Twistlock photocell is an accessory and must be specified (**TW-POL**).

Mounting:
Slip fits Ø3" tenon

Finish:
Durable thermoset polyester powdercoat finish in the following:
- Textured Black (**TBK**)
- Classic Bronze (**CLB**)
- Gloss Textured Bronze (**GBZ**)
- Gloss Textured Black (**GTB**)

Optional Lens:
- Textured Acrylic (**TA**)

Accessories:
- Bird Guard (**BG**)
- Backlight Shield (**BLS**) (available for T2, T3 & T4 distributions)
- Twistlock Photocell (**TW-POL**)
- Shorting Cap (to bypass receptacle) (**SC**)
- Wireless control option

EPA: 1.61
(2.77 with optional lens)

Amerlux reserves the right to change details that do not affect overall function and performance.
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APQ20 Series



amerlux
A Delta Group Company

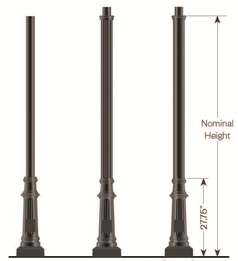
APQ20 Series

Features

- Strong, lightweight and easy to install
- Extruded aluminum shaft welded to a decorative cast aluminum base
- 3" O.D. x 3" tall tenon included for luminaire mounting
- Access door for wiring secured with stainless steel screws
- Ground lug included inside base
- Durable powder coat finish

PROJECT:

TYPE:



See pg 3 for more details.

Materials:
- Base - Cast aluminum (A356)
- Shaft - Extruded Aluminum (6061-T6)
- Tenon - Cast Aluminum (A356)
- Anchor Bolts - Hot dipped galvanized
- Hardware - Stainless Steel

Finish:
The post will be finished with an electrostatically applied polyester powder coat suitable for exterior use. The poles are pretreated using industry standard enviromentally responsible processes for a long lasting and durable finish.

Anchorage:
- 1/2" x 18" x 3" Hot-dipped galvanized steel L-type anchor bolts (ordered separately)

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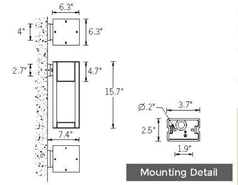
UVA-30001

Vancouver 24 Surface

LIGMAN LIGHTING USA



8W COB 331 Lumens
IP65 • Suitable For Wet Locations
IK08 • Impact Resistant
Weight 13.6 lbs



Mounting Detail



Construction

Aluminum
Less than 0.1% copper content – Marine Grade 6060 extruded & LM6 Aluminum High Pressure die-casting provides excellent mechanical strength , clean detailed product lines and excellent heat dissipation.

Pre-paint
8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive - Silicon Gasket
Provided with special injection molded a "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management
LM6 aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10K lumen depreciation at 50,000 hours.

Surge Suppression
Standard 10kv surge suppressor provided with all fixtures.

IK10 Rating
Contact Factory

Finishing
All Ligman products go through an extensive finishing process that includes prefiling to improve paint adherence.

Paint
UV Stabilized 4 (MM) thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

Inspired by Nature Finishes
The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish.

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

The wood grain finish is so realistic that its almost undistinguishable from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

The Coating Process
After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration.

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This printed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

Wood grain coating can create beautiful wood-looking products of any sort. There are over 300 combinations of designs currently in use. Wood grains can be made with different colors, designs, etc.

Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

Added Benefits
- Resistance to salt-acid room, accelerated aging
- Boiling water, lime and condensed water resistant
- Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch
- Super durable (UV resistant)
- TGIC free (non-toxic)

Hardware
Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes
Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens
Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

Optics & LED
Precise optic design provides exceptional light control and precise distribution of light.
LED CRI > 80

Lumen - Maintenance Life
L80 /10 at 50,000 hours (This means that at least 90% of the LED still achieve 90% of their original flux)

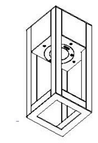
Contemporary urban lighting furniture.
Open-sided, three lattice pattern options or your bespoke design.

A stylish Dark Sky Compliant square high performance wall mounted luminaire with downward light distribution using LED lamps. This light column offers optimal visual comfort through glare control by utilizing a controlled optics designed by Ligman. These luminaires have a square design providing a unique wide light distribution, offering an architecturally appealing shadow pattern on the mounted surface. The internal sides of the support-ing pillars are accented by light from the LED.

Color temperature 2700K, 3000K, 3500K and 4000K. The minimalistic shape provides distinctive lighting effects by night and decorative urban effect during the day. Suitable for pedestrian areas, precincts, building surrounds, shopping centers, squares and parks. The Vancouver comes standard with a unique waterproof internal driver housing compartment that is situated at the top of the pole to stop water and dust from entering the electrical components. This fixture is supplied completely wired with powercord and waterproof gland from the driver enclosure to the base of the column to ensure quick trouble-free installation.

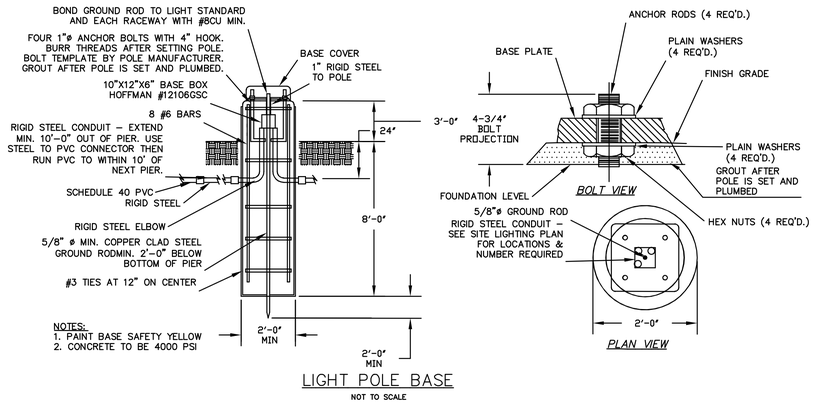
Custom heights are available, please specify in options. Designed to complement the Vancouver Light Column and bollard.

Additional Options (Consult Factory For Pricing)



OB
Open Bottom

Lyman Lighting USA reserves the right to change specifications without prior notice, please contact factory for latest information. Due to the continual improvements in LED technology data and component may change without notice.



LIGHT POLE BASE
NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

PLANNING FILE NO.: SITE-2024-0003

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

NO.	REVISION	DATE	APP'D
2	REVISION PER TRC COMMENTS #2	8-06-24	SJH
1	REVISION PER TRC COMMENTS	4-25-24	SJH

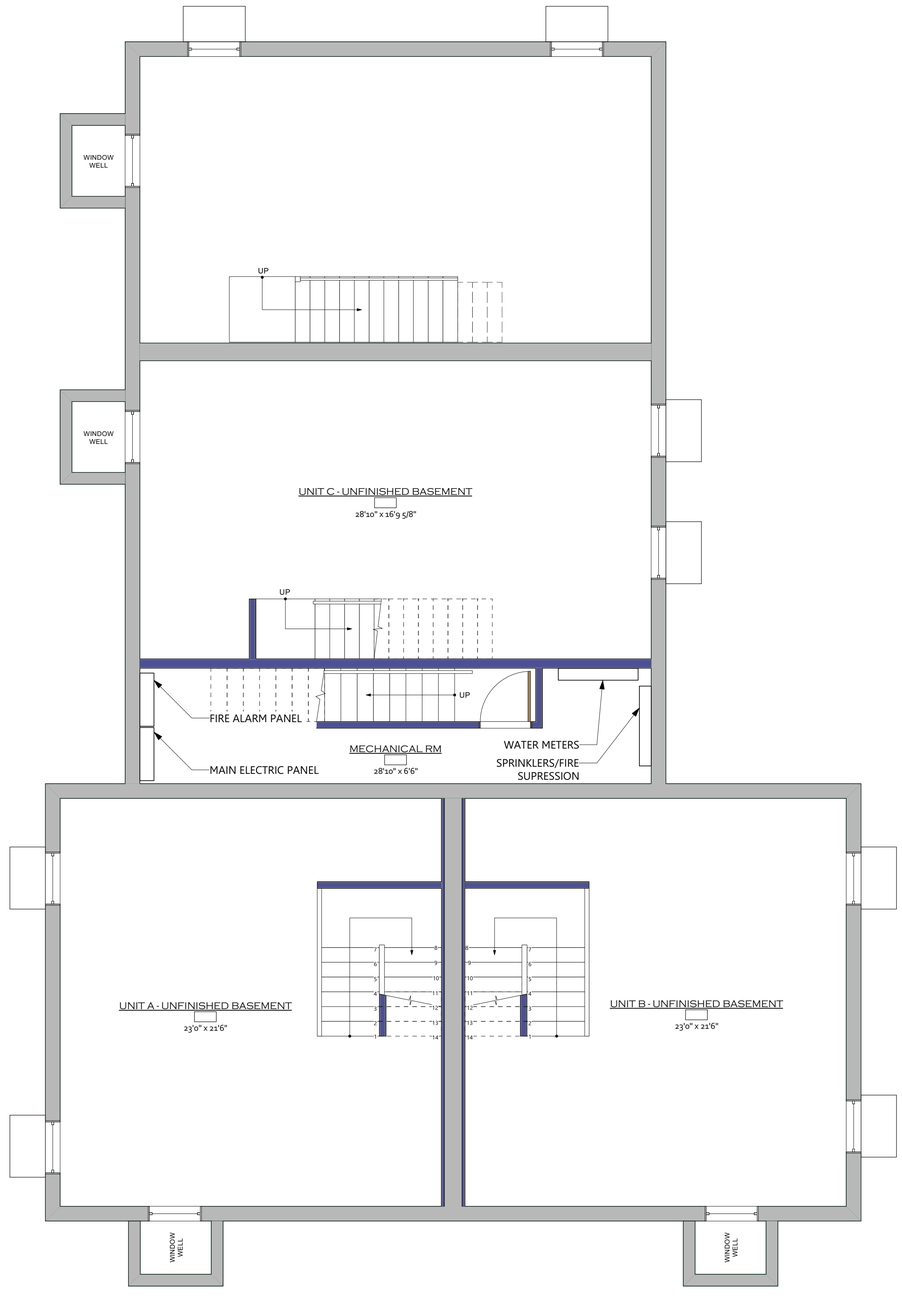
DESIGN BY: SRD
APPROVED BY: SJH
DRAWN BY: SRD
SCALE: AS SHOWN
DATE: 2-29-24
PROJECT NO: 23029
FILE: SITE.DWG

LIGHTING DETAILS

17-19 SUMMER STREET
PROPERTIES, LLC
71 LAFAYETTE ROAD
HAMPTON FALLS, NH 03844

LOCUST STREET
RESIDENTIAL DEVELOPMENT
DOVER, NH

17



1 PROPOSED BASEMENT PLAN
Scale: 1/4" = 1'-0"

SQUARE FOOTAGE	
UNIT A	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	499 SQ.FT.
UNIT A - PROPOSED FINISHED SPACE TOTAL	**1647 SQ.FT.**
UNIT A - UNFINISHED BASEMENT	567 SQ.FT.
UNIT B	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	479 SQ.FT.
UNIT B - PROPOSED FINISHED SPACE TOTAL	**1626 SQ.FT.**
UNIT B - UNFINISHED BASEMENT	567 SQ.FT.
UNIT C	
1st FLOOR GROSS SQ.FT.	536 SQ.FT.
2nd FLOOR GROSS SQ.FT.	742 SQ.FT.
ATTIC GROSS SQ.FT.	608 SQ.FT.
UNIT C - PROPOSED FINISHED SPACE TOTAL	**1886 SQ.FT.**
UNIT C - UNFINISHED BASEMENT	536 SQ.FT.
UNIT D	
1st FLOOR GROSS SQ.FT.	534 SQ.FT.
2nd FLOOR GROSS SQ.FT.	534 SQ.FT.
ATTIC GROSS SQ.FT.	456 SQ.FT.
UNIT D - PROPOSED FINISHED SPACE TOTAL	**1525 SQ.FT.**
UNIT D - UNFINISHED BASEMENT	536 SQ.FT.
COMMON CORRIDOR	205 SQ.FT.
MECAHNICAL ROOM (BASEMENT)	147 SQ.FT.

DISTINCTION
BY DESIGN
603-401-7294

REVISION & REISSUE NOTES

No.	Date	Notes
A	4/25/2024	REVISION BY TRC COMMENTS

4 UNITS RESIDENTIAL BUILDING

LOCUST ST., DOVER, NH 03820

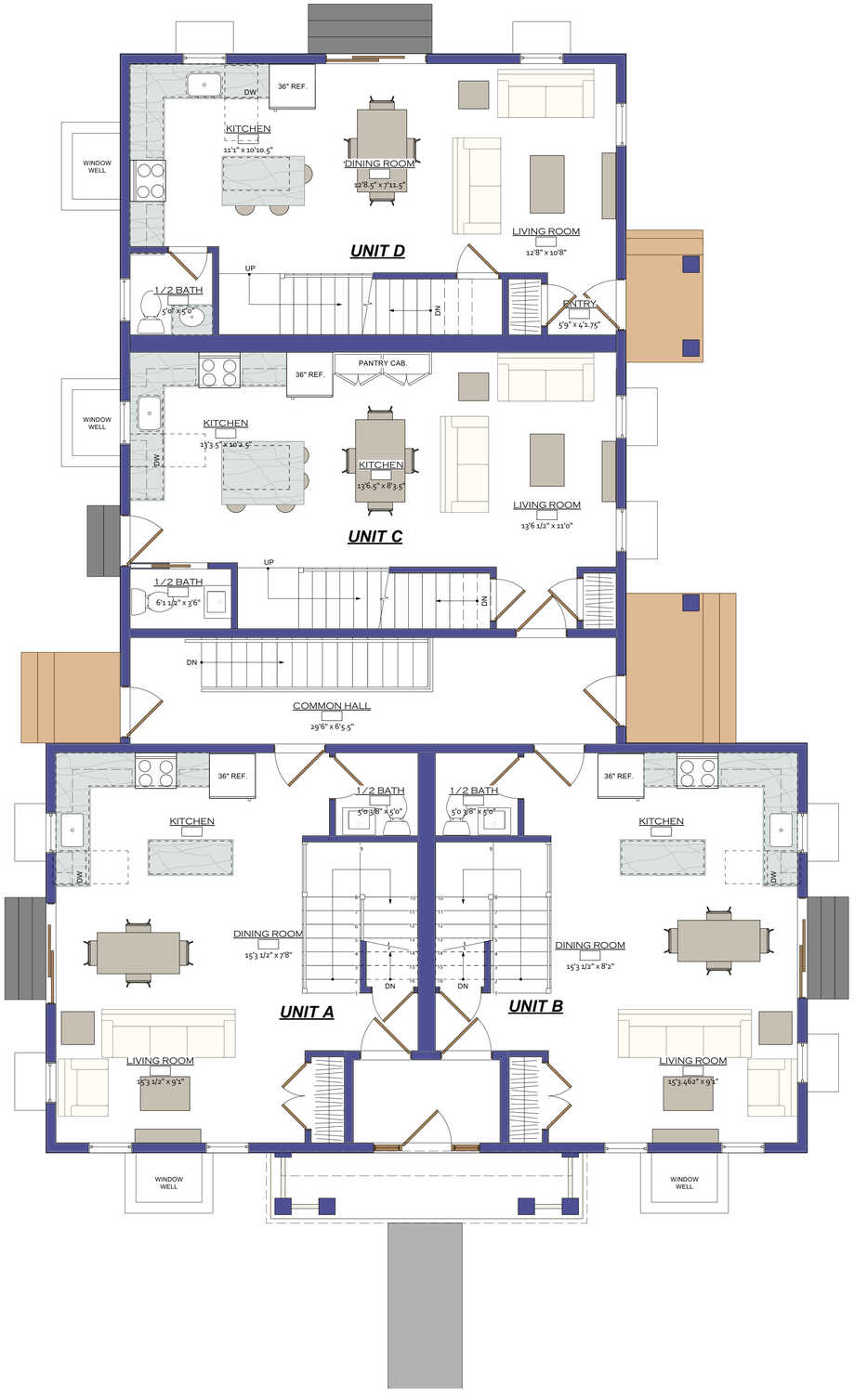
Project Manager	Project #	Date
ST	2022-02	05-13-2022

Scale: AS NOTED

BASEMENT PLAN

A1.0

CAD File Name
Summer street SD -3-REVISED.wx



1 PROPOSED FIRST FLOOR PLAN
Scale: 1/4" = 1'-0"

SQUARE FOOTAGE	
UNIT A	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	499 SQ.FT.
UNIT A - PROPOSED FINISHED SPACE TOTAL	**1647 SQ.FT.**
UNIT A - UNFINISHED BASEMENT	567 SQ.FT.
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UNIT B - PROPOSED FINISHED SPACE TOTAL	**1626 SQ.FT.**
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COMMON CORRIDOR	205 SQ.FT.
MECAHNICAL ROOM (BASEMENT)	147 SQ.FT.

DD BY
DISTINCTION
BY DESIGN
603-401-7294

REVISION & REISSUE NOTES

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4 UNITS RESIDENTIAL BUILDING

LOCUST ST., DOVER, NH 03820

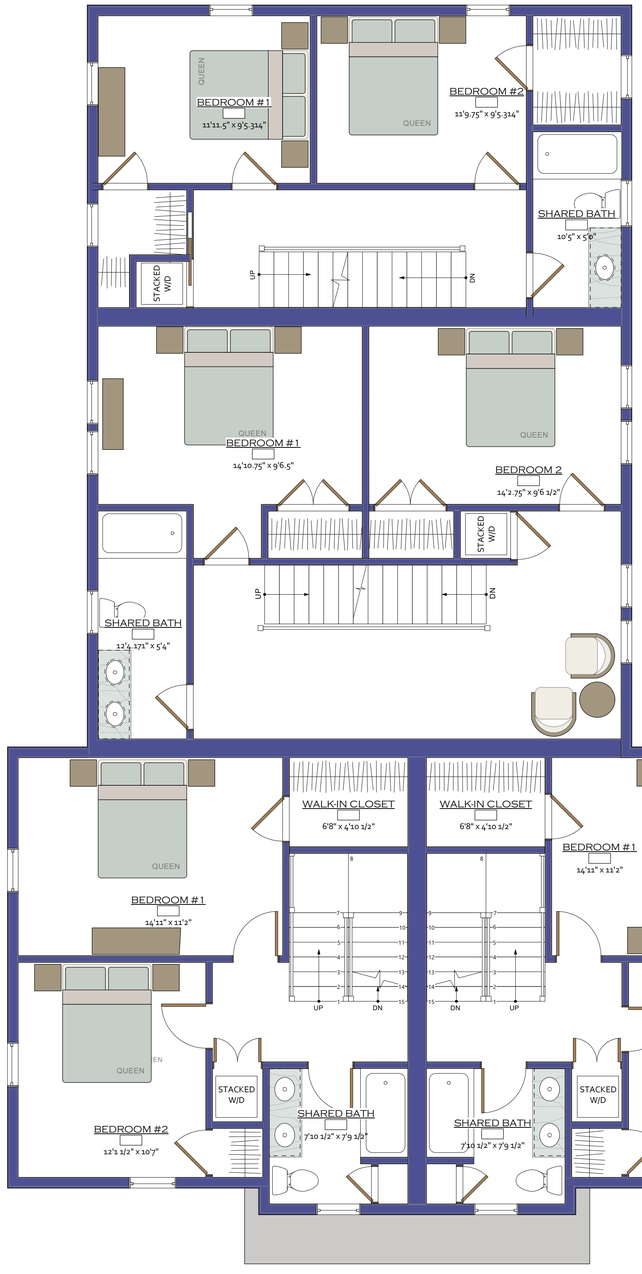
Project Manager	Project #	Date
ST	2022-02	05-13-2022

Scale: AS NOTED

FIRST FLOOR PLAN

A1.1

CAD File Name
Summer street SD -3-REVISED.wxx



1 PROPOSED SECOND FLOOR PLAN
Scale: 1/4" = 1'-0"

SQUARE FOOTAGE	
UNIT A	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	499 SQ.FT.
UNIT A - PROPOSED FINISHED SPACE TOTAL	**1647 SQ.FT.**
UNIT A - UNFINISHED BASEMENT	567 SQ.FT.
UNIT B	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	479 SQ.FT.
UNIT B - PROPOSED FINISHED SPACE TOTAL	**1626 SQ.FT.**
UNIT B - UNFINISHED BASEMENT	567 SQ.FT.
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UNIT C - PROPOSED FINISHED SPACE TOTAL	**1886 SQ.FT.**
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1st FLOOR GROSS SQ.FT.	534 SQ.FT.
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UNIT D - UNFINISHED BASEMENT	536 SQ.FT.
COMMON CORRIDOR	205 SQ.FT.
MECAHNICAL ROOM (BASEMENT)	147 SQ.FT.

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4 UNITS RESIDENTIAL BUILDING

LOCUST ST., DOVER, NH 03820

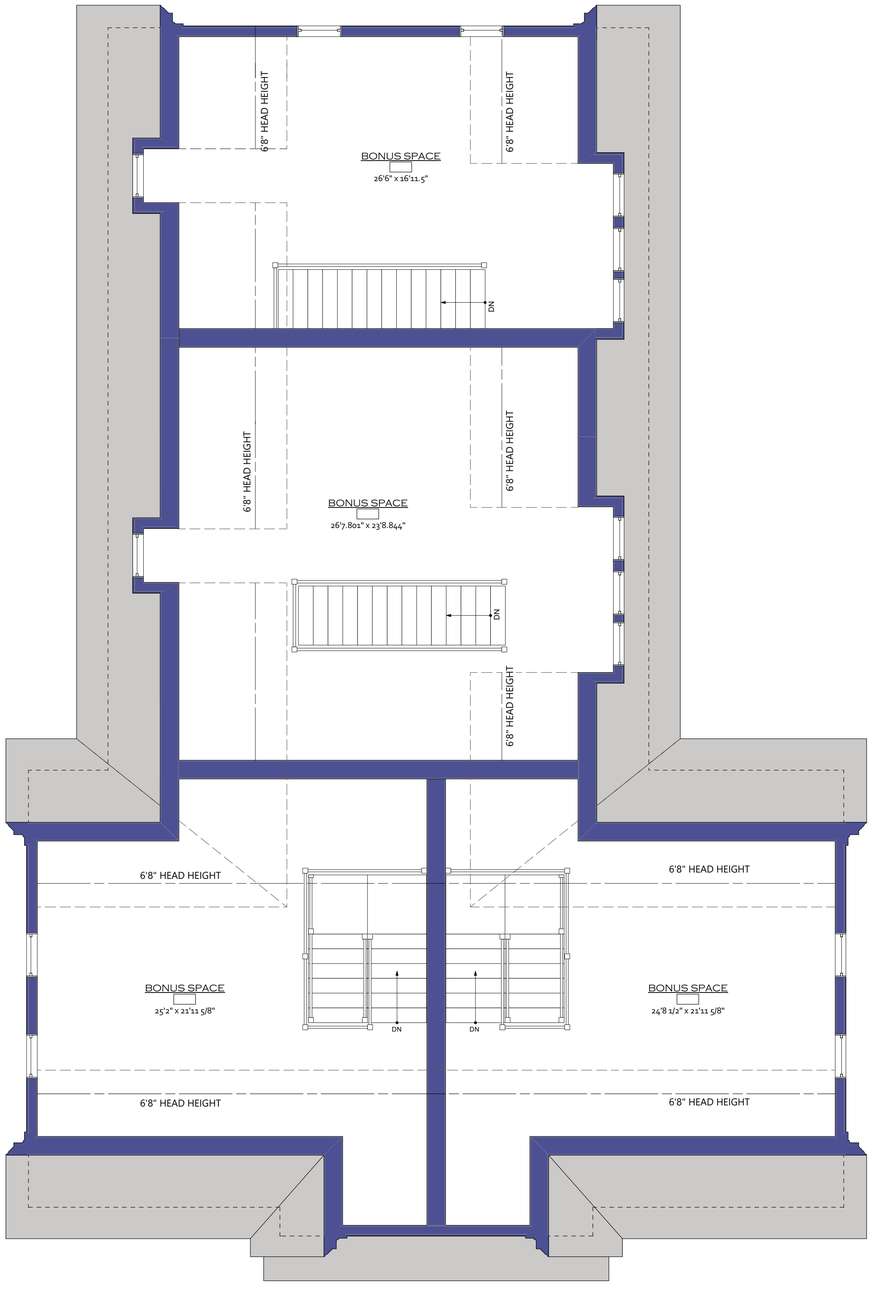
Project Manager	Project #	Date
ST	2022-02	05-13-2022

Scale: AS NOTED

SECOND FLOOR PLAN

A1.2

CAD File Name
Summer street SD -3-REVISED.wxx



1 PROPOSED ATTIC PLAN
Scale: 1/4" = 1'-0"

SQUARE FOOTAGE	
UNIT A	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	499 SQ.FT.
UNIT A - PROPOSED FINISHED SPACE TOTAL	**1647 SQ.FT.**
UNIT A - UNFINISHED BASEMENT	567 SQ.FT.
UNIT B	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	479 SQ.FT.
UNIT B - PROPOSED FINISHED SPACE TOTAL	**1626 SQ.FT.**
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ATTIC GROSS SQ.FT.	608 SQ.FT.
UNIT C - PROPOSED FINISHED SPACE TOTAL	**1886 SQ.FT.**
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ATTIC GROSS SQ.FT.	456 SQ.FT.
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MECAHNICAL ROOM (BASEMENT)	147 SQ.FT.

DISTINCTION
BY DESIGN
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REVISION & REISSUE NOTES

No.	Date	Notes
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4 UNITS RESIDENTIAL BUILDING

LOCUST ST., DOVER, NH 03820

Project Manager	Project #	Date
ST	2022-02	05-13-2022

Scale: AS NOTED

ATTIC PLAN

A1.3

CAD File Name
Summer street SD -3-REVISED.vwx



1 LOCUST STREET ELEVATION
Scale: 1/4" = 1'-0"



2 REAR ELEVATION
Scale: 1/4" = 1'-0"

HERITAGE DISTRICT
ARCHITECTURAL DESIGN ELEMENTS

1	CLAPBOARD SIDING
2	STEEP ROOF PITCH
3	DENTILS AT FRIEZE BOARD
4	TUSCAN COLUMNS
5	DORMERS
6	ENTABLATURE
7	GABLES
8	TRANSOM
9	PORTICO
10	DEEP EAVE OVERHANG
11	DOMINANT FRONT GABLE CANTELIVER ABOVE FLOOR BELOW
12	BALLUSTRADE

DISTINCTION
BY DESIGN
603-401-7294

REVISION & REISSUE NOTES

No.	Date	Notes
A	4/25/2024	REVISION BY TRC COMMENTS

4 UNITS RESIDENTIAL BUILDING

LOCUST ST., DOVER, NH 03820

Project Manager	Project #	Date
ST	2022-02	05-13-2022

Scale: AS NOTED

EXTERIOR ELEVATIONS

A2.0

CAD File Name
Summer street SD -3-REVISED.wxx



1 RIGHT ELEVATION
Scale: 1/4" = 1'-0"



2 LEFT ELEVATION
Scale: 1/4" = 1'-0"

HERITAGE DISTRICT
ARCHITECTURAL DESIGN ELEMENTS

1	CLAPBOARD SIDING
2	STEEP ROOF PITCH
3	DENTILS AT FRIEZE BOARD
4	TUSCAN COLUMNS
5	DORMERS
6	ENTABLATURE
7	GABLES
8	TRANSOM
9	PORTICO
10	DEEP EAVE OVERHANG
11	DOMINANT FRONT GABLE CANTELIVER ABOVE FLOOR BELOW
12	BALLUSTRADE

DISTINCTION
BY DESIGN
603-401-7294

REVISION & REISSUE NOTES

No.	Date	Notes
A	4/25/2024	REVISION BY TRC COMMENTS

4 UNITS RESIDENTIAL BUILDING

LOCUST ST., DOVER, NH 03820

Project Manager	Project #	Date
ST	2022-02	05-13-2022

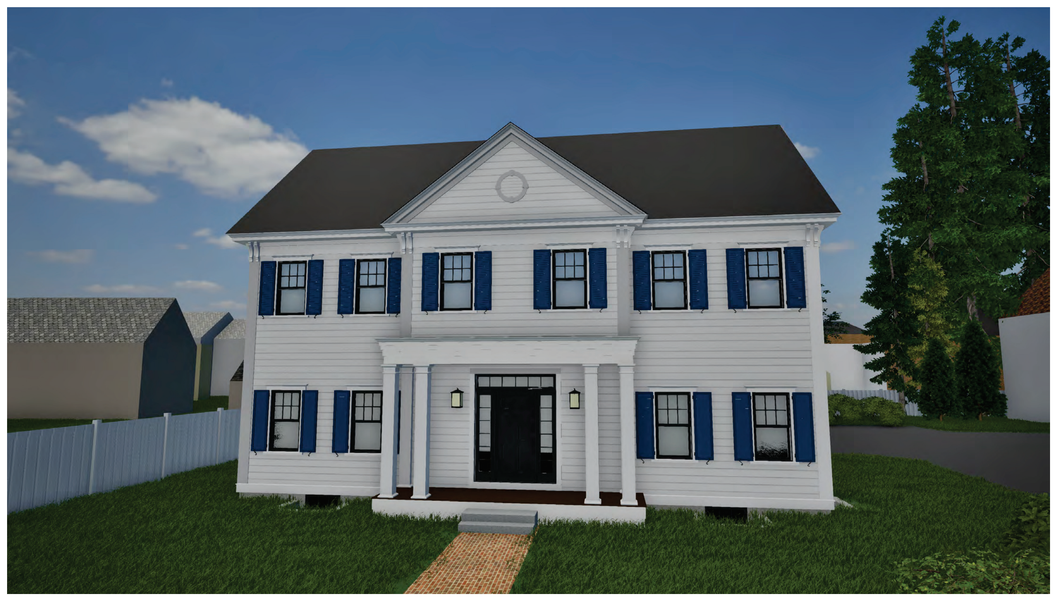
Scale: AS NOTED

EXTERIOR ELEVATIONS

A2.1

CAD File Name
Summer street SD -3-REVISED.vwx







*** THE RENDERINGS ARE MEANT TO DISPLAY THE DESIGN INTENT FOR THE PROJECT. REFER TO ARCHITECTURAL, CIVIL AND LANDSCAPE DRAWINGS FOR SPECIFIC INFORMATION.**

CAD File Name
Summer street SD -3-REVISED.vwx

DISTINCTION
BY DESIGN
603-401-7294

REVISION & REISSUE NOTES

No.	Date	Notes

4 UNITS RESIDENTIAL BUILDING

136 LOCUST ST., DOVER, NH 03820

Project Manager	Project #	Date
ST	2022-02	05/ 01 / 2024

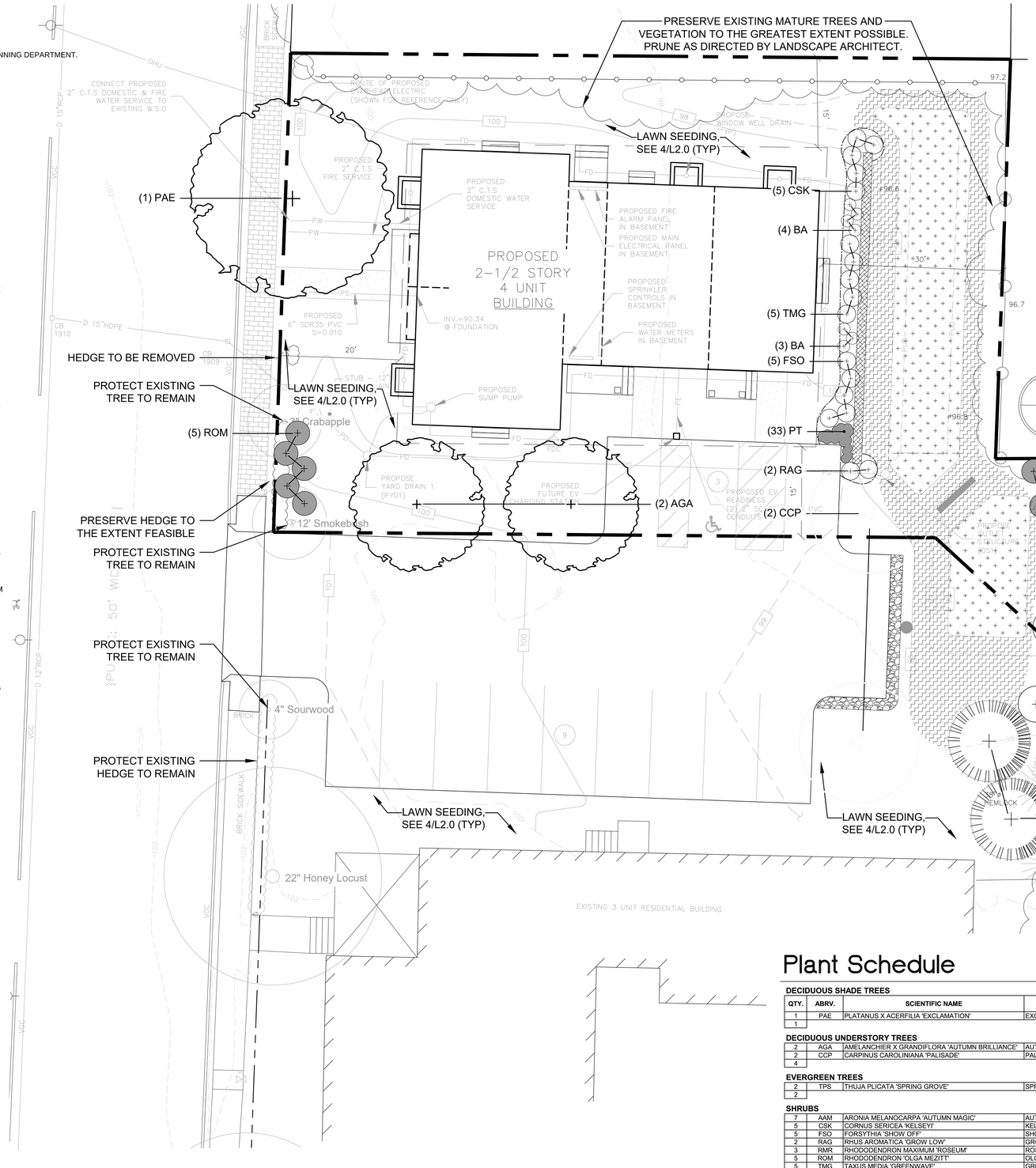
Scale: AS NOTED

RENDERINGS

A2.2

PLANTING NOTES:

1. THE CONTRACTOR SHALL REVIEW AND BECOME FULLY ACQUAINTED WITH THESE NOTES, CONSTRUCTION DETAILS, AND THE PLANTING PLAN.
2. LOCATE AND VERIFY ALL EXISTING AND NEW UTILITY LINE LOCATIONS PRIOR TO PLANTING, REPORT ANY CONFLICT TO THE LANDSCAPE ARCHITECT AND THE CITY'S PLANNING DEPARTMENT.
3. ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE "AMERICAN STANDARD FOR NURSERY STOCK" PUBLISHED BY THE AMERICAN SOCIETY OF NURSERY MEN, INC. LATEST EDITION.
4. THE LOCATION OF ALL THE PROPOSED PLANT MATERIAL SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING. NO PLANTS SHALL BE PLANTED BEFORE THE ACCEPTANCE OF ROUGH GRADING.
5. THE BASE OF THE FLARE OF ALL TREE TRUNKS SHALL BE EXPOSED AND SET 1"-2" ABOVE FINISH GRADE. HOLD MULCH AWAY FROM THE TRUNK.
6. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES WILL BE PLANTS WITH EQUIVALENT OVERALL FORM, HEIGHT, BRANCHING HABIT, FLOWER COLOR, LEAF COLOR, FRUIT COLOR, AND TIME OF BLOOM, AS APPROVED BY THE LANDSCAPE ARCHITECT.
7. EXISTING LOAM: STOCKPILING OF EXISTING LOAM IS SPECIFIED ELSEWHERE. REMOVE CLAY LUMPS, BRUSH, LITTER, ROOTS, STONES 1" AND LARGER, AND ANY DEBRIS AND FOREIGN MATERIALS.
8. ADDITIONAL LOAM: IF STOCKPILED LOAM QUANTITY IS INSUFFICIENT, PROVIDE LOAM, THAT IS A "FINE SANDY LOAM", OR A "SANDY LOAM" DETERMINED BY MECHANICAL ANALYSIS AND BASED ON THE "U.S.D.A. CLASSIFICATION SYSTEM." IT SHALL BE OF UNIFORM COMPOSITION, WITHOUT ADMIXTURE OF SUBSOIL. LOAM SHALL HAVE A PH 5.8 TO PH 7.0 AND SHALL CONTAIN NOT LESS THAN 4% NOR MORE THAN 10% ORGANIC MATTER AS DETERMINED BY THE LOSS OF IGNITION OF OVEN-DRIED SAMPLES. PROVIDE LOAM THAT IS FERTILE, FRIABLE, NATURAL LOAM, FREE FROM SUBSOIL, CLAY LUMPS, BRUSH, LITTER, ROOTS, STONES 1/2" AND LARGER, AND ANY DEBRIS AND FOREIGN MATERIAL.
9. BARK MULCH: ALL PLANT MATERIAL SHALL BE MULCHED AFTER PLANTING. PROVIDE PARTIALLY DECOMPOSED MINIMUM SIX MONTH AGED FINELY SHREDDED PINE BARK MULCH OF A DARK BROWN COLOR AND FREE OF WEEDS, EXCESSIVE FINE PARTICLES, STRINGY MATERIAL, AND CHUNKS OF WOOD THICKER THAN ¼". BARK MULCH SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
10. ALL PLANTS SHALL BE PLUM VERTICALLY AFTER SETTLING.
11. UNLESS OTHERWISE INDICATED, DICTATED BY CONDITIONS AT THE SITE, AND DIRECTED BY THE LANDSCAPE ARCHITECT, BACKFILL SHALL CONSIST OF UNAMENDED SOIL EXCAVATED FROM THE PLANTING PIT. BACKFILL IN 6" LIFTS AND CONSOLIDATE EACH LAYER WITH WATER TO ELIMINATE VOIDS AND ARE POCKETS BEFORE PLACING SUBSEQUENT LAYERS. CONTINUE UNTIL BACKFILL HAS REACHED FINISHED GRADE. WATER THOROUGHLY WHEN EXCAVATION IS BACK FILLED AND CONTINUE WATERING UNTIL SATURATED.
12. IF EXISTING UNAMENDED TOP SOIL IS POOR AND NOT ACCEPTED, PROVIDE PLANTING SOIL MIXTURE CONSISTING OF 7 PARTS LOAM AND 1 PART COMPOST. MIX QUANTITY OF FERTILIZER AND SOIL AMENDMENTS AS RECOMMENDED BY SOIL ANALYSIS AND APPROVED BY THE LANDSCAPE ARCHITECT.
13. WATERING: FLOOD ALL PLANTS WITH WATER TWICE WITHIN THE FIRST 24 HOURS AFTER PLANTING.
14. LOAMING: LOOSEN SUBGRADE AND EXISTING LOAM AREAS BY DISCING OR ROTOTILLING TO MINIMUM DEPTH OF 4". REMOVE STONES GREATER THAN 1" AND ALL RUBBISH AND DEBRIS. PLACE LOAM IN TWO EQUAL LIFTS MIXING FIRST APPLICATION INTO LOOSENED SUBGRADE THEN PLACE SECOND LIFT TO BRING LOAM AFTER SETTLING AND COMPACTING TO THE LINES AND GRADES SHOWN ON THE PLANS. DO NOT HANDLE LOAM OR SUBSOIL IF IT IS WET OR FROZEN.
15. AFTER LOAM HAS BEEN SPREAD, IT SHALL BE CAREFULLY PREPARED BY SCARIFYING AND HAND RAKING. ALL LARGE STIFF CLODS, LUMPS, BRUSH, ROOTS, STUMPS, LITTER AND FOREIGN MATTER, AND STONES OVER 1/2" IN DIAMETER SHALL BE REMOVED FROM THE LOAM. LOAM SHALL ALSO BE FREE OF SMALLER STONES IN EXCESSIVE QUANTITIES AS DETERMINED BY THE LANDSCAPE ARCHITECT.
16. FINE GRADING: SET SUFFICIENT GRADE STAKES FOR CHECKING THE FINISHED GRADES. STAKES MUST BE SET AT THE BOTTOM AND TOP OF SLOPES. GRADES SHALL BE ESTABLISHED THAT ARE ACCURATE TO +/- 1/10TH OF A FOOT. CONNECT CONTOURS AND SPOT ELEVATIONS WITH AN EVEN SLOPE. ALL GRADING WILL INSURE DRAINAGE AWAY FROM STRUCTURES.
17. FINE GRADE LAWN AREAS TO SMOOTH, FREE DRAINING, EVEN SURFACES WITH FINE TEXTURE. ROLL, RAKE AND DRAW LAWN AREAS TO FLATTEN RIDGES AND FILL DEPRESSIONS, EXCEPT AT SELECT AREAS SHOW ON THE DRAWINGS. CONTROL MOISTURE CONTENT TO MAINTAIN OPTIMUM CONDITIONS, BUT DO NOT CREATE A MUDDY CONDITION. APPLY TACKIFIED MULCH TO ALL SEEDED AREAS.
18. ROLLING - TYPICAL: ROLL THE ENTIRE AREA WITH A HAND ROLLER WEIGHTING NOT MORE THAN 100 POUNDS. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT OF ROLLING SHALL BE FILLED WITH ADDITIONAL LOAM AND THE SURFACE SHALL BE RE-GRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE OR TO THE SHAPES AND CONFIGURATIONS AS SHOWN ON THE DETAILS.
19. THE SILT FENCE SHALL BE LIMIT OF SEEDING UNLESS OTHERWISE INDICATED ON THE DRAWINGS. ALL AREAS DISTURBED OUTSIDE THE LIMIT OF WORK SHALL BE SEEDED AS INDICATED ON THE DRAWINGS.
20. IN CASE OF DISCREPANCIES BETWEEN THE QUANTITIES SHOWN ON THE PLANT SCHEDULE AND THE QUANTITIES SHOWN ON THE PLANTING PLAN, THE QUANTITIES ON THE PLANTING PLAN SHALL BE PROVIDED BY THE CONTRACTOR.



Legend

- DECIDUOUS TREE PLANTING, SEE 1/L2.0
- DECIDUOUS MULTI-STEMMED TREE PLANTING, SEE 5/L2.0
- EVERGREEN TREE PLANTING, SEE 2/L2.0
- SHRUB PLANTING, SEE 3/L2.0
- LAWN — LOAM AND LAWN SEEDING, SEE 4/L2.0
- WET SITE RESTORATION SEEDING, SEE 8/L2.0
- DRY SITE RESTORATION SEEDING, SEE 7/L2.0
- PERENNIAL, GROUNDCOVER, ORNAMENTAL GRASS PLANTING, SEE 6/L2.0

GENERAL NOTES:

1. SEE CIVIL DRAWINGS FOR INFORMATION NOT DEPICTED ON THE LANDSCAPE DRAWINGS.
2. PLANT LOCATIONS SHOWN ON THE PLANTING PLAN ARE SUBJECT TO FIELD MODIFICATION TO ACCOMMODATE EXISTING CONDITIONS. FIELD ADJUSTMENTS SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT.
3. ANY INVASIVE PLANT SPECIES ENCOUNTERED SHALL BE REMOVED FOLLOWING NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT BEST MANAGEMENT PRACTICES.
4. ALL DISTURBED AREAS NOT IDENTIFIED FOR A SPECIFIC LANDSCAPE TREATMENT, SHALL BE LOAMED AND SEEDED WITH LAWN SEED MIX, SEE 4/L2.0.
5. SEE SHEET L2.0 FOR LANDSCAPE DETAILS.
6. CONTACT DIGSAFE PRIOR TO BEGINNING WORK.

Plant Schedule

DECIDUOUS SHADE TREES

QTY.	ABRV.	SCIENTIFIC NAME	COMMON NAME	SIZE	APPROX. SIZE AT MATURITY	REMARKS
1	PAE	PLATANUS X ACERFILIA 'EXCLAMATION'	EXCLAMATION PLANETREE	3"-3 1/2" CAL	40' HT x 30' SPD	B&B
1						

DECIDUOUS UNDERSTORY TREES

2	AGA	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	2 1/2"-3" CAL	20' HT x 20' SPD	B&B, SINGLE
2	CCP	CARPINUS CAROLINIANA 'PALISADE'	PALISADE AMERICAN HORNBEAM	10'-12' HT	20' HT x 15' SPD	B&B, MULTI-STEMMED
4						

EVERGREEN TREES

2	TPS	THUJA PLICATA 'SPRING GROVE'	SPRING GROVE ARBORVITAE	7'-8' HT	20' HT x 15' SPD	B&B
2						

SHRUBS

7	AAM	ARONIA MELANOCARPA 'AUTUMN MAGIC'	AUTUMN MAGIC CHOKEBERRY	#5	6' HT x 4' SPD	CONTAINER
5	CSK	CORNUS SERICEA 'KELSEYI'	KELSEYI RED OSIER DOGWOOD	#3	3' HT x 5' SPD	CONTAINER
5	FSO	FORSYTHIA 'SHOW OFF'	SHOW OFF FORSYTHIA	#3	2' HT x 5' SPD	CONTAINER
2	RAG	RHUS AROMATICA 'GROW LOW'	GROW LOW SUMAC	#3	2' HT x 6' SPD	CONTAINER
3	RMR	RHODODENDRON MAXIMUM 'ROSEUM'	ROSEBAY RHODODENDRON	#5	6' HT x 6' SPD	CONTAINER
5	ROM	RHODODENDRON 'OLGA MEZITT'	OLGA MEZITTRHODODENDRON	#5	4' HT x 4' SPD	CONTAINER
5	TMG	TAXUS MEDIA 'GREENWAVE'	GREENWAVE YEW	#3	3' HT x 5' SPD	CONTAINER
32						

PERENNIALS, GROUNDCOVER, ORNAMENTAL GRASS

7	BA	BAPTISIA AUSTRALIS	FALSE INDIGO	#2	3' HT x 3' SPD	CONTAINER
33	PT	PACHYSANDRA TERMINALIS	SPURGE	18 CELL FLAT	PLANT @ 10" OC	CONTAINER
40						

DRAWING SUBMITTED FOR CITY REVIEW

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Landscape Architecture • Planning
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LOCUST STREET RESIDENTIAL DEVELOPMENT
Dover, NH 03820

17-19 Summer Street Properties, LLC
71 Lafayette Road
Hampton Falls, NH 03844

SHEET TITLE

LANDSCAPE PLAN

REVISION LOG

REV#	DATE	DESCRIPTION
1	4/4/29	REVISED TO REFLECT UPDATED CIVIL LAYOUT

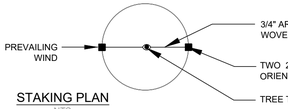
PROJECT NO.	23050.0
DESIGN BY	J. HYLAND
DRAWN BY	S. WRIGHT
CHECKED BY	D.JENSEN / J. HYLAND
DATE	JANUARY 4, 2024
SCALE	0' 10' 20' — SCALE: 1" = 10-0"

SEAL

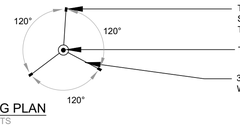
NEW HAMPSHIRE LICENSED LANDSCAPE ARCHITECT — JEFFREY R. HYLAND — 026 — STATE OF NEW HAMPSHIRE

L1.0

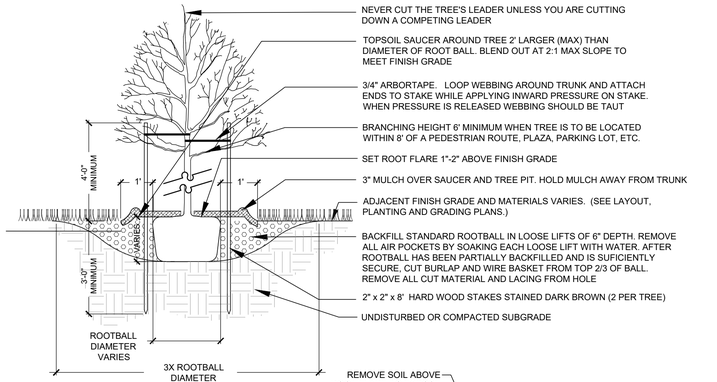
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STAKING PLAN
NTS



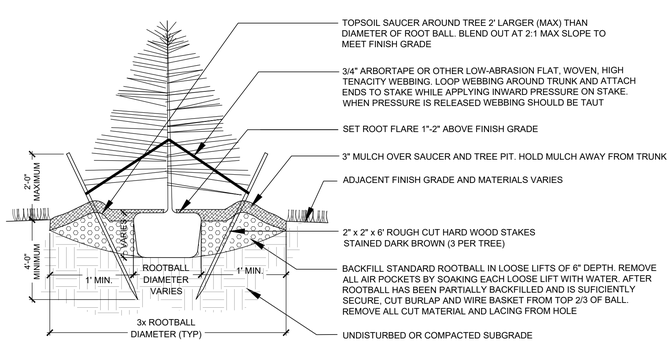
GUYING PLAN
NTS



NOTES:
1. ORIENT TREE IN THE SAME RELATIONSHIP TO NORTH IN WHICH IT WAS GROWN IN THE NURSERY TO MINIMIZE THE POTENTIAL FOR BARK SCALD.
2. TREES SHALL BE DELIVERED WITH SOME FORM OF NORTH DEMARCATION.
3. ALL TREE STAKES AND STAKING MATERIALS SHALL BE REMOVED ONE YEAR AFTER INSTALLATION.

Deciduous Tree Planting

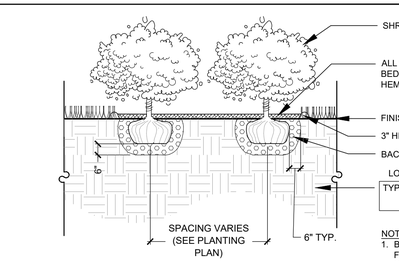
Not to Scale ©IRONWOOD 2024 1 L2.0



NOTES:
1. ORIENT TREE IN THE SAME RELATIONSHIP TO NORTH IN WHICH IT WAS GROWN IN THE NURSERY TO MINIMIZE THE POTENTIAL FOR BARK SCALD.
2. TREES SHALL BE DELIVERED WITH SOME FORM OF NORTH DEMARCATION.
3. ALL TREE STAKES AND STAKING MATERIALS SHALL BE REMOVED ONE YEAR AFTER INSTALLATION.

Evergreen Tree Planting

Not to Scale ©IRONWOOD 2024 2 L2.0

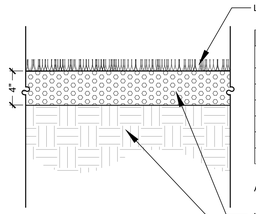


LOCATION	MATERIAL
TYPICAL PLANTING BED	UNDISTURBED OR COMPACTED SUBGRADE

NOTES:
1. B&B PLANTS: AFTER ROOTBALL HAS BEEN PARTIALLY BACK FILLED UNTIE ALL ROPES (LACING) AND REMOVE AT LEAST 2/3 OF JUTE AND ALL LACING.
2. CONTAINER PLANTS: PRIOR TO PLANTING, REMOVE PLANT FROM CONTAINER AND LOOSEN ENCIRCLING ROOTS TO PROMOTE OUTWARD GROWTH AWAY FROM THE PLANT.

Shrub Planting

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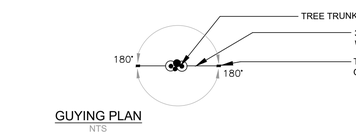
Seed Mix for Lawns	
Percent by Weight	**Common Name**
45%	Firebird 2 or Rebel IV or Firecracker SL fescue
20%	Grand slam GLD or Confetti II perennial ryegrass
15%	Radar or Compass chewings fescue
10%	Sword or Gladiator hard fescue
5%	Side Oats Grama
5%	White Dutch clover

APPLY THIS SEED MIX AT THE RECOMMENDED RATE SPECIFIED BY THE SEED SUPPLIER.

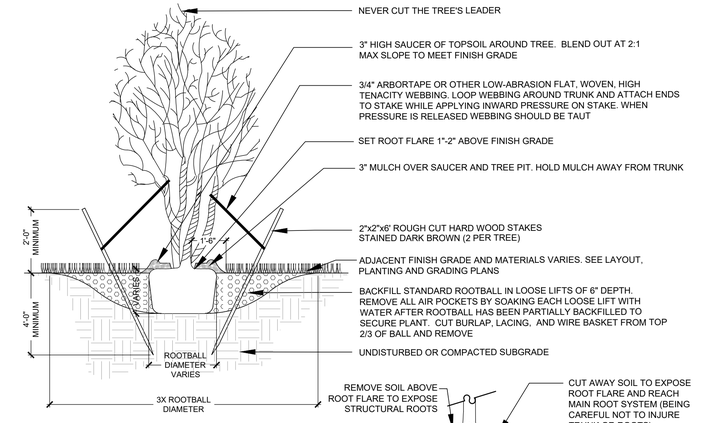
NOTES:
1. LOAM ALL DISTURBED AREAS.
2. PRIOR TO SEEDING THE LAWN SEED MIX PROPERLY PREPARE THE SEED BED.
3. INSTALL JUTE MATING ON SLOPES GREATER THAN 3:1.

Loam and Lawn Seeding

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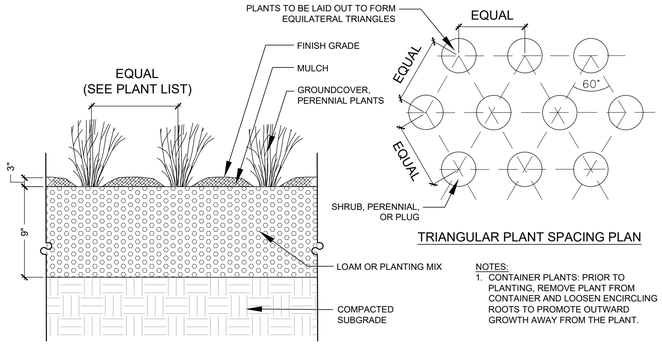
GUYING PLAN
NTS



NOTES:
1. ORIENT TREE IN THE SAME RELATIONSHIP TO NORTH IN WHICH IT WAS GROWN IN THE NURSERY TO MINIMIZE THE POTENTIAL FOR BARK SCALD.
2. TREES SHALL BE DELIVERED WITH SOME FORM OF NORTH DEMARCATION.
3. ALL TREE STAKES AND STAKING MATERIALS SHALL BE REMOVED ONE YEAR AFTER INSTALLATION.

Deciduous Multi-Stemmed Tree Planting

Not to Scale ©IRONWOOD 2024 5 L2.0

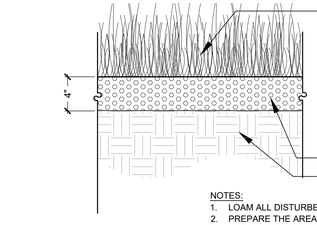


TRIANGULAR PLANT SPACING PLAN

NOTES:
1. CONTAINER PLANTS: PRIOR TO PLANTING, REMOVE PLANT FROM CONTAINER AND LOOSEN ENCIRCLING ROOTS TO PROMOTE OUTWARD GROWTH AWAY FROM THE PLANT.

Perennial, Groundcover, Ornamental Grass Planting

Not to Scale ©IRONWOOD 2024 6 L2.0



New England Erosion Control/Restoration Mix for Dry Sites

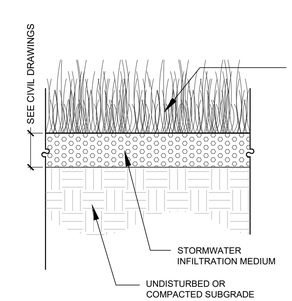
Botanical Name	Common Name
Elymus canadensis	Canada Wild Rye
Festuca rubra	Red Fescue
Lolium multiflorum	Annual Ryegrass
Lolium perenne	Perrenial Ryegrass
Schizachyrium scoparium	Little Bluestem
Panicum virgatum	Switch Grass
Sorghastrum nutans	Indian Grass

APPLY THIS SEED MIX AT THE RECOMMENDED RATE SPECIFIED BY THE SEED SUPPLIER.

NOTES:
1. LOAM ALL DISTURBED AREAS.
2. PREPARE THE AREAS TO BE SEEDED.
3. USE SPECIFIED SEED MIX (OR APPROVED EQUAL) FROM NEW ENGLAND WETLAND PLANTS, 820 WEST STREET, AMHERST, MA 01002, 413-548-8000. NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DRY SITES, FOLLOWING THE MANUFACTURER'S INSTRUCTIONS FOR SEEDING.
4. INSTALL JUTE MATING ON SLOPES GREATER THAN 3:1.

Loam and Dry Site Restoration Seeding

Not to Scale ©IRONWOOD 2024 7 L2.0



New England Erosion Control/Restoration Mix For Detention Basins and Moist Sites

Botanical Name	Common Name
Elymus riparius	Riverbank Wild Rye
Schizachyrium scoparium	Little Bluestem
Festuca rubra	Red Fescue
Andropogon gerardii	Big Bluestem
Panicum virgatum	Switch Grass
Vernonia noveboracensis	New York Ironweed
Agrostis perennans	Upland Bentgrass
Bidens frondosa	Beggar Ticks
Eupatorium maculatum (Eutrochium maculatum)	Spotted Joe Pye Weed
Eupatorium perfoliatum	Boneset
Aster novae-angliae (Symphyotrichum novae-anglia)	New England Aster
Scirpus cyperinus	Wool Grass
Juncus effusus	Soft Rush

APPLY THIS SEED MIX AT THE RECOMMENDED RATE SPECIFIED BY THE SEED SUPPLIER.

NOTES:
1. PREPARE THE AREAS TO BE SEEDED.
2. USE SPECIFIED SEED MIX (OR APPROVED EQUAL) FROM NEW ENGLAND WETLAND PLANTS, 820 WEST STREET, AMHERST, MA 01002, 413-548-8000. NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES, FOLLOWING THE MANUFACTURER'S INSTRUCTIONS FOR SEEDING.
3. INSTALL JUTE MATING ON SLOPES GREATER THAN 3:1.

Wet Site Restoration Seeding

Not to Scale ©IRONWOOD 2024 8 L2.0

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LOCUST STREET RESIDENTIAL DEVELOPMENT
Dover, NH 03820
17-19 Summer Street Properties, LLC
71 Lafayette Road
Hampton Falls, NH 03844

SHEET TITLE

LANDSCAPE DETAILS

REVISION LOG

REV#	DATE	DESCRIPTION
1	4/4/29	REVISED TO REFLECT UPDATED CIVIL LAYOUT

PROJECT NO.	23050.0
DESIGN BY	J. HYLAND
DRAWN BY	S. WRIGHT
CHECKED BY	D.JENSEN / J. HYLAND
DATE	JANUARY 4, 2024
SCALE	AS NOTED

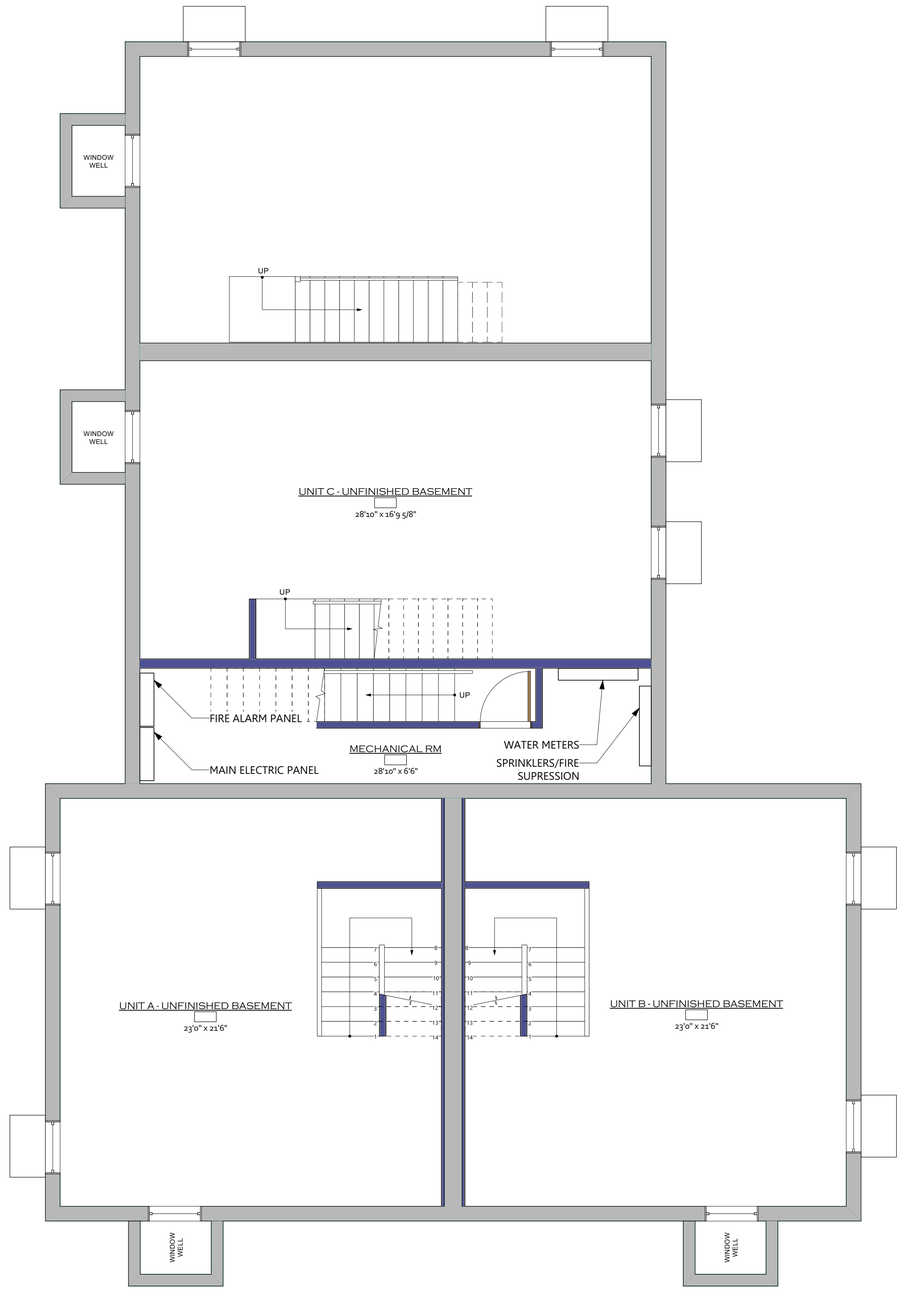
SEAL



L2.0

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1 PROPOSED BASEMENT PLAN
Scale: 1/4" = 1'-0"

SQUARE FOOTAGE	
UNIT A	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	499 SQ.FT.
UNIT A - PROPOSED FINISHED SPACE TOTAL	**1647 SQ.FT.**
UNIT A - UNFINISHED BASEMENT	567 SQ.FT.
UNIT B	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	479 SQ.FT.
UNIT B - PROPOSED FINISHED SPACE TOTAL	**1626 SQ.FT.**
UNIT B - UNFINISHED BASEMENT	567 SQ.FT.
UNIT C	
1st FLOOR GROSS SQ.FT.	536 SQ.FT.
2nd FLOOR GROSS SQ.FT.	742 SQ.FT.
ATTIC GROSS SQ.FT.	608 SQ.FT.
UNIT C - PROPOSED FINISHED SPACE TOTAL	**1886 SQ.FT.**
UNIT C - UNFINISHED BASEMENT	536 SQ.FT.
UNIT D	
1st FLOOR GROSS SQ.FT.	534 SQ.FT.
2nd FLOOR GROSS SQ.FT.	534 SQ.FT.
ATTIC GROSS SQ.FT.	456 SQ.FT.
UNIT D - PROPOSED FINISHED SPACE TOTAL	**1525 SQ.FT.**
UNIT D - UNFINISHED BASEMENT	536 SQ.FT.
COMMON CORRIDOR	205 SQ.FT.
MECAHNICAL ROOM (BASEMENT)	147 SQ.FT.

DISTINCTION
BY DESIGN
603-401-7294

REVISION & REISSUE NOTES

No.	Date	Notes
A	4/25/2024	REVISION BY TRC COMMENTS

4 UNITS RESIDENTIAL BUILDING

LOCUST ST., DOVER, NH 03820

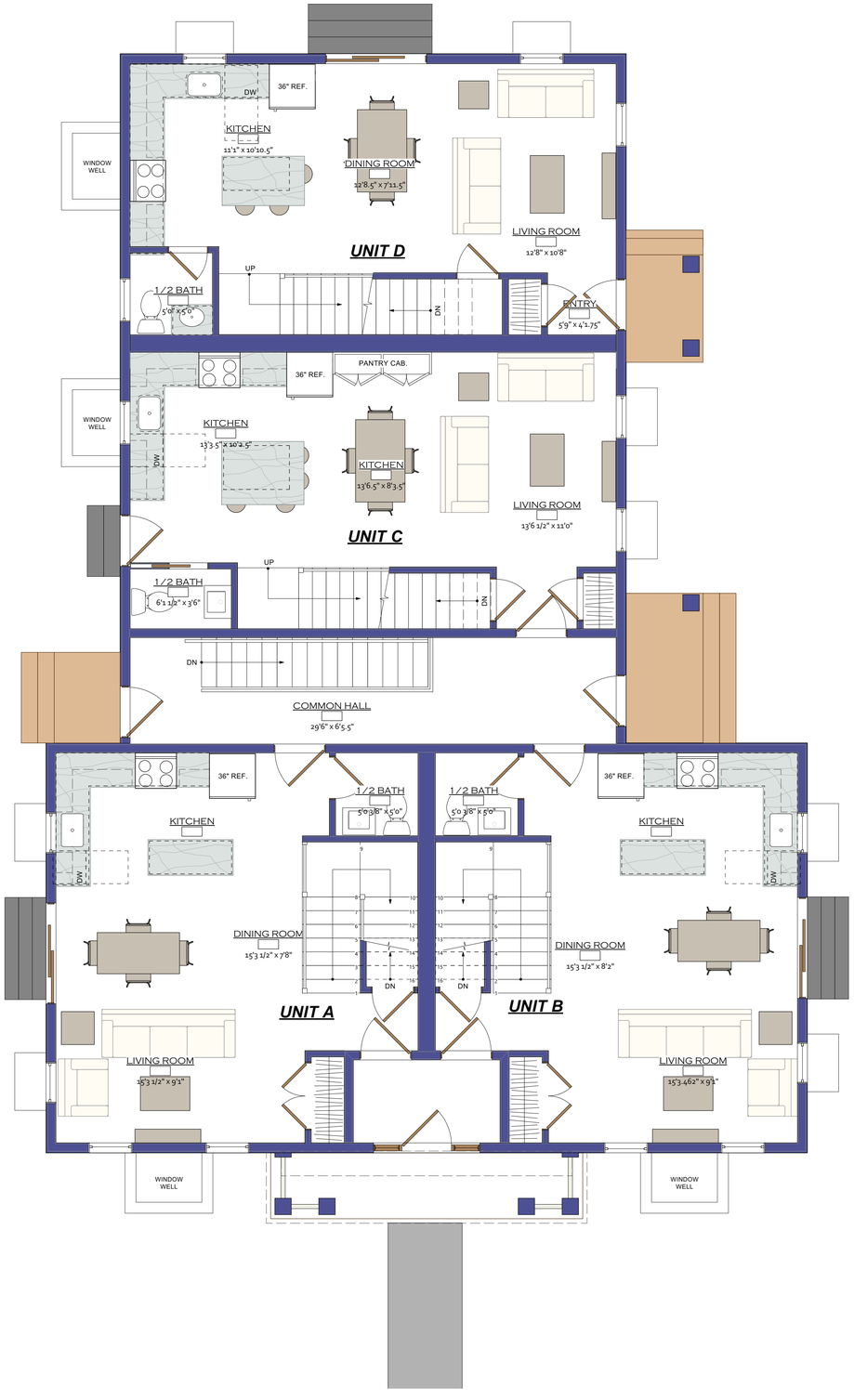
Project Manager	Project #	Date
ST	2022-02	05-13-2022

Scale: AS NOTED

BASEMENT PLAN

A1.0

CAD File Name
Summer street SD -3-REVISED.wx



1 PROPOSED FIRST FLOOR PLAN
Scale: 1/4" = 1'-0"

SQUARE FOOTAGE	
UNIT A	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	499 SQ.FT.
UNIT A - PROPOSED FINISHED SPACE TOTAL	**1647 SQ.FT.**
UNIT A - UNFINISHED BASEMENT	567 SQ.FT.
UNIT B	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	479 SQ.FT.
UNIT B - PROPOSED FINISHED SPACE TOTAL	**1626 SQ.FT.**
UNIT B - UNFINISHED BASEMENT	567 SQ.FT.
UNIT C	
1st FLOOR GROSS SQ.FT.	536 SQ.FT.
2nd FLOOR GROSS SQ.FT.	742 SQ.FT.
ATTIC GROSS SQ.FT.	608 SQ.FT.
UNIT C - PROPOSED FINISHED SPACE TOTAL	**1886 SQ.FT.**
UNIT C - UNFINISHED BASEMENT	536 SQ.FT.
UNIT D	
1st FLOOR GROSS SQ.FT.	534 SQ.FT.
2nd FLOOR GROSS SQ.FT.	534 SQ.FT.
ATTIC GROSS SQ.FT.	456 SQ.FT.
UNIT D - PROPOSED FINISHED SPACE TOTAL	**1525 SQ.FT.**
UNIT D - UNFINISHED BASEMENT	536 SQ.FT.
COMMON CORRIDOR	205 SQ.FT.
MECAHNICAL ROOM (BASEMENT)	147 SQ.FT.

DD BY
DISTINCTION
BY DESIGN
603-401-7294

REVISION & REISSUE NOTES

No.	Date	Notes
A	4/25/2024	REVISION BY TRC COMMENTS

4 UNITS RESIDENTIAL BUILDING

LOCUST ST., DOVER, NH 03820

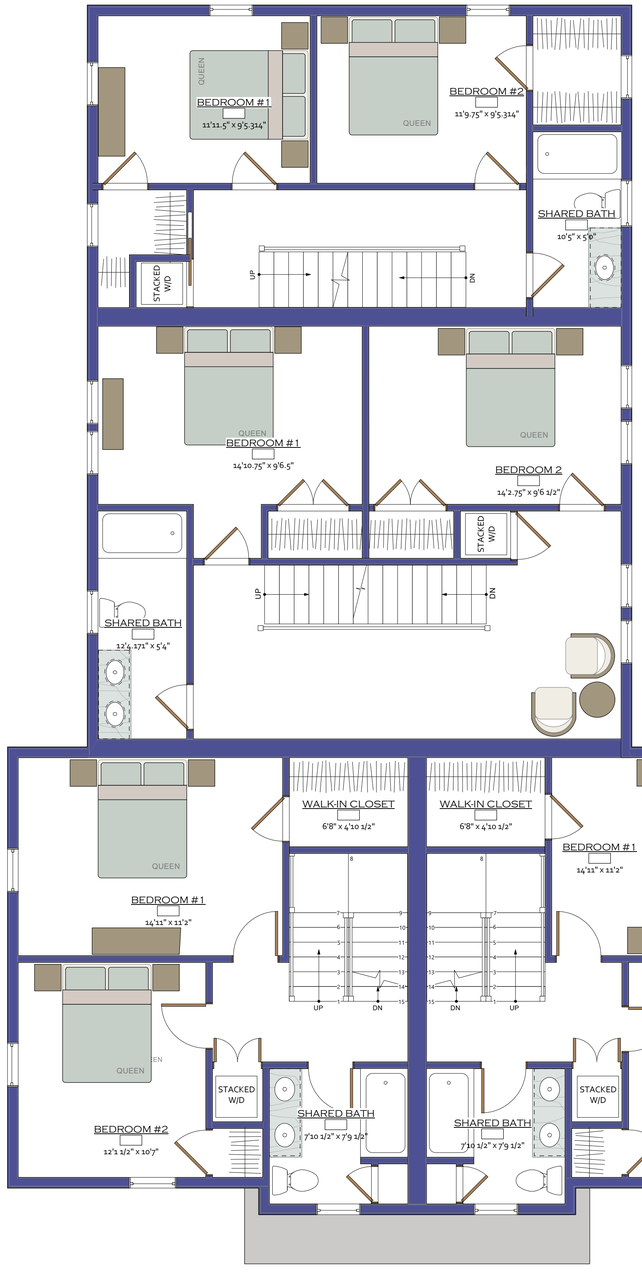
Project Manager	Project #	Date
ST	2022-02	05-13-2022

Scale: AS NOTED

FIRST FLOOR PLAN

A1.1

CAD File Name
Summer street SD -3-REVISED.wxx



1 PROPOSED SECOND FLOOR PLAN
Scale: 1/4" = 1'-0"

SQUARE FOOTAGE	
UNIT A	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	499 SQ.FT.
UNIT A - PROPOSED FINISHED SPACE TOTAL	**1647 SQ.FT.**
UNIT A - UNFINISHED BASEMENT	567 SQ.FT.
UNIT B	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	479 SQ.FT.
UNIT B - PROPOSED FINISHED SPACE TOTAL	**1626 SQ.FT.**
UNIT B - UNFINISHED BASEMENT	567 SQ.FT.
UNIT C	
1st FLOOR GROSS SQ.FT.	536 SQ.FT.
2nd FLOOR GROSS SQ.FT.	742 SQ.FT.
ATTIC GROSS SQ.FT.	608 SQ.FT.
UNIT C - PROPOSED FINISHED SPACE TOTAL	**1886 SQ.FT.**
UNIT C - UNFINISHED BASEMENT	536 SQ.FT.
UNIT D	
1st FLOOR GROSS SQ.FT.	534 SQ.FT.
2nd FLOOR GROSS SQ.FT.	534 SQ.FT.
ATTIC GROSS SQ.FT.	456 SQ.FT.
UNIT D - PROPOSED FINISHED SPACE TOTAL	**1525 SQ.FT.**
UNIT D - UNFINISHED BASEMENT	536 SQ.FT.
COMMON CORRIDOR	205 SQ.FT.
MECAHNICAL ROOM (BASEMENT)	147 SQ.FT.

DISTINCTION
BY DESIGN
603-401-7294

REVISION & REISSUE NOTES

No.	Date	Notes
A	4/25/2024	REVISION BY TRC COMMENTS

4 UNITS RESIDENTIAL BUILDING

LOCUST ST., DOVER, NH 03820

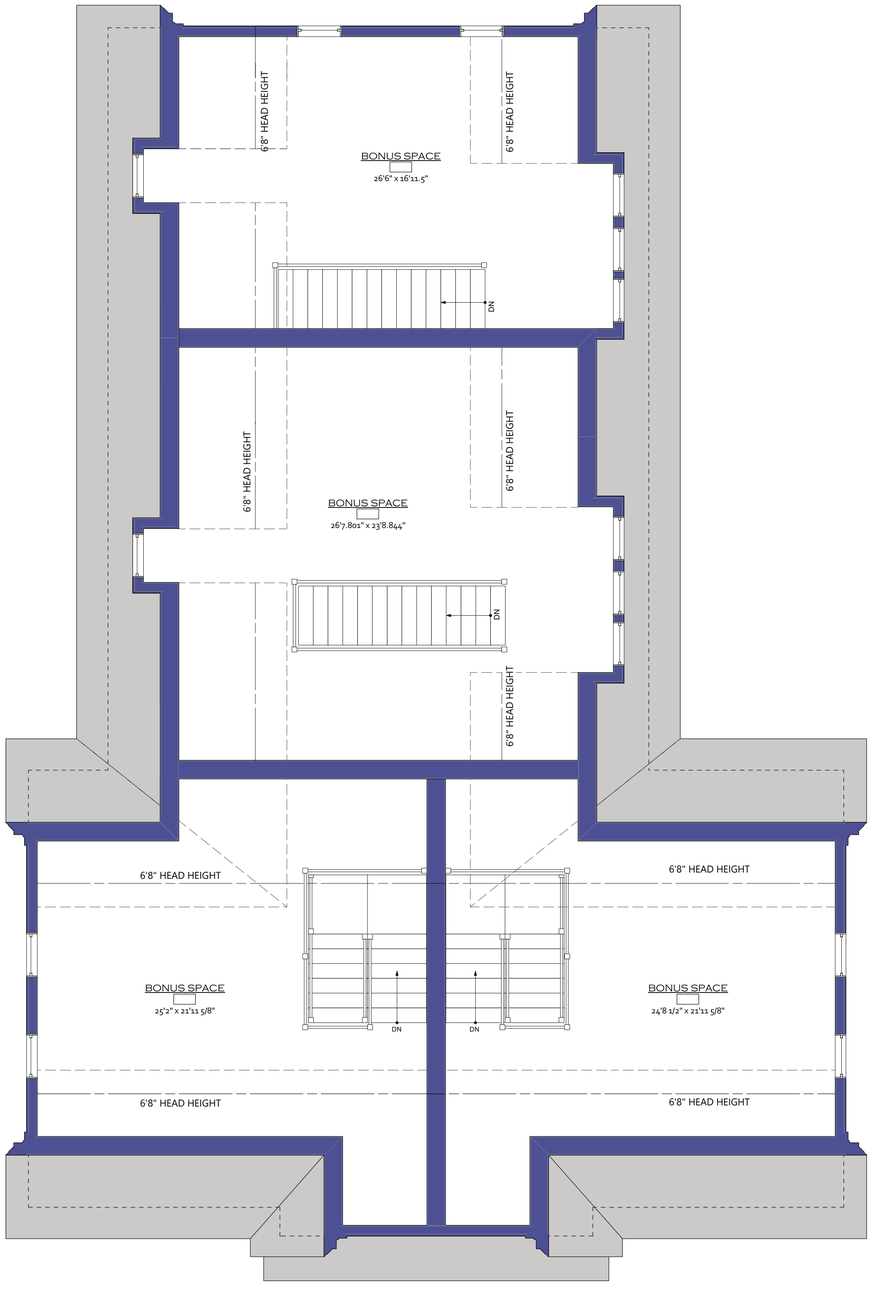
Project Manager	Project #	Date
ST	2022-02	05-13-2022

Scale: AS NOTED

SECOND FLOOR PLAN

A1.2

CAD File Name
Summer street SD -3-REVISED.wxx



1 PROPOSED ATTIC PLAN
Scale: 1/4" = 1'-0"

SQUARE FOOTAGE	
UNIT A	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	499 SQ.FT.
UNIT A - PROPOSED FINISHED SPACE TOTAL	**1647 SQ.FT.**
UNIT A - UNFINISHED BASEMENT	567 SQ.FT.
UNIT B	
1st FLOOR GROSS SQ.FT.	567 SQ.FT.
2nd FLOOR GROSS SQ.FT.	581 SQ.FT.
ATTIC GROSS SQ.FT.	479 SQ.FT.
UNIT B - PROPOSED FINISHED SPACE TOTAL	**1626 SQ.FT.**
UNIT B - UNFINISHED BASEMENT	567 SQ.FT.
UNIT C	
1st FLOOR GROSS SQ.FT.	536 SQ.FT.
2nd FLOOR GROSS SQ.FT.	742 SQ.FT.
ATTIC GROSS SQ.FT.	608 SQ.FT.
UNIT C - PROPOSED FINISHED SPACE TOTAL	**1886 SQ.FT.**
UNIT C - UNFINISHED BASEMENT	536 SQ.FT.
UNIT D	
1st FLOOR GROSS SQ.FT.	534 SQ.FT.
2nd FLOOR GROSS SQ.FT.	534 SQ.FT.
ATTIC GROSS SQ.FT.	456 SQ.FT.
UNIT D - PROPOSED FINISHED SPACE TOTAL	**1525 SQ.FT.**
UNIT D - UNFINISHED BASEMENT	536 SQ.FT.
COMMON CORRIDOR	205 SQ.FT.
MECAHNICAL ROOM (BASEMENT)	147 SQ.FT.

DISTINCTION
BY DESIGN
603-401-7294

REVISION & REISSUE NOTES

No.	Date	Notes
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4 UNITS RESIDENTIAL BUILDING

LOCUST ST., DOVER, NH 03820

Project Manager	Project #	Date
ST	2022-02	05-13-2022

Scale: AS NOTED

ATTIC PLAN

A1.3

CAD File Name
Summer street SD -3-REVISED.vwx



1 LOCUST STREET ELEVATION
Scale: 1/4" = 1'-0"



2 REAR ELEVATION
Scale: 1/4" = 1'-0"

HERITAGE DISTRICT
ARCHITECTURAL DESIGN ELEMENTS

1	CLAPBOARD SIDING
2	STEEP ROOF PITCH
3	DENTILS AT FRIEZE BOARD
4	TUSCAN COLUMNS
5	DORMERS
6	ENTABLATURE
7	GABLES
8	TRANSOM
9	PORTICO
10	DEEP EAVE OVERHANG
11	DOMINANT FRONT GABLE CANTELIVER ABOVE FLOOR BELOW
12	BALLUSTRADE

DISTINCTION
BY DESIGN
603-401-7294

REVISION & REISSUE NOTES

No.	Date	Notes
A	4/25/2024	REVISION BY TRC COMMENTS

4 UNITS RESIDENTIAL BUILDING

LOCUST ST., DOVER, NH 03820

Project Manager	Project #	Date
ST	2022-02	05-13-2022

Scale: AS NOTED

EXTERIOR ELEVATIONS

A2.0

CAD File Name
Summer street SD -3-REVISED.wxx



1 RIGHT ELEVATION
Scale: 1/4" = 1'-0"



2 LEFT ELEVATION
Scale: 1/4" = 1'-0"

HERITAGE DISTRICT
ARCHITECTURAL DESIGN ELEMENTS

1	CLAPBOARD SIDING
2	STEEP ROOF PITCH
3	DENTILS AT FRIEZE BOARD
4	TUSCAN COLUMNS
5	DORMERS
6	ENTABLATURE
7	GABLES
8	TRANSOM
9	PORTICO
10	DEEP EAVE OVERHANG
11	DOMINANT FRONT GABLE CANTELIVER ABOVE FLOOR BELOW
12	BALLUSTRADE

DISTINCTION
BY DESIGN
603-401-7294

REVISION & REISSUE NOTES

No.	Date	Notes
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4 UNITS RESIDENTIAL BUILDING

LOCUST ST., DOVER, NH 03820

Project Manager	Project #	Date
ST	2022-02	05-13-2022

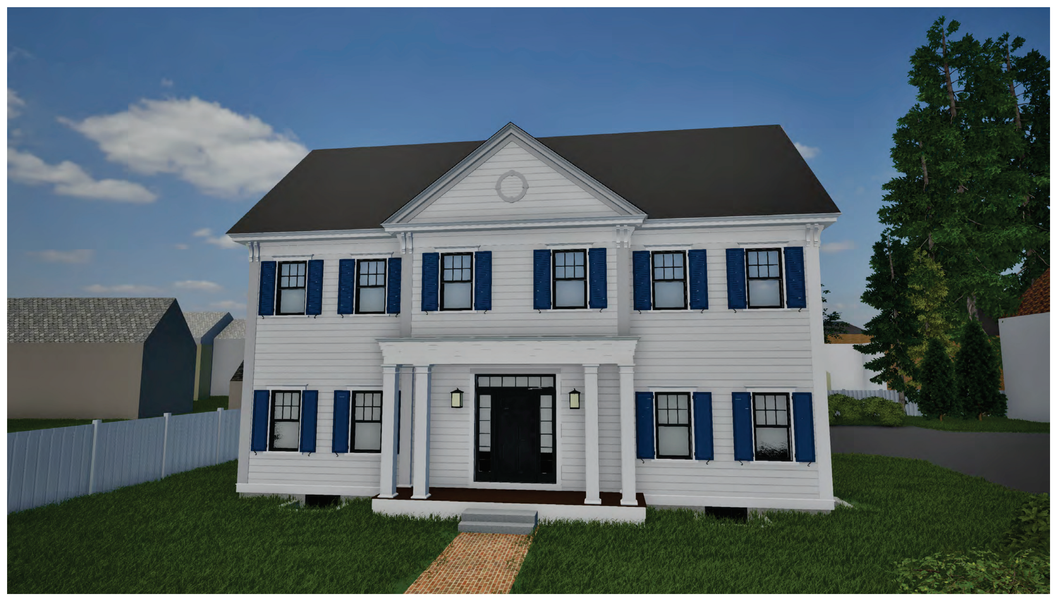
Scale: AS NOTED

EXTERIOR ELEVATIONS

A2.1

CAD File Name
Summer street SD -3-REVISED.vwx







*** THE RENDERINGS ARE MEANT TO DISPLAY THE DESIGN INTENT FOR THE PROJECT. REFER TO ARCHITECTURAL, CIVIL AND LANDSCAPE DRAWINGS FOR SPECIFIC INFORMATION.**

CAD File Name
Summer street SD -3-REVISED.vwx

DISTINCTION
BY DESIGN
603-401-7294

REVISION & REISSUE NOTES

No.	Date	Notes

4 UNITS RESIDENTIAL BUILDING

136 LOCUST ST., DOVER, NH 03820

Project Manager	Project #	Date
ST	2022-02	05/ 01 / 2024

Scale: AS NOTED

RENDERINGS

A2.2

July 14, 2024

Dear Ms Benton,

As residents of the Heritage District we wish to register our objection to the proposed development of two multi-family housing units. The proposed units are located at 135 Locust Street and at 114 Silver Street.

Our concerns include changing what has been touted as “gateways” to the city to logjams in and out of the city, drastic removal of yet more tree cover to provide more paved parking spaces and multi-story buildings out of scale and design in relation to surrounding homes.

There are other impactful housing projects in various stages in this neighborhood, including 20+ units behind Fisher Street and 150+ units at the former McIntosh College location. Current morning commutes during the school year are already nightmarish; none of this proposed development will ease that problem.

Developing every square inch of vacant space in Dover has a cost. While we recognize the need for housing, the density of the proposed units at 135 Locust Street and 114 Silver Street is excessive. We urge the Planning Board to not grant variances to allow these projects to proceed as proposed.

Respectfully,

Laura and Patrick Horan
104 Belknap Street
Dover, NH
03820

cc Planning Board

7/21/24

To: Donna Benton and the Planning Board

From: Laurie Smith, 36 Fisher St.

RE: Proposed Development at 135 Locust St.

I am requesting that the Planning Board deny the development of a 4 unit building and 12 parking spaces at 135 Locust St.

This property is in the Heritage District, which honors some of the oldest and most historically valuable homes in Dover. The six homes most closely abutting this lot were built between 1723 and 1888 and each is uniquely impressive (see page 2 for details and dates). No matter how carefully designed to "fit into the aesthetic of the neighborhood", I strongly disagree with this request. Squeezing a brand new 4 unit building and 12 parking spaces that cover a significant portion of this lot up to 15' from abutting historic homes, with removal of all the mature trees on this lot will NOT be a "true win/win whereby the neighborhood, the City and the Applicant all benefit" as stated on page 4 of Exhibit B of the Variance Application, nor will it "enhance the value of the surrounding properties" as stated on page 5.

The only benefit is to the developer, to the detriment of the abutters.

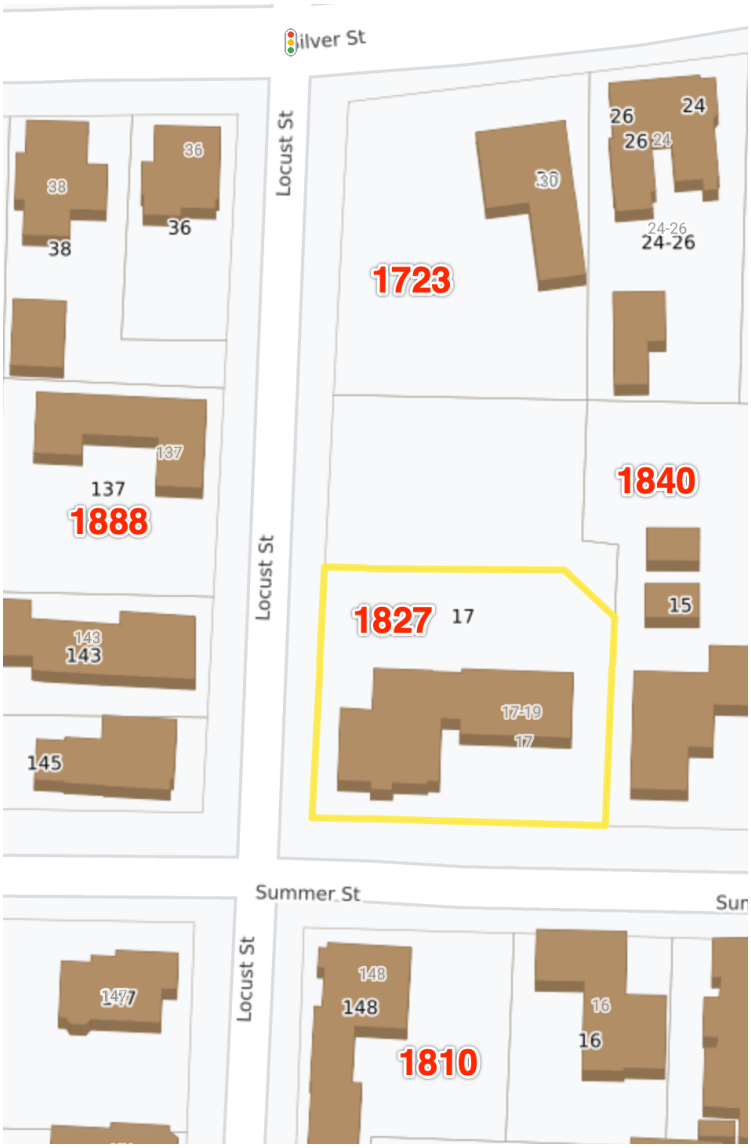
We just celebrated the Dover 400 and our city's rich history, yet we are steadily undermining the character that has made Dover such a special place. I understand that growth is necessary, but thoughtfully planned growth is crucial. Dover has thousands of new units either in construction or in planning, and the Planning Board should carefully consider locations and density of approved growth and the resulting impact on existing neighborhoods and residents.

Sincerely,

Laurie and Greg Smith

Laurie.smith36@comcast.net

CONSTRUCTION DATES OF ABUTTING PROPERTIES NOTED IN RED:



To: Planning Board
From: Anthony McManus, 3 Renaud Ave. Dover, NH

I would like to offer a few comments regarding the proposed development on Locust St. south of 19 Summer St.

The first relates to the question of variances. The ordinance requires a 5-foot setback for any paved area. As I understand it, a variance has been granted for the proposed new building on Locust to pave right to the designated boundary line, but no similar variance was requested for the adjacent Summer St. lot, even though the proposal shows the entire setback area on that property to be paved (in effect, eliminating the boundary between the two).

I understand the Planning Department feels the second requirement is not required since the area behind 19 Summer is already used for parking. The issue, however, is not parking, but paving, and it is my understanding of the law that any expansion of an existing non-conforming use requires a variance. Beyond that, and this should apply to both properties, a self-created "hardship" does not justify the granting of a variance.

The second issue involves the proper consideration and application of the provisions of the Heritage District ordinance. Although a 4-unit building may be approved, the basic standard is for two units, and I'm not aware that the present application has offered any compelling argument for doubling the size of the new building. I believe the intent of the ordinance is to maintain, whenever possible, the integrity of the existing structures and the surrounding neighborhood. In this case, with an already existing 4-unit next door, and given the relatively small size of the lot under consideration, an additional 4-units within that limited area will be very much out of character with the existing neighborhood---for the most part single or double family dwellings.

I am concerned also because approval of this application will undoubtedly be used by future developers to demand approvals for more 4-unit buildings, regardless of the location or size of the lot. A denial of the request in this case...still leaving the applicant with the ability to construct an attractive duplex...would send an important message that Dover's designation of this area to be a Heritage District has some meaning.

Thank you for your consideration.

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #TRAN-2024-0014

Application Type:	Transfer of Development Rights
Applicant(s):	Fergus & Jennifer Cullen
Owner(s):	Fergus & Jennifer Cullen
Location:	566 Sixth St. (Assessor's Map B, Lot 4-F)
Meeting Date:	October 22, 2024

INTENT: To request the purchase of three (3) units through the Transfer of Development Rights (TDR) for a total of five (5) units, where two (2) units are allowed by right.

AGENDA ITEM #: 4-E

APPLICANT/OWNER: Fergus & Jennifer Cullen

LOCATION: 512 Sixth Street (Assessor's Map B, Lot 2)

LOT/UNITS PROPOSED: Three (3) lots and five (5) units

ACREAGE: 1.37± acres before subdivision, proposed acreage following subdivision:
Assessor's Map B, Lot 4-F = 19,942± s.f. (0.45± ac.)
Assessor's Map B, Lot 4-F-1 = 19,480± s.f. (0.45± ac.)
Assessor's Map B, Lot 4-F-2 = 19,580± s.f. (0.45± ac.)

ZONING DISTRICT: R-40

EXISTING/PROPOSED USE: Residential

SURROUNDING USE: Residential

ZBA ACTION: N/A

PERMITS: N/A

WAIVERS REQUESTED: N/A

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

NOTICES SENT: Abutter notices were sent by certified mail.

TRC: 6/20/24 & 10/17/24

ATTACHMENTS: Application materials including TDR Subdivision Plan.

Summary of Request and Background
The applicant is proposing a project for five residential units by purchasing three size-restricted units through TDR. The proposal includes maintaining the existing single-family dwelling and the construction of two, two-family dwellings.

The existing lot, Assessor's Map B, Lot 4-F, contains one single-family dwelling. Today, the Zoning Ordinance would allow for the existing single-family dwelling to be converted into a two-family dwelling. Therefore, it was determined by staff that two units would be allowed by right.

The applicant has described in their narrative the intent for creating attainable housing through size-restriction of the two-family dwellings to under 1,000 square feet. (However, staff would indicate the current design would be under the 1,400 s.f. threshold or would need to be revised to be under 1,000 s.f. per unit). Unlike other zoning districts, the R-40 Zoning Table of use does not have a footnote regarding the use of a two-family dwelling for the TDR calculation.

A Minor Subdivision is being proposed as part of this project (SUBM-2024-0005) to subdivide the existing lot into three lots. Since the applicant is utilizing the TDR ordinance, relief for lot size, frontage, setbacks, density and intensity may be provided.

The applicant's original TDR request was for more units and was treated as a site plan. The applicant took feedback from the TRC and revised the request to be a minor subdivision utilizing TDR by requesting to purchase 3 size-restricted units, therefore many of the previous TRC comments became non-applicable to a minor subdivision with 4 new units proposed.

The Technical Review Committee most recently reviewed the application at their October 17, 2024 meeting. *(draft minutes attached)*

Consistency with Land Use Regulations - TDR
§170-27.2 provides for additional density to be purchased through Transfer of Development Rights. This application meets the ordinance.

Staff understands the need for diverse housing in the City of Dover but also values the rural nature of the R-40 district and the intent of the TDR ordinance.

Staff has reviewed the proposal and supplied a TDR memo to the applicant and ownership team.

STAFF RECOMMENDATION - TDR:
The Planning Department recommends the Planning Board accept the application, open the public hearing, make findings, and vote to find the criteria of the TDR ordinance has been met with the following subsequent conditions:

Subsequent Conditions to be Met Prior to Granting TDR:
1. Approval of SUBM-2024-0005;

Over please →

2. Payment of TDR fees.
3. Add note to plan: "This subdivision 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 3 size restricted units for a total of 5 units between the three proposed lots. The single family may be converted to a duplex without further review and approval by the Planning Board."
4. Add note indicating which units will be size restricted and which size restriction will be used. (1,400 s.f. per the current design or amending floor plans to meet 1,000 s.f.)
5. Provide draft deed restriction to staff regarding size restricted units to eventually be recorded at SCRD.

TRAN-2024-0014 566 Sixth Street



Property Information

Location	566 SIXTH ST
Owner	CULLEN FERGUS
Land Use	
Zoning Code	R-40
Property Id	B0004-F00000

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

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

Geometry updated 10/30/2023
Data updated Daily

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

To: Steve Haight, PE Applicant
From: Donna Benton, AICP
Cc: Fergus and Jennifer Cullen
Date: October 17, 2024
Re: TDR 566 Sixth St.

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

On behalf of your client, you submitted a subdivision and TDR plan and narrative for a project to subdivide one lot into three lots and purchase three units through TDR, resulting in a total of five residential units across the three lots.

The project is located at 566 Sixth Street. The existing lot, Assessor's Map B, Lot 4-F, contains one single-family dwelling. Today, the Zoning Ordinance would allow for the existing single-family dwelling to be converted into a two-family dwelling. The R-40 Zoning Table of Use does not have a footnote regarding the use of two-family dwellings for the TDR calculation that can be found on the Table of Use for other Zoning Districts.

Staff performed this review based upon the information below, and is now providing the required staff report (Chapter 170-27.2 E.(4)a).

Project Information

Project:	566 Sixth St. TDR and Minor Subdivision project
Where:	566 Sixth St.
What:	Five units. Three of which are requested to be purchased through TDR and are proposed to be size restricted to under 1000 square feet. The density calculation per Chapter 170-27.2.G(3)(a) was used to determine base calculation of one unit. As legal non-conforming and existing single-family dwellings are permitted to be converted to a two-family dwelling, staff felt the applicant would be allowed two units by right.
Acres:	1.37± acres prior to subdivision, proposed acreage following subdivision: Assessor's Map B, Lot 4-F = 19,942± s.f. (0.45± ac.) Assessor's Map B, Lot 4-F-1 = 19,480± s.f. (0.45± ac.) Assessor's Map B, Lot 4-F-2 = 19,580± s.f. (0.45± ac.)
Zone:	R-40
Public Water:	Would be extended ~50-75 ft.
Public Sewer:	Would be extended ~50-75 ft.
Units:	Five total units are proposed, staff considers two units to be the base density, therefore the applicant is looking to purchase three size-restricted TDR units. The current floorplan would need to be revised to meet the 1,000 s.f. per unit threshold or the 1,400 s.f. threshold fee will be applied.
CUP:	Not per the plan.

Staff Comment

When reviewing projects, 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, we note:

- Traffic
    - Sixth Street is a public arterial road connecting Dover and Barrington
    - A traffic study was provided for your previous proposal but not necessary for the current proposal
- Existing layout/topography
    - There is currently an existing residence onsite.

- Environmental
    - The property boundary is heavily wooded within the 30' no cut, no disturb buffer that would be applied through TDR.
    - The R-40 District is characterized by its rural nature, requiring a minimum lot size of 40,000 square feet, larger frontage requirements, and open space subdivisions for major subdivision. Since this is a minor subdivision in nature, (considering the number of new lots and "new" units), staff is satisfied with the application being considered complete and the open space subdivisions not being fully met.

Staff Recommendation

Currently, the TDR unit cost is $15,000 per unit, which is reduced if the units are restricted by size or HUD-rental rates with the intention of supporting the creation of more attainable housing units. The application is proposing three TDR units that are size-restricted to below 1000 square feet, reducing the TDR fee to $7,500 per unit. However, based on the floorplans provided, the floorplans will need to be amended to meet the ordinance's definition for the threshold of 1,000s.f. or the 1,400s.f. threshold for TDR fee would need to be applied.

Staff understands the need for additional housing units. But also understands the importance of the rural nature of the R-40 district as laid out in the Vision Chapter of the Master Plan:

> "*Dover maintains distinct areas that have defining land uses and characteristics, such as an urban, historic downtown center, residential neighborhoods, business districts, and rural residential, agricultural, and open lands.*"

Staff appreciates the reduction of units in this proposal as compared with previous proposals for the project site. Staff reminds the applicant of the 30' no cut, no disturb buffer that is applied with TDR, providing a buffer between the project and abutting properties.

As this project is proposing four "new" units and two "new" lots, this project does not fall within the thresholds for requiring TRC review, however, TRC reviewed the application on Oct. 17, 2024, providing comments and recommended conditions of approval for Planning Board.

PLAN SNAPSHOT REPORT TRAN-2024-0014
FOR CITY OF DOVER, N.H.

Plan Type:	Transfer	**Project:**		**App Date:**	10/01/2024
Work Class:	Transfer of Development Rights	**District:**	None	**Exp Date:**	12/05/2024
Status:	Fees Paid	**Square Feet:**	0.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**		**Approval Expire Date:**	

Description: To allow 5 units where 2 units are allowed by rights.

Parcel:	B0004-F00000 Main	**Address:**	566 Sixth St Dover, NH Main	**Zone:**	R-40(Residential - Rural)

Applicant
McEneaney Survey Associates
P.O. Box 1166
DOVER, NH 03821
Business: (603) 742-0911

Engineer
Stephen Haight
Business: (603) 749-0443

Owner
Fergus & Jennifer Cullen
Mobile: (603) 520-5450

Plan Custom Fields

Parcel Map/Lot	B / 4F	Parcel Zoning Overlay		Parcel Zoning	R-40
trandevdetail	To allow 5 units where 2 units are allowed by rights.	Deed Book	5152	Deed Page	7
Property Address	566 Sixth Street	Deed Date		Owner Name	Fergus & Jennifer Cullen
Existing Parcel Size (Ac)	1.35	Owner Address	152 Boxwood Lane Dover, NH 03820	Owner Phone	603-520-5450
Existing Parcel Size (sqft)	58806	Owner EMail	fergus@ferguscullen.com	Parcel Feedback	
Reference Plan ID Number:		Request Type	Purchase, Residential (reduced size)	trandevpermits	
Project Zone	Residential	New Change in Impervious/Paved Area (sq ft)	5415	Quantity of Non-Restricted Units	5
Relief Sought	Frontage, Lot Size, Unit increase				

Attachment File Name	Added On	Added By	Attachment Group	Notes
Signature_Kevin_McEneaney_10/1/2024.jpg	10/01/2024 12:03	McEneaney, Kevin		Uploaded via CSS
2024.10.17_PlanningTechnicalReviewCommittee.Agenda.pdf	10/02/2024 16:24	Blonigen, Rachel		TRC Agenda

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00009506	Planning Transfer of Dev Rights Application Fee	$200.00	$200.00
	Total for Invoice INV-00009506	**$200.00**	**$200.00**
INV-00009525	Planning Impervious Paved Area Fee	$379.05	$379.05
	Total for Invoice INV-00009525	**$379.05**	**$379.05**
NOT INVOICED	Transfer of Dev Rights Fee - Non-Restricted	$75,000.00	$0.00
	Total for Invoice NOT INVOICED	**$75,000.00**	**$0.00**
	Grand Total for Plan	**$75,579.05**	**$579.05**

Meeting Type	Location	Scheduled Date	Subject
Technical Review Committee Meeting v.1	City Hall, Second Floor Conference Room	10/17/2024	Technical Review Committee Meeting

Submittal Name	Status	Received Date	Due Date	Complete Date	Resubmit	Completed
Land Use Plan Technical Review v.1	In Review	10/02/2024	10/30/2024		No	No

PLAN SNAPSHOT REPORT (TRAN-2024-0014)

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Business Development	Business Development	Burdin, James	In Review	10/02/2024	10/30/2024	

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
City Engineer	Community Services - Engineering	Mavrogeorge, Kenneth	In Review	10/02/2024	10/30/2024	

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Planning	Planning	Bassegio, Erin	In Review	10/02/2024	10/30/2024	

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Zoning Administrator	Planning	Crouser, Paul	In Review	10/02/2024	10/30/2024	

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
IS Building Official	Planning / Inspection Services	Maxfield, Jim	In Review	10/02/2024	10/30/2024	

Item Review Name	Department	Assigned User	Status	Assigned Date	Due Date	Completed Date
Traffic Bureau	Police	Speidel, Marn	In Review	10/02/2024	10/30/2024	

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		10/02/2024 15:20	
Confirm application complete v.1	Generic Action		10/02/2024 15:20
Technical Review Committee Meeting Agenda v.1	Task	10/02/2024 15:20	10/02/2024 16:25
Land Use Plan Technical Review v.1	Receive Submittal	10/02/2024 0:00	
Technical Review Committee Meeting v.1	Hold Meeting	10/02/2024 16:25	
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
TRANSFER OF DEVELOPMENT RIGHTS APPLICATION

[Revision Date: October 1, 2020]

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

APPLICANT AND OWNER INFORMATION

Name of Applicant: Fergus & Jennifer Cullen Telephone # 603-520-5450

Address of Applicant: 152 Boxwood Lane Dover, NH 03820

E-Mail Address: fergus@ferguscullen.com

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

Address of Property Owner: same

PROPERTY INFORMATION

Assessor's Map # B Lot(s) # 4F

Address of Property: 566 Sixth Street

Zoning District(s) R-40 Overlay District(s) none

Existing Use of Property: Residential - Single Family

New impervious area (in s.f.): see Subdivision Application

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 3 units

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

To allow 5 units where 2 units are allowed. There are no impacts created by this project.

List Any Associated State or Federal Permits That Have Been or Will Be Applied For and Indicate Their Status: N/A

Name of Professional That Prepared TDR Plans: Kevin McEneaney - McEneaney Survey Associates

Address P.O. Box 1166 Dover, NH 03821 Telephone #: 603-742-0911

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: _____ Date: 9/26/24

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: 9/26/24

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
B	4F	Fergus & Jennifer Cullen	152 Boxwood Lane 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

City of Dover, New Hampshire
TDR REVIEW SUBMISSION CHECKLIST

[Revision Date: January 5, 2021]

This Transfer of Development Rights Review Submission Checklist is intended to assist the applicant in the planning process of preparing a TDR 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.

If staff indicates the scope of the project requires Technical Review Committee Review, 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 Subdivision/Site plan review requirements. Please refer to the Subdivision/Site Plan Review Regulations for full details.

APPLICANT: Fergus & Jennifer Cullen File Number: _____

PROJECT TITLE: TDR Subdivision

PROPERTY LOCATION: 566 Sixth Street Tax Map: B Lot: 4F

	Where/How Provided	Reviewed
1. Completed and signed Application form	X	
2. Plan Review Fees are provided	X	
3. Electronic copy of the engineered/surveyed plan layout	X	
4. Electronic copy of supplementary materials and application	X	
5. Folded copies of site plan w/scale of not less than 1"=50' or 1"=100' for larger site plans, for TRC. Plans shall contain the following items as appropriate:	X 2 full size, 5 small sets	
Location map at appropriate scale	X	
Proposed Project name and title and Planning File #	X	
Date and scale	X	
Name and address of owners and/or applicants	X	
Location and widths of existing & proposed easements & right of ways	X	
Location and width of existing and proposed access/egress ways	X	
Existing and proposed buildings and structure locations and access	X	
Minimum building setbacks or build to lines on all lots	X	
Existing and proposed stormwater infrastructure/direction	N/A	
Neighborhood plan with unit counts	X	
Proposed landscaping	X (undisturbed buffer)	
Location of parking layout delineating spaces and arrangement; note addressing maximum required spaces	X	
Location, material and size of existing and proposed pavement area	X	
Location of solid waste disposal facilities (dumpster, pad and screening, etc.), including required screening	N/A	
All applicable Dover Common Site Plan/Subdivision notes	X	
Provide additional exhibits/technical data determined appropriate by the Planning Board or its staff as required	TBD	

REVIEWED BY: _____ DATE_____ TRC DATE_____

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: FERGUS CULLEN

Signature(s) of Property Owner(s): _____ Date: 6/6/24

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: FERGUS CULLEN

Signature(s) of Property Owner(s): _____ Date: 6/6/24

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

TRAN-2024-0014 **566 SIXTH STREET**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
A0041-000000	571 SIXTH ST	HESTER TAMARA		571 SIXTH STREET	DOVER	NH	03820
A0055-000000	559 SIXTH ST	GERUNGAN MARYKE P & HEIRS OF	TJAHJADI PRAJITNO HEIRS OF	559 SIXTH STREET	DOVER	NH	03820
A0056-000000	565 SIXTH ST	DROUIN LEON A TRUSTEE	DROUIN LEON A REVOCABLE TRUST	565 SIXTH STREET	DOVER	NH	03820
A0065-000000	561 SIXTH ST	DUVAL MATTHEW D	DUVAL DINA A	561 SIXTH ST	DOVER	NH	03820
A0066-000000	563 SIXTH ST	ZABIELSKI RHONDA M &	ZABIELSKI MICHAEL P	563 SIXTH STREET	DOVER	NH	03820-5907
A0067-000000	569 SIXTH ST	VANDINI NORMAN	VANDINI SHARON	569 SIXTH STREET	DOVER	NH	03820
B0004-052000	147 COTTONWOOD DR	DODIER SCOTT B	DODIER SARAH J	147 COTTONWOOD DR	DOVER	NH	03820
B0004-053000	141 COTTONWOOD DR	DAVIE EMILY S &	MALLARD TIMOTHY W	141 COTTONWOOD DR	DOVER	NH	03820
B0004-054000	133 COTTONWOOD DR	VANGUILDER JONATHAN D & MARIE H TRUSTEES	VANGUILDER FAMILY TRUST	133 COTTONWOOD DR	DOVER	NH	03820
B0004-A00000	570 SIXTH ST	BROWN RUTH A	BROWN KARL E	570 SIXTH STREET	DOVER	NH	03820
B0004-G00000	558 SIXTH ST	TSOURAMANIS GEORGE N		558 SIXTH ST	DOVER	NH	03820
B0004-J00000	568 SIXTH ST	VERVILLE CAITLIN &	WILKIE RORY	568 SIXTH ST	DOVER	NH	03820
B0004-L00000	560 SIXTH ST	ORTLIEB MICHAEL & CRYSTAL TRUSTEES	ORTLIEB FAMILY REVOCABLE LIVING TRUST	560 SIXTH STREET	DOVER	NH	03820
B0004-R00000	562 SIXTH ST	GOWEN SHARON	GOWEN JAMES P	562 SIXTH STREET	DOVER	NH	03820
B0004-F00000	566 SIXTH ST	CULLEN FERGUS	CULLEN JENNIFER	152 BOXWOOD LANE	DOVER	NH	03820
		MCENEANEY SURVEY ASSOCIATES	KEVIN MCENEANEY	PO BOX 1166	DOVER	NH	03820
		CIVILWORKS NEW ENGLAND	STEVE HAIGHT	PO BOX 1166	DOVER	NH	03820

CITY OF DOVER

TECHNICAL REVIEW COMMITTEE MINUTES – TRAN-2024-0014

Application Type:	Site Review
Applicant(s):	Fergus & Jennifer Cullen
Owner(s):	Fergus & Jennifer Cullen
Location:	566 Sixth St. (Assessor's Map B, Lot 4-F)
Date:	October 17, 2024

INTENT: Proposal is to subdivide one lot into three lots and purchase three units through TDR, resulting in a total of five units across the three lots.

UNITS PROPOSED: 5 units (1 existing unit, 4 new units)

AGENDA ITEM #: 1

ACREAGE: 1.37± acres before subdivision, proposed acreage following subdivision:
Assessor's Map B, Lot 4-F = 19,942± s.f. (0.45± ac.)
Assessor's Map B, Lot 4-F-1 = 19,480± s.f. (0.45± ac.)
Assessor's Map B, Lot 4-F-2 = 19,580± s.f. (0.45± ac.)

ZONING DISTRICT: R-40

EXISTING LAND USE: Residential

PROPOSED LAND USE: Residential

SURROUNDING LAND USE: Residential

ZBA ACTION: None.

PERMITS REQUIRED: None.

WAIVERS REQUESTED: None.

ATTENDANCE:
Donna Benton, Planning
Paul Crouser, Zoning
Jim Maxfield, Inspection Services
Bill Boulanger, Engineering
James Burdin, Business Development
Tom Clark, Planning Board

Others:
Erin Bassegio, Assistant City Planner
Makayla Edgecomb, Assistant City Planner
Steve Haight, Civilworks NE
Fergus Cullen, Applicant

Approval of minutes from October 3, 2024:
J. Burdin moved to approve the October 3, 2024 minutes. Seconded by T. Clark. Vote: U/A.

PLAN REVIEW:
Planning:

- Due to the changes of the previous plan, this current proposal does not need to meet most of the previous TRC comments as it is now a minor subdivision utilizing TDR to purchase 3 units
- Water and Sewer Investment Fees
- Recommend inclusion of previously completed Traffic Analysis Memo
- HOA or COA docs as a condition of approval for shared roof and driveway
- Revise plans to include:
  - Note and/or detail on proposed tree line (any new plantings?)
  - Add no-cut buffer placards

Engineering:

- General Comment:
  - Streetscape rendering would be helpful to see how the proposed structures relate to one another.
  - How will snow removal be managed? Recommend providing 1 sf of snow storage per 10 sf of pavement to be cleared. Verify snow storage meets or exceeds this recommendation or provide note to remove excess snow when storage areas are filled.
  - ***Engineering requests a letter certifying the tie in locations or discharge points for all sump pumps and roof leaders for existing structures on the property.***
  - Will this development have an HOA? If so, it is strongly recommended that the Applicant submit a detailed breakdown of proposed HOA costs for annual maintenance and replacement of private infrastructure including backup as to how the fees are estimated.
  - Driveways appear too narrow (10 and 13 feet) leading to potential conflicts with multiple vehicles entering and exiting at the same time.

DRAFT

- Recommend showing the location of signs along the no cut buffer to ensure it remains throughout and post-construction.
- Show the proposed treeline.

- Sheet 7:
  - Notes refer to fire department connections and sprinklers. Please identify locations on the plans.
- Sheet 8:
  - Rain Gardens lack information required for construction (contours and spot grades).
  - Show proposed grading for driveways and parking areas.
  - Please provide a test pits in the proposed rain garden locations to determine if they will drain without an outlet shown.
- Sheet 9:
  - Size of sewer laterals should be 6 inches minimum.
  - Show the slope of the sewer laterals.
  - Recommend providing sewer off of the Sixth Street line rather than tying into the line along the southern property line.
  - Recommend providing a separate water service to each unit if they are to be individual units that are sold off.
  - Show inverts of sewer in Sixth St.
  - Label existing SMH in accordance with City of Dover numbering. Can get information from CS.
  - Cleanouts outside of the building are not permitted.
  - Show how the existing sewer service will be abandoned and terminated at the main.
  - Consolidate the utility trenches within City ROW and provide overlay of entire area of disturbance from curb to curb.
  - Is the 30 foot wide utility easement intended for the city or another party? City staff does not support the City taking this easement and prefers the main stay private. City easements need to be 30 feet wide.
  - Would like to see sewer manholes on the end of the sewer main and at the connection with the street given the number of units on the lot. A sewer connection permit with the state is likely necessary if the sewer is not run out to Sixth.

Police:

- No comments.

Inspection Services:

- Address of 566 Sixth Street will have to change to accommodate the additional units. The new numbering would be 562, 564, and 566 Sixth Street as proposed.

Fire Department:

- No comments.

Business Development:

- Revised proposal is more consistent with scale and layout of surrounding development and is well-supported by TDR narrative.

Planning Board:

- No Comments.

Next Steps: Present to Planning Board and revise plans per any conditions of approval.

Adjournment: P. Crouser moved to adjourn the meeting at 11:10 a.m. Seconded by T. Clark. Vote: U/A.

DRAFT

CIVILWORKS NEW ENGLAND

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

PROJECT NARRATIVE

The applicant proposes a TDR subdivision at 566 Sixth Street. The existing lot contains one single family home. The proposed use is to create two additional lots, each with a duplex, utilizing four TDR units. The result would be three lots containing five total living units.

The applicant's goal is to create housing units consistent with the City's goal of developing more "attainable" housing. The intended result is new units priced at or below the median cost of new residential housing units in Dover.

Meeting this goal on this lot by building one or two single family homes simply cannot be done given contemporary site development and construction costs and current interest rates. The resulting homes would need to be priced at the higher end of the market and would, therefore, not qualify as "attainable".



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BACKGROUND: PHASE ONE

The applicant purchased the property at auction in the fall of 2023. The existing home, a 1,440 square foot, two-bedroom, one-bath ranch built in 1957, was partly unfinished and had fallen into disrepair. It was surrounded by dilapidated campers, trailers, sheds, and junk. The applicant cleaned up the property and completed a full-gut renovation of the existing residence, converting it into a three-bedroom, two bath home with all-new plumbing, electric, heating, insulation, windows, doors, flooring, and siding. The newly renovated house has a Certificate of Occupancy and is ready to be a home again.

Before:







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After:





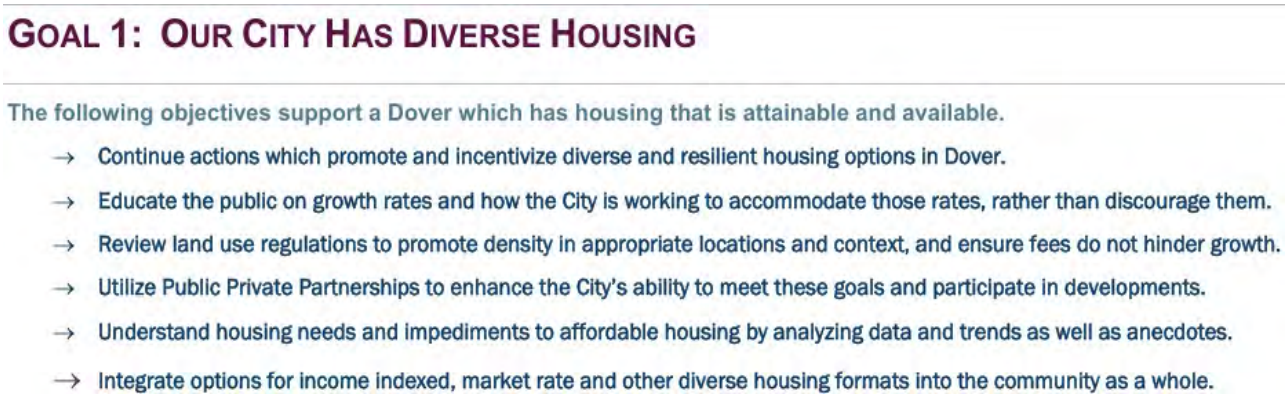






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GOAL 1: OUR CITY HAS DIVERSE HOUSING

The following objectives support a Dover which has housing that is attainable and available.

- → Continue actions which promote and incentivize diverse and resilient housing options in Dover.
- → Educate the public on growth rates and how the City is working to accommodate those rates, rather than discourage them.
- → Review land use regulations to promote density in appropriate locations and context, and ensure fees do not hinder growth.
- → Utilize Public Private Partnerships to enhance the City's ability to meet these goals and participate in developments.
- → Understand housing needs and impediments to affordable housing by analyzing data and trends as well as anecdotes.
- → Integrate options for income indexed, market rate and other diverse housing formats into the community as a whole.

PROPOSED USE IS CONSISTENT WITH DOVER ORDINANCES:

Dover Code 170-27.2, the Transfer of Development Rights (TDR) ordinance as amended in 2018 and 2020, was written to encourage and incentivize projects like this. It meets all three criteria specified in subsection G (8) (Residential Standards). The project

a. Is consistent with the Master Plan
b. Is served by public water and sewer (i.e., existing city infrastructure)
c. Is compatible with the land uses on neighboring lots

DUPLEXES ALLOWED:

Chapter 170 was amended in 2021 specifically to allow duplexes in residential zones by right, provided:

1. The lot shall contain at least four thousand (4,000) square feet per dwelling unit and a minimum floor area of five hundred (500) square feet per dwelling unit.
2. Two-family dwellings shall be designed to look like single family dwellings (i.e. the two-family dwelling should not look like it was designed to occupy more than one family). At a minimum, this shall mean that only one entrance shall be visible from a public street, and only one driveway shall exist with no on street parking required for residents.

The proposed units meet these criteria.

ATTAINABLE SIZE INCENTIVE:

Dover's TDR ordinance is designed to support the creation of more attainable housing by incentivizing smaller housing units. The TDR fee is reduced by 50 percent for units under 1,000 square feet, with the expectation that smaller units will cost less to rent or purchase than larger units.

The proposed housing units respond to this incentive.

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TDR PRECEDENT IN THE R-40 ZONE:

The TDR ordinance is available in all residential zones in Dover, including R-40. The Planning Board has approved many TDR projects in R-40 zones, including some on upper Sixth Street very close to this property. Approved TDR projects in R-40 include:

- 144 Mast Road
- 51 & 65 Bellamy Road
- 537 Sixth Street
- 512 Sixth Street
- Wildcat Drive

SCALED-DOWN PROPOSAL:

The proposal before you is scaled-down from an earlier concept that went before the Technical Review Committee. That concept included two single family homes and two duplexes, or six new housing units total. TRC viewed it as a major subdivision, triggering significant engineering costs inconsistent with the goal of creating attainable housing on this property. The result is a project smaller in scope with fewer new units.

CONSERVATION FUNDING:

If approved, this project will contribute $22,500 for land conservation in Dover.

INCREASED TAX REVENUE:

If approved and built as proposed, this project is expected to increase the original property's assessed value by close to $2 million, adding $35-40,000 in new annual property tax revenue to the City.

COMPATIBLE WITH SURROUNDING PROPERTIES:

Although upper Sixth Street is zoned R-40, as a practical matter the area looks and feels more like R-20 or even R-12 in terms of existing density. Most homes in the vicinity of this project are ranches smaller than 1,200 square feet. Many are built into a hillside, most have about 100 feet of frontage, and several lots are considerably smaller than 40,000 square feet. One of the neighboring properties has extra density in the form of an existing detached ADU. (See map below.)

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The proposed lots will have about 100 feet of frontage. The space between buildings will be similar to that between existing homes in the area. The size of the new units will be similar to that of most surrounding homes.



Frontage measurements for surrounding homes are approximate using measuring feature on City of Dover GIS maps, not taken from recorded deeds.

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Unit Size Calculations – Conditioned Space

566 Sixth Street

Hopscotch Duplex	Length	Width	S.F.	Per Unit
FIRST FLOOR				
Exterior framing:	39	29	1131	
less exterior walls			-62	
less fire wall			-25	
Subtotal:			1044	522
SECOND FLOOR				
Exterior framing:	39	29	1131	
less exterior walls			-62	
less fire wall			-24	
less knee wall			-42	
less one floor of stairs (not double-counted)			-70	
Subtotal:			933	467
Total S.F. per Unit:				**989**

Fergus Cullen

December 1, 2023

«Sal» «Last»
«St_» «St» «Suf»
Dover, NH 03820

Dear «Sal»,

You noticed the house at 566 Sixth Street, previously owned by the Cheneys, went on the market this fall.

We're your new neighbor. Jenny and I recently closed on the property.

I want to give you a head's up about our plans. We will be doing a to-the-studs, gut renovation on the existing home. New everything inside, and mostly new everything on the outside, including new siding in a different color. We'll be tearing down the sheds in the back and removing trees.

We also expect to seek approval to add at least two and maybe more housing units to the property. We don't have a site plan yet, and we don't know the exact number. Our intent is for these to be middle-of-the-market homes that are consistent with the Upper Sixth Street neighborhood. We expect everything to be sold and to become owner-occupied, not rental.

It's important to us to be good neighbors as we work on the property, and after the work is done as well. For now, I just wanted to let you know we're the new owners, and that we're planning to clean up and modernize the property.

I will keep you informed about our plans as they come together. And, you should feel free to contact me if you have any questions or things you'd like to talk about.

Sincerely,

Fergus Cullen

152 Boxwood Lane • Dover, NH 03820 • 603-520-5450 m • fergus@ferguscullen.com

FERGUS CULLEN

May 20, 2024

«Sal» «Last»
«St_» «St» «Suf»
Dover, NH 03820

Dear «Sal»,

I want to give you an update on the work we're doing at 566 Sixth Street.

We are on schedule to complete the gut renovation of the existing home in June. We've converted what was a two bedroom, one bathroom house into a three bedroom, two bathroom home with all new everything inside. I hope you like the new blue color on the outside.

This week we will be clearing about half the trees from the property as we start to prepare for Phase Two of the project.

We are seeking approval for two new single family houses on Sixth Street – one on each side of the existing home. We expect these will be middle market, three bedroom, two bath homes. We are also seeking approval for two small duplexes to the rear of the existing home. Our intent is for these units to be "attainable" housing – smaller two-bedroom, one bathroom units that are more affordable.

I've enclosed our draft site plan so you can see it in advance. You can expect to receive an official "abutters notice" from the city in the coming weeks.

Please contact me directly if you have any questions or things you'd like to talk about.

Sincerely,

Fergus Cullen

152 Boxwood Lane • Dover, NH 03820 • 603-520-5450 m • fergus@ferguscullen.com

From:	Douglas LaRosa
To:	k.mavrogeorge@dover.nh.gov
Cc:	Steve Haight; Kevin McEneaney; Cheryl Andreason
Subject:	CNE# 24081, MSA #2571, 566 Sixth Street, TDR Subdivision, Will Serve, Water and Sewer request.
Date:	Monday, September 30, 2024 3:20:12 PM
Attachments:	sheet 37 P21-43 Approved TDR Subdivision Plan.pdf 7 24081-site SITE UTILITY.pdf

---

Good afternoon, Ken,

Our client is proposing a 5-unit residential TDR development located at 566 Sixth Street. The project consists of a TDR subdivision of the existing residential lot into three lots and the construction of two (2) detached residential duplex structures. Duplex 1 and 2 are each proposed with 2 bedrooms. The existing single-family home has 2 bedrooms. Attached is the draft utility plan for reference.

The project total design flow is estimated below:
Duplex 1 :

2 Units x 2 Bedrooms/unit = 4 Bedrooms
4 Bedrooms x 150 GPD/bedroom = 600 GPD

Duplex 2:

2 Units x 2 Bedrooms/unit = 4 Bedrooms
4 Bedrooms x 150 GPD/bedroom = 600 GPD

Existing Building:

1 unit x 2 Bedrooms/unit = 2 Bedrooms
4 Bedrooms x 150 GPD/bedroom = 300 GPD

Total estimated design flow = 1,500 GPD
**This design flow rate is based on NHDES Env-Wq 1008.03 Table 1008-1 Unit Design Flow Figures.*
.
We are finalizing the design plans and preparing the first TRC site plan application, as required by the City, could you please provide us with a letter acknowledging that the city can provide water and sewer to this proposed development.

A couple things to note about the water and sewer:
Water:

The existing water line, as shown on the attached draft utility plan, is approximate and was taken from the Wildcat Drive Subdivision Plans dated June 10, 2021 by Berry Surveying (I've attached a copy for reference). Do you know of any location discrepancy with this plan and the actual location of the waterline in Sixth Street?

Sewer:

The existing house sewer is connected to the 10" sewer main, Tax Map b Lot 4-53. We are proposing to tie into the existing 10" PVC Sewer witH an 8" PVC Sewer.

If you have any questions or require more information, please do not hesitate to get back to us.

Thank you for your assistance on this project

Doug

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

From: Douglas LaRosa
To: trevor.emmons@eversource.com
Cc: Steve Haight; Kevin McEneaney; Cheryl Andreason
Subject: CNE# 24081 566 Sixth Street, Dover NH. 3 Lot TDR Subdivision request for service
Date: Monday, September 30, 2024 3:48:34 PM
Attachments: 7 24081-site SITE UTILITY.pdf
Eversource Letter to Serve Template.docx

Good afternoon, Trevor

We are requesting service for a 3 Lot TDR Subdivision at 566 Sixth Street in Dover, NH. Currently there exists a single-family home with electrical service. Our client is applying to the City of Dover for two addition lots, each with a proposed duplex home.

The Duplex homes shall be less than 1,400 sq. ft. per side.

I have attached the Eversource template for your review and signature, as well as a draft Utility Plan

Please let me know if you require additional information,

Sincerely,
Doug

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

8/21/2024

Hopscotch Duplex

408.220 (8/21/2024)

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Art Form Architecture, LLC

603-431-9559



Dear Builders and Home Buyers,

In addition to our Terms and Conditions (the "Terms"), please be aware of the following:

This design may not yet have Construction Drawings (as defined in the Terms), and is, therefore, only available as a Design Drawing (as defined in the Terms and together with Construction Drawings, "Drawings'). It is possible that during the conversion of a Design Drawing to a final Construction Drawing, changes may be necessary including, but not limited to, dimensional changes. Please see Plan Data Explained on www.artform.us to understand room sizes, dimensions and other data provided. We are not responsible for typographical errors.

Art Form Architecture ("Art Form") requires that our home designs be built substantially as designed. Art Form will not be obligated by or liable for use of this design with markups as part of any builder agreement. While we attempt to accommodate where possible and reasonable, and where the changes do not denigrate our design, any and all changes to Drawings must be approved in writing by Art Form. It is recommended that you have your Drawing updated by Art Form prior to attaching any Drawing to any builder agreement. Art Form shall not be responsible for the misuse of or unauthorized alterations to any of its Drawings.

Facade Changes:
• To maintain design integrity, we pay particular attention to features on the front facade, including but not limited to door surrounds, window casings, finished porch column sizes, and roof friezes. While we may allow builders to add their own flare to aesthetic elements, we don't allow our designs to be stripped of critical details. Any such alterations require the express written consent of Art Form.
• Increasing ceiling heights usually requires adjustments to window sizes and other exterior elements.
Floor plan layout and/or Structural Changes:
• Structural changes always require the express written consent of Art Form
• If you wish to move or remove walls or structural elements (such as removal of posts, increases in house size, ceiling height changes, addition of dormers, etc), please do not assume it can be done without other additional changes (even if the builder or lumber yard says you can).

8/21/2024

Hopscotch Duplex

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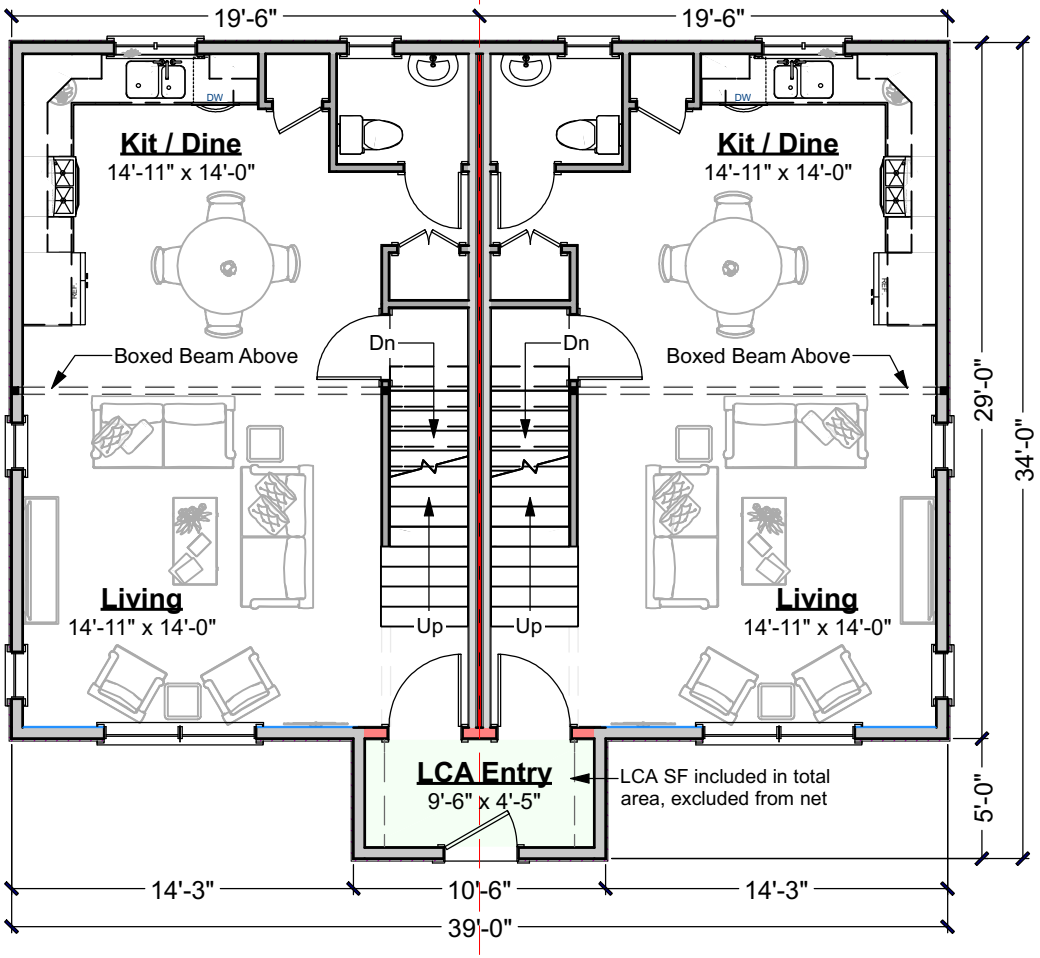
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Total Building Area this Floor: 1183 sq ft

8 ft Ceilings

Net Living Area Per Unit: 522 sq ft (Measured to Interior Framing)



First Floor Plan

Scale: 1/8" = 1'-0"

8/21/2024

Hopscotch Duplex

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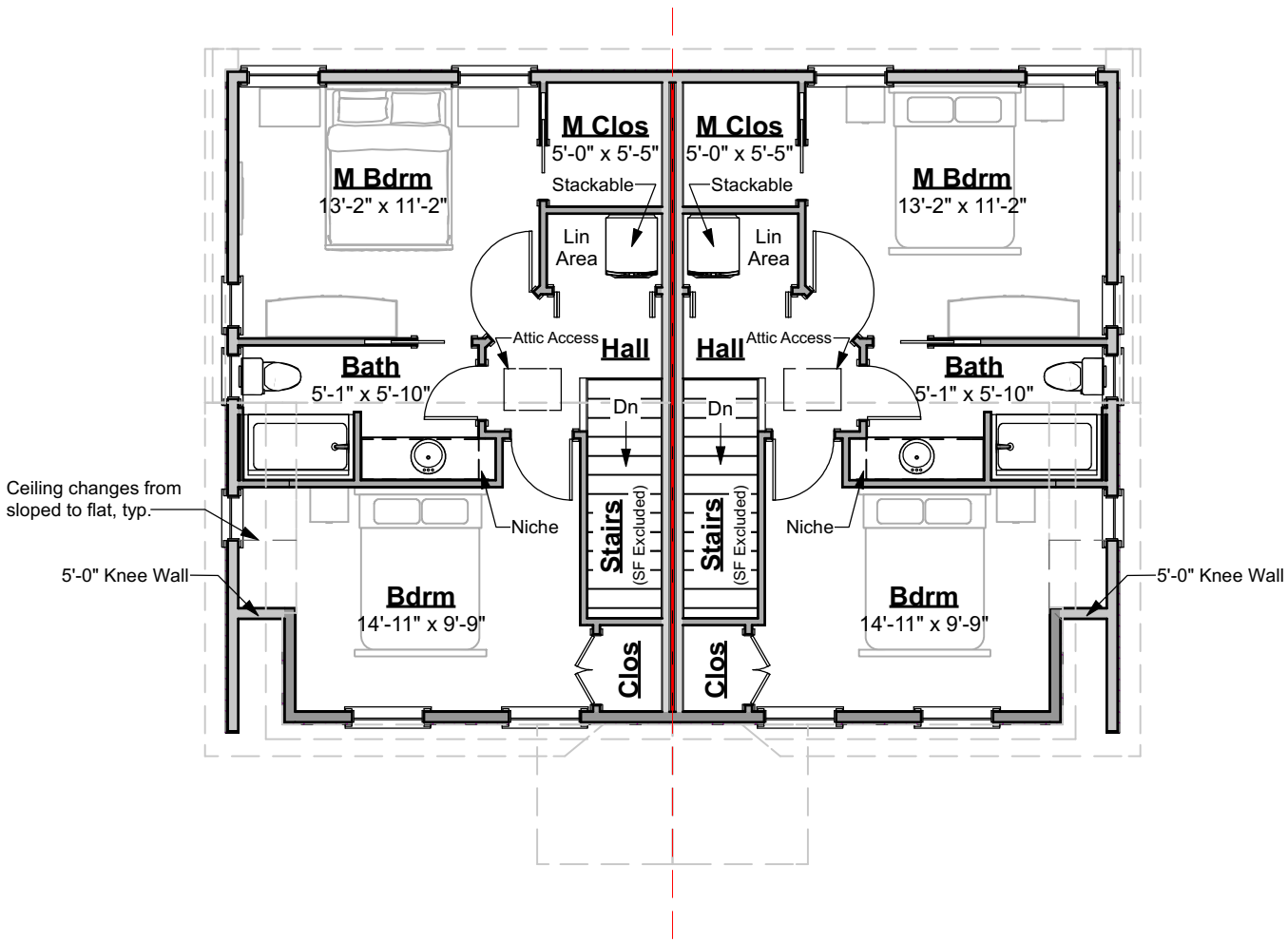
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Total Building Area this Floor: 1010 sq ft

8 ft Ceilings

Net Living Area Per Unit: 467 sq ft (Measured to Interior Framing)



Second Floor Plan

Scale: 1/8" = 1'-0"

8/21/2024

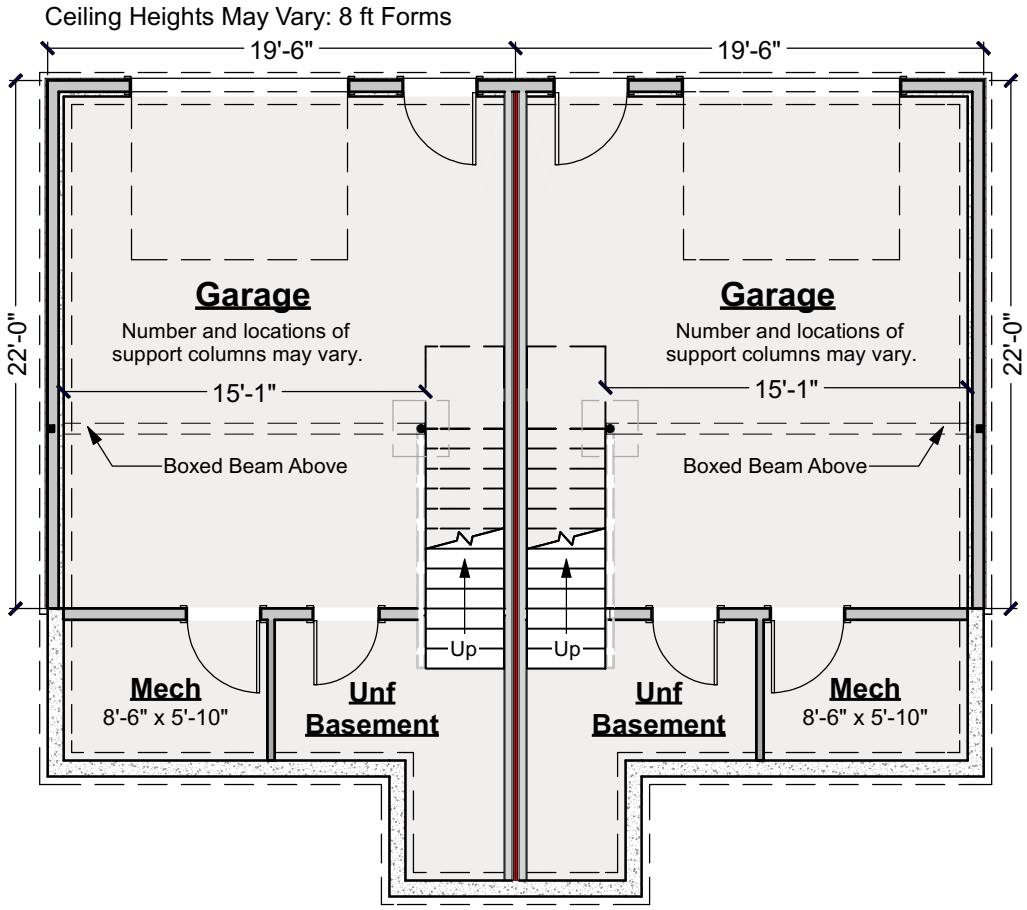
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Foundation Plan

Scale: 1/8" = 1'-0"

8/21/2024

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Front Elevation

Scale: 1/8" = 1'-0"

8/21/2024

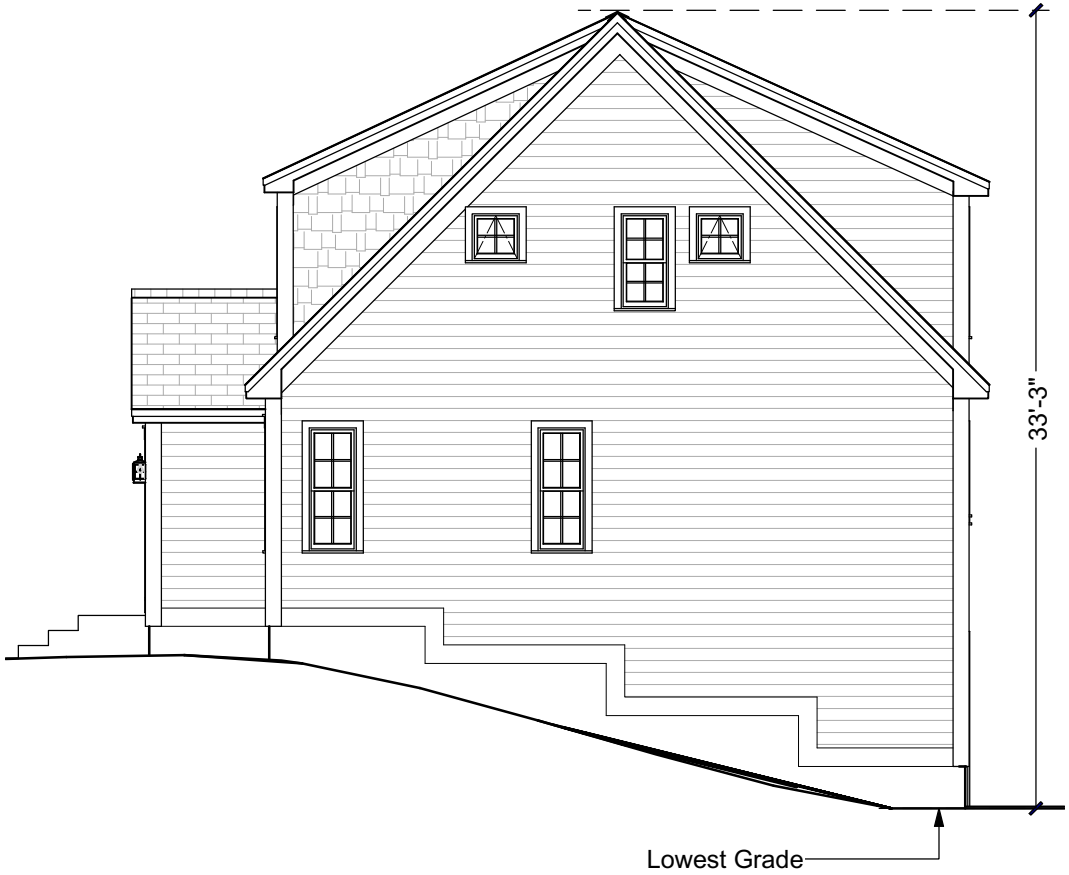
Hopscotch Duplex

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Right Elevation

Scale: 1/8" = 1'-0"

8/21/2024

Hopscotch Duplex

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Rear Elevation

Scale: 1/8" = 1'-0"

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Left Elevation

Scale: 1/8" = 1'-0"

8/21/2024

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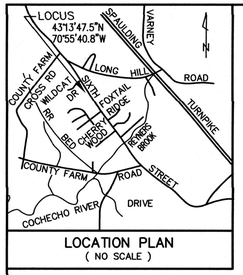




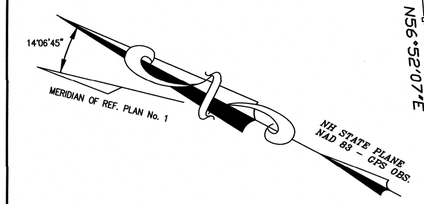


Interior Views

Left Unit (Right Unit to be Mirror Image)



LOCATION PLAN
(NO SCALE)



A / 67
NORMAN E. VANDINI
SHARON J. VANDINI
569 SIXTH STREET
DOVER, NH 03820
1452 / 241

A / 56
LEON A. DROUIN, TRUSTEE
LEON A. DROUIN REVOCABLE TRUST
565 SIXTH STREET
DOVER, NH 03820
4724 / 277

A / 66
RHONDA M. ZABIELSKI
MICHAEL P. ZABIELSKI
563 SIXTH STREET
DOVER, NH 03820
1895 / 740

OWNER SIGNATURES

SMH
RIM = 209.70'
INV. IN = 203.17' 6"PVC
INV. OUT = 203.02' 8"PVC
BRICK SHELF = 203.64'

SIXTH STREET
{PUBLIC; VARIABLE WIDTH R.O.W.}

S 8" PVC
W 12" CL DI
12" RCP
INV. = 205.94'
TBM
SPIKE IN UP
ELEV.209.08'
UP 58/32
UP 20/31.5
OHU

SMH
RIM = 209.81'
INV. IN = 198.47' 8"PVC NW
INV. IN = 201.57' 8"PVC SE
INV. OUT = 186.23' 10"PVC (SITE)
BRICK SHELF = 186.85'

S27°41'30"E 100.00'
S27°41'30"E 111.23'
S27°41'30"E 88.77'
S57°03'29"W 200.87' (73.32')
I.R.(tbs)
(S")

B / 4J
CAITLIN VERVILLE
RORY WILKIE
568 SIXTH STREET
DOVER, NH 03820
4613 / 638

HOUSE
#568

PROPOSED DUPLEX
39' x 29'
1,184 S.F.
FOOTPRINT
10.5'
5.0'
29.0'
39.0'

1 STORY WOOD FRAME HOUSE
#566
F.F. = 213.9'
DRIVE UNDER GARAGE
F.F. = 204.2'

STONE RETAINING WALL
ASPHALT DRIVE
WALK
EXISTING ASPHALT DRIVE
73.02'

PROPOSED DUPLEX
39' x 29'
1,184 S.F.
FOOTPRINT

PROPOSED PAVED DRIVEWAY

PROPOSED 30' WIDE UTILITY EASEMENT
30.14'
30.13'
73.89'
70.87'
30.00'
S 27°31'40" E
95.87'
98.79'
N 27°31'40" W
PROPOSED 30' WIDE ACCESS EASEMENT

N56°52'07"E 194.62'
FENCE
BUILDING SETBACK LINE (TYP.)
S59°52'07"W 196.73'
S62°36'50"W 197.77'

B / 4F
PARCEL AREA
19,942 S.F.
0.45 Ac.

B / 4F-1
PARCEL AREA
19,480 S.F.
0.45 Ac.

B / 4F-2
PARCEL AREA
19,580 S.F.
0.45 Ac.

30' EXTERIOR NO CUT BUFFER (TYP.)

I.P.(fnd)
100.22'
N26°29'30"W
I.R.(tbs)
91.55'
N26°29'30"W
I.R.(tbs)
108.23'
N26°29'30"W
I.P.(fnd)

B / 4R
JAMES P. GOWEN
SHARON GOWEN
562 SIXTH STREET
DOVER, NH 03820
988 / 448

SMH
RIM = 201.06'
INV. IN = 184.90' 10"PVC
INV. OUT = 184.90' 10"PVC
BRICK SHELF = 186.11'

B / 4-53
EMILY S. DAVIE
TIMOTHY W. MALLARD
141 COTTONWOOD DRIVE
DOVER, NH 03820
4221 / 508

S 10" PVC
W 12" CL DI

LEGEND

- I.P.(fnd) – IRON PIPE (FOUND)
- I.R.(tbs) ● – IRON ROD W/ I.D. CAP (TO BE SET)
- SMH – SEWER MANHOLE
- CB – CATCH BASIN
- DMH – DRAIN MANHOLE
- WV ⋈ – WATER GATE VALVE
- S.F. – SQUARE FEET
- Ac. – ACRE
- (TYP.) – TYPICAL
- ± – MORE OR LESS
- ø – DIAMETER
- S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
- UP 410/5 – UTILITY POLE W/ I.D. Nos.
- R.O.W. – RIGHT OF WAY
- INV. – INVERT
- PVC – POLYVINYL CHLORIDE
- CL DI – CEMENT LINED DUCTILE IRON
- ELEV. – ELEVATION
- 204 – – – – – CONTOUR LINE (2 FOOT INTERVAL)
- WSO – WATER SHUT OFF (CURB STOP)
- HYD. – FIRE HYDRANT
- W – WATER SERVICE LINE
- S – SEWER LINE
- S SMH – SEWER MANHOLE
- OHU – OVERHEAD UTILITIES

REFERENCE PLANS:

1.) ALDEN WOODS SUBDIVISION, SIXTH STREET, DOVER, NEW HAMPSHIRE, SHEET 7 OF 26: SCALE: 1" = 60'; DATED: APRIL 27, 1998; BY: MCENEANEY SURVEY ASSOCIATES, INC.; RECORDED S.C.R.D. PLAN 54–34.

2.) SUBDIVISION OF LAND OF SCOTT L. WEEDEN, DOVER, NEW HAMPSHIRE; SCALE: 1" = 50'; DATED: FEB., 1975; BY: RICHARD P. TOWLE; RECORDED S.C.R.D. PLAN 43, POCKET 15, FOLDER 43.

NO.	DATE	DESCRIPTION	BY	CHK
CNE 24081		REVISIONS		

24–2571	TDR SUBDIV	23–12	37–42
PROJECT NO	TYPE	FIELDBOOK & PAGES	

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

NOTES:

1.) OWNER OF RECORD:
FERGUS CULLEN
JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOLUME 5152, PAGE 7

2.) B / 4F – DENOTES TAX MAP AND PARCEL NUMBER.

3.) TOTAL PARCEL AREA = 59,002 S.F. / 1.35 Ac.

4.) THE INTENT OF THIS PLAN IS TO DEPICT A PROPOSED TDR SUBDIVISION CONSISTING OF THREE (3) LOTS, ONE LOT CONTAINING A SINGLE FAMILY DWELLING AND TWO LOTS CONTAINING DUPLEXES.

5.) ZONING DISTRICT: RURAL RESIDENTIAL (R40)

DIMENSIONAL REQUIREMENTS:	
MINIMUM LOT SIZE	= 40,000 S.F.
MAXIMUM LOT COVERAGE	= 10 PERCENT
MINIMUM FRONTAGE	= 150 FEET
BUILDING SETBACK REQUIREMENTS:	
FRONT SETBACK	= 40 FEET
SIDE SETBACK	= 25 FEET
REAR SETBACK	= 30 FEET
MAXIMUM BUILDING HEIGHT	= 35 FEET
WETLAND BUFFER	= 50 FEET

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 BASED ON GPS OBSERVATION DATED JANUARY 30, 2024.

8.) ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATIONS WITH THE RESPECTIVE UTILITY OWNERS PRIOR TO ANY WORK BEING PERFORMED. CALL DIGSAFE AT 1–888–344–7233.

9.) THE SOIL TYPES ON THE SITE ARE:
WdB – WINDSOR LOAMY SAND, 3–8% SLOPES
THE SOURCE FOR THE SOIL TYPE DATA IS USDA SCS SOIL SURVEY OF STRAFFORD COUNTY DATED MARCH 1973 & USDA NRCS WEB SOIL SURVEY http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

10.) NO WETLANDS WERE OBSERVED ON SITE BASED ON SITE INSPECTION PERFORMED DURING APRIL, 2024 BY BRUCE A. GILDAY, N.H.C.W.S. #088; N.H. C.S.S. #012 OF B A G LAND CONSULTANTS.

11.) TDR UNIT CALCULATIONS:
A) 59,002 S.F. – CONSERVATION (0 S.F.)= 59,002 S.F.
B) 59,002 * 0.85 = 50,150 S.F.
C) 50,150 * 0.85 = 42,628 S.F.
D) 42,628 / 40,000 BASE UNIT COUNT = 1 UNIT *
* EXISTING SINGLE FAMILY HOME HAS RIGHT TO CONVERT TO DUPLEX; (2) UNITS BY RIGHT.
E) REMAINING 3 UNITS TO BE PURCHASED, THUS ALLOWING FOR 5 UNITS.

12.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND DURING JANUARY AND MARCH, 2024 WITH AN ERROR NOT GREATER THAN 1 IN 10,000.

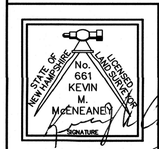
13.) PARCEL IS SERVICED BY MUNICIPAL SEWER AND WATER.

TDR SUBDIVISION PLAN
PREPARED FOR
FERGUS & JENNIFER CULLEN
TAX MAP B, LOT No. 4F
566 SIXTH STREET
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DOVER PLANNING FILE No. SUBM 2024–

DRAWN BY: RJM	FILE: MSA\2571\D\23–2571
SCALE: 1" = 20'	DATE: SEPT. 25, 2024

20 10 0 10 20 40 60 80



McEneaney Survey Associates
of NEW ENGLAND
P.O. Box 1166 – 181 WATSON ROAD
DOVER, NH 03820 (603) 742–0911

SURVEYING – PLANNING – CONSULTING

9/26/2024 15:56:02 File: M:\2571\Drawings\23-2571.dwg Layout: 2571 SUBDIVISION

CITY OF DOVER

PLANNING BOARD - STAFF MEMO FILE #SUBM-2024-0005

Application Type:	Minor Subdivision
Applicant(s):	Fergus & Jennifer Cullen
Owner(s):	Fergus & Jennifer Cullen
Location:	566 Sixth St. (Assessor's Map B, Lot 4-F)
Meeting Date:	October 22, 2024

INTENT: To subdivide one (1) lot into three (3) lots utilizing TDR.

AGENDA ITEM #: 4-F

APPLICANT/OWNER: Fergus & Jennifer Cullen

LOCATION: 512 Sixth Street (Assessor's Map B, Lot 2)

LOTS/UNITS PROPOSED: Three (3) lots and five (5) units

ACREAGE: 1.37± acres before subdivision, proposed acreage following subdivision:
Assessor's Map B, Lot 4-F = 19,942± s.f. (0.45± ac.)
Assessor's Map B, Lot 4-F-1 = 19,480± s.f. (0.45± ac.)
Assessor's Map B, Lot 4-F-2 = 19,580± s.f. (0.45± ac.)

ZONING DISTRICT: R-40

EXISTING USE: Residential

PROPOSED USE: Residential

SURROUNDING USE: Residential

ZBA ACTION: N/A

PERMITS: N/A

WAIVERS REQUESTED: N/A

APPLICATION IS COMPLETE: Yes

REGIONAL IMPACT: No

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

TRC: 10/17/24

ATTACHMENTS: Application materials including TDR Subdivision Plan.

Summary of Request and Background:
The applicant proposes subdividing the subject lot at 566 Sixth St., creating two new lots with proposed lots 4-F, 4-F-1, and 4-F-2 each having approximately 0.45± acres.

As part of this project, the applicant is proposing five residential units by purchasing three size-restricted units through TDR (TRAN-2024-0014). The five total units will be across the three lots, including the existing single-family dwelling.

The Technical Review Committee most recently reviewed the application at their October 17, 2024 meeting. *(minutes attached)*

Since the applicant is utilizing the TDR ordinance, relief for lot size, frontage, setbacks, density and intensity may be provided.

Consistency with Land Use Regulations:
The plan is consistent with §157-15 of the City of Dover's Land Subdivision Regulations, which provides for subdivision of existing lots.

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. Approval of TRAN-2024-0014;
2. Provide physical and digital copies (including CAD) of complete plan set which additionally shall include:
   - 2.1. Signature and stamp of PE, LLS, CWS, and LLA
   - 2.2. The owners' signatures for recording at Strafford County Registry of Deeds
   - 2.3. Provide draft driveway and roof maintenance agreements to the Director of Planning and Community Development.
   - 2.4. Add where future treeline will be or if existing, show existing treeline.
   - 2.5. Add note about no-cut buffer placards to be installed.
   - 2.6. Add note that no sump pumps or roof leaders will be tied to the public sewer.
   - 2.7. Revise driveway to a minimum 14' width
   - 2.8. Identify FDC if any are proposed.
   - 2.9. Revise sewer lines to be off Sixth Street.
   - 2.10. Provide individual water lines for each unit.
   - 2.11. Remove cleanout outside of building.
   - 2.12. Add note about addressing as assigned by the Building Official.

Subsequent Conditions to be Met Prior to Water and Sewer Service Tie In:

3. Payment of water and sewer investment fees.

Subsequent Conditions to be Met Prior to Occupancy:

4. Certificate of Occupancy.
5. Buffer placards shall be in place or if damaged during construction replaced.

SUBM-2024-0005 566 Sixth Street



Property Information

Location	566 SIXTH ST
Owner	CULLEN FERGUS
Land Use	
Zoning Code	R-40
Property Id	B0004-F00000

MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

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

Geometry updated 10/30/2023
Data updated Daily

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

PLAN SNAPSHOT REPORT SUBM-2024-0005
FOR CITY OF DOVER, N.H.

Plan Type:	Subdivision Plan - Minor	**Project:**		**App Date:**	10/01/2024
Work Class:	New Construction	**District:**	None	**Exp Date:**	12/05/2024
Status:	Fees Paid	**Square Feet:**	59,002.00	**Completed:**	NOT COMPLETED
Valuation:	$0.00	**Assigned To:**	Blonigen, Rachel	**Approval Expire Date:**	
Description:	TDR subdivision creating three frontage lots.				

Parcel:	B0004-F00000 Main	**Address:**	566 Sixth St Dover, NH Main	**Zone:**	

Owner	Engineer	Applicant
Fergus & Jennifer Cullen Mobile: (603) 520-5450	Stephen Haight Business: (603) 749-0443	McEneaney Survey Associates P.O. Box 1166 DOVER, NH 03821 Business: (603) 742-0911

Plan Custom Fields

Proposed Number of New Lots	2	Existing Number of Lots	1	Parcel Map/Lot	B / 4F
Parcel Zoning Overlay		Select Subdivision Type	Transfer of Development Rights	Parcel Zoning	R-40
Property Address	566 Sixth Street	Existing Parcel Size (Ac)	1.35	Existing Parcel Size (sqft)	58806
Proposed Use Detail	Residential Units - 2 duplexes, 1 single family	Owner Name	Fergus & Jennifer Cullen	Deed Page	7
Deed Book	5152	Owner Address	152 Boxwood Lane Dover, NH 03820	Deed Date	
Refuse Removal	Public	Owner Phone	603-520-5450	Parcel Feedback	
Owner EMail	fergus@ferguscullen.com	If purchasing units, how many?	3	TDR Relief Sought (Check all that apply.)	Frontage, Lot Size, Purchase Units
Existing Use Detail	Residential Single Family	TDR Detail	To allow 5 units where 2 units are allowed by rights. No impacts are created by this proposed project.	subdroadtype	Municipal
Water Source?	Municipal	Distance to City Water (ft)	75	Distance to City Sewer (ft)	75
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_10/1/2024.jpg	10/01/2024 16:54	McEneaney, Kevin		Uploaded via CSS
2024.10.17_PlanningTechnicalReviewCommittee.Agenda.pdf	10/02/2024 16:24	Blonigen, Rachel		TRC Agenda

Invoice No.	Fee	Fee Amount	Amount Paid
INV-00009493	Planning Subdivision Application Fee	$200.00	$200.00
	Planning Subdivision Lot Fee	$300.00	$300.00
	Total for Invoice INV-00009493	**$500.00**	**$500.00**
	Grand Total for Plan	**$500.00**	**$500.00**

Workflow Step / Action Name	Action Type	Start Date	End Date
Review v.1		10/02/2024 15:12	10/02/2024 15:12
Confirm application complete v.1	Generic Action		10/02/2024 15:12

PLAN SNAPSHOT REPORT (SUBM-2024-0005)

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 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: Fergus & Jennifer Cullen Telephone # 603-520-5450

Address of Applicant: 152 Boxwood Lane Dover, NH 03820

Name of Property Owner (*if different from applicant*): same Telephone #_____

Address of Property Owner: same

E-Mail Address: fergus@ferguscullen.com

PROPERTY INFORMATION

Address of Property: 566 Sixth Street

Assessor's Map # B Lot(s) # 4F

Zoning District(s) R-40 Overlay District(s) none

Size of Parcel: 59,002 s.f. (1.35 ac) Property Deed: Book 5152 Page: 7

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): X Lot Size X Frontage □ Setback □ 30' Buffer □ Purchase 3 units

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

To allow 5 units where 2 units are allowed. There are no impacts created by this project.

Circle one for each category:

Water: City / Well (circle one) How far is city water from the property? 50'-75'

Sewer: City / Septic (circle one) How far is city sewer from the property? 50'-75'

Highway Access: City Street / State Highway (circle one) | Roadway Public / 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.): 5,415

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 - McEneaney Survey Associates

Address P.O. Box 1166 Dover, NH 03821 Telephone #: 603-742-0911

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.) N/A

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

SOIL SCIENTIST INFORMATION

Name of Soil Scientist and Company (Licensed in N.H.) N/A

Address _____ Telephone #: _____

Professional License #: _____ E-mail address: _____

CONSERVATION EASEMENT HOLDER

Name of Easement Holder: N/A 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: 9/26/24

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: 9/26/24

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: 9/26/24

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: 9/26/24

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: N/A 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
B	4F	Fergus & Jennifer Cullen	152 Boxwood Lane 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
Stephen J. Haight, PE	Civilworks New England	P.O. Box 1166 Dover, NH 03821

Conservation Easement Holder:

TAX MAP	LOT #	NAME OF EASEMENT HOLDER	MAILING ADDRESS

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: Fergus & Jennifer Cullen File Number: _____

PROJECT TITLE: TDR Subdivision

PROPERTY LOCATION: 566 Sixth Street Tax Map: B Lot: 4F

	Where/How Provided	Reviewed
1. Completed and signed Application form	X	
2. Plan Review Fees are provided	X	
3. Electronic copy of the surveyed plat layout	X	
4. Electronic copy of supplementary materials and application	X	
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:	X 7 full size, 5 small plots	
Location map at appropriate scale	X	
Proposed subdivision name and title and Planning File #	X	
Date, north arrow and scale	X	
Names of all abutting property owners	X	
Name and address of owners and/or applicants	X	
Signature & stamp of NH licensed land surveyor and/or engineer	X	
Zoning District boundaries, including any special or overlay districts	N/A	
Location of Conservation District areas	N/A	
Location, names and widths of existing and proposed streets, including pavement widths, grades, curbs and crosswalks	X	
Location and widths of existing & proposed easements & right of ways	X	
Location and 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	X	
Existing and proposed lot areas in square feet	X	
Existing and proposed topographic information at two foot intervals	X	
Existing and proposed buildings and structure locations	X	
Minimum building setbacks or build to lines on all lots	X	
Location and size of existing and proposed electric, telephone, gas cable and other underground utilities	X	

	Explain How Provided	Reviewed
Existing and proposed water lines and fire hydrants, including materials and capacity needed	X	
Location and materials of sanitary sewage facilities within project site and projected additional peak hour sewer load	X	
Existing and proposed 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	X	
Soil types	X	
Map and lot numbers for existing and proposed lots as assigned by Tax Assessor	X	
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	X	
Existing railroad lines	N/A	
Note regarding solid waste disposal	X	
All applicable Dover Common Subdivision notes	X	
8. Construction Detail Sheets shall contain the following information (if appropriate):		
Profiles showing existing & proposed elevations along the center lines of proposed streets & within 100' of intersections with existing streets	N/A	
Profiles showing the locations & a typical cross-section detail of streets	N/A	
Location of street trees, street lighting poles and street signs	N/A	
Location, size and invert elevations of existing and proposed sanitary sewers, stormwater drains and fire hydrants	X	
Location and size of all water, gas and other underground utilities	X	
9. Additional Information if appropriate	N/A	
Stormwater Management Plan depicting the existing and proposed storm drainage system and engineered drainage analysis	N/A	
Stormwater Management System Operation and Maintenance Plan	N/A	
Letter to Serve from Public and Private Utilities	X	
Erosion and Sedimentation Control Plan	X	
Proposed restrictive covenants or homeowners association documents	N/A	
Dates and permit numbers of all required state and federal permits	N/A	
If wetland buffer, indicate placards locations, as applicable	N/A	
Provide additional exhibits/technical data determined appropriate by the Planning Board or its staff as required	TBD	

REVIEWED BY: _____ DATE_____

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: FERGUS CULLEN

Signature(s) of Property Owner(s): _____ Date: 6/6/24

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: FERGUS CULLEN

Signature(s) of Property Owner(s): _____ Date: 6/6/24

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.

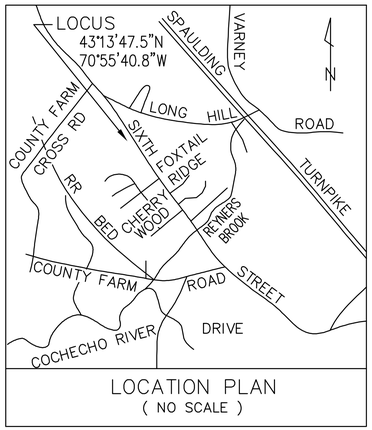
Address of Sign Location: _____

Sign Permit Application Type:
(check one)

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

SUBM-2024-0005 **566 SIXTH STREET**

Property ID	Location	Owner 1	Owner 2	Owner Address 1	City	State	Zip
A0041-000000	571 SIXTH ST	HESTER TAMARA		571 SIXTH STREET	DOVER	NH	03820
A0055-000000	559 SIXTH ST	GERUNGAN MARYKE P & HEIRS OF	TJAHJADI PRAJITNO HEIRS OF	559 SIXTH STREET	DOVER	NH	03820
A0056-000000	565 SIXTH ST	DROUIN LEON A TRUSTEE	DROUIN LEON A REVOCABLE TRUST	565 SIXTH STREET	DOVER	NH	03820
A0065-000000	561 SIXTH ST	DUVAL MATTHEW D	DUVAL DINA A	561 SIXTH ST	DOVER	NH	03820
A0066-000000	563 SIXTH ST	ZABIELSKI RHONDA M &	ZABIELSKI MICHAEL P	563 SIXTH STREET	DOVER	NH	03820-5907
A0067-000000	569 SIXTH ST	VANDINI NORMAN	VANDINI SHARON	569 SIXTH STREET	DOVER	NH	03820
B0004-052000	147 COTTONWOOD DR	DODIER SCOTT B	DODIER SARAH J	147 COTTONWOOD DR	DOVER	NH	03820
B0004-053000	141 COTTONWOOD DR	DAVIE EMILY S &	MALLARD TIMOTHY W	141 COTTONWOOD DR	DOVER	NH	03820
B0004-054000	133 COTTONWOOD DR	VANGUILDER JONATHAN D & MARIE H TRUSTEES	VANGUILDER FAMILY TRUST	133 COTTONWOOD DR	DOVER	NH	03820
B0004-A00000	570 SIXTH ST	BROWN RUTH A	BROWN KARL E	570 SIXTH STREET	DOVER	NH	03820
B0004-G00000	558 SIXTH ST	TSOURAMANIS GEORGE N		558 SIXTH ST	DOVER	NH	03820
B0004-J00000	568 SIXTH ST	VERVILLE CAITLIN &	WILKIE RORY	568 SIXTH ST	DOVER	NH	03820
B0004-L00000	560 SIXTH ST	ORTLIEB MICHAEL & CRYSTAL TRUSTEES	ORTLIEB FAMILY REVOCABLE LIVING TRUST	560 SIXTH STREET	DOVER	NH	03820
B0004-R00000	562 SIXTH ST	GOWEN SHARON	GOWEN JAMES P	562 SIXTH STREET	DOVER	NH	03820
B0004-F00000	566 SIXTH ST	CULLEN FERGUS	CULLEN JENNIFER	152 BOXWOOD LANE	DOVER	NH	03820
		MCENEANEY SURVEY ASSOCIATES	KEVIN MCENEANEY	PO BOX 1166	DOVER	NH	03820
		CIVILWORKS NEW ENGLAND	STEVE HAIGHT	PO BOX 1166	DOVER	NH	03820



LOCATION PLAN
(NO SCALE)

TDR SUBDIVISION PLAN

FOR

3 LOTS (5 UNITS)

TAX MAP B, LOT 4F

566 SIXTH STREET

DOVER, NH

OCTOBER 1, 2024

OWNER/APPLICANT

FERGUS CULLEN & JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NH 03820

_____ DATE

SITE CIVIL ENGINEER

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

LAND SURVEYOR

MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND
P.O. BOX 1166
181 WATSON ROAD
DOVER, NH 03821
(603) 742-0911

SHEET INDEX	SHEET
COVER SHEET	1
NEIGHBORHOOD PLAN	2
EXISTING CONDITIONS PLAN (BY MCENEANEY SURVEY)	3
TDR APPROVAL PLAN (BY MCENEANEY SURVEY)	4
TDR SUBDIVISION PLAN (BY MCENEANEY SURVEY)	5
TDR TOPOGRAPHY PLAN (BY MCENEANEY SURVEY)	6
NOTE SHEET	7
GRADING AND EROSION AND SEDIMENT CONTROL PLAN	8
UTILITY PLAN	9
EROSION CONTROL NOTES	10
EROSION CONTROL DETAILS	11-12
DETAIL SHEETS	13-15

PLANNING FILE NO.: SITE-2024-0005





NEIGHBORHOOD LIST

	TAX MAP	LOT NO.	NAME & ADDRESS
B 4F	B	4F	FERGUS & JENNIFER CULLEN 152 BOXWOOD LANE DOVER, NH 03820
A 41	A	41	TAMARA S. HESTER 571 SIXTH STREET DOVER, NH 03820
A 54	A	54	EVAN P. CANTOR, TRUSTEE EVAN P. CANTOR REVOCABLE LIVING TRUST 7854 TURQUOISE STREET DUBLIN, CA 94568
A 55	A	55	MARYKE P. GERUNGAN HEIRS OF PRAJITNO TJAHJADI 559 SIXTH STREET DOVER, NH 03820
A 56	A	56	LEON A. DROUIN, TRUSTEE LEON A. DROUIN, REVOCABLE TRUST 565 SIXTH STREET DOVER, NH 03820
A 57	A	57	SYDNEY R. SENEY & JEFFREY A. GRAVESON 553 SIXTH STREET DOVER, NH 03820
A 65	A	65	MATHEW D. DUVAL & DINA A. DUVAL 561 SIXTH STREET DOVER, NH 03820
A 66	A	66	RHONDA M. ZABIELSKI & MICHAEL P. ZABIELSKI 563 SIXTH STREET DOVER, NH 03820
A 67	A	67	NORMAN E. VANDINI & SHARON S. VANDINI 569 SIXTH STREET DOVER, NH 03820
B 4-52	B	4-52	SCOTT B. DODIER & SARAH J. DODIER 147 COTTONWOOD DRIVE DOVER, NH 03820
B 4-53	B	4-53	EMILY S. DAVIE & TIMOTHY W. MALLARD 141 COTTONWOOD DRIVE DOVER, NH 03820
B 4-54	B	4-54	JONATHAN D. & MARIE H. VANGUILDER, TRUSTEES VANGUILDER FAMILY TRUST 133 COTTONWOOD DRIVE DOVER, NH 03820
B 4A	B	4A	RUTH A. BROWN & KARL E. BROWN 570 SIXTH STREET DOVER, NH 03820
B 4G	B	4G	GEORGE N. TSOURAMANIS 558 SIXTH STREET DOVER, NH 03820
B 4J	B	4J	CAITLIN VERVILLE & RORY WILKIE 568 SIXTH STREET DOVER, NH 03820
B 4K	B	4K	PATRICK T. BOWEN & FLOR F. BOWEN 556 SIXTH STREET DOVER, NH 03820
B 4L	B	4L	MICHAEL & CRYSTAL ORTLIEB, TRUSTEES ORTLIEB FAMILY REVOCABLE TRUST 560 SIXTH STREET DOVER, NH 03820
B 4R	B	4R	SHARON GOWEN & JAMES P. GOWEN 562 SIXTH STREET DOVER, NH 03820
B 4M	B	4M	KAREN L. EWER-GRAY 574 SIXTH STREET DOVER, NH 03820

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)

PLANNING FILE NO.: SITE-2024-0005

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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

NO.	REVISION	APP'D	DATE

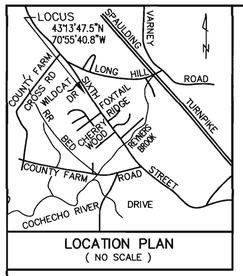
DATE: 10-1-24
SCALE: 1"=100'
DRAWN BY: DJL
DESIGN BY: SJH
APPROVED BY:SJH
PROJECT NO:24081
FILE: 24081-SITE

NEIGHBORHOOD PLAN

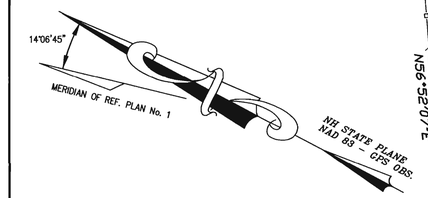
FERGUS & JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NH 03820

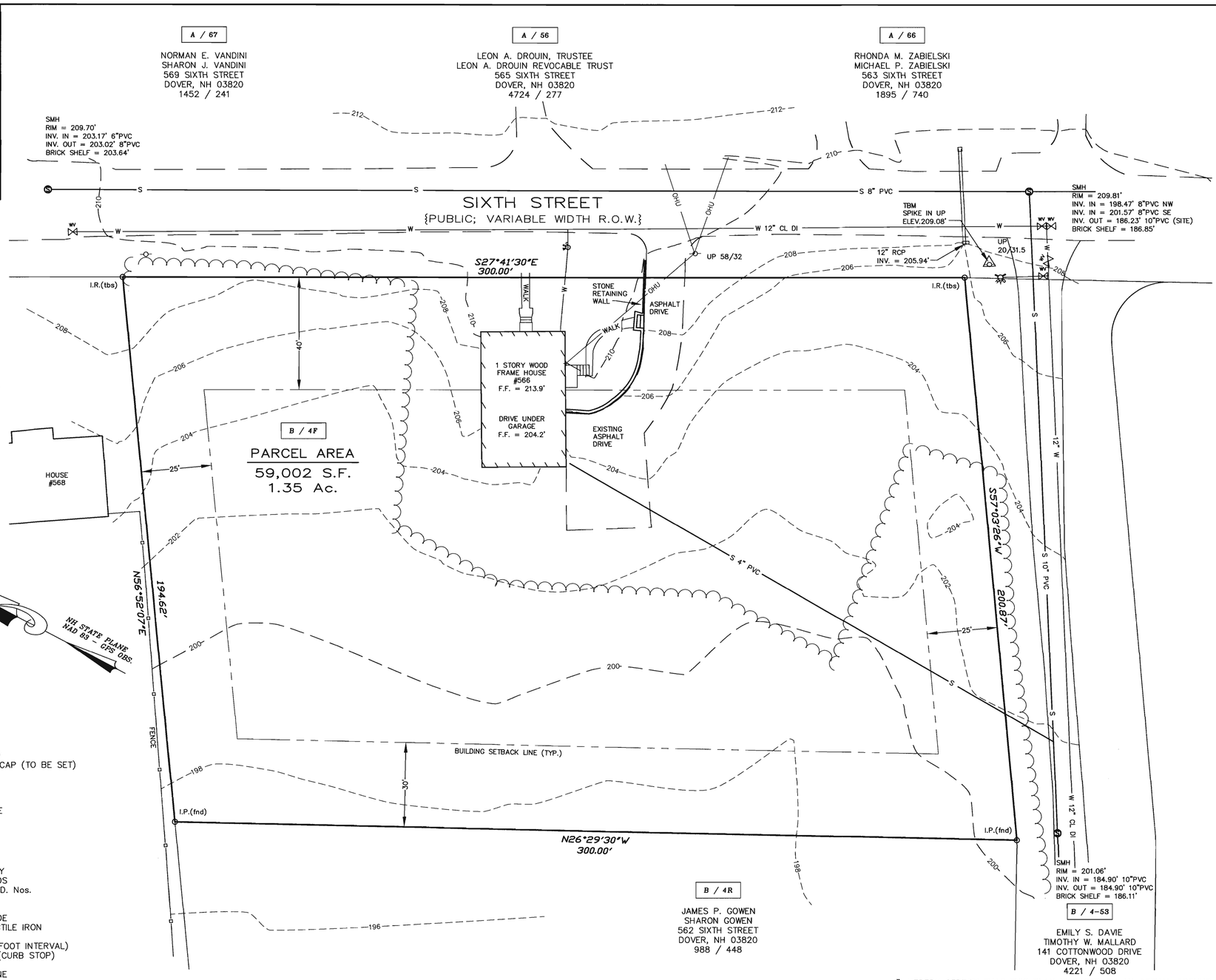
TDR SSUBDIVISION PLAN
5 RESIDENTIAL UNITS
566 SIXTH STREET
DOVER, NH 03820

2



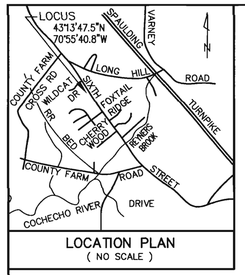
LOCATION PLAN
(NO SCALE)



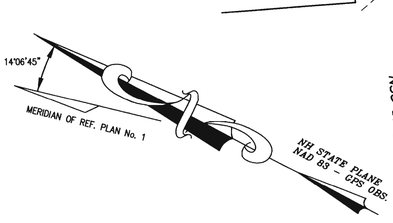


LEGEND

- I.P.(fnd) – IRON PIPE (FOUND)
- I.R.(tbs) ● – IRON ROD W/ I.D. CAP (TO BE SET)
- SMH – SEWER MANHOLE
- CB – CATCH BASIN
- DMH – DRAIN MANHOLE
- W – WATER GATE VALVE
- S.F. – SQUARE FEET
- Ac. – ACRE
- (TYP.) – TYPICAL
- ± – MORE OR LESS
- ø – DIAMETER
- S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
- UP 410/5 – UTILITY POLE W/ I.D. Nos.
- R.O.W. – RIGHT OF WAY
- INV. – INVERT
- PVC – POLYVINYL CHLORIDE
- CL DI – CEMENT LINED DUCTILE IRON
- ELEV. – ELEVATION
- 204 – – –



LOCATION PLAN
(NO SCALE)



LEGEND

I.P.(fnd) – IRON PIPE (FOUND)
I.R.(tbs) ● – IRON ROD W/ I.D. CAP (TO BE SET)
SMH – SEWER MANHOLE
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UP 410/5 – UTILITY POLE W/ I.D. Nos.
R.O.W. – RIGHT OF WAY
INV. – INVERT
PVC – POLYVINYL CHLORIDE
CL DI – CEMENT LINED DUCTILE IRON
ELEV. – ELEVATION
204 – CONTOUR LINE (2 FOOT INTERVAL)
WSO – WATER SHUT OFF (CURB STOP)
HYD. – FIRE HYDRANT
W – WATER SERVICE LINE
S – SEWER LINE
SMH – SEWER MANHOLE
OHU – OVERHEAD UTILITIES

NO.	DATE	DESCRIPTION	BY	CHK
CNE 24081		REVISIONS		

24–2571	TDR APPR	23–12	37–42
PROJECT NO	TYPE	FIELDBOOK & PAGES	

A / 67
NORMAN E. VANDINI
SHARON J. VANDINI
569 SIXTH STREET
DOVER, NH 03820
1452 / 241

A / 56
LEON A. DROUIN, TRUSTEE
LEON A. DROUIN REVOCABLE TRUST
565 SIXTH STREET
DOVER, NH 03820
4724 / 277

A / 66
RHONDA M. ZABIELSKI
MICHAEL P. ZABIELSKI
563 SIXTH STREET
DOVER, NH 03820
1895 / 740

OWNER SIGNATURES

B / 4J
CAITLIN VERVILLE
RORY WILKIE
568 SIXTH STREET
DOVER, NH 03820
4613 / 638

SMH
RIM = 209.70'
INV. IN = 203.17' 6"PVC
INV. OUT = 203.02' 8"PVC
BRICK SHELF = 203.64'

SIXTH STREET
{PUBLIC; VARIABLE WIDTH R.O.W.}

S27°41'30"E
300.00'

TBM
SPIKE IN UP
ELEV.209.08'

SMH
RIM = 209.81'
INV. IN = 198.47' 8"PVC NW
INV. IN = 201.57' 8"PVC SE
INV. OUT = 186.23' 10"PVC (SITE)
BRICK SHELF = 186.85'

12" RCP
INV. = 205.94'

UP 20/31.5

UP 58/32

I.R.(tbs)
100.00'
111.23'
88.77'

STONE RETAINING WALL
ASPHALT DRIVE
WALK

10.5' x 5.0'
PROPOSED DUPLEX
39' x 29'
1,184 S.F. FOOTPRINT
–39.0'–
29.0'

1 STORY WOOD FRAME HOUSE
#566
F.F. = 213.9'

DRIVE UNDER GARAGE
F.F. = 204.2'

EXISTING ASPHALT DRIVE

HOUSE
#568

PROPOSED PAVED DRIVEWAY

PROPOSED 30' WIDE UTILITY EASEMENT

PROPOSED 30' WIDE ACCESS EASEMENT

N56°52'07"E
194.62'

N 56°52'07" E
196.73'

BUILDING SETBACK LINE (TYP.)

B / 4F
PARCEL AREA
19,942 S.F.
0.45 Ac.

B / 4F-1
PARCEL AREA
19,480 S.F.
0.45 Ac.

B / 4F-2
PARCEL AREA
19,580 S.F.
0.45 Ac.

N 62°36'50" E
197.77'

S55°03'26"W
200.87'

S 10" PVC

W 12" CL DI

30' EXTERIOR NO CUT BUFFER (TYP.)

FENCE

I.P.(fnd)
100.22'
I.R.(tbs)
91.55'
N26°29'30"W
300.00'
I.R.(tbs)
108.23'
I.P.(fnd)

SMH
RIM = 201.06'
INV. IN = 184.90' 10"PVC
INV. OUT = 184.90' 10"PVC
BRICK SHELF = 186.11'

B / 4R
JAMES P. GOWEN
SHARON GOWEN
562 SIXTH STREET
DOVER, NH 03820
988 / 448

B / 4–53
EMILY S. DAVIE
TIMOTHY W. MALLARD
141 COTTONWOOD DRIVE
DOVER, NH 03820
4221 / 508

REFERENCE PLANS:

1.) ALDEN WOODS SUBDIVISION, SIXTH STREET, DOVER, NEW HAMPSHIRE, SHEET 7 OF 26: SCALE: 1" = 60'; DATED: APRIL 27, 1998; BY: MCENEANEY SURVEY ASSOCIATES, INC.; RECORDED S.C.R.D. PLAN 54–34.

2.) SUBDIVISION OF LAND OF SCOTT L. WEEDEN, DOVER, NEW HAMPSHIRE; SCALE: 1" = 50'; DATED: FEB., 1975; BY: RICHARD P. TOWLE; RECORDED S.C.R.D. PLAN 43, POCKET 15, FOLDER 43.

"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."

NOTES:

1.) OWNER OF RECORD:
FERGUS CULLEN
JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOLUME 5152, PAGE 7

2.) B / 4F – DENOTES TAX MAP AND PARCEL NUMBER.

3.) TOTAL PARCEL AREA = 59,002 S.F. / 1.35 Ac.

4.) THE INTENT OF THIS PLAN IS TO DEPICT A PROPOSED TDR SUBDIVISION CONSISTING OF THREE (3) LOTS, ONE LOT CONTAINING A SINGLE FAMILY DWELLING AND TWO LOTS CONTAINING DUPLEXES.

5.) ZONING DISTRICT: RURAL RESIDENTIAL (R40)

DIMENSIONAL REQUIREMENTS:	
MINIMUM LOT SIZE	= 40,000 S.F.
MAXIMUM LOT COVERAGE	= 10 PERCENT
MINIMUM FRONTAGE	= 150 FEET
BUILDING SETBACK REQUIREMENTS:	
FRONT SETBACK	= 40 FEET
SIDE SETBACK	= 25 FEET
REAR SETBACK	= 30 FEET
MAXIMUM BUILDING HEIGHT	= 35 FEET
WETLAND BUFFER	= 50 FEET

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 BASED ON GPS OBSERVATION DATED JANUARY 30, 2024.

8.) ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATIONS WITH THE RESPECTIVE UTILITY OWNERS PRIOR TO ANY WORK BEING PERFORMED. CALL DIGSAFE AT 1–888–344–7233.

9.) THE SOIL TYPES ON THE SITE ARE:
WdB – WINDSOR LOAMY SAND, 3–8% SLOPES
THE SOURCE FOR THE SOIL TYPE DATA IS USDA SCS SOIL SURVEY OF STRAFFORD COUNTY DATED MARCH 1973 & USDA NRCS WEB SOIL SURVEY http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

10.) NO WETLANDS WERE OBSERVED ON SITE BASED ON SITE INSPECTION PERFORMED DURING APRIL, 2024 BY BRUCE A. GILDAY, N.H.C.W.S. #088; N.H. C.S.S. #012 OF B A G LAND CONSULTANTS.

11.) TDR UNIT CALCULATIONS:
A) 59,002 S.F. – CONSERVATION (0 S.F.)= 59,002 S.F.
B) 59,002 * 0.85 = 50,150 S.F.
C) 50,150 * 0.85 = 42,628 S.F.
D) 42,628 / 40,000 BASE UNIT COUNT = 1 UNIT *
* EXISTING SINGLE FAMILY HOME HAS RIGHT TO CONVERT TO DUPLEX; (2) UNITS BY RIGHT.
E) REMAINING 3 UNITS TO BE PURCHASED, THUS ALLOWING FOR 5 UNITS.

12.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND DURING JANUARY AND MARCH, 2024 WITH AN ERROR NOT GREATER THAN 1 IN 10,000.

13.) PARCEL IS SERVICED BY MUNICIPAL SEWER AND WATER.

TDR APPROVAL PLAN
PREPARED FOR
FERGUS & JENNIFER CULLEN
TAX MAP B, LOT No. 4F
566 SIXTH STREET
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DOVER PLANNING FILE No. TRAN 2024–

DRAWN BY: RJM	FILE: MSA\2571\D\23–2571
SCALE: 1" = 20'	DATE: SEPT. 25, 2024

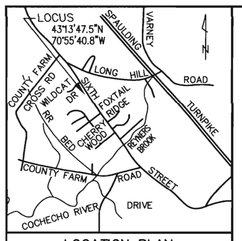
20 10 0 10 20 40 60 80

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

McENEANEY SURVEY ASSOCIATES of NEW ENGLAND
R.O. Box 1166 – 181 WATSON ROAD
DOVER, NH 03820 (603) 742–0911

SURVEYING – PLANNING – CONSULTING

9/26/2024 15:56:08 File: M:\2571\D\drawings\23-2571.dwg Layout: 2571 TDR



LOCATION PLAN
(NO SCALE)

A / 67
NORMAN E. VANDINI
SHARON J. VANDINI
569 SIXTH STREET
DOVER, NH 03820
1452 / 241

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LEON A. DROUIN REVOCABLE TRUST
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MICHAEL P. ZABIELSKI
563 SIXTH STREET
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1895 / 740

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{PUBLIC; VARIABLE WIDTH R.O.W.}

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S27°41'30"E 111.23'
S27°41'30"E 88.77'
I.R.(tbs)
(S')
30.00'

B / 4J
CAITLIN VERVILLE
RORY WILKIE
568 SIXTH STREET
DOVER, NH 03820
4613 / 638

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FOOTPRINT
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#566
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DRIVE UNDER GARAGE
F.F. = 204.2'
STONE RETAINING WALL
ASPHALT DRIVE
WALK
EXISTING ASPHALT DRIVE

HOUSE
#568

PROPOSED PAVED DRIVEWAY

PROPOSED 30' WIDE UTILITY EASEMENT

PROPOSED 30' WIDE ACCESS EASEMENT

S 27°31'40" E 95.87'
N 27°31'40" W 98.79'
70.87'
30.00'
30.14'
30.13'
73.89'
73.02'
(73.32')

S27°03'26"W 200.87'

N56°52'07"E 194.62'
S56°52'07"W 196.73'
S62°36'50"W 197.77'

B / 4F
PARCEL AREA
19,942 S.F.
0.45 Ac.

B / 4F-1
PARCEL AREA
19,480 S.F.
0.45 Ac.

B / 4F-2
PARCEL AREA
19,580 S.F.
0.45 Ac.

BUILDING SETBACK LINE (TYP.)
30' EXTERIOR NO CUT BUFFER (TYP.)
FENCE

I.P.(fnd) 100.22' N26°29'30"W
I.R.(tbs) 91.55' N26°29'30"W
I.R.(tbs) 108.23' N26°29'30"W I.P.(fnd)

S 10" PVC
W 12" CL DI

SMH
RIM = 201.06'
INV. IN = 184.90' 10"PVC
INV. OUT = 184.90' 10"PVC
BRICK SHELF = 186.11'

B / 4R
JAMES P. GOWEN
SHARON GOWEN
562 SIXTH STREET
DOVER, NH 03820
988 / 448

B / 4-53
EMILY S. DAVIE
TIMOTHY W. MALLARD
141 COTTONWOOD DRIVE
DOVER, NH 03820
4221 / 508

LEGEND

I.P.(fnd) – IRON PIPE (FOUND)
I.R.(tbs) ● – IRON ROD W/ I.D. CAP (TO BE SET)
SMH – SEWER MANHOLE
CB – CATCH BASIN
DMH – DRAIN MANHOLE
WV – WATER GATE VALVE
S.F. – SQUARE FEET
Ac. – ACRE
(TYP.) – TYPICAL
± – MORE OR LESS
ø – DIAMETER
S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
UP 410/5 – UTILITY POLE W/ I.D. Nos.
R.O.W. – RIGHT OF WAY
INV. – INVERT
PVC – POLYVINYL CHLORIDE
CL DI – CEMENT LINED DUCTILE IRON
ELEV. – ELEVATION
204 – CONTOUR LINE (2 FOOT INTERVAL)
WSO – WATER SHUT OFF (CURB STOP)
HYD. – FIRE HYDRANT
W – WATER SERVICE LINE
S – SEWER LINE
S SMH – SEWER MANHOLE
OHU – OVERHEAD UTILITIES

NO.	DATE	DESCRIPTION	BY	CHK
CNE 24081		REVISIONS		

24–2571	TDR SUBDIV	23–12	37–42
PROJECT NO	TYPE	FIELDBOOK & PAGES	

REFERENCE PLANS:

1.) ALDEN WOODS SUBDIVISION, SIXTH STREET, DOVER, NEW HAMPSHIRE, SHEET 7 OF 26: SCALE: 1" = 60'; DATED: APRIL 27, 1998; BY: MCENEANEY SURVEY ASSOCIATES, INC.; RECORDED S.C.R.D. PLAN 54–34.

2.) SUBDIVISION OF LAND OF SCOTT L. WEEDEN, DOVER, NEW HAMPSHIRE; SCALE: 1" = 50'; DATED: FEB., 1975; BY: RICHARD P. TOWLE; RECORDED S.C.R.D. PLAN 43, POCKET 15, FOLDER 43.

"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."

NOTES:

1.) OWNER OF RECORD:
FERGUS CULLEN
JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOLUME 5152, PAGE 7

2.) B / 4F – DENOTES TAX MAP AND PARCEL NUMBER.

3.) TOTAL PARCEL AREA = 59,002 S.F. / 1.35 Ac.

4.) THE INTENT OF THIS PLAN IS TO DEPICT A PROPOSED TDR SUBDIVISION CONSISTING OF THREE (3) LOTS, ONE LOT CONTAINING A SINGLE FAMILY DWELLING AND TWO LOTS CONTAINING DUPLEXES.

5.) ZONING DISTRICT: RURAL RESIDENTIAL (R40)
DIMENSIONAL REQUIREMENTS:

MINIMUM LOT SIZE	= 40,000 S.F.
MAXIMUM LOT COVERAGE	= 10 PERCENT
MINIMUM FRONTAGE	= 150 FEET
BUILDING SETBACK REQUIREMENTS:	
FRONT SETBACK	= 40 FEET
SIDE SETBACK	= 25 FEET
REAR SETBACK	= 30 FEET
MAXIMUM BUILDING HEIGHT	= 35 FEET
WETLAND BUFFER	= 50 FEET

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 BASED ON GPS OBSERVATION DATED JANUARY 30, 2024.

8.) ALL EXISTING UTILITY LOCATIONS ARE APPROXIMATE AS SHOWN. THE CONTRACTOR SHALL VERIFY THEIR EXACT LOCATIONS WITH THE RESPECTIVE UTILITY OWNERS PRIOR TO ANY WORK BEING PERFORMED. CALL DIGSAFE AT 1–888–344–7233.

9.) THE SOIL TYPES ON THE SITE ARE:
WdB – WINDSOR LOAMY SAND, 3–8% SLOPES
THE SOURCE FOR THE SOIL TYPE DATA IS USDA SCS SOIL SURVEY OF STRAFFORD COUNTY DATED MARCH 1973 & USDA NRCS WEB SOIL SURVEY http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

10.) NO WETLANDS WERE OBSERVED ON SITE BASED ON SITE INSPECTION PERFORMED DURING APRIL, 2024 BY BRUCE A. GILDAY, N.H.C.W.S. #088; N.H. C.S.S. #012 OF B A G LAND CONSULTANTS.

11.) TDR UNIT CALCULATIONS:
A) 59,002 S.F. – CONSERVATION (0 S.F.)= 59,002 S.F.
B) 59,002 * 0.85 = 50,150 S.F.
C) 50,150 * 0.85 = 42,628 S.F.
D) 42,628 / 40,000 BASE UNIT COUNT = 1 UNIT *
* EXISTING SINGLE FAMILY HOME HAS RIGHT TO CONVERT TO DUPLEX; (2) UNITS BY RIGHT.
E) REMAINING 3 UNITS TO BE PURCHASED, THUS ALLOWING FOR 5 UNITS.

12.) PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM A SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND DURING JANUARY AND MARCH, 2024 WITH AN ERROR NOT GREATER THAN 1 IN 10,000.

13.) PARCEL IS SERVICED BY MUNICIPAL SEWER AND WATER.

TDR SUBDIVISION PLAN
PREPARED FOR
FERGUS & JENNIFER CULLEN
TAX MAP B, LOT No. 4F
566 SIXTH STREET
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DOVER PLANNING FILE No. SUBM 2024–

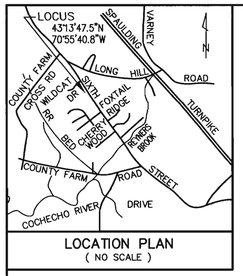
DRAWN BY: RJM	FILE: MSA\2571\D\23–2571
SCALE: 1" = 20'	DATE: SEPT. 25, 2024

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 03820 (603) 742–0911
SURVEYING – PLANNING – CONSULTING

9/26/2024 15:56:02 File: M:\2571\Drawings\23-2571.dwg Layout: 2571 SUBDIVISION



LOCATION PLAN
(NO SCALE)

A / 67
NORMAN E. VANDINI
SHARON J. VANDINI
569 SIXTH STREET
DOVER, NH 03820
1452 / 241

A / 56
LEON A. DROUIN, TRUSTEE
LEON A. DROUIN REVOCABLE TRUST
565 SIXTH STREET
DOVER, NH 03820
4724 / 277

A / 66
RHONDA M. ZABIELSKI
MICHAEL P. ZABIELSKI
563 SIXTH STREET
DOVER, NH 03820
1895 / 740

OWNER SIGNATURES

B / 4J
CAITLIN VERVILLE
RORY WILKIE
568 SIXTH STREET
DOVER, NH 03820
4613 / 638

SMH
RIM = 209.70'
INV. IN = 203.17' 6"PVC
INV. OUT = 203.02' 8"PVC
BRICK SHELF = 203.64'

SIXTH STREET
{PUBLIC; VARIABLE WIDTH R.O.W.}

S 8" PVC
W 12" CL DI
12" RCP
INV. = 205.94'

SMH
RIM = 209.81'
INV. IN = 198.47' 8"PVC NW
INV. IN = 201.57' 8"PVC SE
INV. OUT = 186.23' 10"PVC (SITE)
BRICK SHELF = 186.85'

TBM
SPIKE IN UP
ELEV.209.08'

UP 20/31.5
UP 58/32

S27°41'30"E 100.00'
S27°41'30"E 111.23'
S27°41'30"E 88.77'
S57°03'26"W 200.87'

I.R.(tbs)
(S)

STONE RETAINING WALL
ASPHALT DRIVE
WALK

1 STORY WOOD FRAME HOUSE
#566
F.F. = 213.9'

DRIVE UNDER GARAGE
F.F. = 204.2'

EXISTING ASPHALT DRIVE

PROPOSED DUPLEX
39' x 29'
1,184 S.F.
FOOTPRINT

HOUSE
#568

PROPOSED PAVED DRIVEWAY

PROPOSED 30' WIDE UTILITY EASEMENT

PROPOSED 30' WIDE ACCESS EASEMENT

S 27°31'40" E 95.87'
N 27°31'40" W 98.79'
70.87'
73.89'
73.82'
72.02'
(73.32')
30.00'
30.14'
30.13'

N56°52'07"E 194.62'

B / 4F
PARCEL AREA
19,942 S.F.
0.45 Ac.

B / 4F-1
PARCEL AREA
19,480 S.F.
0.45 Ac.

B / 4F-2
PARCEL AREA
19,580 S.F.
0.45 Ac.

S59°52'07"W 196.73'
S62°36'50"W 197.77'

BUILDING SETBACK LINE (TYP.)
30' EXTERIOR NO CUT BUFFER (TYP.)
FENCE

I.P.(fnd) 100.22' N26°29'30"W
I.R.(tbs) 91.55' N26°29'30"W
I.R.(tbs) 108.23' N26°29'30"W I.P.(fnd)

B / 4R
JAMES P. GOWEN
SHARON GOWEN
562 SIXTH STREET
DOVER, NH 03820
988 / 448

B / 4-53
EMILY S. DAVIE
TIMOTHY W. MALLARD
141 COTTONWOOD DRIVE
DOVER, NH 03820
4221 / 508

SMH
RIM = 201.06'
INV. IN = 184.90' 10"PVC
INV. OUT = 184.90' 10"PVC
BRICK SHELF = 186.11'

14°06'45"
MERIDIAN OF REF. PLAN No. 1
NH STATE PLANE
NAD 83 - GPS OBS.

LEGEND

- I.P.(fnd) – IRON PIPE (FOUND)
- I.R.(tbs) ● – IRON ROD W/ I.D. CAP (TO BE SET)
- SMH – SEWER MANHOLE
- CB – CATCH BASIN
- DMH – DRAIN MANHOLE
- W – WATER GATE VALVE
- S.F. – SQUARE FEET
- Ac. – ACRE
- (TYP.) – TYPICAL
- ± – MORE OR LESS
- ø – DIAMETER
- S.C.R.D. – STRAFFORD COUNTY REGISTRY OF DEEDS
- UP 410/5 – UTILITY POLE W/ I.D. Nos.
- R.O.W. – RIGHT OF WAY
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- OHU – OVERHEAD UTILITIES

NOTES:

1.) OWNER OF RECORD:
FERGUS CULLEN
JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NEW HAMPSHIRE 03820
S.C.R.D. VOLUME 5152, PAGE 7

2.) **B / 4F** – DENOTES TAX MAP AND PARCEL NUMBER.

3.) TOTAL PARCEL AREA = 59,002 S.F. / 1.35 Ac.

4.) THE INTENT OF THIS PLAN IS TO DEPICT A PROPOSED TDR SUBDIVISION CONSISTING OF THREE (3) LOTS, ONE LOT CONTAINING A SINGLE FAMILY DWELLING AND TWO LOTS CONTAINING DUPLEXES.

5.) ZONING DISTRICT: RURAL RESIDENTIAL (R40)

DIMENSIONAL REQUIREMENTS:	
MINIMUM LOT SIZE	= 40,000 S.F.
MAXIMUM LOT COVERAGE	= 10 PERCENT
MINIMUM FRONTAGE	= 150 FEET
BUILDING SETBACK REQUIREMENTS:	
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SIDE SETBACK	= 25 FEET
REAR SETBACK	= 30 FEET
MAXIMUM BUILDING HEIGHT	= 35 FEET
WETLAND BUFFER	= 50 FEET

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THE SOURCE FOR THE SOIL TYPE DATA IS USDA SCS SOIL SURVEY OF STRAFFORD COUNTY DATED MARCH 1973 & USDA NRCS WEB SOIL SURVEY http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

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A) 59,002 S.F. – CONSERVATION (0 S.F.)= 59,002 S.F.
B) 59,002 * 0.85 = 50,150 S.F.
C) 50,150 * 0.85 = 42,628 S.F.
D) 42,628 / 40,000 BASE UNIT COUNT = 1 UNIT *
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13.) PARCEL IS SERVICED BY MUNICIPAL SEWER AND WATER.

SHEET 6 OF 15

REFERENCE PLANS:

1.) ALDEN WOODS SUBDIVISION, SIXTH STREET, DOVER, NEW HAMPSHIRE, SHEET 7 OF 26: SCALE: 1" = 60'; DATED: APRIL 27, 1998; BY: MCENEANEY SURVEY ASSOCIATES, INC.; RECORDED S.C.R.D. PLAN 54-34.

2.) SUBDIVISION OF LAND OF SCOTT L. WEEDEN, DOVER, NEW HAMPSHIRE; SCALE: 1" = 50'; DATED: FEB., 1975; BY: RICHARD P. TOWLE; RECORDED S.C.R.D. PLAN 43, POCKET 15, FOLDER 43.

NO.	DATE	DESCRIPTION	BY	CHK
CNE 24081		REVISIONS		

24-2571	TDR SUBDIV/TOPO	23-12	37-42
PROJECT NO	TYPE	FIELDBOOK & PAGES	

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

TDR TOPOGRAPHIC SUBDIVISION PLAN
PREPARED FOR
FERGUS & JENNIFER CULLEN
TAX MAP B, LOT No. 4F
566 SIXTH STREET
CITY of DOVER
COUNTY of STRAFFORD
STATE of NEW HAMPSHIRE

DOVER PLANNING FILE No. SUBM 2024-

DRAWN BY: RJM	FILE: MSA\2571\D\23-2571
SCALE: 1" = 20'	DATE: SEPT. 25, 2024

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 03820 (603) 742-0911

SURVEYING – PLANNING – CONSULTING

9/26/2024 15:55:56 File: M:\2571\D\dwg\dgs\23-2571.dwg Layout: 2571 SUBDIVISION TOPOGRAPHIC

DOVER SUBDIVISION PLAN REVIEW NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT SITE IMPROVEMENTS ASSOCIATED WITH THE CONSTRUCTION OF TWO NEW DUPLEXES AND 1 EXISTING SINGLE FAMILY HOME, SITE ACCESS, DRIVEWAYS, WALKWAYS, AND UTILITIES.
2. OWNER OF RECORD:
   FERGUS & JENNIFER CULLEN
   152 BOXWOOD LANE
   DOVER, NH 03820
3. THE PARCEL IS SHOWN ON CITY OF DOVER ASSESSOR'S MAP B, LOT 4F.
4. THE SUBJECT PARCEL CONTAINS 1.35 ACRES (59,002 SQ. FT.) OF LAND. THERE IS NO LAND AREA CURRENTLY IN CURRENT USE.
5. TITLE REFERENCE FOR THE PROJECT PARCEL(S) IS THE STRAFFORD COUNTY REGISTRY OF DEEDS, BOOK NO. 5152, PAGE NO. 7.
6. REFERENCE PLANS:
   EXISTING CONDITIONS PLAN PREPARED FOR FERGUS & JENNIFER CULLEN, TAX MAP B, LOT 4F, 566 SIXTH STREET, CITY OF DOVER, COUNTY OF STRAFFORD, STATE OF NEW HAMPSHIRE, PREPARED BY: MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND, DATE: 3/6/24, SCALE: 1"=20'
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: RURAL RESIDENTIAL (R-40) DISTRICT
   ZONING OVERLAY DISTRICTS: RIVER FRONT RESIDENTIAL AND CONSERVATION DISTRICT

DIMENSIONAL REQUIREMENTS:	REQUIRED	PROVIDED
MINIMUM LOT SIZE	40,000 SF	59,002 SF
MINIMUM LOT COVERAGE	10 PERCENT	11.6%
MINIMUM LOT FRONTAGE	150 FT.	300 FT
MINIMUM YARD SETBACKS:		
FRONT SETBACK	40 FT.	
SIDE	25 FT.	
REAR	30 FT.	
MAXIMUM BUILDING HEIGHT	35 FT.	
MAXIMUM BUILDING HEIGHT	35 FT.	

9. OFF STREET PARKING REQUIREMENTS:

	MAXIMUM	PROVIDED
PARKING DIMENSIONS	9 X 18	9 X 18
AISLE DIMENSIONS	24 FT.	24 FT.

10. THE PROJECT DOES NOT REQUIRE A WAIVER REQUEST FROM THE BOARD.
11. THE PROJECT DOES NOT REQUIRE VARIANCES OR SPECIAL EXCEPTIONS TO BE GRANTED BY THE ZONING BOARD. SEE "PROJECT VARIANCE / PERMIT SUMMARY" SECTION IF APPLICABLE.
12. THE PROJECT DOES NOT REQUIRE A CONDITIONAL USE PERMIT.
13. PROPERTY LINE INFORMATION HAS BEEN OBTAINED FROM REFERENCE PLAN 1.
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. 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.
16. TOPOGRAPHIC SURVEY PERFORMED BY MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND ON JANUARY AND MARCH, 2024.
17. ELEVATIONS ARE BASED ON U.S.G.S. NAVD 1988 DATUM BASED ON GPS OBSERVATION ON JANUARY 30, 2024
18. THERE ARE NO WETLANDS ON THE SUBJECT PARCEL.
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 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 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, AS APPLICABLE.
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, SATURDAY 9 AM- 4 PM. 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 (STRUCTURE) IS MULTI-FAMILY.
33. THE PROJECT REQUIRES A NHDES SHORELAND PERMIT (PENDING).
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.

DOVER NOTES CONTINUED:

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, AS 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 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 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.
50. REFUSE REMOVAL SHALL BE BY CURB SIDE PICKUP ON DOVER POINT ROAD.

DEMOLITION NOTES:

1. COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
2. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY DEMOLITION/ CONSTRUCTION ACTIVITIES. (811).
4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, UTILITIES AND PAVEMENT ON THE SITE TO THE LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN.
5. IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
6. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS NOT ALREADY OBTAINED BY THE OWNER AND ARRANGE AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
8. STONES FROM REMOVED STONEWALLS SHALL REMAIN ON-SITE. STONES SHALL BE REPURPOSED ON-SITE AND SHALL NOT BE USED AS FILL.
9. THE LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATION IS NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
10. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, ORDINANCES, AND CODES.

SITE NOTES

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO APPLICABLE CITY AND STATE CODES.
3. ALL CONSTRUCTION LAYOUT SHALL BE DONE BY A LICENSED SURVEYOR UNDER CONTRACT WITH THE CONTRACTOR.
4. SEE DETAILS FOR SIGN LEGENDS.
5. ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", AND THE AMERICAN WITH DISABILITIES ACT, LATEST EDITIONS.
6. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE FACILITIES AND THEIR COMPONENTS DURING DEMOLITION AND CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE OWNERS REPRESENTATIVE. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIE-DOWNS. SUCH MATERIALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AT THE COMPLETION OF THE PROJECT.
7. METHODS OF DEMOLITION, CONSTRUCTION AND ERECTION ARE THE CONTRACTOR'S RESPONSIBILITY UNLESS OTHERWISE SPECIFIED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE AND MUNICIPAL REGULATIONS AND PERMITS. ENVIRONMENTAL CONTROLS SHALL INCLUDE BUT SHALL NOT BE LIMITED TO DUST CONTROL AND SILT BARRIERS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO STRUCTURES OR UTILITIES OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION PHASE CAUSED BY HIMSELF, HIS EMPLOYEES, HIS SUBCONTRACTORS OR EMPLOYEES OF SAME. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL TEMPORARY FACILITIES FOR THE PROTECTION OF THE WORK, WORKERS AND PUBLIC SAFETY.
9. THE SITE SHALL BE MAINTAINED TO PROVIDE ACCESSIBILITY IN ALL WEATHER CONDITIONS.
10. SNOW STORAGE WILL BE ACCORDING TO THE OPERATION AND MAINTENANCE PLAN AND WITHIN AREAS AS INDICATED. ON-SITE SNOW STORAGE SHALL OCCUR ALONG THE EDGES OF PROPOSED PAVEMENT.
11. ALL EXTERIOR DOORS ARE MANUAL AND OPENED FROM THE INTERIOR BY PANIC HARDWARE. ALL EXTERIOR DOORS SHALL COMPLY WITH ADA AND ALL LOCAL BUILDING CODE REQUIREMENTS.

GRADING NOTES:

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. CONTRACTOR SHALL RETAIN A GEOTECHNICAL ENGINEERING CONSULTANT APPROVED BY THE OWNER, TO CONDUCT COMPACTION TESTING AND FILL GRADATION MONITORING.
3. SEE EROSION CONTROL NOTES & DETAIL SHEET FOR TEMPORARY AND PERMANENT EROSION CONTROL MEASURES.
4. ALL DRAINAGE PIPES SHALL BE HDPE OR APPROVED EQUAL UNLESS OTHERWISE NOTED.
5. ALL DISTURBED AREAS NOT OTHERWISE CALLED FOR SURFACE TREATMENT SHALL RECEIVE 6" OF HIGH QUALITY LOAM AND SHALL BE SEEDED WITH GRASS.
6. ALL SITEWORK CONSTRUCTION SHALL BE ADVANCED USING "BEST MANAGEMENT PRACTICES" SANCTIONED BY THE USDA, SCS AND NHDES.
7. TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED, UTILIZED AND MAINTAINED UNTIL BASE MATERIALS ARE CONSTRUCTED.
8. CONTRACTOR SHALL PROVIDE A FINISH GRADED SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE AND UNDER RAISED STRUCTURES.
9. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND AS SHOWN ON PLAN. MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED AND UPSTREAM AREAS HAVE BEEN STABILIZED.
10. INSPECT SILT BARRIERS AFTER EACH RAIN STORM OF 1/4 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF THE FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
11. LIMIT TREE CLEARING TO ONLY THE EXTENT NECESSARY FOR CONSTRUCTION.
12. CONTRACTOR SHALL NOTIFY THE CITY OF DOVER AND THE DESIGN ENGINEER 48 HOURS PRIOR TO THE INSTALLATION OF PERMANENT STORMWATER BMP'S TO PROVIDE THE CITY AND THE ENGINEER THE OPPORTUNITY TO WITNESS THE CONSTRUCTION AND MATERIALS.
13. DENSITY REQUIREMENTS:

LOCATION	MINIMUM DENSITY
BELOW PAVED OR CONCRETE AREAS	95%
TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL	95%
BELOW LOAM AND SEED AREA	90%

*ALL PERCENTAGES SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH AASHTO STANDARD 180, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH AASHTO STANDARD T-191, T-204, OR T-238 AND T-239.

PROJECT VARIANCE / PERMIT SUMMARY:

1. FEDERAL AND STATE PERMITS:
   NONE
2. LIST ANY VARIANCES OR SPECIAL EXCEPTIONS GRANTED BY THE ZONING BOARD OF ADJUSTMENT OR CONDITIONAL USE PERMITS GRANTED BY THE PLANNING BOARD FOR THE PROPOSED USE OR STRUCTURE, INCLUDING THE CASE NUMBER AND DATE OF DECISION AND ANY CONDITIONS.

   TDR SUBDIVISION: APPROVAL REQUESTED CONCURRENTLY WITH TDR APPROVAL.

UTILITY NOTES

1. REVIEW DOVER NOTES FOR ALL APPLICABLE NOTES.
2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES, AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
3. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION.
4. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
5. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PROPOSED GRADING AND EROSION CONTROL MEASURES.
6. ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, DOUBLE CEMENT LINED DUCTILE IRON PIPE OR TYPE "K" COPPER, OR CITY APPROVED MATERIAL.
7. ALL WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION PRIOR TO ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE CHLORINATION AND TESTING WITH THE CITY OF DOVER WATER DEPARTMENT.
8. ALL GRAVITY SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE NOTED AND CONFORM TO THE REQUIREMENTS OF THE CITY OF DOVER SEWER DEPARTMENT STANDARDS.
9. EXISTING UTILITIES TO BE REMOVED SHALL BE CAPPED AT THE MAIN AND MEET THE CITY OF DOVER COMMUNITY SERVICES DEPARTMENT STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES.
10. ALL ELECTRICAL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
11. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE UTILITY COMPANIES.
12. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
13. THE CONTRACTOR SHALL OBTAIN, PAY FOR, AND COMPLY WITH ALL REQUIRED PERMITS, ARRANGE FOR ALL INSPECTIONS, AND SUBMIT COPIES OF ACCEPTANCE CERTIFICATES TO THE OWNER PRIOR TO THE COMPLETION OF THIS PROJECT.
14. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
15. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES. COORDINATE WITH GAS COMPANY.
16. A 10-FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS.
17. THE CONTRACTOR SHALL CONTACT "DIG-SAFE" 72 HOURS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE "DIG-SAFE" NUMBER ON SITE AT ALL TIMES.
18. SAWCUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.
19. GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE CITY OF DOVER.
20. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE CITY OF DOVER.
21. CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.
22. CONTRACTOR SHALL PHASE UTILITY CONSTRUCTION, PARTICULARLY WATER MAIN AND GAS MAIN CONSTRUCTION AS TO MAINTAIN CONTINUOUS SERVICE TO ABUTTING PROPERTIES. CONTRACTOR SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
23. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PREPARED BY THE PROJECT ELECTRICAL ENGINEER.
24. THE PROPOSED STRUCTURE SHALL COMPLY WITH CHAPTER 81, ARTICLE IV, SECTION 81-27 AND THE STATE BUILDING CODES OF THE CODE OF THE CITY OF DOVER.
25. FIRE SUPPRESSION PLANS SHALL BE PROVIDED TO THE FIRE/INSPECTION DEPARTMENT PRIOR TO INSTALLATION.
26. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
27. SEWAGE LOADING (PER NHDES ENV-WQ 1008.03)
    2 RESIDENCE DUPLEX x 2 BEDROOM/RESIDENCE x 150 GPD/BEDROOM = 1,200 GPD.
    1 RESIDENCE x 4 BEDROOMS X 150 GPD/BEDROOM = 300 GPD
    TOTAL = 1,500 GPD

UTILITY CONTACTS

WATER & SEWER: - CITY OF DOVER COMMUNITY SERVICES DEPARTMENT
PUBLIC WORKS & UTILITIES
CONTACT: KEN MAVROGEORGE, PE
271 MAST ROAD
DOVER, NH 03820
TEL: (603)-516-6450
EMAIL: K.MAVROGEORGE@DOVER.NH.GOV

ELECTRIC: - EVERSOURCE
CONTACT: TREVOR EMMONS
4 OLD DOVER ROAD
ROCHESTER, NH 03867
TEL: (603)-332-7515
EMAIL: TREVOR.EMMONS@EVERSOURCE.COM

LEGEND

S.F.	SQUARE FEET	©	EXISTING DRAINAGE MANHOLE
Ac.	ACRE	⬦	EXISTING CATCHBASIN
±	MORE OR LESS	5'R	PAVEMENT RADIUS
(TYP.)	TYPICAL	SBC	SLOPED BITUMINOUS CURB
S.C.R.D.	STRAFFORD REGISTRY OF DEEDS	x 74.00	EXISTING SPOT GRADE
NHHD	NEW HAMPSHIRE HIGHWAY DEPT.		
TBR	TO BE REMOVED	-94-	EXISTING GRADE
ELEV.	ELEVATION	OHW	OVERHEAD UTILITIES
INV.	INVERT	E	EXISTING ELECTRIC
R.O.W.	RIGHT-OF-WAY	W	EXISTING WATER LINE
	EXISTING UTILITY POLE	S	EXISTING SEWER LINE
	EXISTING SIGN	D	EXISTING DRAINAGE LINE
	EXISTING WATER SHUT-OFF	UGT	EXISTING UNDERGROUND TELEPHONE
	EXISTING WATER VALVE		
	EXISTING GAS VALVE	74	PROPOSED FINISH GRADE
	EXISTING HYDRANT	x 74.00	PROPOSED SPOT GRADE
	EXISTING LIGHT/SIGNAL POLE		PAVEMENT WITH CURB
	EXISTING SEWER MANHOLE		SILT BARRIER

	PROPOSED SEWER
PW	PROPOSED WATER
PUGU	PROPOSED UNDERGROUND UTILITIES

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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

PLANNING FILE NO.: SITE-2024-0005

NO.	REVISION	APP'D	DATE

DATE: 10-1-24
SCALE: 1"=100'
DRAWN BY: DJL
DESIGN BY: SJH
APPROVED BY: SJH
PROJECT NO: 24081
FILE: 24081-SITE

NOTE SHEET

TDR SSUBDIVISION PLAN
5 RESIDENTIAL UNITS
566 SIXTH STREET
DOVER, NH 03820

FERGUS & JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NH 03820

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PROPOSED CONSTRUCTION ENTRANCE

S27°41'30"E
300.00'

PROPOSED 5' WIDE ASPHALT WALK (TYP.)

PROPOSED 8" SILTSOXX

PROPOSED DUPLEX
39' x 29'
1,184 S.F. FOOTPRINT

FFE 214.0
GAR 204.0

1 STORY WOOD FRAME HOUSE
#566
F.F. = 213.9'

DRIVE UNDER GARAGE
F.F. = 204.2'

PROPOSED DUPLEX
39' x 29'
1,184 S.F. FOOTPRINT

FFE 214.0
GAR 204.0

PROPOSED 8" SILTSOXX

S57°03'26"W
200.87'

PROPOSED BIO-RETENTION BASIN

PROPOSED BIO-RETENTION BASIN

PROPOSED 8" SILTSOXX

PROPOSED 8" SILTSOXX

N56°52'07"E
194.62'

FENCE

N26°29'30"W
300.00'

14°06'45"
MERIDIAN OF REF. PLAN No. 1
NH STATE PLANE NAD 83 - CRS 0926

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

PLANNING FILE NO.: SITE-2024-0005

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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

NO.	REVISION	APP'D	DATE

10-1-24
1"=100'
DRAWN BY: DJL
DESIGN BY: SJH
APPROVED BY:
PROJECT NO: 24081
24081-SITE

GRADING, DRAINAGE & EROSION CONTROL PLAN

TDR SSUBDIVISION PLAN
5 RESIDENTIAL UNITS
566 SIXTH STREET
DOVER, NH 03820

FERGUS & JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NH 03820

8

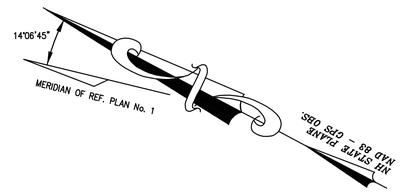
PLANNING FILE NO.: SITE-2024-0005

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NO.	REVISION	APP'D	DATE

10-1-24
1"=100'
DRAWN BY: DJL
DESIGN BY: SJH
APPROVED BY:
PROJECT NO: 24081
24081-SITE



1" STAINLESS STEEL TAPPING SLEEVE
1" STAINLESS STEEL TAPPING SLEEVE
12" CLDI
1"COPPER
1"POLY PW
207.33 HDWALL +7
207.64 HDWALL +7 OH1.0
INV. 4" SEWER 197.25
INV. 4" SEWER 200.00
8"PVC S=0.005 FT/FT
8" CLEANOUT AT GRADE LABELED "SEWER"
INV. 4" SEWER INTO 8" SEWER 196.50
CONTRACTOR SHALL VERIFY EXISTING ELEVATION AND REPLACE 4" SEWER IF REQUIRED
ABANDON EXISTING SEWER. INSTALL WATERTIGHT CAP.
INV. 4" SEWER INTO 8" SEWER 195.56
INV. 8" SEWER 195.35 DROP TO INV 10" SEWER 185.55
25'
40'
30'
FENCE
I.P.(fnd)
I.P.(fnd)

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

UTILITY PLAN

FERGUS & JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NH 03820

TDR SSUBDIVISION PLAN
5 RESIDENTIAL UNITS
566 SIXTH STREET
DOVER, NH 03820

9

DESCRIPTION

1. THE PURPOSE OF THIS PLAN IS TO DEPICT SITE IMPROVEMENTS ASSOCIATED WITH THE CONSTRUCTION OF TWO NEW DUPLEXES AND 1 EXISTING SINGLE FAMILY HOME, SITE ACCESS, DRIVEWAYS, WALKWAYS, AND UTILITIES.

PROJECT NAME AND LOCATION

TDR SUBDIVISION — *LATITUDE N43° 13' 47.5"*
566 SIXTH STREET — *LONGITUDE W70° 55' 40.8"*
DOVER, NEW HAMPSHIRE 03820

DISTURBED AREA

±18,200 S.F.

NOTES:

1. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY TIME BEFORE DISTURBED AREAS ARE STABILIZED.
2. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

SEQUENCE OF MAJOR ACTIVITIES

1. PLACE TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S PRIOR TO EARTH MOVING ACTIVITIES.
2. ALL EROSION CONTROL AND PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO COMMENCING EARTH MOVING OPERATIONS.
3. SELECTIVE DEMOLITION.
4. REGRADE SITE TO SUBGRADE.
5. TEMPORARY WATER DIVERSION (SWALES, BASINS) MUST BE USED AS NECCESSARY UNTIL AREAS ARE STABILIZED.
6. SWALES AND PONDS (AS APPLICABLE) SHALL BE CONSTRUCTED EARLY ON IN THE CONSTRUCTION SEQUENCE AND BEFORE ROUGH GRADING OF THE SITE AND ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
7. INSTALL DRAINAGE STRUCTURES AND CONTROLS.
8. INSTALL FOUNDATION FOOTINGS AND WALLS.
9. INSTALL UTILITIES.
10. PLACE GRAVELS AND FINE GRADE.
11. STABILIZE ROADWAYS AND PARKING AREAS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
12. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED (AS APPLICABLE) WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
13. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY 1/2" OF RAINFALL.
14. IN ALL CASES THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION AND IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

DEFINITIONS

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOMNG HAS OCCURRED.

1. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED; OR
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED

INSTALLATION, MAINTENANCE, AND INSPECTION PROCEDURES OF EROSION AND SEDIMENT CONTROLS

A. SILT BARRIER

1. INSTALLATION
   a. USE SILT BARRIER AS PERIMETER CONTROLS, PARTICULARLY AT THE LOWER OR DOWN SLOPE EDGE OF A DISTURBED AREA.
   b. LEAVE SPACE FOR MAINTENANCE BETWEEN TOE AND SLOPE OF SILT BARRIER.
   c. TRENCH IN THE SILT BARRIER ON THE UPHILL SIDE (6 INCHES DEEP BY 6 INCHES WIDE).
   d. INSTALL STAKES ON THE DOWNHILL SIDE OF THE SILT BARRIER.
   e. CURVE THE END OF THE SILT BARRIER UP-GRADIENT TO HELP IT CONTAIN RUNOFF.
2. SEQUENCE OF INSTALLATION
   a. SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
3. MAINTENANCE
   a. SILT BARRIERS SHOULD BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
   b. SILT BARRIERS HAVE A USEFUL LIFE OF ONE SEASON. ON LONGER CONSTRUCTION PROJECTS, SILT BARRIERS SHOULD BE REPLACED PERIODICALLY TO MAINTAIN EFFECTIVENESS.
   c. REMOVE SEDIMENT WHEN IT REACHES ONE-THIRD (1/3) THE HEIGHT OF THE SILT BARRIER.
   d. REPLACE THE SILT BARRIERS WHERE THEY ARE TORN, WORN, OR OTHERWISED DAMAGED AND MONITOR PERFORMANCE TO ENSURE EFFECTIVE PERFORMANCE.
   e. RETRENCH OR REPLACE ANY SILT BARRIER THAT IS NOT PROPERLY ANCHORED TO THE GROUND.
   f. IF THERE IS EVIDENCE OF END FLOW ON PROPERLY INSTALLED BARRIERS, EXTEND BARRIERS UPHILL OR CONSIDER REPLACING THEM WITH OTHER MEASURES, SUCH AS TEMPORARY DIVERSIONS AND SEDIMENT TRAPS.
   g. SILT BARRIERS SHOULD BE REPAIRED IMMEDIATELY IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SILT BARRIERS SHOULD BE REPLACED WITH A TEMPORARY CHECK DAM.

B. MULCHING

1. TIMING
   a. APPLY MULCH PRIOR TO ANY STORM EVENT. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.
   b. IN OTHER AREAS, THE TIME PERIOD CAN RANGE FROM 14 TO 30 DAYS OF INACTIVITY ON A AREA. THE LENGTH OF TIME VARYING WITH SITE CONDITIONS. PROFESSIONAL JUDGEMENT SHALL BE USED TO EVALUATE THE INTERACTION OF SITE CONDITIONS (SOIL ERODIBILITY, SEASON OF YEAR, EXTENT OF DISTURBANCE, PROXIMITY TO SENSITIVE RESOURCES, ETC.) AND THE POTENTIAL IMPACT OF EROSION ON ADJACENT AREAS TO CHOOSE AN APPROPRIATE TIME RESTRICTION.
   c. WITHIN 100 FEET OF RIVERS, STREAMS, WETLANDS, AND IN LAKE AND POND WATERSHEDS, THE TIME PERIOD OF WHICH MULCHING SHOULD TAKE OCCUR SHOULD BE NO GREATER THAN SEVEN (7) DAYS. THIS SEVEN DAY LIMIT SHOULD BE REDUCED FURTHER DURING WET WEATHER PERIODS.
2. APPLICATION RATE
   a. MULCH SHALL BE APPLIED AT A RATE OF BETWEEN 1.5 TO 2 TONS PER ACRE, OR 70 TO 90 POUNDS PER 1000 SQUARE FEET.
   b. GUIDELINES FOR WINTER MULCH APPLICATION. WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWING SEASON) IT SHALL BE AT A RATE OF 150-200 POUNDS OF HAY OR STRAW PER ACRE WITH ABOUT 4 INCHES IN DEPTH. A TACKIFIER MAY BE ADDED TO THE MULCH.
3. MAINTENANCE
   a. ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS. CHECK FOR SIGNS OF EROSION OR DISPLACEMENT OF THE MULCH. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED.
   b. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE AND SHOULD BE REPAIRED AS NECCESSARY.
   c. INSPECTIONS SHOULD TAKE PLACE UNTIL THE SITE IS ESTABLISHED.
   d. EROSION CONTROL MIX MULCH USED FOR TEMPORARY STABILIZATION SHOULD BE LEFT IN PLACE. VEGETATION ADDS STABILITY AND SHOULD BE PROMOTED.

C. TEMPORARY SEEDING

1. SEEDBED PREPARATION
   a. STONES AND TRASH SHOULD BE REMOVED SO AS NOT TO INTERFERE WITH THE SEEDING AREA.
   b. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
   c. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS.
      i) APPLY FERTILIZER AT A RATE OF 600 POUNDS PER ACRE OR 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER OR EQUIVALENT.
      ii) APPLY LIMESTONE AT A RATE OF 3 TONS PER ACRE OR 138 POUNDS PER 1,000 SQUARE FEET.
2. SEEDING
   a. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SUMMARY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   b. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
   c. TEMPORARY SEEDING BETWEEN MAY 15TH AND AUGUST 15TH SHOULD BE COVERED WITH HAY OR STRAW MULCH, ACCORDING TO THE "TEMPORARY AND PERMANENT MULCHING" PRACTICE.
   d. VEGETATED GROWTH COVERING 85% OF THE DISTURBED AREA SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH.
3. MAINTENANCE
   a. TEMPORARY SEEDING SHALL BE INSPECTED PERIODICALLY. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER FABRICS, CHECK DAMS, ETC.).

D. PERMANENT SEEDING

1. BEDDING – STONES LARGER THAN 2 INCHES, TRASH, ROOTS, AND OTHER DEBRIS INTERFERRING WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA SHOULD BE REMOVED. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF 4" TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL.
2. FERTILIZER
   a. LIME AND FERTILIZER SHOULD BE WORKED INTO THE SOIL TO A DEPTH OF 4 INCHES USING A DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT PRIOR TO OR AT THE SAME TIME OF SEEDING.
   b. FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITORGEN FERTILIZER WHEN APPLIED TO AREAS BETWEEN 25 FEET AND 250 FEET FROM A SURFACE WATER BODY. NO FERTILIZER EXCEPT LIMESTONE SHOULD BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER.
   c. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
      AGRICULTURAL LIMESTONE @ 138 LBS. PER 1,000 S.F.
      LOW PHOSPHATE (N-P205-K20) FERTILIZER @ 13.8 LBS. PER 1,000 S.F.
3. SEED MIXTURE (RECOMMENDED)

RATE: TYPE	LBS. PER ACRE	LBS. PER 1,000 S.F.
TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDSFOOT TREFOIL	8	0.20
TOTAL	48	1.10

4. SEEDING
   a. SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES. PERMANENT SEEDING SHOULD BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST.
   b. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER) WITH A SEEDING DEPTH FROM A QUARTER (1/4) TO A HALF (1/2) INCH.
   c. VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED SHOULD BE ACHIEVED PRIOR TO OCTOBER 15TH. IF THIS CONDITION IS NOT ACHIEVED, IMPLEMENT TEMPORARY STABILIZATION MEASURES FOR OVERWINTER PROTECTION.
5. HYDROSEEDING
   a. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF STRAW MULCH ON CRITICAL AREAS IS PREFERRED SINCE IT GRANTS BETTER SLOPE PROTECTION BY USING ADHESIVE MATERIALS.
   b. SLOPES MUST BE NO STEEPER THAN 2 TO 1 (2 FEET HORIZONTALLY TO 1 FOOT VERTICALLY).
   c. SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.
6. MAINTENANCE
   a. PERMANENT SEEDED AREAS SHOULD BE INSPECTED AT LEAST MONTHLY DURING THE COURSE OF CONSTRUCTION. INSPECTIONS, MAINTENANCE, AND CORRECTIVE ACTIONS SHOULD CONTINUE UNTIL THE OWNER ASSUMES PERMANENT OPERATION OF THE SITE.
   b. SEEDED AREAS SHOULD BE MOWED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION, WITH MOWING HEIGHT AND FREQUENCY DEPENDENT ON TYPE OF GRASS COVER.
   c. BASED ON INSPECTION, AREAS SHOULD BE RESEEDED TO ACHIEVE FULL STABALIZATION OF EXPOSED SOILS.
   d. IF EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHOULD BE MADE AND AREAS RESEEDED. WITH OTHER TEMPORARY MEASURES USED TO PROVIDE EROSION PROTECTION DURING THE PERIOD OF VEGETATION ESTABLISHMENT.
   e. AT A MINIMUM, 85% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION.

E. STORM DRAIN INLET PROTECTION (IF REQUIRED)

1. SPECIFICATIONS
   a. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE BARRIER SHOULD BE LESS THAN ONE ACRE.
   b. ANY RESULTANT PONDING OF STORMWATER MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.
2. INSTALLATION
   a. INSTALL INLET PROTECTION AS SOON AS STORM DRAIN INLETS ARE INSTALLED AND BEFORE LAND-DISTURBANCE ACTIVITIES BEGIN IN AREAS WITH EXISTING STORM DRAIN SYSTEMS.
   b. PROTECT ALL INLETS THAT COULD RECEIVE STORMWATER FROM YOUR CONSTRUCTION PROJECT.
   c. USE IN CONJUNCTION WITH OTHER EROSION PREVENTION AND SEDIMENT CONTROL BMPS.
   d. DESIGN YOUR INLET PROTECTION TO HANDLE THE VOLUME OF WATER FROM THE AREA BEING DRAINED. ENSURE THAT THE DESIGN IS SIZED APPROPRIATELY.
3. MAINTENANCE
   a. INSPECT INLETS BARRIERS FREQUENTLY, BEFORE AND AFTER EACH RAINFALL EVENT AND REPAIR WHEN NECESSARY.
   b. SEDIMENT SHOULD BE REMOVED AND THE STORM DRAIN SEDIMENT BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE BARRIER.
   c. REMOVED SEDIMENT SHOULD BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   d. SWEEP STREETS, SIDEWALKS, AND OTHER PAVED AREAS REGULARLY.
   e. ALL CATCH BASINS AND STORM DRAIN INLETS MUST BE CLEANED AT THE END OF CONSTRUCTION AND AFTER THE SITE HAS BEEN FULLY STABILIZED

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES THE SILT BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING ANY CLEARING OR GRADING OF THE SITE. STRUCTURAL CONTROLS SHALL BE INSTALLED CONCURRENTLY WITH THE APPLICABLE ACTIVITY. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN TWENTY ONE (21) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN FOURTEEN (14) DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, SILT FENCES AND ANY EARTH/DIKES WILL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED. ALL AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.

WASTE DISPOSAL

a. WASTE MATERIALS
   ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN A DUMPSTER. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON SITE. ALL PERSONEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
b. HAZARDOUS WASTE
   ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
c. SANITARY WASTE
   ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

MAINTENACE OF STORMWATER MANAGEMENT FACILITIES

THE PROJECT PROPONENT IS RESPONSIBLE FOR THE MAINTENANCE OF ALL STORMWATER FACILITIES DURING CONSTRUCTION AND THE PROPERTY OWNER IS RESPONSIBLE AFTER CONSTRUCTION IS COMPLETE.

CATCH BASINS & STORMWATER TREATMENT STRUCTURES

1. CATCH BASINS & STORMWATER TREATMENT STRUCTURES SHOULD BE INSPECTED ON A MONTHLY BASIS AND/OR AFTER A MAJOR RAINFALL EVENT TO ASSURE THAT DEBRIS OR SEDIMENTS DO NOT REDUCE THE EFFECTIVENESS OF THE SYSTEM.

SPILL PREVENTION

A. MATERIAL MANAGEMENT PRACTICES
   THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL SANITARY EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
   GOOD HOUSEKEEPING:
   THE FOLLOWING GOOD HOUSEKEEPING PRACTICES THAT WILL BE FOLLOWED ON SITE DURING
   1. THE CONSTRUCTION PROJECT:
      a. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.
      b. ALL MATERIALS STORED ON SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
      c. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
      d. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.
      e. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
      f. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
   2. HAZARDOUS PRODUCTS:
      a. THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
      b. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
      c. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.
      d. SURPLUS PRODUCT THAT MUST BE DISPOSED OF WILL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

B. PRODUCT SPECIFICATION PRACTICES
   THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:
   1. PETROLEUM PRODUCTS:
      a. ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENACE TO REDUCE LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
   2. FERTILIZERS:
      a. FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
   3. PAINTS:
      a. ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE DISPOSED OF PROPERLY ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
   4. CONCRETE TRUCKS:
      a. CONCRETE TRUCKS WILL DISCHARGE AND WASH OUT SURPLUS CONCRETE OR DRUM WASH WATER IN A CONTAINED AREA ON SITE.

C. SPILL CONTROL PRACTICES
   IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
   a. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
   b. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
   c. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
   d. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
   e. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OF LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
   f. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECURRING AND HOW TO CLEANUP THE SPILL IF IT OCCURS. A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.
   g. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.

THE PROJECT PROPONENT IS REQUIRED TO MANAGE CONSTRUCTION TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO CONTROLLING INVASIVE SPECIES AND CONTROLLING FUGITIVE DUST IN ACCORDANCE WITH ENV-A 1002.

AGR 3800 PROHIBITED INVASIVE PLANT SPECIES RULES

THE RULE, AGR 3800, STATES: NO PERSON SHALL COLLECT, TRANSPORT, IMPORT, EXPORT, MOVE, BUY SELL, DISTRIBUTE, PROPAGATE OR TRANSPLANT ANY LIVING AND VIABLE PORTION OF ANY PLANT SPECIES, WHICH INCLUDED ALL OF THEIR CULTIVARS AND VARIETIES, LISTED IN TABLE 3800.1, NEW HAMPSHIRE PROHIBITED INVASIVE SPECIES LIST". A COMPLETE COPY OF THE RULES CAN BE ACCESSED ON THE INTERNET AT HTTP://AGRICULTURE.NH.GOV/TOPICS/PLANTS_INSECTS.HTM.

ENV-A 1002 FUGITIVE DUST: PRECAUTIONS TO PREVENT, ABATE, AND CONTROL FUGITIVE DUST.

a. ANY PERSON ENGAGED IN ANY ACTIVITY WITHIN THE STATE EMITS FUGITIVE DUST, OTHER THAT THOSE LISTED IN ENV-A 1002.02 (b), SHALL TAKE PRECAUTIONS THROUGHOUT THE DURATION OF THE ACTIVITY IN ORDER TO PREVENT, ABATE, AND CONTROL THE EMISSION OF FUGITIVE DUST.
b. PRECAUTIONS REQUIRED BY (a) ABOVE, SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
   i) THE USE OF WATER OR HYDROPHILIC MATERIAL ON OPERATIONS OR SURFACES, OR BOTH;
   ii) THE APPLICATION OF ASPHALT, WATER, OR HYDROPHILIC MATERIAL, OR TARPS OR OTHER SUCH COVERS TO MATERIAL STOCKPILES;
   iii) THE USE OF HOODS, FANS, FABRIC FILTERS, OR OTHER DEVICES TO ENCLOSE AND VENT AREAS WHERE MATERIALS PRONE TO PRODUCING FUGITIVE DUST ARE HANDLED;
   iv) THE USE OF CONTAINMENT METHODS FOR SANDBLASTING OR SIMILAR OPERATIONS; AND
   v) THE USE OF VACUUMS OR OTHER SUCTION DEVICES TO COLLECT AIRBORNE PARTICULATE MATTER.

WINTER CONSTRUCTION NOTES

1. ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT.
2. ALL DITCHES & SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS.
3. AFTER OCTOBER 15TH, INCOMPLETE ROAD AND PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

PLANNING FILE NO.: SITE-2024-0005

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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CIVIL & WATERSHED ENGINEERING
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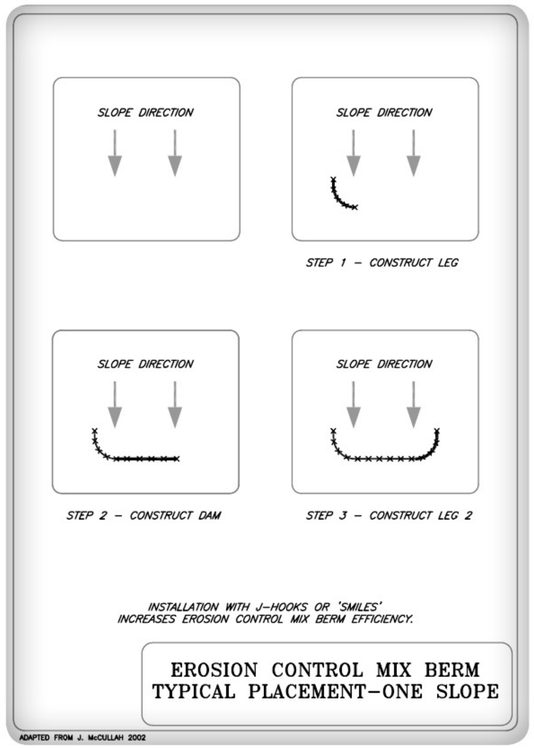
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APPROVED BY:SJH
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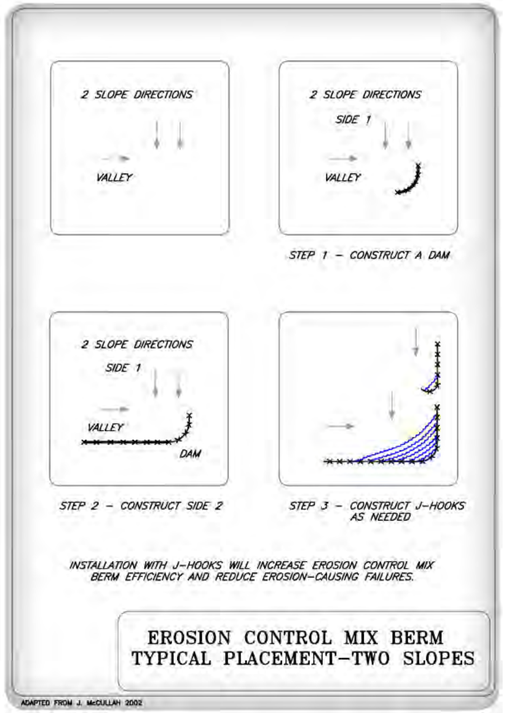
EROSION CONTROL NOTES

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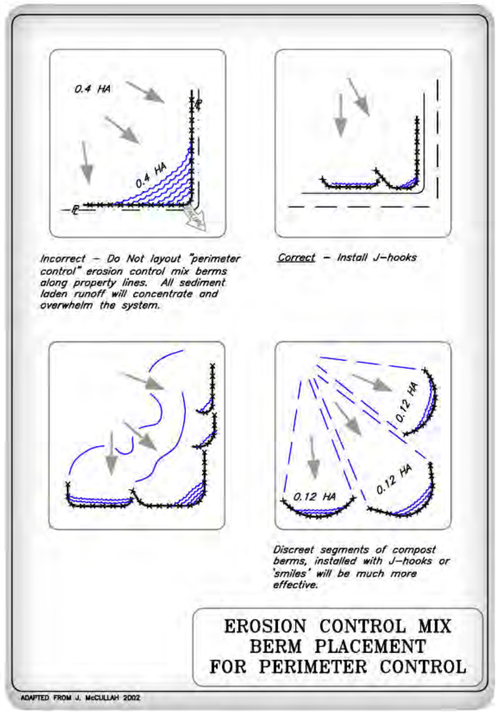
TDR SSUBDIVISION PLAN
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566 SIXTH STRBET
DOVER, NH 03820



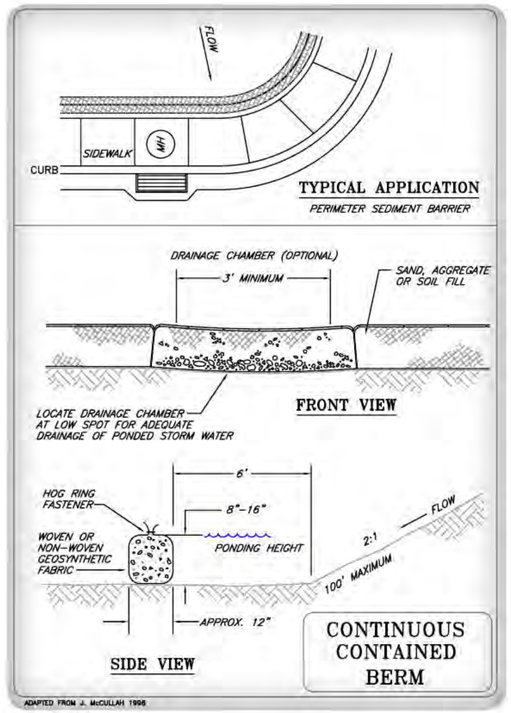
DETAIL FROM NHDES STORMWATER MANUAL VOLUME 3



DETAIL FROM NHDES STORMWATER MANUAL VOLUME 3

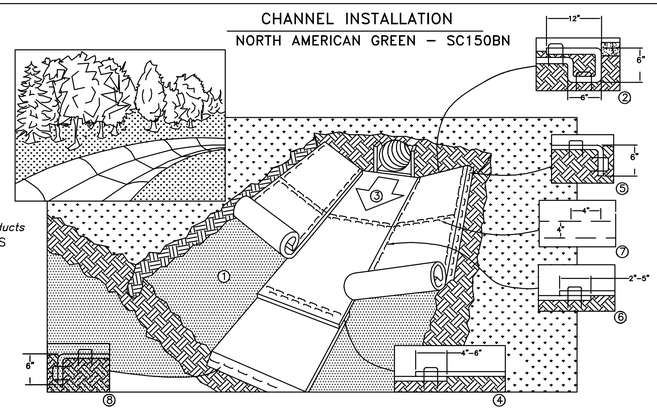


DETAIL FROM NHDES STORMWATER MANUAL VOLUME 3



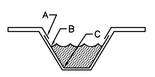
DETAIL FROM NHDES STORMWATER MANUAL VOLUME 3

CHANNEL INSTALLATION
NORTH AMERICAN GREEN – SC150BN



NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4" – 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" – 5" (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. NOTE: * IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

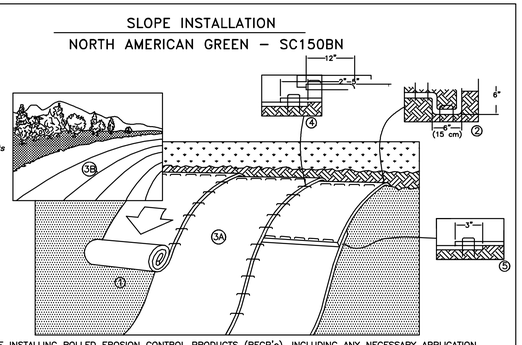


CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTE:
* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

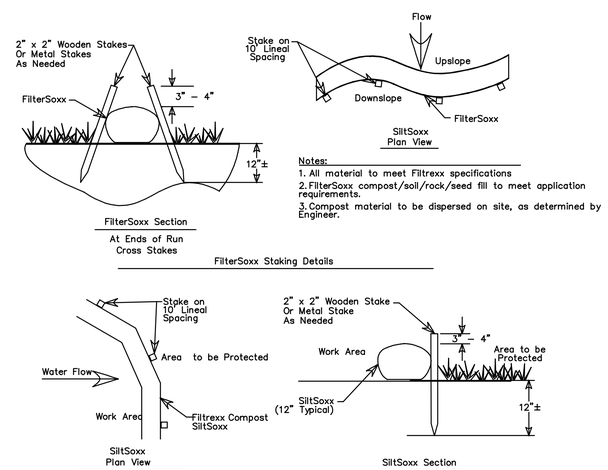
SLOPE INSTALLATION
NORTH AMERICAN GREEN – SC150BN



NORTH AMERICAN GREEN
EROSION CONTROL *Products Guaranteed* SOLUTIONS

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM® , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" – 5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH.
   NOTE:
   *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.

NOTE: THE USE OF WELDED PLASTIC OR BIODEGRADABLE PLASTIC NETTING OR THREAD IN EROSION CONTROL MATTING IS PROHIBITED. THE USE OF WILDLIFE FRIENDLY ORGANIC MATERIALS IS RECOMMENDED.



SILTSOXX DETAILS
NOT TO SCALE

PLANNING FILE NO.: SITE–2024–0005

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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

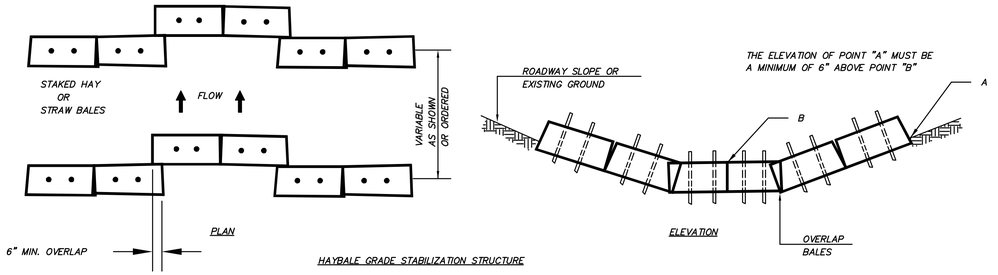
NO.	REVISION	APP'D	DATE

DATE: 10–1–24
SCALE: 1"=100'
DRAWN BY: DJL
DESIGN BY: SJH
APPROVED BY:SJH
PROJECT NO: 24081
FILE: 24081–SITE

EROSION CONTROL DETAILS

FERGUS & JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NH 03820

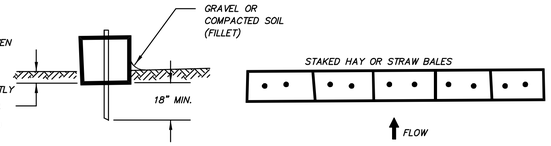
TDR SSUBDIVISION PLAN
5 RESIDENTIAL UNITS
566 SIXTH STRBET
DOVER, NH 03820



HAYBALE GRADE STABILIZATION STRUCTURE

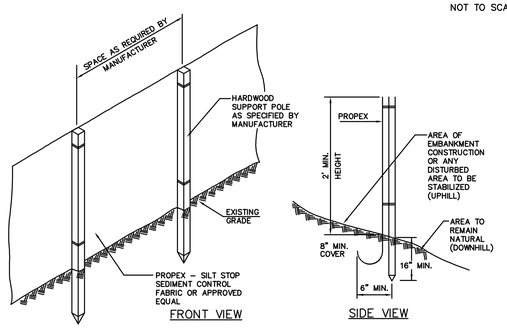
CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY 2" x 2" STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
6. REMOVE AND PROPERLY DISPOSE OF ALL SEDIMENT PRIOR TO REMOVING HAYBALES.



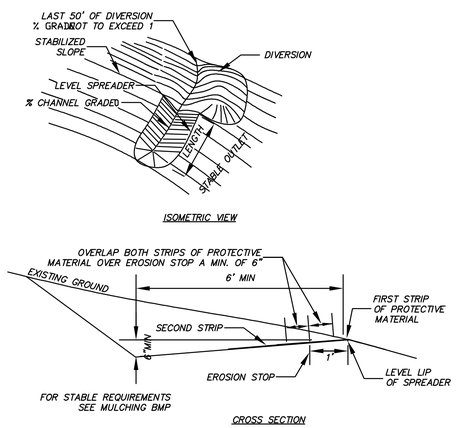
HAYBALE NOTES AND DETAILS

NOT TO SCALE



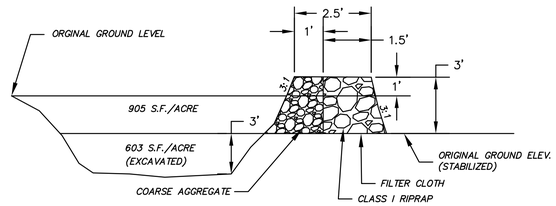
SILT FENCE DETAIL

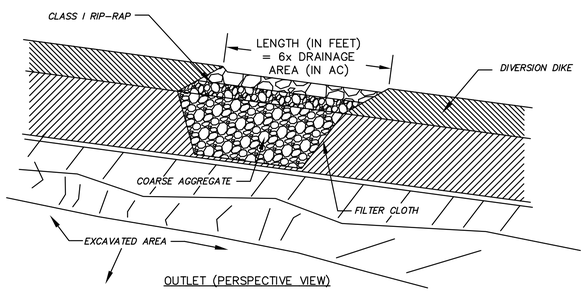
NOT TO SCALE



LEVEL SPREADER DETAIL

NOT TO SCALE



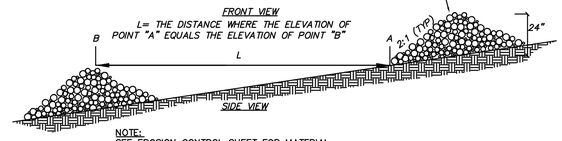


NOTES:
1. COARSE AGGREGATE SHALL MEET NHDOT 304.5 SPECIFICATIONS AND SHALL NOT CONTAIN MORE THAN 5% FINES PASSING THE #200 SIEVE.
2. FILTER CLOTH SHALL BE MIRAFI 700X OR APPROVED EQUAL.
3. CLASS I RIPRAP SHALL MEET NHDOT 583 SS SPECIFICATIONS.
4. THE MAXIMUM CONTRIBUTING AREA TO THE TRAP SHALL BE LESS THAN 5 AC.
5. THE TRAP SHALL BE CLEANED WHEN 50% OF THE ORIGINAL VOLUME IS FILLED.
6. MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.

TEMPORARY SEDIMENT TRAP

NOT TO SCALE



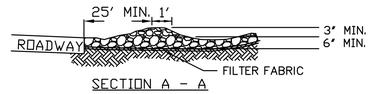


NOTE:
SEE EROSION CONTROL SHEET FOR MATERIAL, INSTALLATION AND MAINTENANCE REQUIREMENTS.

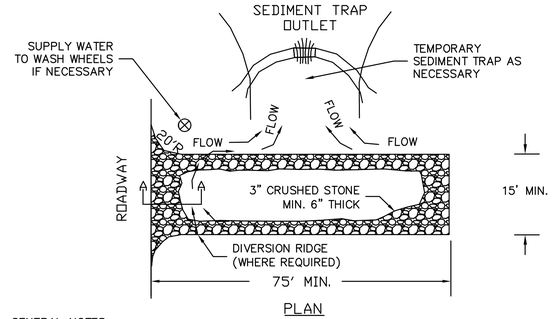
STONE CHECK DAM

NOT TO SCALE

DIVERSION RIDGE REQUIRED
WHERE GRADE EXCEEDS 2%



SECTION A - A



PLAN

A. GENERAL NOTES:

1. A STABILIZED CONSTRUCTION ENTRANCE/EXIT CONSISTS OF A PAD OF STONE AGGREGATE PLACED ON A GEOTEXTILE FILTER FABRIC, LOCATED AT ANY POINT WHERE TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE TO AN EXISTING ACCESS ROAD WAY OR OTHER PAVED SURFACE. ITS PURPOSE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES. THIS HELPS PROTECT RECEIVING WATERS FROM SEDIMENT CARRIED BY STORM WATER RUNOFF FROM ROADS
2. ONLY CONSTRUCTION TRAFFIC LEAVING THE SITE IS REQUIRED TO USE THE TEMPORARY STABILIZED EXIT. CONSIDER PROVIDING A SEPARATE, UNPROTECTED ENTRANCE FOR TRAFFIC ENTERING THE SITE. THIS WILL INCREASE THE LONGEVITY OF THE STABILIZED EXIT BY ELIMINATING HEAVY LOADS ENTERING THE SITE AND REDUCING THE TOTAL TRAFFIC OVER THE DEVICE.
3. LOCATE THE CONSTRUCTION ENTRANCES AND EXITS, A MINIMUM OF 100 FEET FROM INTERSECTIONS, TO LIMIT SEDIMENT LEAVING THE SITE AND TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES. AVOID ENTRANCES THAT HAVE STEEP GRADES AND ENTRANCES AT CURVES IN ROADS.
4. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR MAINTENANCE OF ANY MEASURES USED TO TRAP SEDIMENT.

B. SPECIFICATIONS (TEMPORARY CONSTRUCTION ENTRANCE/EXITS SHOULD MEET THE FOLLOWING REQUIREMENTS).

1. STONE SIZE MINIMUM: USE SHOULD BE 3" CRUSHED STONE.
2. THE MINIMUM LENGTH OF THE PAD SHOULD BE 75 FEET.
3. THE MINIMUM WIDTH OF THE PAD SHOULD BE 15 FEET OR THE WIDTH OF THE ENTRANCE, WHICHEVER IS GREATER
4. THE PAD SHOULD SLOPE AWAY FROM THE EXISTING ROADWAY.
5. THE PAD SHOULD BE AT LEAST 6" THICK.
6. A GEOTEXTILE FILTER FABRIC SHOULD BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACE BELOW THE PAD.
7. THE PAD SHOULD BE MAINTAINED OR REPLACED WHEN MUD AND SOIL PARTICLES CLOG THE VOIDS IN THE STONE SUCH THAT MUD AND SOIL PARTICLES ARE TRACKED OFF-SITE.
8. NATURAL DRAINAGE THAT CROSSES THE LOCATION OF THE STONE PAD SHOULD BE INTERCEPTED AND PIPED BENEATH THE PAD, AS NECESSARY, WITH SUITABLE OUTLET PROTECTION.

C. MAINTENANCE REQUIREMENTS (THE ENTRANCE/EXIT SHOULD BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT).

1. WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHOULD BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL, REGRADED ON SITE, AND STABILIZED. THE ENTRANCE SHOULD THEN BE RECONSTRUCTED.
2. THE CONTRACTOR SHOULD SWEEP THE PAVEMENT AT EXITS WHENEVER SOIL MATERIALS ARE TRACKED ONTO THE ADJACENT PAVEMENT OR TRAVELED WAY.
3. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WHEEL WASHING IS REQUIRED, IT SHOULD BE CONDUCTED ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT-TRAPPING DEVICE. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES OR WATERWAYS.

TEMPORARY CONSTRUCTION ENTRANCE/EXIT

NOT TO SCALE

PLANNING FILE NO.: SITE-2024-0005

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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

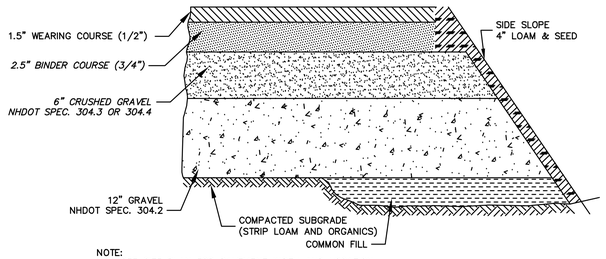
NO.	REVISION	APP'D	DATE

DATE: 10-1-24
SCALE: 1"=100'
DRAWN BY: DJL
DESIGN BY: SJH
APPROVED BY:SJH
PROJECT NO: 24081
FILE: 24081-SITE

EROSION CONTROL DETAILS

FERGUS & JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NH 03820

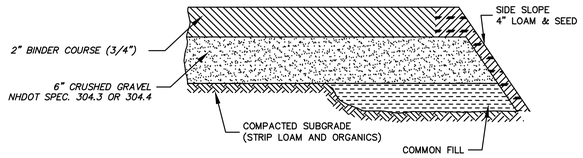
TDR SSUBDIVISION PLAN
5 RESIDENTIAL UNITS
566 SIXTH STREET
DOVER, NH 03820



NOTE:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
3. GEOTEXTILE FABRIC MAYBE REQUIRED UNDER THE ROADWAY AND /OR THE PARKING AREAS AS REQUIRED BY THE ENGINEER BASED UPON SITE CONDITIONS.

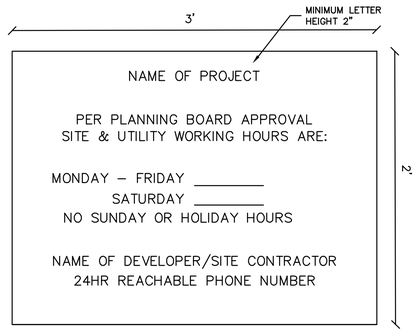
TYPICAL PAVEMENT SECTION

NOT TO SCALE



TYPICAL WALKWAY SECTION

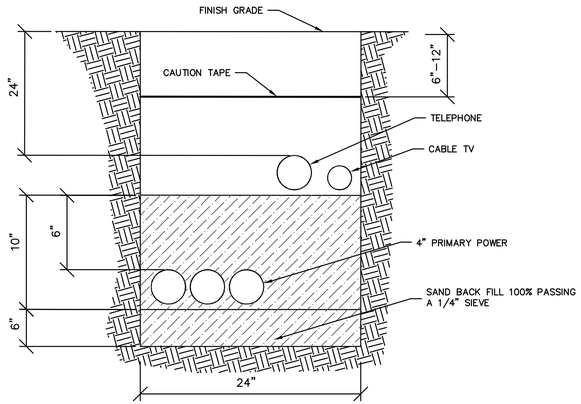
NOT TO SCALE



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.

CITY OF DOVER D-2 CONSTRUCTION SIGN

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 SPECIFICATIONS 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.

UTILITY TRENCH

NOT TO SCALE

PLANNING FILE NO.: SITE-2024-0005

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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

NO.	REVISION	APP'D	DATE
1	PER TRC COMMENTS	SJH	9-19-24

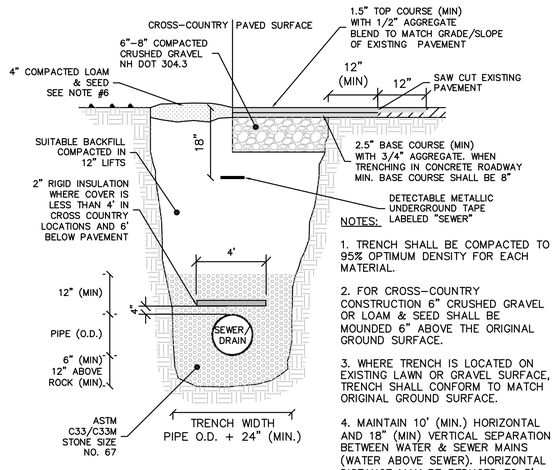
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PROJECT NO: 24081
FILE: 24081-SITE

DETAILS

TDR SSUBDIVISION PLAN
5 RESIDENTIAL UNITS
566 SIXTH STREET
DOVER, NH 03820

FERGUS & JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NH 03820

13



CITY OF DOVER D-3
SEWER TRENCH DETAIL

NOT TO SCALE

NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY FOR EACH MATERIAL.

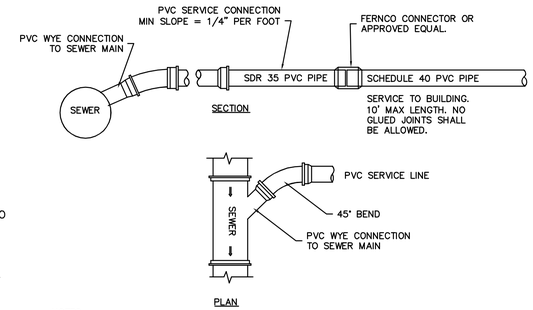
2. FOR CROSS-COUNTRY CONSTRUCTION 6" CRUSHED GRAVEL OR LOAM & SEED SHALL BE MOUNDED 6" ABOVE THE ORIGINAL GROUND SURFACE.

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.

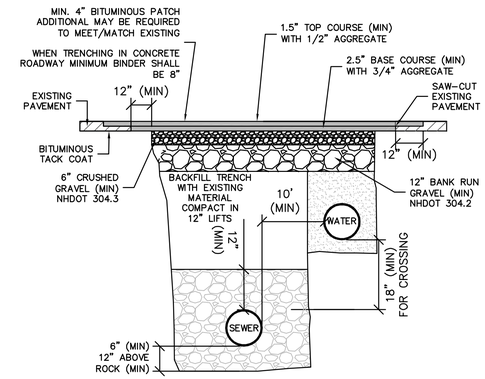


NOTES:

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

CITY OF DOVER D-17
SEWER SERVICE DETAIL

NOT TO SCALE

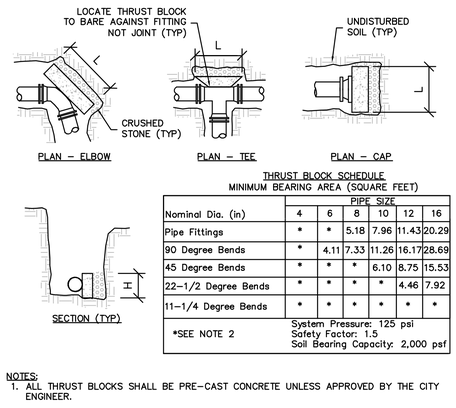


NOTES:

1. TRENCH SHALL BE COMPACTED TO 95% OPTIMUM DENSITY.
2. ALL WORK SHALL COMPLY WITH THE CITY OF DOVER CONSTRUCTION GUIDELINES AND PROCEDURES
3. MAINTAIN 10' (MIN.) HORIZONTAL AND 18" (MIN) VERTICAL SEPARATION BETWEEN WATER & SEWER MAINS (WATER ABOVE SEWER). HORIZONTAL DISTANCE MAY BE REDUCED TO 5' (MIN.) FOR SERVICES PROVIDED THE WATER SERVICE IS A CONTINUOUS PIPE WITHOUT JOINTS OR FITTINGS.

CITY OF DOVER
TYPICAL TRENCH DETAIL

NOT TO SCALE



THRUST BLOCK SCHEDULE
MINIMUM BEARING AREA (SQUARE FEET)

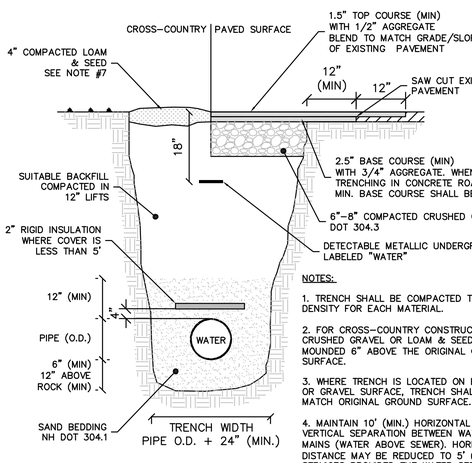
	PIPE SIZE					
Nominal Dia. (in)	4	6	8	10	12	16
Pipe Fittings	*	*	5.18	7.96	11.43	20.29
90 Degree Bends	*	4.11	7.33	11.26	16.17	28.69
45 Degree Bends	*	*	*	6.10	8.75	15.53
22-1/2 Degree Bends	*	*	*	*	4.46	7.92
11-1/4 Degree Bends	*	*	*	*	*	*
*SEE NOTE 2	System Pressure: 125 psi Safety Factor: 1.5 Soil Bearing Capacity: 2,000 psf					

NOTES:

1. ALL THRUST BLOCKS SHALL BE PRE-CAST CONCRETE UNLESS APPROVED BY THE CITY ENGINEER.
2. 2'X2'X2' MINIMUM THRUST BLOCK REQUIRED, ANY BEARING AREA OVER 4SF REQUIRES THRUST BLOCKS, RESTRAINED JOINTS AND CALCULATIONS ASSOCIATED WITH THE JOINT.
3. THE MINIMUM BEARING AREAS SHOWN IN THE THRUST BLOCK SCHEDULE ARE BASED ON A SYSTEM PRESSURE OF 125 PSI. IF THE SYSTEM PRESSURE IS ABOVE 125 PSI, INCREASE THE NOTED AREAS PROPORTIONALLY TO THE ACTUAL SYSTEM PRESSURE.
4. FOR MINIMUM BEARING AREAS OVER 4 SF, THE LENGTH (L) OF THE BLOCK IS APPROXIMATELY TWICE AS LONG AS THE HEIGHT (H).
5. PLACE CRUSHED STONE BEHIND THRUST BLOCK AGAINST UNDISTURBED SOIL.
6. PLACE THRUST BLOCK ALONG MAXIMUM LENGTH OF THE FITTING TO MAXIMIZE BEARING AREA.
7. CONCRETE COMPRESSIVE STRENGTH: 2,000 PSI MINIMUM.
8. USE OF THRUST BLOCKS DOES NOT ELIMINATE THE REQUIREMENT OF OTHER RESTRAINTS OR VICE VERSA.

CITY OF DOVER D-15
THRUST BLOCK DETAIL

NOT TO SCALE

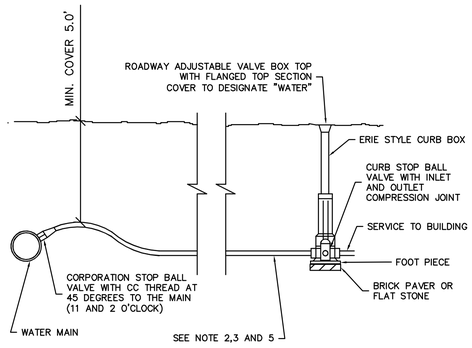


CITY OF DOVER D-4
WATER TRENCH DETAIL

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.

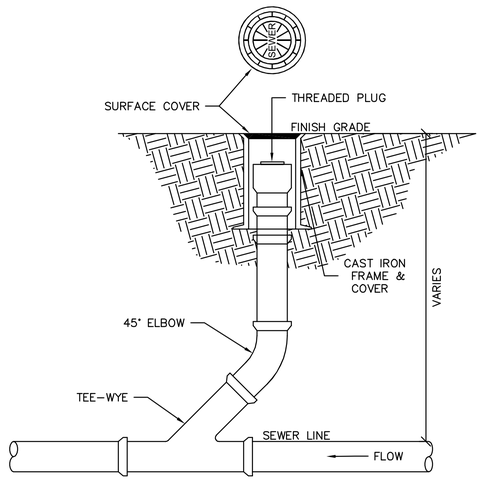


NOTES:

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. 3/4"- COPPER, CTS
   1"- COPPER, CTS
   2"- CTS, HDPE, IPS

CITY OF DOVER D-13
WATER SERVICE CONNECTION DETAIL

NOT TO SCALE



CLEAN-OUT DETAIL

NOT TO SCALE

PLANNING FILE NO.: SITE-2024-0005

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

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

NO.	REVISION	APP'D	DATE

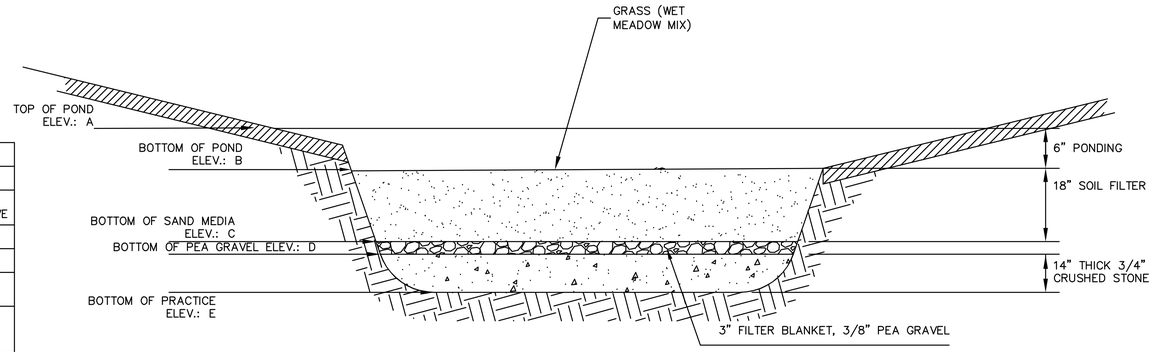
DATE: 10-1-24
SCALE: 1"=100'
DRAWN BY: DJL
DESIGN BY: SJH
APPROVED BY:SJH
PROJECT NO: 24081
FILE: 24081-SITE

DETAILS

TDR SSUBDIVISION PLAN
5 RESIDENTIAL UNITS
566 SIXTH STREET
DOVER, NH 03820

FERGUS & JENNIFER CULLEN
152 BOXWOOD LANE
DOVER, NH 03820

RAIN GARDEN FILTER MEDIA SPECIFICATIONS			
COMPONENT MATERIAL	PERCENT OF MIXTURE BY VOLUME	GRADATION OF MATERIAL	
		SIEVE NO.	PERCENT 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 RAIN GARDEN DETAIL

NOT TO SCALE

NOTES:

1. DO NOT BEGIN CONSTRUCTION OF THE RAIN GARDEN AREAS UNTIL LAWN AREA ON THE ENTIRE SITE IS ESTABLISHED WITH AT LEAST 80 PERCENT TURF. PREVENT SILTATION INTO THE BIORETENTION AREA.
2. THE BIORETENTION SUBGRADE SHALL BE EXCAVATED TO THE DESIGN DEPTH PLUS TWO (2) INCHES. AT THAT DEPTH FOUR (4) INCHES OF COMPOST SHALL BE TILLED INTO THE EXISTING SOILS SUCH THAT THE SOILS ARE WELL MIXED.
3. DO NOT DRIVE CONSTRUCTION EQUIPMENT ON FILTER SUBGRADE NOR ON THE FILTER MATERIAL. INSTALL FILTER MATERIAL BY MEANS OF AN EXCAVATOR LOCATED ADJACENT TO THE FILTER AREA.
4. MATERIALS: CRUSHED STONE LAYER SHALL MEET NHDOT 304.4. PEA STONE SHALL CONTAIN NO MORE THAN 5% FINES PASSING THE #200 SIEVE. TOPSOIL SHALL CONTAIN 15 TO 25% FINES PASSING THE #200 SIEVE. MULCH SHALL BE SHREDDED HARDWOOD, AGED IN A STOCKPILE OR STORED FOR AT LEAST 12 MONTHS.
5. REFER TO LANDSCAPE DRAWINGS FOR GRASS SEED MIXES AND PLANTINGS. FERTILIZATION OF THE FILTER AREA SHALL BE AVOIDED UNLESS ABSOLUTELY NECESSARY TO ESTABLISH VEGETATION.
6. INITIAL ESTABLISHMENT: DURING THE FIRST 2-3 MONTHS OF ESTABLISHMENT WATER THE GRASS ON A WEEKLY BASIS (TO SUPPLEMENT RAINFALL FOR TOTAL OF 1 INCH PER WEEK).
7. ANNUAL MAINTENANCE: IN THE SPRING OF EACH YEAR, ANY DEAD VEGETATION SHALL BE REMOVED TO ALLOW FOR NEW GROWTH, AND ANY ACCUMULATED SEDIMENT (NORMALLY AT THE ENTRANCE TO THE GARDEN) SHALL ALSO BE REMOVED. DURING THE GROWING SEASON THE RAIN GARDEN SHALL BE WEEDED TWO (2) TIMES. TURF AT FILTER SHALL BE MOWED NO MORE THAN 3 TIMES PER GROWING SEASON. IF WATER PONDS ON THE SURFACE FOR MORE THAN 24 HOURS DURING THE FIRST YEAR OR 72 HOURS THEREAFTER, THE FILTER SURFACE SHALL BE AERATED WITH DEEP TINES OR THE SURFACE REPLACED.
8. GRASS SEED SHALL BE NATIVE NON-INVASIVE SPECIES, SEE LANDSCAPE ARCHITECT DRAWINGS.
9. ALL MATERIALS SHALL BE SUBMITTED TO, AND APPROVED BY, THE DESIGN ENGINEER PRIOR TO CONSTRUCTION.

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For the full CIP please visit the City's webpage and search for Capital Improvements Program or visit:

https://www.dover.nh.gov/government/city-operations/planning/special-projects/cip/