



February 20, 2024

Town of Raymond
Planning & Zoning Department
4 Epping Street
Raymond, New Hampshire 03077

Subject: **Gemini Valve Site Plan Application**
Tax Map 28; Lot 4-3
2 Otter Court
Raymond, New Hampshire 03077
KNA Project No. 22-0110-2

Dear Chairman and Board Members:

The above referenced parcel is being submitted for Site Plan approval from the Town of Raymond Planning Board. The property is located at 2 Otter Court and is approximately 11.16 acres in area. The parcel is currently developed with an existing 2-story industrial building and associated parking lots. The rest of the site is undeveloped and consists of forested areas and wetlands associated with the Lamprey River, which borders the site to the south and west. The applicant is proposing to develop the site to accommodate two proposed building additions, consisting of 6,011 sf of office space and 20,162 sf of industrial space, additional parking lots and driveways, utility improvements, and stormwater management provisions. In addition to local site plan approval, the project will also require an Alteration of Terrain Permit, a Shoreland Permit, and an Individual Sewage Disposal System Permit from the New Hampshire Department of Environmental Services (NHDES). The included documents outline the applicants request for approval. All required information has been included within the submittal package. Keach-Nordstrom Associates, Inc. will be present to further discuss the Site Plan Application at the scheduled hearing.

Enclosed is the following material for your review and approval:

- 1. Application for Site Plan
- 2. Application fees:

Site Plan Review Fee:	= \$10,922.28
Escrow for Peer Review & Abutters	= \$2,500.00
Abutter fee @ 10.00 per (7):	= \$70.00
Total Escrow Fee:	= \$2,570.00
- 3. Seven (7) Full Size and Two (2) Half Size Copies of the Plan Set
- 4. Abutter's List & Labels
- 5. Signed Owner Affidavit
- 6. One (1) Copy of the Alteration of Terrain Application
- 7. Seven (7) Full and Two (2) Half Size Copies of the Architectural Building Elevations
- 8. All Submittal Documents Sent Digitally via Email to Town Staff

If you have any questions or comments, please contact me at (603) 627-2881.

Sincerely,

Peter Madsen, EIT
Project Engineer
Keach Nordstrom Associates
10 Commerce Park North, Suite 3
Bedford, NH 03110



Map # 28 Lot # 4-3

Site Plan Review Application

Town of Raymond, NH

Project Name: Gemini Valve

Location: 2 Otter Court Raymond, NH

Project Description: Proposed additions to existing building, site improvements

Zone: D New Industrial/Commercial Square Footage: 26,173 or Number of Residential Units: N/A

Applicant/Agent Information:

Name: Paul Chisholm

Phone: (603) 627-2881 Email: pchisholm@keachnordstrom.com

Company: Keach-Nordstrom Associates, Inc.

Address: 10 Commerce Park North, Suite 3

By signing this application, you are agreeing to all rules and regulations of the Town of Raymond, and are agreeing to allow agents of the Town of Raymond to conduct inspections on your property during normal business hours to ensure compliance with all Raymond Zoning and Site Plan Review Regulations while your application is under consideration and during any construction and operational phases after approval is granted.

Signed*: _____ Date: _____

*Requires notarized letter of permission

Owner Information:

Name: Parker & Harper Companies, LLC

Phone: (603) 244-7918 Email: pdoe@geminivalve.com

Company: Parker & Harper Companies, Inc.

Address: 2 Otter Court Raymond, NH

Signed: Paul C. Doe FOR GEMINI VALVE Date: 2/16/24

Designers of Record: (Provide Name, Email Address, & License Number for each)

Engineer: Keach-Nordstrom Associates, Inc. (Paul Chisholm, PE #15076)

Surveyor: Keach-Nordstrom Associates, Inc. (Chris Hickey, LLS #911)

Soil Scientist: Stoney Ridge Environmental LLC (Cindy Balcius CSS#84)

Landscape Architect: N/A

Fire Protection Engineer: N/A

Other(s): _____

FEES: See attached Fee Schedule

For Office Use Only:

Date Application Received: _____ Total Fees Collected w/Application: _____

Abutters List Received: _____ Plans & Checklist Received: _____

Appendix II

Site Plan Review Fees

Sample Chart Using 180 sf per space	
1	\$ 514.80
2	\$ 579.60
3	\$ 644.40
4	\$ 709.20
5	\$ 774.00
6	\$ 838.80
7	\$ 903.60
8	\$ 968.40
9	\$ 1,183.20
10	\$ 1,248.00
11	\$ 1,312.80
12	\$ 1,377.60
13	\$ 1,442.40
14	\$ 1,657.20
15	\$ 1,722.00
16	\$ 1,786.80
17	\$ 1,851.60
18	\$ 1,916.40
19	\$ 2,131.20
20	\$ 2,196.00
21	\$ 2,260.80
22	\$ 2,325.60
23	\$ 2,390.40

Base Rate: \$ 300.00
(Includes staff wages with a 23 % roll-up rate)

Variable Costs (per newly created space): \$ 0.36

	Units - SF
POV Spaces:	180
Handicap Accessible Spaces:	320
Tractor Trailer	600

# Spaces	Formula for Calculation of Fees
1 - 8	\$ 0.36 per sf + (1.5 x \$ 300 base rate)
9 - 13	\$ 0.36 per sf + (2.0 x \$ 300 base rate)
14 - 18	\$ 0.36 per sf + (2.5 x \$ 300 base rate)
19 - 23	\$ 0.36 per sf + (3.0 x \$ 300 base rate)
24 - 50	\$ 0.36 per sf + (3.5 x \$ 300 base rate)
51 - 75	\$ 0.36 per sf + (4.0 x \$ 300 base rate)
76 - 100	\$ 0.36 per sf + (4.5 x \$ 300 base rate)
101 - 150	\$ 0.36 per sf + (5.0 x \$ 300 base rate)
151 - 200	\$ 0.36 per sf + (5.5 x \$ 300 base rate)

ABUTTERS FEE: \$10.00 PER NOTICE

Escrow Deposits for Legal/Engineering/Other Peer Review Expenses¹	
Minimum Fee (Discretion of the Technical Review Committee):	\$ 1,250.00
Disturbed Area² - Up to 5 Acres:	\$ 2,500.00
Up to 10 Acres	\$ 3,250.00
Up to 15 Acres:	\$ 4,000.00
Up to 20 Acres:	\$ 4,500.00
Over 20 Acres, but less than 30 acres:	\$ 5,000.00
Over 30 Acres - To be determined by Town Engineer/Legal Counsel	TBD

¹ Once a balance is reduced to 50% of the original deposit, the applicant shall replenish it to 100%.

² Disturbed area is defined as: That portion of the site that is altered due to construction of streets, roadways, parking areas, utilities, buildings or other physical improvements, including earth excavation, removal or alteration.

Site Plan Review Checklist

TOWN OF RAYMOND, NH Updated 2023

PROJECT NAME: Gemini Valve APPLICANT NAME: Parker & Harper Companies, LLC DATE RECEIVED: _____
 MAP#: 28 LOT #: 4-3 APPLICATION DATE: 2-23-2024 APPLICATION #: _____

A copy of all plans and technical reports must be sent to the Town engineer. Proof of submittal must be provided to the Community Development Department at the time of application. If proof of transmittal is not provided, the application may be delayed until the following month's Planning Board meeting. Address is: Dubois & King, 15 Constitution Dr. Suite 1L, Bedford NH 03110, ATTN: Jeffrey Adler, P.E.

SUBMITTED

YES NO		WAIVER REQUEST			
<u>X</u>	___	YES	NO		
<u>X</u>	___	1. Name of project; names and addresses and letters of authorization of all owners of record; Tax Map and Lot number.		___	___
<u>X</u>	___	2. Name, license number and seal of surveyor, architect, landscape architect, or other design professional; north arrow, scale, and date of plan; signature block of 4 inches (long) by 2 inches (wide).		___	___
<u>X</u>	___	3. Vicinity map and zoning district(s) of all parcels within the application.		___	___
<u>X</u>	___	4. Abutters and uses of abutting land within 200 feet of the site.		___	___
<u>X</u>	___	5. Shape, size, height, location, and use of existing and proposed structures located on the site and within 200 feet of the site.		___	___
<u>X</u>	___	6. Boundary lines, dimensions, and bearings; lot(s) area in acres and square feet and a calculation of the total disturbed area in square feet.		___	___
<u>X</u>	___	7. Location, name, and widths of any existing and proposed roads on the property and within 200 feet of the site.		___	___
<u>X</u>	___	8. Location of all existing and proposed sidewalks and driveways, with indication of the direction of travel for both pedestrian and vehicular traffic.		___	___
<u>X</u>	___	9. All proposed access points to the site, sight distance at access point(s), curb cuts (existing or proposed) and any proposed changes to existing streets; copy of driveway permit.		___	___
<u>X</u>	___	10. Location and number of parking spaces (including ADA accessible spaces) and loading spaces.		___	___
<u>X</u>	___	11. Location, type, and nature of all existing and proposed landscaping and screening including size. Include an Invasive Species checklist and plan designation of NH Native Species.		___	___

Site Plan Review Checklist

TOWN OF RAYMOND, NH

Updated 2023

SUBMITTED

**WAIVER
REQUEST**
YES NO

YES	NO			
<u>X</u>	___	12. Location, type, and nature of all existing and proposed exterior lighting and show the illumination rate in footcandles.	___	___
<u>X</u>	___	13. All natural features within the site (streams, ponds, vernal pools, wetlands, etc. <u><i>(If there is Zone G land the conservation committee must be notified)</i></u>)	___	___
<u>X</u>	___	14. Waste/dumpster locations and elevations of their enclosures and snow storage Areas.	___	___
<u>X</u>	___	15. Existing and proposed grades and contour lines, including Base Flood Elevation (BFE) where appropriate.	___	___
<u>X</u>	___	16. Size and location of all existing and proposed water mains, sewers, culverts, and distances to the existing fire hydrants, cisterns and/ or fire ponds.	___	___
___	<u>X</u>	17. Copy of certification from licensed septic designer as to sufficiency of the OSTDS.	___	___
<u>X</u>	___	18. Location and type of proposed wastewater disposal system; outline of 4,000 sq. ft. area; test pits; record of percolation tests.	___	___
<u>X</u>	___	19. Existing and proposed stormwater drainage system.	___	___
___	<u>X</u>	20. Location of existing and proposed on-site wells (showing required radii on the property).	___	___
<u>X</u>	___	21. Soil survey data (see: requirements for soils and wetlands data).	___	___
<u>X</u>	___	22. Location and dimensions of any existing or proposed easements, deed restrictions, covenants, or other encumbrances upon the lot(s).	___	___
___	<u>X</u>	23. Information about any hazardous issues or conditions within the subject property or adjacent properties known to the application prior to the application. (IE. Phase 1)	___	___
___	<u>X</u>	24. Copy of the NHDES OSTDS application, if applicable.	___	___
___	<u>X</u>	25. NHDES Alteration of Wetlands Application or Permit, if applicable.	___	___
<u>X</u>	___	26. NHDES Alteration of Terrain Application or Permit, if applicable.	___	___
___	<u>X</u>	27. NHDOT Driveway Application or Permit, if applicable.	___	___
___	<u>X</u>	28. All state applications related to underground storage tanks (USTs).	___	___
___	<u>X</u>	29. Army Corps of Engineers (ACOE) Application or Permit, if applicable.	___	___
<u>X</u>	___	30. Written narrative summarizing the project, separate from the site plan pages themselves.	___	___

Site Plan Review Checklist

TOWN OF RAYMOND, NH

Updated 2023

SUBMITTED

**WAIVER
REQUEST
YES NO**

YES NO

<u>X</u> ___	31. Copy of all submitted materials submitted on a thumb drive or sent to the Town of Raymond via Dropbox link or other filesharing method.	___	___
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OTHER:

___ <u>X</u>	1. Any other federal, state, or local permits.	___	___
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<u>X</u> ___	2. Building elevations (in color and of all four sides) and depiction of overall design.	___	___
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___ <u>X</u>	3. Proposed sign location, size, height, and design.	___	___
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___ <u>X</u>	4. Such additional studies as may have been required by the Planning Board during Conceptual or Design Review or through the Technical Review Committee.	___	___
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<u>X</u> ___	5. Seven (7) full-size copies (24 x 36) of all plans and two (2) copies of all plans in 11 X 17 format, and digital copy of plans.	___	___
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<u>X</u> ___	6. Seven (7) copies of all studies.	___	___
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FEES:

<u>X</u> ___	1. Application Fees	___	___
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<u>X</u> ___	2. Abutter Notice Fees (<i>include three (3) labels per abutter</i>) (\$10.00 per abutter)	___	___
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<u>X</u> ___	3. Engineering and Legal Escrow	___	___
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<u>X</u> ___	4. Site Review-Administrative Fee	___	___
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Name of the person and date performing the Site Plan Checklist: Peter Madsen 2/21/2024

**Abutters List
Gemini Valve
Raymond, NH
KNA# 22-0110-2
Updated: 2/23/24**

Tax Map	Lot	Owner/Applicant
28	4-3	Parker & Harper Companies, LLC 2 Otter Court Raymond, NH 03077

Tax Map	Lot	Abutter
28	2	Casella Waste Management 25 Green Hills Lane Rutland, VT 05701
28	4	Wayne J. Travers 4 Otter Court Raymond, NH 03077
28	5	Wal-Mart Stores, Inc. PO Box 850 Bentonville, AR 72716-0555
28	7	Edward W. Moulton 2 Old Fremont Road Raymond, NH 03077

Professionals to be notified:

Engineer/ Surveyor/Wetland Scientist

Keach-Nordstrom Associates Inc.
10 Commerce Park North, Suite 3
Bedford, NH 03110

Stoney Ridge Environmental, LLC
c/o Cynthia M. Balcius, CSS
233 Prospect Mountain Road
Alton, NH 03809

Parker & Harper Companies, LLC
2 Otter Court
Raymond, NH 03077

Casella Waste Management
25 Green Hills Lane
Rutland, VT 05701

Wayne J. Travers
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c/o Cynthia M. Balcius, CSS
233 Prospect Mountain Road
Alton, NH 03809

Owner Affidavit

I, PAUL C. DOE, authorized representative and owner of Tax Map 28; Lot 4-3 in Raymond, New Hampshire, hereby verify that I have authorized Keach-Nordstrom Associates, Inc. to submit on my behalf, any and all applicable State and local permit applications as they pertain to improvements on said property.

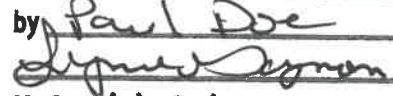
Additionally, I authorize Keach-Nordstrom Associates, Inc. to aid in the representation of these applications throughout the approval process. I do so with the understanding and pre-condition that I will not incur any financial liability to Keach Nordstrom or its agents relative to any submittals made in my behalf and subject to the condition that all such submittals shall be reviewed and approved by me prior to any said submissions be made to any state or local agency.

Signature of Owner: 

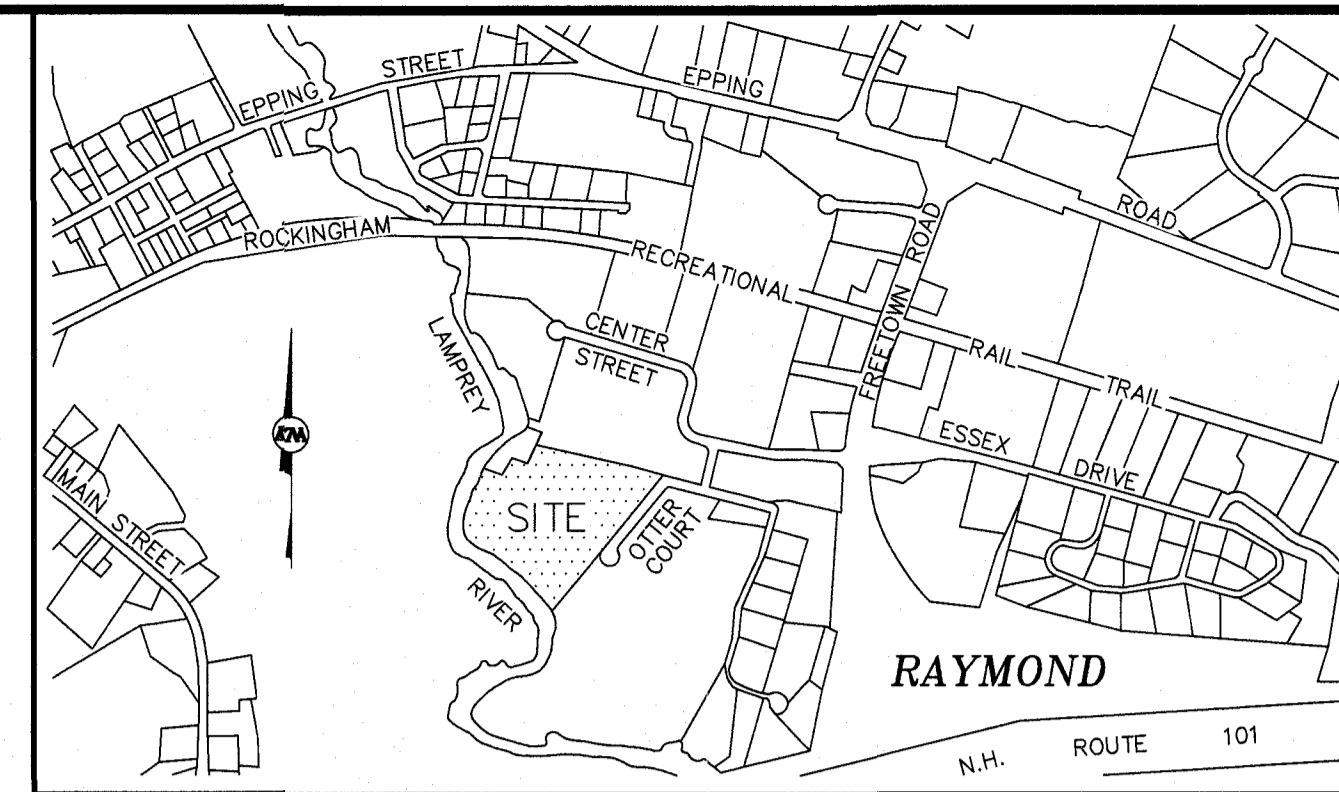
Printed Name of Owner: PAUL C. DOE

Address of Owner: 2 Otter Court
Raymond, NH 03077

Date: FEB 16, 2024

State of NH County of Rockingham
The foregoing instrument was acknowledged before me
this 16 day of February, 2024
by Paul Doe
 Notary Public
My Commission Expires _____

LYNNE GAGNON
NOTARY PUBLIC
State of New Hampshire
My Commission Expires
September 7, 2027

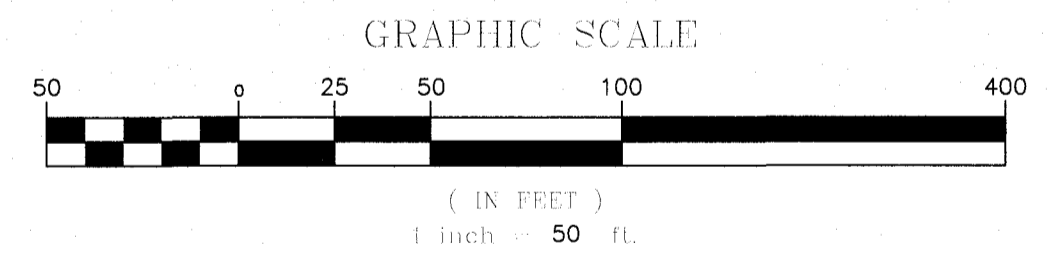


VICINITY PLAN
SCALE: 1" = 1,000±

- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS PRESENT ON MAP 28 LOT 4-3 IN THE TOWN OF RAYMOND.
 - EXISTING AREA OF PARCEL = 486,200 S.F.± OR 11.16 ACRES± (WHICH INCLUDES THE AREA OF THE POSSIBLE GAP - SEE NOTE 3).
 - LOT 4-3 WAS ORIGINALLY CREATED BY PLAN REFERENCE 3 AND DEEDED OUT PER SAID PLAN. PLAN REFERENCE 4 IS A REVISED SUBDIVISION OF PLAN REFERENCE 3. PER PLAN REFERENCE 4, THE EASTERLY END OF THE NORTHERLY RIGHT OF WAY LINE FOR OTTER COURT IS LOCATED 679.09 FEET FROM LOT 4-4 (N/F WEISS) AND SHOWS CONCRETE BOUNDS ALONG SAID LINE. PLAN REFERENCES 6 & 7 SHOW CONCRETE BOUNDS ALONG THE NORTHERLY AND COMMON LOT LINE WITH N/F LAND OF PARKER-HARPER, INC. (LOT 4-3). THE CURRENT LOCATION OF THE BOUNDS IS SHIFTED APPROXIMATELY 15 FEET SOUTHEASTERLY OF THE LINE PER PLAN REFERENCE 4. BASED UPON THE MONUMENTATION FOUND ON THE SOUTHERLY RIGHT OF WAY LINE OF OTTER COURT IN CONJUNCTION WITH THE EXISTING OTTER COURT IMPROVEMENTS, THE BOUNDARY SHOWN IS BASED UPON THE CONCRETE BOUNDS RATHER THAN THE DISTANCE SHOWN ON PLAN REFERENCES 3 OR 4.
 - OWNER OF RECORD:
PARKER & HARPER COMPANIES, LLC
2 OTTER COURT
RAYMOND, N.H. 03077
BK. 2523 PG. 1660
 - THE SUBJECT PARCEL IS LOCATED ENTIRELY WITHIN INDUSTRIAL (D) ZONING DISTRICT. DIMENSIONAL REQUIREMENTS ARE AS FOLLOWS:
- FRONT 15 FT
- SIDE 15 FT
- REAR 15 FT
 - TOPOGRAPHIC AND BOUNDARY INFORMATION SHOWN HEREON ARE BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE IN FEBRUARY OF 2022.
 - HORIZONTAL DATUM IS NAD 83 AND THE VERTICAL DATUM IS NGVD 29 BASED ON NHDOT CONTROL POINT 243-0180.
 - EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) FOR THE TOWN OF RAYMOND, N.H., ROCKINGHAM COUNTY, MAP NUMBER 33015C0191E, PANEL 191 OF 651, EFFECTIVE DATE: MAY 17, 2005 INDICATES THAT A PORTION OF THE SUBJECT PARCEL IS LOCATED WITHIN A DESIGNATED FLOOD HAZARD AREA AE WITH BASE FLOOD ELEVATION OF APPROXIMATELY 183.5 TO 184.3 (NGVD 1929).
 - THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF THE UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR OR OWNER SHALL CONTACT DIG-SAFE AT 811.
 - EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.

UTILITY NOTE

THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN DRAWN FROM FIELD SURVEY INFORMATION AND OR PLOTTED FROM EXISTING DRAWINGS. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHER, KEACH-NORDSTROM ASSOCIATES, INC. DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. KEACH-NORDSTROM ASSOCIATES, INC. HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.



REFERENCE PLANS:

- "PLAN OF LAND; RAYMOND DEVELOPMENT CORP." SCALE: 1"=100'. DATED: MARCH 3, 1972. PREPARED BY: THOMAS F. MORAN INC.-CIVIL ENGINEER & SURVEYOR R.C.R.D. PLAN #3390
- "SUBDIVISION PLAN #73-2; RAYMOND DEVELOPMENT CORPORATION." SCALE: 1"=100'. DATED: JANUARY 3, 1973. PREPARED BY: ALLAN H. SWANSON, INC. R.C.R.D. PLAN #3480
- "SURVEY OF THE ESTATE, THOMAS P. WELCH." SCALE: 1"=100'. DATED: MARCH 15, 1974. PREPARED BY: R.S.L. LAYOUT & DESIGN, R.C.R.D. PLAN #4500
- "REVISED SURVEY OF THE ESTATE, THOMAS P. WELCH." SCALE: 1"=100'. DATED: JULY 10, 1974. PREPARED BY: R.S.L. LAYOUT & DESIGN, R.C.R.D. PLAN #4619
- "SURVEY OF RIGHT OF WAY OVER LAND OWNED BY COURIER CITIZEN'S INC." SCALE: 1"=100'. DATED: JUNE 6, 1974. PREPARED BY: R.S.L. LAYOUT & DESIGN, R.C.R.D. PLAN #4633
- "A SURVEY OF A SUBDIVISION TO BE KNOWN AS 'WELSH ESTATES' OWNED BY THOMAS P. WELCH HEIRS BEING PART OF LOT 111 - TAX MAP 9 SITUATED IN RAYMOND, NH" MAY 1, 1975 SCALE: 1" = 100', PREPARED BY R.S.L. LAYOUT & DESIGN, R.C.R.D. PLAN #5189.
- "SURVEY OF THE LAND OF LEONARD & DIANE DREW." SCALE: 1"=100'. DATED: OCTOBER 3, 1985. PREPARED BY: HOLDEN ENGINEERING & SURVEYING, R.C.R.D. PLAN #14337
- "PROPERTY LINE REVISION PLAN; 14 CENTER ST. & 4 OTTER ROAD." SCALE: 1"=50'. DATED: JUNE 12, 2001. PREPARED BY: CHAS. H. SELLS, INC. R.C.R.D. PLAN #29801

SCS SOILS LEGEND

- 12B** HINCKLEY LOAMY SAND
3 TO 6 PERCENT SLOPES
- 305** LIM-POOTATUCK COMPLEX
- SOURCE: USDA-SCS WEB SOIL SURVEY
ROCKINGHAM COUNTY

LEGEND

- CONCRETE BOUND FOUND
- IRON PIPE FOUND
- IRON PIN FOUND
- DRILL HOLE FOUND
- DHF
- UTILITY POLE
- LIGHT POLE
- HYDRANT
- CATCH BASIN
- ABUTTER LINE
- PROPERTY LINE
- EDGE OF RIVER
- WETLAND
- POST & RAIL FENCE
- GUARDRAIL
- GAS LINE
- WATER LINE
- DRAINAGE LINE
- TREELINE
- STONEMALL
- OVERHEAD UTILITIES
- 10' CONTOUR
- 2' CONTOUR
- BOLLARD
- EDGE OF PAVEMENT
- SETBACK
- EASEMENT
- 100 YEAR FLOOD
- CONCRETE
- SHORELAND WATER QUALITY PROTECTION ACT
- SCS SOIL LINE
- SSS SOIL LINE



SITE SPECIFIC SOIL MAP UNIT KEY

SYMBOL	MAP UNIT	SLOPE CLASS	DRAINAGE CLASS	HSG
42A	CANTON FINE SANDY LOAM	0-3%	WELL DRAINED	B
42B	CANTON FINE SANDY LOAM	3-8%	WELL DRAINED	B
42C	CANTON FINE SANDY LOAM	8-15%	WELL DRAINED	B
42D	CANTON FINE SANDY LOAM	15-25%	WELL DRAINED	B
12A	HINCKLEY LOAMY SAND	0-3%	EXCESSIVELY DRAINED	A
12B	HINCKLEY LOAMY SAND	3-8%	EXCESSIVELY DRAINED	A
12C	HINCKLEY LOAMY SAND	8-15%	EXCESSIVELY DRAINED	A
12D	HINCKLEY LOAMY SAND	15-25%	EXCESSIVELY DRAINED	A
12E	HINCKLEY LOAMY SAND	25-50%	EXCESSIVELY DRAINED	A
118B	SUBBURY FINE SANDY LOAM	3-8%	MODERATELY WELL DRAINED	B
118C	SUBBURY FINE SANDY LOAM	8-15%	MODERATELY WELL DRAINED	B
118D	SUBBURY FINE SANDY LOAM	15-25%	MODERATELY WELL DRAINED	B
118E	SUBBURY FINE SANDY LOAM	25-50%	MODERATELY WELL DRAINED	B
913A	SUBBURY FINE SANDY LOAM	0-3%	SOMEWHAT POORLY DRAINED	C
913B	SUBBURY FINE SANDY LOAM	3-8%	SOMEWHAT POORLY DRAINED	C
913C	SUBBURY FINE SANDY LOAM	8-15%	SOMEWHAT POORLY DRAINED	C
5A/PD	RIPPOWAM FINE SANDY LOAM	0-3%	POORLY DRAINED	C
692A	HINCKLEY-URBAN LAND COMPLEX (UNDER BUILDINGS AND PAVEMENT)	0-3%	EXCESSIVELY DRAINED	A

THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOILS SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, PRODUCED BY A CERTIFIED SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCE CONSERVATION SERVICE. THERE IS A NARRATIVE REPORT THAT ACCOMPANIES THIS MAP AND MAP KEY.



SOIL SCIENTIST'S CERTIFICATION:

THIS SITE-SPECIFIC SOIL MAP WAS COMPLETED BY CYNTHIA M. BALDIUS, NEW HAMPSHIRE CERTIFIED SOIL SCIENTIST #2 OF STONEY RIDGE ENVIRONMENTAL LLC. FIELD WORK WAS COMPLETED ON THE FOLLOWING DATE(S): **10/28/23**. THE FOLLOWING STANDARDS WERE USED TO COMPLETE THIS SOIL MAP AND ACCOMPANYING SOIL REPORT:

- Field Indicators of Hydric Soils in the United States, Version 8.1, 2017. L.M. Vasilos, G.W. Hart, and J.F. Berkowitz (eds.). United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with the National Technical Committee for Hydric Soils.
- Field Indicators for Identifying Hydric Soils in New England, Version 4, June 2018. New England Hydric Soils Technical Committee.
- The Site-Specific Soil Mapping Standards For New Hampshire and Vermont. SSSNNE Special Publication No.3, Version 5, December 2017.
- Soil Survey Manual, United States Department of Agriculture Handbook No.18, Issued March 2017. US Government Printing Office. Soil Survey Staff, Washington D.C. 20402
- New Hampshire State-Wide Numerical Soils Legend, USDA Natural Resources Conservation Service, Durham, New Hampshire, Issue #10, January 2011.
- Field Book for Describing and Sampling Soils, Version 3.0 National Soil Survey Center, Natural Resources Conservation Service, U. S. Department of Agriculture, Lincoln, Nebraska, September 2012.
- Keys to Soil Taxonomy, Twelfth Edition, 2014. United States Department of Agriculture, Natural Resources Conservation Service.

ADDITIONAL NOTE: This map product is within the technical standards of the National Cooperative Soil Survey. It is a special purpose product, produced by a certified soil scientist, and is not a product of the USDA Natural Resources Conservation Service. There is a narrative report that accompanies this map and key.

WETLAND SCIENTIST'S CERTIFICATION:

JURISDICTIONAL WETLANDS SHOWN ON THIS PLAN WERE DELINEATED IN FEBRUARY OF 2022 BY CHRISTOPHER K. DANFORTH CWS #077. THE WETLANDS WERE DELINEATED ACCORDING TO THE CORPUS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE REGIONAL SUPPLEMENT TO THE CORPUS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2, JANUARY 2012. DOMINANT HYDRIC SOILS WITHIN THE WETLAND(S) WERE IDENTIFIED USING "FIELD INDICATORS OF HYDRIC SOILS OF THE UNITED STATES" A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS. NRCS, VERSION 8.1, 2017. DOMINANCE OF HYDROPHYTIC VEGETATION WAS DETERMINED USING THE USACE 2020 NATIONAL WETLAND PLANT LIST, NWPL 2020 VERSION 3.5 HTTP://WETLAND-PLANTS.USACE.ARMY.MIL.

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE DURING FEBRUARY OF 2022. SAID SURVEY HAS A RELATIVE ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000) OR BETTER.

LICENSED LAND SURVEYOR

DATE

EXISTING CONDITIONS PLAN

GEMINI VALVE

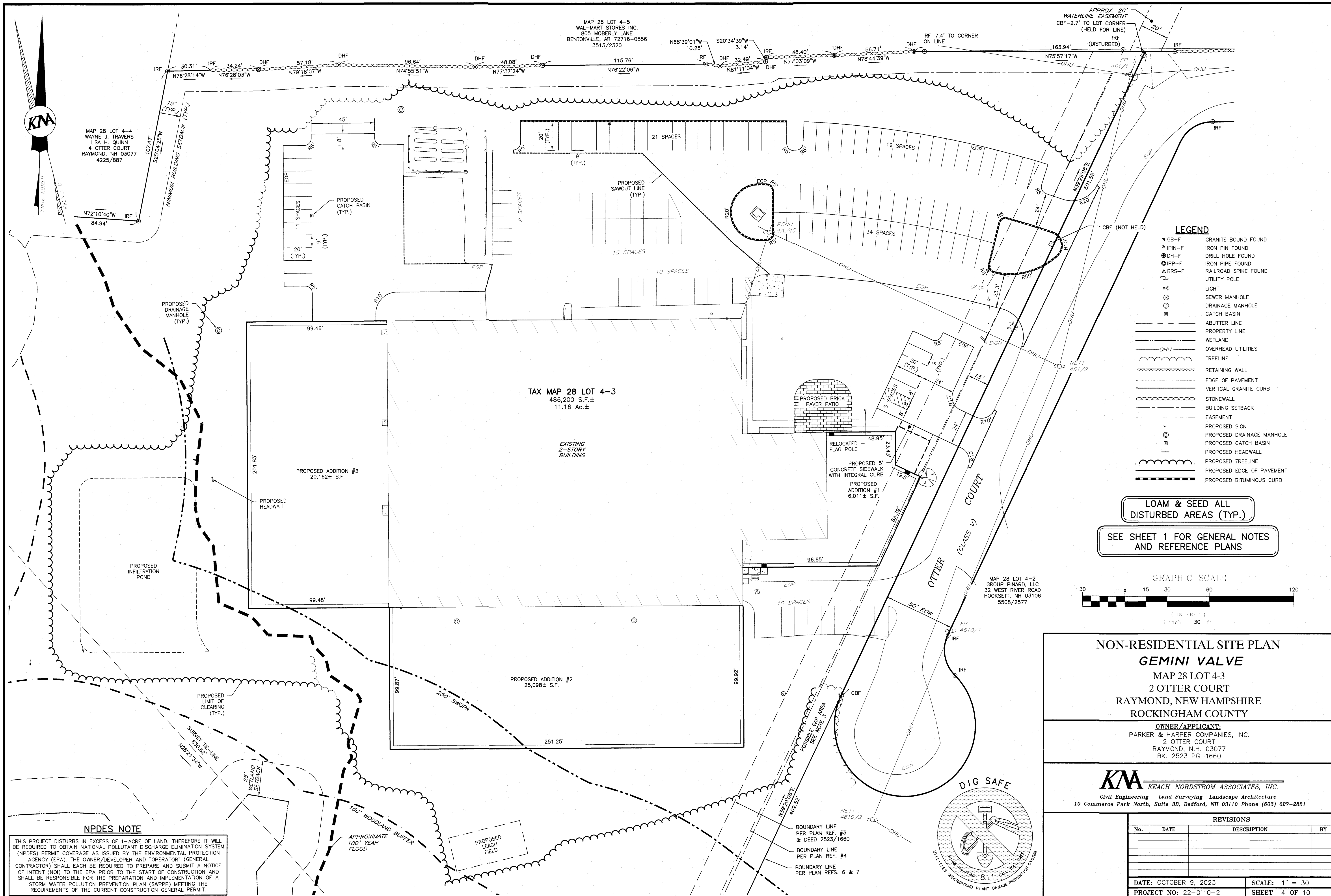
MAP 28 LOT 4-3
2 OTTER COURT
RAYMOND, NEW HAMPSHIRE
ROCKINGHAM COUNTY

OWNER/APPLICANT:
PARKER & HARPER COMPANIES, INC.
2 OTTER COURT
RAYMOND, N.H. 03077
BK. 2523 PG. 1660

KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: OCTOBER 9, 2023 SCALE: 1" = 50
PROJECT NO: 22-0110-2 SHEET 2 OF 10



MAP 28 LOT 4-4
WAYNE J. TRAVERS
LISA H. QUINN
4 OTTER COURT
RAYMOND, NH 03077
4225/887

MAP 28 LOT 4-5
WAL-MART STORES INC.
805 MOBERLY LANE
BENTONVILLE, AR 72716-0556
3513/2320

APPROX. 20'
WATERLINE EASEMENT
CBF-2.7' TO LOT CORNER
(HELD FOR LINE)

TAX MAP 28 LOT 4-3
486,200 S.F.±
11.16 Ac.±

PROPOSED ADDITION #3
20,162± S.F.

PROPOSED ADDITION #2
25,098± S.F.

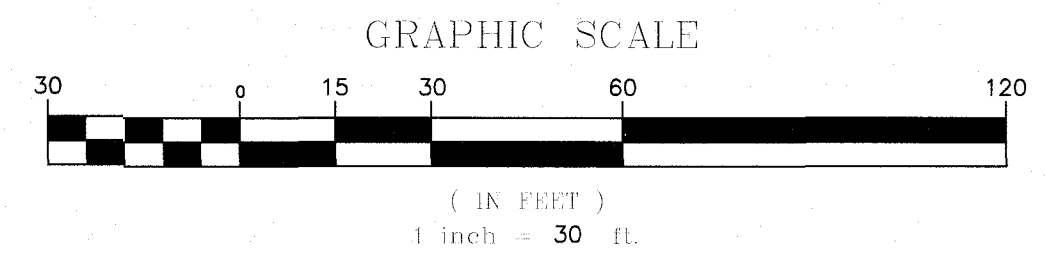
MAP 28 LOT 4-2
GROUP PINARD, LLC
32 WEST RIVER ROAD
HOOKSETT, NH 03106
5508/2577

LEGEND

- GB-F GRANITE BOUND FOUND
- IPIN-F IRON PIN FOUND
- ⊙ DH-F DRILL HOLE FOUND
- ⊙ IPP-F IRON PIPE FOUND
- ▲ RRS-F RAILROAD SPIKE FOUND
- ⊙ UTILITY POLE
- ⊙ LIGHT
- ⊙ SEWER MANHOLE
- ⊙ DRAINAGE MANHOLE
- ⊙ CATCH BASIN
- ABUTTER LINE
- PROPERTY LINE
- WETLAND
- OHU OVERHEAD UTILITIES
- TREELINE
- RETAINING WALL
- EDGE OF PAVEMENT
- VERTICAL GRANITE CURB
- STONEWALL
- BUILDING SETBACK
- EASEMENT
- PROPOSED SIGN
- ⊙ PROPOSED DRAINAGE MANHOLE
- ⊙ PROPOSED CATCH BASIN
- PROPOSED HEADWALL
- PROPOSED TREELINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED BITUMINOUS CURB

LOAM & SEED ALL
DISTURBED AREAS (TYP.)

SEE SHEET 1 FOR GENERAL NOTES
AND REFERENCE PLANS



NON-RESIDENTIAL SITE PLAN
GEMINI VALVE
MAP 28 LOT 4-3
2 OTTER COURT
RAYMOND, NEW HAMPSHIRE
ROCKINGHAM COUNTY

OWNER/APPLICANT:
PARKER & HARPER COMPANIES, INC.
2 OTTER COURT
RAYMOND, N.H. 03077
BK. 2523 PG. 1660

KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

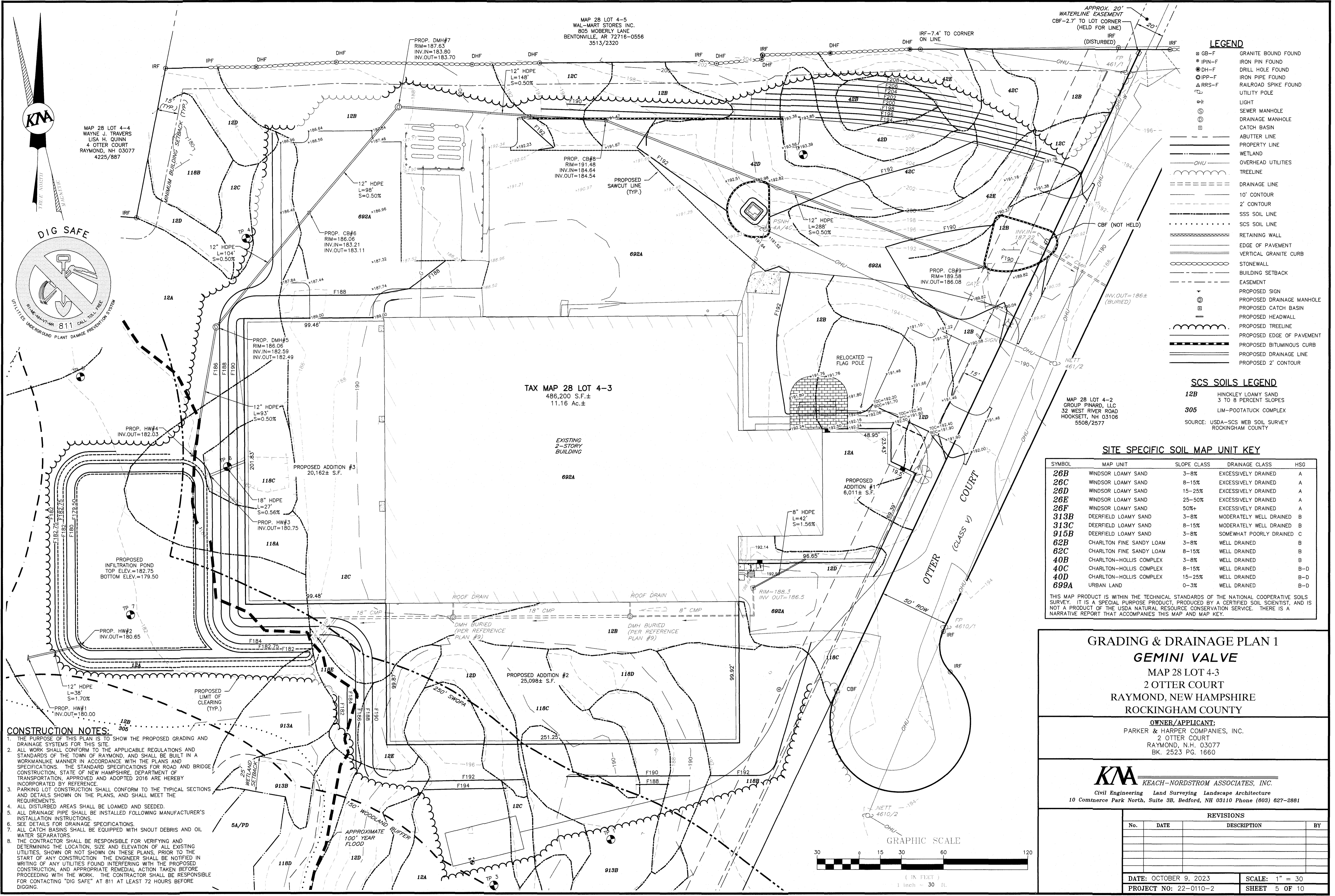
REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: OCTOBER 9, 2023 SCALE: 1" = 30'
PROJECT NO: 22-0110-2 SHEET 4 OF 10

NPDES NOTE
THIS PROJECT DISTURBS IN EXCESS OF 1-ACRE OF LAND. THEREFORE IT WILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE OWNER/DEVELOPER AND "OPERATOR" (GENERAL CONTRACTOR) SHALL EACH BE REQUIRED TO PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA PRIOR TO THE START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEETING THE REQUIREMENTS OF THE CURRENT CONSTRUCTION GENERAL PERMIT.





MAP 28 LOT 4-4
WAYNE J. TRAVERS
LISA H. QUINN
4 OTTER COURT
RAYMOND, NH 03077
4225/887

MAP 28 LOT 4-5
WAL-MART STORES INC.
805 MOBERLY LANE
BENTONVILLE, AR 72716-0556
3513/2320

APPROX. 20'
WATERLINE EASEMENT
CBF-2.7' TO LOT CORNER
(HELD FOR LINE)

- LEGEND**
- GB-F GRANITE BOUND FOUND
 - IPIN-F IRON PIN FOUND
 - DH-F DRILL HOLE FOUND
 - IPP-F IRON PIPE FOUND
 - △ RRS-F RAILROAD SPIKE FOUND
 - UTILITY POLE
 - LIGHT
 - SEWER MANHOLE
 - DRAINAGE MANHOLE
 - CATCH BASIN
 - ABUTTER LINE
 - PROPERTY LINE
 - WETLAND
 - OHU OVERHEAD UTILITIES
 - TREELINE
 - DRAINAGE LINE
 - 10' CONTOUR
 - 2' CONTOUR
 - SSS SOIL LINE
 - SCS SOIL LINE
 - RETAINING WALL
 - EDGE OF PAVEMENT
 - VERTICAL GRANITE CURB
 - STONEWALL
 - BUILDING SETBACK
 - EASEMENT
 - PROPOSED SIGN
 - PROPOSED DRAINAGE MANHOLE
 - PROPOSED CATCH BASIN
 - PROPOSED HEADWALL
 - PROPOSED TREELINE
 - PROPOSED EDGE OF PAVEMENT
 - PROPOSED DRAINAGE LINE
 - PROPOSED 2' CONTOUR

SCS SOILS LEGEND

12B HINCKLEY LOAMY SAND
3 TO 8 PERCENT SLOPES

305 LIM-POOTATUCK COMPLEX

SOURCE: USDA-SCS WEB SOIL SURVEY
ROCKINGHAM COUNTY

SITE SPECIFIC SOIL MAP UNIT KEY

SYMBOL	MAP UNIT	SLOPE CLASS	DRAINAGE CLASS	HSG
26B	WINDSOR LOAMY SAND	3-8%	EXCESSIVELY DRAINED	A
26C	WINDSOR LOAMY SAND	8-15%	EXCESSIVELY DRAINED	A
26D	WINDSOR LOAMY SAND	15-25%	EXCESSIVELY DRAINED	A
26E	WINDSOR LOAMY SAND	25-50%	EXCESSIVELY DRAINED	A
26F	WINDSOR LOAMY SAND	50+	EXCESSIVELY DRAINED	A
313B	DEERFIELD LOAMY SAND	3-8%	MODERATELY WELL DRAINED	B
313C	DEERFIELD LOAMY SAND	8-15%	MODERATELY WELL DRAINED	B
915B	DEERFIELD LOAMY SAND	3-8%	SOMEWHAT POORLY DRAINED	C
62B	CHARLTON FINE SANDY LOAM	3-8%	WELL DRAINED	B
62C	CHARLTON FINE SANDY LOAM	8-15%	WELL DRAINED	B
40B	CHARLTON-HOLLIS COMPLEX	3-8%	WELL DRAINED	B
40C	CHARLTON-HOLLIS COMPLEX	8-15%	WELL DRAINED	B-D
40D	CHARLTON-HOLLIS COMPLEX	15-25%	WELL DRAINED	B-D
699A	URBAN LAND	0-3%	WELL DRAINED	B-D

THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOILS SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, PRODUCED BY A CERTIFIED SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCE CONSERVATION SERVICE. THERE IS A NARRATIVE REPORT THAT ACCOMPANIES THIS MAP AND MAP KEY.

GRADING & DRAINAGE PLAN 1
GEMINI VALVE
MAP 28 LOT 4-3
2 OTTER COURT
RAYMOND, NEW HAMPSHIRE
ROCKINGHAM COUNTY

OWNER/APPLICANT:
PARKER & HARPER COMPANIES, INC.
2 OTTER COURT
RAYMOND, N.H. 03077
BK. 2523 PG. 1660

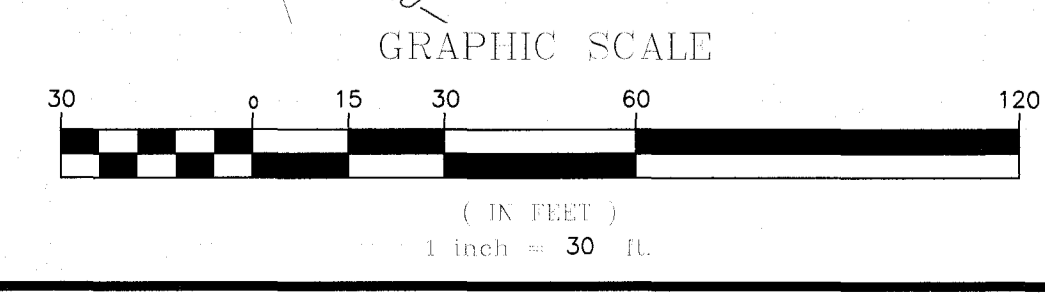
KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

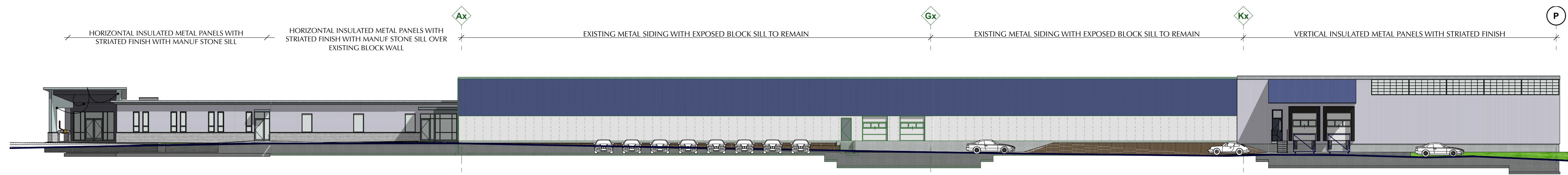
REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: OCTOBER 9, 2023 SCALE: 1" = 30'
PROJECT NO: 22-0110-2 SHEET 5 OF 10

- CONSTRUCTION NOTES:**
- THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED GRADING AND DRAINAGE SYSTEMS FOR THIS SITE.
 - ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF RAYMOND, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2016 ARE HEREBY INCORPORATED BY REFERENCE.
 - PARKING LOT CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET THE REQUIREMENTS.
 - ALL DISTURBED AREAS SHALL BE LOAMED AND SEED.
 - ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - SEE DETAILS FOR DRAINAGE SPECIFICATIONS.
 - ALL CATCH BASINS SHALL BE EQUIPPED WITH SNOT DEBRIS AND OIL WATER SEPARATORS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.

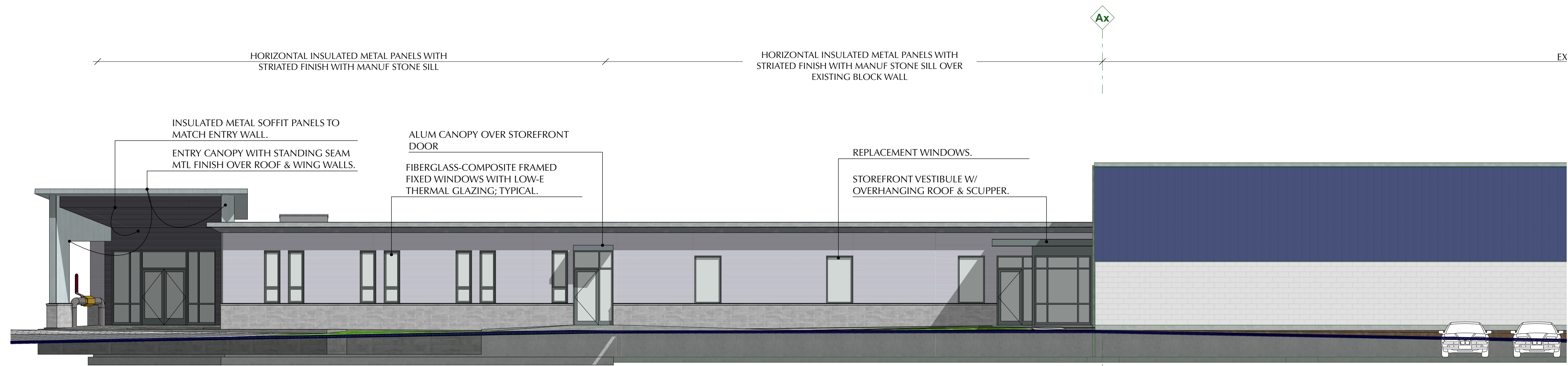




N North Elevation - Overview
SCALE: 1" = 20'



N.1 North Elevation - Manufacturing Addition
SCALE: 1/8" = 1'-0"



N.2 North Elevation - Office Addition
SCALE: 1/8" = 1'-0"

**GEMINI VALVE
ADDITION**
2 OTTER COURT • RAYMOND • NH

CONSULTANTS

FOR REGULATORY
APPROVAL,
NOT FOR
CONSTRUCTION

DENNIS MIREX, P.A.
THE ARCHITECTS
697 UNION STREET, MANCHESTER, NH
(603) 625-4548 WWW.DMARCHITECTS.NET

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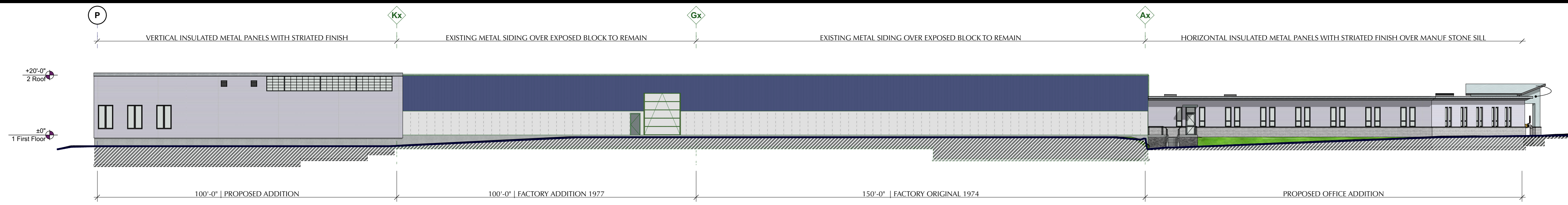
PLANNING BD
ISSUED: February 2024

REV #	DESCRIPTION	DATE

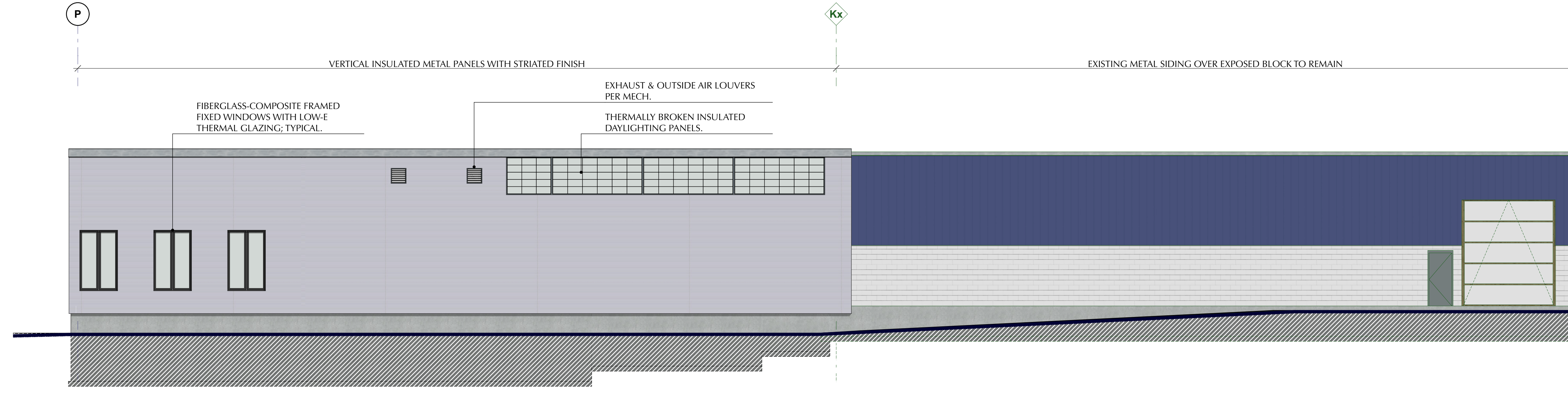
Exterior Elevations

PROJECT #: 2022.001

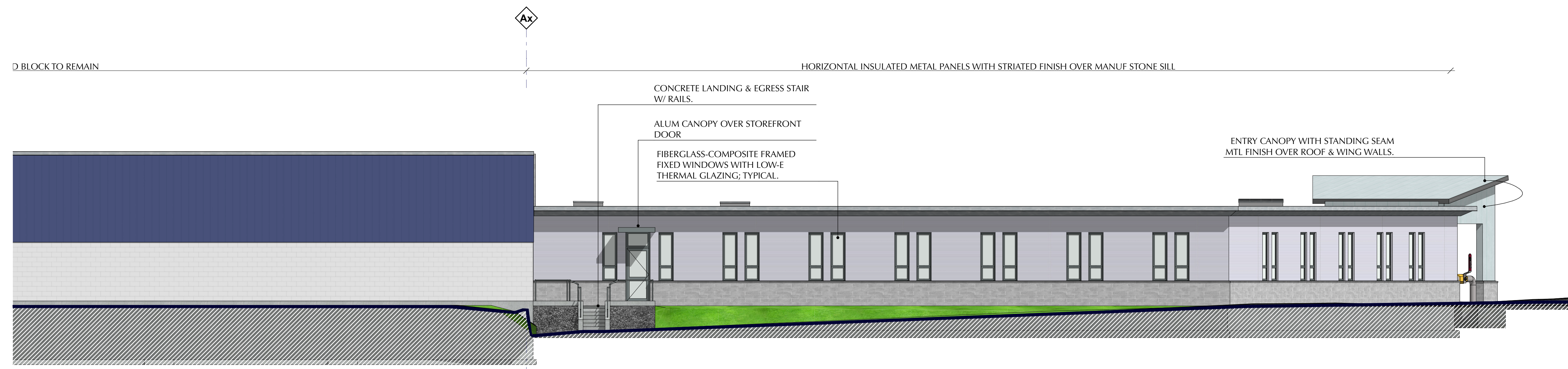
A2.1



S South Elevation - Overview
SCALE: 1" = 20'



S.1 South Elevation - Manufacturing Addition
SCALE: 1/8" = 1'-0"



S.2 South Elevation- Office Addition
SCALE: 1/8" = 1'-0"

**GEMINI VALVE
ADDITION**
2 OTTER COURT • RAYMOND • NH

CONSULTANTS

FOR REGULATORY
APPROVAL,
NOT FOR
CONSTRUCTION

DENNIS MIREX, P.A.
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697 UNION STREET, MANCHESTER, NH
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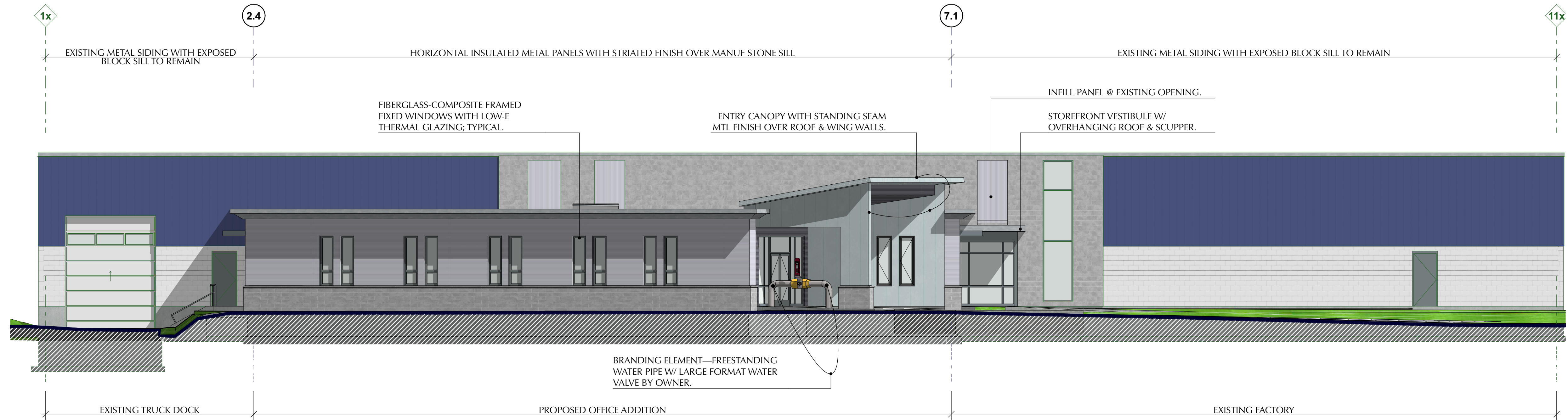
PLANNING BD
ISSUED: February 2024

REV #	DESCRIPTION	DATE

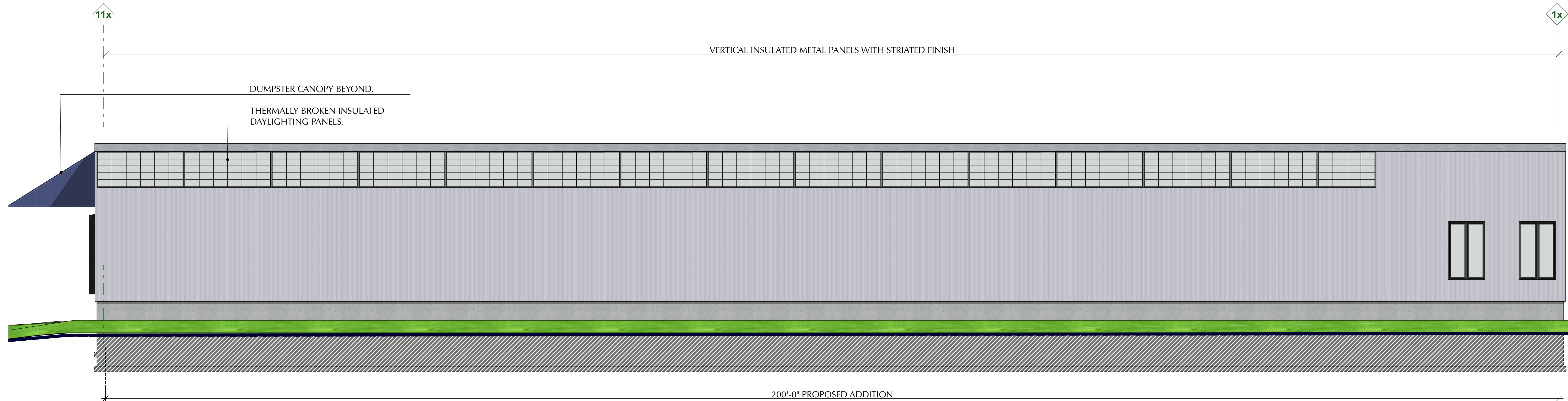
Exterior Elevations

PROJECT #: 2022.001

A2.2



E East Elevation- Office Addition
SCALE: 1/8" = 1'-0"



W West Elevation - Manufacturing Addition
SCALE: 1/8" = 1'-0"

**GEMINI VALVE
ADDITION**
2 OTTER COURT • RAYMOND • NH

CONSULTANTS

FOR REGULATORY
APPROVAL
NOT FOR
CONSTRUCTION

DENNIS MIREX, P.A.
THE ARCHITECTS
697 UNION STREET, MANCHESTER, NH
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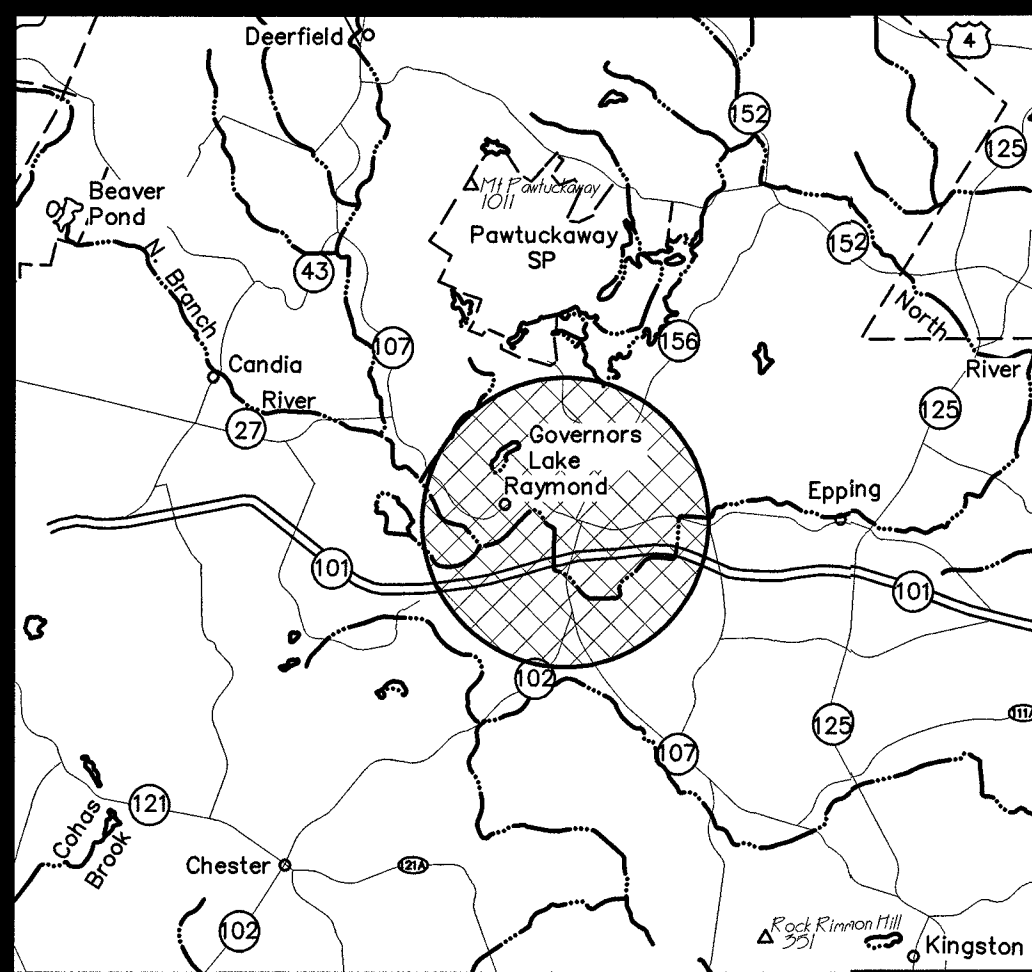
PLANNING BD
ISSUED: February 2024

REV #	DESCRIPTION	DATE

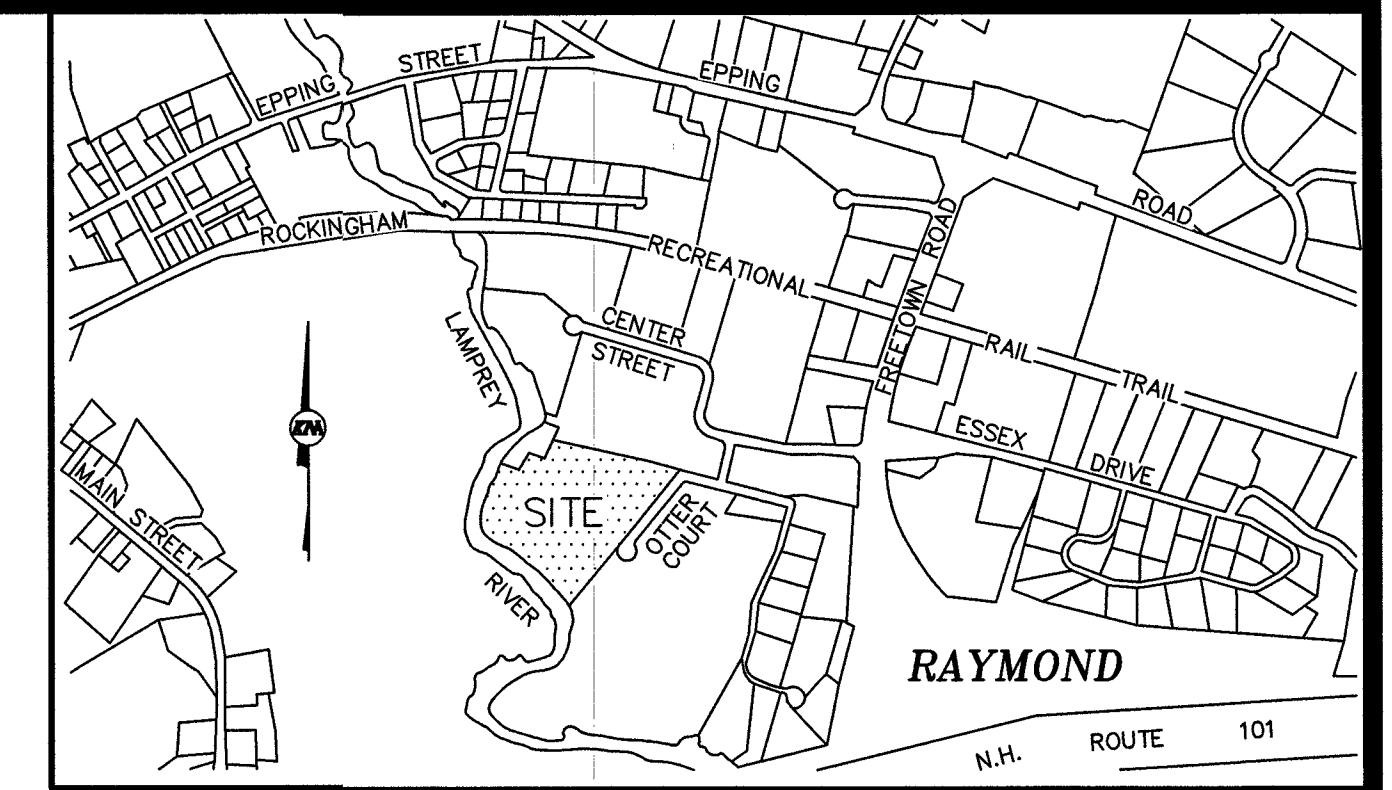
Exterior Elevations

PROJECT #: 2022.001

A2.3



VICINITY PLAN
NOT TO SCALE

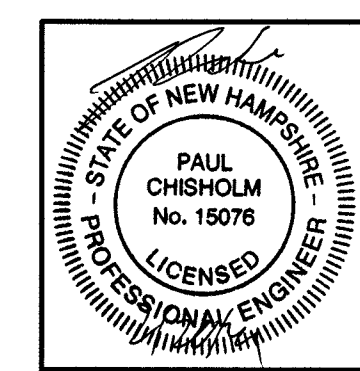
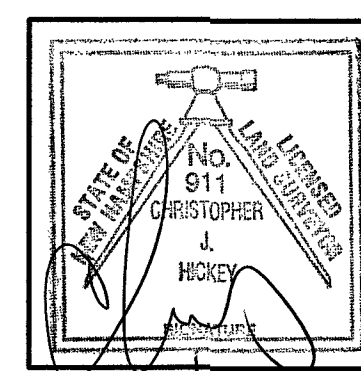


VICINITY PLAN
SCALE: 1" = 1,000±

NON-RESIDENTIAL SITE PLAN GEMINI VALVE MAP 28; LOT 4-3 2 OTTER COURT RAYMOND, NEW HAMPSHIRE

OWNER/APPLICANT:
PARKER & HARPER COMPANIES, INC.
2 OTTER COURT
RAYMOND, NEW HAMPSHIRE 03077

PREPARED BY:
KEACH-NORDSTROM ASSOCIATES, INC.
10 COMMERCE PARK NORTH, SUITE 3B
BEDFORD, NEW HAMPSHIRE 03110
(603) 627-2881



KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

FEBRUARY 15, 2024
PROJECT NO. 22-0110-2

SHEET TITLE

SHEET No.

OVERVIEW PLAN	1
EXISTING CONDITIONS PLAN	2
REMOVALS & DEMOLITION PLAN	3
NON-RESIDENTIAL SITE PLAN	4
GRADING & DRAINAGE PLAN	5
UTILITY PLAN	6
EROSION CONTROL PLAN	7
LANDSCAPE PLAN	8
LIGHTING PLAN	9
CONSTRUCTION DETAILS	10 - 14
TEST PIT LOGS	15

LEGEND

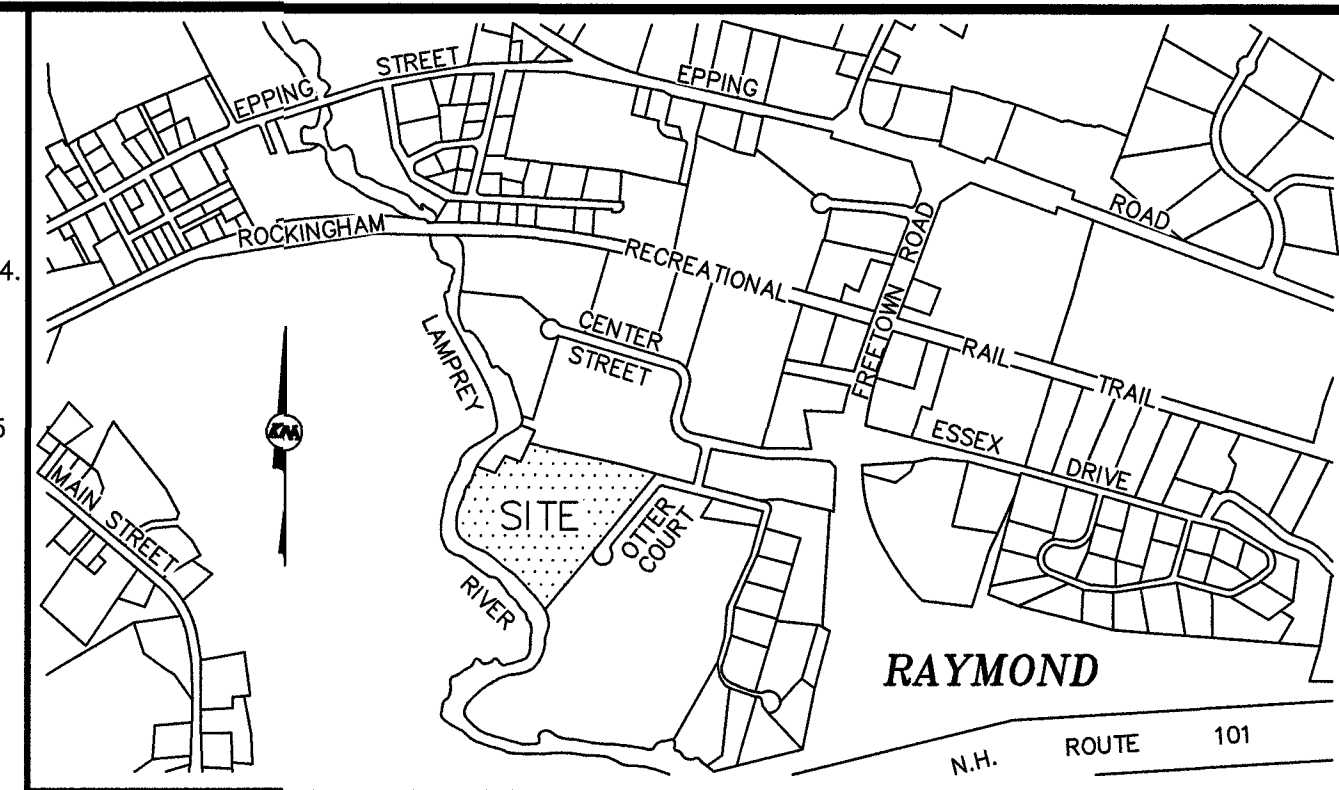
- CBF CONCRETE BOUND FOUND
IPF IRON PIPE FOUND
IPF IRON PIN FOUND
IRF IRON ROD FOUND
DHF DRILL HOLE FOUND
UTILITY POLE
HYDRANT
ABUTTER LINE
PROPERTY LINE
EDGE OF RIVER
WETLAND
POST & RAIL FENCE
GUARDRAIL
TREELINE
STONEWALL
OVERHEAD UTILITIES
EDGE OF PAVEMENT
RIGHT OF WAY
SETBACK
50' RESIDENTIAL SETBACK
EASEMENT
100 YEAR FLOOD
250' SWOPA
150' WOODLAND BUFFER
50' PRIMARY STRUCTURE SETBACK
PROPOSED EDGE OF PAVEMENT
PROPOSED TREE LINE

STATE AND FEDERAL PERMITS:

THE FOLLOWING STATE AND FEDERAL PERMITS ARE REQUIRED FOR THE PROJECT:
NHDES INDIVIDUAL SEWAGE DISPOSAL SYSTEM
NHDES ALTERATION OF TERRAIN
NHDES SHORELAND PERMIT
USEPA NOTICE OF INTENT

REFERENCE PLANS:

- 1. "PLAN OF LAND; RAYMOND DEVELOPMENT CORP." SCALE: 1"=100'. DATED: MARCH 3, 1972.
2. "SUBDIVISION PLAN #73-2; RAYMOND DEVELOPMENT CORPORATION." SCALE: 1"=100'. DATED: JANUARY 3, 1973.
3. "SURVEY OF THE ESTATE, THOMAS P. WELCH." SCALE: 1"=100'. DATED: MARCH 15, 1974.
4. "REVISED SURVEY OF THE ESTATE, THOMAS P. WELCH." SCALE: 1"=100'. DATED: JULY 10, 1974.
5. "SURVEY OF RIGHT OF WAY OVER LAND OWNED BY COURIER CITIZEN'S INC." SCALE: 1"=100'. DATED: JUNE 6, 1974.
6. "A SURVEY OF A SUBDIVISION TO BE KNOWN AS 'WELSH ESTATES' OWNED BY THOMAS P. WELCH HEIRS BEING PART OF LOT 111 - TAX MAP 9 SITUATED IN RAYMOND, NH" MAY 1, 1975.
7. "SURVEY OF THE LAND OF LEONARD & DIANE DREW." SCALE: 1"=100'. DATED: OCTOBER 3, 1985.
8. "PROPERTY LINE REVISION PLAN; 14 CENTER ST. & 4 OTTER ROAD." SCALE: 1"=50'. DATED: JUNE 12, 2001.
9. "SITE PLAN, PARKER AND HARPER." SCALE: 1"=30'. DATED: MARCH 3, 1977.



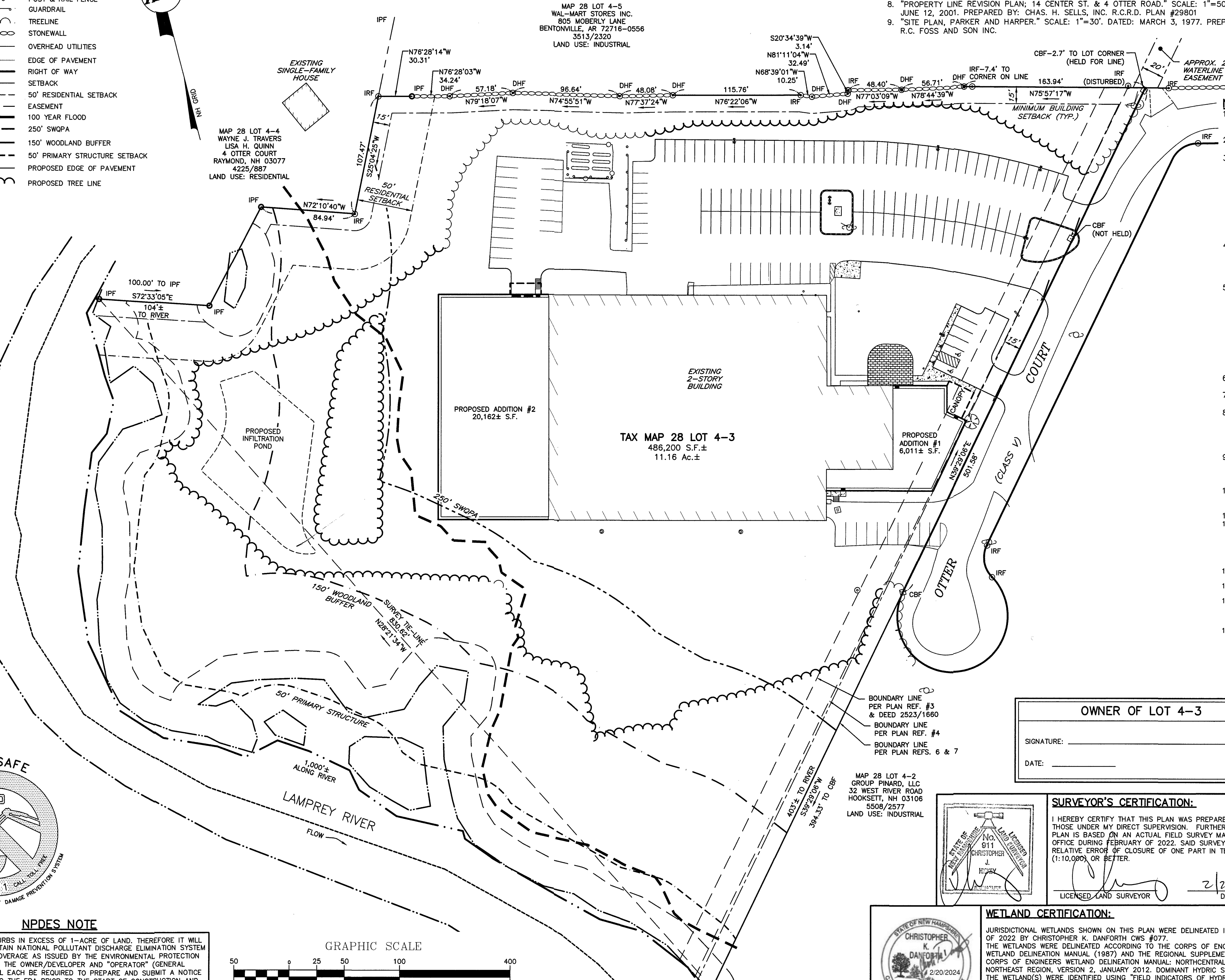
VICINITY PLAN
SCALE: 1" = 1,000±

NOTES:

- 1. THE PURPOSE OF THIS PLAN IS TO SHOW TWO PROPOSED BUILDING ADDITIONS AND PROPOSED PARKING LOT IMPROVEMENTS AND MODIFICATIONS TO THE EXISTING INDUSTRIAL FACILITY ON MAP 28 LOT 4-3 IN THE TOWN OF RAYMOND AND NO OTHER PURPOSE.
2. EXISTING AREA OF PARCEL = 486,200 S.F.± OR 11.16 ACRES± (WHICH INCLUDES THE AREA OF THE POSSIBLE GAP, SEE NOTE 3).
3. LOT 4-3 WAS ORIGINALLY CREATED BY PLAN REFERENCE 3 AND DEEDED OUT PER SAID PLAN. PLAN REFERENCE 4 IS A REVISED SUBDIVISION OF PLAN REFERENCE 3. PER PLAN REFERENCE 4, THE EASTERLY END OF THE NORTHERLY RIGHT OF WAY LINE FOR OTTER COURT IS LOCATED 679.09 FEET FROM LOT 4-4 (N/F WEISS) AND SHOWS CONCRETE BOUNDS ALONG SAID LINE. PLAN REFERENCES 6 & 7 SHOW CONCRETE BOUNDS ALONG THE NORTHERLY AND COMMON LOT LINE WITH N/F LAND OF PARKER-HARPER, INC. (LOT 4-3). THE CURRENT LOCATION OF THE BOUNDS IS SHIFTED APPROXIMATELY 15 FEET SOUTHEASTERLY OF THE LINE PER PLAN REFERENCE 4.
4. OWNER OF RECORD: PARKER & HARPER COMPANIES, LLC
2 OTTER COURT
RAYMOND, N.H. 03077
BK. 2523 PG. 1660
5. THE SUBJECT PARCEL IS LOCATED ENTIRELY WITHIN THE INDUSTRIAL (D) ZONING DISTRICT AND THE GROUNDWATER CONSERVATION DISTRICT. DIMENSIONAL REQUIREMENTS ARE AS FOLLOWS:

Table with 4 columns: DIMENSIONAL REQUIREMENTS, REQUIRED, EXISTING, PROPOSED. Rows include MINIMUM LOT AREA, MINIMUM LOT FRONTAGE, MINIMUM BUILDING SETBACKS (FRONT, SIDE, REAR).

- 6. TOPOGRAPHIC AND BOUNDARY INFORMATION SHOWN HEREON ARE BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE IN FEBRUARY OF 2022.
7. HORIZONTAL DATUM IS NAD 83 AND THE VERTICAL DATUM IS NAVD 29 BASED ON NHDOT CONTROL POINT 243-0180.
8. EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) FOR THE TOWN OF RAYMOND N.H., ROCKINGHAM COUNTY, MAP NUMBER 33015C0191E, PANEL 191 OF 651, EFFECTIVE DATE: MAY 17, 2005 INDICATES THAT A PORTION OF THE SUBJECT PARCEL IS LOCATED WITHIN A DESIGNATED FLOOD HAZARD AREA AE WITH BASE FLOOD ELEVATION OF APPROXIMATELY 183.5 TO 184.3 (NGVD 1929).
9. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF THE UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR OR OWNER SHALL CONTACT DIG-SAFE AT 811.
10. EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.
11. THE TOTAL AREA OF DISTURBANCE FOR THE PROJECT IS 204,455 SQUARE FEET OR 4.69 ACRES.
12. PARKING CALCULATIONS:
REQUIRED: HEAVY INDUSTRIAL:
1 SPACE/2 EMPLOYEES @ 150 EMPLOYEES = 75 SPACES
1 SPACE/2,000 SF OF GFA @ 71,012 SF OF GFA = 41 SPACES
TOTAL = 116 SPACES
PROVIDED: 46 EXISTING + 105 PROPOSED = 151 SPACES (INCLUDING 5 HANDICAP ACCESSIBLE)
13. SITE LIGHTING SHALL BE AS SHOWN ON THE PLAN, DIRECTED ONTO SITE, AND SHALL CONFORM WITH ALL APPLICABLE TOWN OF RAYMOND REGULATIONS.
14. SITE IMPROVEMENTS DEPICTED ON THE PLAN SHALL CONFORM WITH TITLE III OF THE AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSION AND GRADE.
15. PLOWED SNOW FROM THE FACILITIES, DRIVEWAY, PARKING LOTS AND SIDEWALK SHALL BE STORED IN THE DESIGNATED AREAS SHOWN IN THIS PLAN SET. WHEN THE SNOW STORAGE AREAS ARE AT CAPACITY, SUBSEQUENT SNOW SHALL BE HAULED OFF-SITE AND DISPOSED OF IN AN ENVIRONMENTALLY SOUND FASHION AND IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
16. A NEW HAMPSHIRE LICENSED LAND SURVEYOR CERTIFIED AS-BUILT PLAN SHALL BE COMPLETED FOLLOWING CONSTRUCTION. ANY DISCREPANCIES FROM THE APPROVED SITE PLANS SHALL BE IDENTIFIED.

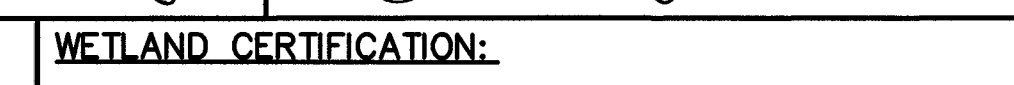


OWNER OF LOT 4-3
SIGNATURE:
DATE:

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE DURING FEBRUARY OF 2022. SAID SURVEY HAS A RELATIVE ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000) OR BETTER.

LICENSED LAND SURVEYOR
DATE: 2/20/24



WETLAND CERTIFICATION:

JURISDICTIONAL WETLANDS SHOWN ON THIS PLAN WERE DELINEATED IN FEBRUARY OF 2022 BY CHRISTOPHER K. DANFORTH CWS #077. THE WETLANDS WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2, JANUARY 2012. DOMINANT HYDRIC SOILS WITHIN THE WETLAND(S) WERE IDENTIFIED USING 'FIELD INDICATORS OF HYDRIC SOILS OF THE UNITED STATES' A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, NRCS, VERSION 8.1, 2017. DOMINANCE OF HYDROPHYTIC VEGETATION WAS DETERMINED USING THE USACE 2020 NATIONAL WETLAND PLANT LIST, NWPL 2020 VERSION 3.5 HTTP://WETLAND-PLANTS.USACE.ARMY.MIL.



OVERVIEW PLAN
GEMINI VALVE
MAP 28 LOT 4-3
2 OTTER COURT
RAYMOND, NEW HAMPSHIRE
ROCKINGHAM COUNTY

OWNER/APPLICANT:
PARKER & HARPER COMPANIES, INC.
2 OTTER COURT
RAYMOND, N.H. 03077
BK. 2523 PG. 1660

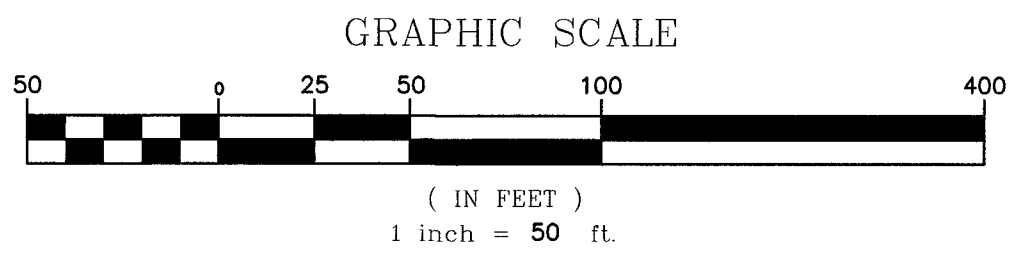
KM KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

Table with 4 columns: No., DATE, DESCRIPTION, BY. Includes a REVISIONS section and a footer with DATE: FEBRUARY 15, 2024, SCALE: 1" = 50', PROJECT NO: 22-0110-2, SHEET 1 OF 15.



NPDES NOTE

THIS PROJECT DISTURBS IN EXCESS OF 1-ACRE OF LAND. THEREFORE IT WILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE OWNER, DEVELOPER AND OPERATOR (GENERAL CONTRACTOR) SHALL EACH BE REQUIRED TO PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA PRIOR TO THE START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEETING THE REQUIREMENTS OF THE CURRENT CONSTRUCTION GENERAL PERMIT.



LEGEND

- CONCRETE BOUND FOUND
- IRON PIPE FOUND
- IRON PIN FOUND
- DRILL HOLE FOUND
- UTILITY POLE
- LIGHT POLE
- HYDRANT
- CATCH BASIN
- ABUTMENT LINE
- PROPERTY LINE
- EDGE OF RIVER
- WETLAND
- POST & RAIL FENCE
- GUARDRAIL
- GAS LINE
- WATER LINE
- CONCRETE
- DRAINAGE LINE
- TREELINE
- STONEWALL
- OVERHEAD UTILITIES
- 10' CONTOUR
- 2' CONTOUR
- BOLLARD
- EDGE OF PAVEMENT
- SETBACK
- EASEMENT
- 100 YEAR FLOOD
- 250' SWOPA
- 150' WOODLAND BUFFER
- 50' PRIMARY STRUCTURE SETBACK
- SCS SOIL LINE
- SSS SOIL LINE

SCS SOILS LEGEND

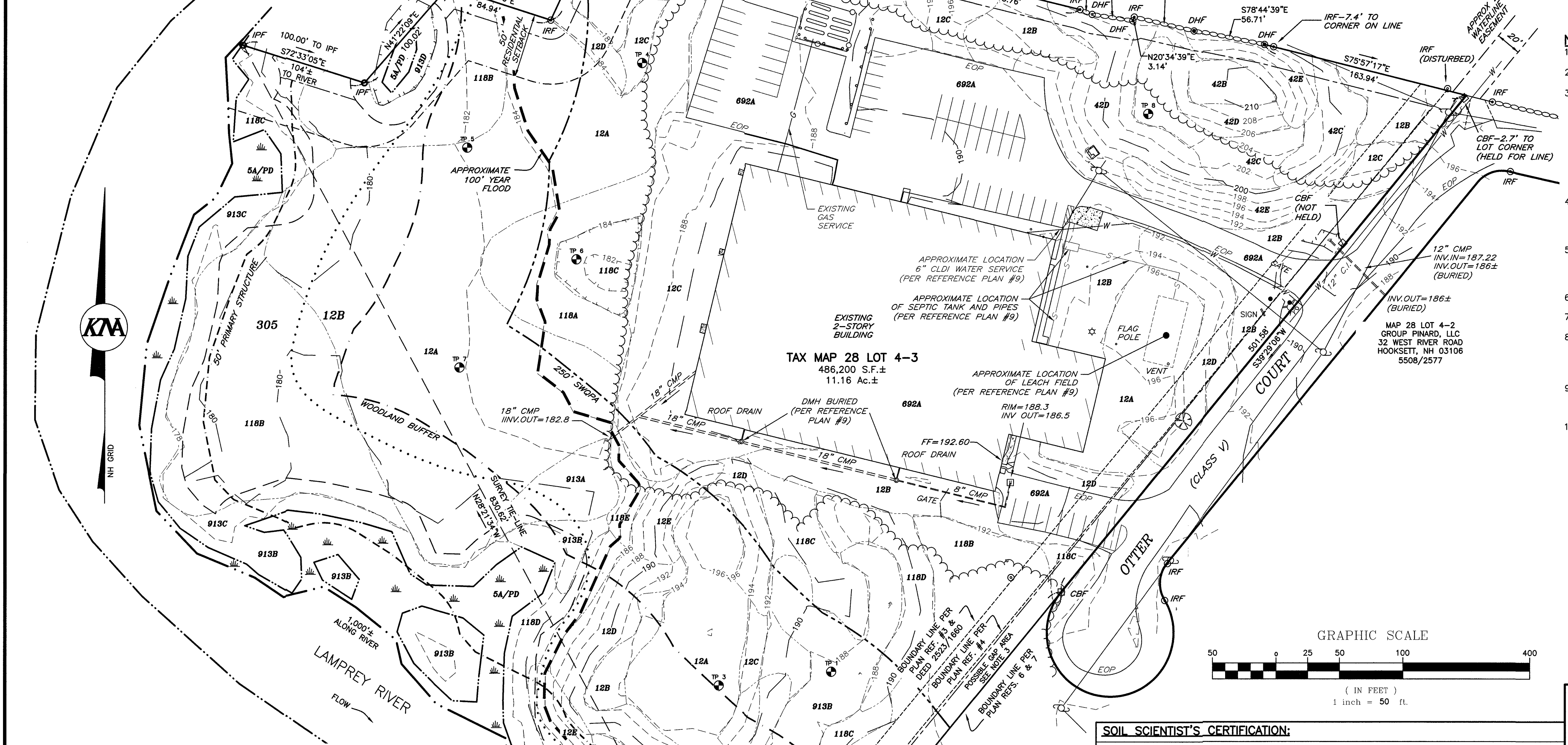
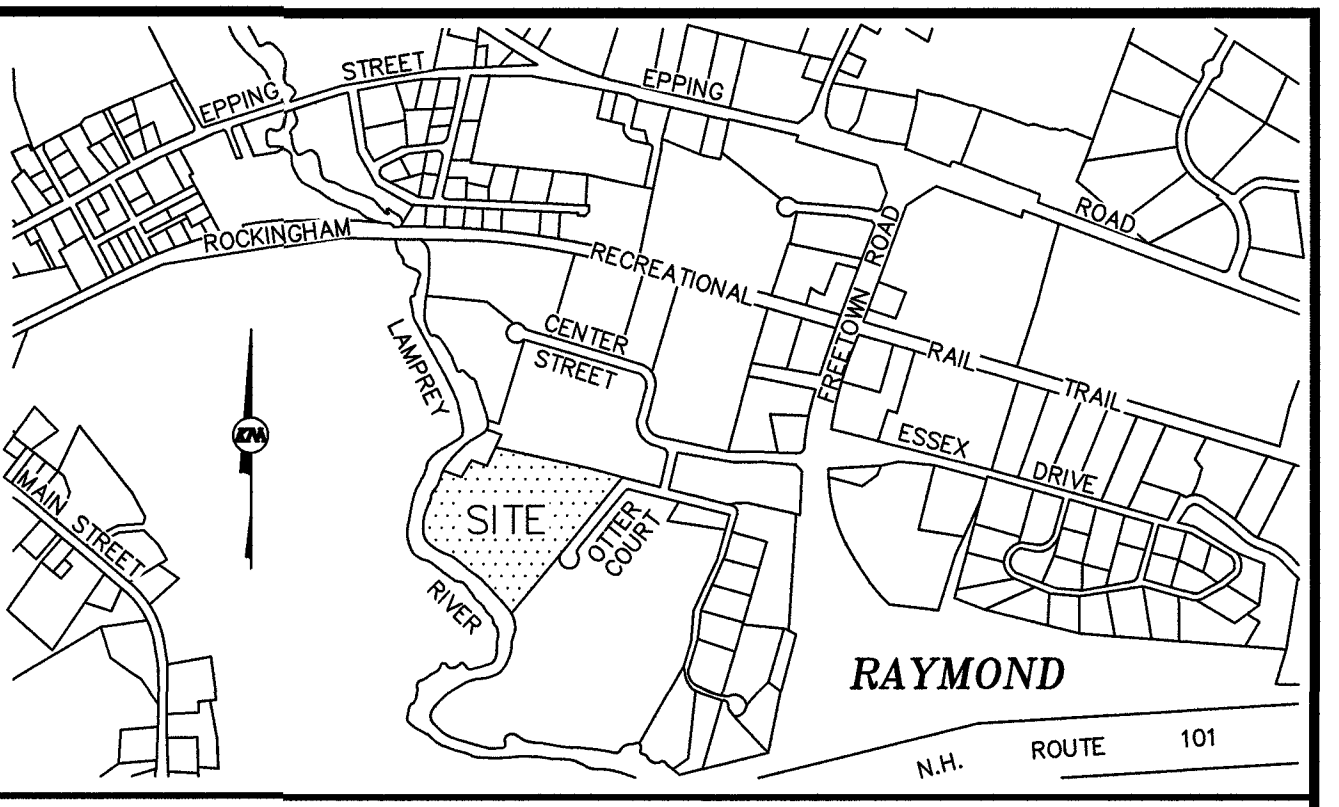
12B HINCKEY LOAMY SAND
3 TO 8 PERCENT SLOPES

305 LIM-POOTATUK COMPLEX

SOURCE: USDA-SCS WEB SOIL SURVEY
ROCKINGHAM COUNTY

REFERENCE PLANS:

- "PLAN OF LAND; RAYMOND DEVELOPMENT CORP." SCALE: 1"=100'. DATED: MARCH 3, 1972. PREPARED BY: THOMAS F. MORAN INC.-CIVIL ENGINEER & SURVEYOR R.C.R.D. PLAN #3390
- "SUBDIVISION PLAN #73-2; RAYMOND DEVELOPMENT CORPORATION." SCALE: 1"=100'. DATED: JANUARY 3, 1973. PREPARED BY: ALLAN H. SWANSON, INC. R.C.R.D. PLAN #3480
- "SURVEY OF THE ESTATE, THOMAS P. WELCH." SCALE: 1"=100'. DATED: MARCH 15, 1974. PREPARED BY: R.S.L. LAYOUT & DESIGN, R.C.R.D. PLAN #4500
- "REVISED SURVEY OF THE ESTATE, THOMAS P. WELCH." SCALE: 1"=100'. DATED: JULY 10, 1974. PREPARED BY: R.S.L. LAYOUT & DESIGN, R.C.R.D. PLAN #4619
- "SURVEY OF RIGHT OF WAY OVER LAND OWNED BY COURIER CITIZEN'S INC." SCALE: 1"=100'. DATED: JUNE 6, 1974. PREPARED BY: R.S.L. LAYOUT & DESIGN, R.C.R.D. PLAN #4633
- "A SURVEY OF A SUBDIVISION TO BE KNOWN AS 'WELSH ESTATES' OWNED BY THOMAS P. WELCH HEIRS BEING PART OF LOT 111 - TAX MAP 9 SITUATED IN RAYMOND, NH" MAY 1, 1975. SCALE: 1"=100'. PREPARED BY: R.S.L. LAYOUT & DESIGN, R.C.R.D. PLAN #5189.
- "SURVEY OF THE LAND OF LEONARD & DIANE DREW." SCALE: 1"=100'. DATED: OCTOBER 3, 1985. PREPARED BY: HOLDEN ENGINEERING & SURVEYING, R.C.R.D. PLAN #14337
- "PROPERTY LINE REVISION PLAN; 14 CENTER ST. & 4 OTTER ROAD." SCALE: 1"=50'. DATED: JUNE 12, 2001. PREPARED BY: CHAS. H. SELLS, INC. R.C.R.D. PLAN #29801



NOTES:

- THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS PRESENT ON MAP 28 LOT 4-3 IN THE TOWN OF RAYMOND, N.H.
- EXISTING AREA OF PARCEL = 486,200 S.F.± OR 11.16 ACRES± (WHICH INCLUDES THE AREA OF THE POSSIBLE GAP, SEE NOTE 3).
- LOT 4-3 WAS ORIGINALLY CREATED BY PLAN REFERENCE 3 AND DEEDED OUT PER SAID PLAN. PLAN REFERENCE 4 IS A REVISED SUBDIVISION OF PLAN REFERENCE 3. PER PLAN REFERENCE 4, THE EASTERLY END OF THE NORTHERLY RIGHT OF WAY LINE FOR OTTER COURT IS LOCATED 679.09 FEET FROM LOT 4-4 (N/F WEISS) AND SHOWS CONCRETE BOUNDS ALONG SAID LINE. PLAN REFERENCES 6 & 7 SHOW CONCRETE BOUNDS ALONG THE NORTHERLY AND COMMON LOT LINE WITH N/F LAND OF PARKER-HARPER, INC. (LOT 4-3). THE CURRENT LOCATION OF THE BOUNDS IS SHIFTED APPROXIMATELY 15 FEET SOUTHEASTLY OF THE LINE PER PLAN REFERENCE 4. BASED UPON THE MONUMENTATION FOUND ON THE SOUTHERLY RIGHT OF WAY LINE OF OTTER COURT IN CONJUNCTION WITH THE EXISTING OTTER COURT IMPROVEMENTS, THE BOUNDARY SHOWN IS BASED UPON THE CONCRETE BOUNDS RATHER THAN THE DISTANCE SHOWN ON PLAN REFERENCES 3 OR 4.
- OWNER OF RECORD:
PARKER & HARPER COMPANIES, LLC
2 OTTER COURT
RAYMOND, N.H. 03077
BK. 2523 PG. 1660
- THE SUBJECT PARCEL IS LOCATED ENTIRELY WITHIN INDUSTRIAL (D) ZONING DISTRICT. DIMENSIONAL REQUIREMENTS ARE AS FOLLOWS:
- FRONT 15 FT
- SIDE 15 FT
- REAR 15 FT
- TOPOGRAPHIC AND BOUNDARY INFORMATION SHOWN HEREON ARE BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE IN FEBRUARY OF 2022.
- HORIZONTAL DATUM IS NAD 83 AND THE VERTICAL DATUM IS NGVD 29 BASED ON NHDOT CONTROL POINT 243-0180.
- EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) FOR THE TOWN OF RAYMOND N.H., ROCKINGHAM COUNTY, MAP NUMBER 33015C0191E, PANEL 191 OF 651, EFFECTIVE DATE: MAY 17, 2005 INDICATES THAT A PORTION OF THE SUBJECT PARCEL IS LOCATED WITHIN A DESIGNATED FLOOD HAZARD AREA AE WITH BASE FLOOD ELEVATION OF APPROXIMATELY 183.5 TO 184.3 (NGVD 1929).
- THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF THE UTILITIES SHOWN, PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR OR OWNER SHALL CONTACT DIG-SAFE AT 811.
- EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.

SITE SPECIFIC SOIL MAP UNIT KEY

SYMBOL	MAP UNIT	SLOPE CLASS	DRAINAGE CLASS	HSG
	CANTON FINE SANDY LOAM	0-3%	WELL DRAINED	B
	CANTON FINE SANDY LOAM	3-8%	WELL DRAINED	B
	CANTON FINE SANDY LOAM	8-15%	WELL DRAINED	B
	CANTON FINE SANDY LOAM	15-25%	WELL DRAINED	B
	HINCKEY LOAMY SAND	0-3%	EXCESSIVELY DRAINED	A
	HINCKEY LOAMY SAND	3-8%	EXCESSIVELY DRAINED	A
	HINCKEY LOAMY SAND	8-15%	EXCESSIVELY DRAINED	A
	HINCKEY LOAMY SAND	15-25%	EXCESSIVELY DRAINED	A
	HINCKEY LOAMY SAND	25-50%	EXCESSIVELY DRAINED	A
	SUBBURY FINE SANDY LOAM	3-8%	MODERATELY WELL DRAINED	B
	SUBBURY FINE SANDY LOAM	8-15%	MODERATELY WELL DRAINED	B
	SUBBURY FINE SANDY LOAM	15-25%	MODERATELY WELL DRAINED	B
	SUBBURY FINE SANDY LOAM	25-50%	MODERATELY WELL DRAINED	B
	SUBBURY FINE SANDY LOAM	0-3%	SOMEWHAT POORLY DRAINED	C
	SUBBURY FINE SANDY LOAM	3-8%	SOMEWHAT POORLY DRAINED	C
	SUBBURY FINE SANDY LOAM	8-15%	SOMEWHAT POORLY DRAINED	C
	RIPPOMAW FINE SANDY LOAM	0-3%	POORLY DRAINED	C
	HINCKEY-URBAN LAND COMPLEX (UNDER BUILDINGS AND PAVEMENT)	0-3%	EXCESSIVELY DRAINED	A

DIG SAFE
CALL 811

WETLAND SCIENTIST'S CERTIFICATION:

JURISDICTIONAL WETLANDS SHOWN ON THIS PLAN WERE DELINEATED IN FEBRUARY OF 2022 BY CHRISTOPHER K. DANFORTH CWS #077. THE WETLANDS WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHEASTRAL AND NORTHEAST REGION, VERSION 2, JANUARY 2012. DOMINANT HYDRIC SOILS WITHIN THE WETLAND(S) WERE IDENTIFIED USING FIELD INDICATORS OF HYDRIC SOILS OF THE UNITED STATES "A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, NRCSS, VERSION 8.1, 2017. DOMINANCE OF HYDROPHYTIC VEGETATION WAS DETERMINED USING THE USACE 2020 NATIONAL WETLAND PLANT LIST, NWPL 2020 VERSION 3.5 HTTP://WETLAND-PLANTS.USACE.ARMY.MIL.

SOIL SCIENTIST'S CERTIFICATION:

THIS SITE-SPECIFIC SOIL MAP WAS COMPLETED BY CYNTHIA M. BALCIUS, NEW HAMPSHIRE CERTIFIED SOIL SCIENTIST #82 OF STONEY RIDGE ENVIRONMENTAL LLC. FIELD WORK WAS COMPLETED ON THE FOLLOWING DATE(S): 10/26/23. THE FOLLOWING STANDARDS WERE USED TO COMPLETE THIS SOIL MAP AND ACCOMPANYING SOIL REPORT:
 1. Field Indicators of Hydric Soils in the United States, Version 8.1, 2017. L.M. Soils, G.W. Hurt, and J.F. Berks (eds.), United States Department of Agriculture, National Resources Conservation Service, in cooperation with the National Technical Committee for Hydric Soils.
 2. Field Indicators for Identifying Hydric Soils in New England, Version 4, June 2018, New England Hydric Soils Technical Committee.
 3. The Site-Specific Soil Mapping Standards for New Hampshire and Vermont. SSSNIE Special Publication No. 3, Version 5, December 2017.
 4. Soil Survey Manual, United States Department of Agriculture Handbook No. 18, Issued March 2017. US Government Printing Office, Soil Survey Staff, Washington D.C. 20402
 5. New Hampshire State-Wide Numerical Soils Legend, USDA Natural Resources Conservation Service, Durham, New Hampshire, Issue #10, January 2011.
 6. Field Book for Describing and Sampling Soils, Version 3.0 National Soil Survey Center, Natural Resources Conservation Service, U.S. Department of Agriculture, Lincoln, Nebraska, September 2012.
 7. Keys to Soil Taxonomy, Twelfth Edition, 2014, United States Department of Agriculture, Natural Resources Conservation Service.

ADDITIONAL NOTE: This map product is within the technical standards of the National Cooperative Soil Survey. It is a special purpose product, produced by a certified soil scientist, and is not a product of the USDA Natural Resources Conservation Service. There is a narrative report that accompanies this map and key.

EXISTING CONDITIONS PLAN
GEMINI VALVE
MAP 28 LOT 4-3
2 OTTER COURT
RAYMOND, NEW HAMPSHIRE
ROCKINGHAM COUNTY

OWNER/APPLICANT:
PARKER & HARPER COMPANIES, INC.
2 OTTER COURT
RAYMOND, N.H. 03077
BK. 2523 PG. 1660

KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881

REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 15, 2024 SCALE: 1" = 50'
PROJECT NO: 22-0110-2 SHEET 2 OF 15

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- REMOVALS/DEMOLITION NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING FEATURES ON SITE TO BE REMOVED, SALVAGED OR REPLACED.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
 3. CONTRACTOR TO REMOVE AND SALVAGE ITEMS SHOWN.
 4. ALL STUMPS, ROOTS, BRANCHES, BRUSH, WOODS AND OTHER PERISHABLE MATERIAL RESULTING FROM THE CLEARING AND GRUBBING OPERATIONS SHALL BE DISPOSED OF BY AN APPROVED METHOD.
 5. ALL EXISTING PAVEMENT WITHIN THE CROSS HATCHED AREA IS TO BE REMOVED DURING THE DEMOLITION PHASE OF THE PROJECT. EXCESS MATERIAL FROM THESE AREAS SHALL BE APPROPRIATELY DISPOSED OF OFFSITE BY AN APPROVED METHOD.
 6. DEBRIS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

MAP 28 LOT 4-5
 WAL-MART STORES INC.
 805 MOBERLY LANE
 BENTONVILLE, AR 72716-0556
 3513/2320
 LAND USE: INDUSTRIAL

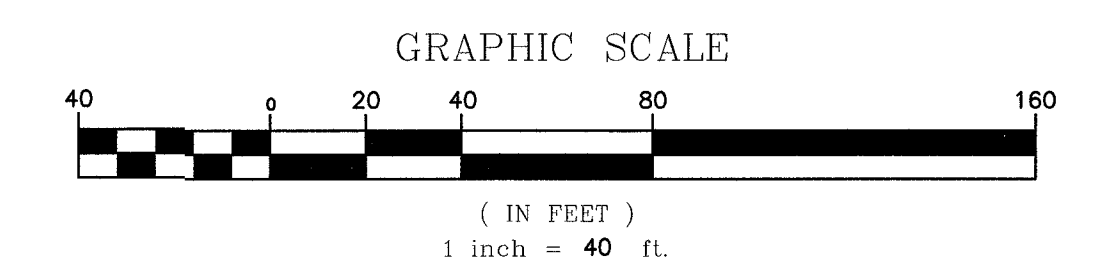
MAP 28 LOT 4-4
 WAYNE J. TRAVERS
 LISA H. QUINN
 4 OTTER COURT
 RAYMOND, NH 03077
 4225/887
 LAND USE: RESIDENTIAL

TAX MAP 28 LOT 4-3
 486,200 S.F.±
 11.16 Ac.±

MAP 28 LOT 4-2
 GROUP PINARD, LLC
 32 WEST RIVER ROAD
 HOOKSETT, NH 03106
 5508/2577
 LAND USE: INDUSTRIAL

LEGEND

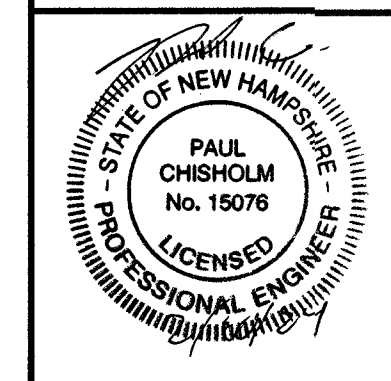
- IPIN-F IRON PIN FOUND
- ⊙ DH-F DRILL HOLE FOUND
- ⊙ IPP-F IRON PIPE FOUND
- ⊙ UTILITY POLE
- LIGHT
- ⊙ SEWER MANHOLE
- ⊙ DRAINAGE MANHOLE
- ⊙ CATCH BASIN
- ⊙ ABUTTER LINE
- PROPERTY LINE
- WETLAND
- OVERHEAD UTILITIES
- TREELINE
- RETAINING WALL
- EDGE OF PAVEMENT
- BITUMINOUS CURB
- EDGE OF GRAVEL
- STONEWALL
- BUILDING SETBACK
- EASEMENT
- 250' SWOPA
- 150' WOODLAND BUFFER
- 50' PRIMARY STRUCTURE SETBACK
- LIMIT OF CLEARING
- SAWCUT LINE
- ▨ PAVEMENT TO BE REMOVED



REMOVALS & DEMOLITION PLAN
GEMINI VALVE
 MAP 28 LOT 4-3
 2 OTTER COURT
 RAYMOND, NEW HAMPSHIRE
 ROCKINGHAM COUNTY

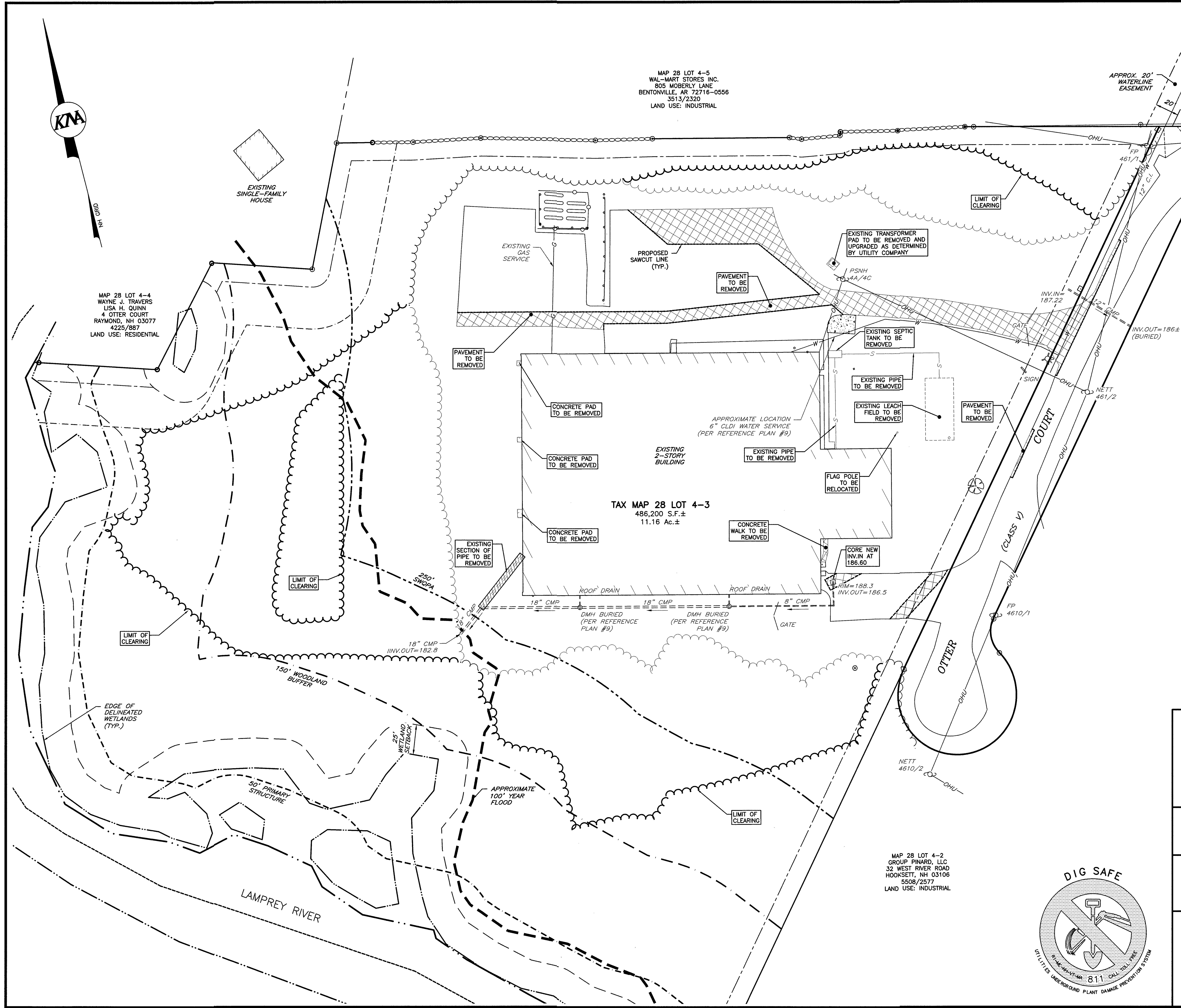
OWNER/APPLICANT:
 PARKER & HARPER COMPANIES, INC.
 2 OTTER COURT
 RAYMOND, N.H. 03077
 BK. 2523 PG. 1660

KMA KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

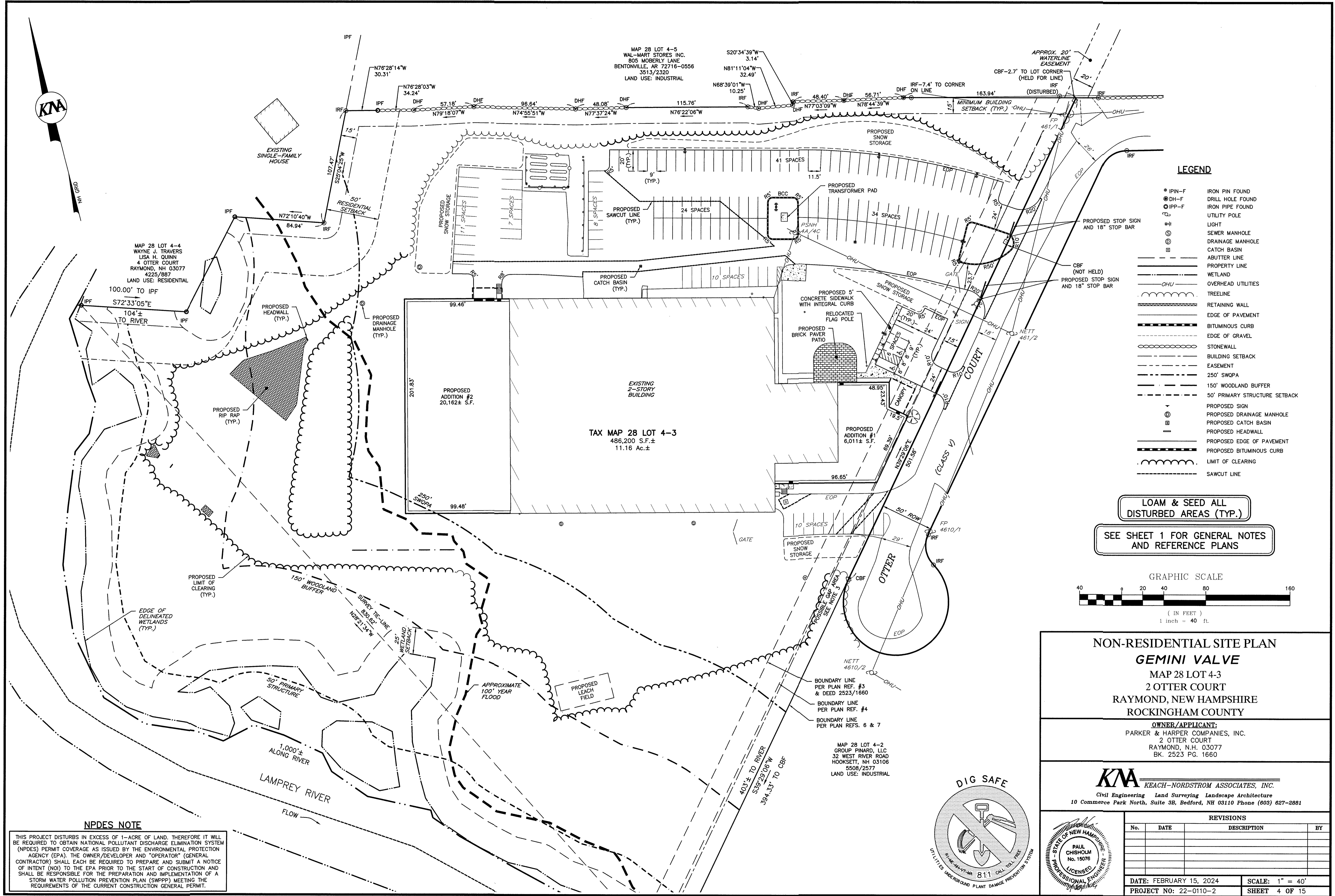


REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 15, 2024 SCALE: 1" = 40'
 PROJECT NO: 22-0110-2 SHEET 3 OF 15



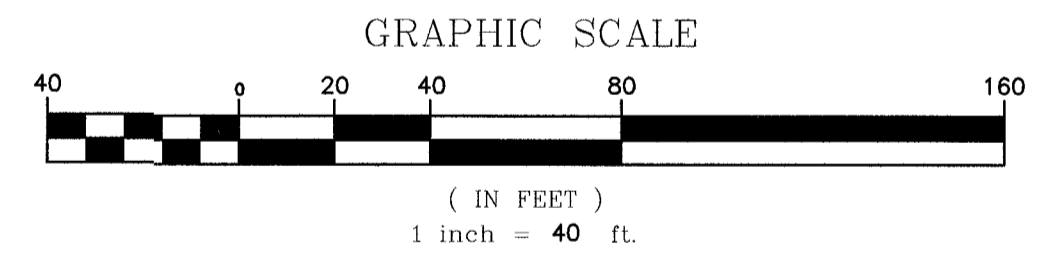
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- LEGEND**
- IPIN-F IRON PIN FOUND
 - ⊙ DH-F DRILL HOLE FOUND
 - ⊙ IPP-F IRON PIPE FOUND
 - ⊙ UTILITY POLE
 - ⊙ LIGHT
 - ⊙ SEWER MANHOLE
 - ⊙ DRAINAGE MANHOLE
 - ⊙ CATCH BASIN
 - ⊙ ABUTTER LINE
 - ⊙ PROPERTY LINE
 - ⊙ WETLAND
 - ⊙ OVERHEAD UTILITIES
 - ⊙ TREELINE
 - ⊙ RETAINING WALL
 - ⊙ EDGE OF PAVEMENT
 - ⊙ BITUMINOUS CURB
 - ⊙ EDGE OF GRAVEL
 - ⊙ STONEWALL
 - ⊙ BUILDING SETBACK
 - ⊙ EASEMENT
 - ⊙ 250' SWOPA
 - ⊙ 150' WOODLAND BUFFER
 - ⊙ 50' PRIMARY STRUCTURE SETBACK
 - ⊙ PROPOSED SIGN
 - ⊙ PROPOSED DRAINAGE MANHOLE
 - ⊙ PROPOSED CATCH BASIN
 - ⊙ PROPOSED HEADWALL
 - ⊙ PROPOSED EDGE OF PAVEMENT
 - ⊙ PROPOSED BITUMINOUS CURB
 - ⊙ LIMIT OF CLEARING
 - ⊙ SAWCUT LINE

LOAM & SEED ALL DISTURBED AREAS (TYP.)

SEE SHEET 1 FOR GENERAL NOTES AND REFERENCE PLANS



NON-RESIDENTIAL SITE PLAN
GEMINI VALVE
 MAP 28 LOT 4-3
 2 OTTER COURT
 RAYMOND, NEW HAMPSHIRE
 ROCKINGHAM COUNTY

OWNER/APPLICANT:
 PARKER & HARPER COMPANIES, INC.
 2 OTTER COURT
 RAYMOND, N.H. 03077
 BK. 2523 PG. 1660

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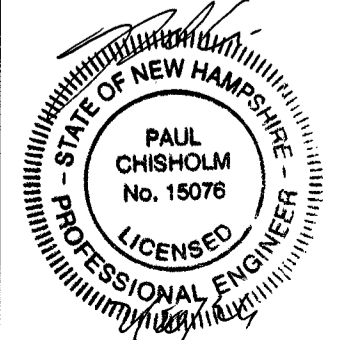
REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 15, 2024 SCALE: 1" = 40'
 PROJECT NO: 22-0110-2 SHEET 4 OF 15

NPDES NOTE

THIS PROJECT DISTURBS IN EXCESS OF 1-ACRE OF LAND. THEREFORE IT WILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE OWNER/DEVELOPER AND "OPERATOR" (GENERAL CONTRACTOR) SHALL EACH BE REQUIRED TO PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA PRIOR TO THE START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEETING THE REQUIREMENTS OF THE CURRENT CONSTRUCTION GENERAL PERMIT.



SITE SPECIFIC SOIL MAP UNIT KEY

SYMBOL	MAP UNIT	SLOPE CLASS	DRAINAGE CLASS	HSG
42A	CANTON FINE SANDY LOAM	0-3%	WELL DRAINED	B
42B	CANTON FINE SANDY LOAM	3-8%	WELL DRAINED	B
42C	CANTON FINE SANDY LOAM	8-15%	WELL DRAINED	B
42D	CANTON FINE SANDY LOAM	15-25%	WELL DRAINED	B
12A	HINCKLEY LOAMY SAND	0-3%	EXCESSIVELY DRAINED	A
12B	HINCKLEY LOAMY SAND	3-8%	EXCESSIVELY DRAINED	A
12C	HINCKLEY LOAMY SAND	8-15%	EXCESSIVELY DRAINED	A
12D	HINCKLEY LOAMY SAND	15-25%	EXCESSIVELY DRAINED	A
12E	HINCKLEY LOAMY SAND	25-50%	EXCESSIVELY DRAINED	A
118B	SUDBURY FINE SANDY LOAM	3-8%	MODERATELY WELL DRAINED	B
118C	SUDBURY FINE SANDY LOAM	8-15%	MODERATELY WELL DRAINED	B
118D	SUDBURY FINE SANDY LOAM	15-25%	MODERATELY WELL DRAINED	B
118E	SUDBURY FINE SANDY LOAM	25-50%	MODERATELY WELL DRAINED	B
913A	SUDBURY FINE SANDY LOAM	0-3%	SOMEWAIT POORLY DRAINED	C
913B	SUDBURY FINE SANDY LOAM	3-8%	SOMEWAIT POORLY DRAINED	C
913C	SUDBURY FINE SANDY LOAM	8-15%	SOMEWAIT POORLY DRAINED	C
5A/PD	RIPPOWAM FINE SANDY LOAM	0-3%	POORLY DRAINED	C
692A	HINCKLEY-URBAN LAND COMPLEX (UNDER BUILDINGS AND PAVEMENT)	0-3%	EXCESSIVELY DRAINED	A

THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOILS SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, PRODUCED BY A CERTIFIED SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCE CONSERVATION SERVICE. THERE IS A NARRATIVE REPORT THAT ACCOMPANIES THIS MAP AND MAP KEY.

LEGEND

- GB-F GRANITE BOUND FOUND
- IPIN-F IRON PIN FOUND
- DH-F DRILL HOLE FOUND
- IPP-F IRON PIPE FOUND
- ▲ RRS-F RAILROAD SPIKE FOUND
- U UTILITY POLE
- * LIGHT
- * SEWER MANHOLE
- * DRAINAGE MANHOLE
- * CATCH BASIN
- * ABUTTER LINE
- * PROPERTY LINE
- * WETLAND
- * OVERHEAD UTILITIES
- * TREELINE
- * DRAINAGE LINE
- * 10' CONTOUR
- * 2' CONTOUR
- * SSS SOIL LINE
- * SCS SOIL LINE
- * RETAINING WALL
- * EDGE OF PAVEMENT
- * VERTICAL GRANITE CURB
- * BUILDING SETBACK
- * EASEMENT
- * PROPOSED SIGN
- * PROPOSED DRAINAGE MANHOLE
- * PROPOSED CATCH BASIN
- * PROPOSED HEADWALL
- * PROPOSED TREELINE
- * PROPOSED EDGE OF PAVEMENT
- * PROPOSED BITUMINOUS CURB
- * PROPOSED DRAINAGE LINE
- * PROPOSED 2' CONTOUR

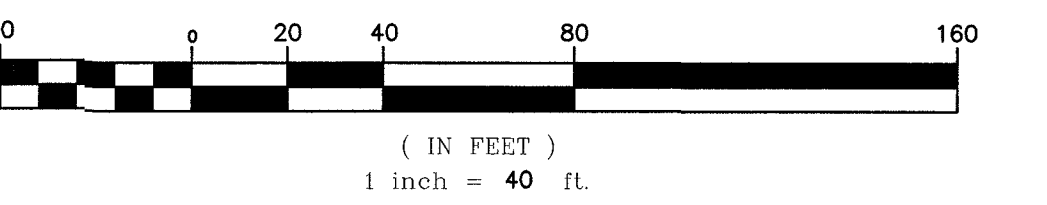
SCS SOILS LEGEND

- 12B HINCKLEY LOAMY SAND 3 TO 8 PERCENT SLOPES
 - 305 LIM-POOTATUCK COMPLEX
- SOURCE: USDA-SCS WEB SOIL SURVEY ROCKINGHAM COUNTY

CONSTRUCTION NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED GRADING AND DRAINAGE SYSTEMS FOR THIS SITE.
2. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF RAYMOND, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2016 ARE HEREBY INCORPORATED BY REFERENCE.
3. PARKING LOT CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET THE REQUIREMENTS.
4. ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDDED.
5. ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
6. SEE DETAILS FOR DRAINAGE SPECIFICATIONS.
7. ALL CATCH BASINS SHALL BE EQUIPPED WITH SNOOT DEBRIS AND OIL WATER SEPARATORS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.

GRAPHIC SCALE



GRADING & DRAINAGE PLAN

GEMINI VALVE

MAP 28 LOT 4-3
2 OTTER COURT
RAYMOND, NEW HAMPSHIRE
ROCKINGHAM COUNTY

OWNER/APPLICANT:
PARKER & HARPER COMPANIES, INC.
2 OTTER COURT
RAYMOND, N.H. 03077
BK. 2523 PG. 1660

KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2861

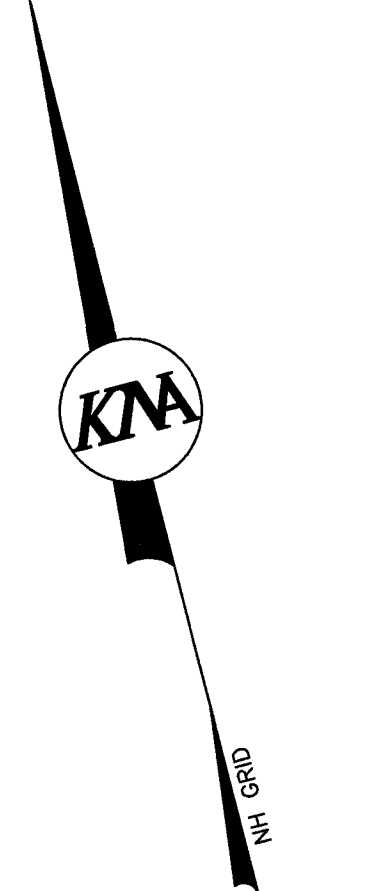
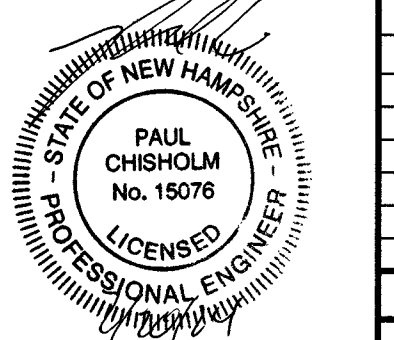
REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 15, 2024 SCALE: 1" = 40'
PROJECT NO: 22-0110-2 SHEET 5 OF 15

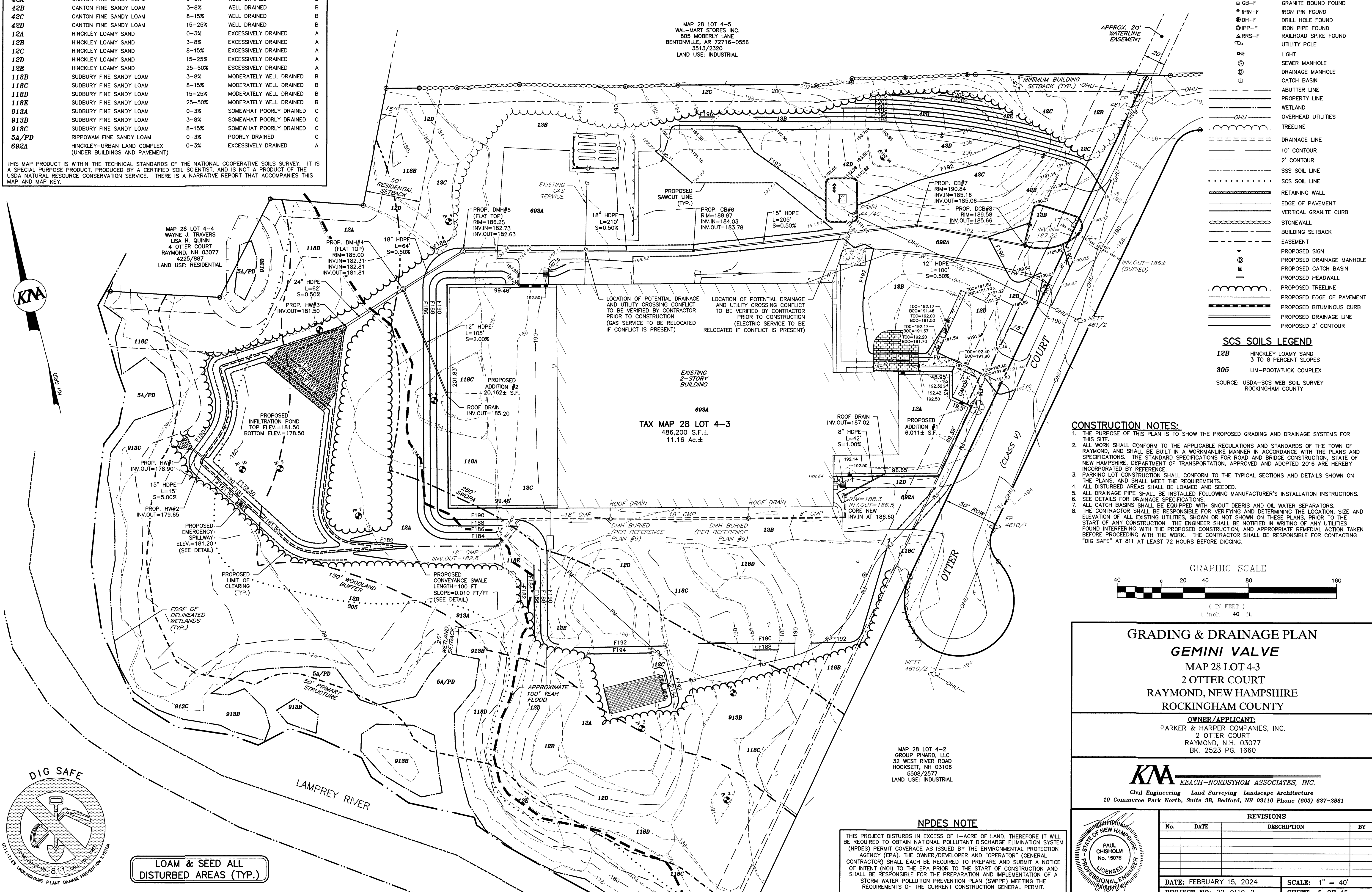
NPDES NOTE

THIS PROJECT DISTURBS IN EXCESS OF 1-ACRE OF LAND. THEREFORE IT WILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE OWNER/DEVELOPER AND "OPERATOR" (GENERAL CONTRACTOR) SHALL EACH BE REQUIRED TO PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA PRIOR TO THE START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEETING THE REQUIREMENTS OF THE CURRENT CONSTRUCTION GENERAL PERMIT.



LOAM & SEED ALL DISTURBED AREAS (TYP.)

UTILITIES: 811 CALL BEFORE YOU DIG
CALL 811
PLANT DAMAGE PREVENTION 5 2018



MAP 28 LOT 4-5
 WAL-MART STORES INC.
 805 MOBERLY LANE
 BENTONVILLE, AR 72716-0556
 3513/2320
 LAND USE: INDUSTRIAL

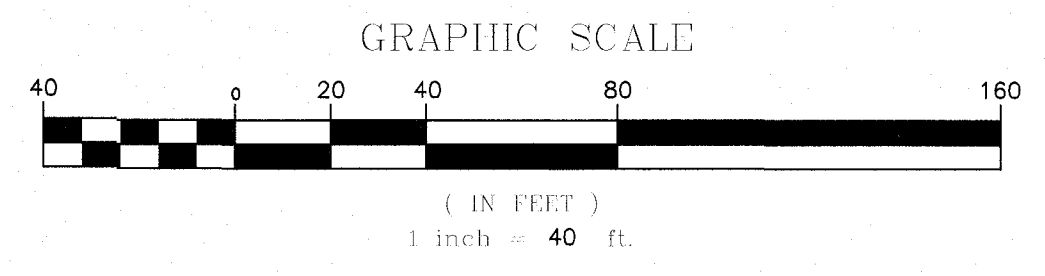
MAP 28 LOT 4-4
 WAYNE J. TRAVERS
 LISA H. QUINN
 4 OTTER COURT
 RAYMOND, NH 03077
 4225/687
 LAND USE: RESIDENTIAL

MAP 28 LOT 4-2
 GROUP PINARD, LLC
 32 WEST RIVER ROAD
 HOOKSETT, NH 03106
 5508/2577
 LAND USE: INDUSTRIAL

LEGEND

□ GB-F	GRANITE BOUND FOUND
● IPIN-F	IRON PIN FOUND
⊙ DH-F	DRILL HOLE FOUND
⊙ IPP-F	IRON PIPE FOUND
△ RRS-F	RAILROAD SPIKE FOUND
○ U	UTILITY POLE
○ L	LIGHT
○ S	SEWER MANHOLE
○ D	DRAINAGE MANHOLE
○ C	CATCH BASIN
---	ABUTTER LINE
---	PROPERTY LINE
---	WETLAND
---	OVERHEAD UTILITIES
---	TREELINE
---	DRAINAGE LINE
---	RETAINING WALL
---	EDGE OF PAVEMENT
---	VERTICAL GRANITE CURB
---	STONEWALL
---	BUILDING SETBACK
---	EASEMENT
---	PROPOSED SIGN
---	PROPOSED DRAINAGE MANHOLE
---	PROPOSED CATCH BASIN
---	PROPOSED HEADWALL
---	PROPOSED TREELINE
---	PROPOSED EDGE OF PAVEMENT
---	PROPOSED BITUMINOUS CURB
---	PROPOSED DRAINAGE LINE
---	PROPOSED SEWER FORCE MAIN

- CONSTRUCTION NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED UTILITY SERVICES FOR THIS SITE.
 2. ALL WORK SHALL CONFORM TO THE TOWN OF RAYMOND, LATEST EDITION, CONSTRUCTION STANDARDS AND DETAILS. IN THE ABSENCE OF A CITY STANDARD/SPECIFICATION, WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS PUBLISHED BY THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, ARE HEREBY INCORPORATED BY REFERENCE.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS. PRIOR TO THE START OF ANY CONSTRUCTION THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
 4. ALL DISTURBED AREAS NOT TO BE PAVED SHALL BE LOAMED AND SEEDDED.
 5. ALL PIPES SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.



**UTILITY PLAN
 GEMINI VALVE**
 MAP 28 LOT 4-3
 2 OTTER COURT
 RAYMOND, NEW HAMPSHIRE
 ROCKINGHAM COUNTY

OWNER/APPLICANT:
 PARKER & HARPER COMPANIES, INC.
 2 OTTER COURT
 RAYMOND, N.H. 03077
 BK. 2523 PG. 1660

KMA KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 15, 2024 SCALE: 1" = 40'
 PROJECT NO: 22-0110-2 SHEET 6 OF 15

KMA



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EROSION CONTROL NOTES:

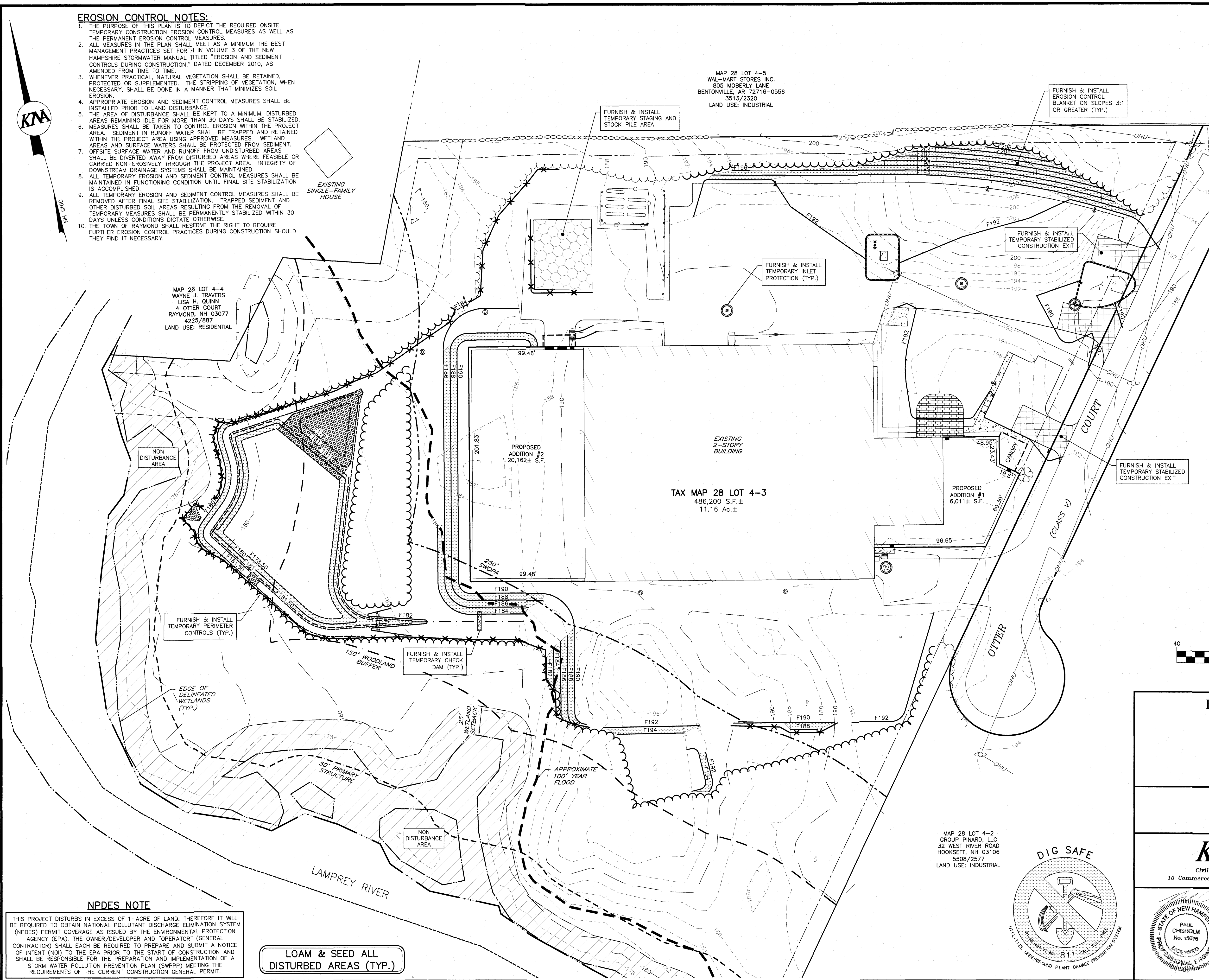
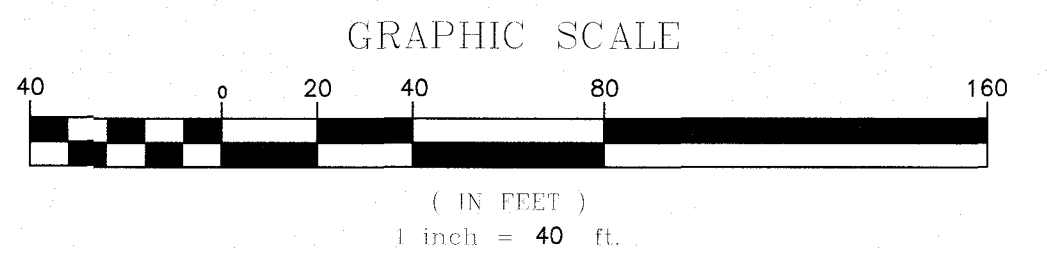
1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE REQUIRED ONSITE TEMPORARY CONSTRUCTION EROSION CONTROL MEASURES AS WELL AS THE PERMANENT EROSION CONTROL MEASURES.
2. ALL MEASURES IN THE PLAN SHALL MEET AS A MINIMUM THE BEST MANAGEMENT PRACTICES SET FORTH IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL TITLED "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION," DATED DECEMBER 2010, AS AMENDED FROM TIME TO TIME.
3. WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED OR SUPPLEMENTED. THE STRIPPING OF VEGETATION, WHEN NECESSARY, SHALL BE DONE IN A MANNER THAT MINIMIZES SOIL EROSION.
4. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE.
5. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 30 DAYS SHALL BE STABILIZED.
6. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES. WETLAND AREAS AND SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENT.
7. OFFSITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED NON-EROSIVELY THROUGH THE PROJECT AREA. INTEGRITY OF DOWNSTREAM DRAINAGE SYSTEMS SHALL BE MAINTAINED.
8. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
9. 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 DAYS UNLESS CONDITIONS DICTATE OTHERWISE.
10. THE TOWN OF RAYMOND SHALL RESERVE THE RIGHT TO REQUIRE FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD THEY FIND IT NECESSARY.

LEGEND

- UTILITY POLE
- ⊙ LIGHT
- ⊙ SEWER MANHOLE
- ⊙ DRAINAGE MANHOLE
- ⊙ CATCH BASIN
- ⊙ ABUTTER LINE
- ⊙ PROPERTY LINE
- ⊙ WETLAND
- OHU OVERHEAD UTILITIES
- TREELINE
- DRAINAGE LINE
- 10' CONTOUR
- 2' CONTOUR
- EDGE OF PAVEMENT
- STONEWALL
- BUILDING SETBACK
- 250' SWOPA
- 150' WOODLAND BUFFER
- 50' PRIMARY STRUCTURE SETBACK
- EASEMENT
- ⊙ PROPOSED SIGN
- ⊙ PROPOSED DRAINAGE MANHOLE
- ⊙ PROPOSED CATCH BASIN
- ⊙ PROPOSED HEADWALL
- ⊙ PROPOSED TREELINE
- ⊙ PROPOSED EDGE OF PAVEMENT
- ⊙ PROPOSED BITUMINOUS CURB
- ⊙ PROPOSED DRAINAGE LINE
- ⊙ PROPOSED 2' CONTOUR
- ⊙ PROPOSED SWALE

EROSION & SEDIMENT CONTROL LEGEND

- ▨ PERMANENT OUTLET PROTECTION APRON (RIP RAP)
- TEMPORARY BLOCK AND GRAVEL SEDIMENT BARRIERS AT ALL CATCH BASINS
- X — TEMPORARY PERIMETER CONTROLS
- — — TEMPORARY STONE CHECK DAM
- — — LIMITS OF CLEARING
- ▨ STABILIZED CONSTRUCTION EXIT
- ▨ NON DISTURBANCE AREA
- ▨ STAGING AND STOCKPILE AREA
- ▨ EROSION CONTROL BLANKETS



MAP 28 LOT 4-4
WAYNE J. TRAVERS
LISA H. QUINN
4 OTTER COURT
RAYMOND, NH 03077
4225/887
LAND USE: RESIDENTIAL

MAP 28 LOT 4-5
WAL-MART STORES INC.
805 MOBERLY LANE
BENTONVILLE, AR 72716-0556
3513/2320
LAND USE: INDUSTRIAL

TAX MAP 28 LOT 4-3
486,200 S.F.±
11.16 Ac.±

MAP 28 LOT 4-2
GROUP PINARD, LLC
32 WEST RIVER ROAD
HOOKSETT, NH 03106
5508/2577
LAND USE: INDUSTRIAL



NPDES NOTE

THIS PROJECT DISTURBS IN EXCESS OF 1-ACRE OF LAND, THEREFORE IT WILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE OWNER/DEVELOPER AND "OPERATOR" (GENERAL CONTRACTOR) SHALL EACH BE REQUIRED TO PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA PRIOR TO THE START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEETING THE REQUIREMENTS OF THE CURRENT CONSTRUCTION GENERAL PERMIT.

LOAM & SEED ALL DISTURBED AREAS (TYP.)

**EROSION CONTROL PLAN
GEMINI VALVE
MAP 28 LOT 4-3
2 OTTER COURT
RAYMOND, NEW HAMPSHIRE
ROCKINGHAM COUNTY**

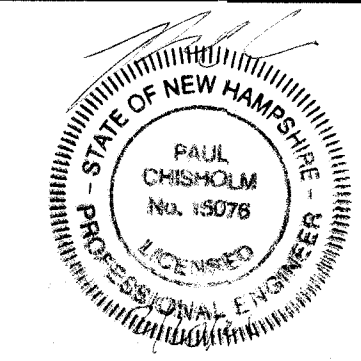
OWNER/APPLICANT:
PARKER & HARPER COMPANIES, INC.
2 OTTER COURT
RAYMOND, N.H. 03077
BK. 2523 PG. 1660

KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 15, 2024 SCALE: 1" = 40'
PROJECT NO: 22-0110-2 SHEET 7 OF 15



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LOAM & SEED ALL
DISTURBED AREAS (TYP.)

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WAL-MART STORES INC.
805 MOBERLY LANE
BENTONVILLE, AR 72716-0556
35.13/2320
LAND USE: INDUSTRIAL

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4 OTTER COURT
RAYMOND, NH 03077
4225/887
LAND USE: RESIDENTIAL

TAX MAP 28 LOT 4-3
486,200 S.F.±
11.16 Ac.±

MAP 28 LOT 4-2
GROUP PINARD, LLC
32 WEST RIVER ROAD
HOOKSETT, NH 03106
5508/2577
LAND USE: INDUSTRIAL

LANDSCAPE NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED SITE LANDSCAPE WHICH PROVIDES CLIMATIC RELIEF AND AESTHETIC APPEAL.
2. ALL PLANT MATERIALS USED SHALL BE NURSERY STOCK AND SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF INSTALLATION. ANY MATERIAL WHICH DIES OR DOES NOT SHOWN HEALTHY APPEARANCE WITHIN THIS TIME SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE; WITH SAME WARRANTY REQUIREMENTS AS THE ORIGINAL. WARRANTIES TYPICALLY DO NOT COVER LOSS DUE TO INSECT INFESTATION OR MECHANICAL DAMAGE (I.E. SNOW STORAGE).
3. IF THE SOIL CONDITIONS ARE EXTREMELY SANDY, ALL TREES SHALL HAVE A 6" LAYER OF COMPACTED TOPSOIL PLACED IN THE BASE OF THE PLANT PIT AS A MOISTURE RETENTION LAYER. THE PLANT PIT SIDEWALLS SHALL BE OVER EXCAVATED BY AN ADDITIONAL 12" BEYOND THE NORMAL OUTSIDE RADIUS OF THE HOLE. A TOPSOIL MIXTURE SHALL BE USED TO BACKFILL THE HOLE AS FOLLOWS; ORGANIC TOPSOIL, AMENDED WITH 10% WOOD ASH, 10% MANURE, 30% COMPOST AND A GRANULAR HYDROGEL TO ABSORB AND RETAIN WATER.
4. PLANTING BEDS AND SAUCERS SHALL RECEIVE A FOUR INCH (4") MINIMUM THICKNESS OF PINE/HEMLOCK BARK MULCH OVER A 5 OZ. POLYPROPYLENE WEED CONTROL FABRIC. MINIMUM TOPSOIL DEPTH IN LAWN AREAS AND ALL OTHER DISTURBED AREAS SHALL BE 6".
5. MULCH SHALL BE MINIMUM 3" THICKNESS CONSISTING OF 50% SHREDDED BARK AND 50% WOOD CHIPS, 3/4 TO 2 INCH IN SIZE, UNIFORMLY MIXED AND FREE OF ELM WOOD. MULCH TO BE PLACED UNIFORMLY OVER THE PLANTING BED ALLOWING NO WEED BARRIER TO BE SEEN.
6. PAVEMENT AND ROAD BASE MATERIAL ENCOUNTERED IN ANY LAWN OR PLANTING BED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SUITABLE AMENDED SOIL INSTALLED AS SPECIFIED IN THE TURF ESTABLISHMENT SCHEDULE.
7. THE APPLICANT OR THEIR SUCCESSORS SHALL BE RESPONSIBLE FOR THE REGULAR MAINTENANCE OF ALL PLANTING AND OTHER LANDSCAPE FEATURES. PLANT MATERIALS SHALL BE MAINTAINED ALIVE, HEALTHY AND FREE FROM PESTS AND DISEASE.

PROPOSED LANDSCAPE CALCULATIONS:

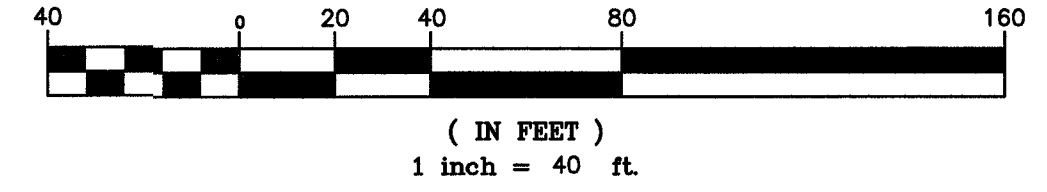
FRONT YARD LANDSCAPING:
5% OF THE FRONT YARD AREA MUST BE LANDSCAPED
FRONT YARD AREA = 80,271 SF
FRONT YARD LANDSCAPING REQUIREMENT = 5% x 80,271 = 4,013.55 SF

FRONT YARD LANDSCAPING PROVIDED:
- EXISTING TREES IN FRONT YARD AREA: 6,425 SF
- PROPOSED LANDSCAPING: 2,055 SF
TOTAL FRONT YARD LANDSCAPING PROVIDED: 8,480.28 SF

LEGEND

- IPIN-F IRON PIN FOUND
- DH-F DRILL HOLE FOUND
- IPP-F IRON PIPE FOUND
- ⊕ UTILITY POLE
- ⊙ LIGHT
- ⊙ SEWER MANHOLE
- ⊙ DRAINAGE MANHOLE
- ⊙ CATCH BASIN
- ⊙ ABUTTER LINE
- ⊙ PROPERTY LINE
- ⊙ WETLAND
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- EDGE OF GRAVEL
- STONEWALL
- BUILDING SETBACK
- EASEMENT
- 250' SWQPA
- 150' WOODLAND BUFFER
- 50' PRIMARY STRUCTURE SETBACK
- ⊙ PROPOSED SIGN
- ⊙ PROPOSED DRAINAGE MANHOLE
- ⊙ PROPOSED CATCH BASIN
- PROPOSED HEADWALL
- PROPOSED EDGE OF PAVEMENT
- PROPOSED BITUMINOUS CURB
- LIMIT OF CLEARING

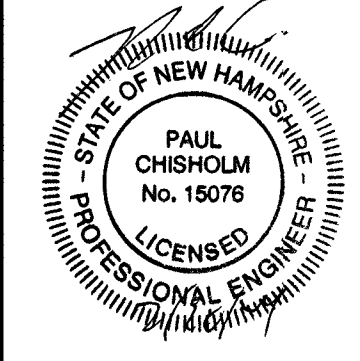
GRAPHIC SCALE



LANDSCAPE PLAN
GEMINI VALVE
MAP 28 LOT 4-3
2 OTTER COURT
RAYMOND, NEW HAMPSHIRE
ROCKINGHAM COUNTY

OWNER/APPLICANT:
PARKER & HARPER COMPANIES, INC.
2 OTTER COURT
RAYMOND, N.H. 03077
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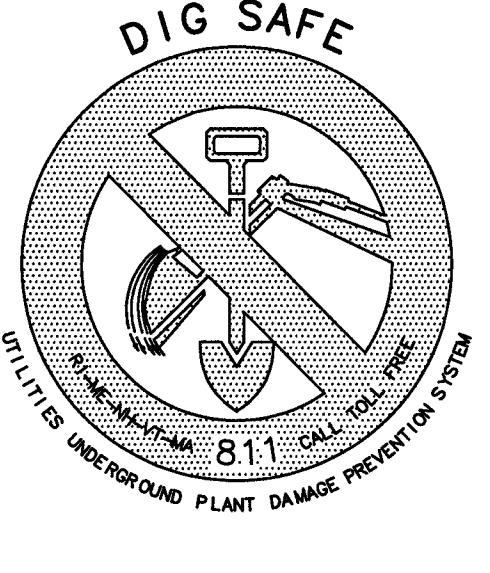


REVISIONS				
No.	DATE	DESCRIPTION	BY	

DATE: FEBRUARY 15, 2024 SCALE: 1" = 40'
PROJECT NO: 22-0110-2 SHEET 8 OF 15

PLANTING SCHEDULE

Botanical Name/ Common Name	Size	Label	Quantity	Mature Height
Trees				
<i>Cornus kousa</i> / Kousa Dogwood	2.5-3" CAL.	CK	3	20-30'
Shrubs				
<i>Azalea</i> 'Bloom A Thon Lavender' / Bloom A Thon Lavender Azalea	2-2.5'	AB	13	3-4'
Grasses				
<i>Panicum virgatum</i> 'Shenandoah' / Shenandoah Switch Grass	#2 Gal.	PV	12	3-4'



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MAP 28 LOT 4-5
 WAL-MART STORES INC.
 805 MOBERLY LANE
 BENTONVILLE, AR 72716-0556
 3513/2320
 LAND USE: INDUSTRIAL

MAP 28 LOT 4-4
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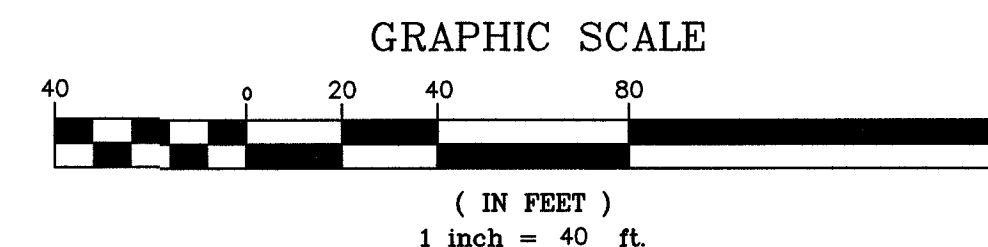
TAX MAP 28 LOT 4-3
 486,200 S.F.±
 11.16 Ac.±

LIGHTING NOTES:

1. ALL LIGHTS/FIXTURES SHALL BE AS SPECIFIED BY EXPOSURE LIGHTING.
2. ALL PROPOSED FIXTURES ARE TO BE FULL CUTOFF.
3. POLE MOUNTED FIXTURES SHALL BE MOUNTED AT HEIGHTS SPECIFIED IN TABLE.
4. ALL FINAL SITE LIGHTING AND CONDUIT LAYOUT SHALL BE COORDINATED WITH LOCAL UTILITY PROVIDER.
5. PRIOR TO CONSTRUCTION, THE SITE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ELECTRICIAN FOR THE EXACT LOCATION, LAYOUT, CONDUIT SIZE AND CIRCUITS ASSOCIATED WITH THE SITE LIGHTING.
6. SEE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION REGARDING LIGHT INSTALLATION AND WIRING REQUIREMENTS.
7. ALL LIGHTING MUST COMPLY WITH THE TOWN OF RAYMOND DEVELOPMENT REGULATIONS.

LEGEND

- IPIN-F IRON PIN FOUND
- DH-F DRILL HOLE FOUND
- IPP-F IRON PIPE FOUND
- U UTILITY POLE
- LIGHT
- SEWER MANHOLE
- DRAINAGE MANHOLE
- CATCH BASIN
- ABUTTER LINE
- PROPERTY LINE
- WETLAND
- OHU OVERHEAD UTILITIES
- TREELINE
- RETAINING WALL
- EDGE OF PAVEMENT
- BITUMINOUS CURB
- EDGE OF GRAVEL
- STONEWALL
- BUILDING SETBACK
- EASEMENT
- 250' SWOPA
- 150' WOODLAND BUFFER
- 50' PRIMARY STRUCTURE SETBACK
- ▽ PROPOSED SIGN
- PROPOSED DRAINAGE MANHOLE
- PROPOSED CATCH BASIN
- PROPOSED HEADWALL
- PROPOSED EDGE OF PAVEMENT
- PROPOSED BITUMINOUS CURB
- LIMIT OF CLEARING



IN ASSOCIATION WITH:

EXPOSURE KENNETH SWEENEY | ARCHITECTS/ENGINEERS
 603-259-1243
 6 SCOTT ST. | RAYMOND, NH 03077 | 603-871-5300
 EXPOSURELIGHTING.COM & ESS-11C.US

LIGHTING PLAN
GEMINI VALVE
 MAP 28 LOT 4-3
 2 OTTER COURT
 RAYMOND, NEW HAMPSHIRE
 ROCKINGHAM COUNTY

OWNER/APPLICANT:
 PARKER & HARPER COMPANIES, INC.
 2 OTTER COURT
 RAYMOND, N.H. 03077
 BK. 2523 PG. 1660

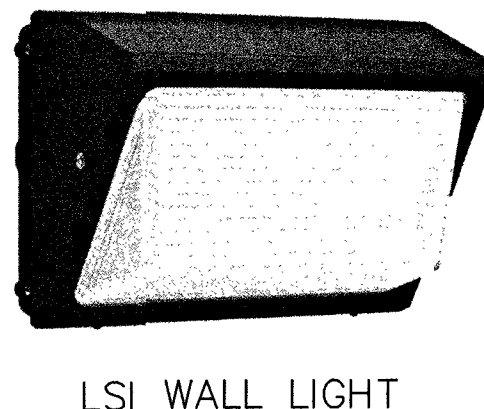
KMA KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY

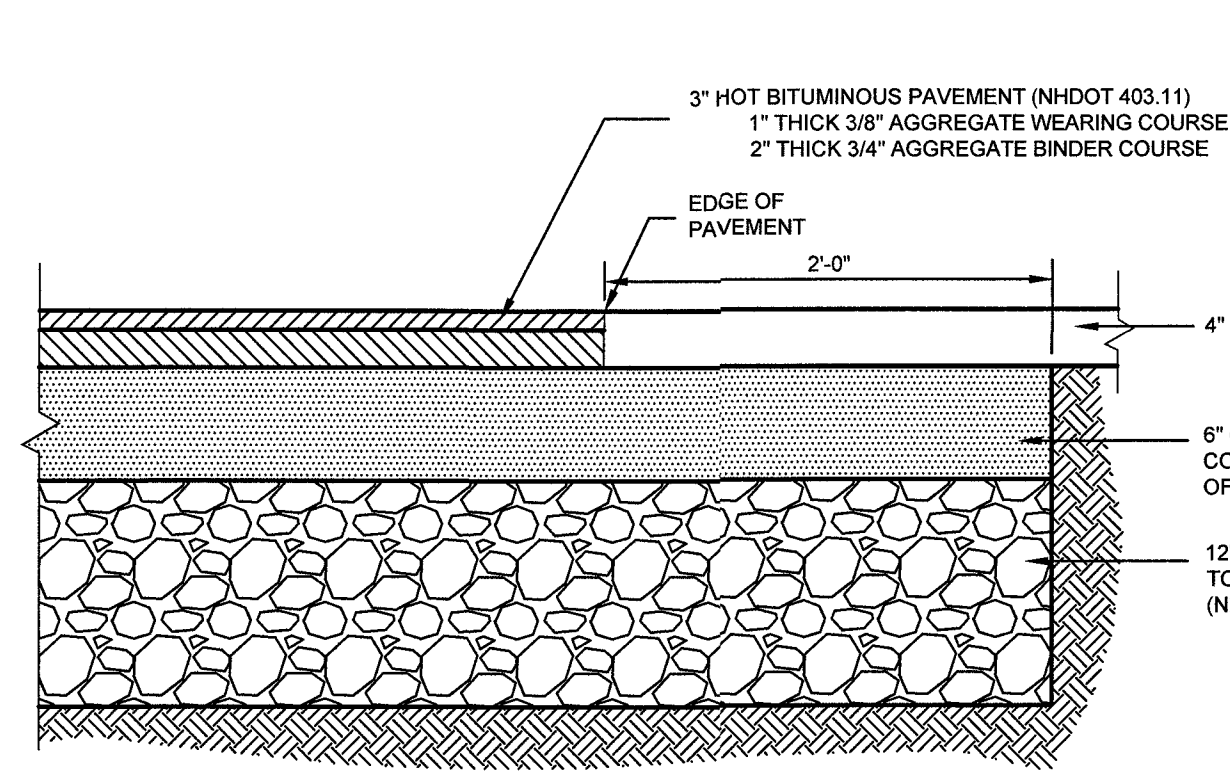
DATE: FEBRUARY 15, 2024 SCALE: 1" = 40'
 PROJECT NO: 22-0110-2 SHEET 9 OF 15

VISITOR PARKING LOT	MAIN PARKING LOT	PARKING AT REAR MOST DOCK AREA	PARKING AT SOUTH SIDE OF BLDG
Illuminance (Fc)	Illuminance (Fc)	Illuminance (Fc)	Illuminance (Fc)
Average = 1.36	Average = 0.94	Average = 0.12	Average = 0.46
Maximum = 2.5	Maximum = 4.5	Maximum = 0.5	Maximum = 3.4
Minimum = 0.5	Minimum = 0.1	Minimum = 0.0	Minimum = 0.0
Avg/Min Ratio = 2.72	Avg/Min Ratio = 9.40	Avg/Min Ratio = N.A.	Avg/Min Ratio = N.A.
Max/Min Ratio = 5.00	Max/Min Ratio = 45.00	Max/Min Ratio = N.A.	Max/Min Ratio = N.A.

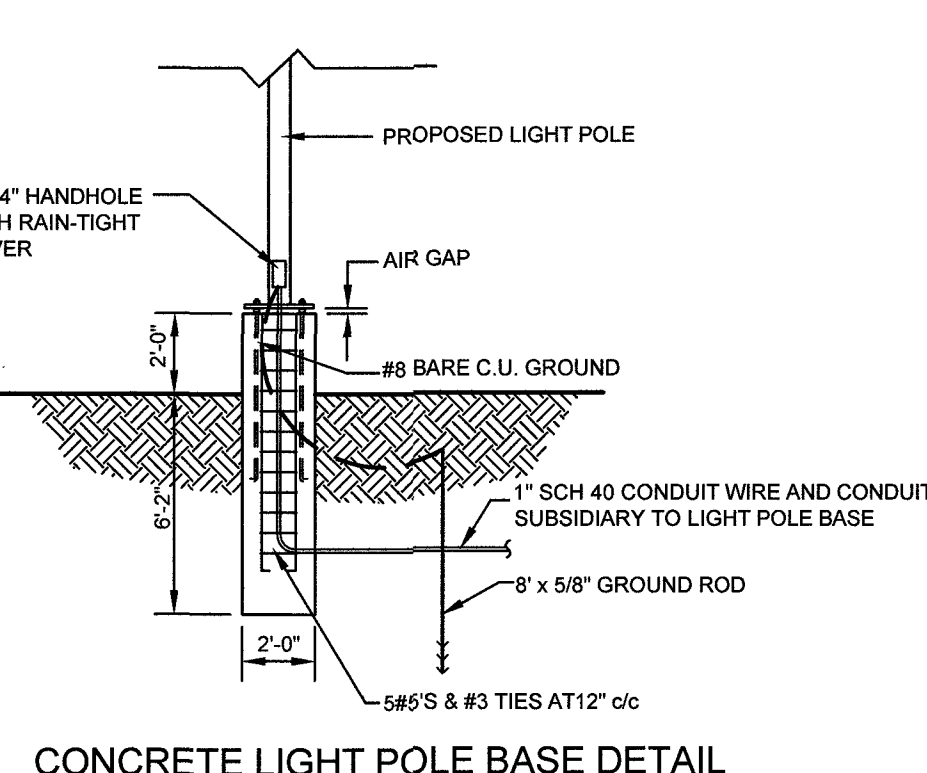
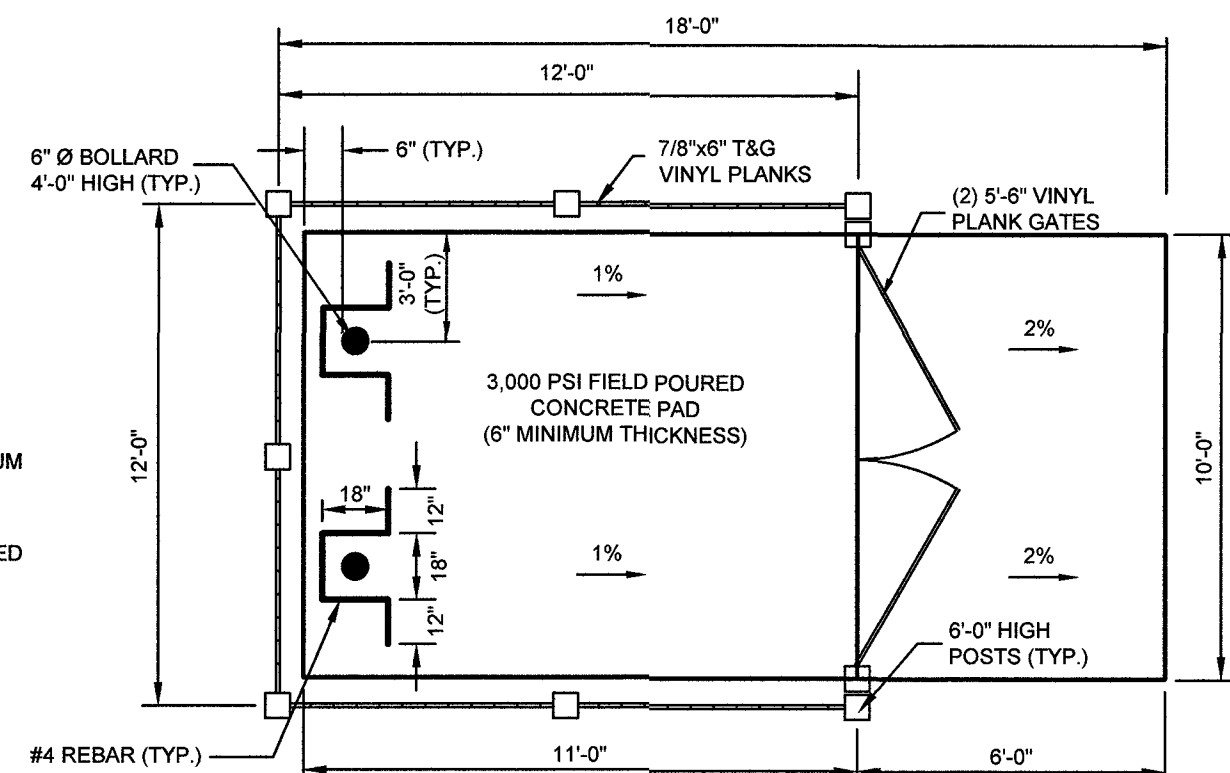
Symbol	Qty	Label	Arrangement	Description	Tag
◀	8	EW	Single	EXISTING WALL MOUNTED LIGHT	LED RETROFITTED EXISTING WALL LIGHT
□*	3	S4	Single	MRM-LED-09L-SIL-4-UNV-DIM-30-70CRI-BRZ / 4SQ B3 S11G20 S AB 4BC BRZ	POLE LIGHT 20' AFG
□*	1	S5-1	Single	MRM-LED-09L-SIL-5W-UNV-DIM-30-70CRI-CXX / 4SQ B3 S11G20 S AB 4BC	POLE LIGHTS 20' AFG
□*	1	S5-2	Back-Back	MRM-LED-09L-SIL-5W-UNV-DIM-30-70CRI-CXX / 4SQ B3 S11G20 D180 AB 4BC	POLE LIGHTS 20' AFG
◀	1	W	Single	TLWP-LED-11L-UNV-DIM-30-BZA	LIGHT WALL MTD 18' AFG



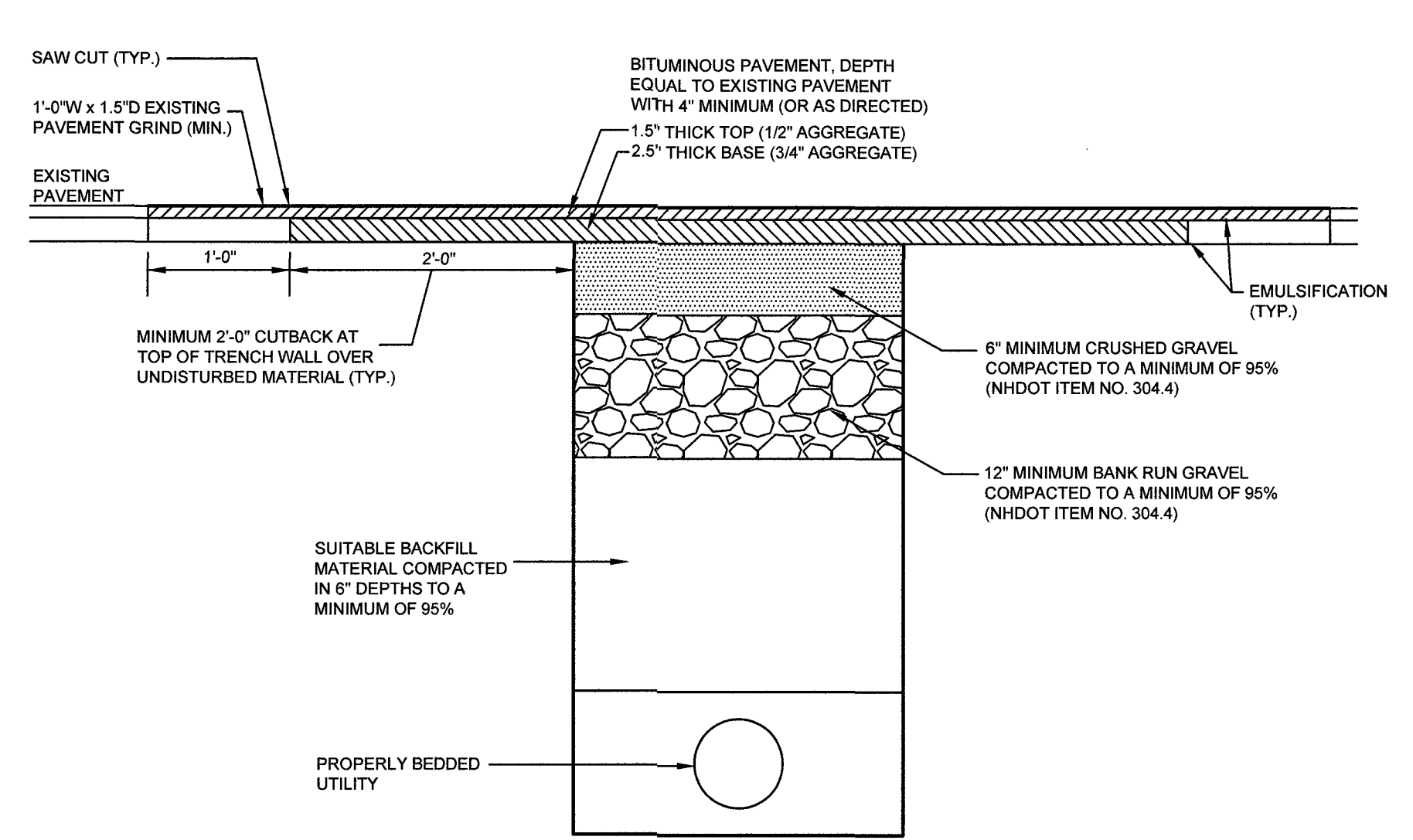
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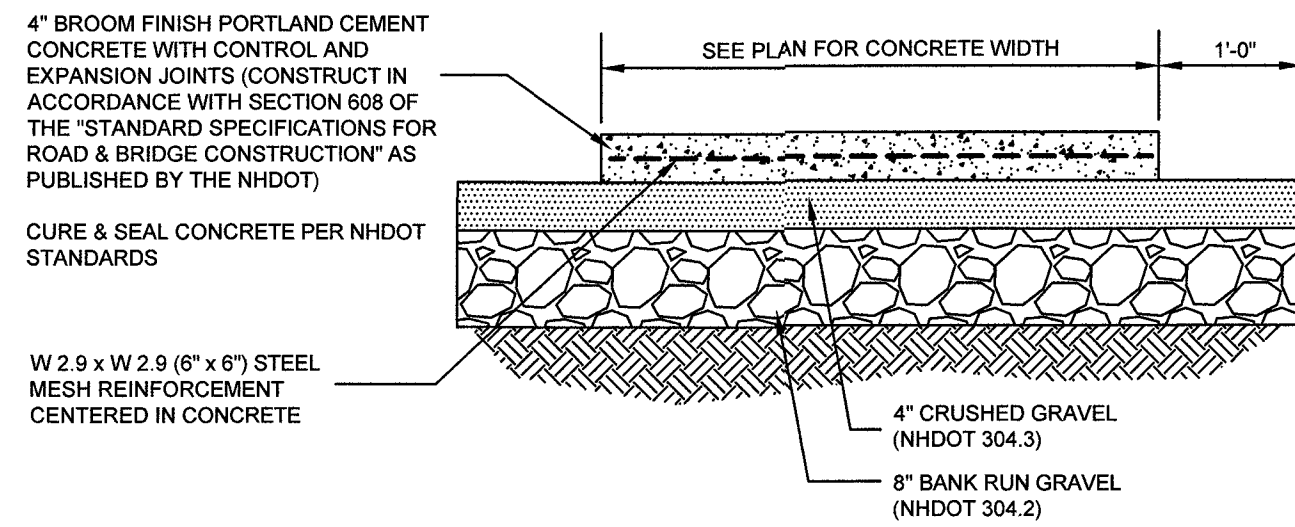
DRIVEWAY AND PARKING LOT SECTION
NOT TO SCALE
(MARCH 2008)



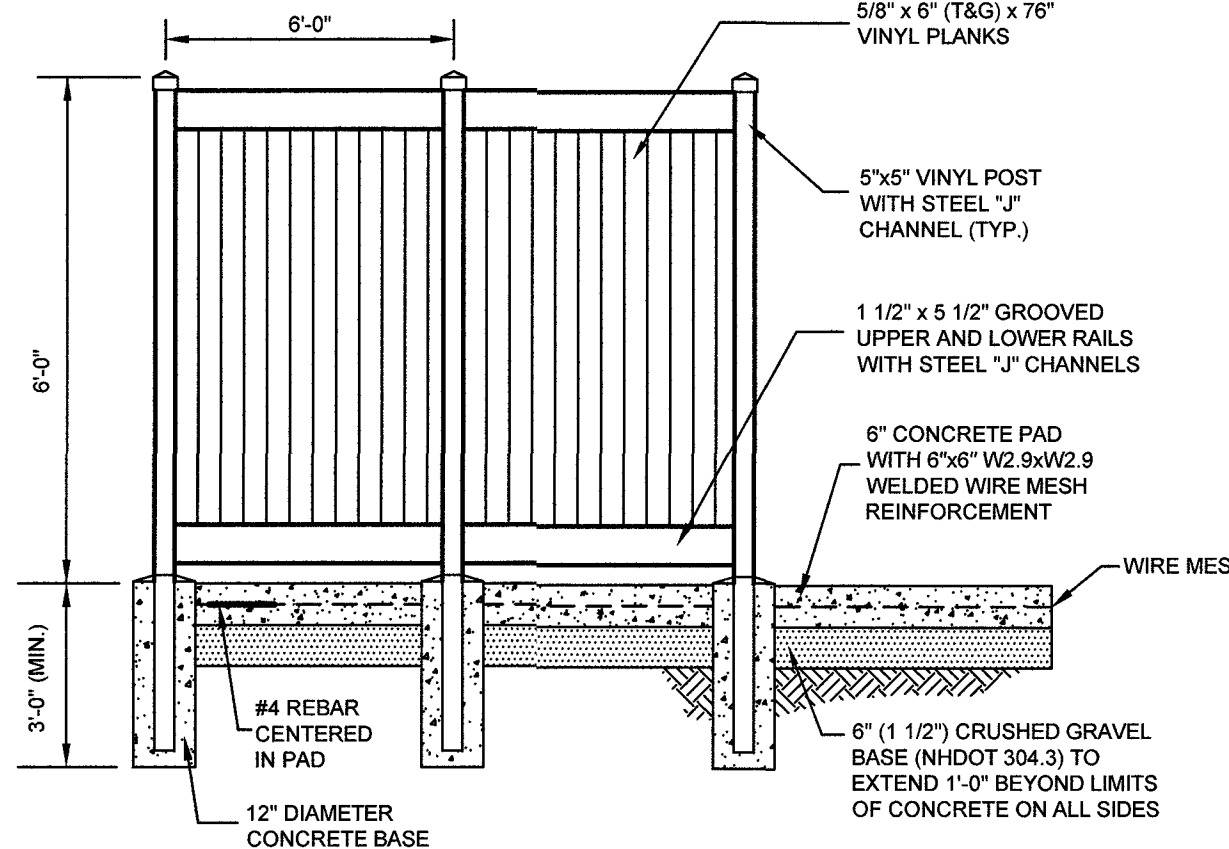
CONCRETE LIGHT POLE BASE DETAIL
NOT TO SCALE
(MARCH 2008)



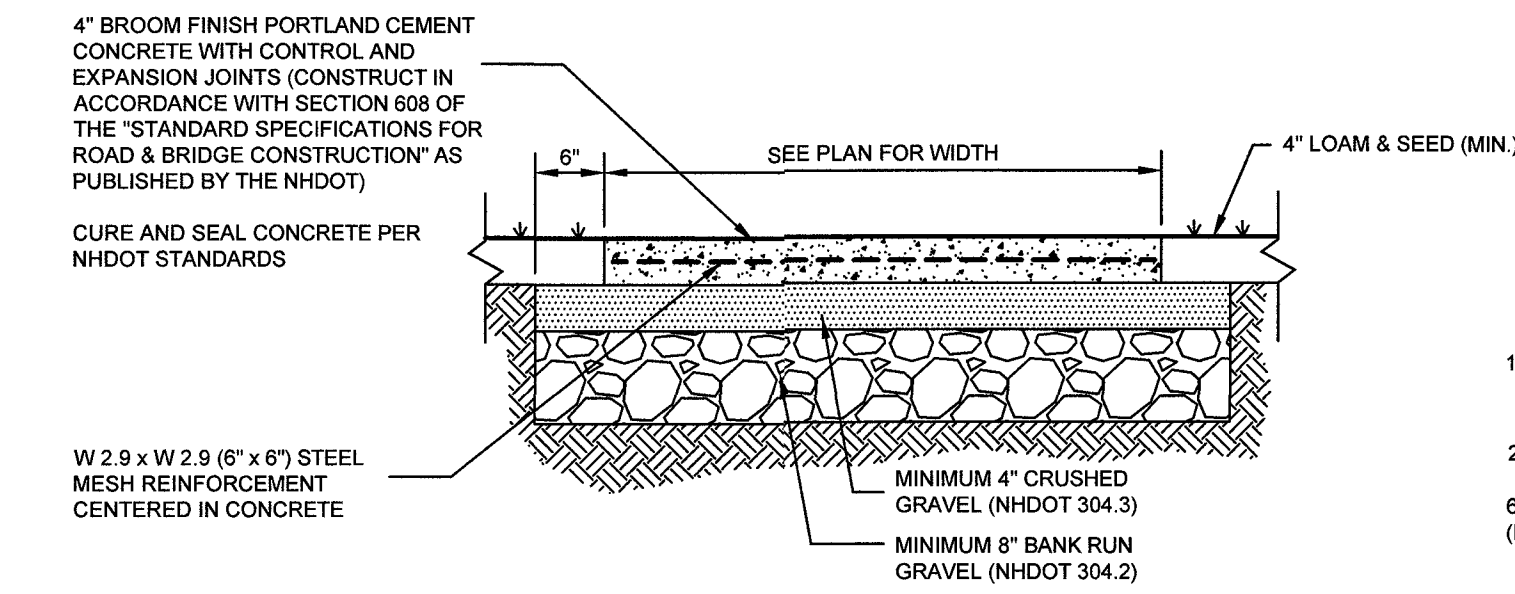
PERMANENT PAVEMENT REPAIR
NOT TO SCALE
(MARCH 2008)



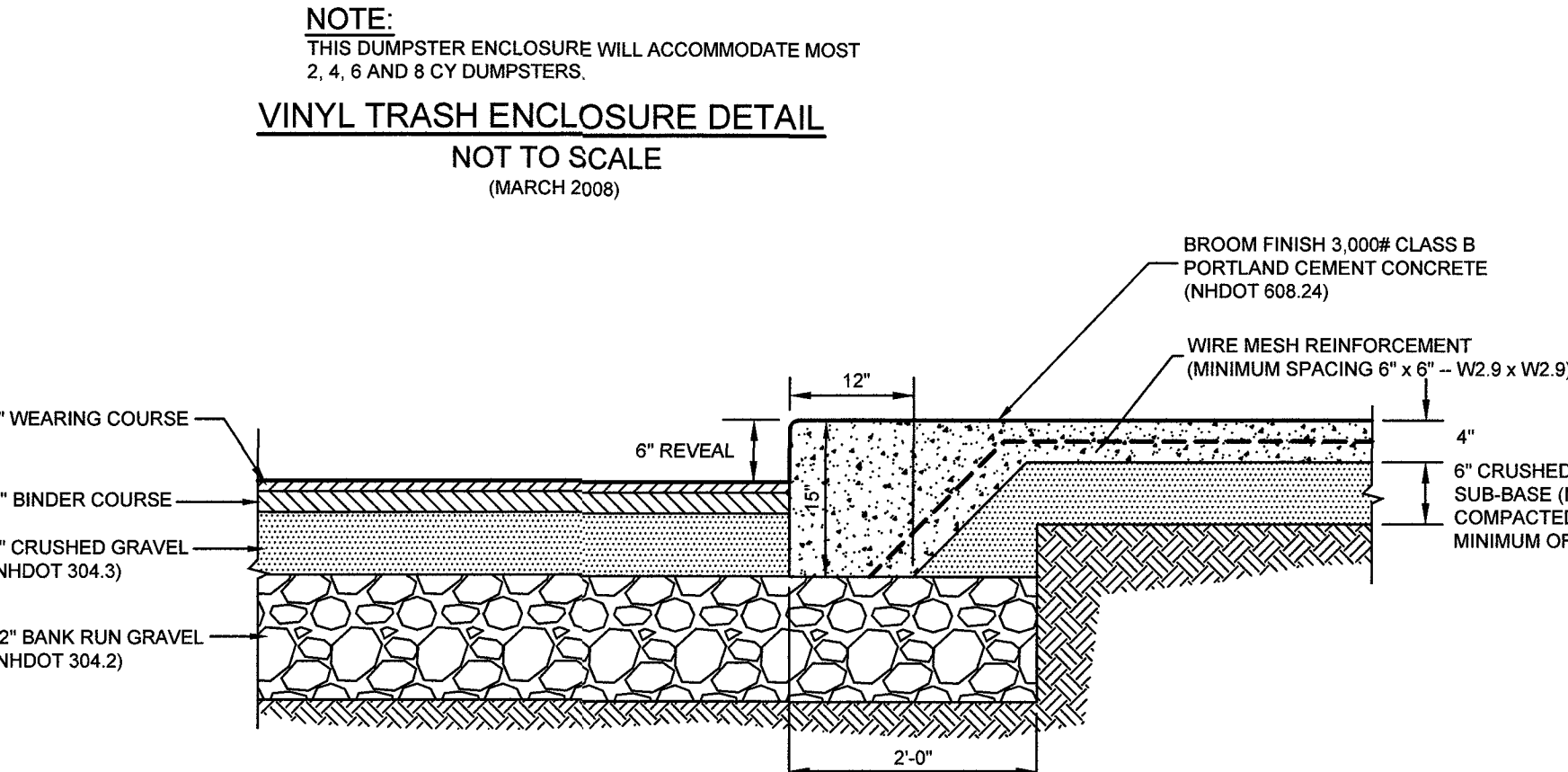
CONCRETE WALK DETAIL
NOT TO SCALE
(MARCH 2008)



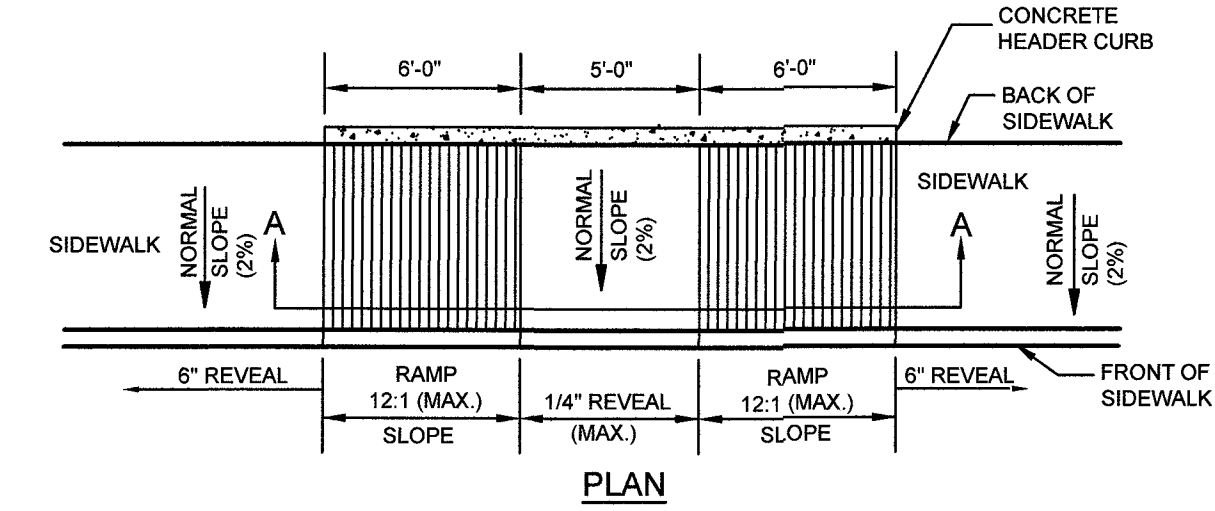
VINYL TRASH ENCLOSURE DETAIL
NOT TO SCALE
(MARCH 2008)



CONCRETE PAD DETAIL
NOT TO SCALE
(MARCH 2008)

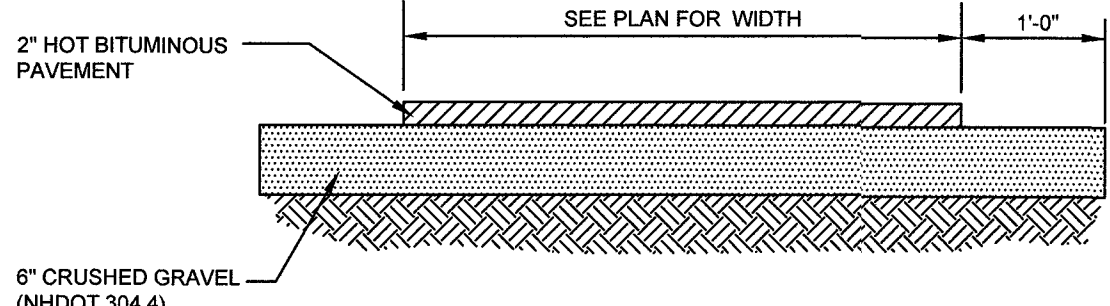


INTEGRAL CURB AND WALK DETAIL
NOT TO SCALE
(MARCH 2008)



NOTES:
1. A BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP SHALL BE USED ON PORTLAND CEMENT CONCRETE RAMPS.
2. MAINTAIN THE NORMAL PAVEMENT PROFILE THROUGHOUT THE RAMP AREA.
3. MAINTAIN A MAXIMUM 1/4\"/>

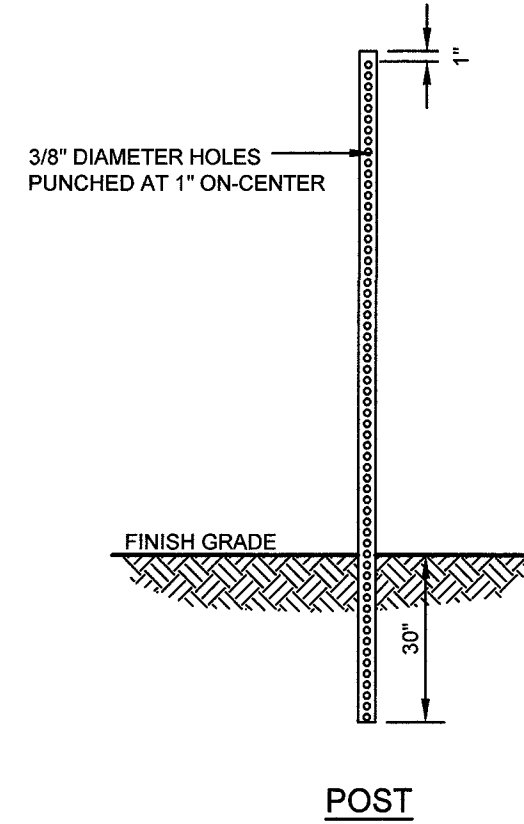
SIDEWALK RAMP
NOT TO SCALE
(JUNE 2012)



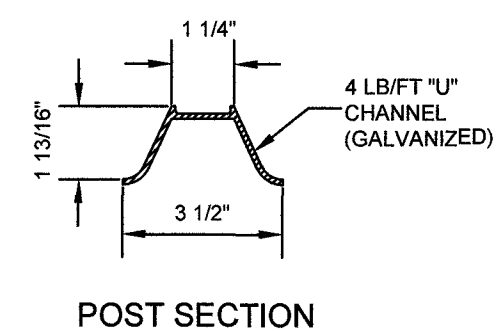
BITUMINOUS WALK DETAIL
NOT TO SCALE
(MARCH 2008)



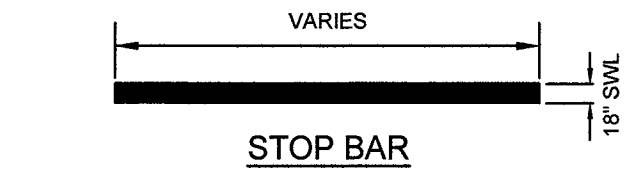
STOP SIGN DETAIL
NOT TO SCALE
(MARCH 2008)



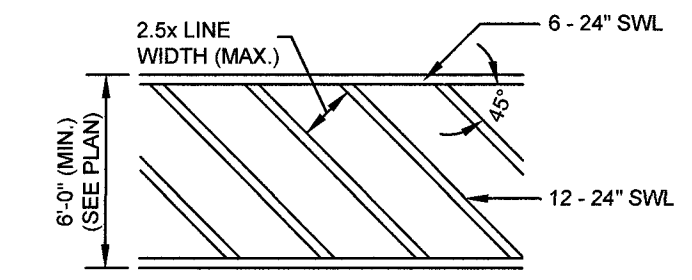
STEEL SIGN POST DETAIL
NOT TO SCALE
(MARCH 2008)



POST SECTION



STOP BAR DETAIL
NOT TO SCALE
(MARCH 2008)



CROSS WALK DETAIL
NOT TO SCALE
(MARCH 2008)

- STRIPING NOTES:**
- ALL PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH THESE STANDARDS AND THE CURRENT EDITION OF MUTCD.
 - WIDTH OF LINES SHALL VARY NO MORE THAN = 1/4 INCH FROM THAT SPECIFIED.
 - THE WET FILM THICKNESS OF A PAINTED LINE SHALL BE A MINIMUM OF 15 MILS THROUGHOUT THE ENTIRE WIDTH AND LENGTH OF LINE SPECIFIED.
 - OVERSPRAY SHALL BE KEPT TO AN ABSOLUTE MINIMUM.
 - BROKEN LINES SHALL BEGIN AND END WITH THE NEAREST FULL CYCLE OF BROKEN LINE.
 - SOLID LONGITUDINAL LINES SHALL BEGIN AND END WITHIN + 2 INCHES OF A LAYOUT SYMBOL INDICATING THE END OF THE LINE, OR WITH A FULL CYCLE OF BROKEN LINE (IF APPROPRIATE).

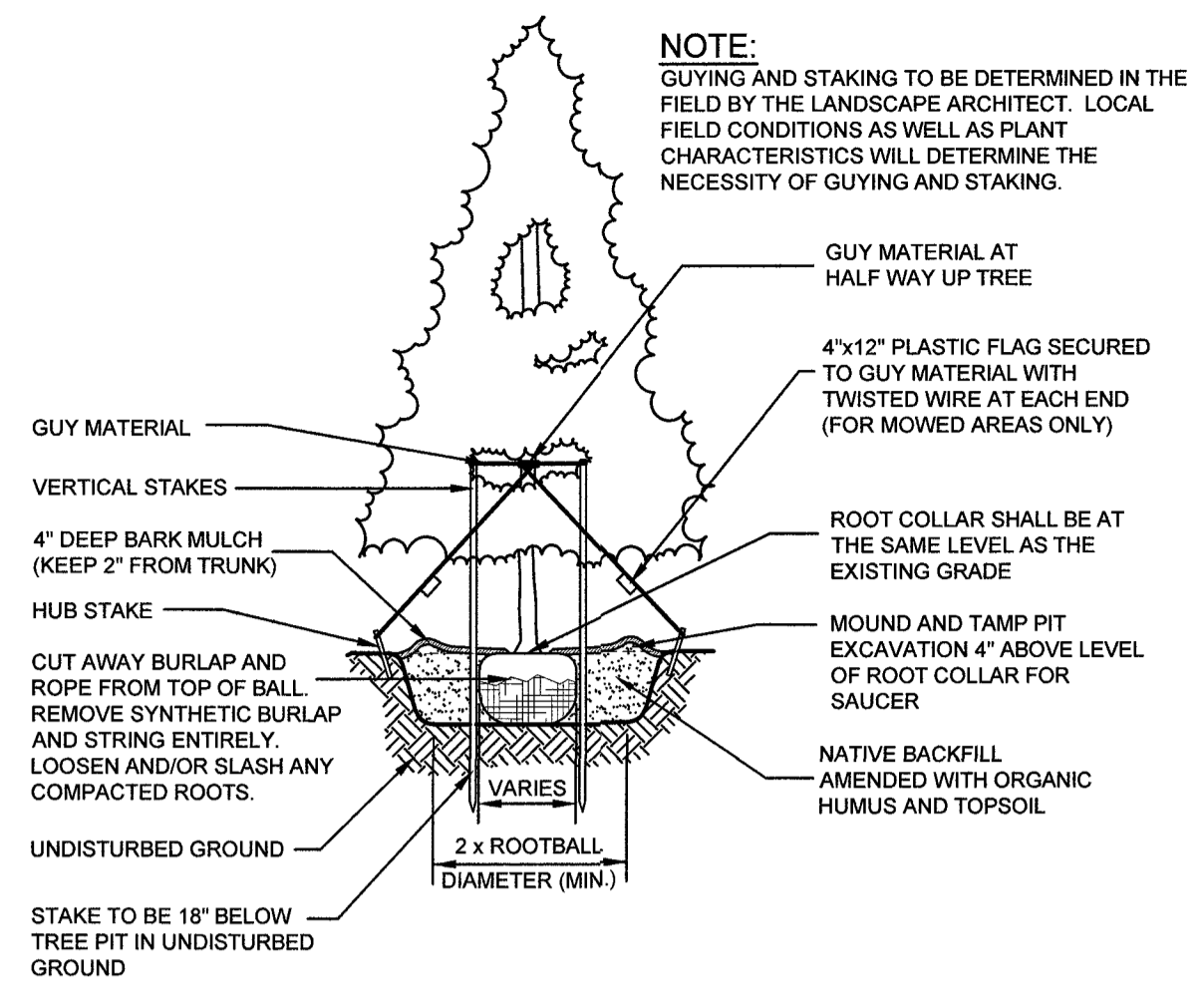
CONSTRUCTION DETAILS
GEMINI VALVE
MAP 28 LOT 4-3
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RAYMOND, NEW HAMPSHIRE
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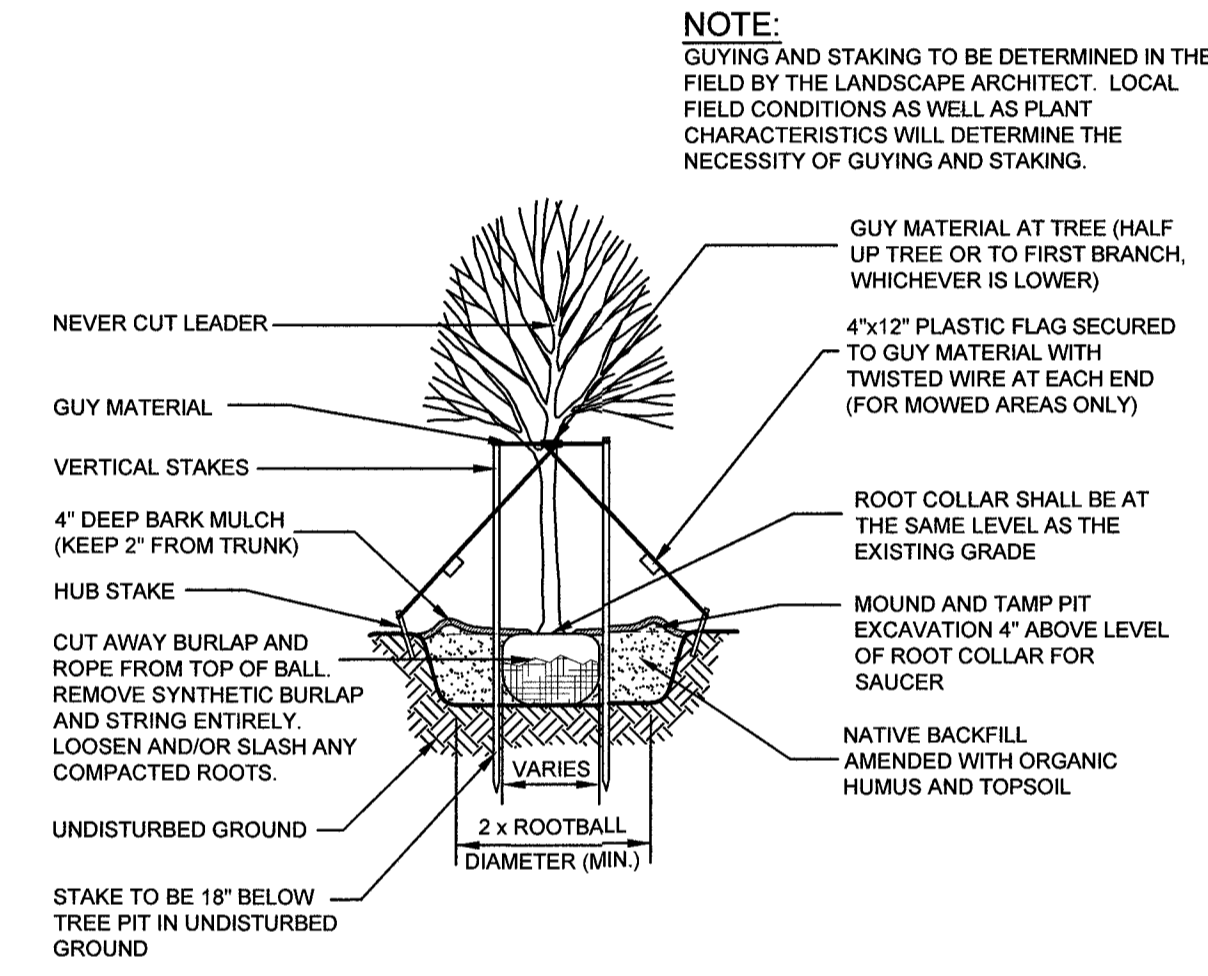
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS			
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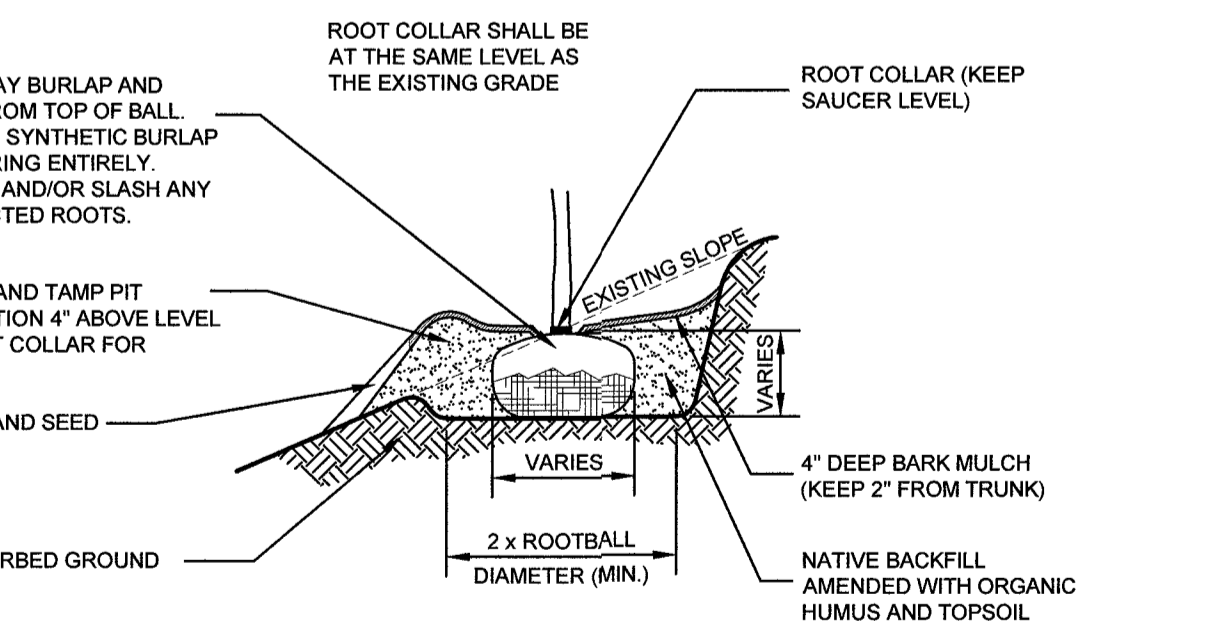
DATE: FEBRUARY 15, 2024 **SCALE:** AS SHOWN
PROJECT NO: 22-0110-2 **SHEET** 10 OF 15



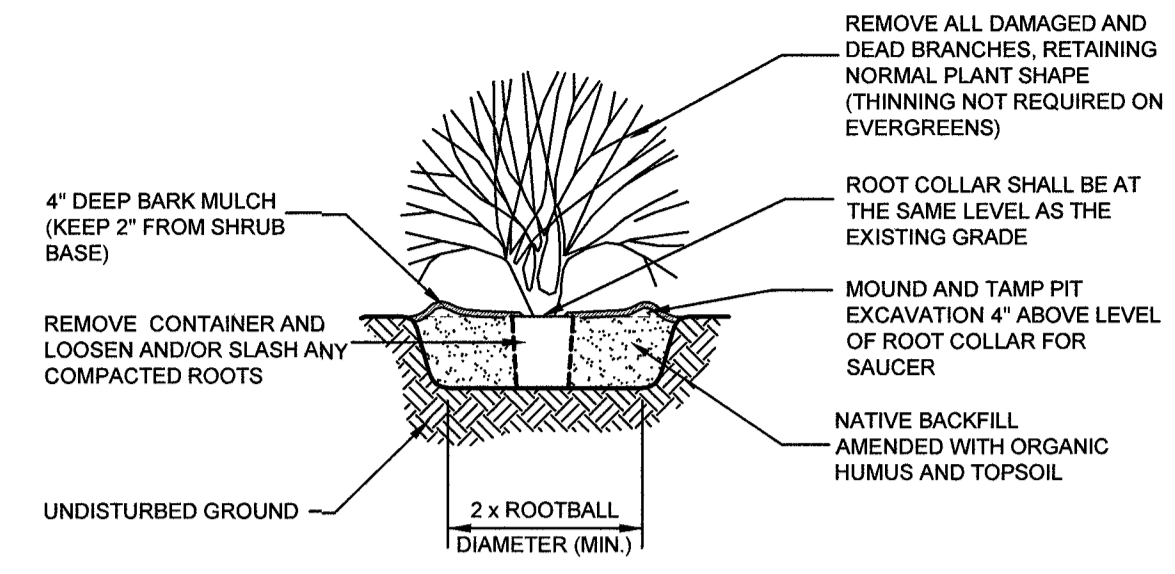
EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



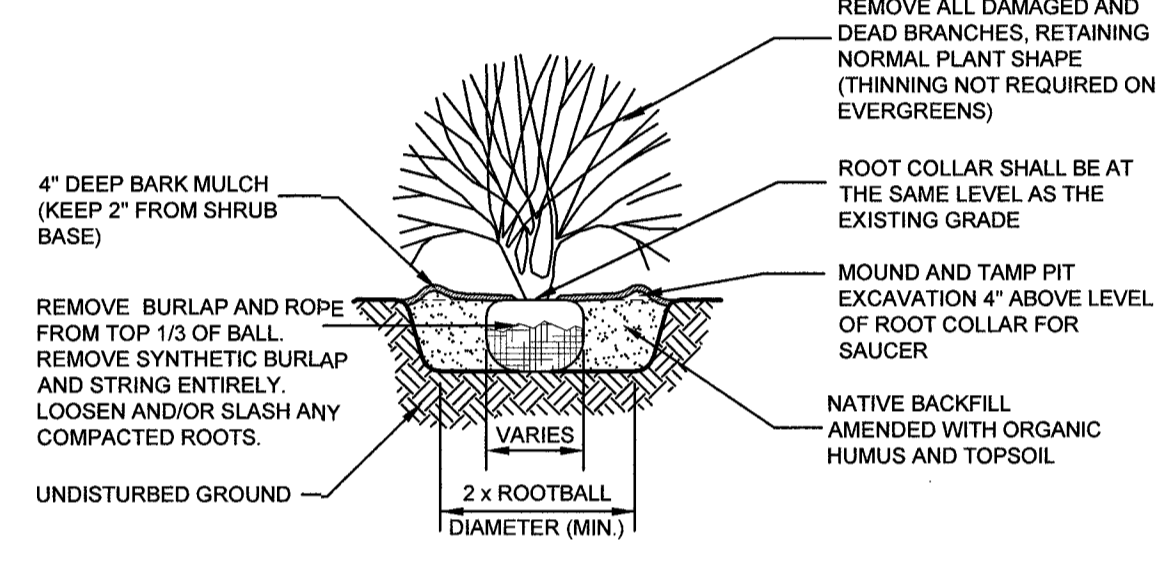
DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



TYPICAL PLANTING PIT ON SLOPE 4:1 OR GREATER
NOT TO SCALE
(JANUARY 2012)



CONTAINER SHRUB PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



BALLED & BURLAP SHRUB PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)

TURF ESTABLISHMENT SCHEDULE

PURPOSE:
TO ESTABLISH AND MAINTAIN PERMANENT AND TEMPORARY TURF AREAS, RESTORE GROWTH TO EXISTING TURF AREAS DISTURBED DURING CONSTRUCTION AND CONTROL SOIL EROSION.

- PREPARATION AND EXECUTION:**
- RAKE THE SUBGRADE OF ALL AREAS TO BE LOAMED AND SEEDED TO REMOVE RUBBISH, STICKS, ROOTS AND STONES LARGER THAN 1 INCH.
 - PLACE LOAM OVER AREAS TO BE SEEDED AND SPREAD.
 - FINE GRADE SURFACE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A UNIFORM SURFACE ACCORDING TO THE FINISH GRADES INDICATED. TOP AND BOTTOM OF SLOPES SHALL BE ROUNDED. NO LOAM SHALL BE SPREAD IF THE SUBGRADE IS EXCESSIVELY WET OR FROZEN.
 - IF THE pH OF THE SOIL NEEDS TO BE RAISED, APPLY LIME EVENLY OVER LOAM SURFACE AND THOROUGHLY INCORPORATE LIME INTO THE LOAM BY HEAVY RAKING TO AT LEAST ONE-HALF THE DEPTH OF THE LOAM.
 - APPLY FERTILIZER AND MIX WITH THE UPPER 2 INCHES OF LOAM.
 - DETERMINE APPROPRIATE MIXTURE FOR AREA TO BE SEEDED BASED ON EXAMINATION OF PROJECT PLANS. UNIFORMLY SPREAD THE SEED BY BROADCASTING OR HYDROSEEDING. IF BROADCASTING, LIGHTLY RAKE INTO THE PREPARED SURFACE AND ROLL. IF HYDROSEEDING, USE 4 TIMES THE RECOMMENDED RATE OF INOCULANT. AFTER SEED IS SPREAD, WATER THOROUGHLY WITH A FINE SPRAY.
 - SEEDING AND INITIAL FERTILIZING SHALL BE DONE BETWEEN APRIL 1 AND JUNE 1 OR BETWEEN AUGUST 15 AND OCTOBER 14, OR AS PERMITTED. SEEDING SHALL NOT BE DONE DURING WINDY WEATHER OR WHEN THE GROUND IS FROZEN, EXCESSIVELY WET OR OTHERWISE UNTILLABLE.
 - WITHIN 24 HOURS AFTER SEEDING OPERATION, UNIFORMLY MULCH THE AREA WITH STRAW ANCHOR MULCH ON ALL SLOPES EXCEEDING 3:1 USING MULCH NETTING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER.
 - PROTECT AND PREVENT AGAINST WASHOUTS, ANY WASHOUTS WHICH OCCUR SHALL BE PROMPTLY REGRADED AND RESEEDED.
 - WHEN IT IS IMPRACTICAL TO ESTABLISH PERMANENT GROWTH ON DISTURBED EARTH BY OCTOBER 14, A TEMPORARY SEED MIXTURE SHALL BE USED. WHEN TEMPORARY SEEDING CANNOT ESTABLISH VISIBLE GROWTH, THE DISTURBED AREA SHALL BE COVERED WITH SIX INCHES OF MULCH FOR THE WINTER.

MAINTENANCE:
ALL SEEDED AREAS SHALL BE KEPT WATERED AND IN GOOD CONDITION. RESEED AS NECESSARY TO ESTABLISH HEALTHY UNIFORM GROWTH OVER THE ENTIRE SEEDED AREA. MAINTAIN SEEDED AREAS IN AN APPROVED CONDITION UNTIL FINAL ACCEPTANCE. MAINTENANCE SHALL INCLUDE REPAIRS FOR DAMAGE CAUSED BY EROSION.

APPLICATION RATES:

- LOAM SHALL BE APPLIED AT A MINIMUM COMPACTED THICKNESS OF 4 INCHES.
- LIME SHALL BE USED WHEN NECESSARY TO RAISE THE pH OF THE SOIL AND APPLIED AT ONE OF THE FOLLOWING RATES:

EXISTING SOIL Ph	TONS/ACRE	POUNDS/CUBIC YARD
4.0 - 4.4	3	12
4.5 - 4.9	2	8
5.0 - 5.4	1	4

- FERTILIZER SHALL BE APPLIED AT THE FOLLOWING RATE:

INITIAL APPLICATION	POUNDS/1,000 SF	MEASUREMENT FACTOR
10-10-10	20.0	1.0
15-15-15	13.4	1.5
19-19-19	10.5	1.9

REFERTILIZATION	POUNDS/1,000 SF	MEASUREMENT FACTOR
10-3-6	20.0	1.0
12-2-8	16.7	1.2
12-4-8	16.7	1.2

- MULCH SHALL BE APPLIED AT A RATE OF 13 CUBIC YARDS PER 1,000 S.F. OF LANDSCAPE BED.

MATERIALS:

- LOAM SHALL CONSIST OF LOOSE, FRIABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE OF VIABLE PARTS OF PROHIBITED INVASIVE PLANTS AND BE GENERALLY FREE OF STONES, LUMPS, STUMPS AND SIMILAR OBJECTS LARGER THAN 2 INCHES IN GREATEST DIAMETER, SUBSOIL, ROOTS AND WEEDS. THE MINIMUM AND MAXIMUM pH VALUE SHALL BE FROM 5.5 TO 7.5.
- LIME SHALL BE A CALICIC OR DOLOMITIC GROUND AGRICULTURAL LIMESTONE CONTAINING NOT LESS THAN 95% OF EITHER CALCIUM OR MAGNESIUM CARBONATE, OR BOTH. IT SHALL CONFORM TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS AND SHALL COMPLY WITH ALL STATE AND FEDERAL RULES AND REGULATIONS.
- FERTILIZER SHALL BE STANDARD COMMERCIAL GRADE FERTILIZER CONFORMING TO ALL STATE AND FEDERAL RULES AND REGULATIONS AND TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. EXCEPT AS PERMITTED, THE ANALYSIS RATIO SHALL BE 1:1:1 FOR INITIAL APPLICATION AND 3:1:2 FOR REFERTILIZATION APPLICATION.
- GRASS SEED SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE AGRICULTURAL AND VEGETABLE SEED LAWS AND SHALL INCLUDE NO "PRIMARY NOXIOUS WEED SEEDS."
- SEED MIXTURE FOR LAWN AREAS SHALL CONSIST OF THE FOLLOWING:

KIND OF SEED	MINIMUM PURITY (%)	MINIMUM GERMINATION (%)	POUNDS/ACRE (TOTAL 120 POUNDS)
CREeping RED FESCUE	96	85	40
PERENNIAL RYEGRASS	98	90	50
KENTUCKY BLUEGRASS	97	85	25
REDTOP	95	80	5

- SEED MIXTURE FOR SLOPE AREAS SHALL CONSIST OF THE FOLLOWING:

KIND OF SEED	MINIMUM PURITY (%)	MINIMUM GERMINATION (%)	POUNDS/ACRE (TOTAL 95 POUNDS)
CREeping RED FESCUE	96	85	35
PERENNIAL RYEGRASS	98	90	30
REDTOP	95	80	5
ALSIKE CLOVER	97	90	5
BIRDSFOOT TREFLOIL	98	80	5
LANCE-LEAVED COREOPSIS	95	80	4
OXEYE DAISY	95	80	3
BLACKKEYED SUSAN	95	80	4
WILD LUPINE	95	80	4

- TEMPORARY SEEDING MIXTURE SHALL BE APPLIED AT A RATE OF 2 POUNDS PER 1,000 SF AND SHALL BE AN APPROVED CONSERVATION MIX OR CONSIST OF THE FOLLOWING:

- 15% BLACKWELL OR SHELTER SWITCHGRASS
- 30% NIAGRA OR KAW BIG BLUESTEM
- 30% CAMPER OR BLAZE LITTLESTEM
- 15% NE-27 OR BLAZE SAND LOWGRASS
- 10% VIKING BIRDSFOOT TREFLOIL
- INOCULUM SPECIFIC TO BIRDSFOOT TREFLOIL MUST BE USED WITH THIS MIXTURE. IF SEEDING BY HAND, A STICKING AGENT SHALL BE USED. IF SEEDING WITH A HYDROSEEDER, USE FOUR TIMES THE RECOMMENDED AMOUNT OF INOCULUM.

- SEED MIXTURE FOR STORMWATER MANAGEMENT AREAS, INCLUDING DETENTION BASINS AND VEGETATED TREATMENT SWALES, SHALL BE APPLIED AT A RATE OF 70 POUNDS PER ACRE OR 1.6 POUNDS PER 1,000 SF, AND SHALL CONSIST OF THE FOLLOWING:

- 25% CREeping RED FESCUE
- 15% SWITCH GRASS
- 15% FOX SEDGE
- 15% CREeping BENTGRASS
- 10% FLATPEA
- 20% WILDFLOWER VARIETY

- STRAW USED FOR MULCH SHALL CONSIST OF MOWED AND PROPERLY CURED GRASS OR LEGUME MOWINGS, FREE FROM WEEDS, TWIGS, DEBRIS, INVASIVE SPECIES OR OTHER DELETERIOUS MATERIAL AND ROT OR MOLD.

SOD SPECIFICATIONS:

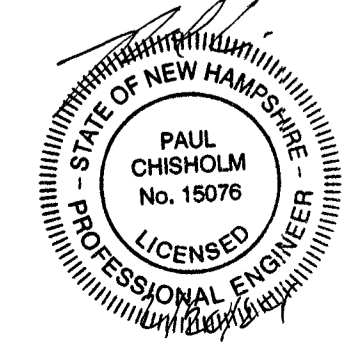
- SOD SHALL BE PROVIDED WITH A STRONG ROOT SYSTEM, NOT LESS THAN TWO YEARS OLD AND SHALL BE FREE OF ANY UNDESIRABLE NATIVE GRASSES OR WEEDS.
- SOD SHALL BE MACHINE CUT TO A THICKNESS NOT LESS THAN 3/4", EXCLUDING THATCH, AND SHALL BE CAPABLE OF VIGOROUS GROWTH WHEN PLANTED.
- SOD PADS SHALL BE OF UNIFORM SIZE AND COMPOSED OF AT LEAST TWO LOCAL GRASS VARIETIES.
- LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS, DO NOT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. TAMP SOD TO ENSURE CONTACT WITH SOIL.
- WATER WITHIN ONE HOUR OF PLANTING WITH A FINE SPRAY.

CONSTRUCTION DETAILS

GEMINI VALVE
MAP 28 LOT 4-3
2 OTTER COURT
RAYMOND, NEW HAMPSHIRE
ROCKINGHAM COUNTY

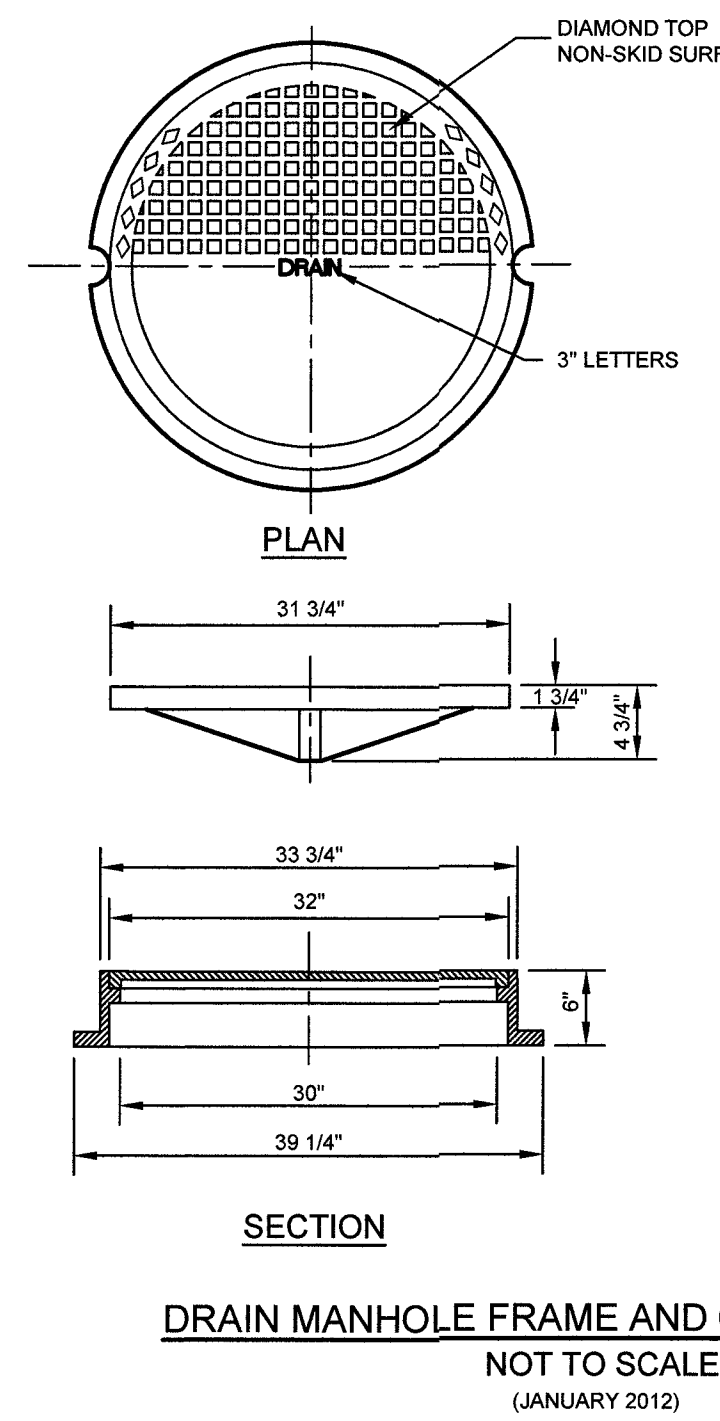
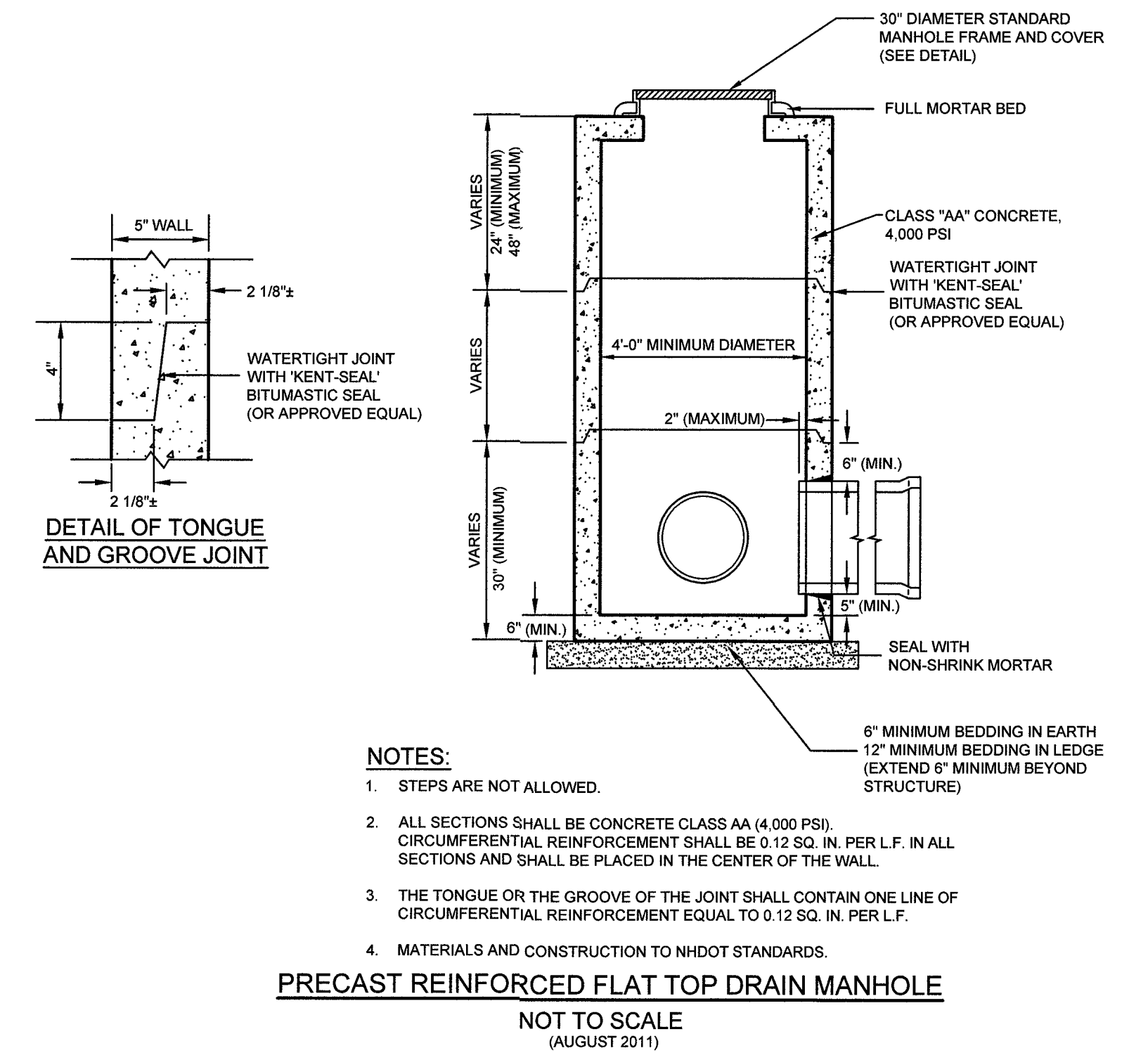
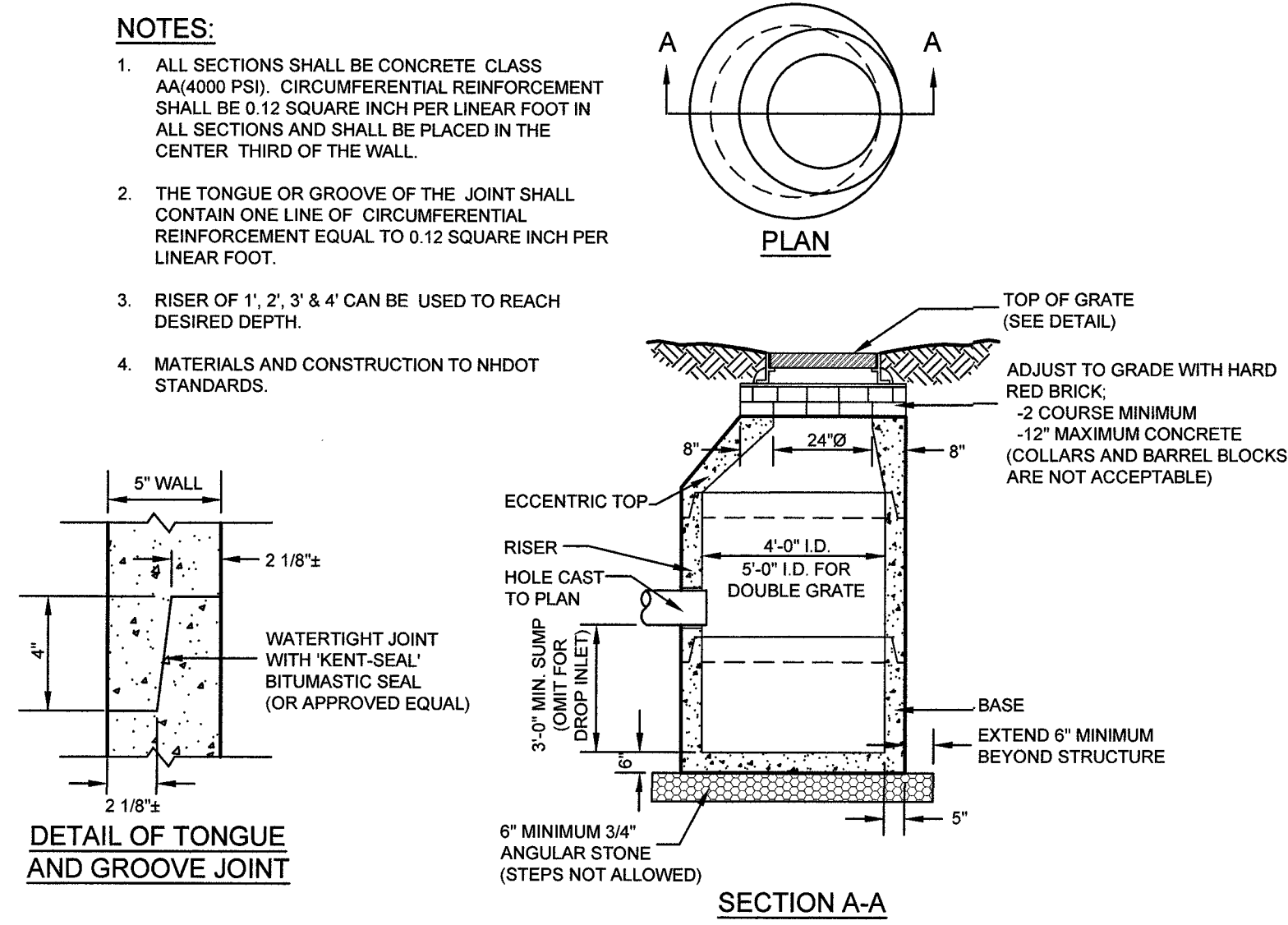
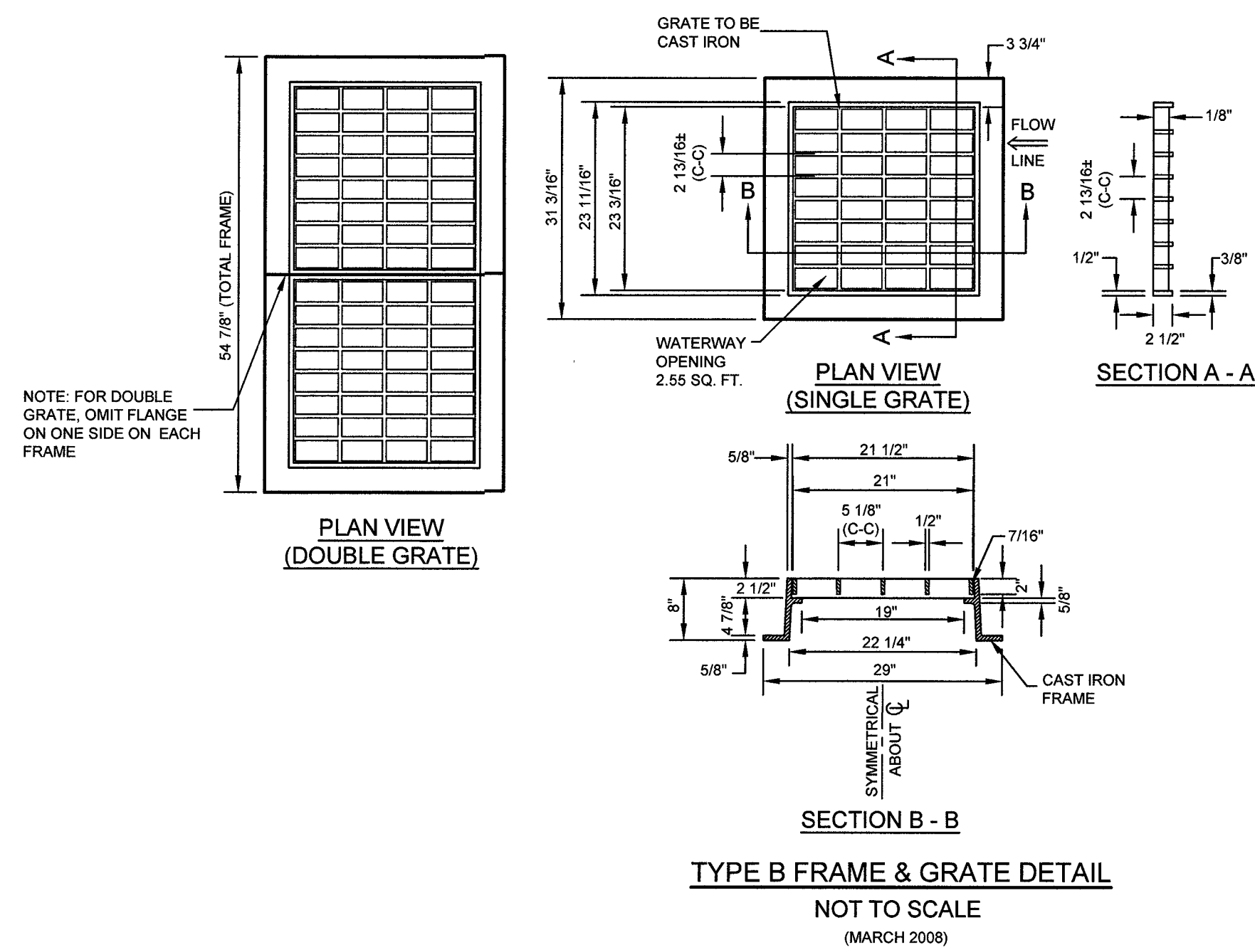
OWNER/APPLICANT:
PARKER & HARPER COMPANIES, INC.
2 OTTER COURT
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BK. 2523 PG. 1660

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Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881



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No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 15, 2024 SCALE: AS SHOWN
PROJECT NO: 22-0110-2 SHEET 11 OF 15



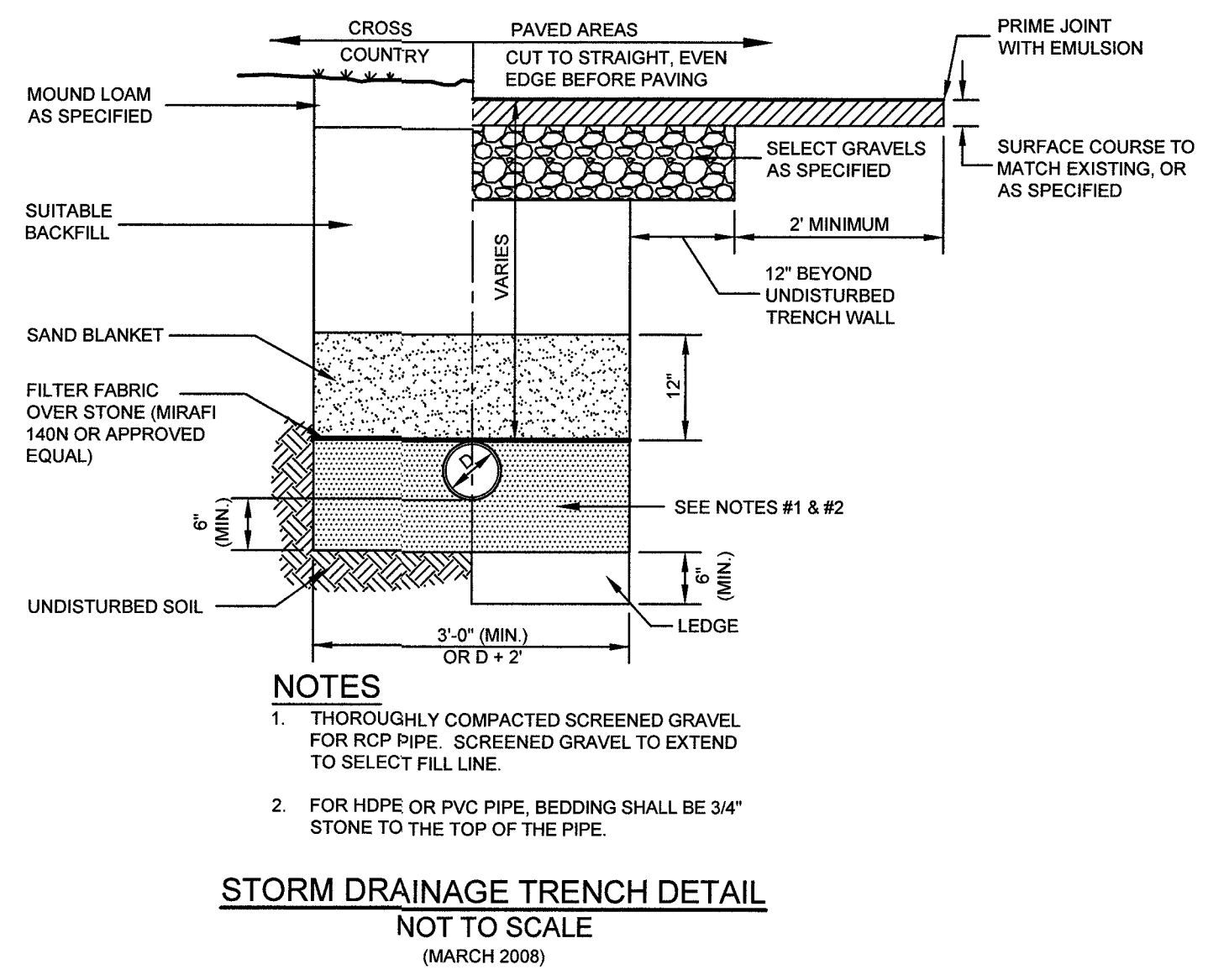
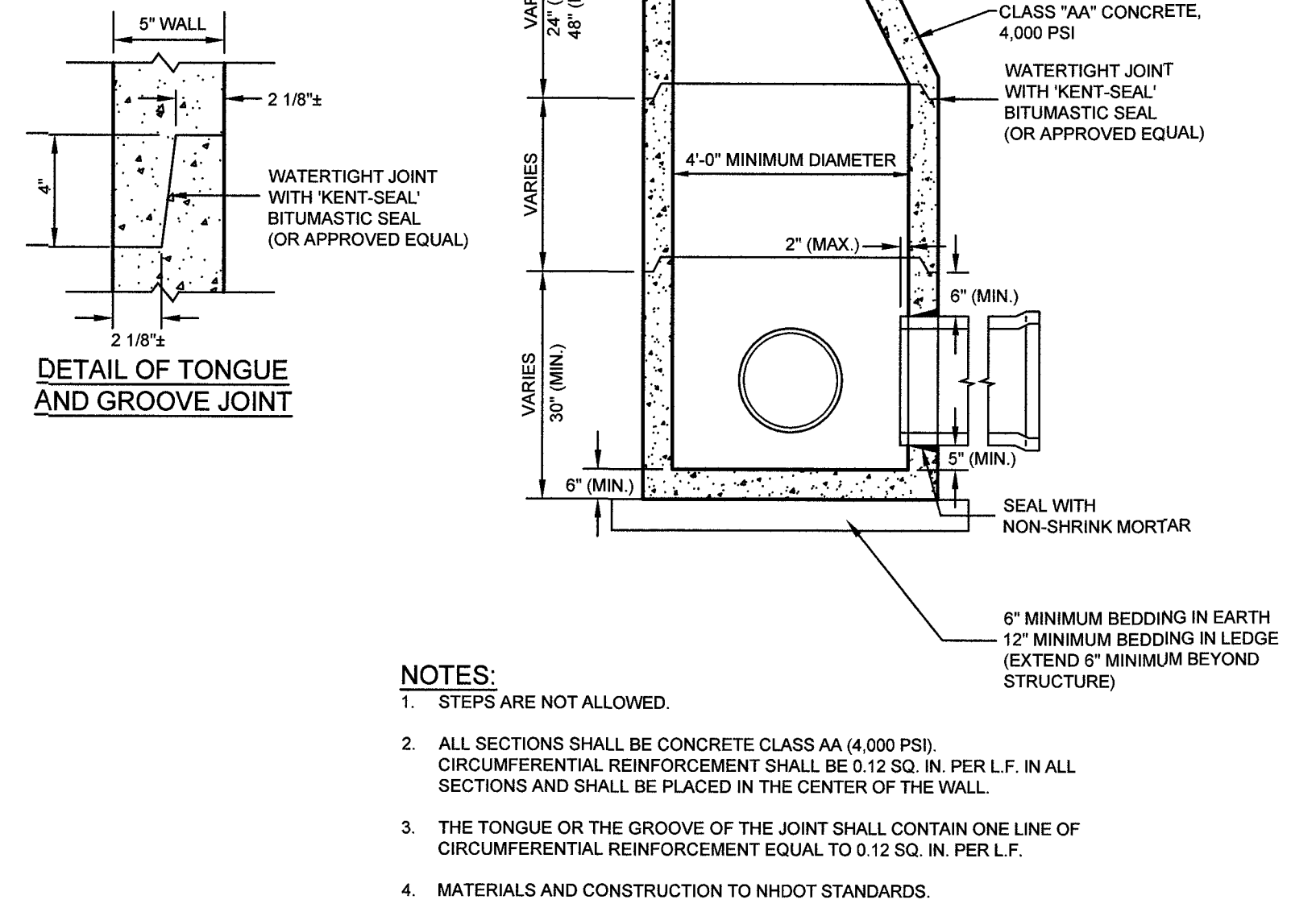
NOTES:
NEW HAMPSHIRE MAINTAINS A CLEAR OPENING DESIGNATION OF 30" FOR ITS MANHOLE CASTINGS.

FEATURES:

- 3" LETTERING
- COVERS MARKED DRAIN
- NONROCKING COVER
- DIAMOND SURFACE DESIGN

SPECIFICATIONS:

- FULLY MACHINED FRAME AND COVER
- H-20 LOAD RATED
- GRAY CAST IRON MEETS ASTM A48 CLASS 30



CONSTRUCTION DETAILS
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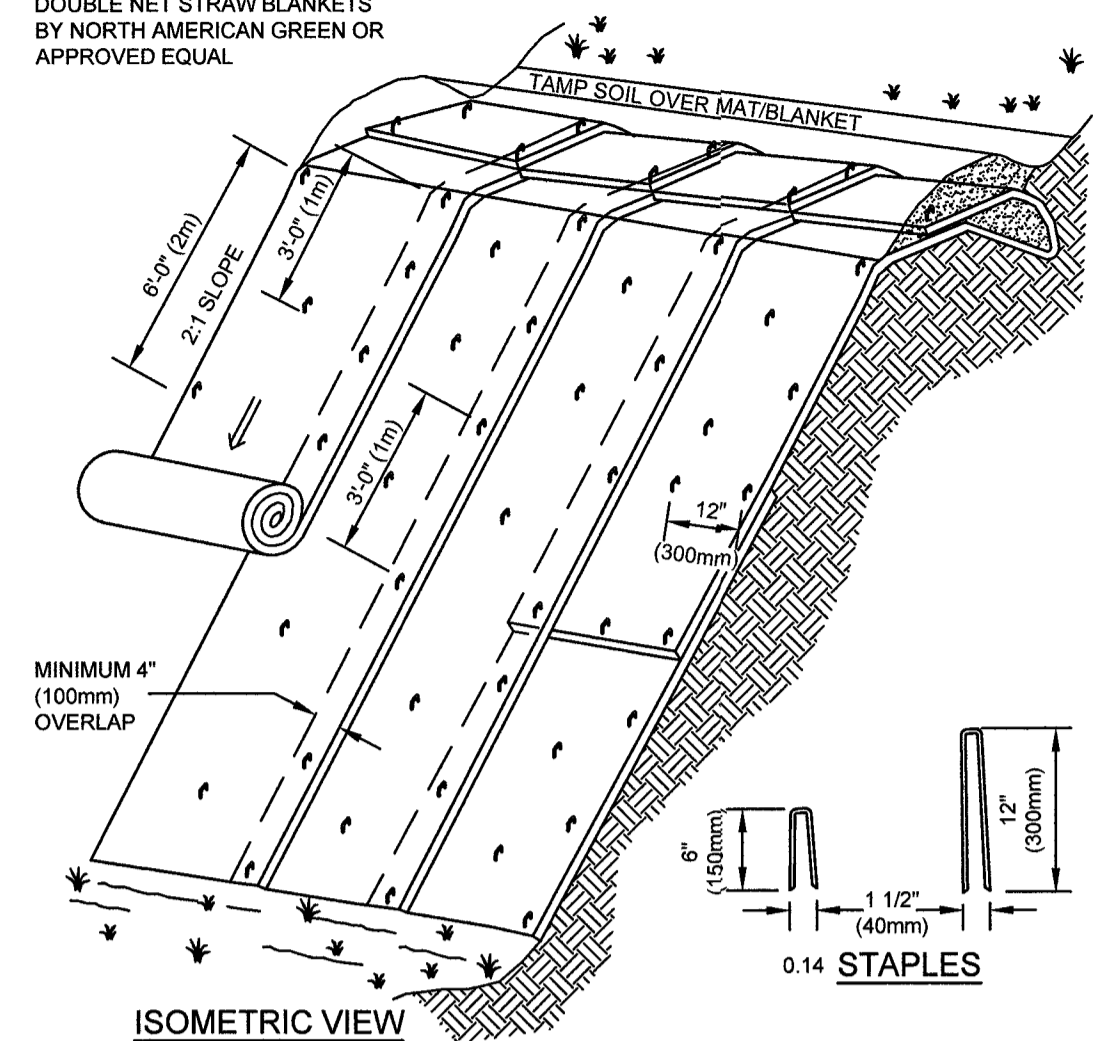
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REVISIONS			
No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 15, 2024 SCALE: AS SHOWN
PROJECT NO: 22-0110-2 SHEET 12 OF 15

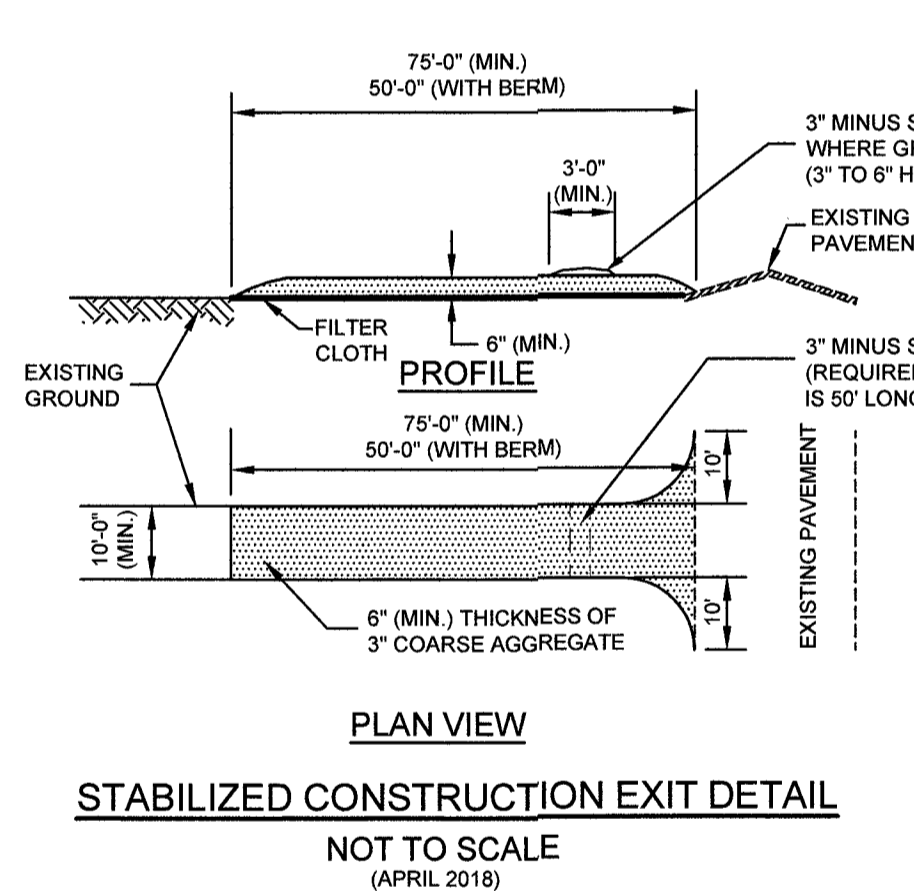
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MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE AND SHALL BE DOUBLE NET STRAW BLANKETS BY NORTH AMERICAN GREEN OR APPROVED EQUAL.



- NOTES:**
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
 - APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
 - LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
 - THERE SHALL BE NO PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES MATERIAL UTILIZED.

EROSION CONTROL BLANKETS - SLOPE INSTALLATION
NOT TO SCALE
(AUGUST 2011)



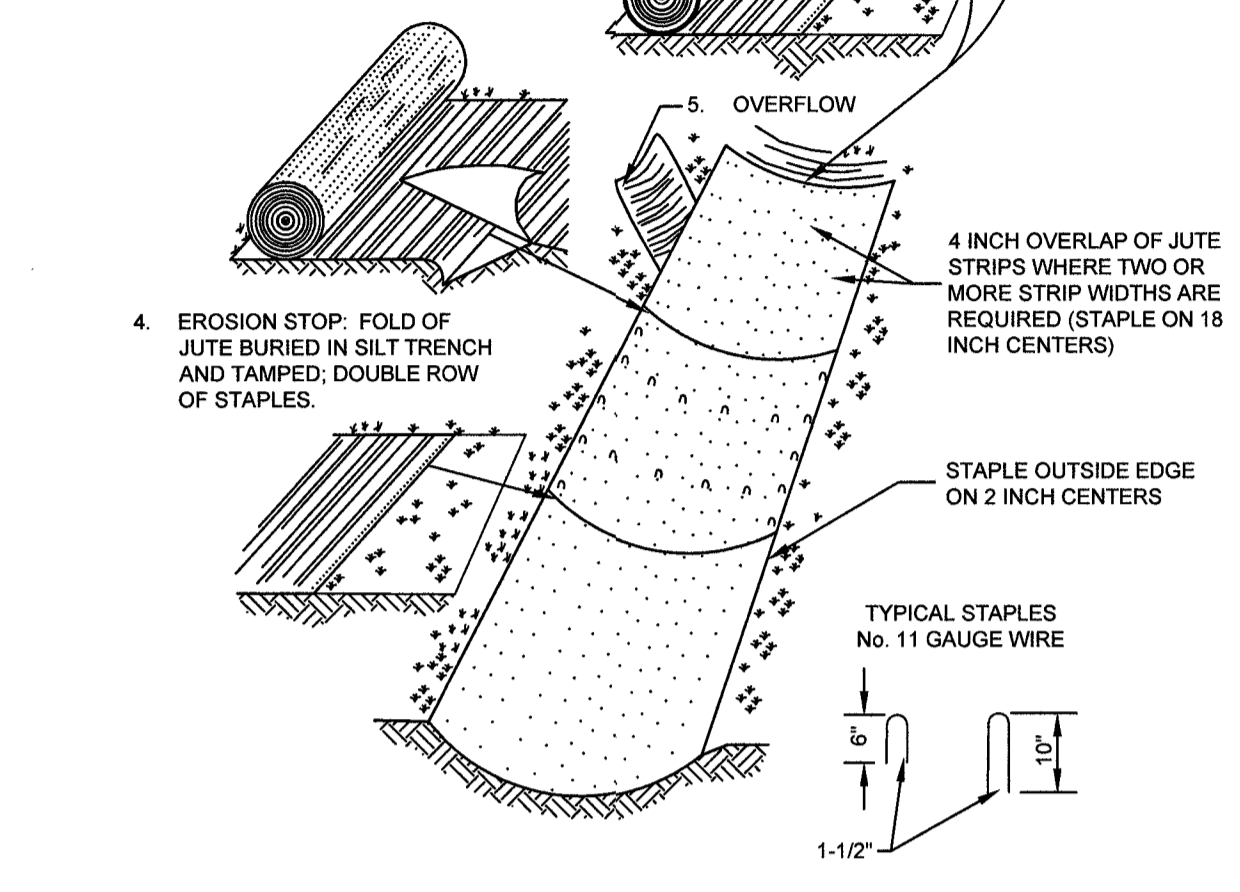
STABILIZED CONSTRUCTION EXIT DETAIL
NOT TO SCALE
(APRIL 2018)

MAINTENANCE:
MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE CRUSHED STONE AND THE EFFECTIVENESS OF THE CRUSHED STONE PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOPDRESSED WITH NEW CRUSHED STONE OR COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.

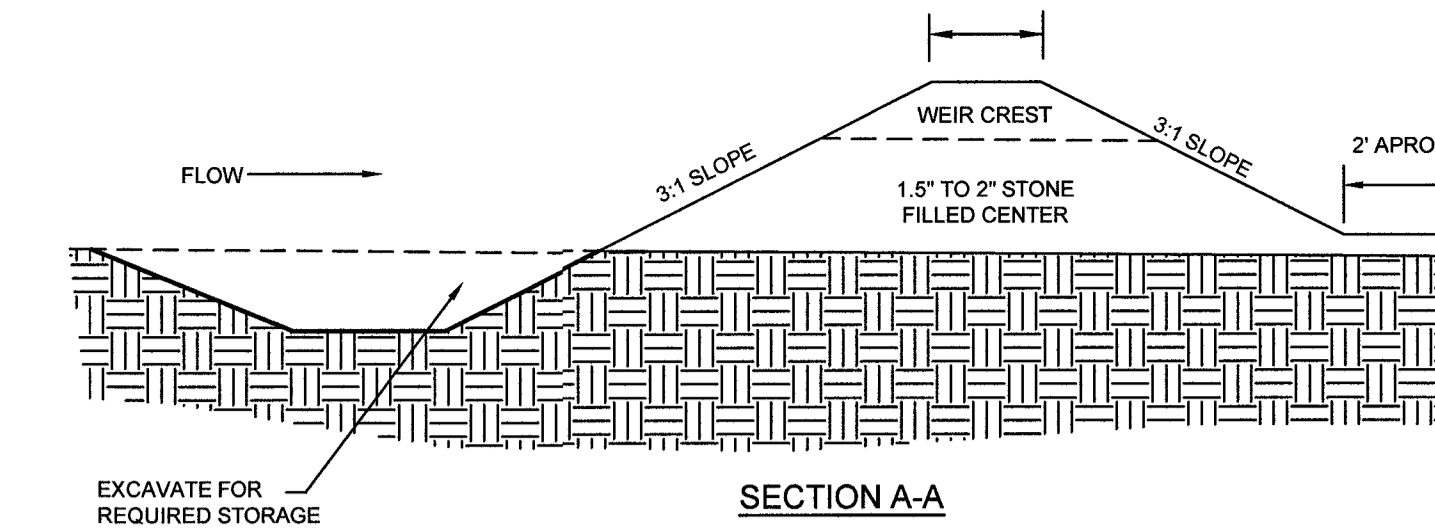
IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.

- CONSTRUCTION SPECIFICATIONS:**
- STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE OR RECYCLED CONCRETE EQUIVALENT.
 - THE LENGTH OF THE STABILIZED EXIT SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
 - THE THICKNESS OF THE STONE FOR THE STABILIZED EXIT SHALL NOT BE LESS THAN 6 INCHES.
 - THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE AREA WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
 - GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
 - ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION EXIT SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A BERM WITH 3:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
 - THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
 - WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
 - STABILIZED CONSTRUCTION EXITS SHALL BE A MINIMUM OF 75 FEET LONG UNLESS A 3" TO 6" HIGH 3" MINUS STONE BERM IS PROVIDED, IN WHICH CASE THE LENGTH CAN BE REDUCED TO 50 FEET.

- BURY THE TOP END OF THE JUTE STRIPS IN A TRENCH 6 INCHES OR MORE IN DEPTH.
- TAMP THE TRENCH FULL OF SOIL. SECURE WITH ROW OF STAPLES, 6 INCH SPACING, 4 INCHES DOWN FROM THE TRENCH.
- OVERLAP: BURY UPPER END OF LOWER STRIP AS IN 'A' AND 'B'. OVERLAP END OF TOP STRIP 4 INCHES AND STAPLE.
- THERE SHALL BE NO PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES MATERIAL UTILIZED.

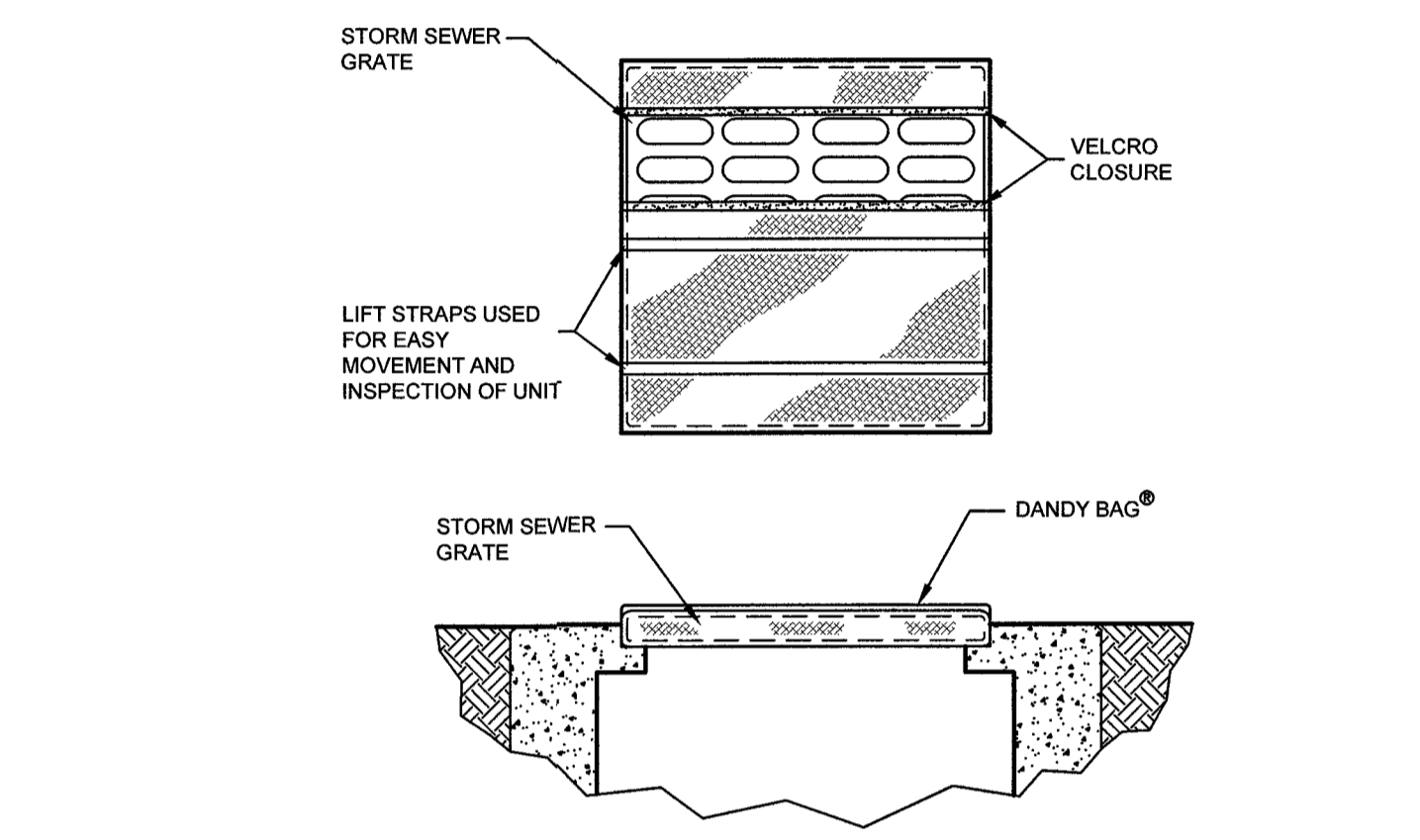


EROSION CONTROL BLANKETS - SWALE INSTALLATION
NOT TO SCALE



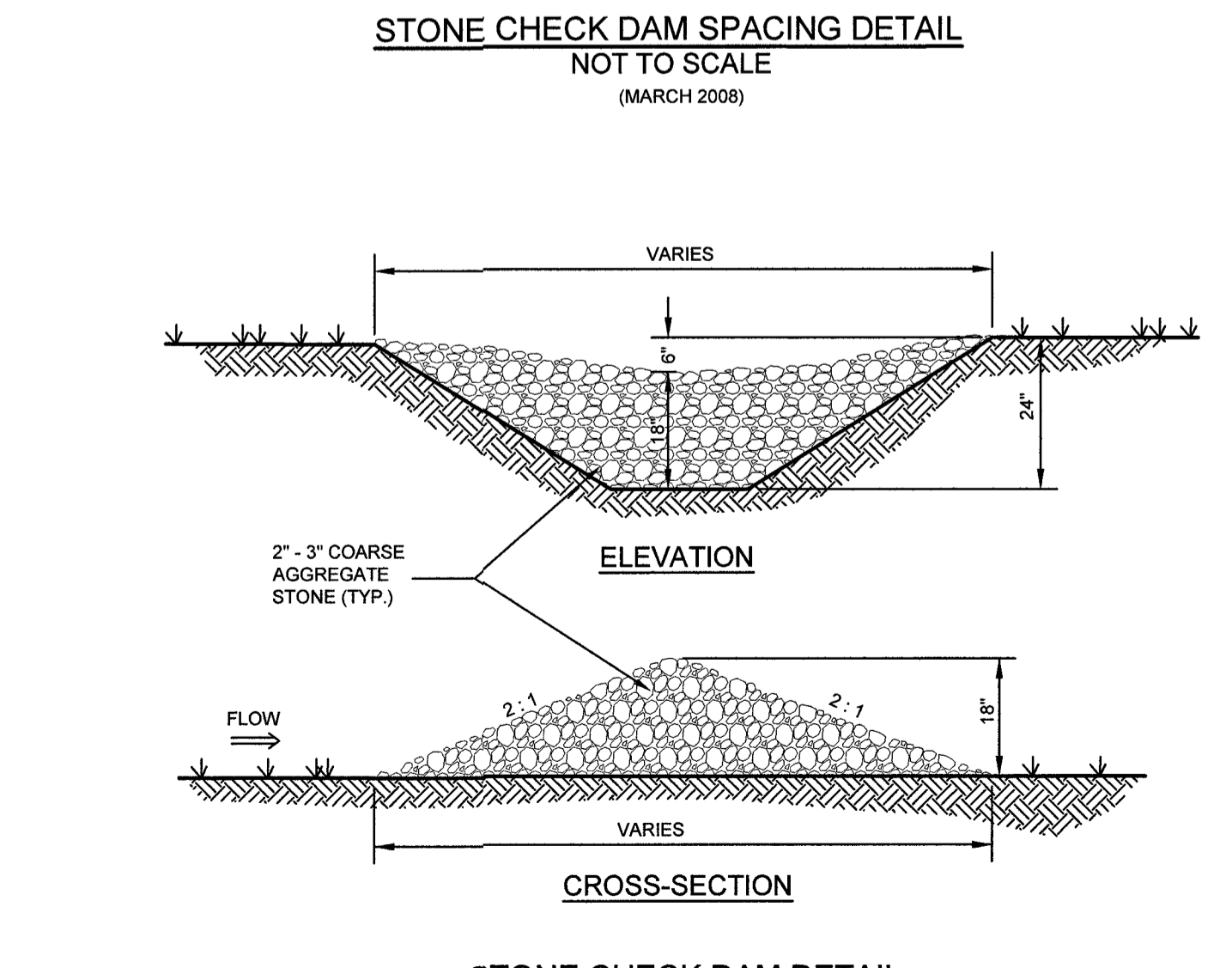
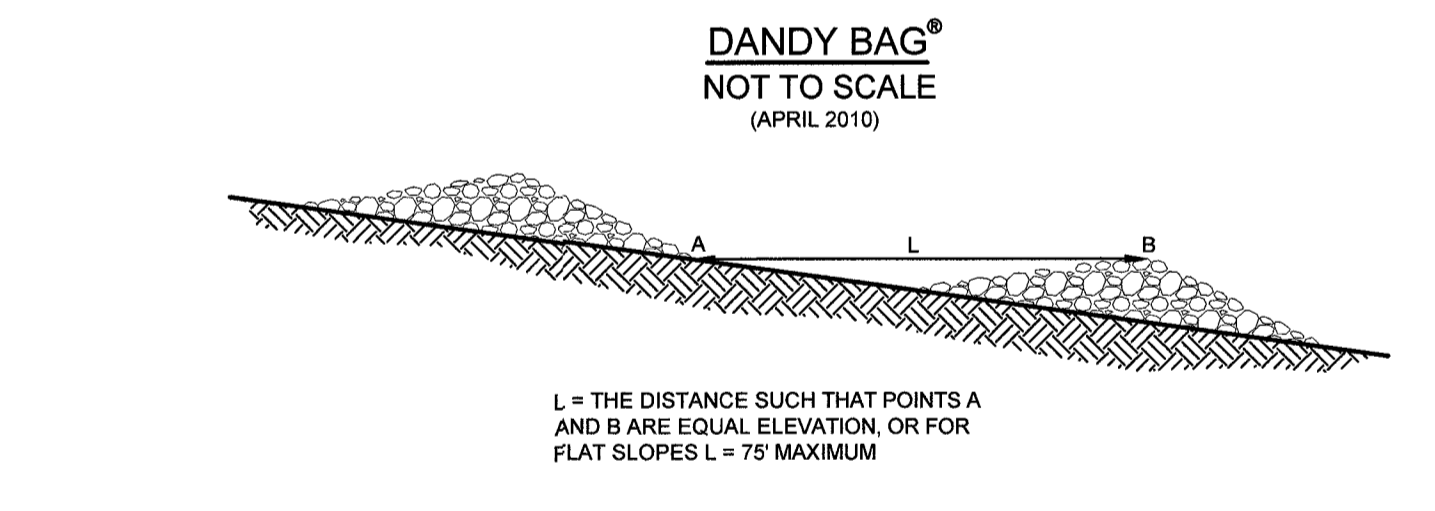
- NOTES:**
- THE TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA OR SOURCE OF SEDIMENT AS POSSIBLE.
 - THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE TRAP SHALL BE LESS THAN 6 ACRES.
 - THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA.
 - THE SIDE SLOPES OF THE TRAP SHALL BE 3:1 OR FLATTER, AND SHALL BE STABILIZED IMMEDIATELY AFTER THEIR CONSTRUCTION.
 - THE OUTLET OF THE TRAP SHALL BE A MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAP AND SHALL DISCHARGE TO A STABILIZED AREA.
 - THE TRAP SHALL BE CLEANED WHEN 50 PERCENT OF THE ORIGINAL VOLUME IS FILLED.
 - THE MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.
 - SEDIMENT TRAPS AND/OR BASINS SHOULD BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL BASINS/PONDS ARE STABILIZED.

TEMPORARY SEDIMENT TRAP DETAIL
NOT TO SCALE



HI-FLOW DANDY BAG® (SAFETY ORANGE)

MECHANICAL PROPERTIES	TEST METHOD	UNITS	MARV
GRAB TENSILE STRENGTH	ASTM D 4632	kN (lbs)	1.62 (365) x 0.89 (200)
GRAB TENSILE ELONGATION	ASTM D 4632	%	24 x 10
PUNCTURE STRENGTH	ASTM D 4833	kN (lbs)	0.40 (90)
MULLEN BURST STRENGTH	ASTM D 3786	kPa (psi)	3097 (450)
TRAPEZOID TEAR STRENGTH	ASTM D 4533	kN (lbs)	0.51 (115) x 0.33 (75)
UV RESISTANCE	ASTM D 4355	%	90
APPARENT OPENING SIZE	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
FLOW RATE	ASTM D 4491	1/min/m ² (gal/min/ft ²)	5907 (145)
PERMITTIVITY	ASTM D 4491	Sec-1	2.1



STONE CHECK DAM DETAIL
NOT TO SCALE
(MARCH 2008)

CONSTRUCTION SEQUENCE

- FIRST CUT AND CLEAR TREES AND BRUSH ONLY WITHIN DESIGNATED LIMITS OF CLEARING AS NECESSARY TO FACILITATE PROPOSED CONSTRUCTION. ALL TREES, BRANCHES AND OTHER VEGETATIVE MATERIALS SHALL BE PROPERLY DISPOSED OF OFF SITE BY THE CONTRACTOR. THIS PROJECT IS MANAGED TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
- PRIOR TO COMMENCEMENT OF ANY EARTHMOVING OPERATIONS, ALL APPLICABLE TEMPORARY EROSION CONTROL MEASURES, INCLUDING SPECIFIED PERIMETER SILTATION FENCING AND STABILIZED CONSTRUCTION EXIT SHALL BE IN PLACE AS SHOWN ON THE PROJECT PLANS.
- COMPLETE EXCAVATION AND SIMILAR ORGANIC SOIL MATERIALS SUITABLE FOR USE AS TOPSOIL SHALL BE STOCKPILED WITHIN AREAS OUT OF THE WAY OF OTHER CONSTRUCTIONS ACTIVITIES AND DRAINAGE FLOW. STOCKPILES SHALL BE TEMPORARILY SEEDED WITH WINTER RYE AND BE SURROUNDED WITH HAY BALES AND/OR FABRIC SILTATION FENCE IN ORDER TO PREVENT LOSS DUE TO EROSION.
- BEGIN EARTHMOVING OPERATIONS, COMMENCING WITH WORK NEEDED TO BALANCE SITE AND FACILITATE BUILDING FOUNDATION AND RETAINING WALL CONSTRUCTION. PERMANENT DOWNSLOPE WORK SHALL BE PROTECTED FROM UPGRADIENT STORMWATER FLOW BY THE CONSTRUCTION OF TEMPORARY EARTHEN DIKES OR EXCAVATED SWALES.
- ONCE BUILDING FOUNDATION WORK IS UNDERWAY, CONTINUE EARTHMOVING OPERATIONS UNTIL DESIGN SUBGRADE IS ACHIEVED.
- INSTALL DRAINAGE SWALE SYSTEMS AND OTHER UTILITIES WORKING FROM LOW TO HIGH. INCOMPLETE WORK SHALL BE PROTECTED FROM SILTATION BY THE USE OF SILTATION BARRIERS AROUND SWALES UNTIL THE SITE HAS BECOME FULLY STABILIZED.
- PLACE GRAVEL AND CRUSHED GRAVEL OVER PROPOSED DRIVEWAY, WALKS AND PARKING AREAS AND COMPACT IN SPECIFIED LIFT THICKNESS.
- COMPLETE EXCAVATION/STABILIZATION GRADING ACTIVITIES. WHEN COMPLETE, IMMEDIATELY BEGIN TOPSOILING PROPOSED TURF AREAS USING STOCKPILED LOAM SUPPLEMENTED WITH BORROW LOAM, IF NECESSARY, TO LEAVE A THICKNESS OF 4 INCHES OF FRIABLE LOAM.
- FINE GRADE ALL FUTURE TURF AREAS AND HYDROSEED WITH THE SPECIFIED SEED MIXTURE IMMEDIATELY AFTER FINE GRADING IS COMPLETED. ALL AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
- INSTALL THE BINDER COURSE OF PAVEMENT OVER ALL DESIGNATED AREAS.
- CONTINUE TO MONITOR AND RECTIFY MINOR SITE AND SLOPE EROSION UNTIL ENTIRE SITE APPEARS TO BE COMPLETELY STABILIZED AND VEGETATED WITH A HEALTHY STAND OF TURF OR GROUND COVER. MAINTAIN SPECIFIED SILTATION/EROSION CONTROL MEASURES THROUGH ONE WINTER.
- INSTALL THE SPECIFIED WEARING COURSE OF PAVEMENT OVER THE BINDER COURSE.
- COMPLETE INSTALLATION OF LANDSCAPING, SIGNAGE AND OTHER SITE AMENITIES.

EROSION CONTROL NOTES

- EXPOSED EARTHWORK SHALL BE CONFINED TO AS LIMITED AN AREA AS IS PRACTICAL AT ANY GIVEN TIME THROUGHOUT THE CONSTRUCTION SEQUENCE. AT NO TIME SHALL MORE THAN FIVE (5) ACRES OF SITE AREA BE IN AN UNSTABLE CONDITION. NO GIVEN AREA OF THE SITE SHALL BE LEFT IN AN UNSTABILIZED CONDITION FOR A PERIOD OF TIME EXCEEDING THIRTY (30) CALENDAR DAYS.
- TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PROJECT PLANS. IN ADDITION, SIMILAR MEASURES SHALL BE INSTALLED WHERE AND WHEN THE FIELD CONDITION, OR FIELD OPERATION OF THE INDIVIDUAL SITE CONTRACTOR, MAY WARRANT. ALL TEMPORARY EROSION CONTROL MEASURES USED SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER 0.25" OF RAINFALL OR MORE. THEY SHALL BE CLEANED AND MAINTAINED AND OTHERWISE KEPT IN AN EFFECTIVE OPERATING MANNER THROUGHOUT THE CONSTRUCTION PERIOD.
- ALL DISTURBED AREAS DESIGNATED TO BE TURF, SHALL RECEIVE A MINIMUM APPLICATION OF 4 INCHES OF LOAM (COMPACTED THICKNESS), PRIOR TO FINAL SEEDING AND MULCHING.
- ALL SWALES AND DITCHLINES SHALL BE PERIODICALLY CLEANED OF DEPOSITED SEDIMENT SO AS TO MAINTAIN AN EFFECTIVE GRADE AND CROSS SECTION. ALL SWALES AND DITCHLINES SHALL BE FULLY STABILIZED PRIOR TO HAVING STORMWATER DIRECTED TOWARDS THEM.
- IN THE EVENT THAT, DURING CONSTRUCTION OF ANY PORTION OF THIS PROJECT, A WINTER SHUTDOWN IS NECESSARY, THE CONTRACTOR SHALL STABILIZE ALL INCOMPLETE WORK AND PROVIDE FOR SUITABLE METHODS OF DIVERTING RUNOFF IN ORDER TO ELIMINATE SHEET FLOW ACROSS FROZEN SURFACES.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- DUST SHALL BE CONTROLLED BY THE USE OF WATER AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD, IN ACCORDANCE WITH ENV-A 1000.
- IN NO WAY ARE THOSE TEMPORARY EROSION CONTROL MEASURES INDICATED ON THESE PLANS TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGEMENT IN INSTALLING SUPPLEMENTARY EROSION CONTROL MEASURES WHERE AND WHEN SPECIFIC SITE CONDITIONS AND/OR CONSTRUCTION METHODOLOGIES MAY WARRANT.
- AREAS HAVING FINISH GRADE SLOPES OF 3:1 OR STEEPER, SHALL BE STABILIZED WITH JUTE MATTING WHEN AND IF FIELD CONDITIONS WARRANT, OR IF SO ORDERED. JUTE MATTING SHALL BE INSTALLED TO CONFORM WITH THE RECOMMENDED BEST MANAGEMENT PRACTICE OUTLINED IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION".
- ALL DETENTION PONDS AND TREATMENT SWALES SHALL BE CONSTRUCTED PRIOR TO ANY EARTH MOVING ACTIVITIES THAT WILL INFLUENCE STORMWATER RUNOFF.
- ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- ALL CUT AND FILL SLOPES SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

WINTER CONSTRUCTION NOTES:

- 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 4:1, 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 EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER OCTOBER 15TH, INCOMPLETE ROAD OR 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.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

CONSTRUCTION DETAILS
GEMINI VALVE
MAP 28 LOT 4-3
2 OTTER COURT
RAYMOND, NEW HAMPSHIRE
ROCKINGHAM COUNTY

OWNER/APPLICANT:
PARKER & HARPER COMPANIES, INC.
2 OTTER COURT
RAYMOND, N.H. 03077
BK. 2523 PG. 1660

KMA
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS

No.	DATE	DESCRIPTION	BY

DATE: FEBRUARY 15, 2024 SCALE: AS SHOWN
PROJECT NO: 22-0110-2 SHEET 14 OF 15

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Soil Test Pits
Gemini Valve

Test Pit 1: Date: October 26, 2023 Weather: Clear

Depth	Soil	Texture	Color	Moisture	Other
0-10	10YR 2/2	FSL	GR	FR	
10-24	7.5YR 4/6	LS	GR	FR	c/d 2.5YR 3/6
24-31	5YR 2.5/1	CS	PL(Ortstein)	FI	c/d 2.5YR 3/2 & 2.5Y 6/2
31-40	7.5YR 4/6	LVFS	WSBK	FR	c/d 7.5YR 4/6
40-52	5Y 6/1	GLFS	WSBK	FR	

Notes: Somewhat Poorly Drained/ Ortstein at 24 inches. Manganese and iron nodules.

ESHWT: 10" Water: 50" Roots: 24" Ledge: >52"

Soil Series: 913 Sudbury fine sandy loam HSG/SG: C/5 Termination: 52"

Recorded By: Cynthia M Balcius CSS#84 Witness:

Test Pit 2:

Depth	Soil	Texture	Color	Moisture	Other
0-7	10YR 2/1	FSL	GR	FR	
7-19	5YR 5/6	GSL	GR	FR	
19-28	7.5YR 4/4	FSL	GR	FR	c/d 5YR 4/6
28-45	10YR 4/4	GLCS	GR	FR	c/d 5YR 3/3

Notes: Inclusion in SWPD Map UNIT

ESHWT: 19" Water: None Roots: 25" Ledge: >45"

Soil Series: 118 Sudbury fine sandy loam HSG/SG: B/3 Termination: 45"

Recorded By: Cynthia M Balcius CSS#84 Witness:

Test Pit 3:

Depth	Soil	Texture	Color	Moisture	Other
0-4	10YR 3/2	FSL	GR	FR	
4-20	7.5YR 4/6	GLS	SG	LO	
20-30	10YR 4/4	GCS	SG	LO	
30-36	2.5Y 5/4	CS	SG	LO	
36-40	2.5Y 3/3	CS	SG	LO	
40-58	2.5Y 4/3	Cobbly GCS	SG	LO	
58-66	2.5Y 5/4	CS	SG	LO	
66-72	5Y 5/2	VFS	WGR	VFR	c/d 5YR 4/6

Notes: 4" Old buried A at 36-40. Stratified coarse sand/sand at 55 inches plus. ED

ESHWT: 66" Water: None Roots: 14" Ledge: >72"

Soil Series: 12 Hinckley loamy sand HSG/SG: A/1 Termination: 72"

Recorded By: Cynthia M Balcius CSS#84 Witness:

Test Pit 4:

Depth	Soil	Texture	Color	Moisture	Other
0-6	10YR 3/2	FSL	GR	FR	
6-10	7.5YR 4/4	LS	WGR	VFR	
10-24	10YR 5/4	LS	WGR	VFR	
24-42	2.5Y 5/4	S	WGR	VFR	
42-52	2.5Y 5/3	CS	SG	LO	c/d 10YR 4/6
52-65	5Y 5/2	LFS	PL	FI	

Notes: Outwash over a pan. Pan at 52". ED above pan

ESHWT: 42" Water: None Roots: 10" Ledge: >65"

Soil Series: 12 Hinckley loamy sand HSG/SG: A/1 Termination: 65"

Recorded By: Cynthia M Balcius CSS#84 Witness:

Test Pit 5:

Depth	Soil	Texture	Color	Moisture	Other
0-6	10YR 3/2	FSL	GR	FR	
6-16	7.5YR 4/4	LS	WGR	VFR	
16-43	2.5Y 5/3	CS	SG	LO	
43-57	5Y 6/3	FS	WGR	VFR	C/D 10YR4/6
57-65	5Y 5/2	LFS	PL	FI	

Notes: Outwash over pan. Pan at 57"

ESHWT: 43" Water: > 65" Roots: 24" Ledge: >65"

Soil Series: 12 Hinckley loamy sand HSG/SG: A/1 Termination: 65"

Recorded By: Cynthia M Balcius CSS#84 Witness:

Test Pit 6:

Depth	Soil	Texture	Color	Moisture	Other
0-7	10YR 3/2	FSL	GR	FR	
7-15	7.5YR 4/4	LS	GR	FR	
15-34	2.5Y 5/3	CS	SG	LO	
34-43	5Y 6/3	FS	WGR	VFR	c/d 10YR 4/6
43-60	5Y 5/2	LFS	PL	FI	

Notes: Sandy Pan/Restrictive Layer at 43"

ESHWT: 34" Water: None Roots: 20" Ledge: >60"

Soil Series: 118 Sudbury fine sandy loam HSG/SG: B/3 Termination: 60"

Recorded By: Cynthia M Balcius CSS#84 Witness:

Test Pit 7:

Depth	Soil	Texture	Color	Moisture	Other
0-6	7.5YR 3/1	GLS	WGR	VFR	
6-12	5YR 4/3	GS	SG	LO	
12-28	2.5Y 6/3	CS	SG	LO	
28-40	5Y 6/2	S	M	LO	
40-65	5Y 5/3	CS	SG	LO	
65-70	5Y 5/3	CS	SG	LO	c/d 10YR 5/6

Notes: Excessively Drained

ESHWT: 65" Water: None Roots: 12" Ledge: >70"

Soil Series: 12 Hinckley loamy sand HSG/SG: A/1 Termination: 70"

Recorded By: Cynthia M Balcius CSS#84 Witness:

Test Pit 8(Probe):

Depth	Soil	Texture	Color	Moisture	Other

Notes: Sandy glacial till/silt caps on rocks and >25% rock fragments and cobbles. Well Drained

ESHWT: >72" Water: None Roots: 24" Ledge: >72"

Soil Series: 42 Canton fine sandy loam HSG/SG: A/1 Termination: 72"

Recorded By: Cynthia M Balcius CSS#84 Witness:

TP #9
LOGGED BY GPC
PERC TEST @ 20"
DATE: 2-9-2024
PERC RATE: 2 MIN./INCH
IMPERVIOUS LAYER: NONE
WATER ENCOUNTERED: 72"

0"	FOREST MAT
8"	2.5YR 4/4, GRANULAR, FRIABLE LOAMY SAND, ROOTS
24"	2.5YR 6/4, GRANULAR, FRIABLE, GRAVELLY SAND, FEW ROOTS
36"	7.5YR 4/6, GRANULAR, FRIABLE, FINE SAND, MASSIVE
60" SHWT	10YR 5/1, FIRM, SAND, W/ REDOX FEATURES
72" BOTTOM OF HOLE	

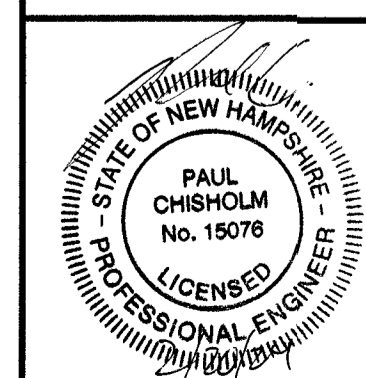
TP #10
LOGGED BY GPC
PERC TEST @ 20"
DATE: 2-9-2024
PERC RATE: 2 MIN./INCH
IMPERVIOUS LAYER: NONE
WATER ENCOUNTERED: 72"

0"	FOREST MAT
8"	2.5YR 4/4, GRANULAR, FRIABLE LOAMY SAND, ROOTS
24"	2.5YR 6/4, GRANULAR, FRIABLE, GRAVELLY SAND, FEW ROOTS
36"	7.5YR 4/6, GRANULAR, FRIABLE, FINE SAND, MASSIVE
60" SHWT	10YR 5/1, FIRM, SAND, W/ REDOX FEATURES
72" BOTTOM OF HOLE	

TEST PIT LOGS
GEMINI VALVE
MAP 28 LOT 4-3
2 OTTER COURT
RAYMOND, NEW HAMPSHIRE
ROCKINGHAM COUNTY

OWNER/APPLICANT:
PARKER & HARPER COMPANIES, INC.
2 OTTER COURT
RAYMOND, N.H. 03077
BK. 2523 PG. 1660

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10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881



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PROJECT NO: 22-0110-2 SHEET 15 OF 15