

# 868 ROUTE 302, LLC. MIXED USE

## WINDHAM, MAINE

**PREPARED BY:**

CIVIL ENGINEER/SURVEYOR:  
TERRADYN CONSULTANTS, LLC  
41 CAMPUS DR. SUITE 301  
NEW GLOUCESTER, MAINE 04260  
(207) 926-5111

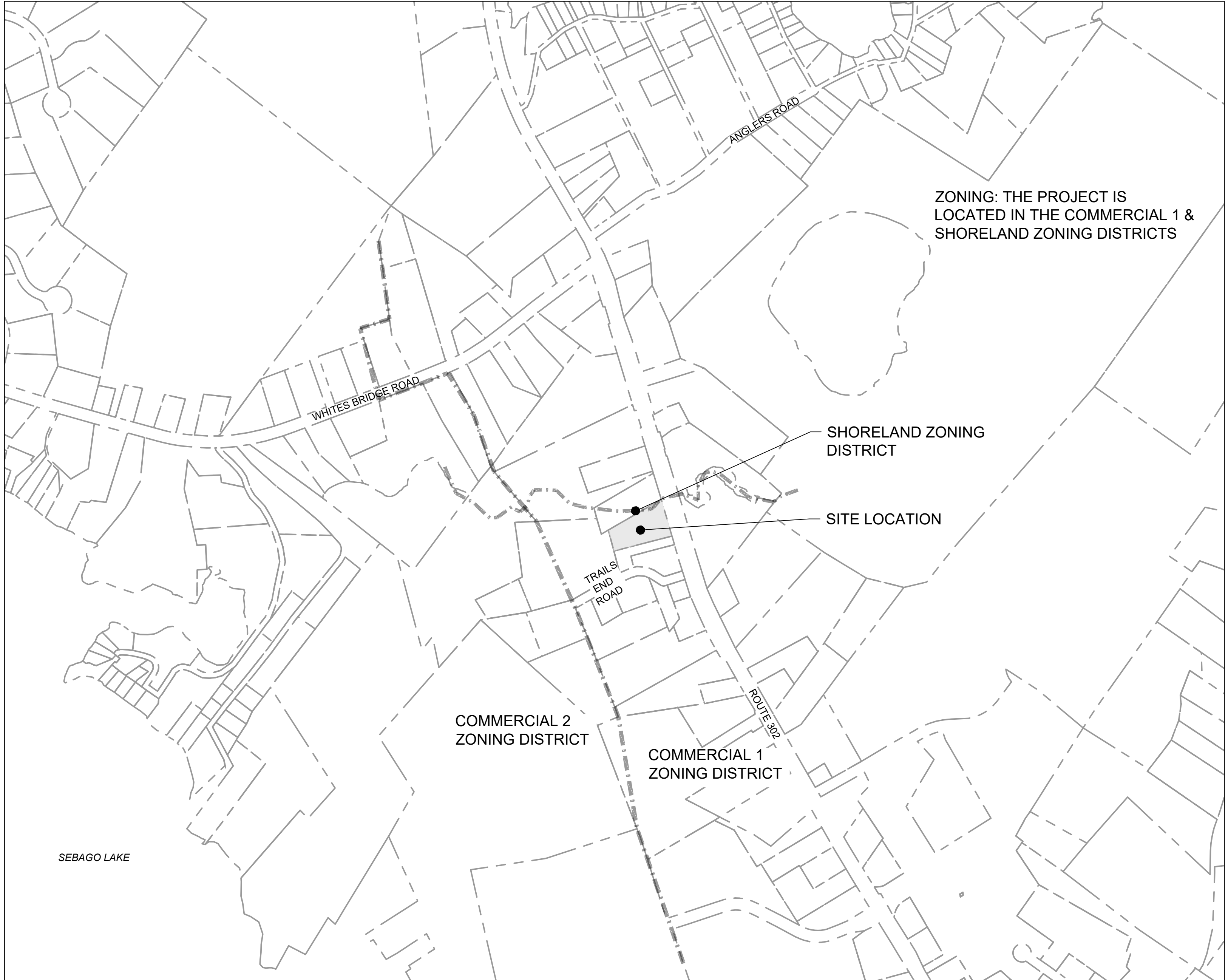
WETLANDS & SOIL SURVEY:  
BASSWOOD ENVIRONMENTAL LLC.  
32 BRENTWOOD ROAD  
CAPE ELIZABETH, MAINE 04107  
(207) 518-8442

**APPLICANT/OWNER:**

868 302 LLC  
1020 RIVER ROAD  
WINDHAM, MAINE 04062

**PROJECT PARCEL SITE**

TOWN OF WINDHAM TAX ASSESSOR'S MAP & LOT NUMBERS  
MAP 71 LOT 50-E



**LOCATION MAP**

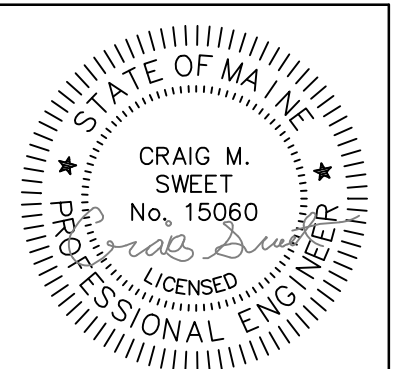
1" = 400'

**SHEET INDEX**

C-0.0	COVER SHEET & LOCATION MAP
S-1.0	EXISTING CONDITIONS SURVEY
C-1.0	DEMOLITION PLAN
C-2.0	SITE LAYOUT PLAN
C-3.0	GRADING PLAN
C-4.0	EROSION & SEDIMENTATION CONTROL PLAN
C-4.1	SITE DETAILS

**LEGEND**

EXISTING	DESCRIPTION	PROPOSED
---	RECORD PROPERTY LINE/R.O.W.	---
---	ABUTTER PROPERTY LINE/R.O.W.	---
---	BUFFER LINE	---
---	SETBACK LINE	---
---	EASEMENT LINE	---
---	CENTERLINE	---
---	FLOOD ZONE	---
▲	SURVEY CONTROL POINT	▲
---	ZONE LINE	---
■	MONUMENT (AS NOTED)	■
○	IRON PIPE/REBAR (AS NOTED)	○
○	DRILLHOLE	○
+	STREET / SITE SIGN	+
---	BUILDING	---
---	BUILDING OVERHANG	---
---	EDGE OF PAVEMENT	---
---	CURBING	---
---	EDGE OF GRAVEL	---
---	EDGE OF CONCRETE	---
○	CHAIN LINK FENCE	○
□	STOCKADE FENCE	□
---	STONE WALL	---
---	WOODEN GUARD RAIL	---
---	METAL GUARD RAIL	---
---	EDGE OF WATER	---
---	TREE LINE	---
---	STREAM	---
---	WETLAND AREA	---
+	TEST PIT	+
---	MINOR CONTOUR LINE	---
---	MAJOR CONTOUR LINE	---
x	SPOT GRADE	x
SD	STORM DRAIN	SD
UD	UNDER DRAIN	UD
□	CATCH BASIN	□
○	DRAINAGE MANHOLE	○
S	SANITARY SEWER	S
FM	FORCE MAIN	FM
○	SEWER MANHOLE	○
W	WATER LINE	W
W	WATER GATE VALVE	W
+	HYDRANT	+
+	WATER SHUT OFF	+
W	WATER MANHOLE	W
OHU	OVERHEAD UTILITY	OHU
OHE	OVERHEAD ELECTRIC	OHE
OHT	OVERHEAD TELEPHONE	OHT
UGU	UNDERGROUND UTILITY	UGU
UGE	UNDERGROUND ELECTRIC	UGE
UGT	UNDERGROUND TELEPHONE	UGT
+	TRANSFORMER	+
+	LIGHT POLE	+
+	UTILITY POLE	+
+	GUY WIRE	+
+	ELECTRIC METER	+
+	HVAC UNIT	+
○	ELECTRICAL MANHOLE	○
○	TELEPHONE MANHOLE	○
G	GAS LINE	G
+	GAS METER	+
+	GAS VALVE	+
+	GAS MANHOLE	+
---	RIPRAP	---
---	SILT FENCE	---
---	FILTER BARRIER	---
---	MULCH BERM	---
---	SILT BARRIER	---



DATE: 04/01/2024

NO.	DATE	REVISIONS
2	04/01/2024	RESPONSE TO TOWN COMMENTS
1	3/04/2024	FINAL SITE PLAN SUBMITTAL

ADDRESS: 41 CAMPUS DRIVE, SUITE 301  
NEW GLOUCESTER, ME 04260  
PHONE: (207) 926-5111  
WEB SITE: www.terradynconsultants.com



PERMIT DRAWING  
NOT FOR CONSTRUCTION

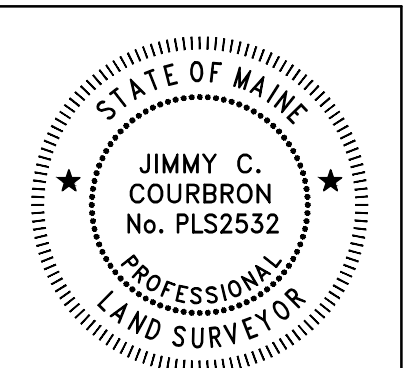
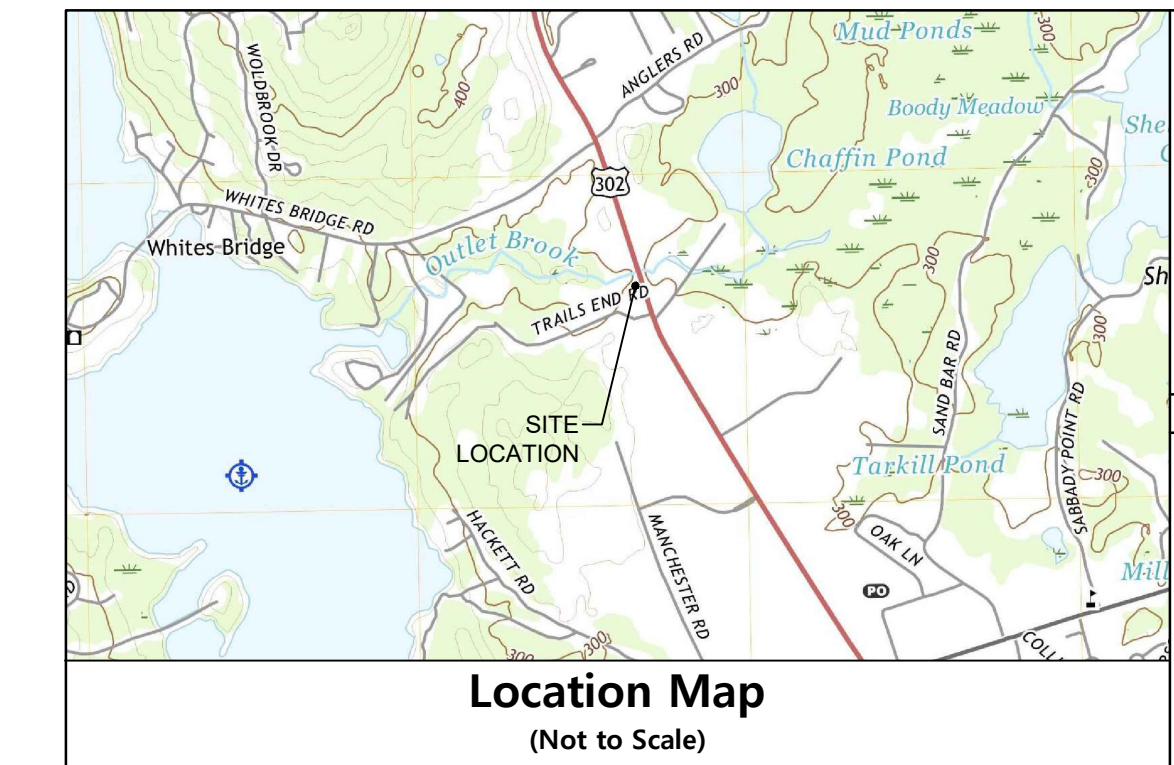
PROJECT: 868 ROUTE 302, LLC. MIXED USE  
SHEET TITLE: COVER SHEET & LOCATION MAP  
CLIENT: 868 302, LLC.  
1020 RIVER ROAD  
WINDHAM, MAINE 04062  
DATE: 2/20/2024  
SCALE: 1"=400'  
JOB NO.: 22-155  
SHEET: C-0.0

C:\ODD\Terradyn\Consultants\Project Folders - Documents\2022 Jobs\22-155 Lewis Windham\CA\DP\Permitting\22-155 C.dwg

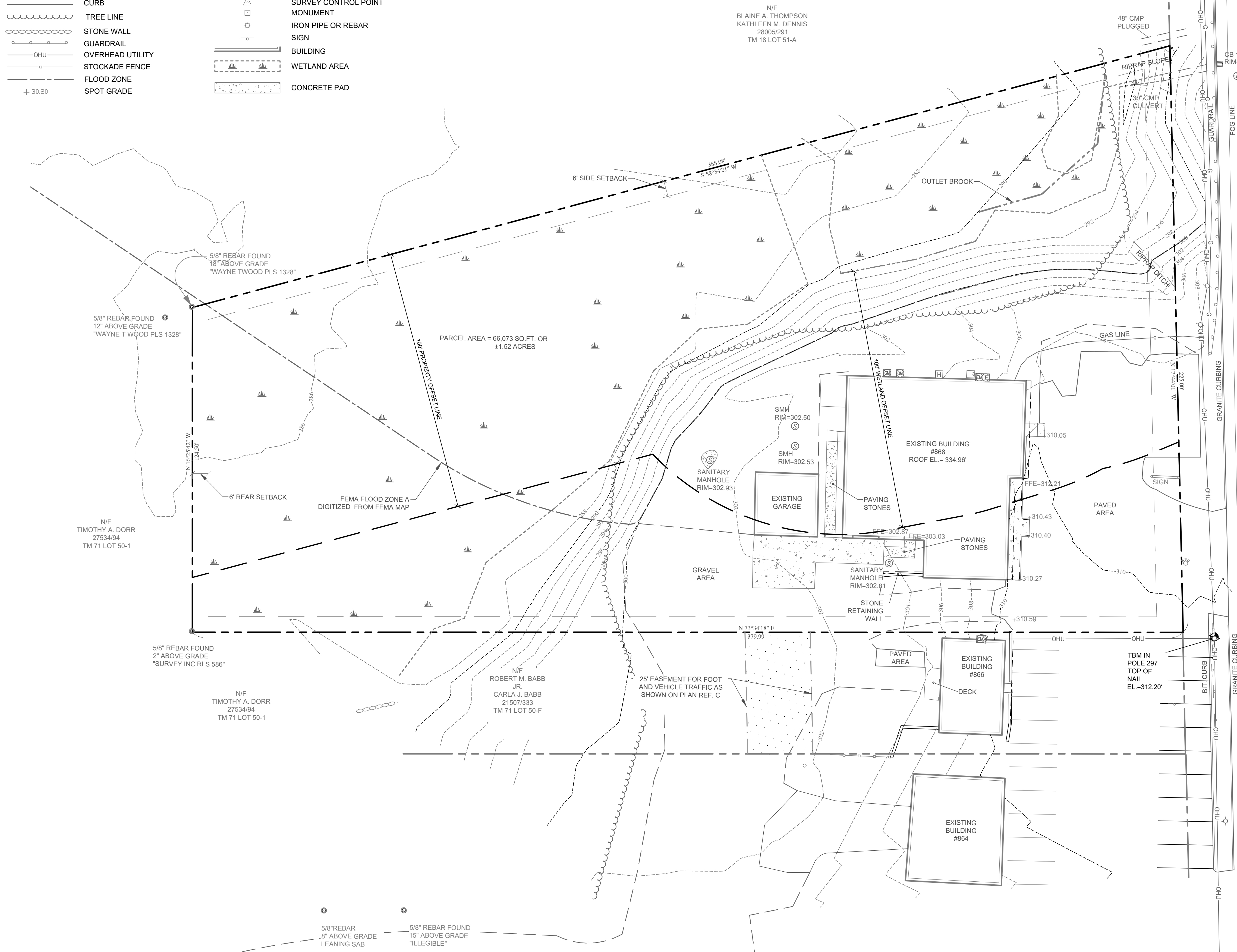


**LEGEND**

	EXISTING PROPERTY LINE		HVAC
	LOCUS PROPERTY LINE		ELECTRIC METER
	SETBACK LINE		ELECTRICAL MANHOLE
	EASEMENT		GAS METER
	MINOR CONTOUR		GATE VALVE
	MAJOR CONTOUR		HYDRANT
	WATER LINE		UTILITY POLE
	GAS LINE		CATCH BASIN
	EDGE OF PAVEMENT		DRAIN MANHOLE
	EDGE OF GRAVEL		SEWER MANHOLE
	CURB		SEWER MANHOLE
	TREE LINE		SURVEY CONTROL POINT
	STONE WALL		MONUMENT
	GUARDRAIL		IRON PIPE OR REBAR
	OVERHEAD UTILITY		SIGN
	STOCKADE FENCE		BUILDING
	FLOOD ZONE		WETLAND AREA
	SPOT GRADE		CONCRETE PAD



DATE: 3/04/2024

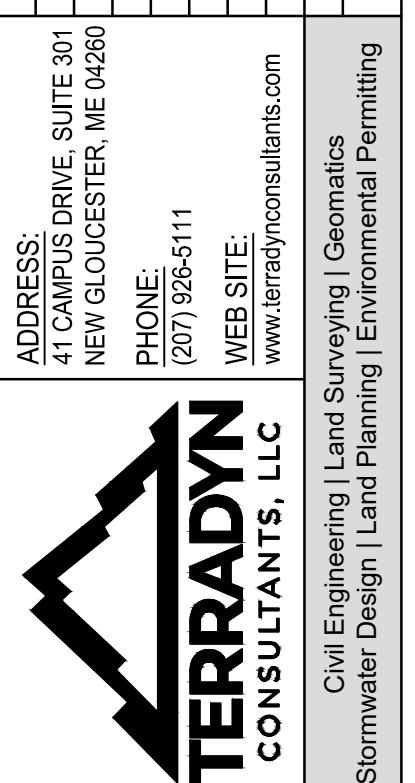


**GENERAL NOTES**

- This plan does not depict a Boundary Survey. The purpose of this plan is to depict the results of an existing conditions survey of the subject parcel.
- All Book and Page numbers refer to the Cumberland County Registry of Deeds, unless otherwise noted.
- The record owner of the subject parcel is 868 302 LLC, by deed dated October 15 2020 and recorded in Book 37323, Page167.
- The subject parcel is shown on the Town of Windham Tax Map71 as Lot 50-E and is located in the Commercial 1 & Shoreland Zoning Districts.
- Space and bulk standards for the Commercial 1 District as of the date of this plan are as follows:  
 Min. Lot Size: None  
 Min. Frontage: 100 ft.  
 Front Setback: On Route 302 10 ft. to 20 ft. All other streets 0 ft. to 20 ft.  
 Building Accessory: Principal Building Setback Plus 20' min.  
 Dwelling, two family: Route 35, 115 and 302 are 300 ft.  
  
 Min. Side Setback: 6 ft.  
 Min. Rear Setback: 6 ft.  
 Max. Building Height: 75 ft.
- Total area of the subject parcel is 1.52 acres.
- Boundary information shown hereon is based solely on upon plan reference 8A, TerradyN Consultants, LLC, has not made an independent investigation as to the trueness or accuracy of the referenced surveys.
- Plan References:  
 A. Plan of property in Windham Maine for the estate of Charles A. Dorr dated January 1991 by Survey Inc. recorded in plan book 189 page 16.  
 B. Easement Deed recorded in Book 21507 page 333. Septic system installation and Access Right Of Way.  
 C. Book 6870 Page 160
- Plan orientation is Grid North, Maine State Plane Coordinate System, West Zone 1802-NAD83. Elevations depicted hereon are NAVD83, based on dual-frequency GPS observations.
- A portion of the subject parcel is located within Zone A, a Special Flood Hazard Area Without Base Flood Elevation (BFE), as delineated on the Flood Insurance Rate Map for the Town of Windham, Cumberland County, Community-Panel Number 230189 0015B, having an Effective Date of September 2, 1981 and letter of map amendments (LOMA) of nearby properties within the same watershed as referenced below: 01-01-0472A, 02-01-1066 A, 02-01-1370A, 07-01-0260A, 12-01-1989A, 14-01-0275A, 14-010802A. The flood data also includes updated data from LOMA done for 868 Route 302 Property 20-1-1163A. The remainder of the subject parcel is located within Zone A1, Areas of 100 Year Flood Hazard.
- A wetland delineation was performed on this project site by Basswood Environmental on January 5th, 2024. This wetlands delineation conforms to the standards and methods outlined in the 1987 Wetland Delineation Manual and Northeast Regional Supplement authored and published by the U.S. Army Corps of Engineers. All wetland flags were located using Global Positioning System (GPS) technology capable of decimeter accuracy.
- The depth, size, location, existence or nonexistence of underground utilities and/or structures were not investigated as part of this survey. Utilities depicted hereon may not necessarily represent all existing utilities. Owners, contractors, and/or designers need to contact Dig-Safe Systems, Inc. (CALL 811) and field verify existing utilities prior to digging or breaking ground.

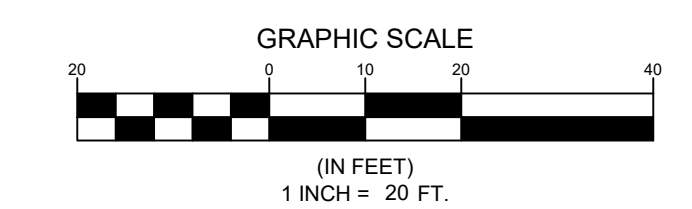
NO.	DATE	REVISIONS
1	3/04/2024	FINAL SITE PLAN SUBMITTAL

ADDRESS: 41 CAMPUS DRIVE, SUITE 301  
 NEW GLOUCESTER, ME 04260  
 PHONE: (207) 926-5111  
 WEB SITE: www.terradyncn.com



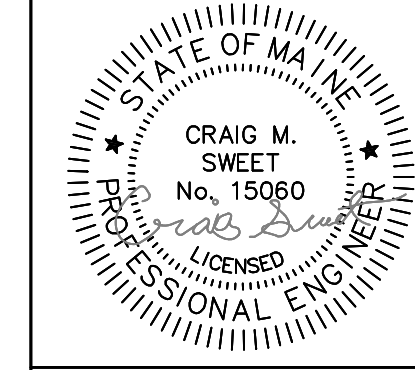
PERMIT DRAWING  
 NOT FOR CONSTRUCTION

PROJECT:	868 ROUTE 302, LLC, MIXED USE
SHEET TITLE:	EXISTING CONDITIONS PLAN
OWNER OF RECORD:	868 302, LLC.
DATE:	2/13/2024
SCALE:	1"=20'
JOB NO.:	22-155
SHEET:	S-1.0



C:\ODI\TerradyN\Consultants\Project\Folders - Documents\2022 Jobs\22-155 Lewis Windham\GIS\Survey\22-155EC.dwg





DATE: 04/01/2024

NO.	DATE	REVISIONS
1	04/01/2024	RESPONSE TO TOWN COMMENTS
2	04/01/2024	FINAL SITE PLAN SUBMITTAL

NO.	DATE	REVISIONS
1	04/01/2024	RESPONSE TO TOWN COMMENTS
2	04/01/2024	FINAL SITE PLAN SUBMITTAL

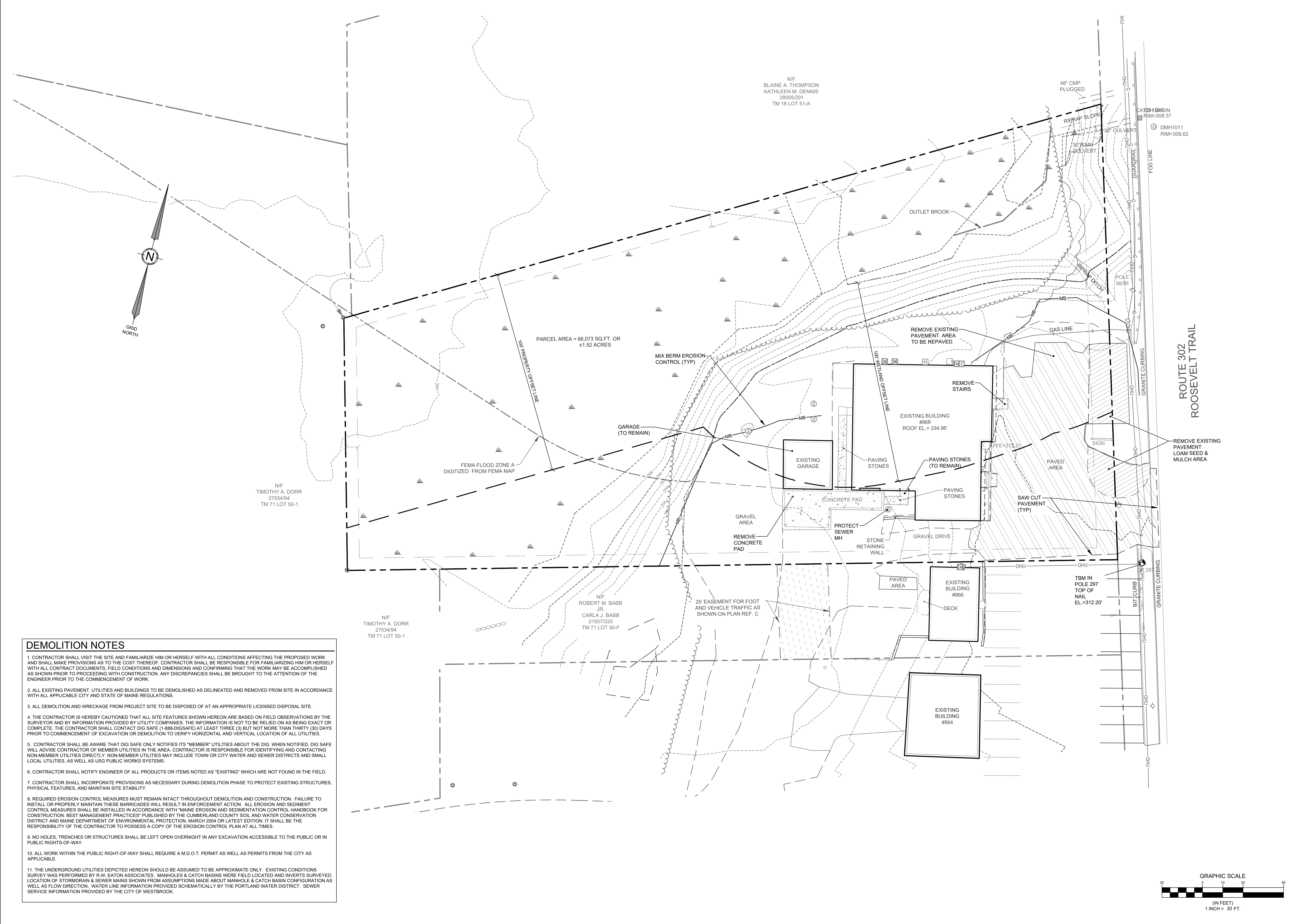
ADDRESS: 41 CAMPUS DRIVE, SUITE 301  
NEW GLOUCESTER, ME 04260  
PHONE: (207) 926-5111  
WEB SITE: www.terraodyn.com



PERMIT DRAWING  
NOT FOR CONSTRUCTION

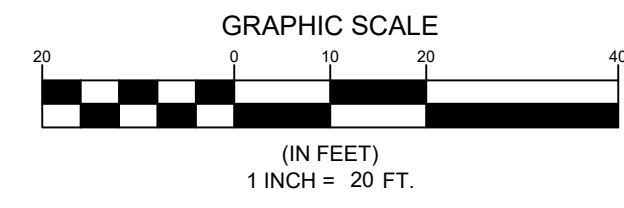
PROJECT: 868 ROUTE 302, LLC, MIXED USE  
868 ROOSEVELT TRAIL, WINDHAM, MAINE  
SHEET TITLE: DEMOLITION PLAN  
CLIENT: 868 302 LLC  
100 RIVER ROAD  
WINDHAM, MAINE 04062

DATE: 2/20/2024  
SCALE: 1"=20'  
JOB NO: 22-155  
SHEET: C-1.0



**DEMOLITION NOTES**

- CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- ALL EXISTING PAVEMENT, UTILITIES AND BUILDINGS TO BE DEMOLISHED AS DELINEATED AND REMOVED FROM SITE IN ACCORDANCE WITH ALL APPLICABLE CITY AND STATE OF MAINE REGULATIONS.
- ALL DEMOLITION AND WRECKAGE FROM PROJECT SITE TO BE DISPOSED OF AT AN APPROPRIATE LICENSED DISPOSAL SITE.
- THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (1-888-DIGSAFE) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.
- CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES, AS WELL AS USG PUBLIC WORKS SYSTEMS.
- CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.
- CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY DURING DEMOLITION PHASE TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY.
- REQUIRED EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT DEMOLITION AND CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN THESE BARRICADES WILL RESULT IN ENFORCEMENT ACTION. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2004 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
- NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
- ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A M.D.O.T. PERMIT AS WELL AS PERMITS FROM THE CITY AS APPLICABLE.
- THE UNDERGROUND UTILITIES DEPICTED HEREON SHOULD BE ASSUMED TO BE APPROXIMATE ONLY. EXISTING CONDITIONS SURVEY WAS PERFORMED BY R.W. EATON ASSOCIATES. MANHOLES & CATCH BASINS WERE FIELD LOCATED AND INVERTS SURVEYED. LOCATION OF STORMDRAIN & SEWER MAINS SHOWN FROM ASSUMPTIONS MADE ABOUT MANHOLE & CATCH BASIN CONFIGURATION AS WELL AS FLOW DIRECTION. WATER LINE INFORMATION PROVIDED SCHEMATICALLY BY THE PORTLAND WATER DISTRICT. SEWER SERVICE INFORMATION PROVIDED BY THE CITY OF WESTBROOK.





**GENERAL NOTES:**

1. THE RECORD OWNER OF THE PARCEL IS 868 302 LLC BY DEED RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 37323 PAGE 167.
2. THE PROPERTY IS SHOWN AS LOT 50-E ON THE TOWN OF WINDHAM TAX MAP 71 AND IS LOCATED IN COMMERCIAL 1 & STREAM PROTECTION DISTRICTS.
3. THE TOTAL AREA OF PARCEL=1.52 AC.

**DIMENSIONAL STANDARDS:**

MIN. LOT SIZE:	NONE
STREET FRONTAGE:	100 FT. MIN.
FRONT SETBACK:	ON ROUTE 302: 10 FT. TO 20 FT. ALL OTHER STREETS: 0 FT. TO 20 FT.
BUILDING PRINCIPAL:	ON ROUTE 302: 10 FT. TO 20 FT. ALL OTHER STREETS: 0 FT. TO 20 FT.
BUILDING ACCESSORY:	PRINCIPAL BUILDING SETBACK PLUS 20' MIN.
DWELLING, TWO FAMILY:	ROUTE 35, 115 AND 302: 300 FT.
SIDE SETBACK:	6 FT. MIN.
REAR SETBACK:	6 FT. MIN.
BUILDING HEIGHT:	75 FT. MAX.
NET RESIDENTIAL DENSITY:	NONE.

**RAIN GARDEN PLAN LIST**

KEY	COMMON & BOTANICAL NAME	SIZE	ROOTS	QTY.	NOTES
AA	SUMMERSWEET CLETHRRA ALNIFOLA	#3	CONT.	4	
BB	WILD GERANIUM GREANIUM MACULATUM	----	CONT.	10	
CC	CARDINAL FLOWER LOBELIA CARDINALIS	----	CONT.	10	

USE MAINE DEP "EROSION CONTROL MIX" ON ENTIRE PLANTED AREA 4" DEEP.

**CONDITIONS OF APPROVAL:**

1. APPROVAL IS DEPENDENT UPON AND LIMITED TO THE PROPOSALS AND PLANS CONTAINED IN THE APPLICATION DATED DECEMBER 18, 2023, REVISED ON FEBRUARY 20, 2024, MARCH 4, 2024, APRIL 1, 2024 AS AMENDED TBD AND SUPPORTING DOCUMENTS AND ORAL REPRESENTATIONS SUBMITTED AND AFFIRMED BY THE APPLICANT, AND CONDITIONS, IF ANY, IMPOSED BY THE PLANNING BOARD. ANY VARIATION FROM SUCH PLANS, PROPOSALS, SUPPORTING DOCUMENTS, AND REPRESENTATIONS IS SUBJECT TO REVIEW AND APPROVAL BY THE PLANNING BOARD OR THE TOWN PLANNER IN ACCORDANCE WITH 120-815 OF THE LAND USE ORDINANCE.
2. IN ACCORDANCE WITH §120-815C(1)(B) OF THE LAND USE ORDINANCE, THE CONSTRUCTION OF IMPROVEMENTS COVERED BY ANY SITE PLAN APPROVAL SHALL BE COMPLETED WITHIN TWO YEARS OF THE DATE UPON WHICH THE PERFORMANCE GUARANTEE IS ACCEPTED BY THE TOWN MANAGER. IF CONSTRUCTION HAS NOT BEEN COMPLETED WITHIN THE SPECIFIED PERIOD, THE TOWN SHALL, AT THE TOWN MANAGER'S DISCRETION, USE THE PERFORMANCE GUARANTEE TO EITHER RECLAIM AND STABILIZE THE SITE OR TO COMPLETE THE IMPROVEMENTS AS SHOWN ON THE APPROVED PLAN.
3. THE DEVELOPMENT IS SUBJECT TO THE NORTH ROUTE 302 ROAD IMPROVEMENTS IMPACT FEE OF \$13,010.10, AS PER ARTICLE 12 IMPACT FEES, THIS FEE SHALL BE COLLECTION UPON THE ISSUANCE OF A BUILDING PERMIT.

**APPROVED: TOWN OF WINDHAM  
PLANNING BOARD**

DATE \_\_\_\_\_

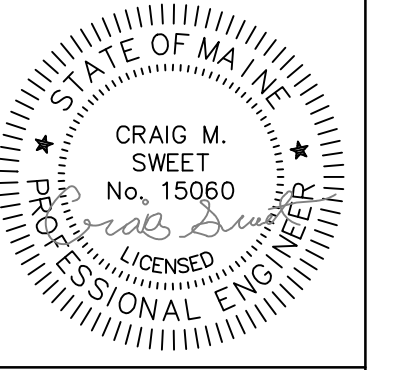
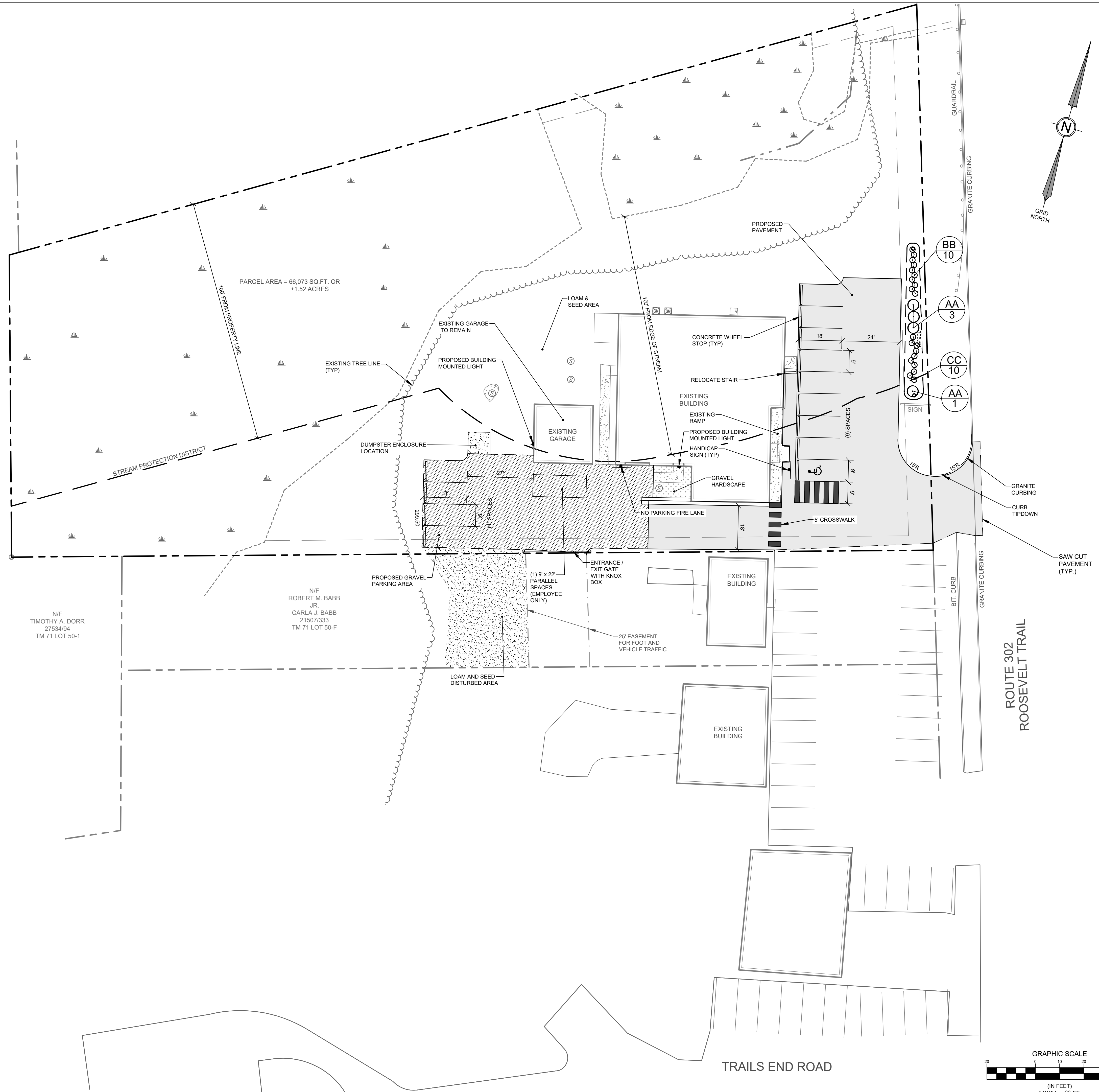
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

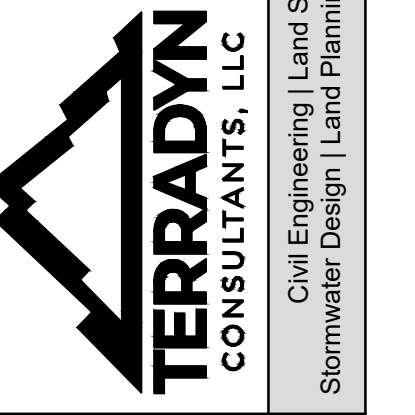


DATE: 04/01/2024

NO.	DATE	REVISIONS
1	04/01/2024	RESPONSE TO TOWN COMMENTS
2	3/04/2024	FINAL SITE PLAN SUBMITTAL

NO.	DATE	REVISIONS
1		
2		

ADDRESS: 41 CAMPUS DRIVE, SUITE 301  
NEW GLOUCESTER, ME 04260  
PHONE: (207) 926-5111  
WEB SITE: www.terradynconsultants.com



PERMIT DRAWING  
NOT FOR CONSTRUCTION

PROJECT: 868 ROUTE 302, LLC, MIXED USE  
868 ROOSEVELT TRAIL, WINDHAM, MAINE  
SHEET TITLE: SITE LAYOUT PLAN  
CLIENT: 868 302, LLC.  
1000 RIVER ROAD  
WINDHAM, MAINE 04062

DATE: 2/20/2024  
SCALE: 1"=20'  
JOB NO: 22-155  
SHEET: C-2.0

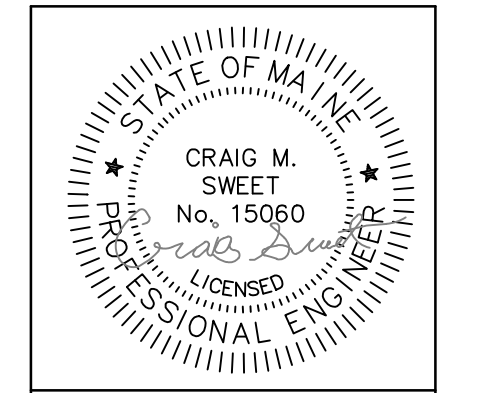
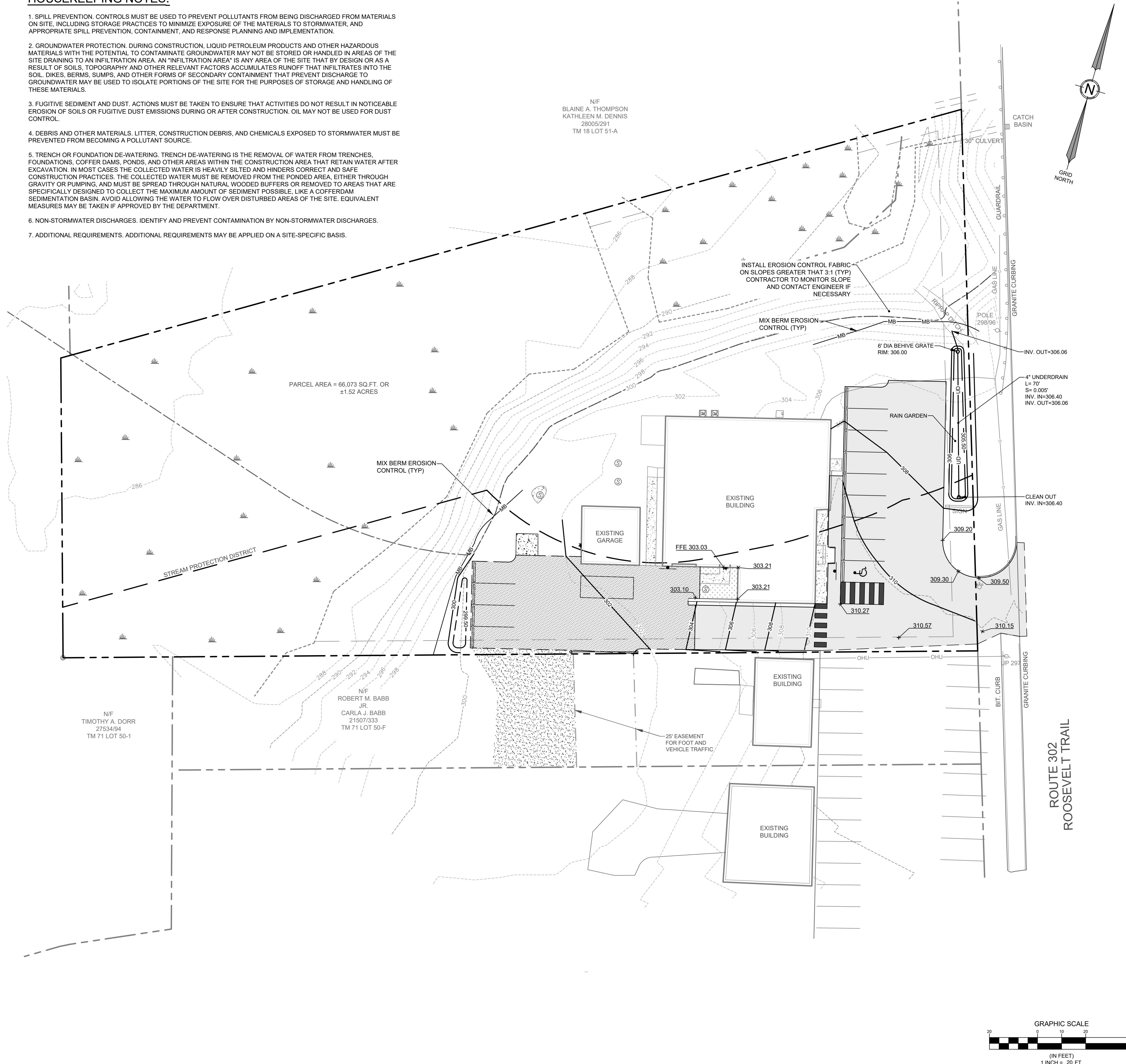
C:\001\Terradyn\Consultants\Project\Folders - Documents\2022 Jobs\22-155 Lewis Windham\GD\Permitting\02-155 B.dwg

**CONSTRUCTION NOTES**

- ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.
- CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.
- INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
- CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.
- CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.
- SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2016 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
- THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (1-888-DIGSAFE) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.
- CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES, AS WELL AS USG PUBLIC WORKS SYSTEMS.
- CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3386-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.
- ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
- ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
- NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
- ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A M.D.O.T. PERMIT AS WELL AS PERMITS FROM THE TOWN AS APPLICABLE.
- THE PROPOSED LIMITS OF CLEARING SHOWN HEREON ARE APPROXIMATE BASED UPON THE PROPOSED LIMITS OF SITE GRADING. THE APPLICANT RESERVES THE RIGHT TO PERFORM NORMAL FOREST MANAGEMENT ACTIVITIES OUTSIDE OF THE CLEARING LIMIT AS SHOWN. TREE REMOVAL OUTSIDE OF THE LIMITS OF CLEARING MAY BE NECESSARY TO REMOVE DEAD OR DYING TREES OR TREE LIMBS. THIS REMOVAL IS DUE TO POTENTIAL SAFETY HAZARDS AND TO PROMOTE PROPER FOREST GROWTH.
- IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.
- THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
- ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.
- WHERE THE TERMS "APPROVED EQUAL", "OTHER APPROVED", "EQUAL TO", "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGMENT OF TERRADYN CONSULTANTS, LLC.
- THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.
- THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.
- THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.
- DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.
- BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION, CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.

**HOUSEKEEPING NOTES:**

- SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
- GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.
- FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.
- DEBRIS AND OTHER MATERIALS. LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
- TRENCH OR FOUNDATION DE-WATERING. TRENCH DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.
- NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES.
- ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.



DATE: 04/01/2024

NO.	DATE	REVISIONS
1	04/01/2024	RESPONSE TO TOWN COMMENTS
2	04/04/2024	FINAL SITE PLAN SUBMITTAL

NO.	DATE	REVISIONS
1	04/01/2024	RESPONSE TO TOWN COMMENTS
2	04/04/2024	FINAL SITE PLAN SUBMITTAL

ADDRESS: 41 CAMPUS DRIVE, SUITE 301  
NEW GLOUCESTER, ME 04260  
PHONE: (207) 936-5111  
WEB SITE: www.terraDyn.com

**TERRADYN CONSULTANTS, LLC**  
Civil Engineering | Land Surveying | Geomatics  
Stormwater Design | Land Planning | Environmental Permitting

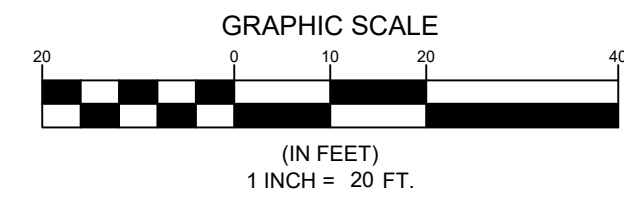
PERMIT DRAWING  
NOT FOR CONSTRUCTION

PROJECT: 868 ROUTE 302, LLC, MIXED USE  
868 ROOSEVELT TRAIL, WINDHAM, MAINE

SHEET TITLE: GRADING PLAN

CLIENT: 868 302, LLC.  
1000 RIVER ROAD  
WINDHAM, MAINE 04062

DATE: 2/20/2024  
SCALE: 1"=20'  
JOB NO: 22-155  
SHEET: C-3.1



C:\ODI\terraDyn\Consultants\Project\Folders - Documents\2022 Jobs\22-155 Lewis Windham\GD\Permitting\22-155 B.dwg



# EROSION AND SEDIMENT CONTROL PLAN

**Pre-Construction Phase**  
A person who conducts, or causes to be conducted, an activity that involves filling, displacing or exposing soil or other earth materials shall take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into a protected natural resource as defined in 38 mrsa § 480-b. Erosion control measures must be in place before the activity begins. Measures must remain in place and functional until the site is permanently stabilized. Adequate and timely temporary and permanent stabilization measures must be taken. The site must be maintained to prevent unreasonable erosion and sedimentation. Minimize disturbed areas and protect natural downgradient buffer areas to the extent practicable.

**BMP Construction Phase**  
A. Sediment barriers. Prior to the beginning of any construction, properly install sediment barriers at the edge of any downgradient disturbed area and adjacent to any drainage channels within the proposed disturbed area. Maintain the sediment barriers until the disturbed area is permanently stabilized.

B. Construction entrance. Prior to any clearing or grubbing, a construction entrance shall be constructed at the intersection with the proposed access drive and the existing roadway to avoid tracking of mud, dust and debris from the site.

C. Riprap. Since riprap is used where erosion potential is high, construction must be sequenced so that the riprap is put in place with the minimum delay. Disturbance of areas where riprap is to be placed should be undertaken only when final preparation and placement of the riprap can follow immediately behind the initial disturbance. Where riprap is used for outlet protection, the riprap should be placed before or in conjunction with the construction of the pipe or channel so that it is in place when the pipe or channel begins to operate. Maintain temporary riprap, such as temporary check dams until the disturbed area is permanently stabilized.

D. Temporary stabilization. Stabilize with temporary seeding, mulch, or other non-erodible cover any exposed soils that will remain unworked for more than 14 days except, stabilize areas within 100 feet of a wetland or waterbody within 7 days or prior to a predicted storm event, whichever comes first. If hay or straw mulch is used, the application rate must be 2 bales (70-90 pounds) per 1000 sf or 1.5 to 2 tons (90-100 bales) per acre to cover 75 to 90% of the ground surface. Hay mulch must be kept moist or anchored to prevent wind blowing. An erosion control blanket or mat shall be used at the base of graded waterways, steep slopes (15% or greater) and on any disturbed soil within 100 feet of lakes, streams and wetlands. Grading shall be planned so as to minimize the length of time between initial soil exposure and final grading. On large projects this should be accomplished by phasing the operation and completing the first phase up to final grading and seeding before starting the second phase, and so on.

E. Vegetated waterway. Upon final grading, the disturbed areas shall be immediately seeded to permanent vegetation and mulched and will not be used as outlets until a dense, vigorous vegetative cover has been obtained. Once soil is exposed for waterway construction, it should be immediately shaped, graded and stabilized. Vegetated waterways need to be stabilized early during the growing season (prior to september 15). If final seeding of waterways is delayed past september 15, emergency provisions such as sod or riprap may be required to stabilize the channel. Waterways should be fully stabilized prior to directing runoff to them.

**Permanent stabilization defined**  
A. Seeded areas. For seeded areas, permanent stabilization means an 90% cover of the disturbed area with mature, healthy plants with no evidence of washing or rilling of the topsoil.

B. Sodded areas. For sodded areas, permanent stabilization means the complete binding of the sod roots into the underlying soil with no slumping of the sod or die-off.

C. Permanent mulch. For mulched areas, permanent mulching means total coverage of the exposed area with an approved mulch material. Erosion control mix may be used as mulch for permanent stabilization according to the approved application rates and limitations.

D. Riprap. For areas stabilized with riprap, permanent stabilization means that slopes stabilized with riprap have an appropriate backing of a well-graded gravel or approved geotextile to prevent soil movement from behind the riprap. Stone must be sized appropriately. It is recommended that angular stone be used.

E. Agricultural use. For construction projects on land used for agricultural purposes (e.g., pipelines across crop land), permanent stabilization may be accomplished by returning the disturbed land to agricultural use.

F. Paved areas. For paved areas, permanent stabilization means the placement of the compacted gravel subbase is completed.

G. Ditches, channels, and swales. For open channels, permanent stabilization means the channel is stabilized with mature vegetation at least three inches in height, with well-graded riprap, or with another non-erosive lining capable of withstanding the anticipated flow velocities and flow depths without reliance on check dams to slow flow. There must be no evidence of slumping of the lining, undercutting of the banks, or down-cutting of the channel.

**General Construction Phase**  
The following erosion control measures shall be followed by the contractor throughout construction of this project:

A. All topsoil shall be collected, stockpiled, seeded with rye at 3 pounds/1,000 sf and mulched, and reused as required. Silt fencing shall be placed down gradient from the stockpiled loam. Stockpile to be located by designation of the owner and inspecting engineer.

B. The inspecting engineer at his/her discretion, may require additional erosion control measures and/or supplemental vegetative provisions to maintain stability of earthworks and finish graded areas. The contractor shall be responsible for providing and installing any supplemental measures as directed by the inspecting engineer. Failure to comply with the engineer's directions will result in discontinuation of construction activities.

C. Erosion control mesh shall be applied in accordance with the plans over all finish seeded areas as specified on the design plans.

D. All graded or disturbed areas including slopes shall be protected during clearing and construction in accordance with the approved erosion and sediment control plan until they are adequately stabilized.

E. All erosion, and sediment control practices and measures shall be constructed, applied and maintained in accordance with the approved erosion and sediment control plan.

F. Areas to be filled shall be cleared, grubbed and stripped of topsoil to remove trees, vegetation, roots or other objectionable materials.

G. Areas shall be scarified to a minimum depth of 3 inches prior to placement of topsoil.

H. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc., shall be compacted in accordance with local requirements or codes.

I. All fills shall be placed and compacted in layers not to exceed 8 inches in thickness.

J. Except for approved landfills or non-structural fills, fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris and other objectionable materials that would interfere with or prevent construction of satisfactory lifts.

K. Frozen material or soft, mucky or highly compressible materials shall not be incorporated into fill slopes or structural fills.

L. Fill shall not be placed on a frozen foundation.

M. Seeps or springs encountered during construction shall be handled appropriately.

N. All graded areas shall be permanently stabilized immediately following finished grading.

O. Remove any temporary control measures, such as silt fence, within 30 days after permanent stabilization is attained. Remove any accumulated sediments and stabilize.

**Permanent vegetation**  
Permanent vegetative cover should be established on disturbed areas where permanent, long lived vegetative cover is needed to stabilize the soil, to reduce damages from sediment and runoff, and to enhance the environment.

**Seedbed preparation**  
A. Grade as feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application and anchoring, and maintenance.

B. Apply limestone and fertilizer according to soil tests such as those offered by the university of maine soil testing laboratory. Soil sample mailers are available from the local cooperative extension service office. If soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 800 pounds per acre or 18.4 pounds per 1,000 square feet using 10-20-20 (N-P2O5-K2O) or equivalent. Apply ground limestone (equivalent to 50% calcium plus magnesium oxide) at a rate of 3 tons per acre (138 lb. Per 1,000 sq. Ft.).

C. Work lime and fertilizer into the soil as nearly as practical to a depth of 4 inches with a disc, spring tooth harrow or other suitable equipment. The final harrowing operation should be on the general contour. Continue tillage until a reasonably uniform, fine seedbed is prepared. All clay or silty soils and coarse sands should be rolled to firm the seedbed wherever feasible. D. Remove from the surface all stones 2 inches or larger in any dimension. Remove all other debris, such as wire, cable, tree roots, concrete, clods, lumps or other unsuitable material.

E. Inspect seedbed just before seeding. If traffic has left the soil compacted, the area must be tilled and firmed as above.

F. Permanent seeding should be made 45 days prior to the first killing frost or as a dormant seeding with mulch after the first killing frost and before snowfall. When crown vetch is seeded in later summer, at least 35% of the seed should be hard seed (uncarried). If seeding cannot be done within the seeding dates, mulch according to the temporary mulching bmp and overwinter stabilization and construction to protect the site and delay seeding until the next recommended seeding period.

G. Following seed bed preparation, swale areas, fill areas and back slopes shall be seeded at a rate of 3 lbs./1,000 s.f. With a mixture of 35% creeping red h. Fescue, 6% red top, 24% kentucky bluegrass, 10% perennial ryegrass, 20% annual ryegrass and 5% white dutch clover.

I. Areas which have been temporarily or permanently seeded shall be mulched immediately following seeding.

J. Areas which cannot be seeded within the growing season shall be mulched for over-winter protection and the area should be seeded at the beginning of the growing season.

**Winter construction phase**  
If an area is not stabilized with temporary or permanent measures by november 15, then the site must be protected with additional stabilization measures.

A. Permanent stabilization consists of at least 90% vegetation, pavement/gravel base or riprap.

B. Do not expose slopes or leave slopes exposed over the winter or for any other extended time of work suspension unless fully protected with mulch.

C. Apply hay mulch at twice the standard rate (150 lbs. Per 1,000 sf). The mulch must be thick enough such that the ground surface will not be visible and must be anchored.

D. Use mulch and mulch netting or an erosion control mulch blanket or all slopes greater than 8 % or other areas exposed to direct wind.

E. Install an erosion control blanket in all drainageways (bottom and sides) with a slope greater than 3 %.

F. See the vegetation measures for more information on seeding dates and types.

G. Winter excavation and earthwork shall be completed so that no more than 1 acre of the site is without stabilization at any one time.

H. An area within 100 feet of a protected natural resource must be protected with a double row of sediment barrier.

I. Temporary mulch must be applied within 7 days of soil exposure or prior to any storm event, but after every workday in areas within 100 feet from a protected natural resource.

J. Areas that have been brought to final grade must be permanently mulched that same day.

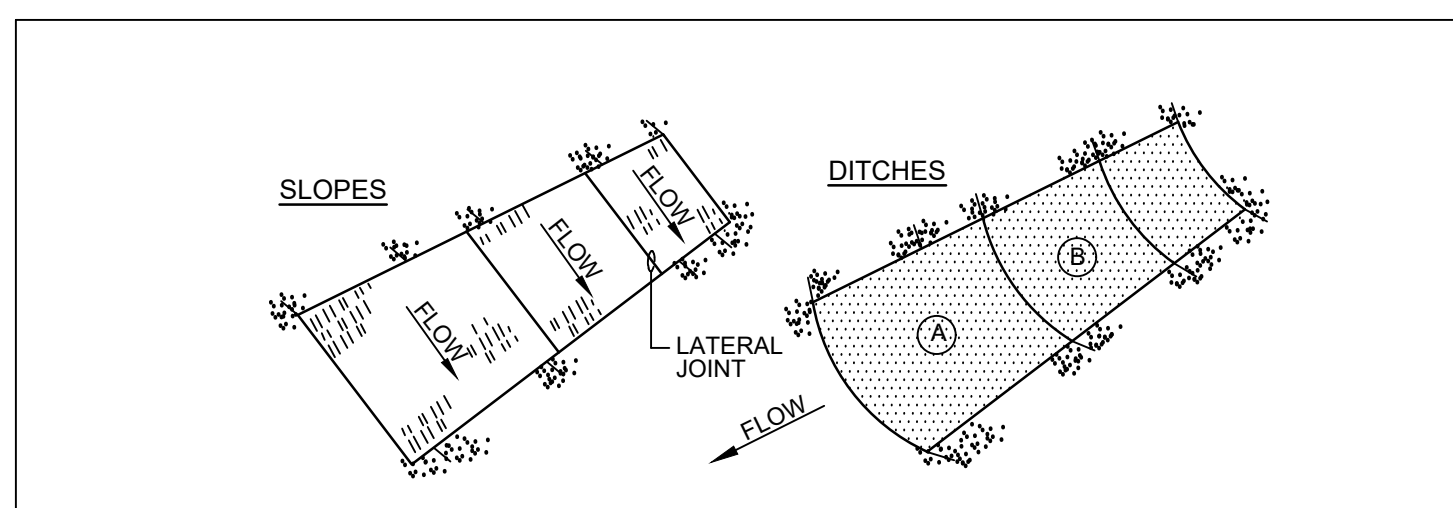
K. If snowfall is greater than 1 inch (fresh or cumulative), the snow shall be removed from the areas due to be seeded and mulched.

L. Loam shall be free of frozen clumps before it is applied.

M. All vegetated ditch lines that have not been stabilized by november 1, or will be worked during the winter construction period, must be stabilized with an appropriate stone lining backed by an appropriate gravel bed or geotextile unless specifically released from this standard by the department.

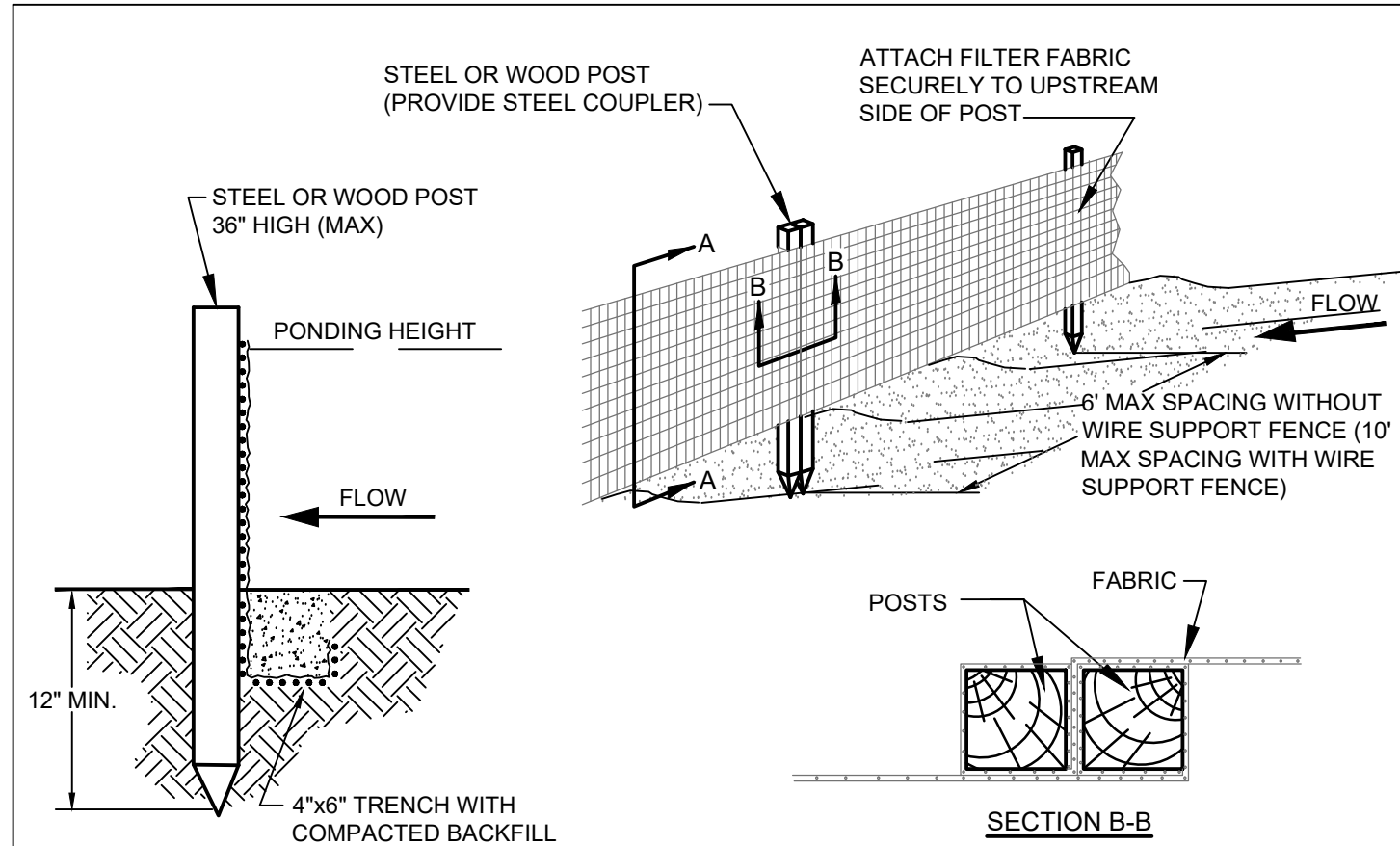
**Maintenance and inspection phase**  
A. Contractor shall inspect disturbed and impervious areas, and erosion and stormwater control measures, areas used for storage that are exposed to precipitation, and locations where vehicles enter or exit the parcel at least once a week and before and after a storm event, prior to completion of permanent stabilization. A person with knowledge of erosion and stormwater must conduct the inspection. This person must be identified in the inspection log. If best management practices (bmps) need to be modified or if additional bmps are necessary, implementation must be completed within 7 calendar days and prior to any storm event (rainfall). All measures must be maintained in effective operating condition until areas are permanently stabilized.

B. A log (report) must be kept summarizing the scope of the inspection, name(s) and qualifications of the personnel making the inspection, the date(s) of the inspection, and major observations relating to operation of erosion and sedimentation controls and pollution prevention measures. Major observations must include: bmps that need to be maintained; location(s) of bmps that failed to operate as designed or proved inadequate for a particular location; and location(s) where additional bmps are needed that did not exist at the time of inspection. Follow-up to correct deficiencies or enhance controls must also be indicated in the log and dated, including what action was taken and when.

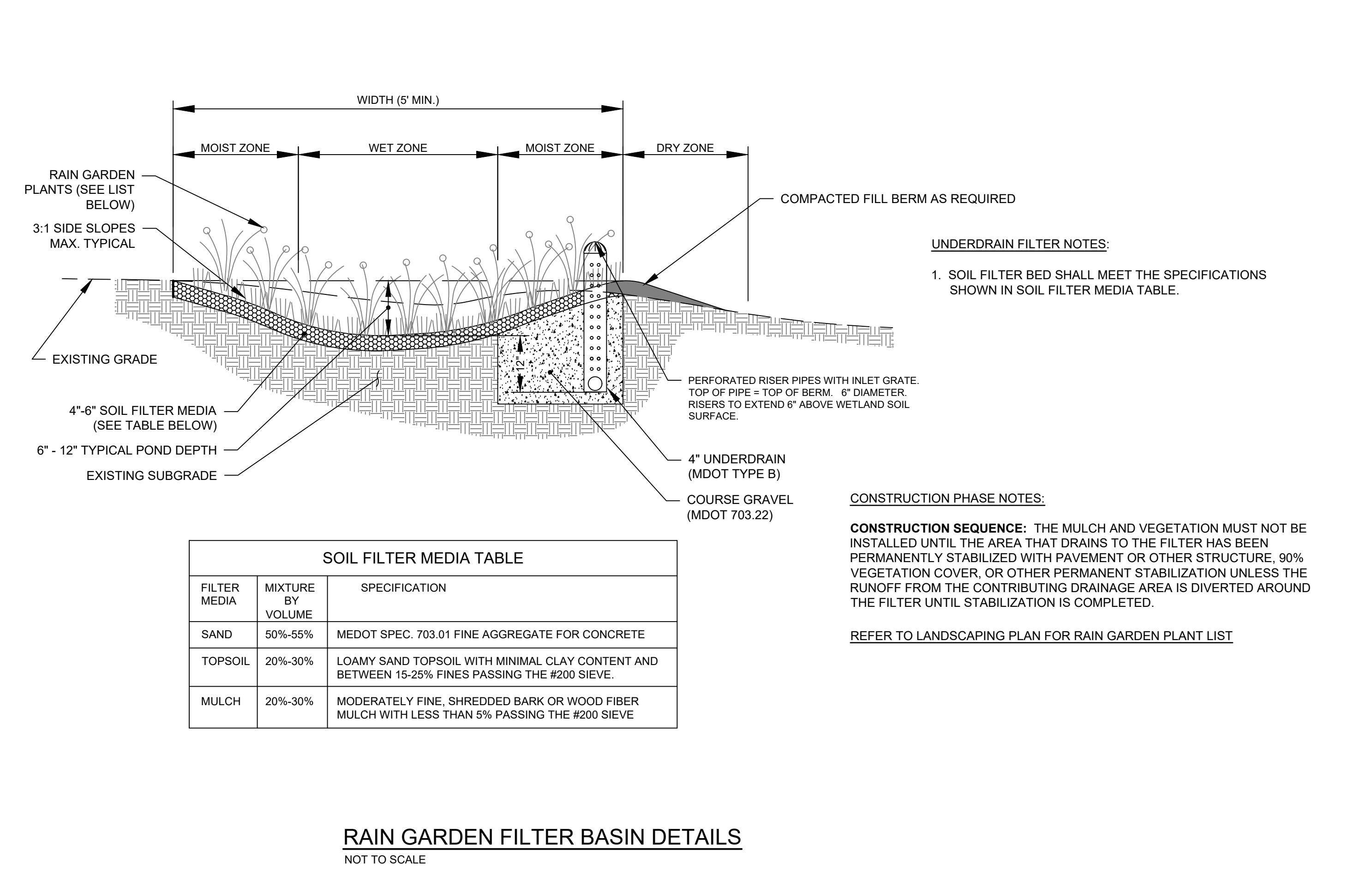


- NOTES:**
1. BURY THE TOP END OF THE MESH MATERIAL IN A 6" TRENCH AND BACKFILL AND TAMP TRENCHING SECURE END WITH STAPLES AT 6" SPACING, 4" DOWN FROM EXPOSED END.
  2. FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED WITH UPPER LAYERS OVERLAPPED 4" AND STAPLED. OVERLAP 8" OVER A.
  3. LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON CENTER.
  4. STAPLE OUTSIDE LATERAL EDGE 2" ON CENTER.
  5. WIRE STAPLES TO BE MIN. OF #11 WIRE, 6" LONG & 1-1/2" WIDE.
  6. USE NORTH AMERICAN GREEN DS 150 (OR APPROVED EQUAL) ON SLOPES BETWEEN 4:1-2:1. USE NORTH AMERICAN GREEN VMAX SC250 PERMANENT TURF REINFORCEMENT MAT (OR APPROVED EQUAL) ON SLOPES 2:1 AND STEEPER.

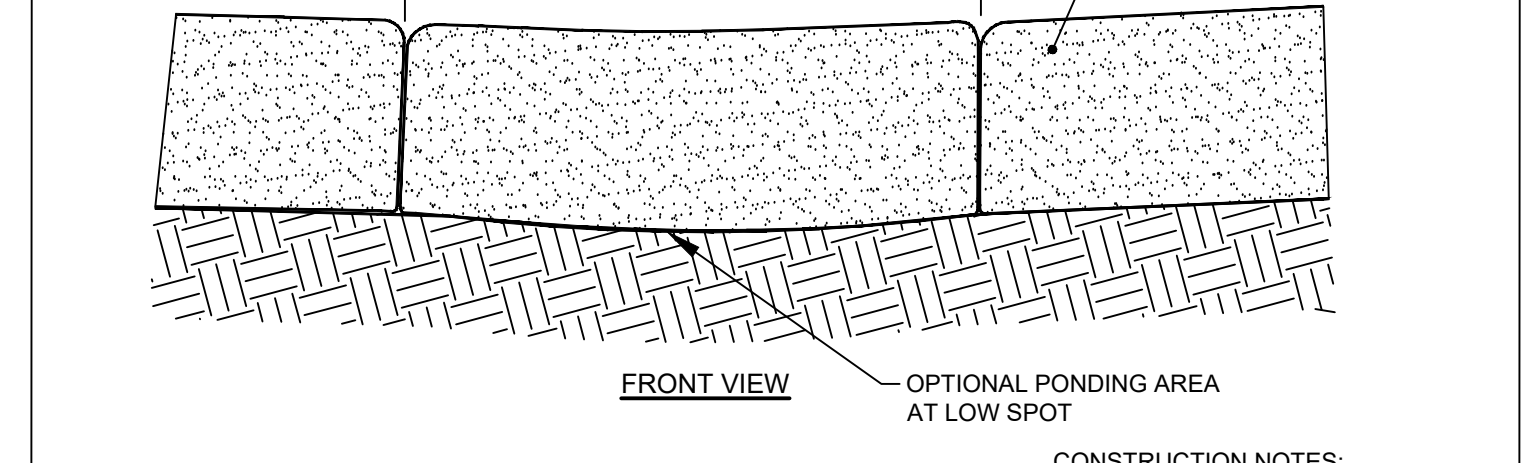
**EROSION CONTROL BLANKET**  
NOT TO SCALE



**SILT FENCE**  
NOT TO SCALE

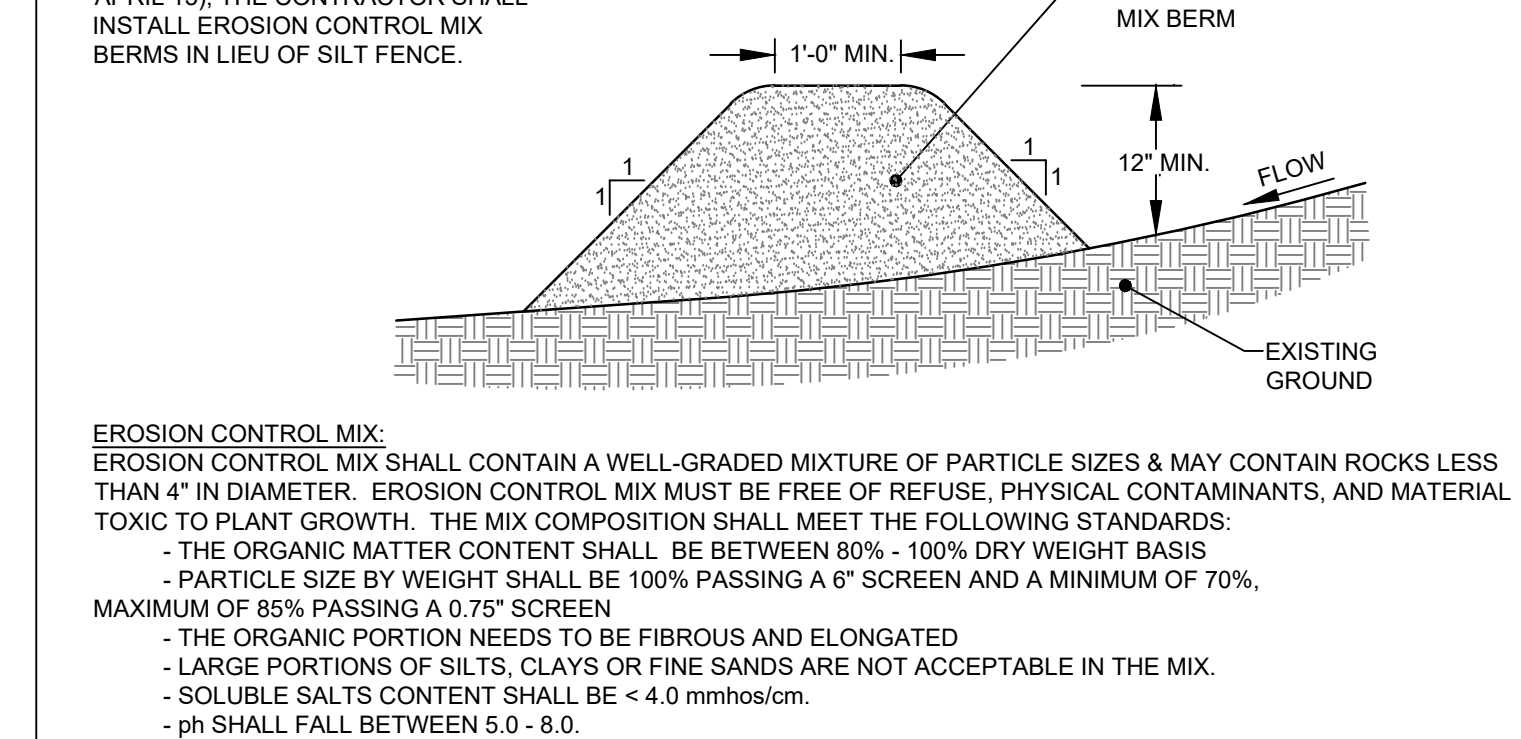


**RAIN GARDEN FILTER BASIN DETAILS**  
NOT TO SCALE

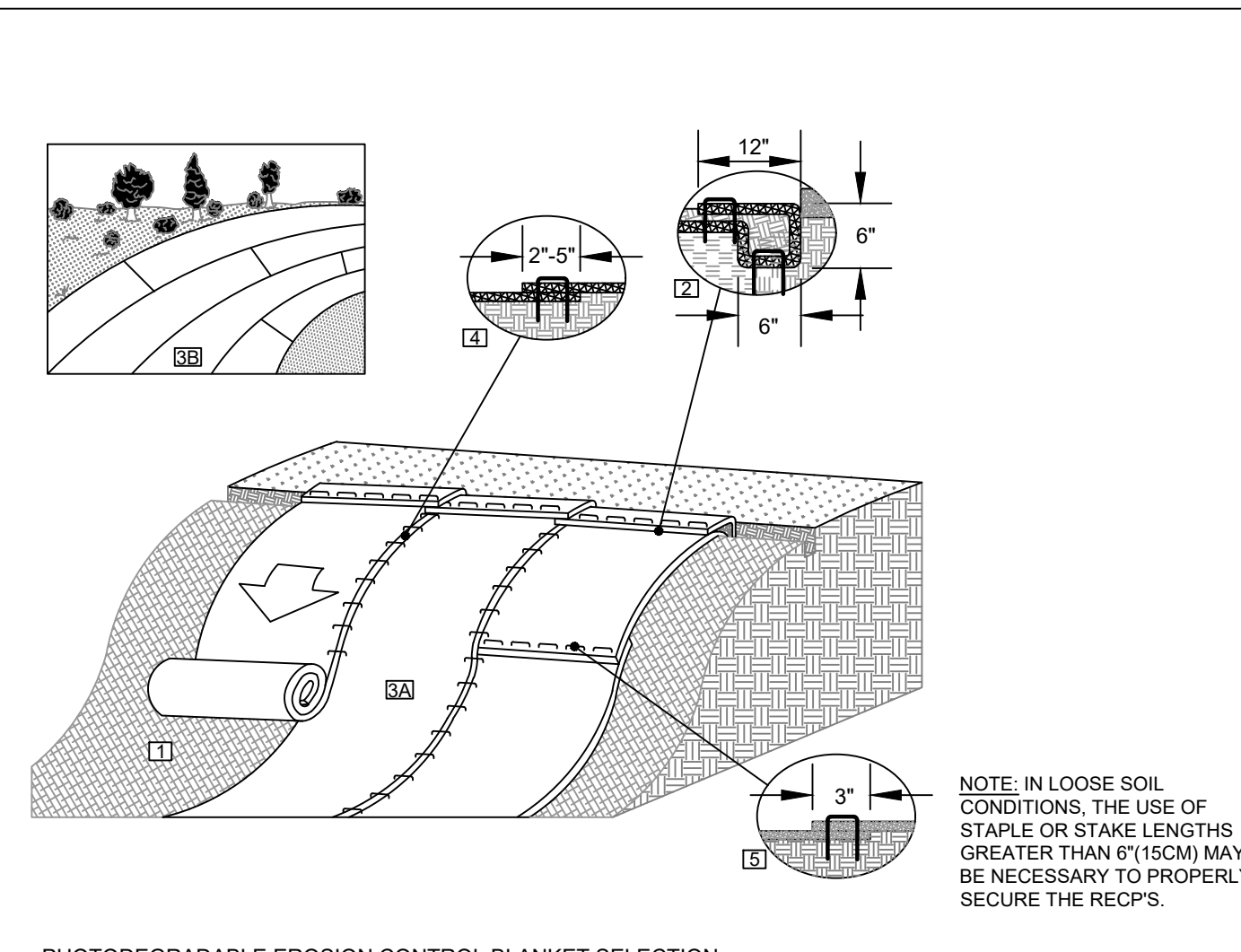


- CONSTRUCTION NOTES:**
1. FULL CONTACT WITH THE GROUND IS CRITICAL TO PREVENT SHORT CIRCUITING UNDER THE TUBE - THE GROUND SURFACE SHOULD BE SMOOTH AND LEVEL. IN WOODED AREAS, PROTRUDING ROOTS AND DEBRIS MAY NEED TO BE REMOVED. IN GRASSED AREAS, THE GRASS NEEDS TO BE EITHER MOVED OR COMPRESSED DOWN.
  2. STAKING MAY BE NECESSARY ON STEEP SLOPES.
  3. INSTALL SEDIMENT BARRIER ALONG THE CONTOUR WITH THE ENDS TURNED UP SLOPE.
  4. UPON FINAL STABILIZATION, THE TUBE CAN BE CUT OPEN AND THE MATERIAL SPREAD OUT ONTO THE GROUND. THE MESH MATERIAL SHOULD BE REMOVED.

**FILTER SOCK**  
NOT TO SCALE

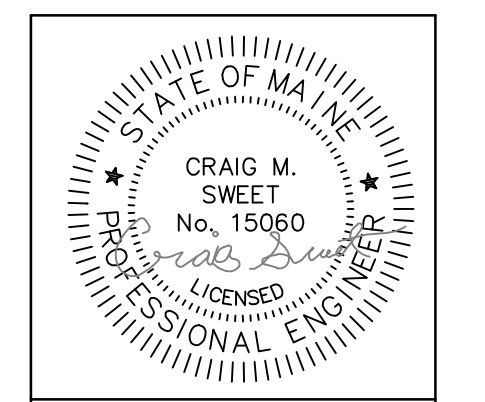


**EROSION CONTROL MIX BERM**  
NOT TO SCALE



- NOTES:**
1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
  2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECPS IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12" PORTION OF RECPS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECPS.
  3. ROLL THE RECPS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
  4. THE EDGES OF PARALLEL RECPS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON THE RECPS TYPE.
  5. CONSECUTIVE RECPS SPLICED DOWN THE SLOPE MUST BE END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECPS WIDTH.

**EROSION CONTROL FABRIC SLOPE INSTALLATION**  
NOT TO SCALE



DATE: 04/01/2024

NO.	DATE	REVISIONS
1	04/01/2024	RESPONSE TO TOWN COMMENTS
2	3/04/2024	FINAL SITE PLAN SUBMITTAL

ADDRESS: 41 CAMPUS DRIVE, SUITE 301  
NEW GLOUCESTER, ME 04260  
PHONE: (207) 926-5111  
WEB SITE: www.terradyn.com  
Civil Engineering | Land Surveying | Geomatics  
Stormwater Design | Land Planning | Environmental Permitting

**TERRADYN CONSULTANTS, LLC**

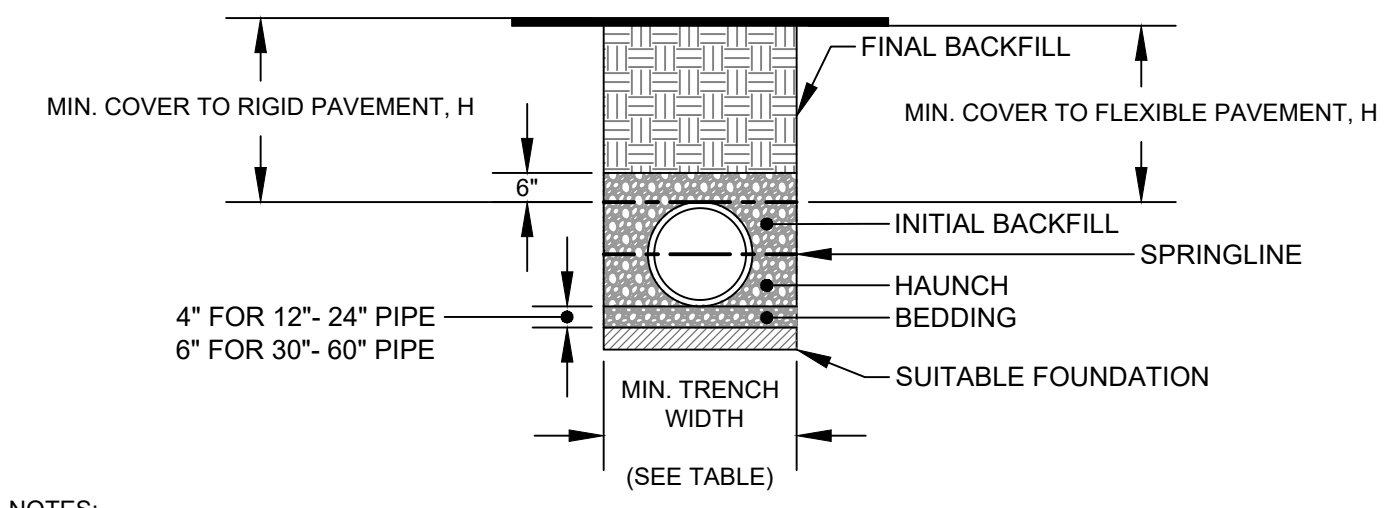
PERMIT DRAWING  
NOT FOR CONSTRUCTION

PROJECT: 868 ROUTE 302, LLC, MIXED USE  
868 ROOSEVELT TRAIL, WINDHAM, MAINE

SHEET TITLE: EROSION & SEDIMENTATION CONTROL PLAN

CLIENT: 868 302, LLC.  
1000 RIVER ROAD  
WINDHAM, MAINE 04092

DATE: 2/20/2024  
SCALE: AS SHOWN  
JOB NO.: 22-155  
SHEET: C-4.0



- NOTES:**
- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION
  - MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
  - FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
  - BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).
  - INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
  - MINIMUM COVER:** MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

**RECOMMENDED MINIMUM TRENCH WIDTHS**

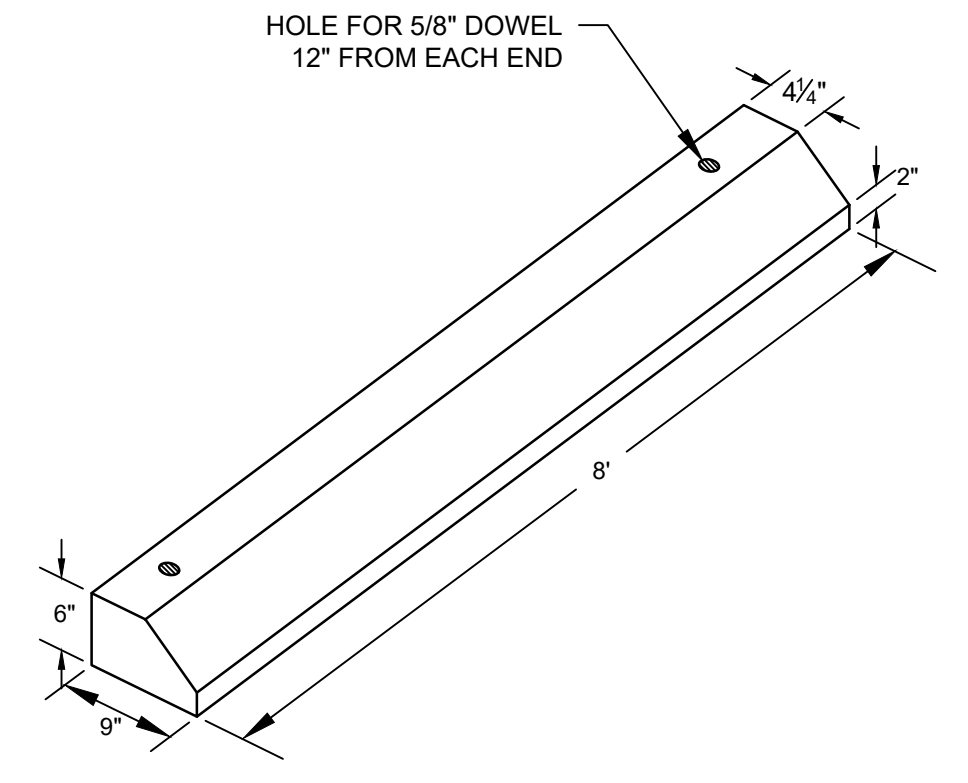
PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

**MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS**

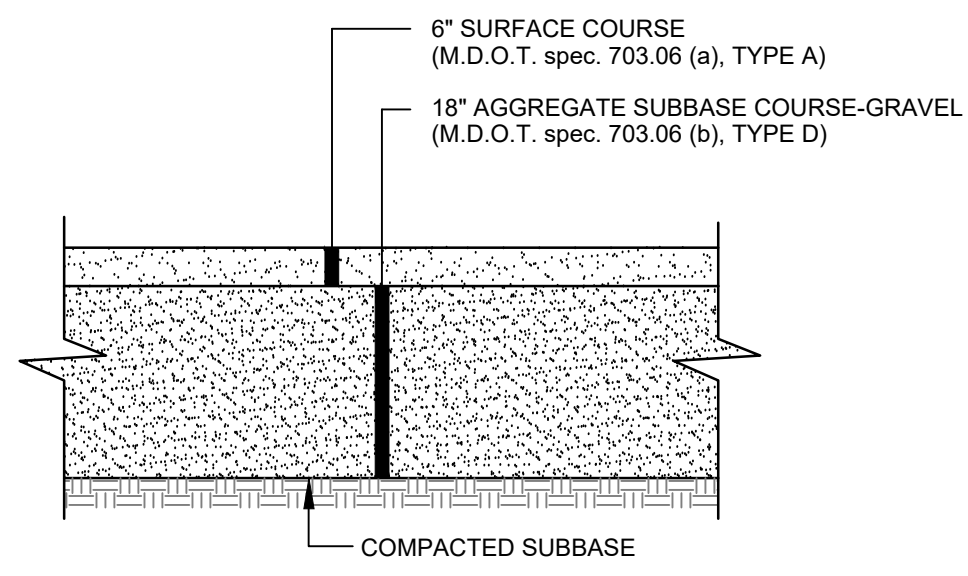
PIPE DIAM.	SURFACE LIVE LOADING CONDITION	
	H-25	HEAVY CONSTRUCTION (75T AXLE LOAD) *
12" - 48"	12"	48"
54" - 60"	24"	60"

\* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

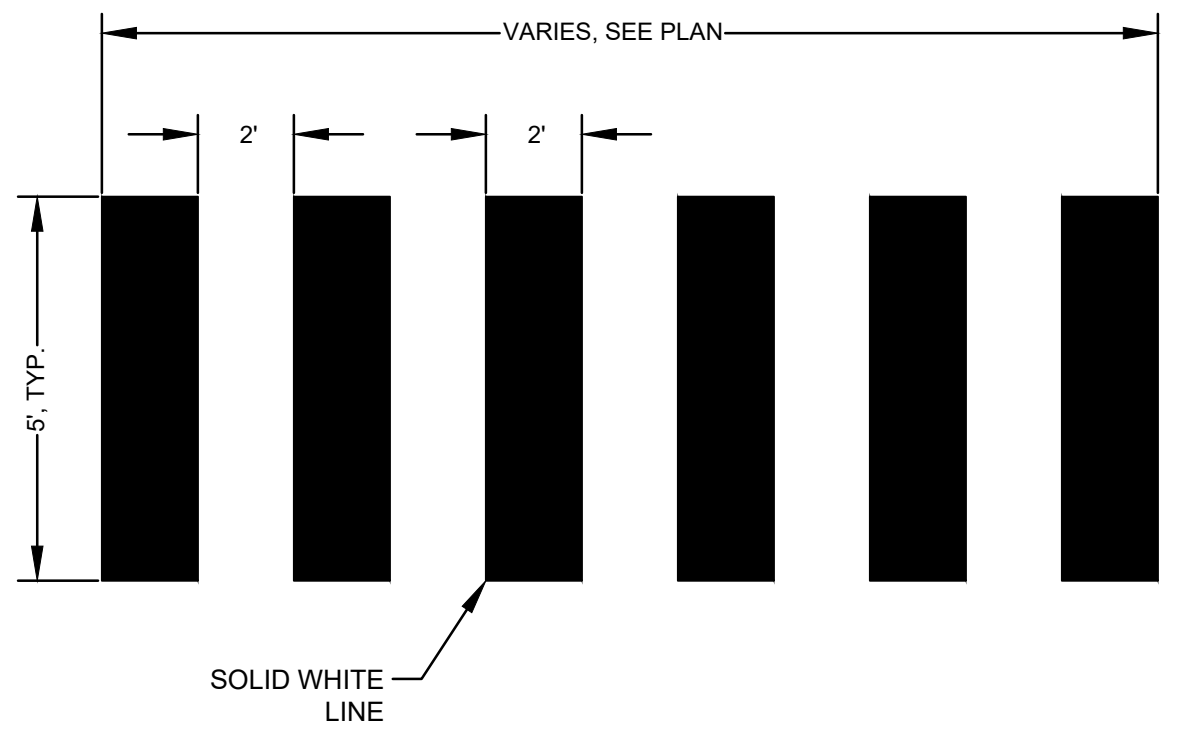
**TYPICAL TRENCH DETAIL**  
NOT TO SCALE



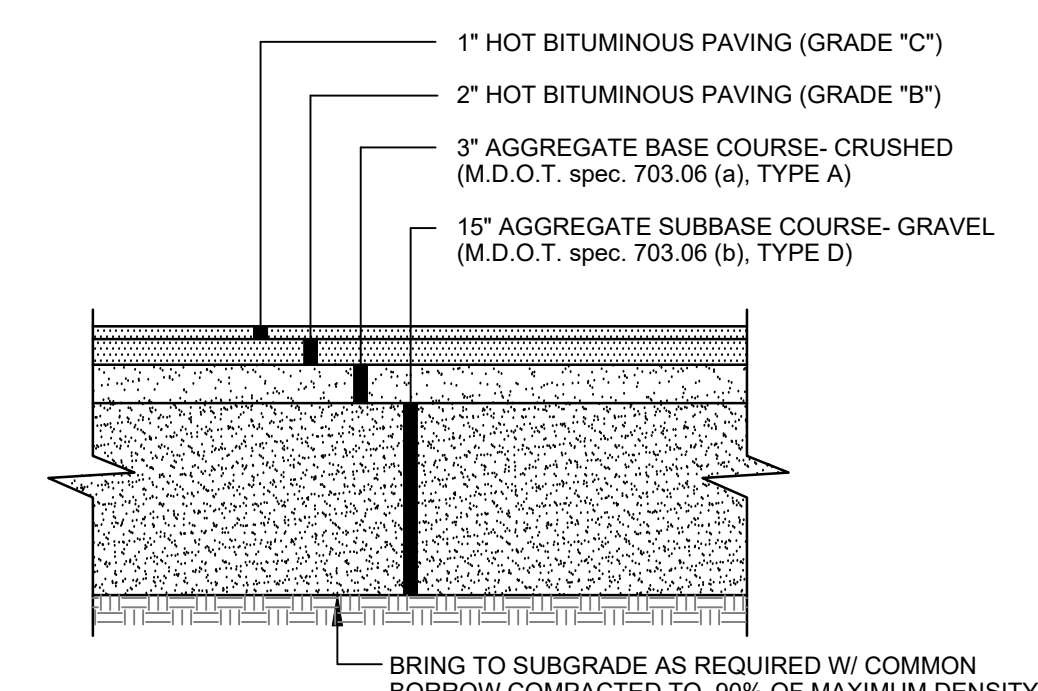
**PRECAST CURB WHEEL STOP**  
NOT TO SCALE



**TYP. GRAVEL PARKING AREA**  
NOT TO SCALE

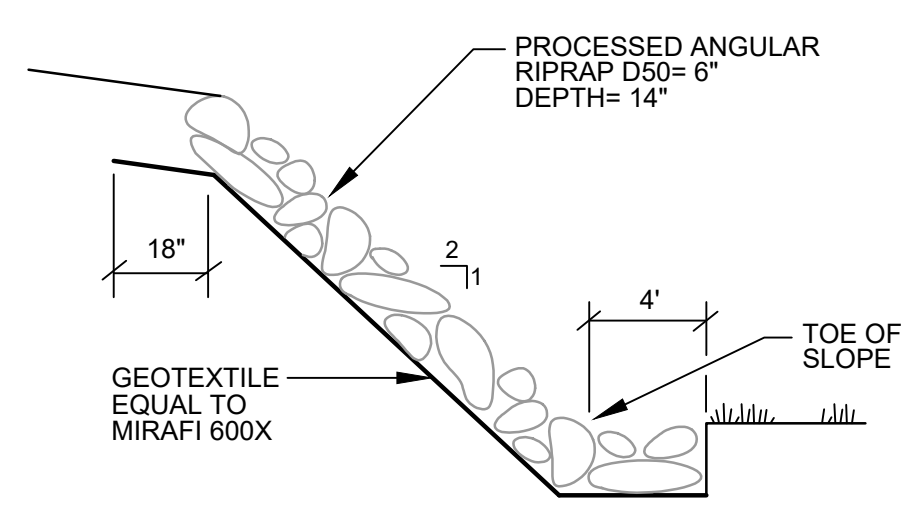


**CROSSWALK STRIPING DETAIL**  
NOT TO SCALE

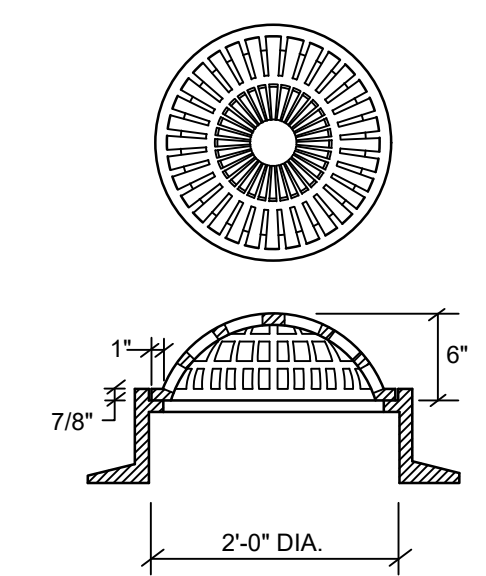


- NOTES:**
- COMPACT GRAVEL SUBBASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
  - CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

**TYP. PAVED PARKING LOT SECTION**  
NOT TO SCALE

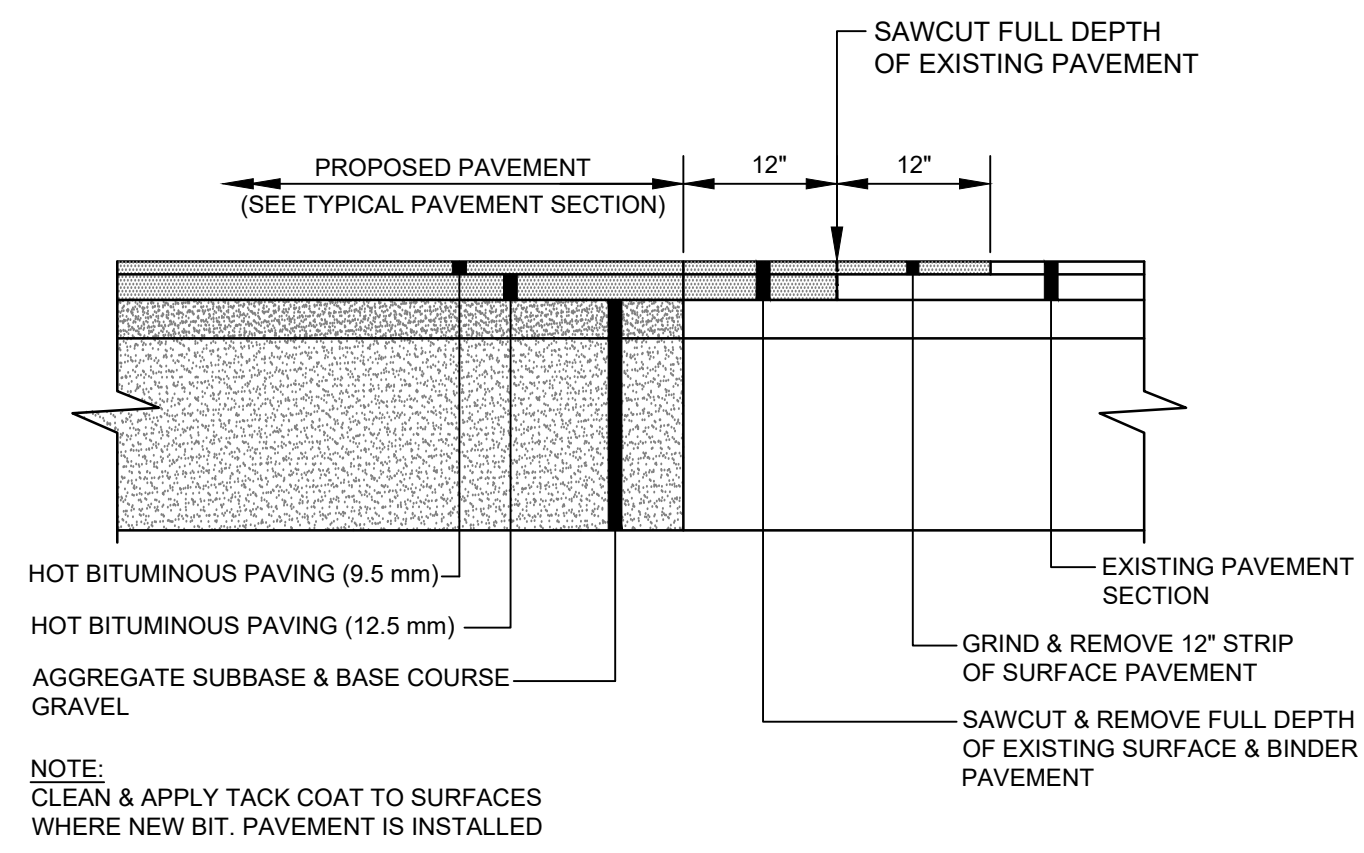


**SIDE SLOPE RIPRAP**  
NOT TO SCALE

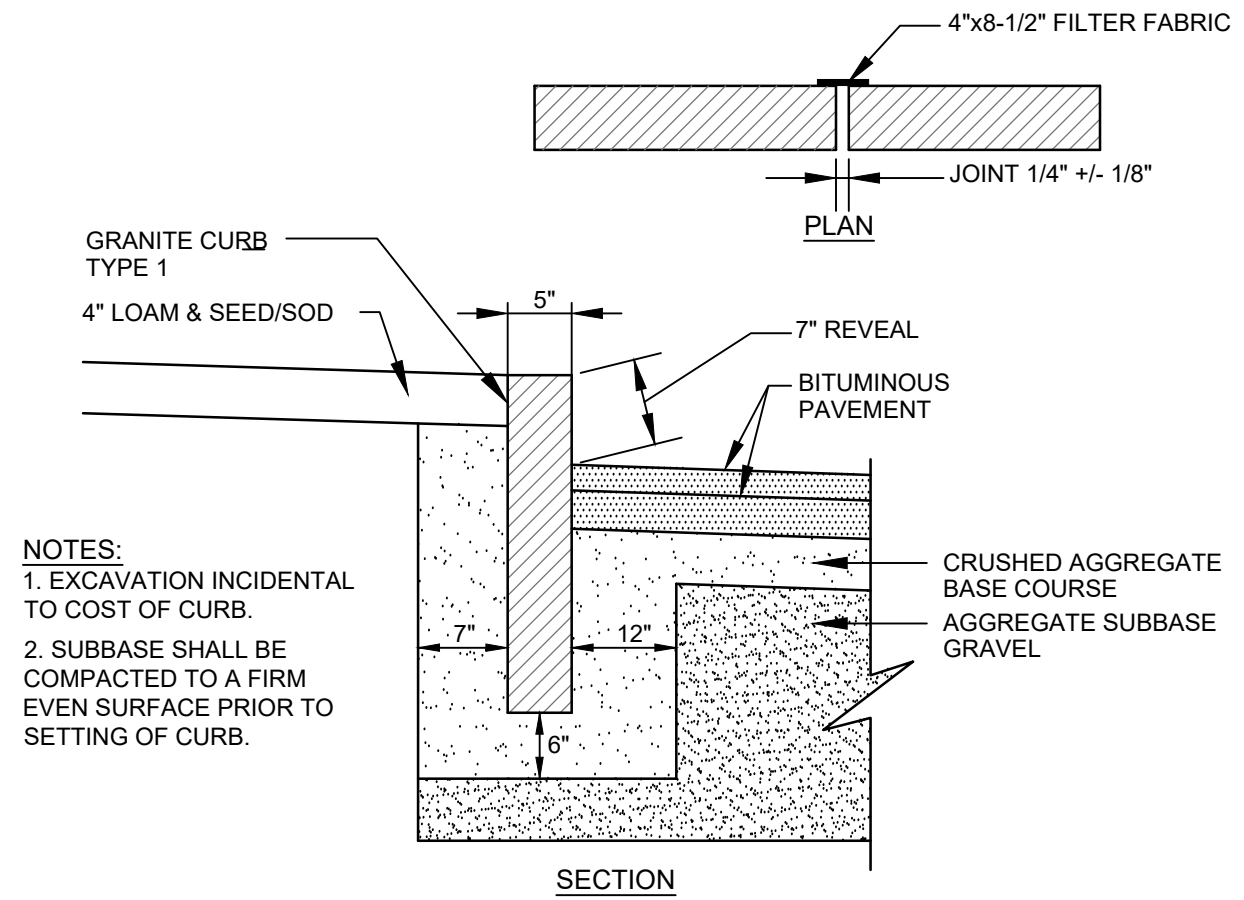


- NOTE:** NEEENAH FOUNDRY #R-4353 OR APPROVED EQUAL

**BEEHIVE GRATE**  
NOT TO SCALE

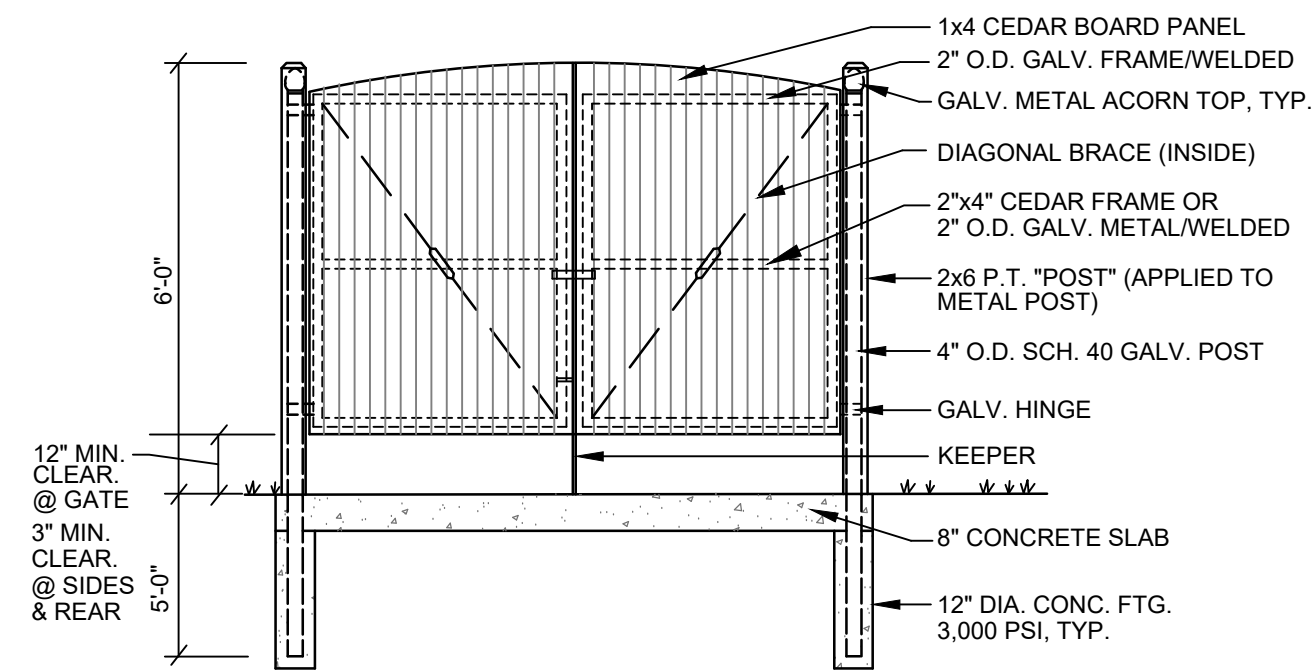


**TYPICAL PAVEMENT JOINT**  
NOT TO SCALE

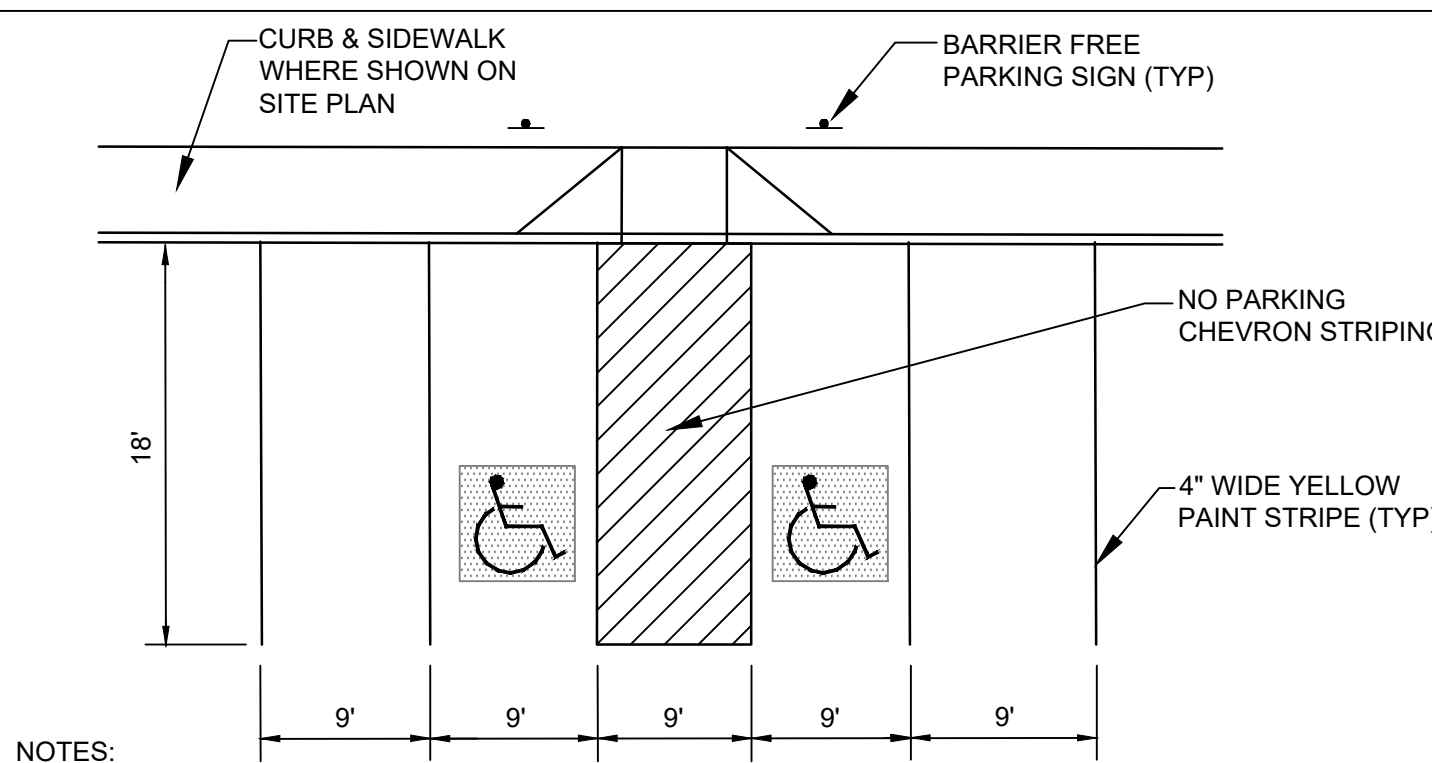


- NOTES:**
- EXCAVATION INCIDENTAL TO COST OF CURB.
  - SUBBASE SHALL BE COMPACTED TO A FIRM EVEN SURFACE PRIOR TO SETTING OF CURB.

**VERTICAL GRANITE CURB**  
NOT TO SCALE

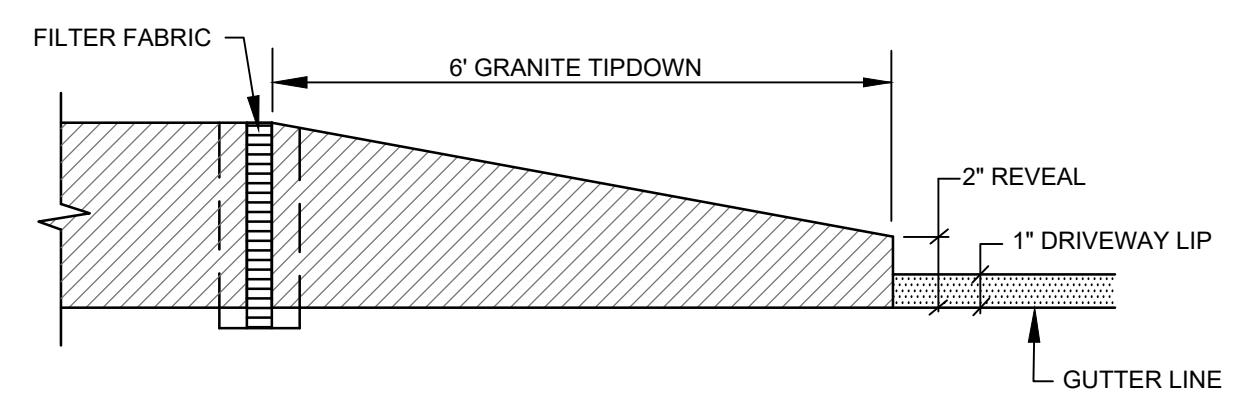


**TYPICAL DUMPSTER ENCLOSURE**  
NOT TO SCALE

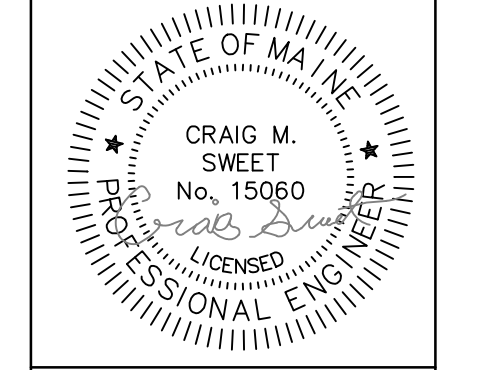


- NOTES:**
- SEE SITE PLAN FOR NUMBER AND LOCATION OF BARRIER FREE PARKING SPACES.
  - BARRIER FREE GRAPHIC SYMBOL (PAINTED WHITE) TO BE CENTERED IN PARKING STALL. SYMBOL TO BE PAINTED ON BLUE NON-SKID BACKGROUND.

**TYPICAL PARKING STALL DIMENSIONS**  
NOT TO SCALE



**TYPICAL TIPDOWN CURB INSTALLATION**  
NOT TO SCALE



DATE: 04/01/2024

NO.	DATE	REVISIONS
1	04/01/2024	RESPONSE TO TOWN COMMENTS
2	3/04/2024	FINAL SITE PLAN SUBMITTAL

ADDRESS: 41 CAMPUS DRIVE, SUITE 301, NEW GLOUCESTER, ME 04260  
 PHONE: (207) 926-5111  
 WEB SITE: www.terradynconsultants.com

**TERRADYN CONSULTANTS, LLC**  
 Civil Engineering | Land Surveying | Geomatics  
 Stormwater Design | Land Planning | Environmental Permitting

PERMIT DRAWING  
NOT FOR CONSTRUCTION

PROJECT: 868 ROUTE 302, LLC, MIXED USE  
 868 ROOSEVELT TRAIL, WINDHAM, MAINE

SHEET TITLE: SITE DETAILS

CLIENT: 868 302, LLC.  
 1000 PARKER ROAD  
 WINDHAM, MAINE 04062

DATE: 2/20/2024  
 SCALE: AS SHOWN  
 JOB NO: 22-155  
 SHEET: C-4.1