

#L- _____
 ATS # _____
 Fees Paid _____
 Date Received _____

CONDITION COMPLIANCE APPLICATION

This form shall be used to comply with a condition(s) on an Order that require approval from the Board or Department of Environmental Protection (Department).

Current fee schedule information can be found by contacting the Department or on the Department's website at: <http://www.maine.gov/dep/feeschedule.pdf>. The fee schedule is updated every November 1. Fees are payable to "Treasurer, State of Maine", and **MUST** accompany the application.

Please type or print in black ink only

1. Name of Applicant:	Core Cutter, LLC.	5. Name of Agent:	ES Coffin Engineering & Surveying
2. Applicant's Mailing Address:	362 Maine Avenue Farmingdale, ME 04344	6. Agent's Mailing Address:	PO Box 4687 Augusta, ME 04330
3. Applicant's Daytime Phone #:	207-588-7519	7. Agent's Daytime Phone #:	207-623-9475
4. Applicant e-mail address (REQUIRED):	amattson@cbmattson.com	8. Agent e-mail address (REQUIRED):	jciffin@coffineng.com
LOCATION OF ACTIVITY			
9. Name of Project:	Core Cutter		
10. Name of Town where project is located:	Gardiner	11. County:	Kennebec
REQUIRED INFORMATION			
12. Existing Department Order number:	L-19861-39-F-A	13. Order condition number(s):	1-24
14. Summary of the information being provided:	Water, Sewer and Public Works have provided letters indicating that the LHBP Phase II has adequate services available.		
15. Project Manager, if known:	Unknown		

This completed application form, fee, and all supporting documents summarized above shall be sent to the appropriate Department Office in Augusta, Portland, or Bangor.

Department of Environmental Protection 17 State House Station Augusta, ME 04333 Tel: (207) 287-7688	Department of Environmental Protection 312 Canco Road Portland, ME 04103 Tel: (207) 822-6300	Department of Environmental Protection 106 Hogan Road Bangor, ME 04401 (207) 941-4570
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CERTIFICATIONS / SIGNATURES on PAGE 2

IMPORTANT: IF THE SIGNATURE BELOW IS NOT THE APPLICANT'S SIGNATURE, ATTACH LETTER OF AGENT AUTHORIZATION SIGNED BY THE APPLICANT.

By signing below, the applicant (or authorized agent), certifies that he or she has read and understood the following:

CERTIFICATIONS / SIGNATURES

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein.

Further, I hereby authorize the Department to send me an electronically signed decision on the license I am applying for with this application by e-mailing the decision to the electronic address located on the front page of this application (see #4 and #8)"

Signed: _____



Title: Civil Engineer

Date: August 16th, 2023

Jim Coffin

From: Payments.DEP@maine.gov
Sent: Wednesday, August 16, 2023 1:09 PM
To: Jim Coffin; Payments.DEP@maine.gov
Subject: DEP Payment Confirmation - 886

DEP Payment Confirmation - 886

Contact Information: James Coffin - 432 Cony Road, Chelsea, ME, 04330
(207) 623-9475
jcoffin@coffineng.com

Product	Reference Number	Customer Number	Payment Amount	Comments
Site Location of Development Law- All Other	Condition Compliance		\$192.00	MCGP already filed

Transaction Summary

Payment	\$192.00
Service Fee	\$2.00
Total	\$194.00

ReceiptID: 886

Transaction Date: Wednesday, August 16, 2023

Thank you for your successful transaction.
If you have questions or concerns, please call (207) 287-7688
or Email: Payments.DEP@maine.gov

432 Cony Road
P.O. Box 4687
Augusta, ME 04330



(207) 623-9475
Fax (207) 623-0016
1-800-244-9475

August 16th, 2023

Mr. Robert Green
DEP Bureau of Land Resources
17 State House Station
Augusta, Maine 04333-0017

Subject: Core Cutter, LLC
Conditional Compliance Narrative
Lot 26 Libby Hill Business Park-Phase 2
DEP #L-19861-L6-G-N

Dear Jim,

Core Cutter, herein called the applicant is proposing to erect a new manufacturing facility on Lot 26 in the Libby Hill Business Park in Gardiner. The parcel is identified as Lot 20-26 on Tax Map 2 in the City of Gardiner tax maps. The 8.4-acre parcel is in the Planned Industrial Commercial (PIC) District as shown on the City's Zoning Map.

The applicant is proposing to erect a 11,520-sf building that will contain 2,145 sf of office space and 9,375 sf of manufacturing area. There will be two bathrooms, a breakroom and the building will not be sprinkled. The applicant will employ 15 people once the project is completed. The Site Location of Development Permit Application (SLODA) for Libby Hill Business Park-Phase 2 was approved on March 11, 2008 with 24 Conditions of Approval. Many of these Conditions are not applicable to this project, but the ones that are include the following:

- 2. In addition to any specific erosion control measures described in this or previous orders, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.*

Erosion control devices are shown on the site plan (C-1) and an erosion control plan is depicted on Sheet C-3.

- 9. All future geotechnical investigations must be submitted to the Bureau of Land and Water Quality for review and approval at least 45 days prior to the start of construction on the affected lot.*

Summit Geo-Engineering has provided test pit logs with refusal depths indicated in a document included with this submission.

22. Prior to occupancy of light industrial facilities on each lot, the applicant shall submit specific build-out plans to the Bureau of Land and Water Quality for review and approval. The information shall include, but not limited to, the following:

a. Information on the nature of the facility operations, the use and storage of potential contaminants, and proposed measures to protect groundwater quality.

Other than soapy water and mineral based grinding oil, there are no other known contaminants. There will be a 260-gallon tote for the soapy water and 55-gallon drum for the used oil. When storage becomes full, Clean Harbors will come to the facility and pick up the containers.

b. Estimated volume of additional wastewater discharges to the municipal system.

An engineering report by Milone & MacBroom entitled "Libby Hill Business Park-Phase II Sanitary Sewer Pumping Station". This report indicates that the sanitary system is designed to handle 18,000 gallons per day (GPD) for Phase II, which includes 12 lots. With 15 employees based on the 35 GPD per employee mentioned by the letter included from Doug Clark (City of Gardiner Wastewater Director) there will be 525 GPD used as the design capacity for the facility. There will be an oil recycling system for the Computer Numerical Control (CNC) machines that process the metals, but there will not be any floor drains in the proposed manufacturing building.

c. Information on estimated quantities and disposal of special, hazardous, or process wastes other than general solid waste to be produced by operations.

There will be 500 gallons per year of soapy water from the applicant's sonic wash tank. There will be 100 gallons per year of used mineral based cutting oil. There will be solid waste associated with this project and a letter from Riverside Disposal is included indicating that they will provide this service.

d. Information identifying all point source air emissions and evidence that an air emissions license has been obtained or is not required.

An air emission license is not required with this project.

e. Information on the nature of and potential sources of odors from the development, including estimates of the affected areas and method of control.

This section is not applicable as there will not be any odors associated with the project.

f. Information identifying potential large-scale water vapor emission from the development that may cause a change in local climate.

There will not be any large-scale vapor emissions associated with the project and this section is not applicable.

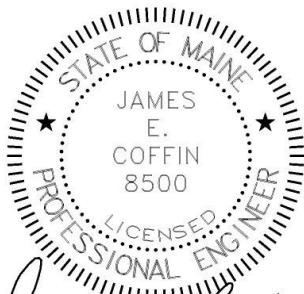
23. Any changes to the approved assumptions regarding lot development and stormwater management, water supply, wastewater, groundwater, air emissions, odors, or water vapor described in the Order shall be submitted to the Bureau of Land and Water Quality for review and approval.
- a. Stormwater Management: **The applicant is only developing Parcel #26, which has a maximum impervious area of 1.5 acres and developed area of 2.9 acres that is allowed to be routed to the existing wet pond (#510). The proposed project will result in 54,300 sf (1.25 acres) of impervious area and 1.89 acres of developed area, which are both below the two thresholds mentioned above.**
 - b. Water Supply: **a letter is attached from Zach Lovely of the Gardiner Water District indicating that they have adequate capacity for the proposed project.**
 - c. Wastewater: **as mentioned above in 22b, the proposed project is well under the design capacity in regard wastewater generation.**
 - d. Groundwater: **Although there will be storage of soapy water and mineral based grinding oil, there are no other known contaminants. As mentioned above, Clean Harbors will come to the facility and pick up the containers.**
 - e. Air Emissions: **as mentioned in 22d, an air emissions license is not required with this project.**
 - f. Odors: **as mentioned in 22e, this section is not applicable.**
 - g. Water Vapor: **As mentioned in 22f, this section is not applicable.**

In addition, there will not be any wetlands impacted as a result of this project. This concludes the conditional compliance narrative for Core Cutter, LLC and if you should you have any questions or concerns, please do not hesitate to contact me at 623-9475.

Sincerely,



James E. Coffin, P.E.





GARDINER WATER DISTRICT

P.O. Box 536 • Gardiner, Maine 04345 • (207) 582-5500 • Fax (207) 582-3093

E.S. Coffin Engineering & Surveying, INC.
P.O. Box 4687
Augusta, Maine 04330

Re: Core Cutter Lot 26 LHBP Gardiner, Maine

To whom these concerns.

Gardiner Water District has the ability to serve Core Cutter @ Lot 26 LHBP as proposed in E.S. Coffin plans Dated July 10, 2023. 2" service line to be ran to serve domestic water to proposed Structure. Gardiner Water District will need accurate peak demand to properly size a meter prior to establishing the service.

Thank You,

Zach Lovely
Gardiner Water District
Superintendent



August 14, 2023

City Council
City of Gardiner
6 Church St.
Gardiner, ME 04345

Re: Core Cutter

To Whom It May Concern,

Core Cutter is proposing to erect a new manufacturing facility on Lot 26 in the Libby Hill Business Park in Gardiner. Based on the proposed addition of 15 employees at the facility and following NEIWPCC TR-16 manual design guidelines for office/manufacturing environment flow estimates, the City of Gardiner Wastewater Transport and Treatment system can adequately handle the additional flow. This is for typical light residential usage such as; toilet flushes, kitchenette/breakroom applications, etc. This is not for any industrial manufacturing or processing activities that would discharge wastes of that nature as defined in the City Sewer Use Ordinance.

If you have any questions please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Clark", written over a white background.

Douglas E. Clark
Wastewater Director
City of Gardiner



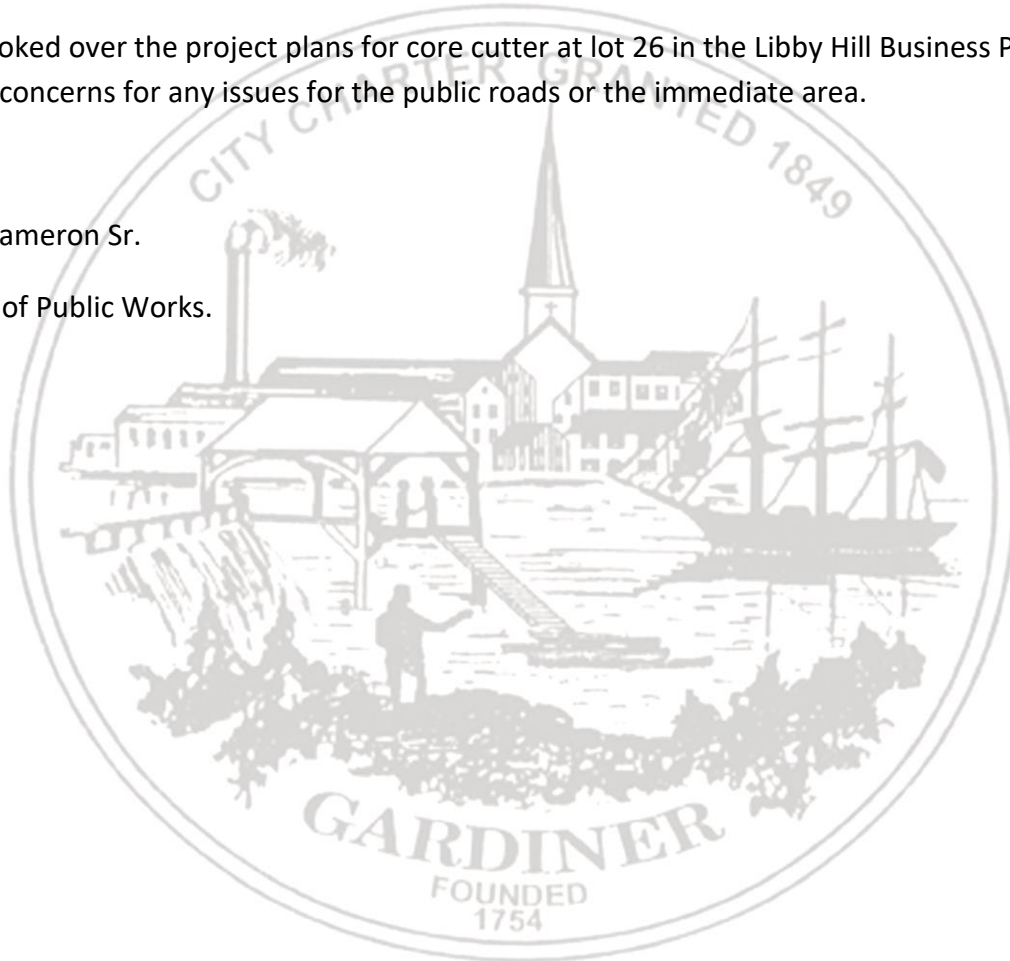
CITY OF
Gardiner
Moving Forward

Dear James Coffin,

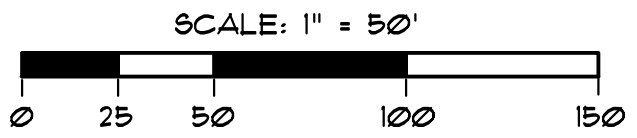
I have looked over the project plans for core cutter at lot 26 in the Libby Hill Business Park and I have no concerns for any issues for the public roads or the immediate area.

John A Cameron Sr.

Director of Public Works.

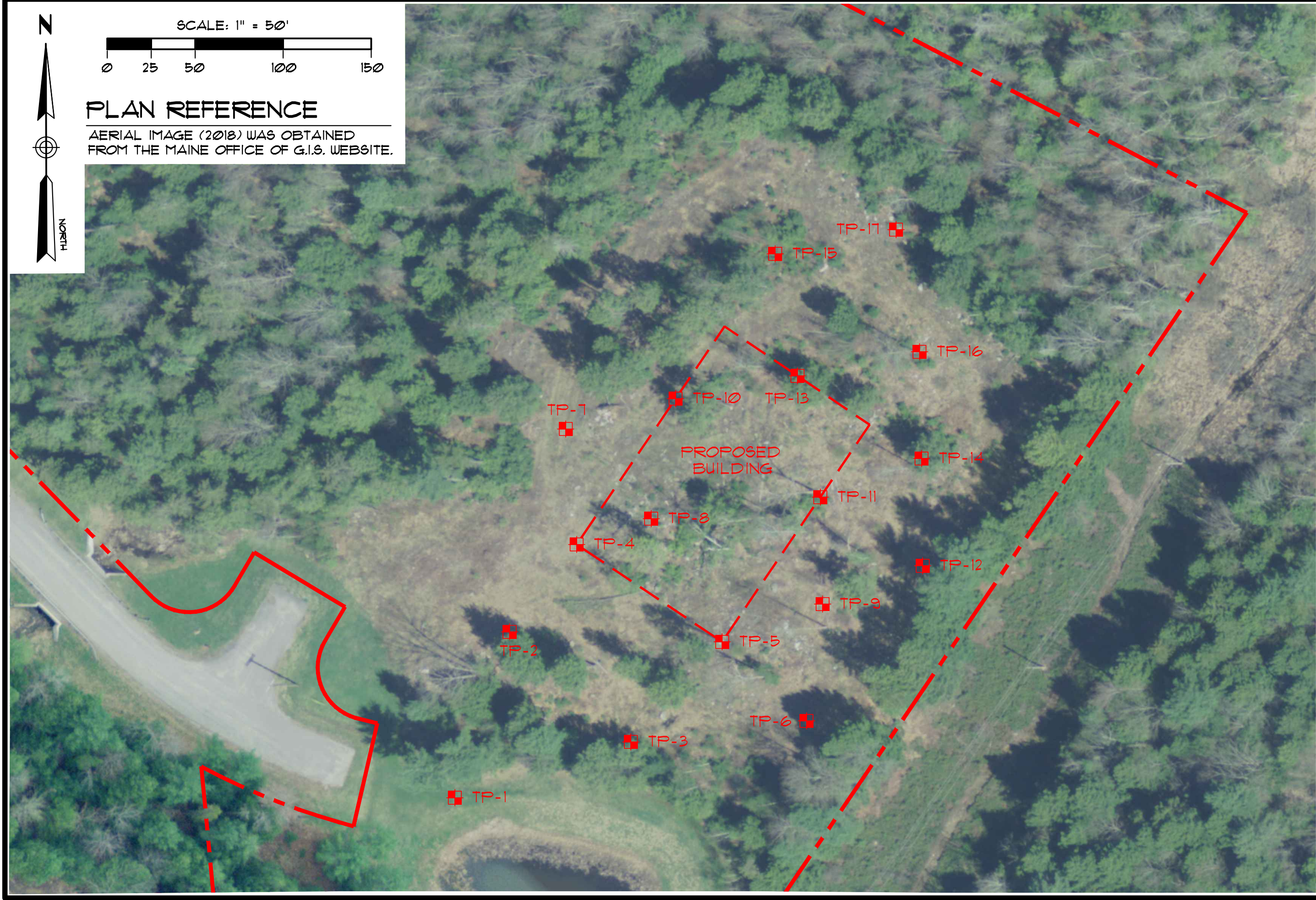


Department of Public Works
6 Church Street | Gardiner, ME 04345
207-582-4800 | 207-582-6895 (fax) | jcameron@gardinermaine.com
www.GardinerMaine.com

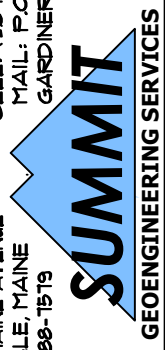


PLAN REFERENCE

AERIAL IMAGE (2018) WAS OBTAINED FROM THE MAINE OFFICE OF G.I.S. WEBSITE.



OFFICE: 210 MAINE AVENUE FARMINGDALE, MAINE TEL: (207) 588-1519	CELL: (207) 516-3313 MAIL: P.O. BOX 515 GARDNER, ME 04345	TEST PIT LOCATION PLAN		PROJECT: PROPOSED BUILDING LOT 26 - LIBBY HILL BUSINESS PARK <small>GARDNER, MAINE</small>
		TITLE: TEST PIT LOCATION PLAN	SCALE: 1" = 50' DATE: JUNE 29, 2022	CLIENT: E.S. COFFIN ENGINEERING & SURVEYING
PROJ.#: 22191		FIGURE: 1		





Project Name: Proposed Building
 Location: Lot 26 - Libby Hill Business Park, Gardiner, ME

Project Number: 22197
 Dates: 6/17/2022

EXPLORATION NUMBER	TOPSOIL	GLACIAL TILL	REFUSAL DEPTH	GROUNDWATER DEPTH
TP-1	0 to 0.2	0.2 to 3.0/4.5	3.0/4.5	N/E
TP-2	0 to 0.1	0.1 to 2.5/3.2	2.5/3.2	N/E
TP-3	0 to 0.5	0.5 to 4.5	4.5	N/E
TP-4	0 to 0.1	0.1 to 3.0	3.0	N/E
TP-5	N/E	0 to 6	6.0	5.5
TP-6	0 to 0.2	0.2 to 1.5/2.5	1.5/2.5	N/E
TP-7	0 to 0.1	0.1 to 2.5/3.5	2.5/3.5	N/E
TP-8	0 to 0.2	0.2 to 5.0	5.0	N/E
TP-9	0 to 0.3	0.3 to 3.5	3.5	N/E
TP-10	0 to 0.1	0.1 to 5.0	5.0	N/E
TP-11	0 to 0.2	0.2 to 6.3	6.3	N/E
TP-12	0 to 0.1	0.1 to 2.5	2.5	N/E
TP-13	0 to 0.2	0.2 to 2.5	2.5	N/E
TP-14	0 to 0.2	0.2 to 6.5	6.5	N/E
TP-15	0 to 0.2	0.2 to 8.0	8.0	7.5
TP-16	0 to 0.2	0.2 to 3.5	3.5	N/E
TP-17	0 to 0.2	0.2 to 6.5	6.5	6.0

NOTES:

- 1.) Test pits were performed by Summit Geoenineering Services (SGS) on June 17, 2022 using a Kubota KX040-4.
- 2.) Where a range of bedrock depths was encountered in a test pit, depths are seperated by a forward slash; i.e. 2.5/3.5 indicates bedrock refusal depths ranged from 2.5 to 3.5 feet below the ground surface.
- 3.) Test pits TP-1 through TP-6 were field located by SGS by taping from existing site features. The remaining test pits were survey located by others prior to digging.
- 4.) N/E = None Encountered, Units are in Feet

EXPLORATION COVER SHEET

The exploration logs are prepared by the geotechnical engineer from both field and laboratory data. Soil descriptions are based upon the Unified Soil Classification System (USCS) per ASTM D2487 and/or ASTM D2488 as applicable. Supplemental descriptive terms for estimated particle percentage, color, density, moisture condition, and bedrock may also be included to further describe conditions.

Drilling and Sampling Symbols:

S = Split Spoon Sample	Hyd = Hydraulic Advancement of Drilling Rods
UT = Thin Wall Shelby Tube	Push = Direct Push of Drilling Rods
SSA = Solid Stem Auger	WOH = Weight of Hammer
HSA = Hollow Stem Auger	WOR = Weight of Rod
RW = Rotary Wash	PI = Plasticity Index
SV = Lab Shear Vane (Torvane)	LL = Liquid Limit
PP = Pocket Penetrometer	MC = Natural Moisture Content
C = Rock Core Sample	USCS = Unified Soil Classification System
FV = Field Vane Shear Test	Su = Undrained Shear Strength
SP = Concrete Punch Sample	Su(r) = Remolded Shear Strength

Water Level Measurements:

Water levels indicated on the boring logs are the levels measured in the boring at the times indicated. In pervious soils, the indicated elevations are considered reliable groundwater levels. In impervious soils, the accurate determination of groundwater elevations may not be possible, even after several days of observations. Groundwater monitoring wells may be required to record accurate depths and fluctuation.

Gradation Description and Terminology:

Boulders:	Over 12 inches	Trace:	Less than 5%
Cobbles:	12 inches to 3 inches	Little:	5% to 15%
Gravel:	3 inches to No.4 sieve	Some:	15% to 30%
Sand:	No.4 to No. 200 sieve	Silty, Sandy, etc.:	Greater than 30%
Silt:	No. 200 sieve to 0.005 mm		
Clay:	less than 0.005 mm		

Density of Granular Soils and Consistency of Cohesive Soils:

CONSISTENCY OF COHESIVE SOILS		DENSITY OF GRANULAR SOILS	
SPT N-value blows/ft	Consistency	SPT N-value blows/ft	Relative Density
0 to 2	Very Soft	0 to 4	Very Loose
2 to 4	Soft	5 to 10	Loose
5 to 8	Firm	11 to 30	Compact
9 to 15	Stiff	31 to 50	Dense
16 to 30	Very Stiff	>50	Very Dense
>30	Hard		



TEST PIT LOG

Test Pit # **TP-1**

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Project #: 22197

Groundwater:
 None Encountered

Contractor: Summit Geoengineering Services

Ground Surface Elevation: Unknown

Equipment: Kubota KX040-4 Excavator

Reference: N/A

Summit Staff: C. Sullivan, E.I.

Date: 6/17/2022

Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
	Dark brown Organic SILT, rootlets, soft, damp, OL	TOPSOIL
1	Brown SILT, trace fine Sand, rootlets to 0.5', slightly mottled, soft to firm, damp, ML	0.2' GLACIAL TILL
2	Olive gray SILT, little fine Sand & Gravel, occasional cobbles, slightly mottled, very stiff, damp, ML	
3		1'
4	Refusal on undulating Bedrock from 3' to 4.5' below ground surface.	3' to 4.5' BEDROCK
5		
6		
7		
8		





TEST PIT LOG

Test Pit # **TP-2**

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Project #: 22197

Groundwater:
 None Encountered

Contractor: Summit Geoengineering Services

Ground Surface Elevation: Unknown



Equipment: Kubota KX040-4 Excavator

Reference: N/A

Summit Staff: C. Sullivan, E.I.

Date: 6/17/2022

Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
	Dark brown Organic SILT, rootlets, soft, damp, OL	TOPSOIL
1	Orange brown SILT-SAND, roots to 1' +/-, slightly mottled, loose to firm, damp, ML-SM	0.1' GLACIAL TILL
2		
3	Olive gray SILT, little Gravel, trace to little fine Sand, frequent 0.5' to 1'-diameter cobbles, slightly mottled, stiff, damp, ML	2' +/-
4	Refusal on sloping Bedrock at 2.5' to 3.2' below ground surface from northwest to southeast.	2.5' to 3.2' BEDROCK
5		
6		
7		
8		



TEST PIT LOG

Test Pit # **TP-3**

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Project #: 22197

Groundwater:
 None Encountered

Contractor: Summit Geoengineering Services

Ground Surface Elevation: Unknown



Equipment: Kubota KX040-4 Excavator

Reference: N/A

Summit Staff: C. Sullivan, E.I.

Date: 6/17/2022

Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
	Dark brown Organic SILT, trace fine Sand, rootlets, soft, damp, OL	TOPSOIL
1	Olive gray SILT, trace Clay, little fine Sand & Gravel, slightly mottled, very stiff, damp, ML	0.5' GLACIAL TILL PP > 9,000 psf
2		
3		
4		
	Brown Silty fine SAND, little Gravel, slightly mottled, compact, damp, SM	4' +/-
5	Refusal on Bedrock at 4.5' below ground surface.	4.5' BEDROCK
6		
7		
8		



TEST PIT LOG

Test Pit # **TP-4**
 Project #: 22197
 Groundwater: None Encountered

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Contractor: Summit Geoengineering Services
 Equipment: Kubota KX040-4 Excavator
 Summit Staff: C. Sullivan, E.I.

Ground Surface Elevation: Unknown
 Reference: N/A
 Date: 6/17/2022 | Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
	Dark brown Organic SILT, rootlets, soft, damp, OL	TOPSOIL
1	Brown SILT, trace to little fine Sand, rootlets to 0.5', soft to firm, damp, ML	GLACIAL TILL
2	Olive gray SILT, little fine Sand & Gravel, slightly to moderately mottled, very stiff, damp, ML	
3	Orange brown Silty fine SAND, trace Gravel, compact, damp, SM	2.5' +/-
4	Refusal on Bedrock at 3' below ground surface.	BEDROCK
5		
6		
7		
8		





TEST PIT LOG

Test Pit # **TP-5**

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Project #: 22197

Groundwater:
 5.5 ft +/-

Contractor: Summit Geoengineering Services

Ground Surface Elevation: Unknown



Equipment: Kubota KX040-4 Excavator

Reference: N/A

Summit Staff: C. Sullivan, E.I.

Date: 6/17/2022

Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Dark brown to brown Silty fine SAND, little Gravel, frequent cobbles & boulders at ground surface, rootlets loose, damp, SM	GLACIAL TILL PP > 9,000 psf (Occasional 0.5' to 2'-diameter cobbles/boulders) Slow groundwater infiltration in bottom of test pit at 5.5'
2	Olive gray SILT, trace to little fine Sand & Gravel, slightly to moderately mottled, very stiff, damp, ML	
3		
4		
5		
6	Refusal on Bedrock at 6' below ground surface.	
7		BEDROCK 
8		



TEST PIT LOG

Test Pit # **TP-6**
 Project #: 22197
 Groundwater: None Encountered

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Contractor: Summit Geoengineering Services
 Equipment: Kubota KX040-4 Excavator
 Summit Staff: C. Sullivan, E.I.

Ground Surface Elevation: Unknown
 Reference: N/A
 Date: 6/17/2022 | Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
0.0 - 0.2	Dark brown Organic SILT, trace fine Sand, soft, damp, OL	TOPSOIL
0.2 - 1.5	Olive gray SILT, little Gravel, trace fine Sand, occasional cobbles, very stiff, damp, ML	0.2' GLACIAL TILL PP > 9,000 psf
1.5 - 2.5	Refusal on undulating Bedrock at 1.5' to 2.5' below ground surface.	1.5' to 2.5' BEDROCK
2.5 - 3.0		
3.0 - 3.5		
3.5 - 4.0		
4.0 - 4.5		
4.5 - 5.0		
5.0 - 5.5		
5.5 - 6.0		
6.0 - 6.5		
6.5 - 7.0		
7.0 - 7.5		
7.5 - 8.0		
8.0 - 8.5		
8.5 - 9.0		





TEST PIT LOG

Test Pit # **TP-7**

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Project #: 22197

Groundwater:
 None Encountered

Contractor: Summit Geoengineering Services

Ground Surface Elevation: Unknown



Equipment: Kubota KX040-4 Excavator

Reference: N/A

Summit Staff: C. Sullivan, E.I.

Date: 6/17/2022

Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
	Dark brown Organic SILT, trace fine Sand, soft, damp, OL	TOPSOIL
0.1'	Brown Silty fine SAND, little to some Gravel, occasional cobbles, compact to loose, damp, SM	GLACIAL TILL (1'-diameter boulder at 1.5' +/-) (3'-diameter boulder at 2' +/-)
2'		
3'		
4'	Refusal on sloping Bedrock at 2.5' to 3.5' below ground surface from north to south.	2.5' to 3.5' BEDROCK
5'		
6'		
7'		
8'		



TEST PIT LOG

Test Pit # **TP-8**

Project: Proposed Building
Libby Hill Business Park
Gardiner, Maine

Project #: 22197

Groundwater:
None Encountered

Contractor: Summit Geoengineering Services

Ground Surface Elevation: Unknown



Equipment: Kubota KX040-4 Excavator

Reference: N/A

Summit Staff: C. Sullivan, E.I.

Date: 6/17/2022

Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
	Dark brown Organic SILT, trace fine Sand, soft, damp, OL	TOPSOIL
1	Orange brown to olive gray with depth Silty fine SAND, rootlets to 0.5', frequent cobbles & boulders, compact, damp, SM	0.2' GLACIAL TILL
2	Olive gray SILT, little fine Sand & Gravel, occasional cobbles, slightly mottled, very stiff, damp, ML	1' +/- (1' to 2'-diameter boulders at 1' +/-)
3		(2'-diameter boulder at 2' +/-)
4		
5	Refusal on Bedrock at 5' below ground surface.	5' BEDROCK
6		
7		
8		



TEST PIT LOG

Test Pit # **TP-9**

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Project #: 22197

Groundwater:
 None Encountered

Contractor: Summit Geoengineering Services

Ground Surface Elevation: Unknown



Equipment: Kubota KX040-4 Excavator

Reference: N/A

Summit Staff: C. Sullivan, E.I.

Date: 6/17/2022

Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
	Dark brown Organic SILT, trace fine Sand, soft, damp, OL	TOPSOIL
0.3'	Brown Silty fine SAND, some Gravel, very stiff, damp, SM	GLACIAL TILL (3'-diameter boulder at 1' +/-) (Frequent cobbles & boulders from 1.5' to 3.5')
3'		(3'-diameter boulder at 3' +/-)
3.5'	Refusal on Bedrock at 3.5' below ground surface.	BEDROCK
7'		
8'		



TEST PIT LOG

Test Pit # **TP-10**
 Project #: 22197
 Groundwater: None Encountered

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Contractor: Summit Geoengineering Services Ground Surface Elevation: Unknown
 Equipment: Kubota KX040-4 Excavator Reference: N/A
 Summit Staff: C. Sullivan, E.I. Date: 6/17/2022 Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL

1	Dark brown Organic SILT, trace fine Sand, soft, damp, OL	TOPSOIL
	Orange brown to brown with depth Silty fine SAND, little to some Gravel, frequent cobbles & boulders, compact to loose, damp, ML	0.1' GLACIAL TILL (0.5' to 1'-diameter cobbles & boulders at 1' to 2' +/-) (2'-diameter boulder at 2' +/-) (Nested 1'-diameter boulders at 3' +/-)
2		
3		
4	Brown Silty fine SAND, little to some Gravel, slightly mottled, compact, damp, ML	
5		

5'	Refusal on Bedrock at 5' below ground surface.	BEDROCK
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TEST PIT LOG

Test Pit # **TP-11**

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Project #: 22197

Groundwater:
 None Encountered

Contractor: Summit Geoengineering Services

Ground Surface Elevation: Unknown



Equipment: Kubota KX040-4 Excavator

Reference: N/A

Summit Staff: C. Sullivan, E.I.

Date: 6/17/2022

Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
	Dark brown Organic SILT, trace fine Sand, soft, damp, OL	TOPSOIL
1	Orange brown to brown SILT, little fine SAND, rootlets to 0.5', soft to firm, damp, ML	GLACIAL TILL
2	Olive gray to brown with depth Silty fine SAND, little to some Gravel, occasional to frequent cobbles & boulders slightly mottled, compact to dense, damp, SM	(2'-diameter boulder at 2' +/-)
3		
4		(3'-diameter boulder at 4' +/-)
5		
6		
7	Refusal on Bedrock at 6.3' below ground surface.	BEDROCK
8		



TEST PIT LOG

Test Pit # **TP-12**
 Project #: 22197
 Groundwater: None Encountered

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Contractor: Summit Geoengineering Services
 Equipment: Kubota KX040-4 Excavator
 Summit Staff: C. Sullivan, E.I.

Ground Surface Elevation: Unknown
 Reference: N/A
 Date: 6/17/2022 | Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL

1	Dark brown Organic SILT, trace fine Sand, soft, damp, OL	TOPSOIL
	Orange brown Silty fine SAND, little Gravel, frequent cobbles & boulders, compact to loose, damp, SM	0.1' GLACIAL TILL

3	Refusal on Bedrock at 2.5' below ground surface.	2.5' BEDROCK
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TEST PIT LOG

Test Pit # **TP-13**
 Project #: 22197
 Groundwater: None Encountered

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Contractor: Summit Geoengineering Services Ground Surface Elevation: Unknown
 Equipment: Kubota KX040-4 Excavator Reference: N/A
 Summit Staff: C. Sullivan, E.I. Date: 6/17/2022 Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL

1	Dark brown Organic SILT, trace fine Sand, soft, damp, OL	TOPSOIL
	Orange brown to brown with depth Silty fine SAND, some Gravel, occasional cobbles, compact, damp, SM	0.2' GLACIAL TILL

3	Refusal on Bedrock at 2.5' below ground surface.	2.5' BEDROCK
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Photographs showing the test pit excavation and soil profile.





TEST PIT LOG

Test Pit # **TP-14**
 Project #: 22197
 Groundwater: None Encountered

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Contractor: Summit Geoengineering Services Ground Surface Elevation: Unknown
 Equipment: Kubota KX040-4 Excavator Reference: N/A
 Summit Staff: C. Sullivan, E.I. Date: 6/17/2022 Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
	Dark brown Organic SILT, trace fine Sand, soft, damp, OL	TOPSOIL
1	Orange brown to brown Silty fine SAND, some Gravel, compact, damp, SM	0.2' GLACIAL TILL (Frequent 2' to 3'-diameter boulders at 1' +/-)
2		
3		
4	Olive gray Silty fine SAND, some Gravel, compact to dense, damp, SM	3.5' +/-
5		
6		
7	Refusal on Bedrock at 6.5' below ground surface.	6.5'
8		BEDROCK 



TEST PIT LOG

Test Pit # **TP-15**

Project: Proposed Building
Libby Hill Business Park
Gardiner, Maine

Project #: 22197

Groundwater:
7.5 ft +/-

Contractor: Summit Geoengineering Services

Ground Surface Elevation: Unknown



Equipment: Kubota KX040-4 Excavator

Reference: N/A

Summit Staff: C. Sullivan, E.I.

Date: 6/17/2022

Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
1	Dark brown Organic SILT, trace fine Sand, frequent cobbles & boulders at ground surface, soft, damp, OL	TOPSOIL
2	Brown to olive gray with depth Silty fine SAND, some Gravel, occasional to frequent cobbles & boulders, loose to compact, damp, SM	GLACIAL TILL (1' to 2'-diameter boulders at 2' +/-)
3		
4		
5	Brown medium to fine SAND, some Gravel, little Silt, frequent cobbles & boulders, compact to dense, damp to moist, SP-SM	4'
6		
7		
8		Slow groundwater infiltration in southwest sidewall at 7.5' Test pit pooling with water at 7.5' +/-
9	Refusal on Bedrock at 8' below ground surface.	8'
10		BEDROCK
11		
12		
13		
14		
15		
16		
17		





TEST PIT LOG

Test Pit # **TP-16**
 Project #: 22197
 Groundwater: None Encountered

Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Contractor: Summit Geoengineering Services Ground Surface Elevation: Unknown
 Equipment: Kubota KX040-4 Excavator Reference: N/A
 Summit Staff: C. Sullivan, E.I. Date: 6/17/2022 Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
	Dark brown Organic SILT, trace fine Sand, soft, damp, OL	TOPSOIL
1	Orange brown to brown Silty fine SAND, little to some Gravel, occasional to frequent cobbles, loose to compact, damp, SM	0.2' GLACIAL TILL
2		(Frequent cobbles & boulders at 2' +/-)
3		
4	Refusal on Bedrock at 3.5' below ground surface.	3.5' BEDROCK
5		
6		
7		
8		





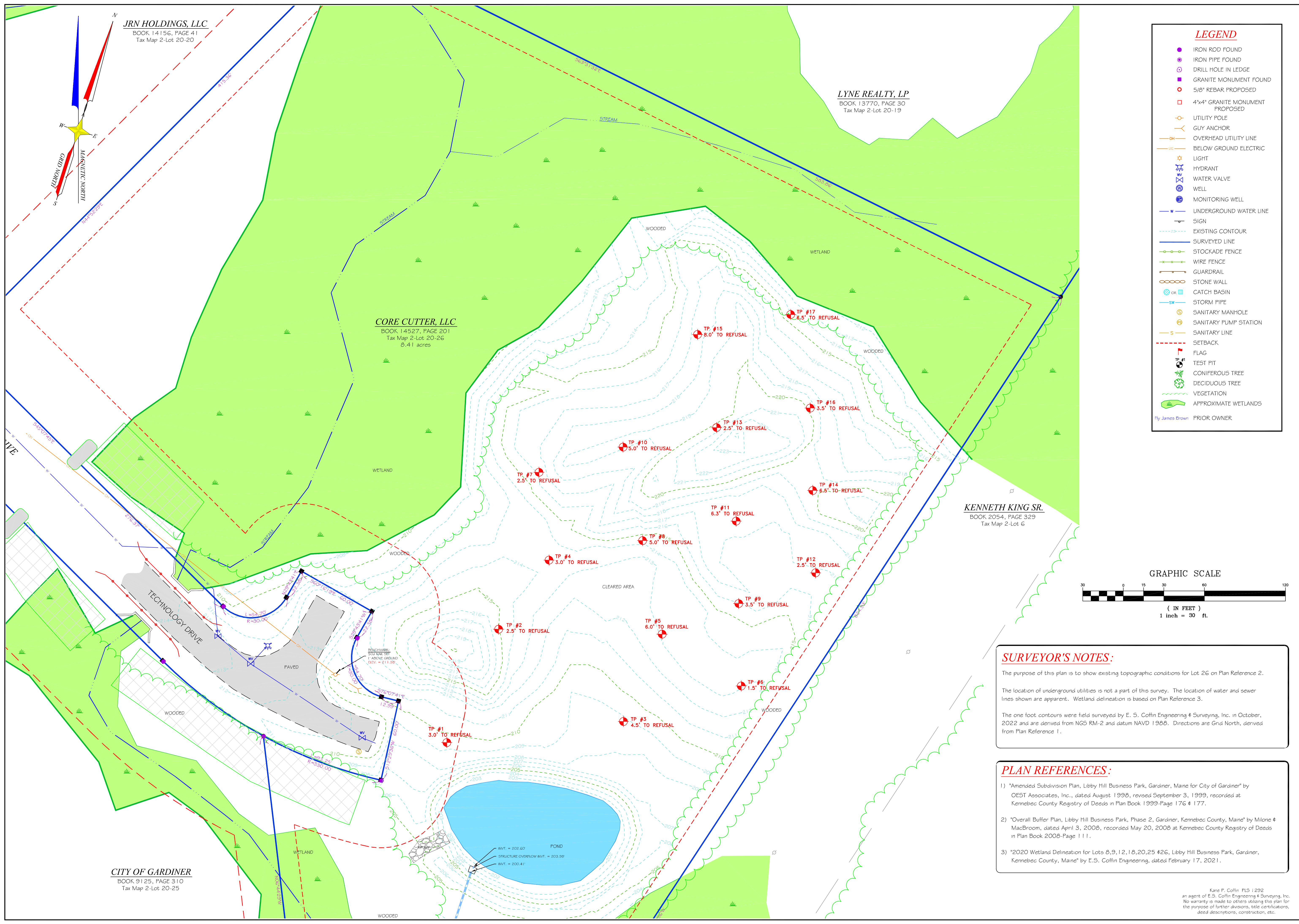
TEST PIT LOG

Test Pit # **TP-17**
 Project #: 22197
 Groundwater: 6 ft +/-

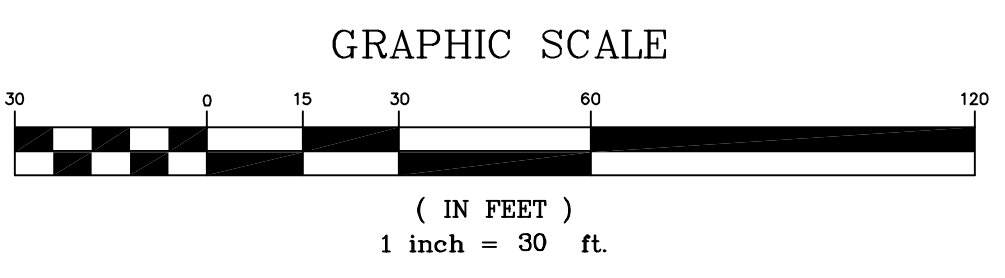
Project: Proposed Building
 Libby Hill Business Park
 Gardiner, Maine

Contractor: Summit Geoengineering Services
 Equipment: Kubota KX040-4 Excavator
 Summit Staff: C. Sullivan, E.I.
 Ground Surface Elevation: Unknown
 Reference: N/A
 Date: 6/17/2022 | Weather: 75°, Clear

Depth (ft)	DESCRIPTION	
	ENGINEERING	GEOLOGIC/GENERAL
	Dark brown Organic SILT, trace fine Sand, soft, damp, OL	TOPSOIL
0.2'	Brown to olive gray with depth Silty fine SAND, some Gravel, compact to dense, damp, SM	GLACIAL TILL
1		
2		
3		(Frequent cobbles & boulders at 3' +/-)
4		
5		
6		Slow groundwater infiltration at 6' Test pit pooling with water
6.5'	Refusal on Bedrock at 6.5' below ground surface.	BEDROCK
7		
8		



- LEGEND**
- IRON ROD FOUND
 - IRON PIPE FOUND
 - DRILL HOLE IN LEDGE
 - GRANITE MONUMENT FOUND
 - 5/8" REBAR PROPOSED
 - 4"x4" GRANITE MONUMENT PROPOSED
 - UTILITY POLE
 - GUY ANCHOR
 - OVERHEAD UTILITY LINE
 - BELOW GROUND ELECTRIC
 - LIGHT
 - HYDRANT
 - WATER VALVE
 - WELL
 - MONITORING WELL
 - UNDERGROUND WATER LINE
 - SIGN
 - EXISTING CONTOUR
 - SURVEYED LINE
 - STOCKADE FENCE
 - WIRE FENCE
 - GUARDRAIL
 - STONE WALL
 - CATCH BASIN
 - STORM PIPE
 - SANITARY MANHOLE
 - SANITARY PUMP STATION
 - SANITARY LINE
 - SETBACK
 - FLAG
 - TEST PIT
 - CONIFEROUS TREE
 - DECIDUOUS TREE
 - VEGETATION
 - APPROXIMATE WETLANDS
 - P. JAMES BROWN P. OWNER



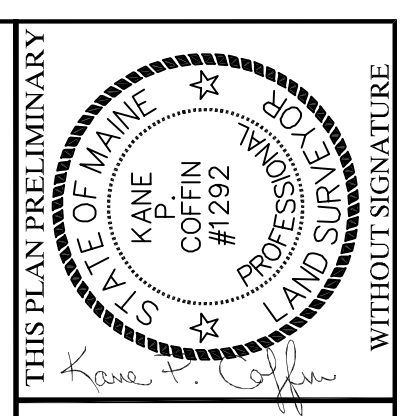
SURVEYOR'S NOTES:

The purpose of this plan is to show existing topographic conditions for Lot 26 on Plan Reference 2.

The location of underground utilities is not a part of this survey. The location of water and sewer lines shown are apparent. Wetland delineation is based on Plan Reference 3.

The one foot contours were field surveyed by E. S. Coffin Engineering & Surveying, Inc. in October, 2022 and are derived from NGS RM-2 and datum NAVD 1985. Directions are Gnd North, derived from Plan Reference 1.

- PLAN REFERENCES:**
- 1) "Amended Subdivision Plan, Libby Hill Business Park, Gardiner, Maine for City of Gardiner" by OEST Associates, Inc., dated August 1, 1998, revised September 3, 1999, recorded at Kennebec County Registry of Deeds in Plan Book 1999-Page 176 & 177.
 - 2) "Overall Buffer Plan, Libby Hill Business Park, Phase 2, Gardiner, Kennebec County, Maine" by Milone & MacBroom, dated April 3, 2008, recorded May 20, 2008 at Kennebec County Registry of Deeds in Plan Book 2008-Page 111.
 - 3) "2020 Wetland Delineation for Lots 8,9,12,18,20,25 & 26, Libby Hill Business Park, Gardiner, Kennebec County, Maine" by E.S. Coffin Engineering, dated February 17, 2021.



E.S. COFFIN
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NO.	DATE	REVISIONS

TOPOGRAPHIC SURVEY

SCALE: 1 INCH=30 FEET

DRAWN BY: CSC
CHECKED BY: KPC

DATE: OCTOBER 3, 2022

LIBBY HILL BUSINESS PARK LOT #26

CLIENT/PROJECT: LIBBY HILL BUSINESS PARK

LOCATION: TECHNOLOGY DRIVE

TOWN: GARDINER COUNTY: KENNEBEC STATE: MAINE

PROJ. NO. 2022-005

TS

Kane P. Coffin PLS 1292
an agent of E.S. Coffin Engineering & Surveying, Inc.
No warranty is made to others utilizing this plan for
the purpose of further divisions, title certifications,
deed descriptions, construction, etc.

EROSION AND SEDIMENTATION NOTES:

1. CONTRACTOR SHALL FOLLOW BEST MANAGEMENT PRACTICES OF THE KENNEBEC COUNTY SOIL CONSERVATION SERVICE AND THE MAINE DEP BEST MANAGEMENT PRACTICES HANDBOOK.

GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES:

EROSION/SEDIMENT CONTROL DEVICES:

THE FOLLOWING EROSION SEDIMENTATION CONTROL DEVICES ARE PROPOSED FOR CONSTRUCTION ON THIS PROJECT. INSTALL THESE DEVICES AS INDICATED ON THE PLANS.

- SILT FENCE:** SILT FENCE WILL BE INSTALLED ALONG THE DOWN GRADING EDGES OF DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL THE SITE IS STABILIZED. IN AREAS WHERE STORMWATER DISCHARGES THE SILT FENCE WILL BE REINFORCED WITH HAY BALES TO HELP MAINTAIN THE INTEGRITY OF THE SILT FENCE AND TO PROVIDE ADDITIONAL TREATMENT.
- STONE CHECK DAMS:** STONE CHECK DAMS ARE TO BE PLACED IN LOW FLOW DRAINAGE SWALES AND PATHS TO TRAP SEDIMENTS AND REDUCE RUNOFF VELOCITIES. DO NOT PLACE STONE CHECK DAMS IN FLOWING WATER OR STREAMS.
- RIPRAP:** PROVIDE RIPRAP IN AREAS WHERE CULVERTS DISCHARGE OR AS SHOWN ON THE PLANS.
- LOAM, SEED, & MULCH:** ALL DISTURBED AREAS, WHICH ARE NOT OTHERWISE TREATED, SHALL RECEIVE PERMANENT SEEDING AND MULCH TO STABILIZE THE DISTURBED AREAS. THE DISTURBED AREAS WILL BE REVEGETATED WITHIN 5 DAYS OF FINAL GRADING. SEEDING REQUIREMENTS ARE PROVIDED ARE THE END OF THIS SPECIFICATION.
- STRAW AND HAY MULCH:** USED TO COVER DENUDED AREA UNTIL PERMANENT SEED OR EROSION CONTROL MEASURES ARE IN PLACE. MULCH BY ITSELF CAN BE USED ON SLOPES LESS THAN 15% IN SUMMER AND 8% IN WINTER. JUTE MESH IS TO BE USED OVER MULCH ONLY. CURLEX II AND EXCELSIOR MAY BE USED IN PLACE OF JUTE MESH OVER MULCH.
- MULCH NETTING:** SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.

TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES:

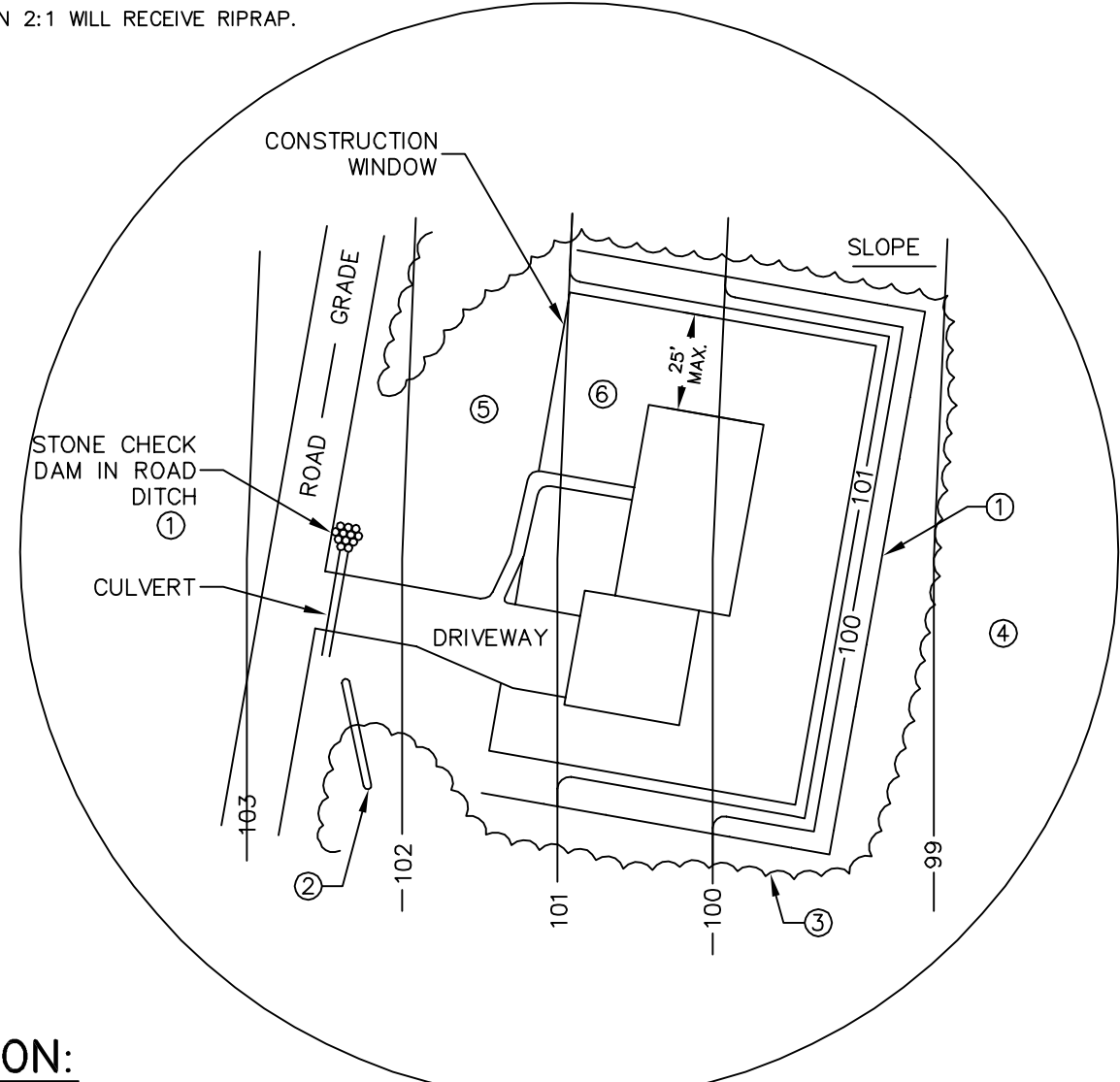
PROVIDE THE FOLLOWING TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION OF THE DEVELOPMENT:

- SILTATION FENCE ALONG THE DOWN GRADIENT SIDE OF THE PARKING AREAS AND OF ALL FILL SECTIONS. THE SILTATION FENCE WILL REMAIN IN PLACE UNTIL THE SITE IS 85% REVEGETATED.
- HAY BALES PLACED AT KEY LOCATIONS TO SUPPLEMENT THE SILT FENCE.
- PROTECT TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION AS FOLLOWS:
 - (A) SOIL STOCKPILE SIDE SLOPES SHALL NOT EXCEED 2:1.
 - (B) AVOID PLACING TEMPORARY STOCKPILES IN AREA WITH SLOPES OVER 10 PERCENT, OR NEAR DRAINAGE SWALES. SEE ITEM 3 IN CONSTRUCTION PHASE NOTES BELOW.
 - (C) THE CONTRACTOR MUST STABILIZE SOIL AND FILL STOCKPILES WITHIN 7 DAYS PRIOR TO ANY RAINFALL.
 - (D) SURROUND STOCKPILE SOIL WITH SILTATION FENCE AT BASE OF PILE.
- ALL DENUDED AREA WHICH HAVE BEEN ROUGH GRADED AND ARE NOTE LOCATED WITHIN THE BUILDING PAD, OR PARKING AND DRIVEWAY SUBBASE AREA SHALL RECEIVE MULCH WITHIN 7 DAYS OF INITIAL DISTURBANCE OF SOIL IN ANY AREA OR WITHIN 7 DAYS AFTER COMPLETING THE ROUGH GRADING OPERATIONS IN ANY AREA, OR PRIOR TO ANY RAINFALL. IN THE EVENT THE CONTRACTOR COMPLETES FINAL GRADING AND INSTALLATION OF LOAM AND SOD WITHIN THE TIME PERIODS PRESENTED ABOVE, INSTALLATION OF MULCH AND NETTING, IS NOT REQUIRED.
- IF WORK IS CONDUCTED BETWEEN OCTOBER 15 AND APRIL 15, ALL DENUDED AREAS ARE TO BE COVERED WITH HAY MULCH, APPLIED AT TWICE THE NORMAL APPLICATION RATE, AND ANCHORED WITH FABRIC NETTING. THE PERIOD BETWEEN FINAL GRADING AND MULCHING SHALL BE REDUCED TO A 1 DAY MAXIMUM FOR WORK COMPLETED BETWEEN OCTOBER 15TH AND APRIL 15TH.
- TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED OR IN AREAS WHERE PERMANENT EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

PERMANENT EROSION CONTROL MEASURES:

THE FOLLOWING PERMANENT CONTROL MEASURES ARE REQUIRED BY THIS EROSION/ SEDIMENTATION CONTROL PLAN:

- ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.), WILL BE LOAMED, LIMED, FERTILIZED AND SEEDED. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.
- SLOPES GREATER THAN 2:1 WILL RECEIVE RIPRAP.



INSTALLATION:

- INSTALL SEDIMENT BARRIERS ON YOUR SITE BEFORE DISTURBING SOILS. SEE THE "SEDIMENT BARRIERS" MEASURE FOR DETAILS ON INSTALLATION AND MAINTENANCE.
- CONSTRUCT A DIVERSION DITCH TO KEEP UPSLOPE RUNOFF OUT OF WORK AREA.
- MARK CLEARING LIMITS ON THE SITE TO KEEP EQUIPMENT OUT OF AREAS WITH STEEP SLOPES, CHANNELIZED FLOW, OR ADJACENT SURFACE WATERS AND WETLANDS.
- PRESERVE BUFFERS BETWEEN THE WORK AREA AND ANY DOWNSTREAM SURFACE WATERS AND WETLANDS. SEE THE "BUFFERS" MEASURE FOR BUFFER PRESERVATION.
- USE TEMPORARY MULCH AND RYE-SEED TO PROTECT DISTURBED SOIL OUTSIDE THE ACTIVE CONSTRUCTION AREA. SEE THE "MULCHING" MEASURE AND "VEGETATION" MEASURE FOR DETAILS AND SPECIFICATIONS FOR THESE CONTROLS.
- PERMANENTLY SEED AREAS NOT TO BE PAVED WITHIN SEVEN DAYS OF COMPLETING FINAL GRADING. SEE "VEGETATION" MEASURE FOR INFORMATION ON PROPER SEEDING.

MAINTENANCE:

EVERY MONTH THE FIRST YEAR AFTER CONSTRUCTION AND YEARLY THEREAFTER, INSPECT FOR AREAS SHOWING EROSION OR POOR VEGETATION GROWTH. FIX THESE PROBLEMS AS SOON AS POSSIBLE. EACH SPRING REMOVE ANY ACCUMULATION OF DEBRIS OR WINTER SAND THAT WOULD IMPEDE RUNOFF FROM ENTERING A BUFFER OR DITCH.

HOUSE SITE - BEST MANAGEMENT PRACTICES

NOT TO SCALE

CONSTRUCTION PHASE:

THE FOLLOWING PRACTICES WILL BE USED TO PREVENT EROSION DURING CONSTRUCTION OF THIS PROJECT.

- ONLY THOSE AREAS UNDER ACTIVE CONSTRUCTION WILL BE CLEARED AND LEFT IN AN UNTREATED OR UNVEGETATED CONDITION. IF FINAL GRADING, LOAMING AND SEEDING WILL NOT OCCUR WITHIN 7 DAYS, SEE ITEM NO. 4.
- PRIOR TO THE START OF CONSTRUCTION IN A SPECIFIC ARE, SILT FENCING AND/OR HAY BALES WILL BE INSTALLED AT THE TOE OF SLOPE AND IN AREAS AS LOCATED ON THE PLANS TO PROTECT AGAINST ANY CONSTRUCTION RELATED EROSION. IMMEDIATELY FOLLOWING CONSTRUCTION OF CULVERTS AND SWALES, RIP RAP APRONS SHALL BE INSTALLED, AS SHOWN ON THE PLANS.
- TOPSOIL WILL BE STOCKPILED WHEN NECESSARY IN AREAS WHICH HAVE MINIMUM POTENTIAL FOR EROSION AND WILL BE KEPT AS FAR AS POSSIBLE FROM THE EXISTING DRAINAGE COURSE. NO STOCKPILE SHALL BE CLOSER THAN 100' OF A RESOURCE INCLUDING, BUT NOT LIMITED TO, WETLANDS, STREAMS, AND OPEN WATER BODIES. ALL STOCKPILES SHALL HAVE A SILTATION FENCE BELOW THEM REGARDLESS OF TIME OF PRESENCE. ALL STOCKPILES EXPECTED TO REMAIN LONGER THAN 15 DAYS SHALL BE:
 - (A) ALL STOCKPILES ANTICIPATED TO REMAIN IN PLACE FOR LESS THAN 30 DAYS SHALL BE TREATED WITH ANCHORED MUGH (WITHIN 5 DAYS OF THE LAST DEPOSIT OF STOCKPILED SOIL), OR PRIOR TO ANY RAINFALL OR COVERED WITH AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL.
 - (B) ALL STOCKPILES ANTICIPATED TO REMAIN IN PLACE LONGER THAN 30 DAYS SHALL BE SEEDED WITH CONSERVATION MIX OF ANNUAL RYE GRASS (0.9 LB/1,000 SQ. FT.) AND MULCHED WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL OR COVERED WITH AN ANCHORED TARP WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL.
 - (C) INSTALL SILT FENCE AROUND STOCKPILE AT BASE OF PILE, STOCKPILES TO HAVE SILT FENCE INSTALLED AT TIME ESTABLISHMENT AT BASE OF PILE.
- DISTURBED AREAS:
 - (A) DISTURBED AREAS ANTICIPATED REMAINING UNDISTURBED FOR LESS THAN 30 DAYS UNTIL PERMANENTLY STABILIZED SHALL BE TREATED WITH ANCHORED MULCH WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL.
 - (B) DISTURBED AREAS ANTICIPATED TO REMAIN UNDISTURBED FOR MORE THAN 30 DAYS UNTIL PERMANENTLY STABILIZED SHALL BE TREATED SEEDED WITH CONSERVATION MIX OF ANNUAL RYE GRASS (0.9 LBS/1,000 SQ. FT.) AND MULCHED AT A RATE OF 150 LB. PER 1000 S.F. WITHIN 7 DAYS OR PRIOR TO ANY RAINFALL.
- ALL GRADING WILL BE HELD TO A MAXIMUM 2:1 SLOPE WHERE PRACTICAL. ALL SLOPES WILL BE STABILIZED WITH PERMANENT SEEDING, OR WITH STONE, WITHIN 5 DAYS AFTER FINAL GRADING IS COMPLETE. (SEE POST-CONSTRUCTION REVEGETATION FOR SEEDING SPECIFICATION.) ALL SLOPES HAVING A GRADE GREATER THAN 8% WILL BE STABILIZED WITH RIP RAP OR PERMANENT SEEDING WITHIN 5 DAYS OF COMPLETING THE SLOPES FINAL GRADING.
- THE CONTRACTOR SHALL WITHIN 24 HOURS OF PLACING A CULVERT PLACE STONE RIP RAP, APRON OR PLUNGE POOL, AT THE CULVERTS OUTLET. ALL CULVERTS WILL BE PROTECTED WITH STONE RIP RAP (D50 = 6" UNLESS OTHERWISE SPECIFIED) AT INLETS AND OUTLETS.
- ANY DITCH SECTION BROUGHT TO FINAL GRADE WILL BE STABILIZED WITH RIP RAP LINED OR PROPERLY INSTALLED EROSION CONTROL BLANKETS (USED OVER PERMANENT SEEDING) WITHIN 5 DAYS.

POST-CONSTRUCTION REVEGETATION:

THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING.

- A MINIMUM OF 4" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE, OR STONE WILL BE PLACED ON SLOPES TO STABILIZE SURFACES.
- IF FINAL GRADING IS REACHED DURING THE NORMAL GROWING SEASON (4/15 TO 9/15), PERMANENT SEEDING WILL BE DONE AS SPECIFIED BELOW. PRIOR TO SEEDING, LIMESTONE SHALL BE APPLIED AT A RATE OF 138 LBS/1,000 SQ. FT. AND 10:20:20 FERTILIZER AT A RATE OF 18.4 LBS/1,000 SQ. FT. WILL BE APPLIED. BROADCAST SEEDING AT THE FOLLOWING RATES:

LAWNS
 KENTUCKY BLUEGRASS 0.46 LBS/1,000 S.F.
 CREEPING RED FESCUE 0.46 LBS/1,000 S.F.
 PERENNIAL RYE GRASS 0.11 LBS/1,000 S.F.

SWALES
 RED TOP 0.05 LBS/1,000 S.F.
 TALL FESCUE 0.46 LBS/1,000 S.F.

- AN AREA SHALL BE MULCHED IMMEDIATELY AFTER IS HAS BEEN SEEDED. MULCHING SHALL CONSIST OF HAY MULCH, HYDRO-MULCH, JUTE NET OVER MULCH, PRE-MANUFACTURED EROSION MATS OR ANY SUITABLE SUBSTITUTE DEEMED ACCEPTABLE BY THE DESIGNER.
 - (A) HAY MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. HAY MULCH SHALL BE SECURED BY EITHER: (NOTE: SOIL SHALL NOT BE VISIBLE)
 - BEING DRIVEN OVER BY TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.
 - BLANKETED BY TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING, OR WITH SPRAY, ON GRADES GREATER THAN 5%.
 - SEE NOTE 6, GENERAL NOTES, AND NOTE 8, WINTER CONSTRUCTION.
- HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF EITHER ASPHALT, WOOD FIBER OR PAPER FIBER AND WATER SPRAYED OVER A SEEDED AREA. HYDRO-MULCH SHALL NOT BE USED BETWEEN 9/15 AND 4/15.
- CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN SEPTEMBER 15 AND APRIL 15. SHOULD SEEDING BE NECESSARY BETWEEN SEPTEMBER 15 AND APRIL 15 THE FOLLOWING PROCEDURE SHALL BE FOLLOWED. ALSO REFER TO NOTE 9 OF WINTER CONSTRUCTION.
 - (A) ONLY UNFROZEN LOAM SHALL BE USED.
 - (B) LOAMING, SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS, IT MUST BE REMOVED PRIOR TO PLACEMENT OF SEED.
 - (C) WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS/1,000 SQ. FT.) SHALL BE ADDED TO THE PREVIOUSLY NOTED AREAS.
 - (D) WHERE TEMPORARY SEEDING IS REQUIRED, ANNUAL WINTER RYE (2.6 LBS/1,000 SQ.FT.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
 - (E) FERTILIZING, SEEDING AND MULCHING SHALL BE APPLIED TO LOAM THE DAY THE LOAM IS SPREAD BY MACHINERY.
 - (F) ALTERNATIVE HAY MULCH SHALL BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING. TRACKING BY MACHINERY ALONE WILL NOT SUFFICE.
- FOLLOWING FINAL SEEDING, THE SITE WILL BE INSPECTED EVERY 30 DAYS UNTIL 85% COVER HAS BEEN ESTABLISHED. THE CONTRACTOR WILL CARRY OUT RESEEDING WITHIN 10 DAYS OF NOTIFICATION BY THE ENGINEER THAT THE EXISTING CATCH IS INADEQUATE.

MONITORING SCHEDULE:

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MONITORING, MAINTAINING, REPAIRING, REPLACING AND REMOVING ALL OF THE EROSION AND SEDIMENTATION CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO. MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, A VISUAL INSPECTION WILL BE MADE OF ALL EROSION AND SEDIMENTATION CONTROLS AS FOLLOWS:

- HAY BALE BARRIERS, SILT FENCE, AND STONE CHECK DAMS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK OR IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REDISTRIBUTED TO AREA UNDERGOING FINAL GRADING. SHOULD THE HAY BALE BARRIERS PROVE TO BE INEFFECTIVE, THE CONTRACTOR SHALL INSTALL SILT FENCE BEHIND THE HAY BALES.
- VISUALLY INSPECT RIP RAP ONCE A WEEK OR AFTER EACH SIGNIFICANT RAINFALL AND REPAIR AS NEEDED. REMOVE SEDIMENT TRAPPED BEHIND THESE DEVICES ONCE IT ATTAINS A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE DAM OR RISER. DISTRIBUTE REMOVED SEDIMENT OFF-SITE OR TO AN AREA UNDERGOING FINAL GRADING.
- REVEGETATION OF DISTURBED AREAS WITHIN 25' OF DRAINAGE-COURSE/STREAM WILL BE SEEDED WITH THE "MEADOW AREA MIX" AND INSPECTED ON A WEEKLY BASIS OR AFTER EACH SIGNIFICANT RAINFALL AND RESEEDED AS NEEDED. EXPOSED AREAS WILL BE RESEEDED AS NEEDED UNTIL THE AREA HAS OBTAINED 100% GROWTH RATE. PROVIDE PERMANENT RIP RAP FOR SLOPES IN EXCESS OF 3:1 AND WITHIN 25' OF DRAINAGE COURSE.

EROSION CONTROL DURING WINTER CONSTRUCTION:

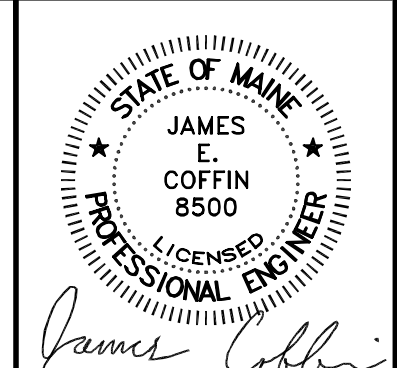
- WINTER CONSTRUCTION PRIOR: NOVEMBER 1 THROUGH APRIL 15.
- WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
- EXPOSED AREA SHALL BE LIMITED TO THOSE AREAS TO BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. ATE END OF EACH WORK WEEK NO AREAS MAY BE LEFT UNSTABILIZED OVER THE WEEKEND.
- CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, SUCH TAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
- AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1,000 B.F. (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ANCHORED SUCH TAT SOIL SURFACE IS NOT VISIBLE THROUGH THEY MULCH. NOTE: AN AREA TO BE USED AS A ROAD OR VEHICLE PARKING LOT IS ALSO CONSIDERED STABLE IF SODDED, COVERED WITH COMPACTED GRAVEL SUBBASE OR COMPACTED STRUCTURAL SAND.
- BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1 AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER, UNTIL SUCH TIME AS EITHER CONDITIONS ALLOW, DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY, SILT FENCE OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS SHOWN ON THE DESIGN DRAWINGS. NOTE: DORMANT SEEDING SHOULD NOT BE ATTEMPTED UNLESS SOIL TEMPERATURE REMAINS ABOVE 50 DEGREES AND DAY TIME TEMPERATURES REMAIN IN THE 30'S.
- MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8% VEGETATED DRAINAGE SWALES SHALL BE LINED WITH EXCELSIOR OR CURLEX.
- MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAN 15%. AFTER OCTOBER 1 THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
- WINTER RYE IS RECOMMENDED FOR STABILIZATION UNTIL OCTOBER 1ST. AFTER OCTOBER 1, WINTER RYE IS NOT EFFECTIVE. AROUND NOVEMBER 15 OR LATER, ONCE TEMPERATURES OF THE AIR AND SOIL PERMIT, DORMANT SEEDING IS EFFECTIVE.
- IN THE EVENT OF SNOWFALL (FRESH OR CUMULATIVE) GREATER THAN 1 INCH DURING WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM THE AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.

GUIDELINES FOR STABILIZING SITES FOR THE WINTER:

- STANDARD FOR THE TIMELY STABILIZATION OF DITCHES AND CHANNELS: THE CONTRACTOR WILL CONSTRUCT AND STABILIZE ALL STONE-LINED DITCHES AND CHANNELS ON THE SITE BY NOVEMBER 15TH. THE CONTRACTOR WILL CONSTRUCTION AND STABILIZE ALL GRASS-LINED DITCHES AND CHANNELS ON THE SITE BY SEPTEMBER 1ST. IF THE CONTRACTOR FAILS TO STABILIZE A DITCH OR CHANNEL TO BE GRASS-LINED BY SEPTEMBER 1ST, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER.
 - (A) INSTALL A SOD LINING IN THE DITCH: THE CONTRACTOR WILL LINE THE DITCH WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING SOD AT THE BASE OF THE DITCH WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD FROM SLOUGHING DURING FLOW CONDITIONS.
 - (B) INSTALL A STONE LINING IN THE DITCH: THE CONTRACTOR WILL LINE THE DITCH WITH STONE RIP RAP BY NOVEMBER 15TH. THE DEVELOPMENT'S OWNER WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE AND LINE THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO AS TO PREVENT THE STONE LINING FORM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.
- STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES: THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 1. THE DEPARTMENT WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.
 - (A) STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE SLOPE BY NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF WOOD-WASTE COMPOST AS DESCRIBED IN ITEM 3 OF THIS STANDARD OR WITH STONE RIP RAP AS DESCRIBED IN ITEM 4 OF THIS STANDARD.
 - (B) STABILIZE THE SLOPE WITH SOD: THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
 - (C) STABILIZE THE SLOPE WITH WOOD-WASTE COMPOST: THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD-WASTE COMPOST ON THE SLOPE BY NOVEMBER 15. THE CONTRACTOR WILL NOT USE WOOD-WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H: 1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
 - (D) STABILIZE THE SLOPE WITH STONE RIP RAP: THE CONTRACTOR WILL PLACE A LAYER OF STONE RIP RAP ON THE SLOPE BY NOVEMBER 15. THE DEVELOPMENT'S OWNER WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIP RAP.
- STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS: BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON THE SITE. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.
 - (A) STABILIZE THE SOIL WITH TEMPORARY VEGETATION: BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1,000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS T COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN THE CONTRACTOR WILL MULCH THE AREA FOR OVER PROTECTION AS DESCRIBED IN ITEM 3 OF THIS STANDARD.
 - (B) STABILIZE THE SOIL WITH SOD: THE CONTRACTOR WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PRONTO ROOT GROWTH INTO THE DISTURBED SOIL.
 - (C) STABILIZE THE SOIL WITH MULCH: BY NOVEMBER 15 THE CONTRACTOR WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1,000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, THE CONTRACTOR WILL ANCHOR THE MULCH WITH NETTING OR OTHER METHOD TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

SITE INSPECTION AND MAINTENANCE:

- WEEKLY INSPECTIONS, AS WELL AS ROUTINE INSPECTIONS FOLLOWING RAIN FALLS, SHALL BE CONDUCTED BY GENERAL CONTRACTOR OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES UNTIL FINAL ACCEPTANCE OF THE PROJECT (85% GRASS CATCH). NECESSARY REPAIRS SHALL BE MADE TO CORRECT UNDERMINING OR DETERIORATION. FINAL ACCEPTANCE SHALL INCLUDE A SITE INSPECTION TO VERIFY THE STABILITY OF ALL DISTURBED AREAS AND SLOPES. UNTIL FINAL INSPECTION, ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL IMMEDIATELY BE CLEANED, AND REPAIRED BY THE GENERAL CONTRACTOR AS REQUIRED. DISPOSAL OF ALL TEMPORARY EROSION AND CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- IT IS RECOMMENDED THAT THE OWNER HIRE THE SERVICES OF THE DESIGN ENGINEER TO PROVIDE COMPLIANCE INSPECTIONS (DURING ACTIVE CONSTRUCTION) RELATIVE TO IMPLEMENTATION OF THE STORMWATER AND EROSION CONTROL PLANS. SUCH INSPECTIONS SHOULD BE LIMITED TO ONCE A WEEK OR AS NECESSARY AND BE REPORTABLE TO THE OWNER, TOWN AND DEP.
- SHORT-TERM SEDIMENTATION MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN OUT ALL SWALES AND STRUCTURES PRIOR TO TURNING PROJECT OVER.
- LONG-TERM PROVISIONS FOR PERMANENT MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL DEVICES AFTER ACCEPTANCE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE OWNER, TOWN OR THEIR DESIGNER.



NO.	REVISIONS	DATE

DETAILS I

SHEET TITLE:

SCALE: AS SHOWN

DATE: JULY 10, 2023

DRAWN BY: TCH

CHECKED BY: JEC

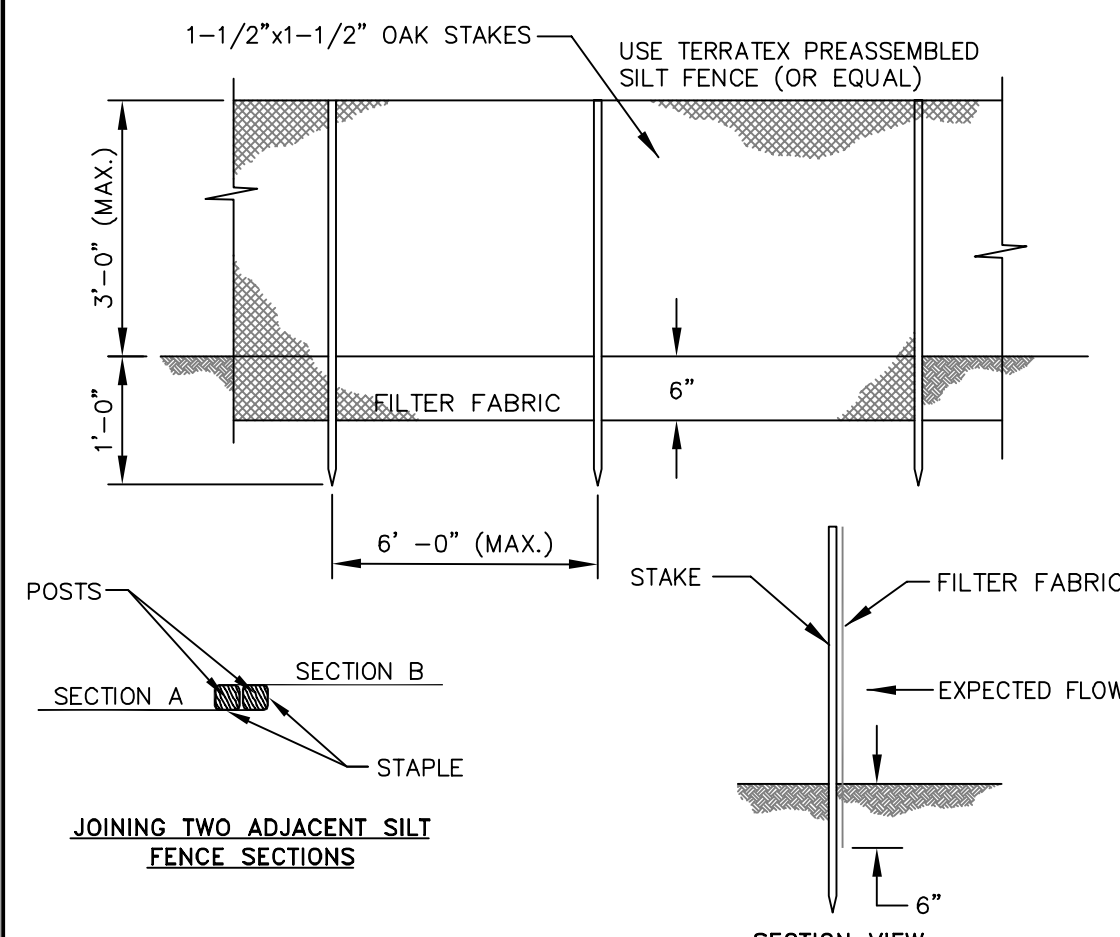
CLIENT/PROJECT: CORE CUTTER, LLC LOT #26

LOCATION: TECHNOLOGY DRIVE

TOWN: GARDNER COUNTY: KENNEBEC STATE: MAINE

PROJ. NO. 2022-005

C-3



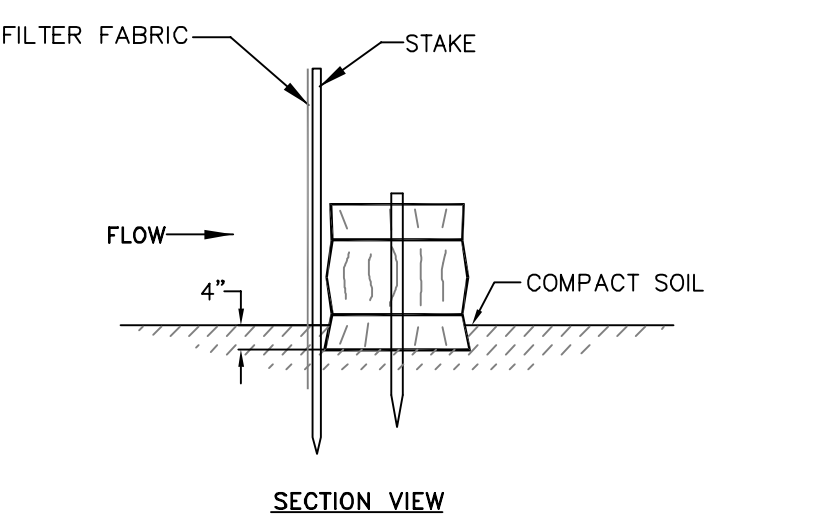
NOTES:
SILT FENCE AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

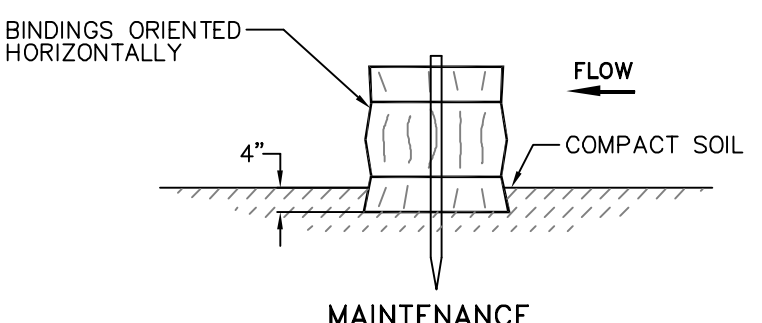
THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.

SILT FENCE DETAIL
NOT TO SCALE



SILT FENCE/BALE BARRIER DETAIL
NOT TO SCALE

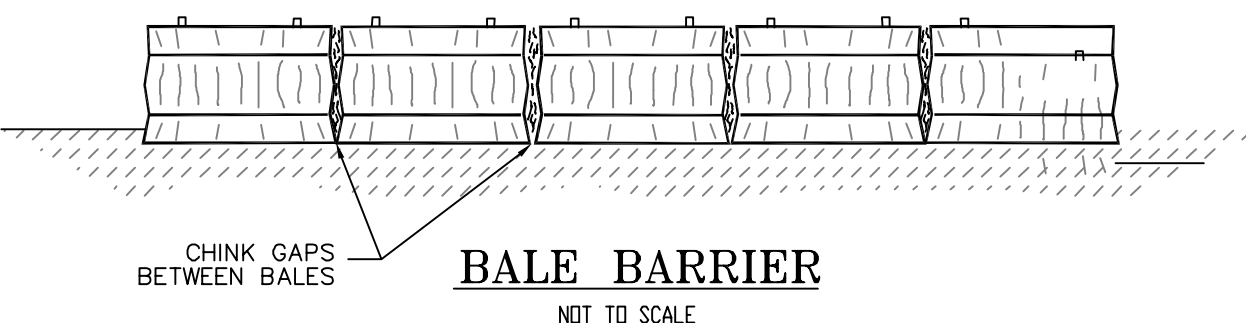
NOTES:
ANY SEDIMENT BARRIERS LOCATED AT LOW POINTS OR SUBJECT TO PONDING ALONG THE FENCE SHALL BE REINFORCED AS SHOWN ABOVE WITH A COMBINATION OF HAYBALES & SILT FENCE.
THE CONTRACTOR SHALL REMOVE SEDIMENT TRAPPED AT THESE LOW POINTS AFTER EVERY STORM EVENT.



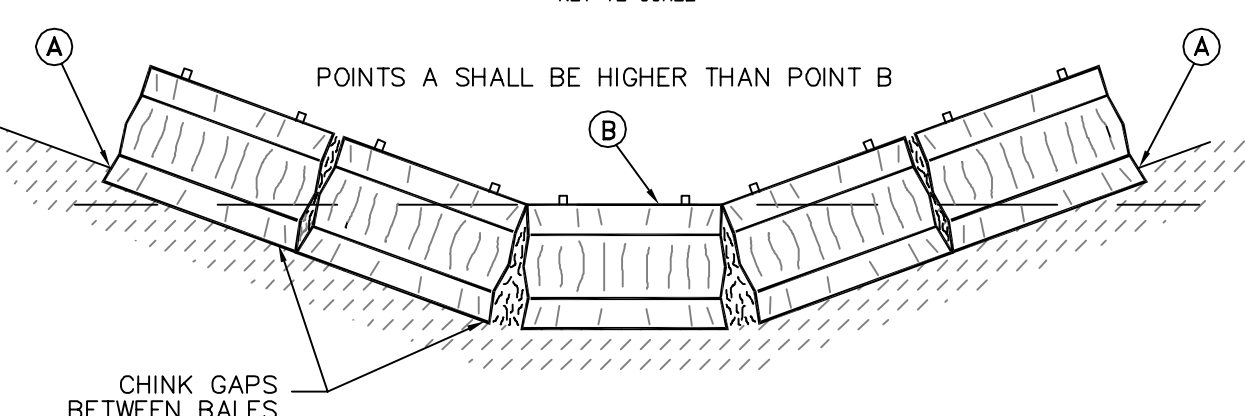
MAINTENANCE

- THE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
- CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
- NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT SHALL BE ACCOMPLISHED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. THEY MUST BE REMOVED WHEN THE BARRIER IS REMOVED.

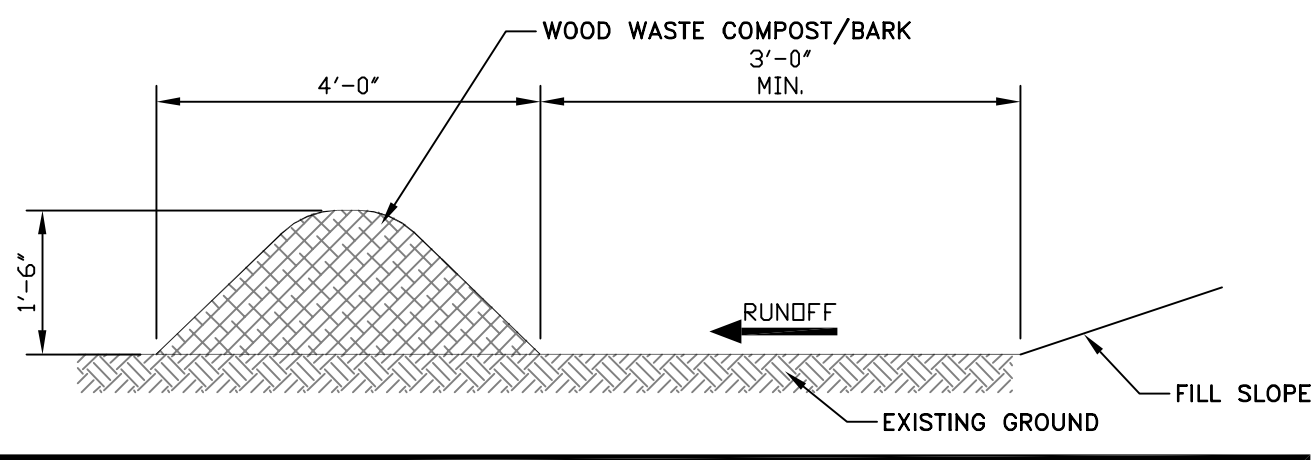
NOTES:
- BALES ARE HAY OR STRAW, DIMENSIONS: 14" x 18" x 30", WIRE OR NYLON, PLACED IN DRAINAGE AREAS, UPON THE CONTOUR OF THE GROUND. BALES ARE TO BE PLACED IN A ROW, WITH ENDS TIGHTLY SET AGAINST THE ADJACENT BALE.
- EACH BALE IS TO BE EMBEDDED IN THE SOIL A MINIMUM OF 4" AND ANCHORED IN PLACE BY STAKES DRIVEN THRU THE BALES INTO THE GROUND AT LEAST 18". THE STAKES ARE TO BE DRIVEN IN SUCH A MANNER AS TO FORCE THE ENDS OF THE BALES TOGETHER. STAKES MAY BE REBAR STEEL PICKETS, 2" x 2" SOFTWOOD, OR 1" x 1" HARDWOOD.



BALE BARRIER
NOT TO SCALE



DITCH BALE BARRIER
NOT TO SCALE



WOOD WASTE COMPOST/BAK FILTER BERMS

THE FILTER BERM SHALL CONSIST OF A WOOD WASTE COMPOST/BAK MULCH MIX OR RECYCLED COMPOSTED BARK FLUME GRIT AND FRAGMENTED WOOD GENERATED FROM WATER-FLUME LOG HANDLING SYSTEMS. COMPOSTED MIXES CAN BE USED UPON APPROVAL OF THE OFFICE OF ENVIRONMENTAL SERVICES LANDSCAPE UNIT.

- THE MIX SHALL CONFORM TO THE FOLLOWING STANDARDS:
- A. MOISTURE CONTENT - 30-60%
 - B. pH - 5.0-8.0
 - C. SCREEN SIZE - 100% LESS THAN 3", MAXIMUM 70% LESS THAN 1"
 - D. NO LESS THAN 40% ORGANIC MATERIAL (DRY WEIGHT) BY LOSS OF IGNITION
 - E. NO STONES LARGER THAN 2" IN DIAMETER

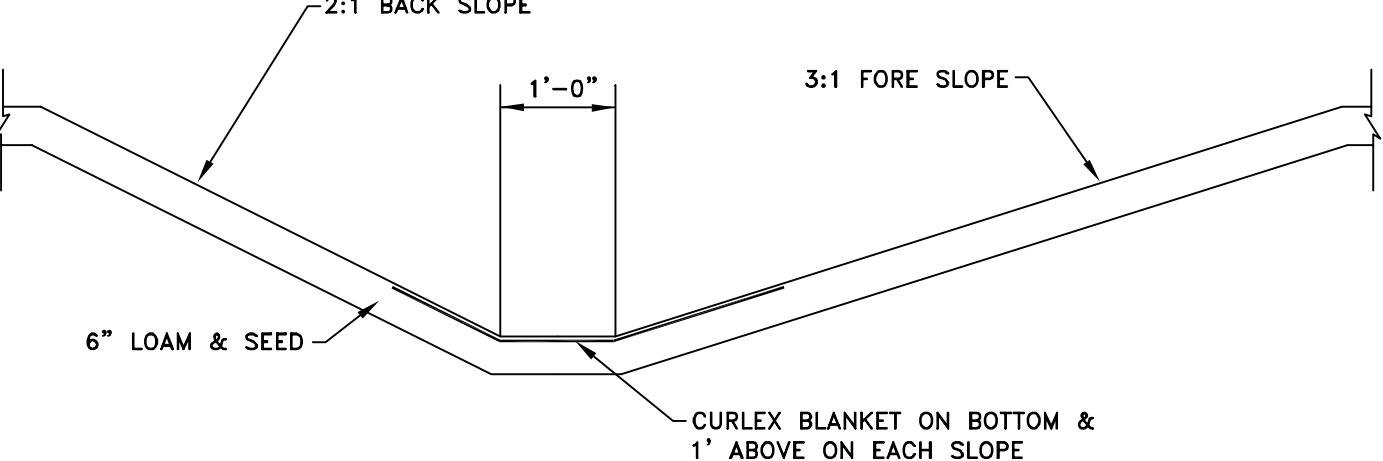
THE COMPOSTED BERM SHALL BE PLACED, UNCOMPACTED, ALONG A RELATIVELY LEVEL CONTOUR.

NOTE:
WOOD WASTE COMPOST/BAK FILTER BERMS MAY BE USED IN COMBINATION WITH SILT FENCE TO IMPROVE SEDIMENT REMOVAL AND PREVENT CLOGGING OF THE WOOD WASTE COMPOST/BAK BERM BY LARGER SEDIMENT PARTICLES. (SILT FENCE PLACED TO FILTER RUNOFF BEFORE WOOD WASTE COMPOST/BAK)

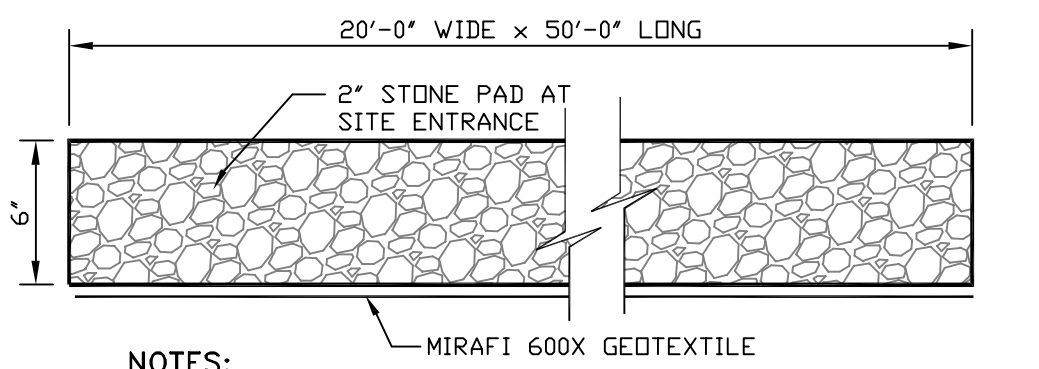
WOOD WASTE COMPOST/BAK FILTER BERM ALTERNATIVE
NOT TO SCALE

SPECIFICATIONS
UPON FINAL GRADING, THE DISTURBED AREAS SHALL BE IMMEDIATELY SEED TO PERMANENT VEGETATION AND MULCHED. THE DITCH WILL NOT BE UTILIZED AS AN OUTLET UNTIL A DENSE, VIGOROUS VEGETATIVE COVER HAS BEEN OBTAINED.
NETTING OR EXCLESIOR MESH SHALL BE INSTALLED AT THE BASE OF THE VEGETATIVE CHANNEL.

MAINTENANCE
MOW WATERWAY AT LEAST ONCE ANNUALLY. WHEN PRACTICAL, DELAY MOWING UNTIL AFTER JULY 15TH TO ACCOMMODATE GROUND NESTING WILDLIFE. MOW TO A HEIGHT OF 4 TO 8 INCHES TO HELP MAINTAIN GOOD SURFACE PROTECTION. EXCESSIVE GROWTH SHALL BE REMOVED. DO NOT MOW LATER THAN 30 DAYS PRIOR TO THE FIRST KILLING FROST.

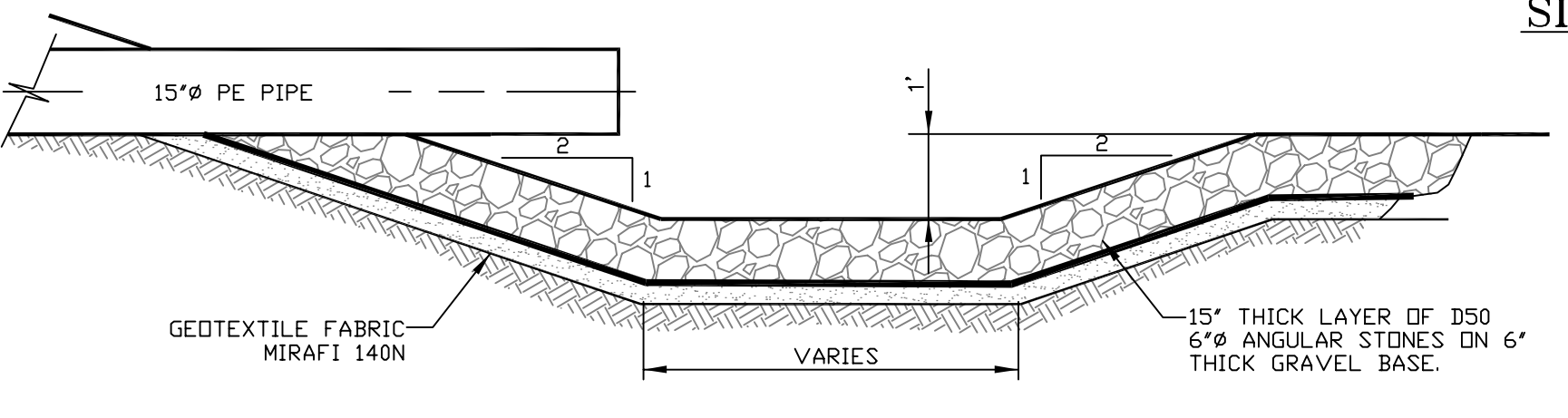


SEEDED DITCH DETAIL
NOT TO SCALE

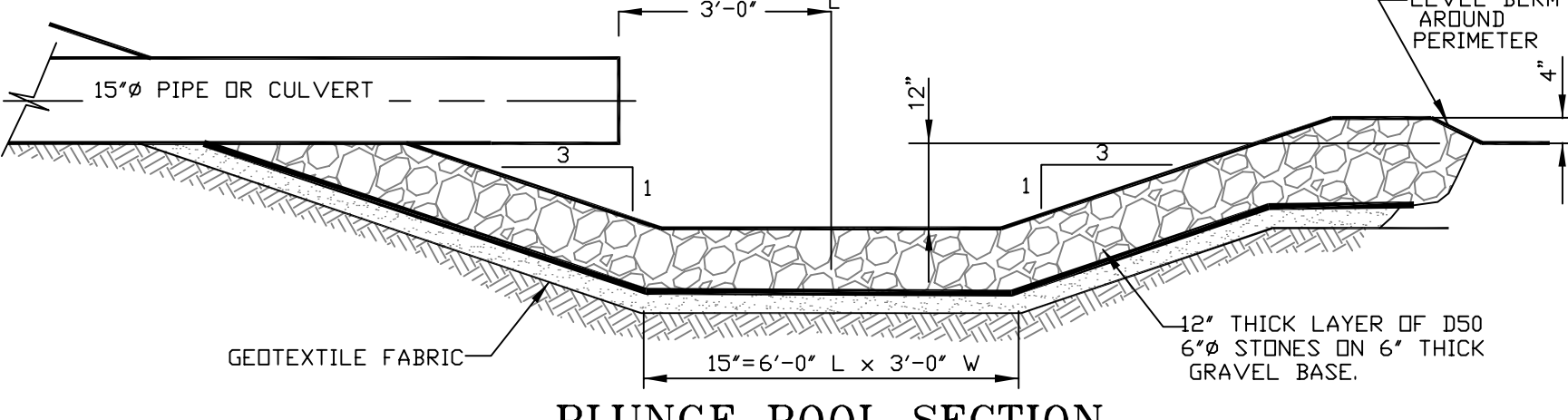


NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO ROAD.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



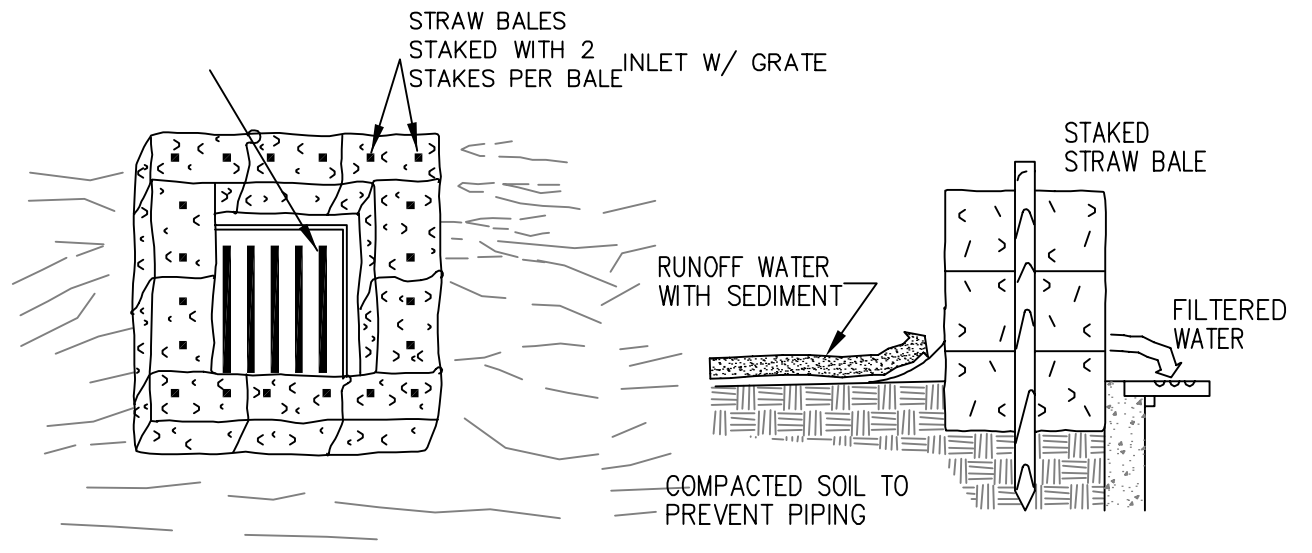
SEDIMENT FOREBAY SECTION
NOT TO SCALE



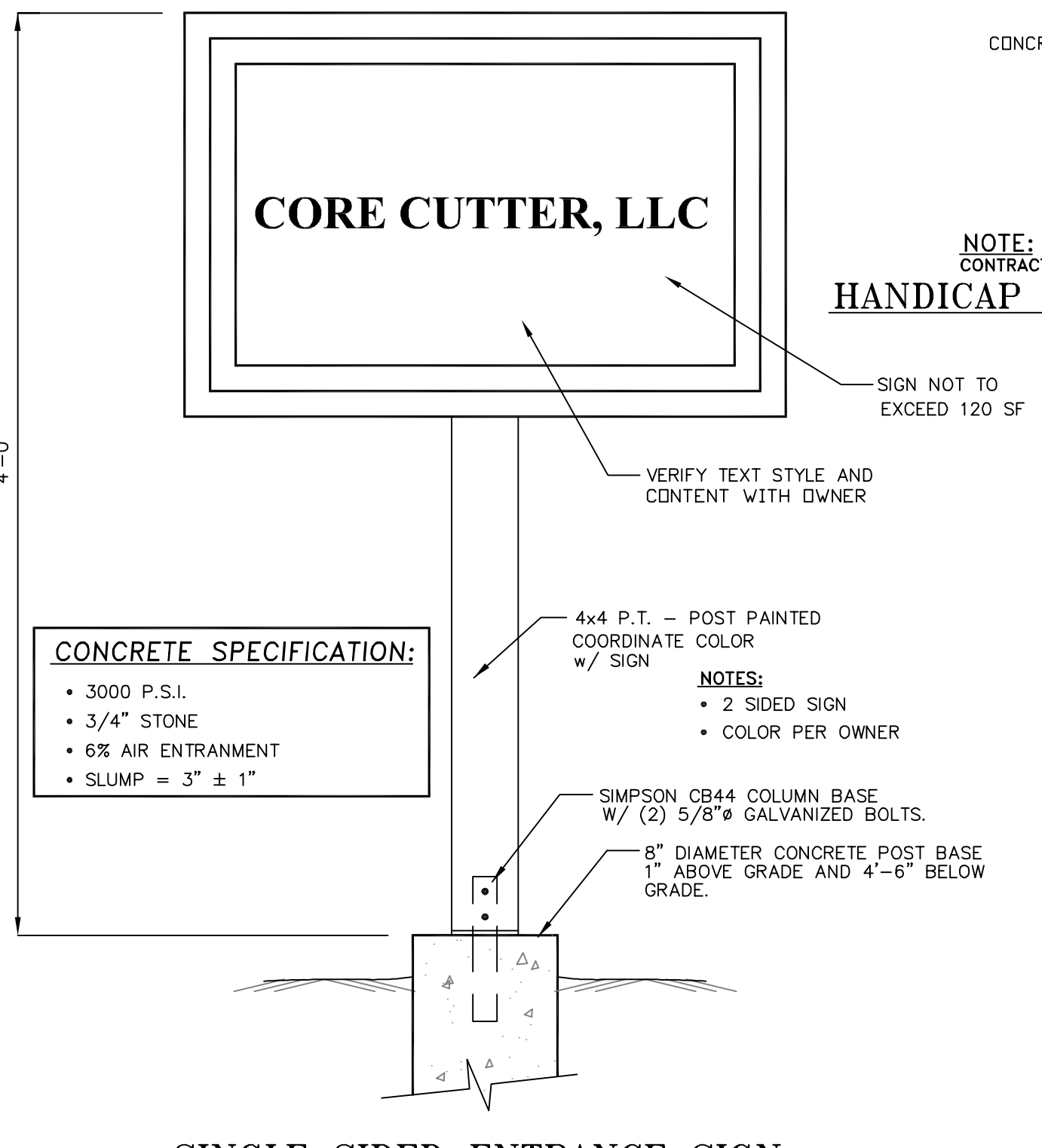
PLUNGE POOL SECTION
NOT TO SCALE

STRAW BALE INLET NOTE
CONSTRUCTION SPECIFICATIONS

1. STRAW BALE INLET STRUCTURE
- A: BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH BINDINGS ORIENTED AROUND THE SIDE RATHER THAN OVER AND UNDER THE BALES.
- B: BALES SHALL BE PLACED LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
- C: THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED AROUND THE INLET THE WIDTH OF A BALE TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
- D: EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBAR DRIVEN THROUGH THE BALE.
- E: LOOSE STRAW SHALL BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.



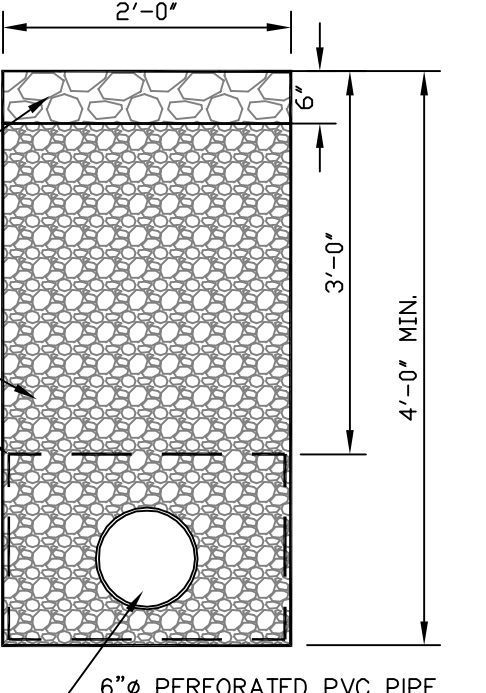
STRAW BALE INLET PROTECTION
NOT TO SCALE



CONCRETE SPECIFICATION:

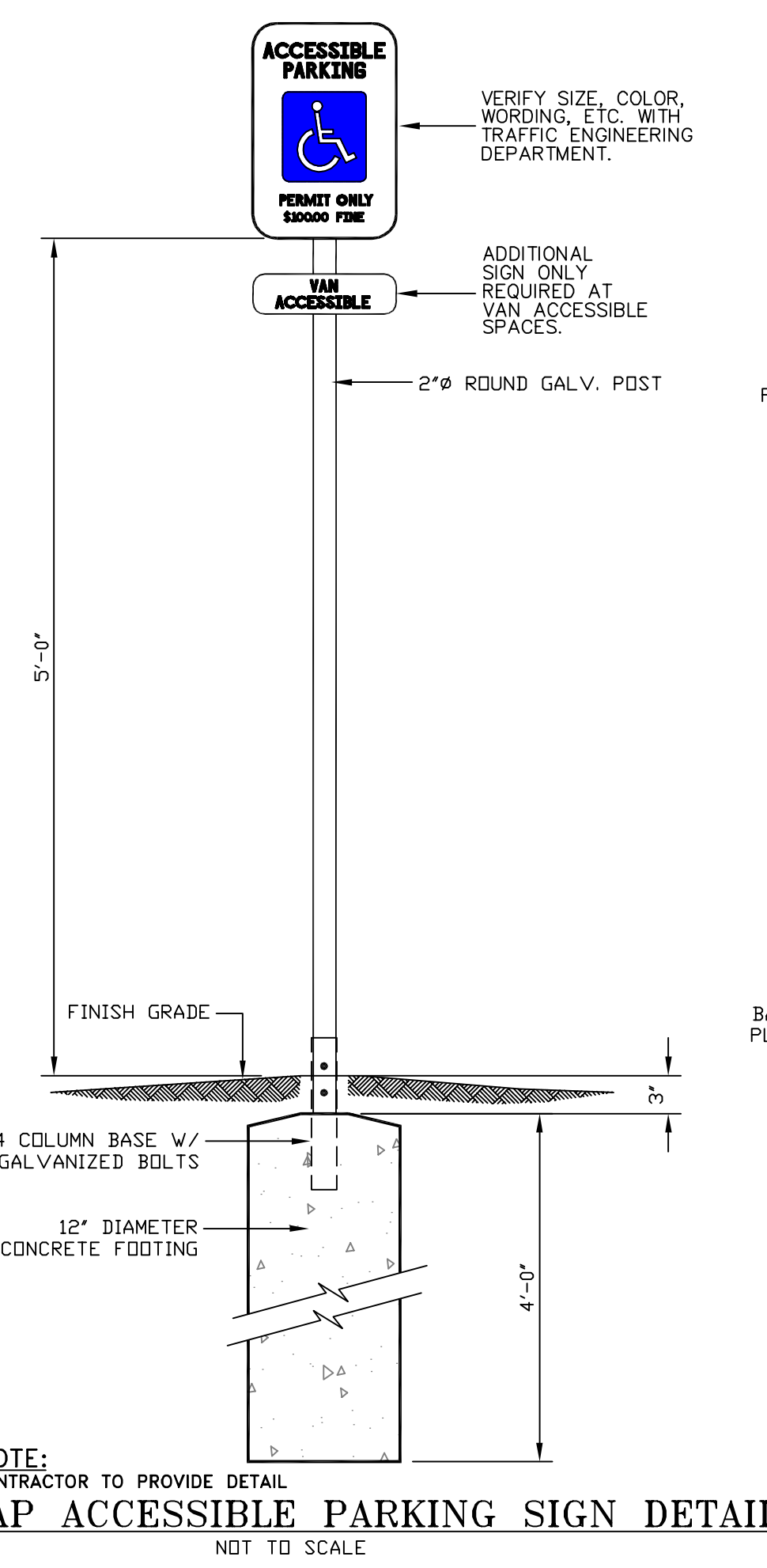
- 3000 P.S.I.
- 3/4" STONE
- 6% AIR ENTRANMENT
- SLUMP = 3" ± 1"

SINGLE SIDED ENTRANCE SIGN
NOT TO SCALE

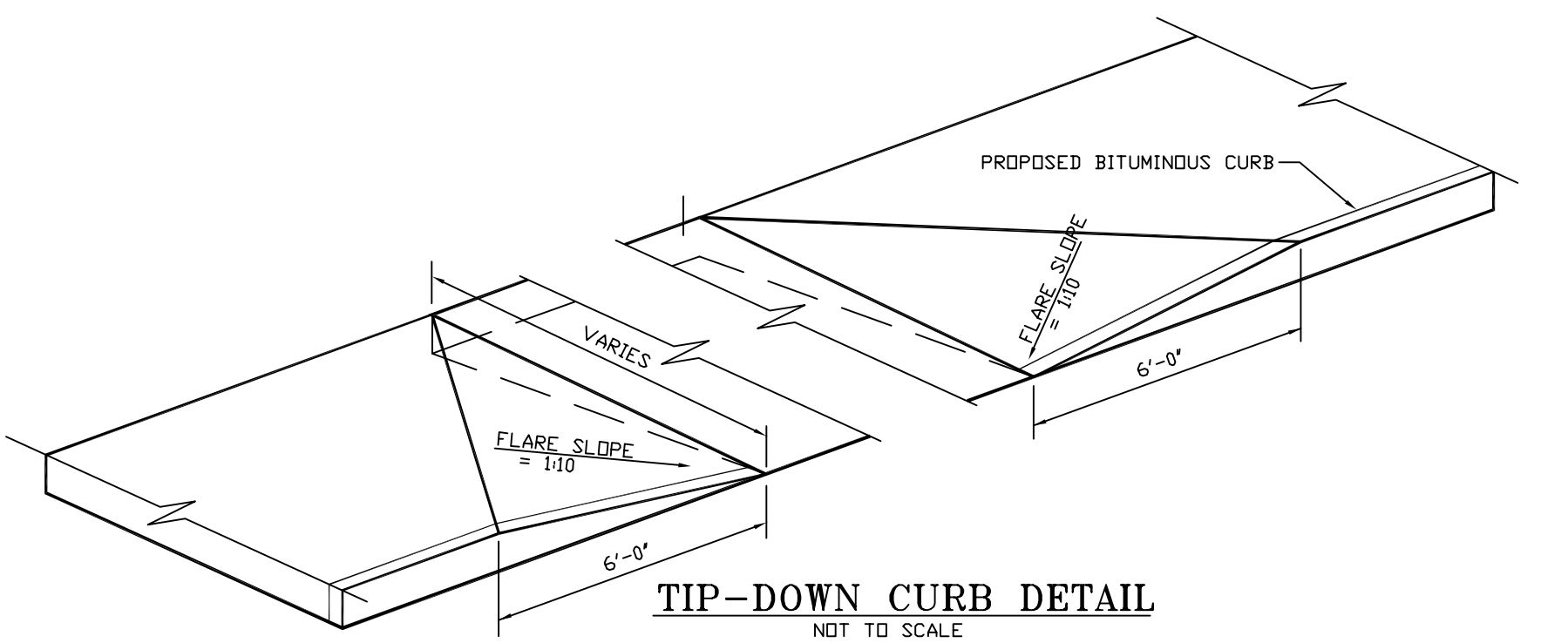


MAINTENANCE
REGULAR INSPECTIONS MUST BE CHECKED FOR SEDIMENT ACCUMULATION AFTER EACH SIGNIFICANT RAINFALL. SEDIMENT MUST BE REMOVED WHEN VISIBLE AT THE TOP OF THE DRAIN. WEEDS AND OTHER DEBRIS SHALL BE REMOVED FROM DRAIN PERIODICALLY AFTER ACCUMULATION. THE AREA IN AND AROUND THE DRAIN SHALL BE MOWED AT LEAST SEMI-ANNUALLY. SHOULD DRAIN BECOME PLUGGED OR BROKEN THAT SECTION SHALL BE REPLACED IMMEDIATELY.

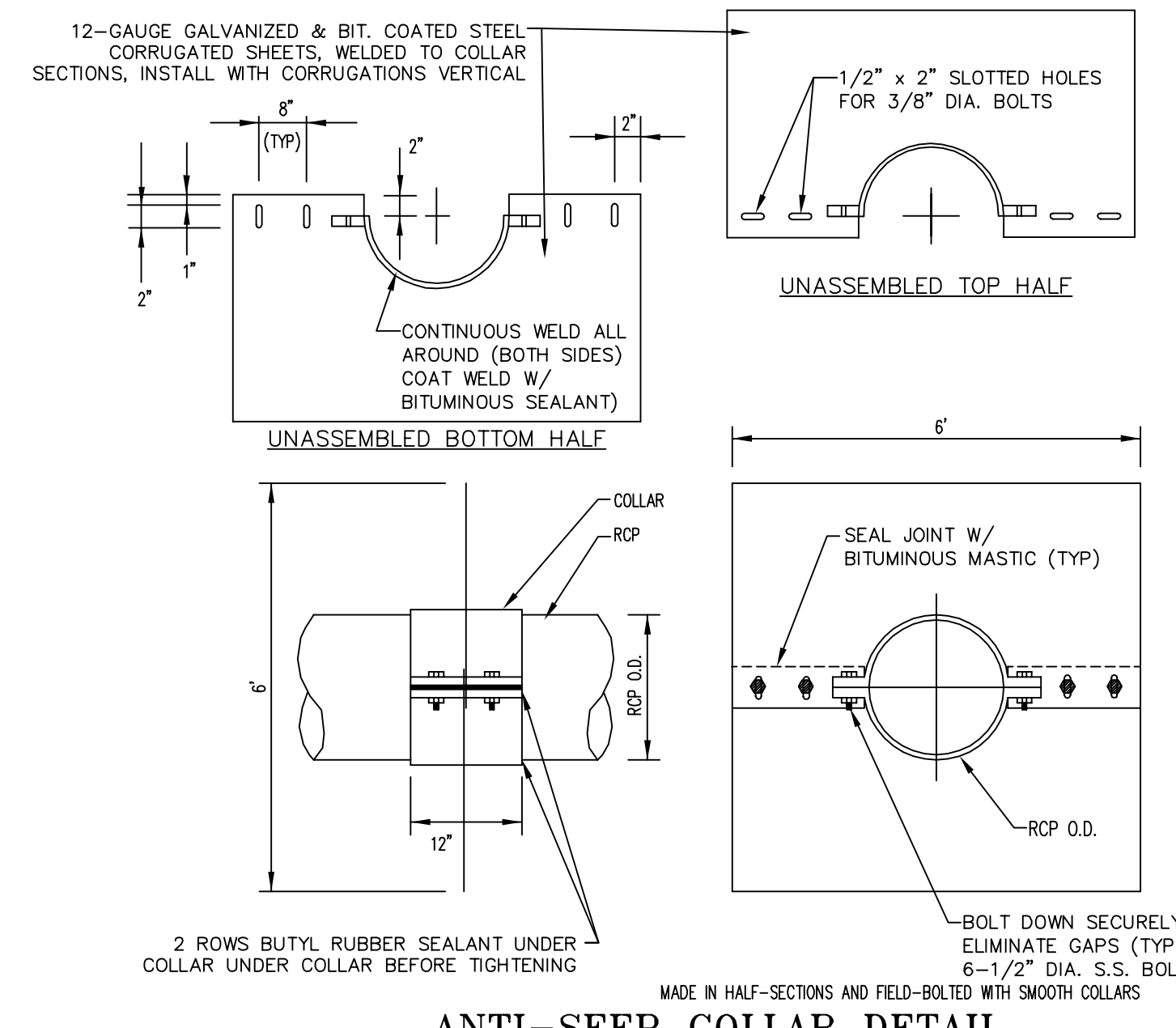
STONE DRIP EDGE DETAIL
NOT TO SCALE



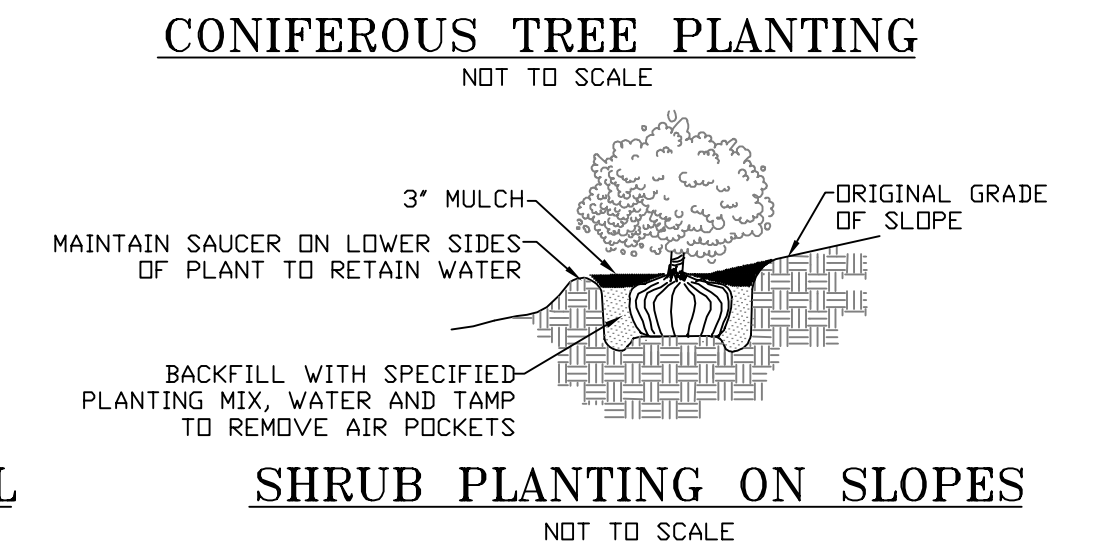
HANDICAP ACCESSIBLE PARKING SIGN DETAIL
NOT TO SCALE



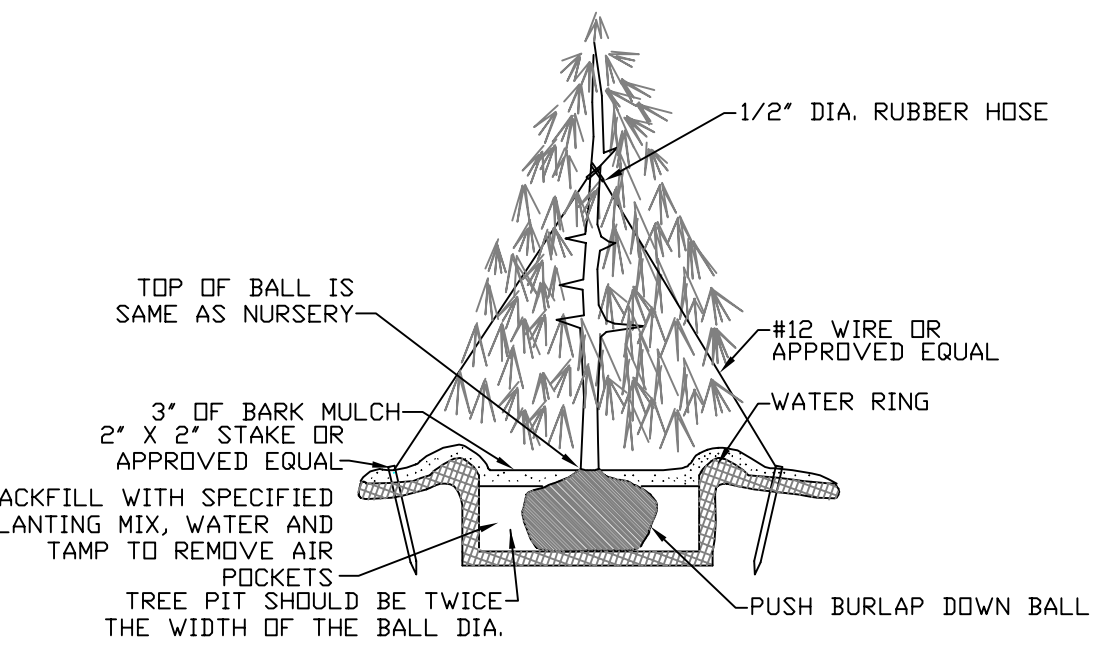
TIP-DOWN CURB DETAIL
NOT TO SCALE



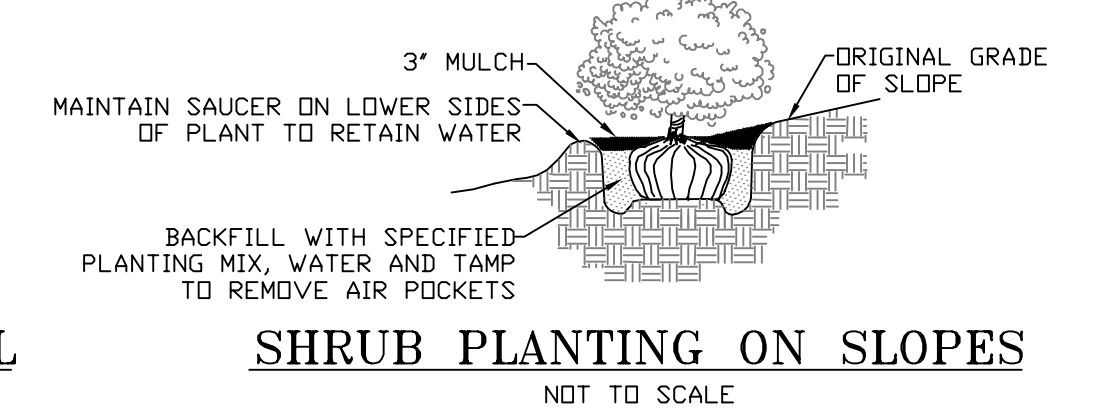
ANTI-SEEP COLLAR DETAIL
NOT TO SCALE



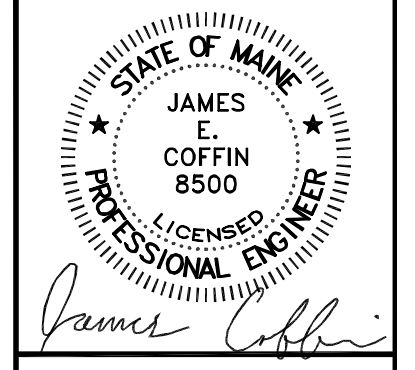
DECIDUOUS TREE PLANTING
NOT TO SCALE



CONIFEROUS TREE PLANTING
NOT TO SCALE



SHRUB PLANTING ON SLOPES
NOT TO SCALE



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NO.	REVISIONS	DATE

CLIENT/PROJECT: CORE CUTTER, LLC LOT #26
LOCATION: TECHNOLOGY DRIVE
TOWN: GARDNER
COUNTY: KENNEBEC
STATE: MAINE

SCALE: AS SHOWN
DRAWN BY: TCH
CHECKED BY: JEC
DATE: JULY 10, 2023

SHEET TITLE: DETAILS II
PROJECT NO.: 2022-005

C-4

GENERAL NOTES

1. AGGREGATE FOR GRAVEL BASE

AGGREGATE FOR GRAVEL BASE SHALL BE SCREENED OR CRUSHED GRAVEL OF HARD DURABLE PARTICLES FREE FROM VEGETABLE MATTER, LUMPS OR BALLS OF CLAY AND OTHER DELETERIOUS SUBSTANCES. THE GRADATION OF THE PART THAT PASSES A 3 INCH SIEVE SHALL MEET THE GRADING REQUIREMENTS OF THE FOLLOWING TABLE:

SIEVE DESIGNATION	PERCENTAGE BY WEIGHT PASSING SQUARE MESH SIEVES		
	TYPE A AGGREGATE	TYPE D AGGREGATE	STRUCTURAL FILL
2" / 3" / 4"	100 (2")	100 (3")	100 (4")
1 1/2 INCH	45-70	35-80	90-100
1/4 INCH	30-55	25-65	25-90
No. 40	0-20	0-30	0-30
No. 200	0-6	0-7	0-5

TYPE "A" AGGREGATE SHALL NOT CONTAIN PARTICLES WHICH WILL NOT PASS THE 2 INCH SQUARE MESH SIEVE.

TYPE "D" AGGREGATE SHALL NOT CONTAIN PARTICLES WHICH WILL NOT PASS THE 6 INCH SQUARE MESH SIEVE.

EACH LAYER AS APPLIED SHALL BE ROLLED WITH A 20 TON ROLLER. THE MATERIAL AS SPREAD SHALL BE WELL MIXED WITH NO POCKETS OF EITHER FINE OR COARSE MATERIAL. OVER SIZED STONES SHALL BE REMOVED FROM THE AGGREGATE.

EACH LAYER OF AGGREGATE SHALL BE PLACED OVER THE FULL WIDTH OF THE SECTION. AGGREGATE BASE AND SUB-BASE COURSES MAY BE PLACED UPON FROZEN SURFACES WHEN SUCH SURFACES HAVE BEEN PROPERLY CONSTRUCTED.

THE SURFACE OF EACH LAYER SHALL BE MAINTAINED DURING COMPACTION OPERATIONS IN SUCH A MANNER THAT A UNIFORM TEXTURE IS PRODUCED AND THE AGGREGATE IS FIRMLY KEYS. THE MOISTURE CONTENT OF THE MATERIAL SHALL BE MAINTAINED AT THE PROPER PERCENT TO ATTAIN THE REQUIRED COMPACTION AND STABILITY. COMPACTION OF EACH LAYER SHALL BE CONTINUED UNTIL DENSITY OF NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 MODIFIED PROCTOR DENSITY HAS BEEN ACHIEVED FOR THE FULL WIDTH AND DEPTH OF EACH LAYER AS APPLIED.

THE SURFACE TOLERANCE OF EACH BASE COURSE AS APPLIED SHALL BE 3/8 INCHES ABOVE OR BELOW THE REQUIRED TEMPLATE LINES.

2. AGGREGATE FOR SUB-BASE

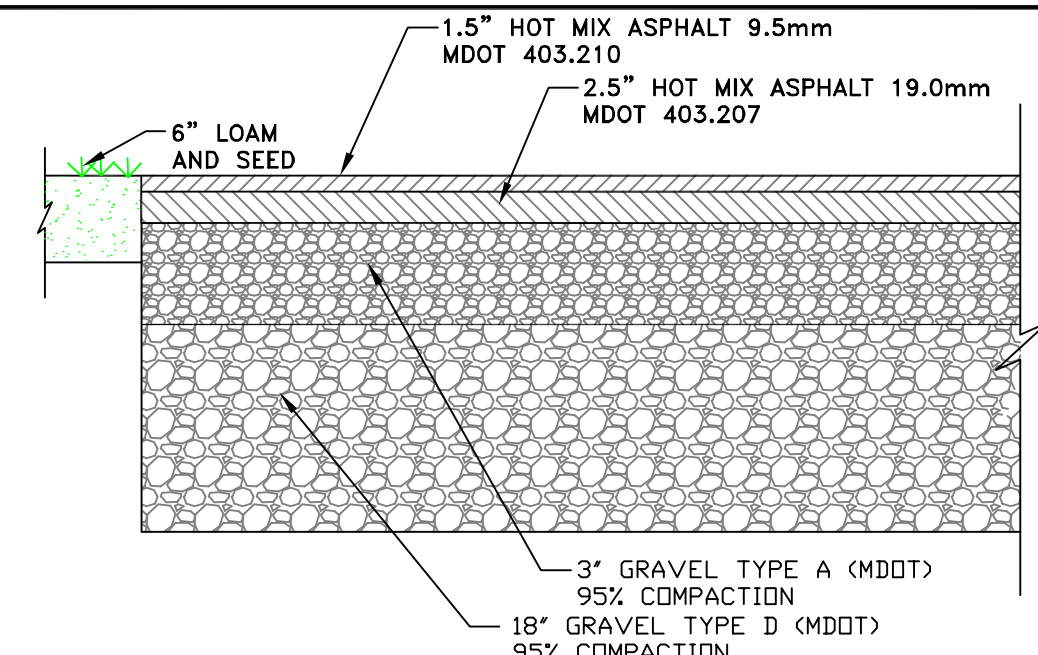
AGGREGATE FOR SUB-BASE SHALL BE TYPE "D" (MDOT). IT SHALL BE FREE FROM VEGETABLE MATTER, LUMPS OR BALLS OF CLAY AND OTHER DELETERIOUS SUBSTANCES.

3. COMMON BORROW

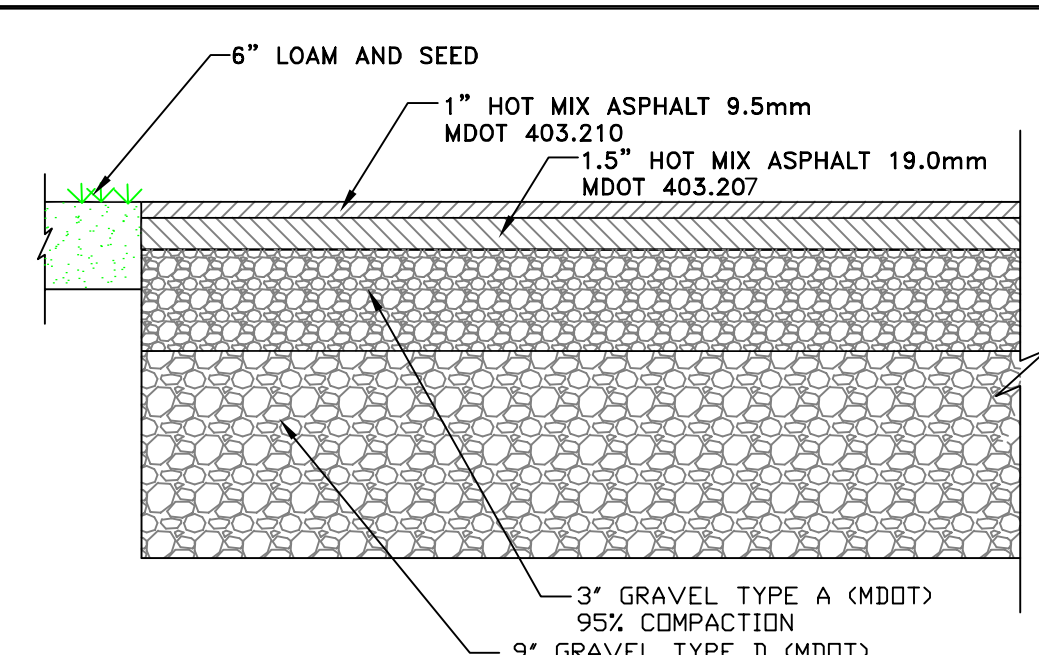
COMMON BORROW SHALL CONSIST OF EARTH, SUITABLE FOR EMBANKMENT CONSTRUCTION. IT SHALL BE FREE FROM FROZEN MATERIAL, PERISHABLE RUBBISH, PEAT AND OTHER UNSUITABLE MATERIAL.

THE MOISTURE CONTENT SHALL BE SUFFICIENT TO PROVIDE THE REQUIRED COMPACTION AND STABLE EMBANKMENT. IN NO CASE SHALL THE MOISTURE CONTENT EXCEED 4 PERCENT ABOVE OPTIMUM.

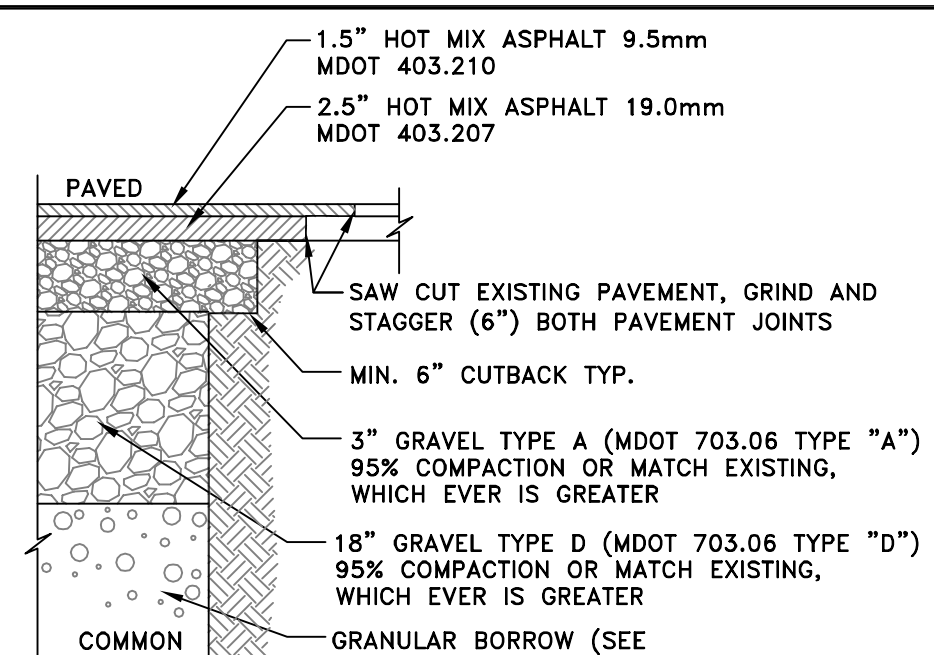
ALL COMMON BORROW AND GRAVEL AREAS TO BE COMPACTED TO 95% OF ITS MAX. DRY DENSITY AS DETERMINED BY ASTM D-1557 "MODIFIED PROCTOR DENSITY". PLACE IN 9" TO 12" LIFTS.



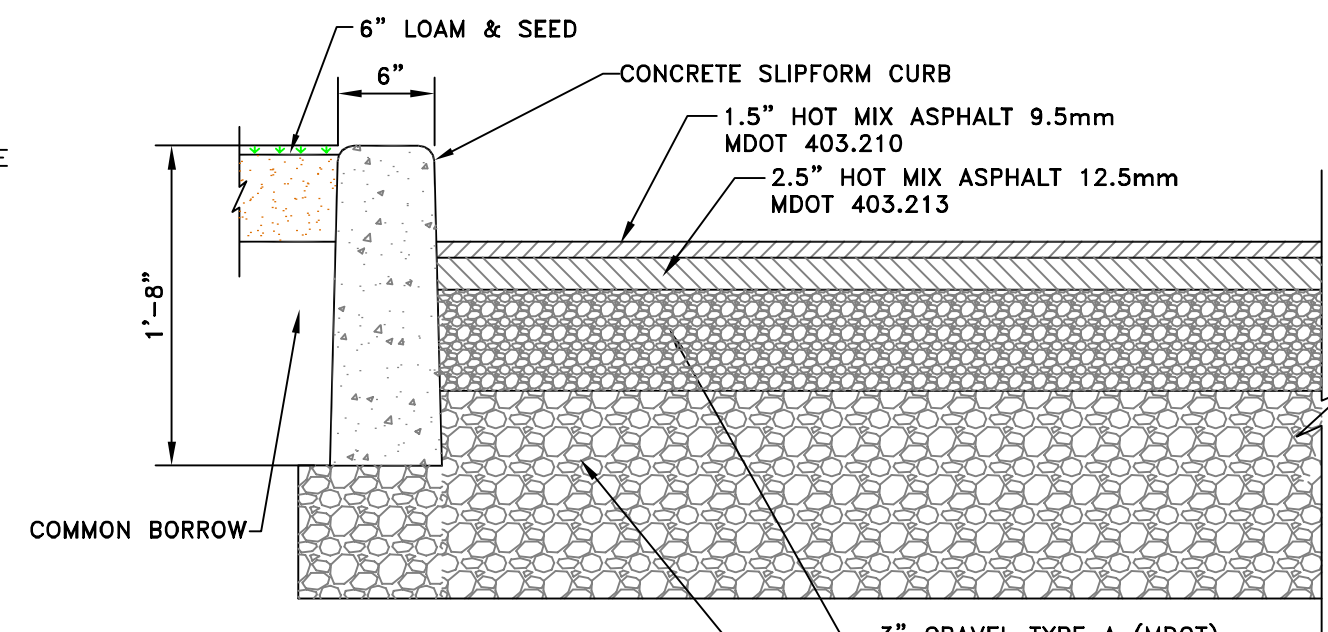
PAVED PARKING AND DRIVE DETAIL
NOT TO SCALE



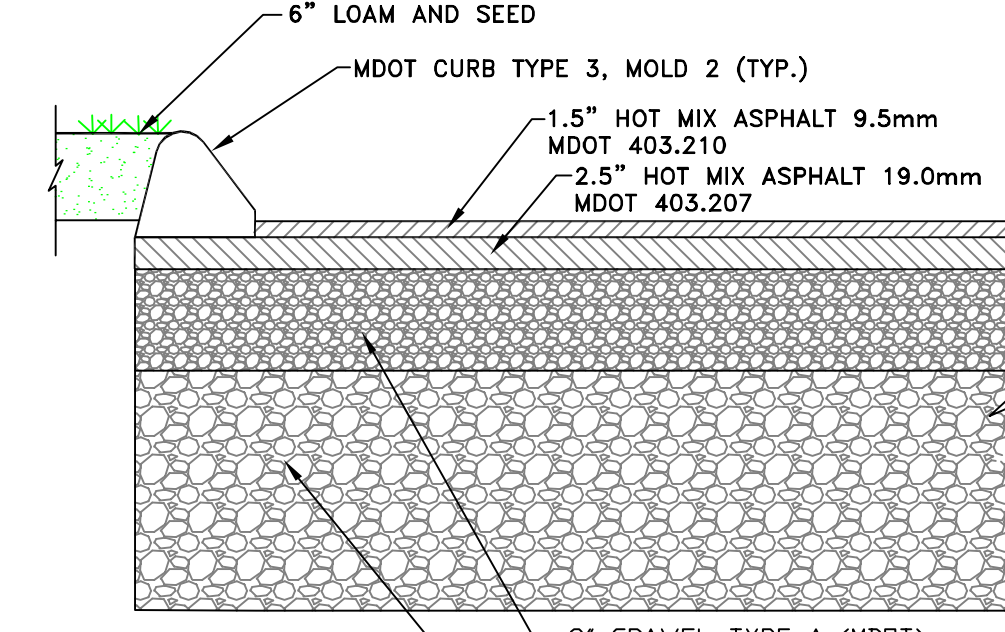
PAVED SIDEWALK DETAIL
NOT TO SCALE



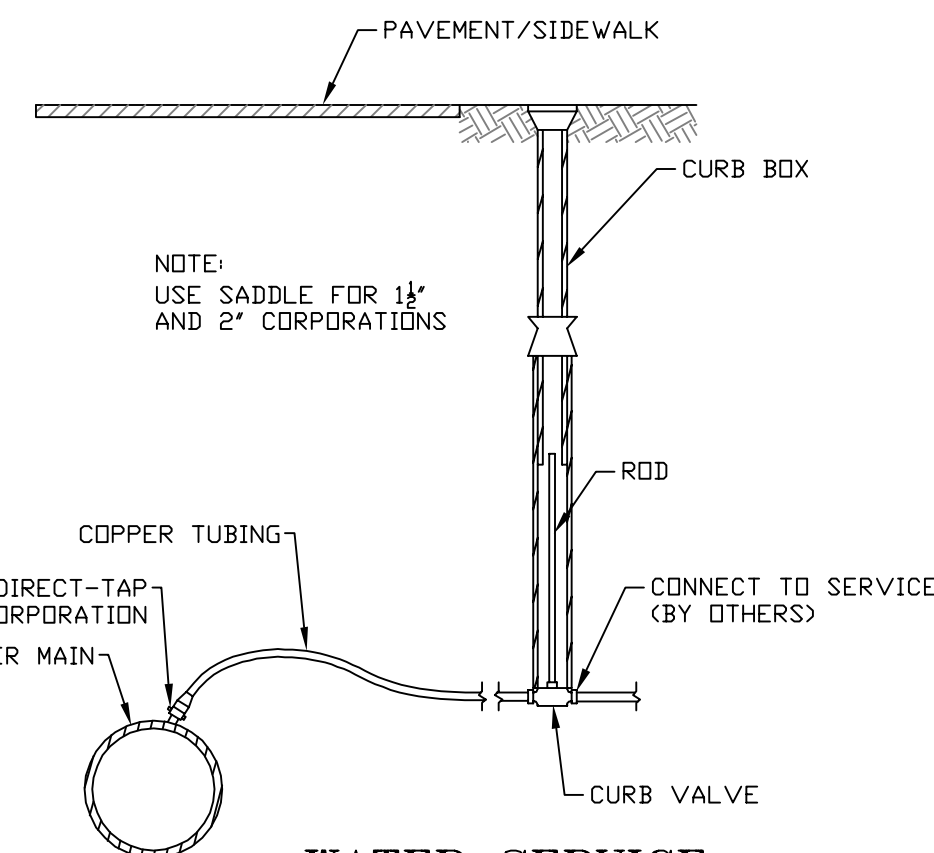
BUTT JOINT DETAIL
NOT TO SCALE



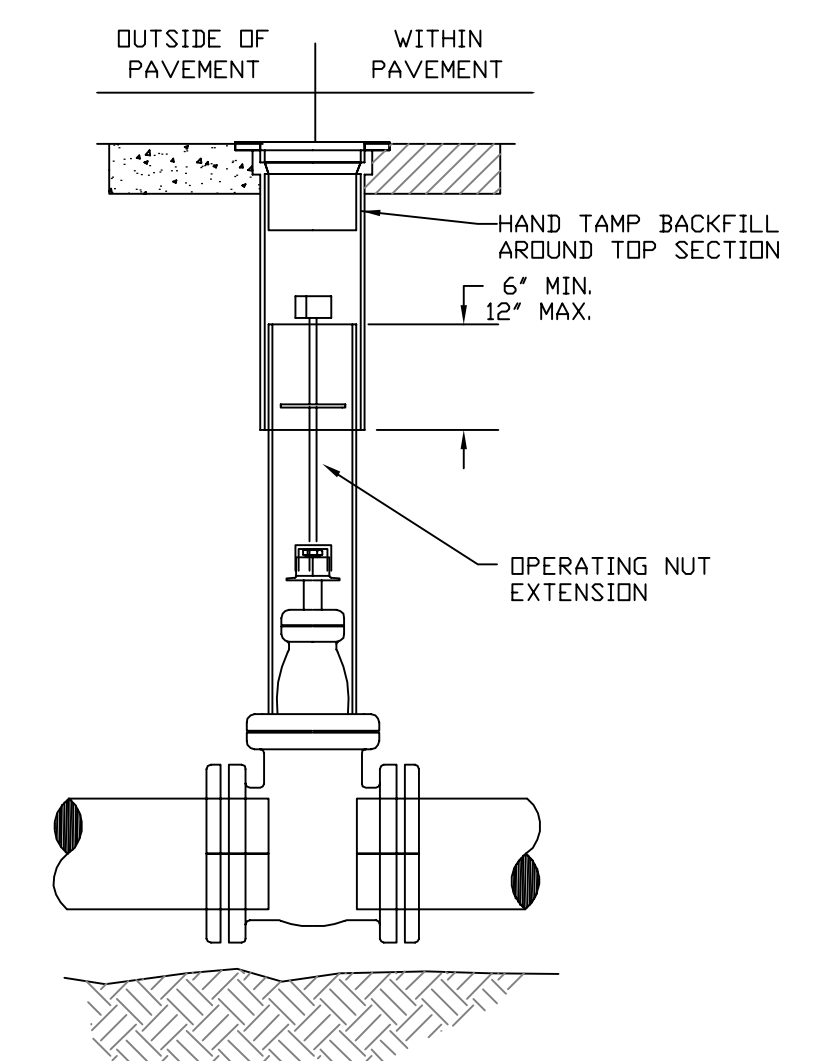
CONCRETE SLIPFORM CURB DETAIL
NOT TO SCALE



BITUMINOUS CAPE COD CURB DETAIL
NOT TO SCALE



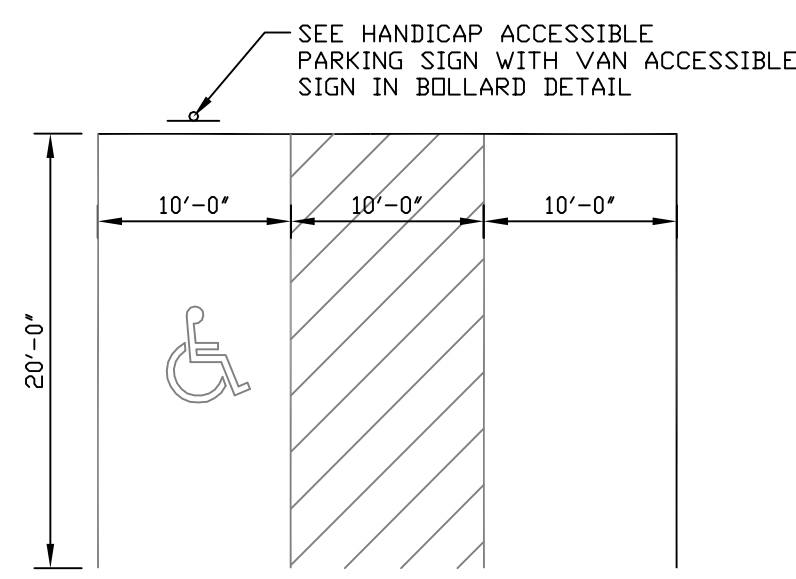
WATER SERVICE
NOT TO SCALE



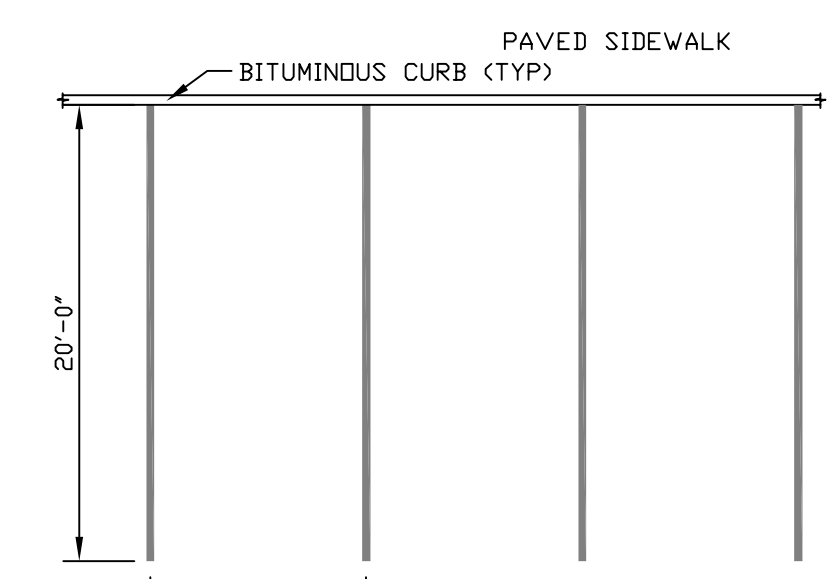
NOTES:

- 1) VALVE BOX NOT TO REST ON OPERATING ASSEMBLY.
- 2) A PERMANENTLY ATTACHED VALVE EXTENSION STEM SHALL BE REQUIRED FOR ANY VALVE WITH AN OPERATING NUT LOCATED IN EXCESS OF 4 FEET BELOW THE TOP OF THE VALVE BOX. THIS EXTENSION SHALL BE SUFFICIENT LENGTH TO ENSURE THAT ITS TOP IS WITHIN 4 FEET OF THE VALVE BOX LID.

GATE VALVE DETAIL
NOT TO SCALE



HANDICAP PARKING DETAIL
NOT TO SCALE



TYPICAL PARKING STALL

SPECIFICATIONS

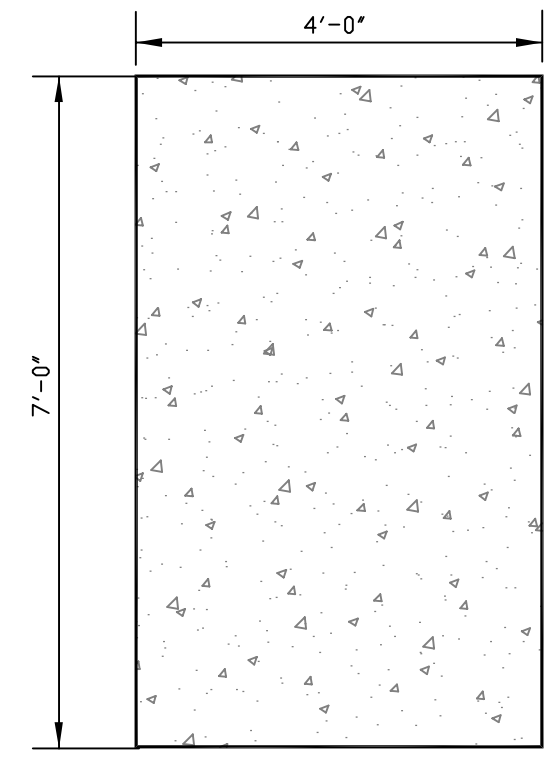
PAVEMENT MARKING PAINT FOR FINAL AND TEMPORARY PAVEMENT MARKINGS SHALL MEET THE REQUIREMENTS OF AASHTO M248. EITHER TYPE N (REGULAR TRAFFIC PAINT) OR TYPE F (FAST DRY TRAFFIC PAINT) MAY BE USED.

ALL PAVEMENT LINES AND MARKINGS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

IMMEDIATELY BEFORE APPLYING THE PAVEMENT PAINT TO THE PAVEMENT OR CURB, THE SURFACE SHALL BE DRY AND ENTIRELY FREE FROM DIRT, GREASE, OIL OR OTHER FOREIGN MATTER.

ALL PAVEMENT MARKING LINES SHALL BE 4" SOLID WHITE.

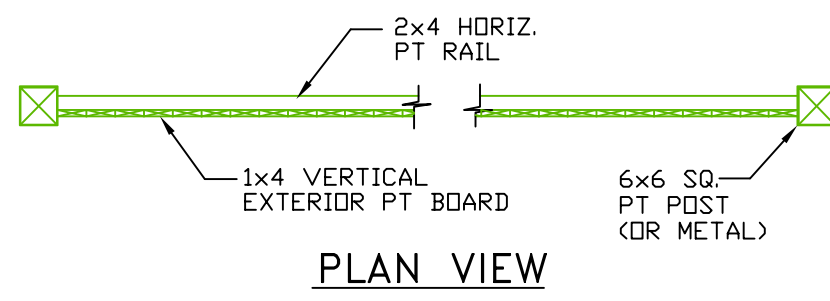
PAVEMENT MARKING DETAIL & SPECIFICATION
NOT TO SCALE



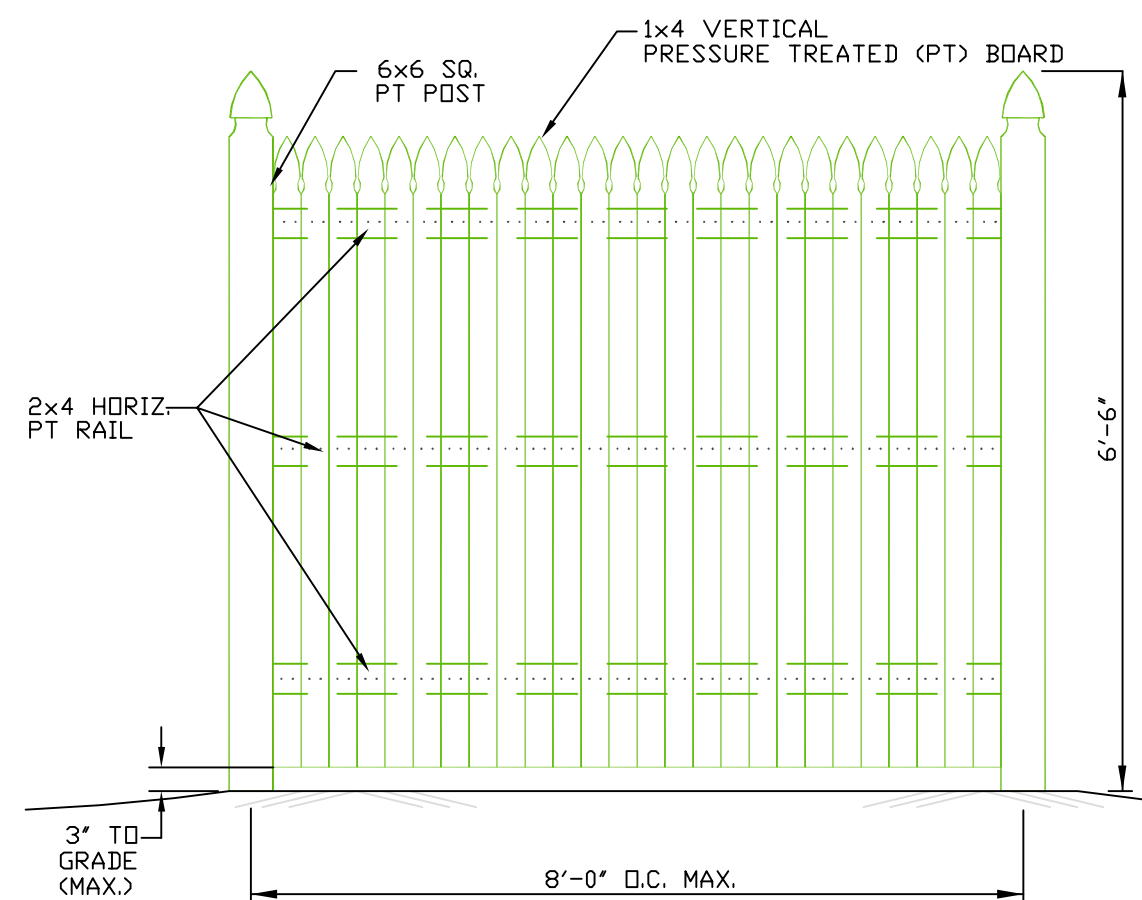
CONCRETE SPECIFICATION:

- 4000 P.S.I.
- 3/4" STONE
- 6% AIR ENTRAINMENT
- SLUMP = 3" ± 1"
- FINE BROOM FINISH

TYPICAL TRANSFORMER SLAB DETAIL
NOT TO SCALE



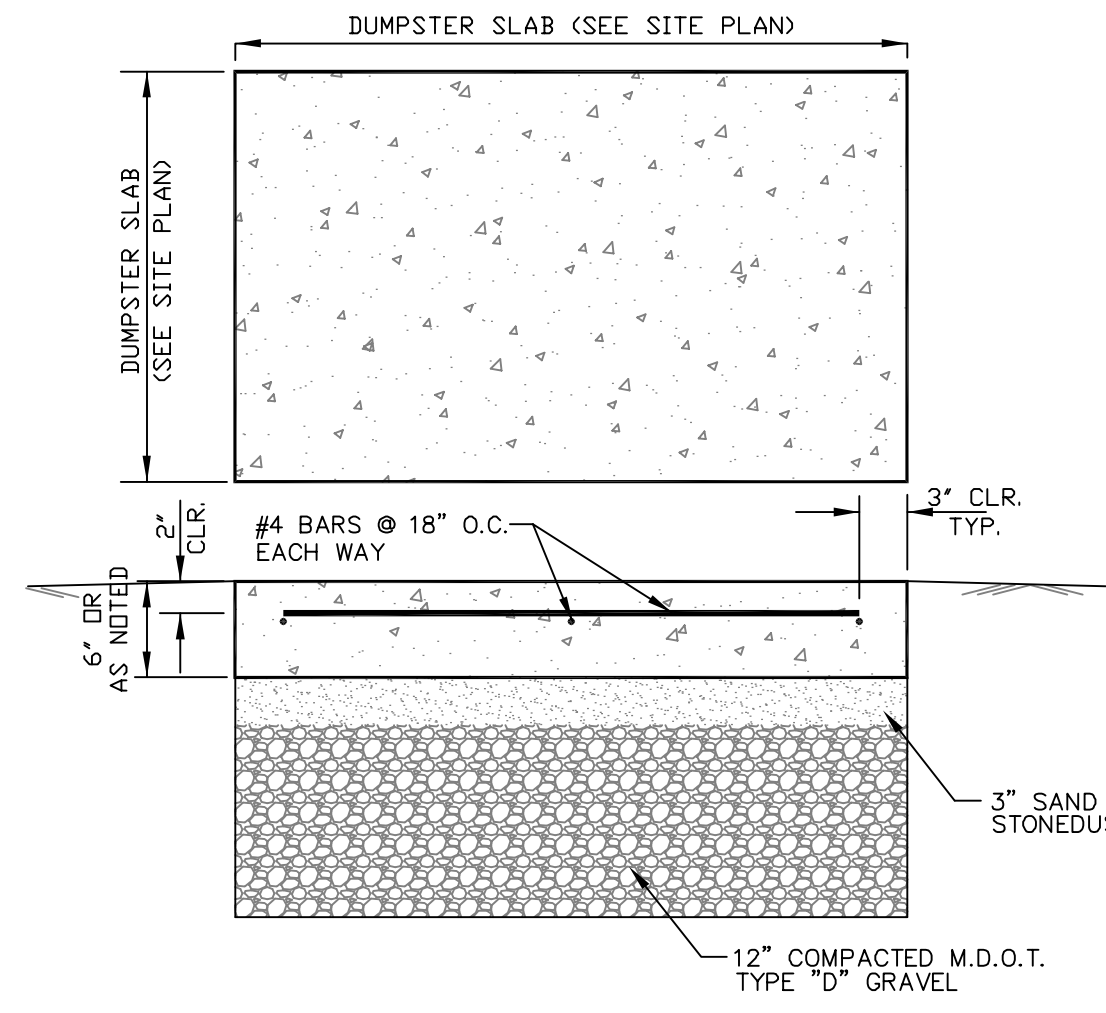
PLAN VIEW



EXTERIOR ELEVATION

- NOTES:**
1. ALL POSTS TO BE SET 3'-6" INTO GROUND AND COMPACTED ALL AROUND.
 2. ANY POST SET LESS THAN 3'-0" SHALL BE SET ON 10" DIAM. CONCRETE FILLED SMDTUBE. USE SIMPSON STRONG-TIE POST BASE, AND SET BELOW GRADE TO HIDE CONCRETE & CONNECTOR.
 3. POST SET ON LEDGE SHALL BE DRILLED AND PINNED. ANCHERING METHOD TO BE APPROVED BY SITE ENGINEER.
 4. 2x4 PT RAILS SHALL HAVE DOVELED ENDS FOR POST CONNECTION.
 5. ALL GATES TO MATCH FENCE.
 6. OWNER TO SPECIFY PAINTING

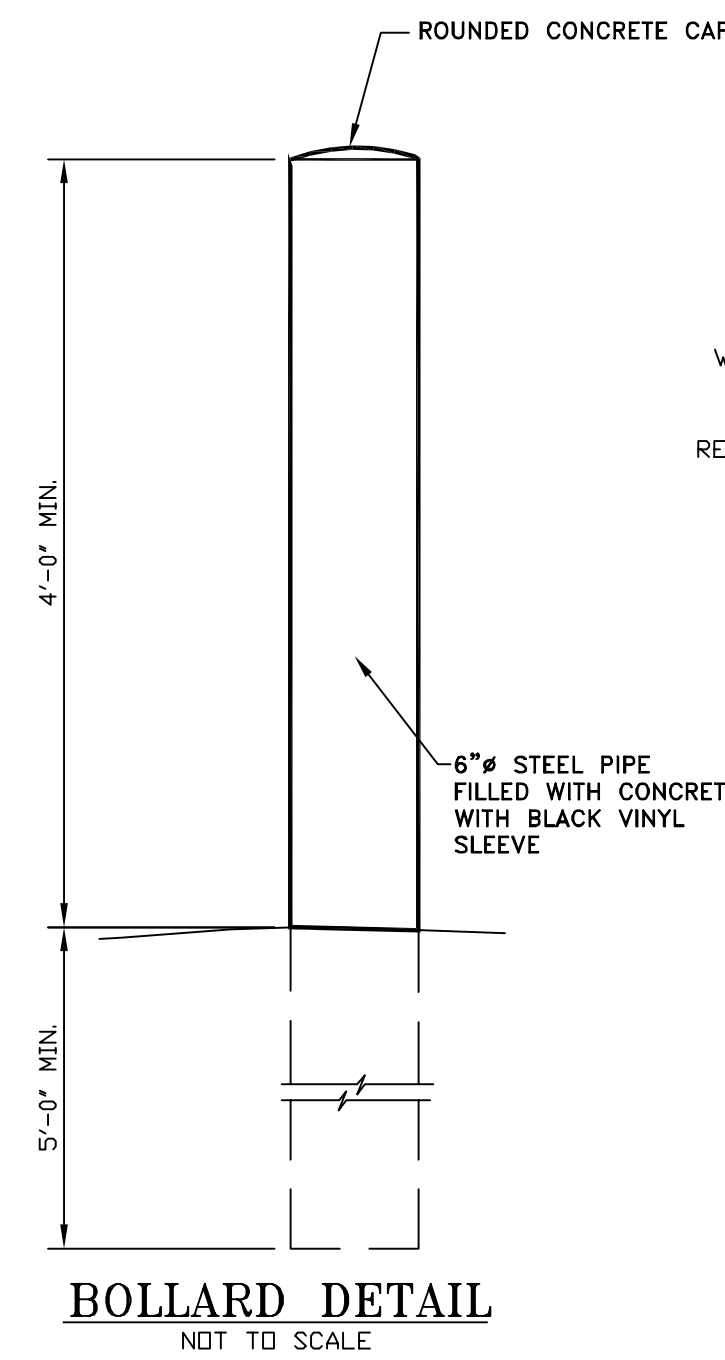
WOOD STOCKADE FENCE DETAIL
NOT TO SCALE



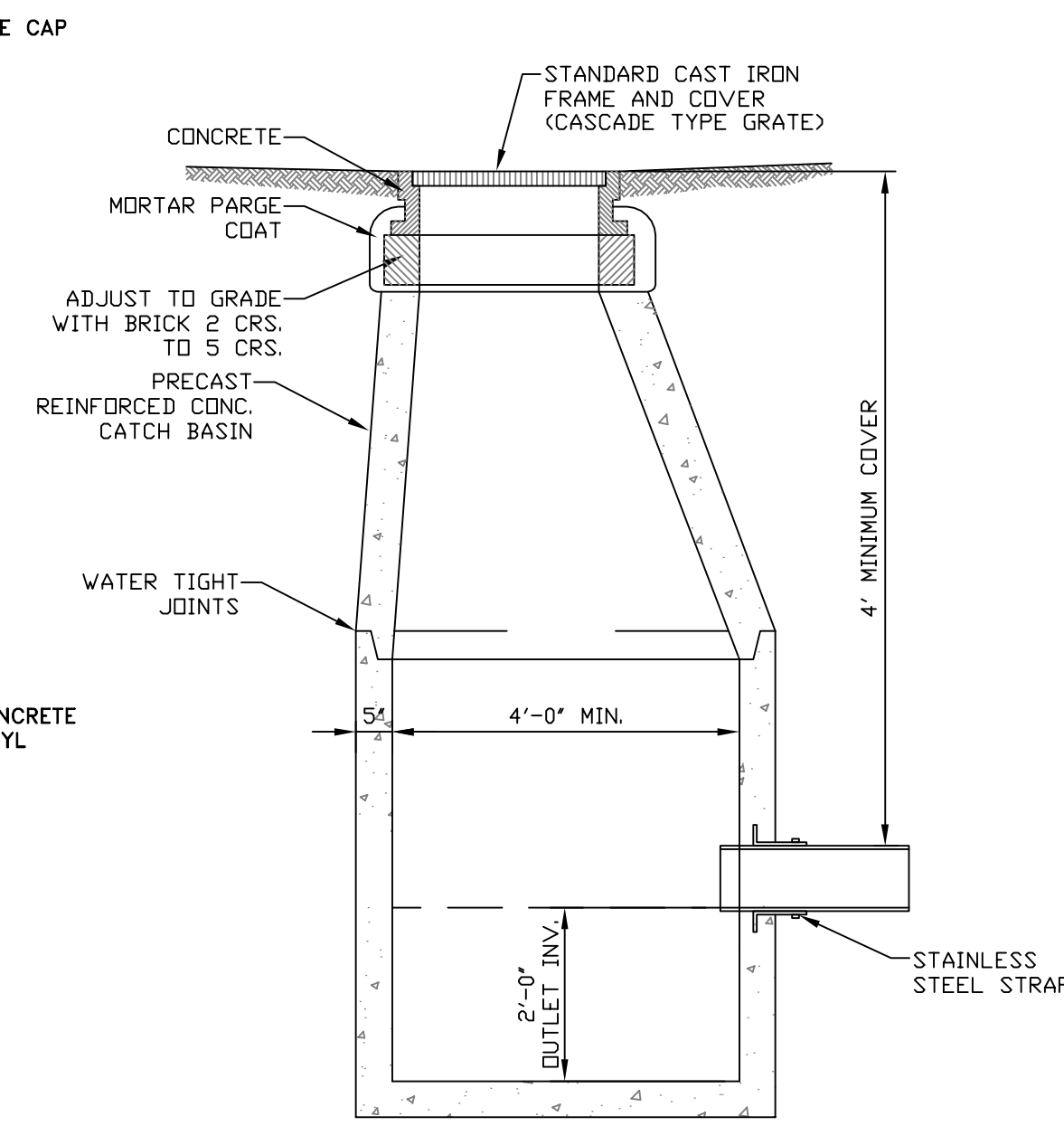
TYPICAL DUMPSTER SLAB DETAIL
NOT TO SCALE

CONCRETE SPECIFICATION:

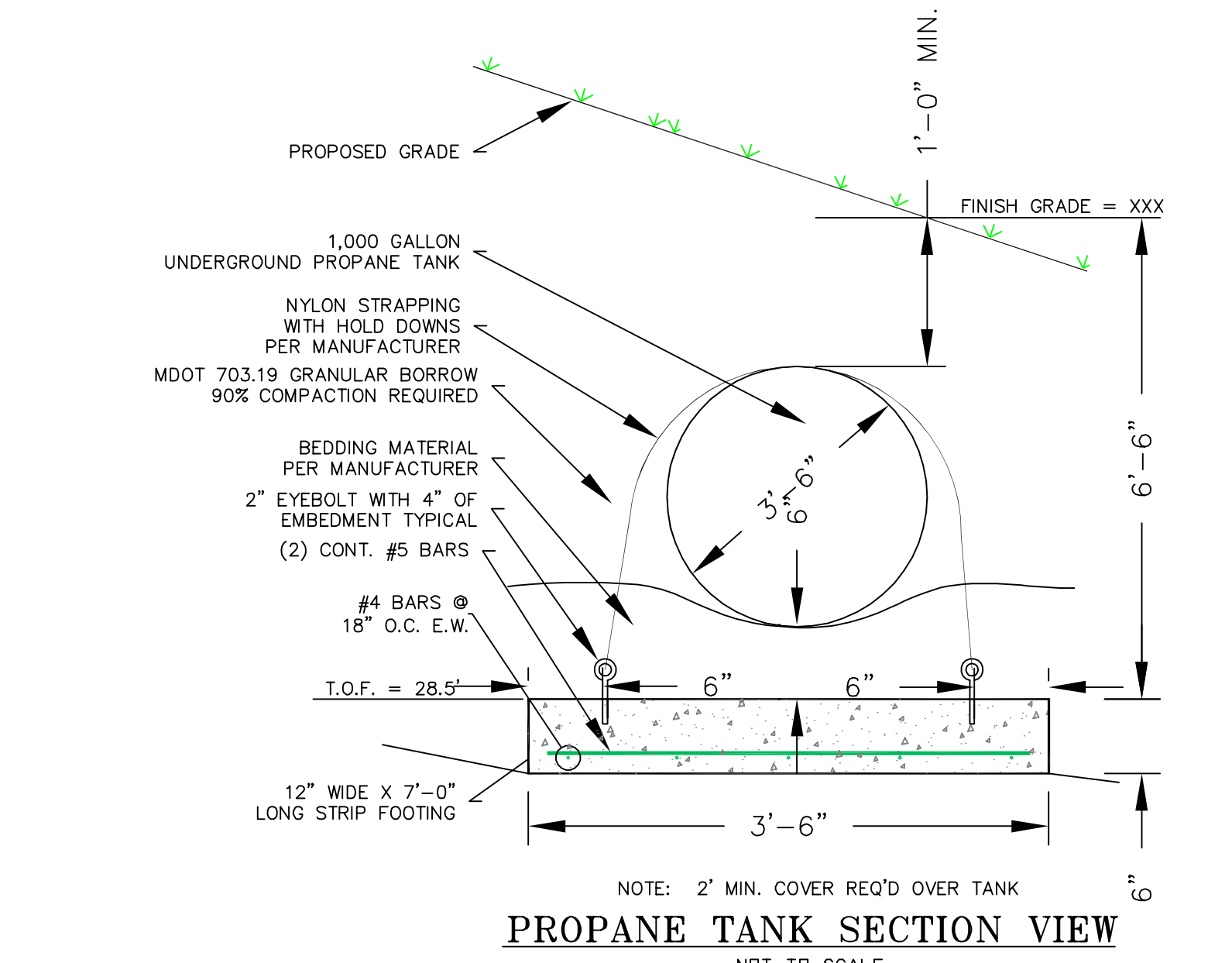
- 4000 P.S.I.
- 3/4" STONE
- 6% AIR ENTRAINMENT
- SLUMP = 3" ± 1"
- FINE BROOM FINISH



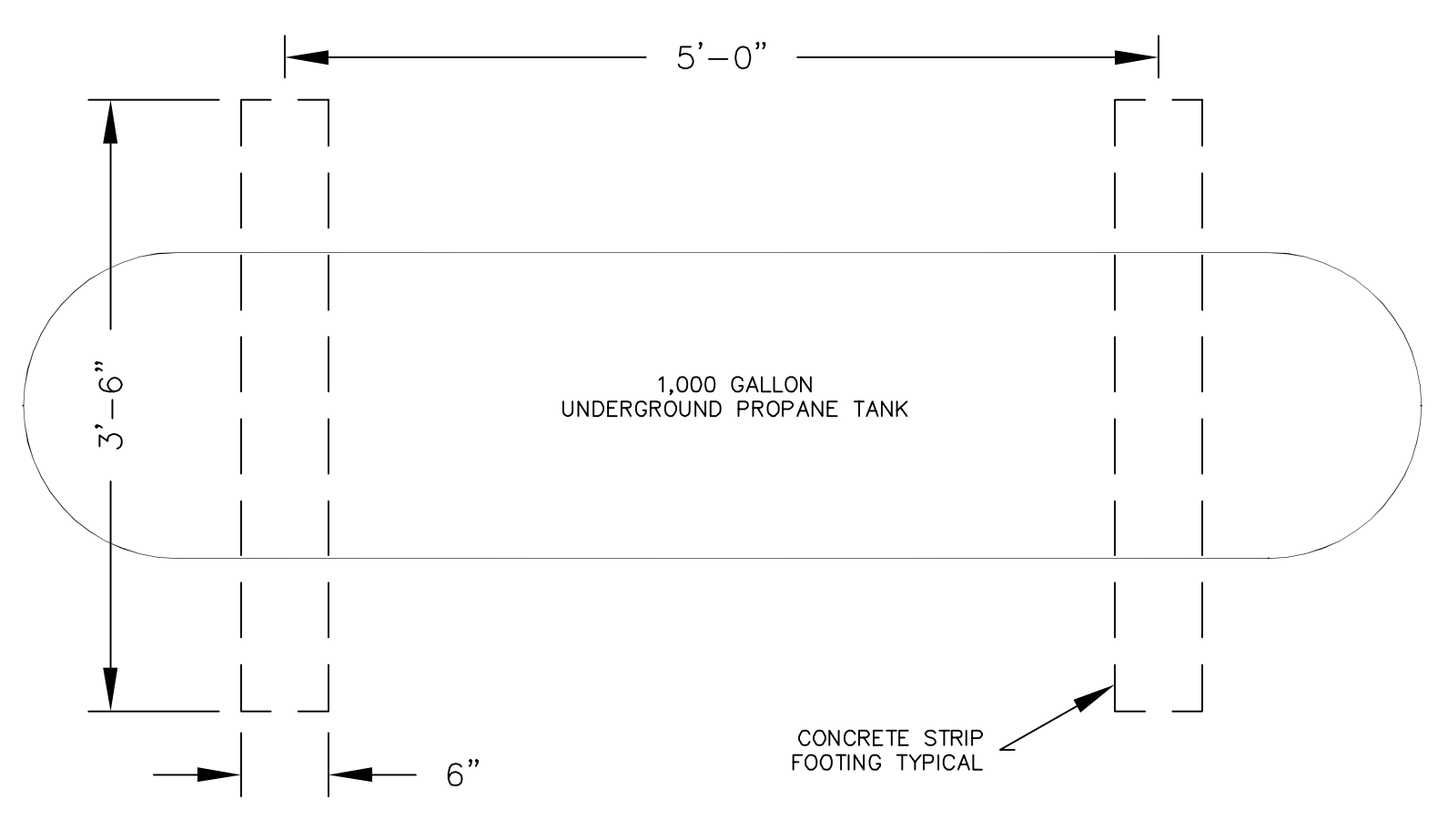
BOLLARD DETAIL
NOT TO SCALE



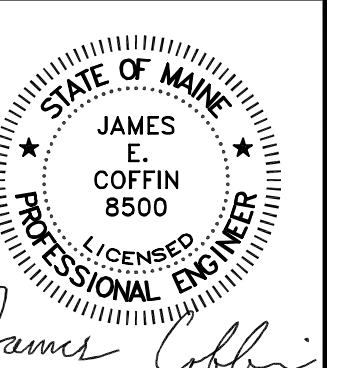
PRECAST CATCH BASIN
NOT TO SCALE



PROPANE TANK SECTION VIEW
NOT TO SCALE



PROPANE TANK PLAN VIEW
NOT TO SCALE



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NO.	REVISIONS	DATE

DETAILS III

SCALE: AS SHOWN
DRAWN BY: TCH
CHECKED BY: JEC

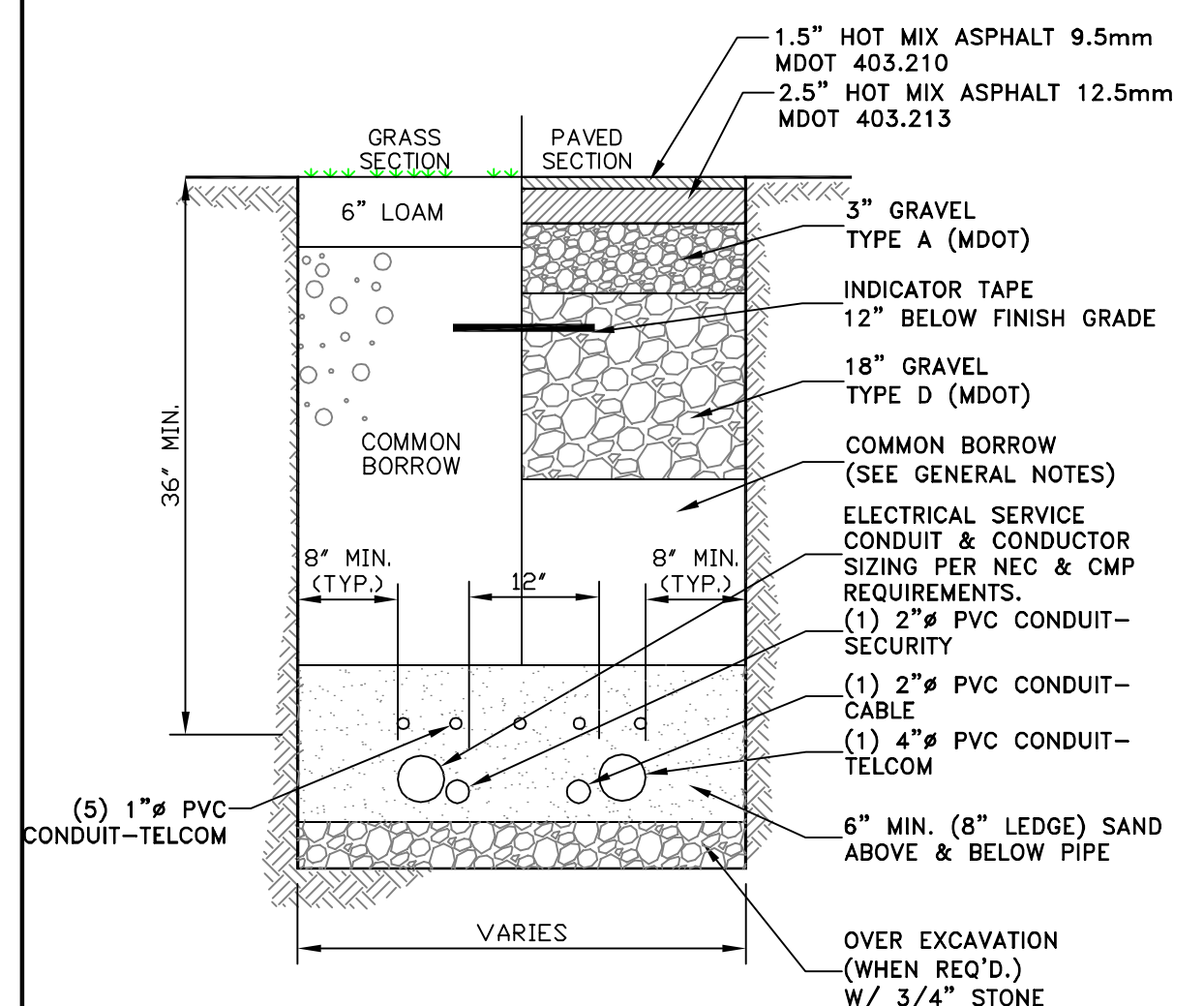
CLIENT/PROJECT: CORE CUTTER, LLC
LOT #26
LOCATION: TECHNOLOGY DRIVE
TOWN: GARDNER COUNTY: KENNEBEC STATE: MAINE

PROJ. NO. 2022-005

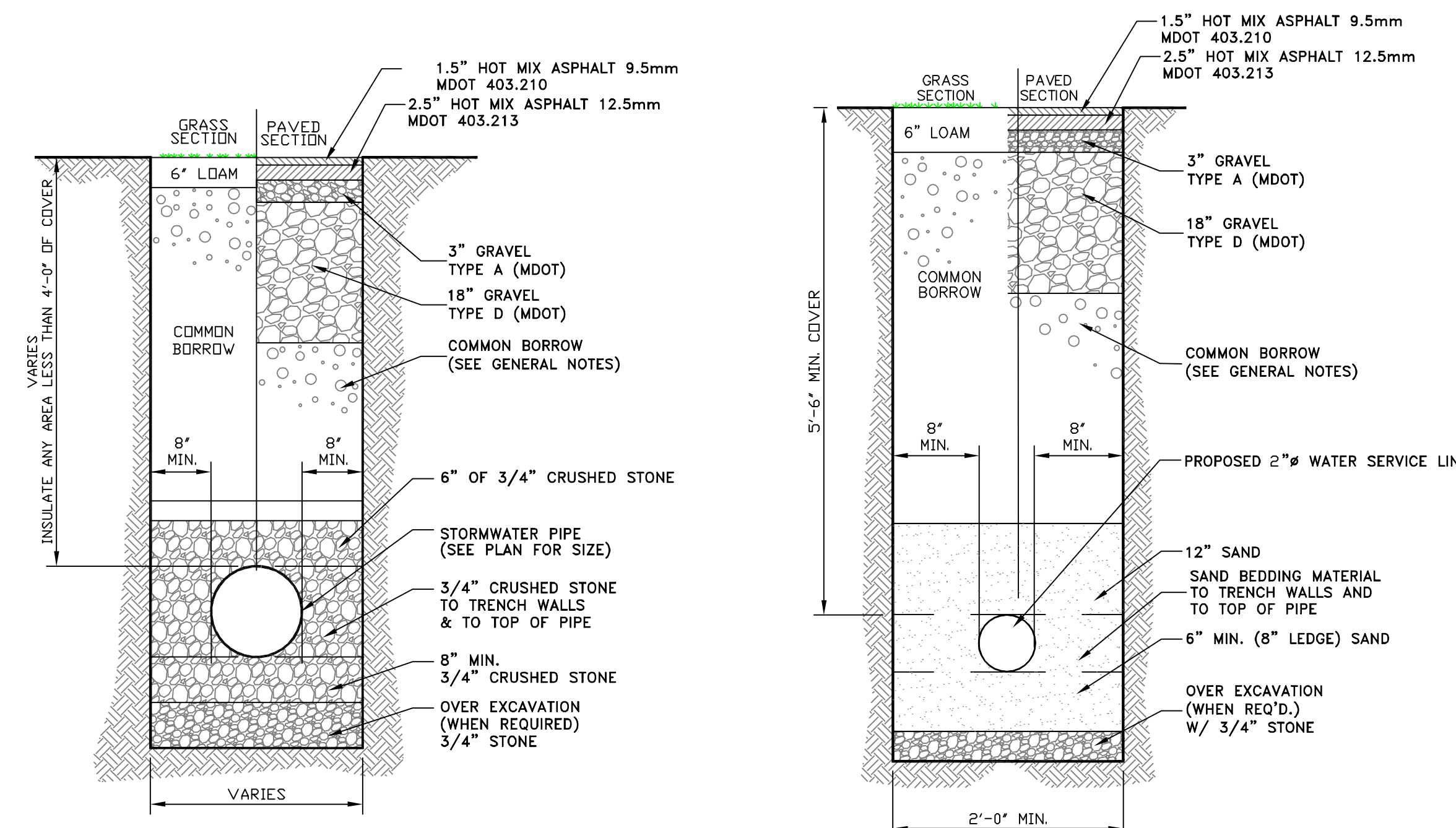
C-5

TRENCH NOTES:

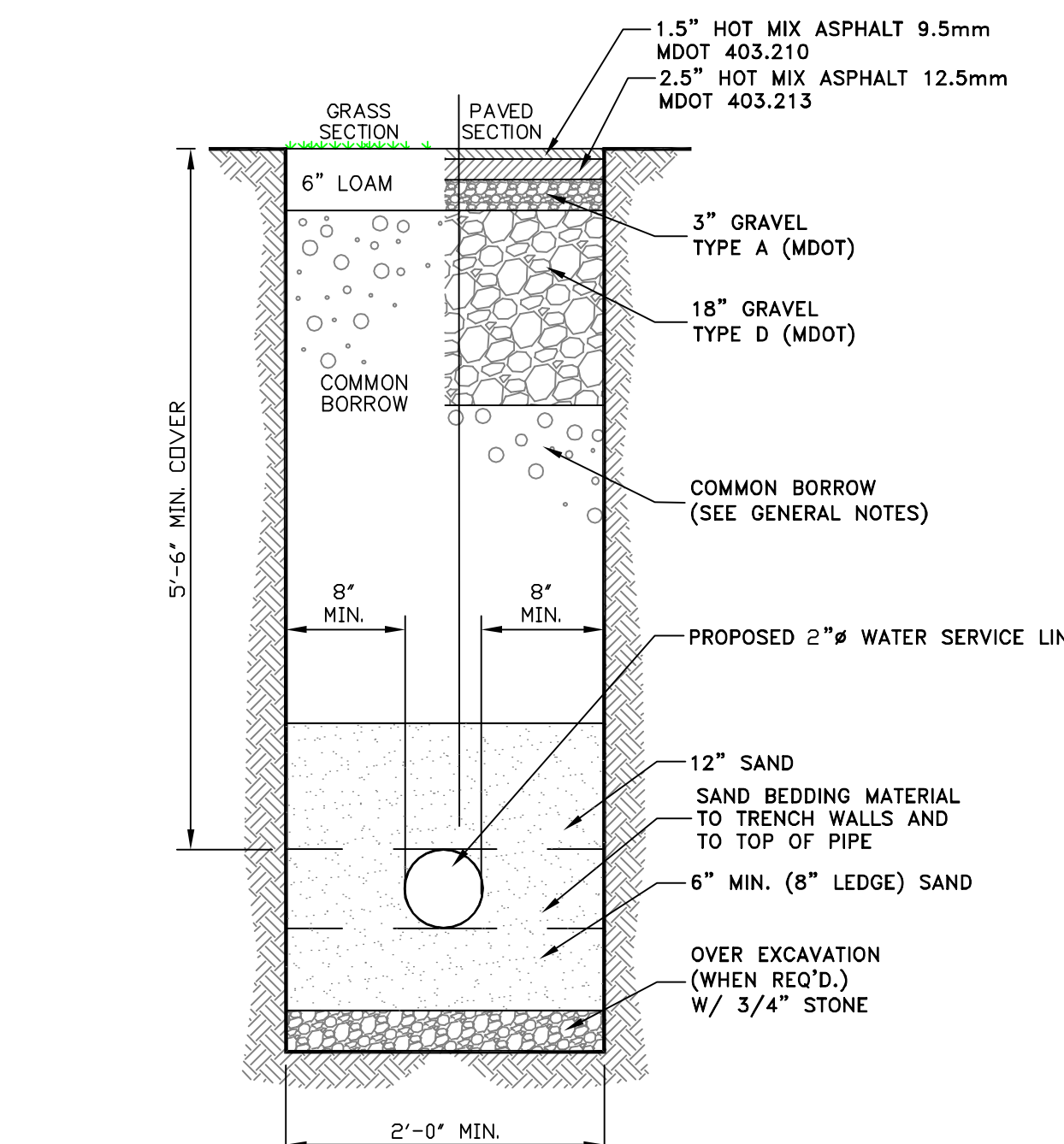
- CONTRACTOR SHALL COMPLY WITH OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION REGULATIONS PERTAINING TO THE EXCAVATION OF ALL TRENCHES. CONTRACTOR SHALL ALLOW FOR PAYMENT OF ADDITIONAL EXCAVATION, TRENCH BOXES AND BACKFILL WITH REGARD TO COMPLYING WITH ALL OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION STANDARDS.
- ALL COMMON BORROW AND GRAVEL AREAS TO BE COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 "MODIFIED PROCTOR DENSITY". PLACE IN 9" TO 12" LIFTS.



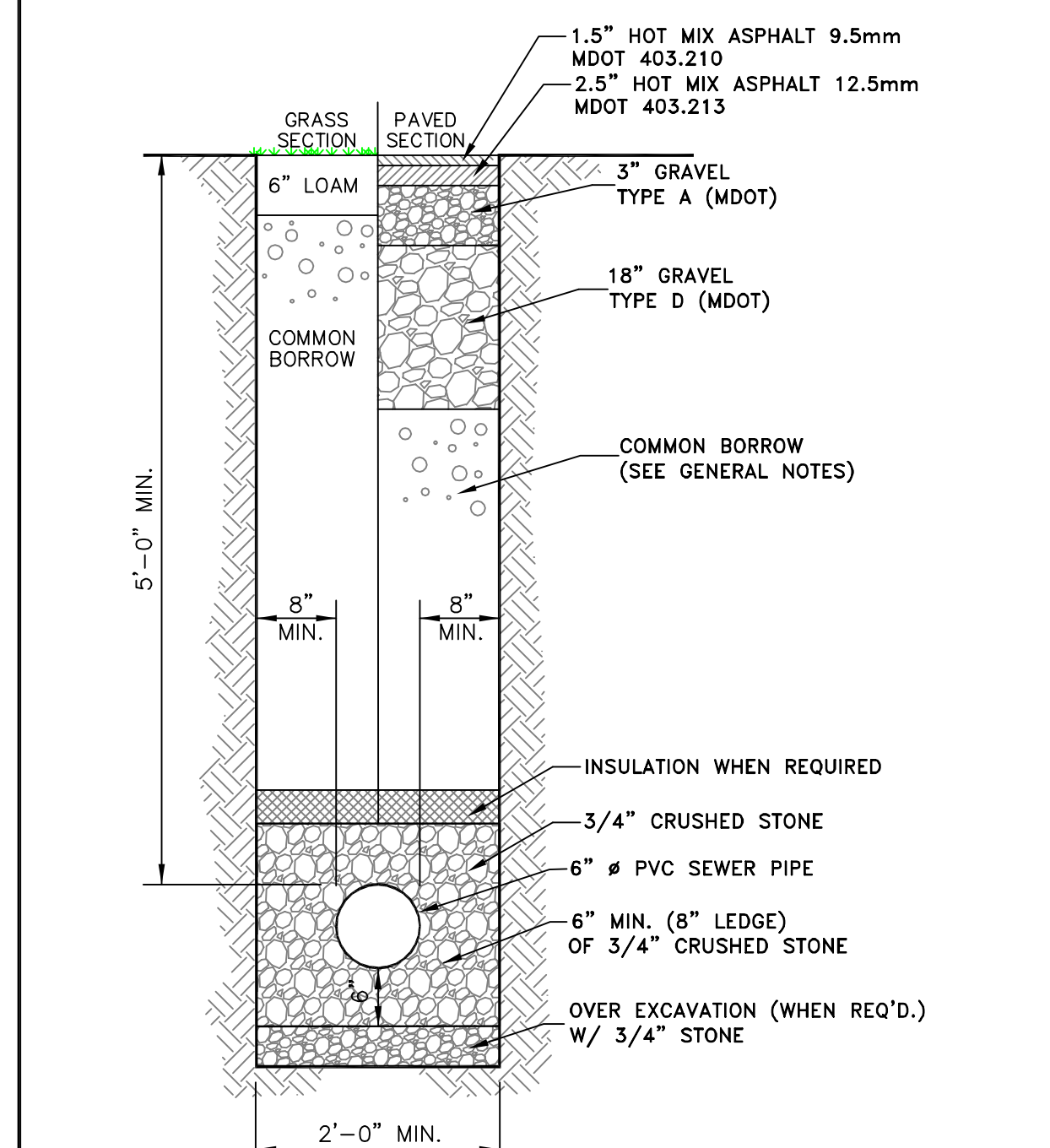
TYPICAL ELECTRICAL/SITE LIGHTING TRENCH SECTION
NOT TO SCALE



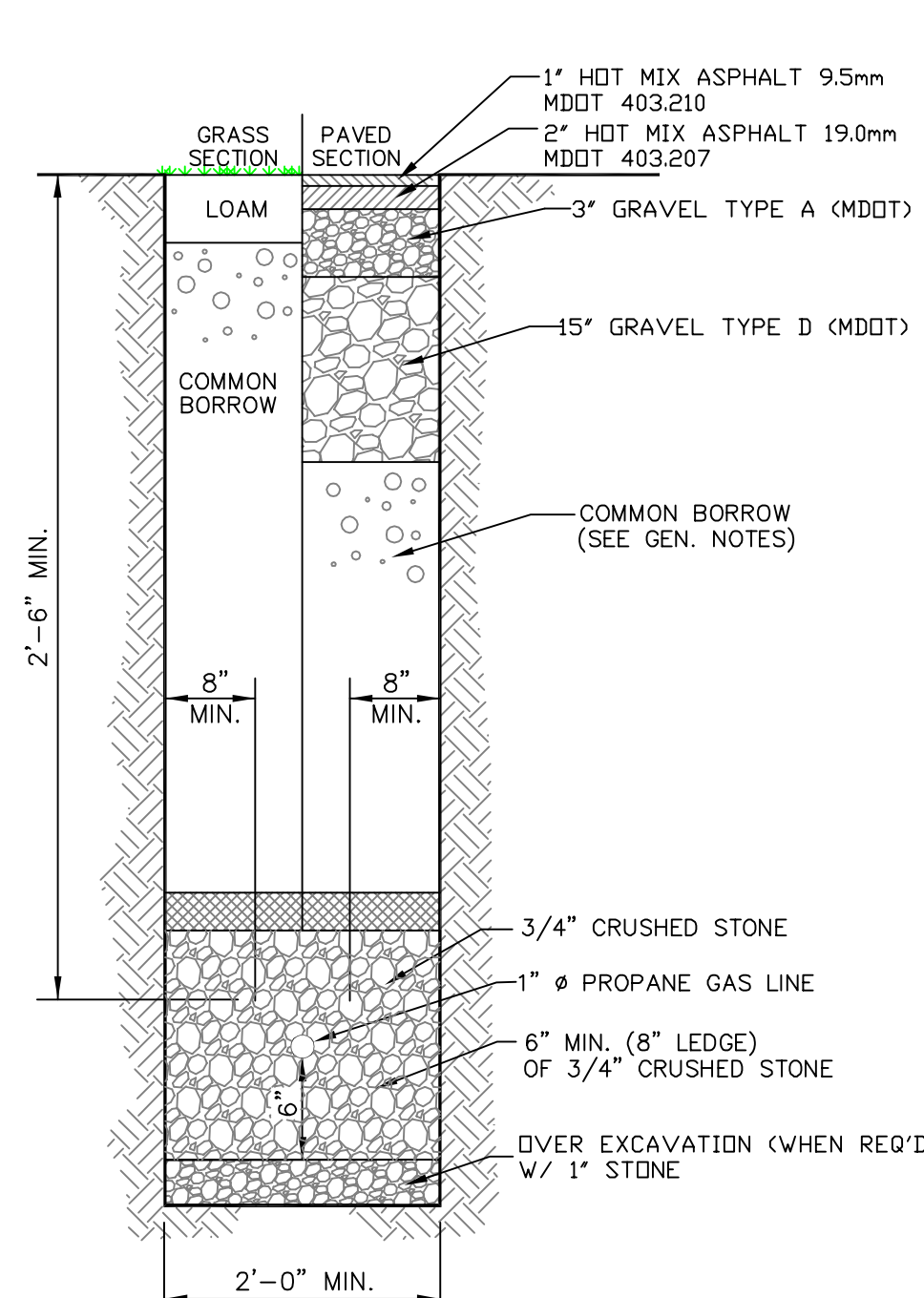
TYPICAL STORMWATER TRENCH SECTION
NOT TO SCALE



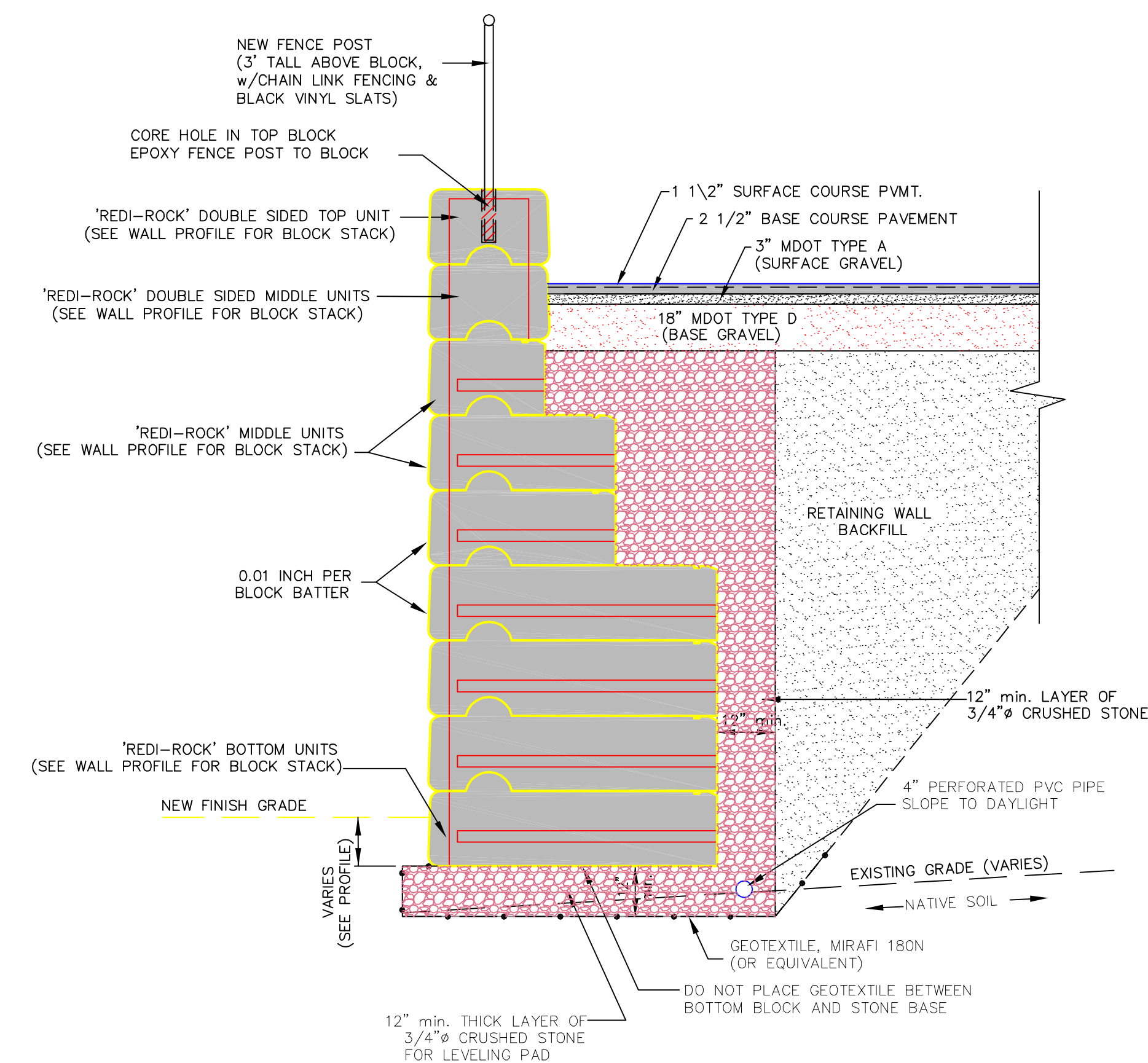
WATER SERVICE TRENCH SECTION
NOT TO SCALE



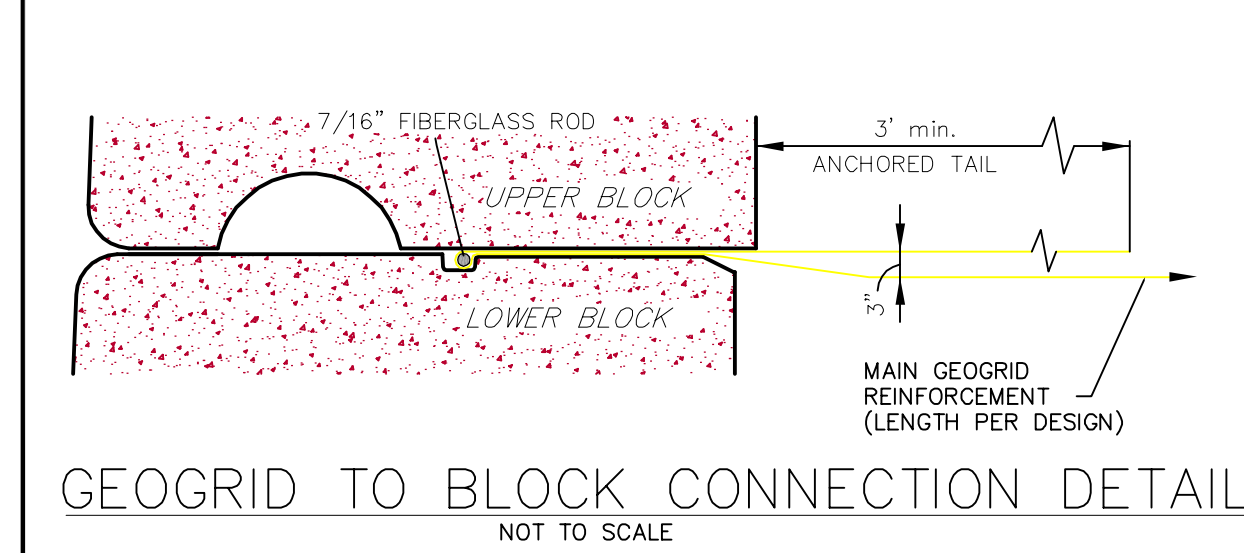
TYPICAL SANITARY TRENCH SECTION
NOT TO SCALE



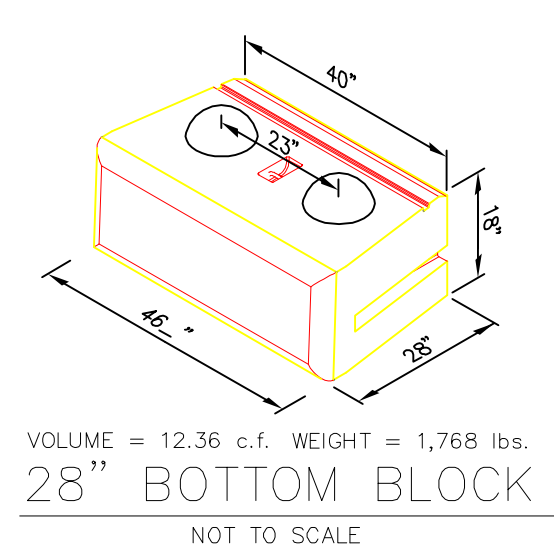
TYPICAL PROPANE GAS TRENCH SECTION
NOT TO SCALE



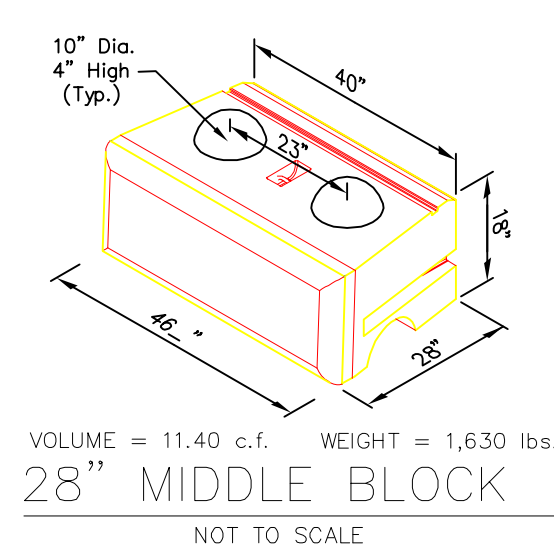
TYPICAL CROSS SECTION
NOT TO SCALE



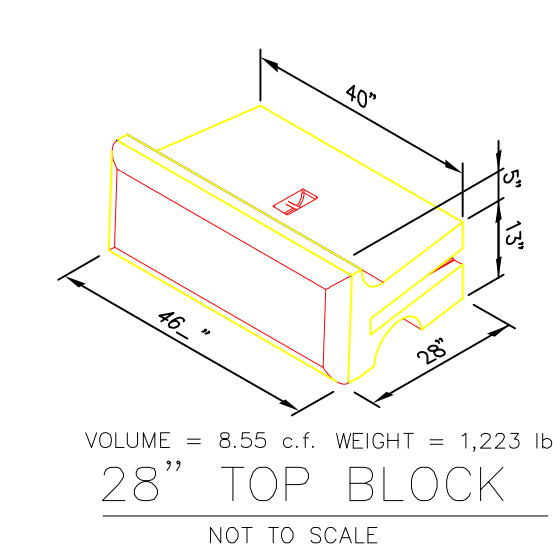
GEOGRID TO BLOCK CONNECTION DETAIL
NOT TO SCALE



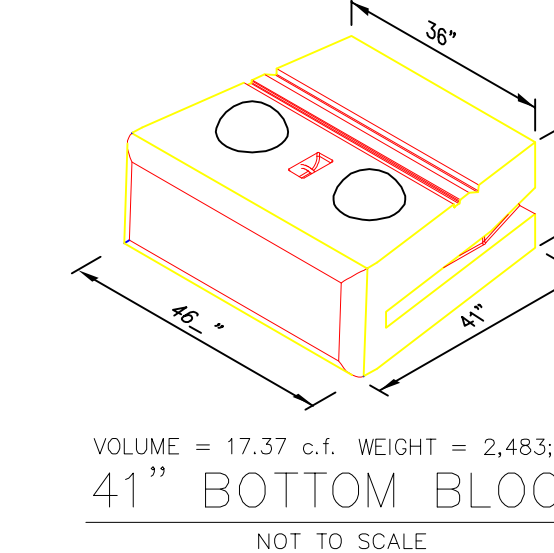
VOLUME = 12.36 c.f. WEIGHT = 1,768 lbs.
28" BOTTOM BLOCK
NOT TO SCALE



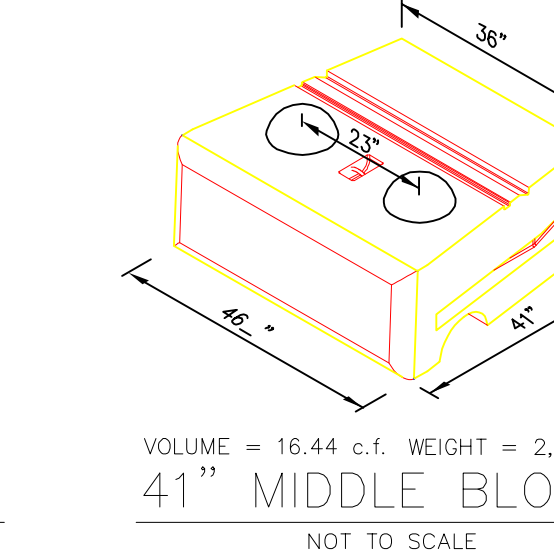
VOLUME = 11.40 c.f. WEIGHT = 1,630 lbs.
28" MIDDLE BLOCK
NOT TO SCALE



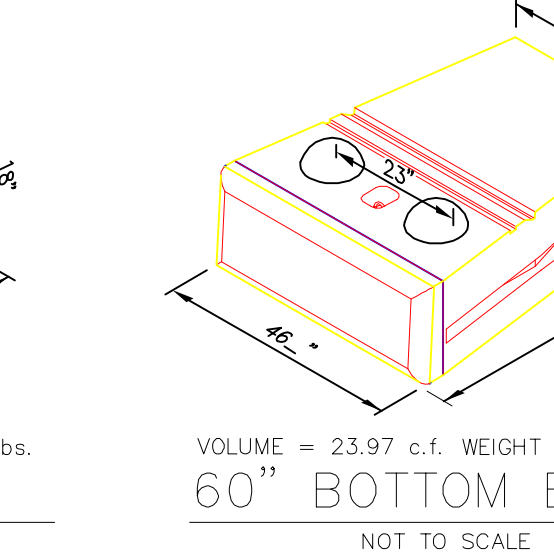
VOLUME = 8.55 c.f. WEIGHT = 1,223 lbs.
28" TOP BLOCK
NOT TO SCALE



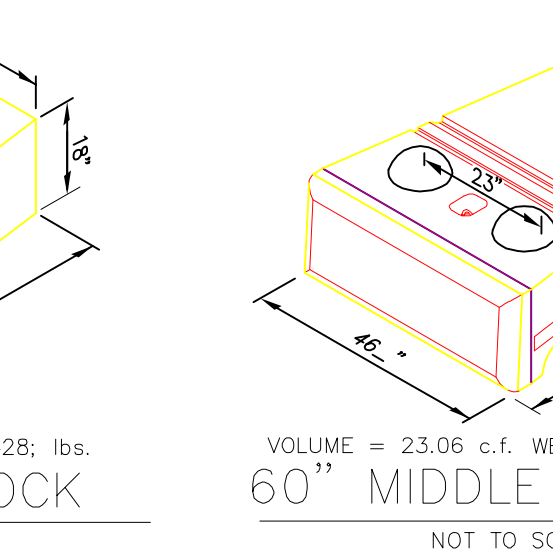
VOLUME = 17.37 c.f. WEIGHT = 2,483 lbs.
41" BOTTOM BLOCK
NOT TO SCALE



VOLUME = 16.44 c.f. WEIGHT = 2,351 lbs.
41" MIDDLE BLOCK
NOT TO SCALE



VOLUME = 23.97 c.f. WEIGHT = 3,428 lbs.
60" BOTTOM BLOCK
NOT TO SCALE



VOLUME = 23.06 c.f. WEIGHT = 3,297 lbs.
60" MIDDLE BLOCK
NOT TO SCALE

MATERIAL SPECIFICATIONS

INSTALL 3/4" DRAINAGE STONE AND WALL BACKFILL SOIL BEHIND THE WALL. COMPACT WALL BACKFILL IN LIFTS NOT EXCEEDING 18".

SWEEP OFF TOP OF BLOCKS AND GRIND SMOOTH ANY ROUGH EDGES ON THE BACK OF THE BLOCKS TO AVOID DAMAGE TO GEOGRID.

CONTRACTOR SHALL TAKE PRECAUTIONS DURING THE INSTALLATION AND COMPACTION OF THE DRAINAGE AND BACKFILL MATERIAL TO ENSURE THAT WALL BACKFILL DOES NOT CONTAMINATE THE DRAINAGE STONE DIRECTLY BEHIND THE WALL. REMOVE AND REPLACE ANY AREAS OF DRAINAGE MATERIAL THAT INADVERTENTLY BECOMES CONTAMINATED DURING THE BACKFILLING OPERATION.

CONTINUE PLACEMENT OF BLOCK WALL, DRAINAGE AGGREGATE AND WALL BACKFILL SOIL TO FULL HEIGHT OF WALL MAINTAINING HORIZONTAL AND VERTICAL ALIGNMENT DURING CONSTRUCTION. USE SMALL VIBRATORY PLATE COMPACTOR WITHIN 3' OF THE BACK OF THE WALL.

3/4" DRAINAGE STONE SHALL BE CLEAN ANGULAR CRUSHED STONE MEETING THE FOLLOWING GRADATION AS DETERMINED IN ACCORDANCE WITH ASTM D422.

SIEVE SIZE	PERCENT PASSING
1"	100
1 1/4"	90 - 100
3/8"	20 - 55
No. 4	0 - 10
No. 8	0 - 5

WALL BACKFILL SHALL BE A FREE DRAINING, WELL GRADED GRANULAR MATERIAL MEETING THE FOLLOWING GRADATION (REFERENCE MDT 703.22, GRAVEL BORROW).

SIEVE SIZE	PERCENT PASSING
4"	100
1 1/4"	25 - 70
No. 40	0 - 30
No. 200	0 - 5

BLOCKS SHALL BE 28", 41" AND 60" REDI-ROCK, UNDER LICENSE OF REDI-ROCK INTERNATIONAL, VERTICAL BATTER. COLOR AND FINISH TO BE SELECTED BY OWNER BASED ON SAMPLES PROVIDED BY MANUFACTURER. SETBACK SHALL BE 0.01 INCHES PER BLOCK.

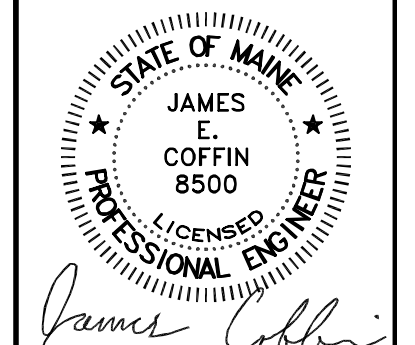
- THE FOLLOWING ASSUMPTIONS WERE USED IN THE DESIGN:
- SLOPE AT TOP OF WALL IS LEVEL.
 - MINIMUM DESIGN EMBEDMENT AT WALL FACE VARIES
 - SOIL PROPERTIES:
 - FOUNDATION SOIL: NATIVE, UNIT WEIGHT = 125 pcf, phi = 30°
 - RETAINED SOIL: NATIVE, UNIT WEIGHT = 130 pcf, phi = 34°
 - LIVE LOAD SURCHARGE = 250 psf
 - GROUNDWATER AT OR BELOW GRADE.
 - SEISMIC DESIGN COEFFICIENT = 0.08
 - MAXIMUM CONTACT PRESSURE = 3,500 psf

GEOTEXTILE SHALL CONSIST OF MIRAFI 180N OR EQUIVALENT.

CONCRETE FOR WALL BASE FOOTINGS SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000psi AND BE AIR ENTRAINED AS REQUIRED TO PROVIDE AN AIR CONTENT OF 5% (±1%).

GENERAL NOTES

- IT IS THE RESPONSIBILITY OF THE OWNER, CONTRACTOR OR THEIR RESPECTIVE REPRESENTATIVES TO ENSURE THAT CONSTRUCTION OF THE WALL AND MATERIALS USED IN THE CONSTRUCTION OF THE WALL ARE IN ACCORDANCE WITH THESE SPECIFICATIONS AND/OR THE CONTRACT SPECIFICATIONS WHICH EVER ARE MORE STRINGENT.
- E.S. COFFIN ENGINEERING & SURVEYING ACCEPTS NO RESPONSIBILITY NOR LIABILITY IN THE DETERMINATION OF THE ADEQUACY OF SITE MATERIALS AND WALL LAYOUT.
- PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY THAT ALL ELEVATIONS AND ASSUMED SITE CONDITIONS SHOWN ON THESE DRAWINGS ARE ACCURATE TO THE GIVEN SITE CONDITIONS. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF S.G.S. PRIOR TO THE START OF CONSTRUCTION.
- THE WALL HAS BEEN DESIGNED ON THE ASSUMPTION THAT THE WALL BACKFILL MATERIAL SHALL BE FREE OF SUBSURFACE DRAINAGE OR WATER (SEEPAGE). PERMANENT SUBSURFACE WATER (SEEPAGE) COLLECTION AND DIVERSION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR OWNER'S ENGINEER (SEE RECOMMENDED TYPICAL DETAILS).
- DURING CONSTRUCTION BEFORE RAIN EVENTS, BACKFILL SURFACE SHALL BE GRADED AWAY FROM THE WALL FACE AND A TEMPORARY SOIL BERM CONSTRUCTED NEAR THE TOP CREST TO PREVENT SURFACE WATER RUNOFF FROM OVERTOPPING THE WALL. PROVIDE PRECAUTIONS AS NECESSARY TO ENSURE THAT SURFACE RUN OFF FROM ADJACENT AREAS DOES NOT ENTER THE WALL CONSTRUCTION SITE. DURING CONSTRUCTION BEFORE RAIN EVENTS, BACKFILL SURFACE SHALL BE SMOOTHED OUT TO PREVENT PONDING OF WATER AND SATURATION OF SOIL.
- THE REDI-ROCK WALL SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER AND THE INFORMATION FURNISHED ON THESE DRAWINGS.
- FOUNDATION EXCAVATION SHALL EXTEND TO COMPETENT SOIL. (UNLESS NOTED OTHERWISE) ALL EXISTING TOPSOIL, LOOSE MATERIAL, FILL, ORGANIC SOIL AND OTHER SOFT OR UNSTABLE FOUNDATION SOILS SHALL BE REMOVED FROM THE AREA TO BE OCCUPIED BY THE WALL AND REPLACED WITH 3/4" CRUSHED STONE. REMOVE UNSUITABLE FOUNDATION SOILS TO THE LATERAL LIMITS EXTENDING BEYOND THE WALL A DISTANCE EQUAL TO THE DEPTH OF FILL REQUIRED BELOW THE WALL PLUS (1) ONE FOOT.
- UPON COMPLETION OF THE EXCAVATION, THE NATURAL SUBGRADE SHALL BE COMPACTED USING A VIBRATORY ROLLER AND MAKING A MINIMUM OF 5 PASSES.
- INSTALL A 12" (MINIMUM THICK) LAYER OF COMPACTED 1" CRUSHED STONE FOR BLOCK WALL LEVELING PAD OR CONCRETE FOOTING. EXTEND LEVELING PAD 6" HORIZONTALLY IN ALL DIRECTIONS BEYOND LIMITS OF THE PRECAST BLOCK WALL.
- INSTALL THE BASE COURSE OF BLOCKS ON THE PREPARED FOUNDATION LEVELING PAD. LEVELING PAD MATERIAL VARIES ACCORDING TO SECTION AND PLAN/PROFILE. ENSURE THAT THE BASE COURSE IS LEVEL SIDE TO SIDE AND PLUMB. ADJUST BLOCKS AS REQUIRED TO PROVIDE A STRAIGHT AND LEVEL BASE COURSE.



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NO.	REVISIONS	DATE

DETAILS IV

SHEET TITLE: CORE CUTTER, LLC LOT #26

SCALE: AS SHOWN

DATE: JULY 10, 2023

DRAWN BY: TCH

CHECKED BY: JEC

CLIENT/PROJECT: CORE CUTTER, LLC LOT #26

LOCATION: TECHNOLOGY DRIVE

TOWN: GARDNER COUNTY: KENNEBEC STATE: MAINE

PROJ. NO. 2022-005

