construction bid document addendum 01 - page 01



Project: Southern Maine Community College - Horticulture Greenhouse

South Portland Campus, Maine BGS # 3674

pages: 02 plus attachments date: 11 August 2025

The Contract Documents govern all aspects of the project. Information conveyed during pre-bid meetings, telephone, email or text with the Owner and/or Architect are informational only. Official instructions, clarifications and/or changes made to the Contract Documents during the bid phase are made only by addenda. The following information, clarifications, changes and additional instructions are hereby made as part of the Project Manual and Construction Drawings dated June 2025.

items: **GENERAL**:

1. Pre bid conference attendees list provided by Architect.

Questions

- 2. Where will the Contractor and Subcontractor be able to park? The Contractor shall have the parking area to the immediate east side of the construction site and along Slocum Road. The Owner will identify further locations within the existing parking lots adjacent to the site.
- 3. *Tree and plant removal.* The Owner will remove specific plants identified by the horticulture instructors. Otherwise all remaining plants and trees identified on the drawings are to be removed by the Contractor unless otherwise noted or determined by the Owner.
- 4. Who will be responsible for parking lot stripping? The Owner will restripe the parking lot after asphalt installation by Contractor.
- 5. Is this a Buy America project? Yes, with a provision of around 5% foreign material source.
- 6. Will there be water and electricity available on site during construction? Yes. Temporary connections can be provided from the existing horticulture and Bay buildings.

DRAWINGS: Civil

PLANS & DETAILS - Underground water and electrical supply pipe, conduit and wire location shown diagrammatically. Contractor to verify precise underground location in the relative vicinity of the Bay Building south entrance. Contractor to carefully remove and replace existing entry wood steps and landing to allow for trenching. Existing asphalt walkway to be protected during construction and repaired if damaged.

Architectural [Not Used]

Structural [Not Used]

Mechanical

M201 MECHANICAL LEGEND AND DETAILS: OMIT: Trap Primer Connection Detail, Domestic Hot Water Piping Schematic and Emergency Eye Wash Detail.

Electrical

E12 ELECTRICAL SITE PLAN: Underground electrical conduit shown diagrammatically. Contractor to install conduit in ceiling from electrical panel in the Bay Building through the foundation wall to the outside. Cored hole to be sealed watertight.

construction bid document addendum 01 - page 02



project: Southern Maine Community College - Horticulture Greenhouse

South Portland Campus, Maine BGS # 3674

ATTACHMENTS:

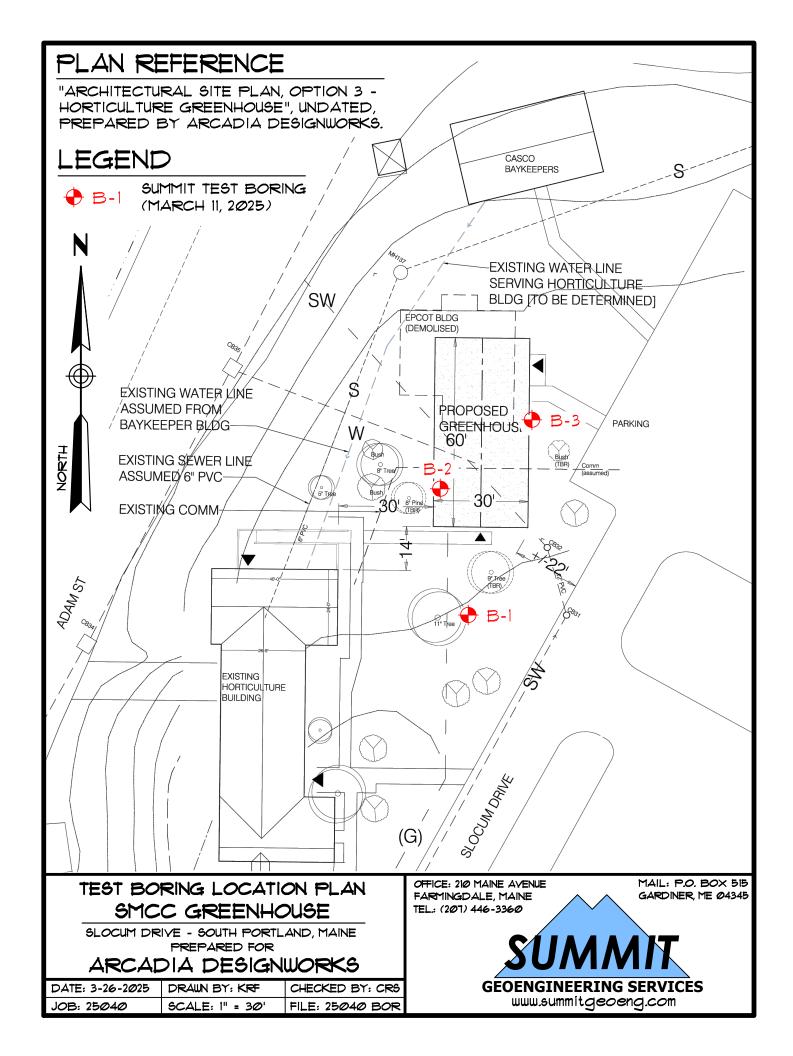
- 1. Pre Bid Conference Attendee Sheet.
- 2. Summit Geoengineering Exploration Data Package
- 3. Summit Geoengineering Geotechnical Report
- 4. Civil Engineering Drawings Complete Set
- 5. E10 Electrical Site Plan

tel: 207-347-5252

pre-bid conference



project.	Souli lett i Mail le Corti Hurilly C	ollege - Morticulture Green House							
date:	5 August 2025 at 10 AM								
location:	SMCC, Horticulture Building, South Portland Campus, Maine								
attendees:									
name	company	telephone							
Mitchell Boden	SMCC, Project Manager	207-741-5940							
Patric Santerre	ARCADIA designworks (Ad)	207-347-5252							
Jackson Swa	ann - Doten's Constance	tion 207-800-5783							
ANDREW	CIMINO C.M. CIMINO	wc. 207-854-8876							
Salvable	Sala benchmak Co	nstucties 207-757-1871							
		In + Sons 207-8541-471							
0	O								
		: *							
		1							





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

WOH = Weight of Hammer SSA = Solid Stem Auger 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%

No. 200 sieve to 0.005 mm Silt:

less than 0.005 mm Clay:

Density of Granular Soils and Consistency of Cohesive Soils:

CONSISTENCY OF CO	HESIVE 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				

		_	_			s	OIL BORI	NG LOG	Boring #:	B-1
		CALL	AAIT				SMCC Greenho		Project #:	25040
		SUM	MIL				Slocum Drive		Sheet:	1 of 1
		GEOENGINEERI	NG SERVICES			City, State:	South Portland	, Maine	Chkd by:	CWC
Drilling Co: Summit Geoengineering Services Borir				Boring Elevation:	:	Unkno	own			
Driller:		S. Floyd				Reference:		N/A		
Summit :		C. Sullivan, E.				Date Started:	3/11/2025	Date Completed:	3/11/2025	
	ILLING	METHOD		AMPLER				ESTIMATED GROUND V		
Vehicle:		AMS Track	Length:	24" SS	TD	Date 3/11/2025	Depth 7.0 ft	Elevation		eference
Mode l : Method:		9580 VTR 2-1/4" HSA	Diameter: Hammer:	2"OD/1.5" 140 l b	עו	3/11/2025	7.010	N/A	Measured in open t	oreho l e after drilling
Hammer	Style:	Auto	Method:	ASTM D15	86					
Depth	otyle:	71000	rictiour	7.0111.013	Elev.		SAMPL	 _E	Geological/	Geological
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIP		Test Data	Stratum
	S-1	24/16	0 - 2	1		Dark brown Silty	SAND, trace G	ravel, loose, frozen, SM		TOPSOIL
1_				2		Brown SILT-SAN	D, little Gravel,	loose, damp, ML to SM		0.5'
				4				Gravel, pushed cobb l e in]1' FILL
2_				20		spoon tip, loose-		•		
_	S-2	12/5	2 - 3	9		1		slightly mottled, crushed		
3_		-		50/6"		rock fragments in	n spoon tip, cor	mpact, damp, SM		
4										
-										
5										
I	S-3	24/12	5 - 7	5		Olive gray SILT-	CLAY, some Sar	nd & Gravel, firm, moist,	PP = 3,000 psf	- 5' +/-
6_				2		ML-CL			to 3,500 psf] '
I -				7				ne Gravel, slightly mottled		5.5'
7_				9		1" crushed cobbl		, ,		
	S-4	24/8	7 - 9	9			•	lightly mottled, frequent		
8_				8		1" cobbles throu	ghout, compact	t, moist, SM		
_				12						
9_				12						
10										
10_	S-5	24/12	10 - 12	11		 Brown-olive brow	wn SAND, some	Gravel, little Silt, slightly	,	
11	33	21/12	10 12	8			•	throughout, compact,	'	
				7		wet, SP-SM		oughout, compact,		
12				4		'				
	S-6	24/24	12 - 14	4		Same as above,	little-some Grav	vel, little Silt, slightly		
13_				10		mottled, compac	t, wet, SP-SM t	o SM		
				17						
¹⁴ _				12			•	ccasional shell fragments	7	13.5'
1.5						compact, wet, SI		ou Defined on Deducati		GLACIAL TILL 14.2'
¹⁵ _						Elia oi Explorado	on at 14.2 , Aug	er Refusal on Bedrock		BEDROCK
16						Offset 3' North,	Auger Refusal a	nt 15.4'		BEDIOCK
I -~-		1						==:		
17										
I -										
18_										
		ļ								
¹⁹ _										
20										
21										
I										
22										
						<u> </u>				
Granula		Cohesiv		% Comp		NOTES:		etrometer, MC = Moisture C		Soil Moisture Condition
Blows/ft.			Consistency	ASTM D	2487	1		, PI = Plastic Index, FV = F		Dry: S = 0%
0-4	V. Loose		V. soft			Bedrock Joints		Shear Strength, $Su(r) = Rer$	molded Shear Strength	Humid: S = 1 to 25%
5-10 11-30	Loose	2-4	Soft	< 5% T		Shallow = 0 to 35	-			Damp: S = 26 to 50%
11-30 31-50	Compact Dense	t 5 - 8 9 - 15	Firm Stiff	5-15% 15-30%		Dipping = 35 to 55 Steep = 55 to 90 c	-			Moist: $S = 51$ to 75% Wet: $S = 76$ to 99%
>50 >50	V. Dense		V. Stiff	> 30%		121CCD - 22 10 30 C	acgrees			Saturated: S = 100%
. 55	501130	>30	Hard	5070		Boulders = diamete	er > 12 inches. C	Cobbles = diameter < 12 incl	hes and > 3 inches	344.4100. 5 = 10070
		·		1				$d = \langle No 4 \text{ and } \rangle No 200, Si$		

							OIL BORI	NG LOG	Daving #1	B-2
									Boring #:	
		SUM	MIT			Project: Location:	SMCC Greenho	ouse	Project #: Sheet:	25040 1 of 1
		GEOENGINEERI	NG SERVICES				South Portland	Maine	Chkd by:	CWC
Drilling (^o·	Summit Geoer	naineerina Ser	vices		Boring Elevation:		Unknov	· · ·	Cive
Driller:		S. Floyd	igineering Sci	VICCS		Reference:	•	N/A	YII	
Summit	Staff:	C. Sullivan, E.1				Date Started:	3/11/2025	Date Completed:	3/11/2025	
DF		METHOD		AMPLER				ESTIMATED GROUND W	ATER DEPTH	
Vehicle:		AMS Track	Length:	24" SS		Date	Depth	E l evation	Re	ference
Model:		9580 VTR	Diameter:	2"OD/1.5"	ID	3/11/2025	6.2 ft	N/A	Measured in open b	oreho l e after drilling
Method:		2-1/4" HSA	Hammer:	140 l b						
Hammer	Style:	Auto	Method:	ASTM D15						
Depth		I 5 (5 (1)	D 11 (0)	1.1 (61)	Elev.		SAMPI		Geological/	Geological
(ft.)	No.	Pen/Rec (in)		blows/6"	(ft.)		DESCRIP		Test Data	Stratum
	S-1	24/12	0 - 2	1				s, soft, frozen, ML		TOPSOIL
1_				2 4	{			ravel, 1" crushed cobble s in spoon tip, loose-		0.3' FILL
2				3	1	compact, damp,		in spoon up, loose-		LILL
-	S-2	24/12	2 - 4	3	1			vel, pushed cobble in		
3		,		2	İ	spoon tip, loose,		* *		
I				3	1	' ', ' ', '				
4_				8]					
I -										
5_								.		
_	S-3	24/14	5 - 7	3		1	•	crushed slatey rock at		
6_				4	-	5.4', loose-comp	act, moist, SM			
7				4	}					
′-	S-4	24/1	7 - 9	3	1	Same as above	nuched cobble	in spoon tip, loose,		
8	5 +	27/1	, ,	2		moist, SM	pusited cobble	ш эрооп ар, юозе,		
_				1	i					
9				2	1					
_]					
10_										
	S-5	24/20	10 - 12	13				vel, slightly mottled at		10'
11_				14		11', compact, mo			L	MARINE REGRESSIVE
12	-			12	-			1" slatey rock fragments		11.5' DEPOSIT
12 -	S-6	24/20	12 - 14	7 5	1	at 11.5', very sti		trace Gravel, frequent		
13	- 30	21/20	12 11	6	1			d, stiff, moist, ML		
				5	İ	-	: - - 	d, frequent fine Sand	PP > 9,000 psf	13'
14				10	İ	seams, moderate		, , , , , , , , , , , , , , , , , , ,		
]					
15_										
	S-7	24/24	15 - 17	3			•	e-little Gravel, heavily		15' +/-
16_				4	-	mottled at 16.8',	compact, wet,	SIM		GLACIAL TILL
17				5 10						
1/-	S-8	24/12	17 - 19	13		Same as above	slightly-modera	itely mottled, compact,		
18		- 1/ ±4		9		wet, SM		, motaca, compact,		
I				13	1	'				
19				18]					
I -										
20_	<u> </u>					_	D. 1.2			
2.4	S-9	17/12	20 - 21.4	3		Same as above,	slightly mottled	l, compact, wet, SM		
²¹ -				5 50/5"	-					
22				30/5		End of Evoloration	on at 21 4' Dof	usal on Probable Bedrock		21.4'
						Lind of Exploration	ای مد کین ہ , اردا	asai on i robable bearock		PROBABLE BEDROCK
Granul	ar Soils	Cohesiv	e Soils	% Comp	osition	NOTES:	PP = Pocket Per	etrometer, MC = Moisture Co	ntent	Soil Moisture Condition
Blows/ft.	Density	Blows/ft.	Consistency	ASTM D	2487]	LL = Liquid Limit	, PI = Plastic Index, FV = Fie	ld Vane Test	Dry: S = 0%
0-4	V. Loose		V. soft			Bedrock Joints		Shear Strength, $Su(r) = Rem$	olded Shear Strength	Humid: S = 1 to 25%
5-10	Loose	2-4	Soft	< 5% 7		Shallow = 0 to 35	=			Damp: S = 26 to 50%
11-30	Compact		Firm	5-15%		Dipping = 35 to 55	-			Moist: S = 51 to 75%
31 - 50	Dense V. Dense	9-15	Stiff	15-30%		Steep = 55 to 90 c	iegrees			Wet: S = 76 to 99%
>50	V. Dense	16-30 >30	V. Stiff Hard	> 30%	VVILII	 Boulders = diamete	er > 12 inches (Cobbles = diameter < 12 inche	es and > 3 inches	Saturated: S = 100%
I			Hard					d = < No 4 and >No 200, Silt		
		1				1	1, 5411		,,00	

						SC	IL BORI	NG LOG	Boring #:	B-3
		CILA	AAIT			Project: S	MCC Greenho	ouse	Project #:	25040
		SUM	MIL			_	ocum Drive		Sheet:	1 of 1
		GEOENGINEERI	NG SERVICES				outh Portland	, Maine	Chkd by:	CWC
Drilling C	io:	Summit Geoer	ngineering Ser	vices		Boring Elevation:		Unkno	-	
Driller:		S. Floyd	<u> </u>			Reference:		N/A		
Summit 9	Staff:	C. Sullivan, E.	Ι.			Date Started:	3/11/2025	Date Completed:	3/11/2025	
DR	ILLING	METHOD	S/	AMPLER				ESTIMATED GROUND V	VATER DEPTH	
Vehicle:		AMS Track	Length:	24" SS		Date	Depth	E l evation		eference
Model:		9580 VTR	Diameter:	2"OD/1.5"	ID	3/11/2025	4.8 ft	N/A	Measured in open b	orehole after drilling
Method:		2-1/4" HSA	Hammer:	140 l b						
Hammer	Style:	Auto	Method:	ASTM D15						
Depth				l	Elev.		SAMPI		Geological/	Geological
(ft.)	No.	Pen/Rec (in)	Depth (ft)	blows/6"	(ft.)		DESCRIP		Test Data	Stratum
	S-1	24/15	0 - 2	2				s, loose, frozen, SM		TOPSOIL
1_				1		Tan fine SAND, tra	ace Gravel & S	Silt, loose, damp, SP		0.3'
٦				2						FILL
2_	6.2	24/10	2 4	2		Camo as abovo lo	oco dama S	ח		
3	S-2	24/18	2 - 4	1		Same as above, lo	ose, uainp, S	Г		
3_				1		Brown fine SAND	little Silt trac	e Gravel, loose, damp-		
4				2		moist, SP-SM	nue on, udu	e oraver, roose, uarrip-		
[¬] -						Inioist, or sin				
5										
	S-3	24/17	5 - 7	31		Same as above In	ose-compact	damp-moist, SP-SM		
6		- ', -'		22		Crushed concrete				5.2' +/-
Ĭ -				6						
7				8						
	S-4	24/10	7 - 9	7		Brown Gravelly SA	ND, little Silt,	occasional 1" cobbles at		7' +/-
8_				6				nt at 7.5', loose-compact,		
				6		wet, SP-SM				
9_				12						
10_										
	S-5	24/1	10 - 12	17		1		in spoon tip preventing		
11_				10		sample collection,	compact, we	t, SP-SM		
				10						
12_				10						
40	S-6	24/12	12 - 14	9			,	Gravel, occasional 1"		
13_				11		cobbles throughou	it, compact, v	iet, SM		
14				14 14						
14_				14						
15										
13-	S-7	24/14	15 - 17	3		Olive grav-grav fir	ne SAND. little	-some Silt, slightly-		15' +/-
16	<u> </u>	- 1/ - 1	20 1/	4				pact, wet, SP-SM to SM		GLACIAL TILL
				4			,	-,, 5. 5.165 5.1		
17				3						
	S-8	24/14	17 - 19	2		Olive gray Silty SA	ND, little Gra	vel, slightly mottled,		
18_				10		compact, wet, SM	-	,		
				10						
19_				8						
20_										
	S-9	14/14	20 - 21.2	10		Same as above, co	ompact, wet,	SM		
21_				12						
				50/2"						24.5
22_						End of Exploration	n at 21.5', Aug	er Refusa l on Bedrock		21.5'
										BEDROCK
C	C-::	C 1 .	e Ceil-	0/ 0	o oliti - :	NOTEC: -	D DI1	atuamatau MC Mill C	Contant	Coil Maisterne C 191
Granula Blows/ft		Cohesiv Plays/ft		% Comp				etrometer, MC = Moisture C		Soil Moisture Condition
Blows/ft.		Blows/ft.	Consistency	ASTM D	240/	1		F, PI = Plastic Index, FV = Fi		Dry: S = 0%
0-4 5-10	V. Loose Loose	<2 2 - 4	V. soft Soft	< 5% T	race	Bedrock Joints Shallow = 0 to 35 de		Shear Strength, Su(r) = Rer	noided Strength	Humid: $S = 1 \text{ to } 25\%$ Damp: $S = 26 \text{ to } 50\%$
11-30	Compact	2 -4 5-8	Firm	5-15%		Dipping = 35 to 55 (_			Moist: $S = 26 \text{ to } 30\%$
31-50	Dense	9 - 15	Stiff	15-30%		Steep = 55 to 90 de	_			Wet: S = 76 to 99%
	V. Dense	16-30	V. Stiff	> 30%		- 33 to 30 de	g. CC3			Saturated: S = 100%
. 50				1		Douldors - diameter	. 42		and and a 2 inches	300,000
		>30	Hard	1		TDOUIGEIS = (Harriere)	· > 12 inches (obbles = diameter < 12 incl	les and > 5 inches	

The key to success starts with a solid foundation. ENGINEERING | EXPLORATION | EXPERIENCE

Geotechnical Report

SMCC Greenhouse Slocum Drive, South Portland, Maine





Mailing: PO Box 515, Gardiner, ME 04345 Office: 210 Maine Avenue, Farmingdale, ME 04344

www.summitgeoeng.com

Client

Arcadia Designworks 199 Prospect Street, Suite A Portland, Maine 04103

> Project #: 25040 Date: 4/16/2025



April 16, 2025 Summit #25040

Patric Santerre Arcadia Designworks 199 Prospect Street, Suite A Portland, Maine 04103

Reference: Geotechnical Engineering Services

SMCC Greenhouse - Slocum Drive, South Portland, Maine

Dear Mr. Santerre;

Summit Geoengineering Services, Inc. (SGS) has completed the geotechnical investigation for the proposed greenhouse at Southern Maine Community College's South Portland Campus (SMCC) in South Portland, Maine. The scope of services includes performing explorations at the site and preparing this report summarizing our findings and geotechnical recommendations for the new greenhouse foundations.

The subsurface soils consist of topsoil overlying existing fill, and glacial till. Localized marine regressive deposits (silt, sand, clay) was encountered in test boring B-2. Refusal on bedrock was encountered at a depth range of 14 to 22 feet below ground surface (BGS). Groundwater was observed at an approximate depth range of 5 to 7 feet BGS.

This report provides discussion of the geotechnical findings and design recommendations for the new greenhouse foundations. Our geotechnical evaluation is based on the existing site and subsurface conditions, along with planned development details provided by Arcadia Designworks.

SGS appreciates the opportunity to serve you during this phase of your project. If there are any questions or additional information is required, please do not hesitate to call.

Sincerely yours,

Summit Geoengineering Services

Colleen Sullivan, E.I. Geotechnical Engineer

Collen Allen



Craig W. Coolidge, P.E.

Vice President & Principal Engineer



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1.0 Project and Site Description	3
2.0 Site Investigation	3
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3.1 Soil Layers	4
3.2 Bedrock	5
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5.0 Geotechnical Design Recommendations	6
5.1 Bearing Capacity & Settlement	6
5.2 Frost Protection	7
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5.6 Removal of Man-made Pond	g
6.0 Earthwork Considerations	g
7.0 Closure	10
Test Boring Location Plan	Appendix A
Boring Logs	Appendix B

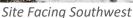


1.0 Project and Site Description

Summit Geoengineering Services (SGS) was asked by Arcadia Designworks to conduct a geotechnical investigation for a proposed greenhouse off Slocum Drive within Southern Maine Community College's South Portland Campus (SMCC) in South Portland, Maine. The greenhouse is proposed as a single-story structure with a footprint of 1,800 sf.

The greenhouse location is proposed in a vacant lot bordered by the Horticulture Building to the southwest, the Casco Bay Keeper Building to the northeast, Adams Street to the west, and Slocum Drive to the east. A paved courtyard area and a man-made pond near the center of the site are planned for removal. SGS understands that a former building with a wood basement foundation has been removed and backfilled onsite. A portion of the greenhouse is proposed in the former building footprint. Topography at the proposed greenhouse location is relatively flat, at or near elevation 18 feet. The greenhouse is anticipated to be constructed with a finish floor elevation at 19 feet, requiring fill heights up to 1-foot across the greenhouse footprint.







Site Facing Northeast

2.0 Site Investigation

SGS explored the subsurface conditions with the drilling of 3 test borings performed on March 11, 2025. Explorations were performed using a track mount AMS 9580 VTR drill rig. Explorations were field located by SGS relative to existing site features and marked for notification of Dig Safe. ProMark Utility Locating, Inc. was subcontracted to scan and clear the exploration locations of underground utilities prior to drilling. Locations of the explorations are shown on the Exploration Location Plan in Appendix A. Logs of the explorations are provided in Appendix B.

Test borings were advanced using a combination of 2¼-inch hollow stem augers and 2½-inch solid stem augers to a depth of bedrock refusal, ranging from 14 to 22 feet below ground surface (BGS). An offset ledge probe was completed at boring B-2 to confirm bedrock depth with refusal met at 15 feet BGS. Sampling was conducted at select intervals with standard penetration tests (SPT-N) using a split spoon sampler and auto-drop hammer.





Advancement of Augers at Test Boring B-1, Facing Northeast

3.0 Subsurface Conditions

The subsurface conditions consist of *topsoil* overlying *fill*, and *glacial till*. Localized *marine regressive deposits* were encountered in test boring B-2 underlying the fill. *Bedrock* refusal was encountered at a depth range of 14 to 22 feet BGS. Details of the test borings are provided on the logs in Appendix B. The subsurface conditions are further described below.

3.1 Soil Layers

Topsoil is present at the ground surface with a thickness ranging from 3 to 6 inches. The topsoil is described as dark brown silty sand to sandy silt with trace to no gravel and rootlets. The topsoil is visually classified as SM to ML in accordance with the Unified Soil Classification System (USCS) and is considered loose to soft and frozen.

Fill is present beneath the topsoil and ranges from 10 to 15 feet in thickness. The fill is described as predominately brown silty sand with variable gravel. Occasional silt-clay seams and cobbles were encountered within the fill. Miscellaneous debris including concrete and asphalt fragments were encountered in test boring B-3 at an approximate depth of 5 feet BGS. The fill is visually classified as SP, SP-SM, SM, ML, and ML-CL in accordance with USCS. Standard penetration testing (SPT) values indicate a density range of loose to compact with N-values ranging from 2 to 28 blows per foot (bpf), averaging 12 bpf. The fill is considered damp to wet with depth.



Marine regressive deposit, is localized to test boring B-2 with a thickness of 5 feet and encountered at a depth of 10 feet BGS. The deposit is described as slightly to moderately mottled interlayered silt, sand, and clay with variable gravel and occasional cobbles. The deposit is visually classified as SM, ML, and ML-CL in accordance with the USCS and is considered moist to wet. SPT-N values indicate a density range of compact or stiff, with N-values ranging from 11 to 26 bpf, averaging 19 bpf.

Glacial till is encountered at depths ranging from 14 to 15 feet BGS and consists of slightly to moderately gray to olive gray silty sand with variable gravel. The till visually classifies as SP-SM to SM in accordance with the USCS and is considered compact and wet.

3.2 Bedrock

Bedrock refusal was encountered at a depth range of 14 to 22 feet BGS, approximate elevations 5 to -4 feet. Mapping by the Maine Geological Survey indicates bedrock at the site is part of the Spring Point Formation (Osp) consisting of medium to dark greenish gray amphibolite with plagioclase, chlorite, and actinolite granofels.

3.3 Groundwater

Groundwater was encountered at a depth range of 5 to 7 feet BGS, elevations 13 to 12 feet. Mottling within the fill and marine regressive deposits indicate that presence and depth of groundwater may fluctuate between wet and dry periods.

4.0 Geotechnical Evaluation

SGS understands that two different greenhouse locations were originally proposed at the site, Option A and Option B. Option A was proposed at the southeast portion of the site, with Option B shifted slightly north. After the subsurface investigation was completed, Option C was proposed. This location is planned 14 feet north of Option B, covering a portion of the former Ebcot building footprint. SGS understands that the former building had a wood basement foundation that has been removed and backfilled. Boring B-3 was completed at the south corner of the former building, but subsurface conditions to the north portion of the footprint are still unknown. Based on this, SGS recommends subgrade inspections to be completed by the geotechnical engineer prior to construction of foundation footings.

An existing man-made pond is present at the site surrounded by a small stone retaining wall. The pond is planned to be backfilled and the retaining wall removed to construct the new greenhouse. SGS recommends the pond be dewatered, if necessary, and backfilled with compacted Gravel Borrow, see Section 5.6 for details.



The greenhouse finish floor elevation is anticipated at 19 feet. Based on this, fill heights up to 1-foot will be required across the greenhouse footprint to meet final grades. Footings for the proposed greenhouse are anticipated to bear on existing fill. SGS anticipates the greenhouse can be supported by conventional spread footings with proper subgrade preparation.

5.0 Geotechnical Design Recommendations

5.1 Bearing Capacity & Settlement

SGS anticipates the new greenhouse foundations will be constructed on existing fill. SGS recommends foundations be designed using an allowable bearing pressure of 3,000 psf. Total settlement is estimated at 1-inch or less. Differential settlement is estimated at or less than a deflection of 1/300 (δ /L, deflection divided by span length), which is anticipated to be within tolerable limits for the proposed structure. The bearing pressure and associated settlement is based on the following conditions:

- Existing topsoil, surface vegetation, and deleterious materials are removed from within the building footprint prior to placing fill or constructing footings.
- Where dry and granular, existing soil exposed in the building footprint should be proof-rolled prior to placing new fill. Proof-rolling should consist of a minimum of five passes in a north-south direction and then five passes in an east-west direction using a vibratory roller. Proof-rolling is not recommended where excavations are located near or below groundwater.
- All fill required in the building footprint should consist of compacted Gravel Borrow, as specified in Section 5.3.
- Subgrade soils that become softened or disturbed in the base of excavations are over excavated
 and stabilized using 12 inches of Crushed Stone. Crushed Stone should be tamped to lock the
 stone structure together.
- If encountered, existing cobbles are removed from directly beneath footings. Voids created by this process should be backfilled with Crushed Stone. A minimum 12-inch cushion should be provided below footings and any cobbles or boulders.
- SGS should be retained to inspect the footing subgrade conditions particularly in unexplored areas at the north portion of the greenhouse footprint to verify that recommendations are appropriate for the encountered soil conditions.



SGS further recommends the following design parameters be used for foundation design:

PARAMETER	ENGINEERED FILL	EXISTING FILL & MARINE REGRESSIVE DEPOSIT
Total Natural (moist) Unit Weight (Υ_t)	130 pcf	125 pcf
Saturated (buoyant) Unit Weight (Υ _s)	68 pcf	63 pcf
Friction Coefficient (f)	0.50	0.45
Passive Earth Pressure Coefficient (K _p)	3.54	3.39
Active Earth Pressure Coefficient (Ka)	0.28	0.29
At Rest Pressure Coefficient (K _o)	0.44	0.46
Effective Friction Angle (φ',)	34 ⁰	33 ⁰

5.2 Frost Protection

Exterior footings should be constructed at a minimum depth of 4 feet below finished grade for frost protection. This frost protection depth is based on a design air-freezing index of 1,200-degree days for the South Portland area. SGS recommends exterior and interior portions of foundation elements be backfilled with Foundation Backfill. Foundation Backfill should have a maximum particle size limited to 6 inches and the portion passing a 3-inch sieve should meet the following specification:

FOUNDATION BACKFILL					
Sieve Size	Percent Passing				
¼ inch	25 to 100				
No. 40	0 to 50				
No. 200	0 to 7				

Reference: MDOT Specification 703.06, Type E (2020)

Foundation Backfill should be placed in 12-inch lifts or less and compacted to 95 percent of its maximum dry density determined in accordance with ASTM D1557.

5.3 Building Slab

SGS recommends the building slab be constructed on a minimum 12-inch thick layer of Gravel Borrow. The coefficient of subgrade reaction, k (per 12-inch plate) applies to the design of reinforced concrete foundations over soil. For the conditions described above, the slab can be designed using a coefficient of subgrade reaction of 150 tons/ft³.



Gravel Borrow should consist of well graded granular material with a maximum particle size of 6 inches. The portion passing a 3-inch sieve should meet the following gradation:

GRAVEL BORROW				
Sieve Size	Percent Passing			
¼ inch	0 to 70			
No. 200	0 to 10			

Reference: MDOT Specification 703.20, Gravel Borrow (2020)

Gravel Borrow should be placed in maximum 12-inch lifts and compacted to 95 percent of its maximum dry density determined in accordance with ASTM D1557. Additional fill required to meet grades at the site should consist of Gravel Borrow.

5.4 Seismic Design

The soils at the site are categorized as Site Class D in accordance with ASCE 7-16. Soils at the site are not considered susceptible to widespread liquefaction during earthquakes. The following seismic site coefficients should be used:

SUBGRADE SITE SEISMIC DESIGN COEFFICIENTS – ASCE 7-16						
Seismic Coefficient	Site Class D					
Peak Ground Acceleration (PGA)	0.165					
Site Modified Peak Ground Acceleration (PGA _M)	0.242					
Short period spectral response (S _S)	0.279					
1 second spectral response (S ₁)	0.071					
Maximum short period spectral response (S _{MS})	0.441					
Maximum 1 second spectral response (S _{M1})	0.171					
Design short period spectral response (S _{DS})	0.294					
Design 1 second spectral response (S _{D1})	0.114					

5.5 Groundwater Control

Groundwater was encountered at a depth range of 5 to 7 feet BGS, elevations 13 to 12 feet. Based on this, perimeter underdrains are not strictly required for the exterior footings. At a minimum, SGS recommends exterior grades be sloped away from the building footprint, as best practical, to reduce runoff water from infiltrating the foundation backfill.



Perimeter underdrains, if used, should consist of 4-inch rigid perforated PVC placed adjacent to the exterior footings and surrounded by a minimum of 6 inches of Crushed Stone wrapped in filter fabric to prevent clogging from the migration of the fine soil particles in the foundation backfill soils. The underdrain pipe should have an outlet free flowing. Where exposed at the ground surface, the ends of pipes should be screened or otherwise protected from entry and nesting of wildlife, which could cause clogging.

5.6 Removal of Man-made Pond

An existing man-made pond is present at the site surrounded by a small stone retaining wall. The pond is planned to be backfilled and the retaining wall removed to construct the new greenhouse. SGS recommends the pond be dewatered, if standing water is encountered. Prior to backfilling the pond, remove the pond liner. Gravel Borrow should meet specification, placement, and compaction requirements specified in Section 5.3.

6.0 Earthwork Considerations

Existing topsoil, surface vegetation, and deleterious materials should be removed from the ground surface prior to placing fill or constructing footings. SGS anticipates occasional cobbles may be encountered in foundation excavations. If encountered, voids created by removal of cobbles beneath footings should be backfilled with Crushed Stone.

Foundation Backfill and Gravel Borrow should be placed in maximum 12-inch lifts and compacted to a minimum of 95 percent of their maximum dry density, determined in accordance with ASTM D1557, Modified Proctor Density.

Granular subgrade above groundwater should be proof-rolled prior to placement of fill. Proof-rolling should consist of a minimum of five passes in a north-south direction and then five passes in an east-west direction using a vibratory roller or large plate compactor. Proof-rolling is not recommended where subgrade or foundation footings are located near or below groundwater due to potential for subgrade disturbance.

If subgrade disturbance occurs during construction, SGS recommends the base of the subgrade be over excavated and replaced with 12 inches of Crushed Stone. Crushed Stone should be tamped to lock the stone structure together.

Depending on the depth, location, and timing of excavation, dewatering may be required. Shallow sumps and conventional submersible pumps should be sufficient to control localized groundwater during construction. Diversion and control of surface water should be performed to prevent water flow from adjacent wet areas or from rain or snowmelt from entering the excavations.



Utility trenching and general excavations below 4 feet should be sloped no greater than 1.5H to 1V (OSHA type C) for granular soils and/or below groundwater. This slope is based on the current OSHA Excavation Guidelines.

It is recommended the geotechnical engineer be retained to conduct subgrade inspections, particularly in unexplored areas at the north portion of the greenhouse footprint, to confirm that soil conditions and construction methods are consistent with this report. It is further recommended that a qualified testing agency inspect soil materials gradation and compaction during construction for conformance to the project specifications. Soil materials testing reports should be made available to the geotechnical engineer for review.

7.0 Closure

The recommendations provided in this report are based on professional judgment and generally accepted principles of geotechnical engineering and project information provided by others. No other warranty is expressed or implied. Our evaluations and recommendations are based on discrete and widely spaced data points. Some changes in subsurface conditions from those presented in this report are anticipated to occur. Should these conditions differ materially from those described in this report, SGS should be notified so that we can re-evaluate our recommendations.

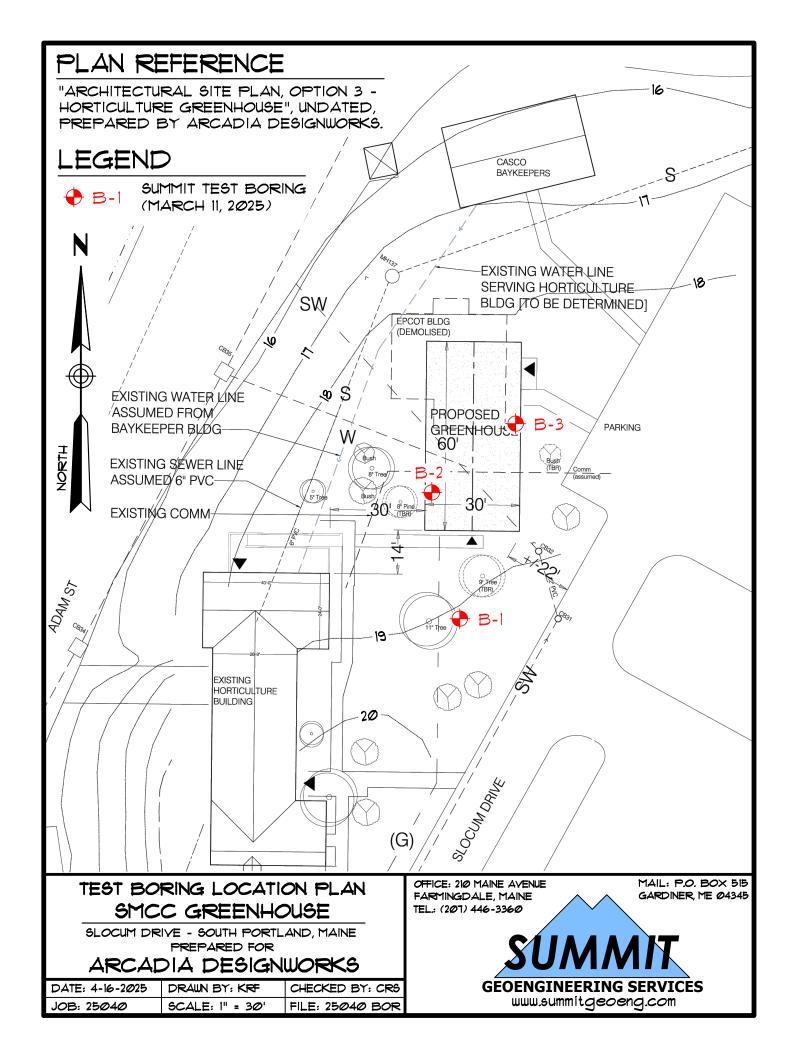
SGS appreciates the opportunity to serve you during this phase of your project. If there are any questions or additional information is required, please do not hesitate to call.

APPENDIX A

TEST BORING LOCATION PLAN

Mailing: PO Box 515, Gardiner, ME 04345 Office: 210 Maine Avenue, Farmingdale, ME 04344

www.summitgeoeng.com



APPENDIX B BORING LOGS



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

WOH = Weight of Hammer SSA = Solid Stem Auger 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%

No. 200 sieve to 0.005 mm Silt:

less than 0.005 mm Clay:

Density of Granular Soils and Consistency of Cohesive Soils:

CONSISTENCY OF CO	HESIVE 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				



>50

V. Dense

16-30

>30

V. Stiff

Hard

> 30% With

SOIL BORING LOG B-1 Boring #: SMCC Greenhouse Project #: 25040 Slocum Drive Sheet: 1 of 1 South Portland, Maine Chkd by: CWC

Saturated: S = 100%

Project: Location: City, State: Drilling Co: Summit Geoengineering Services Boring Elevation: 19 ft +/-Driller: S. Floyd Reference: Estimated from Existing Conditions Plan prepared by Sitelines, PA C. Sullivan, E.I. 3/11/2025 Date Completed: Summit Staff: Date Started: 3/11/2025 DRILLING METHOD SAMPLER ESTIMATED GROUND WATER DEPTH Vehicle: Date Depth AMS Track Length: 24" SS Elevation Reference Model: 9580 VTR Diameter: 2"OD/1.5"ID 3/11/2025 7.0 ft 12 ft +/-Measured in open borehole after drilling Method: 2-1/4" HSA Hammer: 140 lb Hammer Style: Method: **ASTM D1586** Auto Depth Elev. SAMPLE Geological/ Geological (ft.) Pen/Rec (in) Depth (ft) blows/6" **DESCRIPTION** Test Data Stratum (ft.) Dark brown Silty SAND, trace Gravel, loose, frozen, SM TOPSOIL S-1 24/16 0 - 2 1 2 Brown SILT-SAND, little Gravel, loose, damp, ML to SM 0.5' Brown SAND, little-some Silt & Gravel, pushed cobble in 1' FILL 4 20 spoon tip, loose-compact, damp, SP-SM to SM 2 S-2 12/5 2 - 3 9 Brown Silty SAND, little Gravel, slightly mottled, crushed 50/6" 3 rock fragments in spoon tip, compact, damp, SM 5 S-3 24/12 5 - 7 5 Olive gray SILT-CLAY, some Sand & Gravel, firm, moist, PP = 3,000 psf6 2 to 3,500 psf Olive gray Silty SAND, little-some Gravel, slightly mottled, 5.5' 7 9 1" crushed cobble at 5.5', compact, moist, SM 7 S-4 24/8 7 - 9 9 Same as above, some Gravel, slightly mottled, frequent 8 1" cobbles throughout, compact, moist, SM 12 9 12 10 S-5 24/12 10 - 12 11 Brown-olive brown SAND, some Gravel, little Silt, slightly 8 mottled, occasional 1" cobbles throughout, compact, 11 7 wet, SP-SM 12 4 12 - 14 24/24 4 S-6 Same as above, little-some Gravel, little Silt, slightly 13 10 mottled, compact, wet, SP-SM to SM 17 13.5 12 Gray Silty SAND, little Gravel, occasional shell fragments, 14 compact, wet, SM GLACIAL TILL End of Exploration at 14.2', Auger Refusal on Bedrock 14.2' 15 **BFDROCK** 16 Offset 3' North, Auger Refusal at 15.4' 17 18 19 20 21 22 Granular Soils Cohesive Soils % Composition NOTES: PP = Pocket Penetrometer, MC = Moisture Content Soil Moisture Condition **ASTM D2487** Blows/ft. Density Blows/ft. Consistency LL = Liquid Limit, PI = Plastic Index, FV = Field Vane Test Dry: S = 0%V. soft Su = Undrained Shear Strength, Su(r) = Remolded Shear StrengthHumid: S = 1 to 25% 0-4 V. Loos Bedrock Joints <2 5-10 2-4 Soft < 5% Trace Damp: S = 26 to 50% Shallow = 0 to 35 degrees 11-30 Compac 5-8 Firm 5-15% Little Dipping = 35 to 55 degrees Moist: S = 51 to 75% Stiff 15-30% Some Wet: S = 76 to 99%Dense 9-15 Steep = 55 to 90 degrees 31-50

> Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200



>50

V. Dense

16-30

>30

V. Stiff

Hard

> 30% With

SOIL BORING LOG B-2 Boring #: SMCC Greenhouse Project #: 25040 Slocum Drive Sheet: 1 of 1 South Portland, Maine Chkd by: CWC

Saturated: S = 100%

Project: Location: City, State: Drilling Co: Summit Geoengineering Services Boring Elevation: 18 ft +/-Driller: S. Floyd Reference: Estimated from Existing Conditions Plan prepared by Sitelines, PA C. Sullivan, E.I. 3/11/2025 Date Completed: Summit Staff: Date Started: 3/11/2025 SAMPLER DRILLING METHOD ESTIMATED GROUND WATER DEPTH Vehicle: Date Depth Reference AMS Track Length: 24" SS Elevation Model: 9580 VTR Diameter: 2"OD/1.5"ID 3/11/2025 6.2 ft 12 ft +/-Measured in open borehole after drilling Method: 2-1/4" HSA Hammer: 140 lb Hammer Style: Method: **ASTM D1586** Auto Depth Elev. SAMPLE Geological/ Geological (ft.) Pen/Rec (in) Depth (ft) blows/6" **DESCRIPTION** Test Data Stratum (ft.) Dark brown Sandy SILT, rootlets, soft, frozen, ML TOPSOIL S-1 24/12 0 - 2 1 2 Brown Silty SAND, little-some Gravel, 1" crushed cobble 0.3 FILL 4 at 0.4', crushed brick fragments in spoon tip, loose-3 compact, damp, SM 2 S-2 24/12 2 - 4 3 Same as above, little-some Gravel, pushed cobble in 2 spoon tip, loose, damp-moist, SM 3 3 4 8 5 24/14 5 - 7 Same as above, little Gravel, 1" crushed slatey rock at S-3 3 6 4 5.4', loose-compact, moist, SM 4 4 7 S-4 24/1 7 - 9 3 Same as above, pushed cobble in spoon tip, loose, 2 8 moist, SM 1 9 2 10 10 - 12 S-5 24/20 13 Gray Silty SAND, little-some Gravel, slightly mottled at 14 11', compact, moist-wet, SM MARINE REGRESSIVE 11 12 Gray SILT, little Sand & Gravel, 1" slatey rock fragments 11.5' DEPOSIT 12 7 at 11.5', very stiff, moist, ML 24/20 12 - 14 5 Same as above, little fine Sand, trace Gravel, frequent S-6 13 6 fine Sand seams, slightly mottled, stiff, moist, ML PP > 9,000 psf Gray SILT-CLAY, trace fine Sand, frequent fine Sand 13' 5 10 14 seams, moderately mottled, stiff, moist, ML-CL 15 Olive gray Silty fine SAND, trace-little Gravel, heavily 15' +/-S-7 24/24 15 - 17 3 **GLACIAL TILL** 16 4 mottled at 16.8', compact, wet, SM 5 17 10 S-8 24/12 17 - 19 13 Same as above, slightly-moderately mottled, compact, 18 9 wet, SM 13 18 19 20 17/12 20 - 21.4 S-9 3 Same as above, slightly mottled, compact, wet, SM 21 5 50/5" 22 -3+/- End of Exploration at 21.4', Refusal on Probable Bedrock PROBABLE BEDROCK Granular Soils Cohesive Soils % Composition NOTES: PP = Pocket Penetrometer, MC = Moisture Content Soil Moisture Condition **ASTM D2487** LL = Liquid Limit, PI = Plastic Index, FV = Field Vane Test Blows/ft. Density Blows/ft. Consistency Dry: S = 0%V. soft Su = Undrained Shear Strength, Su(r) = Remolded Shear StrengthHumid: S = 1 to 25% 0-4 V. Loos Bedrock Joints <2 5-10 2-4 Soft < 5% Trace Damp: S = 26 to 50% Shallow = 0 to 35 degrees 11-30 Compac 5-8 Firm 5-15% Little Dipping = 35 to 55 degrees Moist: S = 51 to 75% Stiff 15-30% Some Wet: S = 76 to 99%Dense 9-15 Steep = 55 to 90 degrees 31-50

> Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200



SOIL BORING LOG B-3 Boring #: SMCC Greenhouse Project #: 25040 Slocum Drive Sheet: 1 of 1 South Portland, Maine Chkd by: CWC

Project: Location: City, State: Drilling Co: Summit Geoengineering Services Boring Elevation: 18 ft +/-Reference: Estimated from Existing Conditions Plan prepared by Sitelines, PA Driller: S. Floyd C. Sullivan, E.I. 3/11/2025 Date Completed: Summit Staff: Date Started: 3/11/2025 DRILLING METHOD SAMPLER ESTIMATED GROUND WATER DEPTH Vehicle: Date Depth Reference AMS Track Length: 24" SS Elevation Model: 9580 VTR Diameter: 2"OD/1.5"ID 3/11/2025 4.8 ft 13 ft +/-Measured in open borehole after drilling Method: 2-1/4" HSA Hammer: 140 lb Hammer Style: Method: **ASTM D1586** Auto SAMPLE Depth Elev. Geological/ Geological (ft.) Pen/Rec (in) Depth (ft) blows/6" (ft.) **DESCRIPTION** Test Data Stratum 24/15 0 - 2 Dark brown Silty SAND, rootlets, loose, frozen, SM TOPSOIL S-1 2 1 1 18+/- Tan fine SAND, trace Gravel & Silt, loose, damp, SP 0.3 FILL 2 2 2 S-2 24/18 2 - 4 2 Same as above, loose, damp, SP 1 3 Brown fine SAND, little Silt, trace Gravel, loose, damp-1 2 moist, SP-SM 5 S-3 24/17 5 - 7 31 Same as above, loose-compact, damp-moist, SP-SM 6 22 Crushed concrete & black reclaim fragments 5.2' +/-6 7 8 S-4 24/10 7 - 9 7 Brown Gravelly SAND, little Silt, occasional 1" cobbles at 6 7.2' & 7.3', 1" concrete fragment at 7.5', loose-compact, 6 wet, SP-SM 9 12 10 S-5 24/1 10 - 12 17 Same as above, pushed cobble in spoon tip preventing 10 sample collection, compact, wet, SP-SM 11 10 12 10 24/12 12 - 14 9 Olive brown Silty SAND, some Gravel, occasional 1" S-6 13 11 cobbles throughout, compact, wet, SM 14 14 14 15 15 - 17 Olive gray-gray fine SAND, little-some Silt, slightly-15' +/-S-7 24/14 3 **GLACIAL TILL** 16 4 moderately mottled, loose-compact, wet, SP-SM to SM 4 17 3 S-8 24/14 17 - 19 Olive gray Silty SAND, little Gravel, slightly mottled, 2 18 10 compact, wet, SM 10 19 8 20 S-9 14/14 20 - 21.2 10 Same as above, compact, wet, SM 21 12 50/2" 22 -4+/- End of Exploration at 21.5', Auger Refusal on Bedrock 21.5 **BEDROCK**

Granul	ar Soils	Cohesi	ve Soils	% Composition	NOTES:	PP = Pocket Penetrometer, MC = Moisture Content	Soil Moisture Condition	
Blows/ft	Density	Blows/ft.	Consistency	ASTM D2487	l	LL = Liquid Limit, PI = Plastic Index, FV = Field Vane Test	Dry: S = 0%	
0-4	V. Loose	<2	V. soft		Bedrock Joints S	Su = Undrained Shear Strength, Su(r) = Remolded Shear Strength	Humid: S = 1 to 25%	
5-10	Loose	2-4	Soft	< 5% Trace	Shallow = 0 to 35 degrees		Damp: S = 26 to 50%	
11-30	Compact	5-8	Firm	5-15% Little	Dipping = 35 to 55	Dipping = 35 to 55 degrees		
31-50	Dense	9-15	Stiff	15-30% Some	Steep = 55 to 90 de	Steep = 55 to 90 degrees		
>50	V. Dense	16-30	V. Stiff	> 30% With			Saturated: S = 100%	
		>30	Hard		Boulders = diameter > 12 inches, Cobbles = diameter < 12 inches and > 3 inches			
					Gravel = < 3 inch a	Gravel = < 3 inch and > No 4, Sand = < No 4 and >No 200, Silt/Clay = < No 200		

GENERAL NOTES:

1. DRAWINGS ARE BASED ON BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION FROM MULTIPLE SOURCES BY SITELINES, PA.

2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION HAS NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES AND IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE (1-800-DIG-SAFE) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IN AREAS OF POTENTIAL CONFLICTS TEST PITS SHALL BE REQUIRED TO VERIFY EXISTING UTILITY LOCATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

3. RIM ELEVATIONS OF PROPOSED SANITARY SEWER MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE WITHIN LIMITS OF WORK.

4. THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS PROVIDED BY, AND APPROVED BY THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE, ELECTRIC, CABLE AND FIRE ALARM). FINAL DESIGN LOADS AND LOCATIONS TO BE COORDINATED WITH CONSTRUCTION MANAGER AND ARCHITECT.

5. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATIONS, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE

6. THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS AND GRADES BEFORE WORK BEGINS. CONTRACTOR SHALL CONFIRM LOCATION AND DEPTH ALL UTILITY LINE CROSSINGS WITH TEST PITS PRIOR TO BEGINNING WORK. CONFLICTS SHALL BE REPORTED IN WRITING TO CONSTRUCTION MANAGER FOR RESOLUTION OF THE CONFLICT.

7. ALL AREAS OUTSIDE THE LIMIT OF WORK THAT ARE DISTURBED SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. ALL AREAS DISTURBED DURING CONSTRUCTION NOT COVERED WITH BUILDINGS, STRUCTURES, OR PAVEMENT SHALL RECEIVE 4 INCHES OF LOAM AND SEED.

8. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND SHALL BE RESPONSIBLE FOR PAYING ANY FEES FOR ANY POLE RELOCATION AND FOR THE ALTERATION OR ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, CABLE, FIRE ALARM AND ANY OTHER PRIVATE UTILITIES BY THE

9. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY PERMITS, PAY ALL FEES AND POST ALL BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS AND AS SPECIFIED.

10. ALL PROPERTY MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE RESET TO THEIR ORIGINAL LOCATION BY A MAINE REGISTERED LICENSED PROFESSIONAL LAND SURVEYOR (PLS) AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL PREPARE AN AS-BUILT PLAN SURVEY SHOWING LOCATIONS OF ALL SURFACE FEATURES AND SUBSURFACE UTILITY SYSTEMS INCLUDING THE LOCATION

11. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES PRIOR TO EARTHWORK OPERATION AND MAINTAIN ALL EROSION CONTROL MEASURES AND SEEDED EMBANKMENTS DURING CONSTRUCTION. EROSION CONTROL SHALL BE REMOVED ONLY UPON THE ESTABLISHMENT OF ALL LANDSCAPED AREAS. ALL WORK SHALL BE IN COMPLIANCE WITH THE ENVIRONMENTAL QUALITY HANDBOOK FOR EROSION AND SEDIMENT CONTROL, LATEST EDITION, AS ADOPTED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

12. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITY SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS.

13. ALL MATERIALS AND CONSTRUCTION METHODS USED WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO ALL LOCAL MUNICIPAL STANDARDS AND MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

14. THE CONTRACTOR IS REQUIRED TO CONTROL DUST DURING CONSTRUCTION. EXPOSED SOIL AREAS SHALL BE SPRAYED WITH WATER AS NEEDED TO CONTROL DUST EMISSIONS. COVER EXPOSED SOIL AREAS AS QUICKLY AS PRACTICAL TO PREVENT WINDS FROM GENERATING

15. ALL HANDICAP ACCESSIBLE PARKING SPACES, RAMPS AND SIDEWALKS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA).

16. ALL SITE SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. 17. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE

18. ALL MATERIALS SHALL BE NEW AND PROVIDED BY THE CONTRACTOR.

19. CONTRACTOR SHALL PROVIDE NOTIFICATION TO THE NAVY COORDINATOR PRIOR TO START OF CONSTRUCTION.

LAYOUT NOTES:

1. ALL DIMENSIONING, UNLESS NOTED OTHERWISE, IS TO THE FACE OF CURB OR FOUNDATION.

2. OFFSETS TO CATCH BASINS AND MANHOLES ARE TO THE CENTER OF THE FRAME.

3. PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE HALF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.

4. BOUNDARY INFORMATION ON LAYOUT PLAN IS FOR REFERENCE ONLY, REFER TO CERTIFIED BOUNDARY PLANS FOR BOUNDARY

GRADING AND DRAINAGE NOTES:

1. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 603. PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH THE EXCEPTION THAT THE ONLY ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:

POLYVINYL CHLORIDE PIPE (PVC) SDR 35

SMOOTH BORE POLYETHYLENE PIPE - HDPE N-12 ADS OR SDR 35

2. TOPSOIL STRIPPED IN AREAS OF CONSTRUCTION THAT IS SUITABLE FOR REUSE AS LOAM SHALL BE STOCKPILED ON SITE AT A LOCATION TO BE DESIGNATED BY OWNER. UNSUITABLE SOIL SHALL BE SEPARATED, REMOVED AND DISPOSED OF AT AN APPROVED DISPOSAL LOCATION

3. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR

PERMITTING REQUIREMENTS:

AGENCY:

CITY OF SOUTH PORTLAND

PERMIT:

SITE PLAN REVIEW BUILDING

APPROVED 06/11/25 (BY CONTRACTOR)

STATUS:

SMCC GREENHOUSE BUILDING

37 SLOCUM DRIVE SOUTH PORTLAND, MAINE

PREPARED FOR:

MAINE TECHNICAL COLLEGE SYSTEM 3 ADAMS STREET SOUTH PORTLAND, ME 04106

TOWN/UTILITY CONTACTS

CODE ENFORCEMENT

NICHOLAUS RICHARD CITY OF SOUTH PORTLAND 829 SAWYER STREET SOUTH PORTLAND, MAINE 04106 207-767-7603

ELECTRIC SERVICE

CENTRAL MAINE POWER 57 OLD WINTHROP ROAD AUGUSTA, MAINE 04330 207-629-9555

CITY ENGINEER

LACEY KREMER. P.E. 11 WATERMAN DRIVE SOUTH PORTLAND, MAINE 04106 207-767-7675

WATER SERVICE

PORTLAND WATER DISTRICT HEATHER FIELDS 225 DOUGLASS STREET PORTLAND, MAINE 04104 207-774-5961 EXT. 3199

SANITARY SEWER

WATER RESOURCE PROTECTION DEPARTMENT FRED DILLON, DIRECTOR 111 WATERMAN DRIVE SOUTH PORTLAND, MAINE 04106 207-767-7675 EXT. 7581

PUBLIC WORKS DEPARTMENT

MELISSA HUTCHINS, PUBLIC WORKS DIRECTOR 929 HIGHLAND AVENUE SOUTH PORTLAND, MAINE 04106 207-767-7635

BRUNSWICK FIRE DEPARTMENT

PHIL SELBERG, FIRE CHIEF 684 BROADWAY SOUTH PORTLAND, MAINE 04106 207-799-3314

PROJECT TEAM

SITELINES P.A. ATTN: JOSEPH J. MARDEN P.E. 119 PURINTON ROAD, SUITE A **BRUNSWICK. MAINE 04011** 207-725-1200

CIVIL ENGINEER

SURVEYOR

WWW.SITELINESPA.COM

SITELINES P.A. ATTN: KEVIN CLARK, PLS 119 PURINTON ROAD, SUITE A BRUNSWICK, MAINE 04011 207-725-1200 WWW.SITELINESPA.COM

GEOTECHNICAL SUMMIT GEOENGINEERING SERVICES ATTN: CRAIG COOLIDGE, P.E. 173 PLEASANT STREET **ROCKLAND. MAINE 04841** PHONE: 207-318-7761

ARCHITECTURE

ARCADIA DESIGNWORKS 199 PROSPECT STREET, SUITE A PORTLAND, ME 04101 PHONE: 207-347-5252



5.40 T. 10	LEGEND	5555555
EXISTING		PROPOSED
•	IRON MARKER FOUND	
5/8	" REBAR TOPPED WITH AN ALUMINUM	I.D. CAP O
D=	MANHOLE/CATCH BASIN	
<u></u>	SEWER MANHOLE	S
HYD	FIRE HYDRANT	***
WV	WATER GATE VALVE	WV 150
	WATER SHUT-OFF	
CMP	BLOW-OFF/CLEAN-OUT	0
#13	UTILITY POLE	-
OVERHEAD UTILITY LINE)	UTILITY LINE	OVERHEAD UTILITY LINE)
	PROPERTY LINE	
	EASEMENTS	
	SETBACK/BUFFER	
/ ·· ~ ·· _	STREAM	
	CURB	
	EDGE OF PAVEMENT	
V//////	BUILDING	
12"SD	STORM DRAIN(SEE PLAN FOR SIZE)	12"SD
6"S	SEWER LINE(SEE PLAN FOR SIZE)	6"S
8"W	WATER LINE(SEE PLAN FOR SIZE)	8"W
	UNDERDRAIN(SEE PLAN FOR SIZE)	
	SLOPE ARROW	<u>-1.5%</u>
- - - 1 00 -	CONTOURS	100
	TREE LINE	.~~~.
	SEDIMENT BARRIER	SB
	RIPRAP	
	PROPOSED PAVEMENT	
	SPOT GRADE	T100.50 B100.00
4	CONCRETE	

	SHEET INDEX	
SHEET#	SHEET TITLE:	SCALE:
C1	COVER SHEET	NTS
C2	EXISTING CONDITIONS AND DEMOLITION PLAN	1"=20'
C3	SITE LAYOUT AND UTILITY PLAN	1"=20'
C4	GRADING AND DRAINAGE PLAN	1"=20'
C5	EROSION CONTROL PLAN	1"=20'
C6	SITE DEVELOPMENT DETAILS	NTS
C7	EROSION CONTROL NOTES	NTS
L1	LIGHTING PLAN	1"=20'
L2	LANDSCAPE PLAN	1"=20'

CONTRACTOR AND OWNER.

ISSUED FOR

PRICING

JOSEPH MARDEN 12828

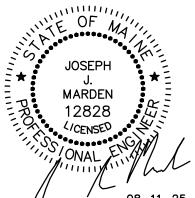
6.	08-11-25	BID ADDENDUM #1	JJM
5.	06-24-25	REVISED PLAN TO ADD PROPANE TANK	JJM
4.	06-23-25	ADDED CONDITIONS OF APPROVAL	JJM
3.	05-29-25	REVISED PER CITY COMMENTS	JJM
2.	05-05-25	REVISED PER MECHANICAL PLANS	JJM
1.	04-21-25	SUBMITTED TO CITY FOR REVIEW	JJM
(T) T) (-		

PROGRESS PRINT THIS PLAN IS ISSUED FOR REVIEW AND INFORMATION PURPOSES ONLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS PREPARED FOR: PLAN IS NOT BINDING UNLESS SIGNED BY BOTH

COVER SHEET

GREENHOUSE BUILDING 37 SLOCUM DRIVE, SOUTH PORTLAND, ME 04106

MAINE TECHNICAL COLLEGE SYSTEM 3 ADAMS STREET, SOUTH PORTLAND, ME 04106





CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS SCALE: NTS FIELD WK: CJH JOB #: 5113 DRN BY: RPL CH'D BY: JJM MAP/LOT: 4/2 FILE: 5113-COV-DET DATE: 04/03/25

STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITIES

UTILITY LOCATION

CALL DIG SAFE

DEMOLITION NOTES:

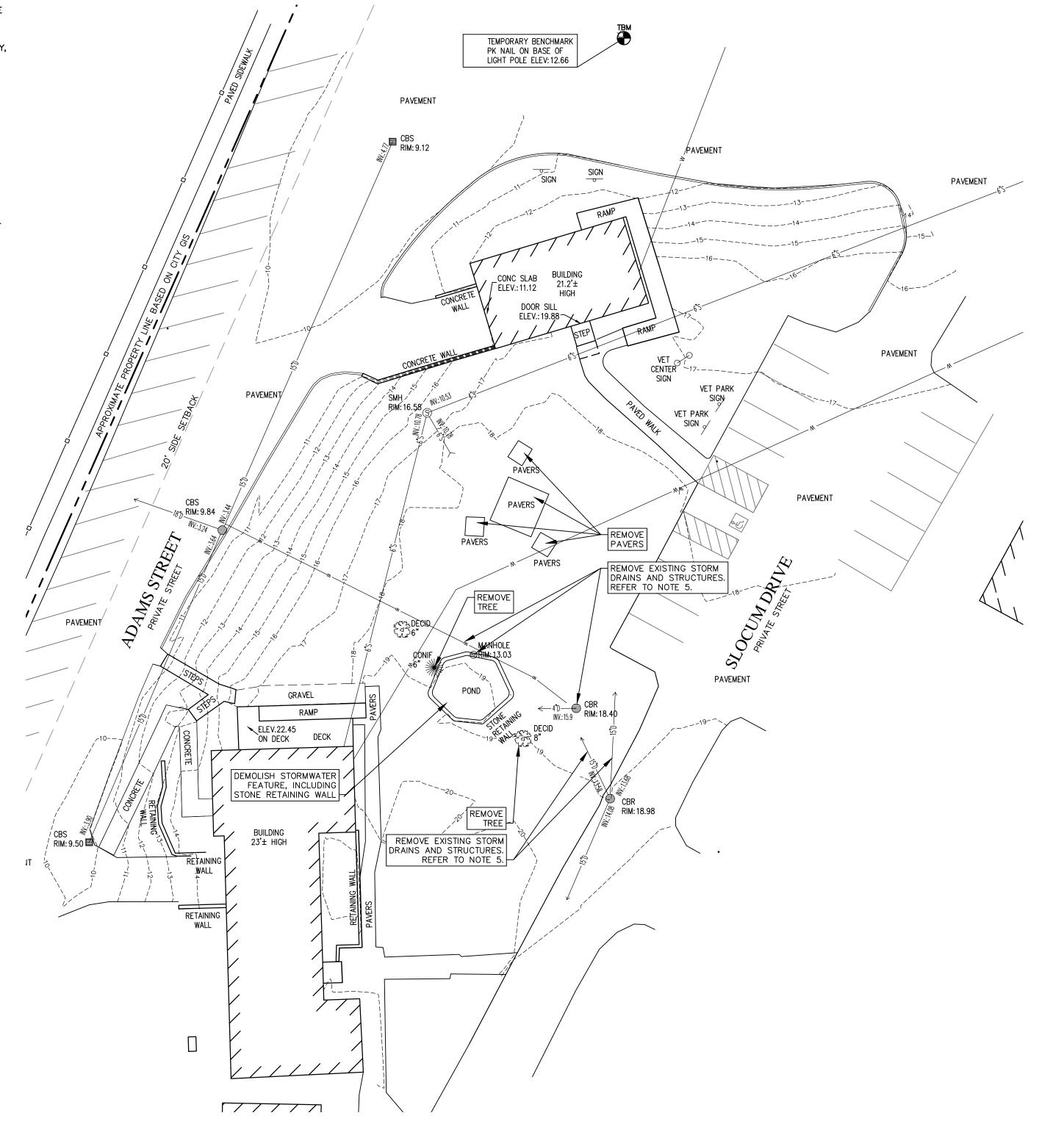
- ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN STRICT ADHERENCE TO ALL FEDERAL, STATE AND LOCAL REGULATIONS. CONTRACTOR TO INSTALL EROSION CONTROL DEVICES IN ACCORDANCE WITH GRADING & DRAINAGE PLAN PRIOR TO BEGINNING DEMOLITION ACTIVITIES.
- 2. DEMOLISH CONCRETE IN ALL SECTIONS.

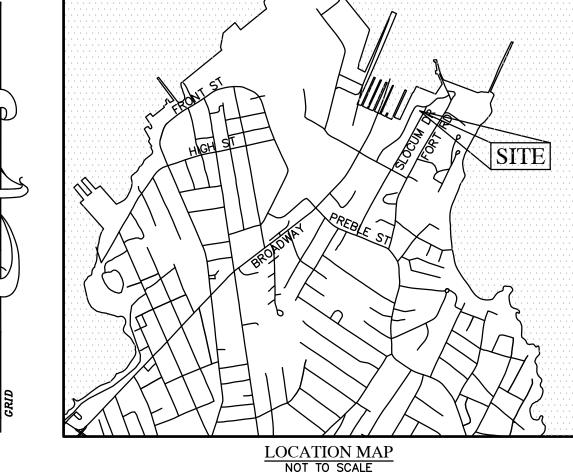
AND APPLICABLE GOVERNMENTAL AUTHORITIES.

- BREAK UP CONCRETE SLABS-ON-GRADE UNLESS OTHERWISE DIRECTED BY THE
- CONSTRUCTION MANAGER.
- TO STRUCTURES, ADJACENT BUILDINGS AND ALL PERSONS. REFRAIN FROM USING EXPLOSIVES WITHOUT PRIOR WRITTEN CONSENT OF THE DEVELOPER

CONDUCT ALL DEMOLITION OPERATIONS IN A MANNER THAT WILL PREVENT INJURY, DAMAGE

- CONDUCT DEMOLITION SERVICES IN SUCH A MANNER TO INSURE MINIMUM INTERFERENCE WITH ROADS. STREETS. WALKS AND OTHER ADJACENT FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS. WALKS OR OTHER OCCUPIED FACILITIES WITHOUT PRIOR WRITTEN PERMISSION OF THE DEVELOPER AND APPLICABLE GOVERNMENTAL AUTHORITIES. PROVIDE ALTERNATIVE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS IF REQUIRED BY APPLICABLE GOVERNMENTAL REGULATIONS.
- . USE WATERING, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS, AS NECESSARY, TO LIMIT THE AMOUNT OF DUST AND DIRT RISING AND SCATTERING IN THE AIR. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. RETURN ALL ADJACENT AREAS TO THE CONDITIONS EXISTING PRIOR TO THE START OF WORK.
- 8. ACCOMPLISH AND PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE UNAUTHORIZED ENTRY OF PERSONS AT ANY TIME.
- REMOVE FROM THE DESIGNATED SITE, AT THE EARLIEST POSSIBLE TIME, ALL DEBRIS RUBBISH, SALVAGEABLE ITEMS. HAZARDOUS AND COMBUSTIBLE SERVICES. REMOVED MATERIALS MAY NOT BE STORED, SOLD OR BURNED ON SITE. REMOVAL OF HAZARDOUS AND COMBUSTIBLE MATERIALS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PROCEDURES AS AUTHORIZED BY THE FIRE DEPARTMENT OR OTHER APPROPRIATE REGULATORY AGENCIES AND DEPARTMENTS.
- 10. PROTECT EXISTING DRAINAGE SYSTEM(S) AS NECESSARY TO PREVENT SEDIMENT FROM ENTERING DURING CONSTRUCTION. SEÈ DETAIL SHEETS FOR EROSION CONTROL DEVICES.
- 1. THE LIMITS OF WORK SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION OR SITE CLEARING.





NOTES:

THIS PLAN DEPICTS CONDITIONS FOUND AND SURVEYED BY SITELINES PA AS OF MARCH 2025. SUPPORTING DATA IS FROM THE INFORMATION BELOW.

1. TITLE REFERENCE FOR SURVEYED PARCEL:

BK 18694, PG 52

2. AREA INFORMATION:

12.97 ACRES (PER ASSESSING DATA)

3. TAX MAP REFERENCE:

TAX MAP 4, LOT 2

4. <u>UTILITY INFORMATION:</u>

THERE MAY BE UNDERGROUND CONDUIT, WIRES, CABLES AND/OR STRUCTURES NOT SHOWN ON THIS PLAN. THE LOCATIONS SHOWN ARE BASED ON SURFACE FEATURES VISIBLE AT THE TIME OF SURVEY AND POSSIBLY FROM INFORMATION PROVIDED BY THE OWNER, MUNICIPAL GIS DATA, AND/OR UTILITY COMPANIES. NO EXCAVATIONS WERE MADE DURING THE COURSE OF THE SURVEY TO VERIFY OR LOCATE ANY UNDERGROUND STRUCTURES. IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY THE LOCATION OF ANY UNDERGROUND UTILITIES PRIOR TO EXCAVATING BY CONTACTING THE APPROPRIATE UTILITY COMPANY. STATE LAW REQUIRES DIG-SAFE BE CONTACTED PRIOR TO EXCAVATION.

5. LOCATION OF EXISTING STORM DRAINS IS BASED ON BEST AVAILABLE DATA. THERE ARE CONFLICTS BETWEEN THE DATA IN THE FIELD AND THE INFORMATION AVAILABLE FROM SMCC GIS SYSTEM. CONTRACTOR SHALL REMOVE ANY EXISTING STORM DRAINS OR STRUCTURES FOUND WITHIN THE FOOTPRINT OF THE NEW GREENHOUSE BUILDING.

6. 08-11-25 BID ADDENDUM #1 5. 06-24-25 REVISED PLAN TO ADD PROPANE TANK 4. 06-23-25 ADDED CONDITIONS OF APPROVAL 3. 05-29-25 REVISED PER CITY COMMENTS 2. 05-05-25 REVISED PER MECHANICAL PLANS 1. 04-21-25 SUBMITTED TO CITY FOR REVIEW

EXISTING CONDITIONS AND DEMOLITION PLAN

PROJECT:

GREENHOUSE BUILDING

37 SLOCUM DRIVE, SOUTH PORTLAND, ME 04106

PREPARED FOR:

MAINE TECHNICAL COLLEGE SYSTEM 3 ADAMS STREET, SOUTH PORTLAND, ME 04106



119 PURINTON ROAD, SUITE A **BRUNSWICK, MAINE 04011** 207.725.1200 **CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS**

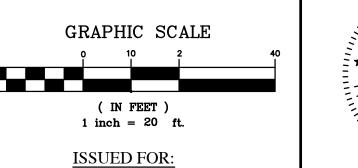
FIELD WK: CJH	SCALE: 1"=20'	S
DRN BY: RPL	JOB #: 5113	
CH'D BY: JJM	MAP/LOT: 4/2	
DATE: 04/03/25	FILE: 5113-SITE	

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Know what's below Call before you dig.

STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE

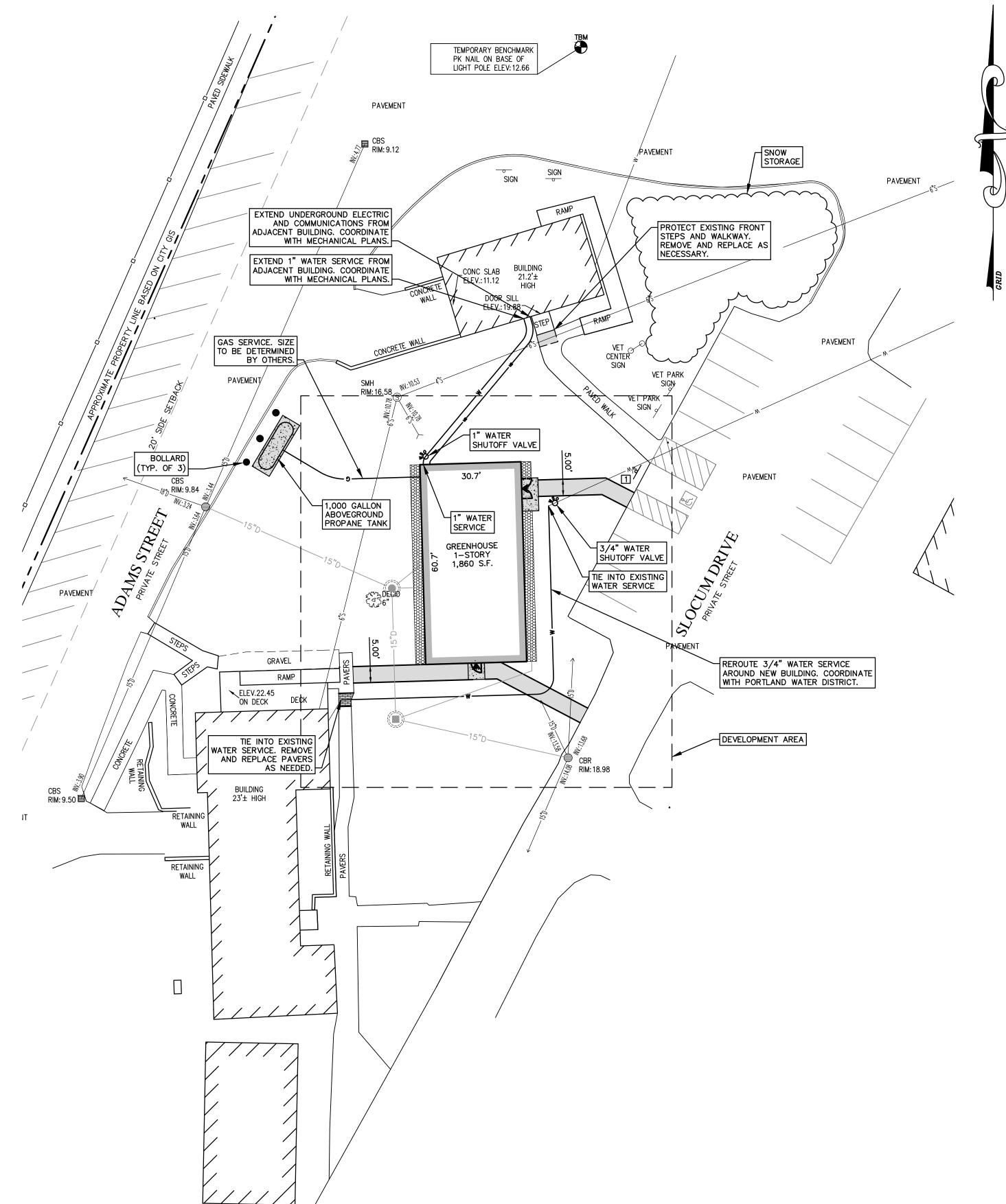






CONDITIONS OF APPROVAL:

- THIS APPROVAL IS DEPENDENT UPON AND LIMITED TO THE PROPOSALS AND PLANS CONTAINED IN THE APPLICATION AND SUPPORTING DOCUMENTS SUBMITTED AND AFFIRMED TO BY THE APPLICANT. ANY VARIATION FROM THE PLANS, PROPOSALS AND SUPPORTING DOCUMENTS, EXCEPT CHANGES AS DETERMINED BY THE PLANNING DIRECTOR WHICH DO NOT AFFECT APPROVAL STANDARDS AND ARE NOT SUBJECT TO DE MINIMIS CHANGE REVIEW BY THE PLANNING BOARD PURSUANT TO ZONING ORDINANCE SECTION 27-140 OR SUBDIVISION ORDINANCE 24-27,IS SUBJECT TO THE REVIEW AND APPROVAL OF THE PLANNING BOARD PRIOR TO IMPLEMENTATION.
- ALL CONDITIONS OF APPROVAL AND ANY WAIVERS GRANTED SHALL APPEAR ON THE FACE OF THE PLANS SUBMITTED FOR BUILDING PERMITS, AND THE FACE OF THE SUBDIVISION PLAN, IF APPLICABLE
- PRIOR TO THE ISSUANCE OF A BUILDING PERMIT, OR RELEASE OF THE RECORDING SUBDIVISION-SIGNING PLAN IF APPLICABLE, THE APPLICANT SHALL PAY ALL OUTSTANDING REVIEW ESCROW ACCOUNT FEES, POST THE NECESSARY PERFORMANCE GUARANTEE(S) IN SUCH AMOUNT(S) AS ESTABLISHED BY THE CITY, POST EROSION AND SEDIMENTATION CONTROL INSPECTION ESCROW, HOLD A PRE-CONSTRUCTION MEETING WITH THE CITY IF NECESSARY, AND PAY COMPENSATION AND/OR IMPACT FEES AS DETERMINED BY THE PLANNING BOARD.
- THIS PLANNING BOARD APPROVAL IS VALID FOR 24 MONTHS FROM THE DATE OF APPROVAL. UNLESS THE SPECIAL EXCEPTION USE HAS COMMENCED, IF APPLICABLE, OR START OF CONSTRUCTION, AS DEFINED IN SECTION 27-201 AND VERIFIED BY THE CODE ENFORCEMENT OFFICE, IS COMPLETED WITHIN THAT PERIOD, THE APPROVAL SHALL EXPIRE.
- PRIOR TO THE ISSUANCE OF A BUILDING PERMIT, THE APPLICANT SHALL SUBMIT DIGITAL PLANS TO THE PLANNING DIVISION WITH ALL CONDITIONS AND WAIVERS LISTED ON THE
- 6. THE APPLICANT SHALL PROVIDE THE PLANNING AND DEVELOPMENT DIRECTOR WITH SATISFACTORY EVIDENCE THAT ONE OF THE FIRST SIX METHODS SET FORTH IN SECTION 3(B) OF THE CITY'S SITE PLAN APPLICATION FORM RELATING TO THE APPLICANT'S FINANCIAL CAPACITY IS IN PLACE.
- PRIOR TO HOLDING A PRE-CONSTRUCTION MEETING AND SUBMITTING A BUILDING PERMIT, THE APPLICANT SHALL FINALIZE AND PROVIDE A STORMWATER MANAGEMENT DRAINAGE MAINTENANCE AGREEMENT THAT WILL BE REVIEWED BY THE PLANNING DIRECTOR AND THEN RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS. THE OWNER OF THE PROPERTY AND ALL FUTURE OWNERS SHALL BE REQUIRED TO OPERATE, REPAIR, MAINTAIN, AND REPLACE THE STORMWATER MANAGEMENT FACILITIES AS SHOWN IN THE STORMWATER MANAGEMENT PLAN.
- THE APPLICANT SHALL CONTRACT WITH A PRIVATE WASTE HAULER FOR THE REMOVAL OF CONSTRUCTION WASTE, OR PROVIDE OTHER EVIDENCE OF A SUFFICIENT PLAN FOR SOLID WASTE REMOVAL DURING CONSTRUCTION FOR REVIEW AND APPROVAL BY THE PLANNING
- THE APPLICANT SHALL SECURE A BUILDING PERMIT FROM THE CODE ENFORCEMENT OFFICE IN COORDINATION WITH THE PLANNING DIVISION, FIRE DEPARTMENT, AND ALL RELEVANT REVIEW AUTHORITIES, PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES.
- PRIOR TO BUILDING PERMIT ISSUANCE. THE APPLICANT SHALL PROVIDE TO THE CITY'S CODE ENFORCEMENT OFFICE A COPY OF THE NOTIFICATION SUBMITTED TO MAINE DEP TO INFORM THEM THAT CONSTRUCTION WILL BE UNDERTAKEN UNDER THE EXEMPTION IN 38 MRSA
- PRIOR TO THE ISSUANCE OF A BUILDING PERMIT, THE APPLICANT SHALL SUBMIT A SOIL QUALITY PERMIT WITH THE CODE ENFORCEMENT OFFICE IN ACCORDANCE WITH CHAPTER 32, LANDCARE MANAGEMENT.
- PRIOR TO HOLDING A PRE-CONSTRUCTION MEETING AND SUBMITTING A BUILDING PERMIT, THE DESIGNATED FOR PRESERVATION IN THE APPROVED SITE PLAN. NO CONSTRUCTION STAGING OR OTHER CONSTRUCTION-RELATED ACTIVITY IS PERMITTED WITHIN THE DRIP LINE FENCE BARRIER UNLESS REVIEWED AND APPROVED BY THE PLANNING DIRECTOR.
- 13. THE APPLICANT SHALL REPLACE ANY TREES REMOVED ON SITE AT A RATE OF 5 TREES FOR EACH PROTECTED TREE REMOVED WITHIN THE SHORELAND AREA OVERLAY DISTRICT.
- 14. ALL SPREADING OF MANURE SHALL BE ACCOMPLISHED IN CONFORMANCE WITH THE MANURE UTILIZATION GUIDELINES PUBLISHED BY THE DEPARTMENT OF AGRICULTURE ON NOVEMBER 1, 2001, AND THE NUTRIENT MANAGEMENT LAW (7 M.R.S. §§ 4201-4209, AS MAY BE AMENDED). MANURE SHALL NOT BE STORED OR STOCKPILED WITHIN SEVENTY-FIVE (75) FEET. HORIZONTAL DISTANCE, OF THE NORMAL HIGH-WATER LINE OF WATER BODIES, TRIBUTARY STREAMS, OR WETLANDS. ALL MANURE STORAGE AREAS WITHIN THE SHORELAND AREA MUST BE CONSTRUCTED OR MODIFIED SUCH THAT THE FACILITY PRODUCES NO DISCHARGE OF EFFLUENT OR CONTAMINATED STORM WATER. USE OF MANURE AT THE PROPERTY SHALL REQUIRE REVIEW FROM THE WATER RESOURCES PROTECTION DIVISION AND APPROVAL THROUGH A DE MINIMIS CHANGE APPLICATION TO THE PLANNING DIRECTOR.
- 15. ALL EXTERIOR LIGHTING SHALL BE DARK SKY COMPLIANT.
- 16. THE LANDSCAPING PLAN SHALL ONLY USE NATIVE PLANT SPECIES AND SHALL NOT INCLUDE TREES AND SHRUB SPECIES LISTED ON THE STATES ADVISORY LIST OF INVASIVE PLANTS.
- 17. PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, THE APPLICANT SHALL SUBMIT TO THE PLANNING DIRECTOR A CERTIFIED "AS-BUILT" GRADING PLAN & CADD FILE MEETING THE CITY'S G.I.S. REQUIREMENTS; GRADES WILL NOT BE MODIFIED FROM THE APPROVED GRADING PLAN WITHOUT PLANNING BOARD APPROVAL.
- 18. THE APPLICANT SHALL PROVIDE FINAL CONNECTION DETAILS RELATED TO NATURAL GAS TO THE PLANNING DIRECTOR FOR REVIEW AND APPROVAL PRIOR TO INSTALLING THE UTILITY SERVICE, AND THE LOCATION OF A GAS CONNECTION SHALL BE PROVIDED IN AN UPDATED PLAN SET TO BE HELD ON RECORD AT THE PLANNING DEPARTMENT. THE GAS UTILITY CONNECTION SHALL BE INCLUDED IN PLANS SUBMITTED FOR BUILDING PERMITS.



LAYOUT NOTES:

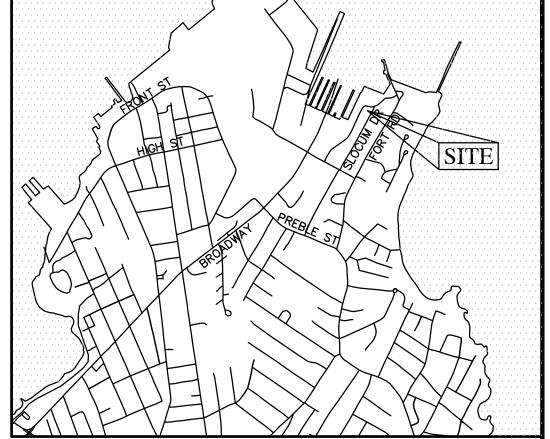
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- . ALL HANDICAP ACCESSIBLE PARKING SPACES, RAMPS AND SIDEWALKS SHALL
- BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES
- 4. ALL SITE SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. (MUTCD) BUILDING FOUNDATION SHOWN IS NOT FOR FOUNDATION LAYOUT. COORDINATE SITE WORK WITH ARCHITECTURAL DRAWINGS INCLUDING BUILDING
- 6. REFER TO SHEET C4 FOR GRADING AND DRAINAGE INFORMATION.
- 7. REFER TO SHEET L1 FOR LANDSCAPE INFORMATION.
- 8. REFER TO SHEET L2 FOR LIGHTING INFORMATION.

FEATURES AND FOUNDATION PLAN.

UTILITY NOTES:

FITTINGS FOR APPROVAL.

- . ALL TERMINATIONS AND CONNECTIONS OF SERVICES SHALL BE IN COMPLIANCE WITH REQUIREMENTS OF THE LOCAL UTILITY DISTRICT. ALL BACKFILLING AND COMPACTION OF WATER AND SEWER LINE TRENCHES SHALL BE AS APPROVED BY THE LOCAL UTILITY DISTRICT.
- 2. THE CONTRACTOR SHALL CONTACT DIGSAFE (811) PRIOR TO COMMENCING
- 3. THE BASIS FOR PROJECT LAYOUT AND FOR CONSTRUCTION ELEVATIONS IS THE BASELINE AND BENCHMARK EXISTING ON THE SITE AND SHOWN ON THE
- 4. THE CONTRACTOR SHALL CONFIRM HORIZONTAL AND VERTICAL CONTROL BEFORE BEGINNING WORK.
- 5. SEE PLUMBING AND ELECTRICAL PLANS FOR LOCATION AND INVERTS OF SLEEVES IN FOUNDATIONS.
- 6. ELECTRIC SERVICE SHALL BE INSTALLED IN CONDUIT UNDER PAVEMENT AND
- 7. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL SEWER, WATER, ELECTRICAL, AND SANITARY CONDUIT, MANHOLES, TRANSFORMERS, AND
- 8. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- 9. SANITARY SEWER PIPE AND FITTINGS SHALL BE SDR-35 PVC.
- 10. INSTALL 2" RIGID STYROFOAM INSULATION OVER SANITARY SEWER IN AREAS WHERE THERE IS LESS THAN 4' OF COVER.
- 11. CONNECTIONS AT MANHOLES/CATCH BASINS SHALL HAVE A FLEXIBLE BOOT CAST ONTO THE BARREL AND SECURED WITH STAINLESS STEEL BANDS.
- 12. SEE SHEET C4 FOR GRADING, DRAINAGE, STORM DRAIN DATA, AND SHEET C5 FOR EROSION CONTROL MEASURES.
- 13. BUILDING FOOTPRINT SHOWN IS NOT FOR FOUNDATION LAYOUT. REFER TO STRUCTURAL/ARCHITECTURAL DRAWINGS.
- 14. ANY CURB BOXES LOCATED WITHIN PAVEMENT SHALL BE INSTALLED INSIDE A GATE BOX TOP.
- 15. ALL MATERIALS SHOWN SHALL BE NEW AND FURNISHED BY CONTRACTOR AS PART OF CONTRACT WORK. ONLY ITEMS SPECIFICALLY IDENTIFIED TO BE SALVAGED MAY BE RE-USED WITHOUT PRIOR WRITTEN PERMISSION.



LOCATION MAP NOT TO SCALE GENERAL NOTES:

1. TITLE REFERENCE FOR SURVEYED PARCEL:

BK 18694, PG 52

LOT AREA: 12.97 ACRES (BASED ON CITY ASSESSING DATA)

3. TAX MAP REFERENCE:

2. AREA INFORMATION:

TAX MAP 4, LOT 2

4. BASIS OF BEARINGS:

BEARINGS ARE REFERENCED TO MAGNETIC.

5. ELEVATION DATUM:

REFER TO PLANS FOR BENCHMARK INFORMATION.

6. ZONING INFORMATION:

THE PROPOSED USE IS LOCATED WITHIN THE SPRING POINT (SP) ZONING DISTRICT (SEE ZONING TABLE BELOW) AND IS ALSO LOCATED WITHIN THE SHORELAND OVERLAY DISTRICT. AS THE USE IS LOCATED WITHIN THE SHORELAND OVERLAY DISTRICT, THE PROJECT IS SUBJECT TO THE APPLICABLE ZONING STANDARDS WITHIN SEC. 27—1322. PERFORMANCE STANDARDS OF THE SOUTH PORTLAND ZONING ORDINANACE.

7. FLOOD ZONE INFORMATION:

THE DEVELOPMENT AREA IS LOCATED WITHIN ZONE X (AREAS OF MINIMAL FLOOD HAZARD) OF THE FLOOD INSURANCE RATE MAPS FOR CUMBERLAND COUNTY, MAINE. THE PROJECT IS LOCATED ON PANEL 731 OF 837 (COMMUNITY PANEL 23005C0713F, EFF. DATE JUNE 20, 2024)

8. <u>IMPERVIOUS AREA (WITHIN DEVELOPMENT AREA):</u>

3,067 S.F. (0.07 AC) EXISTING IMPERVIOUS AREA: PROPOSED IMPERVIOUS AREA: 5,579 S.F. (0.13 AC) NET CHANGE IN IMPERVIOUS AREA: +2,512 S.F. (0.06 AC)

UTILITY NOTES:

1. INFORMATION REGARDING THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS A COMPILATION OF THAT FOUND IN THE FIELD AND THAT SHOWN ON A PREVIOUS PLANS, AND SHALL NOT BE CONSIDERED AN AS-BUILT PLAN. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING UTILITY LOCATIONS PRIOR TO COMMENCING WORK. NOTIFY ENGINEER OF ANY DISCREPANCY BETWEEN UTILITIES AS SHOWN AND AS FOUND. CONTRACTOR SHALL NOTIFY DIG-SAFE (811) PRIOR TO EXCAVATION.

SPRING POINT ZONING DISTRICT (SP)					
ZONING STANDARD	REQUIRED	PROPOSED			
MIN. LOT AREA:	30,000 S.F.	12.97 AC.			
MIN. STREET FRONTAGE:	100'	~523'			
IIN. SETBACKS:					
FRONT:	20'	~835'*			
REAR:	20'	~365'*			
SIDE:	20'	~95'*			
MAX. HEIGHT:	86'	21.7'			
MAX. BLDG COVERAGE:	40%	19%**			

*APPLIES TO PROPOSED GREENHOUSE BUILDING ONLY **BASED ON AERIAL IMAGERY CALCULATION OF EXISTING BUILDINGS ON

6. 08-11-25 BID ADDENDUM #1 5. 06-24-25 REVISED PLAN TO ADD PROPANE TANK 4. 06-23-25 ADDED CONDITIONS OF APPROVAL 3. 05-29-25 REVISED PER CITY COMMENTS 2. 05-05-25 REVISED PER MECHANICAL PLANS 1. 04-21-25 SUBMITTED TO CITY FOR REVIEW

SITE LAYOUT AND UTILITY PLAN

PROJECT:

GREENHOUSE BUILDING

37 SLOCUM DRIVE, SOUTH PORTLAND, ME 04106

PREPARED FOR:

MAINE TECHNICAL COLLEGE SYSTEM

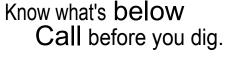
3 ADAMS STREET, SOUTH PORTLAND, ME 04106

119 PURINTON ROAD, SUITE A **BRUNSWICK, MAINE 04011** 207.725.1200 **CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS**

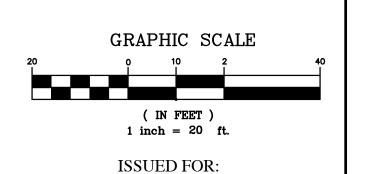
FIELD WK: CJH SCALE: 1"=20' JOB #: 5113 DRN BY: RPL CH'D BY: JJM MAP/LOT: 4/2FILE: 5113-SITE DATE: 04/03/25

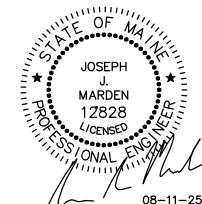
PROGRESS PRINT THIS PLAN IS ISSUED FOI REVIEW AND INFORMATION PURPOSES ONLY. THIS PLAN IS SUBJECT CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS PLAN IS NOT BINDING UNLESS SIGNED BY BOTH CONTRACTOR AND OWNER.

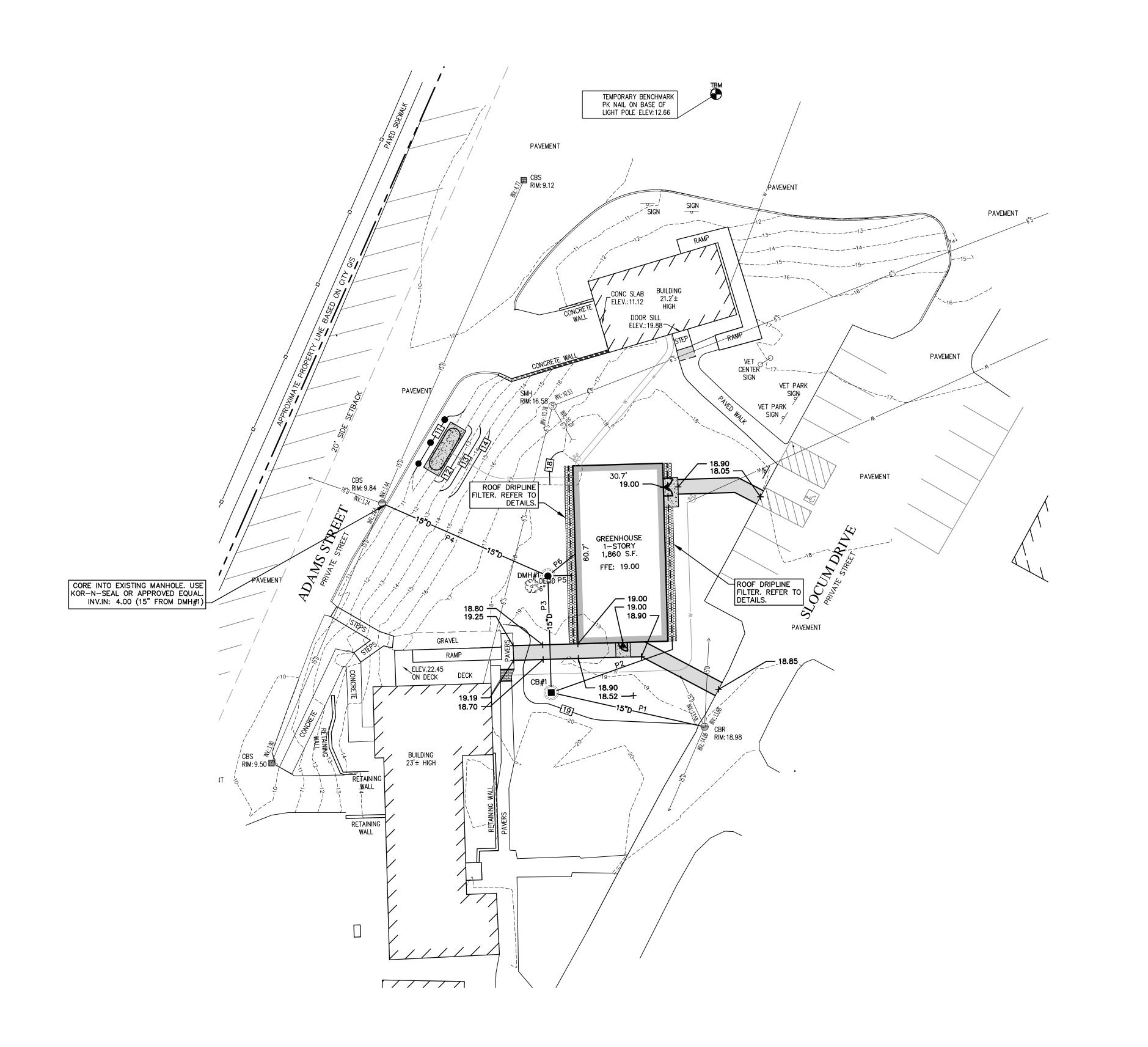




STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITIES









1. THE CONTRACTOR SHALL PHASE GRADING EFFORTS SUCH THAT TOTAL SITE DISTURBANCE IS MINIMIZED. TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO GRADING EFFORTS OR WITHOUT DELAY UPON THEIR COMPLETION, DEPENDENT UPON THE SITUATION.

2. ALL FILL SLOPES SHALL BE A MINIMUM OF 3:1 HORIZONTAL TO VERTICAL UNLESS OTHERWISE NOTED OR DIRECTED.

3. THE LIMITS OF DISTURBANCE SHALL GENERALLY BE THE MINIMAL EXTENT NECESSARY ONLY TO PERFORM THE GRADING EFFORTS SHOWN ON THE DRAWINGS. SPECIAL CARE SHALL BE TAKEN TO AVOID DISTURBANCE OF OBJECTS AND AREAS NOT SPECIFICALLY IDENTIFIED FOR MODIFICATION OR DEMOVAL

4. ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED IN ACCORDANCE WITH THE DRAWINGS, UNLESS INTENDED FOR OTHER SURFACE COVER.

5. STORM DRAINS SHALL BE CONSTRUCTED CONCURRENTLY WITH GRADING EFFORTS TO PROVIDE ADEQUATE CONVEYANCE FOR ANY SITE RUNOFF CONDITIONS.

6. WHERE FINAL GRADING HAS BEEN COMPLETED, SURFACE RESTORATION FOR DISTURBED AREAS WILL BE COMPLETED AS SOON AS PRACTICABLE. FOR VEGETATIVE AREAS, VEGETATION WILL BE PROGRESSIVELY ESTABLISHED.

7. UNLESS OTHERWISE NOTED, ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS SECTION 603. PIPE CULVERTS AND STORM DRAINS, LATEST REVISION WITH ACCEPTABLE TYPES OF PIPE ARE AS FOLLOWS:

SMOOTH BORE POLYETHYLENE PIPE - HDPE N-12 ADS

8. BENCHMARK INFORMATION: SEE PLAN

9. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL DRAINAGE STRUCTURES AND PIPING PRIOR TO ORDERING.

10. RIM ELEVATIONS OF PROPOSED DRAINAGE STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING

11. TRANSITIONS BETWEEN SLOPES ARE TO BE GENERALLY GRADUAL AND RESULT IN A SMOOTH, ROUNDED APPEARANCE.

DRAINAGE STRUCTURE DATA:

RIM: 18.10

INV.IN: 13.42 (4" FROM UNDERDRAIN)

INV.IN: 10.31 (15" FROM EX.CB)

INV.OUT: 10.21 (15" TO DMH#1)

RIM: 18.50

INV.IN: 13.94 (4" FROM UNDERDRAIN)

INV.IN: 13.00 (4" FROM FOUNDATION DRAIN)

INV.IN: 7.87 (15" FROM CB#1)

INV.OUT: 7.77 (15" TO EX.CB)

P1: 15" HDPE L=50' S=0.0654

P2: 4" PVC L=58' S=0.0100

P3: 15" HDPE L=36' S=0.0650 P4: 15" HDPE L=58' S=0.0650

P4: 15" HDPE L=58" S=0.06 P5: 4" PVC L-6" S-0.0100

P5: 4" PVC L=6' S=0.0100 P6: 4" PVC L=10' S=0.0050 MIN.

6. 08-11-25 BID ADDENDUM #1 JJM
5. 06-24-25 REVISED PLAN TO ADD PROPANE TANK JJM
4. 06-23-25 ADDED CONDITIONS OF APPROVAL JJM
3. 05-29-25 REVISED PER CITY COMMENTS JJM
2. 05-05-25 REVISED PER MECHANICAL PLANS JJM
1. 04-21-25 SUBMITTED TO CITY FOR REVIEW JJM

GRADING PLAN

PROJEC

GREENHOUSE BUILDING

37 SLOCUM DRIVE, SOUTH PORTLAND, ME 04106

PREPARED FOR:

MAINE TECHNICAL COLLEGE SYSTEM

3 ADAMS STREET, SOUTH PORTLAND, ME 04106

CITELINE

119 PURINTON ROAD, SUITE A
BRUNSWICK, MAINE 04011
207.725.1200

CIVIL ENGINEERS - PLANNERS - LAND SURVEYORS

FIELD WK: CJH SCALE: 1"=20"

DRN BY: RPL JOB #: 5113

CH'D BY: JJM MAP/LOT: 4/2

DATE: 04/03/25 FILE: 5133-SITE

8 www.di

PROGRESS PRINT
THIS PLAN IS ISSUED FOR

REVIEW AND INFORMATION

PURPOSES ONLY. THIS PLAN IS SUBJECT TO

CHANGE AND IS NOT FOR

PRICING OR CONSTRUCTION.

PRICING BASED ON THIS

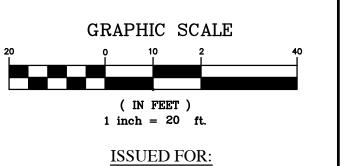
PLAN IS NOT BINDING

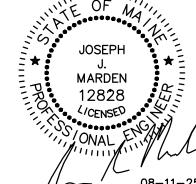
CONTRACTOR AND OWNER.

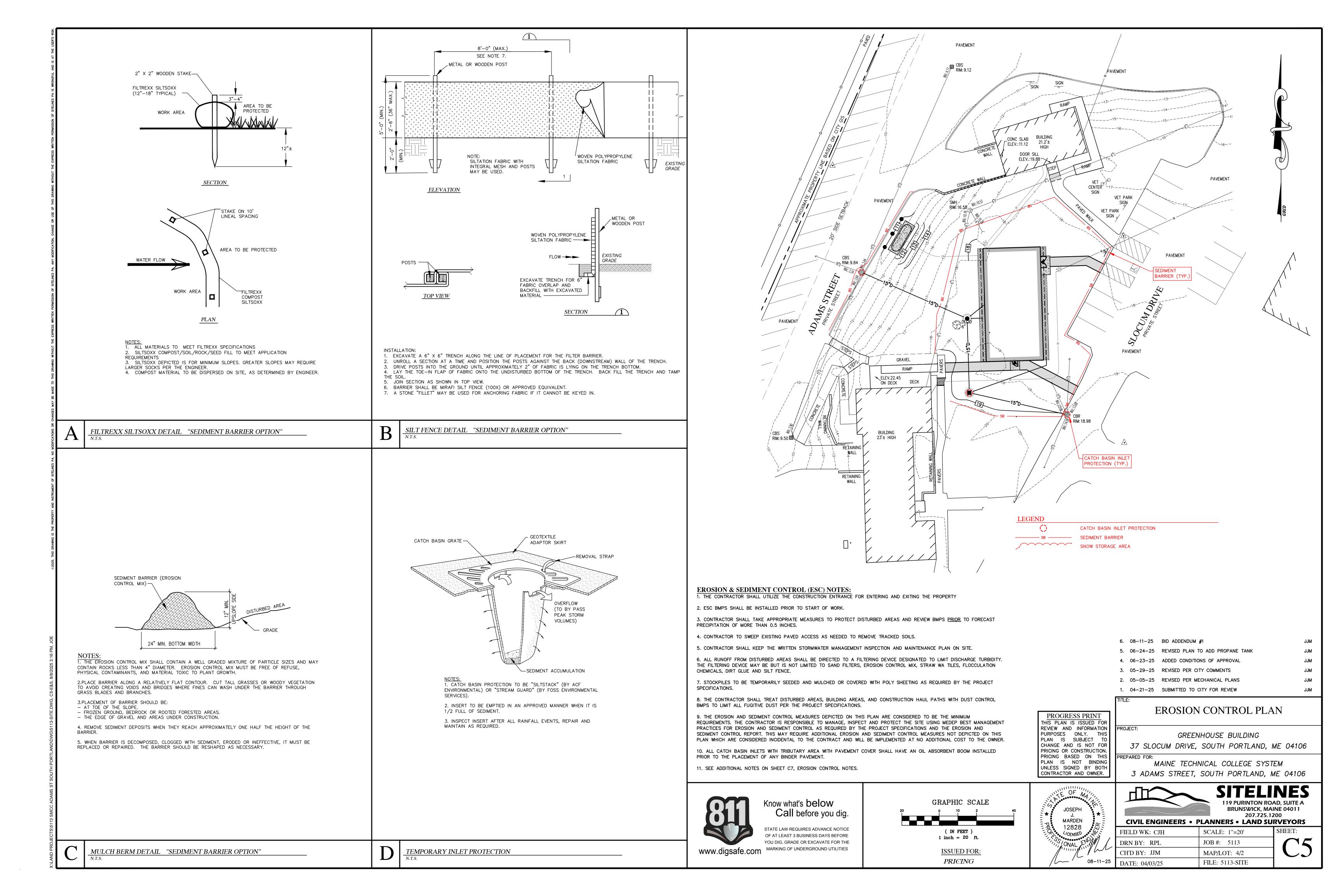
UNLESS SIGNED BY BOTH

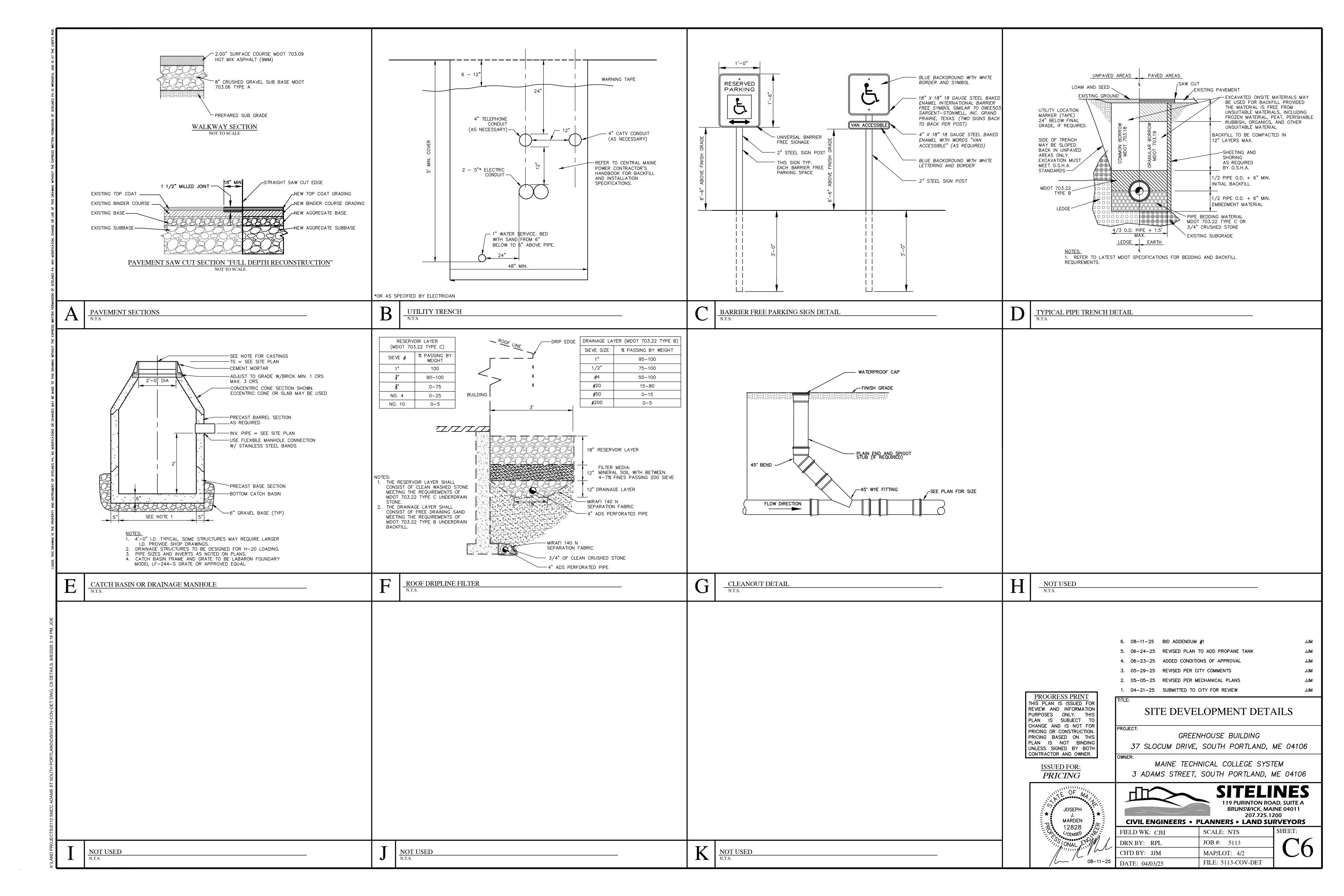


STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITIES









EROSION AND SEDIMENTATION NOTES:

CONTRACTOR SHALL FOLLOW BEST MANAGEMENT PRACTICES OF THE CUMBERLAND 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.

SEDIMENT BARRIER: SILT SOXX OR APPROVED EQUAL 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 SEDIMENT BARRIER WILL BE REINFORCED WITH HAY BALES TO HELP MAINTAIN THE INTEGRITY OF THE SEDIMENT BARRIER AND TO PROVIDE ADDITIONAL TREATMENT.

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 AT THE END OF THIS SPECIFICATION.

STRAW AND HAY MULCH: USED TO COVER DENUDED AREAS 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.

5. IN LIEU OF MULCH, USE EROSION CONTROL BLANKET (EQUAL TO NORTH AMERICAN GREEN SC150) TO STABILIZE AREAS OF CONCENTRATED FLOW AND DRAINAGE WAYS.

TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES:

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

SEDIMENT BARRIER ALONG THE DOWNGRADIENT SIDE OF THE PARKING AREAS AND OF ALL FILL SECTIONS. THE SEDIMENT BARRIER WILL REMAIN IN PLACE UNTIL THE SITE IS 85% REVEGETATED.

HAY BALES PLACED AT KEY LOCATIONS TO SUPPLEMENT THE SEDIMENT BARRIER.

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 AREAS WITH SLOPES OVER 10 PERCENT, OR NEAR DRAINAGE SWALES. SEE ITEM 3 IN CONSTRUCTION PHASE NOTES BELOW.

C. STABILIZE STOCKPILES WITHIN 7 DAYS BY TEMPORARILY SEEDING WITH A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH. D. SURROUND STOCKPILE SOIL WITH SEDIMENT BARRIER AT BASE OF PILE.

ALL DENUDED AREAS WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN THE BUILDING PAD, OR PARKING AND DRIVEWAY SUBBASE AREA SHALL RECEIVE MULCH WITHIN 30 DAYS OF INITIAL DISTURBANCE OF SOIL OR WITHIN 7 DAYS AFTER COMPLETING THE ROUGH GRADING OPERATIONS. 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, WHERE APPLICABLE, IS NOT REQUIRED.

5. EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 10 ACRES OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.

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 15 DAY MAXIMUM.

TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED OR IN AREAS WHERE PERMANENT EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY WETLAND. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY WETLAND, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE WETLAND, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.

AREAS WITHIN 75 FT OF A WETLAND WILL BE STABILIZED WITHIN 48 HOURS OF INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.

9. ALL AREAS WITHIN 75 FEET OF A WETLAND MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS DURING WINTER CONSTRUCTION (NOVEMBER 1 THROUGH APRIL 15).

10. TEMPORARY SEDIMENT BASINS MAY BE INSTALLED DOWNGRADIENT OF THE DISTURBED AREAS. THESE BASINS MUST BE DESIGNED TO PROVIDE STORAGE FOR EITHER THE CALCULATED RUNOFF FROM A 2-YEAR, 24-HOUR STORM OR PROVIDE FOR 3,600 CUBIC FEET OF CAPACITY PER ACRE DRAINING TO THE BASIN. OUTLET STRUCTURES MUST DISCHARGE WATER FROM THE SURFACE OF THE BASIN WHENEVER POSSIBLE. EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES MUST BE USED IF THE DISCHARGING WATERS ARE LIKELY TO CREATE EROSION. ACCUMULATED SEDIMENT MUST BE REMOVED AS NEEDED FROM THE BASIN TO MAINTAIN AT LEAST 1/2 OF THE DESIGN CAPACITY OF THE BASIN.

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.

2. SLOPES GREATER THAN 2:1 WILL RECEIVE RIPRAP. (NONE ANTICIPATED)

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 6" 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.

2. 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/1000 SQ. FT. AND 10: 20: 20 FERTILIZER AT A RATE OF 18.4 LBS/1000 SQ.FT WILL BE APPLIED. BROADCAST SEEDING AT THE FOLLOWING RATES: LAWNS SHALL BE: ALLEN, STERLING & LATHROP 'TUFFTURF', 70% DIAMOND TALL FESCUE, 20% PLEASURE OLUS PERENNIAL

RYEGRASS, 10% BARON KENTUCKY BLUEGRASS, SEEDING RATE SHALL BE 7-LBS./1,000 SQ, FT. 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.

II. BLANKETED BY TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING, OR WITH SPRAY, ON GRADES GREATER THAN 5%. III. SEE NOTE 6, GENERAL NOTES, AND NOTE 8, WINTER CONSTRUCTION.

B. 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.

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.

WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS/1000 SQ.FT) SHALL BE ADDED TO THE PREVIOUSLY NOTED AREAS.

WHERE TEMPORARY SEEDING IS REQUIRED, ANNUAL WINTER RYE (2.6 LBS/1000 SQ. FT.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.

CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN SEPTEMBER 15 AND APRIL 15.

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 15 DAYS UNTIL 90% COVER HAS BEEN ESTABLISHED. RESEEDING WILL BE CARRIED OUT BY THE CONTRACTOR 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, SEDIMENT BARRIER, 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 AREAS UNDERGOING FINAL GRADING. SHOULD THE HAY BALE BARRIERS PROVE TO BE INEFFECTIVE, THE CONTRACTOR SHALL INSTALL SEDIMENT BARRIER BEHIND THE HAY BALES.

VISUALLY INSPECT RIPRAP 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 RIPRAP FOR SLOPES IN EXCESS OF 3:1 AND WITHIN 25' OF DRAINAGE COURSE.

HOUSEKEEPING:

SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

NOTE: ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT. FOR OIL SPILLS, CALL 1-800-482-0777 WHICH IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-452-4664 WHICH IS AVAILABLE 24 HOURS A DAY. FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE AT: HTTP: //WWW.MAINE.GOV/DEP/SPILLS/EMERGSPILLRESP/

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. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF

THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION. NOTE: LACK OF APPROPRIATE POLLUTANT REMOVAL BEST MANAGEMENT PRACTICES (BMPS) MAY RESULT IN VIOLATIONS OF THE DURING WINTER CONSTRUCTION, THE EROSION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH RAINFALL, SNOWSTORM, OR GROUNDWATER QUALITY STANDARD ESTABLISHED BY 38 M.R.S.A. §465-C(1).

STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT

FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION $\frac{2}{3}$ OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHALL BE INSTALLED AT THE END OF THE EXIST PAVED ACCESS TO THE SITE TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

EXCAVATION DE-WATERING. EXCAVATION 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, NO EXCAVATION DEWATERING IS ANTICIPATED FOR THIS PROJECT. SHOULD IT BE NECESSARY, THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, 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. A DEWATERING DISCHARGE PLAN SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL.

AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES ARE NECESSARY, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:

(a) DISCHARGES FROM FIREFIGHTING ACTIVITY;

(b) FIRE HYDRANT FLUSHINGS; (c) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);

(d) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);

(e) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE

(f) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL

SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED; (q) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;

UNCONTAMINATED GROUNDWATER OR SPRING WATER; FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;

UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));

(k) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND LANDSCAPE IRRIGATION.

UNAUTHORIZED NON-STORMWATER DISCHARGES. THE MDEP APPROVAL UNDER CHAPTER 500 DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH THE AUTHORIZED NON-STORMWATER DISCHARGES INDICATED ABOVE. SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

(a) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;

(b) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND

(d) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

CONSTRUCTION PHASE:

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

INSTALL STABILIZED CONSTRUCTION ENTRANCE AND MAINTAIN UNTIL SITE IS PAVED.

ONLY THOSE AREAS NECESSARY FOR CONSTRUCTION WILL BE DISTURBED.

PRIOR TO THE START OF CONSTRUCTION, SEDIMENT BARRIER WILL BE INSTALLED ACROSS THE SLOPE(S). ON THE CONTOUR, AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT TRAVELLED WAY TO PROTECT IT FROM CONSTRUCTION-RELATED EROSION.

CLEAR AND GRUB WORK SITE AS NEEDED TO EXECUTE PLANS USING CAUTION NOT TO OVER EXPOSE THE SITE.

STORMWATER MANAGEMENT SYSTEM WILL BE INSTALLED PRIOR TO CONSTRUCTION OF SITE ELEMENTS THAT DISCHARGE TO THESE SYSTEMS. CATCH BASIN INLET PROTECTION SHALL BE INSTALLED IN ALL NEW AND EXISTING CATCH BASINS THAT WILL RECEIVE RUNOFF FROM THE PROJECT. NO STORMWATER SHOULD BE DIRECTED TO THE WET POND UNTIL THE SITE IS COMPLETELY STABILIZED.

WITHIN 30 DAYS OF THE INITIAL DISTURBANCES OF SOILS. DISTURBED AREAS WILL BE STABILIZED BEFORE STORMS. LOAM WILL BE SAVED FOR LATER USE WHERE POSSIBLE. EXCESS SOIL MATERIALS WILL BE USED AS FILL OR REMOVED FROM SITE TO AN

DISTURBED AREAS WILL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED

AT A MINIMUM, THE EROSION CONTROL MEASURES SHALL BE REVIEWED AND REPAIRED ONCE A WEEK OR IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOWMELT. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6 INCHES AND BE DISCARDED ON THE SITE. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS.

LOAM, LIME, FERTILIZE, SEED, AND MULCH LANDSCAPED AND OTHER DISTURBED AREAS.

ONCE THE SITE IS STABILIZED AND A 90% CATCH OF VEGETATION HAS BEEN OBTAINED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

10. TOUCH UP LOAM AND SEED.

NOTE: ALL DENUDED AREAS NOT SUBJECT TO FINAL PAVING, RIPRAP OR GRAVEL SHALL BE REVEGETATED.

EROSION CONTROL DURING WINTER CONSTRUCTION: WINTER CONSTRUCTION PERIOD: 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. AT THE 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 THAT 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 1000 S.F. (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ANCHORED SUCH THAT SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH. NOTE: AN AREA IS ALSO CONSIDERED STABLE IF SODDED, COVERED WITH GRAVEL (PARKING LOTS) OR 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 WEATHER CONDITIONS ALLOW, DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY, SEDIMENT BARRIER 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 BELOW 50 DEGREES AND DAY TIME TEMPERATURES REMAIN IN THE 30'S.

MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS, SLOPES GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%. VEGETATED DRAINAGE SWALES SHALL BE LINED WITH STRAW-COCONUT EROSION CONTROL BLANKET (NORTH AMERICAN GREEN SC150 OR APPROVED EQUAL).

BETWEEN THE DATES OF OCTOBER 15 TO NOVEMBER 1, WINTER RYE IS RECOMMENDED FOR STABILIZATION. AFTER NOVEMBER 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.

SITE INSPECTION AND MAINTENANCE:

WEEKLY INSPECTIONS, AS WELL AS ROUTINE INSPECTIONS FOLLOWING EACH RAINFALL, SNOWSTORM, OR THAWING, SHALL BE CONDUCTED BY THE GENERAL CONTRACTOR OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES UNTIL FINAL ACCEPTANCE OF THE PROJECT (90% GRASS CATCH). RAINFALL OF 0.5 INCHES OR MORE IN 24 CONSECUTIVE HOURS SHALL IRIGGER AN INSPECTION. SNOWFALL OF 2 INCHES OR MORE SHALL TRIGGER AN INSPECTION. CORRECTIVE ACTION SHALL BE STARTED BY THE END OF THE NEXT WORK DAY AND COMPLETED WITHIN SEVEN (7) DAYS OR BEFORE THE NEXT STORM EVENT AS NOTED ABOVE. INSPECTIONS SHALL BE PERFORMED BY SOMEONE WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT ISSUED FOR THE PROJECT. THE SCOPE OF CONSTRUCTION INSPECTIONS INCLUDES DISTURBED AREAS AND IMPERVIOUS AREAS, MATERIAL STORAGE AREAS, AND VEHICLE ACCESS POINTS IN ADDITION TO ESC MEASURES. 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. RECORDS OF INSPECTIONS SHALL BE KEPT FOR THREE (3) YEARS.

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, MUNICIPALITY, AND

THAWING, AND A MINIMUM OF ONCE PER WEEK.

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.

> 5. 06-24-25 REVISED PLAN TO ADD PROPANE TANK 4. 06-23-25 ADDED CONDITIONS OF APPROVAL 3. 05-29-25 REVISED PER CITY COMMENTS 2. 05-05-25 REVISED PER MECHANICAL PLANS 1. 04-21-25 SUBMITTED TO CITY FOR REVIEW **EROSION CONTROL DETAILS**

> > AND NOTES

GREENHOUSE BUILDING

37 SLOCUM DRIVE, SOUTH PORTLAND, ME 04106

MAINE TECHNICAL COLLEGE SYSTEM

6. 08-11-25 BID ADDENDUM #1

PROGRESS PRINT THIS PLAN IS ISSUED FOI REVIEW AND INFORMATION PURPOSES ONLY. THIS PLAN IS SUBJECT TO CHANGE AND IS NOT FOR PRICING OR CONSTRUCTION. PRICING BASED ON THIS PLAN IS NOT BINDING UNLESS SIGNED BY BOTH

CONTRACTOR AND OWNER. **ISSUED FOR: PRICING**

JOSEPH

MARDEN

12828

</CENSED

CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS FIELD WK: CJH

PROJECT:

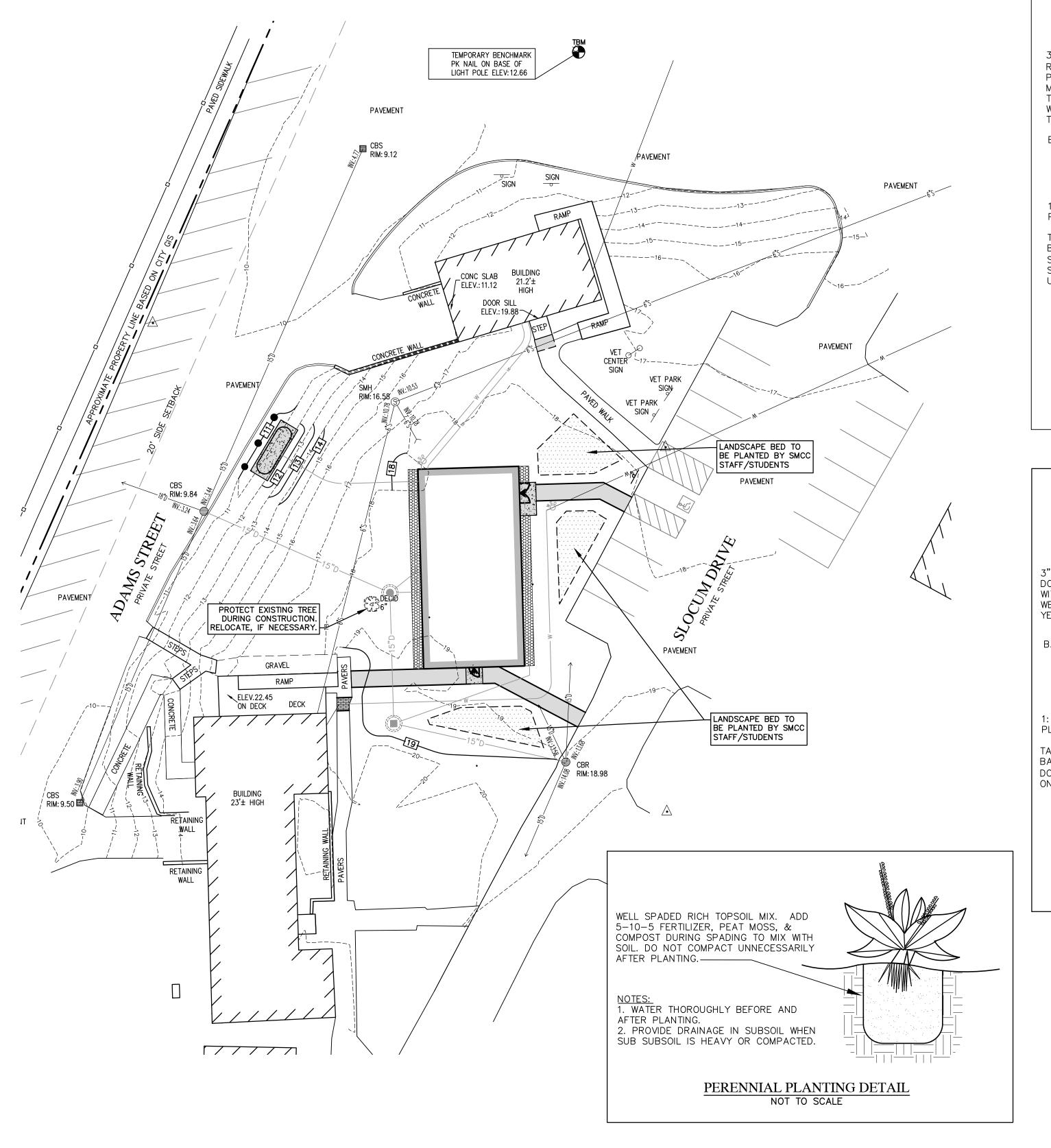
3 ADAMS STREET, SOUTH PORTLAND, ME 04106

119 PURINTON ROAD, SUITE A

BRUNSWICK, MAINE 04011

207.725.1200

SCALE: NTS JOB #: 5113 DRN BY: RPL CH'D BY: JJM MAP/LOT: 4/2FILE: 5113-COV-DET DATE: 04/03/25



PROGRESS PRINT THIS PLAN IS ISSUED FOR

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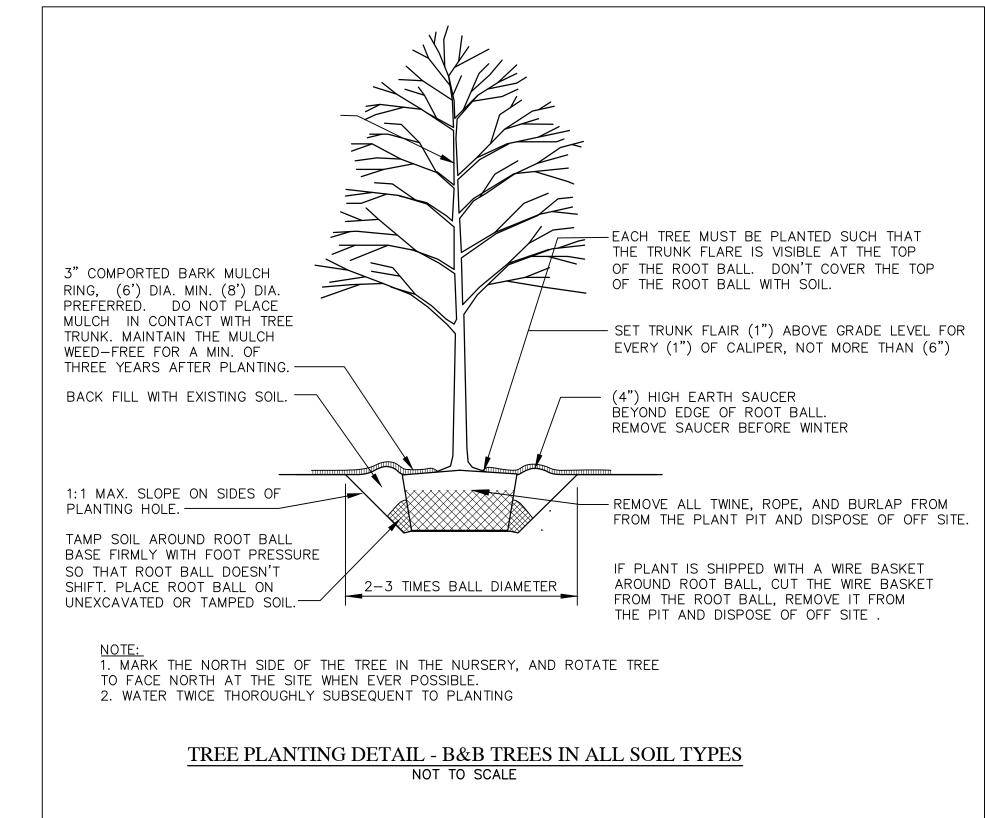
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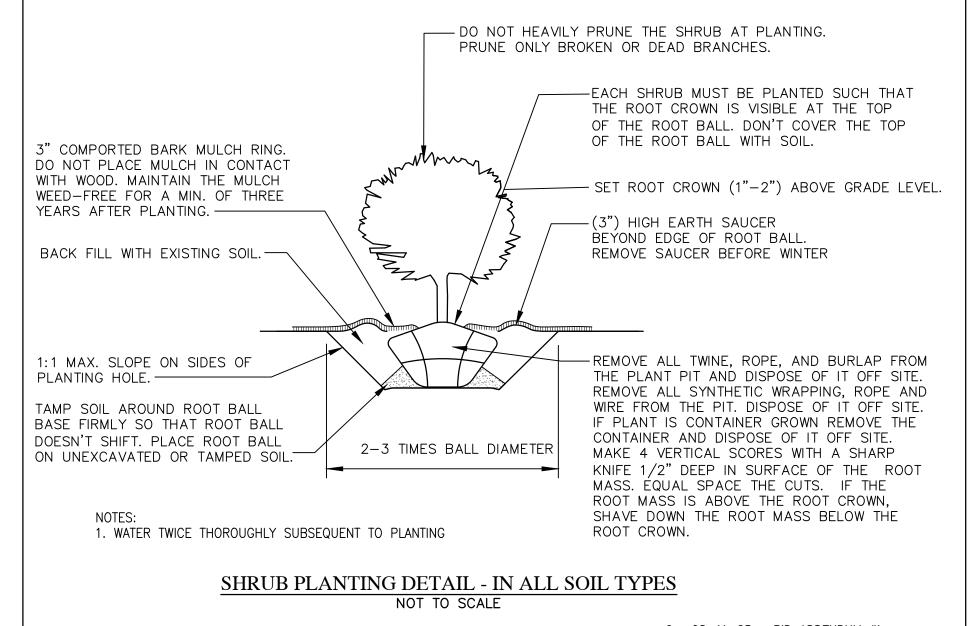
PLAN IS NOT BINDING

CONTRACTOR AND OWNER.

UNLESS SIGNED BY BOTH

PLAN IS SUBJECT





6.	08-11-25	BID ADDENDUM #1
5.	06-24-25	REVISED PLAN TO ADD PROPANE TANK
4.	06-23-25	ADDED CONDITIONS OF APPROVAL
3.	05-29-25	REVISED PER CITY COMMENTS
2.	05-05-25	REVISED PER MECHANICAL PLANS
1.	04-21-25	SUBMITTED TO CITY FOR REVIEW
_		

LANDSCAPE PLAN

GREENHOUSE BUILDING

37 SLOCUM DRIVE, SOUTH PORTLAND, ME 04106

PREPARED FOR:

MAINE TECHNICAL COLLEGE SYSTEM

3 ADAMS STREET, SOUTH PORTLAND, ME 04106

119 PURINTON ROAD, SUITE A

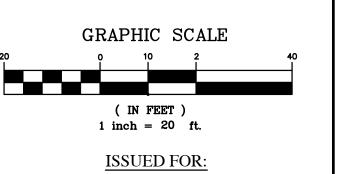
BRUNSWICK, MAINE 04011

207.725.1200

CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS

SCALE: 1"=20' FIELD WK: CJH DRN BY: RPL JOB #: 5113 CH'D BY: JJM MAP/LOT: 4/2 FILE: 5113-SITE DATE: 04/03/25

JOSEPH MARDEN 12828 </CENSED



PRICING

Know what's below

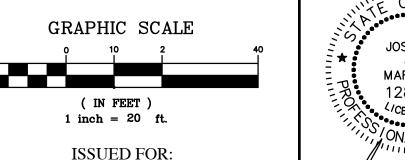
Call before you dig.

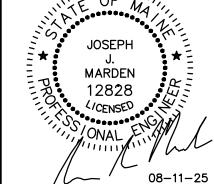
STATE LAW REQUIRES ADVANCE NOTICE

OF AT LEAST 3 BUSINESS DAYS BEFORE

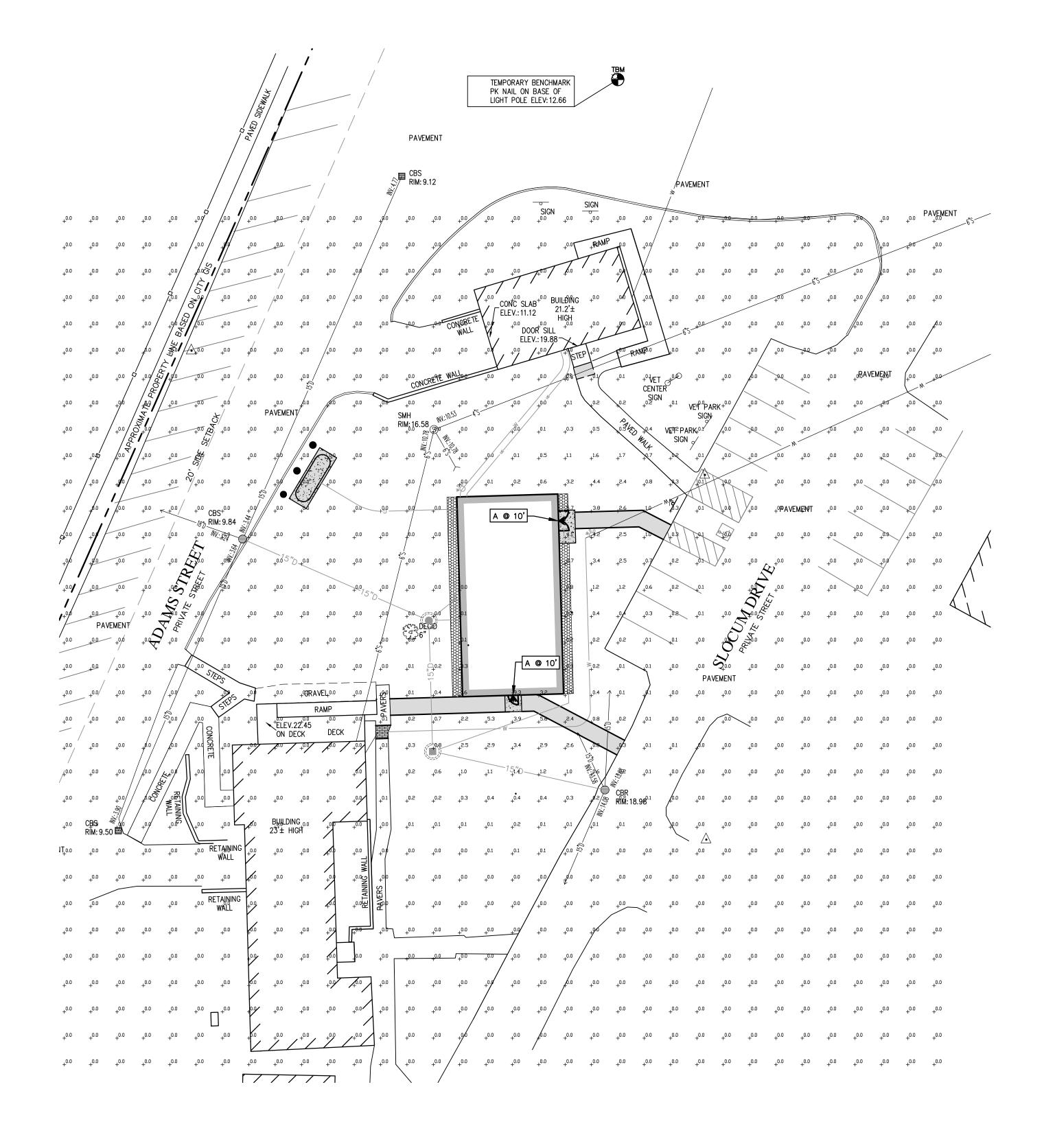
YOU DIG, GRADE OR EXCAVATE FOR THE

www.digsafe.com MARKING OF UNDERGROUND UTILITIES









Schedule									
Symbol	Label	QTY	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage
3	А	2	LMC-30LU-3K-4	LAREDO LMC, 30 LED, 3000K, TYPE 4, 700mA	30- NICHIA 3K LEDS	1	4534.53	0.9	70

6.	08-11-25	BID ADDENDUM #1	JJM
5.	06-24-25	REVISED PLAN TO ADD PROPANE TANK	JJM
4.	06-23-25	ADDED CONDITIONS OF APPROVAL	JJM
3.	05-29-25	REVISED PER CITY COMMENTS	JJM
2.	05-05-25	REVISED PER MECHANICAL PLANS	JJM
1.	04-21-25	SUBMITTED TO CITY FOR REVIEW	JJM
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LIGHTING PLAN

PROJECT:

JOSEPH

MARDEN

12828

CENSED .

GREENHOUSE BUILDING

37 SLOCUM DRIVE, SOUTH PORTLAND, ME 04106

PREPARED FOR:

MAINE TECHNICAL COLLEGE SYSTEM

3 ADAMS STREET, SOUTH PORTLAND, ME 04106

119 PURINTON ROAD, SUITE A **BRUNSWICK, MAINE 04011** 207.725.1200 **CIVIL ENGINEERS • PLANNERS • LAND SURVEYORS**

SCALE: 1"=20' FIELD WK: CJH JOB #: 5113 DRN BY: RPL CH'D BY: JJM MAP/LOT: 4/2 FILE: 5113-SITE DATE: 04/03/25

1. EXACT MOUNTING DETAILS TO BE DETERMINED AT JOBSITE BY OTHERS.

2. CALCULATIONS DO NOT SHOW THE EFFECT OF SHADOWING CAUSED BY BUILDINGS AND OBJECTS WITHIN THE CALCULATED SPACE OR IN THE SITE AREA.

3. READINGS SHOWN ARE INITIAL HORIZONTAL FOOTCANDLES ON A FLAT SITE WITHOUT REFLECTIONS OR OBSTRUCTIONS UNLESS OTHERWISE INDICATED.

4. THIS LAYOUT DRAWING MUST BE COORDINATED WITH THE SITE LOCATION FOR CORRECT FIXTURE ORIENTATION.

THAN THE DESIRED OR ASSUMED GRAPHIC SCALES. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THAT THE PRINTED OR PLOTTED—TO—SCALE DRAWING IS PRINTED

5. DOCUMENTS PRINTED OR PLOTTED FROM ELECTRONIC FILES MAY APPEAR AT OTHER

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Know what's below Call before you dig.

STATE LAW REQUIRES ADVANCE NOTICE OF AT LEAST 3 BUSINESS DAYS BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE www.digsafe.com MARKING OF UNDERGROUND UTILITIES

	GRAPHIC SCALE	
20	0 10 2 	4 0
	(IN FEET) 1 inch = 20 ft.	
	ISSUED FOR:	

GENERAL NOTES — SITE ELECTRICAL

1. THE COMPLETE INSTALLATION SHALL CONFORM WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, CODES AND ORDINANCES, INCLUDED BUT NOT LIMITED TO APPROVED EDITIONS OF THE FOLLOWING: NATIONAL ELECTRICAL SAFETY CODE (ANSI C2): NATIONAL ELECTRICAL CODE (NFPA 70): OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND ALL AMENDMENTS THERETO. NOTHING CONTAINED IN THE DRAWINGS AND SPECIFICATIONS SHALL BE CONSTRUED TO CONFLICT WITH THESE LAWS, CODES, AND ORDINANCES, AND THEY ARE THEREBY INCLUDED IN THESE SPECIFICATIONS. OBTAIN PERMITS AND REQUEST INSPECTIONS FROM ALL AUTHORITIES HAVING JURISDICTION. COMPLY WITH ALL POWER, TELEPHONE, CABLE TELEVISION PROVIDER REGULATIONS AND STANDARDS.

2. THE FOLLOWING ELECTRICAL WORK SHALL BE PERFORMED UNDER THIS CONTRACT: UNDERGROUND CONDUIT, FITTINGS, AND ALL DEVICES; PROVISION OF UNDERGROUND CONDUIT AND WIRE TO SERVE NEW SUBPANEL IN NEW STRUCTURE;

3. PROVIDE UNDERGROUND ELECTRICAL WARNING TAPE: 6" WIDE PLASTIC TAPE, COLORED RED WITH SUITABLE LEGEND DESCRIBING BURIED ELECTRICAL LINES FOR ALL UNDERGROUND CONDUITS. LOCATE 6 INCHES BELOW FINISHED GRADE.

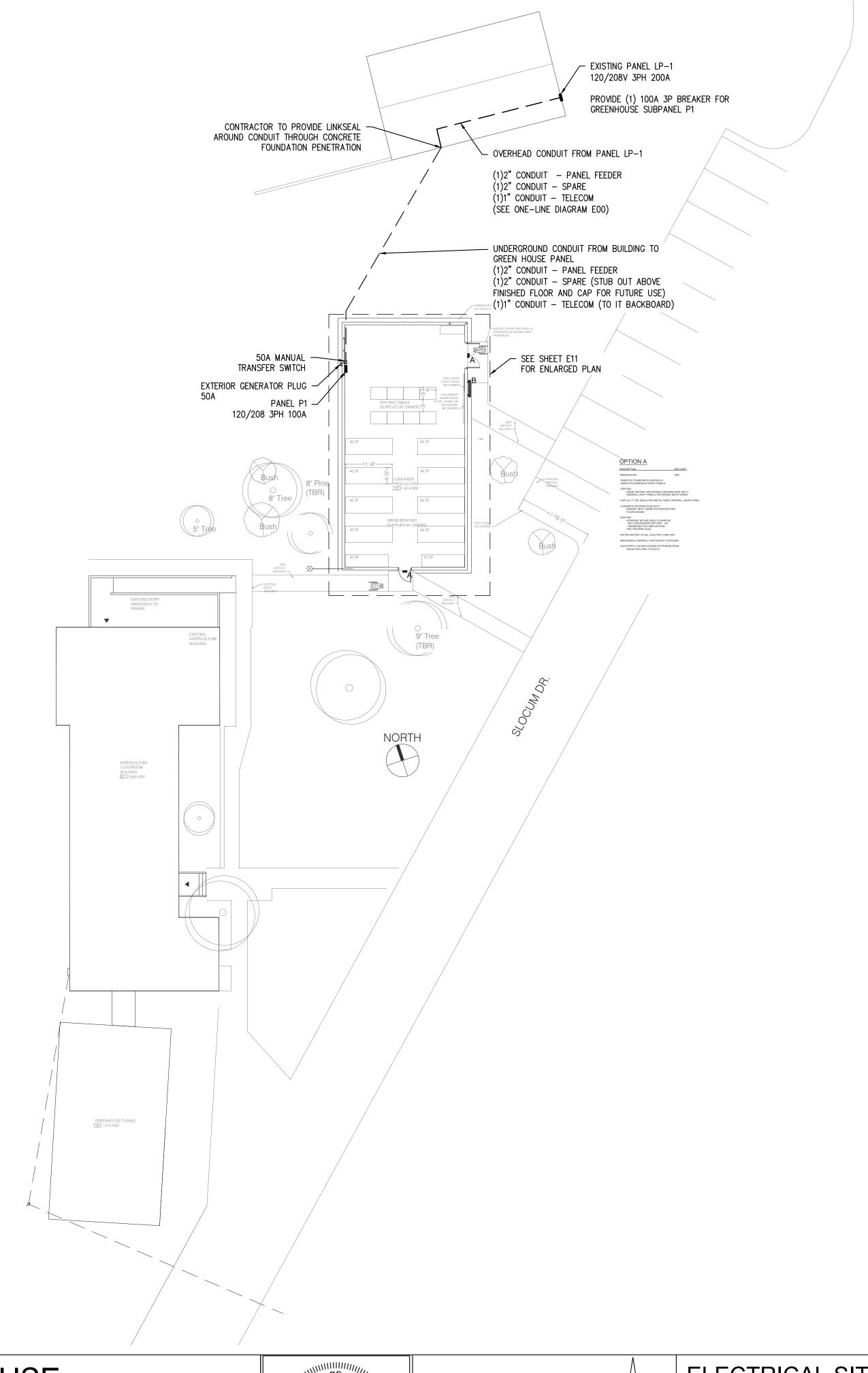
4. REFER TO CIVIL DRAWINGS FOR EXCAVATION AND BACKFILL OF ALL UNDERGROUND WORK.

5. EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED. CONTRACTORS SHALL CONTACT DIG SAFE BEFORE BEGINNING ANY EXCAVATIONS.

6. UNDERGROUND CONDUIT SHALL BE SCHED 40 PVC. ABOVE GRADE CONDUIT SHALL BE RGS. ALL CONDUIT SWEEPS SHALL BE RGS LONG SWEEPS.

7. PROVIDE EXPANSION FITTINGS FOR ALL UNDERGROUND CONDUIT CONNECTED TO FIXED ABOVE GROUND STRUCTURES.

8. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.





SOUTH
199 prospect street, suite A
portland, maine 04101

NORTH
22 balsam drive
Millinocket, maine 04462

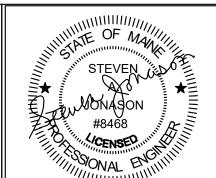
PH: 207.347.5252 &
207adiages 96 works.com

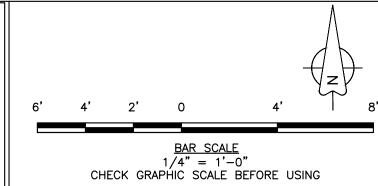




REVISIONS:

HORTICULTURE GREENHOUSE SOUTHERN MAINE COMMUNITY COLLEGE SOUTH PORTLAND, MAINE





ELECTRICAL SITE PLAN