

NOT FOR CONSTRUCTION

APPROXIMATE LOCATION OF SNOWMAKING PUMP STATION TO REMAIN

WETLAND DATA TO BE OBTAINED

EXPAND EXISTING ABANDONED TREATMENT LAGOON AS SHOWN TO CREATE SCULPTED POND.

UNDISTURBED VEGETATED BUFFER (RB 3)

STONE BERMED LEVEL LIP SPREADER AND BUFFER (BL2) (SEE DETAIL)

PROPOSED NEW 18' WIDE ACCESS LOOP

WETLAND DATA TO BE OBTAINED

PROPOSED PARK AREA WITH SELECTIVE TREE THINNING TO MEET LUPC STANDARDS (TYP.)

STONE BERMED LEVEL LIP SPREADER (BL3) (SEE DETAIL)

RESORT WELCOME SIGN

PROPOSED OUTDOOR CENTER AND PARKING AREA

EXISTING OPERATIONAL BASE LODGE TO REMAIN

DELINEATED WETLAND (TYP.)

100' SETBACK (TYP.)

75' SETBACK (TYP.)

25' SETBACK (TYP.)

DELINEATED STREAMS (TYP.)

MAINTENANCE BUILDING TO REMAIN

STONE BERMED LEVEL LIP SPREADER AND BUFFER (BL1) (SEE DETAIL)

UNDISTURBED VEGETATED BUFFER (RB 2)

PROPOSED NEW 18' WIDE ACCESS LOOP

UNDISTURBED VEGETATED BUFFER (RB 1)

UNDERDRAIN SOIL FILTER (TYP) (SEE DETAIL)

PROPOSED BASE VILLAGE AREA (SEE SHEET C-1.02)

INSTALL STOP SIGN (SEE DETAIL)

STONE BERMED LEVEL LIP SPREADER AND BUFFER (BL4) (SEE DETAIL)

EXISTING ABANDONED SEWER TREATMENT BUILDING TO BE DEMOLISHED

RESORT WELCOME SIGN

PROPOSED PAVED ACCESS DRIVE AND PARKING AREAS. MILL AND RESURFACE EXISTING PAVED AREAS AS SHOWN. IN AREAS NOT CURRENTLY PAVED, PROVIDE FULL-DEPTH CONSTRUCTION AND PAVEMENT.

UNDISTURBED VEGETATED BUFFER (BA1)

PROPOSED T-BAR LIFT ALIGNMENT, OPERATION BUILDINGS, AND BULLWHEELS

PROPOSED PARK AREA WITH SELECTIVE TREE THINNING TO MEET LUPC STANDARDS (TYP.)

MAINTENANCE BUILDING TO REMAIN

PROPOSED CHAIRLIFT

PROPOSED SNOWMAKING BOOSTER PUMP HOUSE

PROPOSED CLEARING LIMITS (TYP.)

STONE BERMED LEVEL LIP SPREADER AND BUFFER (BL1) (SEE DETAIL)

UNDISTURBED VEGETATED BUFFER (RB 2)

PROPOSED NEW 18' WIDE ACCESS LOOP

UNDISTURBED VEGETATED BUFFER (RB 1)

UNDERDRAIN SOIL FILTER (TYP) (SEE DETAIL)

PROPOSED BASE VILLAGE AREA (SEE SHEET C-1.02)

LEGEND

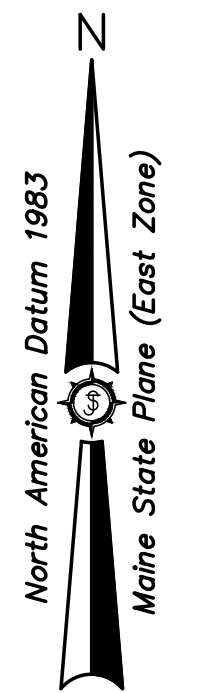
PROPOSED	EXISTING
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HATCH LEGEND

[Hatch Pattern]	DELINEATED WETLAND
[Hatch Pattern]	PROPOSED PARK AREA
[Hatch Pattern]	PATIO/WALKWAY AREA
[Hatch Pattern]	VEGETATED BUFFER

Big Moose Resort - Impervious area calculations

Structure/feature	New impervious area (SF)	New impervious area (Ac.)
Hotel	9690	0.22
Hotel Deck	1387	0.03
Tap House	4200	0.10
Base Lodge	13402	0.31
"Beachfront" patio & village plaza	19335	0.44
Event Center	3300	0.08
Pool	1500	0.03
Event patio	2380	0.05
Roads and parking (new pavement)	50379	1.16
Welcome Center	2000	0.05
Welcome Center patio/walkway	1000	0.02
Snowmaking booster pump house	2100	0.05
Zip Line stations	3642	0.08
T-Bar foundations & lift operator buildings	395	0.01
Maintenance Bldg	4400	0.10
Wellhouses	600	0.01
Chairlift (replacement)	n/a	n/a
Total	119710	2.75



- PLAN REFERENCE:**
- THIS PLAN IS BASED UPON TOPOGRAPHIC SURVEY DATA AND EXISTING SITE INFORMATION COLLECTED BY JAMES SEWALL COMPANY OF OLD TOWN, ME. TOPOGRAPHIC DATA SHOWN WAS DERIVED FROM LIDAR DATA OBTAINED THROUGH THE STATE OF MAINE OFFICE OF GIS AND WAS SPOT CHECKED BY JAMES SEWALL COMPANY DURING THEIR SITE SURVEY.
 - WETLANDS AND STREAMS SHOWN WERE DELINEATED BY BURMAN LAND & TREE CO. OF ORRINGTON, ME IN DECEMBER 2020 & JANUARY 2021 AND BY ECO-ANALYSTS, INC IN OCTOBER 2019.
 - SOILS MAP AND CLASSIFICATIONS WERE DERIVED FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE'S NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY ON MARCH 31, 2020.
- SITE PLAN NOTES:**
- GRUBBING ACTIVITIES SHALL START UPHILL AND BE STABILIZED AS WORK CONTINUES.
 - ALL AREAS DISTURBED FROM CONSTRUCTION SHALL BE LOAMED, SEEDED, AND MULCHED.

Project No: **85716E**

Phase: **PERMIT**

Sheet No: **C-1.01**

Drawn By: **FAB/JAO**

Checked By: **AS SHOWN**

Date: **04/28/2021**

Scale: **AS SHOWN**

Project Location: **BIG MOOSE TOWNSHIP, MAINE**

Client: **BIG LAKE DEVELOPMENT, LLC**

Project Name: **BIG MOOSE RESORT**

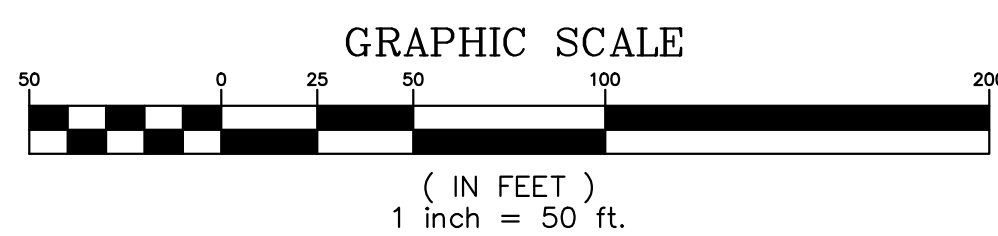
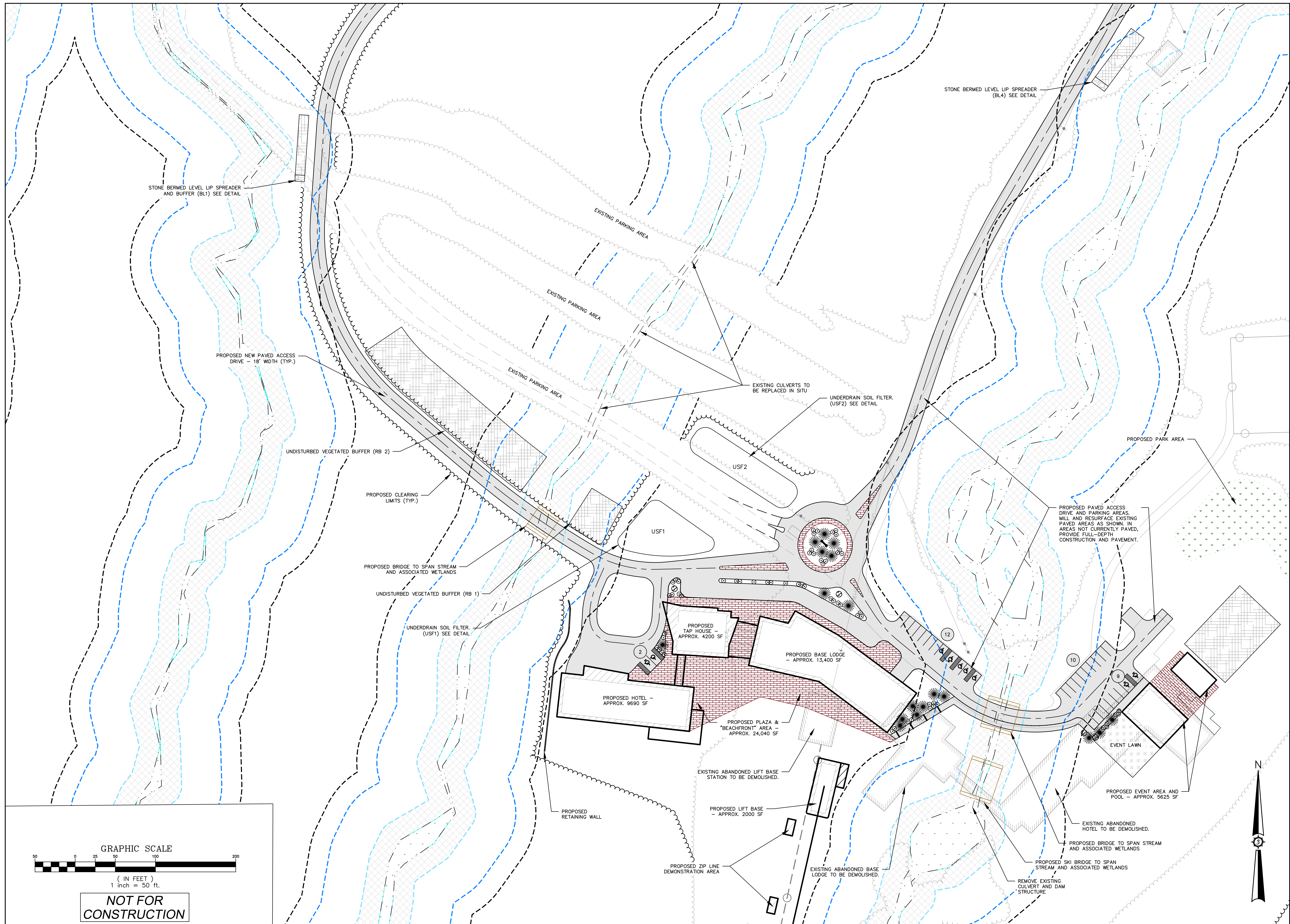
Overall Site Plan

Professional Engineer: **JAMES SEWALL**, License No. **13020**, dated **4/28/2021**

Surveying: **1 800 648 4202**

Engineering: **www.sewall.com**

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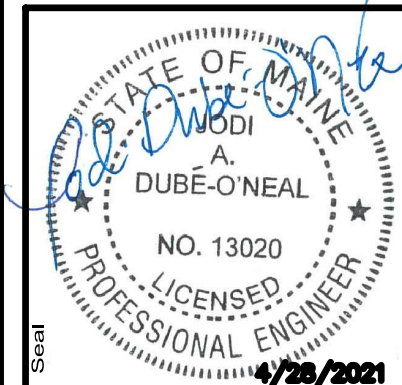


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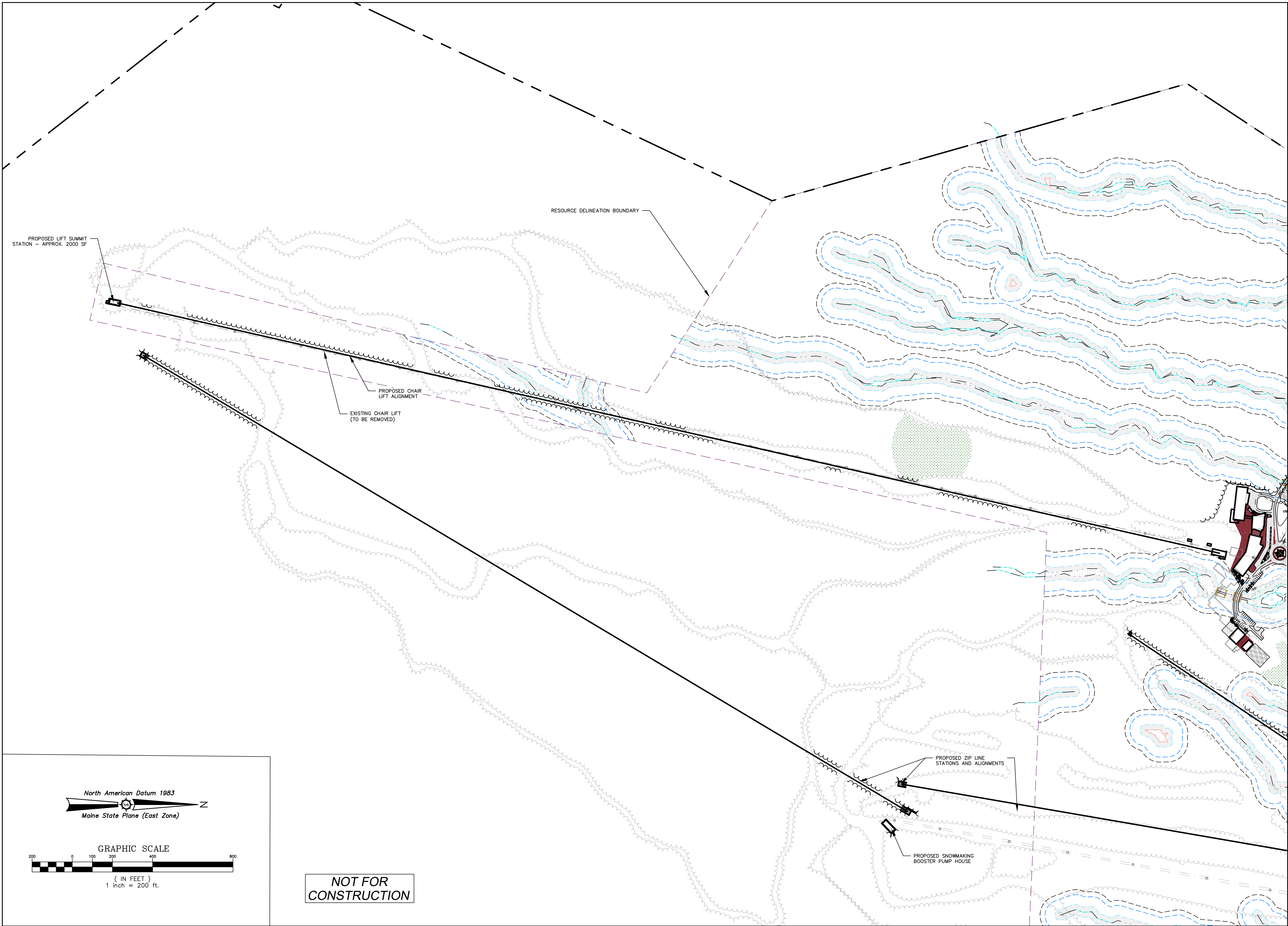
Rev. #	Date	By	Description
1	JAC		REVISED PER DEP. STORMWATER COMMENTS

Designed By	FAB/JAO
Drawn By	FAB/JAO
Date	04/28/2021
Scale	AS SHOWN
Approved	Checked

BIG LAKE DEVELOPMENT, LLC	
BIG MOOSE RESORT	
Site Location	BIG MOOSE TOWNSHIP, MAINE
Project Location	BIG MOOSE TOWNSHIP, MAINE
Project No.	85716E
Sheet No.	C-1.02
Drawing Description	SITE PLAN - VILLAGE



Project No. 85716E
 Engineer **Sewall** ENGINEERING
 SURVEYING
 www.sewall.com
 1 800 648 4202
 Phase **PERMIT**
 Sheet No. **C-1.02**



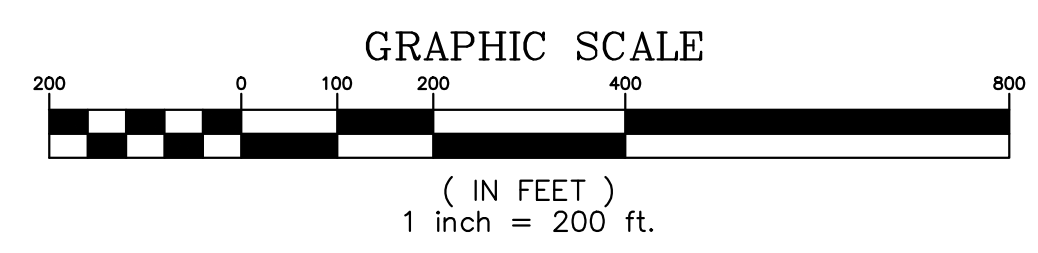
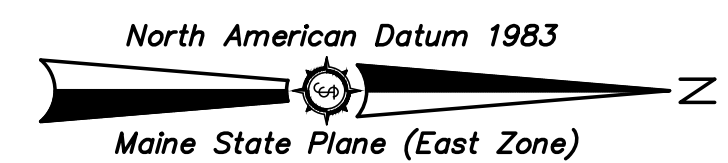
PROPOSED LIFT SUMMIT STATION - APPROX. 2000 SF

RESOURCE DELINEATION BOUNDARY

PROPOSED CHAIR LIFT ALIGNMENT
EXISTING CHAIR LIFT (TO BE REMOVED)

PROPOSED ZIP LINE STATIONS AND ALIGNMENTS

PROPOSED SNOWMAKING BOOSTER PUMP HOUSE



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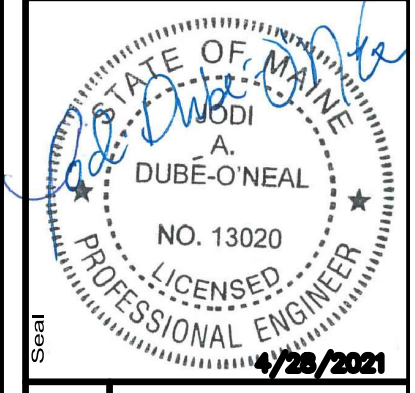
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1	JAC		REVISED PER DEP. STORMWATER COMMENTS

Drawn By	FAB/JAO
Checked By	
Date	04/28/2021
Scale	AS SHOWN
Approved	
Checked	

BIG LAKE DEVELOPMENT, LLC
BIG MOOSE RESORT

Project Location
BIG MOOSE TOWNSHIP, MAINE

Drawing Description
SITE PLAN - CHAIRLIFT



Project No.: **85716E**

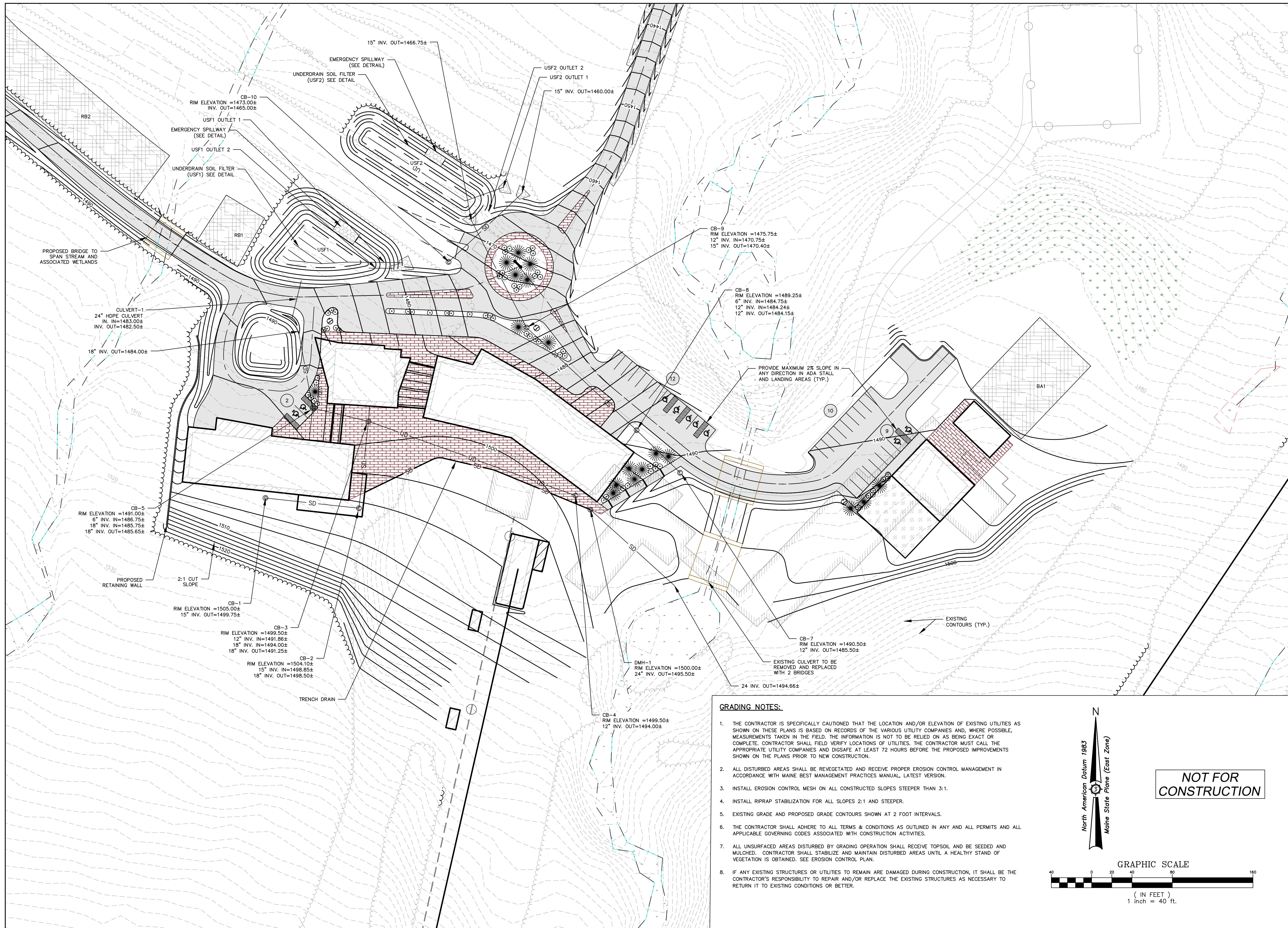
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Phase: **PERMIT**

Sheet No.: **C-1.03**

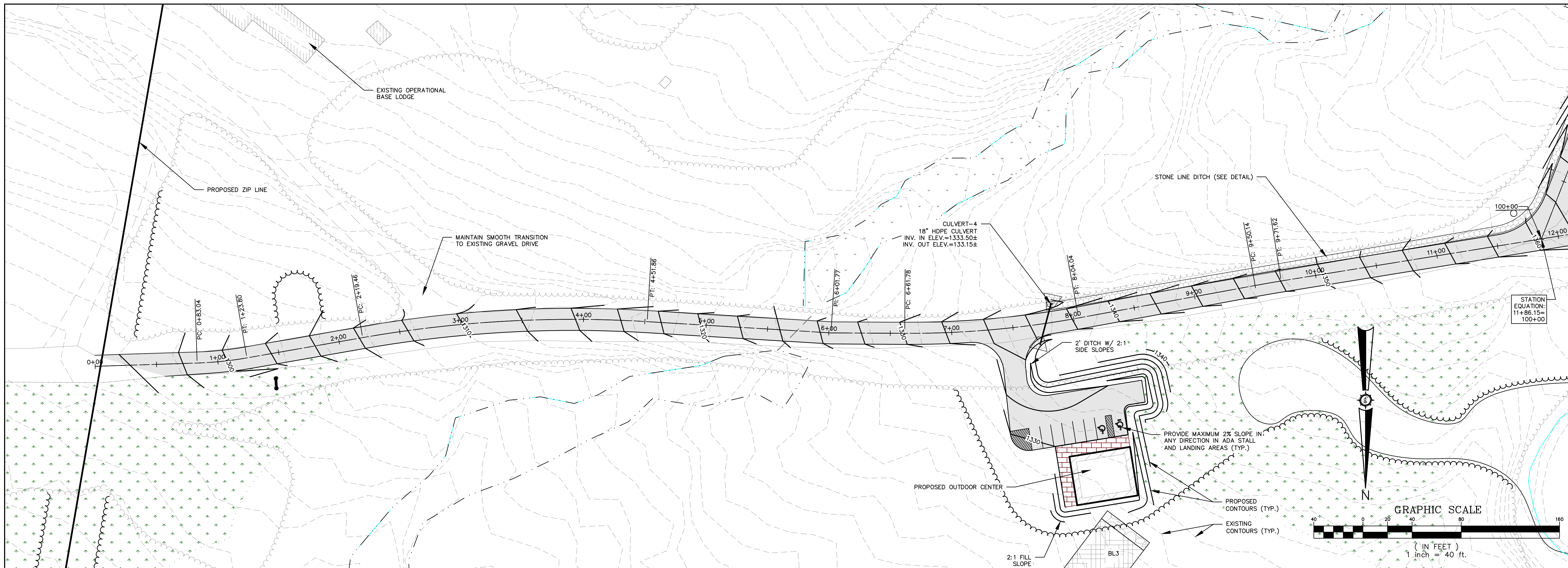


GRADING NOTES:

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF UTILITIES. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AND DIGSAFE AT LEAST 72 HOURS BEFORE THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS PRIOR TO NEW CONSTRUCTION.
2. ALL DISTURBED AREAS SHALL BE REVEGETATED AND RECEIVE PROPER EROSION CONTROL MANAGEMENT IN ACCORDANCE WITH MAINE BEST MANAGEMENT PRACTICES MANUAL, LATEST VERSION.
3. INSTALL EROSION CONTROL MESH ON ALL CONSTRUCTED SLOPES STEEPER THAN 3:1.
4. INSTALL RIPRAP STABILIZATION FOR ALL SLOPES 2:1 AND STEEPER.
5. EXISTING GRADE AND PROPOSED GRADE CONTOURS SHOWN AT 2 FOOT INTERVALS.
6. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN ANY AND ALL PERMITS AND ALL APPLICABLE GOVERNING CODES ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
7. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE TOPSOIL AND BE SEEDED AND MULCHED. CONTRACTOR SHALL STABILIZE AND MAINTAIN DISTURBED AREAS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED. SEE EROSION CONTROL PLAN.
8. IF ANY EXISTING STRUCTURES OR UTILITIES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURES AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.

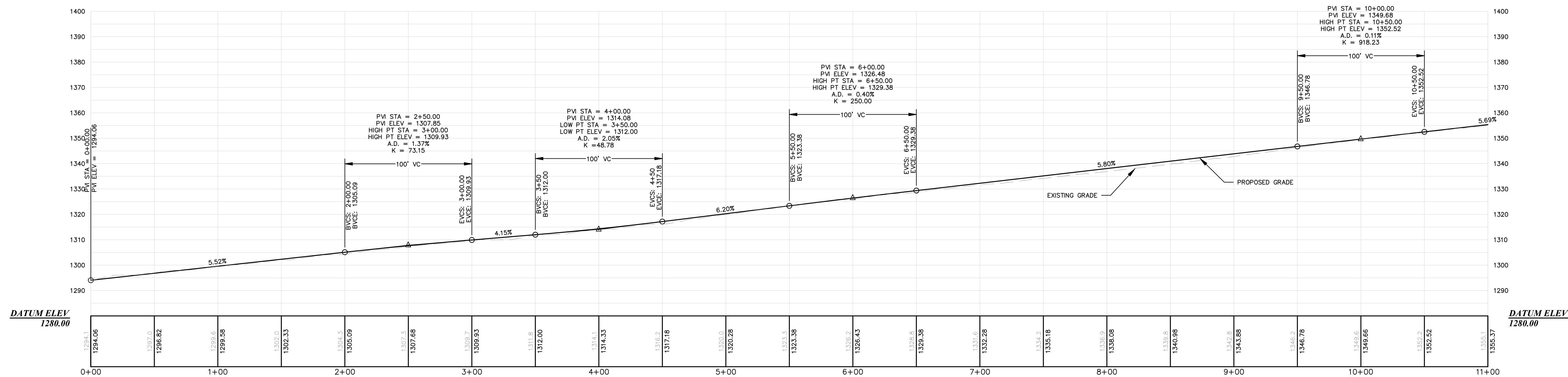
NOT FOR CONSTRUCTION
 GRAPHIC SCALE
 (IN FEET)
 1 inch = 40 ft.

85716E	ENGINEERING	SURVEYING	PERMIT
Project No.	Engineer	Surveyor	Sheet No.
			C-2.01
SEWALL The evolution of expertise www.sewall.com 1 800 648 4202			
STATE OF MAINE JAMES A. DUBE-O'NEAL NO. 13020 LICENSED PROFESSIONAL ENGINEER 4/20/2021			
BIG LAKE DEVELOPMENT, LLC BIG MOOSE RESORT Project Location: BIG MOOSE TOWNSHIP, MAINE Drawing Description: VILLAGE AREA GRADING PLAN			
Designed By: FAB/JAO	Drawn By: FAB/JAO	Checked By: JAS/SHOWN	Approved By: Checked
Date: 04/28/2021	Scale: AS SHOWN		
Row #	Draw. By	Description	REVISION PER DEP. STORMWATER COMMENTS
1	JAO		



HORIZONTAL SCALE: 1"=40'
 VERTICAL SCALE: 1"=20'
MOOSEHEAD LOOP DRIVE
 0+00.00 - 11+00.00

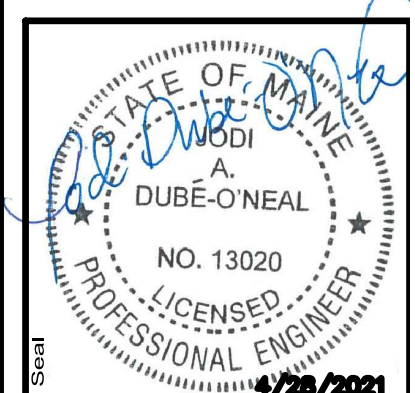
NOT FOR CONSTRUCTION



DATE	DESCRIPTION
04/28/2021	REVISION PER DEP. STORMWATER COMMENTS
04/28/2021	JAC

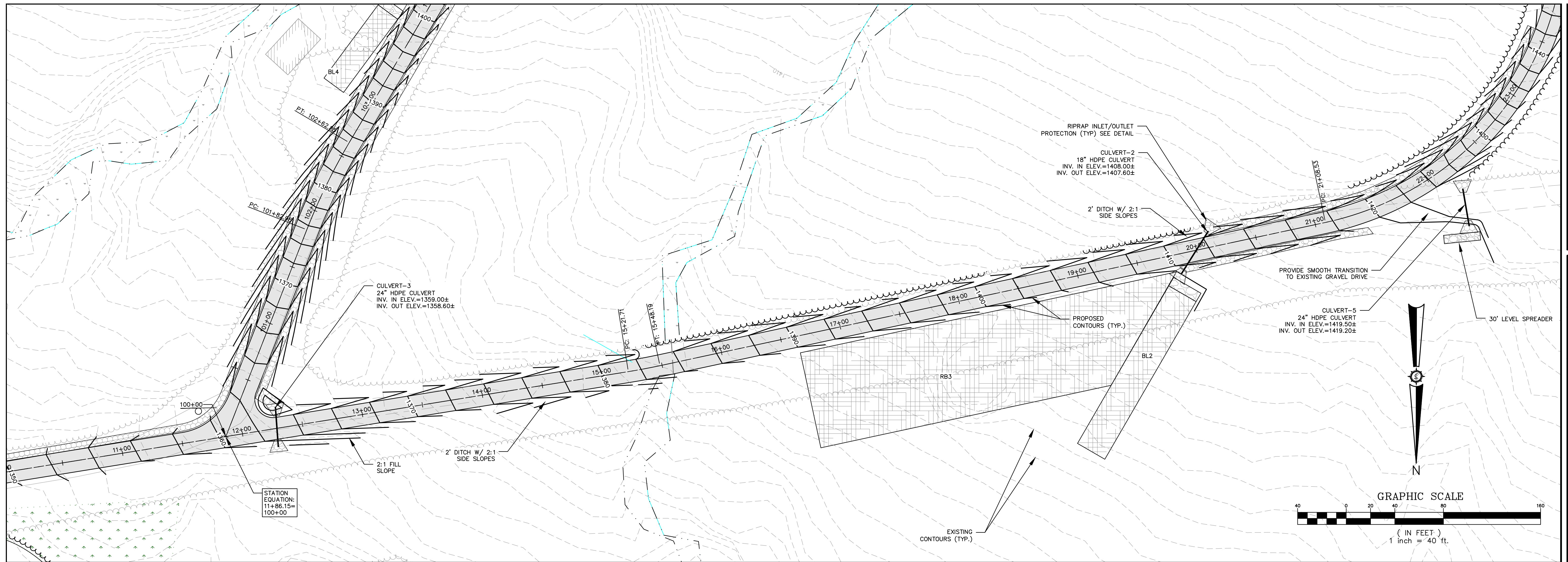
Drawn By: FAB/JAO	Checked: [Signature]
Designed By: FAB/JAO	Approved: [Signature]
Date: 04/28/2021	Scale: AS SHOWN

BIG LAKE DEVELOPMENT, LLC
BIG MOOSE RESORT
 Project Location: BIG MOOSE TOWNSHIP, MAINE
PLAN AND PROFILE - MAIN LOOP DRIVE
 STA. 0+00 TO STA. 11+00



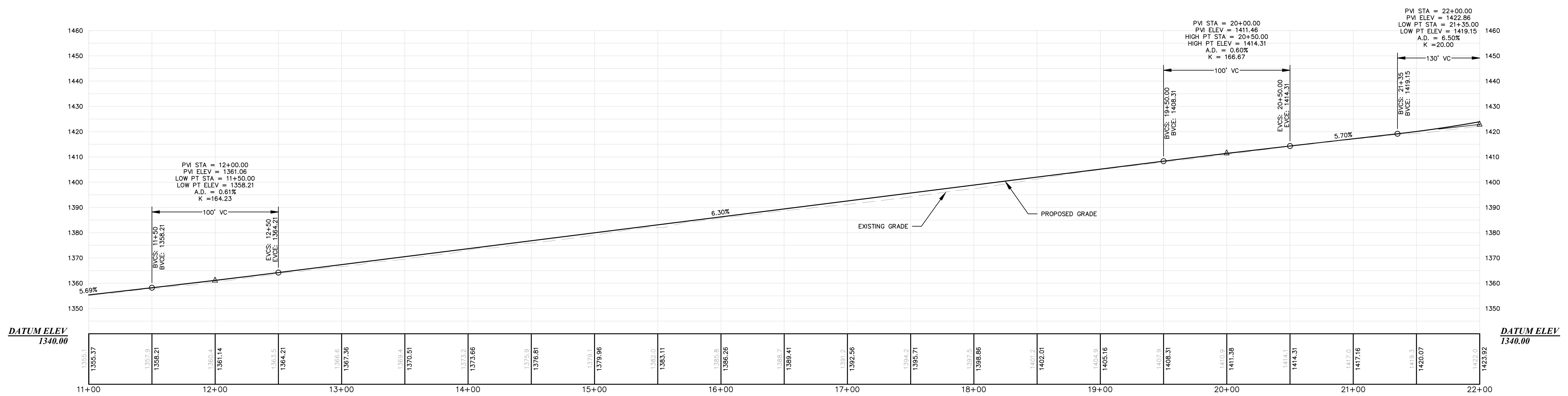
Project No: **85716E**
 Engineer: **Sewall** SURVEYING
 ENGINEERING
 www.sewall.com
 1 800 648 4202

Phase: **PERMIT**
 Sheet No.: **C-2.02**



HORIZONTAL SCALE: 1"=40'
 VERTICAL SCALE: 1"=20'
MOOSEHEAD LOOP DRIVE
 11+00.00 - 22+00.00

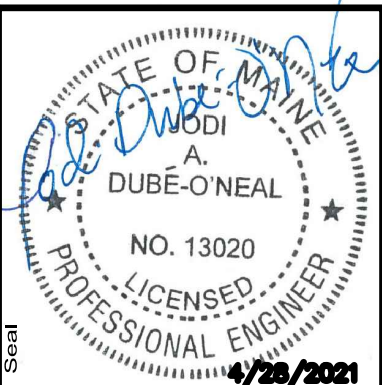
**NOT FOR
 CONSTRUCTION**



Rev. #	Date	By	Description
1	JAC	JAC	REVISION PER DEP. STORMWATER COMMENTS

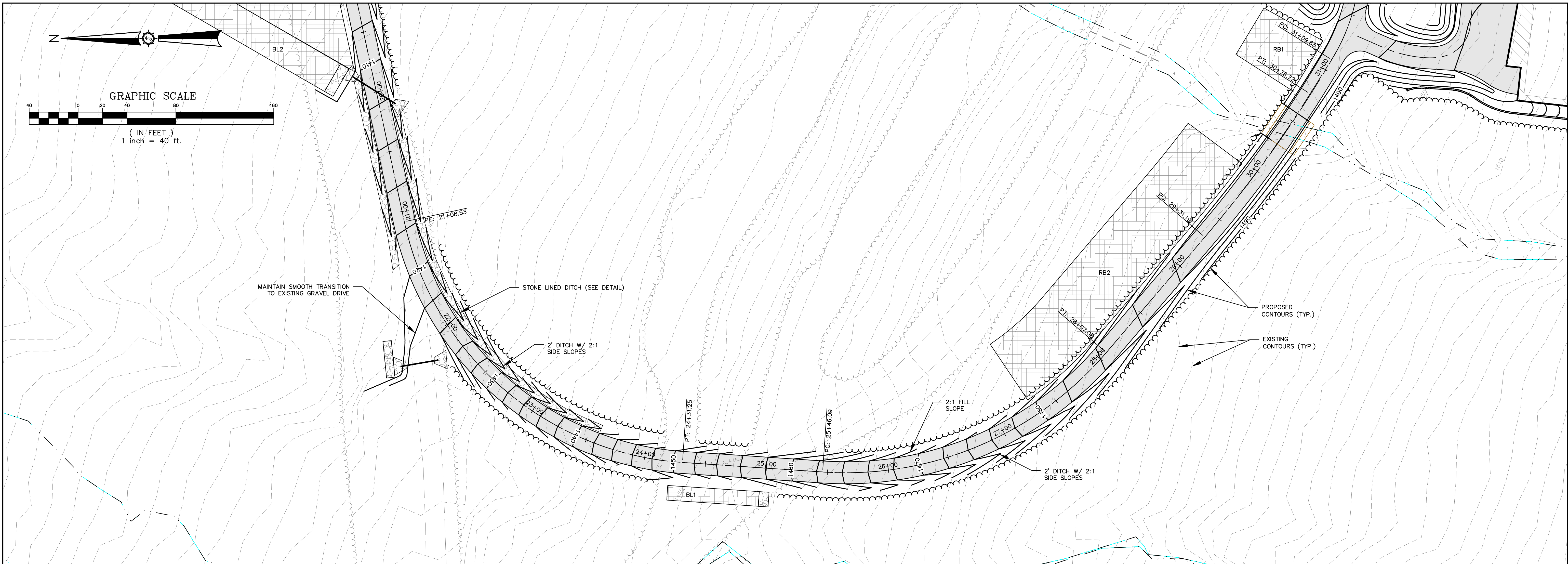
Designed By	FAB/JAO
Drawn By	FAB/JAO
Date	04/28/2021
Scale	AS SHOWN
Checked	
Approved	

BIG LAKE DEVELOPMENT, LLC
BIG MOOSE RESORT
 Project Location
BIG MOOSE TOWNSHIP, MAINE
 Drawing Description
PLAN AND PROFILE - MAIN LOOP DRIVE
 STA. 11+00 TO STA. 22+00



Project No.: **85716E**
 Engineer: **Sewall**
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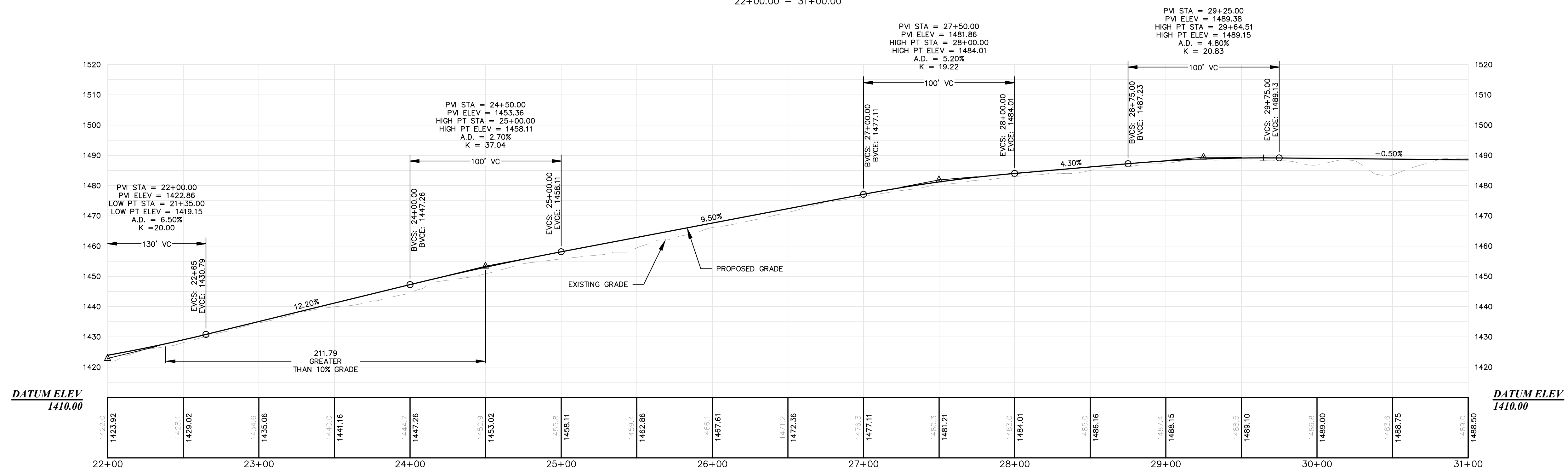
Phase: **PERMIT**
 Sheet No.: **C-2.03**



HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=20'

NOT FOR CONSTRUCTION

MOOSEHEAD LOOP DRIVE
22+00.00 - 31+00.00



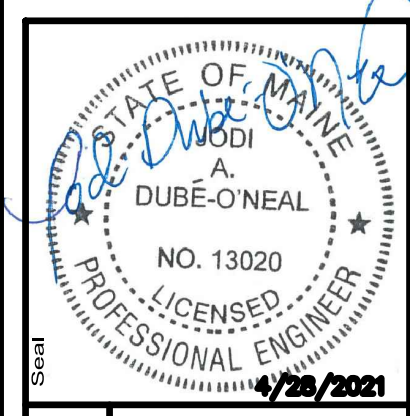
Rev. #	Date	By	Description
1		JAC	REVISED PER DEP. STORMWATER COMMENTS

Designed By	FAB/JAO
Drawn By	FAB/JAO
Date	04/28/2021
Scale	AS SHOWN
Checked	

BIG LAKE DEVELOPMENT, LLC
BIG MOOSE RESORT

Project Location
BIG MOOSE TOWNSHIP, MAINE

Plan and Profile - MAIN LOOP DRIVE
STA. 22+00 TO 31+00

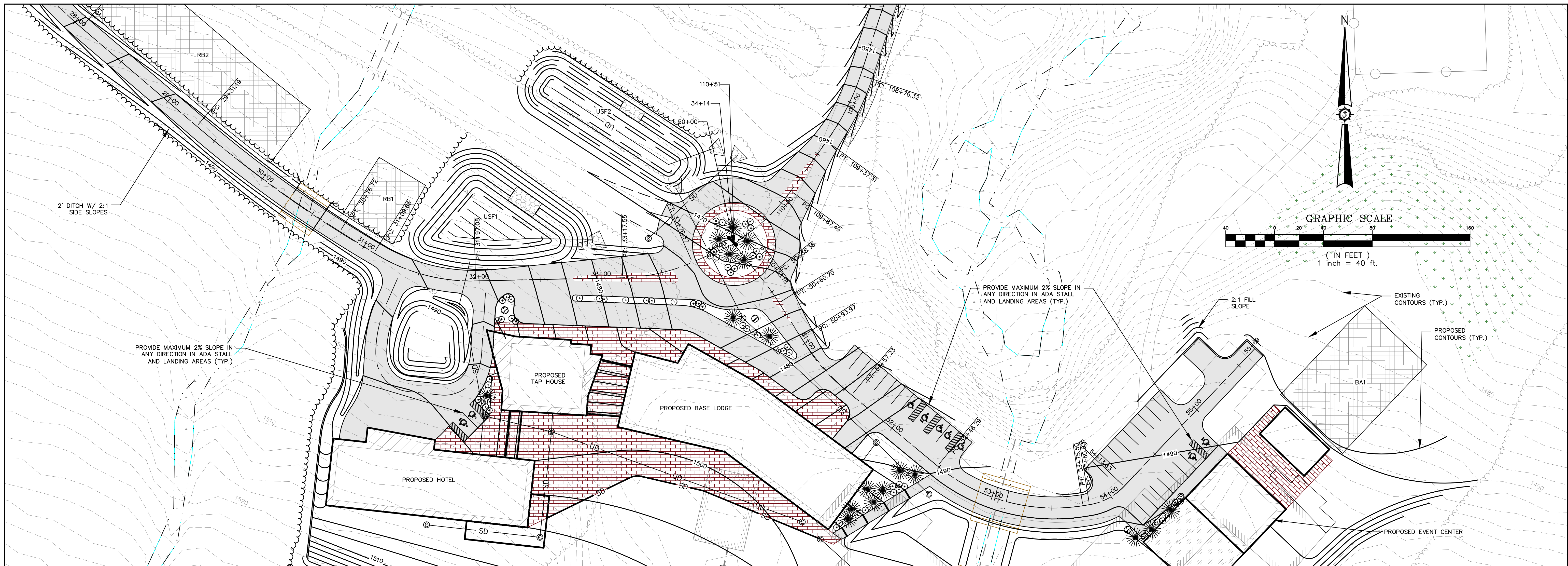


Project No. 85716E

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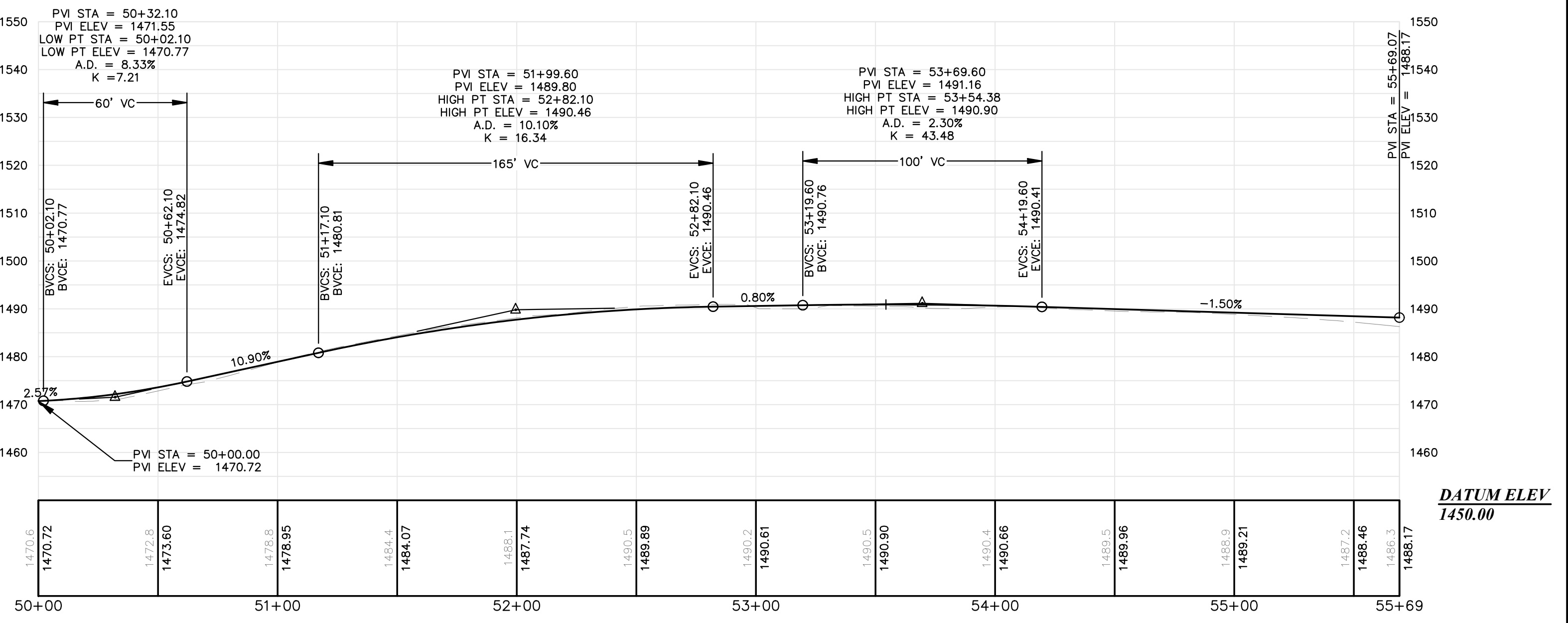
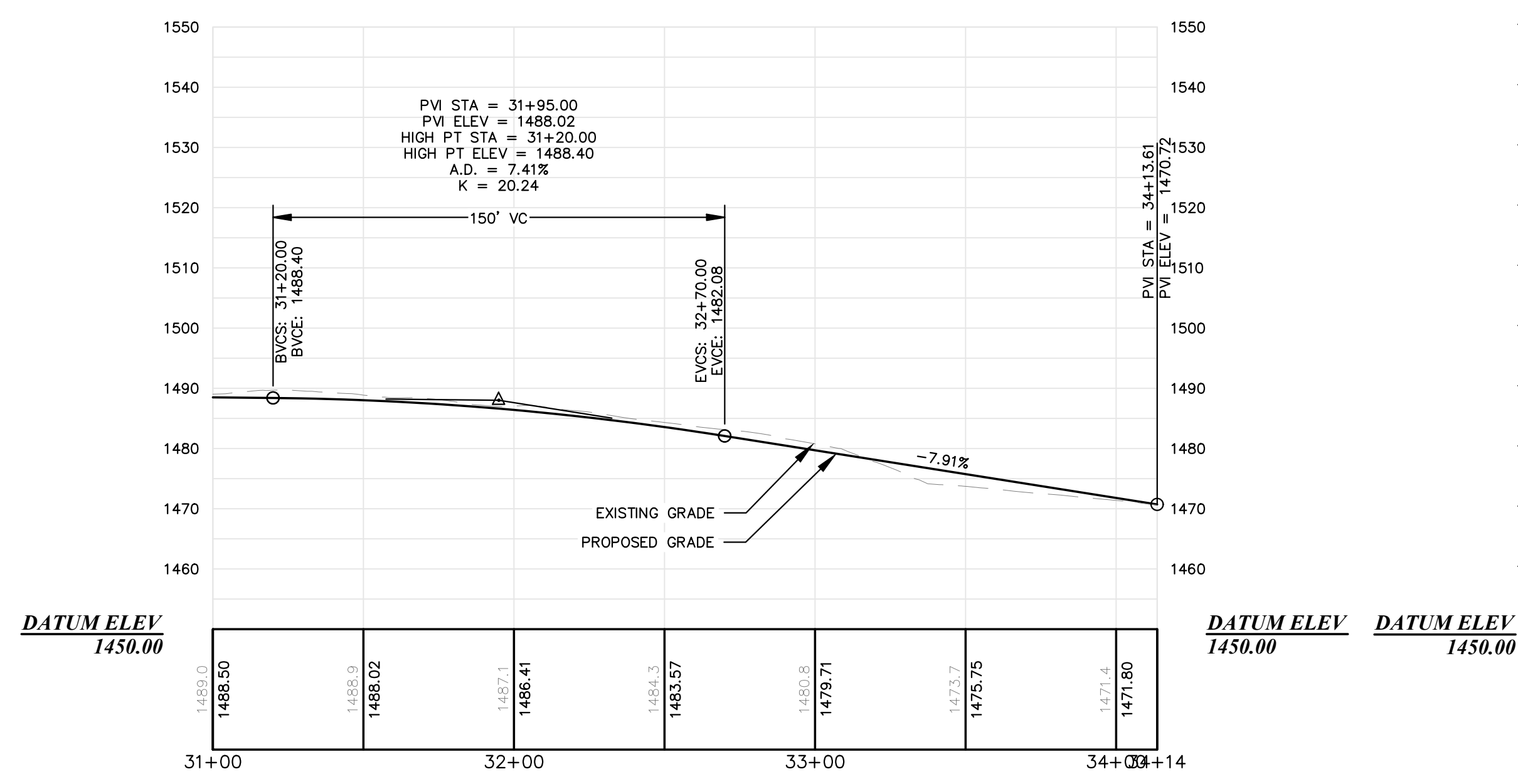


MOOSEHEAD LOOP DRIVE
31+00.00 - 34+13.61

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=20'

MOOSEHEAD LOOP DRIVE II
50+00.00 - 55+69.07

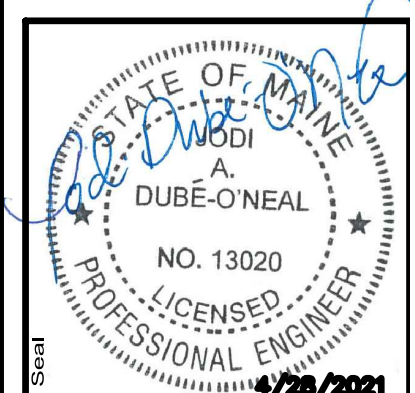
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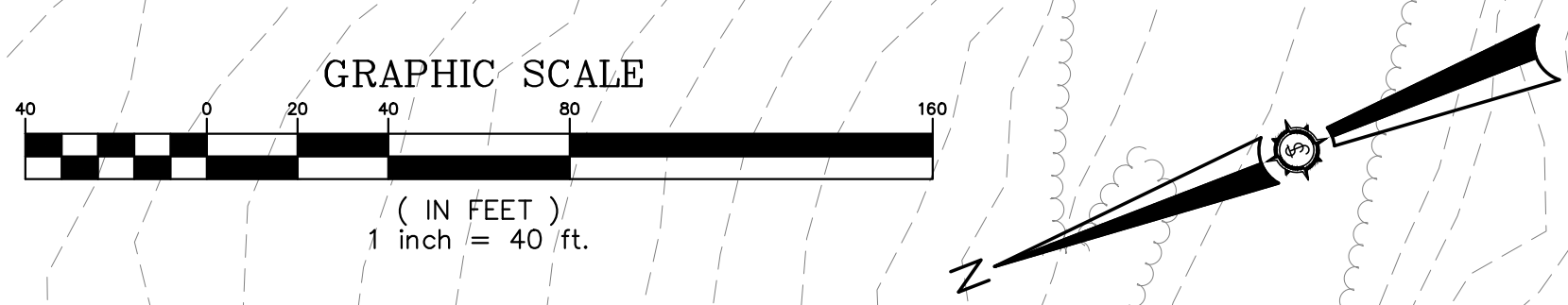
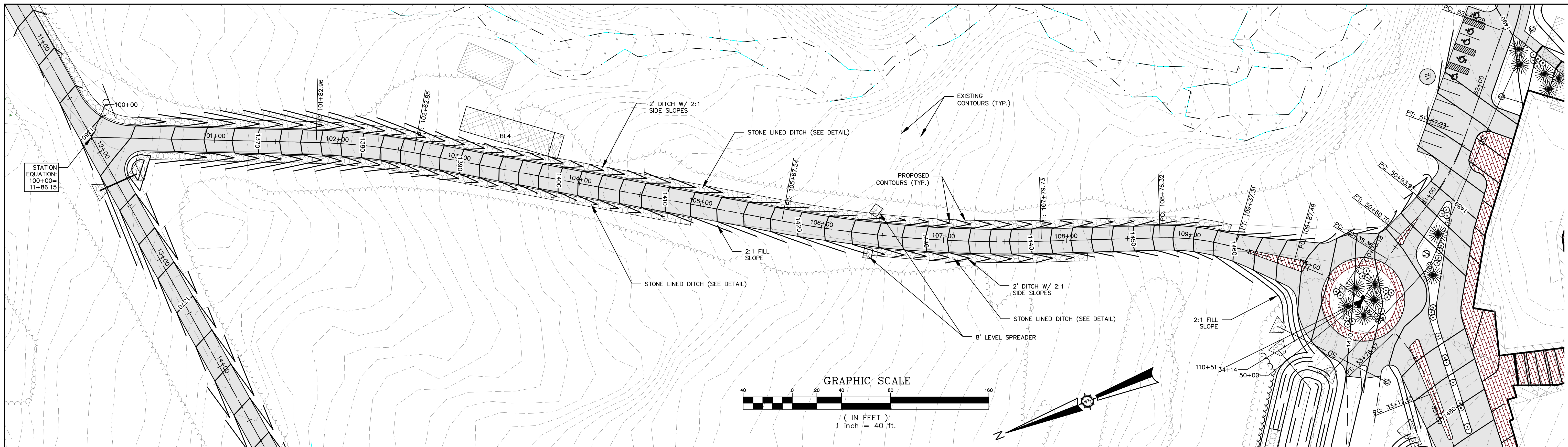
Rev.	Date	By	Description
1	JAC		REVISED PER DEP. STORMWATER COMMENTS

Designed By	FAB/JAO
Drawn By	FAB/JAO
Scale	AS SHOWN
Checked	
Approved	

BIG LAKE DEVELOPMENT, LLC
BIG MOOSE RESORT
Project Location
BIG MOOSE TOWNSHIP, MAINE
Drawing Description
PLAN AND PROFILE - MAIN LOOP DRIVE



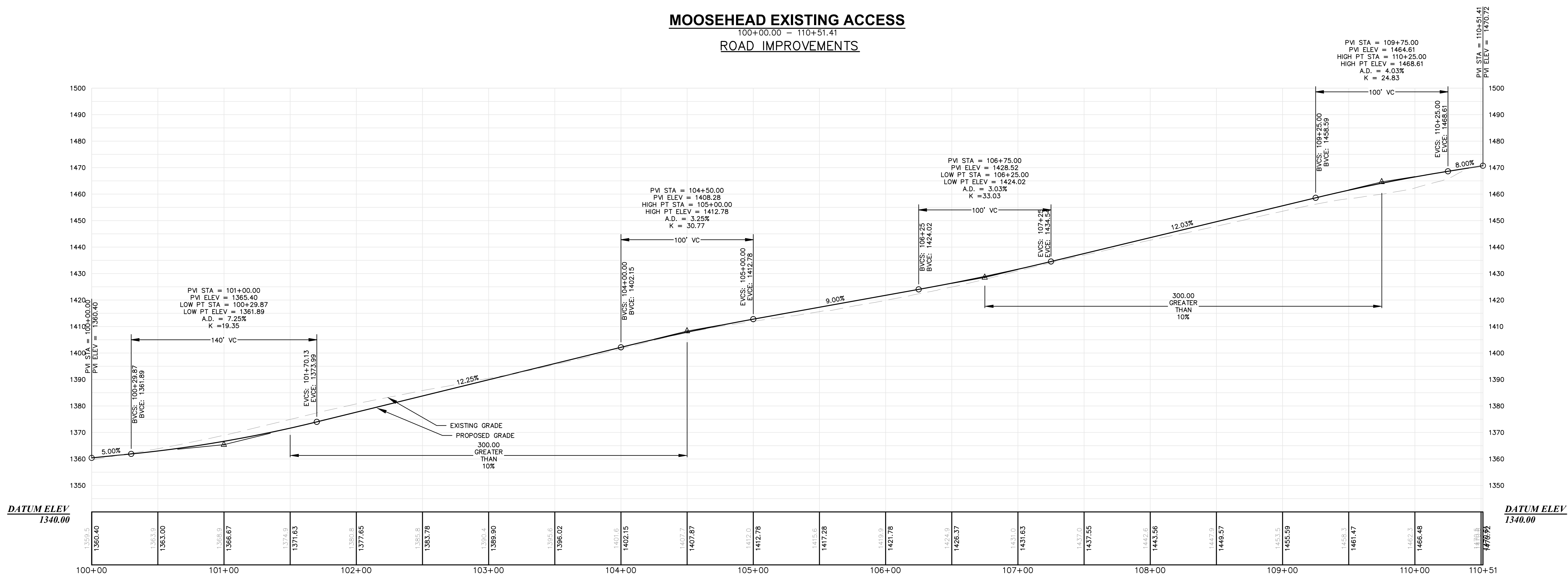
Project No. **85716E**
Engineer **Sewall**
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MOOSEHEAD EXISTING ACCESS
100+00.00 - 110+51.41
ROAD IMPROVEMENTS

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=20'

NOT FOR CONSTRUCTION



DATUM ELEV
1340.00

DATUM ELEV
1340.00

DATE	DESCRIPTION
1	JAC REVISION PER DEP. STORMWATER COMMENTS

DESIGNED BY	FAB/JAO
DRAWN BY	FAB/JAO
DATE	04/28/2021
SCALE	AS SHOWN
APPROVED	[Signature]

BIG LAKE DEVELOPMENT, LLC
BIG MOOSE RESORT
BIG MOOSE TOWNSHIP, MAINE
EXISTING ACCESS ROAD IMPROVEMENTS
STA. 100+00 TO STA. 110+51.41

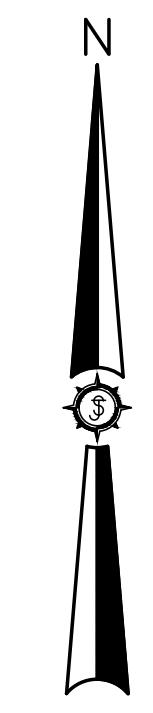
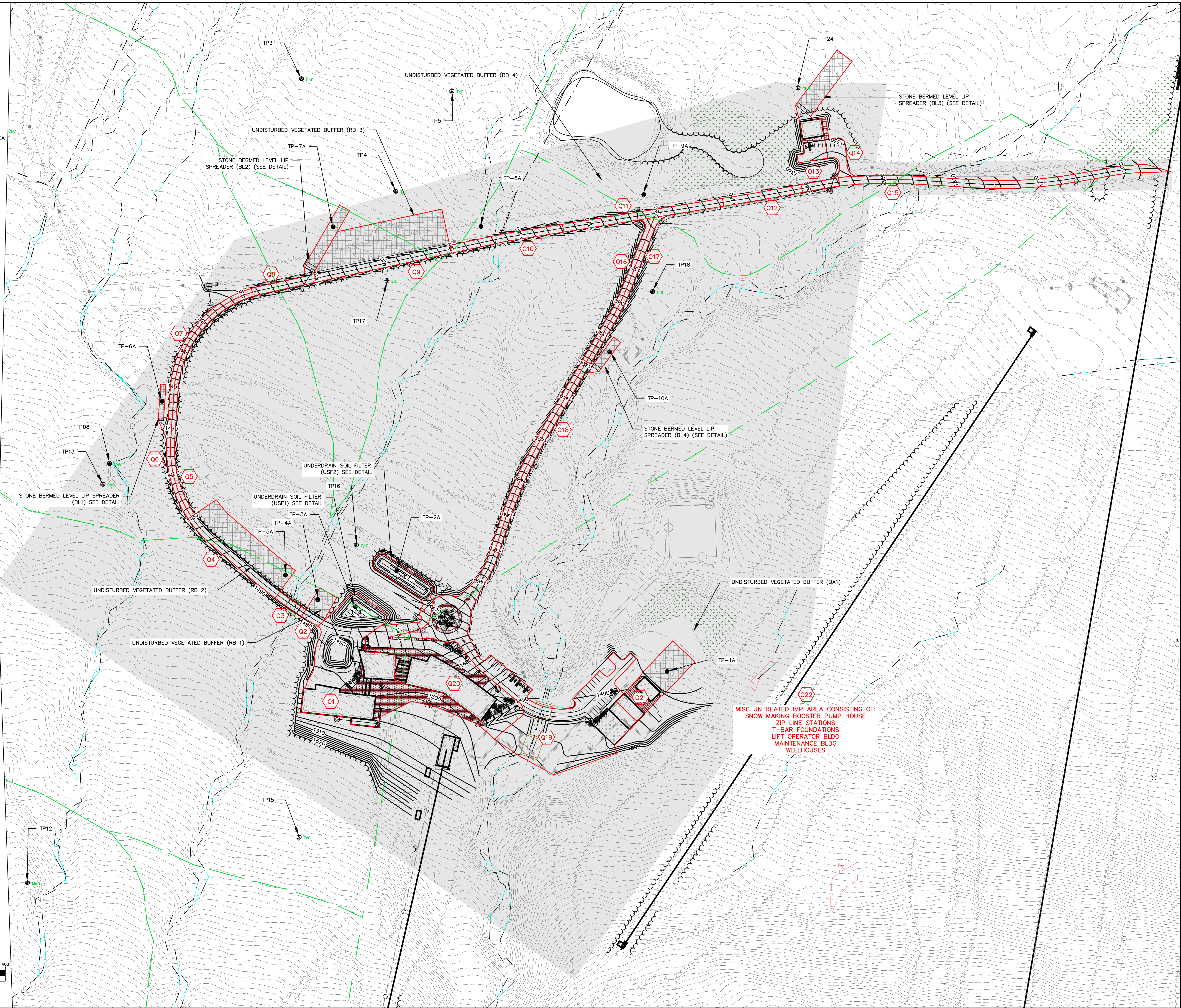
STATE OF MAINE
DIANE A. DUBE-O'NEAL
NO. 13020
LICENSED PROFESSIONAL ENGINEER
4/28/2021

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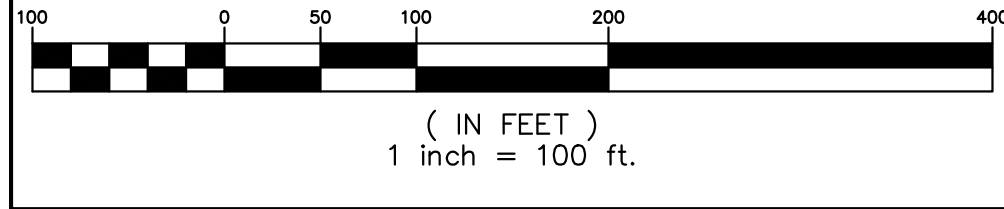
PERMIT
C-2.06

LINE LEGEND

- 1 SUBCATCHMENT LABEL
- SUBCATCHMENT LINE
- SOILS LINE
- SOILS LABEL
- PHOSPHOROUS DEVELOPMENT AREA



GRAPHIC SCALE



DATE	BY	DESCRIPTION
04/28/2021	JAC	REVISION PER DEP. STORMWATER COMMENTS

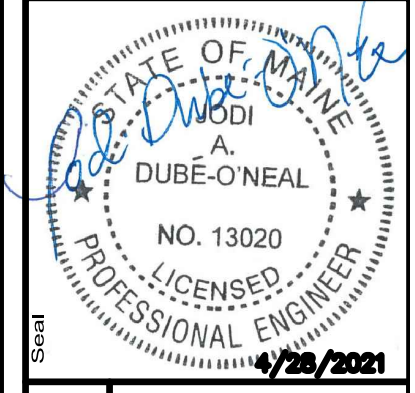
Designed By	FAB/JAO
Drawn By	FAB/JAO
Scale	AS SHOWN
Checked	

BIG LAKE DEVELOPMENT, LLC
BIG MOOSE RESORT

Project Location
BIG MOOSE TOWNSHIP, MAINE

Project No.
85716E

Professional Engineer
PHOSPHOROUS MANAGEMENT PLAN



85716E

ENGINEERING SURVEYING

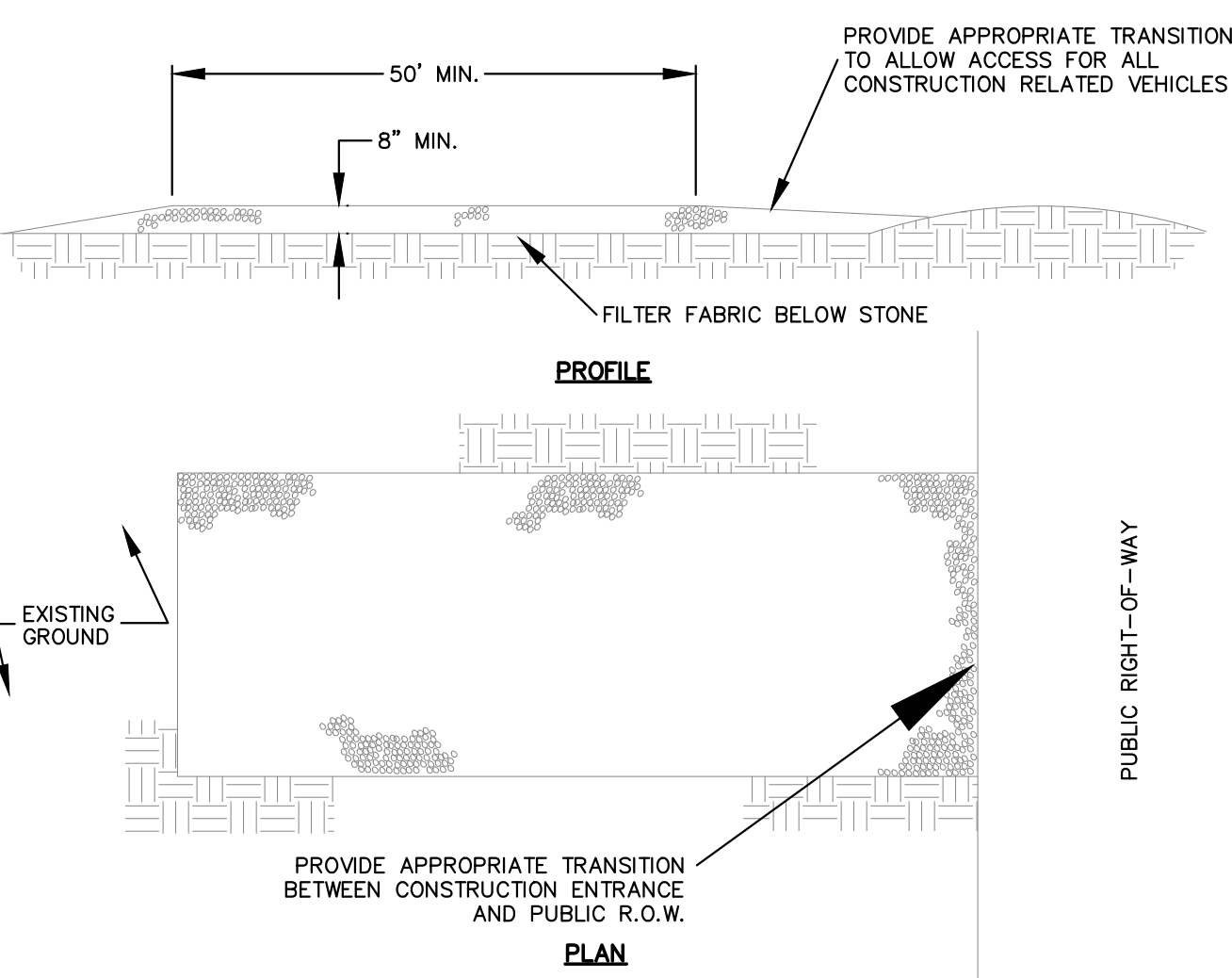
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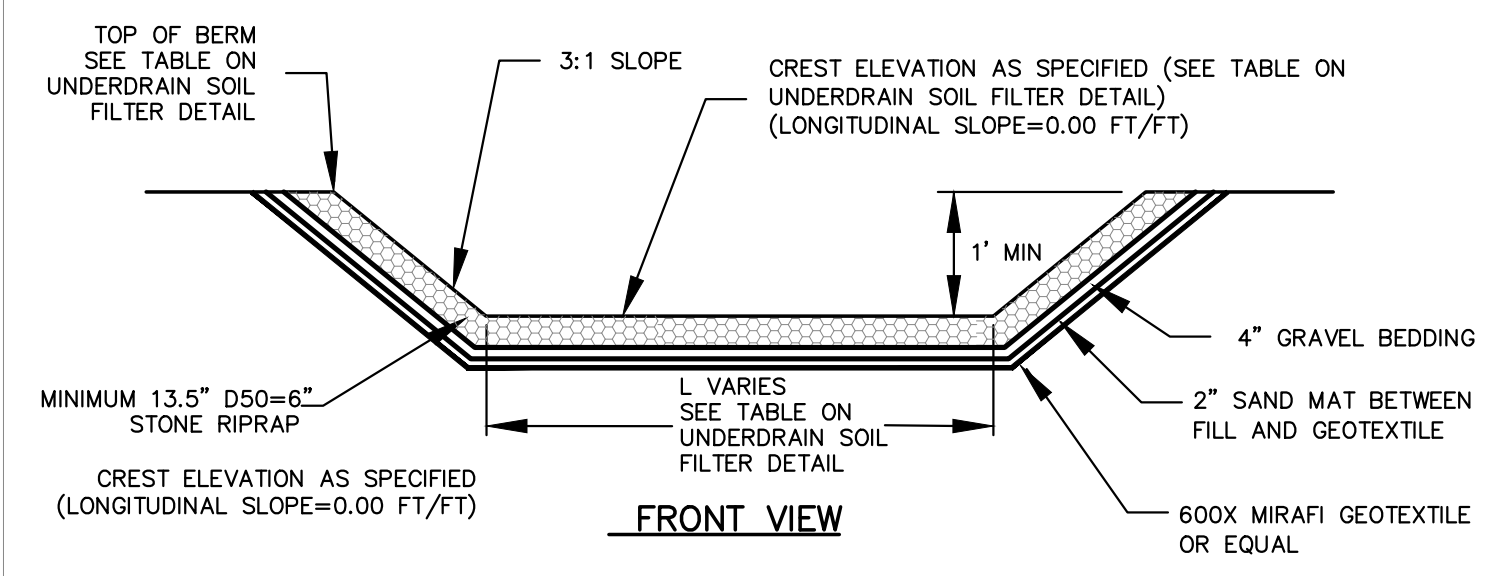
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PERMIT
C-5.01

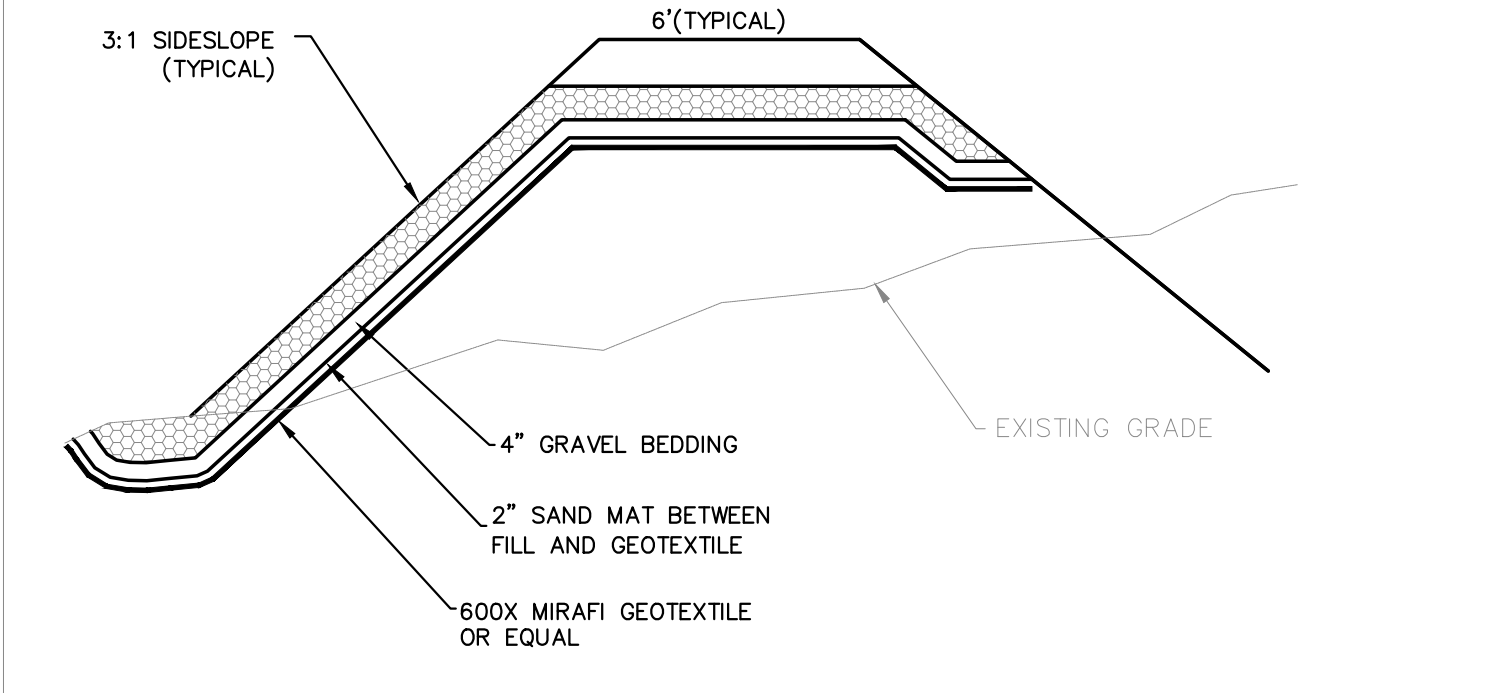
- NOTES:**
1. STONE SIZE - AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE CRUSHED STONE.
 2. LENGTH - AS SHOWN ON GRADING PLAN, MIN. 50 FEET.
 3. THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
 4. WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
 5. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ON PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT, ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.



STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

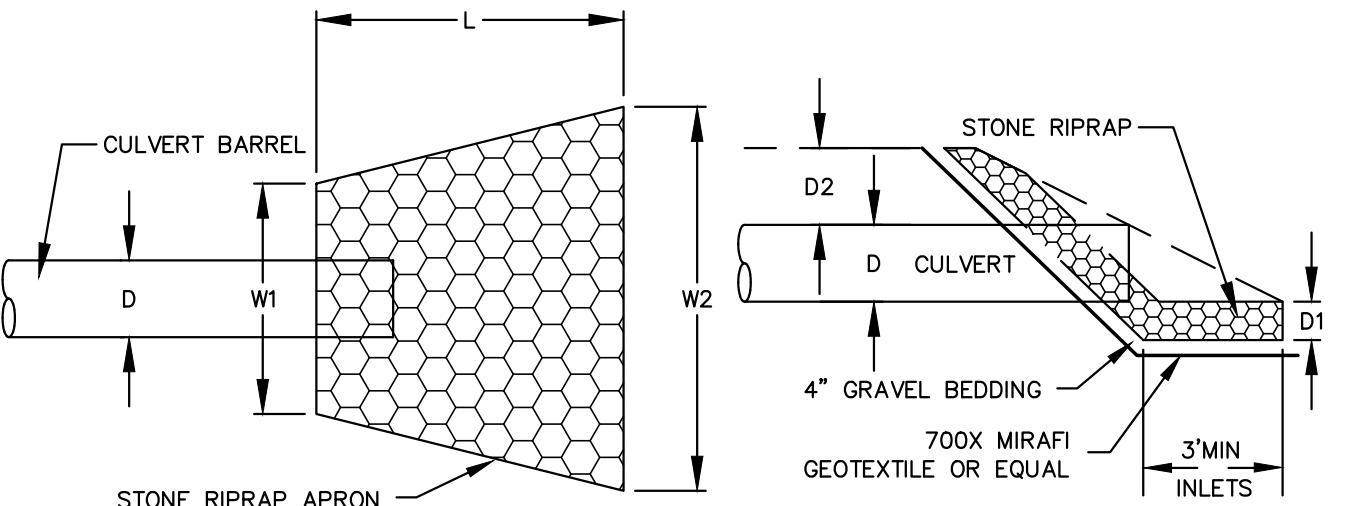


FRONT VIEW



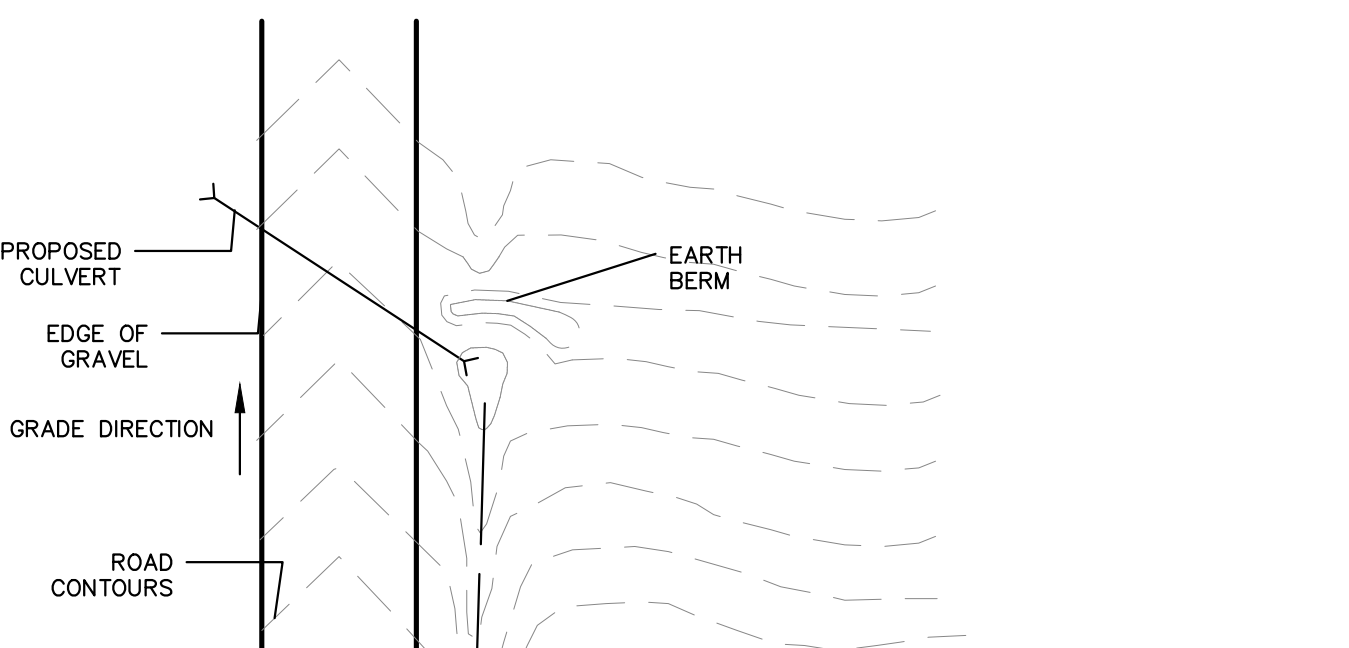
EMERGENCY SPILLWAY DETAIL
NOT TO SCALE

- NOTE:**
1. SEE TABLES ON SHEET D-1.03 AND TYPICAL UNDERDRAIN SOIL FILTER DETAIL FOR ELEVATIONS AND DIMENSION INFORMATION.



CULVERT OUTLET DETAIL
PLAN VIEW
NOT TO SCALE

D	W1	W2	L	d50
15"	4'	14'	10'	4"
18"	5'	15'	10'	6"
24"	6'	16'	12'	6"

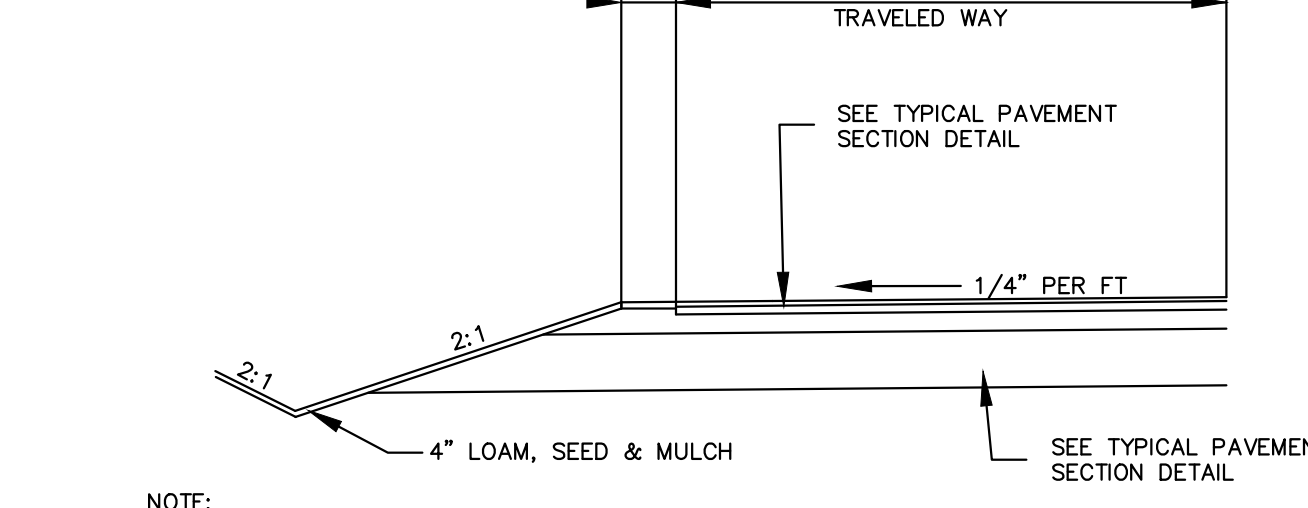


BERMED CULVERT INLET DETAIL
NOT TO SCALE

- NOTES:**
1. CONTRACTOR SHALL CONSTRUCT BERM AT EACH CULVERT INLET TO DIRECT DITCH FLOW INTO CULVERT.
 2. CONTRACTOR SHALL LOWER INVERT ELEVATION AS APPROPRIATE TO MAINTAIN COVER BETWEEN CROSS CULVERTS, ROADWAY, AND DITCH ON OPPOSITE SIDE OF ROAD.
 3. VERIFY COVER REQUIREMENTS WITH PIPE MANUFACTURER.

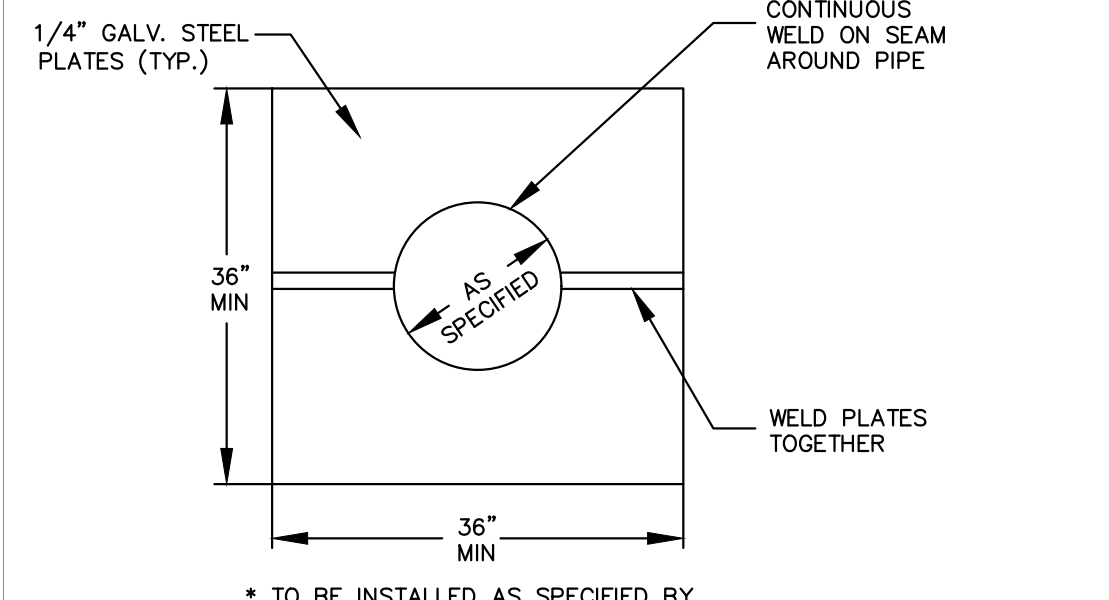
SUPERELEVATION SCHEDULE

ROAD NAME	BEGINNING STATION	END STATION
MOOSEHEAD LOOP DRIVE	0+00	22+00
MOOSEHEAD LOOP DRIVE	27+50	34+00
MOOSEHEAD LOOP DRIVE II	50+00	55+70

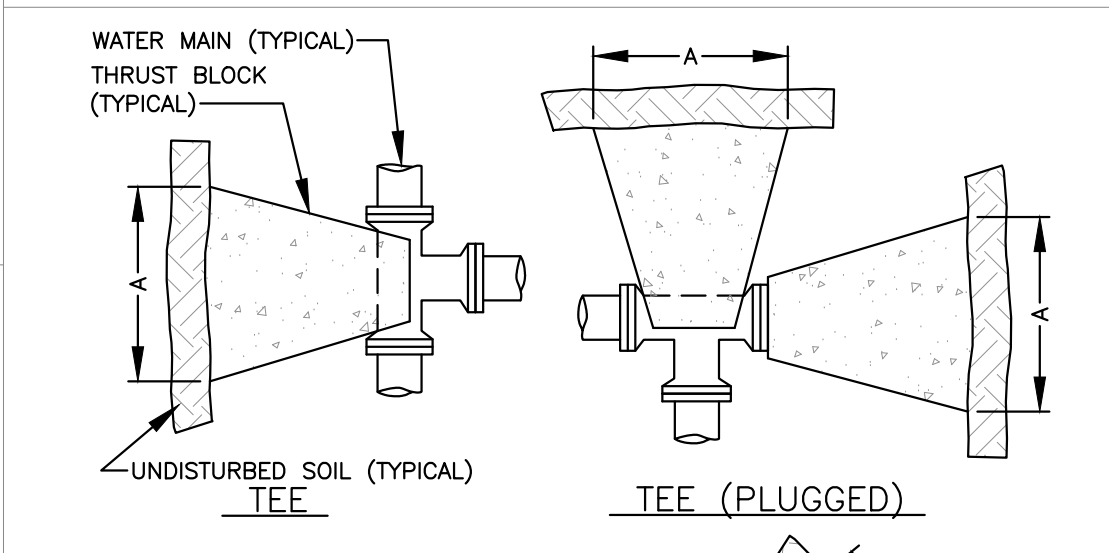


TYPICAL ROAD CROSS-SECTION
NOT TO SCALE

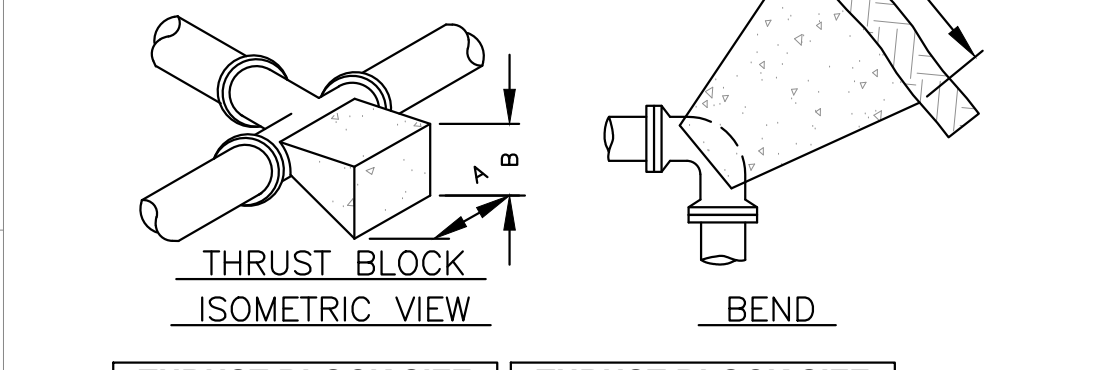
- NOTE:**
1. SEE SECTIONS FOR PAVEMENT AND AGGREGATE THICKNESS
 2. DITCH BACK-SLOPES MAY BE 4V:1H IN LEDE SECTIONS
 3. 9" WIDE TRAVELED WAY FOR MOOSEHEAD LOOP DRIVE & MOOSEHEAD LOOP DRIVE II.
 4. SEE SCHEDULE FOR SECTIONS OF ROAD TO BE SUPERELEVATED.



TYPICAL ANTI-SEEP COLLAR
NOT TO SCALE



THRUST BLOCK DETAIL
NOT TO SCALE

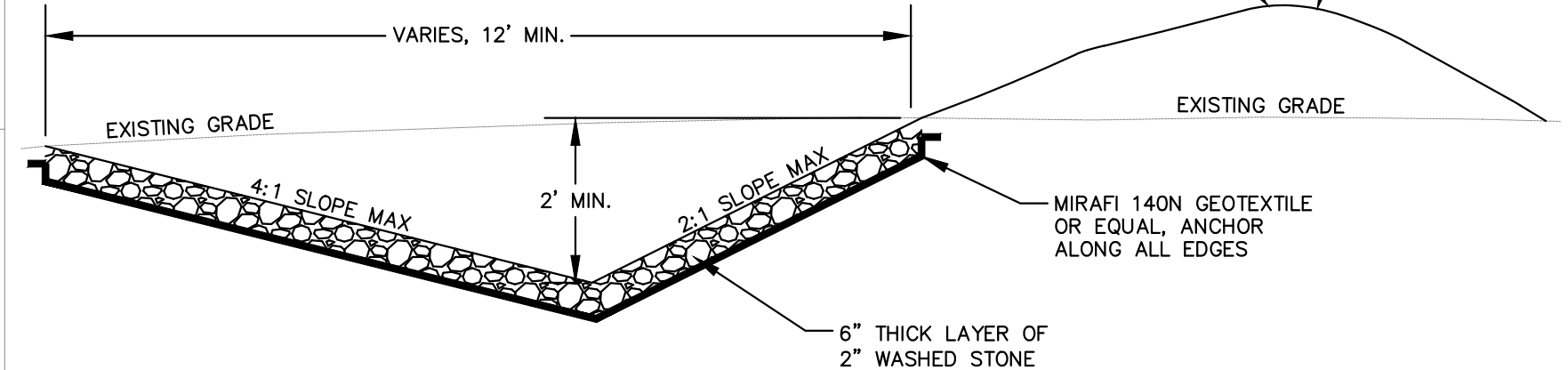


THRUST BLOCK SIZE CHART (FITTINGS UP TO 10")				THRUST BLOCK SIZE CHART (FITTINGS 12" TO 16")				
SOIL TYPE	A	B	BENDS	SOIL TYPE	A	B	BENDS	
SOFT CLAY	48"	24"	48"	24"	60"	36"	72"	36"
SAND	24"	24"	24"	24"	36"	30"	48"	30"
GRAVEL	24"	18"	24"	18"	30"	24"	40"	24"

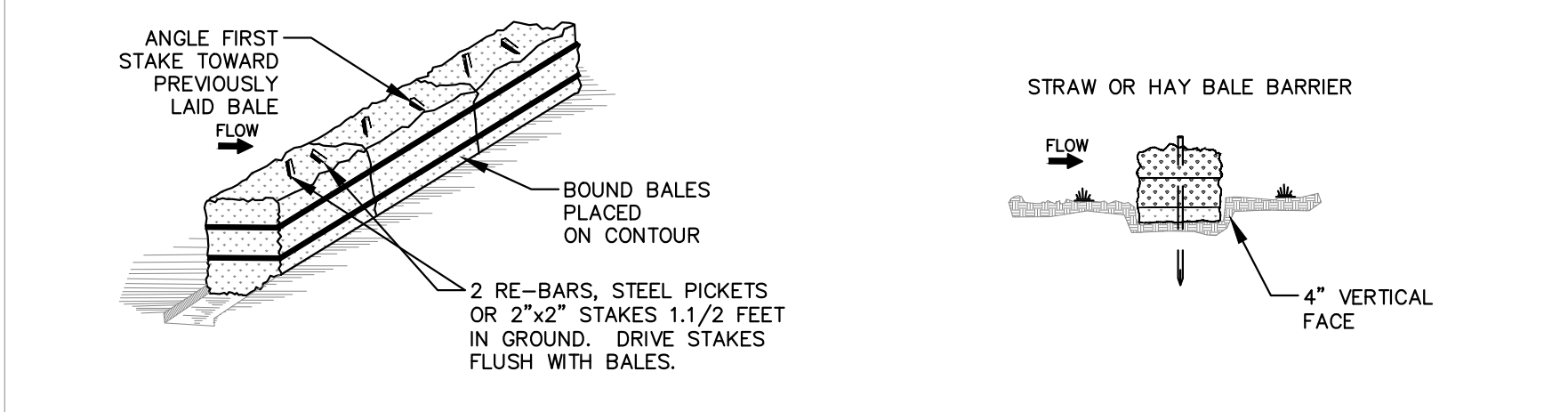
- NOTES:**
1. CONCRETE FOR ALL THRUST BLOCKS TO BE MINIMUM 3,000 PSI AFTER 28 DAYS, TYPE I CEMENT, 3/4" STONE.
 2. WHERE POSSIBLE, CONSTRUCT THRUST BLOCKS AGAINST UNDISTURBED SOIL. WHERE NOT POSSIBLE, PLACE 90% STANDARD PROCTOR DENSITY, COMPACTED FILL BETWEEN THE THRUST BLOCK AND THE UNDISTURBED SOIL.
 3. WRAP FITTINGS WITH POLYETHYLENE PRIOR TO CONSTRUCTING THRUST BLOCKS. NO JOINTS SHALL BE COVERED WITH CONCRETE.
 4. THRUST BLOCK DIMENSIONS ARE BASED ON A MAXIMUM WATER MAIN PRESSURE OF 150 PSI.

LEVEL SPREADER DETAIL

1. ALL LEVEL SPREADERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH "BEST MANAGEMENT PRACTICES MANUAL" BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
2. ALL LEVEL SPREADERS SHALL BE CONSTRUCTED IN A CUT SECTION, I.E. THERE SHALL BE NO EARTH FILL ALONG THE DOWNSTREAM EDGE.
3. ALL LEVEL SPREADERS SHALL BE ALIGNED PARALLEL TO THE EXISTING CONTOURS.
4. THE ENTRANCE TO THE LEVEL SPREADER SHALL HAVE A MAXIMUM GRADE OF 1.0%.
5. THE LEVEL SPREADER SHALL HAVE A LONGITUDINAL GRADE OF 0.0%.



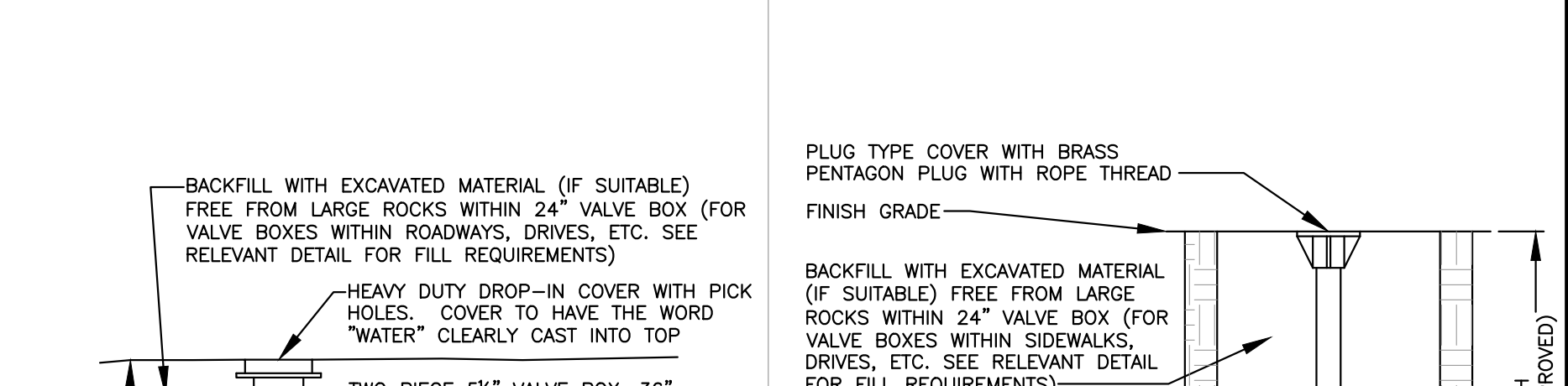
TYPICAL LEVEL SPREADER
NOT TO SCALE



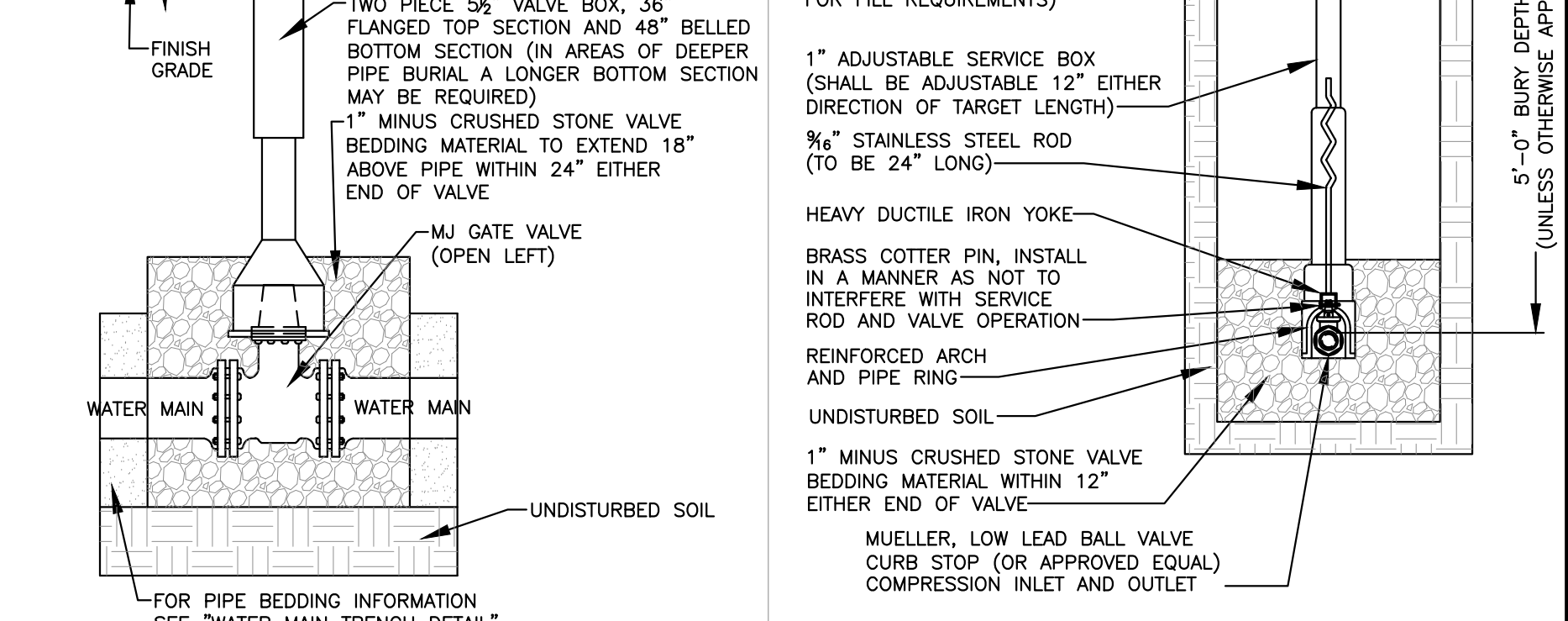
ANCHORING DETAIL

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF FOUR INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECT FREQUENTLY AND REPAIR OR REPLACE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

HAYBALE DETAIL
NOT TO SCALE

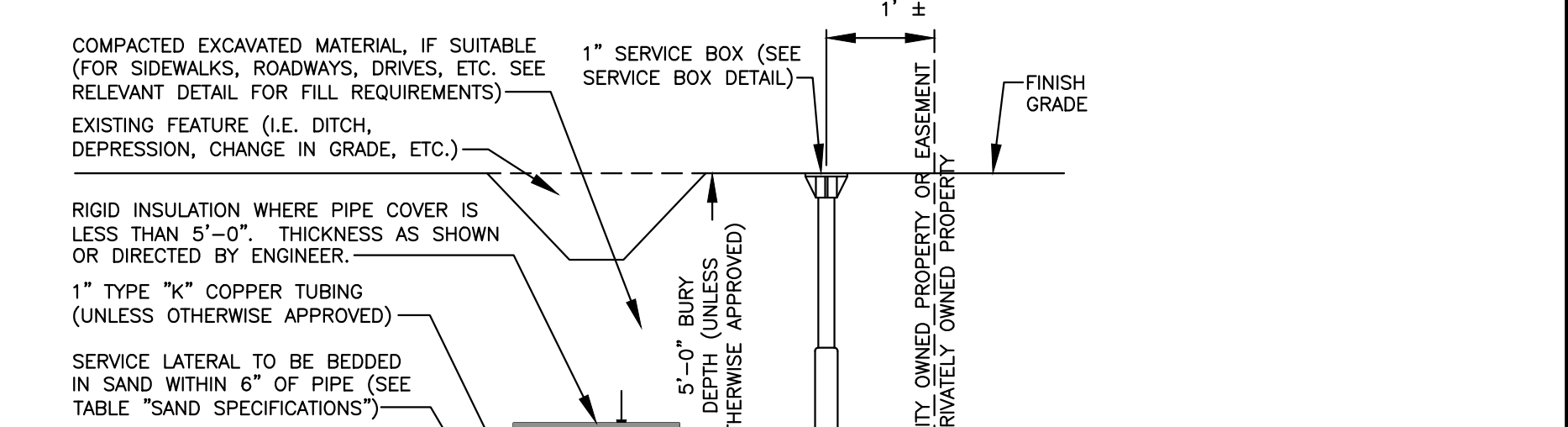


WATER MAIN VALVE AND VALVE BOX DETAIL
NOT TO SCALE

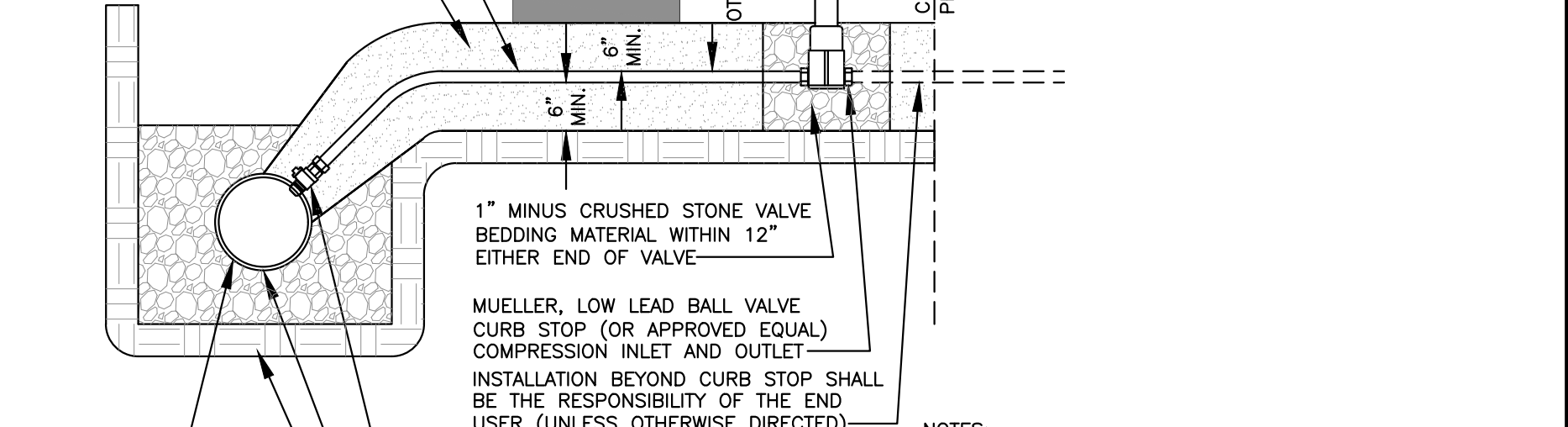


WATER MAIN SERVICE CURB STOP DETAIL
NOT TO SCALE

- NOTES:**
1. SERVICE BOX SHALL ACCOMMODATE UP TO 1" SERVICES.
 2. SERVICE BOX TO BE INSTALLED IN SUCH A MANNER AS TO ENSURE IT WILL BE FREE FROM OBSTRUCTIONS AND DEBRIS AND THAT NO MATERIAL WILL INTERFERE WITH VALVE OPERATION.



WATER SERVICE DETAIL
NOT TO SCALE



HYDRANT LATERAL DETAIL
NOT TO SCALE

NOT FOR CONSTRUCTION

Drawn By	Checked By	Date
FABIAO	FABIAO	01/28/2021

Drawn By	Checked By	Date
FABIAO	FABIAO	01/28/2021

BIG LAKE DEVELOPMENT, LLC
BIG MOOSE RESORT

Project Location: **BIG MOOSE TOWNSHIP, MAINE**

Scale: **AS SHOWN**

Approved: **FABIAO**

STATE OF MAINE

DUBE-O'NEAL

NO. 13020

PROFESSIONAL ENGINEER

4/28/2021

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GENERAL NOTES & CONSTRUCTION SPECIFICATIONS

- FINAL STABILIZATION WILL BE DONE WITHIN 7 DAYS OF FINAL GRADING OR WITHIN 30 DAYS OF INITIAL SOIL DISTURBANCE.
- EVERY WEEK AND AFTER PRECIPITATION PRODUCING THE EQUIVALENT OF ONE-HALF INCH OF RAINFALL, THE CONTRACTOR SHALL INSPECT AND MAINTAIN ALL EROSION CONTROL MEASURES. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, REMOVAL OF SEDIMENT FROM SILT FENCES IF SOIL ACCUMULATES TO A DEPTH OF ONE-HALF THE FABRIC HEIGHT AND REMOVAL OF EXCESS ACCUMULATED SEDIMENT FROM DETENTION BASINS (IF APPLICABLE).
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH "MAINE EROSION & SEDIMENT CONTROL: BEST MANAGEMENT PRACTICES," BY MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MEASURES, INCLUDING MATERIALS, CONSTRUCTION, MAINTENANCE AND REMOVAL.
- SEE DETAILS FOR SLOPE STABILIZATION OPTIONS.

CONSTRUCTION SEQUENCE

- INSTALL EROSION CONTROL MEASURES DOWN-GRADE OF ALL CONSTRUCTION ACTIVITY AREAS.
- PERFORM COMMON EXCAVATION AND SUBGRADE PREPARATION FOR CONSTRUCTION.
- CONSTRUCT ROAD, UTILITIES, LANDSCAPED AREAS AND INSTALL STORMWATER TREATMENT STRUCTURES.
- SPREAD LOAM AND SEED ON OTHER AREAS TO BE REVEGETATED.
- CLEAN UP SITE.
- REMOVE TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES UPON FINAL STABILIZATION OF ALL GRADES AND AREAS OF PREVIOUSLY OPEN SOIL. EROSION CONTROL MIX BERMS MAY BE LEFT IN PLACE.

CLEARING OF VEGETATION AND STOCKPIILING OF TOPSOIL

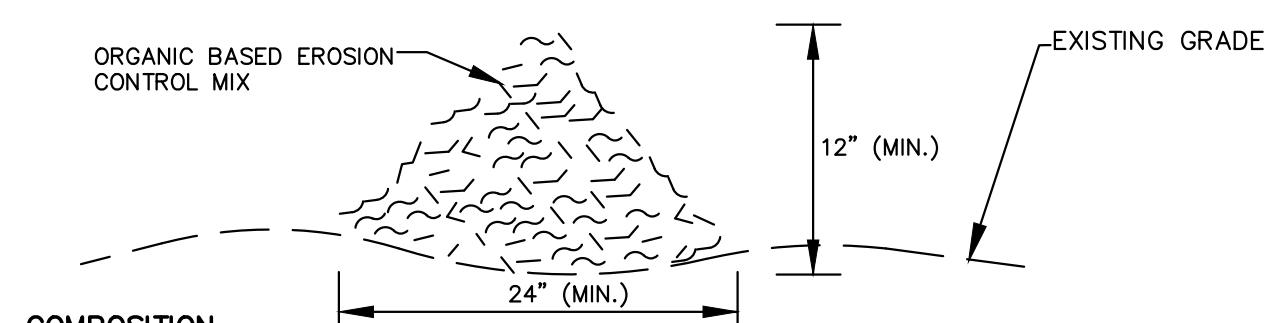
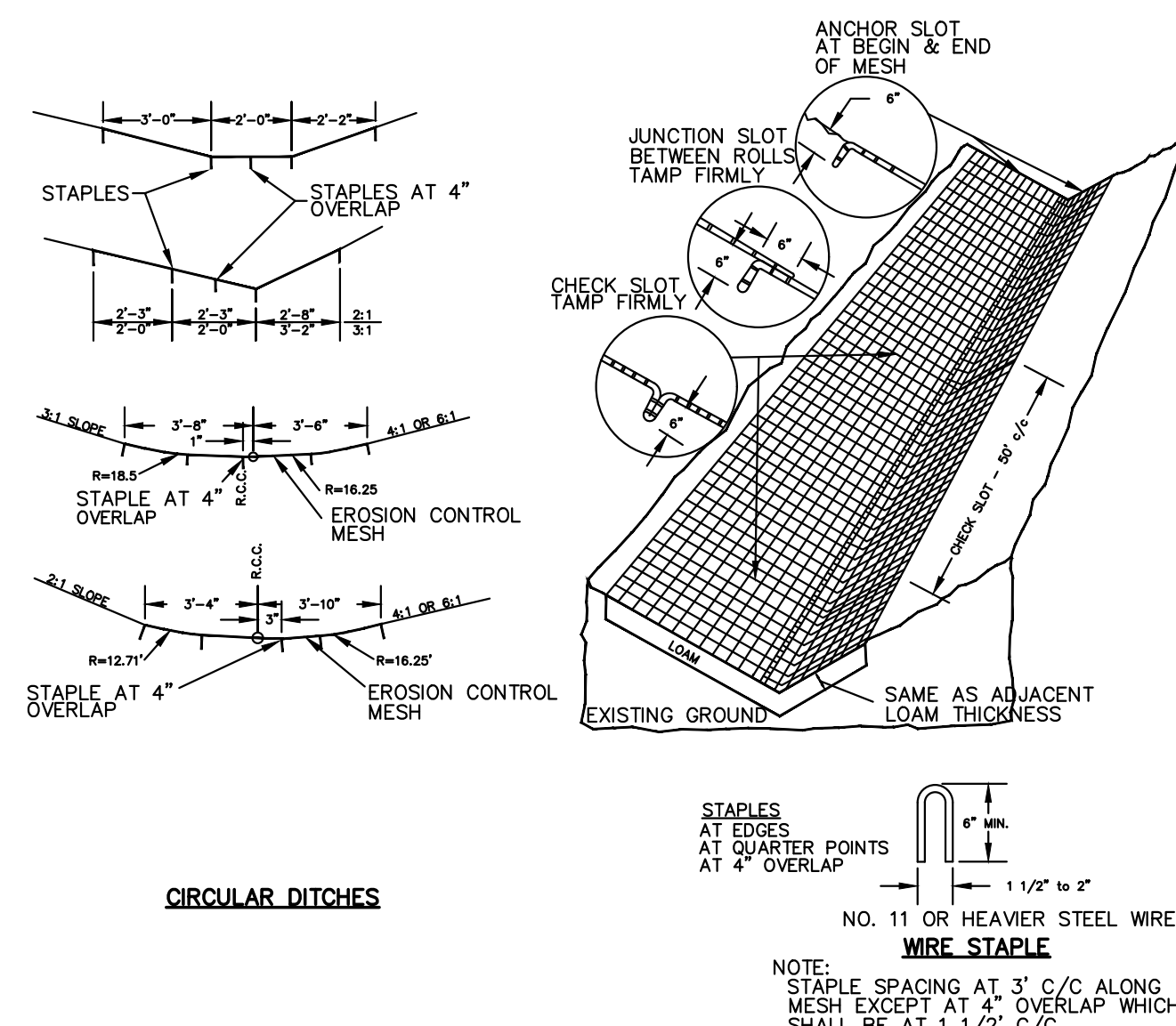
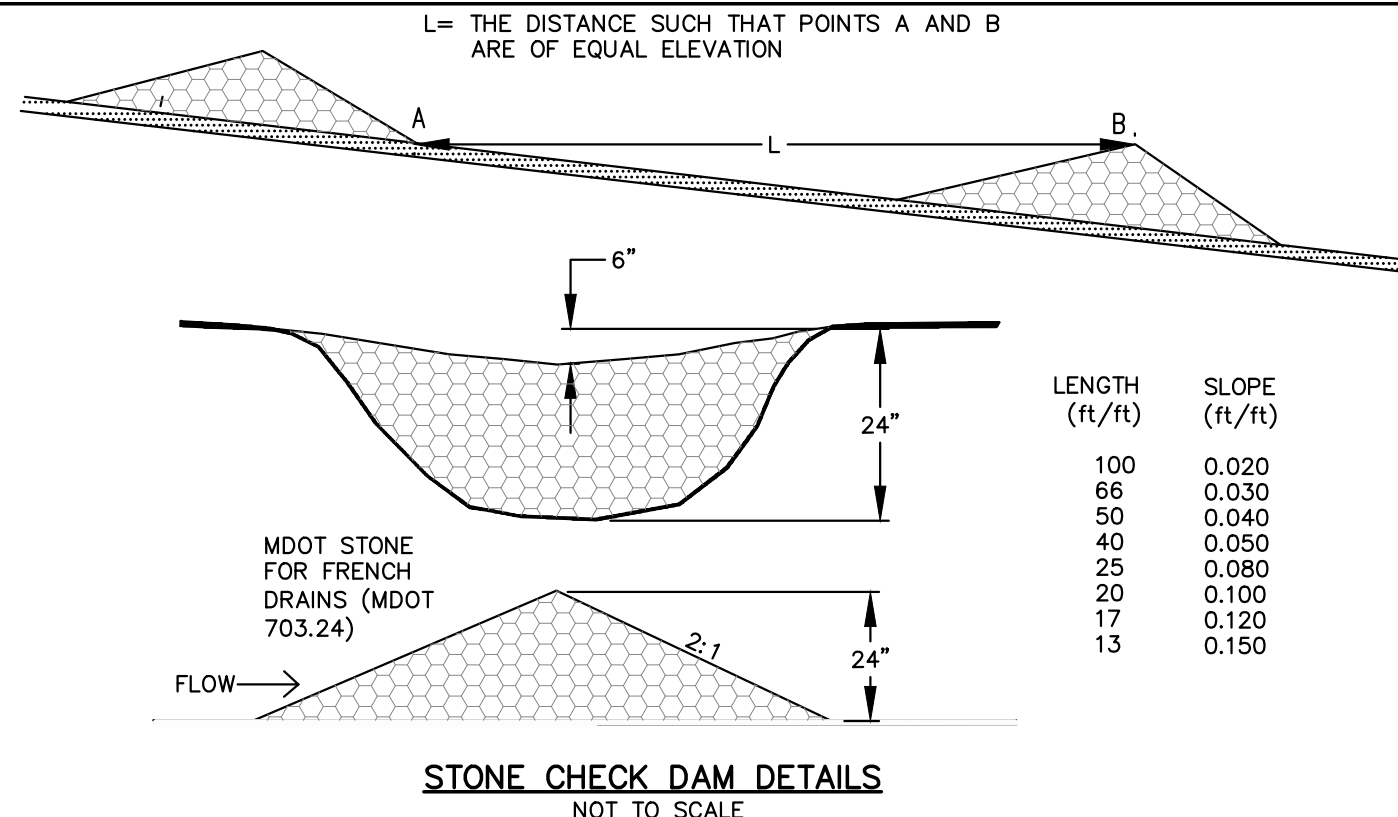
- INSTALL EROSION CONTROL MEASURES PRIOR TO SOIL DISTURBANCE.
- STUMPS TO BE REMOVED FROM LOCATIONS WHERE STRUCTURES ARE TO BE INSTALLED/CONSTRUCTED. STUMPS TO BE GROUND ON-SITE BY THE ROAD CONTRACTOR & USED AS AN EPSIC MEASURE.
- LOW GROWING VEGETATION TO REMAIN, WHERE FEASIBLE TO PROVIDE SOIL STABILITY.
- EXISTING TOPSOIL IN AREAS OF DEVELOPMENT TO BE STOCKPILED ON-SITE FOR USE IN FINAL STABILIZATION.
- MULTIPLE LAYERS OF PROTECTION INCLUDING SILT FENCE AND EROSION CONTROL MIX BERM SHALL BE INSTALLED AROUND TOPSOIL STOCKPILE TO PROTECT DOWN STREAM RESOURCES. CONTRACTOR SHALL INSTALL ALL CONTROL MEASURES AS DIRECTED BY ENGINEER AT STOCKPILE LOCATIONS.

CLEAN-UP & FINAL STABILIZATION

- UPON COMPLETION OF CONSTRUCTION ACTIVITIES, ALL WORK AREAS TO BE CLEARED OF CONSTRUCTION DEBRIS & OTHER MATERIALS.
- SPECIFIC CLEAN-UP REQUIREMENTS TO INVOLVE: REMOVAL OF ALL TEMPORARY WORK TRAILERS; REMOVAL OF MATERIAL & EQUIPMENT; DISPOSAL OF ALL RUBBISH RESULTING FROM CLEARING, CONSTRUCTION, & INSTALLATION; ROUGH GRADING & STABILIZATION OF EMBANKMENTS MADE FOR CONSTRUCTION PURPOSES; FILLING OF ANY EXCAVATIONS; & REPAIRING RUTS IN ACCESS ROADS.
- FINAL STABILIZATION OF ALL AREAS OF DISTURBED SOIL, WHERE FINAL GRADE HAS BEEN ACHIEVED, INVOLVE RESPREADING OF STOCKPILED TOPSOIL MATERIAL & SEEDING, MULCHING WITH WOODWASTE MULCH, OR APPLICATION OF OTHER APPROVED STABILIZATION METHODS. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH THE PROJECTS PERMITS.

WINTER CONSTRUCTION NOTES

- THE WINTER CONSTRUCTION PERIOD SHALL BE FROM NOVEMBER 1 THROUGH APRIL 15.
- WHERE FEASIBLE, A MINIMUM 25-FT BUFFER SHALL BE MAINTAINED BETWEEN SILT FENCE OR OTHER PERIMETER CONTROLS TO ALLOW FOR SNOW CLEARING AND MAINTENANCE.
- WIRE REINFORCED SILT FENCE SHALL BE UTILIZED IN ALL AREAS (SEE DETAILS).
- DRAINAGE STRUCTURES SHALL BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS.
- ACCEPTABLE OVER-WINTER STABILIZATION SHALL CONSIST OF VEGETATION (MIN. 75% MATURE), MULCHING, EROSION CONTROL MIX, EROSION CONTROL MATS, RIPRAP OR GRAVEL ROAD BASE.
- EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT REQUIRE EARTH DISTURBANCE (e.g., CONSTRUCTION FENCE AND SILT FENCE) SHALL BE INSTALLED PRIOR TO THE GROUND FREEZING. DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS.
- FROM NOVEMBER 1 TO APRIL 15, MULCH SHALL BE INSTALLED AT DOUBLE THE NORMAL RATE. NETTING OR OTHER MEANS APPROVED BY THE ENGINEER SHALL BE USED TO MINIMIZE WIND EROSION OF MULCHING.
- PRIOR TO STABILIZATION, ICE AND SNOW SHALL BE REMOVED TO LESS THAN 1-IN.
- IF VEHICLE TRAFFIC IS ANTICIPATED AROUND STRUCTURES UNDER CONSTRUCTION, THE AREA SHALL BE STABILIZED WITH STONE.
- EXCAVATED FROZEN SOILS SHALL BE STOCKPILED IN LEVEL AREAS AND SHALL NOT BE USED UNTIL THAWED. STOCKPILES SHALL BE ENCRICLED WITH EROSION CONTROL MIX BERMS AS NECESSARY.
- EXCAVATION OF SOILS IN SHALLOW GROUNDWATER AREAS SHALL BE MINIMIZED IF AT ALL POSSIBLE DURING WINTER, AND LIMITED TO ONLY THOSE AREAS THAT CAN BE STABILIZED DURING THE SAME DAY.
- TO ENSURE COVER OF DISTURBED SOIL IN ADVANCE OF A MELT EVENT, AREAS OF DISTURBED SOIL MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
 - IF NO PRECIPITATION IS FORECAST WITHIN 24 HOURS AND WORK WILL RESUME IN THE SAME DISTURBED AREA WITHIN 24 HOURS, DAILY STABILIZATION IS NOT NECESSARY.
 - DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS BUILDING FOUNDATIONS AND OPEN UTILITY TRENCHES.
- THE ENGINEER MAY MAKE NECESSARY ADJUSTMENTS TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN AND ASSOCIATED EROSION PREVENTION AND SEDIMENT CONTROL MEASURES (e.g., CONSTRUCTION FENCE AND SILT FENCE) TO ACCOMMODATE ANTICIPATED SNOW STORAGE AREAS.
- AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCE, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL COVER. DURING WINTER CONSTRUCTION A DOUBLE ROW OF SEDIMENT BARRIERS SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. NATURAL RESOURCE CROSSINGS SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.
- STOCKPILES OF SOIL SHALL BE MULCHED FOR OVER-WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A 4-INCH LAYER OF EROSION CONTROL MIX.
- MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL, IN THE SPRING, INSPECT AND REPAIR ANY DAMAGES OR BARE SPOTS.
- WINTER CONSTRUCTION SHALL BE IN ACCORDANCE WITH REGULATORY PERMIT. PERMIT REQUIREMENTS SHALL SUPERCEDE ANY DISCREPANCY IN ABOVE LISTED NOTES.

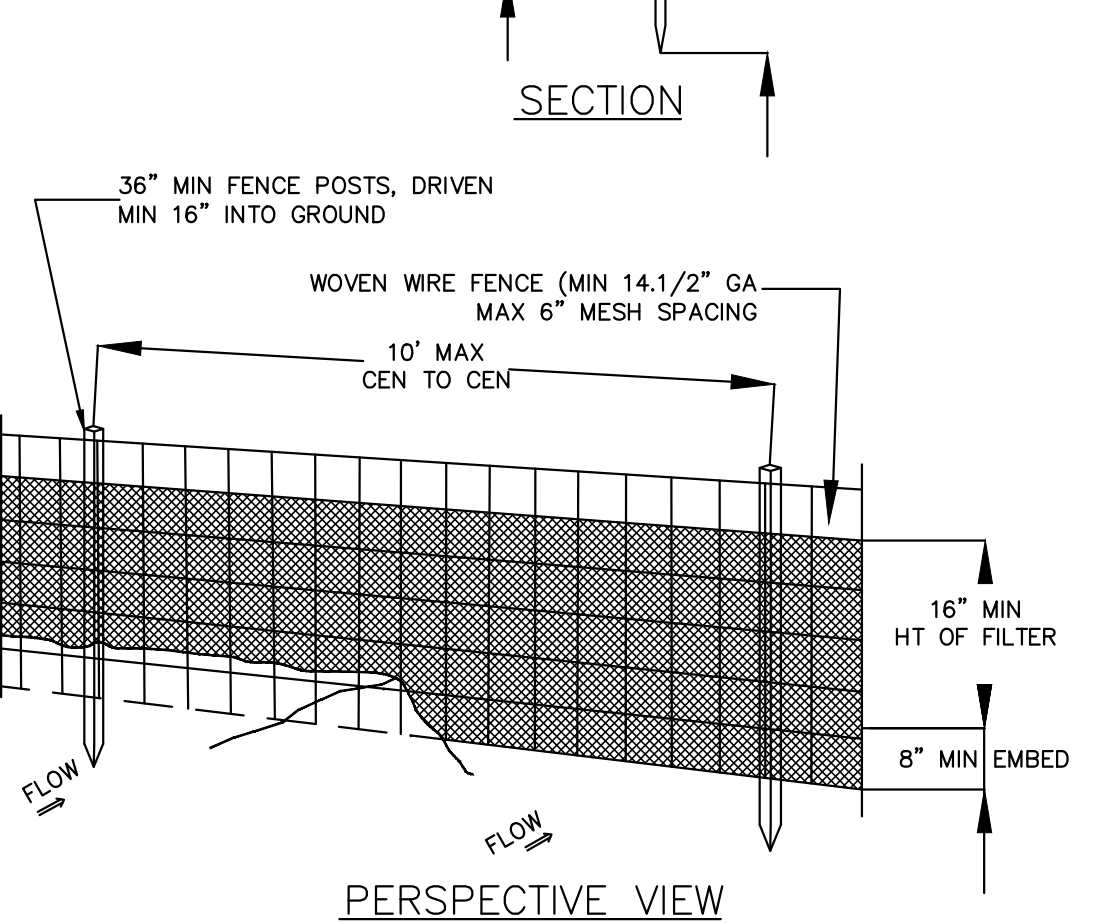
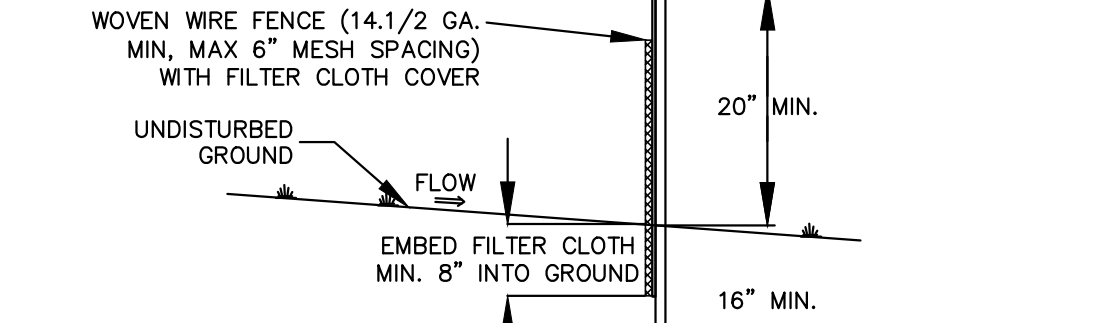
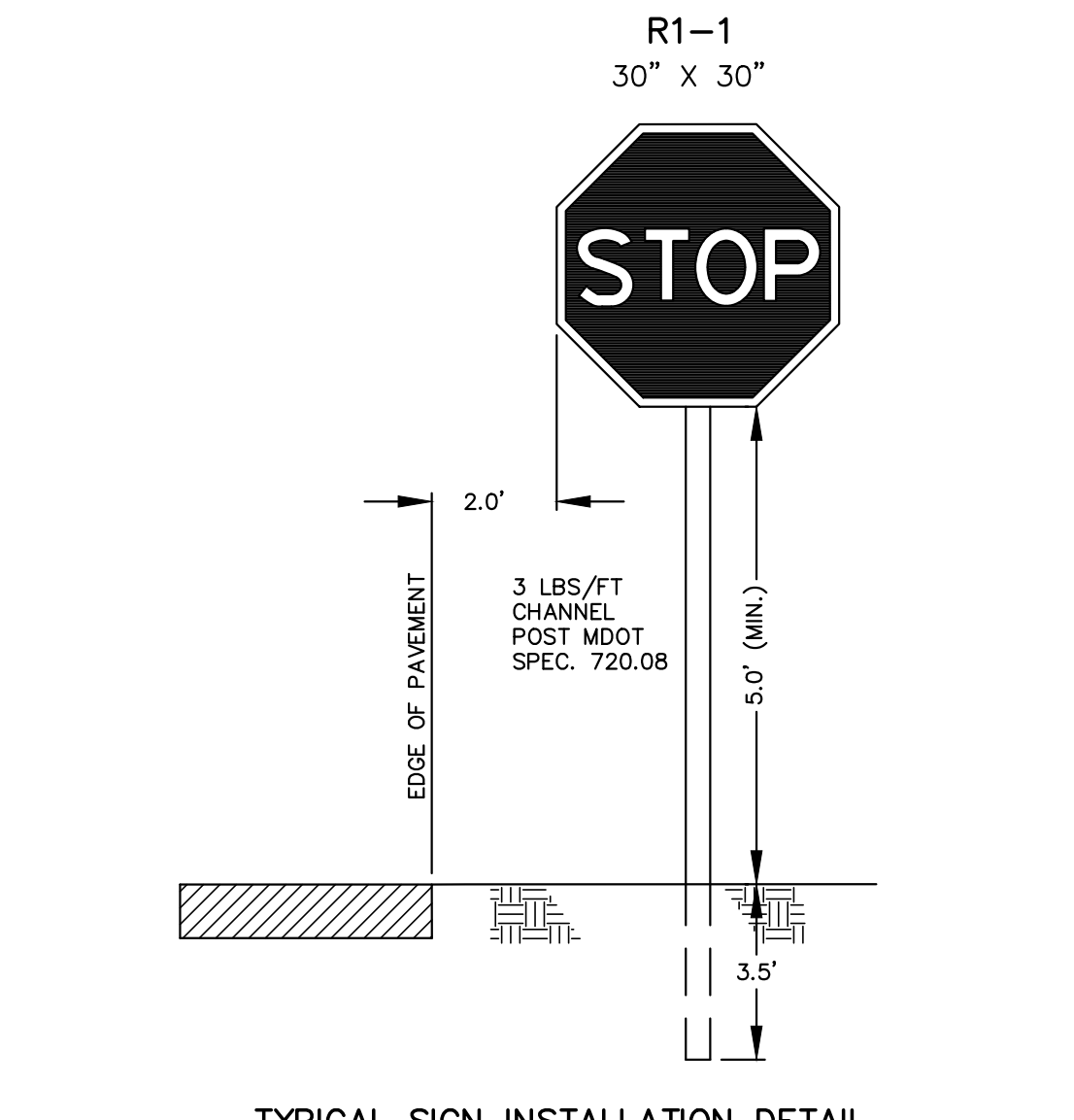
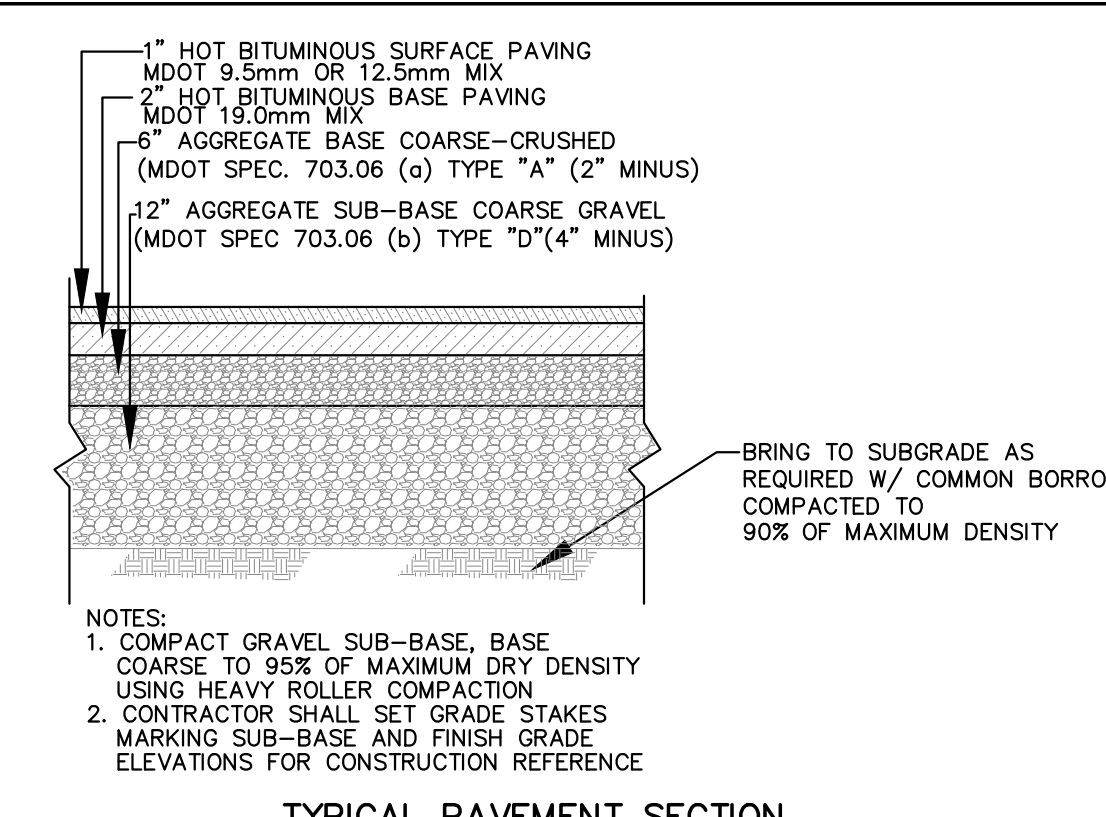


COMPOSITION
EROSION CONTROL MIX SHALL BE MANUFACTURED ON OR OFF THE PROJECT SITE SUCH THAT ITS COMPOSITION IS IN ACCORDANCE WITH THE MDEP MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL, LAST REVISED 3/2003 OR LATER. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

INSTALLATION:

- THE BARRIER MUST BE PLACED ACROSS THE SLOPE, ALONG THE CONTOUR.
- EXISTING GROUND SHALL BE PREPARED SUCH THAT THE BARRIER MAY LIE NEARLY FLAT ALONG THE GROUND TO AVOID THE CREATION OF VOIDS AND BRIDGES IN ORDER TO MINIMIZE THE POTENTIAL OF WASH OUTS UNDER THE BARRIER.
- THE BARRIER SHALL BE A MINIMUM OF 1 FOOT HIGH (AS MEASURED ON THE UP HILL SIDE) AND 2 FEET WIDE FOR SLOPES LESS THAN 5% IN GRADE AND SHALL BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF.
- EROSION CONTROL MIX MAY BE INSTALLED WHERE SILT FENCE IS ILLUSTRATED ON THE DESIGN PLANS IN AREAS EXCEPT IN, BUT NOT LIMITED TO, THE FOLLOWING AREAS: WETLAND AREAS, AT POINTS OF CONCENTRATED FLOW, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS AND AT THE BOTTOM OF STEEP SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM.

- NOTES:**
- TEMPORARY SEEDING NOTES**
- ANY DISTURBED AREAS TO BE LEFT IN ROUGH GRADED FORM FOR MORE THAN 30 DAYS BUT LESS THAN ONE GROWING SEASON SHALL BE LIMED, FERTILIZED, TEMPORARILY SEEDED AND MULCHED OR OTHERWISE STABILIZED.
 - APPLICATION RATES AND MATERIALS USED SHALL BE THE SAME AS FOR PERMANENT SEEDING EXCEPT SEED MIXTURE SHALL BE ANNUAL RYEGRASS.
- PERMANENT SEEDING NOTES**
- DURING PERIODS FROM APRIL 15 TO OCTOBER 1, AREAS DISTURBED SHALL BE PERMANENTLY SEEDED WITH CONSERVATION SEED MIX (A MIXTURE OF CREEPING RED FESCUE, REDTOP, TALL FESCUE, CLOVER AND ANNUAL RYE), AT A RATE OF 1.0 LB/1,000 SF.
- DORMANT SEEDING NOTES**
- DURING PERIODS FROM OCTOBER 1 TO NOVEMBER 15, AREAS DISTURBED SHALL BE DORMANT SEEDED WITH WINTER RYE, 1.5 LB/1,000 SF. DURING PERIODS BETWEEN NOVEMBER 15 AND APRIL 15, DISTURBED AREAS SHALL BE MULCHED AND IF NECESSARY, STABILIZED WITH EROSION CONTROL MESH.
- SPECIFIC MAINTENANCE INSTRUCTION:**
- STRAW/HAY BALE BARRIERS, SILT FENCE, FILTER BARRIERS— MAKE ANY REQUIRED REPAIRS IMMEDIATELY. REPLACE W/ TEMPORARY CHECK DAM IF THERE IS UNDERCUTTING AT CENTER OR EDGES, OR IF LARGE VOLUMES OF WATER ARE IMPOUNDED. REPLACE DECOMPOSED OR INEFFECTIVE FABRIC IMMEDIATELY. REMOVE SEDIMENT DEPOSITS AFTER EACH STORM. DEPOSITS REMAINING IN PLACE AFTER SILT FENCE OR FILTER FABRIC IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM W/ EXISTING GRADE, PREPARED AND STABILIZED.
 - CULVERTS — CULVERTS SHOULD BE CHECKED MONTHLY FOR ACCUMULATION OF DEBRIS. IF NEEDED THEY SHOULD BE DREDGED.
 - A STORMWATER MAINTENANCE LOG SHOULD BE MAINTAINED TO DOCUMENT COMPLIANCE WITH THE SUGGESTED SCHEDULE.



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

NOTE: CONTRACTOR HAS THE OPTION NOT TO USE WOVEN WIRE MESH IF STAKE SPACING IS 6' O.C. OR LESS.

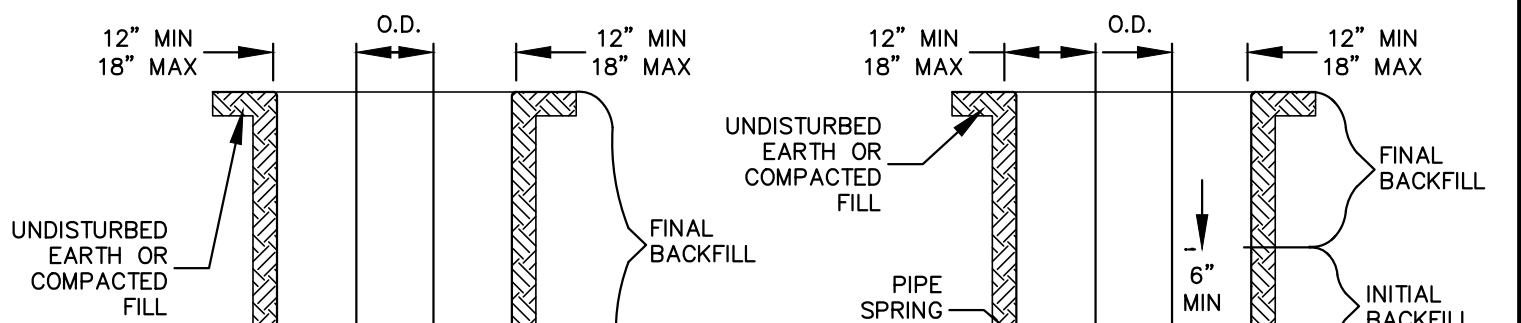
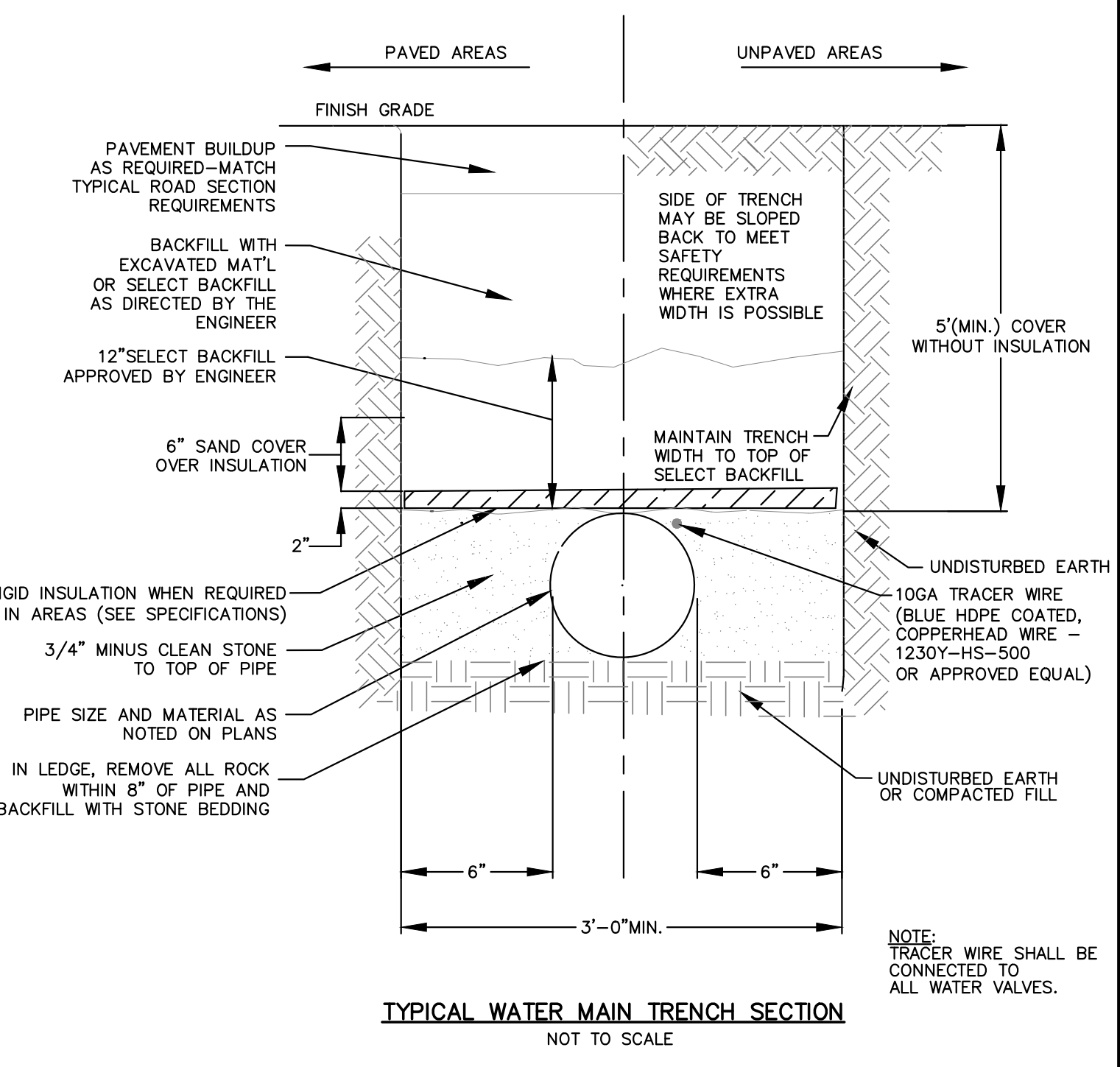
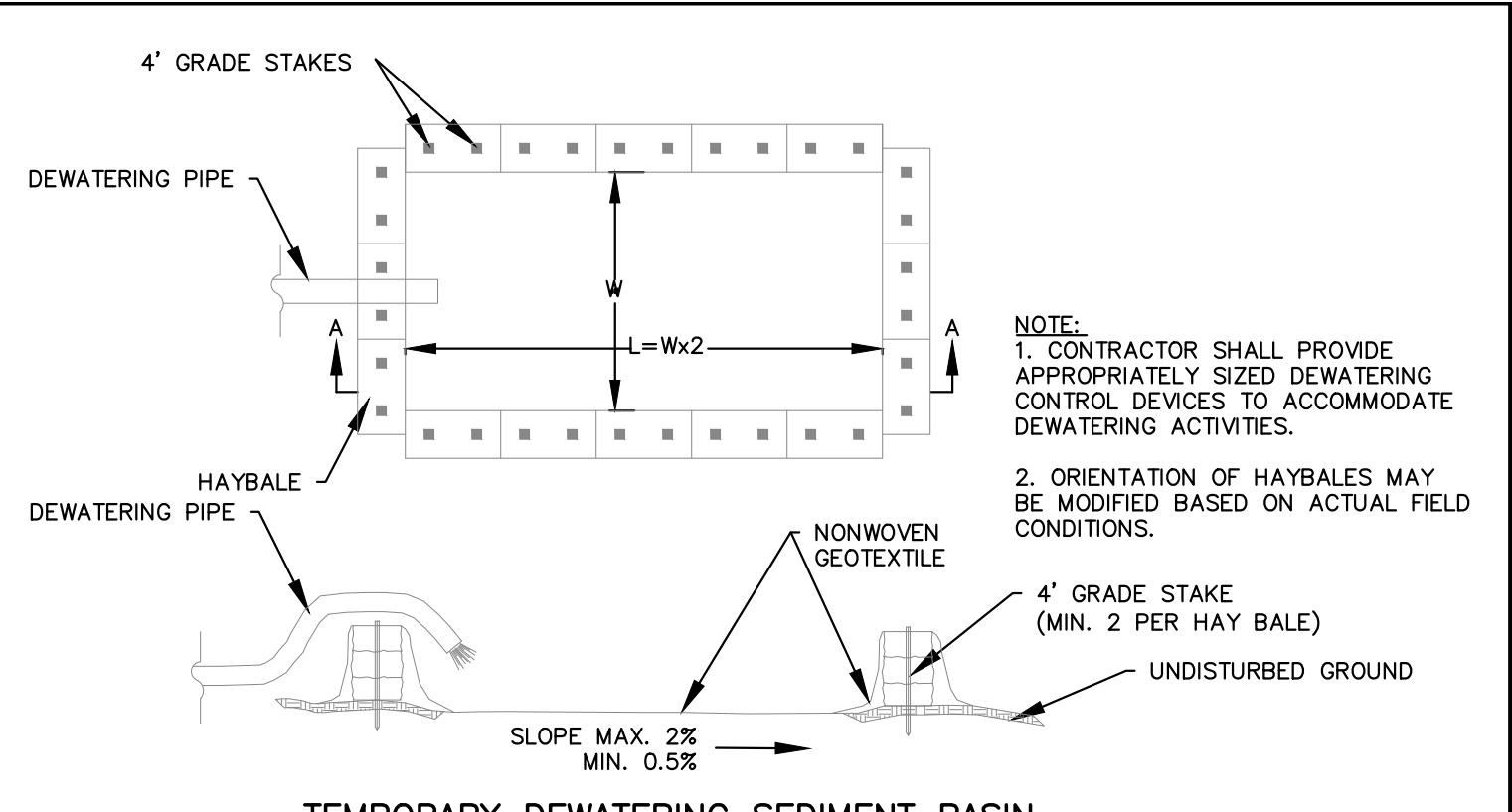
NOTE: DRAINAGE AREA SHALL NOT EXCEED 1/4 ACRE PER 100 FEET ON NON-REINFORCED SILT FENCE, OR 1/2 ACRE PER 100 FEET OF WIRE-REINFORCED SILT FENCE FOR SLOPES LESS THAN 2 PERCENT. IN AREAS OF STEEPER SLOPES OR HIGHLY ERODIBLE SOILS, WIRE-REINFORCED SILT FENCE SHALL BE USED.

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP OF MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING
FILTER CLOTH: FILTER X, MARAFI 100X, STAB-1, UNKA T140N OR APPROVED EQUAL
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE DETAIL

NOT TO SCALE



GENERAL NOTES:

*AASHTO SOIL CLASSIFICATION SYSTEM USED.

- BEDDING SHALL BE CLASS I-A WORKED BY HAND. IF GROUND WATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR. (SEE SPECIFICATIONS FOR GRADATION)
- HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS 1-A, CLASS 1-B OR CLASS II COMPACTED TO 85% PROCTOR.
- INITIAL BACK FILL SHALL BE CLASS I-A WORKED BY HAND, OR CLASS 1-B OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
- INITIAL BACK FILL NOT UNDER PAVED AREAS CAN BE CLASS IV-A COMPACTED TO 85% STANDARD PROCTOR.
- ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-LATEST ADDITION.
- ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 6" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV-A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
- FILL SALVAGED FROM EXCAVATIONS SHALL BE FREE OF DEBRIS ORGANIC AND ROCKS LARGER THAN 3".
- ALL TRENCH EXCAVATIONS SHALL BE SLOPED SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)

NOT FOR CONSTRUCTION

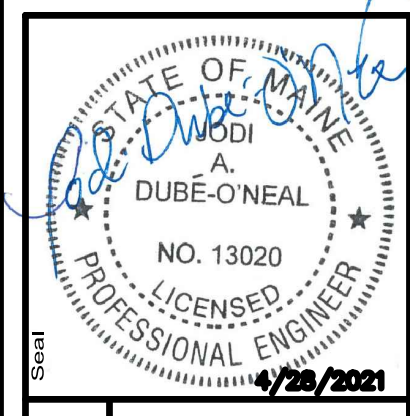
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01/27/2021	FABIAO	FABIAO		

BIG LAKE DEVELOPMENT, LLC
BIG MOOSE RESORT

Drawn By: FABIAO
Checked By: FABIAO
Scale: AS SHOWN
Project Location: BIG MOOSE TOWNSHIP, MAINE

SKI REPORT NO. 8428/2021
NO. 13020
LICENSED PROFESSIONAL ENGINEER
4/28/2021

Approved: [Signature]
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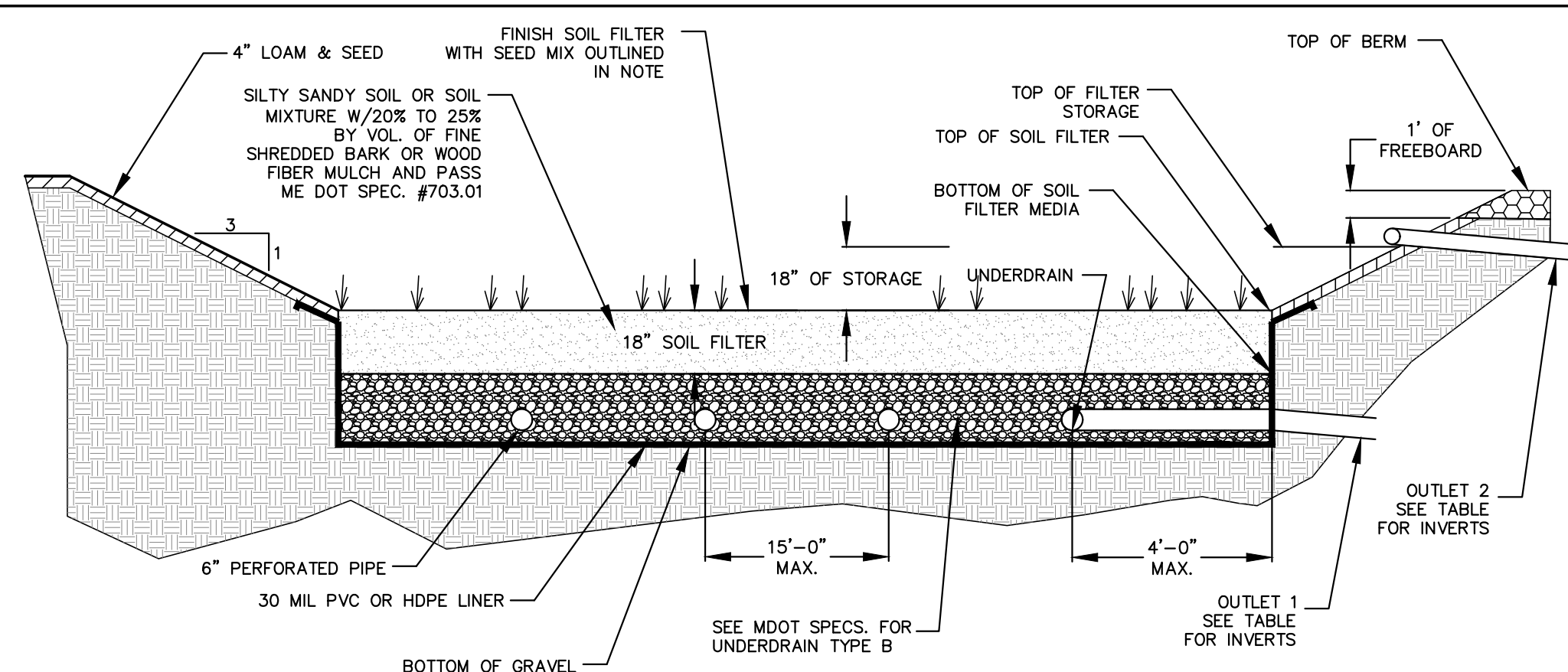
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ME DOT Specifications for Aggregate (MDO #703.01)

Sieve Size	% by Weight
#3/4"	100
#4	95-100
#8	80-100
#16	50-85
#30	25-60
#60	10-30
#100	2-10
#200	0-5

TYPICAL UNDERDRAIN SOIL FILTER

NOT TO SCALE

NOTE: UNDERDRAIN PIPE DIAMETER SHALL BE 6" UNLESS OTHERWISE NOTED.

SOIL FILTER MEDIA TO MEET THE LATEST MDEP SPECS FOUND IN THE MOST CURRENT VERSION OF THE BMP MANUAL.

THE UNDERDRAINED SOIL FILTER MUST BE PLANTED WITH A SPECIES TOLERANT OF FREQUENT INUNDATION SUCH AS A NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AS AVAILABLE FROM NEW ENGLAND WETLAND PLANTS, INC., AMHERST, MA, CONTAINING THE FOLLOWING:

UPLAND BENTGRASS
 CREEPING BENTGRASS
 FOX SEDGE
 SOFT RUSH
 GREEN BULRUSH
 WOOL GRASS
 GRASS-LEAVED GOLDENROD
 BLUE VERVAIN

VIRGINIA WILD RYE
 CREEPING RED FESCUE
 SWITCH GRASS
 LITTLE BLUESTEM
 BONESET
 SENSITIVE FERN
 BIG BLUESTEM, NIAGRA
 NEW ENGLAND ASTER

APPLIED AT A RATE OF 35 LBS/ACRE. LIGHTLY MULCH WITH CLEAN WEED FREE STRAW TO CONSERVE MOISTURE.

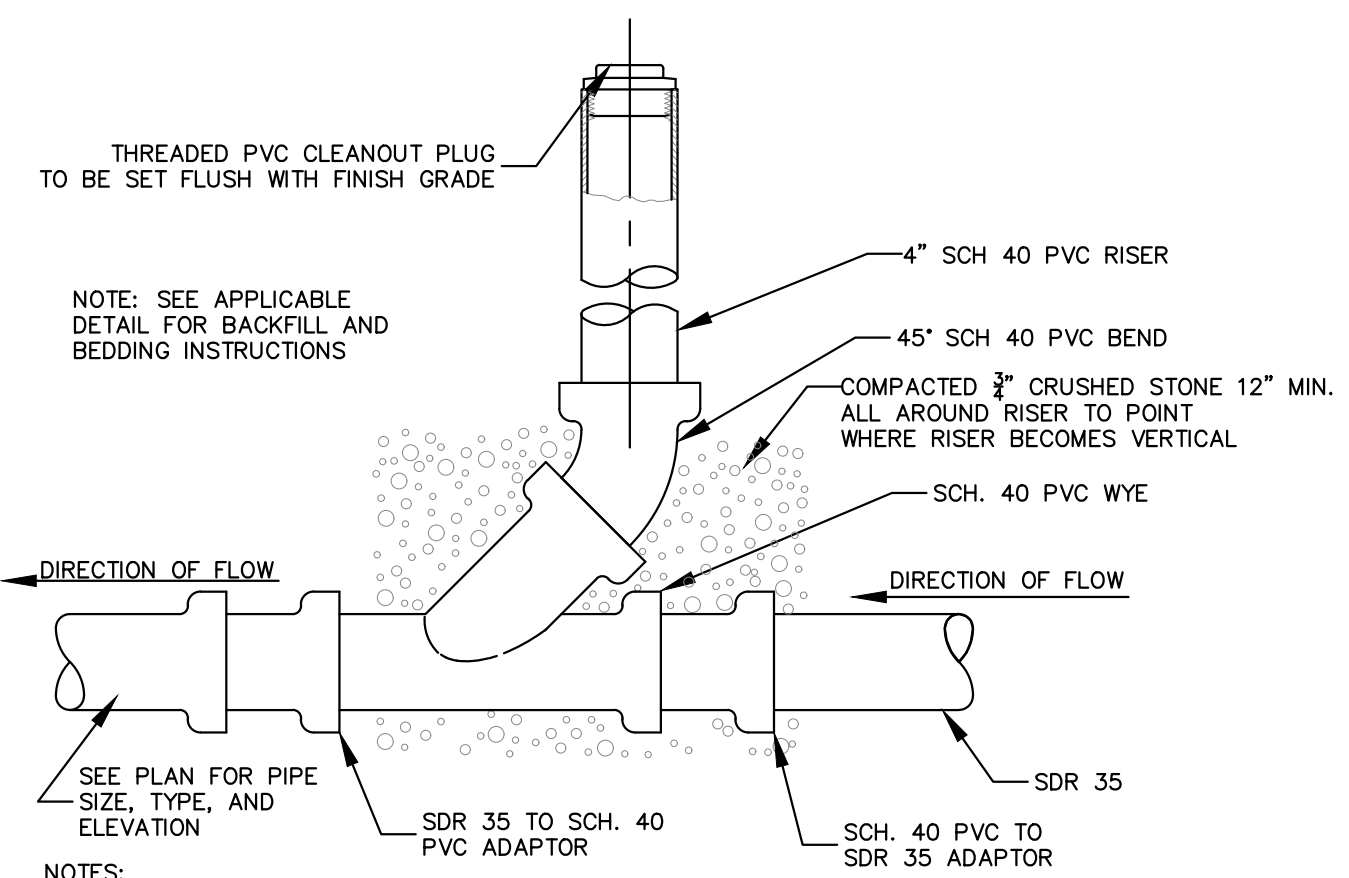
ME DOT Specifications for Underdrain Type B

Sieve Size	% by Weight
1"	90-100
1/2"	75-100
#4	50-100
#20	15-80
#50	0-15
#200	0-5

	TOP OF BERM	TOP OF SPILLWAY ELEV./LENGTH	TOP OF SOIL FILTER	BOTTOM OF SOIL MEDIA	BOTTOM OF GRAVEL	OUTLET 1 (UD) DIA./LENGTH	OUTLET 1 (UD) ELEV. IN/OUT	OUTLET 2 (SD) DIA./LENGTH	OUTLET 2 (SD) ELEV. IN/OUT
USF 1	1482.00	1480.50/25 FT	1477.00	1475.50	1474.33	4"/55 FT	1474.67/1474.00	10"/25 FT	1478.50/1478.25
USF 2	1467.00	1465.25/20 FT	1463.00	1461.50	1460.33	4"/40 FT	1460.67/1460.27	8"/25 FT	1464.50/1464.25

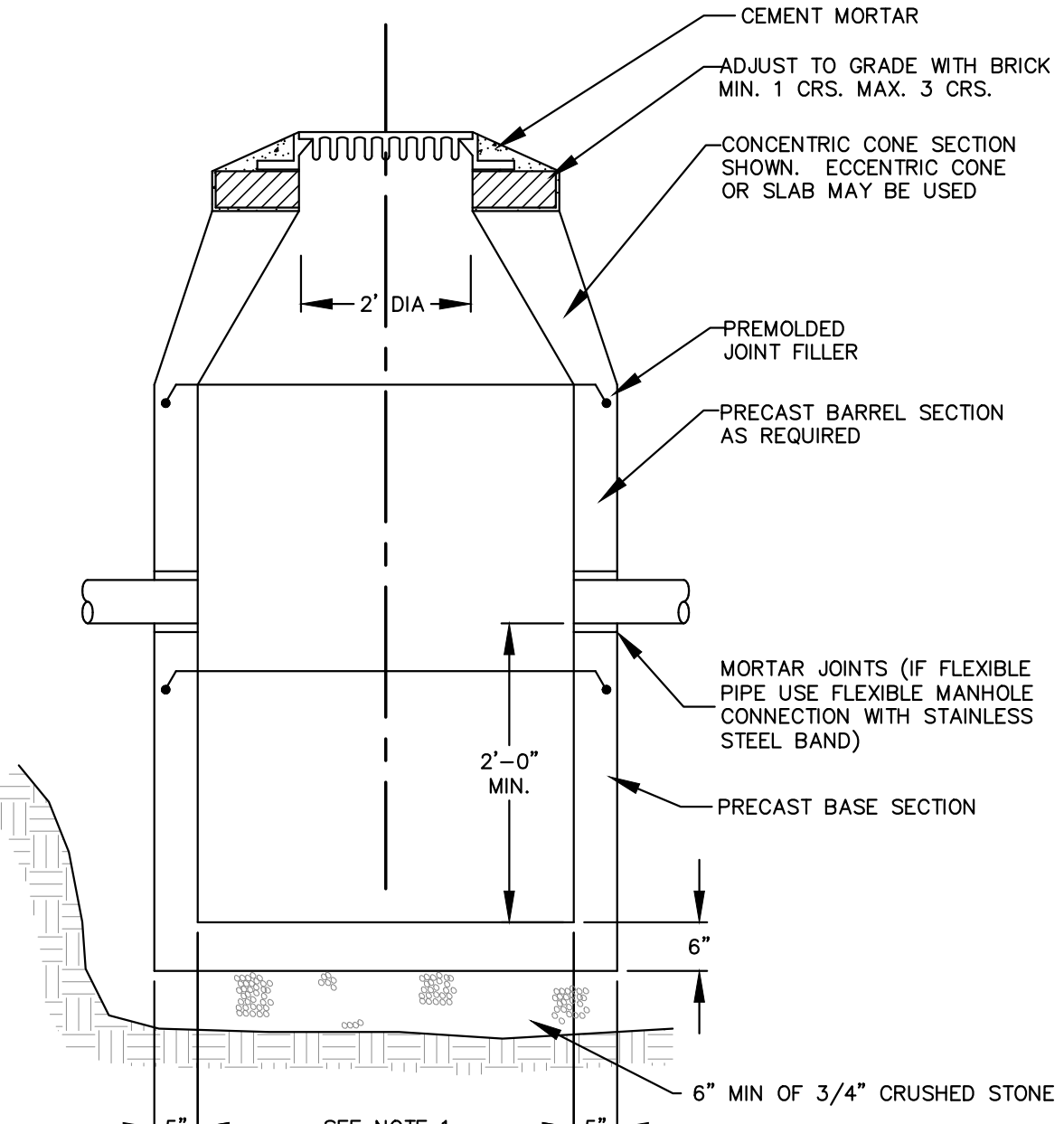
GENERAL NOTES FOR UNDERDRAIN FILTER BASINS:

- CONSTRUCTION SEQUENCE:**
- THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE, 80% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION UNLESS THE RUNOFF FROM THE CONTRIBUTING AREA IS DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED.
- COMPACTION OF SOIL FILTER:**
- FILTER SOIL MEDIA AND UNDERDRAIN BEDDING MATERIAL MUST BE COMPACTED TO BETWEEN 90% AND 92% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST TWO LIFTS OF 9 INCHES TO PREVENT POCKETS OF LOOSE MEDIA.
- CONSTRUCTION OVERSIGHT: INSPECTION BY A PROFESSIONAL ENGINEER WILL OCCUR AT A MINIMUM:**
- AFTER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
 - AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
 - AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDED. BIO-RETENTION CELLS MUST BE STABILIZED PER THE PROVIDED PLANTING SCHEME AND DENSITY FOR THE CANOPY COVERAGE OF 30 AND 50%.
 - AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS, AND ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY HAVE PASSED DEP SPECIFICATIONS.
- TESTING AND SUBMITTALS:**
- THE CONTRACTOR SHALL IDENTIFY THE LOCATION AND SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:
 - SELECT SAMPLES FOR SAMPLING OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
 - PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COURSE AGGREGATES 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE, A CLAY CONTENT OF LESS THAN 2% (DETERMINED HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
 - PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.
- OUTLET VALVE SETTING:**
- SET VALVE AT THE OUTLET TO THE CLOSED POSITION.
 - INSPECT SOIL FILTER AFTER RAIN EVENT. ONCE THE SOIL FILTER IS FULL OF WATER OPEN THE VALVE. NOTE THE TIME THAT THE VALVE WAS OPENED AND THE POSITION OF THE VALVE.
 - CHECK THE SOIL FILTER 24 HOURS AFTER THE VALVE WAS OPENED. AT THE 24 HOUR MARK WATER SHOULD STILL BE COMING OUT OF THE OUTLET.
 - CHECK THE FILTER AGAIN IN ANOTHER 24 HOURS (48 HOURS FROM THE VALVE BEING OPENED). AT THIS TIME THERE SHOULD BE NO MORE WATER COMING OUT OF THE OUTLET.
 - THIS PROCESS SHOULD BE REPEATED UNTIL THE VALVE IS AT THE CORRECT POSITION SUCH THAT THE WATER DOES NOT DRAIN FROM THE FILTER BEFORE 24 HOURS BUT IS DRAINED BY 48 HOURS.
 - MARK THE FINAL VALVE POSITION. CONTINUE THE REGULAR INSPECTIONS AND MAINTENANCE.



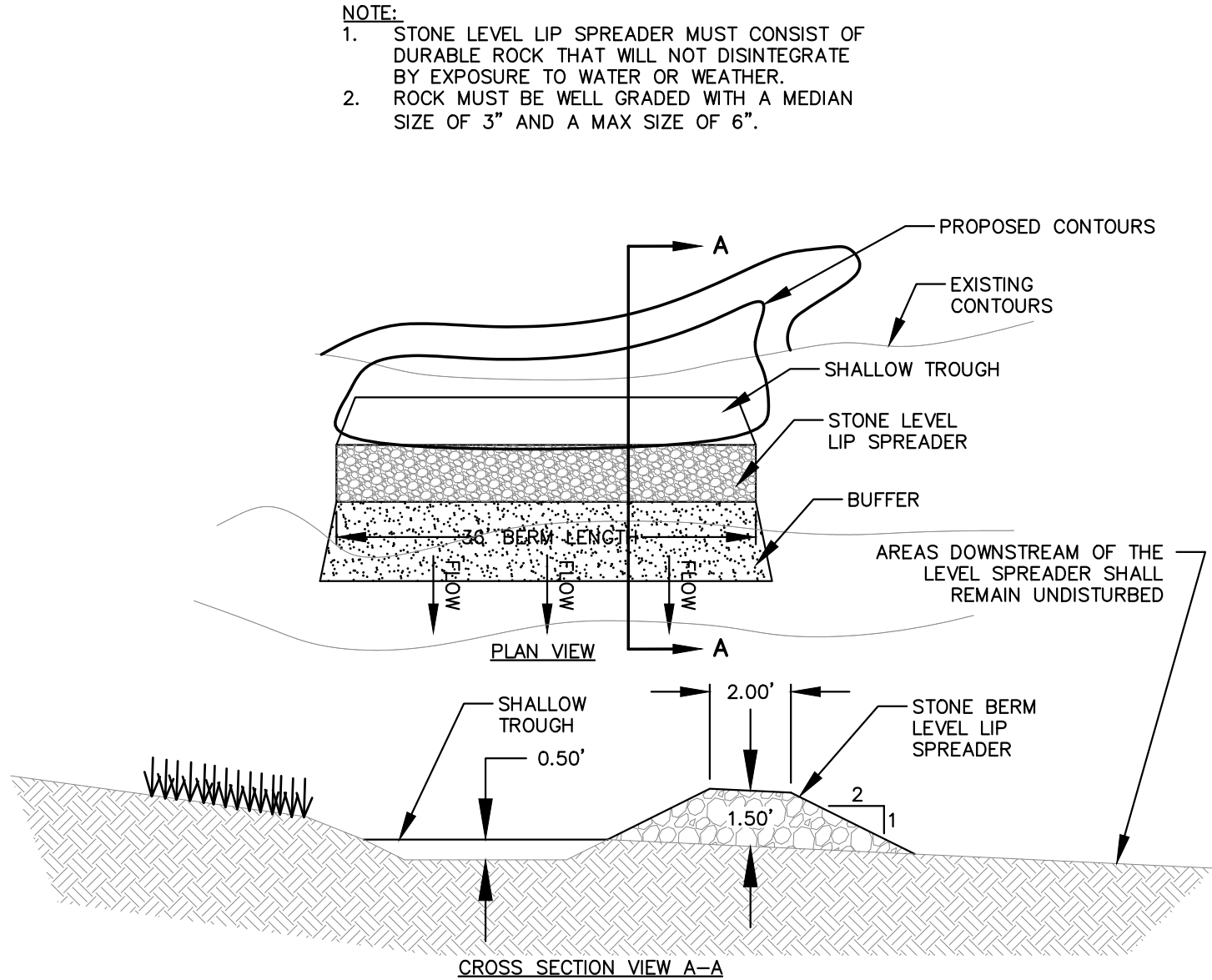
SANITARY SEWER CLEANOUT

- NOTES:
- PROVIDE 2" THICK BY 4" SQUARE RIGID INSULATION WITH PIPE SLEEVE CUT OUT 12" BELOW FINISH GRADE.
 - CONTRACTOR TO PROVIDE APPROPRIATE TRANSITION FITTINGS BETWEEN SDR 35 AND SCHEDULE 40. CONTRACTOR SHALL SUBMIT AND ENGINEER SHALL APPROVE TRANSITION FITTING PRIOR TO CONSTRUCTION.



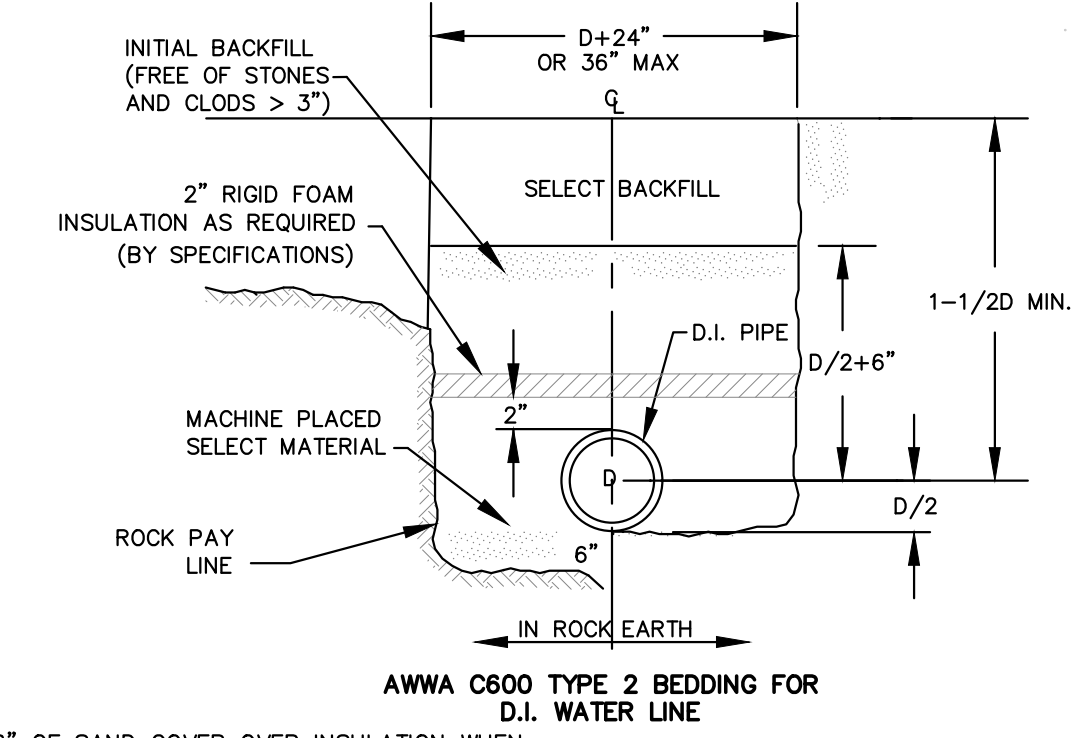
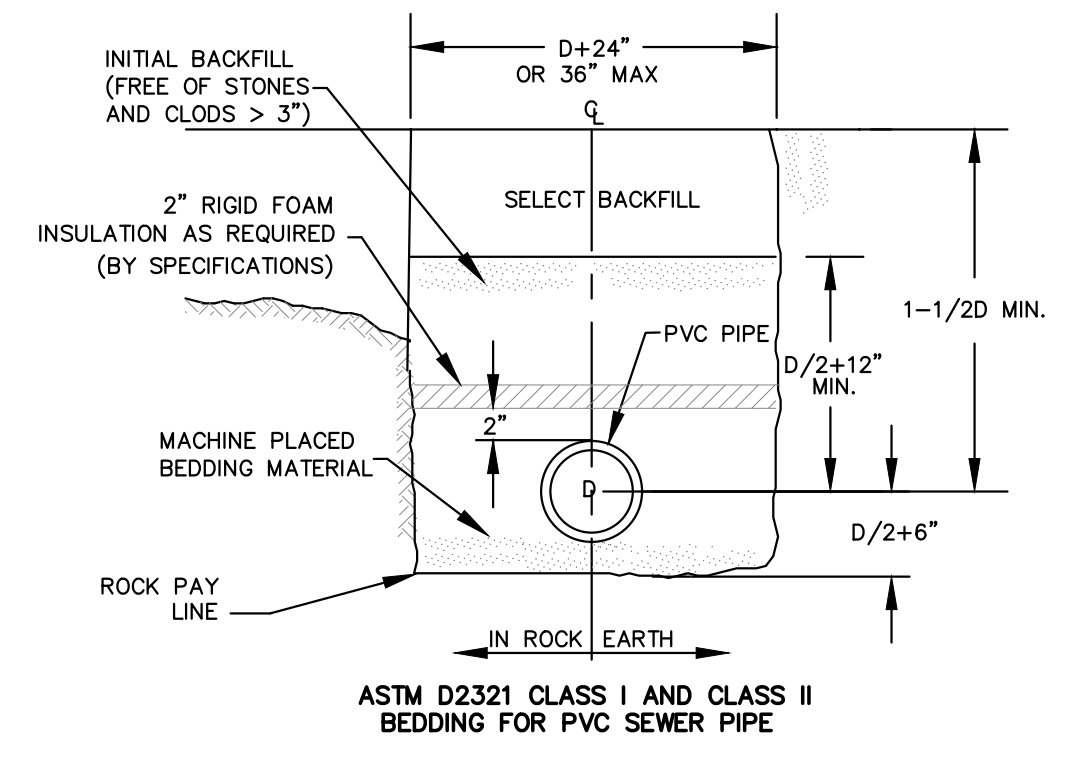
PRECAST CONCRETE CATCH BASIN

- NOTES:
- 4"-0" I.D. TYPICAL. SOME STRUCTURES REQUIRE LARGER I.D., PROVIDE SHOP DRAWINGS (SEE PLANS)
 - DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
 - PIPE SIZES AND INVERTS AS NOTED ON PLANS.
 - FRAME & GRATE TO BE LEBARON OR APPROVED EQUAL
 - GRATE TO BE CASCADE TYPE



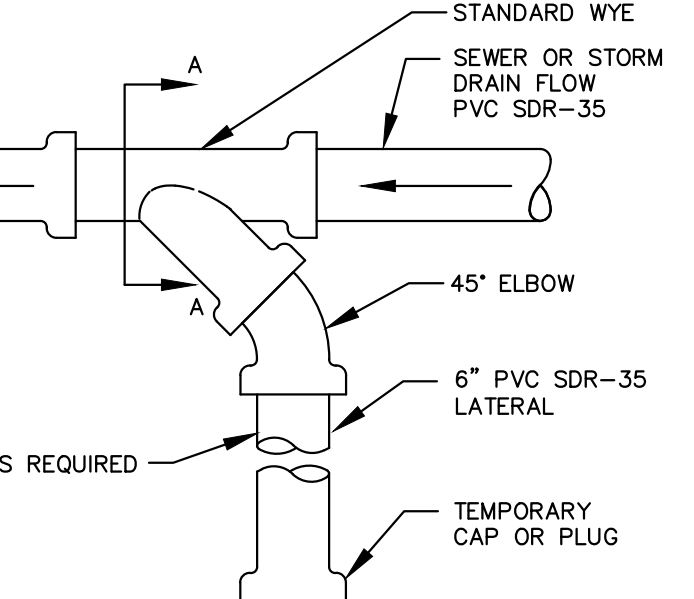
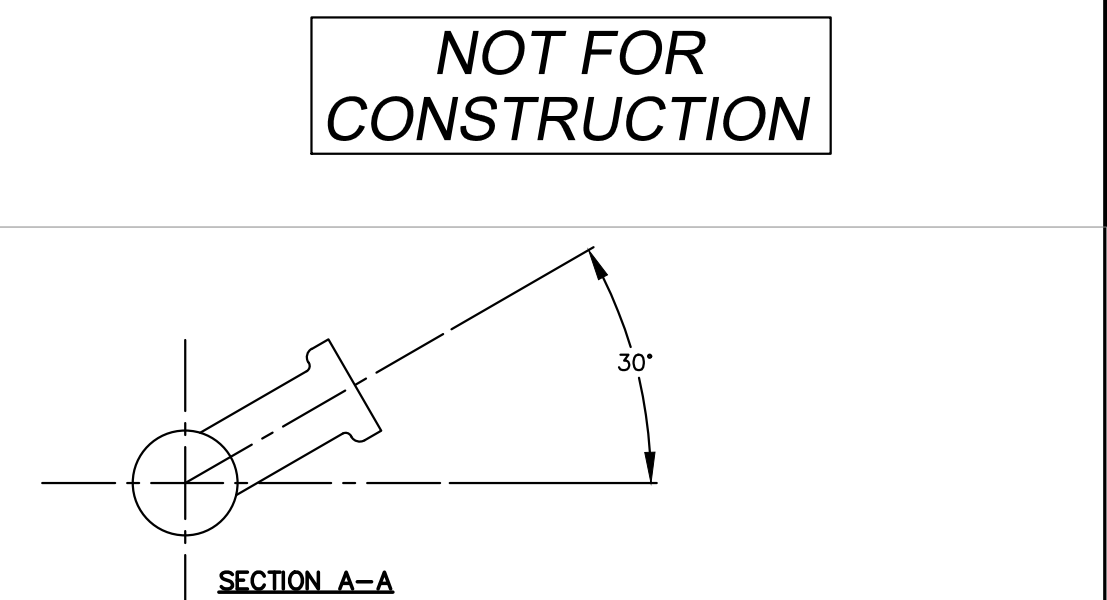
STONED BERMED LEVEL LIP SPREADER DETAIL

- NOT TO SCALE



TRENCH PAY LIMITS AND BEDDING DETAILS

- NOT TO SCALE

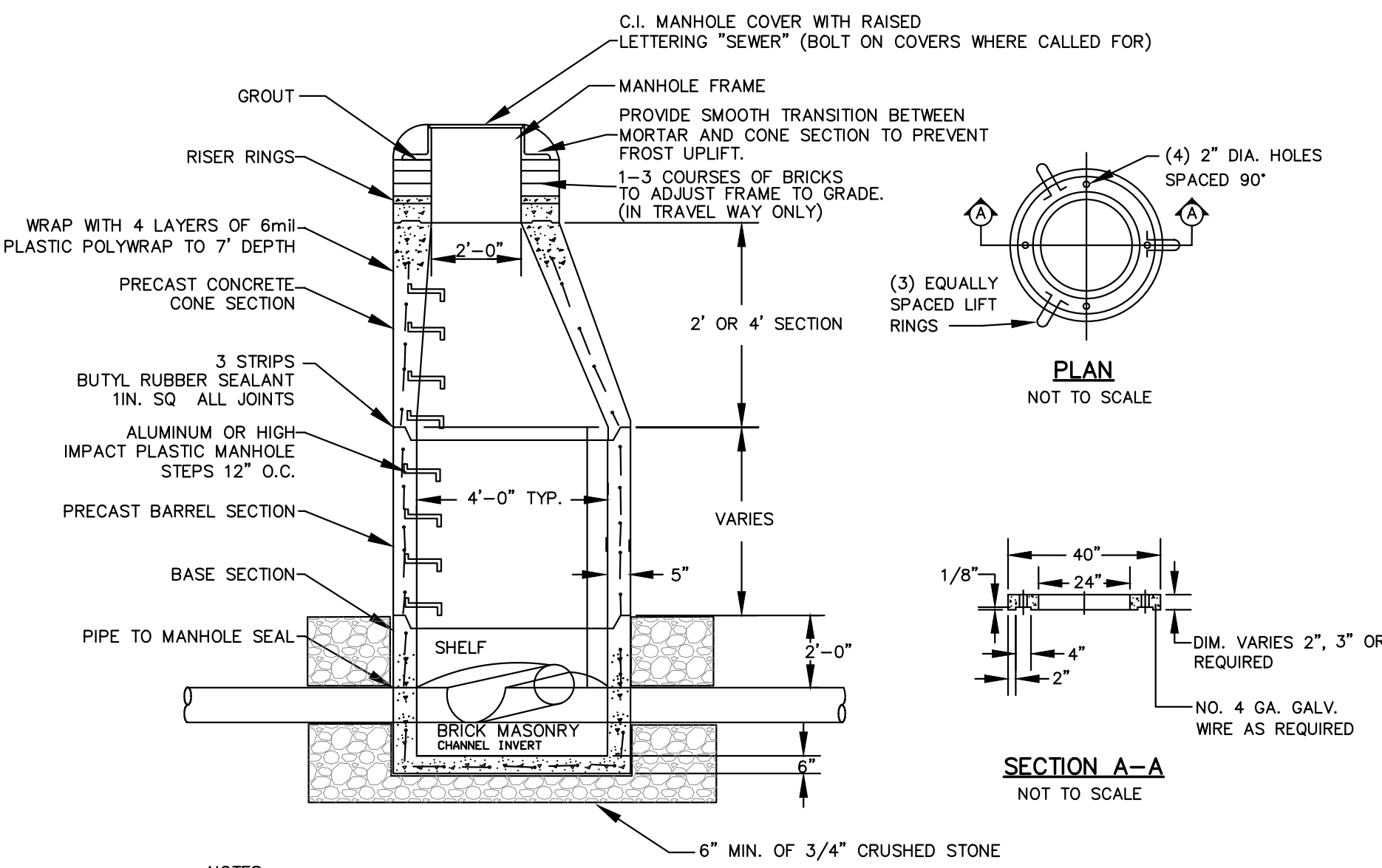


SEWER SERVICE CONNECTION

NOT TO SCALE

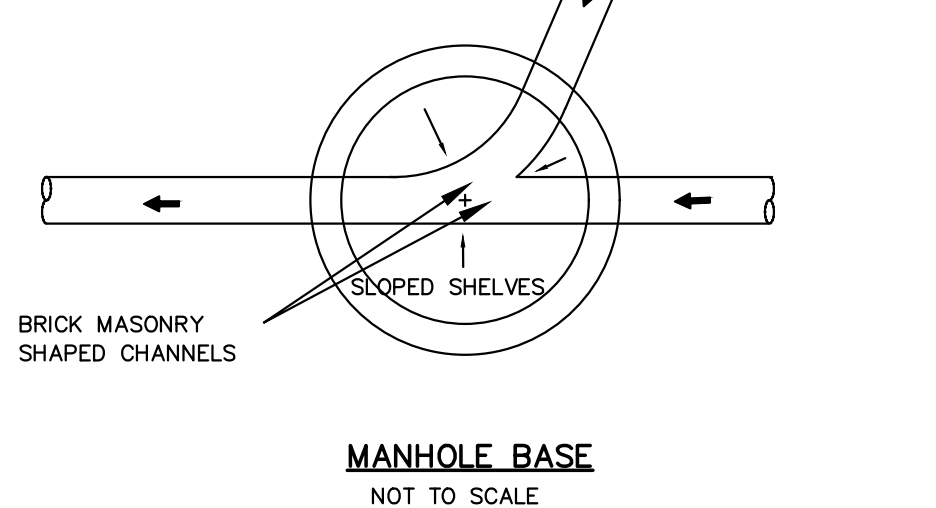
TRENCH DAM DETAIL

NOT TO SCALE



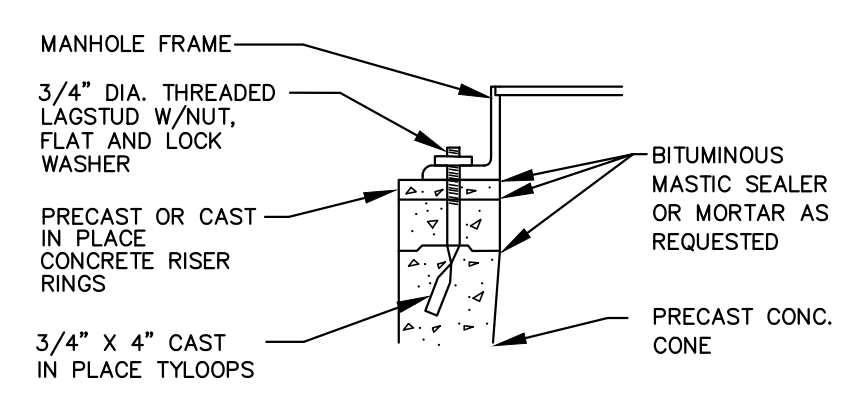
TYPICAL MANHOLE

NOT TO SCALE



MANHOLE BASE

NOT TO SCALE



ASSEMBLY DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION

85716E

Project No. 85716E

Drawn By: FABIANO

Checked By: FABIANO

Date: 04/28/2021

Scale: AS SHOWN

Project Location: BIG MOOSE TOWNSHIP, MAINE

Project Description: BIG LAKE DEVELOPMENT, LLC BIG MOOSE RESORT

Professional Engineer: DUBE-O'NEAL, NO. 13020, LICENSED PROFESSIONAL ENGINEER, 4/28/2021

Engineering: Sewal Engineering, The evolution of expertise, www.sewal.com, 1 800 648 4202

Permit: PERMIT

Sheet No. D-1.03