

JORDAN BAY MARINA

1328 ROOSEVELT TRAIL
RAYMOND, ME

APPLICANT:

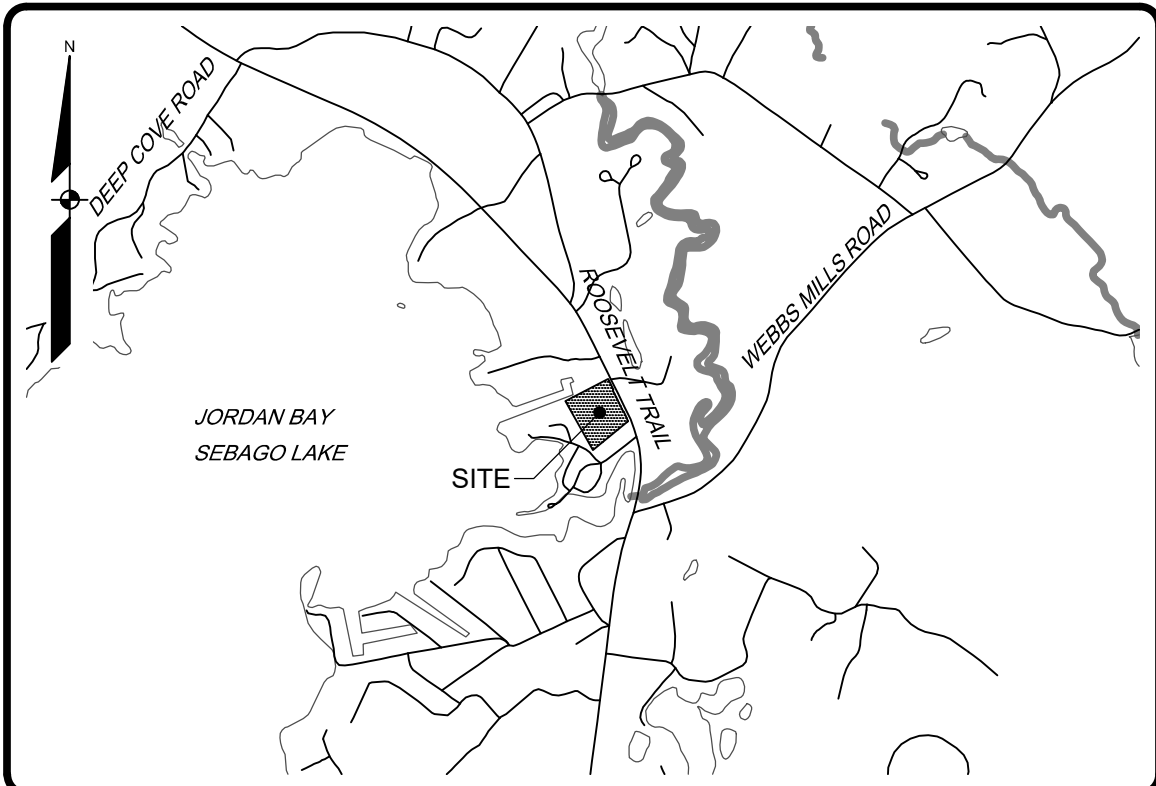
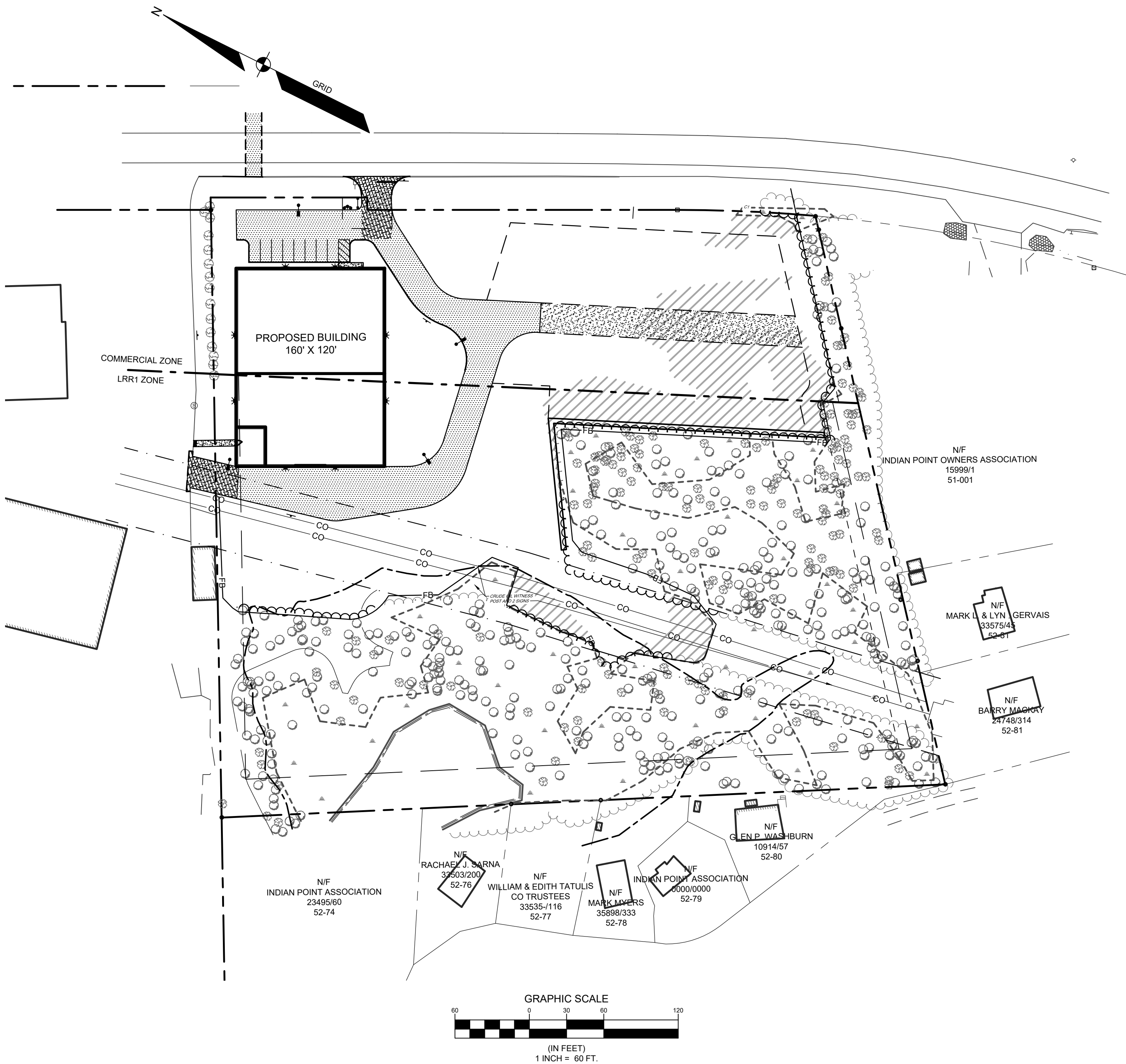
PORT HARBOR MARINE

1 SPRING POINT DRIVE
SOUTH PORTLAND, ME 04106

ENGINEER/SURVEYOR/
LANDSCAPE ARCHITECT:

SEBAGO
TECHNICS

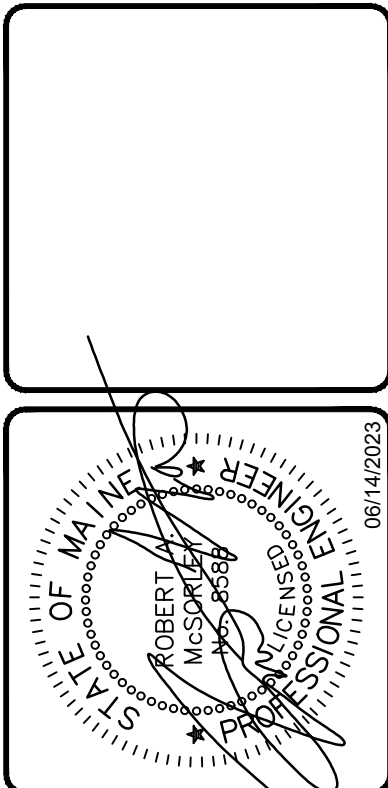
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100



LOCATION MAP NTS

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H	RAM	06/14/2023	RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
G	RAM	12/05/2022	MDEP - CORRECT CONTROL STRUCTURE BLEEDERS
F	RAM	10/20/22	REVISED PER PWD
E	RAM	10/12/22	REVISED PER PWD AND ARCHITECTURAL COORDINATION
D	RAM	9/21/22	ADD WAIVER REQUEST
C	RAM	9/14/22	REVISED PER TOWN OF RAYMOND COMMENTS
B	RAM	08/25/22	REVISED PER PORTLAND PIPELINE
REV	BY	DATE	STATUS

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.



COVER SHEET
OF:
JORDAN BAY MARINA
1328 ROOSEVELT TRAIL
RAYMOND, ME
FOR:
PORT HARBOR MARINE
1 SPRING POINT DRIVE
SOUTH PORTLAND, ME 04106

DESIGNED	JSH
DRAWN	DAB
CHECKED	RAM
DATE	06/22/22
SCALE	1" = 60'
PROJECT	14265-02

EXISTING	PROPOSED
PROPERTY LINE/R.O.W.	PROPERTY LINE/R.O.W.
ABUTTER LINE/R.O.W.	ABUTTER LINE/R.O.W.
DEED LINE/R.O.W.	DEED LINE/R.O.W.
TIE LINE	TIE LINE
SETBACK	SETBACK
EASEMENT	EASEMENT
BUFFER	BUFFER
FLOODPLAIN	FLOODPLAIN
FLOODWAY	FLOODWAY
CENTERLINE	CENTERLINE
MONUMENT	MONUMENT
IRON PIPE/ROD	IRON PIPE/ROD
DRILL HOLE	DRILL HOLE
DEED CALL	DEED CALL
C1/L1	C1/L1
C1/L1	C1/L1
CURVE/LINE NO.	CURVE/LINE NO.
SOILS	SOILS
ZONE LINE	ZONE LINE
ZONE LINE ON PL	ZONE LINE ON PL
BENCHMARK DESCRIPTION WITH ELEVATION	BENCHMARK
SURVEY CONTROL	SURVEY CONTROL
TP-1	TP-1
TEST PIT	TEST PIT
MONITORING WELL	MONITORING WELL
BORING	BORING
B-1	B-1
BUILDING	BUILDING
DECK/STEPS/ OVERHANG	DECK/STEPS/ OVERHANG
EDGE WETLAND	EDGE WETLAND
WETLANDS	WETLANDS
UPLANDS	UPLANDS
STREAM	STREAM
LEDGE	LEDGE
EDGE PAVEMENT	EDGE PAVEMENT
PAVEMENT SAWCUT	PAVEMENT SAWCUT
EDGE CONCRETE	EDGE CONCRETE
PAVEMENT PAINT	PAVEMENT PAINT
EDGE GRAVEL	EDGE GRAVEL
CURB LINE	CURB LINE
EDGE OF WATER	EDGE OF WATER
TREELINE	TREELINE
CONTOURS	CONTOURS
SPOT GRADE	SPOT GRADE
CHAIN LINK FENCE	CHAIN LINK FENCE
BARB WIRE FENCE	BARB WIRE FENCE
STOCKADE FENCE	STOCKADE FENCE
GUARD RAIL	GUARD RAIL
STONE WALL	STONE WALL
RETAINING WALL	RETAINING WALL
DECIDUOUS TREE	DECIDUOUS TREE
CONIFEROUS TREE	CONIFEROUS TREE
MULCH LINE	MULCH LINE
BOLLARD	BOLLARD
SIGN	SIGN
RAILROAD	RAILROAD
GAS	GAS
GAS GATE VALVE	GAS GATE VALVE
GAS METER	GAS METER
GAS MANHOLE	GAS MANHOLE
WATER	WATER
WATER GATE VALVE	WATER GATE VALVE
WATER SHUT OFF	WATER SHUT OFF
HYDRANT	HYDRANT
WATER MANHOLE	WATER MANHOLE
WELL	WELL
SANITARY SEWER	SANITARY SEWER
FM FORCE MAIN	FM FORCE MAIN
SANITARY MANHOLE	SANITARY MANHOLE
SD STORM DRAIN	SD STORM DRAIN
UD UNDER DRAIN	UD UNDER DRAIN
DRAINAGE MANHOLE	DRAINAGE MANHOLE
CATCH BASIN	CATCH BASIN
OVERHEAD UTILITY	OVERHEAD UTILITY
UNDERGROUND UTILITY	UNDERGROUND UTILITY
TRANSFORMER PAD	TRANSFORMER PAD
ELECTRIC MANHOLE	ELECTRIC MANHOLE
ELECTRIC METER	ELECTRIC METER
HVAC UNIT	HVAC UNIT
TELEPHONE MANHOLE	TELEPHONE MANHOLE
LIGHT POLE	LIGHT POLE
UTILITY POLE	UTILITY POLE
GUY WIRE	GUY WIRE
DRAINAGE DITCH	DRAINAGE DITCH
EROSION CONTROL BLANKET	EROSION CONTROL BLANKET
FILTER BARRIER	FILTER BARRIER
RIPPRAP	RIPPRAP
CHECK DAM	CHECK DAM
INLET PROTECTION BOULDER	INLET PROTECTION BOULDER
CRUDE OIL	CRUDE OIL

1. THE RECORD OWNER OF THE PARCEL IS PORT HARBOR MARINE BY THE FOLLOWING DEEDS RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS:					
MAP 51, LOT 2 - DATED DECEMBER 18, 2020 IN BOOK 37597, PAGE 223					
2. THE PROPERTY IS SHOWN AS LOT 2 ON TAX MAP 51 AND IS LOCATED IN THE COMMERCIAL DISTRICT. AND LIMITED RESIDENTIAL/RECREATIONAL (LRR1, SHORELAND) DISTRICT.			33. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FLOW THROUGH THE EXISTING CLOSED STORM DRAINAGE SYSTEM DURING CONSTRUCTION AND SHALL SUBMIT A WORK PLAN FOR APPROVAL BY THE DESIGN ENGINEER.		
3. SPACE AND BULK CRITERIA FOR THE COMMERCIAL ZONE (C) DISTRICT ARE AS FOLLOWS:			34. BOUNDARY INFORMATION SHOWN HEREON IS BASED UPON LIDAR DATA AVAILABLE FROM THE TOWN OF RAYMOND AND AS DEPICTED IN PLAN REFERENCE 7A. THE TOPOGRAPHICAL INFORMATION SHOWN HEREON IS SOLELY BASED UPON LIDAR TOPOGRAPHICAL INFORMATION PROVIDED BY THE OWNER, SEBAGO TECHNIQS, INC., MAKES NO REPRESENTATION AS TO THE ACCURACY OF THIS INFORMATION, AND THROUGH DIRECTION OF THE OWNER, HAS RELIED UPON THIS INFORMATION FOR THE DESIGN.		
			C DISTRICT		
	<u>REQUIRED</u>	<u>PROPOSED</u>			
MINIMUM LOT SIZE:	N/A	N/A			
MINIMUM FRONT SETBACK:	N/A	N/A			
MINIMUM SIDE SETBACK:	N/A	N/A			
MINIMUM REAR SETBACK:	N/A	N/A			
MAXIMUM BUILDING HEIGHT:	2.5 STORIES	15 STORIES			
* SEE ORDINANCE FOR MORE SPECIFIC INFORMATION AND CONFIRM WITH A TOWN OFFICIAL.					
			LRR1 DISTRICT		
	<u>REQUIRED</u>	<u>PROPOSED</u>			
MINIMUM LOT SIZE:	2 ACRES	5.9 ACRES			
MINIMUM FRONT SETBACK:	20 FEET	82 FEET			
MINIMUM SIDE SETBACK:	20 FEET	20 FEET			
MINIMUM REAR SETBACK:	30 FEET	204 FEET			
MAXIMUM BUILDING HEIGHT:	35 FEET	<35 FEET			
* SEE ORDINANCE FOR MORE SPECIFIC INFORMATION AND CONFIRM WITH A TOWN OFFICIAL.					

1. PROTECT EXISTING BOUNDARY LINE MONUMENTATION. IF DISTURBED, EXISTING MONUMENTATION TO BE RESET BY A PROFESSIONAL LAND SURVEYOR.
2. DEMOLITION OF UTILITIES REQUIRING TREE REMOVAL SHALL BE COORDINATED WITH THE OWNER AND IN ACCORDANCE WITH PROJECT PLANS.
3. UTILITY DEMOLITION SHALL BE COMPLETED IN COORDINATION WITH NEW INFRASTRUCTURE. CONTRACTOR SHALL ENSURE EXISTING SURFACE DRAINAGE IS MAINTAINED DURING CONSTRUCTION.
4. EXISTING SEWER AND STORM DRAINAGE INFRASTRUCTURE TO REMAIN ACTIVE DURING CONSTRUCTION AND UPON COMPLETION OF PROJECT. DEMOLITION/CONSTRUCTION ACTIVITIES SHALL NOT INTERFERE OR IMPEDE EXISTING FLOWS. CONTRACTOR SHALL PROVIDE BYPASS PUMPING AS REQUIRED DURING SEWER AND STORM DEMOLITION AND NEW CONSTRUCTION. DAMAGE TO EXISTING SEWER INFRASTRUCTURE SHALL BE REPAIRED BY CONTRACTOR AT THEIR EXPENSE.
5. PROTECT EXISTING UTILITIES NOT CALLED OUT TO BE REMOVED DURING CONSTRUCTION.
6. DEMOLITION SHOWN IS FOR MAJOR SITE ELEMENTS TO BE DEMOLISHED. OTHER MINOR DEMOLITION MAY BE REQUIRED AS PART OF CONSTRUCTION AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTION. COORDINATE ALL DEMOLITION WORK WITH SITE AND BUILDING DRAWINGS.
7. PRIOR TO ANY DEMOLITION, THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF DEMOLITION PLANS TO THE OWNER. THIS PLAN SHALL DEPICT LOCATIONS OF PROPOSED TERMINATIONS AND ANY TEMPORARY SERVICES THAT WILL BE NEEDED.
8. CONTRACTOR REQUIRED TO CONFIRM/MAINTAIN BENCHMARKS. IF IMPACTED CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION/RELOCATION AND COORDINATION WITH PROJECT TEAM.

1. SIDESLOPES SHALL NOT BE STEEPER THAN 3:1 (H:V) EXCEPT AS OTHERWISE IDENTIFIED ON THIS PLAN. ALL SIDESLOPES STEEPER THAN 3:1 (H:V) SHALL BE LINED WITH EROSION CONTROL BLANKET, OR ADDITIONAL MEASURES AS INDICATED.
2. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENT CONTROL BMPs" MANUAL PUBLISHED BY BUREAU OF LAND AND WATER, U.S. DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
3. ALL AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE LOAM AND SEED PER DETAIL.
4. SEE UTILITY DRAWINGS FOR PIPE AND STRUCTURE DATA TABLES.

1. PROVIDE EROSION CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
2. WETLANDS, ASSOCIATED SETBACKS AND STREAM SETBACKS TO BE STAKED BY OWNER PRIOR TO SITE DISTURBANCE.
3. BEFORE TREE CLEARING, REFER TO PLANS FOR WOODED BUFFER LOCATIONS. TREES SHALL NOT BE CLEARED WITHIN DESIGNATED WOODED BUFFER AREAS.
4. GRADING AND CLEARING LIMITS SHALL NOT ENCRATCH ON ADJACENT PROPERTIES UNLESS NOTED OTHERWISE ON THE PLANS.
5. OPEN AREAS SHALL BE LIMITED TO AREAS BEING WORKED IN. THE AREA STRIPPED OF EXISTING VEGETATION AT ANY GIVEN TIME SHALL BE MINIMIZED AND BE PHASED WHERE PRACTICAL, SO THAT AREAS ARE REVEGETATED AND PERMANENTLY STABILIZED BEFORE ADDITIONAL AREAS ARE STRIPPED OF EXISTING VEGETATION. STABILIZE CONSTRUCTION AREAS BY USE OF RIPRAP, SEED, MULCH, OR OTHER GROUND COVER WITHIN ONE WEEK FROM THE TIME IT WAS ACTIVELY WORKED. SURFACES SHALL BE STABILIZED PRIOR TO DIRECTION OF STORMWATER RUNOFF TOWARD STORMWATER BMPs. PLEASE REFER TO DRAINAGE PLANS FOR WATERSHED AREAS.

1. UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL EVIDENCE LOCATED IN THE FIELD. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) TO FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION. PROTECT AND AVOID EXISTING SEWER PIPE AND ADJUST MANHOLE RISE TO GRADE WHERE APPLICABLE.
2. ALL GRAVITY CONDUIT PIPES SHALL BE INSTALLED USING A PIPE LASER AND TARGET SYSTEM THROUGHOUT THE PIPE. IF PIPE RUNS 5 FEET OR LESS, THE CONTRACTOR SHALL REQUEST ENGINEER'S APPROVAL TO USE OR NOT USE A GROUND LASER.
3. MAINTAIN MINIMUM 5'-6" OF COVER ABOVE TOP OF WATER SERVICE PIPE.
4. MAINTAIN MINIMUM 10 FEET HORIZONTAL SEPARATION BETWEEN WATER SERVICES AND OTHER UTILITIES. MAINTAIN MINIMUM 18 INCHES VERTICAL SEPARATION BETWEEN WATER SERVICES AND OTHER UTILITIES.
5. LOWER OR RAISE WATER SERVICES AS REQUIRED TO MAINTAIN MINIMUM 12 INCH VERTICAL SEPARATION FROM OTHER UTILITIES. WATER SERVICES CROSSING SEWERS SHALL MAINTAIN 12 INCH MINIMUM SEPARATION BETWEEN THE BOTTOM OF WATER LINE AND TOP OF SEWER UNLESS NOTED OTHERWISE ON THE PLANS.
6. PIPE:
 - SEWER PIPE SHALL BE SDR 35 PVC OR APPROVED EQUAL.
 - FORCEMAIN PIPE SHALL BE DR-11 HDPE OR APPROVED EQUAL.
 - STORMDRAIN SHALL BE ADS N-12 UDL WALL HDPE PIPE WITH SMOOTH-WALLED INTERIOR OR APPROVED EQUAL UNLESS NOTED OTHERWISE ON THE UTILITY PLANS.
 - WATER PIPE AND FITTINGS SHALL CONFORM TO PORTLAND WATER DISTRICT WATER PIPE SPECIFICATIONS. MAIN WATER SERVICE PIPE SHALL BE DUCTILE IRON, CLASS 52 PUSH-ON PIPE MEETING THE REQUIREMENTS OF AWWA/CES C-111/ASTM 11 (LATEST REVISION). PIPE SHALL BE CEMENT-LINED AWWA/CES C-104/ASTM 14 WITH LINING THICKNESS THE THICKNESS SPECIFIED, AND COATED TWICE WITH A BITUMINOUS SEAL COATING. PULL PRISMATIC BLOCKS AT ALL WATER SERVICE BENDS.
7. COORDINATE FOUNDATION UNDERDRAIN LOCATIONS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
8. COORDINATE GREASE INTERCEPTOR LOCATIONS WITH ARCHITECTURAL & PLUMBING DRAWINGS.
9. COORDINATE UTILITY INVERTS AT BUILDING WITH ARCHITECTURAL, STRUCTURAL AND PLUMBING DRAWINGS.
10. COORDINATE LOCATION OF SEWER, WATER, GAS, FOUNDATION DRAINS AND ROOF DRAIN INVERTS AT THE BUILDING WITH ARCHITECTURAL DRAWINGS.
11. WATER SERVICE ENTRANCE DESIGNS TO INCLUDE METERS AND BACKFLOW PREVENTERS TO MEET ALL STANDARDS AND REQUIREMENTS OF THE PORTLAND WATER DISTRICT.
12. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY GRADE CHANGES THAT WILL IMPACT STORM DRAINAGE INFRASTRUCTURE OR OTHER UTILITIES.
13. UTILITIES WITHIN 5 FEET FROM FACE OF BUILDING ARE COORDINATED ON RELEVANT M.E.P. DRAWINGS. CONTRACTOR SHALL COORDINATE INVERTS, CONNECTIONS AND MATERIALS WITH ALL DRAWINGS.
14. PROVIDE AN OIL BOOM IN EVERY CATCH BASIN WITH A PAVED AREA.
15. CONTRACTOR SHALL FURNISH AND INSTALL TRENCHING, MATERIALS AND BACKFILL FOR ALL UTILITY ELECTRICAL AND TELECOM DATA PROVIDERS WILL. PROVIDE PRIMARY SERVICE TO TRANSFORMER AND PANEL. CONTRACTOR RESPONSIBLE FOR TIMING AND COORDINATION WITH UTILITIES AND DRAWINGS. COORDINATE WITH ELECTRICAL DRAWINGS FOR CONDUIT SCHEDULE, TYPE AND SIZES.
16. COORDINATE ALL WATER RELATED WORK WITH PORTLAND WATER DISTRICT.

ELECTRIC:
CENTRAL MAINS POWER (CMP)
NAME, TITLE - TBD
TELEPHONE - TBD
JOB # TBD
ACCOUNT # TBD

WATER:
PORTLAND WATER DISTRICT
MEANS DEPARTMENT
207-774-5961

PIPELINE:
PORTLAND PIPELINE
JAY MAGEE
207-787-0415

SPECTRUM:
NAME - TBD
TELEPHONE - TBD

18. WELL TO BE DRILLED BY OTHERS. ELECTRICAL CONNECTION, PUMP SIZING, GROUNDWATER TESTING AND OTHER RELATED SERVICES TO BE COORDINATED BY WELL DRILLER WITH DESIGN ENGINEER, MECHANICAL ENGINEER AND ELECTRICAL ENGINEER.

19. STAGING AND BID ITEM INFORMATION REGARDING UTILITIES CAN BE REFERENCED ON SHEET PS003 AND SHALL BE COORDINATED WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL PLANS.

1. PLANT QUANTITIES SHOWN ON PLANT LISTS ARE FOR CONVENIENCE TO THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLANT MATERIAL INSTALLATION AS SHOWN ON PLANS.
2. SIZE AND GRADING STANDARDS OF PLANT MATERIALS SHALL CONFORM TO THE LATEST EDITION OF U.S.A. STANDARD FOR NURSERY STOCK, BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
3. ALL PLANT MATERIAL SHALL BE FREE FROM INSECTS AND DISEASE.
4. ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH ACCEPTABLE HORTICULTURAL PRACTICES THIS IS TO INCLUDE PROPER PLANTING MIX, PLANT BED AND TREE PIT PREPARATION, PRUNING, STAKING OR GUYING, WRAPPING, SPRAYING, FERTILIZATION, PLANTING AND ADEQUATE MAINTENANCE UNTIL ACCEPTANCE BY THE OWNER.
5. PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR BY THE CONTRACTOR AND A PERIOD OF TWO YEARS THEREAFTER BY THE OWNER FROM DATE OF INSTALLATION. DURING THE ONE OR GUARANTEE PERIOD, DEAD PLANT MATERIAL SHALL BE REPLACED AT NO COST TO THE OWNER. AT THE END OF THE ONE YEAR PERIOD, THE CONTRACTOR SHALL OBTAIN FINAL ACCEPTANCE FROM THE OWNER.
6. ALL GRASS, OTHER VEGETATION AND DEBRIS SHALL BE REMOVED FROM ALL PLANTING AREAS PRIOR TO PLANTING.
7. EXISTING TREES TO BE PRESERVED WILL BE PROTECTED DURING CONSTRUCTION AND SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
8. THE LANDSCAPE CONTRACTOR IS ADVISED OF THE PRESENCE OF THE UNDERGROUND UTILITIES AND SHALL VERIFY THE EXISTENCE AND LOCATION OF SAME BEFORE COMMENCING AND DIGGING OPERATIONS. THE LANDSCAPE CONTRACTOR SHALL REPLACE OR REPAIR UTILITIES, PAVING, WALKS, CURBING, ETC. DAMAGED IN PERFORMANCE OF THIS JOB AT NO ADDITIONAL COST TO THE OWNER.
9. ALL SHRUB BEDS SHALL BE MULCHED WITH 3" CLEAN SHEARED DARK BROWN BARK MULCH.
10. THE CONTRACTOR SHALL PROVIDE 4" LOAM FOR ALL AREAS TO BE SODDED OR SEEDED. PLANTING AREAS SHALL RECEIVE 12" ROLLED THICKNESS OF LOAM. THE LANDSCAPE CONTRACTOR SHALL COORDINATE SUBGRADE PREPARATION WITH THE GENERAL CONTRACTOR PRIOR TO PLACING LOAM.
11. ANY DEVIATION FROM THE LANDSCAPE PLAN, INCLUDING PLANT LOCATION, SELECTION, SIZE, QUANTITY OR CONDITION SHALL BE REVIEWED AND APPROVED BY THE OWNER AND LANDSCAPE ARCHITECT (AND MUNICIPAL AUTHORITY, IF APPLICABLE) PRIOR TO INSTALLATION ON SITE.
12. WHERE INDICATED ON PLAN, PLANTING SOIL MIXTURE FOR PERENNIAL AND ANNUAL FLOWERING BED AREAS SHALL CONSIST OF FOUR PARTS TOPSOIL, TWO PARTS SPAGNUM PEAT MOSS, AND ONE PART HORTICULTURAL PERLITE BY VOLUME. PEAT MOSS MAY BE SUBSTITUTED WITH WELL-ROTTED OR DEHYDRATED MANURE OR COMPOST. ROTOTILL BEDS TO A DEPTH OF 8 INCHES.
13. DURING CLEANING OF SITE AND PRIOR TO TREE AND SHRUB INSTALLATION, CONTRACTOR SHALL REMOVE INVASIVE PLANTS. AREAS WHERE INVASIVE PLANTS ARE REMOVED AND NO OTHER PLANTING IS PROPOSED, AREA SHALL BE LOAM AND SEEDED.

AC	ACRE
AFG	ABOVE FINISH GRADE
AFPROX.	APPROXIMATELY
BC	BOTTOM OF CURB
BCC	BITUMINOUS CONCRETE CURB
BIT	BITUMINOUS
BLD	BUILDING
BW	BOTTOM BY WALL
CB	CATCH BASIN
CONC	CONCRETE
CONT	CONTINUOUS
CO	CRUDE OIL
DI	DUCTILE IRON
DIA	DIAMETER
DNH	DRAIN MANHOLE
E.W.	EACH WAY
ELEV	ELEVATION
FF	FINISH FLOOR ELEVATION
FIN. GR.	FINISH GRADE
FD	FOOTING
HDPE	HIGH DENSITY POLYETHYLENE
HGT	HEIGHT
HMA	HOT MIX ASPHALT
INV	INVERT
LF	LINEAR FEET
OC	ON CENTER
PVC	POLYVINYL CHLORIDE
PWD	PORTLAND WATER DISTRICT
R	RADIUS
R.O.W.	RIGHT OF WAY
S.F.	SQUARE FEET
SCH	SCHEDULE
SLURF	SLURF/FORM CONCRETE SLOPED CURB
SCVC	SLURF/FORM CONCRETE VERTICAL CURB
SS	SEWER DRAIN
SGR	SLOPED GRANITE CURB
SMH	SEWER MANHOLE SPECS SPECIFICATIONS
SS	SANITARY SEWER
SVGC	SLOPED VERTICAL GRANITE CURB
SVGC	SLOPED VERTICAL GRANITE CURB
TC	TOP OF CURB
TW	TOP OF WALL
TYP	TYPICAL
VTG	VERTICAL GRANITE CURB
VIF	VERIFY IN FIELD

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B	RAM	09/25/22	REVISED PER PORTLAND PIPELINE
REV	BY:	DATE:	STATUS:

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TECHNICS

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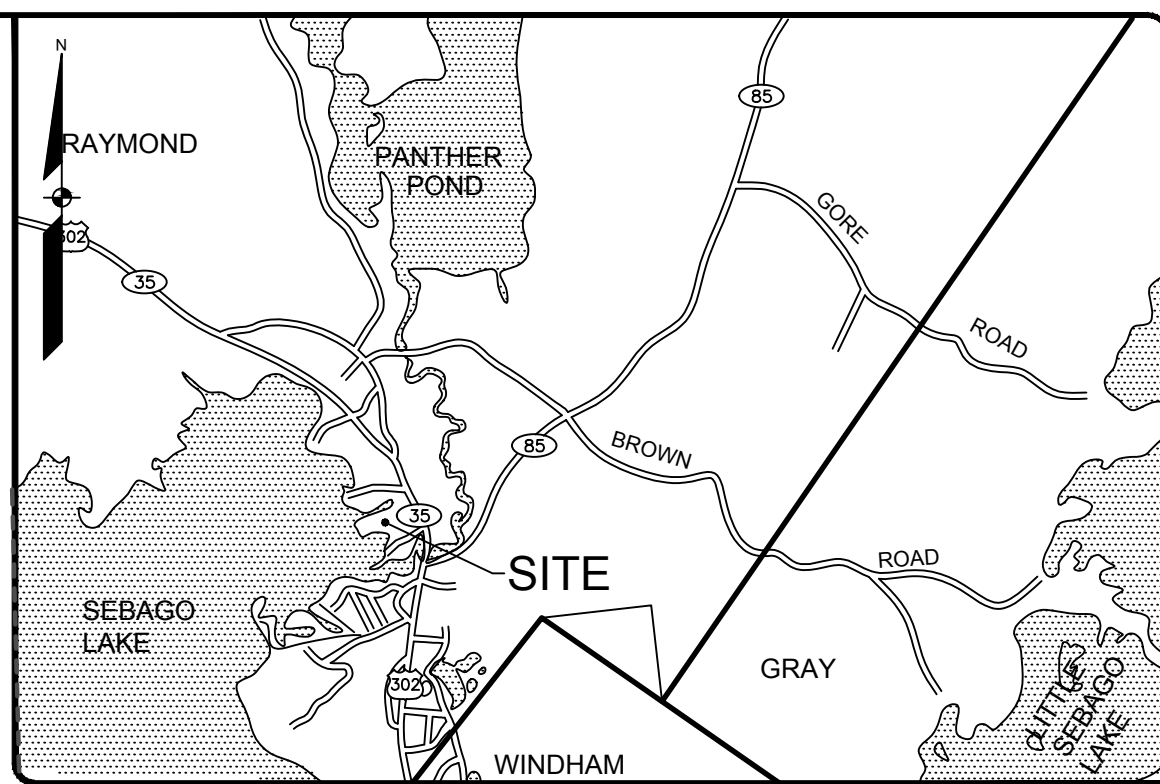
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

NOTES & LEGENDS

OF: JORDAN BAY MARINA
1328 ROOSEVELT TRAIL
RAYMOND, ME

FOR: PORT HARBOR MARINE
1 SPRING POINT DRIVE
SOUTH PORTLAND, ME 04106

DESIGNED	JSH
DRAWN	DAB
CHECKED	RAM
DATE	06/22/22
SCALE	NTS
PROJECT	14265-02



GENERAL NOTES:

1. THE RECORD OWNER OF THE PARCEL IS PORT HARBOR MARINE INC. BY DEED DATED DECEMBER 18, 2020 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS CCRD IN BOOK 37597, PAGE 223.
2. THE PARCEL IS SHOWN AS LOT 20 ON THE TOWN OF RAYMOND TAX MAP 51 AND IS LOCATED IN THE COMMERCIAL (C) DISTRICT.
3. SPACE AND BULK CRITERIA FOR THE COMMERCIAL DISTRICT ARE AS FOLLOWS:
NET RESIDENTIAL DENSITY: NONE
MINIMUM LOT SIZE: NONE
MINIMUM STREET FRONTAGE: NONE
MINIMUM FRONT YARD: NONE
MINIMUM SIDE YARD: NONE
MINIMUM REAR YARD: NONE
MAXIMUM BUILDING HEIGHT: 2.5 STORIES
*SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.
4. TOTAL AREA OF PARCEL IS APPROXIMATELY 5.90 ACRES.
5. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHINCS, INC. IN APRIL OF 2021.
6. PLAN REFERENCES:
 - A. "INDIAN POINT CAMPING AREA AMENDMENT TO ADDENDUM TO FINAL PLAN" PREPARED BY SKINNER & LAMBE, INC DATED MARCH 11, 1988 AND RECORDED IN PLAN BOOK 170, PAGE 70 (CCRD).
 - B. "MAINE STATE HIGHWAY COMMISSION RIGHT OF WAY MAP STATE HIGHWAY "14" FEDERAL STATE AID PROJECT F-014-1 (6) SHEETS 24-25", RECORDED IN PLAN BOOK 49 PAGE 24-25 (CCRD).
7. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NAVD88, BASED ON DUAL FREQUENCY GPS OBSERVATIONS.
8. BENCHMARK:
BM-1 VERTICAL NAIL IN ROOT 28" PINE ELEVATION: 272.65
9. UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY FIELD PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD CHSR-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD "VERIFY" EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR ANCHOR.
10. THE LOCUS PROPERTY AS DEPICTED HEREON DOES FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR RAYMOND, MAINE, CUMBERLAND COUNTY, COMMUNITY-PANEL NUMBER 22305-0016 B, HAVING AN EFFECTIVE DATE OF MAY 5, 1981. THE FLOOD FALLS WITHIN AN AREA IDENTIFIED AS ZONE A-1. ZONE A-1 IS SHOWN AS ELEVATION "28" ON NAVD28 (WHICH CALCULATES TO BE 267.39 ON NAVD88).
11. A WETLAND DELINEATION WAS PERFORMED ON THIS PROJECT SITE IN APRIL OF 2021 BY GARY M. FULLERTON, CERTIFIED SOIL SCIENTIST OF SEBAGO TECHINCS, INC. AND LOCATED BY GROUND SURVEY. THIS DELINEATION CONFORMS TO THE STANDARDS AND METHODS OUTLINED IN THE 1987 WETLANDS DELINEATION MANUAL, AND NORTHEAST REGIONAL SUPPLEMENT AUTHORED AND PUBLISHED BY THE U.S. ARMY CORPS OF ENGINEERS.

EXISTING	PROPOSED
----	PROPERTY LINE/R.O.W.
----	ABUTTER LINE/R.O.W.
----	EASEMENT
----	FLOODPLAIN
----	CENTERLINE
	MONUMENT
	IRON PIPE/ROD
	DRILL HOLE
<i>C(1/L)</i>	DEED CALL
<i>C1/L</i>	CURVELINE NO.
<i>N/F</i>	NOW OR FORMERLY
	BENCHMARK
	BUILDING
----	DECK/STEPS/ OVERHANG
----	EDGE WETLAND
	WETLANDS
----	EDGE PAVEMENT
----	EDGE GRAVEL
----	EDGE OF WATER
	TREELINE
	CONTOURS
	CHAIN LINK FENCE
	DECIDUOUS TREE
	CONIFEROUS TREE
	SIGN
	GAS
	SANITARY MANHOLE
	ELECTRIC METER
	LIGHT POLE
	UTILITY POLE
	GUY WIRE
----	CULVERT
----	CRUDE OIL

STATE OF MAINE
MATTHEW W.
EK
2117
PROFESSIONAL LAND SURVEYOR

Matthew W. Ek

H	RAM	06/14/2023	RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
G	RAM	12/05/2025	MDEP - CORRECT CONTROL STRUCTURE BLEEDERS
F	RAM	10/20/22	REVISED PER PWD
E	RAM	10/12/22	REVISED PER PWD AND ARCHITECTURAL COORDINATION
D	RAM	9/21/22	ADD WAIVER REQUEST
C	RAM	9/14/22	REVISED PER TOWN OF RAYMOND COMMENTS
B	RAM	09/25/22	REVISED PER PORTLAND PIPELINE
REV	BY:	DATE:	STATUS:

THIS PLAN SHALL NOT BE MODIFIED WITHOUT THE WRITTEN PERMISSION FROM SERAGO TECHINCS INC. ANY ALTERATIONS AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SERAGO TECHINCS INC.

S=BAGO
T E C H N I C S
WWW.SEBAGOTECHNICS.COM

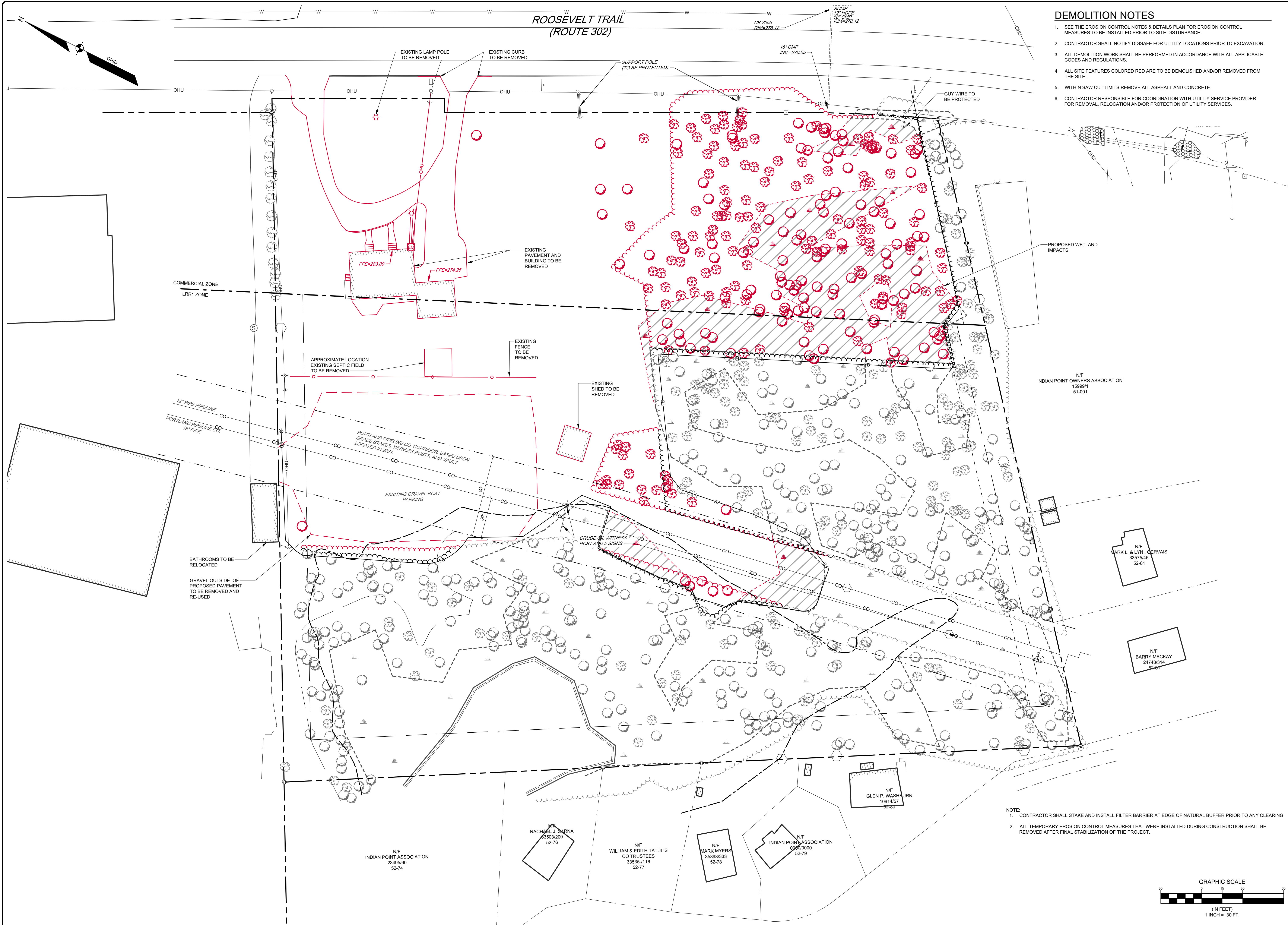
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-209-2100

EXISTING CONDITIONS PLAN

OF: JORDAN BAY MARINA
1328 ROOSEVELT TRAIL
RAYMOND, ME

FOR: PORT HARBOR MARINE
1 SPRING POINT DRIVE
SOUTH PORTLAND, ME 04106

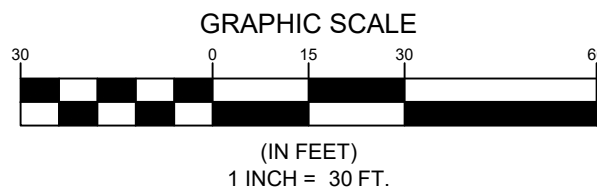
DESIGNED	DES
DRAWN	DRAWN
CHECKED	CHK
DATE	06/22/22
SCALE	1" = 30'
PROJECT	14265-02



DEMOLITION NOTES

1. SEE THE EROSION CONTROL NOTES & DETAILS PLAN FOR EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO SITE DISTURBANCE.
2. CONTRACTOR SHALL NOTIFY DIGSAFE FOR UTILITY LOCATIONS PRIOR TO EXCAVATION.
3. ALL DEMOLITION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
4. ALL SITE FEATURES COLORED RED ARE TO BE DEMOLISHED AND/OR REMOVED FROM THE SITE.
5. WITHIN SAW CUT LIMITS REMOVE ALL ASPHALT AND CONCRETE.
6. CONTRACTOR RESPONSIBLE FOR COORDINATION WITH UTILITY SERVICE PROVIDER FOR REMOVAL, RELOCATION AND/OR PROTECTION OF UTILITY SERVICES.

- NOTE:
1. CONTRACTOR SHALL STAKE AND INSTALL FILTER BARRIER AT EDGE OF NATURAL BUFFER PRIOR TO ANY CLEARING
 2. ALL TEMPORARY EROSION CONTROL MEASURES THAT WERE INSTALLED DURING CONSTRUCTION SHALL BE REMOVED AFTER FINAL STABILIZATION OF THE PROJECT.



14265-02 DEMO.DWG, TAB 4 DEMO PLAN

DESIGNED JSH
DRAWN DAB
CHECKED RAM
DATE 06/22/22
SCALE 1" = 30'
PROJECT 14265-02

SHEET 4 OF 13

DEMOLITION & EROSION CONTROL PLAN

OF:
JORDAN BAY MARINA
1328 ROOSEVELT TRAIL
RAYMOND, ME

FOR:
PORT HARBOR MARINE
1 SPRING POINT DRIVE
SOUTH PORTLAND, ME 04106

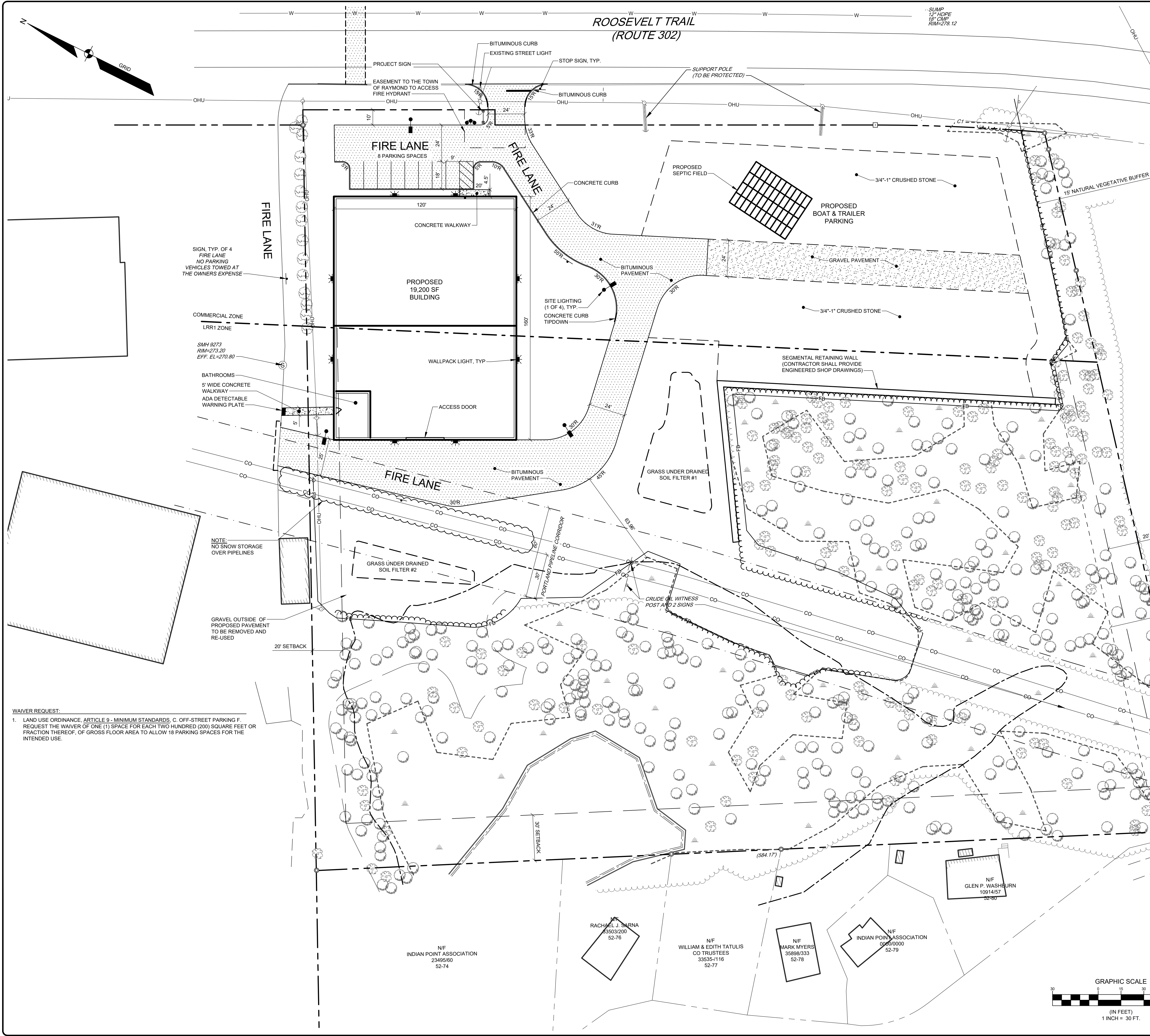
SEBAGO
TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Sullivan, ME 04106
South Portland, ME 04106
Tel. 207-200-2100

H	RAM	06/14/2023	RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
G	RAM	12/05/2022	MDEP - CORRECT CONTROL STRUCTURE BLEEDERS
F	RAM	10/20/22	REVISED PER PWD
E	RAM	10/12/22	REVISED PER PWD AND ARCHITECTURAL COORDINATION
D	RAM	9/21/22	ADD WAIVER REQUEST
C	RAM	9/14/22	REVISED PER TOWN OF RAYMOND COMMENTS
B	RAM	08/25/22	REVISED PER PORTLAND PIPELINE
REV	BY	DATE	STATUS

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ROBERT A. MCGORLEY, PE 6588

06/14/2023



- GENERAL NOTES:
- THE RECORD OWNER OF THE PARCEL IS PORT HARBOR MARINE INC. BY DEED DATED DECEMBER 18, 2020 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS CCRD IN BOOK 37597, PAGE 223.
 - THE PROPERTY IS SHOWN AS LOT 2 ON THE TOWN OF RAYMOND TAX MAP 51 AND IS LOCATED IN THE COMMERCIAL (C) DISTRICT, AND LIMITED RESIDENTIAL/RECREATIONAL (LRR1, SHORELAND) DISTRICT.
 - SPACE AND BULK CRITERIA FOR THE COMMERCIAL DISTRICT ARE AS FOLLOWS:

	C DISTRICT	LRR1 DISTRICT
NET RESIDENTIAL DENSITY:	NONE	1 UNIT / 2 ACRES
MINIMUM LOT SIZE:	NONE	2 ACRES
MINIMUM STREET FRONTAGE:	NONE	300 FEET
MINIMUM FRONT YARD:	NONE	20 FEET
MINIMUM SIDE YARD:	NONE	20 FEET
MINIMUM REAR YARD:	NONE	30 FEET
MAXIMUM BUILDING HEIGHT:	2.5 STORIES	35 FEET

* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.
 - TOTAL AREA OF PARCEL IS APPROXIMATELY 5.90 ACRES.
 - BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHNICS, INC. IN APRIL OF 2021.
 - PLAN REFERENCES:
 - "INDIAN POINT CAMPING AREA AMENDMENT TO ADDENDUM TO FINAL PLAN" PREPARED BY SKINNER & LAMBE, INC DATED MARCH 11, 1988 AND RECORDED IN PLAN BOOK 170, PAGE 70 (CCRD).
 - "MAINE STATE HIGHWAY COMMISSION RIGHT OF WAY MAP STATE HIGHWAY "14" FEDERAL STATE AID PROJECT F-014-1 (5) SHEETS 24-25", RECORDED IN PLAN BOOK 49 PAGE 24-25 (CCRD).
 - PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NA083. ELEVATIONS DEPICTED HEREON ARE NAVD83, BASED ON DUAL FREQUENCY GPS OBSERVATIONS.
 - BENCHMARK:
BM-1 VERTICAL NAIL IN ROOT 28" PINE ELEVATION: 272.85
 - UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD 38-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
 - THE LOCUS PROPERTY AS DEPICTED HEREON DOES FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR RAYMOND, MAINE, CUMBERLAND COUNTY, COMMUNITY-PANEL NUMBER 23205-0015 B, HAVING AN EFFECTIVE DATE OF MAY 5, 1981. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE A1. ZONE A1 IS SHOWN AS ELEVATION 268' ON NGVD29 WHICH CALCULATES TO BE 267.39' (ON NAVD83).
 - A WETLAND DELINEATION WAS PERFORMED ON THIS PROJECT SITE IN APRIL OF 2021 BY GARY M. FULLERTON, CERTIFIED SOIL SCIENTIST OF SEBAGO TECHNICS, INC. AND LOCATED BY GROUND SURVEY. THIS DELINEATION CONFORMS TO THE STANDARDS AND METHODS OUTLINED IN THE 1987 WETLANDS DELINEATION MANUAL AND NORTHEAST REGIONAL SUPPLEMENT AUTHORED AND PUBLISHED BY THE U.S. ARMY CORPS OF ENGINEERS.
 - AT THE TIME THAT THE BUILDING AND BOAT RACK ARE INSTALLED, THE SIGNAGE SHALL BE INSTALLED IN THE LOCATIONS INDICATED TO DENOTE THE ADJACENT FIRE LANE.
 - THE PROPOSED FIRE HYDRANT IS PRIVATE AND WILL BE INSTALLED PER THE REQUIREMENTS OF THE PORTLAND WATER DISTRICT AND THE TOWN OF RAYMOND FIRE DEPARTMENT. THE FIRE HYDRANT SHALL BE TESTED UPON COMPLETION OF CONSTRUCTION TO DETERMINE FIRE FLOW. OWNER SHALL ENTER INTO A YEARLY CONTRACT FOR INSPECTION AND TESTING OF THE FIRE HYDRANT AND SUBMIT A YEARLY REPORT TO THE FIRE DEPARTMENT.
 - ACCESS TO FIRE HYDRANT SHALL BE MAINTAINED IN THE WINTER BY THE OWNER.
 - THE PROPOSED BUILDING SHALL BE SPRINKLERED, HAVE AN ALARM SYSTEM, PROVIDE A KNOX BOX, AND PROVIDE PORTABLE FIRE HYDRANTS, IN ACCORDANCE WITH NFPA REQUIREMENTS.
 - UTILITY SERVICES TO THE BUILDING SHALL BE PROVIDED UNDERGROUND.
 - ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH NFPA REQUIREMENTS.
 - STORAGE AND HANDLING OF FUELS SHALL BE IN ACCORDANCE WITH LOCAL, STATE AND NFPA REQUIREMENTS. LOCATIONS TO BE REVIEWED AND APPROVED BY THE TOWN OF RAYMOND FIRE DEPARTMENT.
 - ADDRESSING FOR THE BUILDING SHALL BE VISIBLE FROM ROOSEVELT TRAIL FOR BOTH DIRECTIONS OF TRAFFIC.

SHORELAND ZONE IMPACTS	
TOTAL AREA WITH SHORELAND ZONE	183,487 SF
CLEARING WITHIN SHORELAND ZONE	45,398 SF (24.74%)
NON-VEGETATED SURFACES	23,240 SF (12.67%)
TOTAL TREES WITHIN SHORELAND ZONE >4"	513
TOTAL TREES >4" TO BE REMOVED IN SHORELAND ZONE	59 (11.50%)

- WAIVER REQUEST:
- LAND USE ORDINANCE, ARTICLE 9 - MINIMUM STANDARDS, C. OFF-STREET PARKING F. REQUEST THE WAIVER OF ONE (1) SPACE FOR EACH TWO HUNDRED (200) SQUARE FEET OR FRACTION THEREOF, OF GROSS FLOOR AREA TO ALLOW 18 PARKING SPACES FOR THE INTENDED USE.

APPROVAL - TOWN OF RAYMOND,
MAINE PLANNING BOARD

DESIGNED	JSH
DRAWN	DAB
CHECKED	RAM
DATE	06/22/22
SCALE	1" = 30'
PROJECT	14265-02

14265-02 S.DWG, TAB 5 SITE PLAN

SITE PLAN
OF:
JORDAN BAY MARINA
1328 ROOSEVELT TRAIL
RAYMOND, ME
FOR:
PORT HARBOR MARINE
1 SPRING POINT DRIVE
SOUTH PORTLAND, ME 04106

DESIGNED JSH
DRAWN DAB
CHECKED RAM
DATE 06/22/22
SCALE 1" = 30'
PROJECT 14265-02

SHEET 5 OF 13

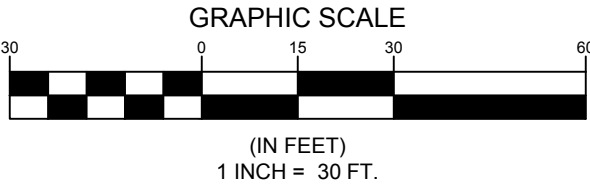
SEBAGO
TECHNICS
www.sebagotech.com
75 John Roberts Rd.
Sullivan, ME 04106
Tel. 207-200-2100

RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
MDEP - CORRECT CONTROL STRUCTURE BLEEDERS
REVISED PER PWD
REVISED PER PWD AND ARCHITECTURAL COORDINATION
ADD WAIVER REQUEST
REVISED PER TOWN OF RAYMOND COMMENTS
REV. BY: DATE: STATUS:

H	RAM	06/14/2023	RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
G	RAM	12/05/2022	MDEP - CORRECT CONTROL STRUCTURE BLEEDERS
F	RAM	10/20/22	REVISED PER PWD
E	RAM	10/12/22	REVISED PER PWD AND ARCHITECTURAL COORDINATION
D	RAM	9/21/22	ADD WAIVER REQUEST
C	RAM	9/14/22	REVISED PER TOWN OF RAYMOND COMMENTS
B	RAM	08/25/22	REVISED PER PORTLAND PIPELINE
A	RAM	08/25/22	STATUS:

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06/14/2023
ROBERT A. MCKINLEY, P.E. 6588
MAINE PROFESSIONAL ENGINEER
LICENSE NO. 10565



NOTES:

1. ROOSEVELT TRAIL IS CURRENTLY UNDER MORATORIUM. ANY OPEN CUT OF TRAVEL LANES WILL REQUIRE THE MILL AND OVERLAY OF TRAVEL LANE PAVEMENT 100 FEET IN BOTH DIRECTIONS FROM OPEN CUT. CONTRACTOR SHALL COORDINATE WORK WITH ENGINEER AND MDOT TO DETERMINE CURRENT STATUS BEFORE WATER MAIN INSTALLATION.
2. MILL AND OVERLAY SHALL INCLUDE THE MILLING TO 1 1/2" DEPTH. THE PLACEMENT AND COMPACTION OF 1 1/2" OF 12.5mm HOT MIX ASPHALT AND THE RESTORATION OF ALL STRIPING THROUGH THE LIMITS OF THE PAVEMENT REPLACEMENT.

DESIGNED	JSH
DRAWN	DAB
CHECKED	RAM
DATE	06/22/22
SCALE	1" = 30'
PROJECT	14265-02

SHEET 6 OF 13

GRADING & UTILITIES PLAN

OF:
JORDAN BAY MARINA
1328 ROOSEVELT TRAIL
RAYMOND, ME

FOR:
PORT HARBOR MARINE
1 SPRING POINT DRIVE
SOUTH PORTLAND, ME 04106

H	G	RAM	06/14/2023	RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
H	RAM	12/05/2023	MDEP - CORRECT CONTROL STRUCTURE BLEEDERS	
F	RAM	10/02/2022	REVISED PER PWD	
F	RAM	10/1/2022	REVISED PER PWD AND ARCHITECTURAL COORDINATION	
D	RAM	9/21/2022	ADD WANNER REQUEST	
C	RAM	9/14/2022	REVISED PER TOWN OF RAYMOND COMMENTS	
B	RAM	09/25/22	REVISED PER PORTLAND PIPELINE	
REV:	DATE:	STATUS:		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBASTIEN TECHINCS, INC. ANY ALTERATIONS TO THIS PLAN SHALL BE RECORDED IN THE PROJECT LOG AND BE SUBJECT TO THE SAME REVIEW AND APPROVAL PROCESS.

SEBAGO
TECHNICS

W. SEBAGO TECHNICS.
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

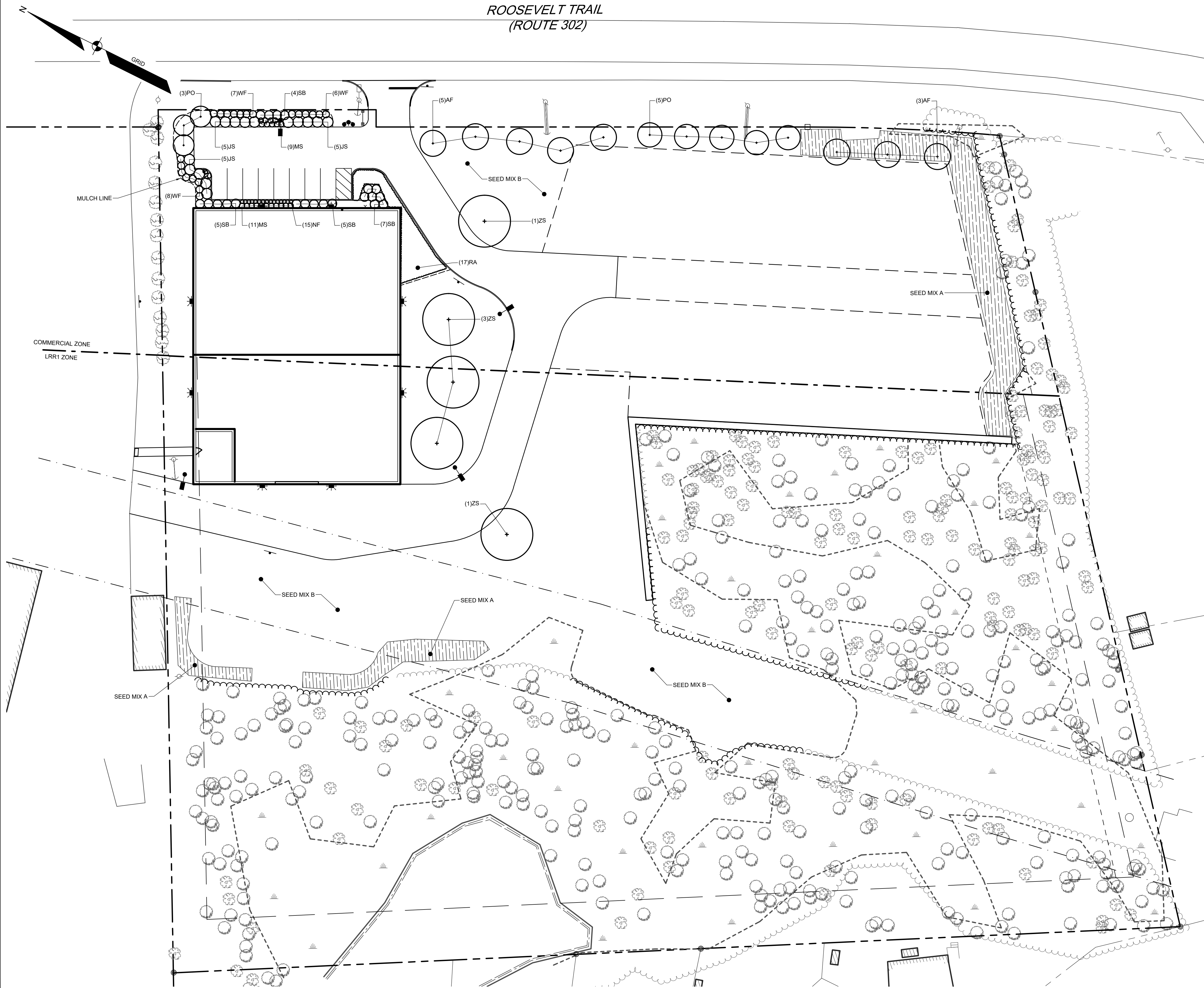
H	G	RAM	06/14/2023	RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
H	RAM	12/05/2023	MDEP - CORRECT CONTROL STRUCTURE BLEEDERS	
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B	RAM	09/25/22	REVISED PER PORTLAND PIPELINE	
REV:	DATE:	STATUS:		

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBASTIEN TECHINCS, INC. ANY ALTERATIONS TO THIS PLAN SHALL BE MADE TO THE ORIGINAL PLAN AND THE REVISIONS SHALL BE RECORDED IN THE PLAN REVISION LOG.

SEBAGO
TECHNICS

W. SEBAGO TECHNICS.
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

ROOSEVELT TRAIL
(ROUTE 302)

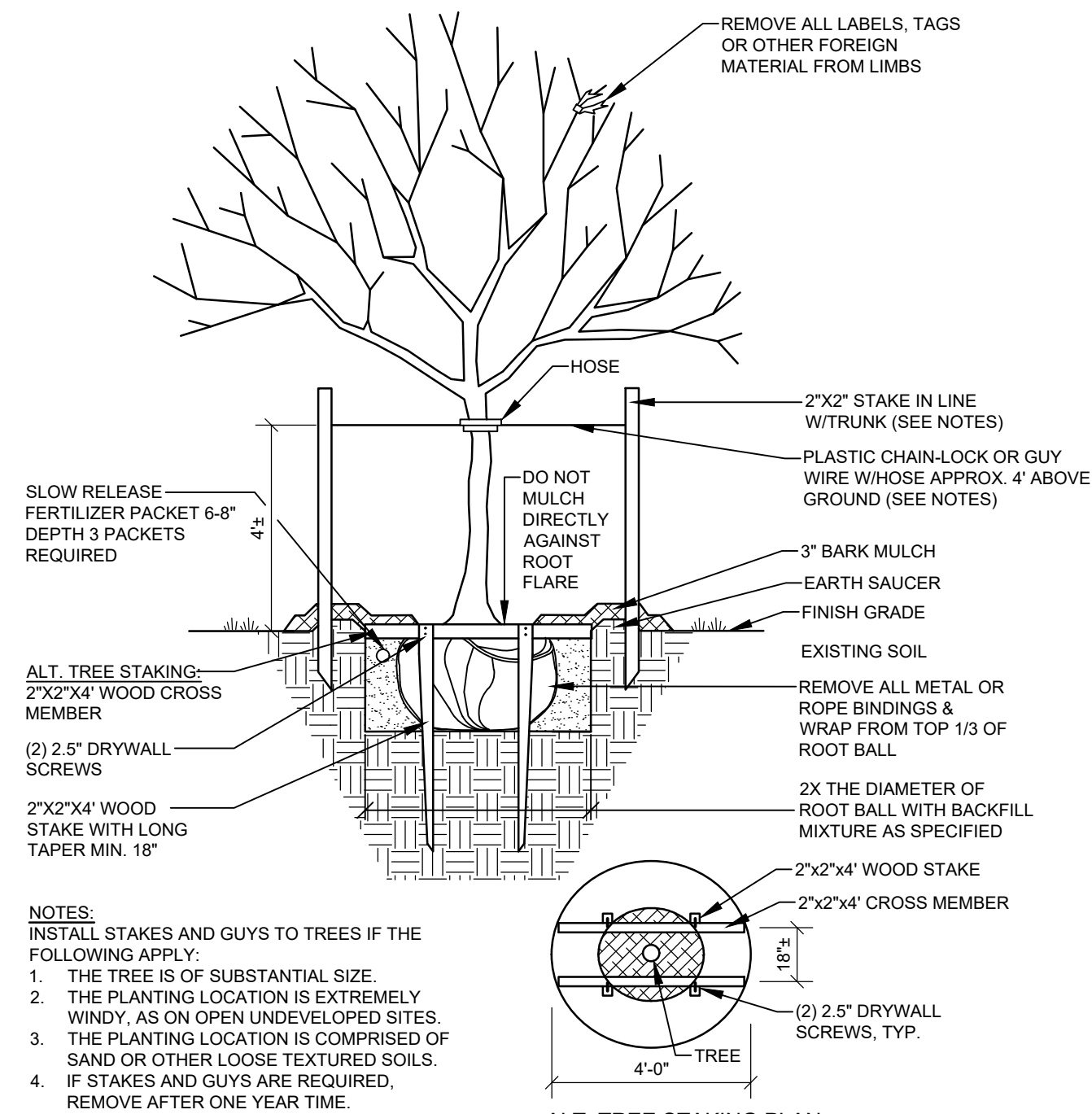


PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	SIZE / NOTES
AF	ACER X FREEMANII 'ARMSTRONG'	ARMSTRONG RED MAPLE	2.5" CAL
ZS	ZELKOVA SERRATA	ZELKOVA	2.5" CAL
PO	PICEA OMORICA	SERBIAN SPRUCE	6'-7' HGT.
JV	JUNIPERUS SABINA 'GREEN CARPET'	GREEN CARPET JUNIPER	#3 CONT.
SB	SPIRAEA X BULMDA 'ANTHONY WATERER'	ANTHONY WATERER	#3 CONT.
RA	RHUS AROMATICA 'GRO-LOW'	FRAGRANT SUMAC	#3 CONT.
WF	WEIGELA FLORIDA 'FINE WINE'	FINE WINE WEIGELA	#3 CONT.
MS	MISCANTHUS SINENSIS 'LITTLE KITTEN'	LITTLE KITTEN MAIDEN GRASS	#2 CONT.
NF	NEPETA FAASENII 'WALKER'S LOW'	WALKER'S LOW CATMINT	#2 CONT.

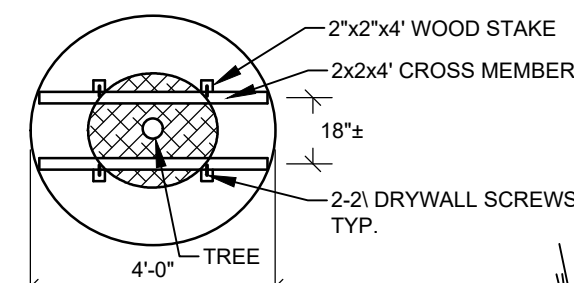
SEED MIX A: NEW ENGLAND CONSERVATION/WILDLIFE MIX
(FOR MORE INFORMATION PLEASE VISIT NEW ENGLAND WETLAND PLANTS, INC.)

SEED MIX B: MDOT METHOD #1 PARK MIX
(FOR MORE INFORMATION PLEASE VISIT DIVISION 700 OF THE MAINE DEPARTMENT OF TRANSPORTATION)



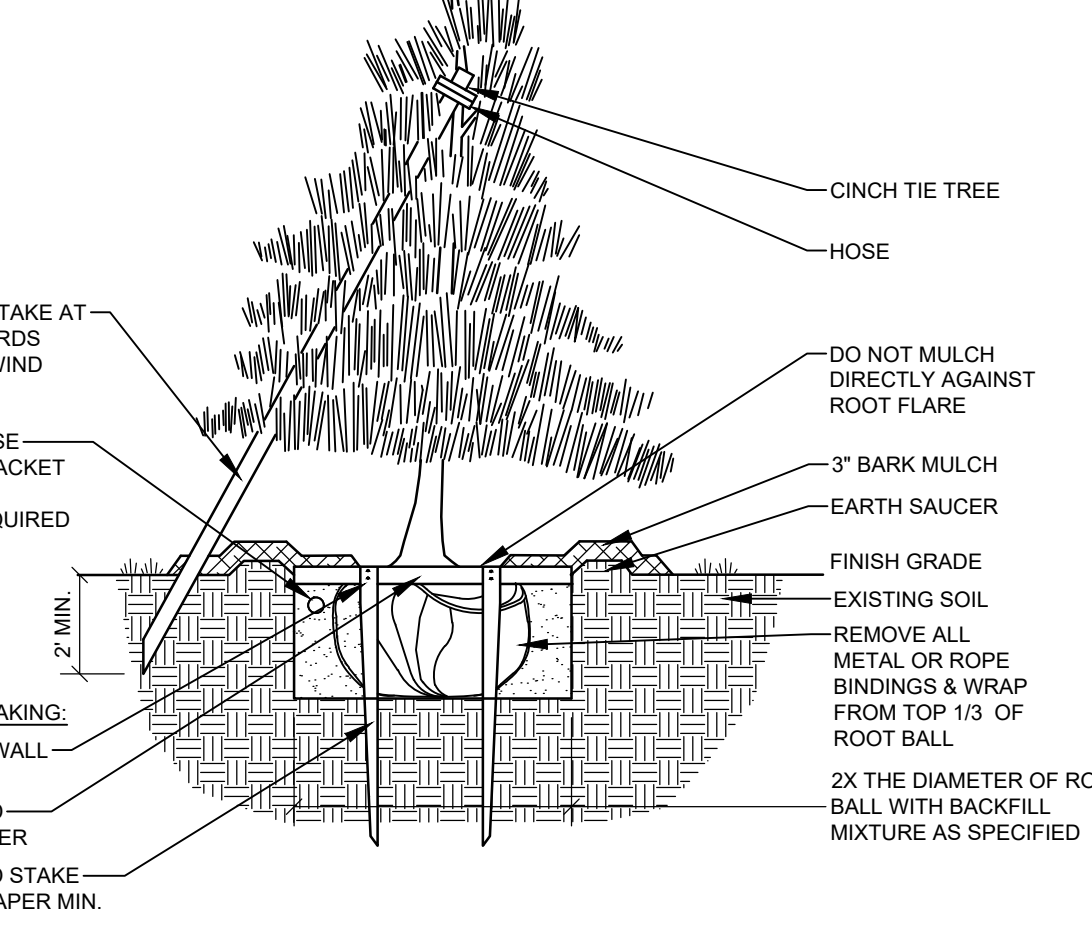
DECIDUOUS TREES

NOT TO SCALE



EVERGREEN TREES

NOT TO SCALE

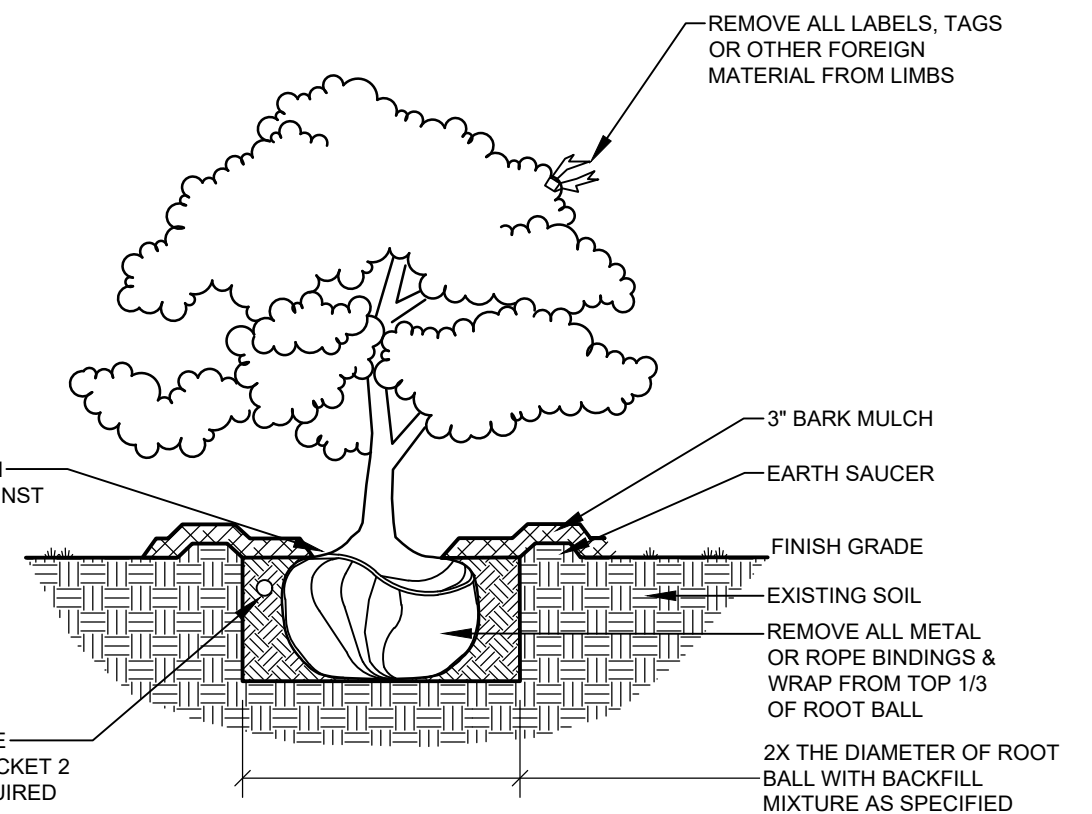


NOTES:

- INSTALL STAKES AND GUYS TO TREES IF THE FOLLOWING APPLY:
- THE TREE IS OF SUBSTANTIAL SIZE.
- THE PLANTING LOCATION IS EXTREMELY WINDY, AS ON OPEN UNDEVELOPED SITES.
- THE PLANTING LOCATION IS COMPRISED OF SAND OR OTHER LOOSE TEXTURED SOILS.
- IF STAKES AND GUYS ARE REQUIRED, REMOVE AFTER ONE YEAR TIME.

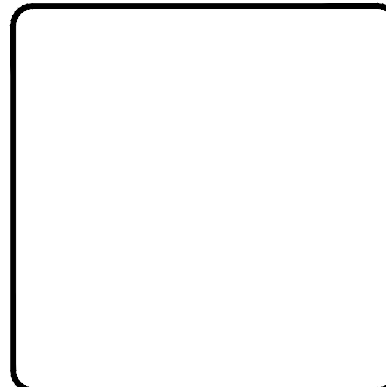
EVERGREEN TREES

NOT TO SCALE



DECIDUOUS & EVERGREEN SHRUB

NOT TO SCALE



H	RAM	06/14/2023	RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
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REV	BY	DATE	STATUS
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LANDSCAPE PLAN	DESIGNED	JSH
OF:	DRAWN	DAB
JORDAN BAY MARINA	CHECKED	RAM
1328 ROOSEVELT TRAIL	DATE	08/28/22
RAYMOND, ME	SCALE	1" = 30'
FOR:	PROJECT	14265-02
PORT HARBOR MARINE		
1 SPRING POINT DRIVE		
SOUTH PORTLAND, ME 04106		

DESIGNED	JSH
DRAWN	DAB
CHECKED	RAM
DATE	08/28/22
SCALE	1" = 30'
PROJECT	14265-02

EROSION CONTROL MEASURES

PRE-CONSTRUCTION PHASE

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS (SILT FENCE) WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SEDIMENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND DETAILS IN THIS PLAN SET. THIS NETWORK IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.

PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ENTRANCES AND EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATES OF DISTURBANCE AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

CONSTRUCTION AND POST-CONSTRUCTION PHASE

AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD, SUCH AS ACTIVE EXCAVATION AND ACTIVE GRADING. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS ACTIVELY OCCURRING OR CAN BE MULCHED IN THE SAME DAY. OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL, AS SHOWN ON THE DESIGN PLANS AND AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN SEVEN (7) DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100 FEET OF STREAMS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL, WITHIN SEVEN (7) DAYS. REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

EROSION CONTROL APPLICATIONS & MEASURES

THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

1. TEMPORARY MULCHING:

ALL DISTURBED AREAS SHALL BE MULCHED WITH MATERIALS SPECIFIED BELOW PRIOR TO ANY STORM EVENT. ALL DISTURBED AREAS NOT FINAL GRADED WITHIN 14 DAYS SHALL BE MULCHED. DISTURBED AREAS ADJACENT TO NATURAL RESOURCES THAT ARE NOT GRADED WITHIN SEVEN (7) DAYS SHALL BE MULCHED. ALSO, AREAS, WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED, SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING. EROSION CONTROL BLANKETS ARE RECOMMENDED TO BE USED AT THE BASE OF GRASSED WATERWAYS AND ON SLOPES GREATER THAN 33%. MULCH ANCHORING SHOULD BE USED ON SLOPES GREATER THAN 5% AFTER SEPTEMBER 15TH OF THE CONSTRUCTION YEAR (SEE WINTER EROSION CONTROL NOTES).

TYPES OF MULCH:

HAY OR STRAW: SHALL BE APPLIED AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE).

EROSION CONTROL MIX: SHALL BE PLACED EVENLY AND MUST PROVIDE 100% SOIL COVERAGE. EROSION CONTROL MIX SHALL BE APPLIED SUCH THAT THE THICKNESS ON SLOPES 3:1 OR LESS IS 2 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THE THICKNESS ON SLOPES BETWEEN 3:1 AND 2:1 SHALL BE 4 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THIS SHALL NOT BE USED ON SLOPES GREATER THAN 2:1.

EROSION CONTROL BLANKET: SHALL BE INSTALLED SUCH THAT CONTINUOUS CONTACT BETWEEN THE MAT AND THE SOIL IS OBTAINED. INSTALL BLANKETS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. SOIL STOCKPILES:

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES. SEDIMENT BARRIERS SHALL BE INSTALLED DOWNGRADEMENT OF STOCKPILES, AND STORMWATER SHALL BE PREVENTED FROM RUNNING INTO THE STOCKPILE.

3. NATURAL RESOURCES PROTECTION:

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES SHALL BE MULCHED USING TEMPORARY MULCHING (AS DESCRIBED IN PART 1 OF THIS SECTION) WITHIN 7 DAYS OF EXPOSURE OR PRIOR TO ANY STORM EVENT. SEDIMENT BARRIERS (AS DESCRIBED IN PART 4 OF THIS SECTION) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.

4. SEDIMENT BARRIERS:

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS SHALL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. SEDIMENT BARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION.

SILT FENCE: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE EFFECTIVE HEIGHT OF THE FENCE SHALL NOT EXCEED 36 INCHES. IT IS RECOMMENDED THAT SILT FENCE BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL SO AS TO AVOID ADDITIONAL SOIL DISTURBANCE.

HAY BALES: SHALL NOT BE INSTALLED ADJACENT TO WETLAND. INSTALL PER THE DETAIL ON THE PLANS. BALES SHALL BE WIRE-BOUND OR STRING-TIED AND THESE BINDINGS MUST REMAIN PARALLEL WITH THE GROUND SURFACE DURING INSTALLATION TO PREVENT DETEIORATION OF THE BINDINGS. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

EROSION CONTROL MIX: SHALL NOT BE USED ADJACENT TO WETLANDS. INSTALL PER THE DETAIL ON THE PLANS. THE MIX SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL AND CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4 INCHES IN DIAMETER. THE MIX COMPOSITION SHALL MEET THE STANDARDS DESCRIBED WITHIN THE MDEP BEST MANAGEMENT PRACTICES. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER. EROSION CONTROL MIX BERMS SHALL NOT BE USED AT THE BOTTOM OF STEEP SLOPES (>8%) OR SLOPES WITH FLOWING WATER.

CONTINUOUS CONTAINED BERM: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THIS SEDIMENT BARRIER IS EROSION CONTROL MIX PLACED WITHIN A SYNTHETIC TUBULAR NETTING AND PERFORMS AS A STURDY SEDIMENT BARRIER THAT WORKS WELL ON HARD GROUND SUCH AS FROZEN CONDITIONS, TRAVELED AREAS OR PAVEMENT. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

5. TEMPORARY CHECK DAMS:

SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. CHECK DAMS ARE TO BE PLACED WITHIN DITCHES/ SWALES AS SPECIFIED ON THE DESIGN PLANS IMMEDIATELY AFTER FINAL GRADING. CHECK DAMS SHALL BE 2 FEET HIGH. TEMPORARY CHECK DAMS MAY BE REMOVED ONLY AFTER THE ROADWAYS ARE PAVED AND THE VEGETATED SWALES ARE ESTABLISHED WITH AT LEAST 90% OF PERENNIAL PERENNIAL GROWTH. THE AREA BENEATH THE CHECK DAM MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER REMOVAL OF THE CHECK DAM.

STONE CHECK DAMS: STONE DAMS SHOULD BE CONSTRUCTED OF 2 TO 3 INCH STONE AND PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAN THE OUTER EDGES.

HAY BALE CHECK DAMS: BALES SHALL BE WIRE-BOUND OR STRING-TIED. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. HAY BALES SHALL BE PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAN THE OUTER EDGES.

MANUFACTURED CHECK DAMS: MANUFACTURED CHECK DAMS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF AUTHORIZED BY THE PROPER LOCAL, STATE OR FEDERAL REGULATING AGENCIES. THESE UNITS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS.

6. STORMDRAIN INLET PROTECTION:

INLET PROTECTION SHALL BE PLACED AROUND A STORMDRAIN DROP INLET OR CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESULTANT PONDING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.

HAY BALE DROP INLET PROTECTION: WE DO NOT RECOMMEND THE USE OF HAY BALES AS INLET PROTECTION.

CONCRETE BLOCK AND STONE INLET SEDIMENT FILTER (DROP OR CURB INLET): SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE HEIGHT OF THE CONCRETE BLOCK BARRIER CAN VARY BUT MUST BE BETWEEN 12 AND 24 INCHES TALL. A MINIMUM OF 1 INCH CRUSHED STONE SHALL BE USED.

MANUFACTURED SEDIMENT BARRIERS AND FILTER (DROP OR CURB INLET): MANUFACTURED FILTERS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. STABILIZED CONSTRUCTION ENTRANCE/EXIT:

PRIOR TO CLEARING AND/OR GRUBBING THE SITE A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PUBLIC ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEEP TO FURTHER MINIMIZE THE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. THE TERM "SWEEP" IS UNDERSTOOD TO MEAN REMOVAL AND RECOVERY OF TRACKED SEDIMENT WITH A STREET SWEEPER, NOT BRUSHING THE MATERIAL INTO SWALES OR STRUCTURES WITH A MECHANICAL BROOM. STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN AREAS SPECIFIED ON THE PLANS AND AS DETAILED ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.

DUST CONTROL:

DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS. APPLYING OTHER DUST CONTROL PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL, STATE AND/OR FEDERAL REGULATING AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEP IMMEDIATELY AND NOT LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS.

TEMPORARY VEGETATION:

TEMPORARY VEGETATION SHALL BE APPLIED TO DISTURBED AREAS THAT WILL NOT RECEIVE FINAL GRADING FOR PERIODS UP TO 12 MONTHS. THIS PROCEDURE SHOULD BE USED EXTENSIVELY IN AREAS ADJACENT TO NATURAL RESOURCES. SEEDBED PREPARATION AND APPLICATION OF SEED SHALL BE CONDUCTED AS INDICATED IN THE PERMANENT VEGETATION SECTION OF THIS NARRATIVE. SPECIFIC SEEDS (FAST GERMINATING AND SHORT LIVING) SHALL BE SELECTED FROM THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUALS FOR CONTRACTORS AND ENGINEERS, LATEST REVISION. ALTERNATIVE EROSION CONTROL MEASURES SHOULD BE USED IF SEEDING CAN NOT BE DONE BEFORE SEPTEMBER 15TH OF THE CONSTRUCTION YEAR.

PERMANENT VEGETATION:

REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOAMED AND SEEDED. THE APPLICATION OF SEED SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR, PLEASE REFER TO THE WINTER EROSION CONTROL NOTES FOR MORE DETAIL. REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

SEEDBED PREPARATION:

- FOUR (4) INCHES OF LOAM SHALL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER 2 INCHES OR LARGER IN ANY DIMENSION, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
- SOILS TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOILS TESTS SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14-DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

ITEM	APPLICATION RATE
10-20-20 FERTILIZER (N-P205-K20 OR EQUAL)	18.4 LBS./1,000 S.F.
GROUND LIMESTONE (50% CALCIUM & MAGNESIUM OXIDE)	138 LBS./1,000 S.F.
C. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH PROPER EQUIPMENT. ROLL THE AREA TO FIRM THE SEEDBED EXCEPT ON CLAY OR SILTY SOILS OR COARSE SAND.	

APPLICATION OF SEED:

- SEEDING: SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. GENERALLY A SEED MIXTURE MAY BE APPLIED AS FOLLOWS: (MDEP SEED MIX 2 IS DISPLAYED)

SEED TYPE	APPLICATION RATE
CREeping RED FESCUE	0.46 LBS/1,000 S.F. (20 LBS/ACRE)
REDTOP	0.05 LBS/1,000 S.F. (2 LBS/ACRE)
TALL FESCUE	0.46 LBS/1,000 S.F. (20 LBS/ACRE)
TOTAL:	0.97 LBS/1,000 S.F. (42 LBS/ACRE)

NOTE: A SPECIFIC SEED MIXTURE SHOULD BE CHOSEN TO MATCH THE SOILS CONDITION OF THE SITE. VARIOUS AGENCIES CAN RECOMMEND SEED MIXTURES. MDEP RECOMMENDED SEED MIXTURES ARE IN THE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 2016 OR LATEST REVISION.

- HYDROSEEDING: SHALL BE CONDUCTED ON PREPARED AREAS WITH SLOPES LESS THAN 2:1. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. RECOMMENDED SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

- MULCHING: SHALL COMMENCE IMMEDIATELY AFTER SEED IS APPLIED. REFER TO THE TEMPORARY MULCHING SECTION OF THIS NARRATIVE FOR DETAILS.

SODDING:

FOLLOWING SEEDBED PREPARATION, SOD CAN BE APPLIED IN LIEU OF SEEDING IN AREAS WHERE IMMEDIATE VEGETATION IS MOST BENEFICIAL, SUCH AS DITCHES, AROUND STORMWATER DROP INLETS AND AREAS OF AESTHETIC VALUE. SOD SHOULD BE LAID AT RIGHT ANGLES TO THE DIRECTION OF FLOW, STARTING AT THE LOWEST ELEVATION. SOD SHOULD BE ROLLED OR TAMPED DOWN TO EVEN OUT THE JOINTS ONCE LAID DOWN, WHERE FLOW IS PREVALENT THE SOD MUST BE PROPERLY ANCHORED DOWN, IRRIGATE THE SOD IMMEDIATELY AFTER INSTALLATION. IN MOST CASES, SOD CAN BE ESTABLISHED BETWEEN APRIL 1ST AND NOVEMBER 15TH OF THE CONSTRUCTION YEAR, HOWEVER, REFER TO THE WINTER EROSION CONTROL NOTES FOR ANY ACTIVITIES AFTER OCTOBER 1ST.

STANDARDS FOR TIMELY STABILIZATION:

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES – THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE MDEP WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (10H:1V) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS – BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE APPLICANT WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 2(C) OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM 2(D) OF THIS STANDARD.
- STABILIZE THE SLOPE WITH SOD – THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).
- STABILIZE THE SLOPE WITH WOOD WASTE COMPOST – THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOOD WASTE COMPOST, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- STABILIZE THE SLOPE WITH STONE RIPRAP – THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS – BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% (10H:1V). IF THE APPLICANT FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION – BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE APPLICANT WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 15, THEN THE APPLICANT WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM 3(C) OF THIS STANDARD.
- STABILIZE THE SOIL WITH SOD – THE APPLICANT WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
- STABILIZE THE SOIL WITH MULCH – BY NOVEMBER 15 THE APPLICANT WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

- MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, AND AT LEAST EVERY SEVEN (7) DAYS, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS NO LATER THAN THE END OF THE NEXT WORKDAY. TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURE, THE CONTRACTOR SHALL PROVIDE THE NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN WITHIN SEVEN (7) DAYS.
- FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMIMONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.

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 OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

- 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, PUMPS, AND OTHER FORMS OF DISCHARGE 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 STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

- FUGITIVE SEDIMENT AND DUST: ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SEE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEP 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, IN MOST CASES THE COLLECTED WATER IS HEAVILY SITED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. 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. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

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

- DISCHARGES FROM FIREFIGHTING ACTIVITY;
- FIRE HYDRANT FLUSHINGS;
- VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
- DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS;
- ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
- 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;
- UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
- UNCONTAMINATED GROUNDWATER OR SPRING WATER;
- FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
- UNCONTAMINATED EXCAVATION DEWATERING;
- POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
- LANDSCAPE IRRIGATION.

- UNAUTHORIZED NON-STORMWATER DISCHARGES: THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES, SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

- WASTEWATER FROM THE WASHOUT OR CLEAN OUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
- FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
- SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING, AND
- TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

WINTER EROSION CONTROL MEASURES

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 1 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. ALL AREAS SHALL BE CONSIDERED TO BE DENUEED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS/1,000 S.F. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. THE CONTRACTOR MUST BE RESPONSIBLE FOR THE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

1. SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT AT 150 LBS/1,000 S.F. (3 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

2. NATURAL RESOURCES PROTECTION

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA.

PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

3. SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOOD WASTE FILTER BERMS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

4. MULCHING

ALL AREA SHALL BE CONSIDERED TO BE DENUEED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. ANCHOR HAY OR STRAW WITHIN 100 FEET FROM ANY NATURAL RESOURCES. SEDIMENT BARRIERS SHALL BE INSTALLED DOWNGRADEMENT OF STOCKPILES, AND STORMWATER SHALL BE PREVENTED FROM RUNNING OVER THE STOCKPILE.

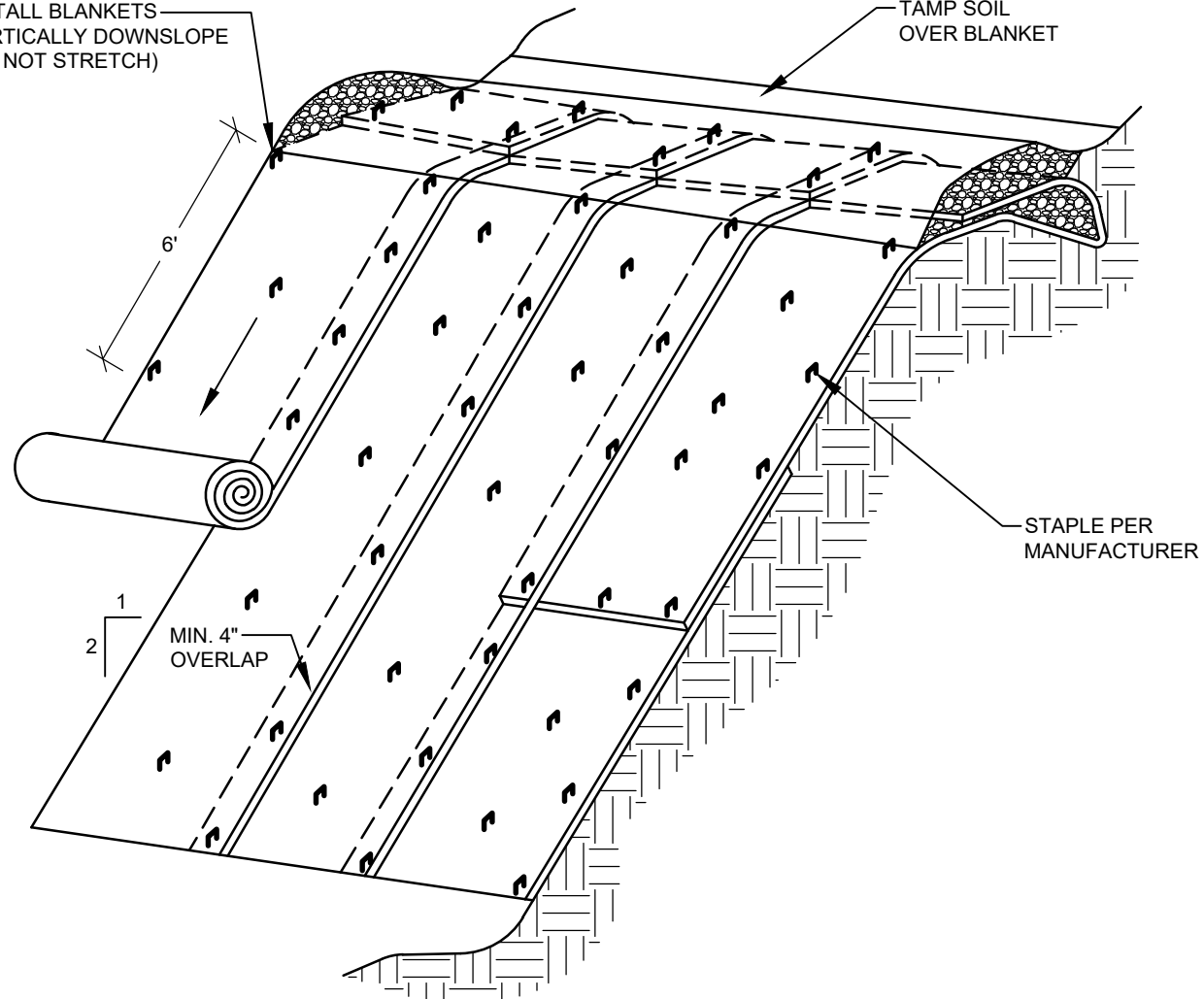
BETWEEN THE DATES OF SEPTEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACK OR WOOD CELLULOSE FIBER, WHEN GROUND SURFACE IS NOT VISIBLE THOUGH THE MULCH THEN COVER IS SUFFICIENT. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORK DAY.

5. MULCHING ON SLOPES AND DITCHES

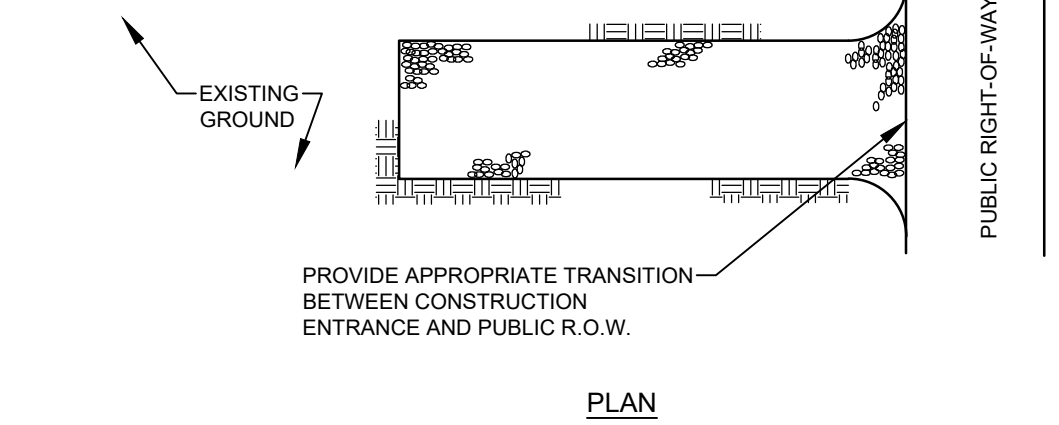
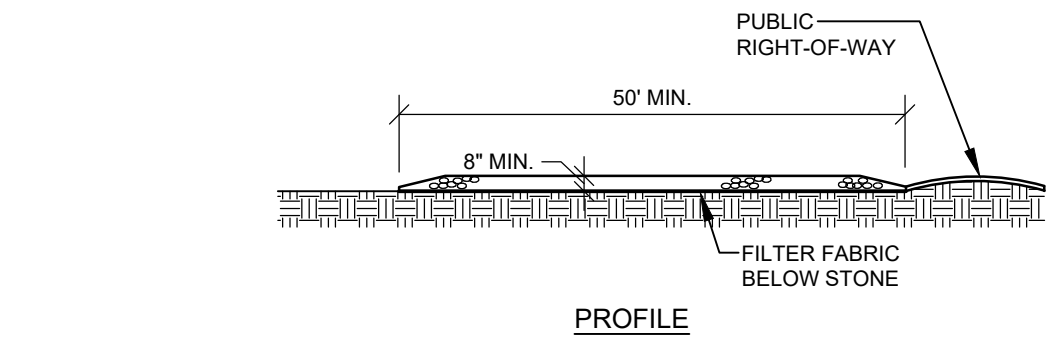
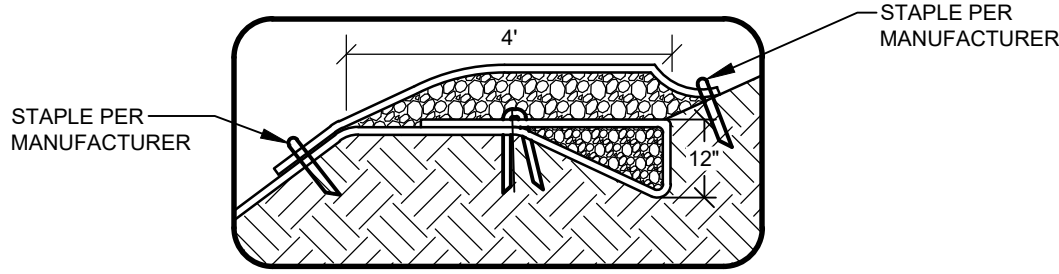
SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS/1,000 S.F. ON ALL SLOPES GREATER THAN 8%. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 5% FOR SLOPES GREATER THAN 3% AND FOR ALL OTHER SLOPES GREATER THAN 8%. EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES 8%. EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.

6. SEEDING

BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS 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 1ST 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. DORMANT SEEDING MAY BE SELECTED TO BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING ANCHORED WITH STAPLES. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5LBS/1000 S.F. ALL AREAS SEEDED DURING THE WINTER WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS SUFFICIENTLY VEGETATED (LESS THAN 75% CATCH) SHALL BE REVEGETATED BY REPLACING LO



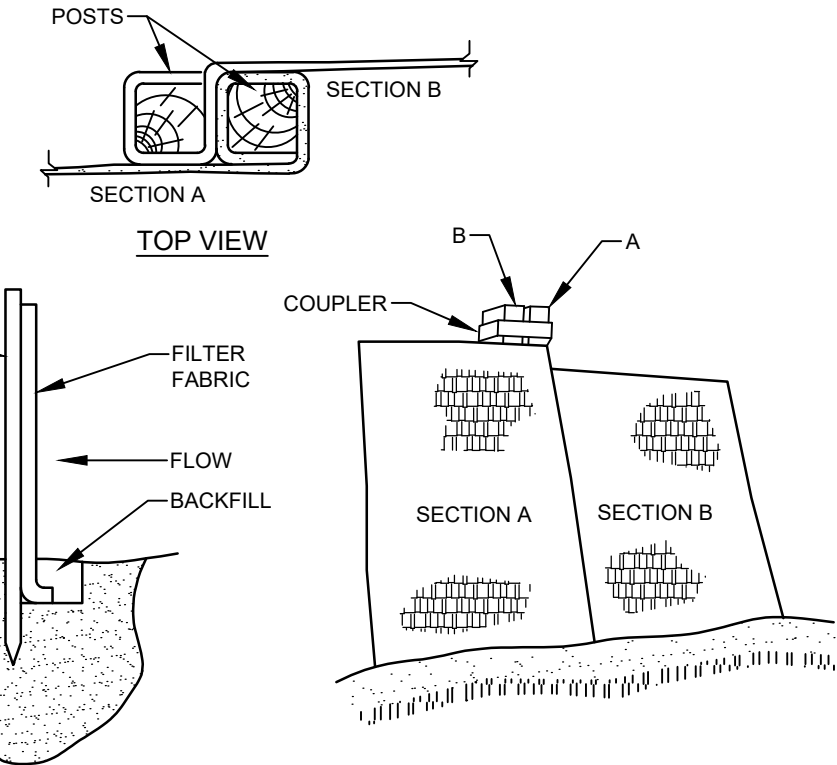
- CONSTRUCTION SPECIFICATIONS**
1. THE SOIL SURFACE SHALL BE FINELY GRADED AND SMOOTH FOR THE BLANKET TO HAVE DIRECT CONTACT WITH THE SOIL AND TO PREVENT UNDERMINING.
 2. SEED SHALL BE SOWN BEFORE INSTALLING THE EROSION CONTROL BLANKET.
 3. ALWAYS UNROLL THE BLANKET DOWNHILL WITHOUT STRETCHING AND ANCHOR THE UPSLOPE EDGE IN A 12 INCH DEEP TRENCH THAT IS BACKFILLED AND TAMPED. COVER TEH TAMPED SOIL WITH BLANKET AND STAPLE TO SECURE.
 4. OVERLAP SHINGLE STYLE A MINIMUM OF 12 INCHES AT THE TOP OF EACH ROW AND 4 INCHES AT THE EDGES OF PARALLEL ROWS. ANCHOR ALONG THE OVERLAP WITH A MAXIMUM SPACING OF 3 FEET OR AS REQUIRED BY THE MANUFACTURER.



- 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 PLANS, 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 ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT 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

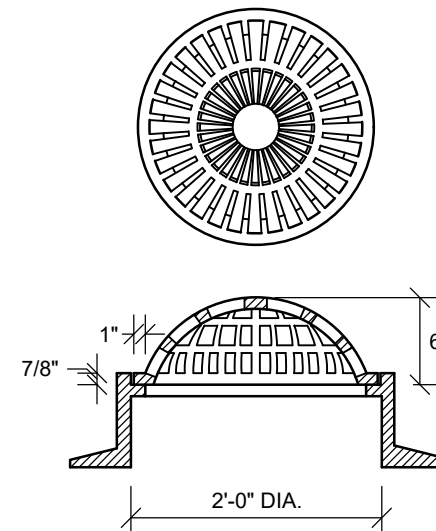
NOT TO SCALE



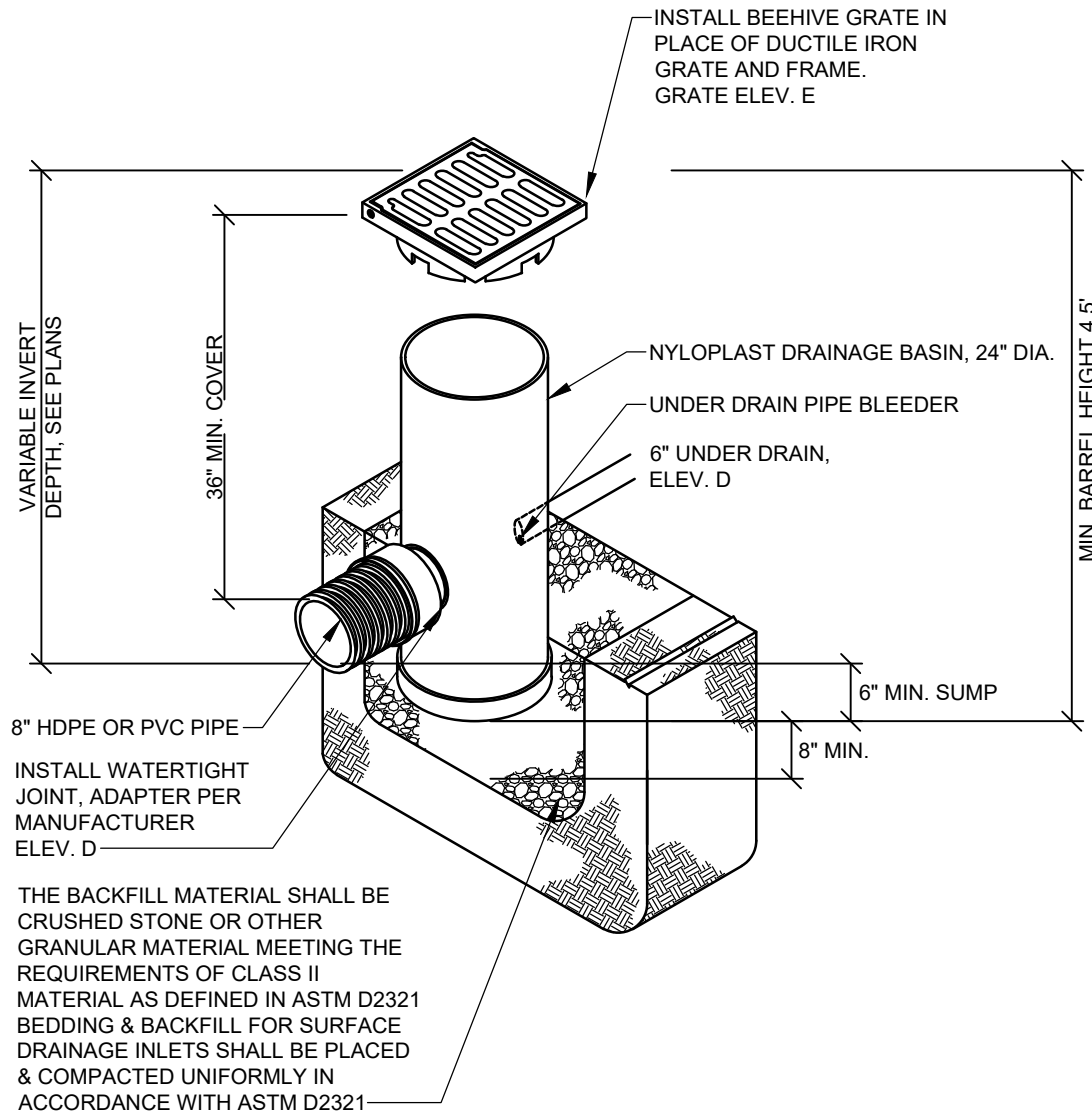
- INSTALLATION:**
1. EXCAVATE A 6"x 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
 2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
 3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
 4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT THE BASE, BUT MUST BE ACCOMPANIED BY AN INTERCEPTION DITCH.
 5. JOIN SECTION AS SHOWN ABOVE.
 6. BARRIER SHALL BE MIRAFI SILT FENCE OR EQUAL.
 7. THE FENCE SHOULD BE ANCHORED TO RESIST PULL-OUT AND BE STRETCHED TIGHTLY BETWEEN STAKES TO PREVENT SAGGING.
 8. IN AREAS WHERE FLAP CANNOT BE KEYED PROPERLY (DUE TO FROZEN GROUND, BEDROCK, STONY SOILS, ROOTS NEAR A PROTECTED NATURAL RESOURCE, ETC.) THE SILT FENCE SHOULD BE ANCHORED WITH AGGREGATE, CRUSHED STONE, EROSION CONTROL, MIX OR OTHER MATERIAL.
 9. FILTER BARRIER NEEDS TO BE REMOVED WHEN THE AREA IS STABILIZED.

FILTER BARRIER

NOT TO SCALE



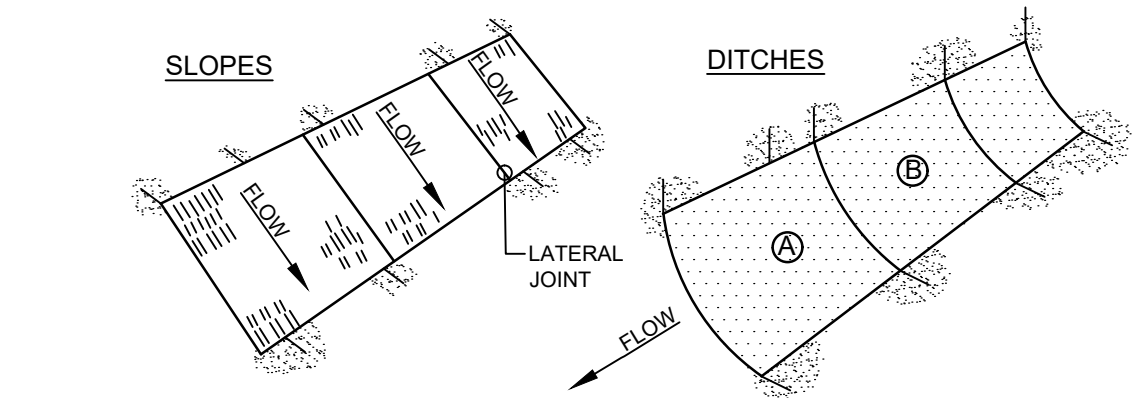
- NOTES:**
- NEENAH FOUNDRY #R-4353 OR APPROVED EQUAL
- BEEHIVE GRATE**
- NOT TO SCALE



- NOTES:**
1. INSTALL BASIN IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 2. INSTALL BEEHIVE GRATE IN PLACE OF D.I. GRATE AND FRAME.

TYP. NYLOPLAST OUTLET CONTROL STRUCTURE

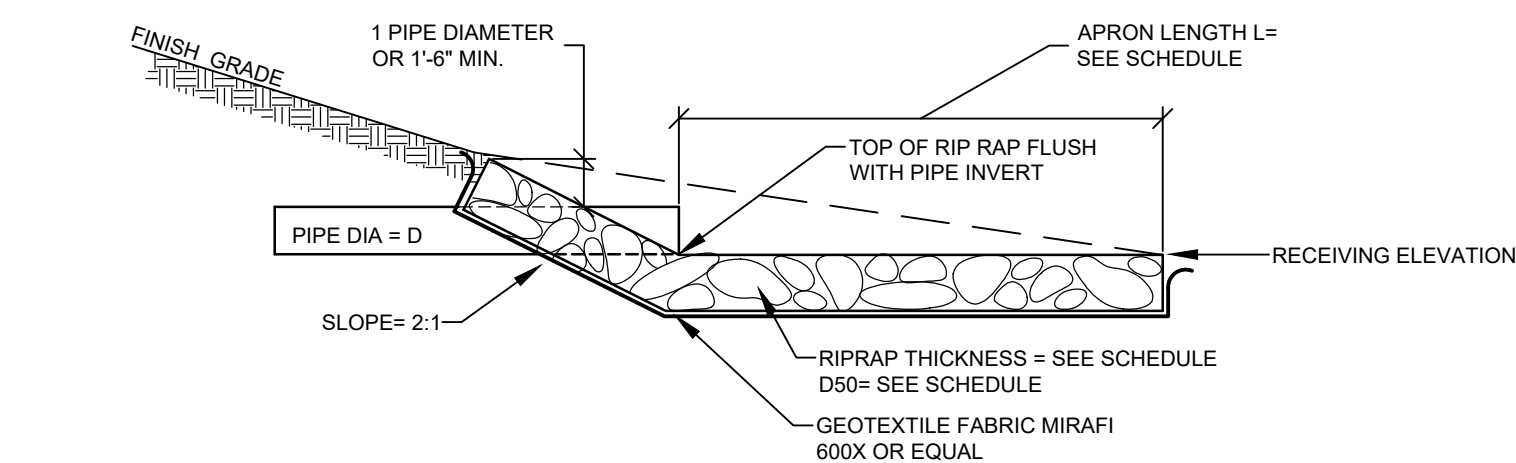
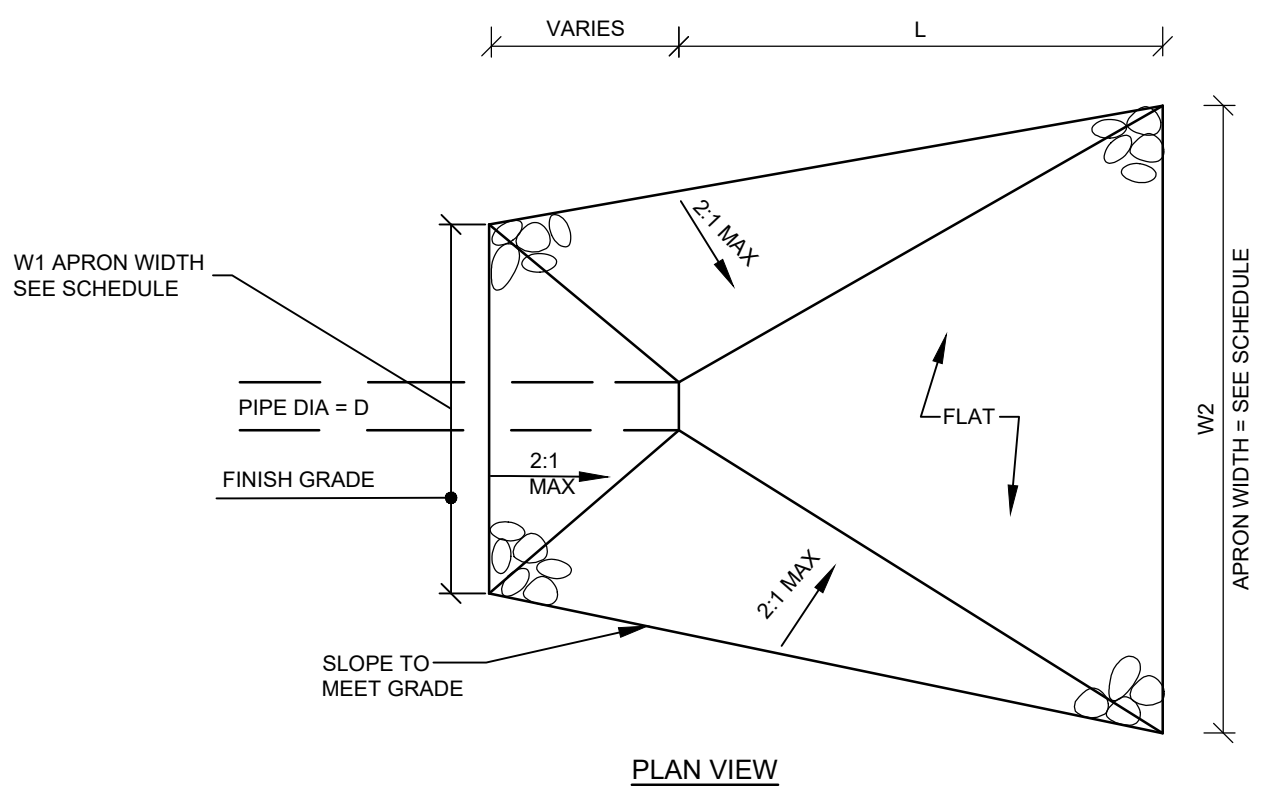
NOT TO SCALE



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

EROSION CONTROL BLANKET

NOT TO SCALE



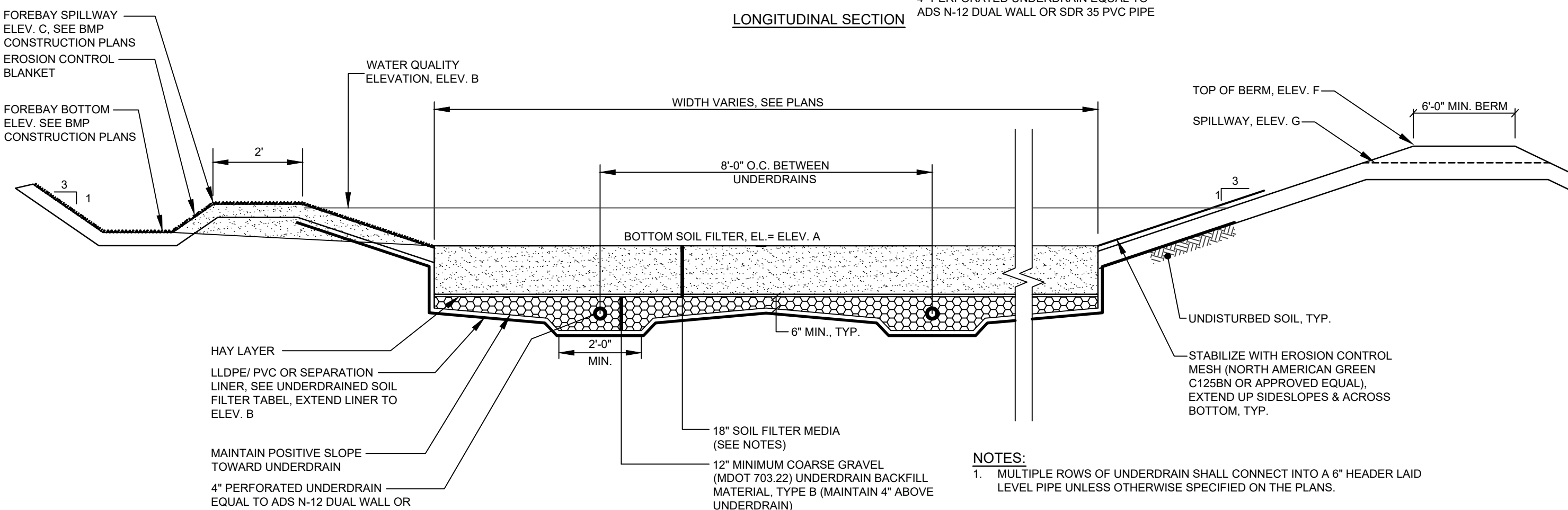
- NOTES:**
1. RIPRAP TO BE PROCESSED ANGULAR ROCK
 2. RIPRAP GRADATION SHALL BE A WELL GRADED MIX FROM ABOUT 1.5 TIMES D SIZE TO 25 PERCENT OF THE D SIZE
 3. THE RIPRAP STONES SHALL BE CAREFULLY PLACED FROM THE TOE OF THE SLOPE UPWARD
 4. STONES SHALL BE LOWERED TO THE SLOPE AND NOT BE ALLOWED TO DROP MORE THAN 12" ONTO THE GEOTEXTILE
 5. THE FINISHED SURFACE SHALL BE A RELATIVELY SMOOTH, UNIFORMLY SLOPED SURFACE

TYPICAL RIPRAP APRON SCHEDULE

CULVERT DIAMETER - D (IN.)	APRON LENGTH - L (FT.)	WIDTH -W1 (FT)	WIDTH -W2 (FT)	RIPRAP D50 (IN.)	RIPRAP THICKNESS (IN.)
12	8	3	9	6	14
15	10	4	12	6	14
18	13	5	15	7	16
24	18	6	20	8	18
36	29	9	32	11	25
42	33	11	37	12	27
48	39	12	43	16	36

RIPRAP APRON

NOT TO SCALE



- NOTES:**
1. MULTIPLE ROWS OF UNDERDRAIN SHALL CONNECT INTO A 6" HEADER LAID LEVEL PIPE UNLESS OTHERWISE SPECIFIED ON THE PLANS.

UNDERDRAINED SOIL FILTER TABLE

UNDERDRAINED SOIL FILTER #	ELEV. A	ELEV. B	ELEV. C	ELEV. D	ELEV. E	ELEV. F	ELEV. G	CONTROL STRUCTURE	UNDER DRAIN PIPE BLEEDER SIZE	LINER TYPE
1	270.0'	271.33'	271.50'	267.80'	271.50'	273.25'	272.0'	CS-1	1.1" DIAM.	30 MIL HDPE/PVC
2	269.0'	270.17'	270.50'	266.80'	270.85'	272.10'	271.0'	CS-2	0.7" DIAM.	30 MIL HDPE/PVC

UNDERDRAINED SOIL FILTER DETAIL

NOT TO SCALE

UNDERDRAINED SOIL FILTER CONSTRUCTION OVERSIGHT NOTES:

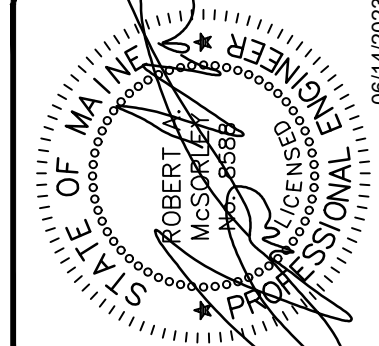
THE APPLICANT WILL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER TO INSPECT THE CONSTRUCTION AND STABILIZATION OF THE UNDERDRAIN. IF NECESSARY, THE INSPECTING ENGINEER WILL INTERPRET THE UNDERDRAIN'S CONSTRUCTION PLAN FOR THE CONTRACTOR. ONCE ALL STORMWATER MANAGEMENT STRUCTURES ARE CONSTRUCTED AND STABILIZED, THE INSPECTING ENGINEER WILL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT IN WRITING WITHIN 30 DAYS TO STATE THAT THE POND HAS BEEN COMPLETED. ACCOMPANYING THE ENGINEER'S NOTIFICATION MUST BE A LOG OF THE ENGINEER'S INSPECTIONS GIVING THE DATE OF EACH INSPECTION, THE TIME OF EACH INSPECTION, AND THE ITEMS INSPECTED ON EACH VISIT, AND INCLUDE ANY TESTING DATA OR SIEVE ANALYSIS DATA OF EVERY MINERAL SOIL AND SOIL MEDIA SPECIFIED IN THE PLANS AND USED ON SITE.

1. CONSTRUCTION SEQUENCE: THE UNDERDRAIN AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE UNDERDRAIN HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE. 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION UNLESS THE RUNOFF FROM THE CONTRIBUTING DRAINAGE AREA IS DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED.
2. COMPACTION OF UNDERDRAIN: UNDERDRAIN BEDDING MATERIAL MUST BE COMPACTED TO BETWEEN 90% AND 92% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST 2 LIFTS OF 8 INCHES TO PREVENT POCKETS OF LOOSE MEDIA.
3. CONSTRUCTION OVERSIGHT: INSPECTION BY A PROFESSIONAL ENGINEER WILL OCCUR AT A MINIMUM:
 - A. FOR FIRST UNDERDRAIN CONSTRUCTED, AFTER UNDERDRAIN PIPE IS INSTALLED AT GRADE AND BUT NOT BACKFILLED, AFTER THE UNDERDRAIN PIPE IS COMPLETELY BACKFILLED AND BEFORE PLACEMENT OF SOIL FILTER MEDIA.
 - B. AFTER THE SOIL FILTER MEDIA HAS BEEN INSTALLED.
 - C. AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS.
 - D. ALL MATERIAL USED FOR THE CONSTRUCTION OF THE UNDERDRAIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY.

- TESTING AND SUBMITTALS**
1. THE SOIL FILTER MEDIA SHALL CONSIST OF A BLEND OF MATERIALS AS IDENTIFIED IN THE UNDERDRAINED SOIL FILTER MEDIA NOTES BELOW. THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE FOR EACH COMPONENT OF THE UNDERDRAIN AND SUBMIT GRADATIONS FOR THE UNDERDRAIN MATERIALS TO THE ENGINEER FOR APPROVAL. 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.

- UNDERDRAINED SOIL FILTER MEDIA NOTES:**
1. SOIL FILTER MEDIA CONSISTS OF A SILTY SAND SOIL OR SOIL MIXTURE COMBINED WITH A MATURE, MODERATELY FINE SHREDED BARK OR WOOD FIBER MULCH 20% TO 25% BY VOLUME (NO LESS THAN 10% BY DRY WEIGHT), THE RESULTING MIXTURE SHOULD HAVE 8% TO 12% PASSING THE NO. 200 SIEVE AND A CLAY CONTENT OF LESS THAN 2%. THE PROPORTIONS OF THE MIXTURE CAN BE ADJUSTED SO IT WILL CONTAIN SUFFICIENT FINES AND ORGANIC MATTER. THE SOIL FILTER MEDIA MAY CONTAIN THE FOLLOWING (BY VOLUME):
 - A. 50% OF SAND (MAINE DOT SPECIFICATION #703.01 IS CLOSE BUT IT CONTAINS INSUFFICIENT FINE MATERIAL FOR THE FILTER MEDIA)
 - B. 20% OF SANDY LOAM TO FINE SANDY LOAM (TABLE 7.1.2).
 - C. 30 % OF MATURE COMPOSTED WOODY FIBERS AND FINE SHREDED BARK, SUPERHUMUS OR EQUIVALENT (ADJUSTED FOR MINERAL SOIL CONTENT).
 2. UNDERDRAIN BEDDING MATERIAL MUST CONFORM TO THE MDOT SPECIFICATION 703.22 UNDERDRAIN TYPE B FOR UNDERDRAIN BACKFILL MATERIAL. THE BEDDING MATERIAL MUST HAVE NO MORE THAN 5% PASSING THE 200 SIEVE.
 3. MATERIAL LAYERS ABOVE THE UNDERDRAIN BACKFILL LAYER SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS CAN BE MIXED WITHIN THE FILTER. DURING CONSTRUCTION, CARE SHOULD BE TAKEN TO AVOID COMPACTION OF BOTH THE GRAVEL AND SOIL FILTER.
 4. OVER COMPACTION OF UNDERDRAIN MATERIAL SHALL BE AVOIDED. IF OVER COMPACTION OCCURS, ROTOTILL AGAIN PRIOR TO SEEDING OR SODDING.

ROBERT A. MCGOWAN, PE 6588



DATE	DESCRIPTION
06/14/2023	RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
12/05/2022	MDEP - CORRECT CONTROL STRUCTURE BLEEDERS
10/20/22	REVISED PER PWD
10/12/22	REVISED PER PWD AND ARCHITECTURAL COORDINATION
9/21/22	ADD WAIVER REQUEST
9/14/22	REVISED PER TOWN OF RAYMOND COMMENTS
08/25/22	REVISED PER PORTLAND PIPELINE
08/25/22	STATUS: DATE:

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DETAILS

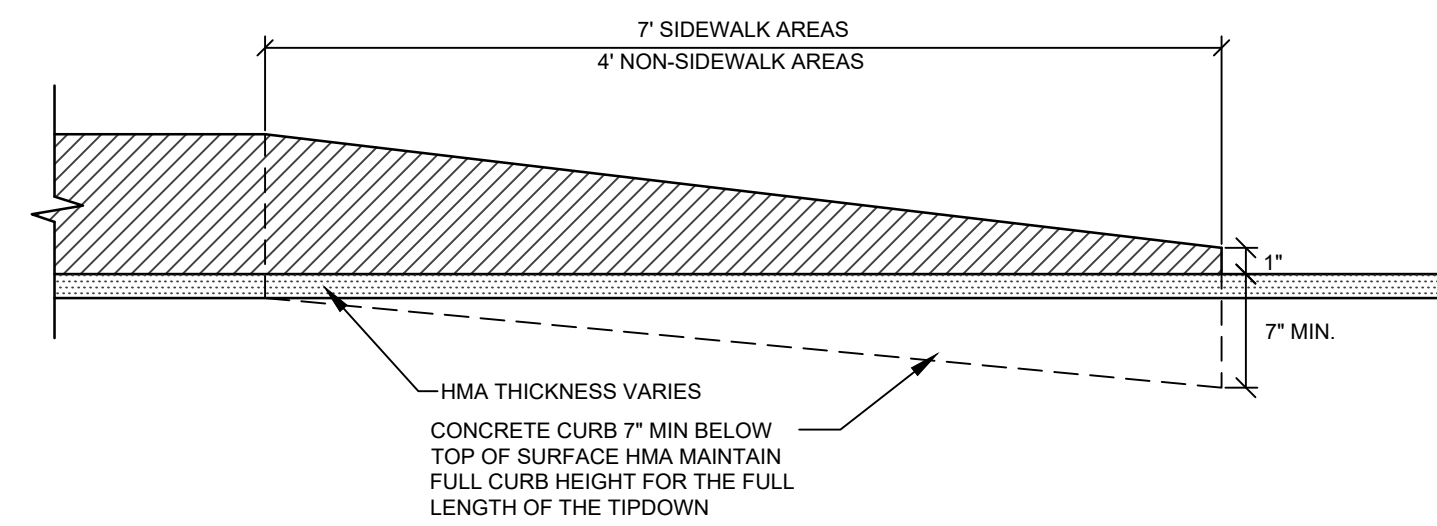
OF: JORDAN BAY MARINA
1328 ROOSEVELT TRAIL
RAYMOND, ME

FOR: PORT HARBOR MARINE
1 SPRING POINT DRIVE
SOUTH PORTLAND, ME 04106

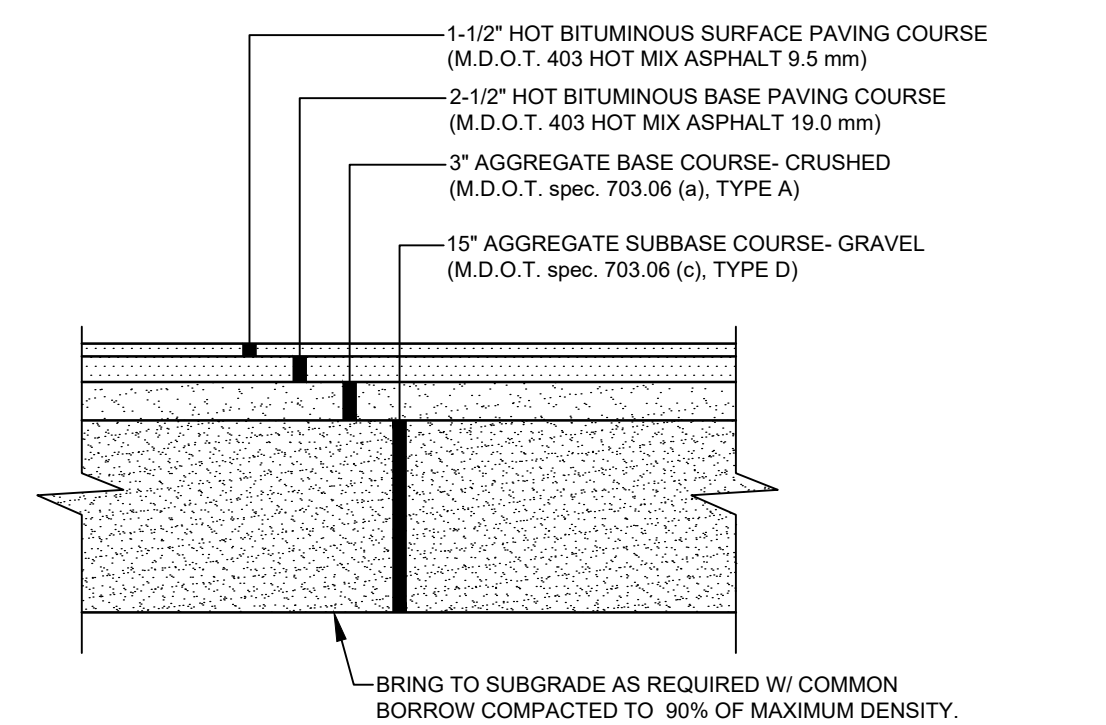
DESIGNED	JSH
DRAWN	DAB
CHECKED	RAM
DATE	06/22/22
SCALE	NTS
PROJECT	14265-02

SHEET 9 OF 13

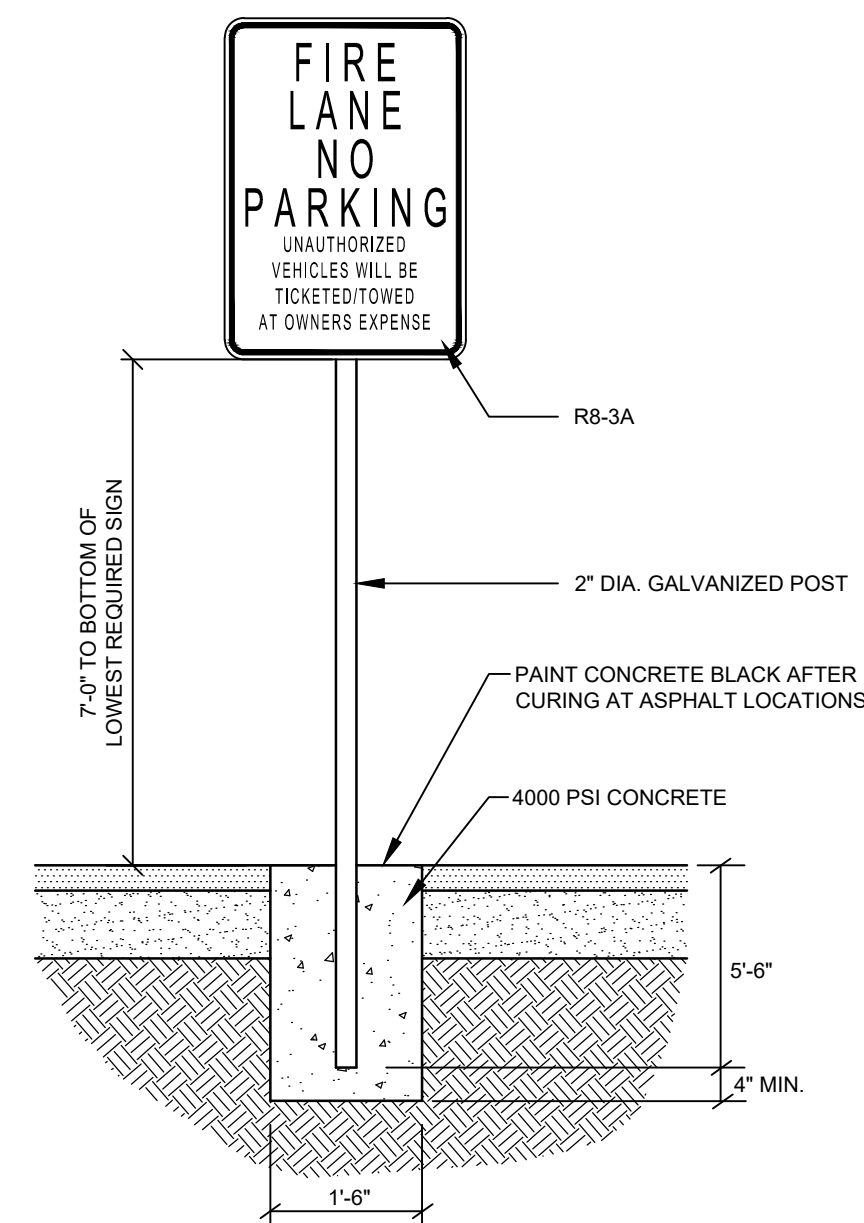




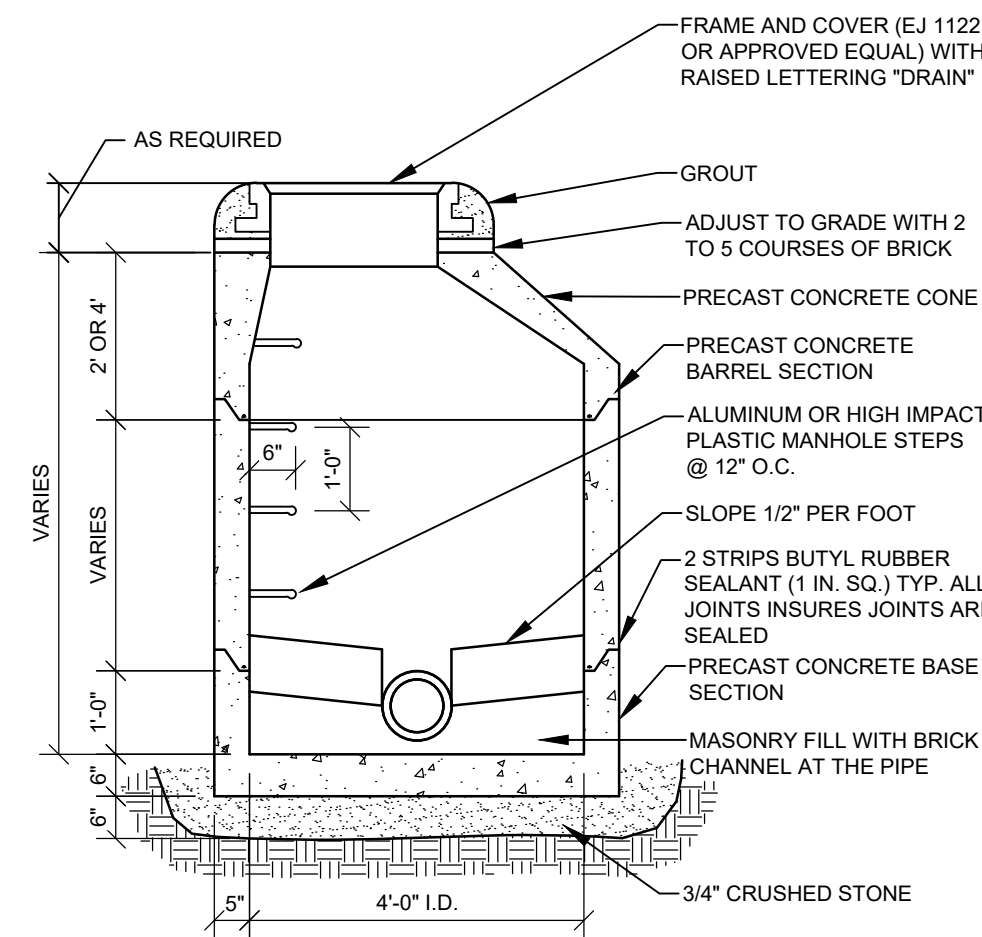
SLIPFORM CONCRETE CURB TIPDOWN, TYPICAL
NOT TO SCALE



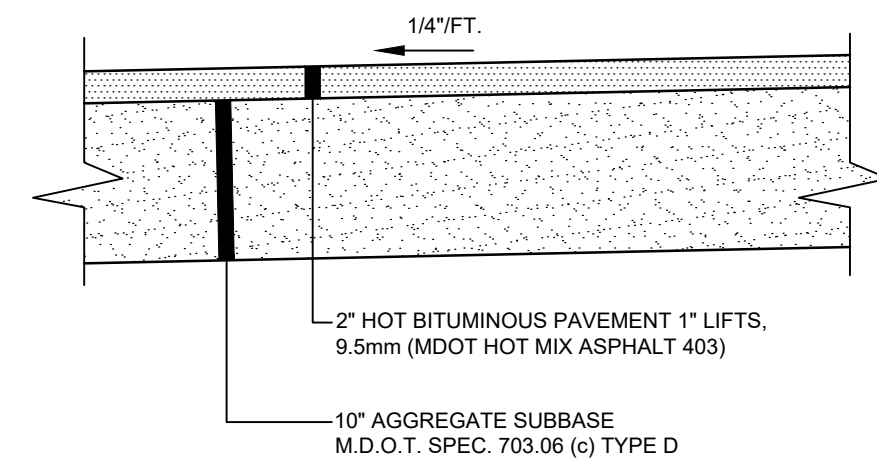
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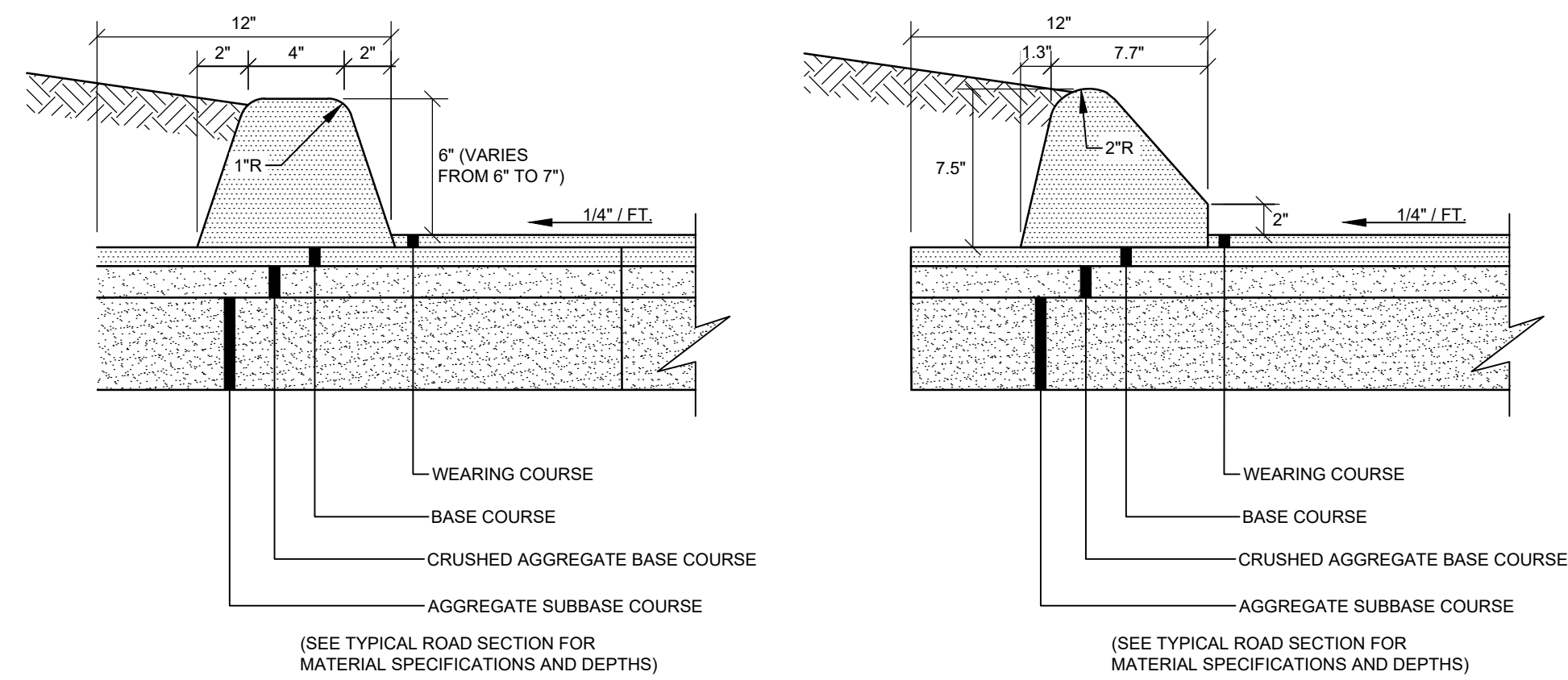
FIRE LANE SIGN
NOT TO SCALE



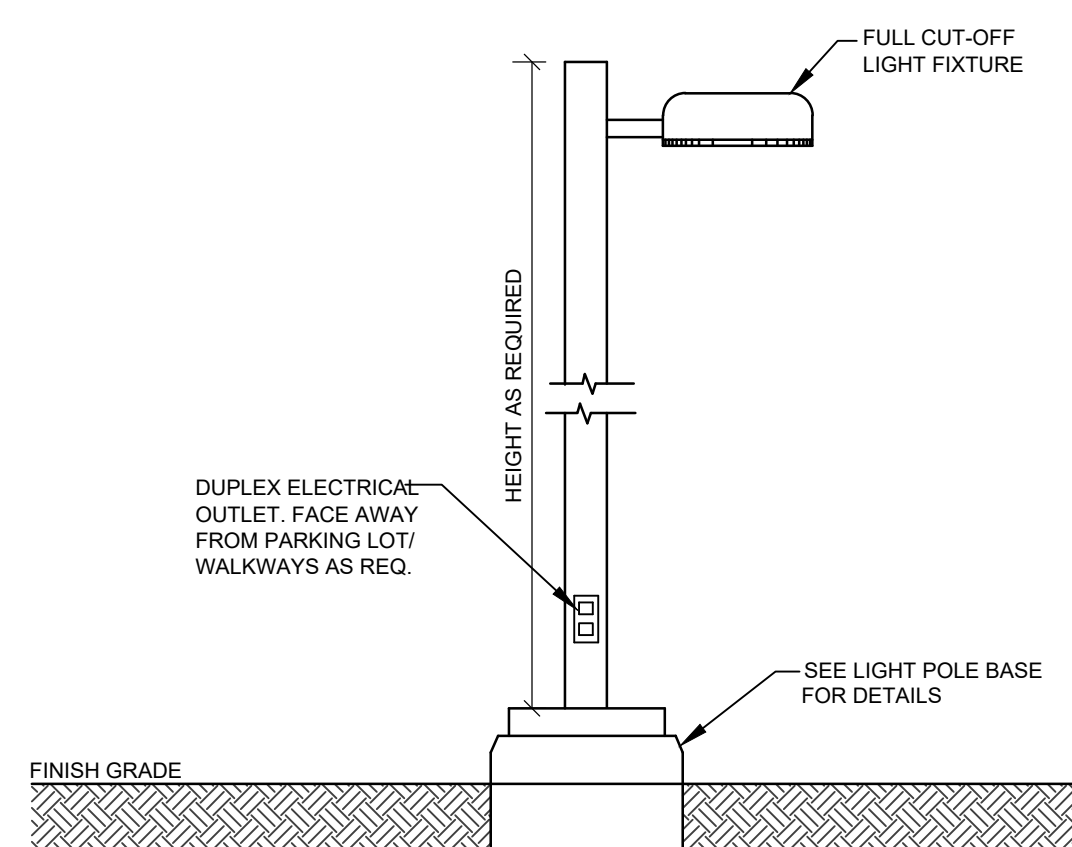
GRAVEL PARKING AREA
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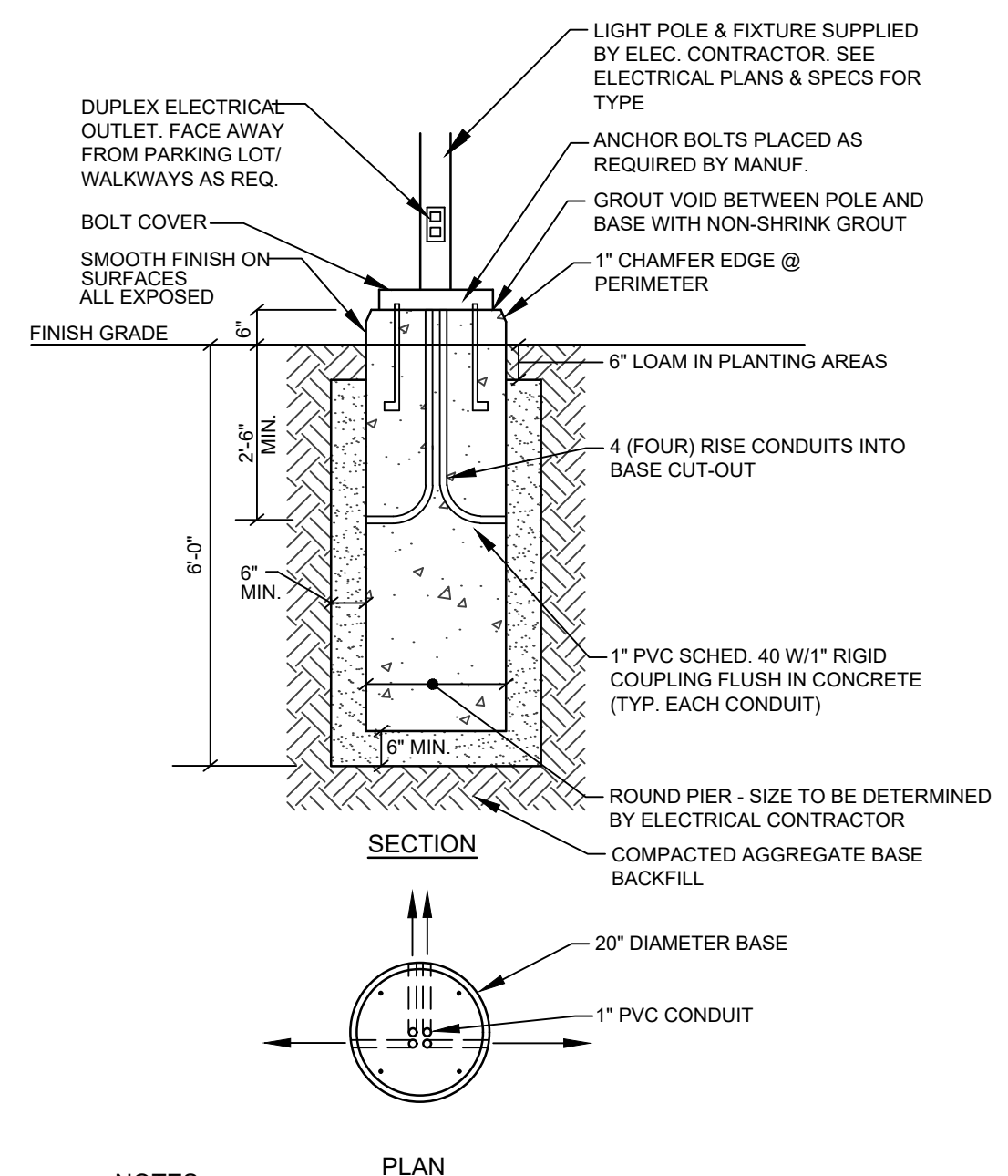
BITUMINOUS SIDEWALK
NOT TO SCALE



BITUMINOUS CURB SECTION
NOT TO SCALE



POLE MOUNTED LIGHT FIXTURE
NOT TO SCALE
NOTE: LIGHTS SHALL BE SHIELDED AND EMIT NO MORE
1.0 FOOT-CANDLES AT PROPERTY LINE



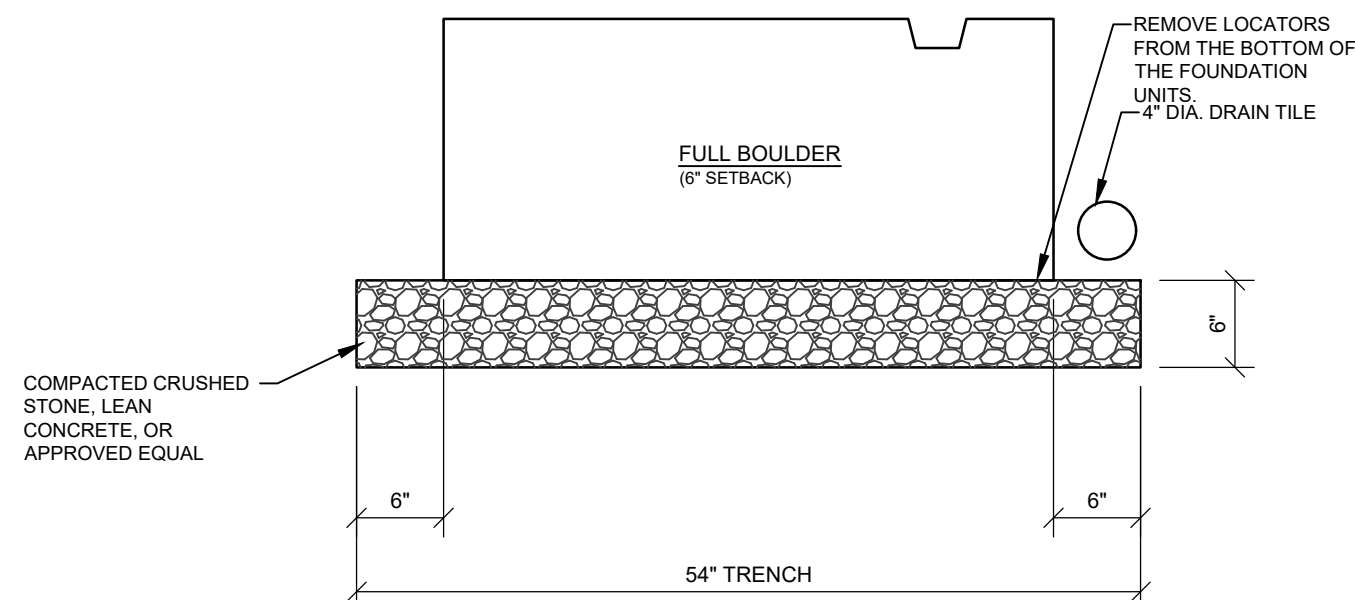
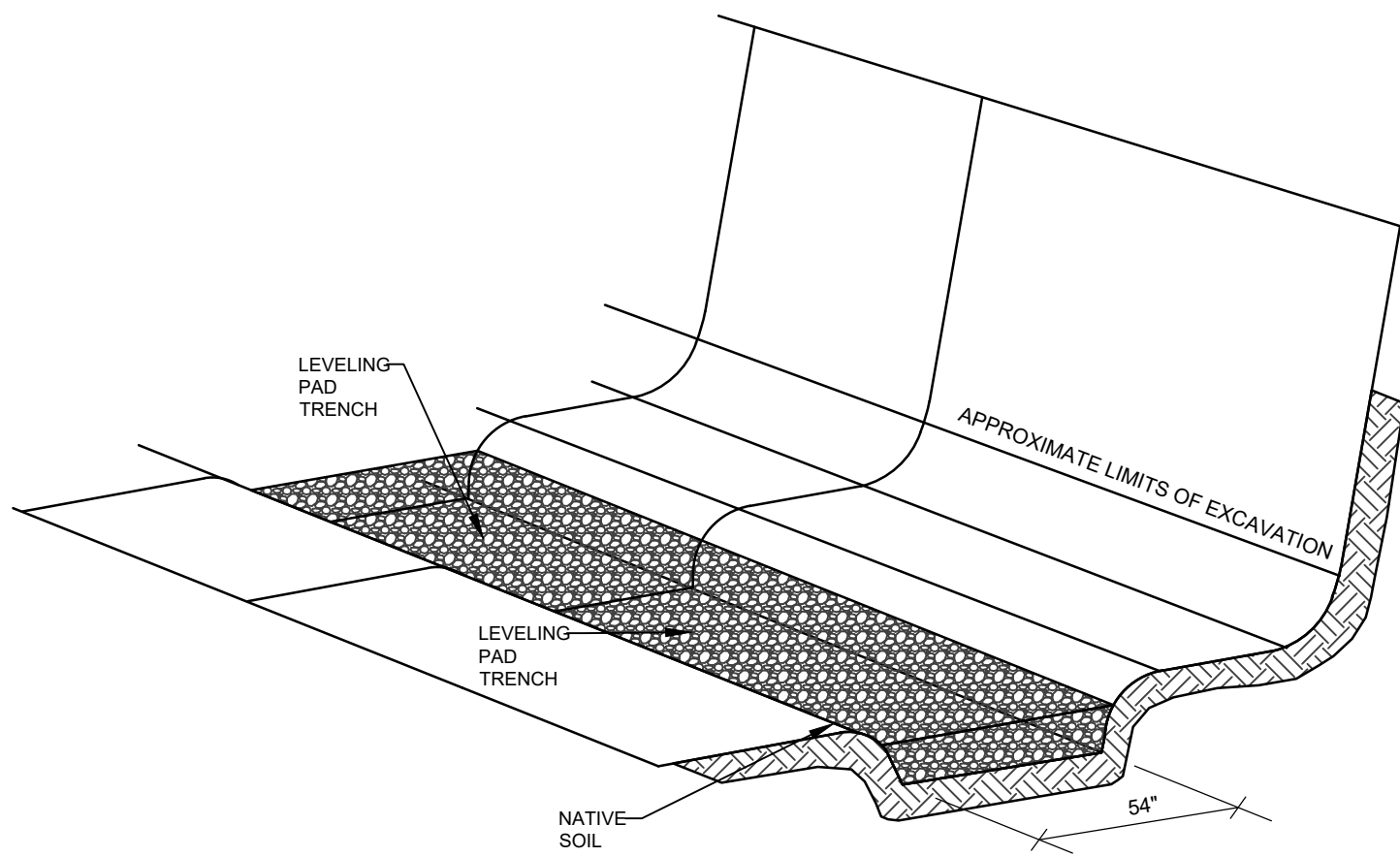
20" ROUND LIGHT POLE BASE
NOT TO SCALE

H	RAM	06/14/2023	RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
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REV:	BY:	DATE:	STATUS:

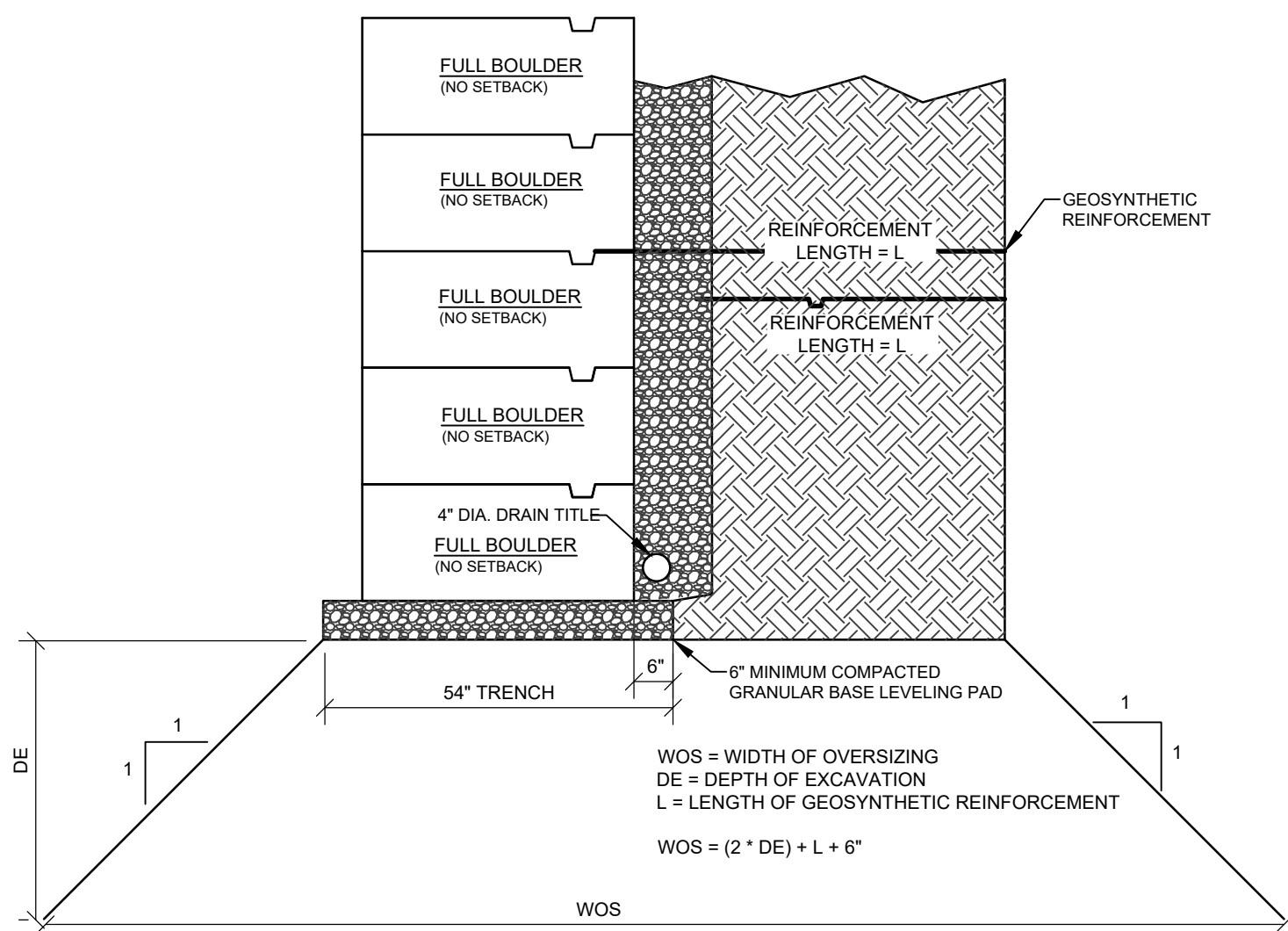
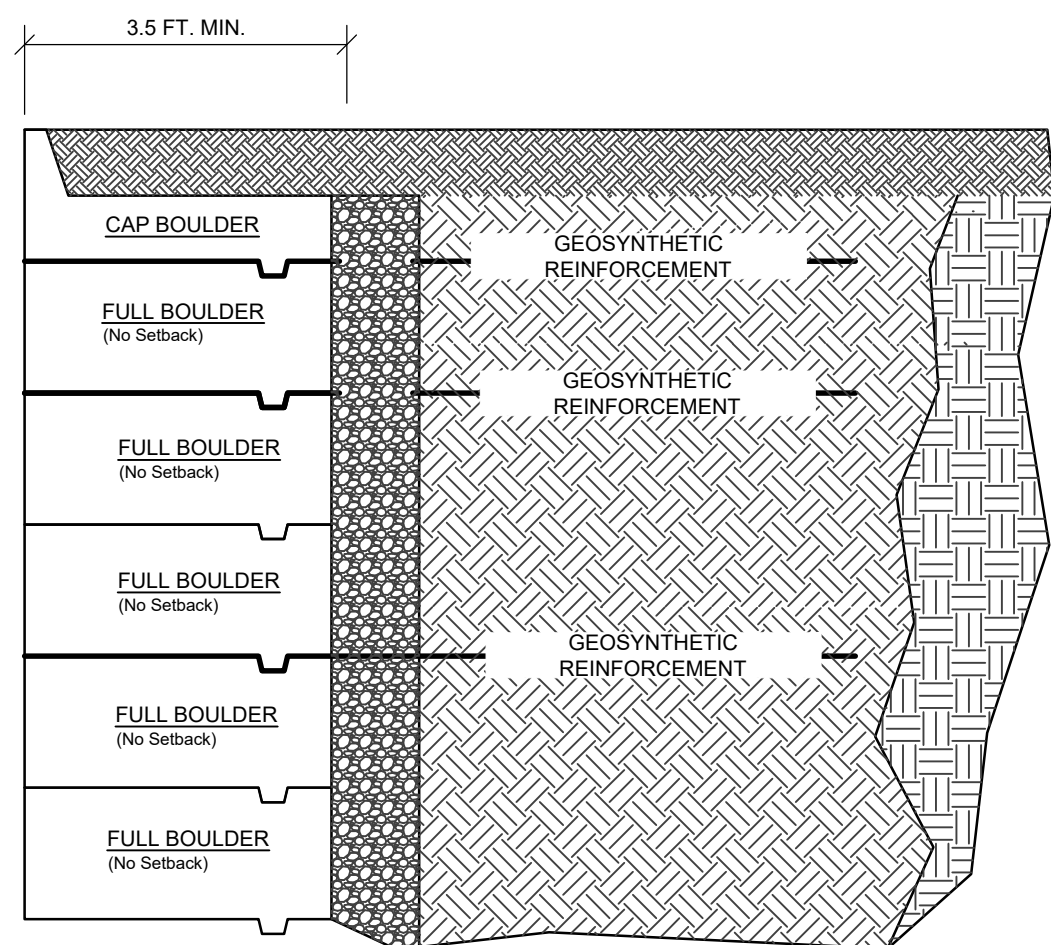
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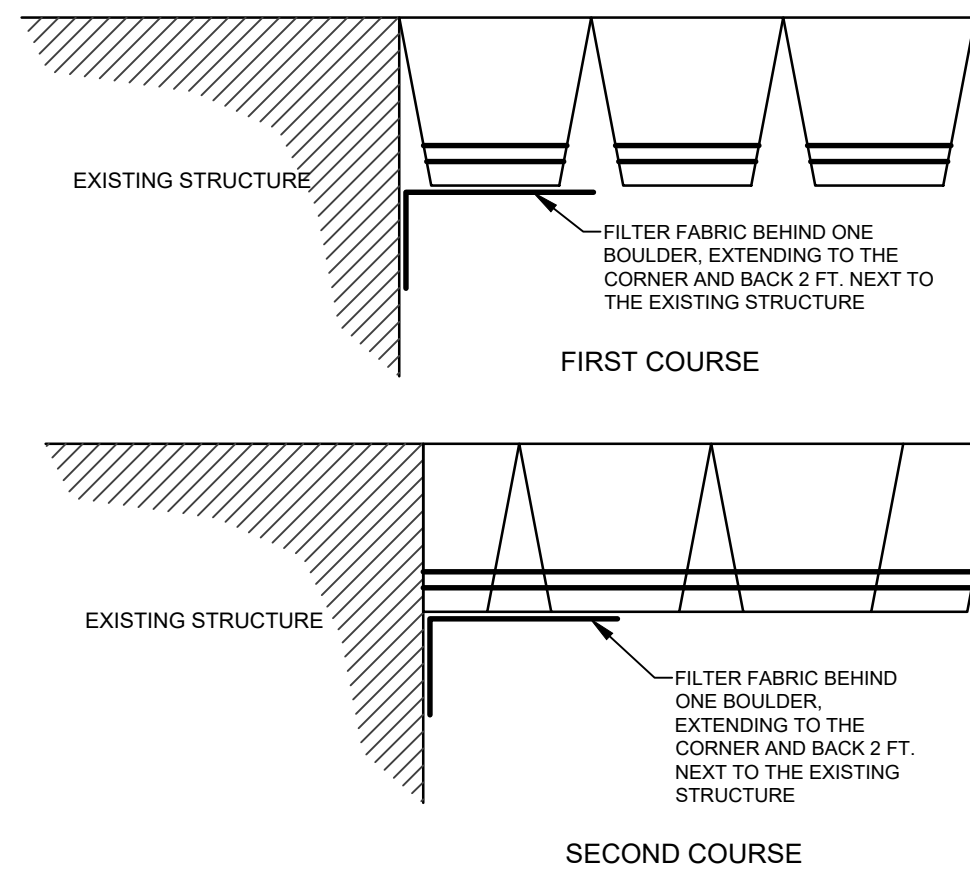
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DRAWN	DAB
CHECKED	RAM
DATE	06/22/22
SCALE	NTS
PROJECT	14265-02



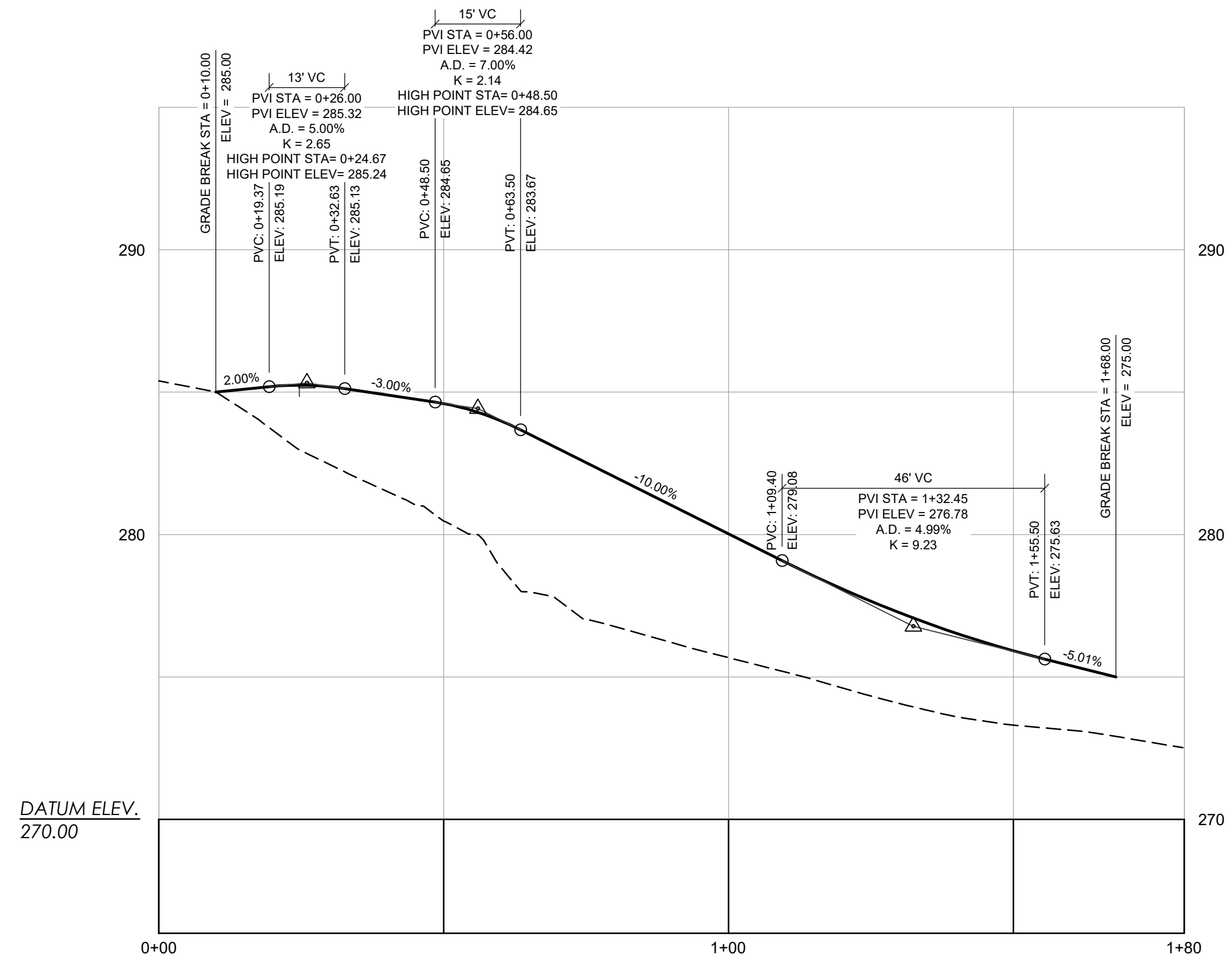
TYPICAL BASE PREPARATION
NOT TO SCALE



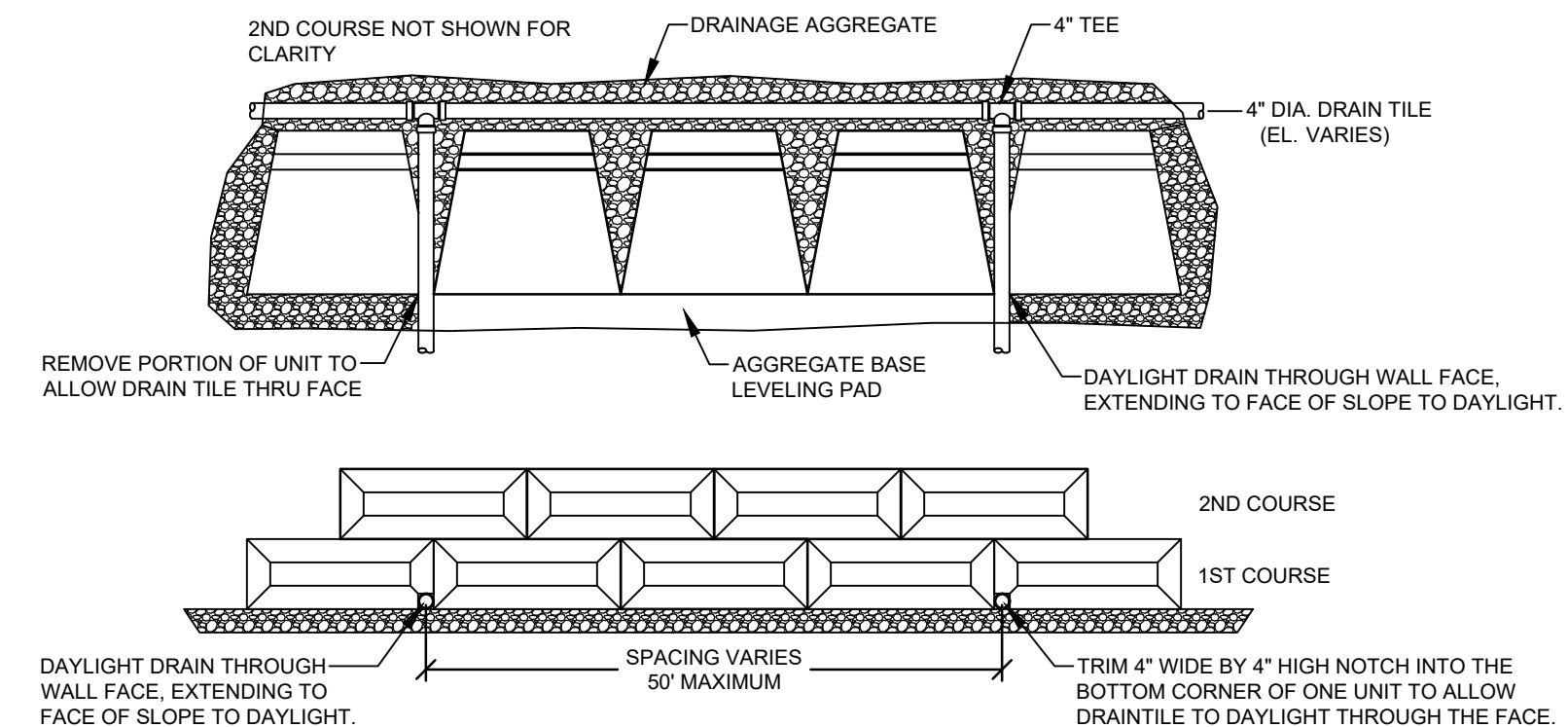
1:1 EXCAVATION OVERSIZING - REINFORCED WALLS
NOT TO SCALE



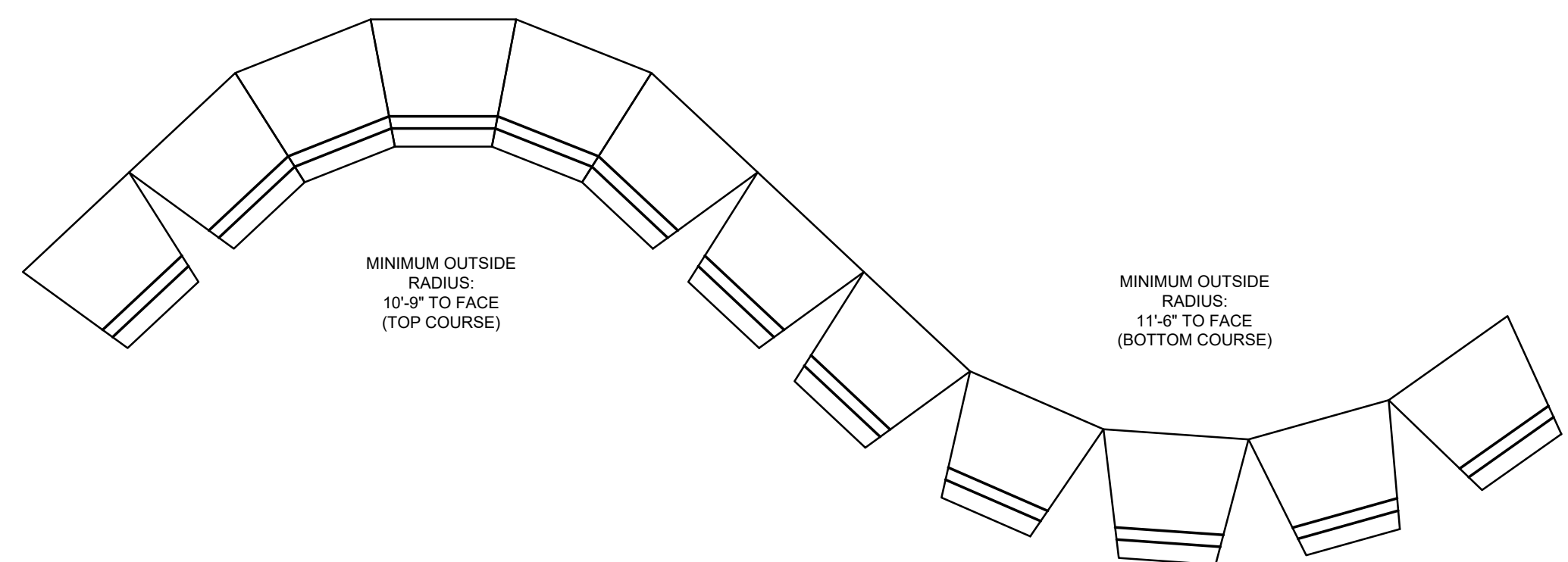
WALL ABUTTING EXISTING STRUCTURE
NOT TO SCALE



ACCESSWAY PROFILE



DAYLIGHT DRAINTILE THROUGH TOE SLOPE
NOT TO SCALE



TYPICAL RADIUS LAYOUTS
NOT TO SCALE

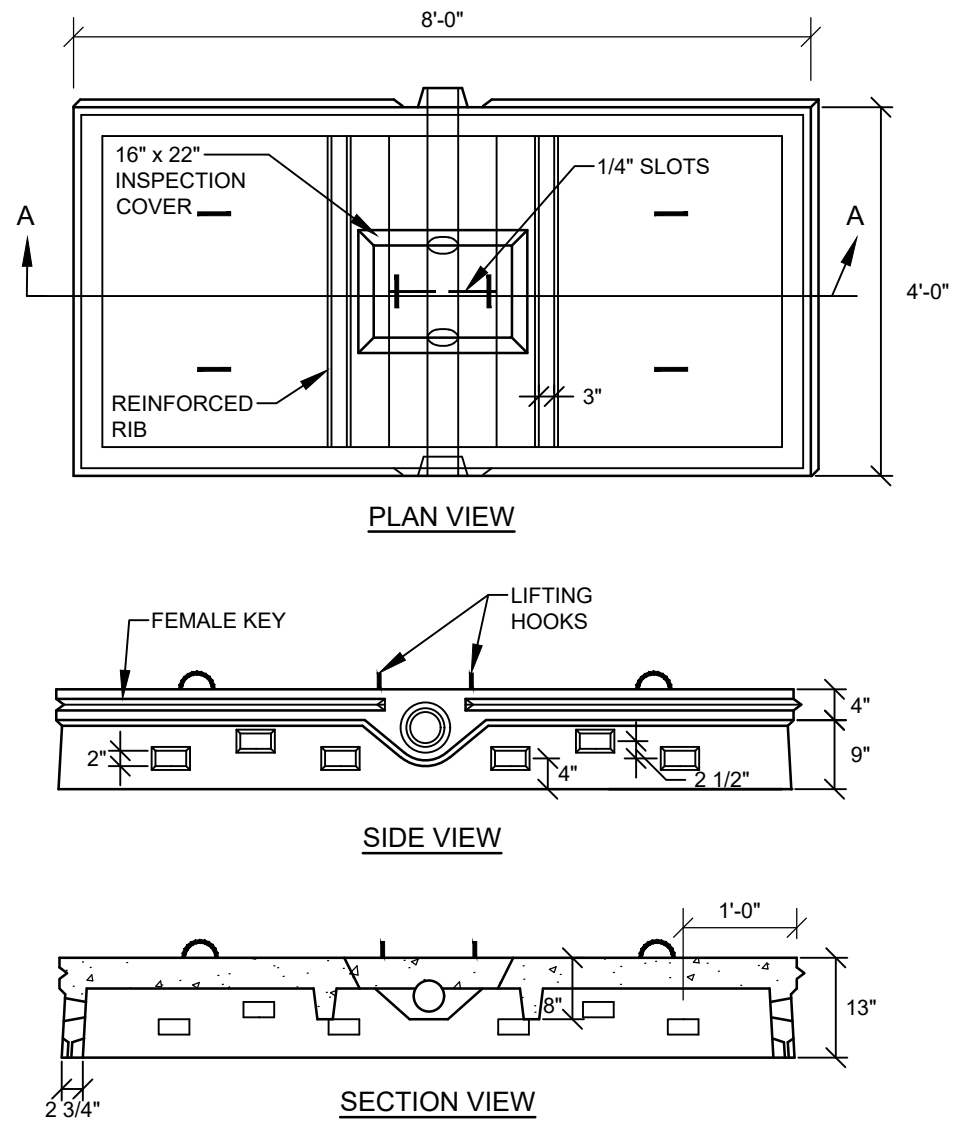
H	RAM	06/14/2023	RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
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B	RAM	08/25/22	REVISED PER PORTLAND PIPELINE
A	BY	DATE	STATUS:

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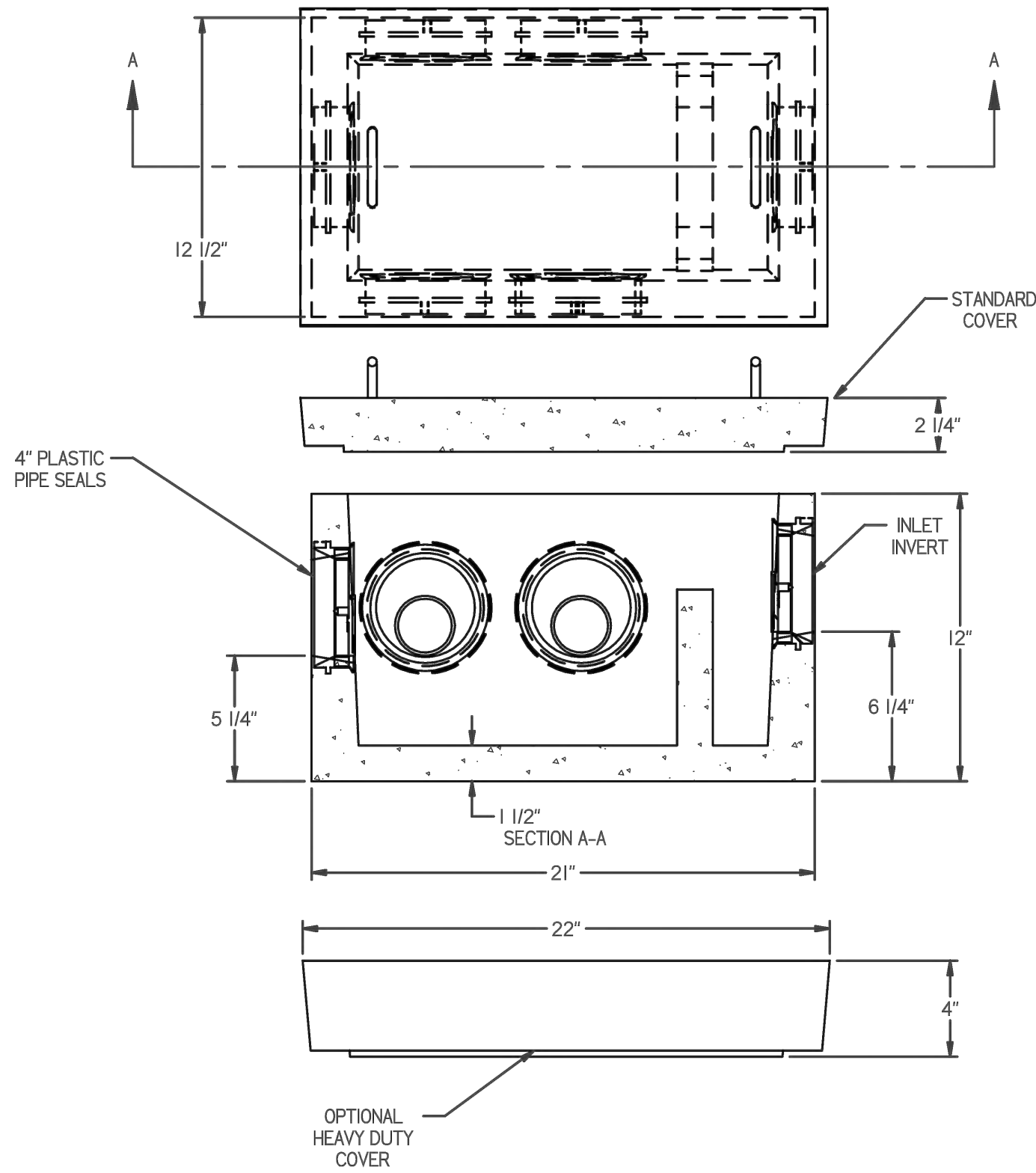
DETAILS	FOR:	JORDAN BAY MARINA
		1328 ROOSEVELT TRAIL
		RAYMOND, ME
	FOR:	PORT HARBOR MARINE
		1 SPRING POINT DRIVE
		SOUTH PORTLAND, ME 04106

DESIGNED	JSH
DRAWN	DAB
CHECKED	RAM
DATE	06/22/22
SCALE	NTS
PROJECT	14265-02



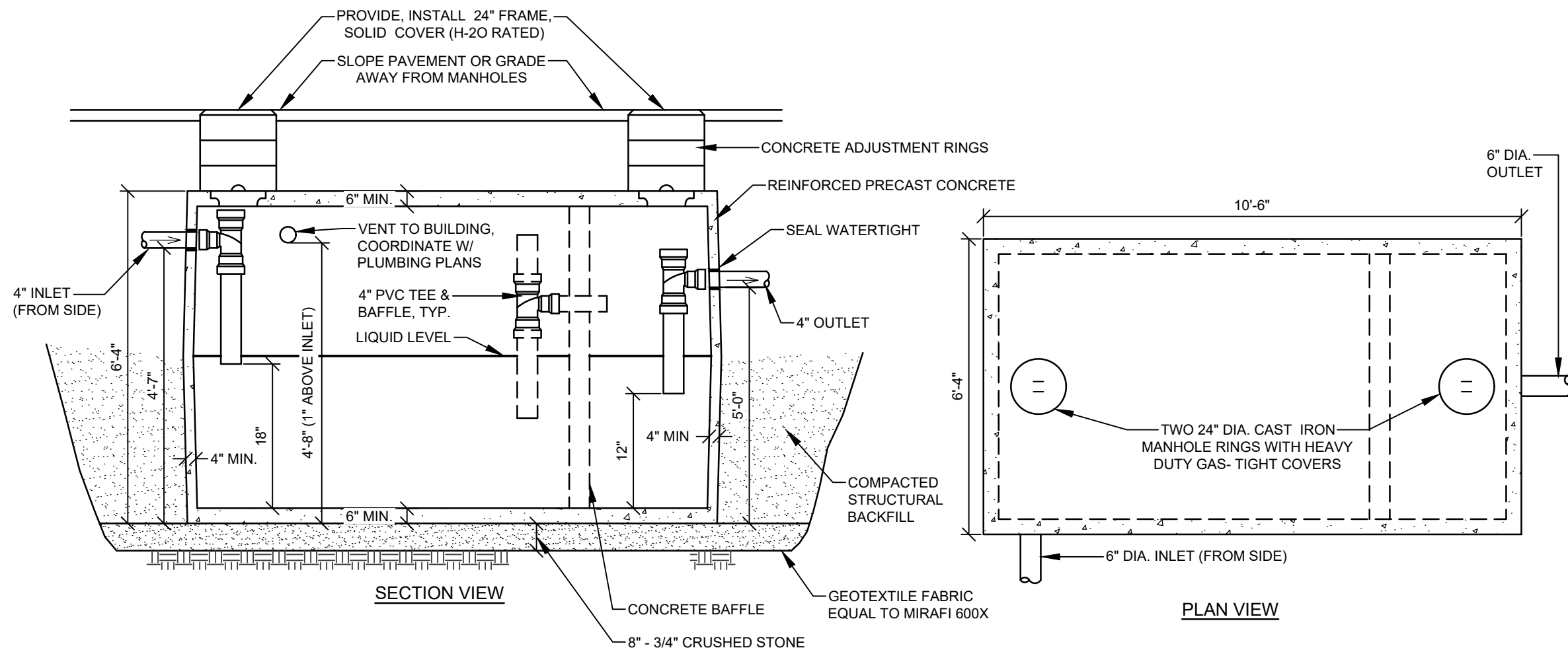
- NOTES:
1. CONCRETE : 4,000 P.S.I. @ 28 DAYS.
 2. WEIGHT PER UNIT APPROX. 1,900 LBS.
 3. DESIGN LOAD 600 PSF H-20 WHEEL LOADING AVAILABLE.

CHAMBER DETAIL
NOT TO SCALE



- NOTES:
1. CONCRETE : 4000 PSI AFTER 28 DAYS
 2. REINFORCING Ø8@ 10\"/>
 3. EXCAVATION MUST BE AT LEAST 12\"/>

5 OUTLET D BOX
NOT TO SCALE



CAPACITY	LENGTH	WIDTH	HEIGHT	INLET	OUTLET
2,000 GAL.	10'-6"	6'-4"	6'-4"	4'-7"	4'-4"

- NOTES:
1. COAT INTERIOR OF TANK WITH EPOXY SEALER
 2. ALL CONCRETE HAS A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI @ 28 DAYS.
 3. SHALL BE DESIGNED FOR H-20 LOADINGS.
 4. THE TONGUE AND GROOVE CENTER SEAM IS SEALED WITH A BUTYL SEALANT.
 5. THE PVC TEE BAFFLES FOR THIS TANK CAN BE MOVED TO ANY OF THE (3) INLETS OR OUTLETS.
 6. POLYLOK PIPE SEALS STANDARD AT ALL PIPE PENETRATIONS.
 7. DETAIL SHOWS GENERAL SCHEMATIC REQUIREMENTS. CONTRACTOR SHALL SUBMIT PROPOSED GREASE INTERCEPTOR INSTALLATION PLANS AND SPECIFICATIONS TO LOCAL AUTHORITIES FOR THEIR APPROVAL BEFORE ACQUISITION OF INTERCEPTOR. PROVIDE INTERCEPTOR WITH ADEQUATE STRUCTURAL STRENGTH TO ACCOMMODATE VEHICULAR TRAFFIC AT INSTALLATION LOCATION.
 8. COAT EXTERIOR OF CONCRETE WITH BITUMASTIC SEALANT.
 9. COORDINATE LOCATION WITH ARCHITECTURAL DRAWINGS.
 10. SEE UTILITY PLANS FOR INLET AND OUTLET PIPE SIZES AND INVERTS.
 11. GREASE TRAP TO BE 1,500 GAL. DOUBLE COMPARTMENT AS MANUFACTURED BY GENEST PRECAST OR APPROVED EQUAL.

1,500 GAL. SEPTIC TANK
NOT TO SCALE

- STRUCTURAL NOTES:
1. CONCRETE:
 - a) 28 DAY COMPRESSIVE STRENGTH F'C= 4,000 PSI.
 - b) CEMENT TO BE TYPE III PER ASTM C-150
 - c) 4%-6% ENTRAINED AIR
 2. STRUCTURAL REINFORCEMENT:
 - a) REINFORCED FOR H-20 LOADING
 3. BAR CLEARANCE/PROTECTION:
 - a) 1 1/2" CLR. (UNLESS OTHERWISE NOTED)

- INSTALLATION REQUIREMENTS:
1. TO BE INSTALLED ON MIN. 8" THICK BED OF CRUSHED 3/4" STONE.
 2. USE 1" CON-SEAL 102 AT JOINTS.
 3. JOINT GAPS LESS THAN 0.5", GROUT TO FILL VOIDS.
- GENERAL NOTES:
1. ALL BAFFLES AND WEIRS TO BE PRECAST CONCRETE.
 2. CONTRACTOR TO: ABOVE GROUND SERVICES SHALL BE INSTALLED IN SCHEDULE 40 GALVANIZED CONDUIT. SIZES AS REQUIRED BY ELECTRIC COMPANY. ALL ELECTRICAL WIRING SHALL MEET ALL LOCAL AND NEC ELECTRICAL CODE REQUIREMENTS.
 3. GREASE INTERCEPTOR BY AMERICAN CONCRETE OR APPROVED EQUAL.

NOTES

1. LIFT STATION SHALL BE DUPLEX LIFT STATION PANEL AND CONTROLS FOR THE OPERATIONS OF 1.7 HP HOMA EFFLUENT GRINDER PUMPS OPERATING AT APPROXIMATELY THE DUTY POINT LISTED IN THE TABLE BELOW. THE PUMPS ARE MODEL TP30V24/2/1, 1PHASE, 60 HZ, 230 VOLT, 3450 RPM AND 8.0 FLA WITH THE INSTALLED IMPELLER.
2. PUMPS SHALL HAVE BREAK AWAY FITTINGS.
3. ALL UNDERGROUND ELECTRIC POWER LINES SHALL BE INSTALLED IN PVC CONDUIT. ABOVE GROUND SERVICES SHALL BE INSTALLED IN SCHEDULE 40 GALVANIZED CONDUIT. SIZES AS REQUIRED BY ELECTRIC COMPANY. ALL ELECTRICAL WIRING SHALL MEET ALL LOCAL AND NEC ELECTRICAL CODE REQUIREMENTS.
4. THE PANEL SHALL BE EQUIPPED WITH AN INNER DOOR THAT HAS ELAPSED TIMED METERS, WARNING LIGHTS FOR TEMPERATURE AND MOISTURE SENSORS, CONTROL SWITCHES FOR THE INDIVIDUAL PUMPS (AUTO, OFF AND RUN) AND A CONTROL SWITCH FOR THE ALARM WITH TEST AND SILENCE.
5. THE MAIN BREAKERS (CONTROL AND PUMPS) AND FUSES FOR BOTH THE ALARM AND CONTROLS SHALL BE ACCESSIBLE WITHOUT OPENING THE INNER DOOR.
6. THE PANEL SHALL HAVE BOTH AMBER VISIBLE ALARM LIGHT AND AN AUDIBLE PIEZO 80DB ALARM. THE ENCLOSURE SHALL BE A FIBERGLASS NEMA 4X RATED, UL508A COMPLIANT LISTED ENCLOSURE RATED FOR THE PUMPS WITH A WIRING SCHEMATIC PROVIDED ON THE INNER FACE OF THE PANEL DOOR. THE DOOR SHALL HAVE A WEATHER SEAL AND LOCKABLE LATCHES.
7. THE PANEL SHALL HAVE THE REQUIRED CIRCUITRY, CONTROLLERS, CIRCUIT BREAKERS, DELAYS, MOTOR STARTERS, RELAYS, TERMINAL BLOCK AND GROUNDING REQUIRED TO OPERATE THE PUMPS IN A AN ALTERNATING SEQUENCE.
8. THE PANEL SHALL BE MANUFACTURED BY SJE RHOMBUS, PRIMEX CONTROLS, CSI OR APPROVED EQUIVALENT.
9. THE PUMPS, CONTROLS, FLOATS AND FLOAT RACK SHALL BE SUPPLIED BY ONE DISTRIBUTOR OR MANUFACTURER. FLOAT SWITCHES SHALL BE INSTALLED WITH KWIK FLOAT SWITCH CONNECTION SYSTEM. DISTRIBUTOR OR MANUFACTURER SUPPLYING EQUIPMENT SHALL CONFIRM ALL EQUIPMENT MEETS THE INTENT OF THIS SPECIFICATION, AND THAT ALL EQUIPMENT SUPPLIED IS COMPATIBLE FOR THIS SPECIFIC APPLICATION. ALL EQUIPMENT SUPPLIED REQUIRING FACTORY START-UP TO OBTAIN WARRANTY SHALL BE INCLUDED AND PERFORMED BY FACTORY AUTHORIZED PERSONNEL. ANY DEFICIENCIES SHALL BE ADDRESSED PRIOR TO FINAL ACCEPTANCE.
10. PUMP POWER/CONTROL CABLES AND FLOAT CABLES SHALL BE ROUTED TO THE WET WELL IN SEPARATE CONDUITS WITH THE PROPER EXPANSION JOINTS, SEAL OFFS, AND EXPANSION JOINTS. PUMP AND FLOAT CABLES SHALL BE WIRED FORM WET WELL DIRECTLY TO PANEL WITH NO INTERMEDIATE JUNCTION BOXES. WIRE SIZING AND CONDUITS FEEDING AND LEAVING THE CONTROL PANEL SHALL BE PROPERLY SIZED, SHALL SUPPORT THE LOAD OF TWO PUMPS OPERATING AND MEET ALL APPLICABLE LOCAL, STATE AND NEC ELECTRICAL CODES.
11. PUMPS SHALL BE PROVIDED WITH TEMPERATURE AND MOISTURE SENSORS MATCHED TO THE PUMPS.
12. FLOAT CONTROLS SHALL BE NON-MERCURY MECHANICAL FLOATS.
13. CONCRETE: 5,000 PSI AFTER 28 DAYS. REINFORCING STEEL MIN. YIELD STRESS OF 40,000 PSI.
14. REINFORCING: WALLS & FLOOR 4X4/4X4 W.W.M. SLAB TOP #5 @ 8" O.C.
15. THE ACCESS HATCH SHALL BE MANUFACTURED BY THE BILCO COMPANY OR EQUIVALENT AND BE RATED FOR H-20 LOADING. HATCH SHALL OPEN TOWARDS PUMP STATION PANEL AND HAVE INTEGRAL SECONDARY FALL PROTECTION
16. ALL LIFT STATION PIPING SHALL BE 2" SCH 80 PVC.
17. COAT INTERIOR OF STRUCTURES WITH KOPPERS BITUMASTIC 3000 M OR EQUAL.
18. WET WELL SHALL BE INSTALLED ON A MINIMUM 12" BED OF SCREENED GRAVEL.
19. CONTRACTOR TO CONFIRM OPERATING ELEVATIONS WITH ENGINEER BEFORE ORDERING STATION.
20. CONTRACTOR TO SUBMIT SPECIFICATIONS FOR PUMPS, CONTROL PANELS, AND ALARM FOR OWNER AND ENGINEERS APPROVAL.
21. ELECTRIC SERVICES SHALL BE VERIFIED BY CONTRACTOR AND COORDINATED WITH OWNER, ELECTRIC COMPANY AND PUMP STATION MANUFACTURER PRIOR TO INSTALLATION. CONTRACTOR SHALL PROVIDE AND INSTALL ALL ELECTRICAL COMPONENTS REQUIRED FOR PUMP STATION MEETING APPLICABLE STATE, FEDERAL AND LOCAL CODES.
22. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL MEET ON-SITE WITH OWNER AND ENGINEER TO REVIEW LOCATION OF PUMP STATION AND VALVE PIT. DEPENDING ON PHYSICAL SITE FEATURES, THE ENGINEER RESERVES THE RIGHT TO MODIFY LOCATION.
23. UPON INSTALLATION OF PUMP STATION, CONTRACTOR SHALL PROVIDE OWNER WITH THE FOLLOWING:
 - a. OPERATION AND MAINTENANCE MANUALS.
 - b. ONE-YEAR WARRANTY ON ALL STRUCTURES, PUMP STATION MECHANICS AND ELECTRIC COMPONENTS, ALL PIPING AND CONNECTIONS.
 - c. STARTUP REPORT THAT INCLUDES DRAW DOWN TESTS TO DETERMINE THE OPERATING POINTS FOR BOTH PUMPS.

PUMP PARAMETERS

STATION	I
PUMP	HOMA
MODEL	TP30V24/2/1
FLOW (GPM)	33
TDH (FT)	26
VOLTAGE	230
PHASE	1ø
HERTZ	60
RPM	3450

**PUMP STATION SCHEDULE
MEASUREMENT (FT.)**

PUMP STATION	A	B	C	D	E	F	G	H	I	J	K
I	267.00	266.50	266.00	266.50	264.50	263.00	272.00	271.50	266.38	5'-0"	7'-0"

DETAILS

OF:
JORDAN BAY MARINA
1328 ROOSEVELT TRAIL
RAYMOND, ME

FOR:
PORT HARBOR MARINE
1 SPRING POINT DRIVE
SOUTH PORTLAND, ME 04106

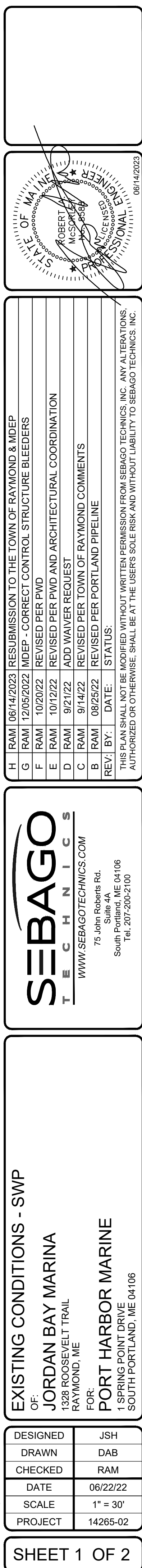
DESIGNED	JSH
DRAWN	DAB
CHECKED	RAM
DATE	06/22/22
SCALE	NTS
PROJECT	14265-02



H	RAM	06/14/2023	RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
G	RAM	12/05/2022	MDEP - CORRECT CONTROL STRUCTURE BLEEDERS
F	RAM	10/20/22	REVISED PER PWD
E	RAM	10/1/22	REVISED PER PWD AND ARCHITECTURAL COORDINATION
D	RAM	9/21/22	ADD WAIVER REQUEST
C	RAM	9/14/22	REVISED PER TOWN OF RAYMOND COMMENTS
B	RAM	08/25/22	REVISED PER PORTLAND PIPELINE
REV	BY:	DATE:	STATUS:

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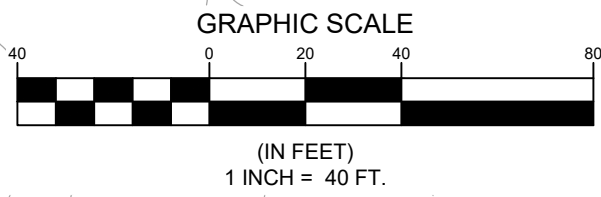






PROPOSED CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH
- SUBCATCHMENT LABEL
- REACH
- POINT OF ANALYSIS
- STORMWATER TREATMENT/DETENTION POND
- SOILS BOUNDARY



ROBERT A. MCGOWAN, PE 6588

STATE OF MAINE
REGISTERED PROFESSIONAL ENGINEER
ROBERT A. MCGOWAN
NO. 6588
EXPIRATION DATE 12/31/2023

H	RAM	06/14/2023	RESUBMISSION TO THE TOWN OF RAYMOND & MDEP
G	RAM	12/05/2022	MDEP - CORRECT CONTROL STRUCTURE BLEEDERS
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SEBAGO
TECHNIQS
WWW.SEAGOTECHNIQS.COM

75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

PROPOSED CONDITIONS - SWP

OF:
JORDAN BAY MARINA
1328 ROOSEVELT TRAIL
RAYMOND, ME

FOR:
PORT HARBOR MARINE
1 SPRING POINT DRIVE
SOUTH PORTLAND, ME 04106

DESIGNED	JSH
DRAWN	DAB
CHECKED	RAM
DATE	06/22/22
SCALE	1" = 30'
PROJECT	14265-02