

Town of Bowdoinham

WATERFRONT PLAN - PHASE II

8 River Road, Bowdoinham, Maine

APRIL 12, 2021 - PERMIT SET



PHASE II SHEET INDEX:

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WATERFRONT PHASE I:

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C-2	BOAT LAUNCH - EXISTING CONDITIONS, DEMOLITION & EROSION CONTROL PLAN
C-3	BOAT LAUNCH - LAYOUT PLAN
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C-5	BOAT LAUNCH - DETAILS
C-6	SHORELINE STABILIZATION - EXISTING CONDITIONS, DEMOLITION & EROSION CONTROL PLAN
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L-2	LANDSCAPE & SITE AMENITIES PLAN
L-3	LANDSCAPE SITE DETAILS

OWNER/APPLICANT

TOWN OF BOWDOINHAM
13 SCHOOL STREET
BOWDOINHAM, MAINE 04103
PHONE: (207) 666-5531

PREPARED BY:

LANDSCAPE ARCHITECT AND SITE PLANNER:

MITCHELL & ASSOCIATES
70 CENTER STREET
PORTLAND, MAINE 04101
PHONE: 207.774.4427
FAX: 207.874.2460
CONTACT: ROBERT METCALF
E-MAIL: RMETCALF@MITCHELLASSOCIATES.BIZ

CIVIL ENGINEER:

ACORN ENGINEERING, INC.
P.O. BOX 3372
PORTLAND, MAINE 04104
TEL: 207-775-2655
CONTACT: WILL SAVAGE, P.E.
EMAIL: WSAVAGE@ACORN-ENGINEERING.COM

LAND SURVEYOR

LITTLE RIVER LAND SURVEYING, INC.
390 U.S. ROUTE ONE, SUITE 10
LISBON FALLS, MAINE 04252
PHONE: 207.841.0056
CONTACT: JERAMIAH RAITT, P.L.S.

UTILITIES:

ELECTRIC:

CENTRAL MAINE POWER
ELECTRICAL DISTRIBUTION ENGINEERING
162 CANCO ROAD
PORTLAND, MAINE 04103
PHONE: 207.842.2367
CONTACT: JAMIE COUGH
E-MAIL: JAMES.COUGH@CMPCO.COM

WATER:

BOWDOINHAM WATER DISTRICT
331 FRONT STREET RICHMOND, MAINE 04357
TEL: 207-737-4721
CONTACT: ROBIN VEROW
EMAIL: BOWDOINHAMWATER@NE.TWCBC.COM

PERMITS:

TYPE OF PERMIT:

SITE PLAN REVIEW:

GOVERNING BODY:

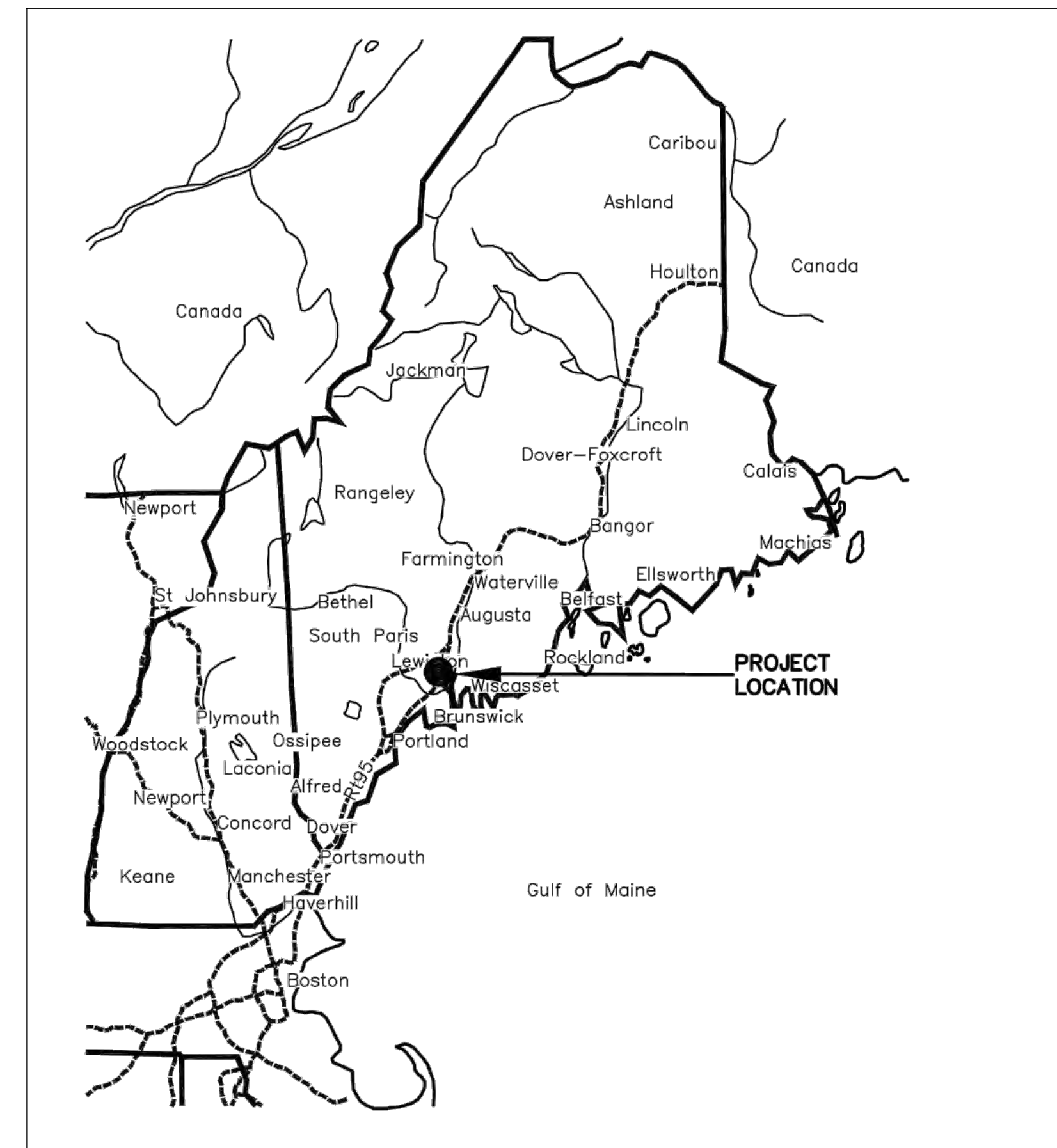
TOWN OF BOWDOINHAM
13 SCHOOL STREET
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STATUS:

SUBMITTED: APRIL 12, 2021

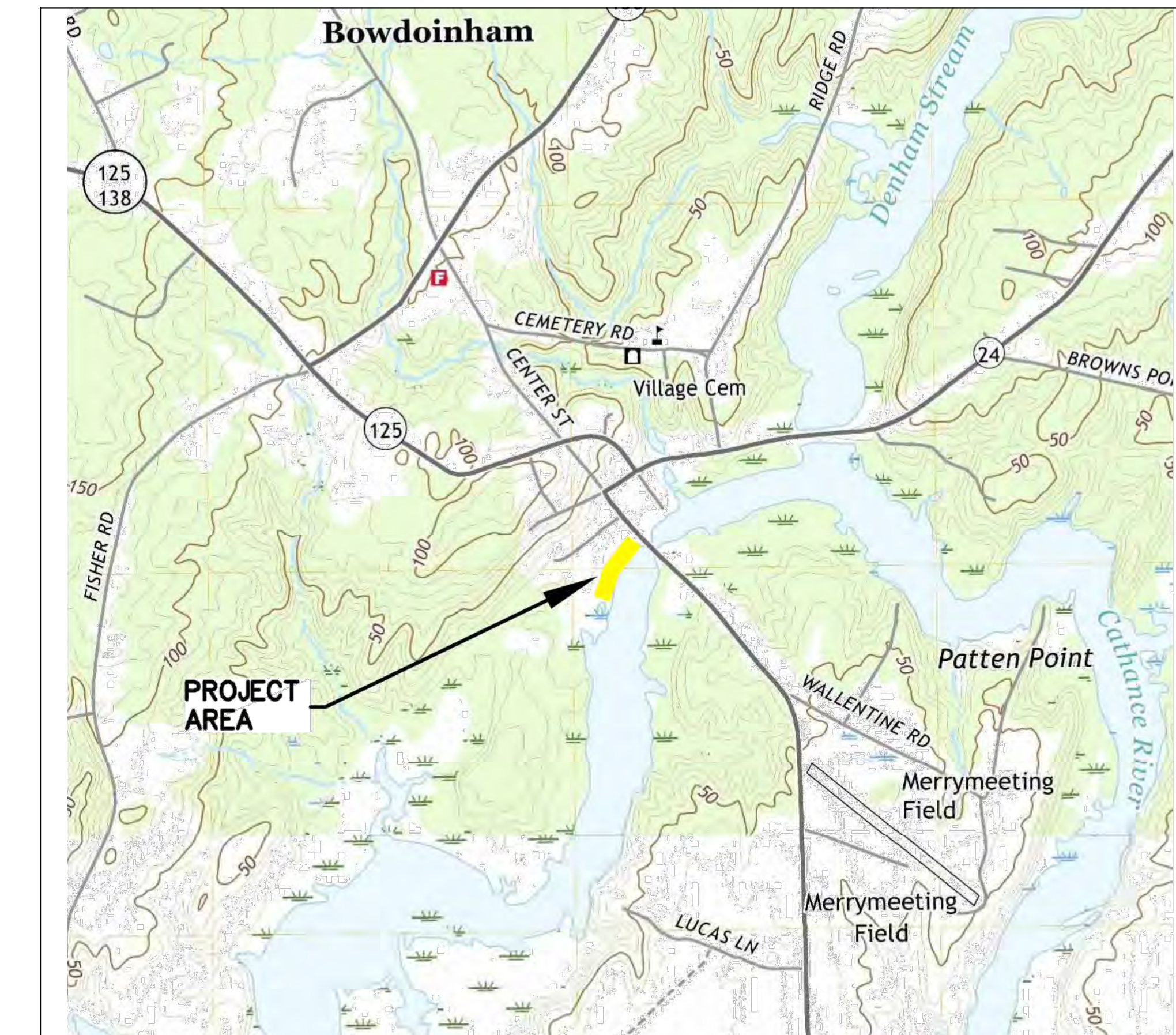
LOCATION MAP:

NOT TO SCALE

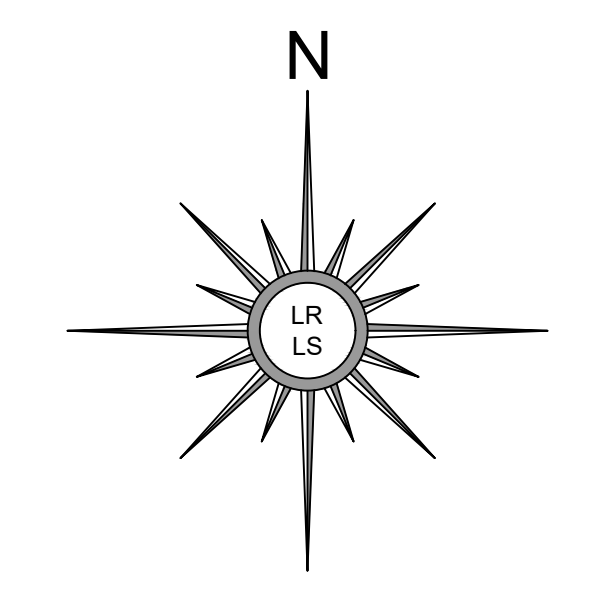


US TOPO MAP - BRUNSWICK / BOWDOINHAM 2018 QUADRANGLES

SCALE 1"=1,000'



NOTE: This drawing is PRELIMINARY ONLY. It is NOT intended for use as a construction document.



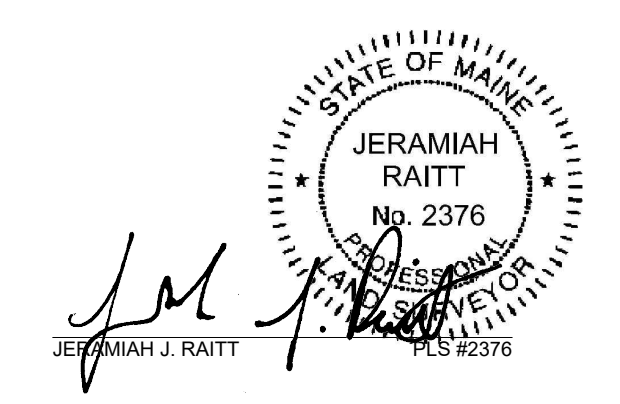
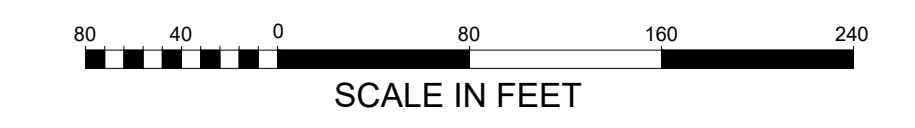
SOURCE
SPCS - 1983 MAINE WEST

NOTES

- 1) RECORD OWNERS: INHABITANTS OF THE TOWN OF BOWDOINHAM
REFERENCE DOCUMENTS: DEED BOOK 1615, PAGE 321 DATED SEPTEMBER 2, 1998
DEED BOOK 1649, PAGE 157 DATED DECEMBER 14, 1998
SEE ALSO: "STANDARD BOUNDARY SURVEY & TOPOGRAPHIC PLAN" FOR CENTRAL CHEMICAL CORPORATION DATED APRIL 24, 1998 BY HARTY LAND SURVEYING RECORDED IN PLAN BOOK 34, PAGE 25.
- 2) PROPERTY LINES AND A SIGNIFICANT PORTION OF THE AREA OUTSIDE OF THE DEFINED SCOPE OF WORK OF THIS PROJECT ARE DEPICTED ON THE HARTY PLAN CITED ABOVE. VARIOUS STORM WATER DRAINAGE STRUCTURES NOT OBSERVED BY THIS SURVEYOR DURING THE COURSE OF THE FIELD WORK CONDUCTED IN 2019 HAVE BEEN SHOWN AS DEPICTED ON THE HARTY PLAN. THE CURRENT STATUS OF SAID STRUCTURES IS UNKNOWN.
- 3) BEARINGS ARE REFERENCED TO THE STATE PLANE COORDINATE SYSTEM OF 1983, MAINE WEST ZONE, AS DETERMINED BY REAL TIME KINEMATIC GNSS TECHNIQUES WITH CORRECTIONS APPLIED BY THE MAINE DOT VRS NETWORK.
- 4) ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS DETERMINED BY REAL TIME KINEMATIC GNSS TECHNIQUES WITH CORRECTIONS APPLIED BY THE MAINE DOT VRS NETWORK.
- 5) THE HIGHEST ANNUAL TIDE (HAT) ELEVATION OF 2.9 FEET (NAVD88) IS LISTED IN A TABLE PUBLISHED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION AVAILABLE ONLINE. THE DATA FOR THE "BOWDOINHAM, CATHANCE RIVER" LOCATION IS DEPICTED HEREON.
- 6) A PORTION OF THE PROJECT AREA IS SHOWN IN A SPECIAL FLOOD HAZARD AREA, ZONE AE (AREAS OF 100 YEAR FLOOD WITH BASE FLOOD ELEVATIONS DETERMINED) AS DEPICTED ON THE FLOOD INSURANCE RATE MAP FOR SAGadahoc COUNTY WITH MAP NUMBER 23023C0094F AND AN EFFECTIVE DATE OF JULY 16, 2015. THE BASE FLOOD ELEVATION OF 8 FEET (NAVD88) IS DEPICTED HEREON.

LEGEND

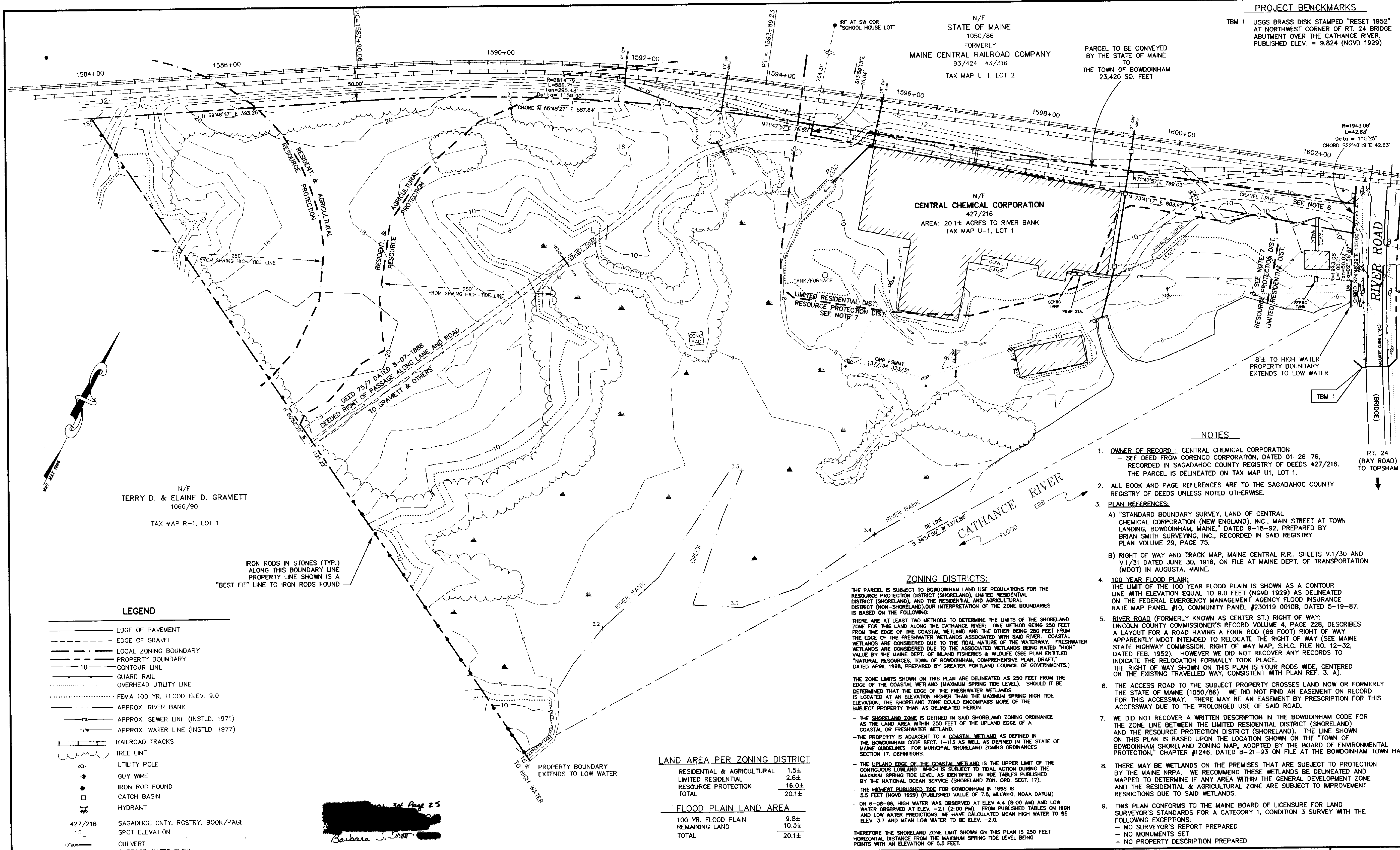
- PIPE OR ROD FOUND
- RIGHT OF WAY
- PROPERTY LINE
- ▨ BUILDING
- ▨ PAVEMENT
- ▨ CONCRETE
- ▨ GRANITE CURB
- ▨ GRAVEL
- ▨ TRAIL
- ⊠ CATCH BASIN
- ⊙ ELECTRIC OUTLET
- ⊙ UTILITY POLE AND ANCHOR
- - - CONTOURS - MAJOR
- - - CONTOURS - MINOR



TOPOGRAPHIC SURVEY	
FOR	TOWN OF BOWDOINHAM 8 RIVER ROAD, BOWDOINHAM, MAINE
SITE	8 RIVER ROAD BOWDOINHAM, MAINE
LITTLE RIVER	
LAND SURVEYING, INC. ME PLS #2376 NH LLS #957 PO BOX 332, LISBON FALLS MAINE 04252 (207) 841-0056	
DATE: JUNE 28, 2019	SCALE: 1" = 80'
PROJECT #19-025 DRAWING #19-025	DRAWN BY: TJC CHECKED BY: JUR

PROJECT BENCHMARKS

TBM 1 USGS BRASS DISK STAMPED "RESET 1952" AT NORTHWEST CORNER OF RT. 24 BRIDGE ABUTMENT OVER THE CATHANCE RIVER. PUBLISHED ELEV. = 9.824 (NGVD 1929)



N/F
TERRY D. & ELAINE D. GRAVIETT
1066/90
TAX MAP R-1, LOT 1

N/F
CENTRAL CHEMICAL CORPORATION
427/216
AREA: 20.1± ACRES TO RIVER BANK
TAX MAP U-1, LOT 1

PARCEL TO BE CONVEYED
BY THE STATE OF MAINE
TO
THE TOWN OF BOWDOINHAM
23,420 SQ. FEET

LEGEND

- EDGE OF PAVEMENT
- - - EDGE OF GRAVEL
- - - LOCAL ZONING BOUNDARY
- - - PROPERTY BOUNDARY
- 10 — CONTOUR LINE
- - - GUARD RAIL
- - - OVERHEAD UTILITY LINE
- - - FEMA 100 YR. FLOOD ELEV. 9.0
- - - APPROX. RIVER BANK
- - - APPROX. SEWER LINE (INSTLD. 1971)
- - - APPROX. WATER LINE (INSTLD. 1977)
- - - RAILROAD TRACKS
- - - TREE LINE
- UTILITY POLE
- GUY WIRE
- IRON ROD FOUND
- CATCH BASIN
- ⊕ HYDRANT
- 427/216 SAGADHOC CNTY. RGSTRY. BOOK/PAGE
- 3.5 SPOT ELEVATION
- 10" BOX CULVERT
- SURFACE WATER FLOW

IRON RODS IN STONES (TYP.)
ALONG THIS BOUNDARY LINE
PROPERTY LINE SHOWN IS A
"BEST FIT" LINE TO IRON RODS FOUND

Barbara J. Hart

LAND AREA PER ZONING DISTRICT

RESIDENTIAL & AGRICULTURAL	1.5±
LIMITED RESIDENTIAL	2.6±
RESOURCE PROTECTION	16.0±
TOTAL	20.1±

FLOOD PLAIN LAND AREA

100 YR. FLOOD PLAIN	9.8±
REMAINING LAND	10.3±
TOTAL	20.1±

ZONING DISTRICTS:

THE PARCEL IS SUBJECT TO BOWDOINHAM LAND USE REGULATIONS FOR THE RESOURCE PROTECTION DISTRICT (SHORELAND), LIMITED RESIDENTIAL DISTRICT (SHORELAND), AND THE RESIDENTIAL AND AGRICULTURAL DISTRICT (NON-SHORELAND). OUR INTERPRETATION OF THE ZONE BOUNDARIES IS BASED ON THE FOLLOWING:

THERE ARE AT LEAST TWO METHODS TO DETERMINE THE LIMITS OF THE SHORELAND ZONE FOR THIS LAND ALONG THE CATHANCE RIVER: ONE METHOD BEING 250 FEET FROM THE EDGE OF THE COASTAL WETLAND AND THE OTHER BEING 250 FEET FROM THE EDGE OF THE FRESHWATER WETLANDS ASSOCIATED WITH SAID RIVER. COASTAL WETLANDS ARE CONSIDERED DUE TO THE TIDAL NATURE OF THE WATERWAY. FRESHWATER WETLANDS ARE CONSIDERED DUE TO THE ASSOCIATED WETLANDS BEING RATED "HIGH" VALUE BY THE MAINE DEPT. OF INLAND FISHERIES & WILDLIFE (SEE PLAN ENTITLED "NATURAL RESOURCES, TOWN OF BOWDOINHAM, COMPREHENSIVE PLAN, DRAFT," DATED APRIL 1998, PREPARED BY GREATER PORTLAND COUNCIL OF GOVERNMENTS.)

THE ZONE LIMITS SHOWN ON THIS PLAN ARE DELINEATED AS 250 FEET FROM THE EDGE OF THE COASTAL WETLAND (MAXIMUM SPRING TIDE LEVEL). SHOULD IT BE DETERMINED THAT THE EDGE OF THE FRESHWATER WETLANDS IS LOCATED AT AN ELEVATION HIGHER THAN THE MAXIMUM SPRING HIGH TIDE ELEVATION, THE SHORELAND ZONE COULD ENCOMPASS MORE OF THE SUBJECT PROPERTY THAN AS DELINEATED HEREIN.

- THE SHORELAND ZONE IS DEFINED IN SAID SHORELAND ZONING ORDINANCE AS THE LAND AREA WITHIN 250 FEET OF THE UPLAND EDGE OF A COASTAL OR FRESHWATER WETLAND.

- THE PROPERTY IS ADJACENT TO A COASTAL WETLAND AS DEFINED IN THE BOWDOINHAM CODE SECT. 1-113 AS WELL AS DEFINED IN THE STATE OF MAINE GUIDELINES FOR MUNICIPAL SHORELAND ZONING ORDINANCES SECTION 17, DEFINITIONS.

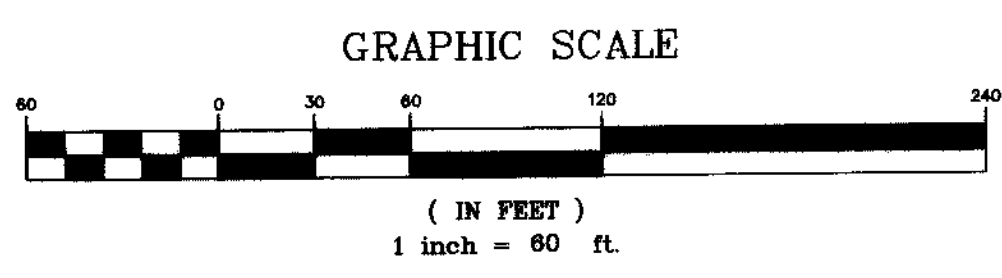
- THE UPLAND EDGE OF THE COASTAL WETLAND IS THE UPPER LIMIT OF THE CONTIGUOUS LOWLAND WHICH IS SUBJECT TO TIDAL ACTION DURING THE MAXIMUM SPRING TIDE LEVEL AS IDENTIFIED IN TIDE TABLES PUBLISHED BY THE NATIONAL OCEAN SERVICE (SHORELAND ZON. ORD. SECT. 17).

- THE HIGHEST PUBLISHED TIDE FOR BOWDOINHAM IN 1998 IS 5.5 FEET (NGVD 1929) (PUBLISHED VALUE OF 7.5, MLLW=0, NOAA DATUM)

- ON 6-08-96, HIGH WATER WAS OBSERVED AT ELEV. 4.4 (8:00 AM) AND LOW WATER OBSERVED AT ELEV. -2.1 (2:00 PM). FROM PUBLISHED TABLES ON HIGH AND LOW WATER PREDICTIONS, WE HAVE CALCULATED MEAN HIGH WATER TO BE ELEV. 3.7 AND MEAN LOW WATER TO BE ELEV. -2.0.

THEREFORE THE SHORELAND ZONE LIMIT SHOWN ON THIS PLAN IS 250 FEET HORIZONTAL DISTANCE FROM THE MAXIMUM SPRING TIDE LEVEL BEING POINTS WITH AN ELEVATION OF 5.5 FEET.

- NOTES**
- OWNER OF RECORD: CENTRAL CHEMICAL CORPORATION - SEE DEED FROM CORENCO CORPORATION, DATED 01-26-76, RECORDED IN SAGADHOC COUNTY REGISTRY OF DEEDS 427/216. THE PARCEL IS DELINEATED ON TAX MAP U1, LOT 1.
 - ALL BOOK AND PAGE REFERENCES ARE TO THE SAGADHOC COUNTY REGISTRY OF DEEDS UNLESS NOTED OTHERWISE.
 - PLAN REFERENCES:
 - A) "STANDARD BOUNDARY SURVEY, LAND OF CENTRAL CHEMICAL CORPORATION (NEW ENGLAND), INC., MAIN STREET AT TOWN LANDING, BOWDOINHAM, MAINE," DATED 9-18-92, PREPARED BY BRIAN SMITH SURVEYING, INC., RECORDED IN SAID REGISTRY PLAN VOLUME 29, PAGE 75.
 - B) RIGHT OF WAY AND TRACK MAP, MAINE CENTRAL R.R., SHEETS V.1/30 AND V.1/31 DATED JUNE 30, 1916, ON FILE AT MAINE DEPT. OF TRANSPORTATION (MDOT) IN AUGUSTA, MAINE.
 - 100 YEAR FLOOD PLAIN: THE LIMIT OF THE 100 YEAR FLOOD PLAIN IS SHOWN AS A CONTOUR LINE WITH ELEVATION EQUAL TO 9.0 FEET (NGVD 1929) AS DELINEATED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP PANEL #10, COMMUNITY PANEL #230119 0010B, DATED 5-19-87.
 - RIVER ROAD (FORMERLY KNOWN AS CENTER ST.) RIGHT OF WAY: LINCOLN COUNTY COMMISSIONER'S RECORD VOLUME 4, PAGE 228, DESCRIBES A LAYOUT FOR A ROAD HAVING A FOUR ROD (66 FOOT) RIGHT OF WAY. APPARENTLY MDOT INTENDED TO RELOCATE THE RIGHT OF WAY (SEE MAINE STATE HIGHWAY COMMISSION, RIGHT OF WAY MAP, S.H.C. FILE NO. 12-32, DATED FEB. 1952). HOWEVER WE DID NOT RECOVER ANY RECORDS TO INDICATE THE RELOCATION FORMALLY TOOK PLACE. THE RIGHT OF WAY SHOWN ON THIS PLAN IS FOUR RODS WIDE, CENTERED ON THE EXISTING TRAVELLED WAY, CONSISTENT WITH PLAN REF. 3. A).
 - THE ACCESS ROAD TO THE SUBJECT PROPERTY CROSSES LAND NOW OR FORMERLY THE STATE OF MAINE (1050/86). WE DID NOT FIND AN EASEMENT ON RECORD FOR THIS ACCESSWAY. THERE MAY BE AN EASEMENT BY PRESCRIPTION FOR THIS ACCESSWAY DUE TO THE PROLONGED USE OF SAID ROAD.
 - WE DID NOT RECOVER A WRITTEN DESCRIPTION IN THE BOWDOINHAM CODE FOR THE ZONE LINE BETWEEN THE LIMITED RESIDENTIAL DISTRICT (SHORELAND) AND THE RESOURCE PROTECTION DISTRICT (SHORELAND). THE LINE SHOWN ON THIS PLAN IS BASED UPON THE LOCATION SHOWN ON THE "TOWN OF BOWDOINHAM, SHORELAND ZONING MAP, ADOPTED BY THE BOARD OF ENVIRONMENTAL PROTECTION," CHAPTER #1246, DATED 8-21-93 ON FILE AT THE BOWDOINHAM TOWN HALL.
 - THERE MAY BE WETLANDS ON THE PREMISES THAT ARE SUBJECT TO PROTECTION BY THE MAINE NRPA. WE RECOMMEND THESE WETLANDS BE DELINEATED AND MAPPED TO DETERMINE IF ANY AREA WITHIN THE GENERAL DEVELOPMENT ZONE AND THE RESIDENTIAL & AGRICULTURAL ZONE ARE SUBJECT TO IMPROVEMENT RESTRICTIONS DUE TO SAID WETLANDS.
 - THIS PLAN CONFORMS TO THE MAINE BOARD OF LICENSURE FOR LAND SURVEYOR'S STANDARDS FOR A CATEGORY 1, CONDITION 3 SURVEY WITH THE FOLLOWING EXCEPTIONS:
 - NO SURVEYOR'S REPORT PREPARED
 - NO MONUMENTS SET
 - NO PROPERTY DESCRIPTION PREPARED



REV	DATE	STATUS	BY	CHKD	APPD
3	09-16-98	ADD PARCEL TO BE CONV. BY STATE	MJH	PFH	MJH
2	06-22-98	ZONING; WATER & SEWER LINES	MJH	PFH	MJH
1	05-08-98	100 YR. FLOOD ACREAGE	MJH	PFH	MJH

DESIGNED BY: -
DRAWN BY: MJH
CHECKED BY: PFH
APPROVED BY: MJH
DATE: 04-24-98

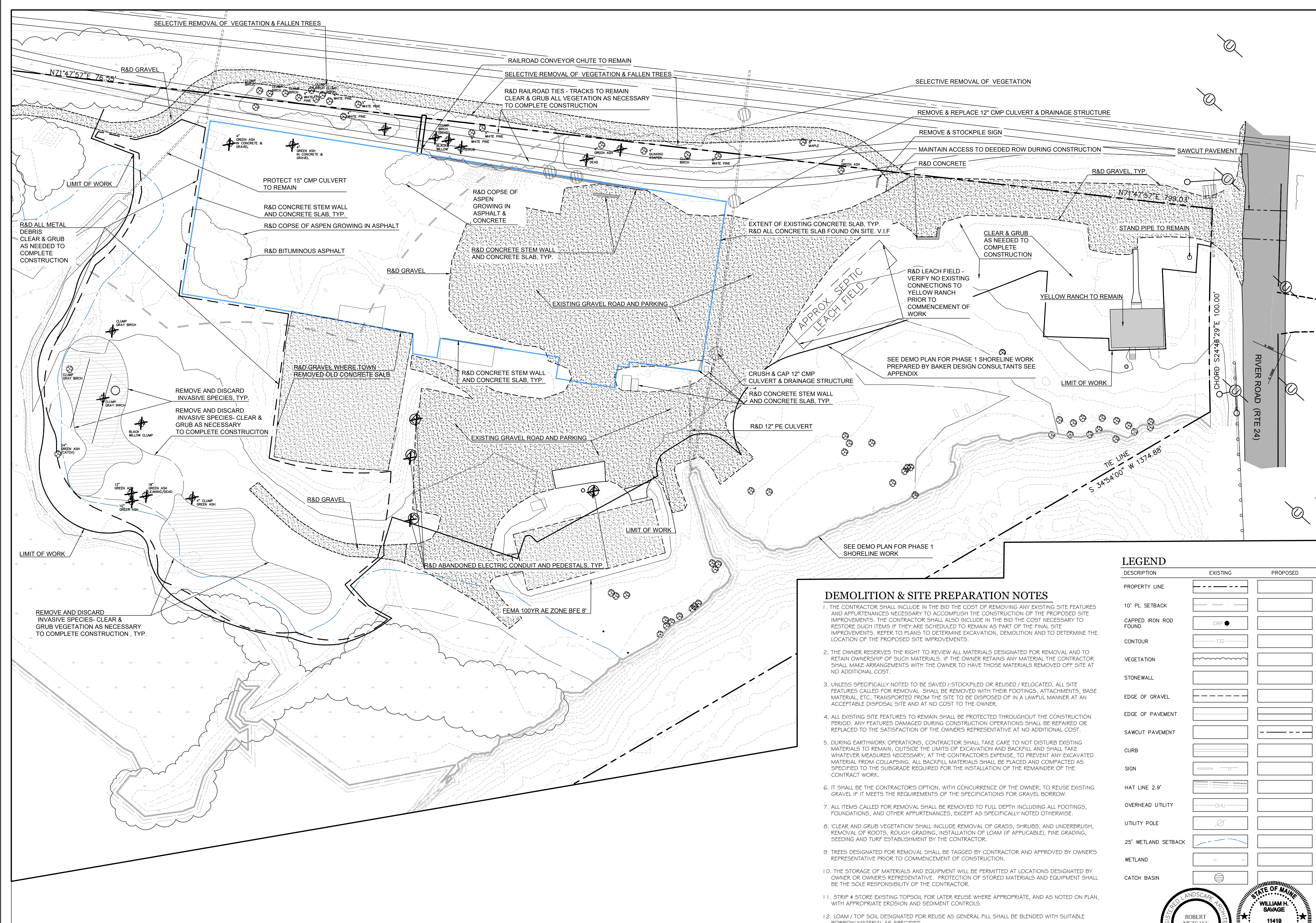
Harty Land Surveying
535 Bay Road
Bowdoinham, Maine 04008
Tel: (207) 729-4571

CLIENT
TOWN OF BOWDOINHAM
13 SCHOOL STREET
BOWDOINHAM, MAINE 04008

PROJECT
CENTRAL CHEMICAL CORP. PROPERTY
8 RIVER ROAD, BOWDOINHAM, ME

TITLE
STANDARD BOUNDARY SURVEY & TOPOGRAPHIC PLAN

SCALE	1" = 60'
PROJECT NO.	HL59802
DRAWING NO.	centchem.DWG
SHT.	1 of 1
REV.	2



Prepared For:
 Applicant:
TOWN OF BOWDOINHAM
 8 RIVER ROAD
 Bowdoinham, Maine 04074
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Prepared By:
MITCHELL & ASSOCIATES
 Landscape Architects
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ACORN ENGINEERING INC.
 PO BOX 3372, Portland, Maine 04104
 Tel: (207) 775-2555

Site Plan Phase II
Redevelopment of Waterfront Property
8 River Road
Bowdoinham, Maine

NOTE: This drawing is PRELIMINARY ONLY. It is NOT intended for use as a construction document.

DEMOLITION & SITE PREPARATION NOTES

1. THE CONTRACTOR SHALL INCLUDE IN THE BID THE COST OF REMOVING ANY EXISTING SITE FEATURES AND APPURTENANCES NECESSARY TO ACCOMPLISH THE CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS. THE CONTRACTOR SHALL ALSO INCLUDE IN THE BID THE COST NECESSARY TO RESTORE SUCH ITEMS IF THEY ARE SCHEDULED TO REMAIN AS PART OF THE FINAL SITE IMPROVEMENTS. REFER TO PLANS TO DETERMINE EXCAVATION, DEMOLITION AND TO DETERMINE THE LOCATION OF THE PROPOSED SITE IMPROVEMENTS.
2. THE OWNER RESERVES THE RIGHT TO REVIEW ALL MATERIALS DESIGNATED FOR REMOVAL AND TO RETAIN OWNERSHIP OF SUCH MATERIALS. IF THE OWNER RETAINS ANY MATERIAL THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE OWNER TO HAVE THOSE MATERIALS REMOVED OFF SITE AT NO ADDITIONAL COST.
3. UNLESS SPECIFICALLY NOTED TO BE SAVED / STOCKPILED OR REUSED / RELOCATED, ALL SITE FEATURES CALLED FOR REMOVAL SHALL BE REMOVED WITH THEIR FOOTINGS, ATTACHMENTS, BASE MATERIAL, ETC. TRANSPORTED FROM THE SITE TO BE DISPOSED OF IN A LAWFUL MANNER AT AN ACCEPTABLE DISPOSAL SITE AND AT NO COST TO THE OWNER.
4. ALL EXISTING SITE FEATURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PERIOD. ANY FEATURES DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST.
5. DURING EARTHWORK OPERATIONS, CONTRACTOR SHALL TAKE CARE TO NOT DISTURB EXISTING MATERIALS TO REMAIN, OUTSIDE THE LIMITS OF EXCAVATION AND BACKFILL AND SHALL TAKE WHATEVER MEASURES NECESSARY, AT THE CONTRACTOR'S EXPENSE, TO PREVENT ANY EXCAVATED MATERIAL FROM COLLAPSING. ALL BACKFILL MATERIALS SHALL BE PLACED AND COMPACTED AS SPECIFIED TO THE SUBGRADE REQUIRED FOR THE INSTALLATION OF THE REMAINDER OF THE CONTRACT WORK.
6. IT SHALL BE THE CONTRACTOR'S OPTION, WITH CONCURRENCE OF THE OWNER, TO REUSE EXISTING GRAVEL IF IT MEETS THE REQUIREMENTS OF THE SPECIFICATIONS FOR GRAVEL BORROW.
7. ALL ITEMS CALLED FOR REMOVAL SHALL BE REMOVED TO FULL DEPTH INCLUDING ALL FOOTINGS, FOUNDATIONS, AND OTHER APPURTENANCES, EXCEPT AS SPECIFICALLY NOTED OTHERWISE.
8. 'CLEAR AND GRUB VEGETATION' SHALL INCLUDE REMOVAL OF GRASS, SHRUBS, AND UNDERBRUSH, REMOVAL OF ROOTS, ROUGH GRADING, INSTALLATION OF LOAM (IF APPLICABLE), FINE GRADING, SEEDING AND TURF ESTABLISHMENT BY THE CONTRACTOR.
9. TREES DESIGNATED FOR REMOVAL SHALL BE TAGGED BY CONTRACTOR AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
10. THE STORAGE OF MATERIALS AND EQUIPMENT WILL BE PERMITTED AT LOCATIONS DESIGNATED BY OWNER OR OWNER'S REPRESENTATIVE. PROTECTION OF STORED MATERIALS AND EQUIPMENT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
11. STRIP & STORE EXISTING TOPSOIL FOR LATER REUSE WHERE APPROPRIATE, AND AS NOTED ON PLAN, WITH APPROPRIATE EROSION AND SEDIMENT CONTROLS.
12. LOAM / TOP SOIL DESIGNATED FOR REUSE AS GENERAL FILL SHALL BE BLENDED WITH SUITABLE BORROW MATERIAL AS SPECIFIED.
13. THE CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN, CONTRACTOR SHALL INSTALL TREE PROTECTION

LEGEND

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
10' PL SETBACK		
CAPPED IRON ROD FOUND		
CONTOUR		
VEGETATION		
STONEWALL		
EDGE OF GRAVEL		
EDGE OF PAVEMENT		
SAWCUT PAVEMENT		
CURB		
SIGN		
HAT LINE 2.9'		
OVERHEAD UTILITY		
UTILITY POLE		
25' WETLAND SETBACK		
WETLAND		
CATCH BASIN		

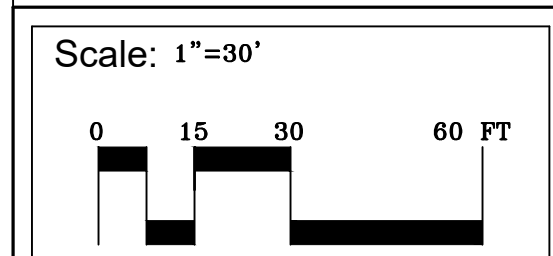
Date:
APRIL 12, 2021

Issued For:
PERMIT LEVEL

Revisions:

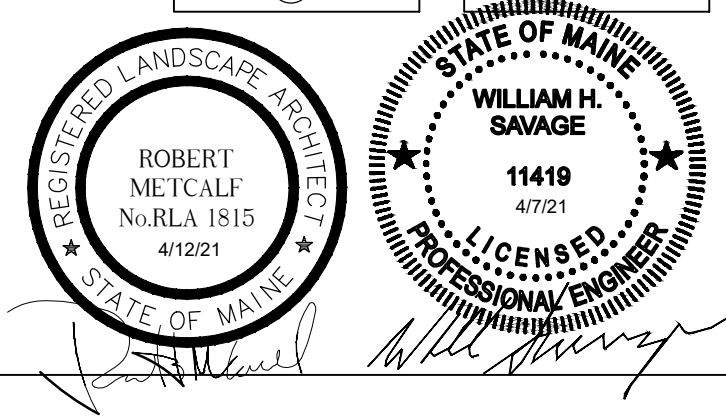
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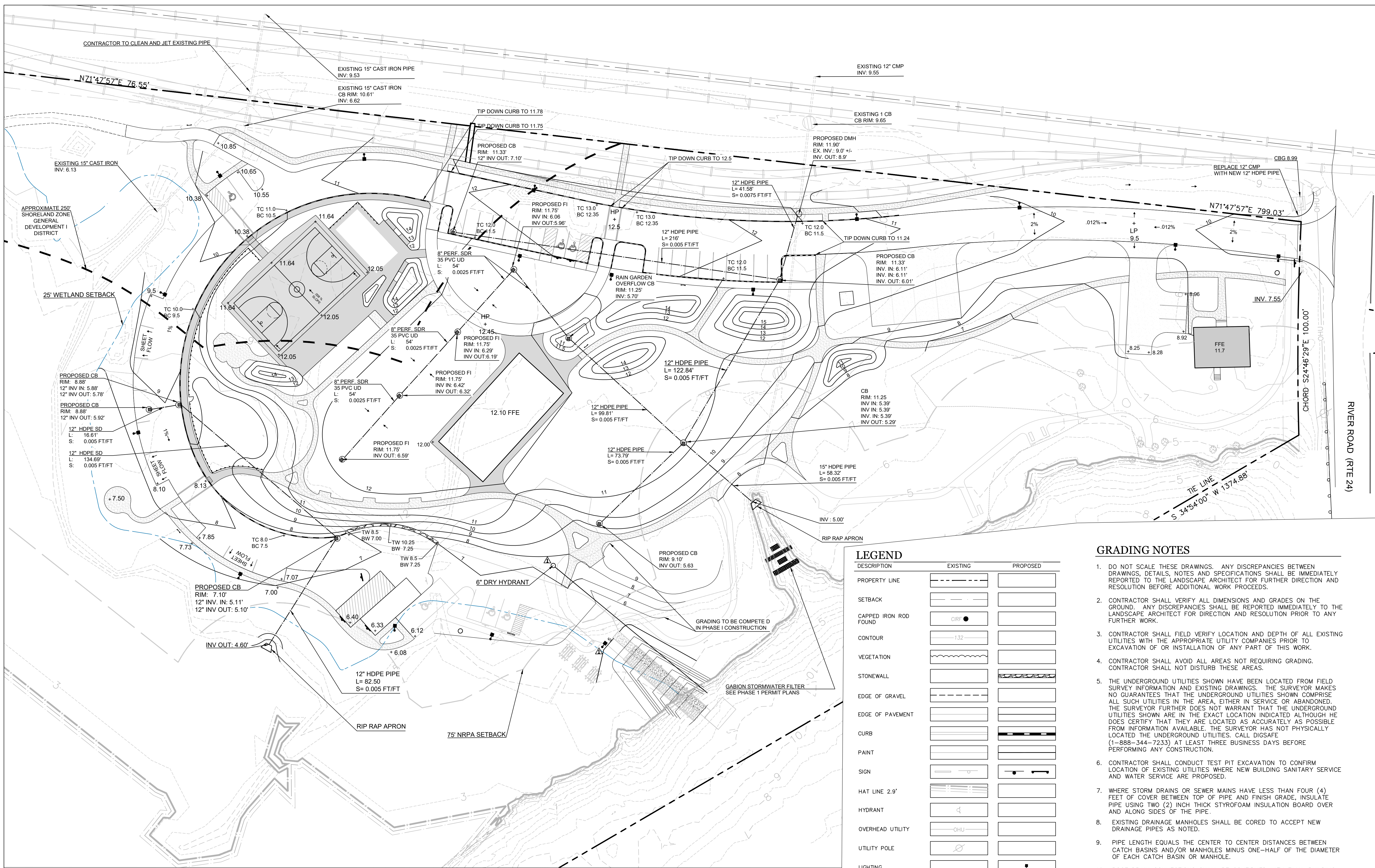
Title:
EXISTING CONDITION, DEMOLITION & SITE PREPARATION PLAN



North:

Sheet No.: **L1**





Prepared For:
 Applicant:
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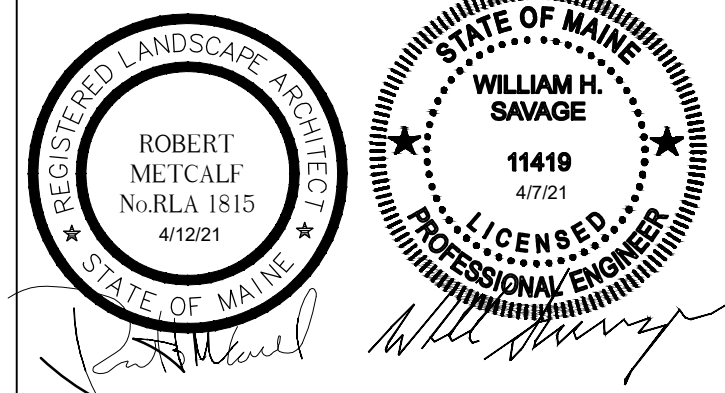
ACORN ENGINEERING INC.
 PO BOX 3372, Portland, Maine 04104
 Tel: (207) 775-2555

Site Plan Phase II Redevelopment of Waterfront Property 8 River Road Bowdoinhams, Maine

LEGEND

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
SETBACK		
CAPPED IRON ROD FOUND		
CONTOUR		
VEGETATION		
STONEWALL		
EDGE OF GRAVEL		
EDGE OF PAVEMENT		
CURB		
PAINT		
SIGN		
HAT LINE 2.9'		
HYDRANT		
OVERHEAD UTILITY		
UTILITY POLE		
LIGHTING		
EXISTING CONTOURS		
PROPOSED CONTOURS		
STORMDRAIN PIPE		
250' SHORELAND ZONE GENERAL DEVELOPMENT DISTRICT 1		
25' WETLAND SETBACK		
CATCH BASIN		
DRAINAGE MANHOLE		

- ### GRADING NOTES
- DO NOT SCALE THESE DRAWINGS. ANY DISCREPANCIES BETWEEN DRAWINGS, DETAILS, NOTES AND SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE LANDSCAPE ARCHITECT FOR FURTHER DIRECTION AND RESOLUTION BEFORE ADDITIONAL WORK PROCEEDS.
 - CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR DIRECTION AND RESOLUTION PRIOR TO ANY FURTHER WORK.
 - CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES WITH THE APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATION OF OR INSTALLATION OF ANY PART OF THIS WORK.
 - CONTRACTOR SHALL AVOID ALL AREAS NOT REQUIRING GRADING. CONTRACTOR SHALL NOT DISTURB THESE AREAS.
 - THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL DIGSAFE (1-888-344-7233) AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION.
 - CONTRACTOR SHALL CONDUCT TEST PIT EXCAVATION TO CONFIRM LOCATION OF EXISTING UTILITIES WHERE NEW BUILDING SANITARY SERVICE AND WATER SERVICE ARE PROPOSED.
 - WHERE STORM DRAINS OR SEWER MAINS HAVE LESS THAN FOUR (4) FEET OF COVER BETWEEN TOP OF PIPE AND FINISH GRADE, INSULATE PIPE USING TWO (2) INCH THICK STYROFOAM INSULATION BOARD OVER AND ALONG SIDES OF THE PIPE.
 - EXISTING DRAINAGE MANHOLES SHALL BE CORED TO ACCEPT NEW DRAINAGE PIPES AS NOTED.
 - PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE-HALF OF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.
 - ROOF DRAIN CONNECTIONS SHALL BE CONFIRMED WITH FINAL BUILDING PLANS.
 - ALL UTILITIES SHALL BE INSTALLED IN CONFORMANCE WITH INDIVIDUAL UTILITY DISTRICT REQUIREMENTS; CONTRACTOR SHALL COORDINATE INSTALLATION WITH APPROPRIATE UTILITY DISTRICT BEFORE INSTALLATION.
 - ALL WORK WITHIN THE ROAD RIGHT-OF-WAY AND ALL UTILITIES CONNECTING TO INFRASTRUCTURE WITHIN THE ROAD SHALL MEET TOWN OF BOWDOINHAM STANDARDS.
 - GRADING FOR THE A.D.A. COMPLIANT PARKING SPACES TO THE A.D.A. BUILDING ENTRANCES SHALL COMPLY WITH ACCESSIBILITY REQUIREMENTS INCLUDING MAXIMUM 2% SLOPE IN ANY DIRECTION AND SURFACE TREATMENT. ANY REPAIRS TO ACHIEVE COMPLIANCE SHALL BE COMPLETED AT NO EXTRA EXPENSE TO THE OWNER.



NOTE: This drawing is PRELIMINARY ONLY. It is NOT intended for use as a construction document.

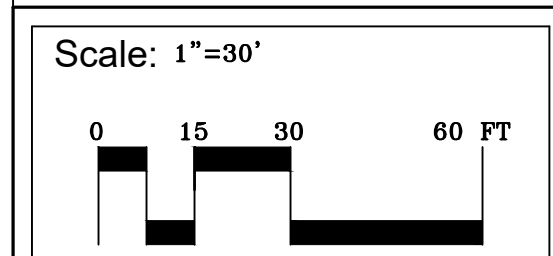
Date:
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REVISION A 05.17.2021

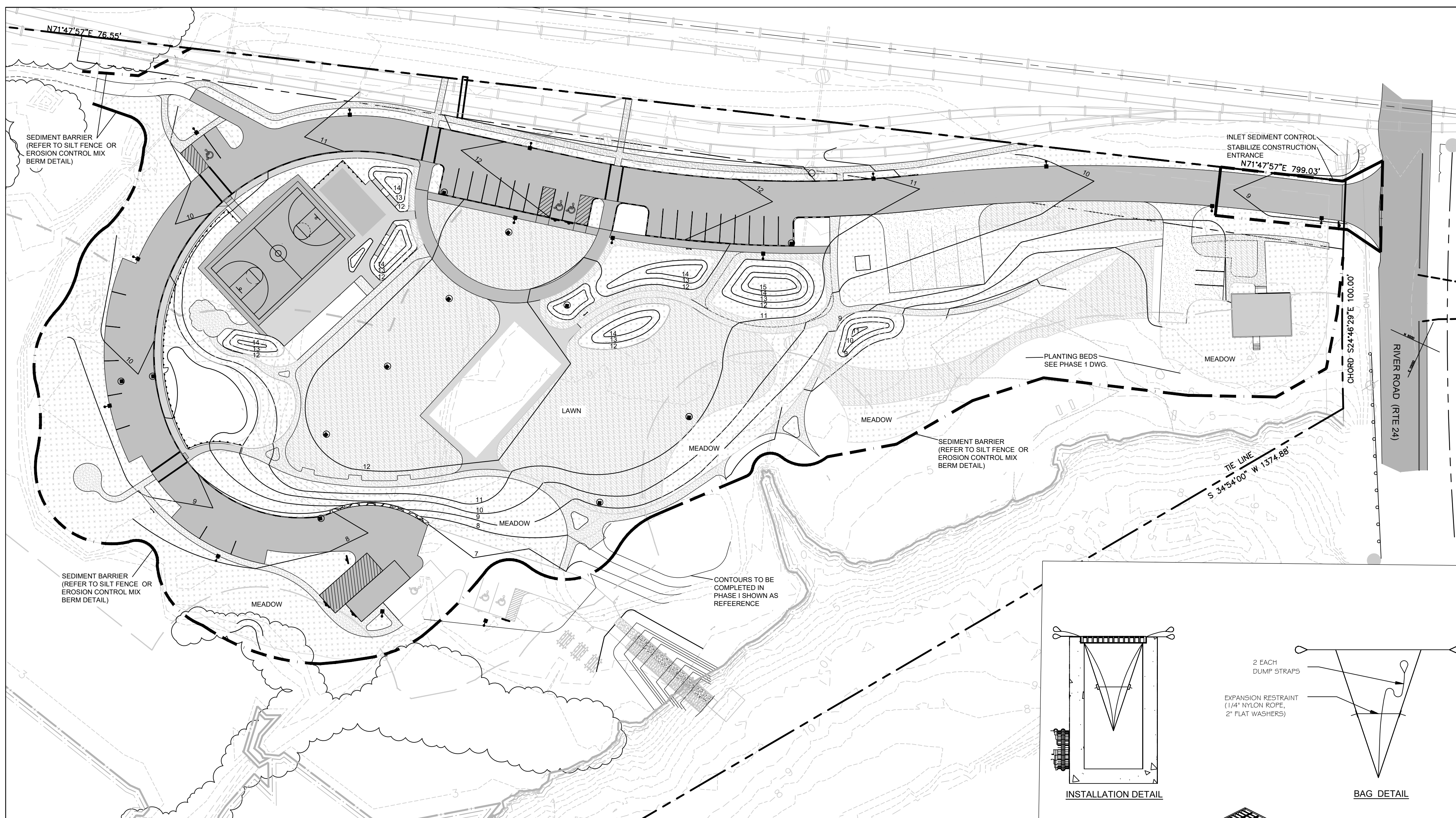
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Title:
GRADING & DRAINAGE PLAN



North:

Sheet No.:
L3



EROSION CONTROL NOTES

THIS PLAN HAS BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER THE CONSTRUCTION. THIS PLAN IS BASED ON THE MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION, BEST MANAGEMENT PRACTICES, OCTOBER, 2020.

A. PROPOSED DEVELOPMENT

THIS PROJECT CONSISTS OF THE CONSTRUCTION OF PHASE 2 DEVELOPMENT OF BOWDOINHAM'S WATER FRONT PARK. SITE IMPROVEMENTS INCLUDE: PARKING LOT, PATHS, ACTIVE RECREATION COURTS AND ROADWAY PAVING, GRADING OPERATIONS, SIGNAGE, PERGOLAS AND PATIO CONSTRUCTIONS, WALLS, FENCES, PLANTING AND ALL OTHER PERTINENT SITE IMPROVEMENT REQUIREMENTS AS PER THE SITE PLAN AND ORDINANCES FOR THE TOWN OF BOWDOINHAM, MAINE.

B. EROSION CONTROL PRACTICES/TEMPORARY MEASURES

THE FOLLOWING TEMPORARY MEASURES TO CONTROL EROSION AND SEDIMENTATION SHALL BE UTILIZED:
 EACH GROUND AREA, OPENED OR EXPOSED, WHETHER DIRECTLY OR INDIRECTLY DUE TO THE DEVELOPMENT, SHALL BE MINIMIZED AND SHALL BE STABILIZED WITHIN 15 DAYS OF INITIAL DISTURBANCE OF SOIL AND SHALL BE PERMANENTLY STABILIZED WITHIN SEVEN DAYS OF FINAL GRADING. THIS STATEMENT APPLIES TO DISTURBED AREAS BEYOND THE LIMITS OF THE PROPOSED BUILDING. EXPOSED AREAS SHALL BE STABILIZED PRIOR TO A RAIN EVENT.
 TEMPORARY SOIL STABILIZATION SHALL BE EITHER BY TEMPORARY MULCHING, TEMPORARY SEEDING, PERMANENT BASE GRAVEL, OR ASPHALT BINDER COURSE AS FOLLOWS:

TEMPORARY SEEDING: SEED SHALL BE AROOSTOOK RYE APPLIED AT 2.60#/1000 SF. LIME SHALL BE AGRICULTURAL GROUND LIMESTONE APPLIED AT 13.8#/1000 SF. FERTILIZER SHALL BE 10-10-10 CLASSIFICATION APPLIED AT 13.8#/1000 SF. MULCH SHALL CONSIST OF HAY AND STRAW MULCH AND SPREAD EVENLY AT A RATE OF 70-90#/1000 SF. TEMPORARY SEEDINGS SHALL ONLY BE MADE BETWEEN APRIL 15 AND OCTOBER 1, AND SHALL NOT BE PLACED OVER SNOW.

TEMPORARY MULCHING: MULCH SHALL CONSIST OF CHOPPED HAY OR STRAW MULCH AND SPREAD BY MECHANICAL BLOWER EVENLY AT A RATE OF 150-200#/1000 SF. TEMPORARY MULCH SHALL BE REMOVED PRIOR TO PERMANENT SOIL STABILIZATION. MULCH MUST NOT BE PLACED OVER SNOW. SNOW SHALL BE REMOVED PRIOR TO MULCHING.

PERMANENT BASE GRAVEL: BASE GRAVEL UNDER PAVEMENT SHALL BE SUITABLE AS TEMPORARY SOIL STABILIZATION UNDER THE FOLLOWING CONDITIONS:
 a) SLOPES SHALL BE LESS THAN EIGHT PERCENT;
 b) GRAVEL SHALL MEET THE SPECIFICATIONS FOR BASE OR SUBBASE GRAVEL FOR THE PROPOSED COMPLETED PAVEMENT.

C. EROSION CONTROL PRACTICES/PERMANENT MEASURES

THE FOLLOWING PERMANENT MEASURES TO CONTROL EROSION AND SEDIMENTATION SHALL BE UTILIZED:
 1. PERMANENT SEEDING SHALL BE PERFORMED DURING CONSTRUCTION OPERATIONS AS EACH DISTURBED AREA HAS BEEN BROUGHT TO FINISH GRADE. PERMANENT SEEDINGS SHALL BE MADE AS DORMANT SEEDING AFTER THE FIRST KILLING FROST. DORMANT SEEDING AND MULCH SHALL BE USED AT TWO TIMES THE PERMANENT SEEDING AND MULCHING RATE SHOWN BELOW FOR BOTH LAWN AS WELL AS EMBANKMENTS. SEED, LOAM, LIME, FERTILIZER AND MULCH ARE TO BE AS FOLLOWS:

SEED: THE SEED MIXTURE SHALL CONSIST OF SEED PROPORTIONED BY WEIGHT. ALL SEED SHALL BE FRESH, CLEAN, "NEW CROP" SEED. HARMLESS INERT WATER AND WEED SEEDS SHALL BE PERMITTED UP TO ONE PERCENT OF THE GROSS WEIGHT OF EACH VARIETY OF SEED. ALL SEED SUPPLIED SHALL BE PACKED IN APPROVED CONTAINERS BEARING THE MANUFACTURER'S NAME AND ANALYSIS OF CONTENTS. THE FOLLOWING MATERIALS AND APPLICATION RATES SHALL BE REQUIRED FOR PERMANENT SEEDING:

LAWN:	
CREeping RED RESCUE:	0.69#/1000 SF
KENTUCKY BLUEGRASS:	0.57#/1000 SF
PERENNIAL RYEGRASS:	0.46#/1000 SF
RETOP:	0.12#/1000 SF
TOTAL:	1.84#/1000 SF

LOAM: SHALL BE FREE OF GRASSES, ROOTS, LARGE STONE AND INORGANIC DEBRIS. PLACE LOAM AT FOUR INCHES MINIMUM DEPTH OVER ALL DISTURBED AREAS. FINAL GRADING OF ALL LAWN AREAS TO BE APPROVED BY LANDSCAPE ARCHITECT BEFORE SEEDING.

LIME: LIME SHALL BE AGRICULTURAL GROUND LIMESTONE AND APPLIED AS PER RECOMMENDATION OF A STATE COMMERCIAL SOIL TESTING LABORATORY. FERTILIZER: FERTILIZER SHALL BE 10-20-20 CLASSIFICATION AND APPLIED AS PER RECOMMENDATION OF A STATE COMMERCIAL SOIL TESTING LABORATORY.

MULCH: MULCH SHALL CONSIST OF HAY OR STRAW MULCH. MULCH SHALL BE SPREAD EVENLY AT A RATE OF TWO AND ONE HALF TONS PER ACRE OVER ALL SEEDING. AFTER APPLICATION, THE MULCH SHALL BE THOROUGHLY WETTED. IN STEEP AREAS, THE MULCH SHALL BE HELD IN PLACE BY THE USE OF JUTE EROSION CONTROL NETTING OR APPROVED ALTERNATIVE NETTING MATERIAL. NOTE: ALL EXPOSED SOIL MUST BE COVERED REGARDLESS OF MULCHING RATES SPECIFIED.

THE CONTRACTOR SHALL MAINTAIN THE SEEDED AND MULCHED AREAS UNTIL FINAL ACCEPTANCE OR THE WORK. MAINTENANCE SHALL CONSIST OF PROVIDING PROPER WATERING, PROTECTION AGAINST TRAFFIC AND REPAIRING ANY AREAS DAMAGED DUE TO WIND, WATER, EROSION, FIRE OR OTHER CAUSES. SUCH DAMAGED AREAS SHALL BE REPAIRED TO REESTABLISH THE CONDITION AND GRADE OF THE SOIL PRIOR TO SEEDING AND SHALL THEN BE REFERTILIZED, RESEEDED AND REMULCHED.

D. WINTER CONDITIONS

EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDERTAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS./1,000 SF. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. THE CONTRACTOR SHALL 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.

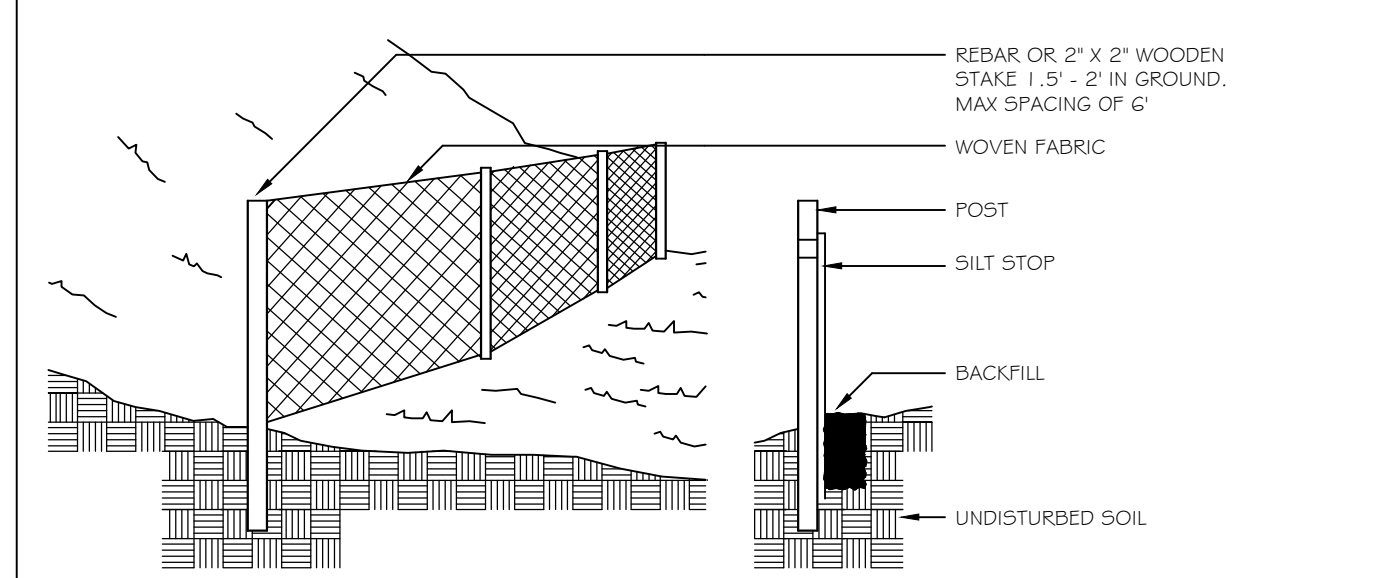
E. CONSTRUCTION SEQUENCE

- THE GENERAL SEQUENCE OF WORK SHALL BE AS FOLLOWS:
1. INSTALL EROSION CONTROL DEVICES. (SILT FENCE, STABILIZED CONSTRUCTION ENTRANCE AND OR SEDIMENT BARRIER.)
 2. TEMPORARILY STABILIZE DISTURBED AREAS BY MULCHING ALL EXPOSED SOIL WITHIN 15 DAYS OF INITIAL DISTURBANCE.
 3. INSTALL STORMWATER SYSTEM;
 4. CONSTRUCTION OF BUILDINGS;
 5. COMPLETE SITE CONSTRUCTION WORK;
 6. CONSTRUCT PAVED ACCESS AND PARKING AREAS;
 7. INSTALL PERMANENT VEGETATION ON ALL EXPOSED AREAS WITHIN 15 DAYS OF FINAL GRADING; AND
 8. PERFORM CONTINUING MAINTENANCE ON ALL EROSION AND SEDIMENTATION CONTROL DEVICES AND MEASURES.

F. SITE INSPECTION & MAINTENANCE

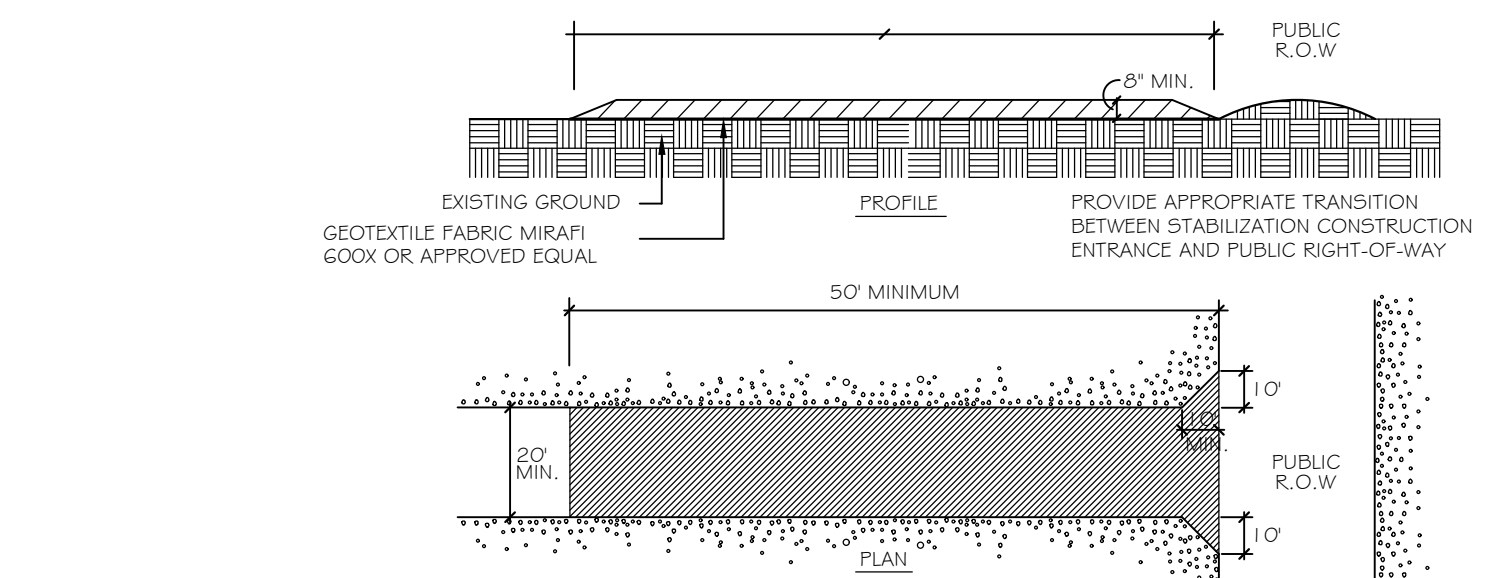
WEEKLY INSPECTIONS, AS WELL AS ROUTINE INSPECTIONS FOLLOWING RAINFALLS OF 0.5" OVER A CONSECUTIVE 24-HOUR PERIOD, SHALL BE CONDUCTED BY THE SITE CONTRACTOR OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES UNTIL FINAL ACCEPTANCE OF THE PROJECT. NECESSARY REPAIRS SHALL BE MADE TO CORRECT UNDERMINING OR DETERIORATION. FINAL ACCEPTANCE SHALL INCLUDE A SITE INSPECTION TO VERIFY THE STABILITY OF ALL DISTURBED AREAS AND SLOPES. UNTIL FINAL INSPECTION, ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL IMMEDIATELY BE CLEANED, AND REPAIRED BY THE SITE CONTRACTOR AFTER STORM EVENTS. DISPOSAL OF ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE SITE CONTRACTOR.

CONTINUED TEMPORARY MAINTENANCE AND LONG TERM PROVISIONS FOR PERMANENT MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL FACILITIES AFTER ACCEPTANCE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE TOWN OF BOWDOINHAM.



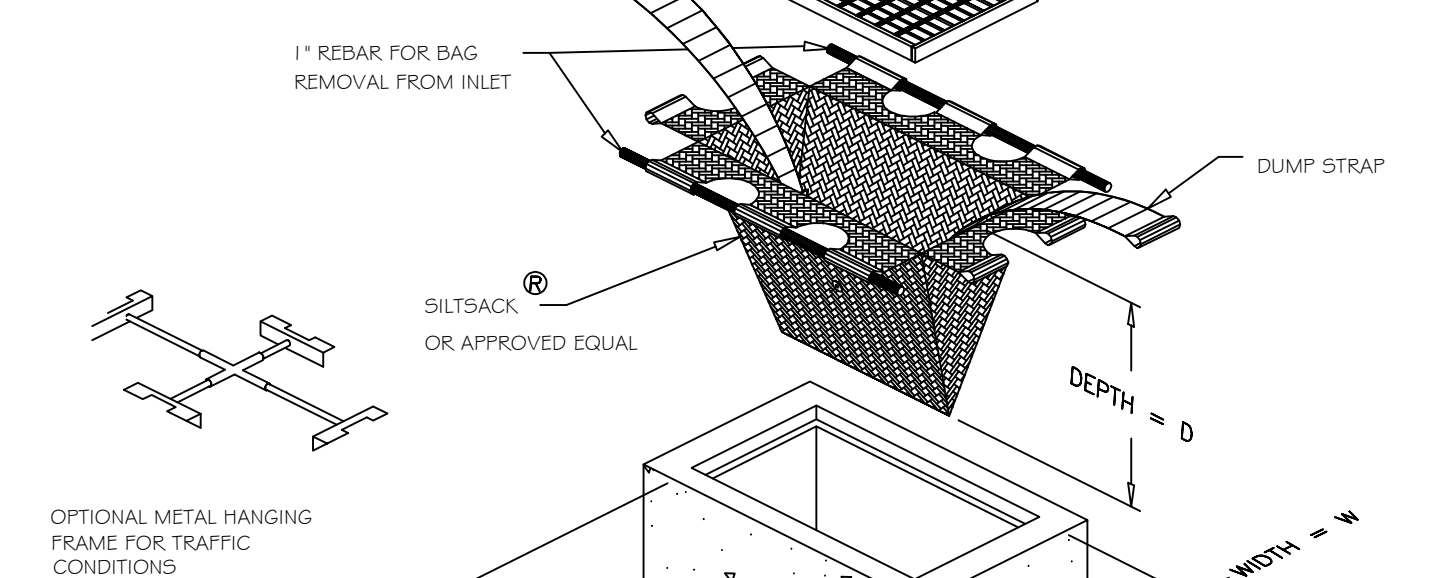
1. SILT FENCE TO BE INSTALLED PARALLEL TO EXISTING CONTOURS DOWNSLOPE FROM AREAS OF SOIL DISTURBANCE.
2. SILT FENCE TO BE SECURELY ATTACHED TO THE UPSLOPE SIDE OF THE SUPPORTING STAKES.
3. BOTTOM 4 TO 6 INCHES OF SILT FENCE TO BE BURIED IN SLOPE AND BACKFILLED WITH COMPACTED SOIL.
4. INSPECTION SHALL BE MADE AFTER EVERY RAINFALL WITH REMOVAL OF EXCESSIVE SEDIMENT AND REPAIR OF THE FENCE ACCOMPLISHED PROMPTLY.
5. SILT FENCE AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS SOON AS PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

1 SILT FENCE
NOT TO SCALE



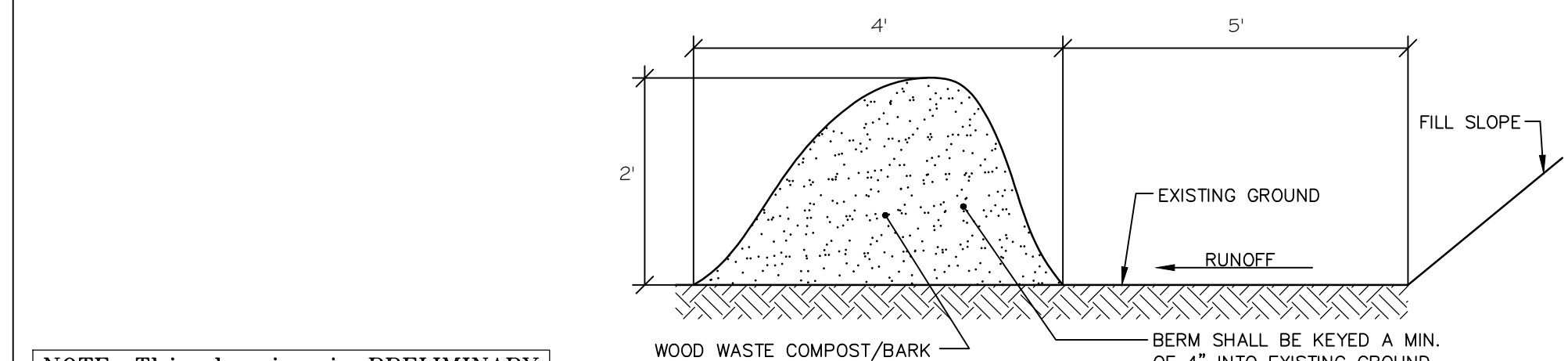
- CONSTRUCTION SPECIFICATIONS:
1. STONE SIZE: AASHTO DESIGNATION M 43, SIZE NO. 2 (2.5\"/>

2 STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



- CONSTRUCTION SPECIFICATIONS:
1. STONE SIZE: AASHTO DESIGNATION M 43, SIZE NO. 2 (2.5\"/>

3 INLET SEDIMENT CONTROL DEVICE
NOT TO SCALE



- NOTES:
1. THE WOOD WASTE COMPOST/BARK MIX SHALL CONFORM TO THE FOLLOWING STANDARDS:
 - A. MOISTURE CONTENT - 30-60%.
 - B. pH - 5.0 - 8.0.
 - C. SCREEN SIZE - 100% LESS THAN 3", MAX. 70% LESS THAN 1".
 - D. NO LESS THAN 40% ORGANIC MATERIAL (DRY WEIGHT) BY LOSS OF IGNITION.
 - E. NO STONES LARGER THAN 2" IN DIAMETER.
 - F. SILTS, CLAYS OR SUGAR SANDS ARE NOT ACCEPTABLE IN THE MIX.
 2. THE COMPOST BERM SHALL BE PLACED, UNCOMPACTED, ALONG A RELATIVELY LEVEL CONTOUR.
 3. THE WOOD WASTE COMPOST/BARK FILTER BERM MAY BE USED IN LIEU OF SILTATION FENCE, AT THE TOE OF SHALLOW SLOPES, ON FROZEN GROUND, LEDGE OUT CROPS, VERY ROOTED FORESTED AREA OR AT THE EDGE OF GRAVEL PARKING AREAS.
 4. BERMS SHALL REMAIN IN PLACE UNTIL UPSTREAM AREA IS COMPLETED OR 70% CATCH OF VEGETATION IS ATTAINED. BERMS SHALL BE REMOVED BY SPREADING SUCH THAT NATIVE EARTH CAN BE SEEN BELOW.

4 EROSION CONTROL MIX
NOT TO SCALE

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ACORN ENGINEERING INC.
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Site Plan Phase II
Redevelopment of Waterfront Property
Bowdoingham, Maine
8 River Road

Date:
 APRIL 12, 2021

Issued For:
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Revisions:

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Title:
 EROSION & SEDIMENT CONTROL PLAN

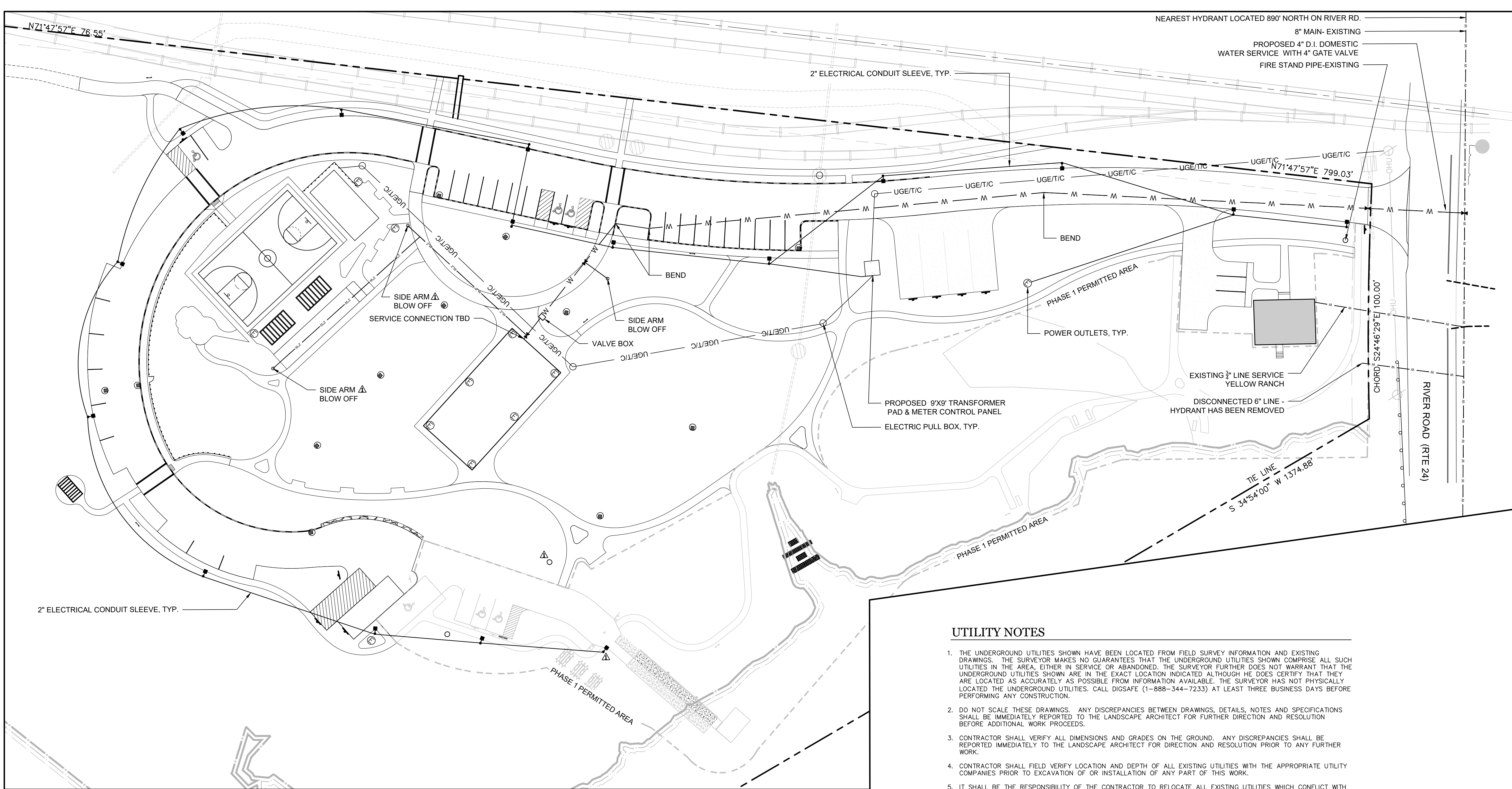
Scale: 1"=40'

North:

Sheet No.: **L3.1**

REGISTERED LANDSCAPE ARCHITECT
 STATE OF MAINE
 ROBERT METCAL
 No. RL1515
 412921

STATE OF MAINE
 WILLIAM H. SAVAGE
 11419
 4/1/21
 LICENSED PROFESSIONAL ENGINEER



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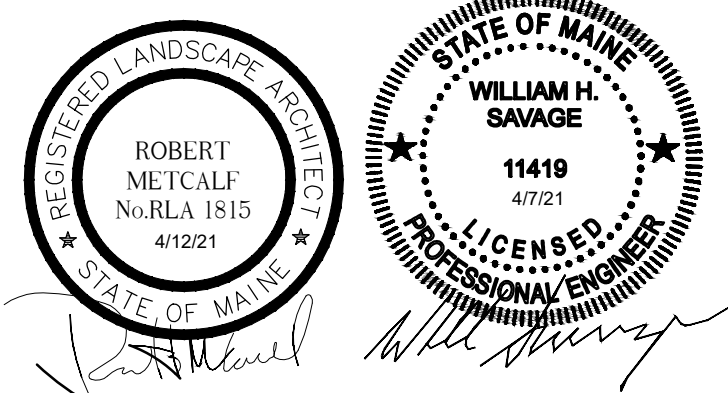
Site Plan Phase II
Redevelopment of Waterfront Property
8 River Road
Bowdoinham, Maine

UTILITY NOTES

1. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL DIGSAFE (1-888-344-7233) AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION.
2. DO NOT SCALE THESE DRAWINGS. ANY DISCREPANCIES BETWEEN DRAWINGS, DETAILS, NOTES AND SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE LANDSCAPE ARCHITECT FOR FURTHER DIRECTION AND RESOLUTION BEFORE ADDITIONAL WORK PROCEEDS.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR DIRECTION AND RESOLUTION PRIOR TO ANY FURTHER WORK.
4. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES WITH THE APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATION OF OR INSTALLATION OF ANY PART OF THIS WORK.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE STANDARDS OF THE TOWN OF BOWDOINHAM AND AFFECTED UTILITY OWNERS. ALL UTILITIES SHALL BE INSTALLED IN CONFORMANCE WITH INDIVIDUAL UTILITY DISTRICT REQUIREMENTS; CONTRACTOR SHALL COORDINATE INSTALLATION WITH APPROPRIATE UTILITY DISTRICT BEFORE INSTALLATION.
6. LOCATION OF UTILITY STRUCTURES AND INVERTS OF PIPED UTILITIES MAY BE ADJUSTED TO MEET FIELD CONDITIONS ONLY AFTER PRIOR APPROVAL OF THE OWNER, THE AFFECTED UTILITY COMPANY, AND THE TOWN OF BOWDOINHAM.
7. WHERE STORM DRAINS HAVE LESS THAN FOUR (4) FEET OF COVER BETWEEN THE TOP OF PIPE AND FINISH GRADE, INSULATE PIPE USING TWO (2) INCH THICK STYROFOAM INSULATION BOARD OVER AND ALONG SIDES OF THE PIPE. ALL REQUIRED UTILITIES SERVING THE DEVELOPMENT SHALL BE COORDINATED AND CONSTRUCTED TO WITHIN 5 FEET OF THE BUILDINGS, AT A LOCATION COORDINATED WITH THE CONTRACTOR AND THE BUILDING PLANS. ALL REQUIRED CONNECTION FEES SHALL BE PAID BY CONTRACTOR.
8. PIPE LENGTH EQUALS THE CENTER TO CENTER DISTANCES BETWEEN CATCH BASINS AND/OR MANHOLES MINUS ONE-HALF OF THE DIAMETER OF EACH CATCH BASIN OR MANHOLE.
9. ROOF DRAIN CONNECTIONS SHALL BE CONFIRMED WITH FINAL BUILDING PLANS.
10. THRUST BLOCKS OR LOCKING RETAINER GLANDS SHALL BE PLACED ON THE WATER DISTRIBUTION LINES AT ALL BENDS, TEES, FIRE HYDRANTS, VALVES, CHANGES IN DIRECTION, ETC. THE THRUST BLOCKS OR LOCKING RETAINER GLANDS SHALL MEET THE REQUIREMENTS OF THE BOWDOINHAM WATER DISTRICT.
11. FINAL UTILITY LOCATIONS TO BE FINALIZED DURING CONSTRUCTION DOCUMENTATION.

LEGEND

	EXISTING	PROPOSED
CATCHBASIN		
MANHOLE		
HYDRANT		
UTILITY POLE		
CURB		
WATER MAIN		
WATER LINE		
WATER SHUT-OFF VALVE		
FROST HYDRANT		
ELECTRIC PULL BOX		
POWER OUTLET		



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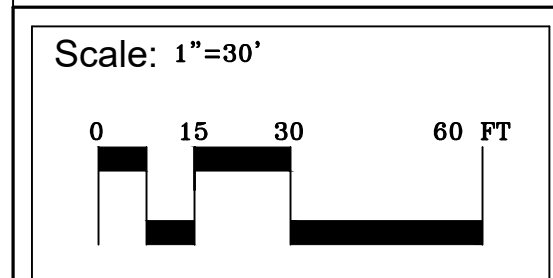
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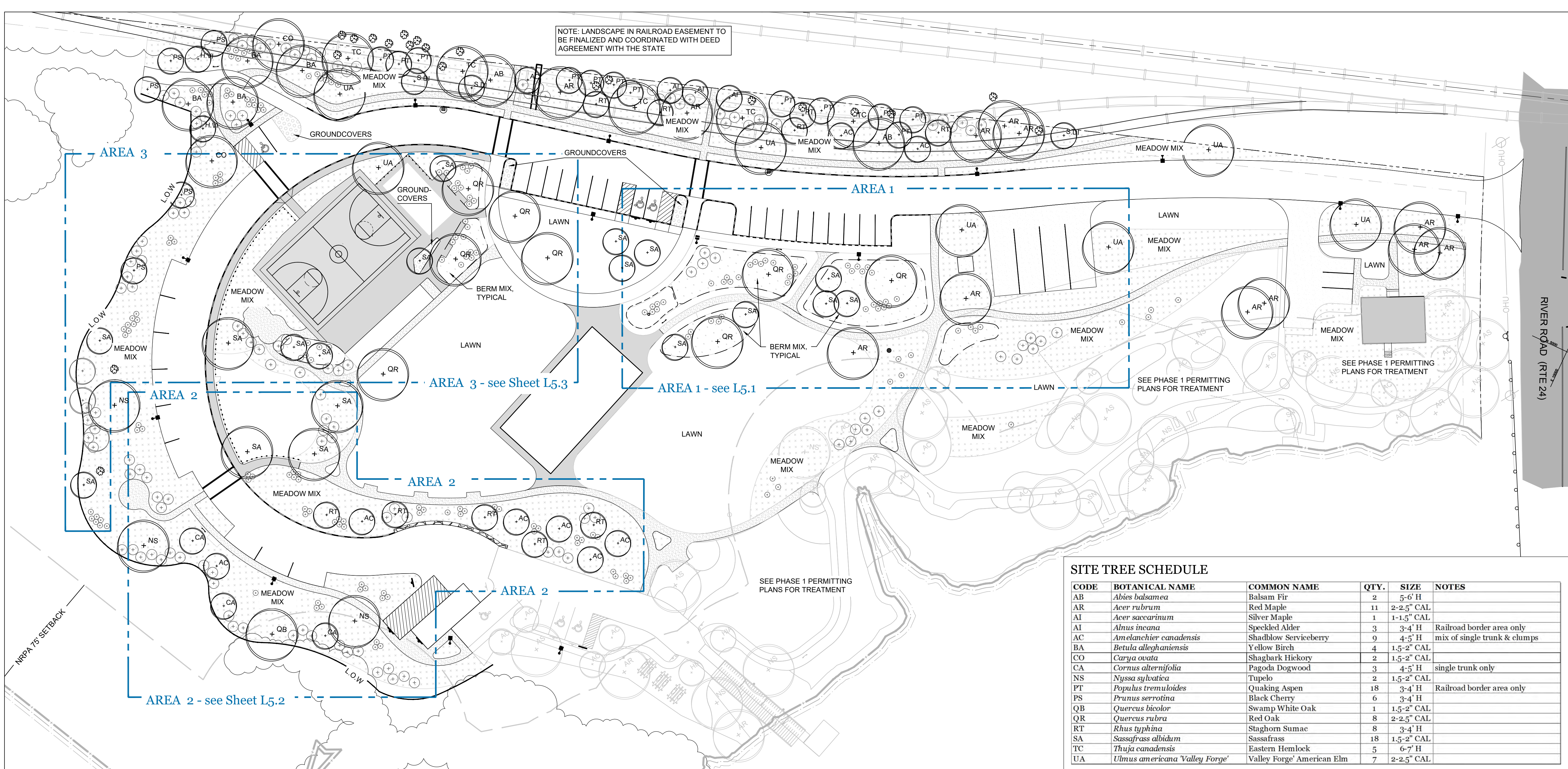
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Title:
 UTILITIES PLAN



North:

Sheet No.:
L4



Prepared For:
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Site Plan Phase II
Redevelopment of Waterfront Property
8 River Road
Bowdoinham, Maine

SITE TREE SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	NOTES
AB	<i>Abies balsamea</i>	Balsam Fir	2	5-6' H	
AR	<i>Acer rubrum</i>	Red Maple	11	2-2.5" CAL	
AI	<i>Acer saccharinum</i>	Silver Maple	1	1-1.5" CAL	
AI	<i>Alnus incana</i>	Speckled Alder	3	3-4' H	Railroad border area only
AC	<i>Amelanchier canadensis</i>	Shadblow Serviceberry	9	4-5' H	mix of single trunk & clumps
BA	<i>Betula alleghaniensis</i>	Yellow Birch	4	1.5-2" CAL	
CO	<i>Carya ovata</i>	Shagbark Hickory	2	1.5-2" CAL	
CA	<i>Cornus alternifolia</i>	Pagoda Dogwood	3	4-5' H	single trunk only
NS	<i>Nyssa sylvatica</i>	Tupelo	2	1.5-2" CAL	
PT	<i>Populus tremuloides</i>	Quaking Aspen	18	3-4' H	Railroad border area only
PS	<i>Prunus serratina</i>	Black Cherry	6	3-4' H	
QB	<i>Quercus bicolor</i>	Swamp White Oak	1	1.5-2" CAL	
QR	<i>Quercus rubra</i>	Red Oak	8	2-2.5" CAL	
RT	<i>Rhus typhina</i>	Staghorn Sumac	8	3-4' H	
SA	<i>Sassafras albidum</i>	Sassafras	18	1.5-2" CAL	
TC	<i>Thuja canadensis</i>	Eastern Hemlock	5	6-7' H	
UA	<i>Ulmus americana 'Valley Forge'</i>	Valley Forge' American Elm	7	2-2.5" CAL	

LEGEND

- TREE - PROPOSED (circle with 'X')
- SHRUB - PROPOSED (circle with dot)
- TREE - EXISTING (circle with cross)
- TREELINE - EXISTING (dashed line)
- MEADOW MIX - PROPOSED (stippled area)
- BERM MIX - PROPOSED (hatched area)

GENERAL PLANTING NOTES

- CALL DIG-SAFE (1-888-344-7233) PRIOR TO BEGINNING WORK. THE LANDSCAPE CONTRACTOR IS ADVISED OF THE PRESENCE OF 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 OWNER.
- CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH ALL SITE CONDITIONS PRIOR TO CONSTRUCTION BIDDING.
- DO NOT SCALE FROM DRAWINGS. ANY OMISSIONS IN DIMENSIONING SHALL BE REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT. ANY DISCREPANCIES BETWEEN DRAWINGS, DETAILS, NOTES AND SPECS SHALL BE IMMEDIATELY REPORTED TO THE LANDSCAPE ARCHITECT FOR FURTHER DIRECTION AND RESOLUTION BEFORE ANY ADDITIONAL WORK PROCEEDS.
- PROVIDE SMOOTH TRANSITION WHERE NEW WORK MEETS EXISTING CONDITIONS.
- CONTRACTOR SHALL FURNISH AND PLACE 12 INCHES OF LOAM IN ALL SHRUB BEDS, 30 INCHES IN ALL TREE PITS, AND 6 INCHES UNDER ALL TURF AREAS. THE LANDSCAPE CONTRACTOR SHALL COORDINATE SUBGRADE PREPARATION WITH THE GENERAL CONTRACTOR PRIOR TO PLACING LOAM.
- ALL PLANT MATERIAL INSTALLED SHALL MEET THE SPECIFICATIONS OF "AMERICAN STANDARDS FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN" LATEST EDITION.
- ALL PLANT MATERIAL SHALL BE FREE FROM INSECTS AND DISEASE.
- 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 FROM THE OWNER.
- ALL GRASS, OTHER VEGETATION AND DEBRIS SHALL BE REMOVED FROM ALL PLANTING AREAS PRIOR TO PLANTING.
- EXISTING TREES TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION AND SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- ALL SHRUB BEDS AND TREE PITS SHALL BE MULCHED WITH 3" CLEAN SHREDDED BLACK MULCH (DO NOT EXCEED 3" DEPTH).
- 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.
- WHERE INDICATED ON PLAN, PLANTING SOIL MIXTURE FOR GROUND COVER AND PERENNIAL BED AREAS SHALL CONSIST OF FOUR PARTS TOPSOIL, TWO PARTS SPHAGNUM 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.
- DAMAGE TO EXISTING SITE IMPROVEMENTS DURING INSTALLATION OF LANDSCAPE MATERIAL SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- PROVIDE SLOW-RELEASE WATER BAGS ON ALL NEW TREE PLANTINGS AT THE TIME OF PLANTING. WATER ALL TREES TWICE A WEEK IN THE SPRING, SUMMER AND FALL OF FIRST YEAR OF PLANTINGS.
- LAWN - ALL DISTURBED AREAS WITHIN THE "LIMIT OF CONSTRUCTION" SHALL BE HYDROSEEDDED WITH LAWN MIX ACCORDING TO SPECIFICATIONS.
- SUBSTITUTIONS OF PLANT MATERIAL SHALL BE ALLOWED - PLANT MATERIAL SUBSTITUTIONS SHALL BE NATIVE TO THE EXTENT POSSIBLE AND BE APPROVED BY THE LANDSCAPE ARCHITECT OR TOWN OFFICIAL.

PERENNIALS - SEED - MEADOW (49,032 TOTAL SF IN AREA 1 AT 175 SEEDS/SF)

BOTANICAL NAME	COMMON NAME	% OF MIX	SEEDS/OZ	TOTAL SEEDS	TOTAL OZ	NOTES
<i>Allium cernuum</i>	Nodding Onion	0.04				
<i>Aquilegia canadensis</i>	Wild Columbine	0.04				
<i>Asclepias syriaca</i>	Common Milkweed	0.04				
<i>Asclepias tuberosa</i>	Butterflyweed	0.03				
<i>Bouteloua gracilis</i>	Mosquito Grass	0.019				
<i>Chamaecrista fasciculata</i>	Partridge Pea	0.03				
<i>Coreopsis lanceolata</i>	Lanceleaf Coreopsis	0.04				
<i>Elymus virginicus</i>	Virginia Wild Rye	0.1				
<i>Eragrostis spectabilis</i>	Purple Love Grass	0.1				
<i>Liatris scariosa var. nieuwlandii</i>	Northern Blazing Star	0.02				
<i>Monarda fistulosa</i>	Wild Bergamot	0.04				
<i>Penstemon hirsutus</i>	Hairy Beardtongue	0.04				
<i>Rudbeckia hirta</i>	Black Eyed Susan	0.07				
<i>Schizachyrium scoparium</i>	Little Bluestem	0.3				
<i>Solidago juncea</i>	Early Goldenrod	0.04				
<i>Spirea tomentosa</i>	Steeplebush	0.04				
<i>Symphoricarum lateriflorum</i>	Calico Aster	0.02				
<i>Secale cereale</i>	Rye	N/A				Spring Sow Nurse Crop

ROBERT METCALF
 No. 1815
 REGISTERED LANDSCAPE ARCHITECT
 STATE OF MAINE

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 APRIL 12, 2021

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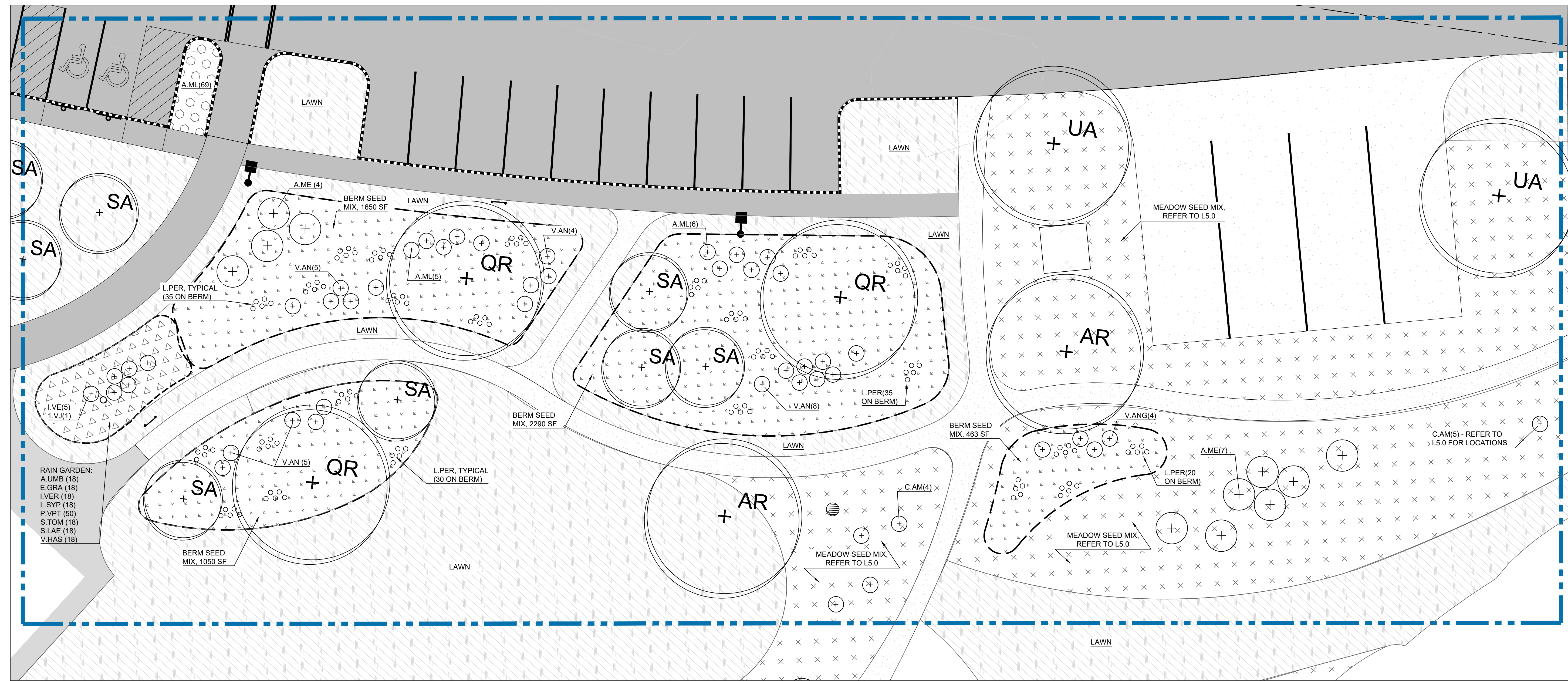
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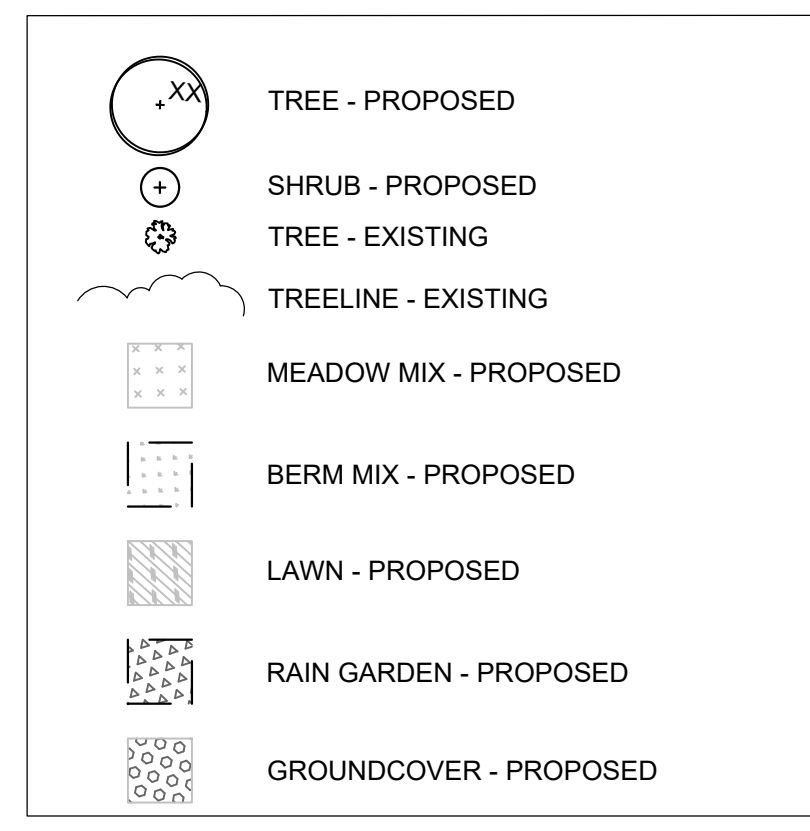
North:

Sheet No.:
L5



AREA 1

LEGEND



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PLANT SCHEDULE: SHRUBS & PERENNIALS, AREA 1
 Note: Refer to L5.0 for Tree Schedule & Meadow Seed Mix Schedule

SHRUBS & WOODY GROUNDCOVERS						
CODE	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	SPACING	NOTES
A.ME	<i>Aronia melanocarpa</i>	Chokeberry	11	#3 CONT.	AS SHOWN	straight species preferred
A.ML	<i>Aronia melanocarpa 'Low Scape Mound'</i>	Low Scape Mound Chokeberry	80	#1 CONT.	18" O.C./AS SHOWN	
C.AM	<i>Ceanothus americanus</i>	New Jersey Tea	4	#1 CONT.	AS SHOWN	
L.VJ	<i>Ilex verticillata 'Jim Dandy'</i>	Winterberry 'Jim Dandy'	1	#3 CONT.	36" O.C.	straight species preferred
L.VE	<i>Ilex verticillata 'Red Sprite'</i>	Winterberry 'Red Sprite'	5	#3 CONT.	36" O.C.	dwarf winterberry
V.AN	<i>Vaccinium corymbosum</i>	Lowbush Blueberry	26	#1 CONT.	AS SHOWN	straight species preferred
PERENNIALS - LIVE PLANTS						
CODE	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	SPACING	NOTES
A.UMB	<i>Aster umbellatus</i>	Flat Topped White Aster	18	#1 CONT.	18" OC	in rain garden
E.GRA	<i>Euthamia graminifolia</i>	Grass-Leaved Goldenrod	18	#1 CONT.	18" OC	in rain garden
L.VER	<i>Iris versicolor</i>	Blue Flag	18	#1 CONT.	18" OC	in rain garden
L.SYP	<i>Lobelia siphilitica</i>	Great Blue Lobelia	18	#1 CONT.	18" OC	in rain garden
L.PER	<i>Lupinus perennis</i>	Sundial Lupine	115	PLUG	18" OC	on berms
P.VPT	<i>Panicum virgatum 'Purple Tears'</i>	Purple Tears Dwarf Switchgrass	50	#1 CONT.	18" OC	in rain garden
S.TOM	<i>Spiraea tomentosa</i>	Sleepybush	18	#1 CONT.	18" OC	in rain garden
S.LAE	<i>Symphoricarpon laeve</i>	Smooth Blue Aster	18	#1 CONT.	18" OC	in rain garden
V.HAS	<i>Verbena hastata</i>	Blue Vervain	18	#1 CONT.	18" OC	in rain garden
PERENNIALS - SEED - BERMS (5,453 TOTAL SQUARE FEET IN AREA 1)						
BOTANICAL NAME	COMMON NAME	% OF MIX	SEEDS/OZ	TOTAL SEEDS	TOTAL OZ	NOTES
<i>Allium cernuum</i>	Nodding Onion	5				
<i>Anaphalis margaritacea</i>	Pearly Everlasting	0.1				
<i>Asclepias tuberosa</i>	Butterflyweed	5				
<i>Bouteloua gracilis</i>	Mosquito Grass	15				
<i>Chamaecrista fasciculata</i>	Partridge Pea	3				
<i>Coreopsis lanceolata</i>	Lanceleaf Coreopsis	5				
<i>Eragrostis spectabilis</i>	Purple Love Grass	5				
<i>Ionactis linariifolius</i>	Stiff Aster	15				
<i>Penstemon hirstutus</i>	Hairy Beardtongue	5				
<i>Rudbeckia hirta</i>	Black Eyed Susan	6.9				
<i>Schizachyrium scoparium</i>	Little Bluestem	30				
<i>Solidago nemoralis</i>	Old Field Goldenrod	5				
<i>Secale cereale</i>	Rye	N/A				Spring Sow Nurse Crop

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Site Plan Phase II
 Redevelopment of Waterfront Property
 8 River Road
 Bowdoinhams, Maine

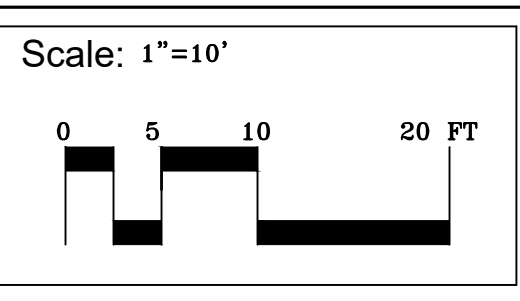
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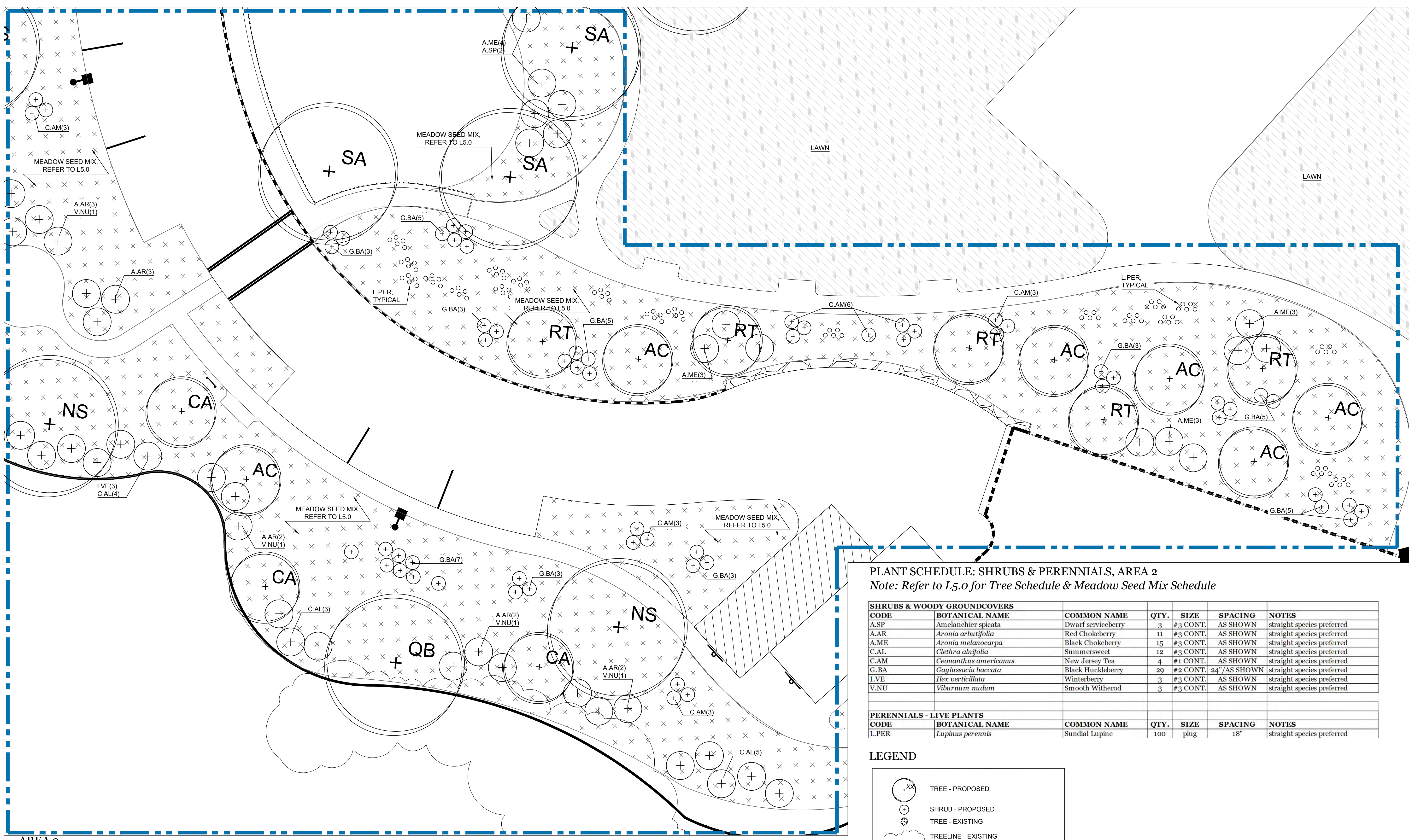
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L5.1

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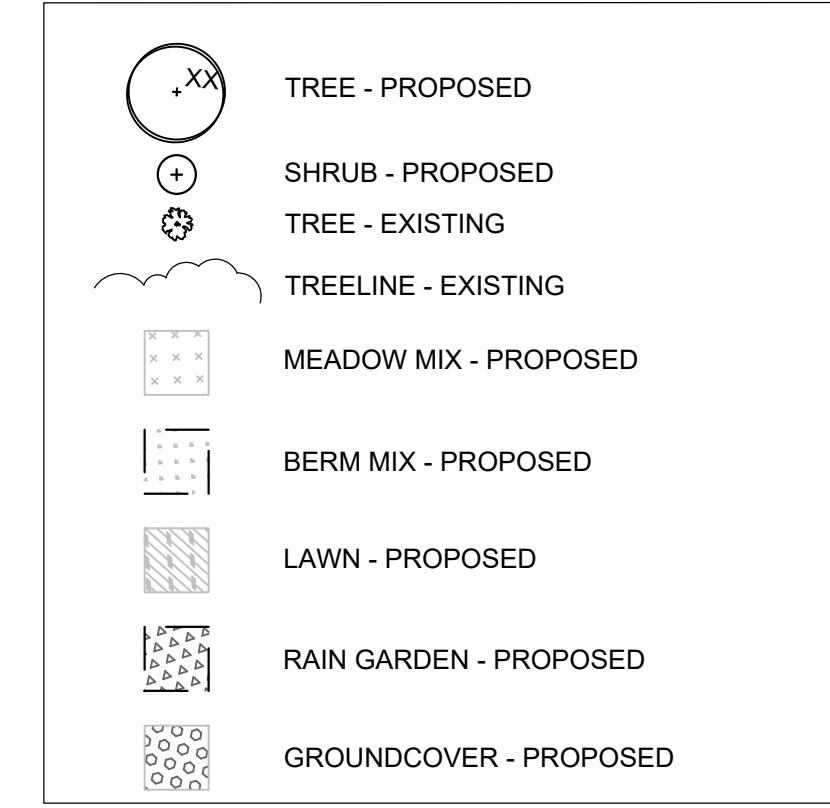


PLANT SCHEDULE: SHRUBS & PERENNIALS, AREA 2
 Note: Refer to L5.0 for Tree Schedule & Meadow Seed Mix Schedule

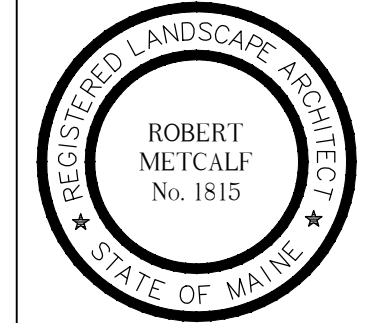
SHRUBS & WOODY GROUNDCOVERS						
CODE	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	SPACING	NOTES
A.SP	<i>Amelanchier spicata</i>	Dwarf serviceberry	3	#3 CONT.	AS SHOWN	straight species preferred
A.AR	<i>Aronia arbutifolia</i>	Red Chokeberry	11	#3 CONT.	AS SHOWN	straight species preferred
A.ME	<i>Aronia melanocarpa</i>	Black Chokeberry	15	#3 CONT.	AS SHOWN	straight species preferred
C.AL	<i>Clethra alnifolia</i>	Summersweet	12	#3 CONT.	AS SHOWN	straight species preferred
C.AM	<i>Ceanothus americanus</i>	New Jersey Tea	4	#1 CONT.	AS SHOWN	straight species preferred
G.BA	<i>Gaylussacia baccata</i>	Black Huckleberry	29	#2 CONT.	24"/AS SHOWN	straight species preferred
I.VE	<i>Ilex verticillata</i>	Winterberry	3	#3 CONT.	AS SHOWN	straight species preferred
V.NU	<i>Viburnum nudum</i>	Smooth Witherod	3	#3 CONT.	AS SHOWN	straight species preferred

PERENNIALS - LIVE PLANTS						
CODE	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	SPACING	NOTES
L.PER	<i>Lupinus perennis</i>	Sundial Lupine	100	plug	18"	straight species preferred

LEGEND



AREA 2



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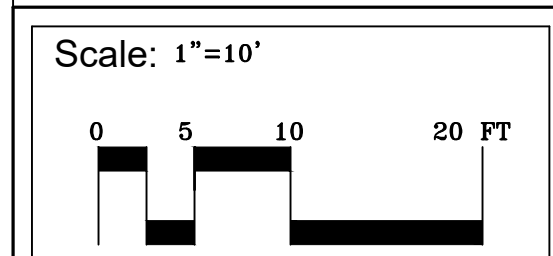
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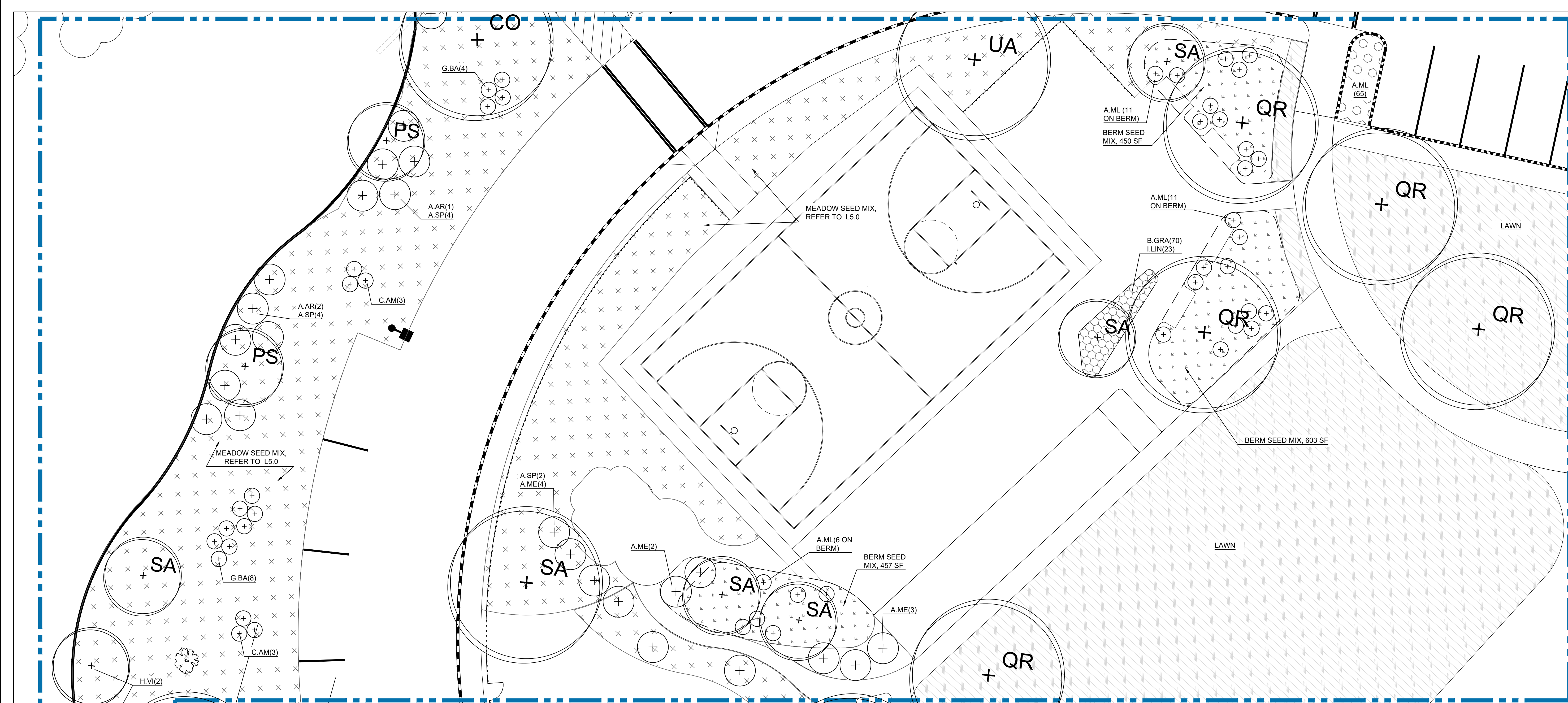
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L5.2



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Site Plan Phase II
Redevelopment of Waterfront Property
8 River Road
Bowdoinham, Maine

AREA 3

LEGEND

	TREE - PROPOSED
	SHRUB - PROPOSED
	TREE - EXISTING
	TREELINE - EXISTING
	MEADOW MIX - PROPOSED
	BERM MIX - PROPOSED
	LAWN - PROPOSED
	RAIN GARDEN - PROPOSED
	GROUNDCOVER - PROPOSED

PLANT SCHEDULE: SHRUBS & PERENNIALS, AREA 3
 Note: Refer to L5.0 for Tree Schedule & Meadow Seed Mix Schedule

SHRUBS & WOODY GROUNDCOVERS

CODE	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	SPACING	NOTES
A.AR	<i>Aronia arbutifolia</i>	Red Chokeberry	3	#5 CONT.	AS SHOWN	straight species preferred
A.ME	<i>Aronia melanocarpa</i>	Black Chokeberry	9	#3 CONT.	AS SHOWN	straight species preferred
A.ML	<i>Aronia melanocarpa 'Low Scape Mound'</i>	Low Scape Mound' Chokeberry	83	#1 CONT.	18"/AS SHOWN	
A.SP	<i>Amelanchier spicata</i>	Dwarf Serviceberry	10	#3 CONT.	AS SHOWN	
C.AM	<i>Ceanothus americanus</i>	New Jersey Tea	7	#1 CONT.	AS SHOWN	
G.BA	<i>Gaylussacia baccata</i>	Black Huckleberry	17	#1 CONT.	AS SHOWN	
H.VI	<i>Hamamelis virginiana</i>	Common Witchazel	3	#5 CONT.	AS SHOWN	

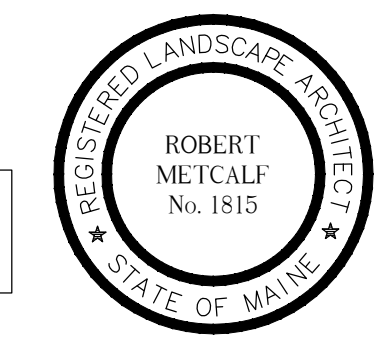
PERENNIALS - LIVE PLANTS

CODE	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	SPACING	NOTES
B.GRA	<i>Bouteloua gracilis</i>	Mosquito Grass	70	plug	15" OC	
I.LIN	<i>Ionactis linarifolia</i>	Stiff Aster	23	plug	15" OC	

PERENNIALS - SEED - BERMS (1,510 TOTAL SF IN AREA 3 @ 175 SEEDS/SF)*

BOTANICAL NAME	COMMON NAME	% OF MIX	SEEDS/OZ	TOTAL SEEDS	TOTAL OZ	NOTES
<i>Allium cernuum</i>	Nodding Onion	5				
<i>Anaphalis margaritacea</i>	Pearly Everlasting	0.1				
<i>Asclepias tuberosa</i>	Butterflyweed	5				
<i>Bouteloua gracilis</i>	Mosquito Grass	15				
<i>Chamaecrista fasciculata</i>	Partridge Pea	3				
<i>Coreopsis lanceolata</i>	Lanceleaf Coreopsis	5				
<i>Eragrostis spectabilis</i>	Purple Love Grass	15				
<i>Ionactis linarifolius</i>	Stiff Aster	5				
<i>Penstemon hirtutus</i>	Hairy Beardtongue	5				
<i>Rudbeckia hirta</i>	Black Eyed Susan	6.9				
<i>Schizachyrium scoparium</i>	Little Bluestem	30				
<i>Solidago nemoralis</i>	Old Field Goldenrod	5				
<i>Secale cereale</i>	Rye	N/A				Spring Sow Nurse Crop

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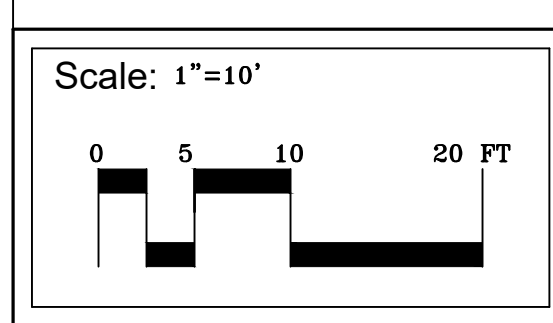
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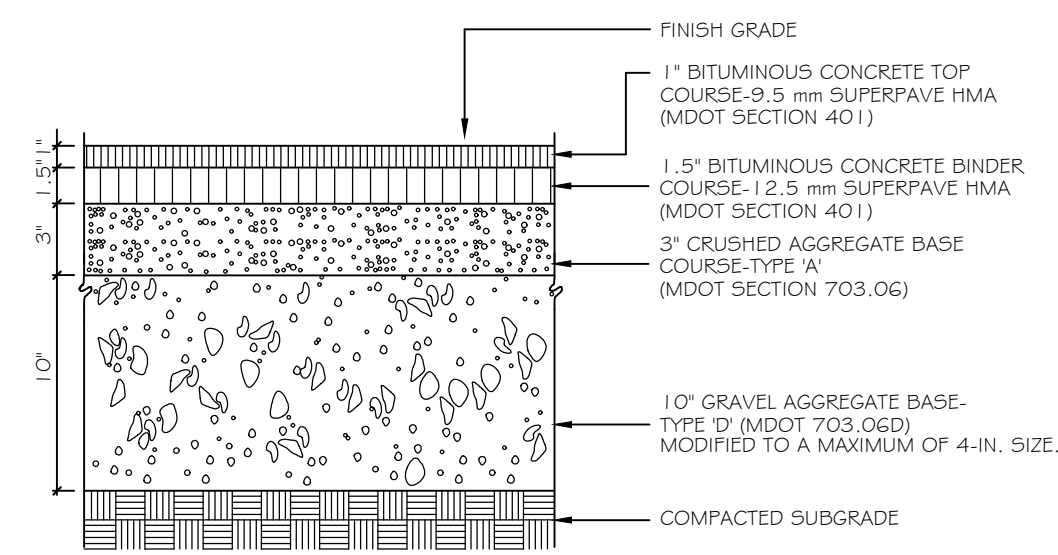
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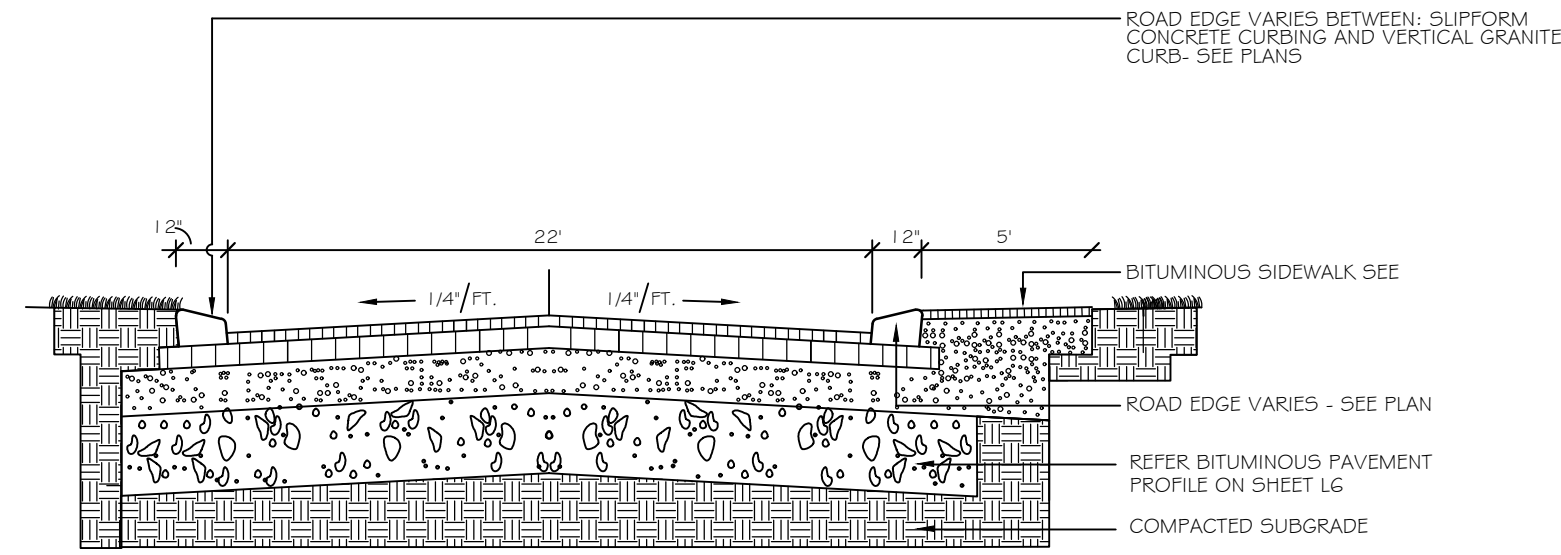


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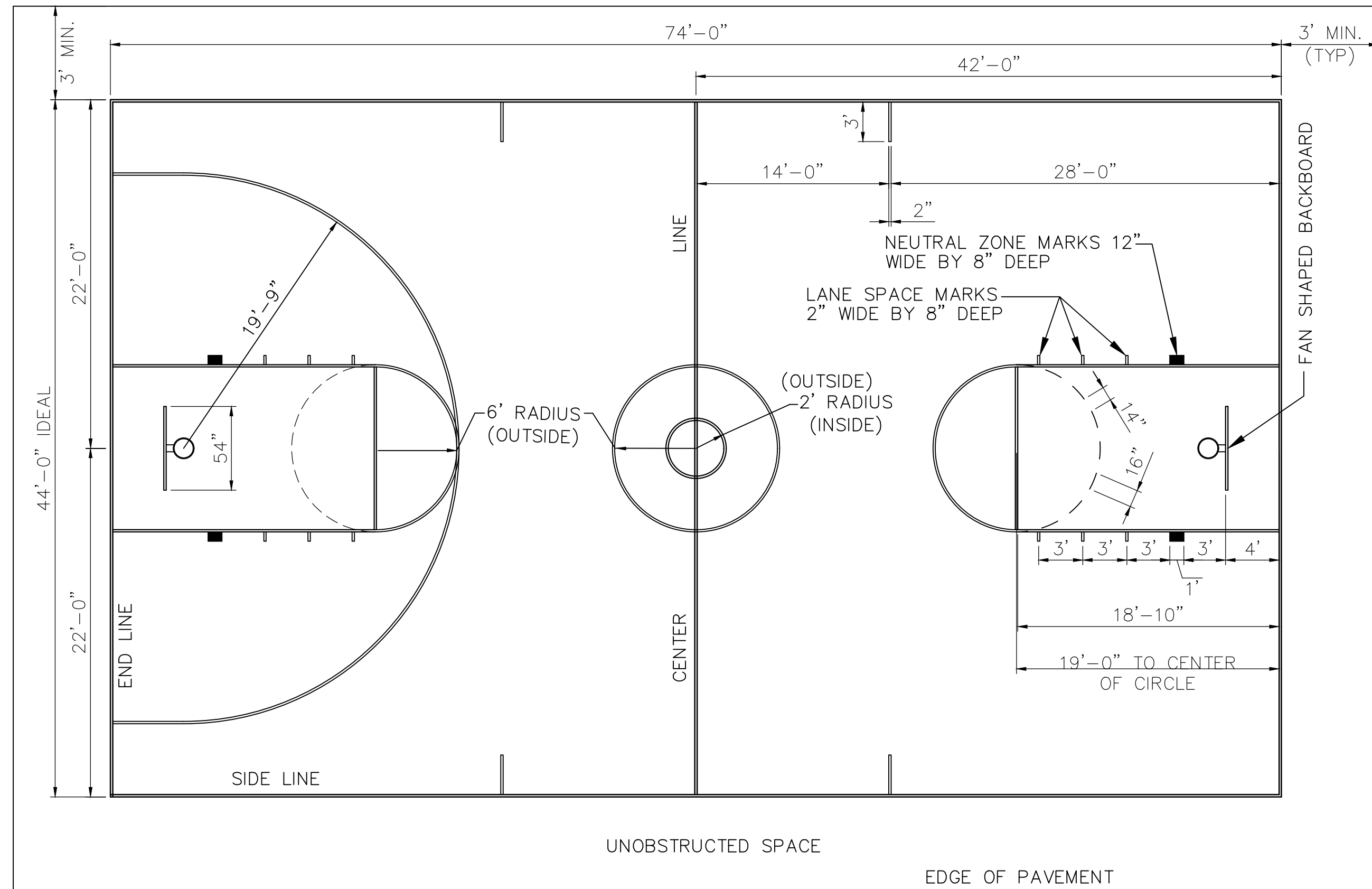
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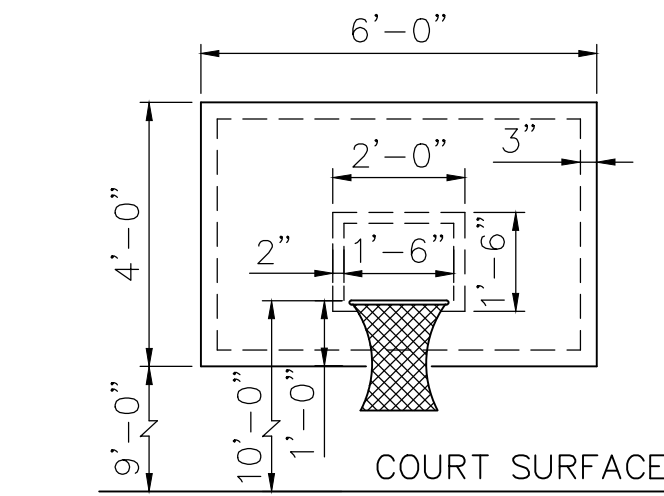
1 BITUMINOUS MULTI-PURPOSE PLAY COURT
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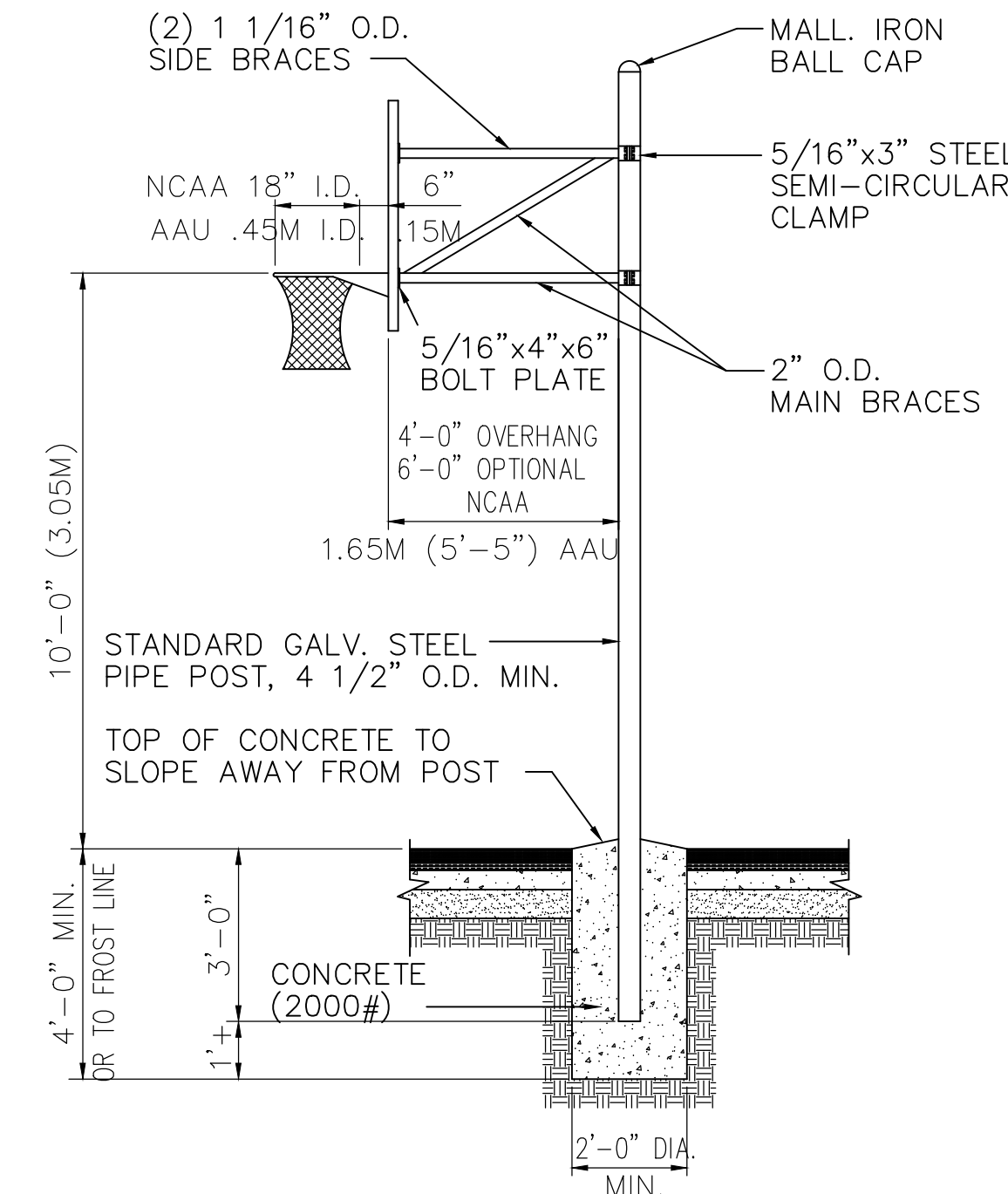
2 TYPICAL CROWNED ROADWAY SECTION
NTS



FAN SHAPED BACKBOARD
N.T.S.

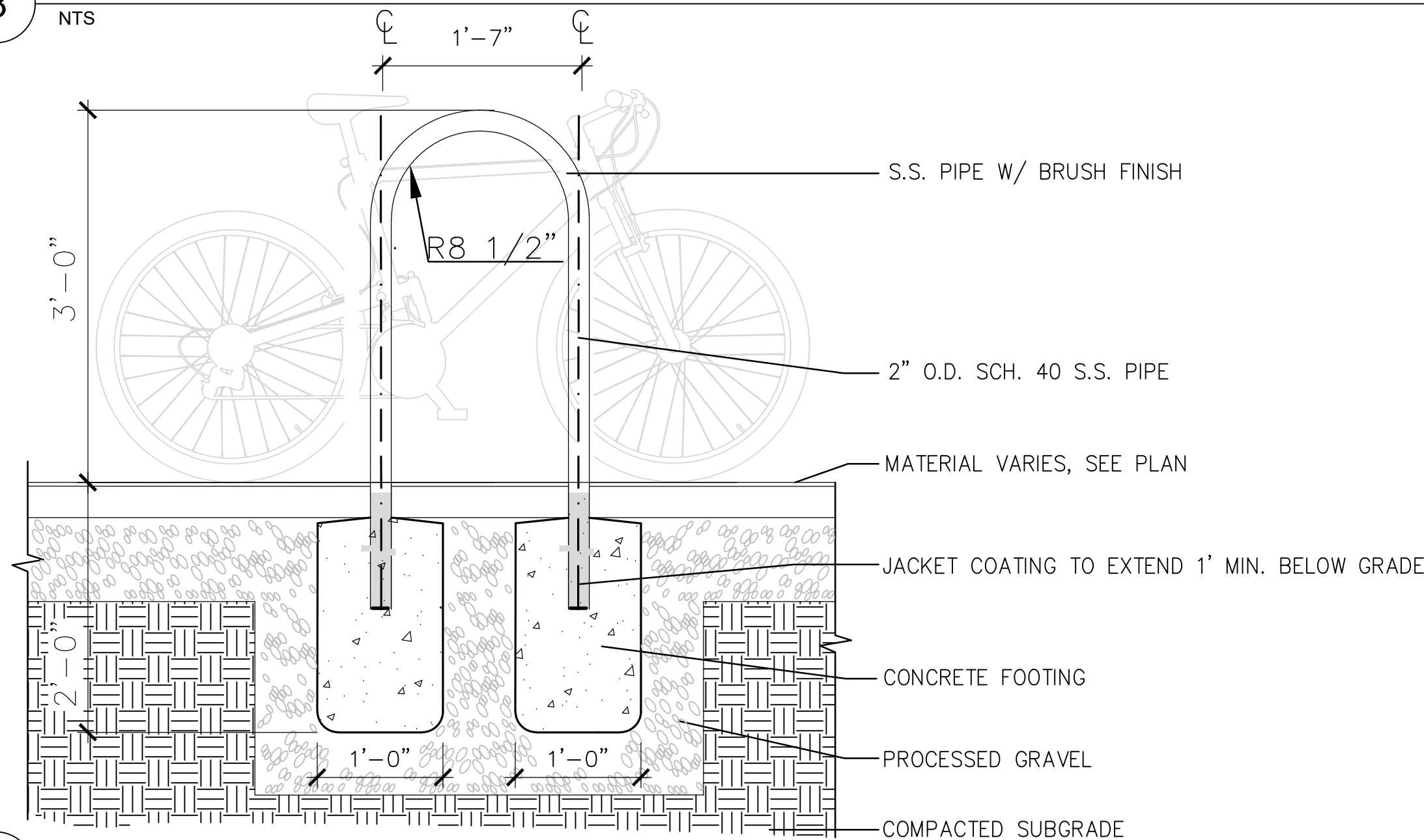


RECTANGULAR BACKBOARD
N.T.S.



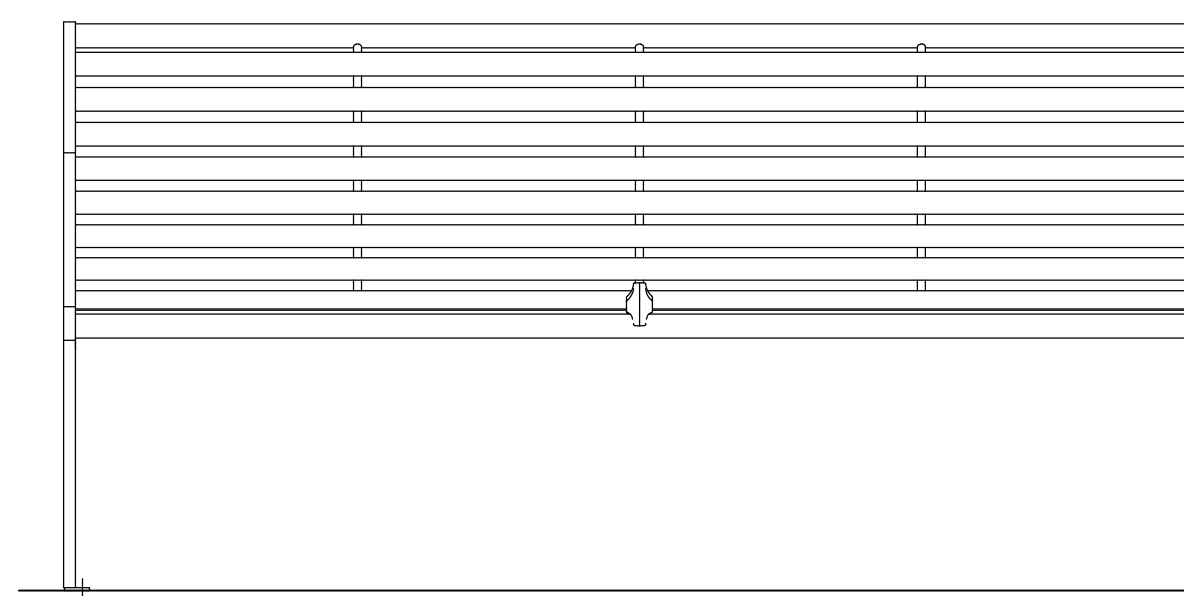
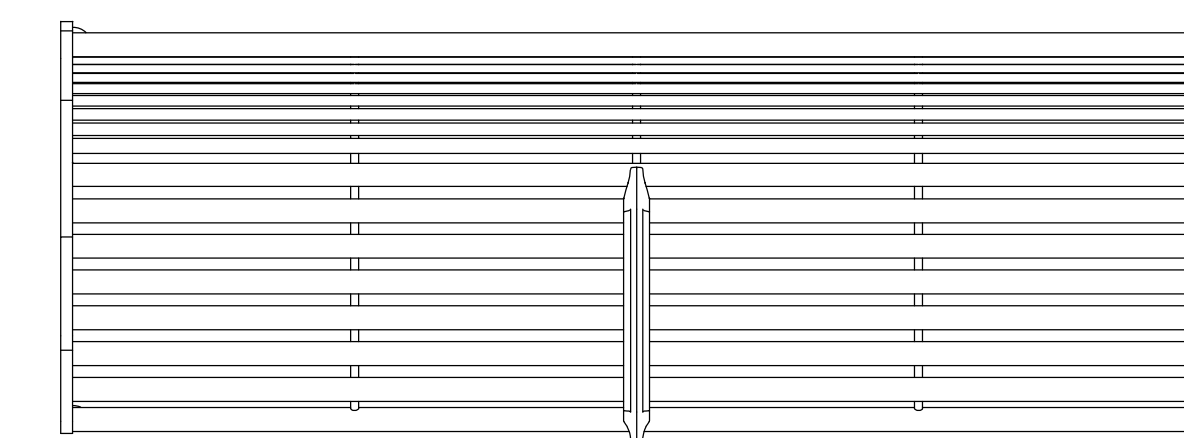
DETAIL - BASKETBALL STANDARD WITH 2'-8\"/>

3 MULTICOURT
NTS



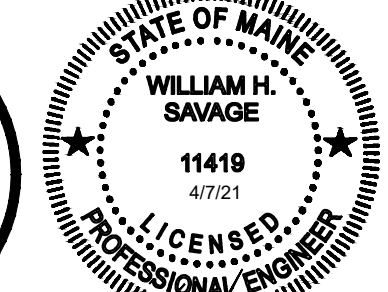
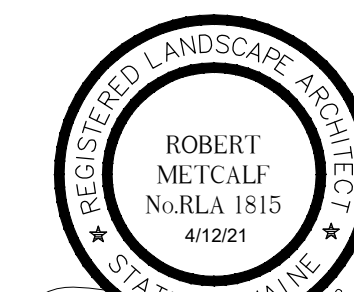
4 BIKE RACK
NTS

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5 BENCH- FINAL SELECTION TBD
NTS

SURFACE MOUNT TAB WITH Ø7/16" [11] HOLES FOR ANCHORING. NON-CORROSIVE MOUNTING HARDWARE SUPPLIED BY OTHERS.



Prepared For:
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Site Plan Phase II
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Date:
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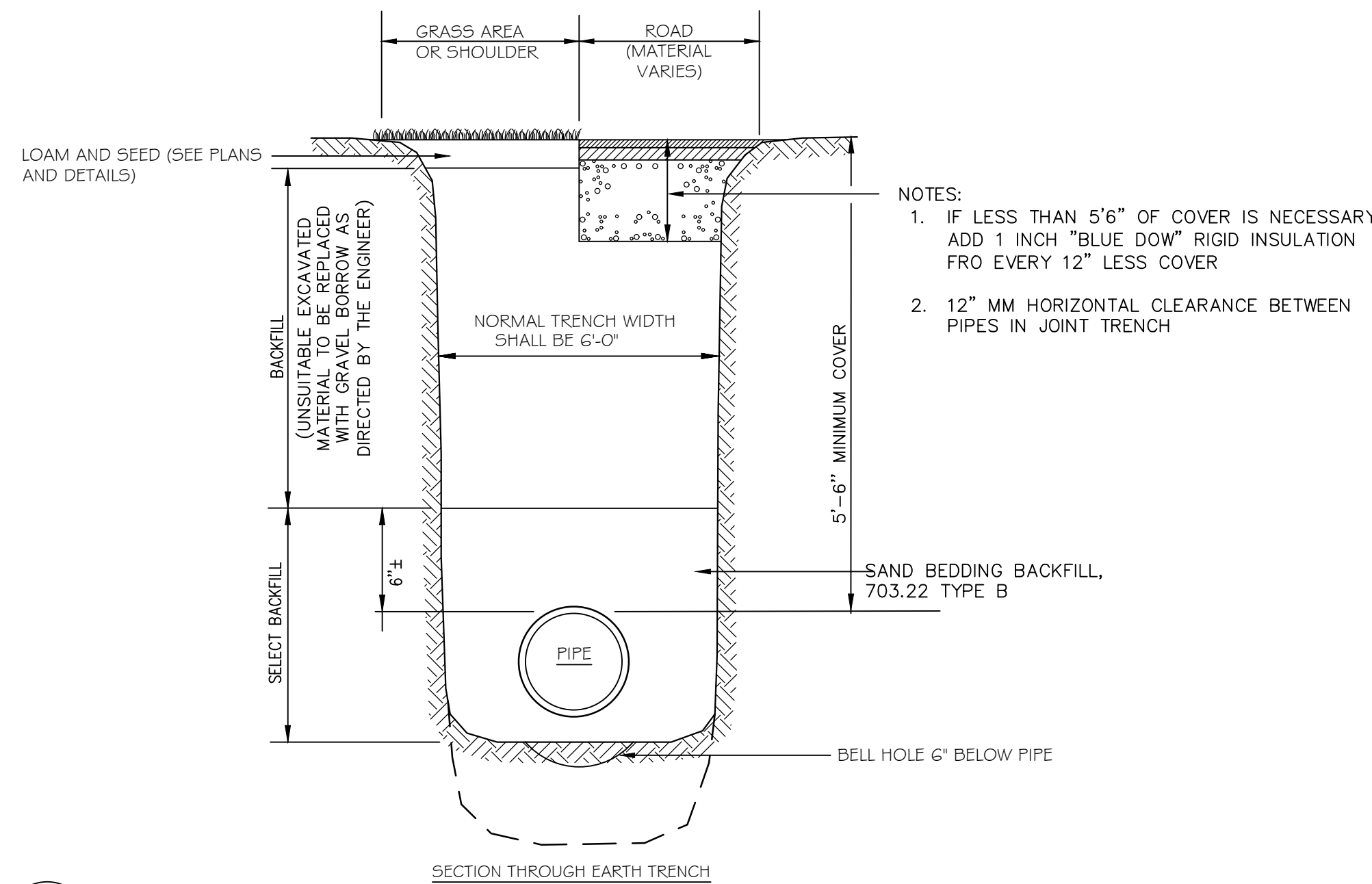
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DETAILS

Scale: AS NOTED

North: Sheet No.:

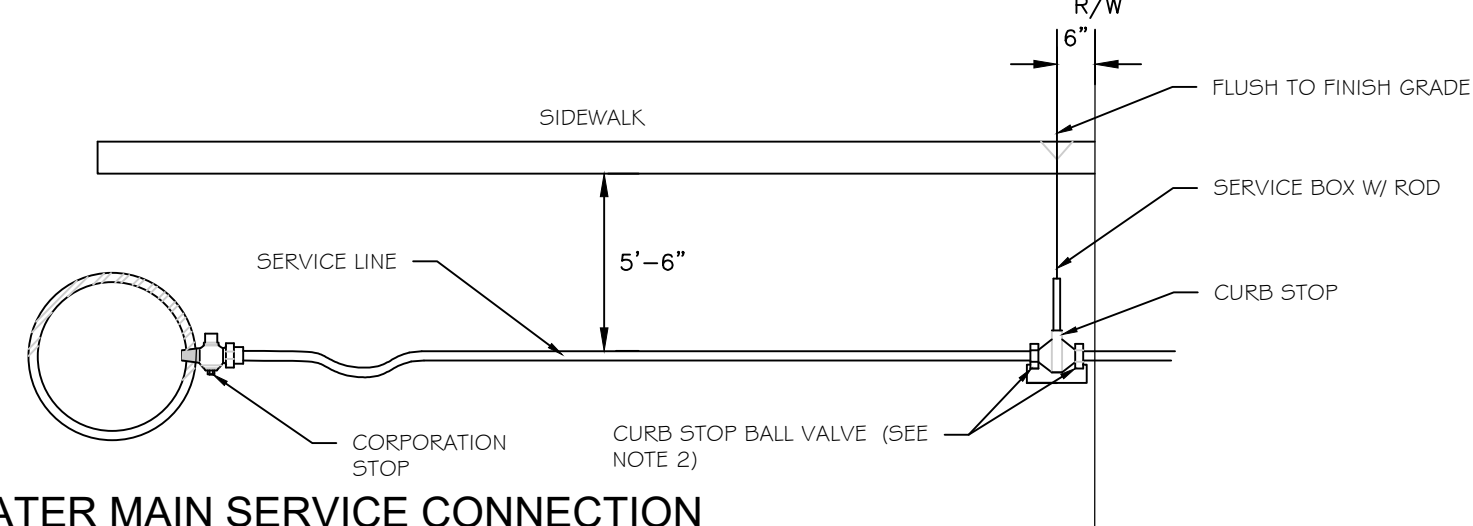
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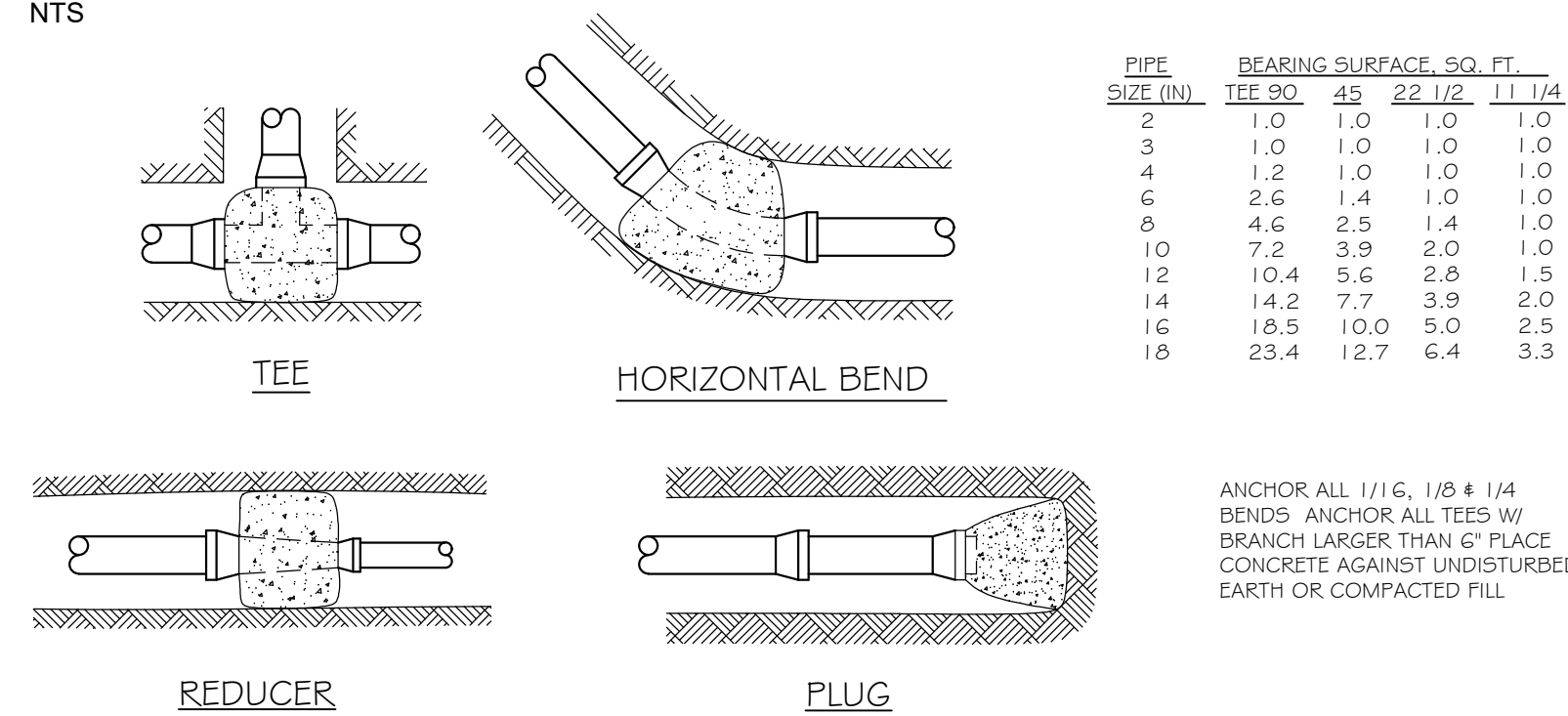
- NOTES:
- IF LESS THAN 5'-6" OF COVER IS NECESSARY ADD 1 INCH "BLUE DOW" RIGID INSULATION FRO EVERY 12" LESS COVER
 - 12" MM HORIZONTAL CLEARANCE BETWEEN PIPES IN JOINT TRENCH

1 WATER DISTRICT PIPE TRENCH DETAIL

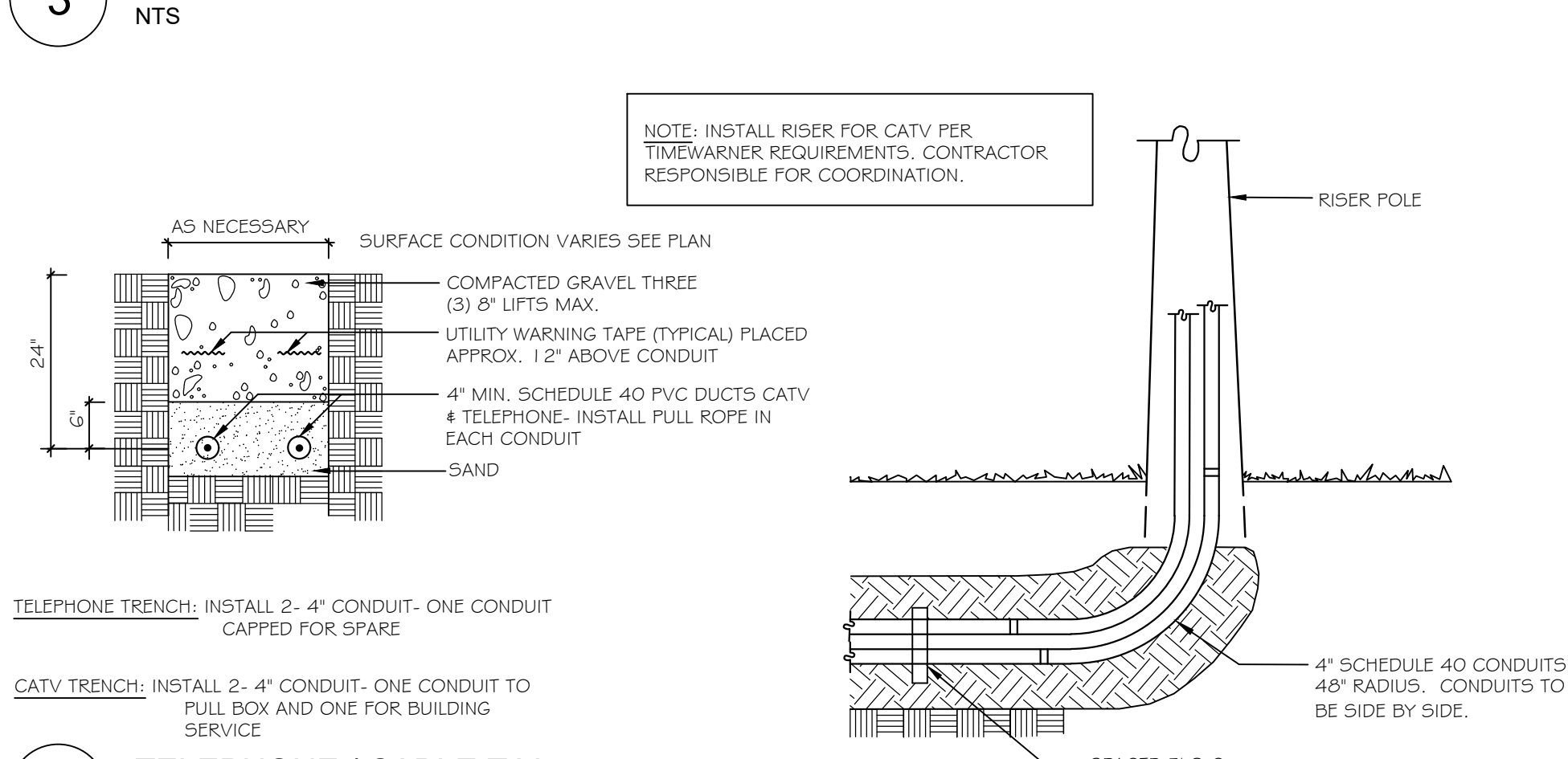
- NTS NOTES:
- ALL MATERIALS AND INSTALLATION PROCEDURES MUST COMPLY WITH THE PORTLAND WATER DISTRICT (PWD) SPECIFICATIONS.
 - CURB STOP BALL VALVE TO BE MADE OF COPPER OR BRASS UNLESS OTHERWISE NOTED BY THE PORTLAND WATER DISTRICT.
 - SERVICE LINE TO BE MADE OF TYPE K COPPER.
 - CONCRETE BLOCKING SHALL BE ADDED TO THE BASE OF THE CURB STOP TO PROVIDE STRUCTURAL SUPPORT FOR THE CURB STOP AND SERVICE BOX.



2 WATER MAIN SERVICE CONNECTION

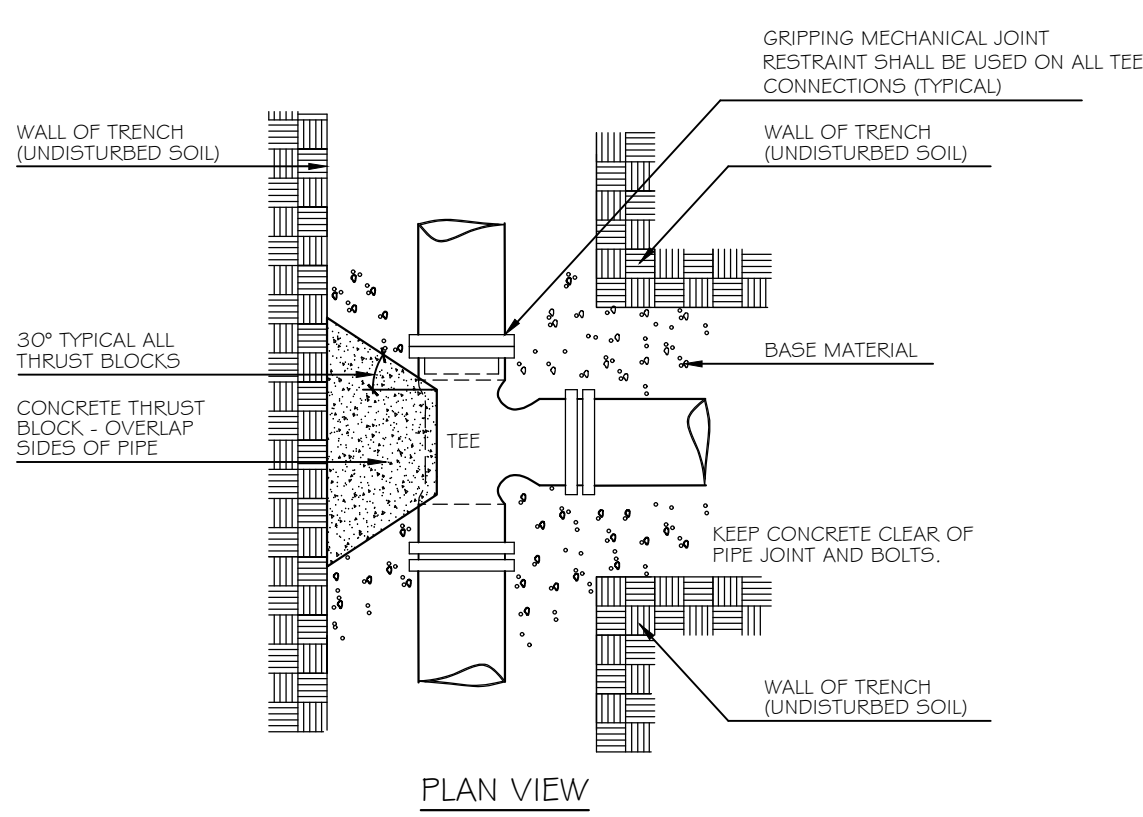
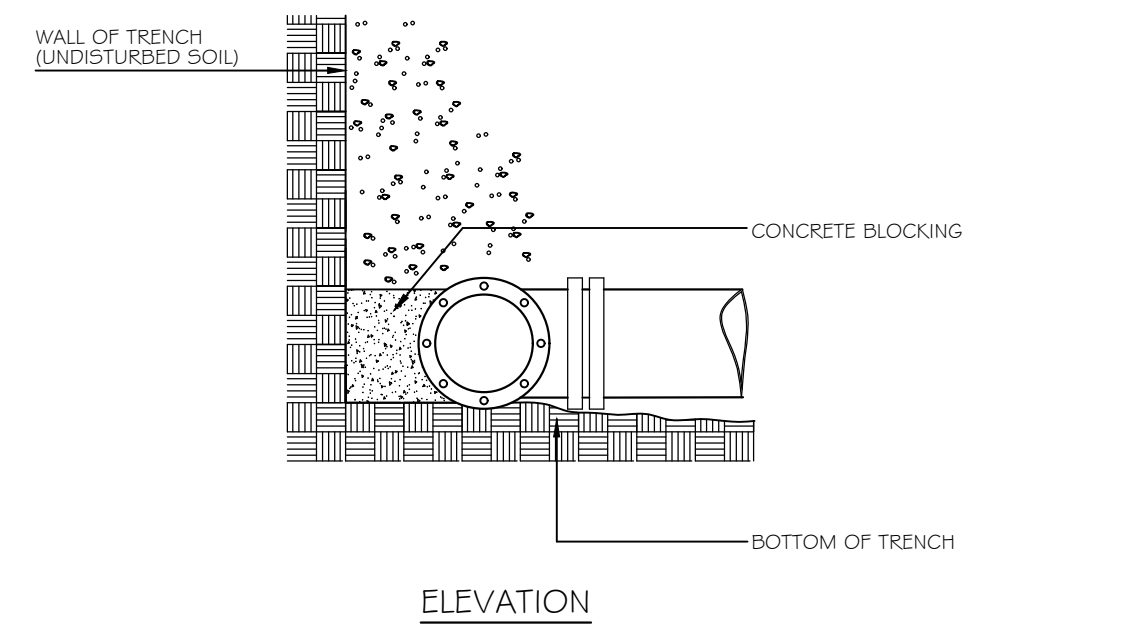


3 WATER MAIN ANCORAGE DETAILS



4 TELEPHONE / CABLE T.V.

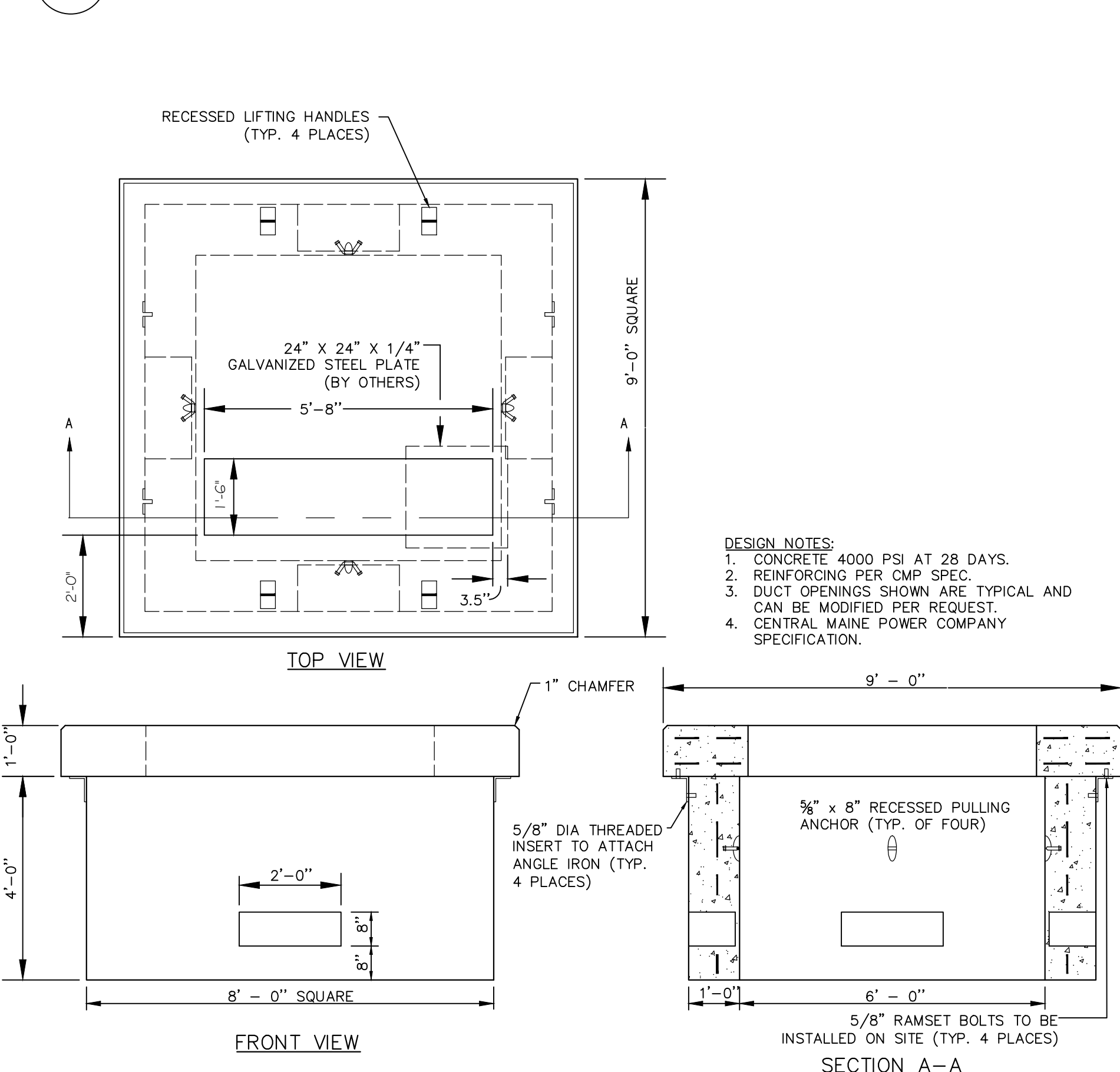
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- INSTALL POLY BARRIER BETWEEN PIPE AND ALL THRUST BLOCKS.
- ANY MODIFICATION TO THRUST BLOCK SIZING OR PIPE RESTRAINT REVISIONS SHALL BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT PRIOR TO IMPLEMENTATION IN THE FIELD.
- ANY WORK RELATING TO WATER PIPING OF DETAILS SHALL BE IN ACCORDANCE WITH THE PORTLAND WATER DISTRICT SPECIFICATIONS.

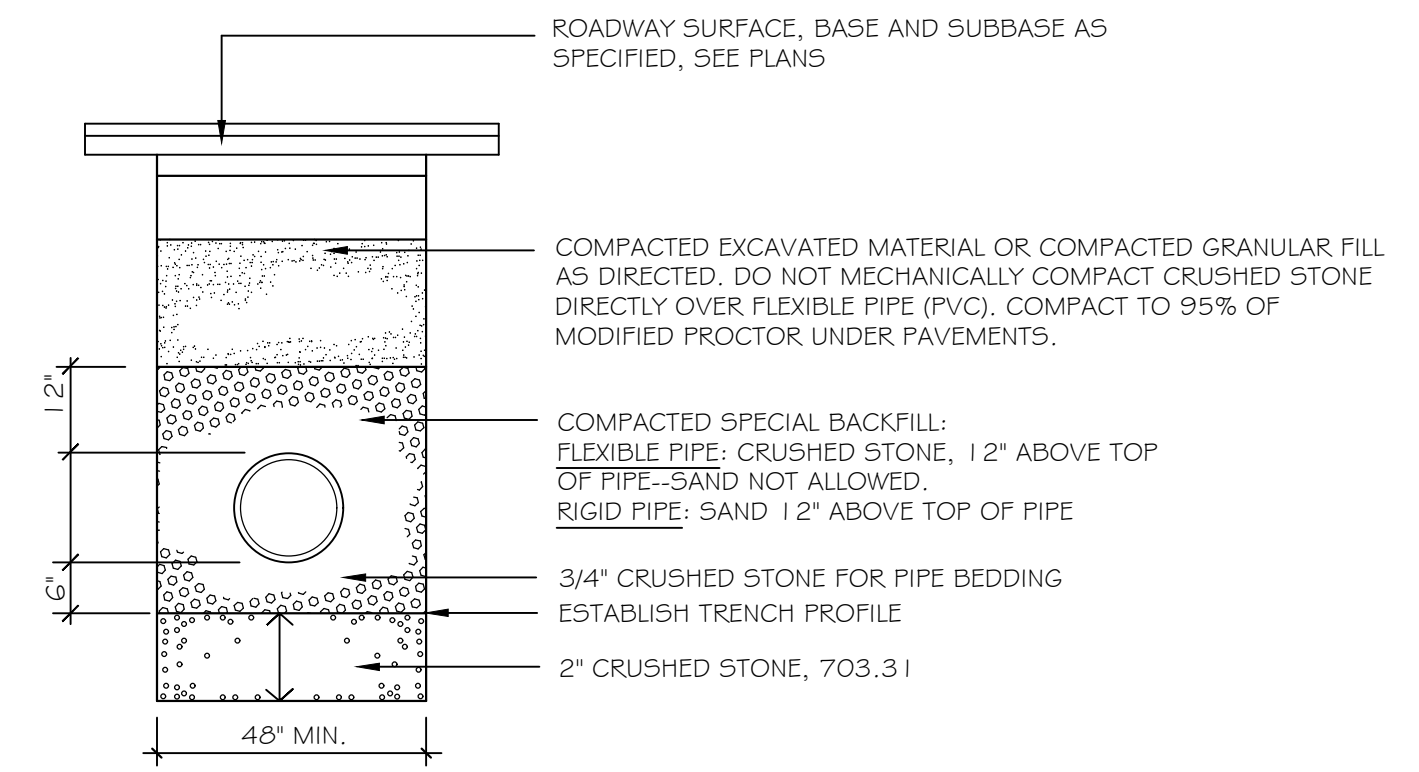
PIPE SIZE	1/32 BEND	1/16 BEND	1/8 BEND	1/4 BEND	TEES/CAPS
6"	1.0	1.5	2.5	4.5	3.5
8"	1.5	2.5	4.5	8.0	5.5

5 STANDARD TEE BLOCKING



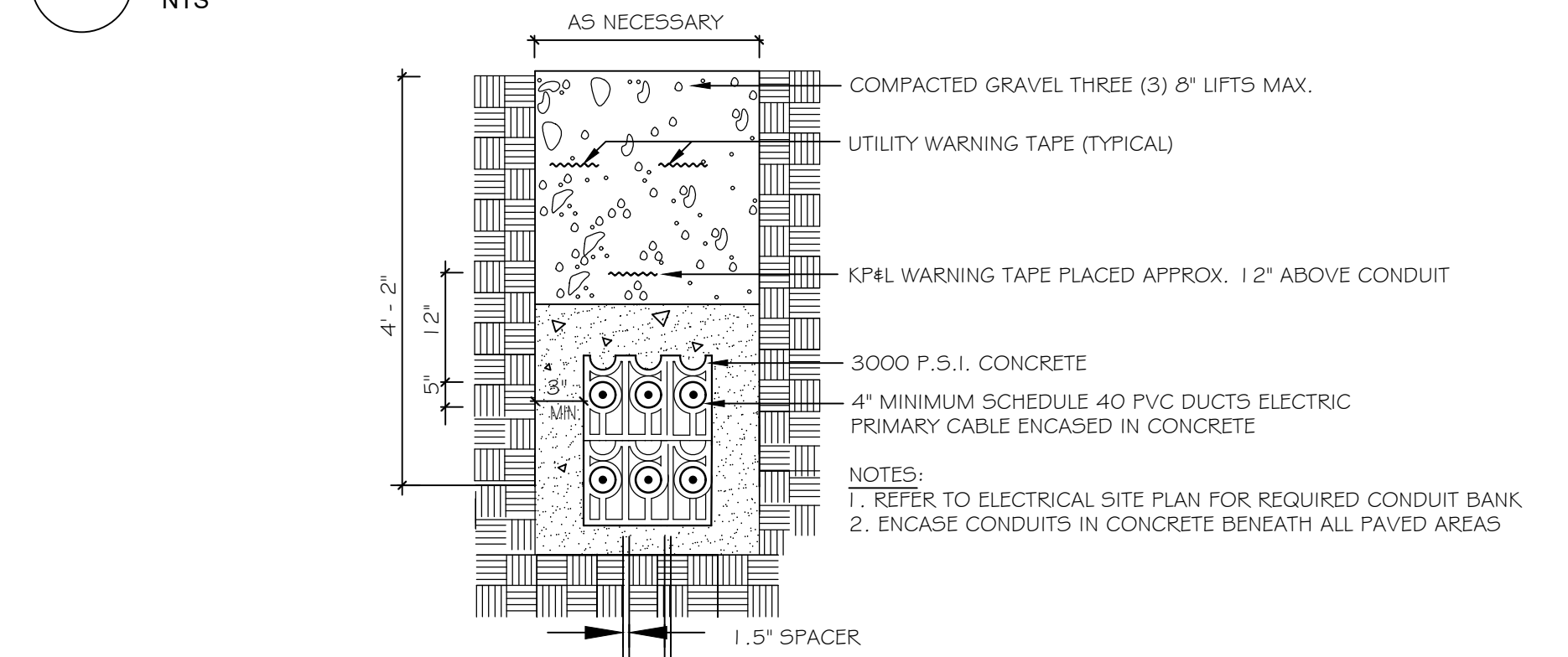
6 9' X 9' TRANSFORMER PAD

NTS

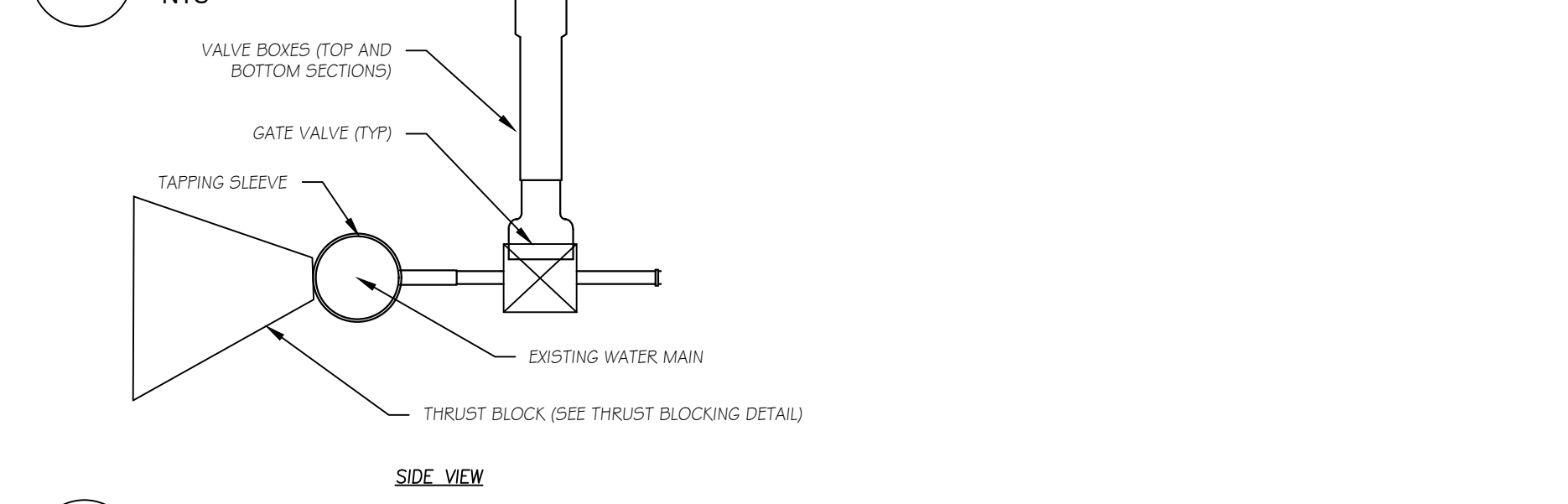


- NOTES:
- ANY ALTERNATE TRENCHING METHODS SHALL BE APPROVED IN ADVANCE BY THE TOWN.
 - ALL TRENCH DIMENSIONS SHALL BE IN CONFORMANCE WITH THE TOWN OF BOWDOINHAM DETAIL FIGURE II-1.2 OF THE TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.

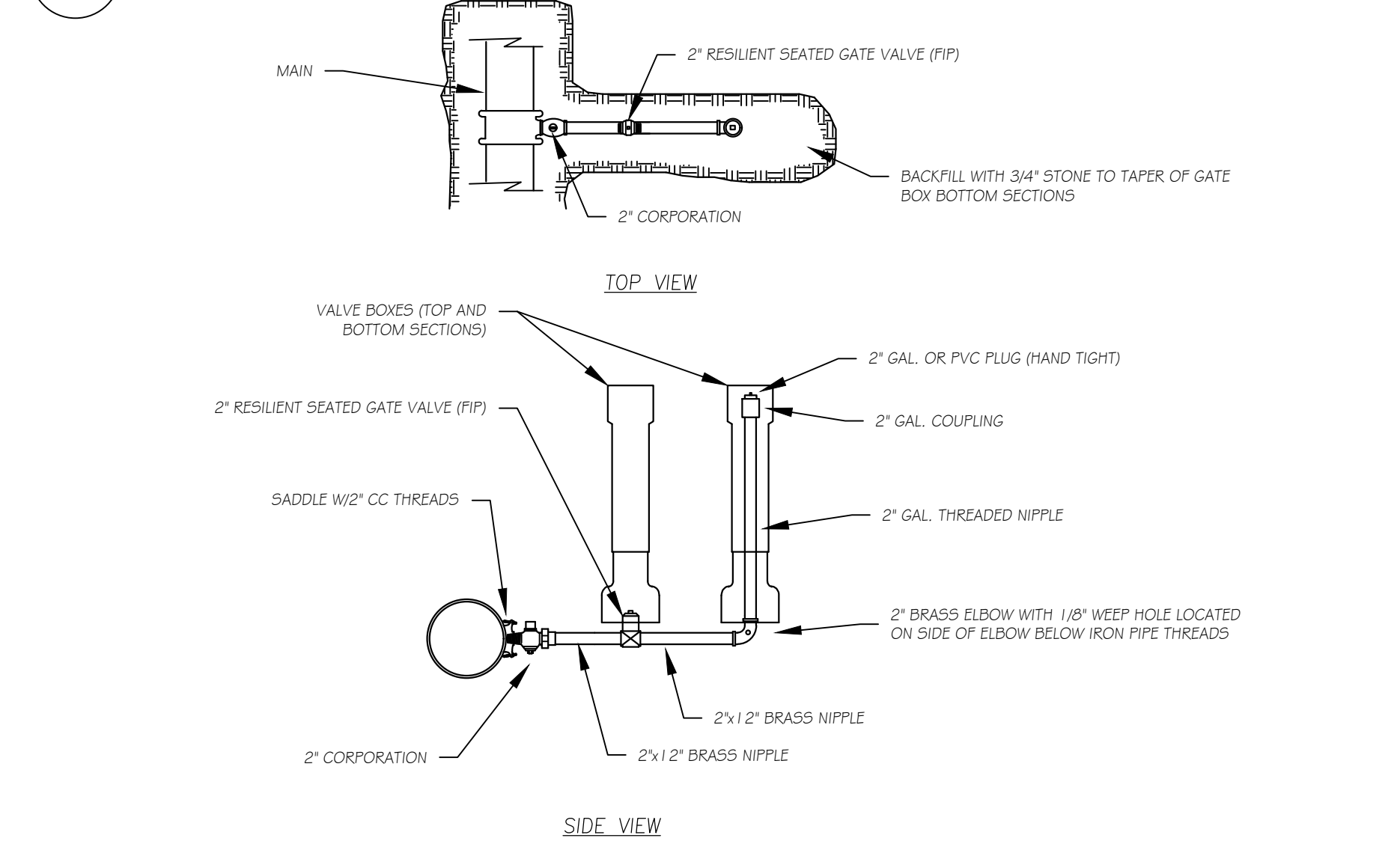
7 PIPE TRENCH DETAIL



8 ELECTRIC TRENCH

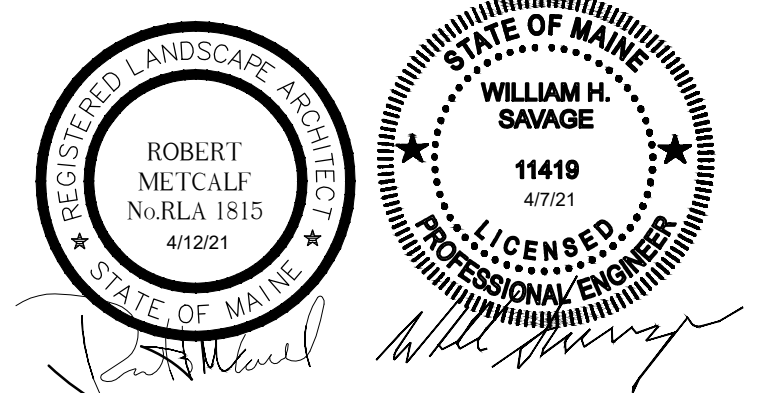


9 TAPPING SLEEVE & VALVE



10 SIDE-ARM BLOW-OFF

NTS



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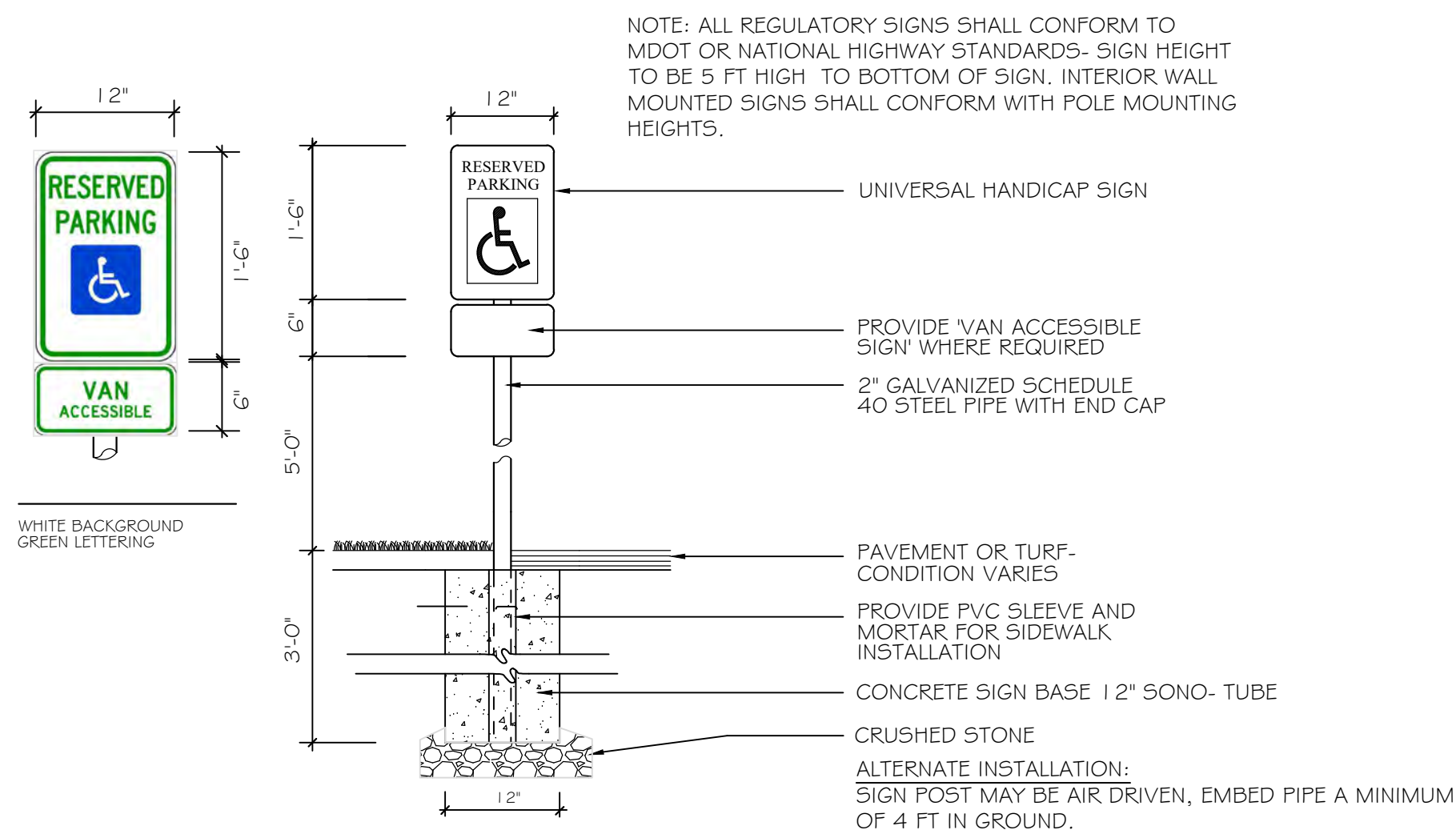
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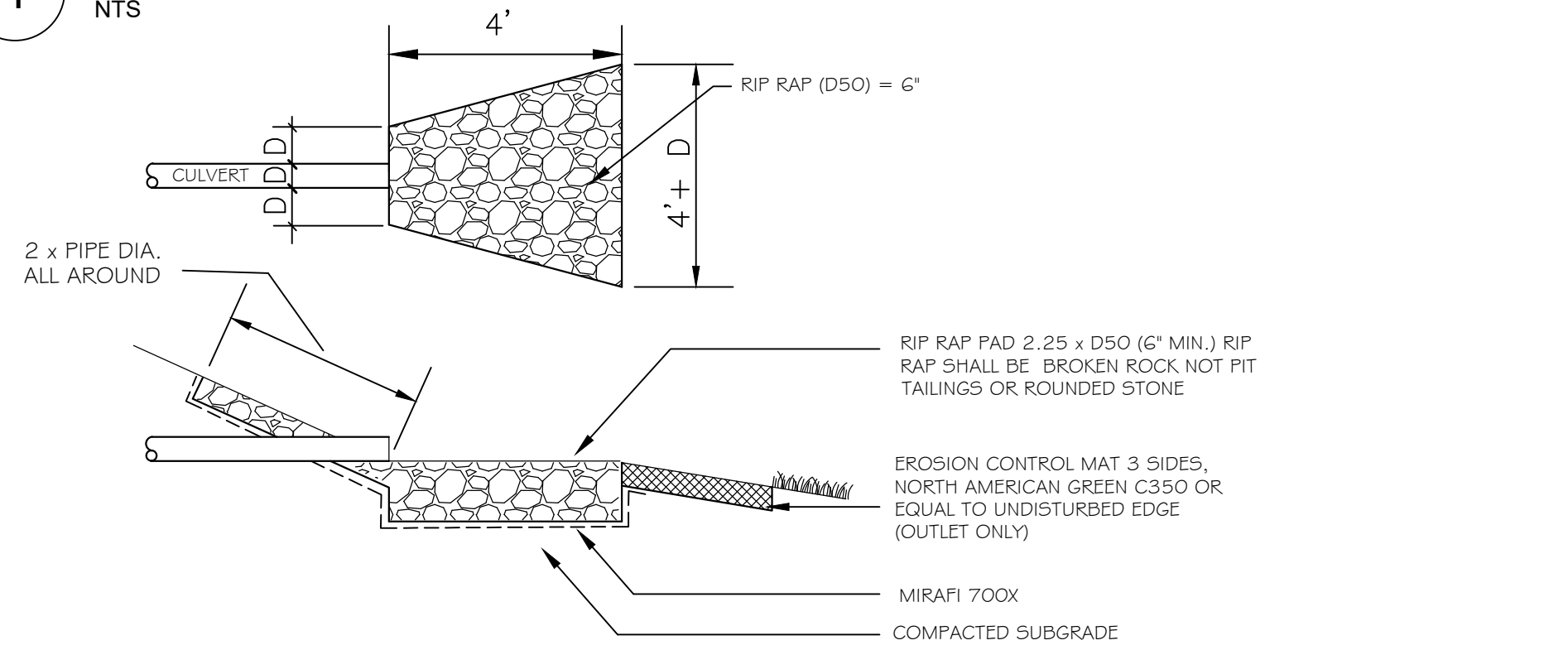
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DETAILS

Scale: AS NOTED

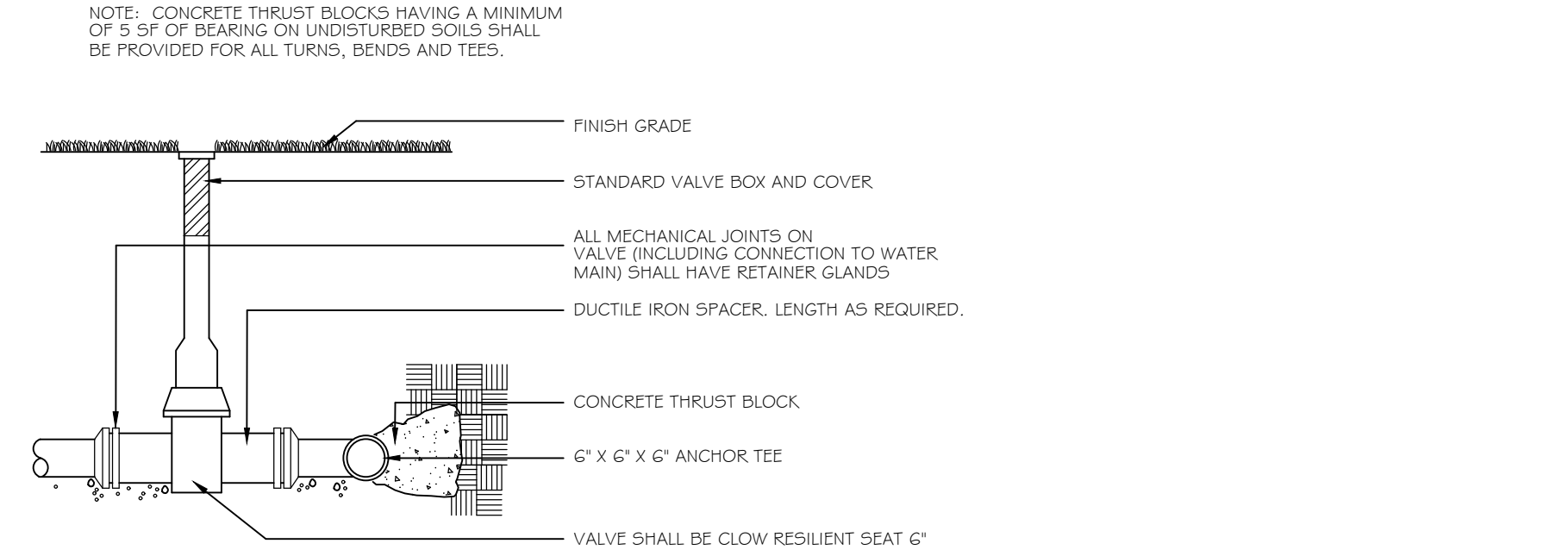
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L6.2



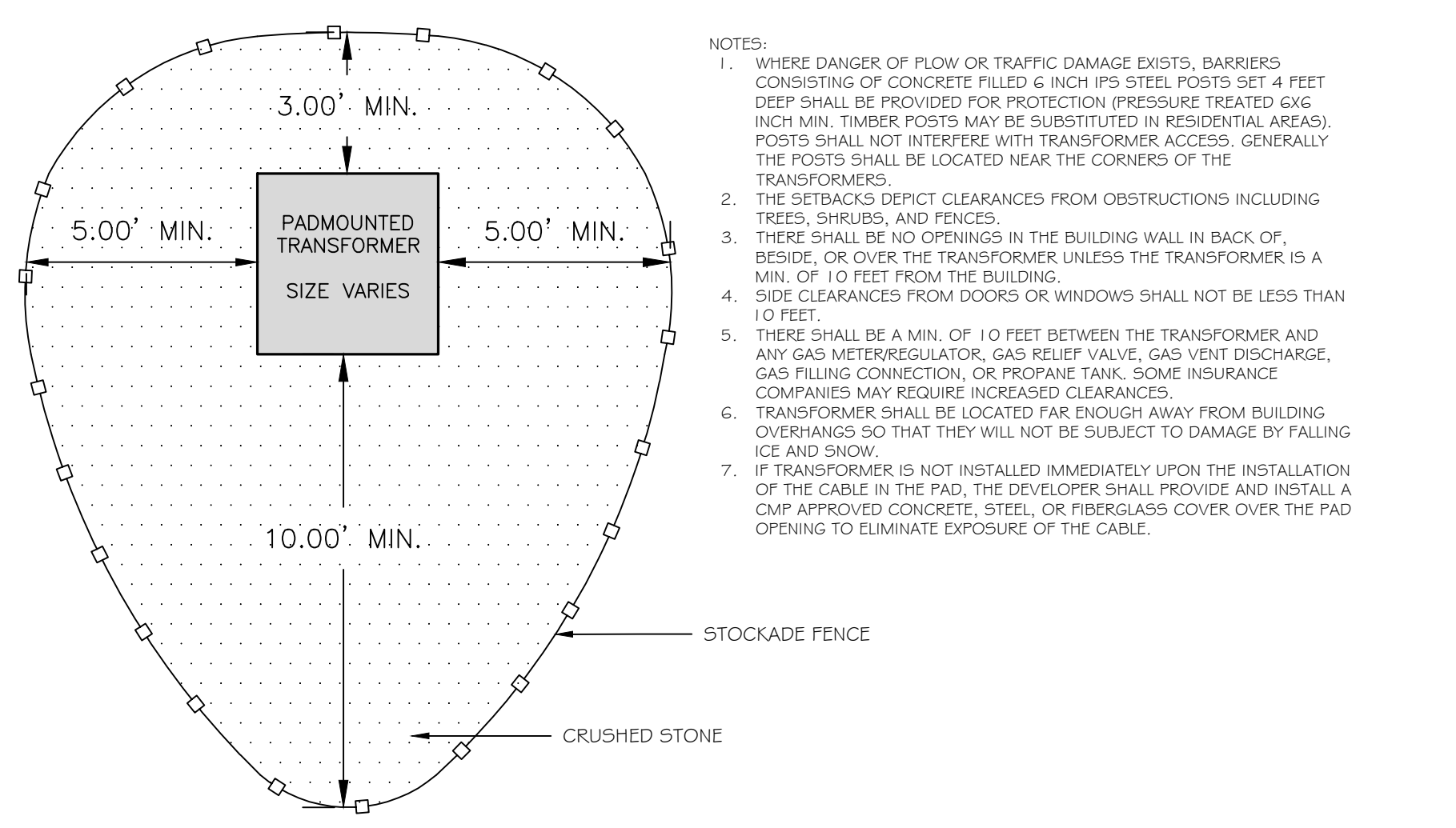
1 HANDICAP PARKING SIGNAGE AND REGULATORY SIGNS
NTS



2 PIPE INLET/OUTLET PROTECTION
NTS

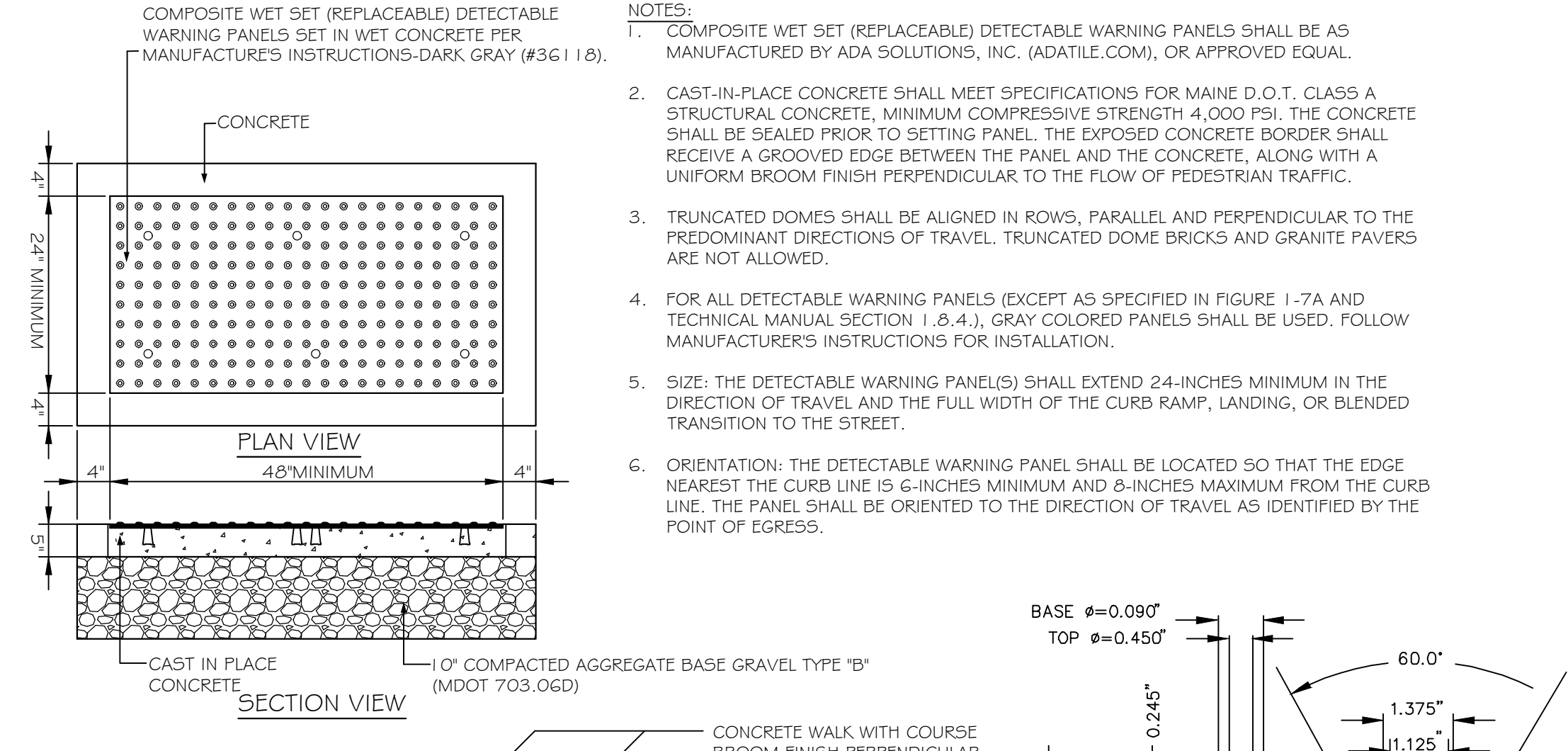


3 GATE VALVE
NTS

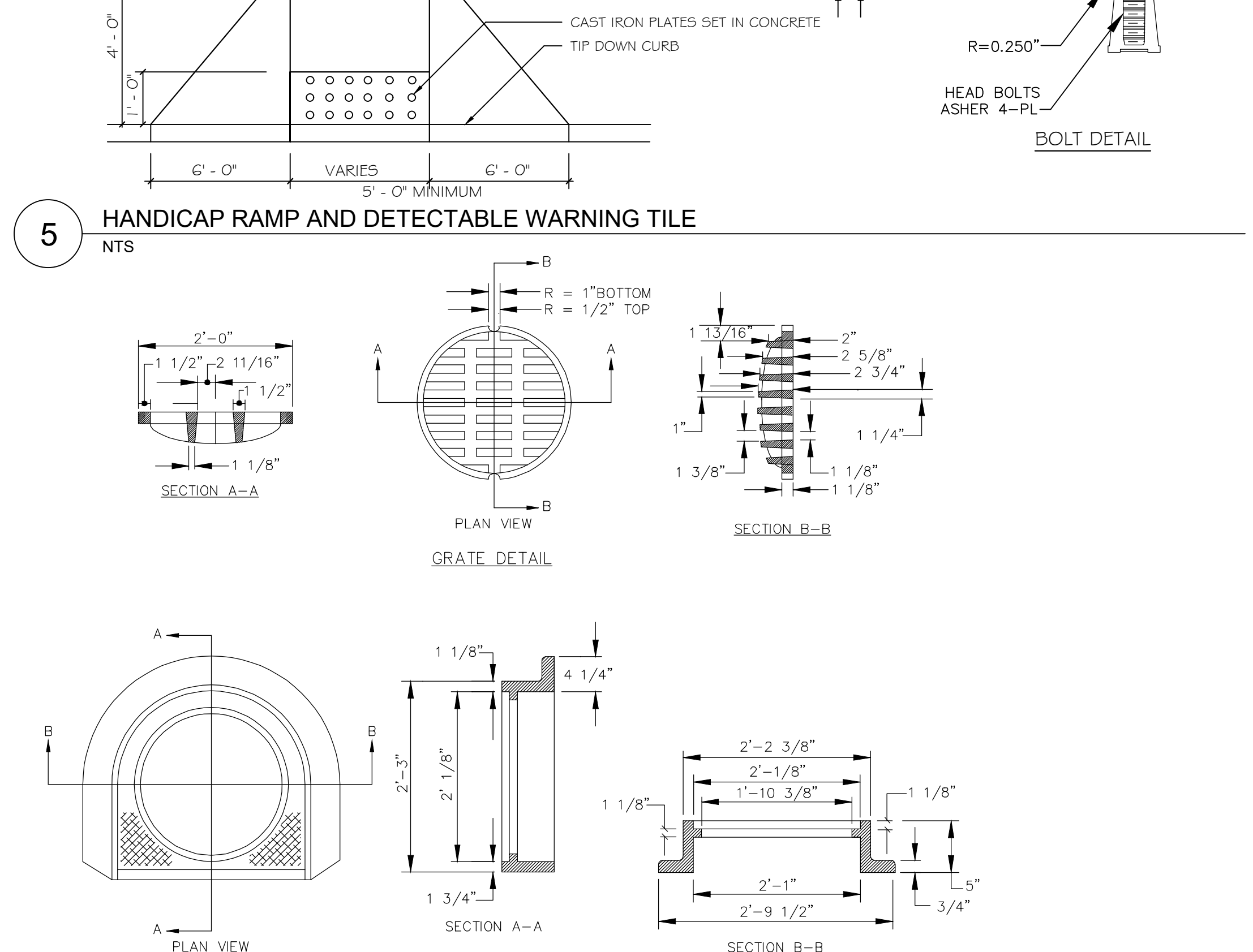


4 CMP TRANSFORMER SETBACKS
NTS

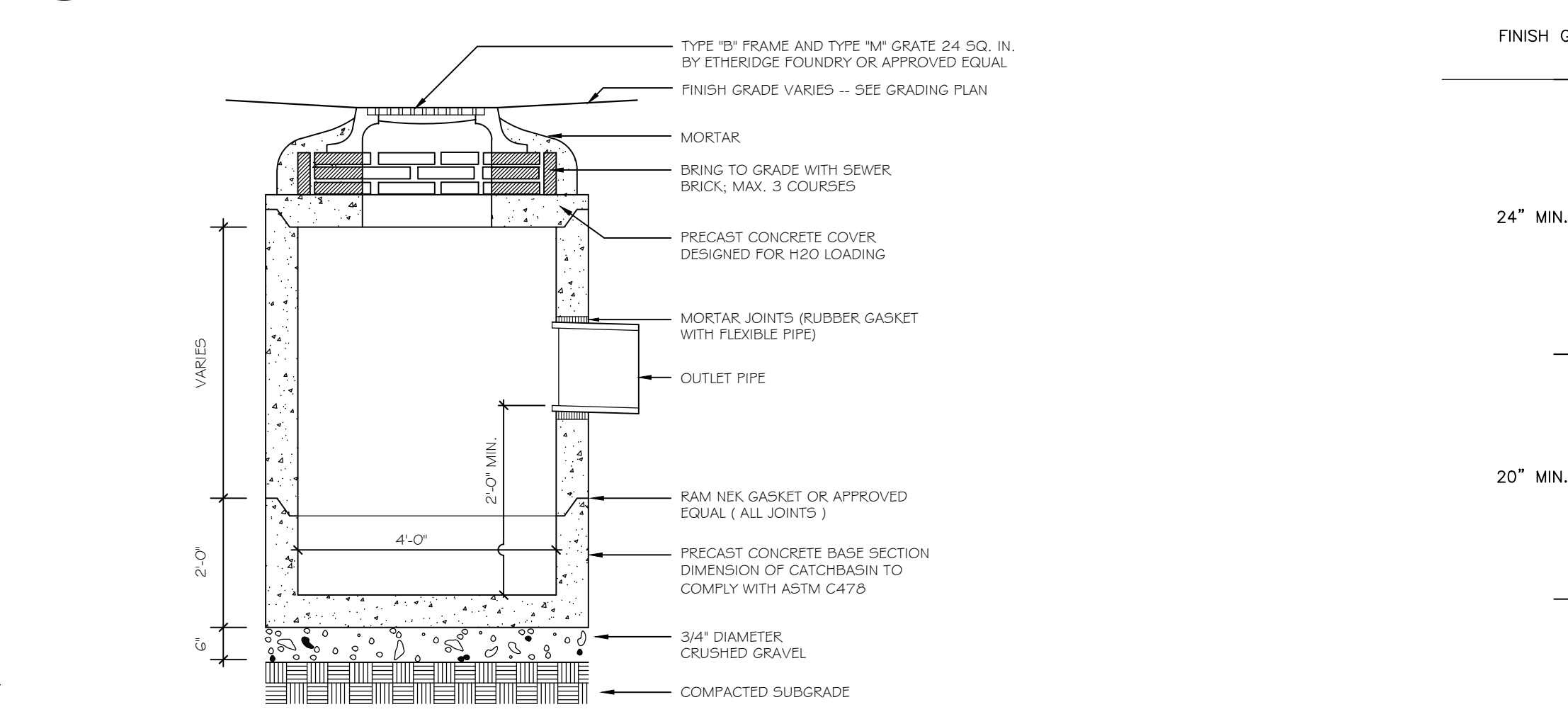
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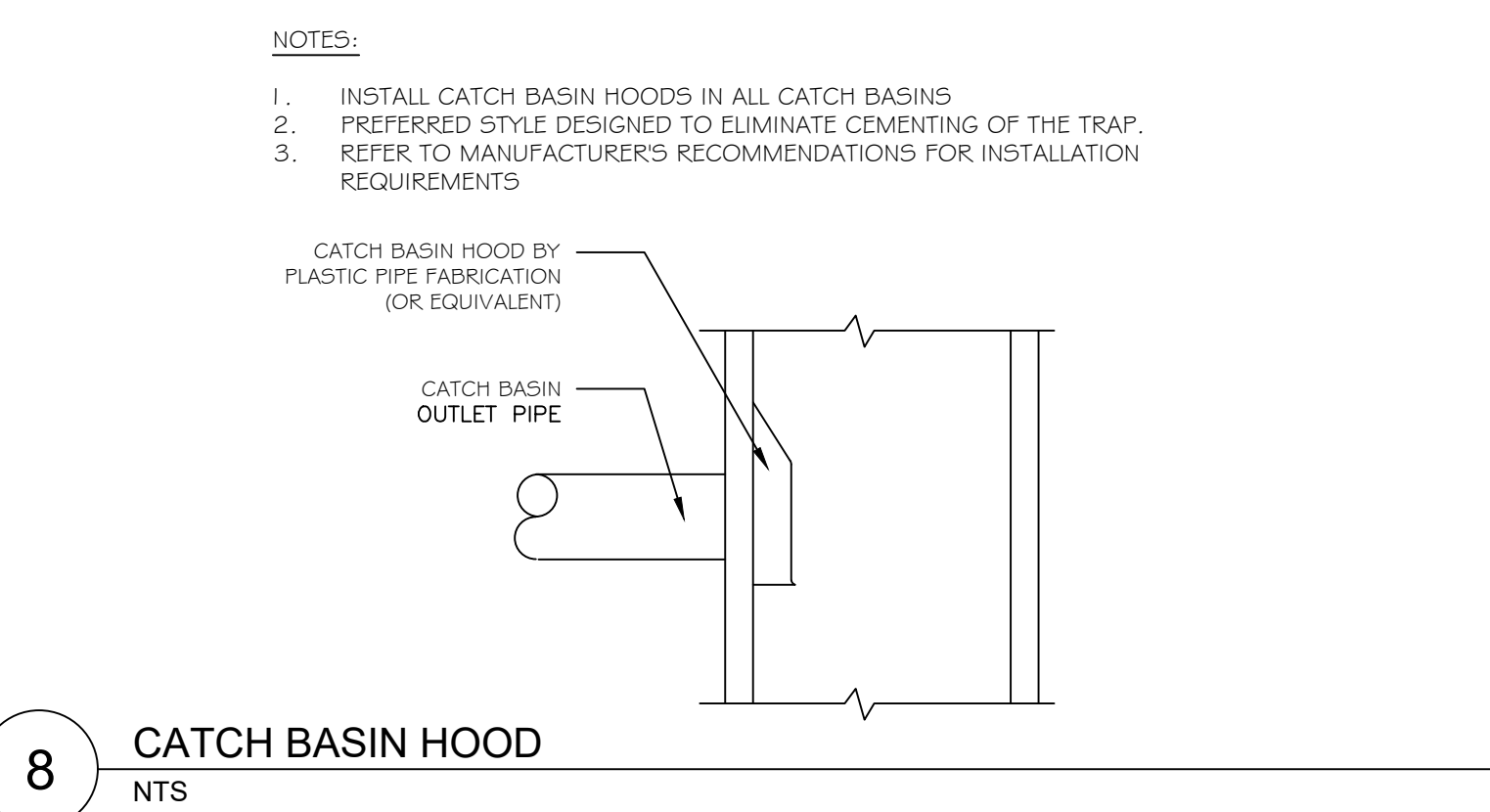
5 HANDICAP RAMP AND DETECTABLE WARNING TILE
NTS



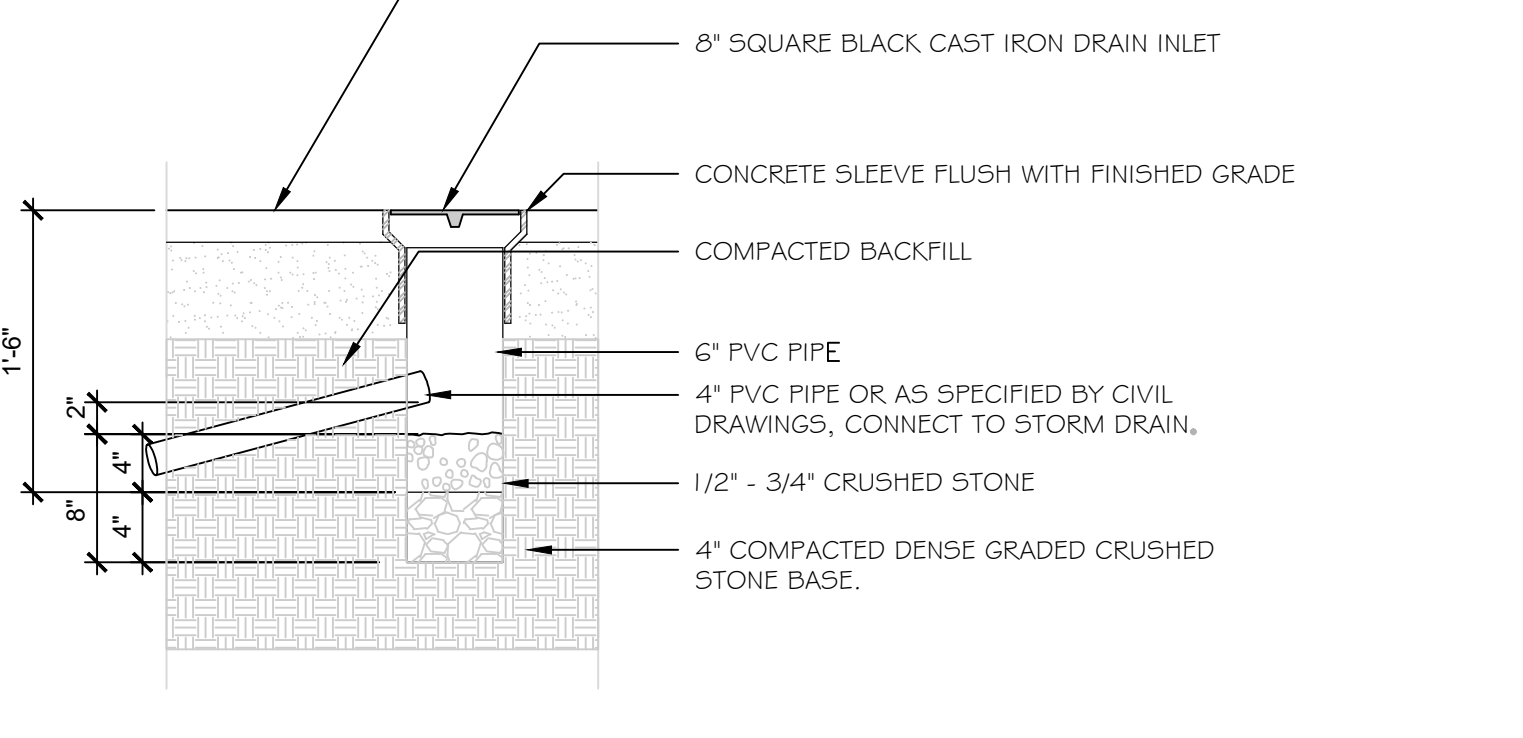
6 CATCH BASIN FRAME AND GRATE
NTS



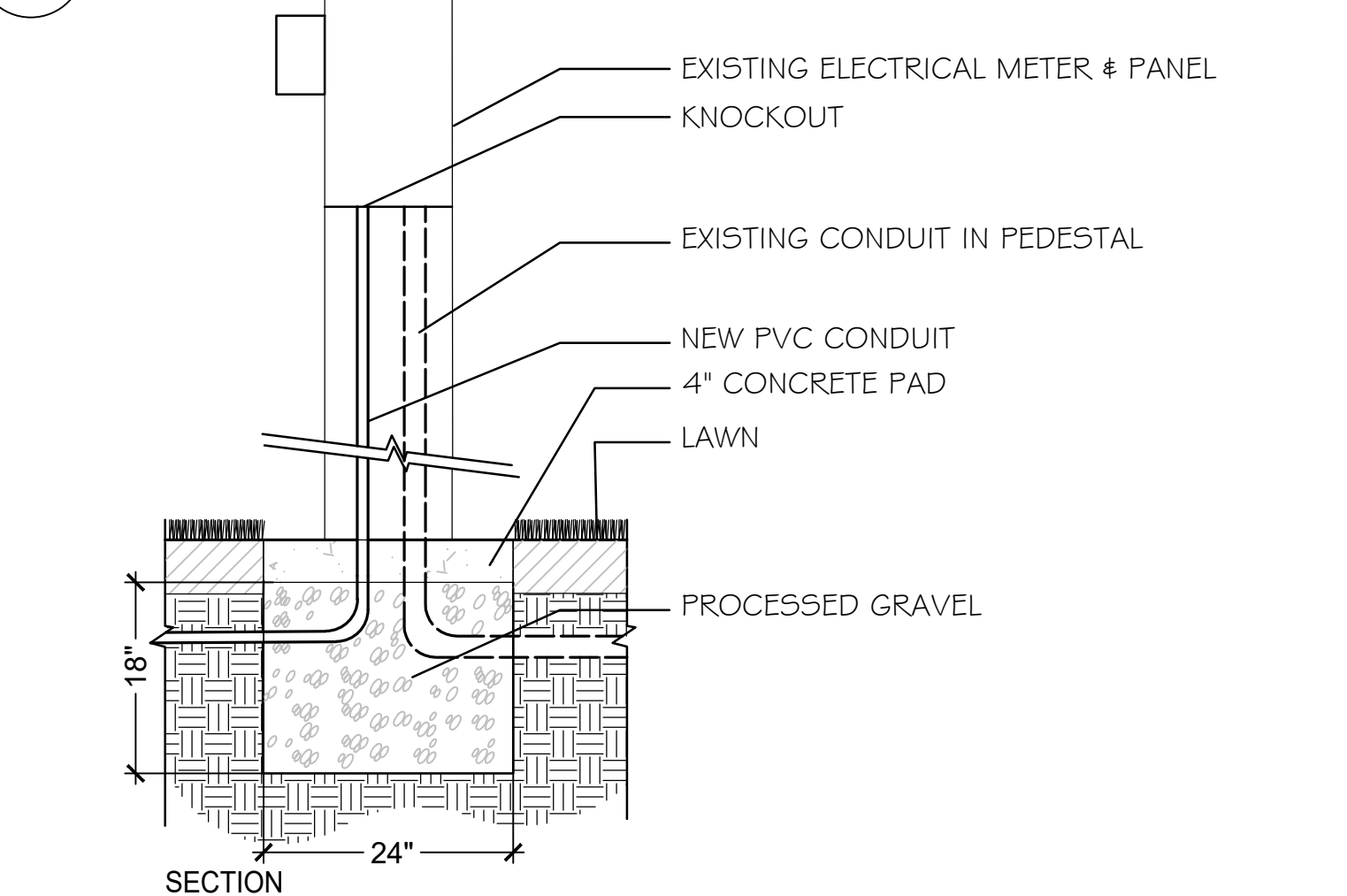
7 PRECAST DRAINAGE MANHOLE
NTS



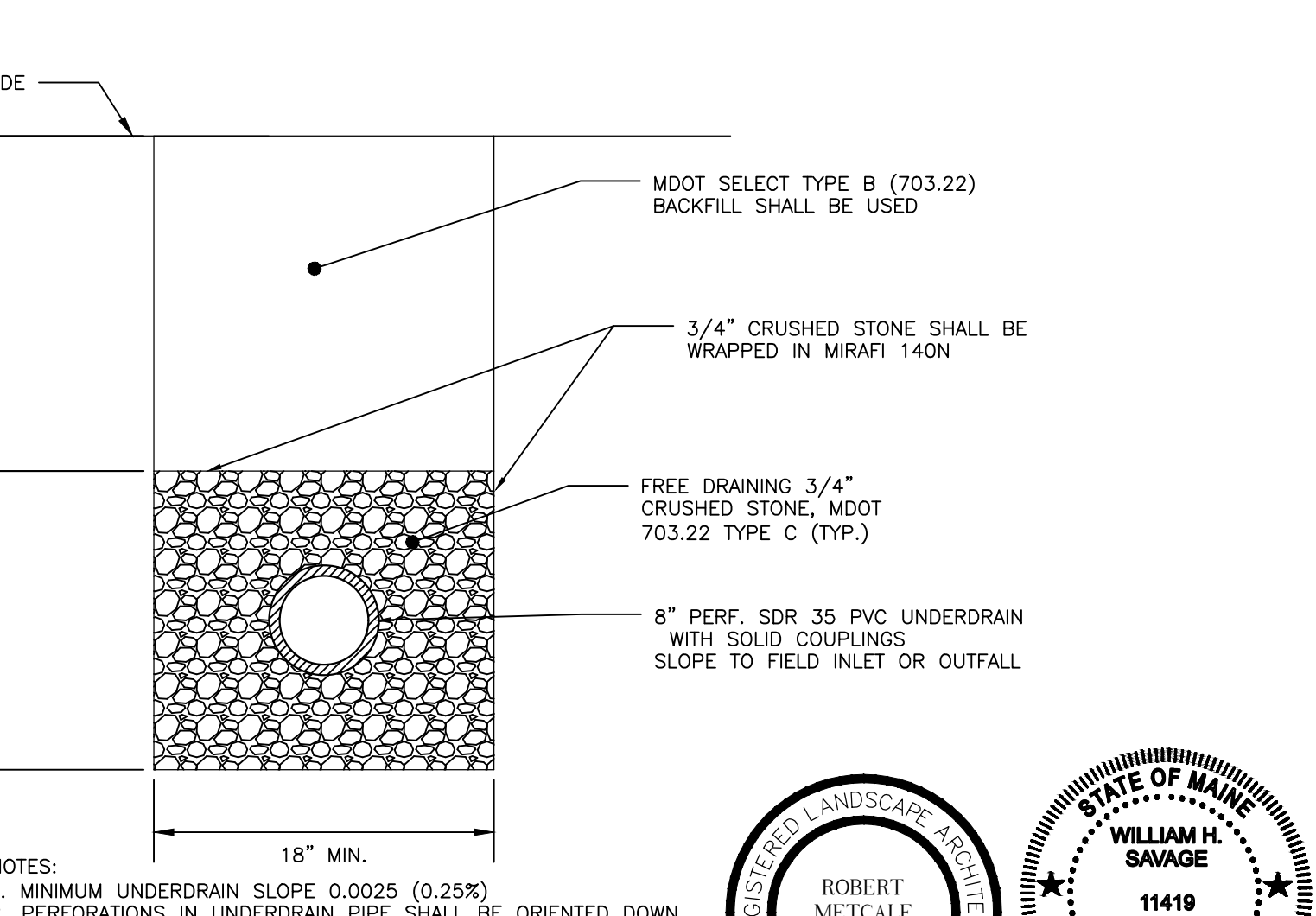
8 CATCH BASIN HOOD
NTS



9 FIELD INLET
NTS



10 ELECTRIC SERVICE HOOKUP
NTS



10 UNDERDRAIN DETAIL
NTS

ROBERT MITCHELL
No. RL 1515
4/12/21
REGISTERED LANDSCAPE ARCHITECT
STATE OF MAINE

WILLIAM H. SAVAGE
11419
4/17/21
LICENSED PROFESSIONAL ENGINEER
STATE OF MAINE

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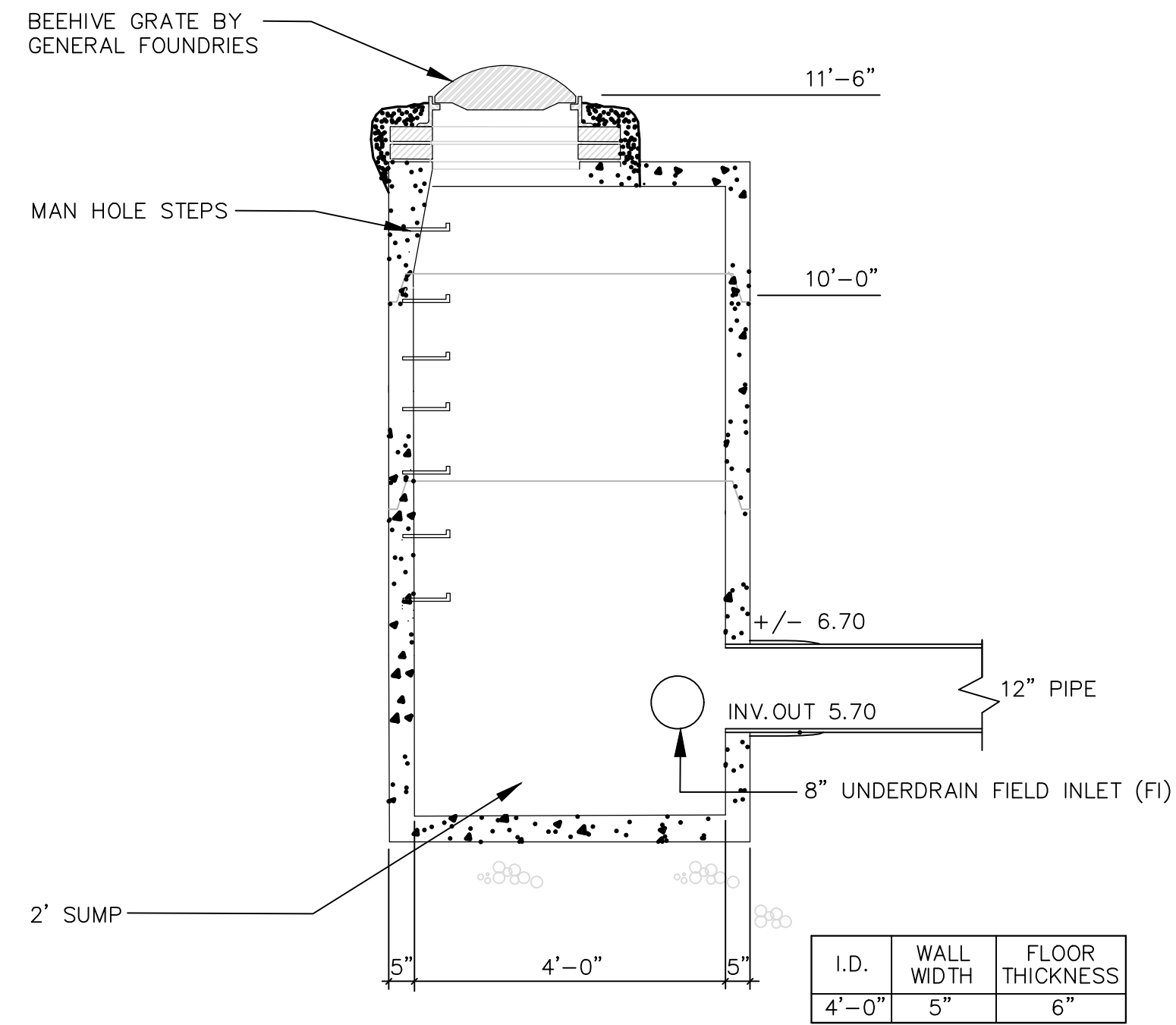
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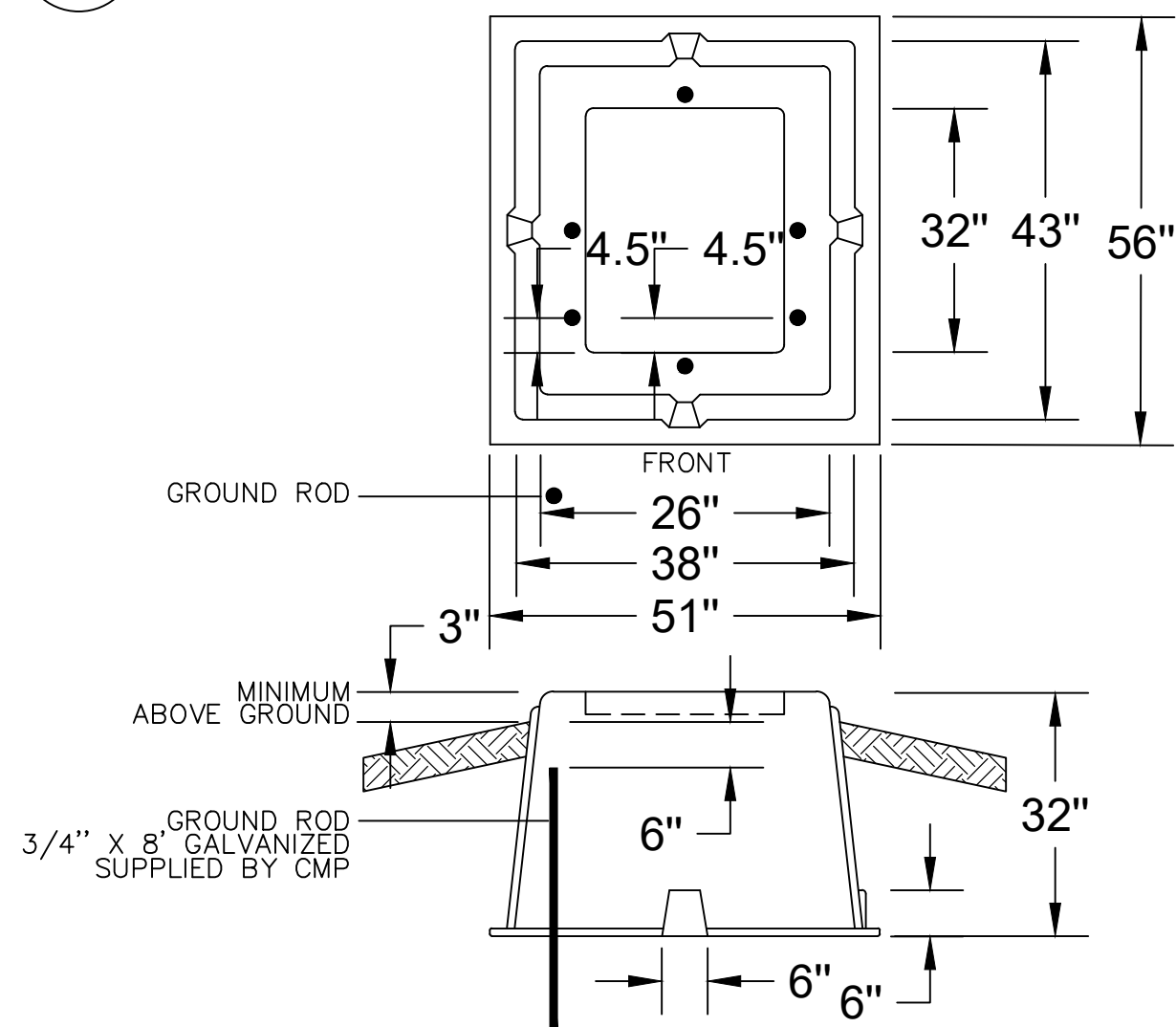
Scale: AS NOTED

North: Sheet No.:
L6.3



I.D.	WALL WIDTH	FLOOR THICKNESS
4'-0"	5"	6"

1 OVERFLOW CATCH BASIN
NTS



2 FIBERGLASS PULLBOX
NTS

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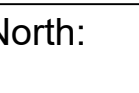
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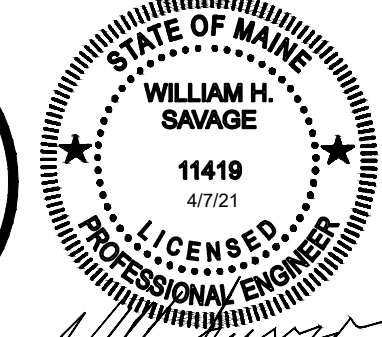
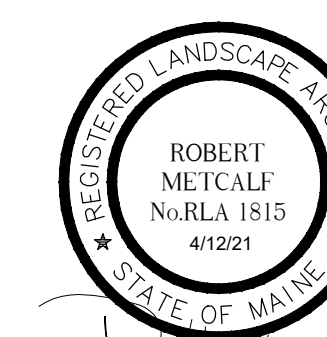
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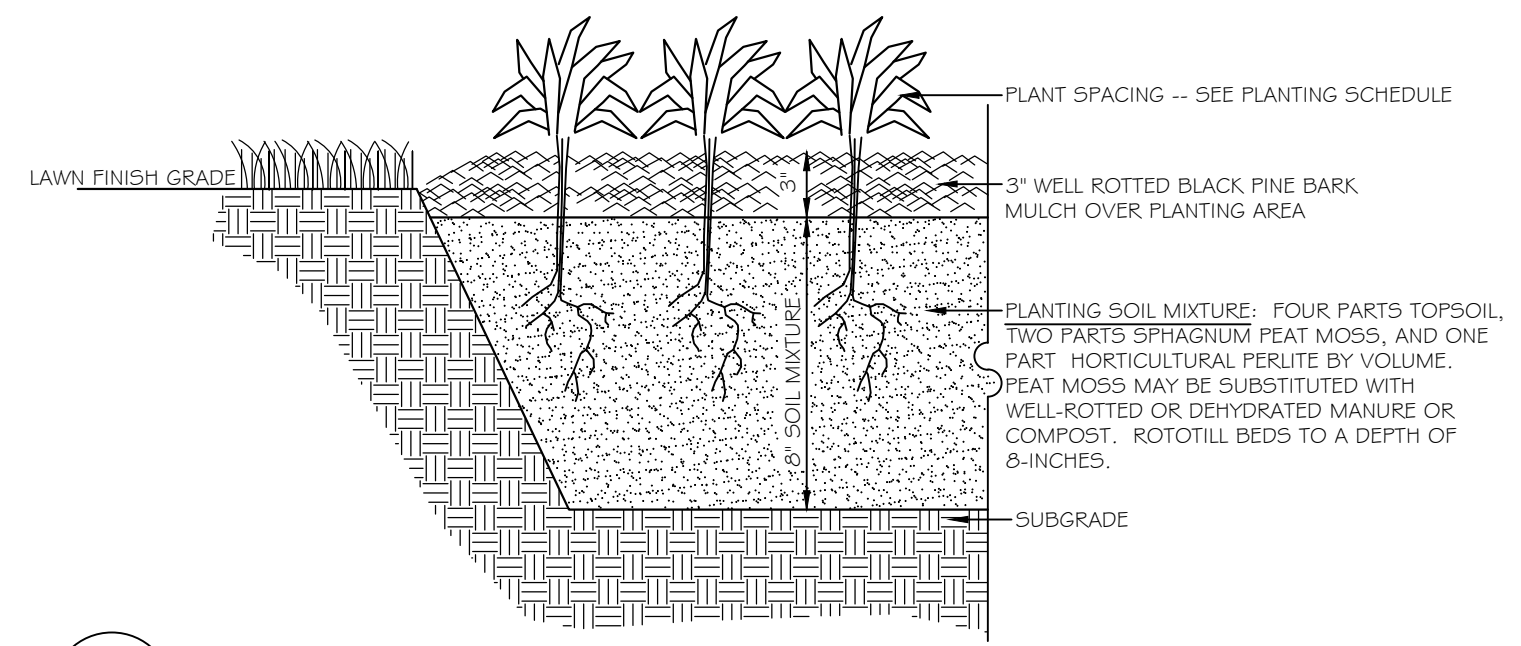
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Scale: AS NOTED

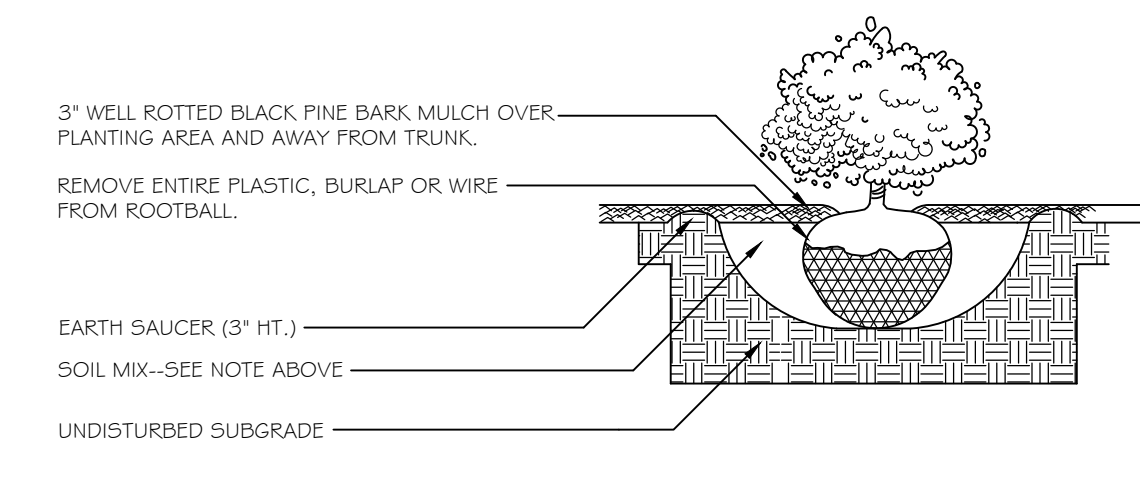
North:  Sheet No.:
L6.4



Robert Metcalf *William H. Savage*



1 PLANTING BED AND MULCH DETAIL
NTS



2 SHRUB INSTALLATION
NTS

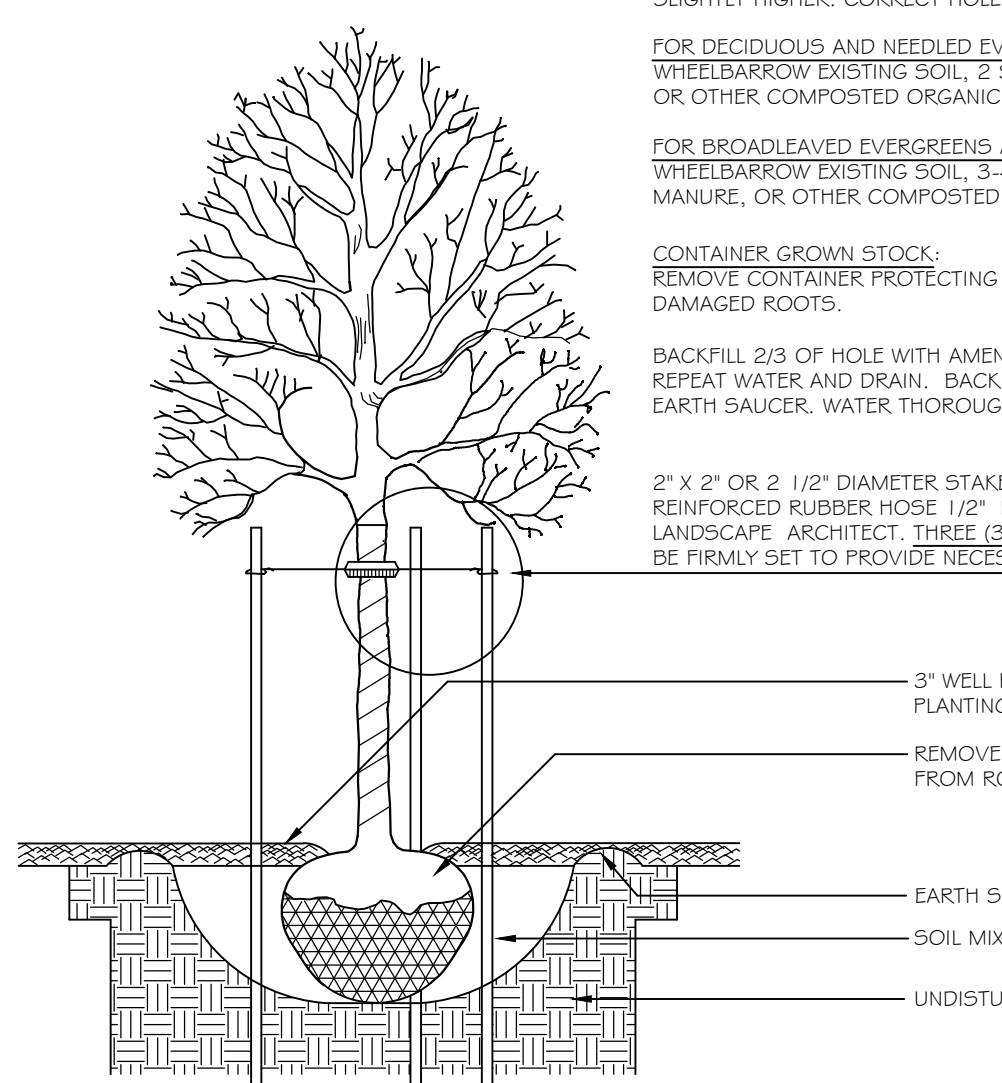
PLANT INSTALLATION NOTES:
DIG HOLE AT LEAST 2 TIMES THE WIDTH OF ROOT BALL AND AS DEEP AS THE ROOT BALL (NO DEEPER). SET ROOT BALL CENTERED, WITH TOP AT GROUND LEVEL OR SLIGHTLY HIGHER. CORRECT HOLE DEPTH AS NEEDED.

FOR DECIDUOUS AND NEEDLED EVERGREEN TREES AND SHRUBS: 1 FULL WHEELBARROW EXISTING SOIL, 3-4 SHOVELS PEAT, 1 SHOVEL WELL ROTTED MANURE, OR OTHER COMPOSTED ORGANIC MATERIAL.

FOR BROADLEAVED EVERGREENS AND RELATED ERICACEAE PLANTS: 1 FULL WHEELBARROW EXISTING SOIL, 3-4 SHOVELS PEAT, 1 SHOVEL WELL ROTTED MANURE, OR OTHER COMPOSTED ORGANIC MATERIAL OF LOW pH

CONTAINER GROWN STOCK: REMOVE CONTAINER PROTECTING ROOT BALL. GENTLY COMB OUT ROOTS, PRUNE DAMAGED ROOTS.

BACKFILL 2/3 OF HOLE WITH AMENDED SOIL THEN FILL HOLE WITH WATER. LET DRAIN, REPEAT WATER AND DRAIN. BACK FILL TO FINISH GRADE, TAMP GENTLY, AND CREATE EARTH SAUCER. WATER THOROUGHLY ONCE AGAIN TO REMOVE REMAINING AIR POCKETS.



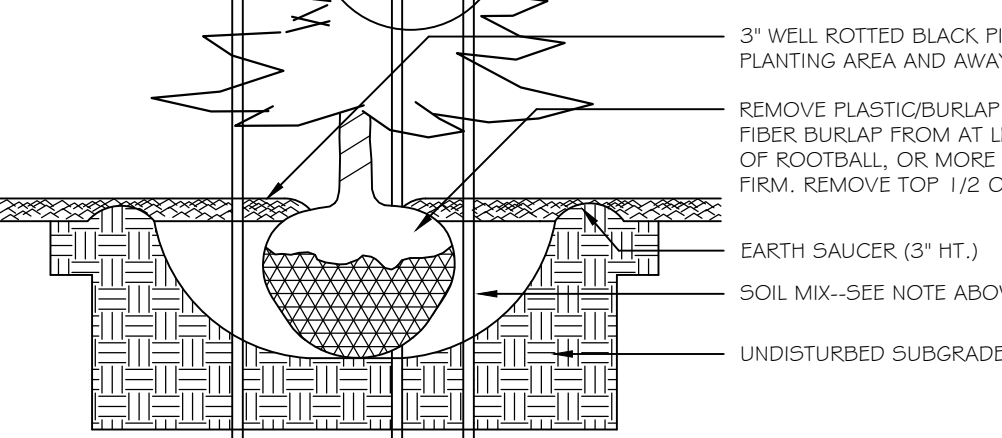
3 DECIDUOUS TREE DETAIL
NTS

PLANT INSTALLATION NOTES:
DIG HOLE AT LEAST 2 TIMES THE WIDTH OF ROOT BALL AND AS DEEP AS THE ROOT BALL (NO DEEPER). SET ROOT BALL CENTERED, WITH TOP AT GROUND LEVEL OR SLIGHTLY HIGHER. CORRECT HOLE DEPTH AS NEEDED.

FOR NEEDLED EVERGREEN TREES: 1 FULL WHEELBARROW EXISTING SOIL, 2 SHOVELS PEAT, 1 SHOVEL WELL ROTTED MANURE, OR OTHER COMPOSTED ORGANIC MATERIAL.

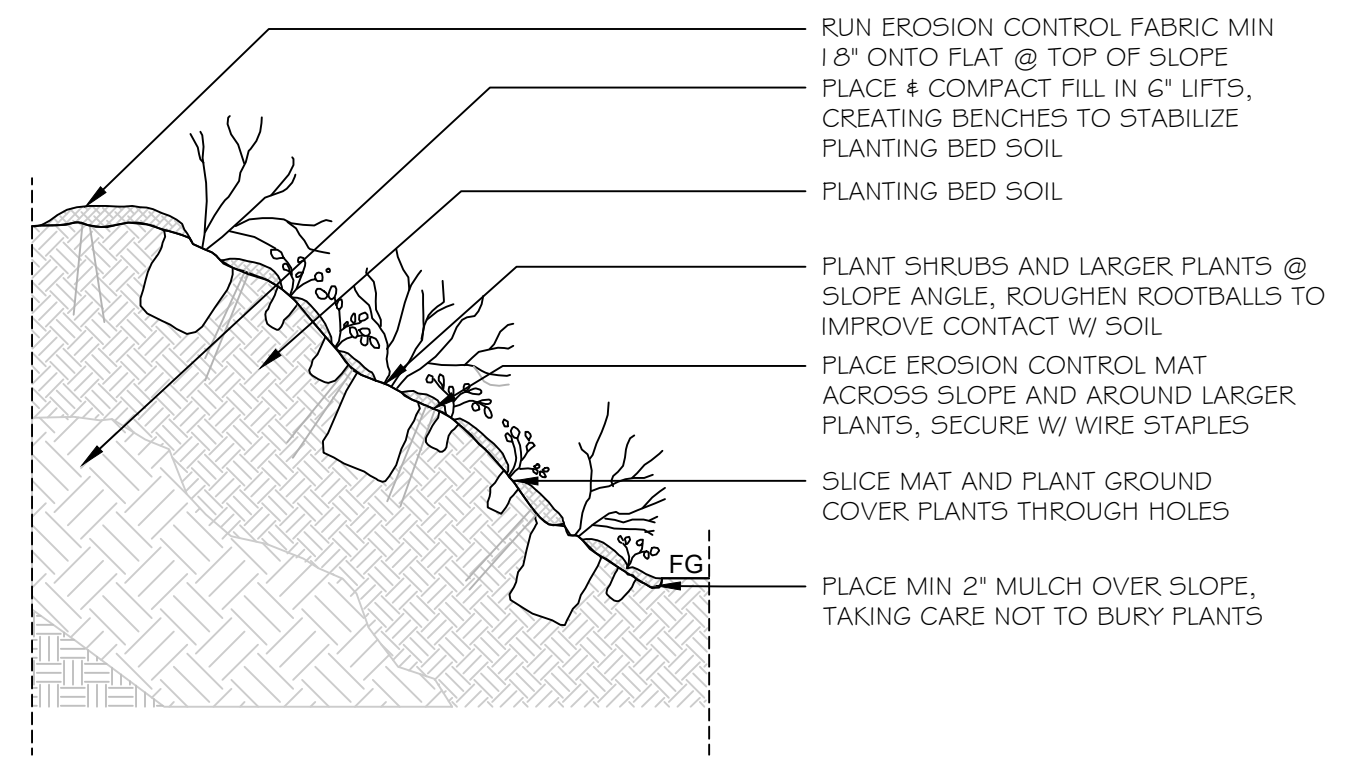
BACKFILL 2/3 OF HOLE WITH AMENDED SOIL THEN FILL HOLE WITH WATER. LET DRAIN, REPEAT WATER AND DRAIN. BACK FILL TO FINISH GRADE, TAMP GENTLY, AND CREATE EARTH SAUCER. WATER THOROUGHLY ONCE AGAIN TO REMOVE REMAINING AIR POCKETS.

2\"/>

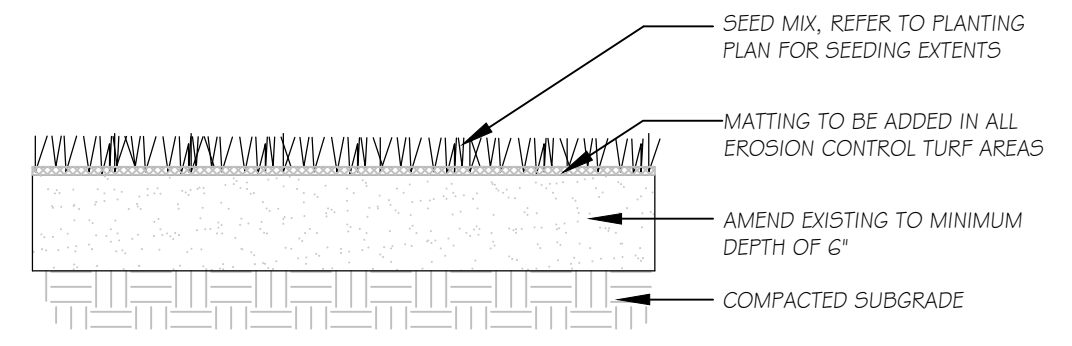


4 CONIFEROUS TREE INSTALLATION
NTS

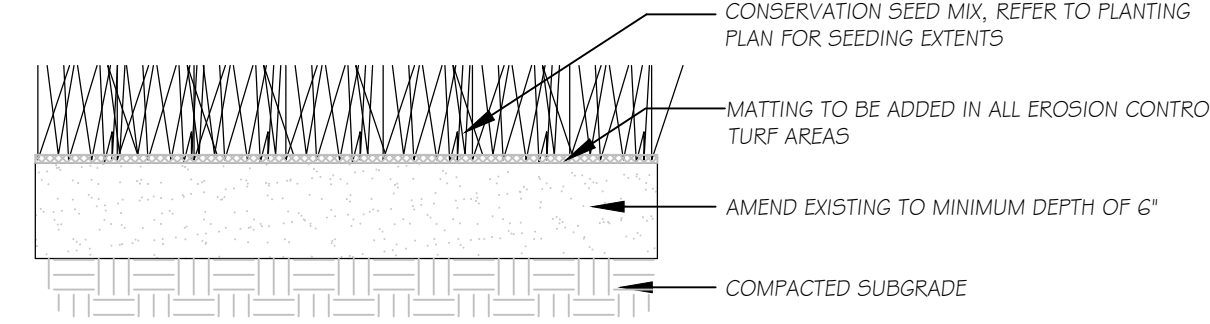
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5 SLOPE PLANTING
NTS



6 LAWN (SEED)
NTS



7 MEADOW SEED MIX
NTS

**** BIORETENTION MIX:**

A. RAIN GARDEN SOIL MIX SHALL BE COMPOSED AS FOLLOWS:

COMPONENT	PERCENTAGE PASSING BY WEIGHT
TOPSOIL	20-30%
SAND	40%
COMPOST	30-40%

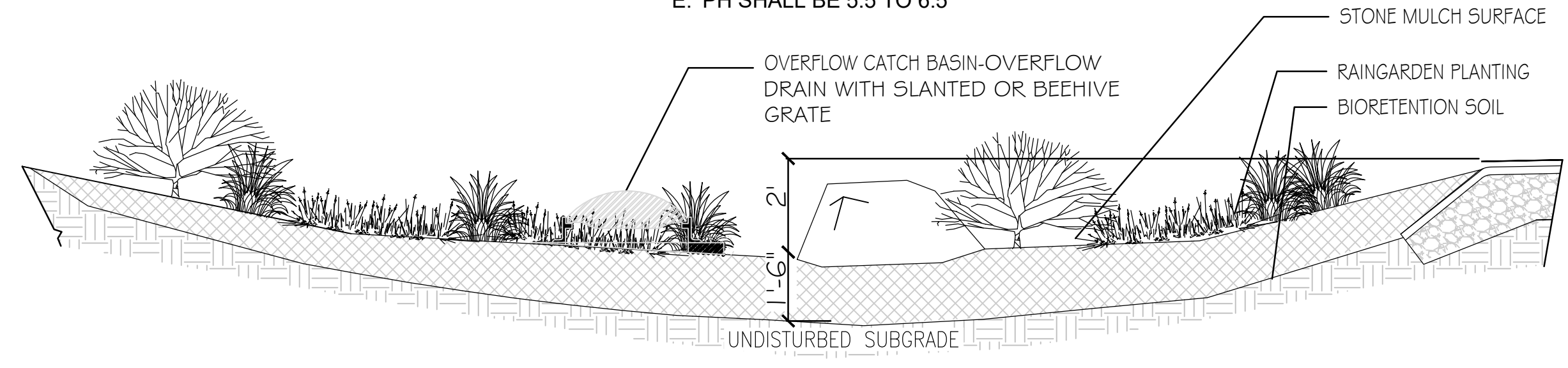
B. TOPSOIL SHALL BE SANDY LOAM, LOAMY SAND OR LOAM AS DEFINED BY THE USDA CLASSIFICATION SYSTEM.

C. COMPOST SHALL BE LEAF COMPOST. COMPOST SHALL BE FULLY MATURE. BIOSOLIDS ARE NOT ALLOWED FOR THE COMPOST COMPONENT.

D. SAND SHALL BE GRAVELLY SAND THAT MEETS ASTM D 422 AND THE FOLLOWING GRADATION:

INCH	PERCENT PASSING BY WEIGHT	
	MAXIMUM	MINIMUM
2	100	100
0.75	100	70
0.25	80	50
#40	40	15
#200	3	0

E. PH SHALL BE 5.5 TO 6.5



8 RAIN GARDEN
NTS

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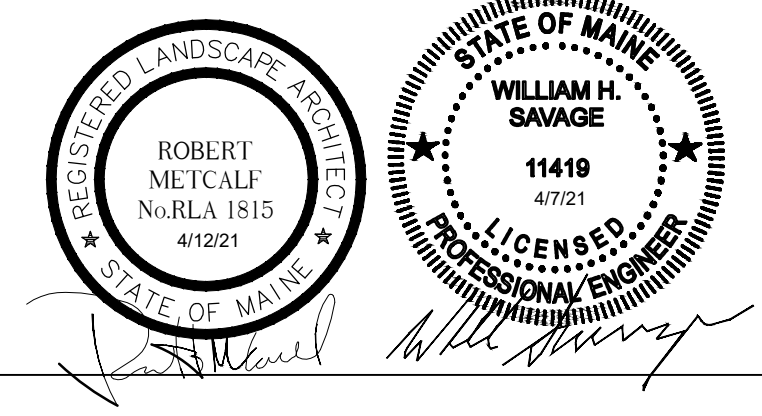
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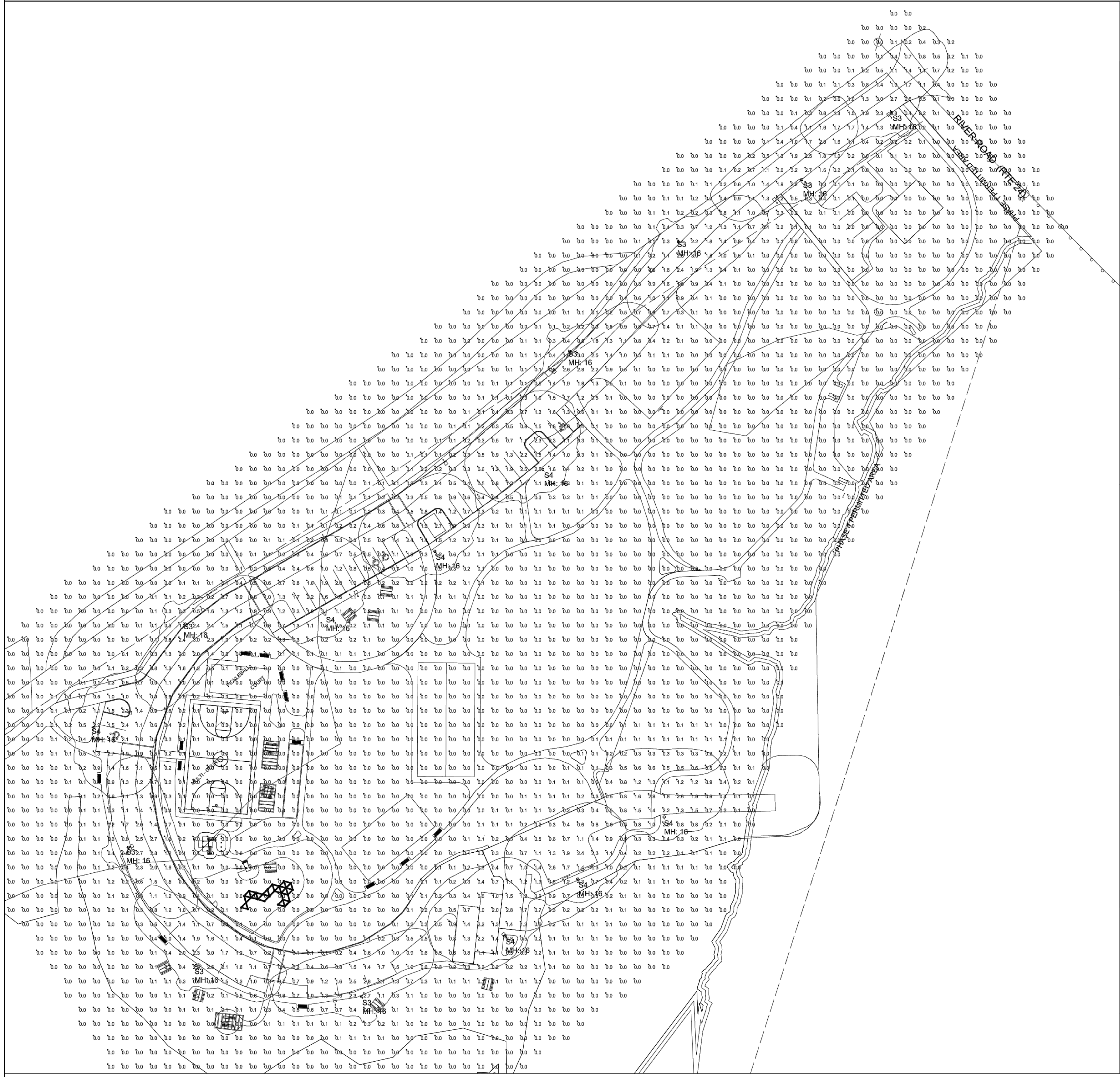
Title:
DETAILS

Scale:

North: Sheet No.:

L6.5





- NOTES:
- 1) EXACT MOUNTING DETAILS TO BE DETERMINED AT JOBSITE BY OTHERS.
 - 2) CALCULATIONS MAY OR MAY NOT SHOW THE EFFECT OF SHADOWING CAUSED BY BUILDINGS AND OBJECTS WITHIN THE CALCULATED SPACE OR IN THE SITE AREA.
 - 3) READINGS SHOWN ARE INITIAL HORIZONTAL FOOTCANDLES ON A FLAT SITE WITHOUT REFLECTIONS OR OBSTRUCTIONS UNLESS OTHERWISE INDICATED.
 - 4) THIS CALCULATION IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO SWANEY LIGHTING ASSOCIATES AND STANDARD ASSUMPTIONS OF THE SPACE AND/OR SITE.
 - 5) CONFORMANCE TO CODES AND OTHER LOCAL REQUIREMENTS AS DETERMINED BY THE AHJ ARE THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.
 - 6) THIS LAYOUT DRAWING MUST BE COORDINATED WITH THE SITE LOCATION FOR CORRECT FIXTURE ORIENTATION.
 - 7) DOCUMENTS PRINTED OR PLOTTED FROM ELECTRONIC FILES MAY APPEAR AT OTHER THAN THE DESIRED OR ASSUMED GRAPHIC SCALES. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THAT THE PRINTED OR PLOTTED-TO-SCALE DRAWING IS PRINTED TO SCALE.

Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
SITE	0.24	4.3	0.0	N.A.	N.A.

Luminaire Schedule (note fixture catalogue numbers are not complete)					
Type	Qty	Lum. Lumens	LLF	Lum. Watts	Description
S4	7	5703	0.900	57	URB-XXXX-21-24L-55-3K7-4W-U
S3	8	5744	0.900	57	URB-XXXX-21-24L-55-3K7-3-U

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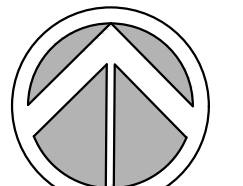
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 REVISION 1 05.27.21

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