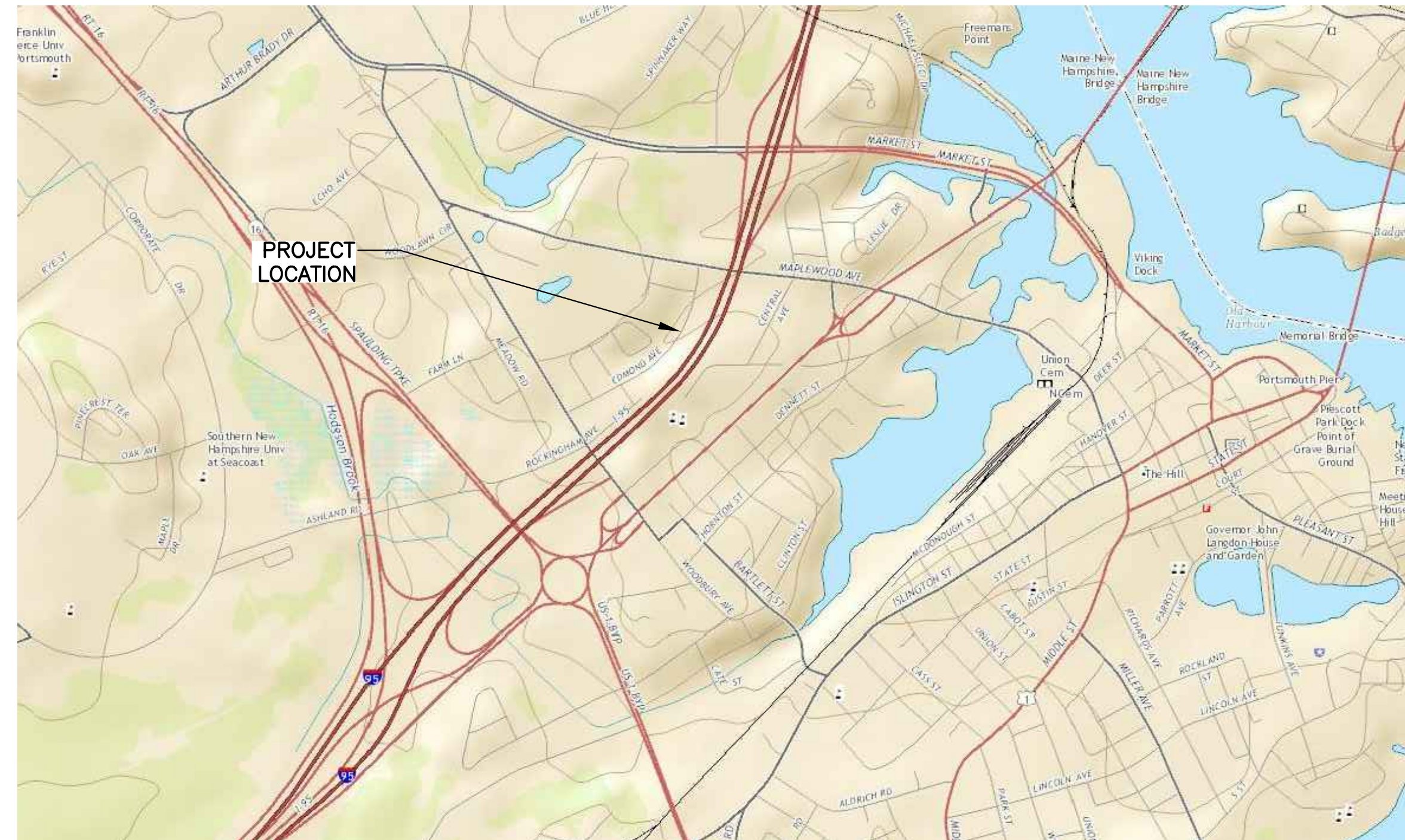


EDMOND AVENUE
Portsmouth, New Hampshire
CULVERT IMPROVEMENT PLANS
SPRING 2020

PREPARED FOR: DEPARTMENT OF PUBLIC WORKS
CITY OF PORTSMOUTH
680 PEVERLY HILL ROAD
PORTSMOUTH, NH 03801

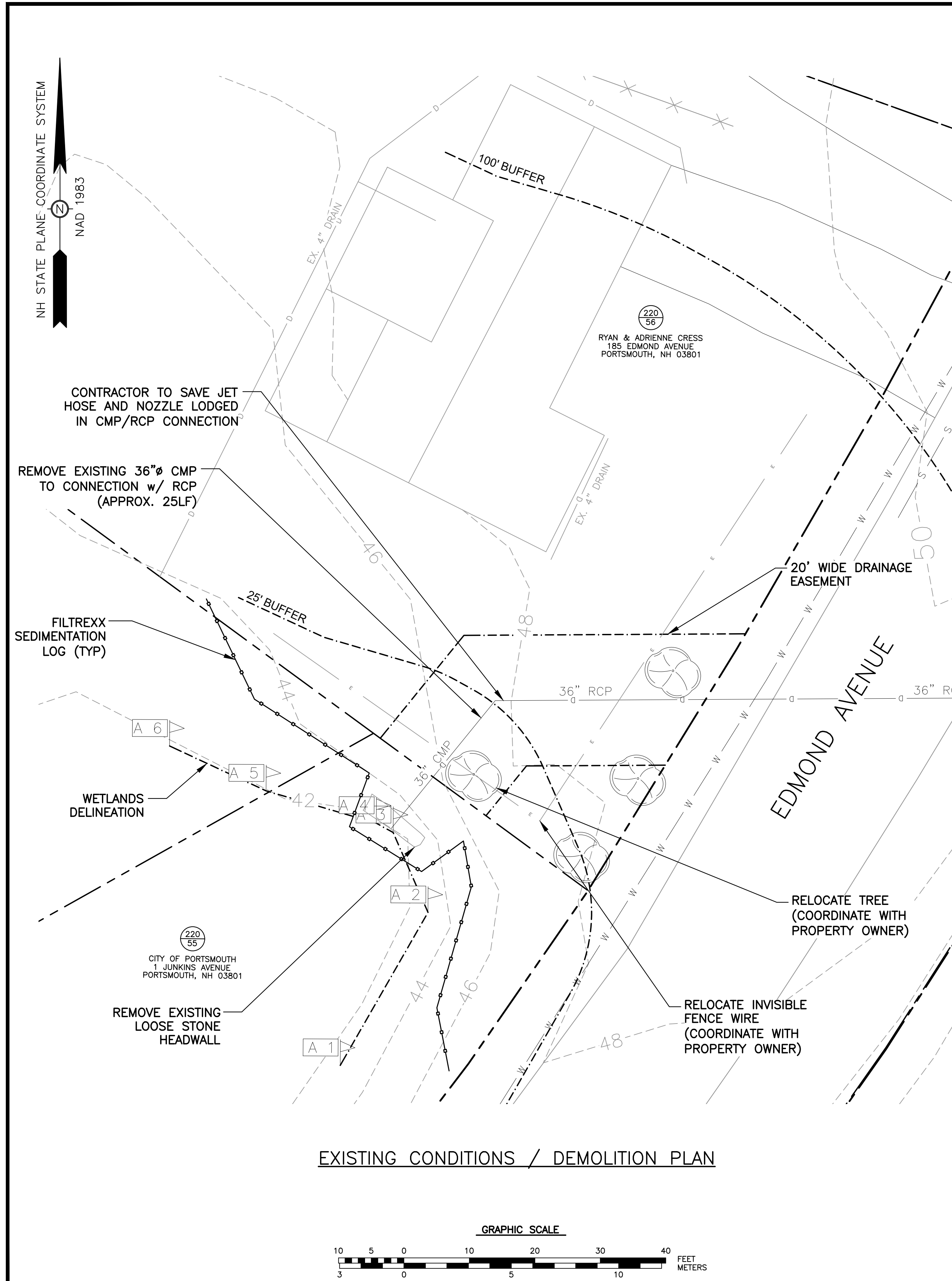
PREPARED BY: SEAPORT ENGINEERING, LLC
PORTSMOUTH, NH 03801
WWW.SEAPORTENG.COM
603-498-8449



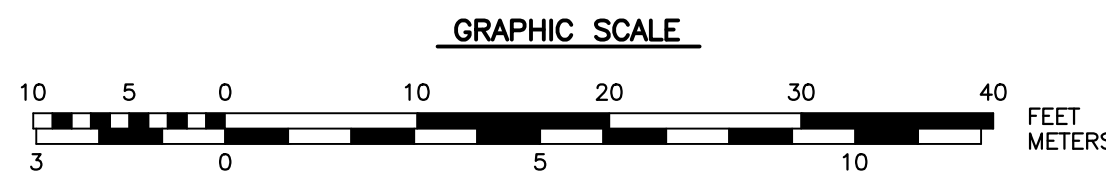
INDEX	SHEET NO.	LATEST REV.
185 EDMOND CULVERT - DEMOLITION PLAN	C-101	
185 EDMOND CULVERT - PROPOSED PLAN	C-102	
DETAIL SHEETS	C-103	
WETLANDS IMPACT PLAN	C-104	

ISSUED FOR CONSTRUCTION

3/6/2020



EXISTING CONDITIONS / DEMOLITION PLAN



DEMOLITION NOTES:

1. LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT GUARANTEED. CONTRACTOR SHALL LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR AND/OR RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
2. MATERIAL TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED. DISPOSAL SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.
3. ANY DAMAGE BY THE CONTRACTOR DURING DEMOLITION AND/OR CONSTRUCTION SHALL BE REPAIRS OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, ARRANGE ALL INSPECTIONS, AND SUBMIT CERTIFICATES OF ACCEPTANCE TO THE OWNER PRIOR TO COMPLETION OF THE PROJECT.
5. CONTRACTOR SHALL REMOVE TREES AND BRUSH AS INDICATED AND AS REQUIRED FOR COMPLETION OF THE WORK. ALL STUBS SHALL BE REMOVED AND SURFACES GRUBBED WITHIN THE LIMITS OF WORK.
6. ALL WORK WITHIN THE PUBLIC RIGHT OF WAY SHALL BE COORDINATED WITH THE CITY OF PORTSMOUTH.
7. CONTRACTOR SHALL PROTECT ALL FIELD STONE WALLS, FENCES, MAILBOXES, STRUCTURES, ETC. THROUGHOUT THE COMPLETION OF THE WORK.
8. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION WORK. THIS INCLUDES SILT FENCE / SILT SOCK AND INLET PROTECTION BARRIERS.
9. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE PADS, PAVEMENT, PIPES AND HEADWALLS WITHIN THE LIMITS OF CONSTRUCTION.
10. CONTRACTOR SHALL NOTIFY DIG-SAFE 72 HOURS PRIOR TO ANY WORK STARTING. CONTRACTOR REQUIRED TO MAINTAIN AN ACTIVE DIG-SAFE PERMIT THROUGHOUT THE DURATION OF CONSTRUCTION.

LEGEND:

EXISTING	PROPOSED	
---	---	PROPERTY LINE
---	---	RIGHT-OF-WAY
---	---	BUILDING
---	---	EDGE OF PAVEMENT
---	---	SIGN
---	---	MAILBOX
---	---	SINGLE WHITE LINE
---	---	DOUBLE YELLOW CENTERLINE
---	---	FENCE
---	---	SHRUB
---	---	TREE
---	---	TEMPORARY BENCHMARK
---	---	1' CONTOUR
---	---	WETLANDS
---	---	WETLANDS BOUNDARY
---	---	DRAINAGE
---	---	WATER
---	---	GRAVITY SEWER
---	---	LOW PRESSURE SEWER MAIN
---	---	UNDERGROUND TELE.
---	---	OVERHEAD WIRES
---	---	GAS
---	---	FIRE HYDRANT
---	---	UTILITY POLE
---	---	UTILITY POLE w/ LIGHT
---	---	CATCHBASIN
---	---	MANHOLE
---	---	WATER SHUT OFF
---	---	WATER VALVE
---	---	EROSION CONTROL
---	---	SAWCUT / TRENCH LIMITS

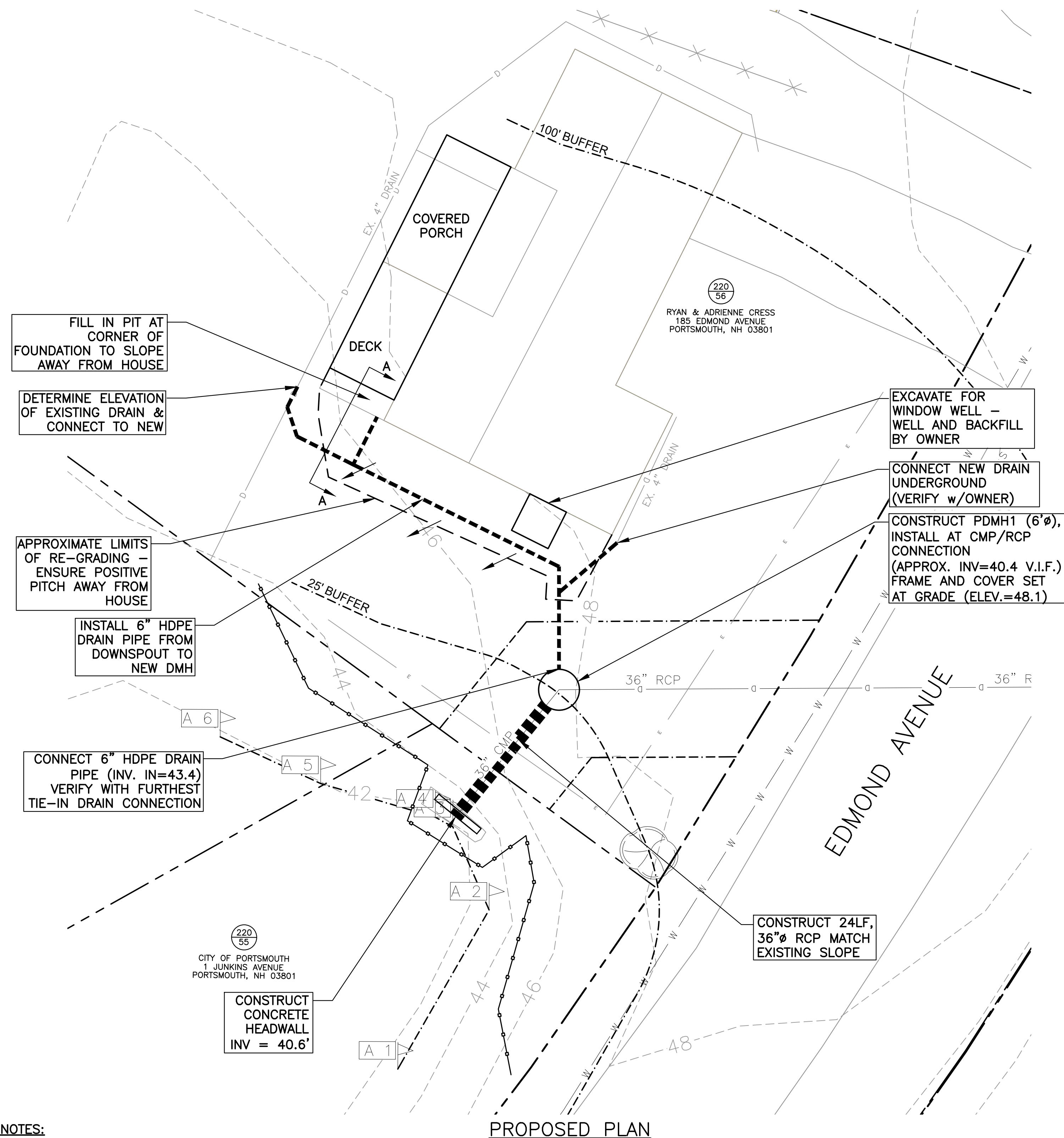
NO.	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	3/6/20
	MRB	APP'D

DATE: MAY 22, 2017	SCALE: 1:10	PROJECT NO.: C-01-007
FOR: Edmond Avenue Utility & Roadway Improvements Portsmouth, NH		
MARC R. BATCHELDER, PE ENGINEER OF RECORD		

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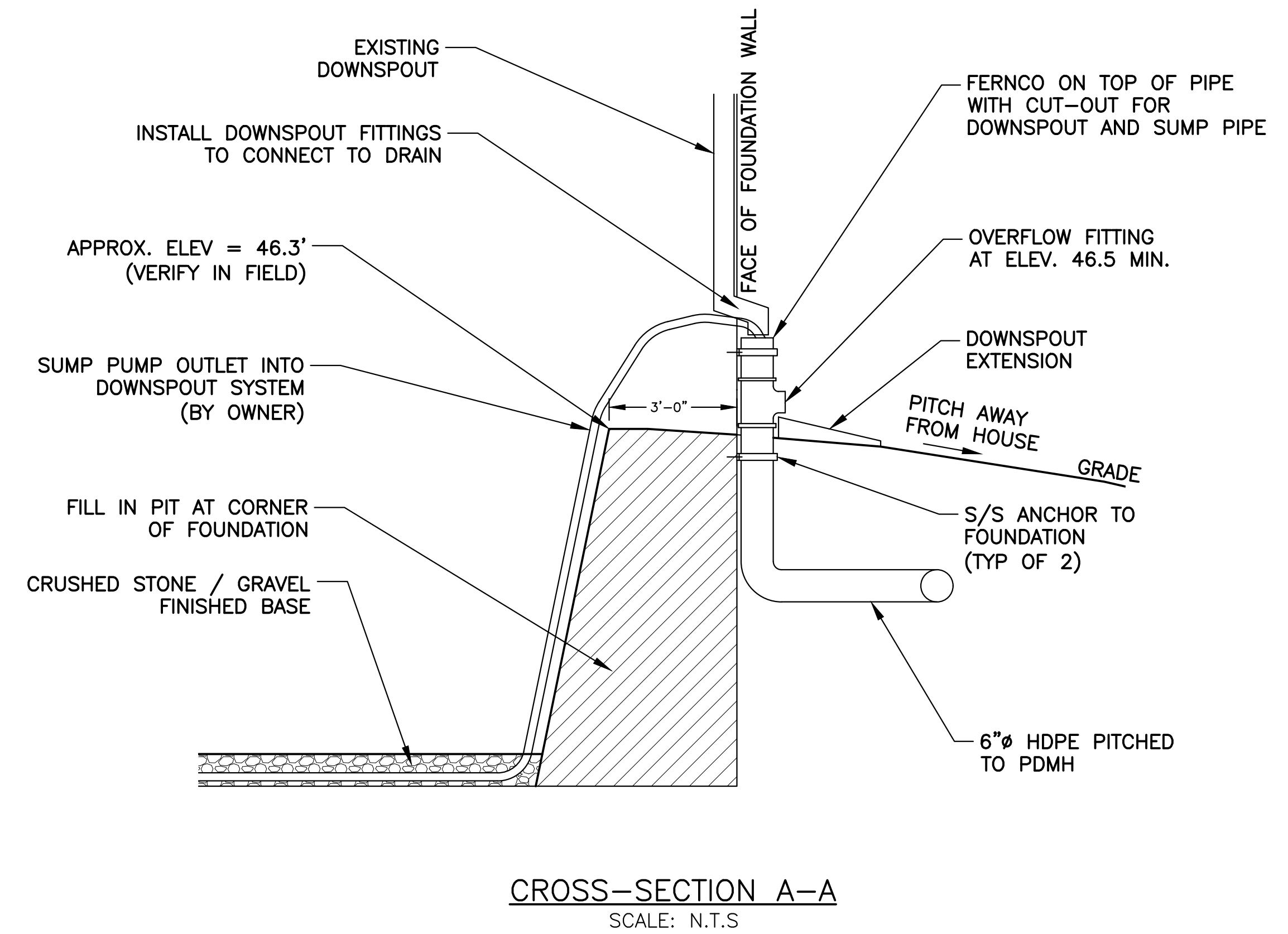
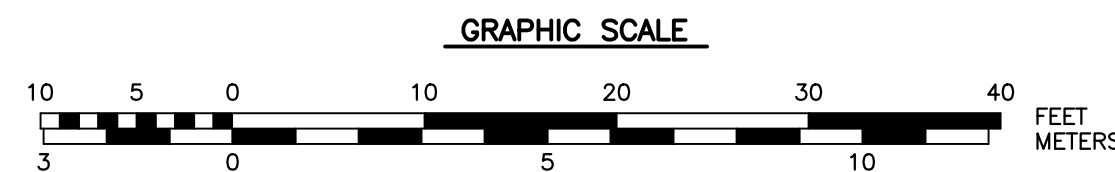
TITLE: 185 EDMOND CULVERT DEMOLITION PLAN
C-101

NH STATE PLANE COORDINATE SYSTEM
NAD 1983



SITE NOTES:

1. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, ARRANGE ALL INSPECTIONS, AND SUBMIT CERTIFICATES OF ACCEPTANCE TO THE OWNER PRIOR TO COMPLETION OF THE PROJECT.
2. CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, FRAMES, & COVERS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF THE UTILITY COMPLETE AND OPERATIONAL.
3. CONTRACTOR SHALL AS-BUILT PROPOSED STORM WATER DRAINAGE SYSTEM, TO INCLUDE ELEVATIONS OF RIM AND ALL INVERTS.
4. LOAM AND SEED ALL DISTURBED AREA. PLACE WETLANDS SEEDING MIX ON SLOPED DISTURBED AREAS AND STANDARD SEEDING MIX ON ALL OTHER DISTURBED AREAS.



CROSS-SECTION A-A
SCALE: N.T.S.

UTILITY NOTES:

1. CONTRACTOR SHALL IDENTIFY AND RECORD SWING TIES TO ALL EXISTING UTILITY STRUCTURES, INCLUDING, BUT NOT LIMITED TO WATER SHUT OFF VALVES, MANHOLES, FIRE HYDRANTS.
2. CONTRACTOR SHALL COORDINATE UTILITY WORK WITH THE APPROPRIATE UTILITY COMPANY.
ELECTRIC - EVERSOURCE
TELEPHONE - FAIRPOINT
WATER/SEWER - CITY OF PORTSMOUTH
3. CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, CATCHBASINS, FRAMES, GRATES & COVERS, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF THE UTILITY COMPLETE AND OPERATIONAL.
4. CONTRACTOR SHALL AS-BUILT PROPOSED STORM WATER DRAINAGE SYSTEM, TO INCLUDE ELEVATIONS OF RIM AND ALL INVERTS.

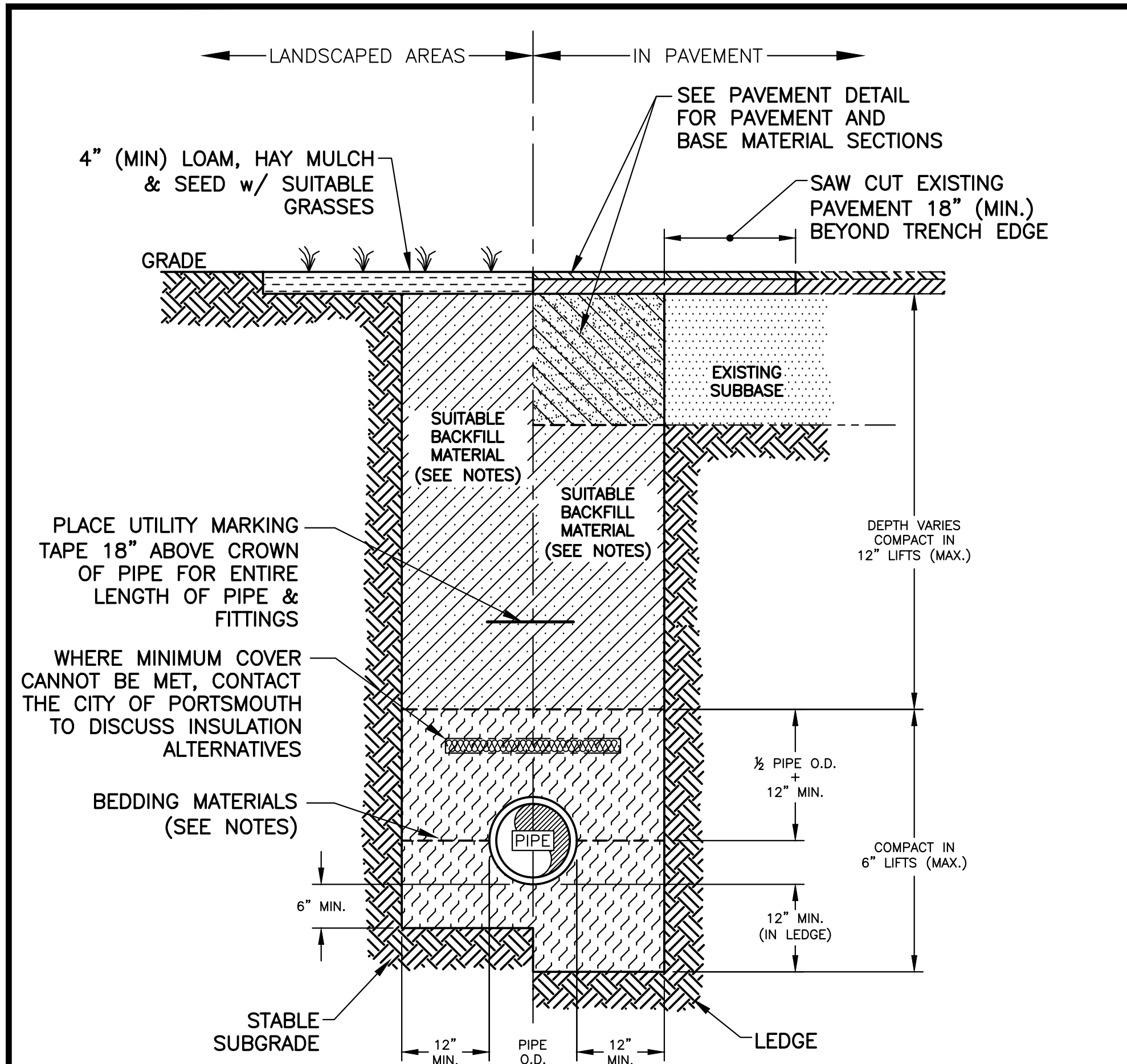
NO.	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	3/6/20

DATE: MAY 22, 2017
SCALE: 1:10
PROJECT NO.: C-102-007
MARC R. BATCHELDER, PE
ENGINEER OF RECORD

FOR: Edmond Avenue
Utility & Roadway
Improvements
Portsmouth, NH

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Engineering, LLC
PORTSMOUTH, NH
(603) 498-8449
www.seaporteng.com

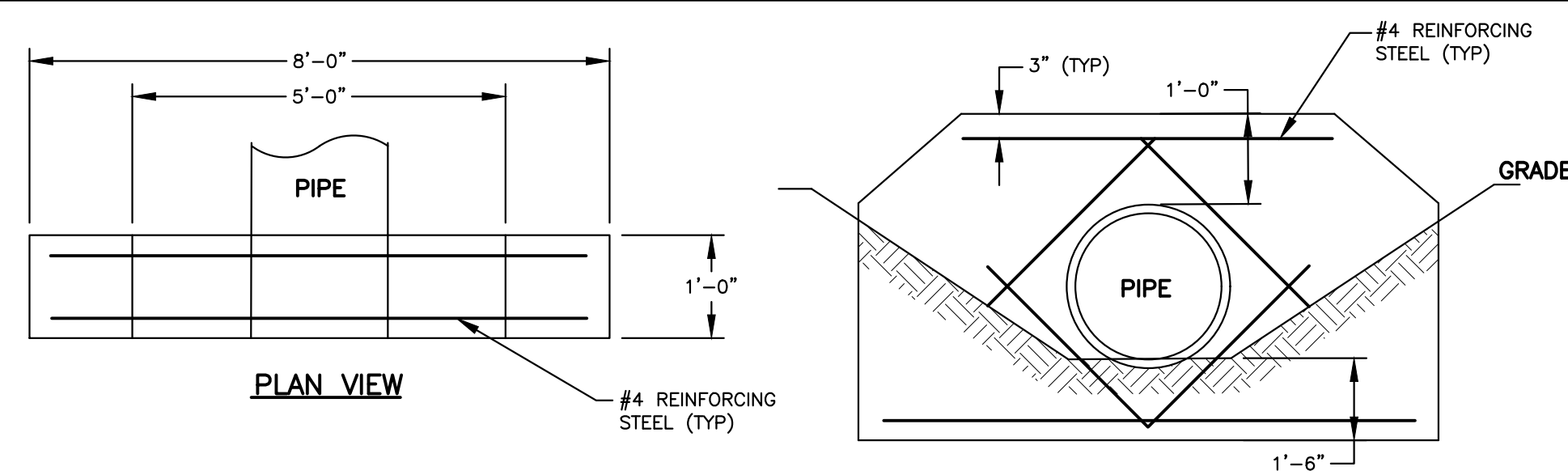
TITLE: 185 EDMOND CULVERT
PROPOSED PLAN



NOTES:

1. DRAIN PIPE SHALL HAVE CRUSHED STONE (NHDOT 304.4) BEDDING FOR FULL WIDTH. RCP PIPE SHALL HAVE CRUSHED STONE TO SPRINGLINE. 6" HDPE DRAIN PIPE SHALL HAVE CRUSHED STONE TO 3" ABOVE PIPE.
2. BEDDING MATERIAL FOR ALL PIPE IS SUBSIDIARY TO THE PIPE PAY ITEM.
3. SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIALS DEEMED TO BE UNACCEPTABLE BY THE ENGINEER.
4. DEPTH OF COVER SHALL BE:
 WATER - 5' MIN. & 7' MAX. (<5' REQ. RIGID INS.)
 SEWER - 6' MIN. (<5' REQ. RIGID INS.)
 DRAIN - AS INDICATED ON PLANS (<3' REQ. RIGID INS.)

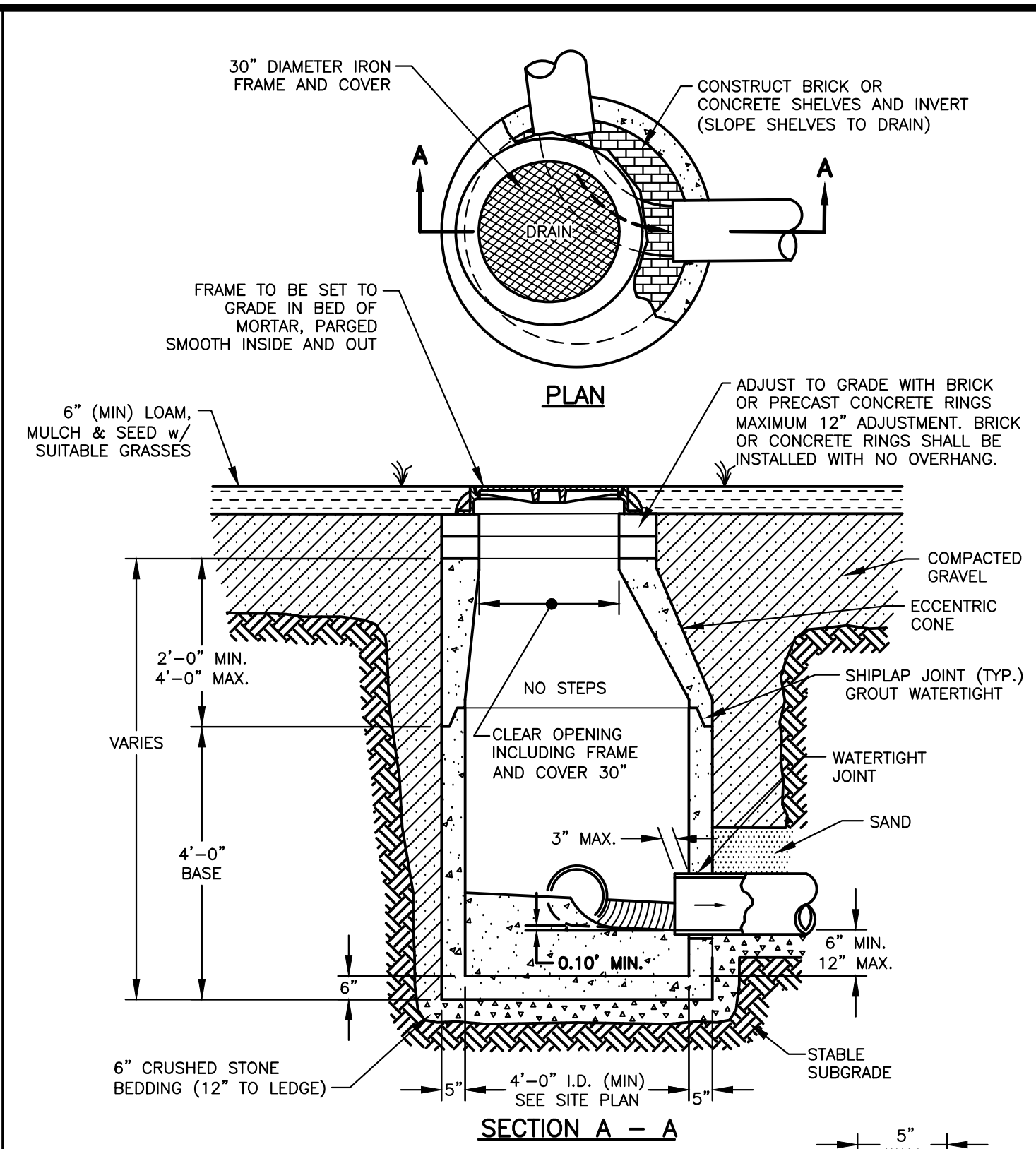
UTILITY TRENCH
SCALE: N.T.S.



NOTES:

1. CONCRETE SHALL BE 4,000 P.S.I. AFTER 28 DAYS.
2. CONTRACTOR SHALL PROVIDE SHEET PLATES TO ACT AS COTTER DAMS DURING INSTALLATION OF PIPE AND CONSTRUCTION OF HEADWALL.
3. CONTRACTOR RESPONSIBLE FOR ALL DE-WATERING NECESSARY.
4. COORDINATE WITH DPW TO INSPECT BASE FOR HEADWALL. AN ADDITIONAL 12" OF CRUSHED STONE MAY BE REQUIRED FOR BASE.

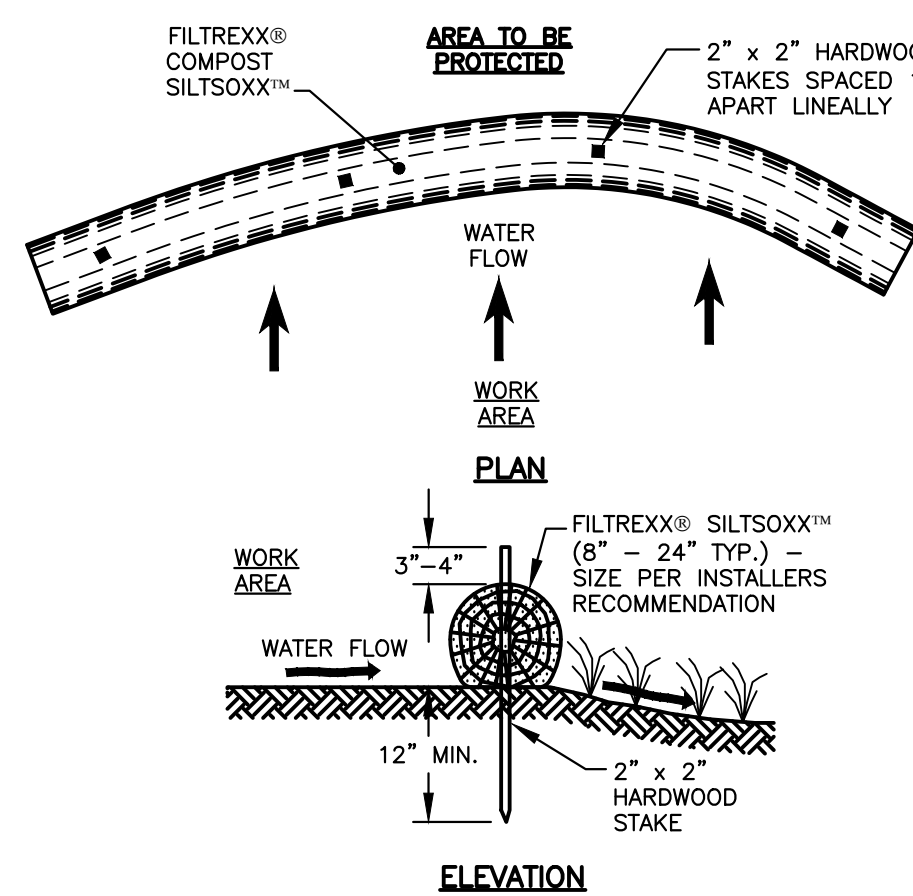
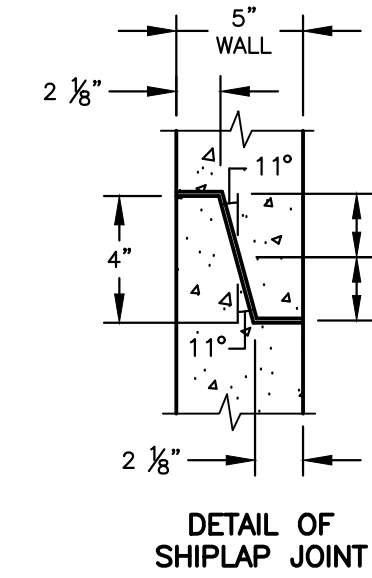
CONCRETE HEADWALL
SCALE: N.T.S.



NOTES:

1. CONCRETE SHALL BE 4,000 P.S.I. AFTER 28 DAYS.
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. EACH CASTING TO HAVE LIFTING HOLES CAST IN.

DRAIN MANHOLE
SCALE: N.T.S.



NOTES:

1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILTREXX SYSTEM SHALL BE INSTALLED BY A CERTIFIED FILTREXX INSTALLER.
3. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTRATION SYSTEM IN A FUNCTIONAL CONDITION AT ALL TIMES. IT WILL BE ROUTINELY INSPECTED AND REPAIRED WHEN REQUIRED.
4. SILTSOXX DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE ADDITIONAL PLACEMENTS.
5. THE COMPOST FILTER MATERIAL WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

SEDIMENTATION FENCE / LOG
SCALE: N.T.S.

NO.	DESCRIPTION	DATE
0	ISSUED FOR CONSTRUCTION	3/6/20
	MRB	APP'D

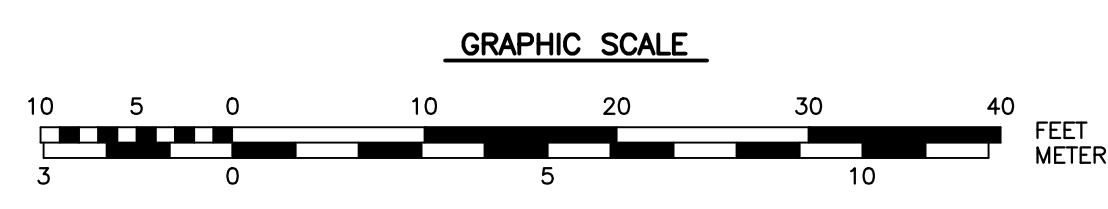
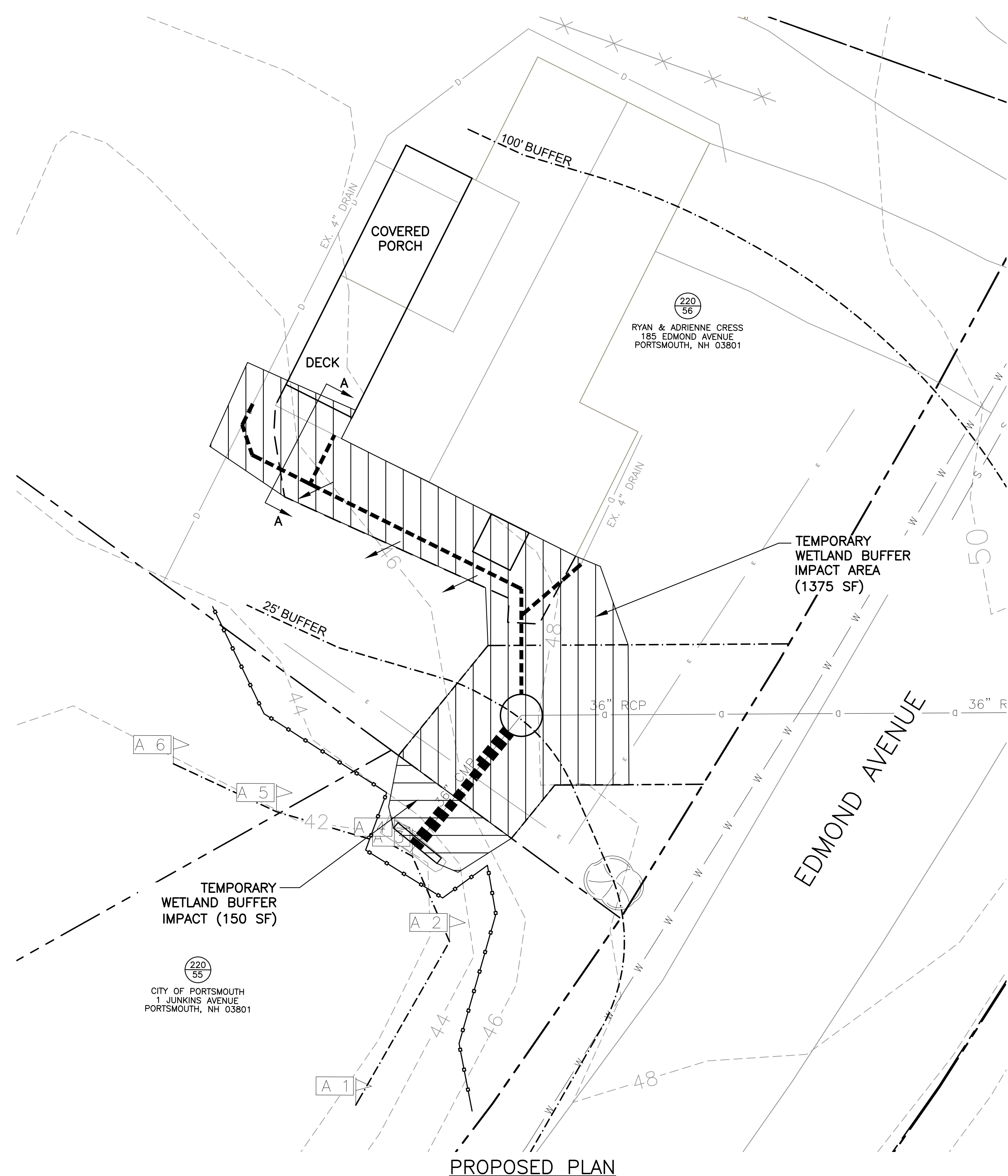
DATE: MAY 22, 2017
 SCALE: VARIES
 PROJECT NO.: C&P-007
 MARC R. BATCHELDER, PE
 ENGINEER OF RECORD

FOR: Edmond Avenue
 Utility & Roadway
 Improvements
 Portsmouth, NH

Seaport
 Engineering, LLC
 PORTSMOUTH, NH
 (603) 498-8449
 www.seaporteng.com

TITLE: **DETAIL SHEET**

NH STATE PLANE COORDINATE SYSTEM
NAD 1983



- WETLANDS NOTES:**
- MECHANICAL EQUIPMENT SHALL SIT ON TOP OF BANK AND GENERALLY NOT WITHIN 10' OF EDGE OF WETLANDS.
 - SCOPE OF WORK INCLUDES:
 - INSTALL EROSION CONTROL DEVICES.
 - SET SHEET PILE IN FROM OF EXISTING HEADWALL AND PIPE.
 - REMOVE HEADWALL AND EXISTING CMP.
 - REMOVE PORTION OF RCP TO ALLOW FOR INSTALLATION OF DRAIN MANHOLE.
 - PLACE APPROPRIATE BEDDING FOR DRAIN MANHOLE AND NEW RCP PIPE.
 - INSTALL DRAIN MANHOLE AT END OF RCP.
 - INSTALL NEW RCP PIPE AND CONCRETE HEADWALL.
 - INSTALL NEW 6" HDPE DRAIN PIPE AROUND HOUSE.
 - BACKFILL AROUND PIPE AND STRUCTURES. GRADE AS NECESSARY.
 - PLACE 6" LOAM TO GRADE, SEED AND HAY DISTURBED AREAS.
 - REMOVE EROSION CONTROL DEVICES ONCE SLOPE HAS BEEN STABILIZED.

DATE: MAY 22, 2017		SCALE: 1:10		PROJECT NO.: GP-007	
FOR: Edmond Avenue Utility & Roadway Improvements Portsmouth, NH		MARC R. BATCHELDER, PE		ENGINEER OF RECORD	
TITLE: 185 EDMOND CULVERT WETLAND IMPACT PLAN		Seaport Engineering, LLC		PORTSMOUTH, NH (603) 498-8449 www.seaporteng.com	
C-104		NO.		REVISIONS	
				MRB	3/6/20
				APP'D	DATE