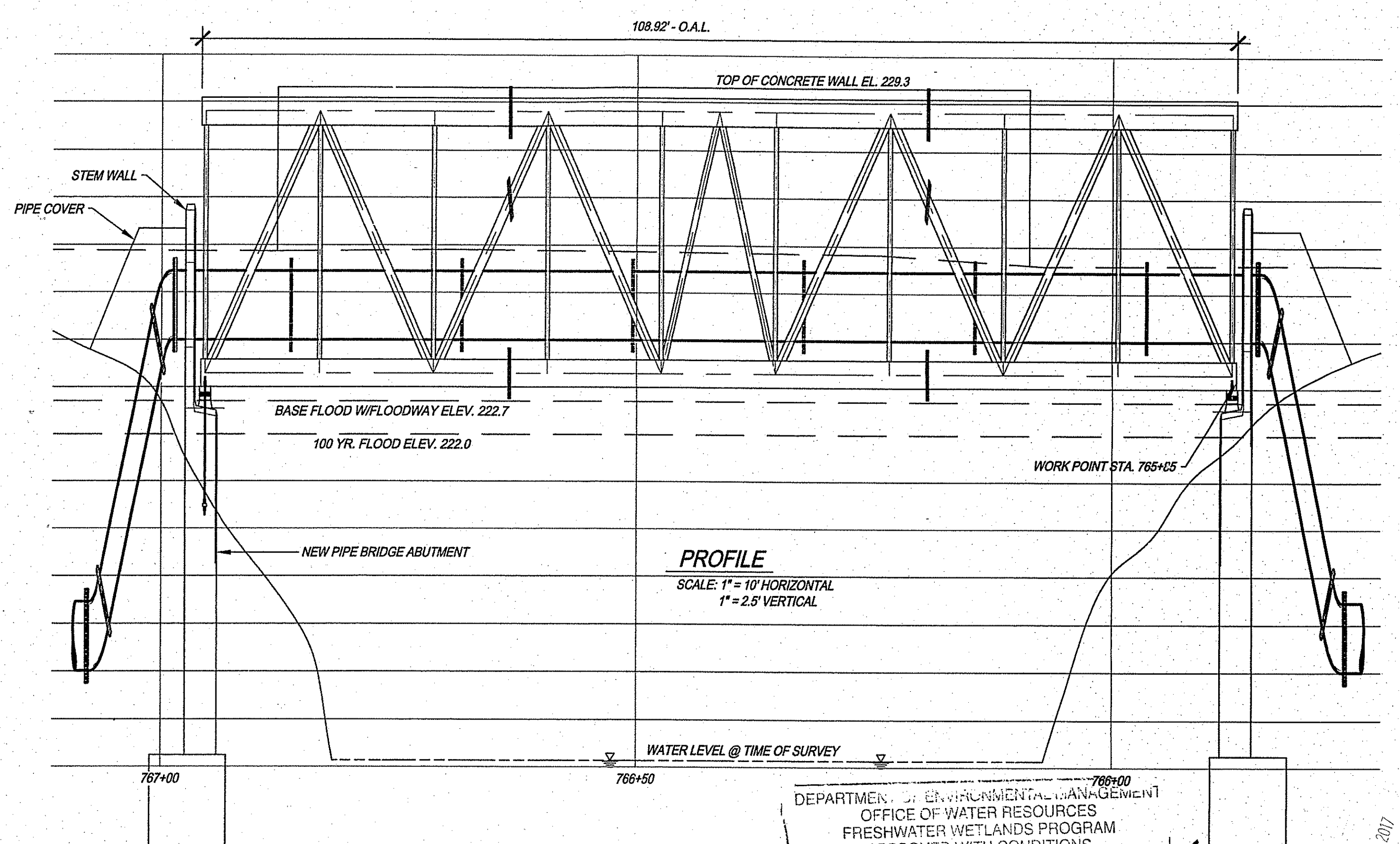
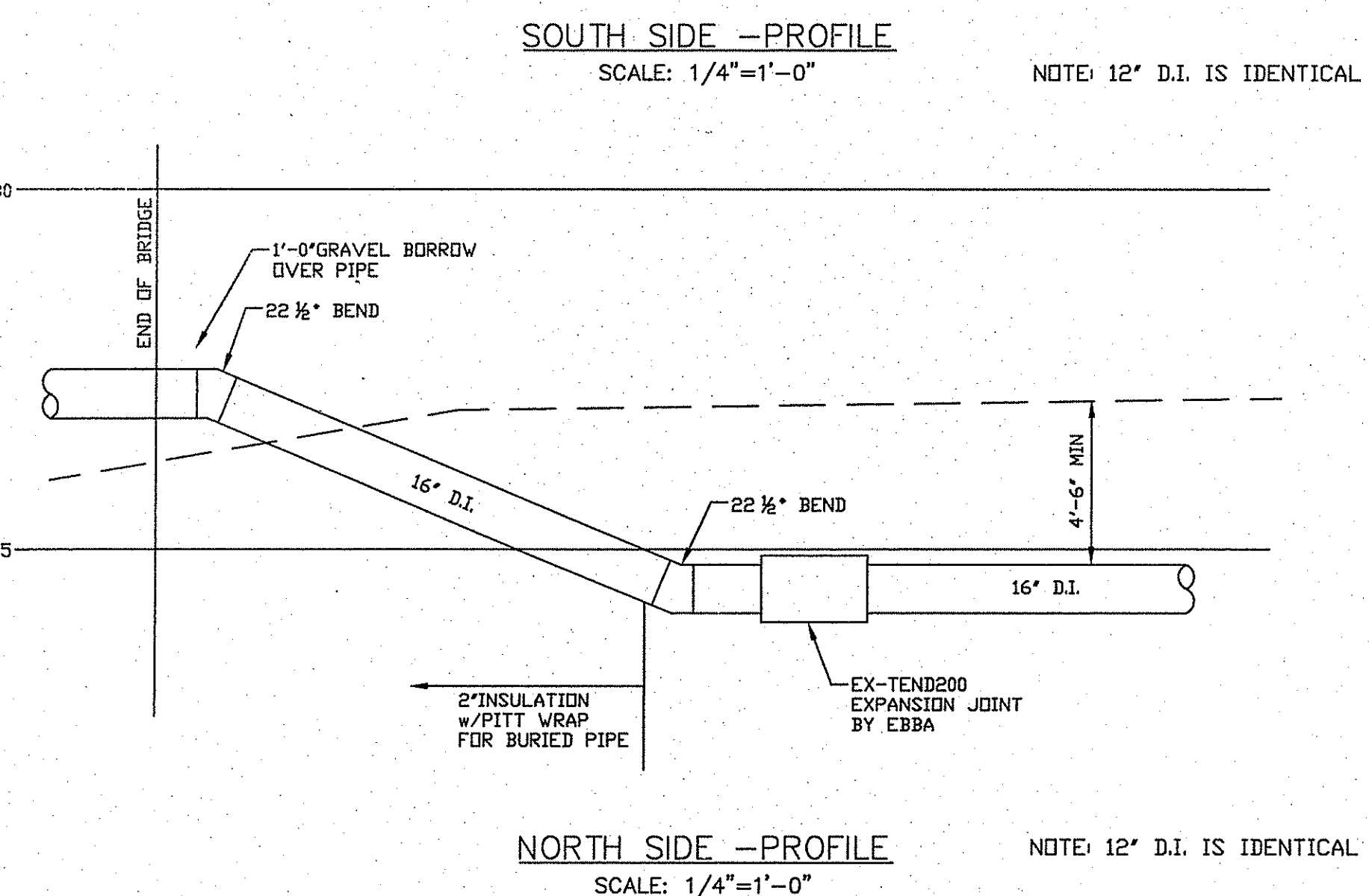
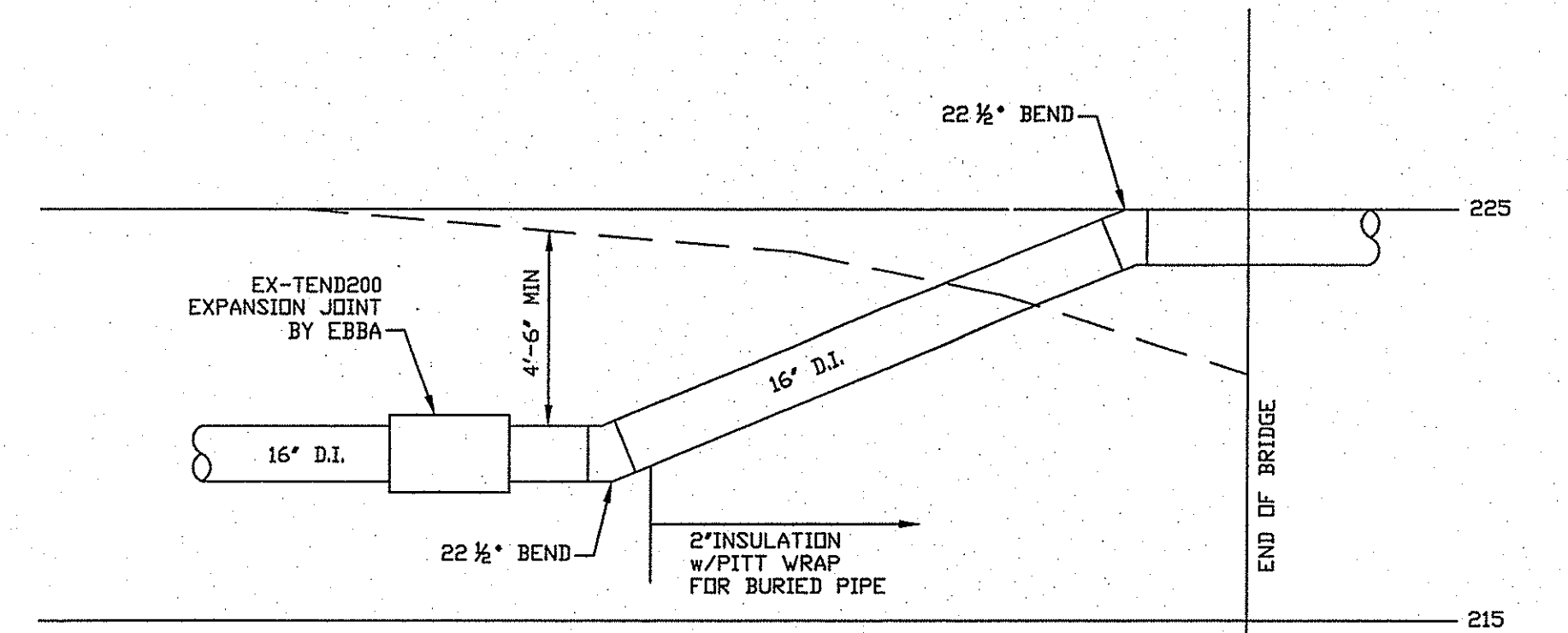
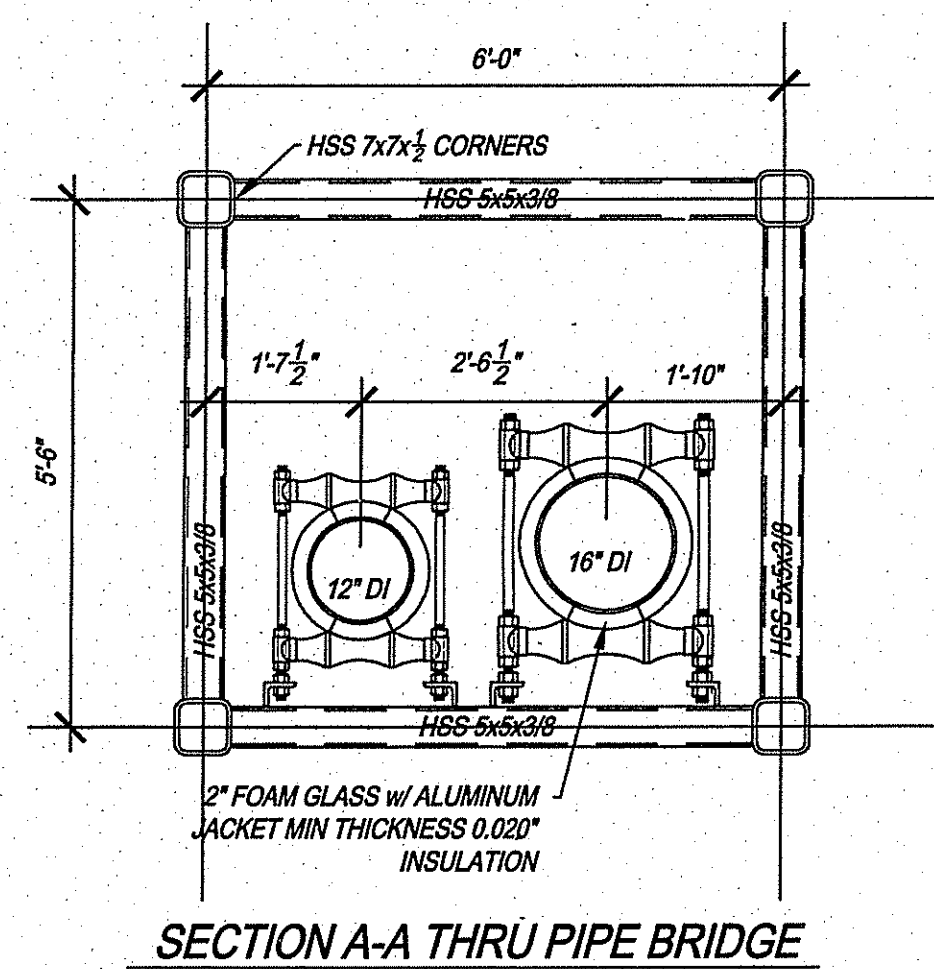


- NOTES:**
1. INSTALL CAP AND THRUST BLOCK AFTER NEW PIPE HAS BEEN TESTED AND DISINFECTED REMOVE CAP AND T.B. AND COMPLETE CONNECTION WITH PIPING, FITTINGS, AND SOLID SLEEVE DISINFECT PER K.W.C.A. REQUIREMENTS.
 2. NATIONAL GRID WILL DE-ENERGIZE THE POWER BETWEEN POLE 4-40 AND POLE 5-50.
 3. REMOVAL OF ROCK ON THE SOUTH SIDE SHALL BE BY A HYDRAULIC SPLITTING AS REQUIRED.
 4. ON THE NORTH AND SOUTH SIDE WITHIN THE DISTURBED AREAS THE CONTRACTOR SHALL INSTALL CLASS B RIP-RAP.
 5. IF IT IS REQUIRED TO CLOSE SANDY BOTTOM RD TO SET THE BRIDGE THE WORK SHALL BE DONE BETWEEN 9PM AND 5AM.
 6. THE EXISTING SANDY BOTTOM RD BRIDGE HAS A NO BLANKET PERMIT VEHICLES ALLOWED.
 7. THE STATE HIGHWAY LINE SHALL BE LOCATED IN THE FIELD BY A R.I. REGISTERED LAND SURVEYOR.
 8. ALL PIPE AND FITTING JOINTS TO BE MECHANICAL JOINT WITH RESTRAINED JOINTS FROM STA 788+50 TO STA 765+00 INCLUDING PIPE BRIDGE.



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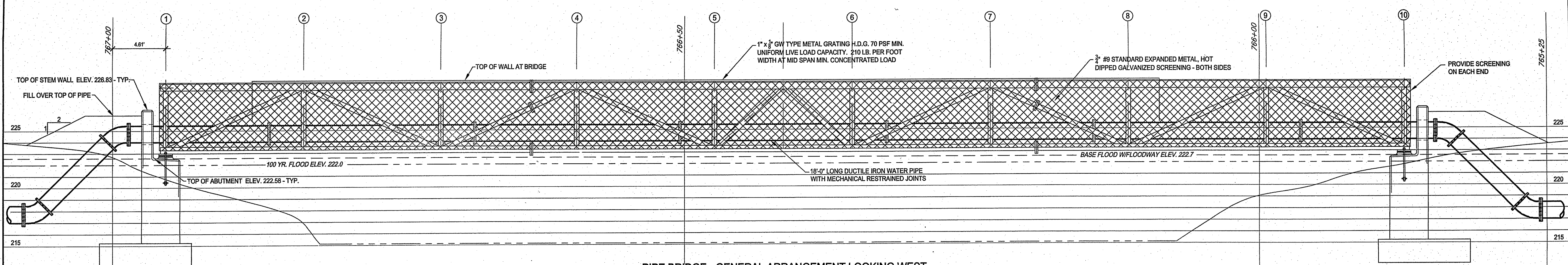
KENT COUNTY WATER AUTHORITY
 NORTH AND SOUTH 500 FEET GRADIENT TRANSMISSION AND INFRASTRUCTURE REPLACEMENT

PLAN
 SANDY BOTTOM RD PIPE BRIDGE
 COVENTRY, RI

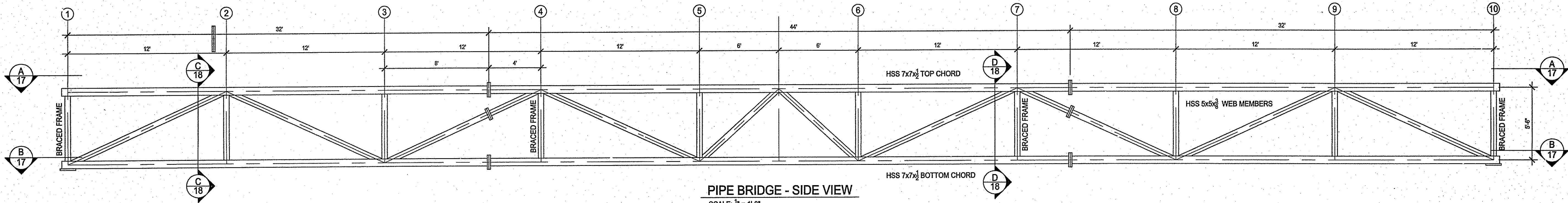
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED AUG 14, 2017 FILE # 17-015
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SHEET NO. 1

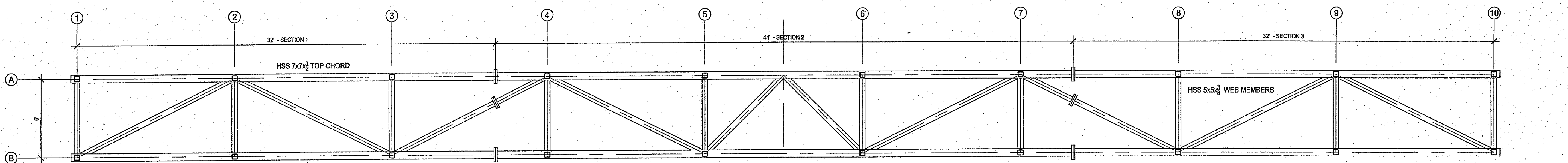
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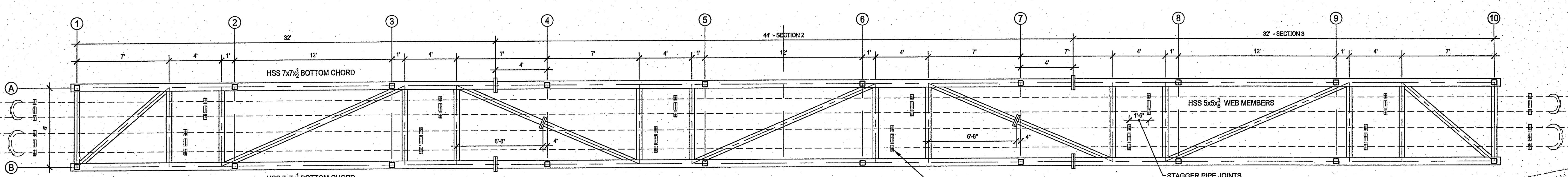
PIPE BRIDGE - GENERAL ARRANGEMENT LOOKING WEST
SCALE: 1/4" = 1'-0"



PIPE BRIDGE - SIDE VIEW
SCALE: 1/4" = 1'-0"



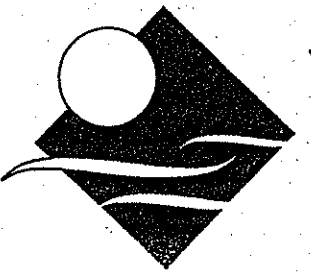
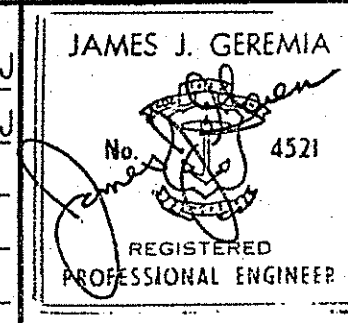
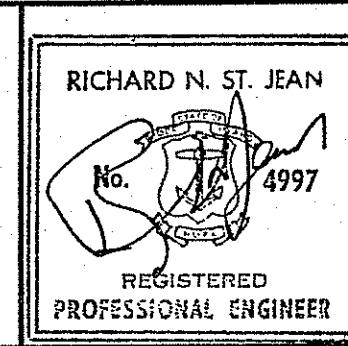
PLAN VIEW A-A - TOP CHORD
SCALE: 1/4" = 1'-0"



PLAN VIEW B-B - BOTTOM CHORD
SCALE: 1/4" = 1'-0"

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KENT COUNTY WATER AUTHORITY
NORTH AND SOUTH 500 FOOT GRADIENT
TRANSMISSION INTERCONNECTION AND
INFRASTRUCTURE REPLACEMENTS

PIPE BRIDGE
SANDY BOTTOM RD. PIPE BRIDGE
COVENTRY, RI

SHEET NO.
2

APPROXIMATE LIFTING WEIGHTS (NO PIPES)
END SECTIONS: 10,900 LBS
MIDDLE SECTION: 15,000 LBS
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED AUG 4 2017 FILE # R-015
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JUL 14 2017

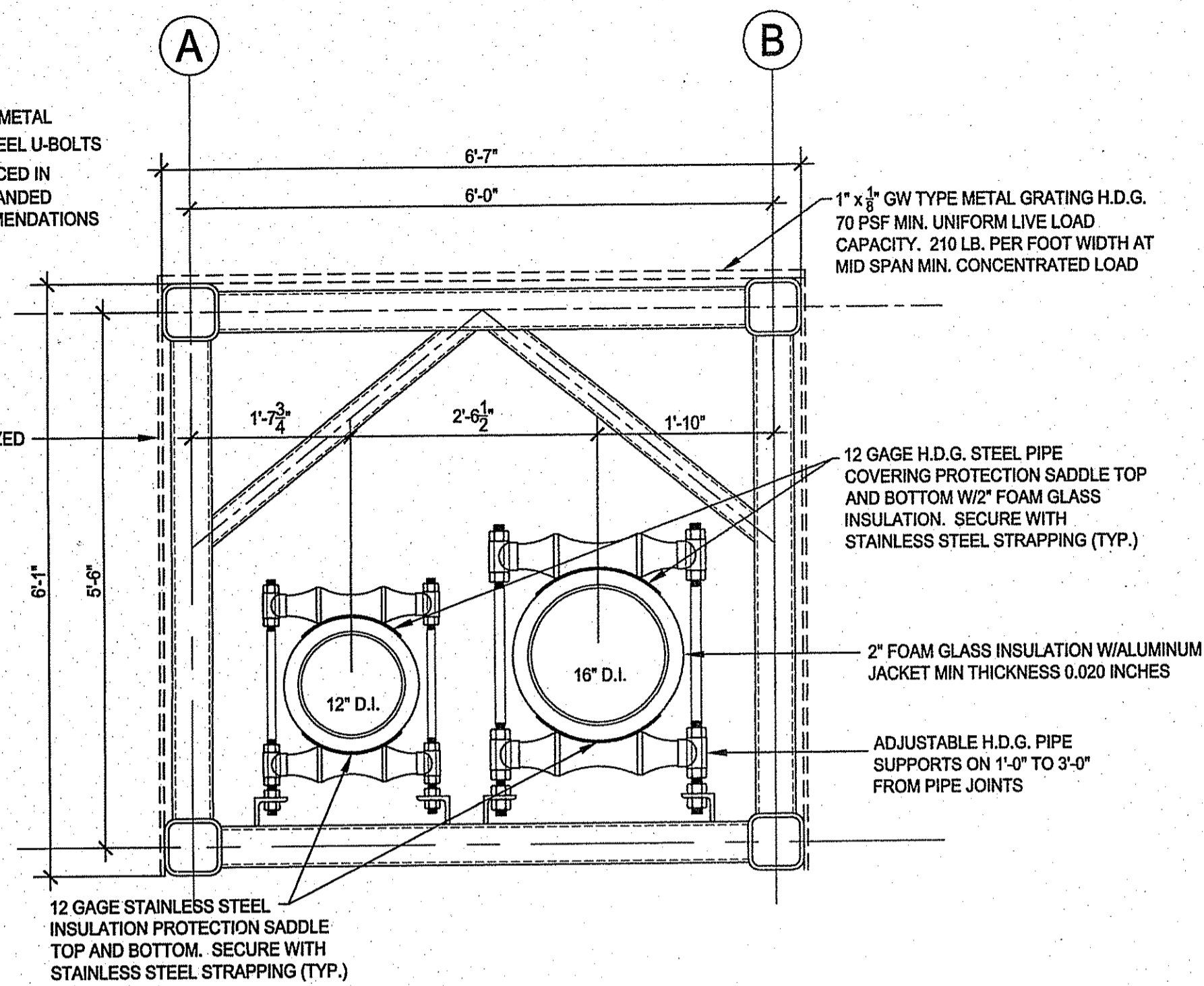
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NO.: BY: DATE: REMARKS: DATE PRINTED: 7/12/17
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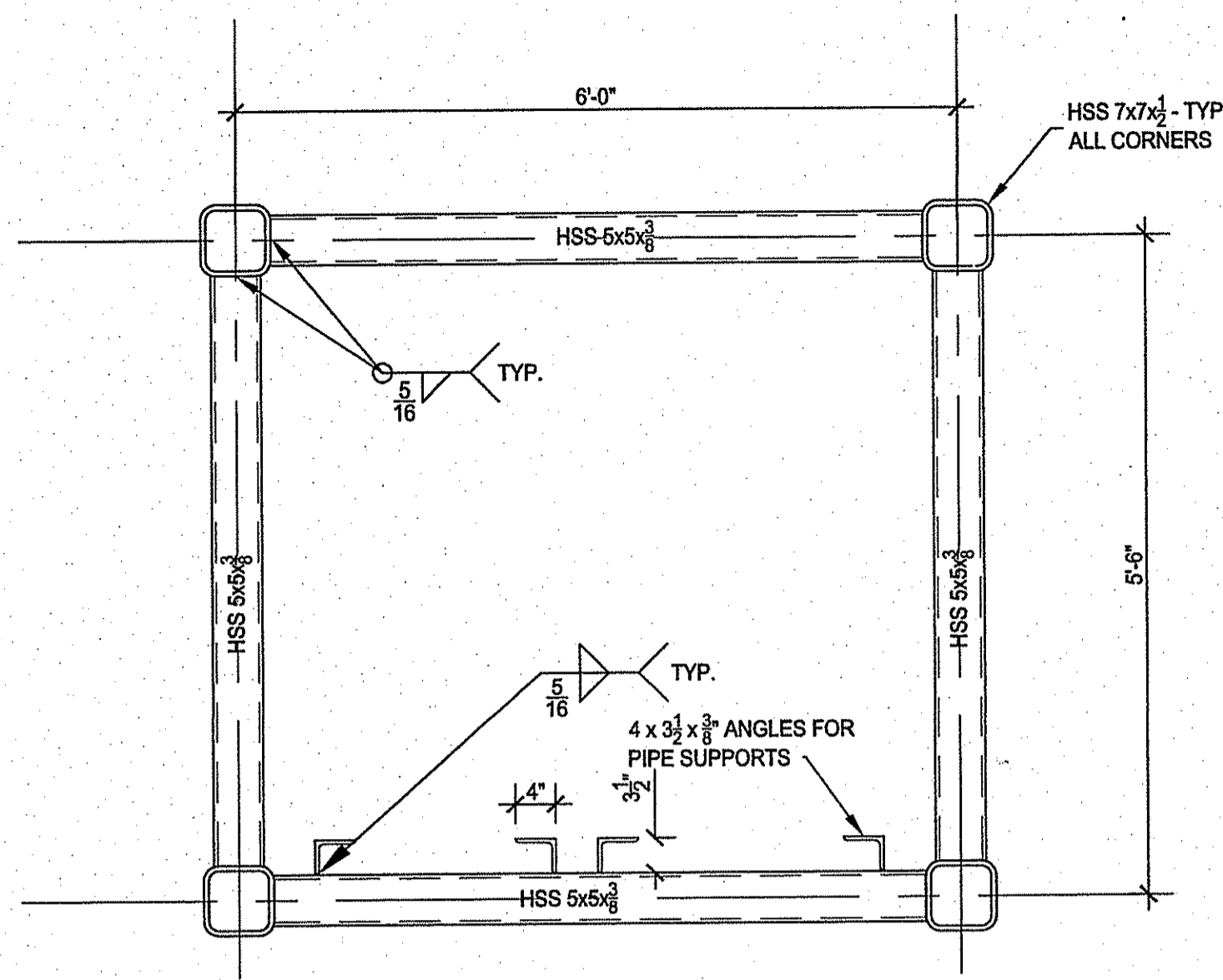
DESIGNED BY: RSTJ
DRAWN BY: RSTJ
CHECKED BY:
SCALE: 1/4" = 1'-0"
DATE: MARCH 2017

ATTACH GRATING AND EXPANDED METAL SCREENING WITH $\frac{1}{2}$ " STAINLESS STEEL U-BOLTS AROUND HSS 7x7 $\frac{1}{2}$ " MEMBERS SPACED IN ACCORDANCE WITH GRATING/EXPANDED METAL MANUFACTURER'S RECOMMENDATIONS

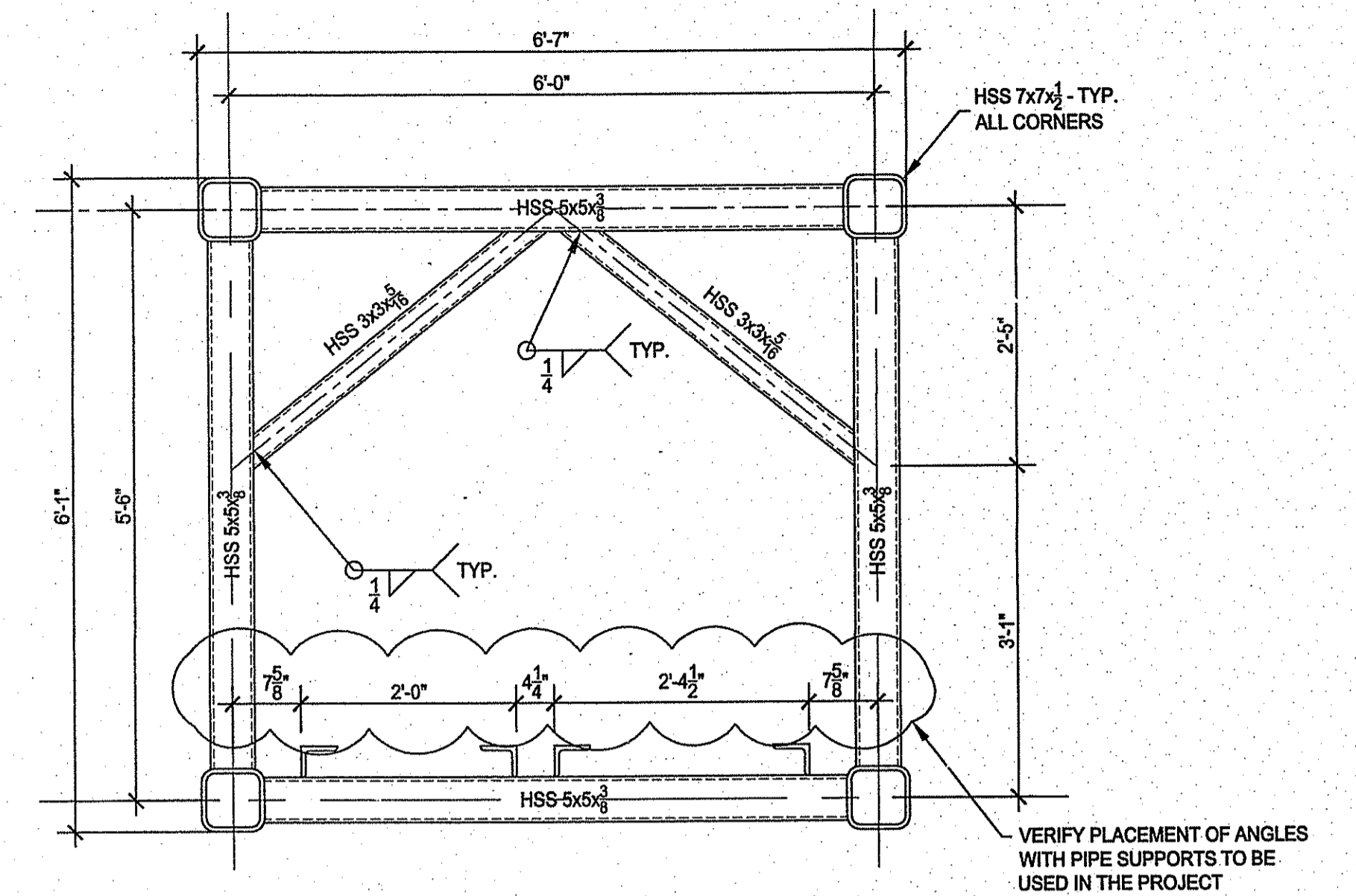
$\frac{3}{4}$ " #9 STANDARD EXPANDED METAL, HOT DIPPED GALVANIZED SCREENING - BOTH SIDES



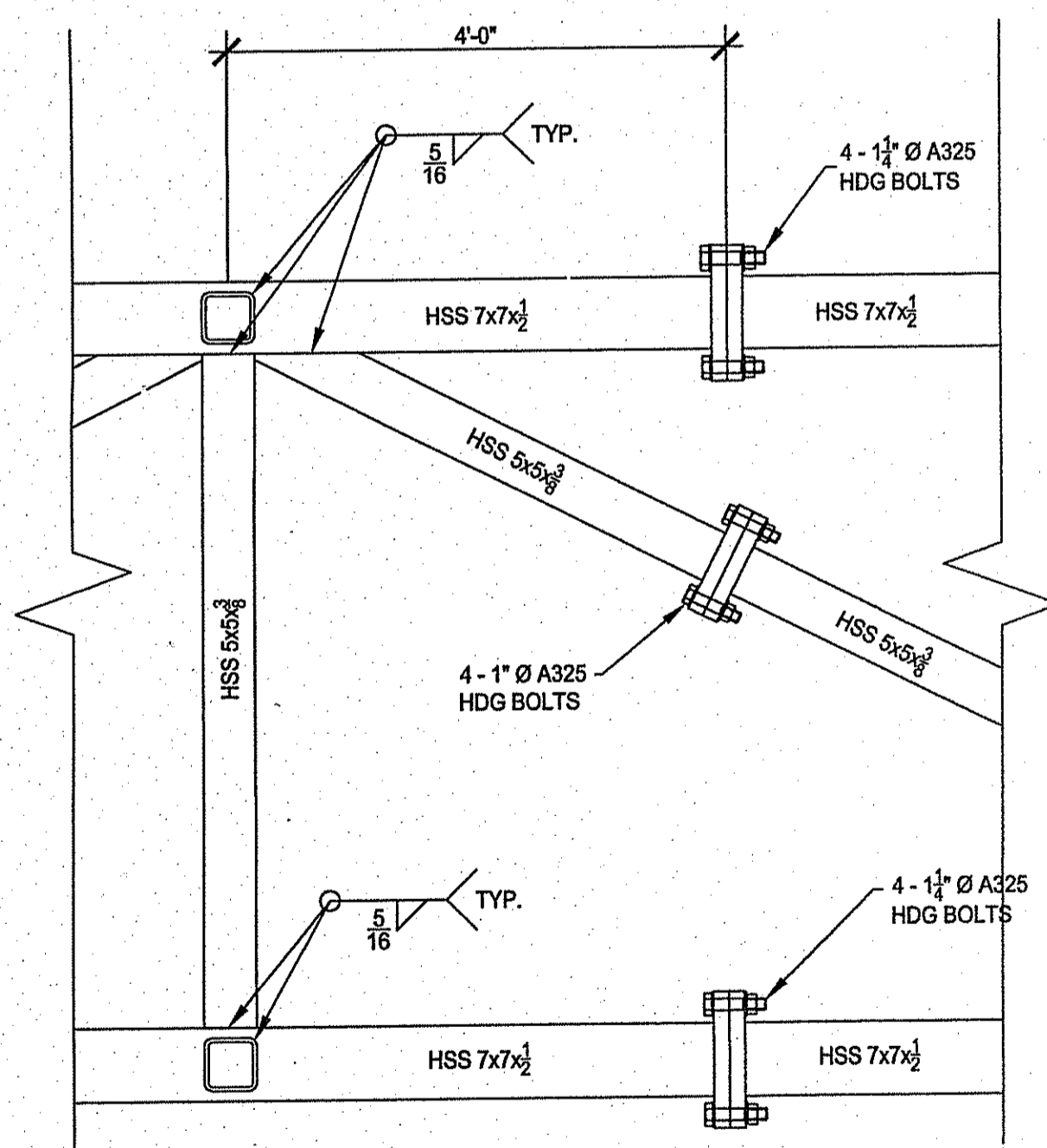
CROSS SECTION BENT 1 - GENERAL ARRANGEMENT @ END
SCALE: $\frac{3}{4}$ " = 1'-0"



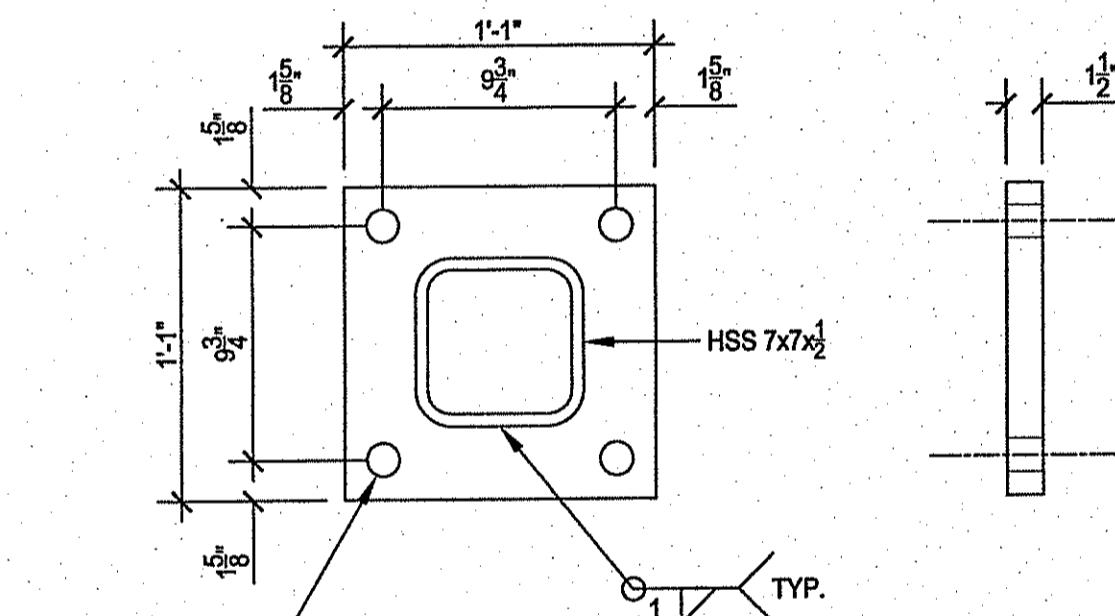
CROSS SECTION - C-C
SCALE: $\frac{3}{4}$ " = 1'-0"
TYPICAL @ BENTS 2, 3, 5, 6, 8, 9



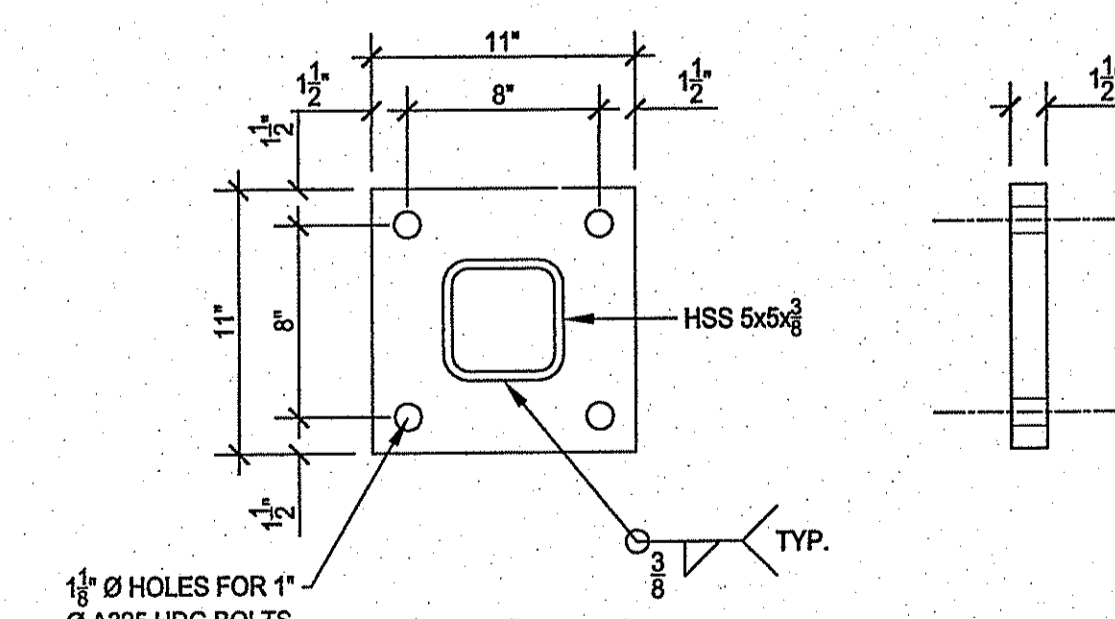
CROSS SECTION - D-D - BRACED BENT
SCALE: $\frac{3}{4}$ " = 1'-0"
TYPICAL @ BENTS 1, 4, 7 & 10



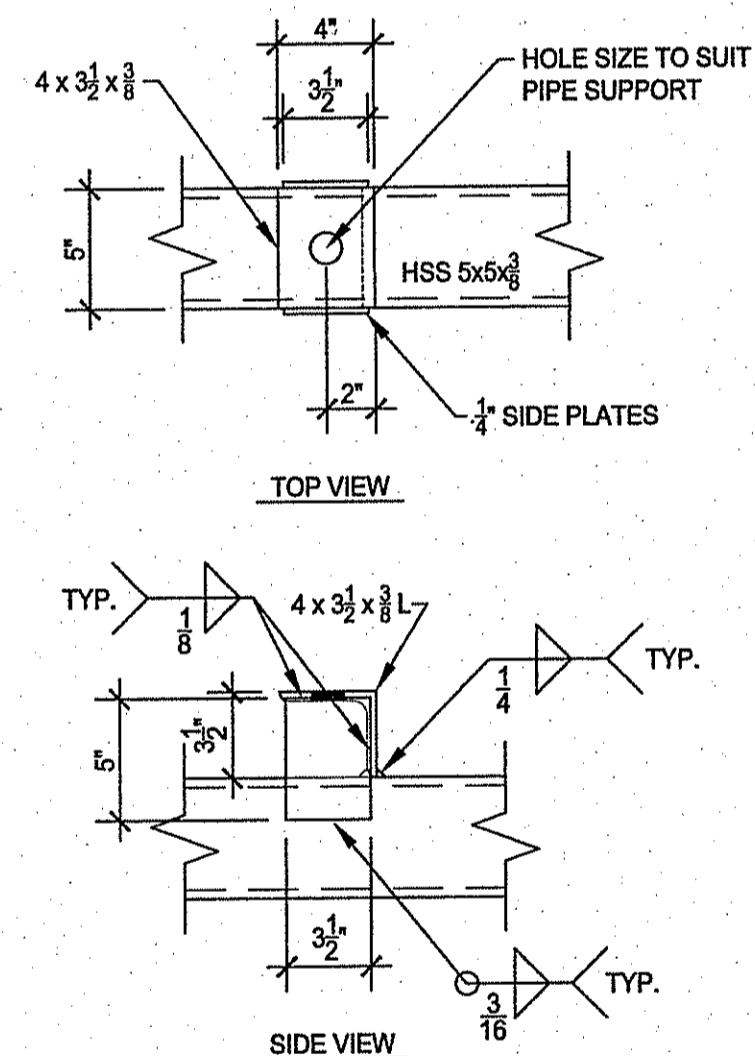
TYPICAL TRUSS SPLICE CONNECTION
SCALE: $\frac{3}{4}$ " = 1'-0"



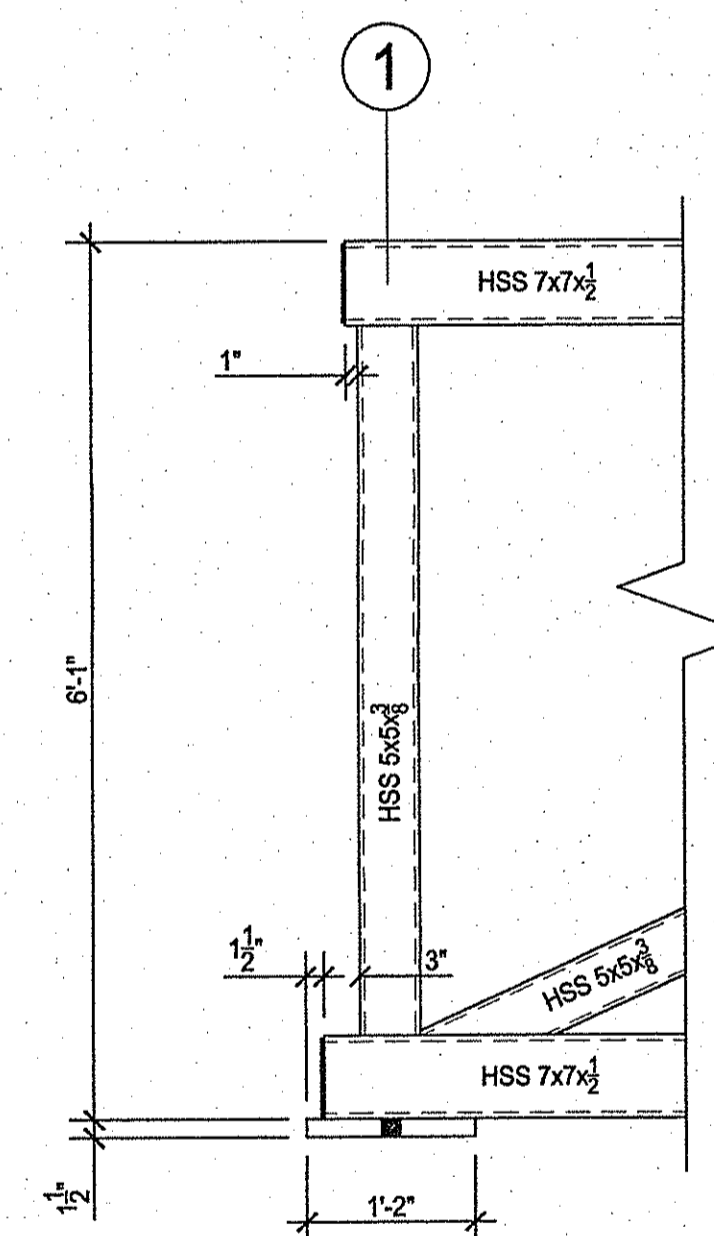
HSS 7x7x1/2" CONNECTION PLATE
SCALE: $\frac{3}{4}$ " = 1'-0"



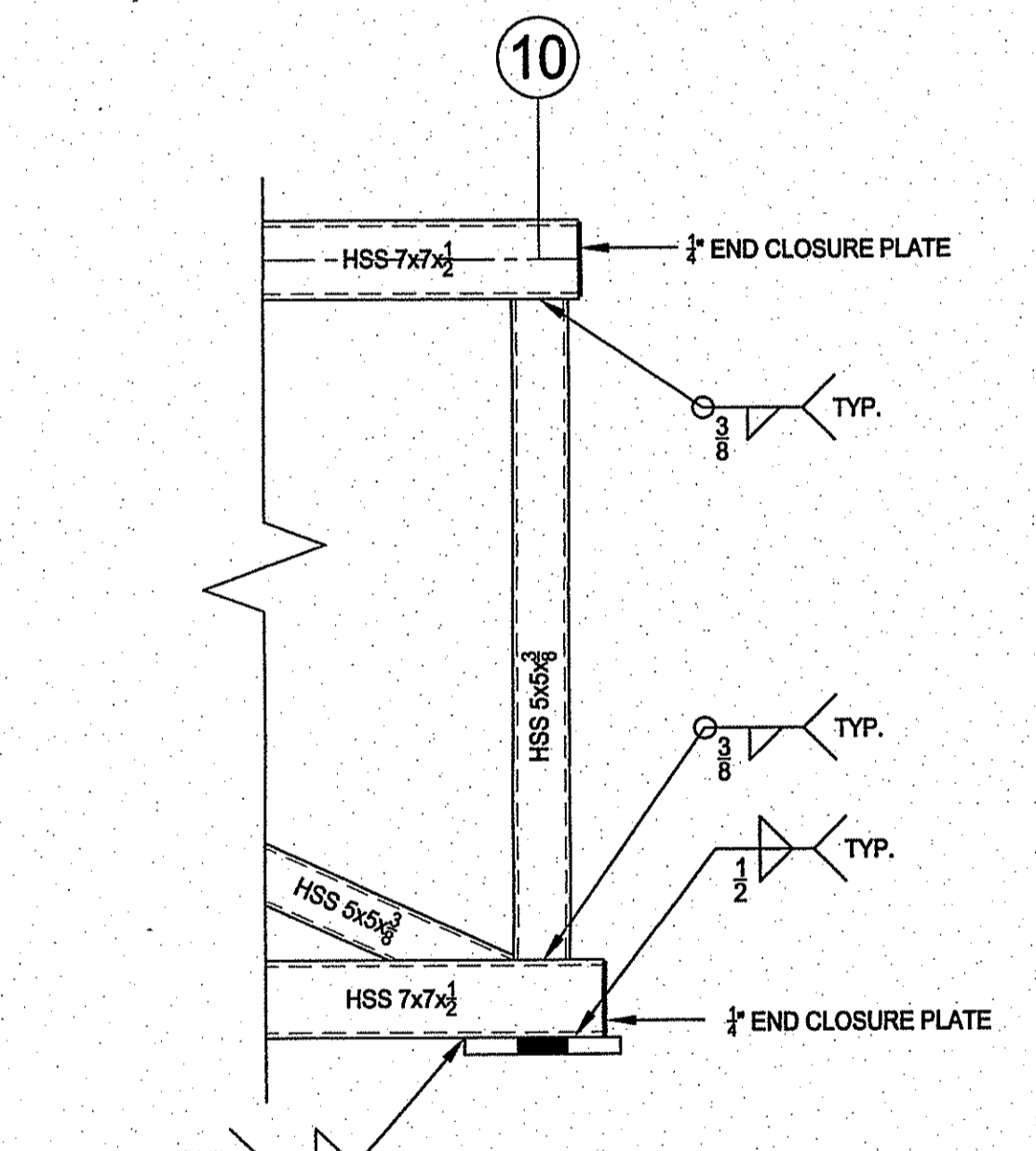
HSS 5x5x3/8" CONNECTION PLATE
SCALE: $\frac{1}{2}$ " = 1'-0"



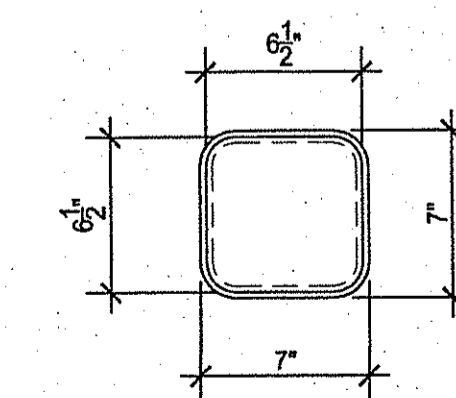
PIPE SUPPORT ANGLE - ARRANGEMENT
SCALE: $\frac{1}{2}$ " = 1'-0"



BRIDGE END SUPPORT
SCALE: $\frac{3}{4}$ " = 1'-0"



BRIDGE END EXPANSION SUPPORT
SCALE: $\frac{3}{4}$ " = 1'-0"



END CLOSURE PLATE
SCALE: $\frac{1}{2}$ " = 1'-0"

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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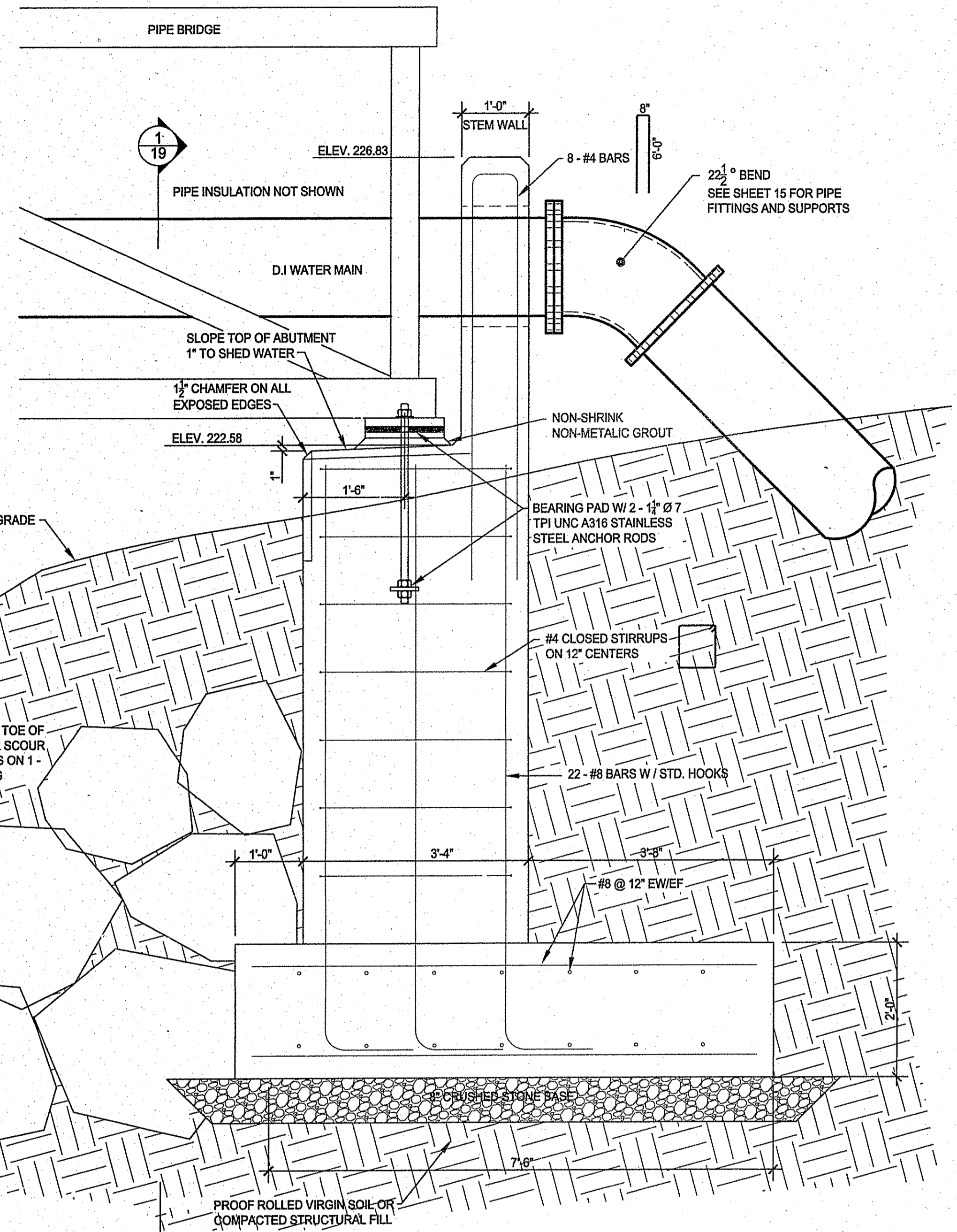
KENT COUNTY WATER AUTHORITY
NORTH AND SOUTH 500 FOOT GRADIENT
TRANSMISSION INTERCONNECTION AND
INFRASTRUCTURE REPLACEMENTS

PIPE BRIDGE DETAILS

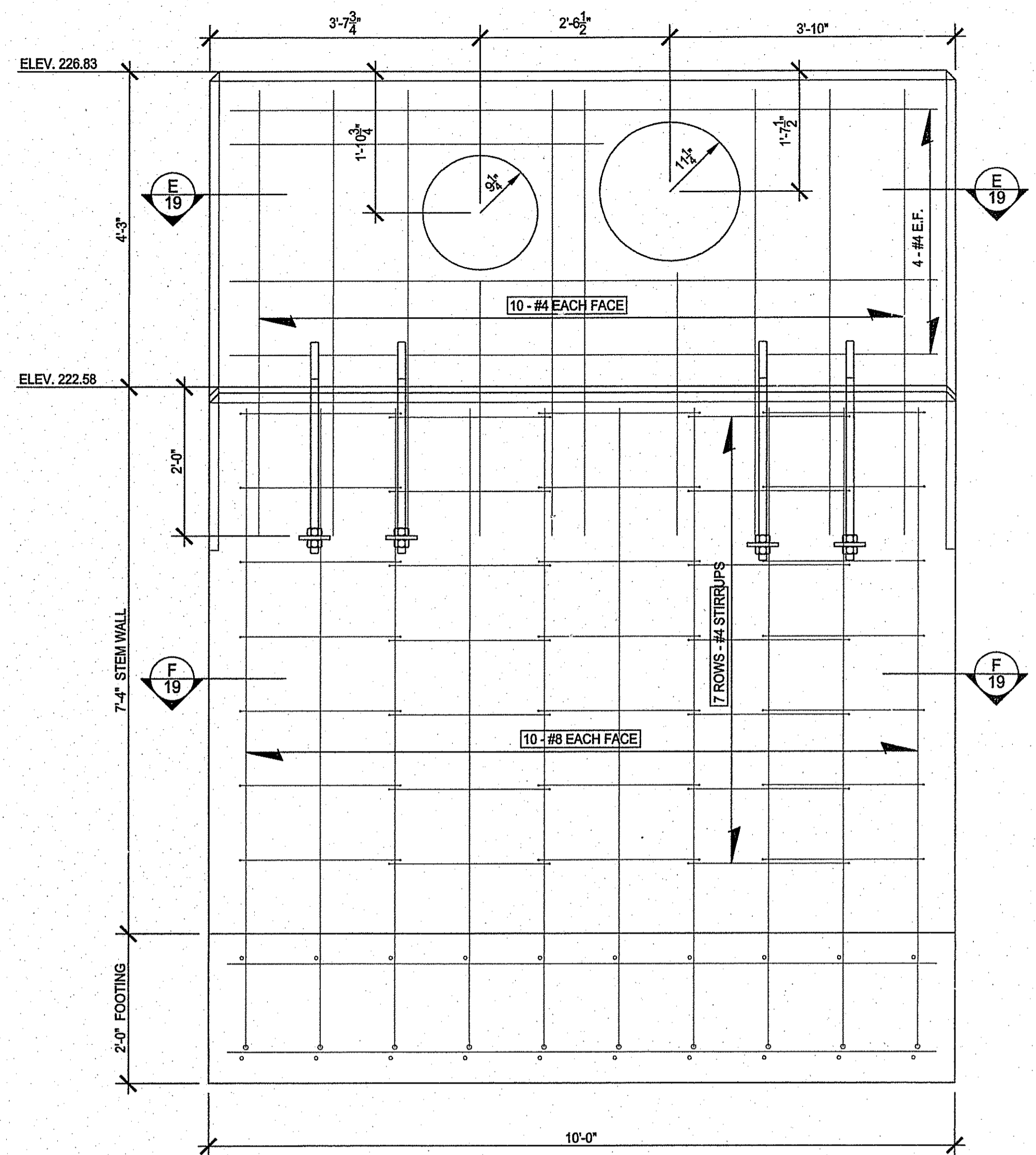
SANDY BOTTOM RD. PIPE BRIDGE
COVENTRY, RI

SHEET NO.
3

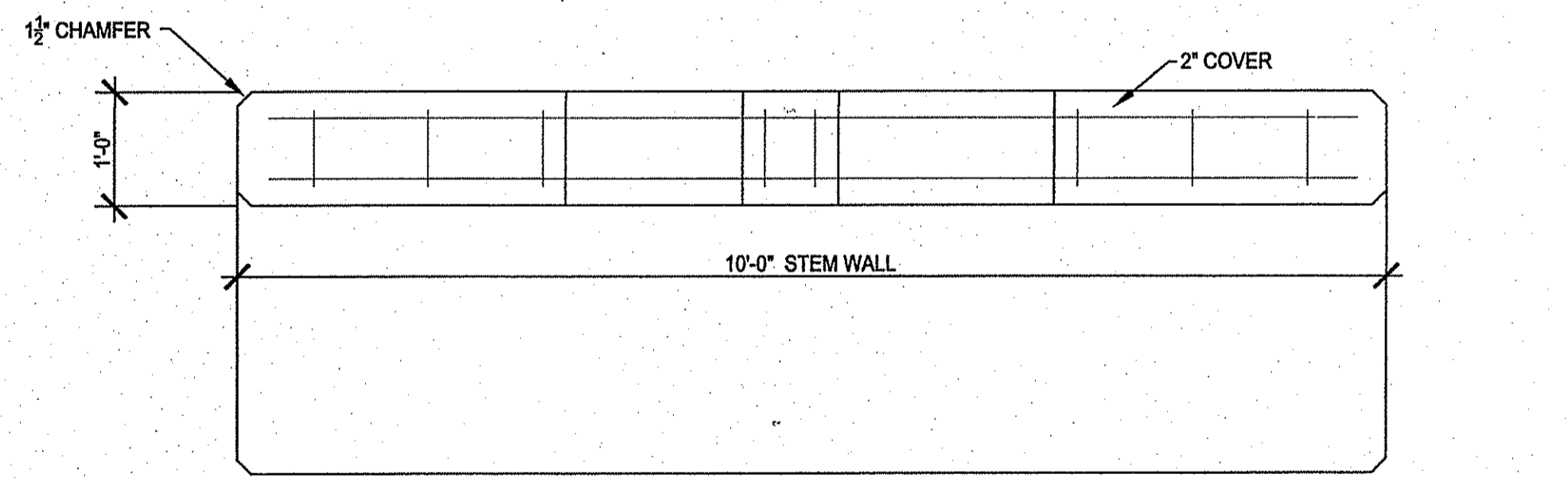
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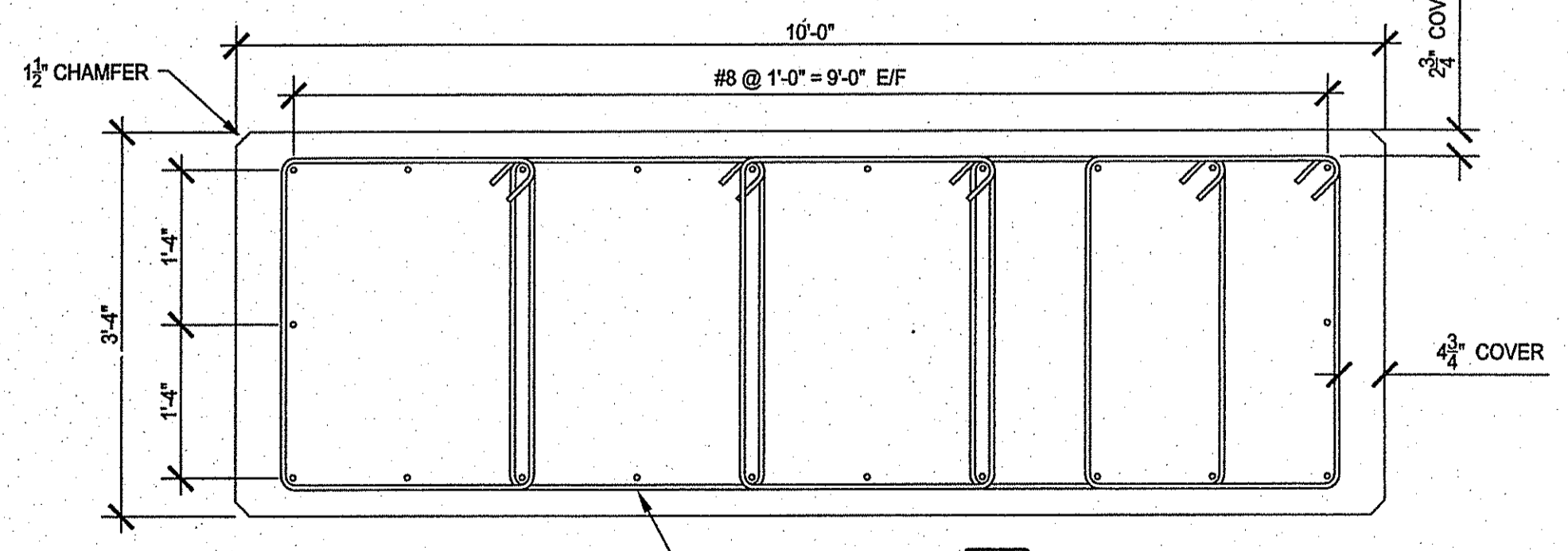
END VIEW - PIPE BRIDGE ABUTMENT
SCALE: 3/4" = 1'-0"



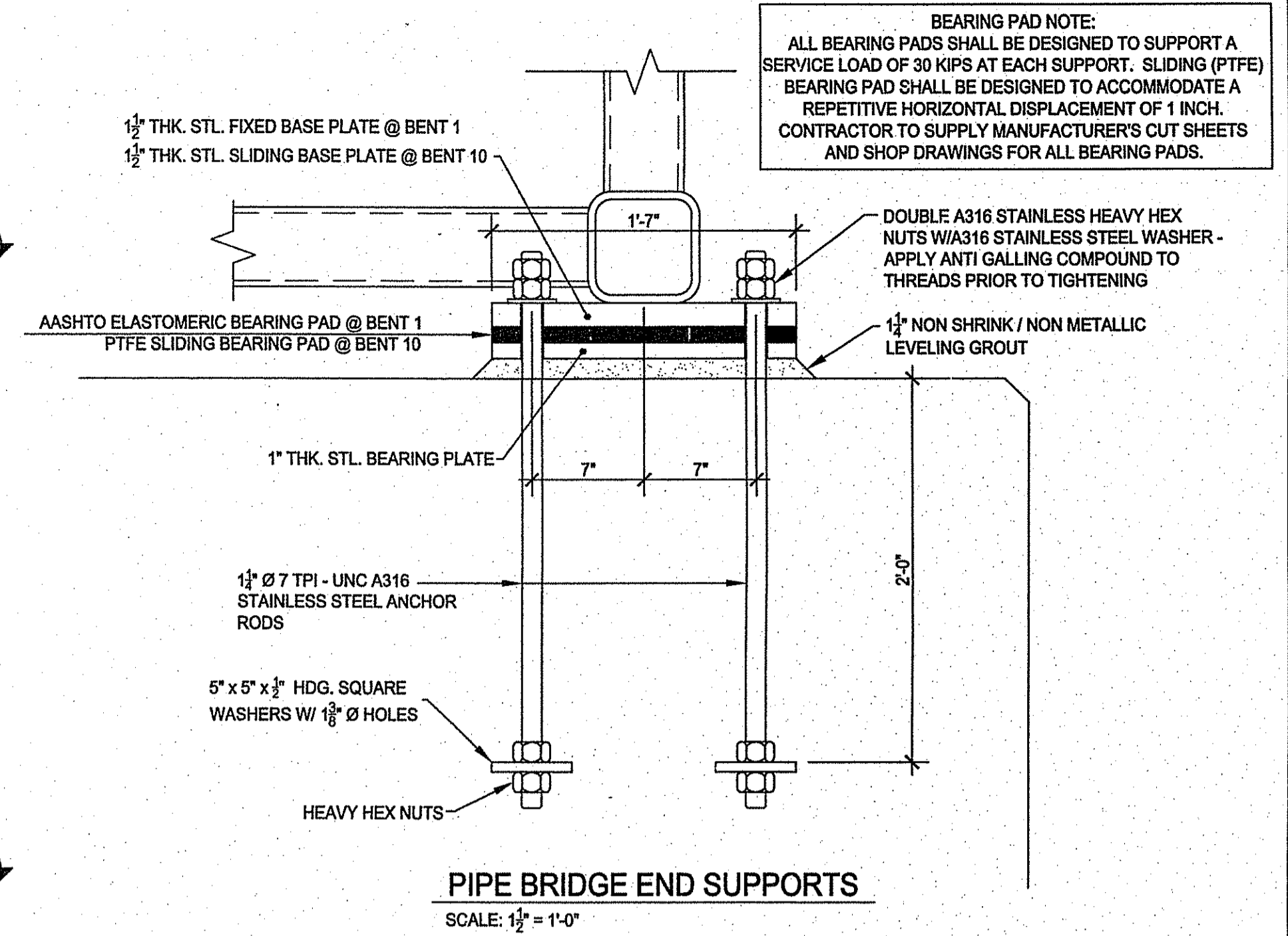
ELEVATION 1-1 - PIPE BRIDGE ABUTMENT
SCALE: 3/4" = 1'-0"



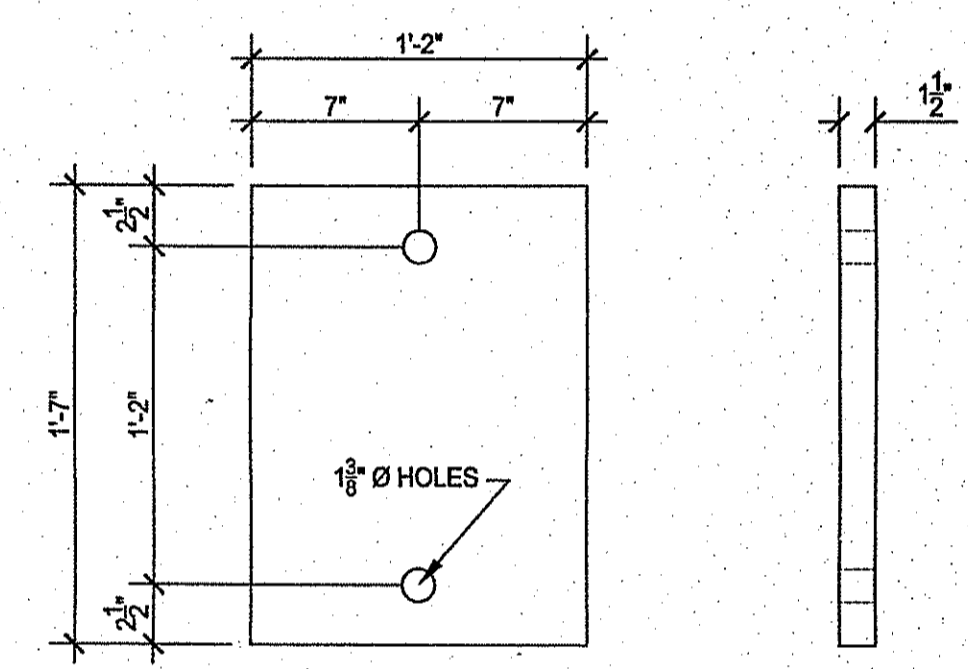
SECTION E-E - PIPE BRIDGE ABUTMENT
SCALE: 3/4" = 1'-0"



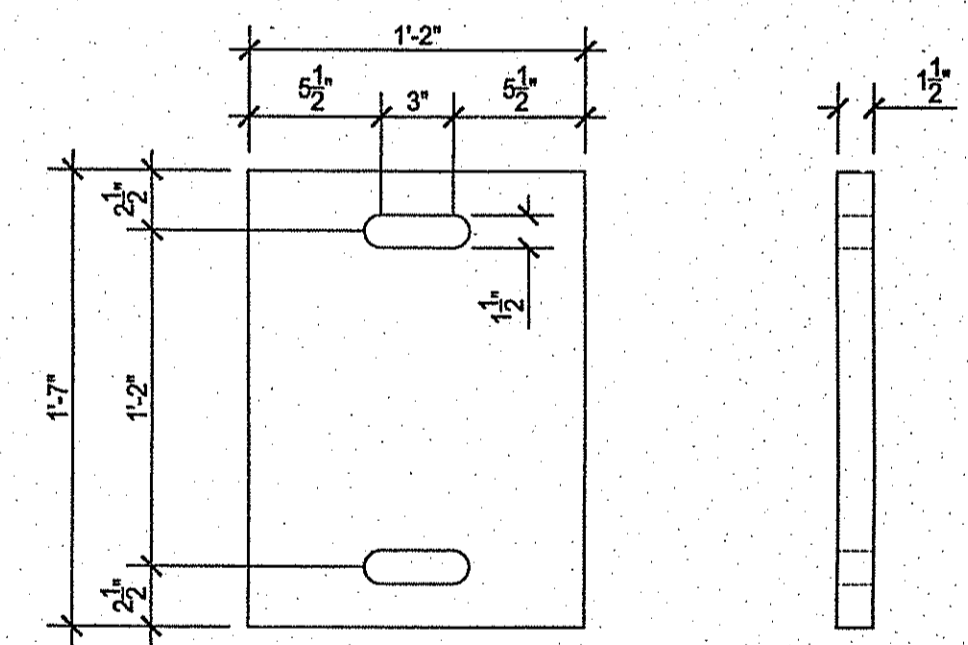
SECTION F-F - PIPE BRIDGE ABUTMENT
SCALE: 3/4" = 1'-0"



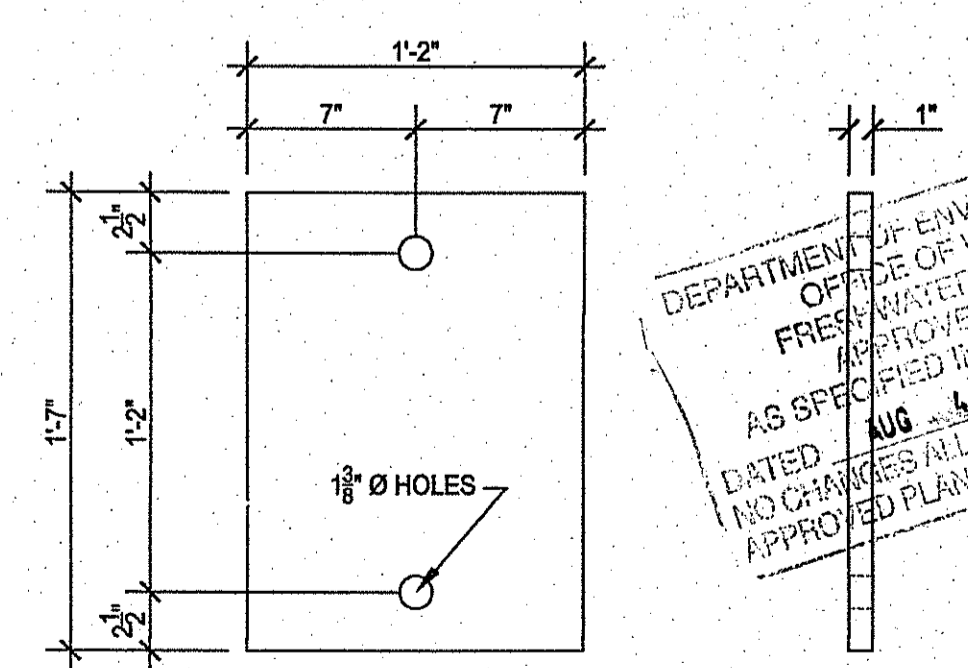
PIPE BRIDGE END SUPPORTS
SCALE: 1/2" = 1'-0"



FIXED BASE PLATE
SCALE: 1/2" = 1'-0" - 2 REQUIRED



SLIDING BASE PLATE - BENT 10
SCALE: 1/2" = 1'-0" - 2 REQUIRED



BEARING PLATE
SCALE: 1/2" = 1'-0" - 4 REQUIRED

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESH WATER WETLANDS PROGRAM
AS SPECIFIED IN THE LETTER OF APPROVAL
FILE # 17-D165
DATED AUG 4 2017
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
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James A. Geremia

JUL 14 2017

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KENT COUNTY WATER AUTHORITY
NORTH AND SOUTH 500 FOOT GRADIENT
TRANSMISSION INTERCONNECTION AND
INFRASTRUCTURE REPLACEMENTS

PIPE BRIDGE ABUTMENT
SANDY BOTTOM RD. PIPE BRIDGE
COVENTRY, RI

SHEET NO.
4

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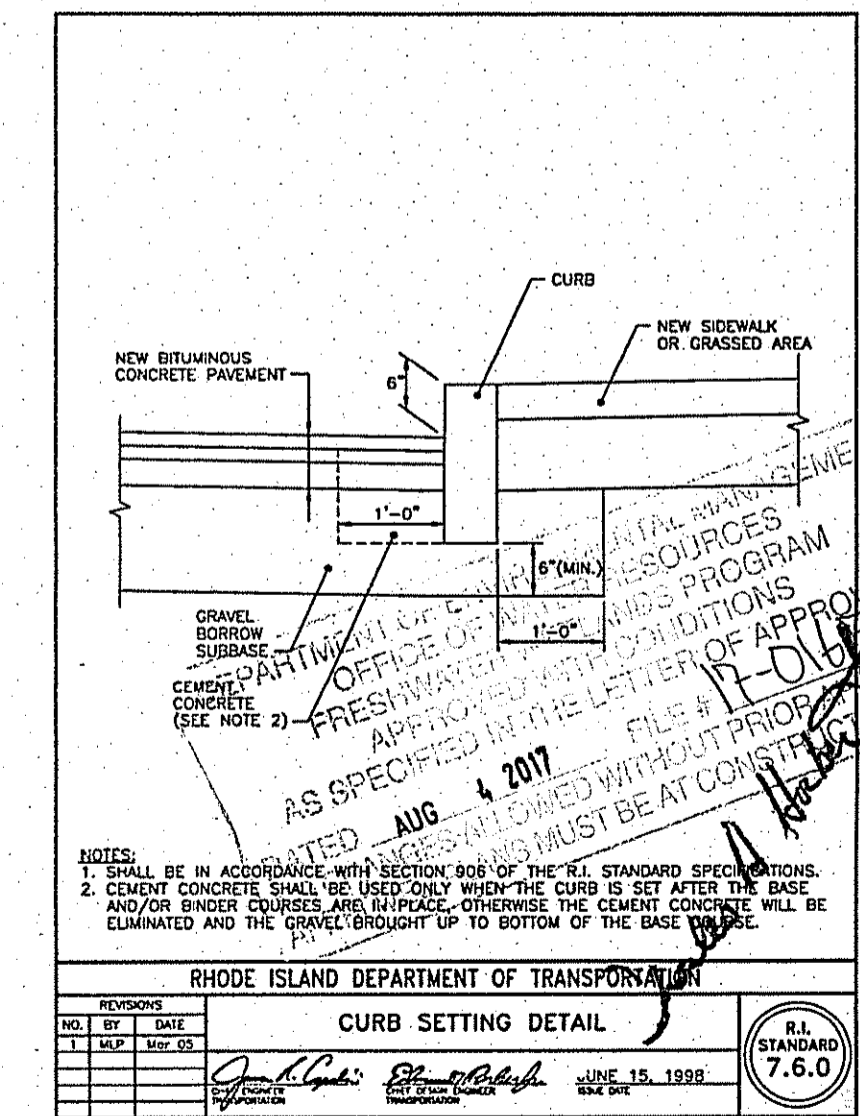
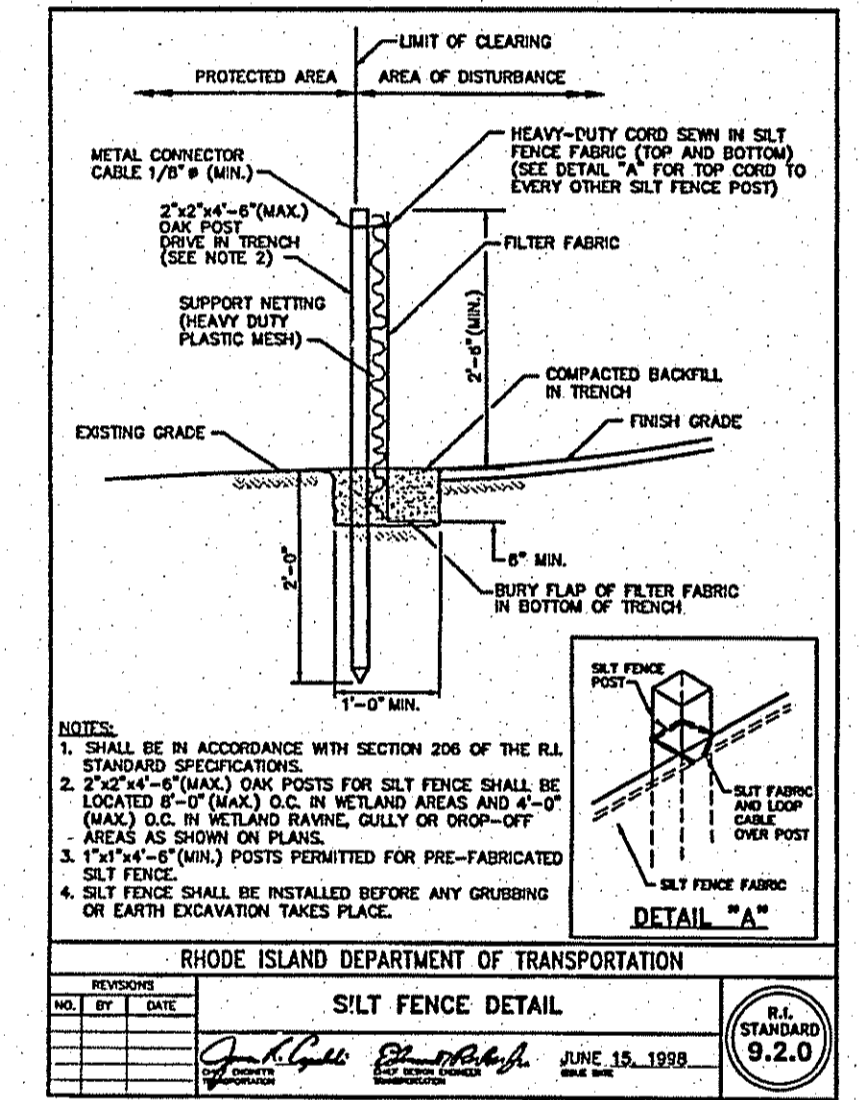
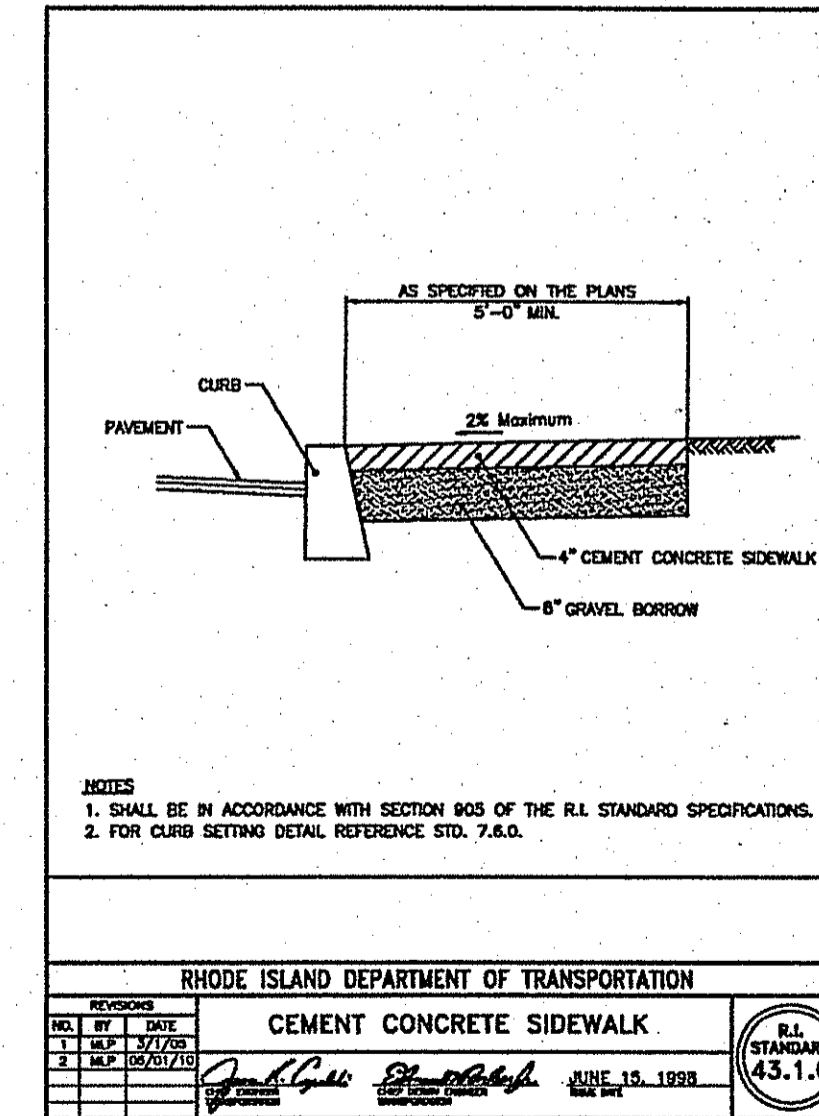
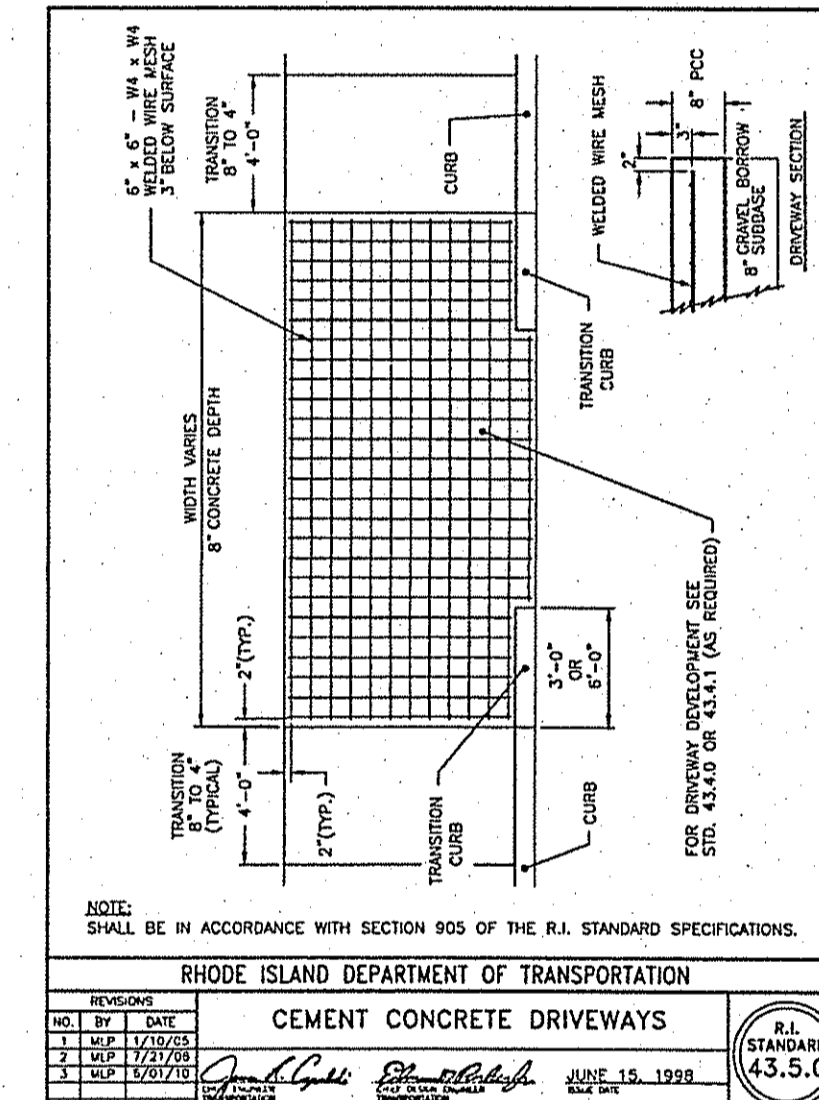
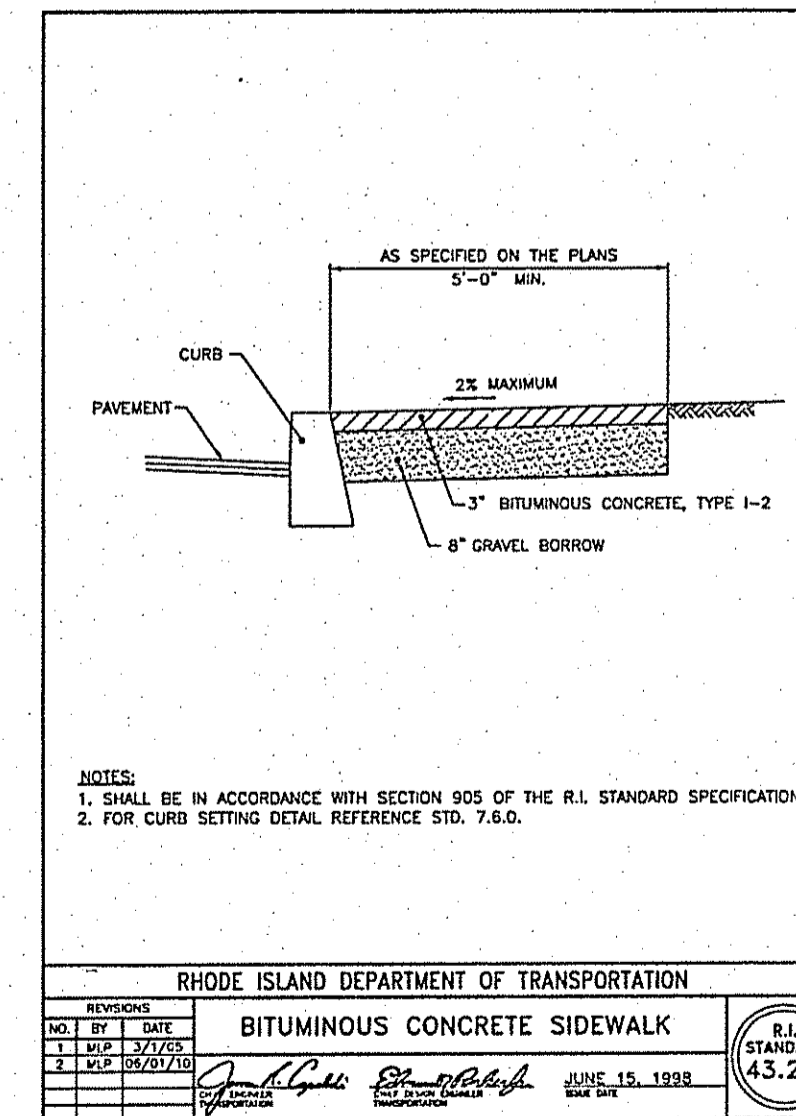
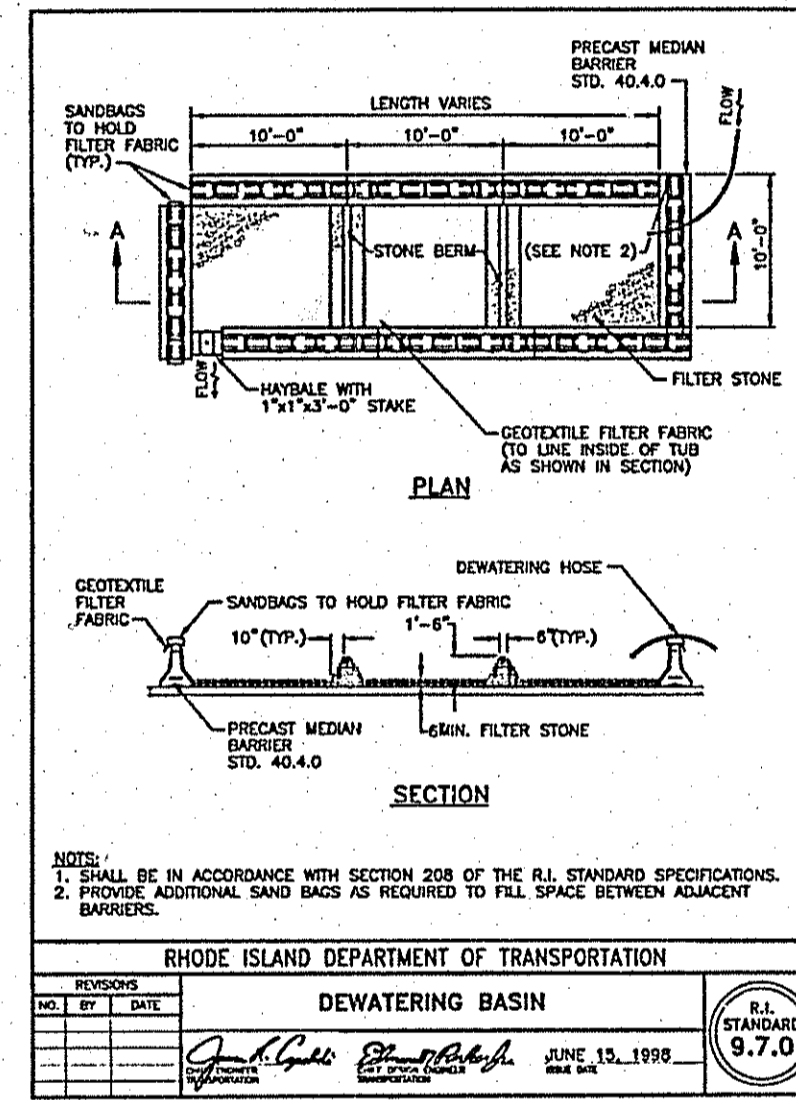
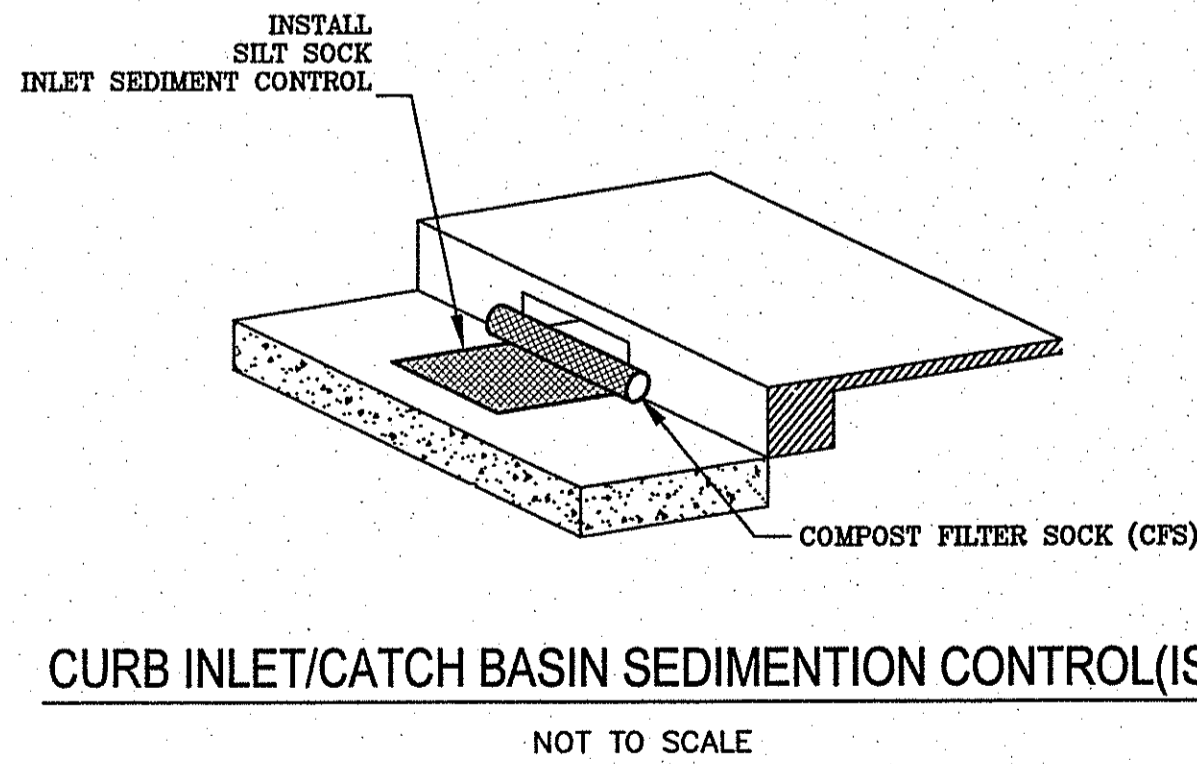
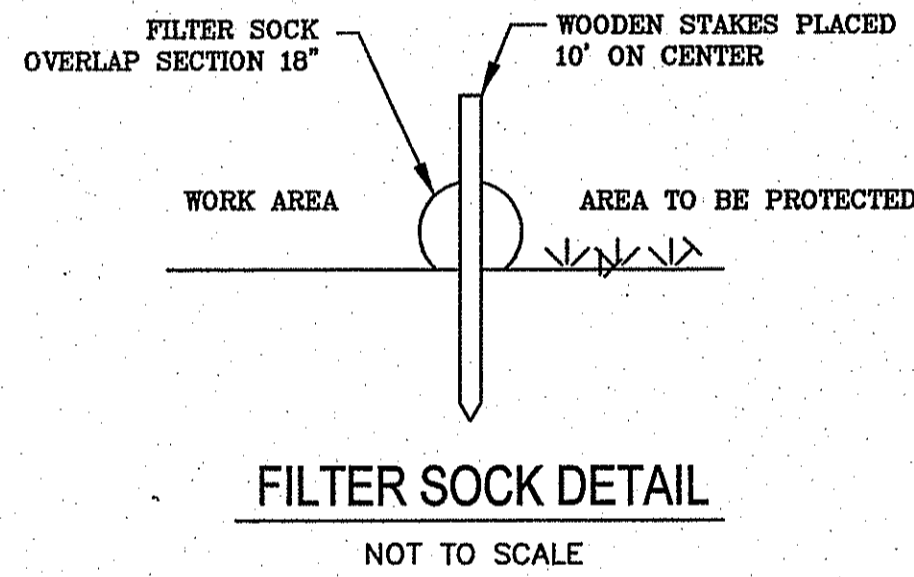
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DATE: MARCH 2017	
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GENERAL NOTES:

- PLANIMETRIC AND TOPOGRAPHIC MAPPING BY GARAFALO ASSOCIATES, INC.
- NAD83 & VERTICAL DATUM NAVD FIELD EDITING BY GARAFALO & ASSOCIATES, INC. WETLAND FLAGGING BY APPLIED BIOSYSTEMS, INC.
- ALL EXISTING GATE BOXES SHALL BE REMOVED & DISPOSED.
- LOCATION AND DEPTHS OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION BY MARC NYBERG & ASSOC. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXIST. UTILITIES AND NOTIFY THE APPROPRIATED UTILITY AUTHORITIES INCLUDING "DIG SAFE" PRIOR TO STARTING WORK. ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE COST OF REPAIRS SHALL BE BORNE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- THE CONTRACTOR SHALL CONFINE HIS OPERATIONS AND ACTIVITIES FOR CONSTRUCTION PURPOSES TO WITHIN THE STREET LINES.
- ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. WATER, GAS, SEWER AND OTHER UTILITIES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- ALL GRASSED AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE LOAMED AND SEEDED.
- TOPOGRAPHIC MAPPING BASED ON NAD83 HORIZONTAL DATUM & NAVD88 VERTICAL DATUM.
- SAW CUT PAVEMENT FULL-DEPTH PRIOR TO THE INSTALLATION OF UTILITIES.
- EACH DWELLING UNIT & COMMERCIAL ESTABLISHMENT SHALL BE ACCESSIBLE FOR TRASH REMOVAL AND POSTAL SERVICE.
- AT THE END OF EACH WORK DAY THE TRENCH SHALL BE TOTALLY BACKFILLED AND TEMPORARY PAVEMENT INSTALLED IN ACCORDANCE WITH RIDOT REQUIREMENTS.
- DEWATERING SYSTEMS EFFLUENT FOR TRENCH EXCAVATIONS SHALL BE DISCHARGED INTO DEWATERING BASINS. THE EFFLUENT FROM THE DEWATERING BASINS SHALL HAVE NO VISUAL SEDIMENTATION PRESENT AND SHALL NOT CAUSE SILTATION OF EXISTING DRAINAGE SYSTEM AND REGULATED WETLANDS. THE DEWATERING BASINS SHALL HAVE A VOLUME NOT LESS THAN THE TOTAL VOLUME OF WATER THAT WILL BE PUMPED DURING A FOUR - HOUR PERIOD.
- THE DEWATERING BASINS SHALL BE DESIGNED IN ACCORDANCE WITH THE R.I. SOIL EROSION AND SEDIMENTATION CONTROL HANDBOOK AND THE EDGES SHALL BE PAVED.
- THE CONTRACTOR SHALL SUBMIT CALCULATIONS FOR SIZING OF DEWATERING BASINS TO THE ENGINEER FOR REVIEW.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR SEDIMENTATION THAT ENTERS THE DRAINAGE SYSTEM AND REGULATED WETLANDS. THE WETLANDS SHALL BE RESTORED IN ACCORDANCE WITH RIDOT REQUIREMENTS AND THE DRAINAGE SYSTEM SHALL BE FLUSHED AND CLEANED IN ACCORDANCE WITH RIDOT REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR WILL BE RESPONSIBLE FOR FINES THAT MAY BE IMPOSED BY THE RIDOT AND THE OWNER WILL NOT REIMBURSE THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION OPERATIONS. SILT FENCE SHALL BE PLACED SO AS TO PREVENT SEDIMENT FROM ENTERING ADJOINING REGULATED WETLANDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT/REPLACE DAILY AND AFTER EACH RAINFALL. REPAIRS SHALL BE MADE IMMEDIATELY.
- ALL SEDIMENT MUST BE REMOVED WHEN THE HEIGHT OF THE SEDIMENT REACHES THE HEIGHT OF THE SEDIMENT BARRIER (SILT FENCE).
- THE "R.I. EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE LATEST EDITION, MUST BE UTILIZED BY THE CONTRACTOR AS A GUIDE.
- IF DRAIN PIPES ARE REMOVED THEY SHALL BE RESET OR REPLACED IMMEDIATELY IN KIND IN ACCORDANCE WITH RIDOT.
- CONTRACTOR SHALL NOTIFY KCWA WATER CUSTOMERS A MINIMUM OF 48 HOURS PRIOR TO ANY DISRUPTION OF SERVICE IN ACCORDANCE WITH KCWA REQUIREMENTS.
- THE CONTRACTOR WILL BE REQUIRED TO PROVIDE CERTIFICATION BY A PROFESSIONAL ENGINEER THAT THE SOIL COMPACTION OF TRENCHES MEETS SPECIFIED STANDARDS.
- TEMPORARY WATER CONNECTION(S) BETWEEN NEW WATER MAIN & EXISTING WATER MAIN SHALL NOT BE LESS THAN 6" IN DIAMETER. BACKFLOW PREVENTER SHALL BE REMOVED WHEN THE DISINFECTION RESULTS ARE APPROVED BY KCWA. BACKFLOW PREVENTER SHALL BE REPLACED WITH A SECTION OF PIPE. TEMPORARY CONNECTION(S) SHALL STAY IN SERVICE UNTIL ALL WATER SERVICES HAVE BEEN RELOCATED TO NEW WATER MAIN INCLUDING HYDRANTS & TIE-INS AS REQUIRED. TEMPORARY CONNECTION(S) SHALL BE THE LAST CONNECTION(S) TO BE REMOVED.
- ALL TREE PRUNING MUST BE IN ACCORDANCE WITH THE ANSI A-300. IN EACH COMMUNITY THE TREE WARDEN SHALL BE CONTACTED PRIOR TO TREE PRUNING. SNAPPING TREE BRANCHES BY CONTRACTOR'S EQUIPMENT IS NOT ALLOWED. TREE PRUNING AND ROOT PRUNING SHALL BE PERFORMED BY A RI LICENSED ARBORIST.
- CONNECTIONS BETWEEN NEW WATER MAINS AND EXISTING WATER MAINS SHALL BE MADE WITH RESTRAINED JOINTS.
- THE ALIGNMENT OF THE NEW WATER MAIN WILL BE DETERMINED AFTER THE TEST PITS ARE PERFORMED.
- AT THE END OF EACH DAY THE CONTRACTOR SHALL SWEEP THE ROADWAY USING MECHANICAL SWEEPERS. DUST CONTROL SHALL BE EMPLOYED BY SPRAYING WATER FROM CONTRACTORS PORTABLE WATER TRUCK & USE OF CALCIUM CHLORIDE.
- EXISTING VALVE BOXES & HYDRANTS SHALL BE REMOVED AND DISPOSED.
- THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY TO SECURE POLES AND PROVIDE SHIELDS AS REQUIRED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
- IF GAS FACILITIES BECOME EXPOSED THE CONTRACTOR SHALL NOTIFY NEW ENGLAND GAS CO. (NEGC) BEFORE BACKFILLING, BACKFILL AND COMPACTION AT GAS FACILITY CROSSINGS SHALL CONFORM TO "GUIDELINES FOR BACKFILL AND COMPACTION AROUND GAS PIPES- PERMANENT BACKFILL AND COMPACTION."
- WHERE THE PROPOSED WATER MAIN CROSSES EXISTING GAS FACILITIES "GUIDELINES FOR SUPPORT OF GAS PIPES-TEMPORARY SUPPORT OF GAS PIPES" SHALL BE ADHERED TO.
- CONTRACTOR SHALL RENEW WATER SERVICES TO ALL EXISTING CUSTOMERS & SERVICE SIZE SHALL MATCH EXISTING.
- EXISTING HYDRANTS SHALL REMAIN IN SERVICE UNTIL NEW HYDRANTS ARE ACTIVATED.
- AT ALL TIE-INS TO EXISTING WATER MAINS THE CONTRACTOR SHALL PERFORM TEST PITS TO LOCATE EXISTING PIPES, VERTICALLY & HORIZONTALLY & CONNECT TO EXISTING PIPE WITH FITTINGS AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER. BENDS WILL BE PAID FOR UNDER APPROPRIATE BID ITEMS. ALL PIPING AND FITTINGS FOR TIE INS SHALL BE MECHANICAL JOINT WITH RESTRAINED JOINTS.
- THE ABANDONED WATER GATE BOXES AND HYDRANTS SHALL BE REMOVED AND DISPOSED OF.
- CONTRACTOR SHALL PERFORM TEST PITS TO LOCATE EXISTING SEWER SERVICES, WATER MAINS AND WATER SERVICES.
- EXISTING GAS GATE BOXES THAT CAN NOT BE ADJUSTED SHALL BE REPLACES WITH NEW GAS GATE BOXES. THE TOP OF THE WORK SHALL BE PART OF THE BID ITEM FOR FULL WIDTH OVERLAY. NEW BOXES CAN BE OBTAINED FROM 477 DEXTER ST. PROVIDENCE, RI
- ALL WORK DONE WITHIN THE STATE RIGHT OF WAY SHALL CONFORM TO THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AMENDED AUGUST 2013 WITH ALL REVISIONS AND ADDENDA. STANDARD DETAILS FOR THIS WORK ARE R.I. STANDARD DETAILS 1998 EDITION WITH ALL REVISIONS.
- IF ANY GAS FACILITY IS EXPOSED OR DAMAGED CONTACT NGRID DISPATCH OFFICE AT 877-304-1203 FOR AN INSPECTOR TO BE DISPATCHED TO THE SITE.
- FOR GAS LEAK CONTACT NGRID GAS LEAK LINE 800-640-1595
- ANY EXPOSED FACILITY REQUIRES THE PRESENCE OF A DAMAGE PREVENTION INSPECTOR PLEASE CALL RICK LEASE AT 508-948-8432 OR IF RICK IS NOT AVAILABLE DAVID SOLTYS AT 401-623-0579
- UPON COMPLETION OF THE SEWER AND WATER IMPROVEMENTS THE ROADWAY WILL BE OVERLAID, GAS VALVES BOXES WHERE ENCOUNTERED WILL NEED TO BE ADJUSTED AND WILL NEED TO BE ACCESSIBLE AT ALL TIMES TO BE OPERATED IN THE EVENT OF AN EMERGENCY. IF NEW BOXES ARE NEEDED THEY CAN BE OBTAINED AT NGRID PROVIDENCE FACILITY, 477 DEXTER STREET.
- THERE ARE SEVERAL LOCATIONS WHERE A PROPOSED INSTALLATION WILL BE INVOLVING A CATHODIC PROTECTION TEST BOX CONTAINING WIRES THAT GO TO THE GAS MAIN AND ALSO GO TO AN ANODE GROUND BED. EXTREME CARE MUST BE USED IN THESE AREAS NOT TO DISTURB THE ANODES OR THE WIRING AS THIS SYSTEM PROTECTS THE GAS MAIN FROM CORROSION. NATIONAL GRID REQUIRES THAT A CORROSION ENGINEER BE ON SITE WHEN DOING WORK AROUND THESE FACILITIES. CALL ASAD AKINFOLARIN AT 401-215-5678. THE LOCATIONS ARE AS FOLLOWS:
 - WATER TIE-IN FOR #1482 MAIN STREET ADJACENT TO BOX AND GROUND BED, SHEET 1
 - WATER MAIN INSTALL IN FRONT OF #55 SANDY BOTTOM RD ADJACENT TO BOX AND GROUND BED, SHEET 7
 - NEW WATER MAIN INSTALL AT POLE 55% TIQUUE AVE CROSSING GROUND BED, SHEET 11
 - NEW WATER MAIN INSTALL IN TIQUUE AVE A T JENNIFER LANE CROSSING GROUND BED, SHEET 13
- THE TRANSPORTATION MANAGEMENT CENTER (TMC) SHALL BE NOTIFIED 7 DAYS IN ADVANCE OF WHEN THE WORK BEGINS.
- THE PAVEMENT MANAGEMENT WORKING COMMITTEE (PMWC) SHALL BE NOTIFIED 7 DAYS ON ADVANCE OF WHEN WORK BEGINS. AN EMAIL TO DOT.PMWC@DOT.RI.GOV IS REQUIRED.
- ALL EXISTING STRIPING SHALL BE REPLACED IN-KIND.
- WATERBORNE PAVEMENT MARKINGS SHALL BE USED ON COLD PLAINED SURFACES AND INTERMEDIATE LAYERS WHICH WILL BE OPEN TO TRAFFIC AT THE COMPLETION OF EACH DAY'S PAVING OPERATION.
- TEMPORARY WATERBORNE PAVEMENT MARKINGS SHALL BE PLACED ON THE FINAL SURFACE COURSE LAYER WHICH WILL BE OPENED TO TRAFFIC AT THE COMPLETION OF EACH DAY'S PAVING OPERATION.
- EPOXY RESIN PAVEMENT MARKINGS SHALL BE PLACED IN THE FINAL SURFACE COURSE LAYER NO SOONER THAN 2 WEEKS BUT NO LONGER THAN 4 WEEKS FROM THE COMPLETIONS OF EACH DAY'S PAVING OPERATION.
- THE FINAL PAVEMENT RESTORATION WILL NOT TAKE PLACE UNTIL AFTER WATER SHUTDOWNS. THEREFORE TEMPORARY EPOXY RESIN PAVEMENT MARKINGS SHALL BE USED ON ANY TEMPORARY PAVEMENT SO THAT THE MARKINGS DO NOT FADE OVER THE WINTER.
- TRAFFIC LOOPS THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE TEMPORARILY REPAIRED OR PERMANENTLY REPAIRED PER RIDOT REQUIREMENTS

GENERAL LEGEND & ABBREVIATIONS:

N/F	NOW OR FORMERLY	LOCUS PROPERTY LINE	TREE (VARIOUS SPECIES)	SHRUBS FROM AERIAL CO.
A.P.	ASSESSOR PLAT	ASSESSORS LINE	TELEPHONE MANHOLE	CATCH BASIN FROM AERIAL CO.
S.F.	SQUARE FEET	EASEMENT LINE	ELECTRIC MANHOLE	MANHOLES FROM AERIAL CO.
AC.	ACRES	CONTOUR (10')	ELECTRIC HANDHOLE	TRAFFIC LIGHTS FROM AERIAL CO.
Bt.	BITUMINOUS	CONTOUR (2')	SEWER MANHOLE	FLAG POLE FROM AERIAL CO.
Conc.	CONCRETE	SPOT GRADE	ROUND GRATED CATCH BASIN	ROCK/BOULDERS FROM AERIAL CO.
FF.	FINISH FLOOR	GUARD RAIL	GRATED CATCH BASIN	WATER SHUT OFF/CURB STOP
C.L.F.	CHAIN LINK FENCE	CHAIN LINK FENCE	DRAIN MANHOLE	SOIL BORING
C.I.	CAST IRON	IRON RAIL FENCE	COMMUNICATIONS MANHOLE	TEST PITS TO BE PERFORMED
PL.	PLASTIC	POST & RAIL FENCE	UNKNOWN MANHOLE	NEW WATER GATE/BUTTERFLY VALVE
R.C.P.	REINFORCED CONCRETE PIPE	STOCKADE/WOOD FENCE	FIRE HYDRANT	NEW HYDRANT
R.W.S.	RETURN WATER SERVICE	STONE WALL	WATER GATE	
V.C.	VITRIFIED CLAY	SEWER LINE	GAS GATE	
TRANS.	TRANSITE	DRAIN LINE	LIGHT POLE	
C.M.P.	CORRUGATED METAL PIPE	WATER LINE	TRAFFIC SIGNAL POLE	
AC.	ASBESTOS CONCRETE	GAS LINE	MONITORING WELL	
(FND)	FOUND	TELEPHONE LINE	SIGN	
GB	GRANITE BOUND	ELECTRIC LINE	LOOP DETECTORS	
CB	CONCRETE BOUND	COMMUNICATIONS LINE	UTILITY POLE	
IP	IRON PIPE	OVERHEAD WIRES	BOLLARD	
DH	DRILL HOLE	TREE LINE	GATE CONTROL BOX	
REBAR	REBAR	SINGLE WHITE LINE		
		DOUBLE YELLOW LINE		



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DESIGNED BY: RH	JAMES J. GEREMIA
DRAWN BY: OL	
CHECKED BY: JG	
SCALE: AS SHOWN	
DATE: MAR 2017	

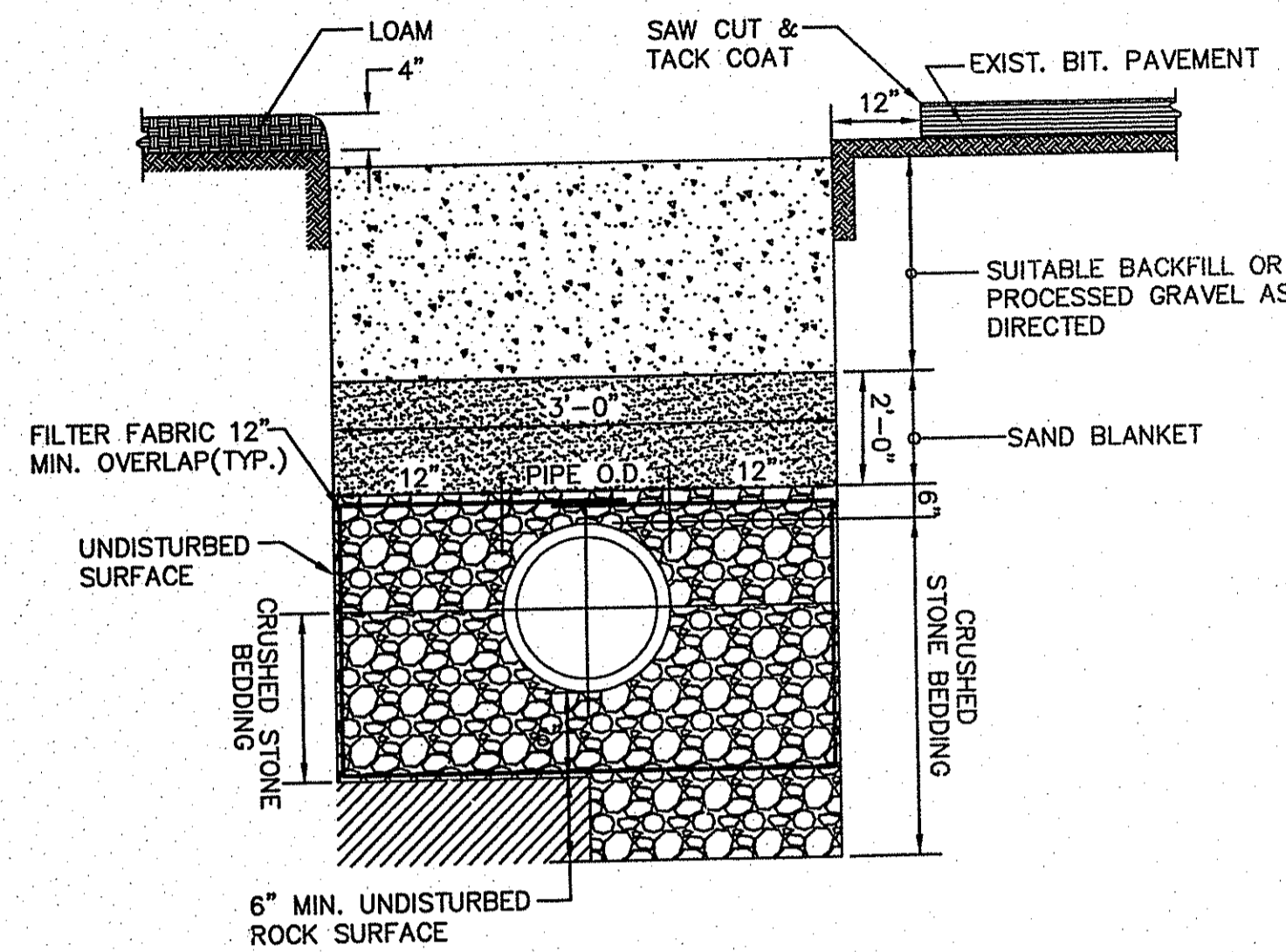
JAMES J. GEREMIA & ASSOCIATES, INC.
 CONSULTING ENVIRONMENTAL ENGINEERS & SCIENTISTS
 272 W. Exchange Street Suite 201 Providence, RI 02903-1061
 Phone: 401-454-7000 Fax: 401-454-7415

KENT COUNTY WATER AUTHORITY
 NORTHAND SOUTH 500 FEET
 GRADIENT TRANSMISSION
 AND INFRASTRUCTURE REPLACEMENT

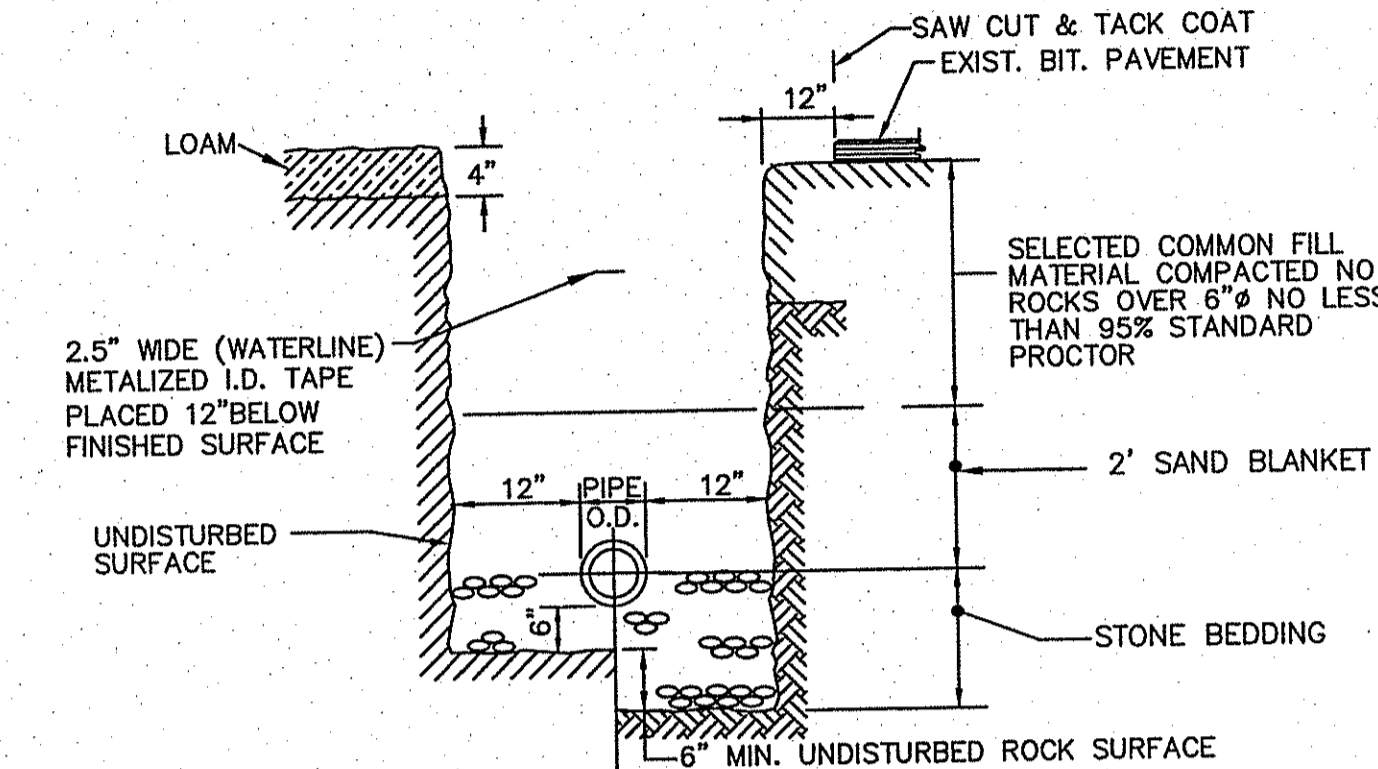
PLAN

MISCELLANEOUS DETAILS I

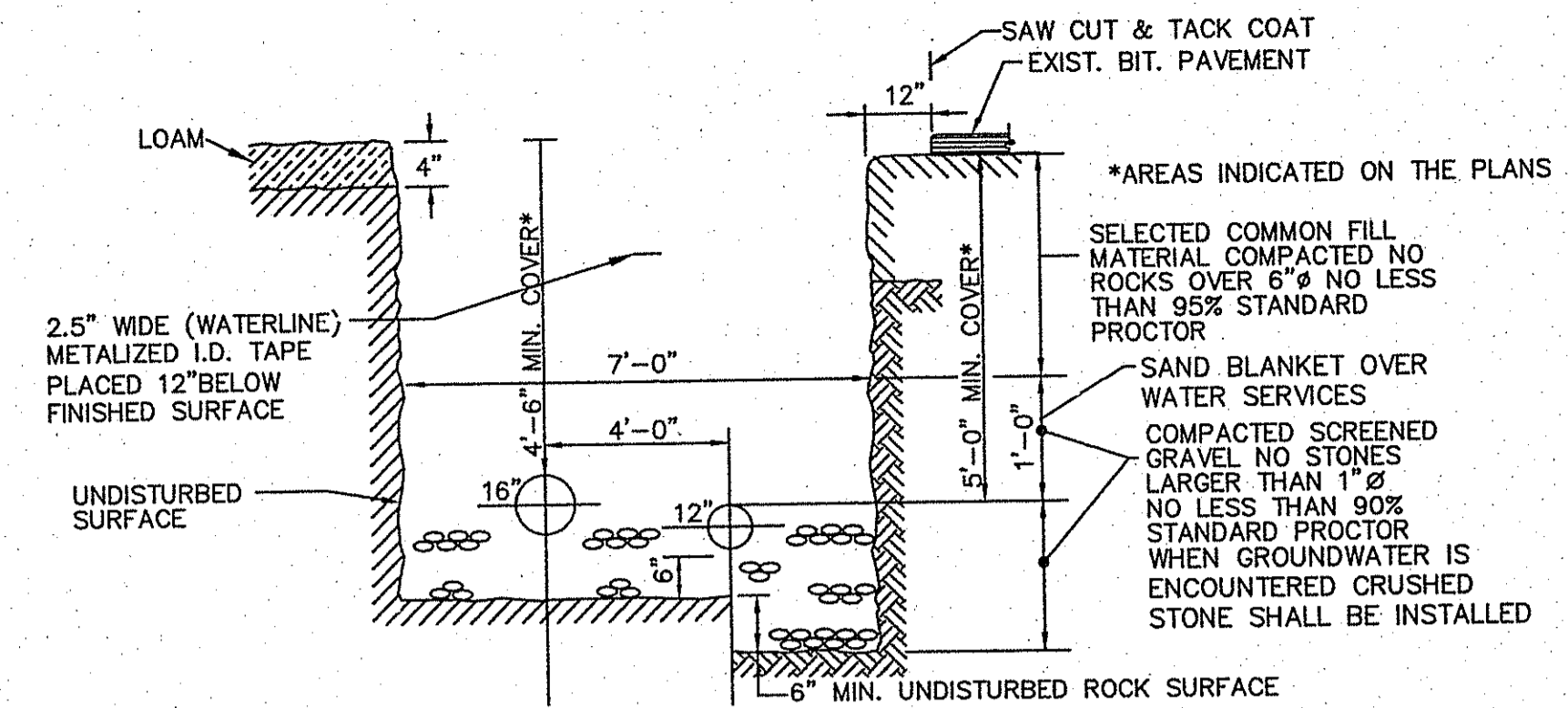
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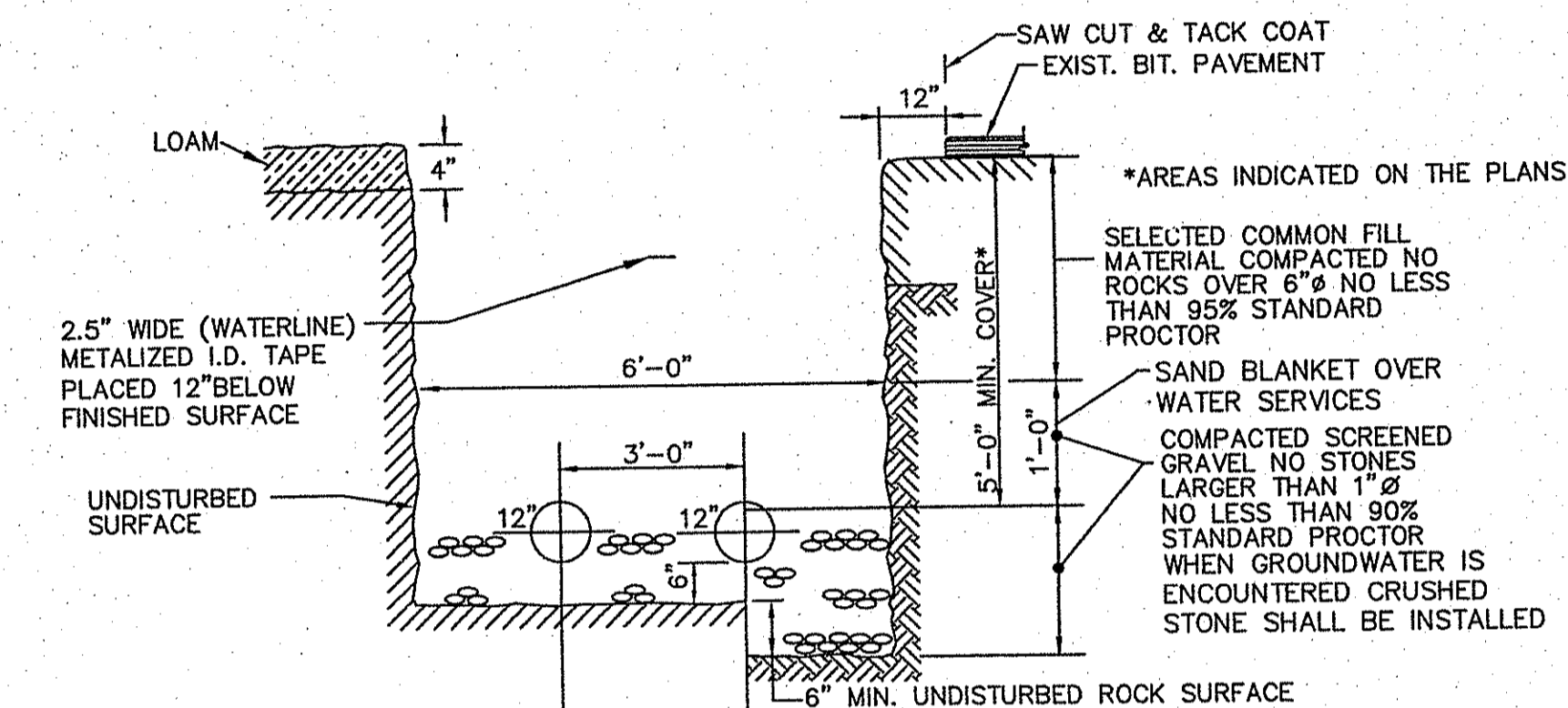
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NOT TO SCALE



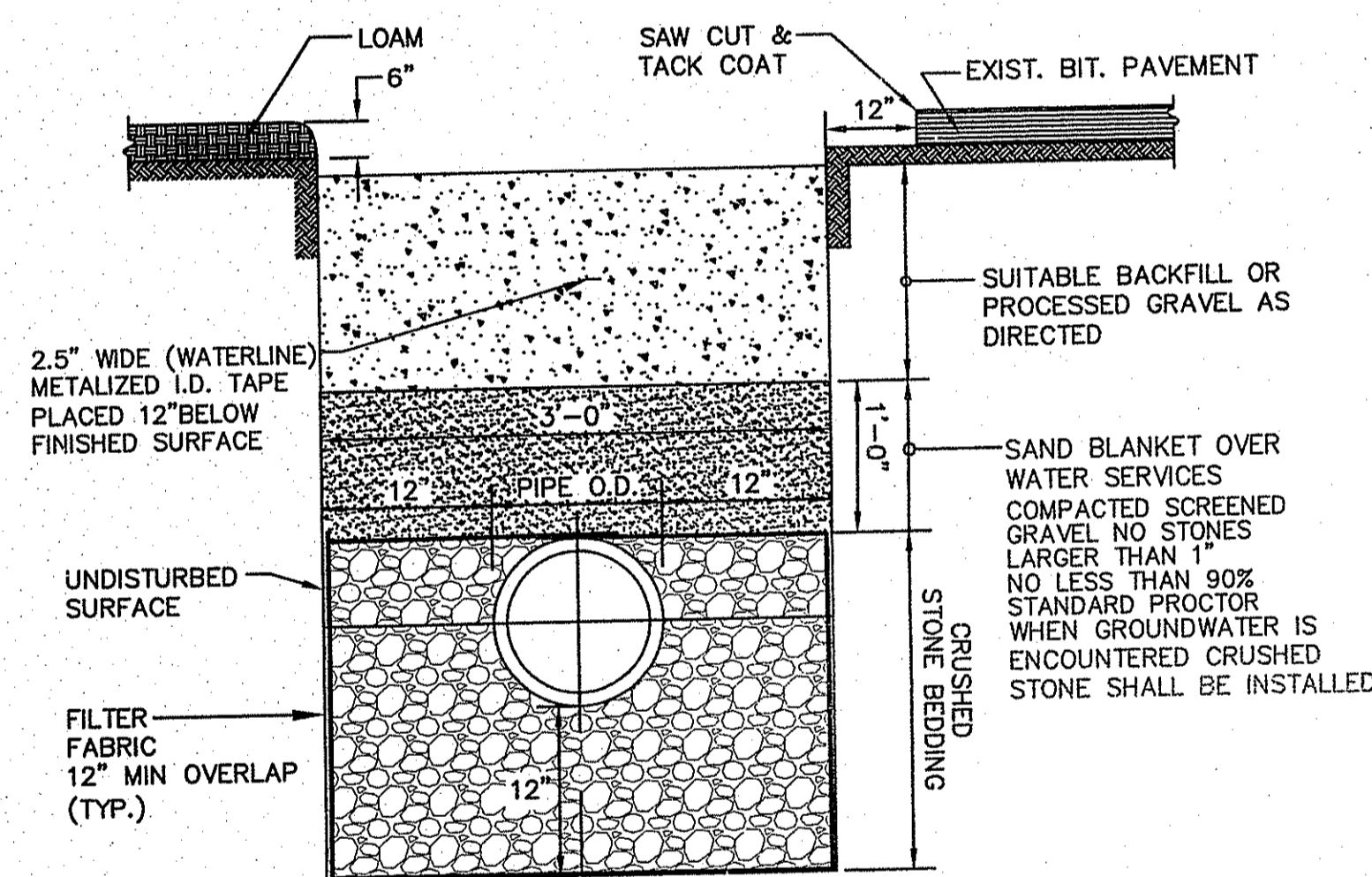
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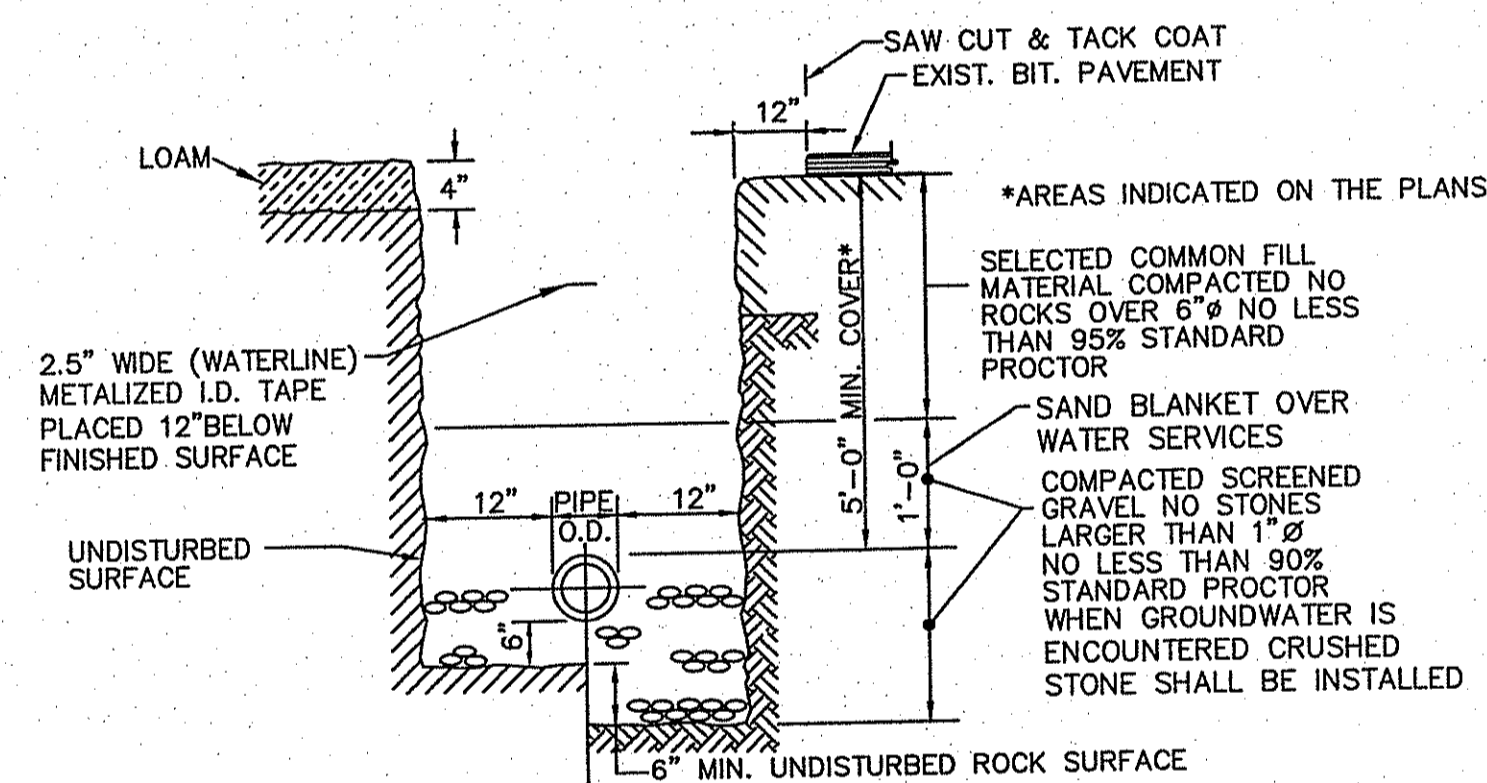
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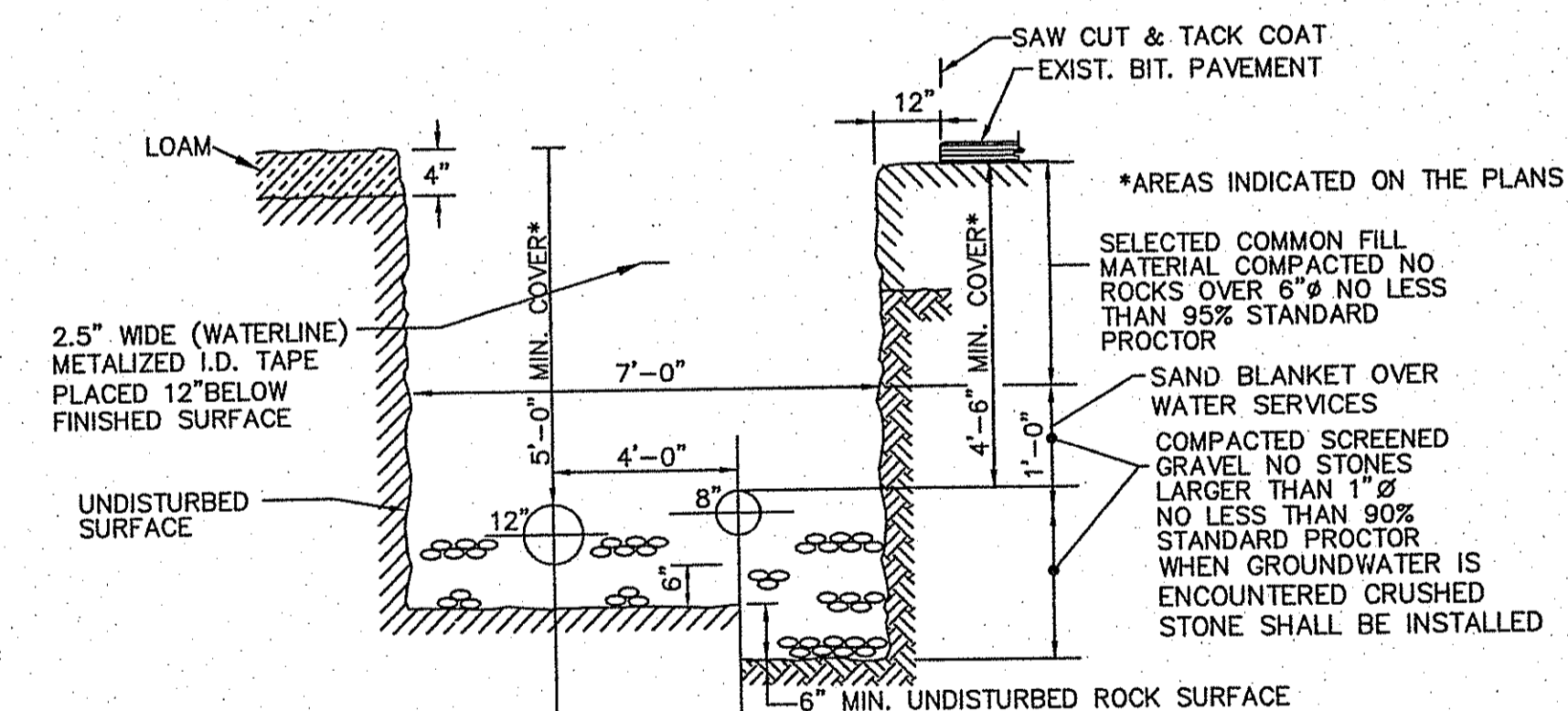
WATER TRENCH DETAIL 12\"/>



WATER TRENCH DETAIL (WET AREA)
NOT TO SCALE



WATER TRENCH DETAIL (DRY AREA)
NOT TO SCALE



WATER TRENCH DETAIL 12\"/>

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER DIVISION
APPROVED FOR CONSTRUCTION
AS SPECIFIED AUG 4 2017
DATED AUG 4 2017
NO CHANGES ARE TO BE MADE AT CONSTRUCTION
APPROVED PLANS MUST BE AT CONSTRUCTION

James J. Geremia

JUL 14 2017
Office of Water Resources

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DRAWN BY: OL
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SCALE: 1"=40'
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JAMES J. GEREMIA
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KENT COUNTY WATER AUTHORITY
NORTH AND SOUTH 500 FEET
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PLAN
MISCELLANEOUS DETAILS III

SHEET NO.
6