

GENERAL NOTES

- ## GENERAL NOTES
1. ALL DIMENSIONS ARE TO THE EDGE OF STRUCTURES AND FACE OF CURBS UNLESS SPECIFICALLY INDICATED OTHERWISE.
 2. DUE TO THE NATURE OF THIS PROJECT, THE EXACT EXTENT OF THE WORK CANNOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO THE COMMENCEMENT OF THE WORK. THESE DRAWINGS HAVE BEEN PREPARED BASED ON VARIOUS FIELD INSPECTION PROGRAMS, AND OTHER AVAILABLE INFORMATION. ACTUAL CONDITIONS ENCOUNTERED MAY REQUIRE MODIFICATIONS IN CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF DISCREPANCIES BETWEEN FIELD CONDITIONS AND CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK. THE CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH FIELD CONDITIONS AS APPROVED AND/OR DIRECTED BY THE ENGINEER.
 3. EXISTING UTILITY LOCATIONS, SIZE AND ELEVATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE AND ARE INTENDED TO INDICATE THE EXISTENCE OF SUCH UTILITIES IN THE AREAS SHOWN. BEFORE PROCEEDING WITH THE WORK, THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES.
 4. ALL EXISTING UTILITIES AND BURIED PIPING SHALL BE PROTECTED FROM DAMAGE AS A RESULT OF THE WORK INCLUDED IN THIS PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE ANY DAMAGED UTILITIES OR BURIED PIPING TO THE SATISFACTION OF THE DEP. ALL EXCAVATORS MUST CALL DIG SAFELY, NEW YORK AT 1-800-962-7962 AT LEAST TWO (2) BUT NOT MORE THAN (10), WORKING DAYS PRIOR TO THE START OF EXCAVATION. ACCORDING TO NEW YORK STATE LAW (GENERAL BUSINESS LAW ARTICLE 36 AND PUBLIC SERVICE LAW 119-B) ALL OPERATORS OF UNDERGROUND FACILITIES MUST BECOME MEMBERS OF THE DIG SAFELY, NEW YORK ONE-CALL NETWORK.
 5. CONSTRUCTION VEHICLES AND EQUIPMENT WITH LOADS GREATER THAN H-20 HIGHWAY LOADS SHALL NOT CROSS EXISTING UNDERGROUND STRUCTURES OR PIPING WITHOUT PROPER BRIDGING. FURTHERMORE, VEHICLES USED TO HAUL DEMOLISHED MATERIALS, UNSUITABLE MATERIAL, EARTH, CONCRETE, ETC., SHALL AVOID CROSSING OVER EXISTING UNDERGROUND STRUCTURES WHENEVER POSSIBLE. WHEN CROSSING CAN NOT BE AVOIDED, SUITABLE BRIDGING SHALL BE PROVIDED.
 6. NEW ROADWAY TOP ELEVATIONS SHALL BE FINISHED TO MATCH ADJOINING ROADWAY ELEVATIONS UNLESS NOTED OTHERWISE.
 7. AT THE COMPLETION OF THE WORK FOR THIS CONTRACT, ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THE FINAL CONDITION AS SHOWN IN THE CONTRACT DRAWINGS.
 8. EXISTING TOPOGRAPHIC INFORMATION WAS OBTAINED FROM SURVEYS PERFORMED BY GEOD SURVEYING, P.C., AND AERIAL MAPPING, NEWFOUNDLAND, NJ
 9. VERTICAL DATUM IS NGVD 29 UNLESS NOTED OTHERWISE.
 10. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT THE EXISTING FACILITIES SHALL BE KEPT IN CONTINUOUS DEPENDABLE OPERATION DURING THE COURSE OF THIS CONTRACT. THE CONTRACTOR SHALL NOT INTERFERE WITH THE OPERATION OF OR BLOCK ACCESS TO THE EXISTING FACILITIES.
 11. CONTRACTOR SHALL FIELD VERIFY EXTENTS OF DEMOLITION. CONTRACTOR SHALL NOTIFY ENGINEER AND RECEIVE ENGINEER'S APPROVAL BEFORE PROCEEDING WITH THE WORK.
 12. THE DETAILS, SEQUENCE AND METHOD OF CONSTRUCTION SHOWN ON THE DRAWINGS REPRESENT A SUGGESTED METHOD OF EXECUTING THE WORK. PRIOR TO THE COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL SUBMIT HIS PROPOSED METHOD AND SEQUENCE OF CONSTRUCTION FOR REVIEW TO THE ENGINEER.
 13. SIGNS SHALL CONFORM TO THE OFFICIAL COMPILATION CODE RULES AND REGULATIONS OF NEW YORK.
 14. TEMPORARY ROADS AND STAGING AREAS SHALL BE SURFACED WITH COMPACTED GRAVEL UNLESS SHOWN OTHERWISE ON DRAWINGS.
 15. ALL WATERCOURSES SHALL BE PROTECTED FROM SITE SURFACE RUNOFF IN ACCORDANCE TO NYSDEC REQUIREMENTS, AND CONTRACT DOCUMENTS.
 16. ALL CONSTRUCTION RELATED ACTIVITIES, INCLUDING STAGING AND STOCKPILING, SHALL BE CONTAINED WITHIN THE NYCDEP PROPERTY LIMITS.
 17. DUST AND TRAFFICABLE MUD SHALL BE MINIMIZED PER NYSDEC REQUIREMENTS.
 18. NOISE ABATEMENT PROCEDURES SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.
 19. EXCAVATIONS PERFORMED AS PART OF SITE PREPARATIONS SHALL BE MADE IN ACCORDANCE TO NYSDOT SPECIFICATION SECTION 203.
 20. ALL WORK SHALL MEET THE REQUIREMENTS OF THE TOWN OF WAPPINGER FOR WATER MAIN INSTALLATIONS. THE CONTRACTOR SHALL BRING TO THE ENGINEER'S ATTENTION ANY DISCREPANCIES BETWEEN THE TOWN REQUIREMENTS AND THE CONTRACT DRAWINGS.

21. THE LAYOUT OF CONTRACTOR FACILITIES AND WORK AREAS AT THE SITE ARE GENERAL SUGGESTIONS. ACTUAL LAYOUT SHALL BE DETERMINED BY THE CONTRACTOR, AND APPROVED BY THE ENGINEER.
22. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL PERMITS REQUIRED BY THE TOWN OF WAPPINGER TO INCLUDE ROAD OPENING AND ALL BUILDING PERMITS. WORK ONLY DURING STANDARD CONSTRUCTION WORK HOURS AS DESIGNATED BY THE TOWN OF WAPPINGER CODE. THE CONTRACTOR SHALL CONFORM TO ALL REQUIREMENTS OF THE EXISTING SITE PLAN APPROVAL PREVIOUSLY OBTAINED BY THE CITY. COORDINATE SITE WORK WITH DEP CONTRACT BT-2 THROUGH THE ENGINEER. USE ONLY THE DESIGNATED BT-2 TRUCK ROUTE TO AND FROM THE SITE (RIVER ROAD TO THE SOUTH/CHELSEA ROAD). CONFORM TO THE BT-2 NOISE MANAGEMENT PLAN.

23. THE CONTRACTOR SHALL NOTIFY THE DUTCHESS COUNTY DEPARTMENT OF HEALTH PRIOR TO FILLING THE WATER LINE AND SHALL COMPLY WITH ALL REQUIREMENTS SET FORTH BY THE DEPARTMENT OF HEALTH. RESULTS OF ANY WATER QUALITY TESTS SHALL BE SUBMITTED TO THE COUNTY AND TO THE ENGINEER.

GENERAL UTILITY NOTES

1. CONTRACTOR SHALL AVOID SUBSURFACE, ON-SURFACE, AND OVERHEAD UTILITIES NOT DESIGNATED TO BE DEMOLISHED OR RELOCATED.
2. CONTRACTOR SHALL FIELD VERIFY THE ELECTRICAL LOAD AVAILABLE AT THE SITE; AND DETERMINE WHETHER OR NOT THIS LOAD IS ADEQUATE TO SUPPORT THE DEMAND FROM EQUIPMENT AND OPERATIONS. ANY CHANGES TO THE ELECTRICAL DESIGN SHALL BE APPROVED BY THE ENGINEER.
3. ALL COSTS INCURRED IN OBTAINING PERMITS AND FURNISHING ELECTRICAL SERVICES, INCLUDING CONNECTION AND USAGE, SHALL BE BORNE BY THE CONTRACTOR. THE CONTRACTOR SHALL MAKE DUE ALLOWANCE FOR THE TIME REQUIRED TO APPLY FOR AND RECEIVE THE POWER SUPPLY AND DISTRIBUTION.

EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL ADHERE TO ALL REQUIREMENTS OF THE EXISTING, APPROVED SITE SWPPP AND NYSDEC AND TOWN EROSION AND SEDIMENT CONTROL REGULATIONS.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NYSDEC STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL CURRENT EDITION. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE STORMWATER PERMITS, INCLUDING THE NYSDEC SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES AND THE NYSDEC WATER DEPARTMENT "NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL".
3. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED. AREAS OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM SHALL NOT BE DISTURBED. SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS IN ACCORDANCE WITH NYSDEC STANDARDS, INCLUDING AFTER EVERY STORM EVENT.
4. ANY DISTURBED AREA AND STOCK PILED MATERIALS THAT WILL BE LEFT EXPOSED FOR MORE THAN FOURTEEN (14) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND MULCHING. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREA SHALL BE MULCHED WITH SALT HAY OR EQUIVALENT AND BOUND IN ACCORDANCE WITH NYSDEC STANDARDS. (i.e. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER). IF SOIL EROSION CONTINUES, THE AREA SHALL BE STABILIZED WITH EROSION CONTROL MATTING IN ACCORDANCE WITH NYSDEC STANDARDS.
5. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION SHALL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF 2 TONS PER ACRE.
6. STABILIZE ALL AREAS NOT TO BE DISTURBED WITHIN 10 DAYS WITH TEMPORARY SEEDING PER NYSDOT SPECIFICATION SECTION 610.
7. CLEARING SHALL BE LIMITED TO AREAS REQUIRED FOR IMMEDIATE CONSTRUCTION ACTIVITIES. MASS CLEARING AND GRADING OF SITES SHALL BE AVOIDED.
8. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL PRACTICES.
9. STOCKPILES ARE NOT TO BE LOCATED WITHIN 50' OF A FLOOD PLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES SHALL BE CONTAINED BY A SILT FENCE.
10. MAXIMUM SIDE SLOPES SHALL NOT EXCEED (H:V) 2:1 FOR EARTH SURFACES OR FOR ROCK SURFACES, UNLESS OTHERWISE SHOWN/NOTED ON DRAWINGS OR SPECIFIED IN CONTRACT DOCUMENTS. ANY SIDE SLOPE REVISION MUST BE APPROVED BY THE ENGINEER.

11. ALL POINTS OF CONSTRUCTION ENTRANCE AND EGRESS SHALL BE PROTECTED TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED PUBLIC THOROUGHFARE(S) BY INSTALLING AND MAINTAINING A STABILIZED CONSTRUCTION ENTRANCE, AND BY WASHING ALL VEHICLE WHEELS IN THE INSTALLED TRUCK WASH. ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) SHALL BE REMOVED IMMEDIATELY. PROPER PRECAUTIONS SHALL BE TAKEN TO ENSURE THAT MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) ARE REMOVED SO THAT THEY DO NOT ENTER DRAINAGE SWALES, CATCH BASINS, STORM SEWERS, OR COMBINED SEWERS.
12. DUST SHALL BE CONTROLLED VIA THE APPLICATION OF UNCONTAMINATED WATER OR OTHER APPROVED METHOD IN ACCORDANCE WITH NYSDEC STANDARDS.
13. TREES INSIDE LIMITS OF DISTURBANCE TO REMAIN AFTER CONSTRUCTION ARE TO BE PROTECTED WITH A SUITABLE FENCE INSTALLED 5 FEET BEYOND THE DRIP LINE IN ACCORDANCE WITH NYSDEC STANDARDS.
14. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT ALL POINTS OF ACCESS WHERE A DISTURBED AREA MEETS AN IMPERVIOUS SURFACE.
15. ANY REVISION TO THE APPROVED SWPPP MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION IN THE FIELD. UPON APPROVAL, ALL REVISIONS INCLUDING DOCUMENTATION AND CALCULATIONS MUST BE ADDED TO THE SWPPP PRIOR TO IMPLEMENTATION. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR THE TIME REQUIRED TO RECEIVE APPROVALS PRIOR TO IMPLEMENTATION.
16. CONTRACTOR SHALL DETERMINE THE OVERALL EXTENT OF MEASURES REQUIRED IN THE SWPPP, EROSION CONTROL MEASURES AND NOISE ABATEMENT MEASURES, BASED ON ITS PLANNED OPERATIONS. A COPY OF THE CERTIFIED STORMWATER POLLUTION PREVENTION PLAN ALONG WITH ALL ASSOCIATED DOCUMENTATION MUST BE AVAILABLE AT THE PROJECT SITE THROUGHOUT CONSTRUCTION.
17. THE LOCATION AND EXTENT OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MODIFIED AT EACH PHASE OF CONSTRUCTION THAT RESULTS IN A CHANGE OF EITHER THE QUANTITY OR DIRECTION OF SURFACE RUNOFF FROM THE CONSTRUCTION AREAS. CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM THE ENGINEER FOR DEVIATIONS FROM THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
18. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. MEASURES SHALL BE REPAIRED OR REPLACED IMMEDIATELY AS REQUIRED TO MAINTAIN PERFORMANCE.
19. REMOVED SEDIMENT SHALL BE DISPOSED OF IN SUCH MANNER AS TO ENSURE FURTHER SEDIMENT TRANSPORT DOES NOT OCCUR.

ABBREVIATIONS

AC	ASPHALTIC CONCRETE	OD	OUTER DIAMETER
BLDG	BUILDING	PR	PROPOSED
B/	BOTTOM	PROJ	PROJECTION
B/P	BOTTOM OF PIPE	PVC	POLY VINYL CHLORIDE
CMP	CORRUGATED METAL PIPE	PW	POTABLE WATER
CJ	CONSTRUCTION JOINT	RQD	REQUIRED
CY	CUBIC YARD	RW	RAW WATER
DI	DUCTILE IRON	S	SLOPE, SOUTH
DEFL	DEFLECTION	SAN	SANITARY SEWER
DWLS	DOWELS	SMP	STORMWATER MANAGEMENT
EG	EXISTING GRADE		PRACTICE
EHH	ELECTRICAL HAND HOLE	SWPPP	STORM WATER POLLUTION
EMH	ELECTRICAL MANHOLE		PREVENTION PLAN
ENGR	ENGINEERING	SQ	SQUARE
EX	EXISTING	SPEC	SPECIFICATION
F	FIRE PROTECTION	T/C	TOP OF CONCRETE
FA	FIRE ALARM	T/P	TOP OF PIPE
FG	FINISHED GRADE	TC	TOP OF CURB
FND	FOUNDATION, FOUND	THK	THICKNESS
FO	FUEL OIL	TW	TOP OF WALK
FT	FOOT, FEET	UG	UNDERGROUND
G	GAS	UNK	UNKNOWN
GAL	GALLON	Ø	JOINT DEFLECTION ANGLE
GALV	GALVANIZED	V	VALVE
GV	GAS VALVE	VER	VERTICAL
HOR	HORIZONTAL	VIF	VERIFY IN FIELD
IE	INVERT ELEVATION	W	WATER, WEST
MJ	MECHANICAL JOINT	WV	WATER VALVE
MON	MONUMENT	WWF	WELDED WIRE FABRIC
#, NO	NUMBER		

EXISTING			
	BRUSH/TREE LINE		TRAFFIC CHANNELING DEVICES
	SPOT ELEVATION		TRAFFIC SIGN
			TRAFFIC DIRECTION OF TRAVEL
			TRAFFIC SIGNAL LIGHT
NEW			LANE LINE
	BRUSH/TREE LINE		NORMAL BROKEN LINE
	SPOT ELEVATION		ARROWS-WHITE PREFORMED REFLECTORIZED
	WETLAND AREA		TRAFFIC SIGNAL MODULE
	CHAIN LINK FENCE		TRAFFIC SIGNAL POLE
	PROTECTIVE FENCE		MICROWAVE VEHICLE DETECTOR
	SPLIT RAIL FENCE		REINFORCED CONCRETE PULL BOX
	SILT FENCE		INDUCTANCE LOOP WIRE
	NOISE FENCE		MICROCOMPUTER STRETCH CABINET
	GUIDE RAILING		
	CONCRETE BARRIER		RIP-RAP
	LIMITS OF DISTURBANCE		CONSTRUCTION STAGING AREA
	50' STREAM BUFFER		ROCK
	100 YEAR FLOOD PLAIN		SAND/ BACKFILL
	POTABLE WATER		DEMOLITION
	NON-POTABLE WATER		GRUBBING AND STRIPPING
	DEWATERING FORCE MAIN		50' STREAM BUFFER
	DEWATERING LINE		100 YEAR FLOOD PLAIN
	DRAIN		
	PROPERTY LINE		BORING LOCATION AND ID NO.
	HYDRAULIC GRADE LINE		POST HYDRANT
	SLOPE		COMMON FILL
	DROP INLET		TO BE REMOVED
	INLET SEDIMENT PROTECTION		TO BE ABANDONED
	TREE PROTECTION		STRUCTURE TO BE REMOVED
	SHIPPING/STORAGE CONTAINERS FOR NOISE ABATEMENT		STRUCTURE TO BE ABANDONED
	ASPHALT		CUT & CAP
	CONCRETE		BULKHEAD
	GRAVEL		AIR RELEASE ASSEMBLY
	EARTH		AIR VENT ASSEMBLY

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REVISIONS				EP

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NYC Water for the Future
Environmental Protection



PROJECT MANAGER
CHIEF, TUNNEL DESIGN
DIRECTOR, IN HOUSE DESIGN PATRICK O'CONNOR

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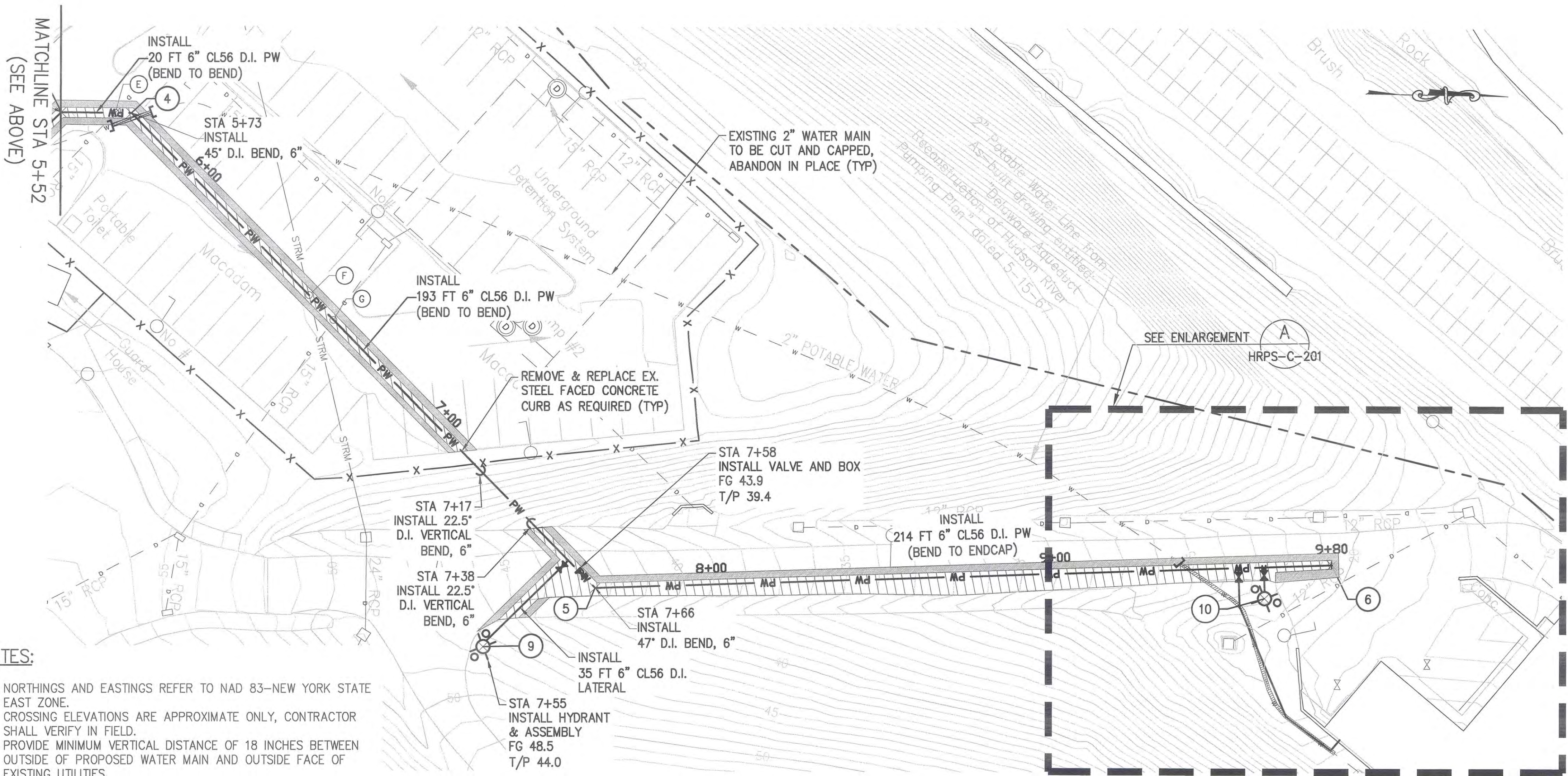
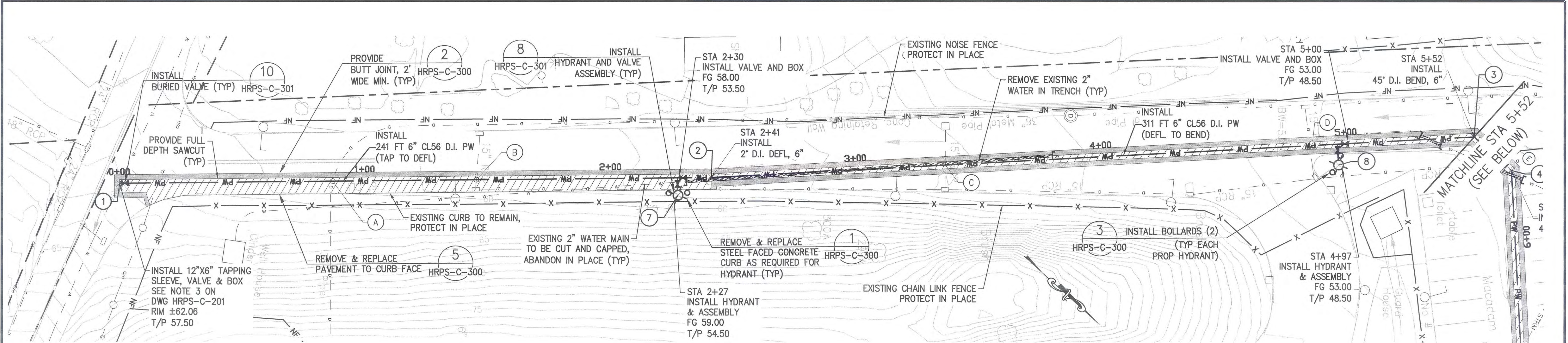
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GRAPHIC SCALES
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HUDSON RIVER PUMPING STATION IMPROVEMENTS CIVIL SYMBOLS, NOTES & ABBREVIATIONS	DATE: 9/29/2017
	SCALE: NTS
	SHEET NO:
	1 OF 9
	DRAWING NO. HRPS-C-100.00

Last Saved By: & Date: Alopez, Friday, August 05, 2016 and Date Plotted: Thursday, September 28, 2017
Paper Size: ANSI full bleed D (34.00 x 22.00 inches) Plot Scale: 1" = 20.00 feet
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NOTES:

1. NORTHINGS AND EASTINGS REFER TO NAD 83-NEW YORK STATE EAST ZONE.
2. CROSSING ELEVATIONS ARE APPROXIMATE ONLY, CONTRACTOR SHALL VERIFY IN FIELD.
3. PROVIDE MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN OUTSIDE OF PROPOSED WATER MAIN AND OUTSIDE FACE OF EXISTING UTILITIES.
4. SEE ADDITIONAL NOTES ON DWG HRPS-C-201.

Point Table

Point #	Northing	Easting	Description
1	994105.7924	640616.3064	12" X 6" TAPPING SLEEVE
2	994281.3899	640451.0698	HOR. 2 DEG. DEFL, 6" D.I.
3	994498.4630	640228.3019	HOR. 45 DEG. BEND, 6" D.I.
4	994518.8712	640228.0378	HOR. 45 DEG. BEND, 6" D.I.
5	994657.4185	640363.0455	HOR. 45 DEG. BEND, 6" D.I.
6	994871.4590	640351.0067	END CAP, 6" D.I.
7	994276.3029	640465.6130	Hydrant
8	994465.6791	640274.1611	Hydrant
9	994625.3005	640380.9130	Hydrant
10	994852.1261	640361.1579	Hydrant

UTILITY CROSSING SCHEDULE (V.I.F)

NAME	ELEVATION	CROSSING DESCRIPTION	W.M. CROSSING ELEVATION
A	T/P 41.5±	36" PIPE	B/P 54.50±
B	B/P 55.00±	15" RCP	T/P 53.50±
C	B/P 51.42±	15" RCP	T/P 49.92±
D	B/P 48.10±	15" RCP	T/P 46.60±
E	B/P 46.55±	15" RCP	T/P 45.05±
F	T/P 44.00±	24" RCP	B/P 47.00±
G	B/P 48.06±	15" RCP	T/P 46.56±

1"=20'
0 20 40 FT.

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HUDSON RIVER PUMPING STATION
IMPROVEMENTS

CIVIL
SHAFT 6B
WATER PIPING PLAN - SHEET 1 OF 2

DATE: 9/29/2017

SCALE: 1"=20'

SHEET NO:

2 OF 9

DRAWING NO.

HRPS-C-200.00

PROJECT MANAGER

CHIEF, TUNNEL DESIGN

DIRECTOR, IN HOUSE DESIGN

PATRICK O'CONNOR

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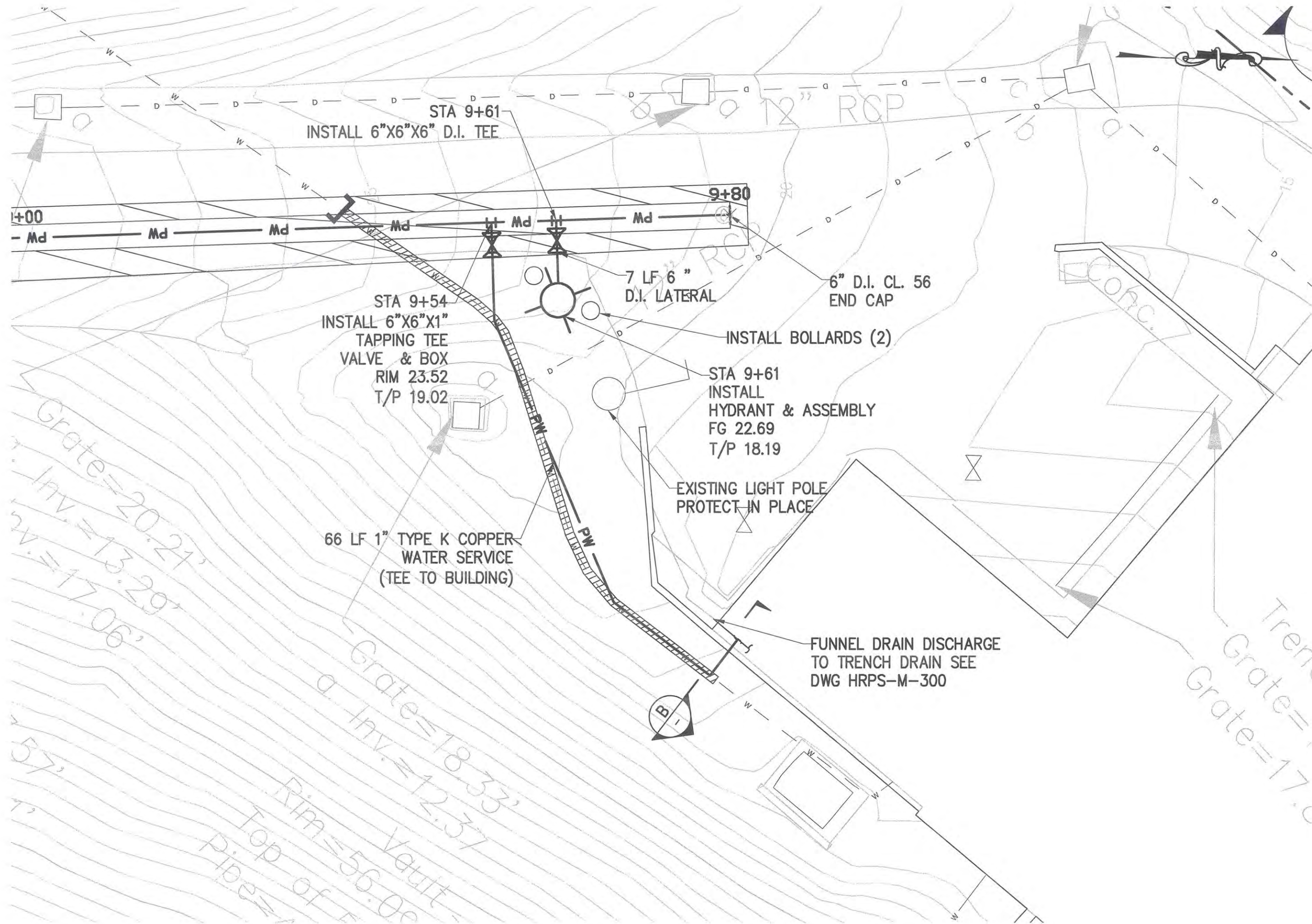
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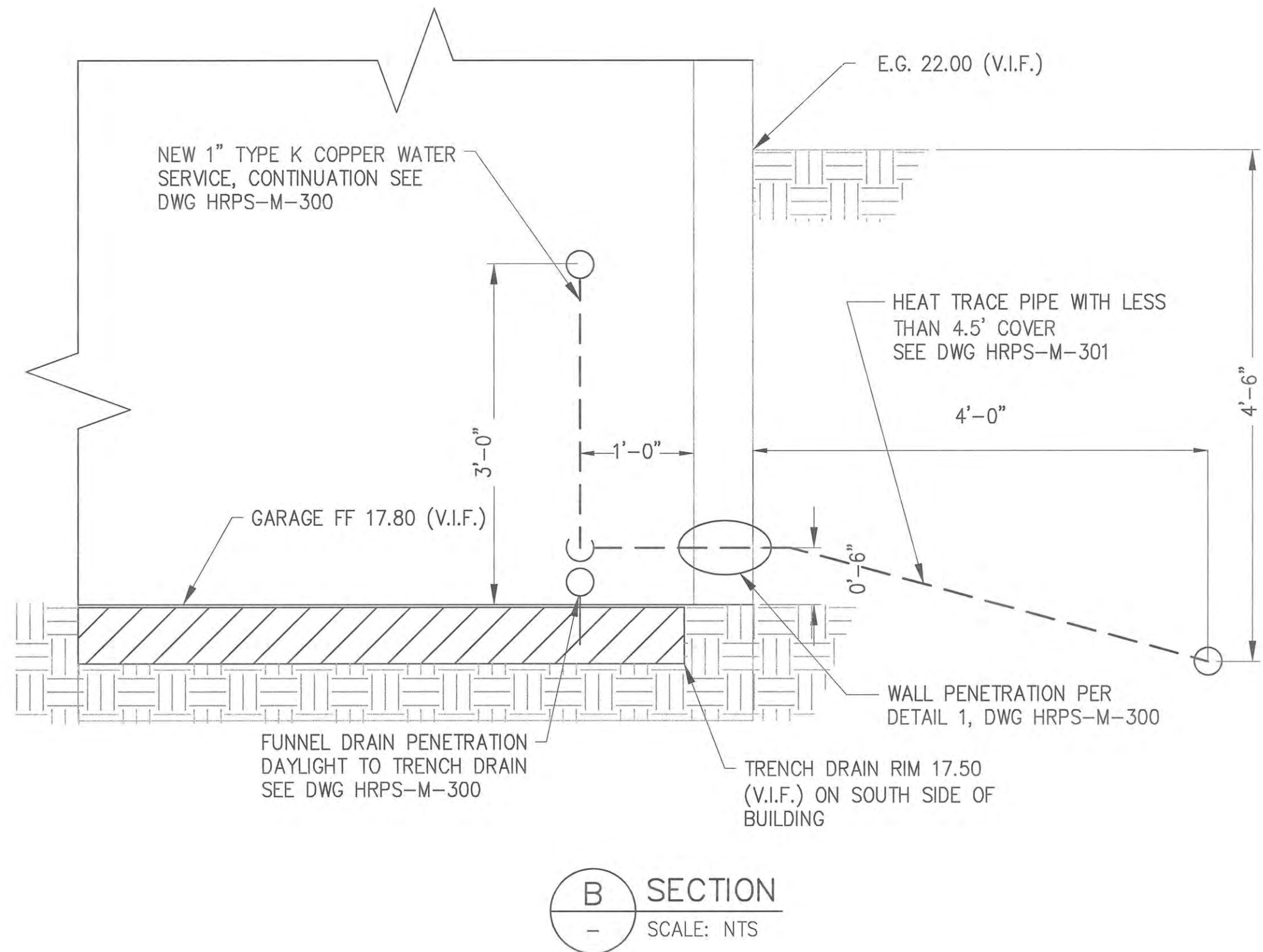


A WATER PIPING PLAN ENLARGEMENT
SCALE: 1' = 10'

NOTES:

1. WATER MAIN SHALL BE PER AWWA C151/C104. PROVIDE DOUBLE THICKNESS CEMENT MORTAR LINING AND STANDARD ASPHALTIC OUTSIDE COATING. ALL DUCTILE IRON PIPE, JOINT RESTRAINTS AND FITTINGS SHALL CONFORM TO ANSI/NSF-61. JOINTS SHALL BE AWWA C111, EITHER PUSH ON (TYTON) OR MECHANICAL JOINT PIPE AS MANUFACTURED BY U.S. PIPE AND FOUNDRY OR APPROVED EQUAL, UNLESS OTHERWISE NOTED. ALL PUSH ON JOINTS SHALL REQUIRE 3 BRONZE WEDGES.
2. JOINT RESTRAINTS SHALL BE AWWA C111, U.L. LISTED, AND FACTORY MUTUAL APPROVED TO WITHSTAND A MINIMUM PRESSURE OF 250 PSI. JOINT RESTRAINTS SHALL BE PROVIDED FOR DUCTILE IRON PUSH ON OR MECHANICAL JOINT PIPE WITH TWIST OFF INDICATORS AND SHALL BE AS MANUFACTURED BY EBAA IRON MEGALUG FOR MECHANICAL JOINT PIPE, U.S. PIPE AND FOUNDRY FIELD LOK 350 FOR PUSH ON JOINT OR APPROVED EQUAL.
3. TAPPING SLEEVE SHALL BE MUELLER H-615 OR SMITH BLAIR 665 AS APPROVED BY THE TOWN OF WAPPINGER.
4. HYDRANTS SHALL BE MUELLER CENTURION 4.5" WVO OR 5.25" WVO AS APPROVED BY THE TOWN OF WAPPINGER.

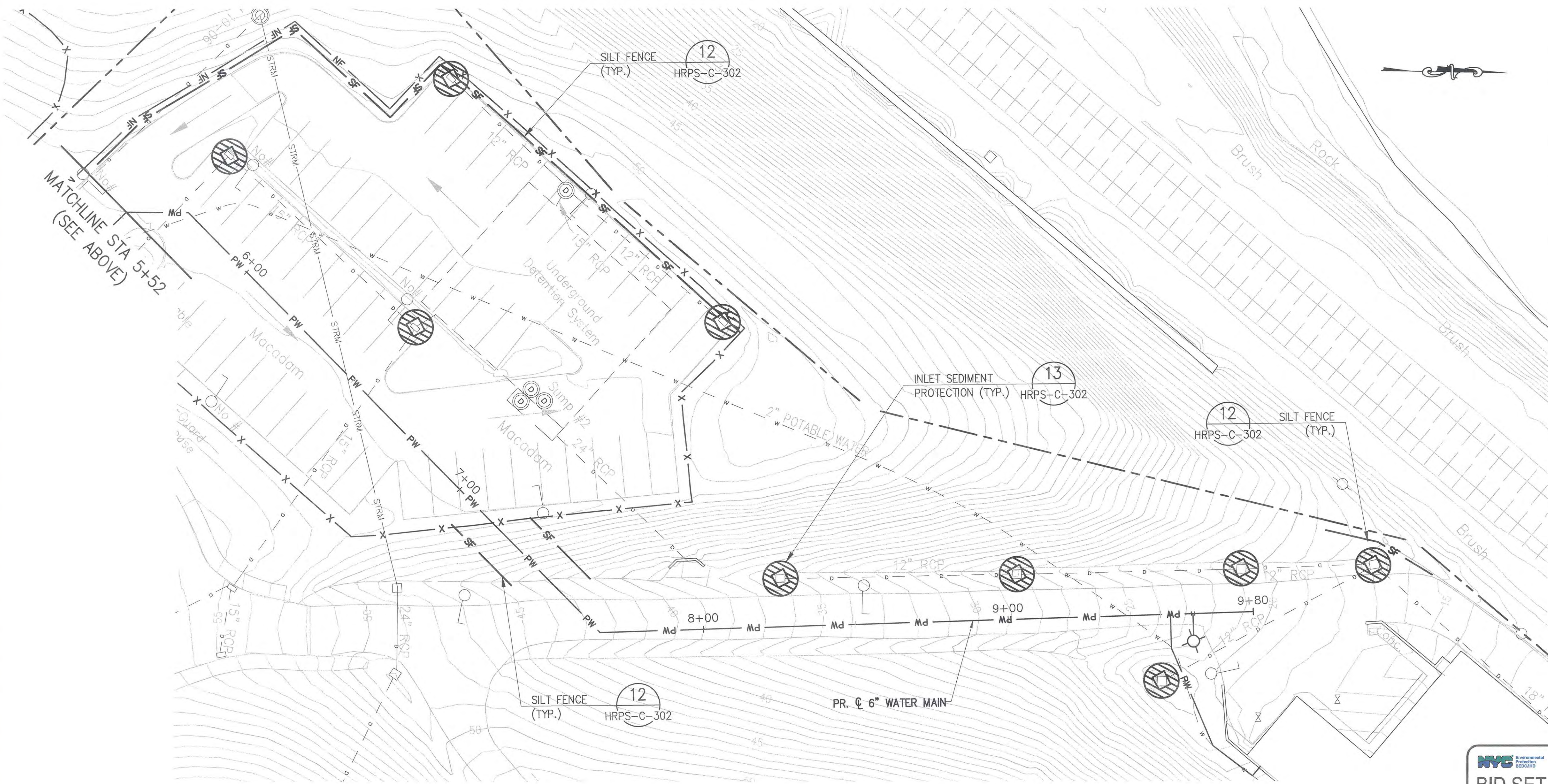
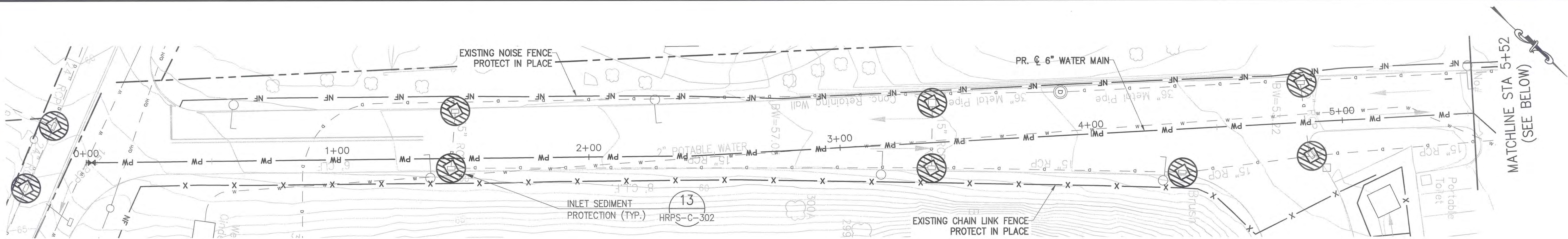
5. TAPPING SADDLE SHALL BE SMITH BLAIR 317 DOUBLE BAND STAINLESS STEEL EPOXY COATED AS APPROVED BY THE TOWN OF WAPPINGER.
6. CORPORATION STOP SHALL BE MUELLER B25008N BALL CORP AS APPROVED BY THE TOWN OF WAPPINGER.
7. CURB VALVE SHALL BE MUELLER B25209N BALL CURB VALVE AS APPROVED BY THE TOWN OF WAPPINGER.
8. CURB VALVE RISER SHALL BE STANDARD TWO HOLE LID WITH STAINLESS STEEL OPERATING ROD AS APPROVED BY THE TOWN OF WAPPINGER.
9. GATE VALVES SHALL BE PER AWWA C509 WITH IRON BODY, RESILIENT SEAT, BRONZE TRIM, SINGLE WEDGE, MECHANICAL JOINT, AND CONTROL ROD, AS MANUFACTURED BY MUELLER OR APPROVED EQUAL. VALVES SHALL BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI.
10. VALVE EXTENSION BOX SHALL BE CLOW BOX #F-2450 WITH F-2494 COVER AND TWO (2) ADJUSTABLE VALVE KEYS.



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HUDSON RIVER PUMPING STATION IMPROVEMENTS		3 OF 9	
CIVIL SHAFT 6B WATER PIPING PLAN - SHEET 2 OF 2		DRAWING NO. HRPS-C-201.00	

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CHECKED BY: EP				DESIGN LEAD: GM			
SECTION MANAGER: EP				PROJECT MANAGER			
NO.				CHIEF, TUNNEL DESIGN			
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DESCRIPTION				PATRICK O'CONNOR			
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Last Saved By & Date: Alopez, Thursday, September 01, 2016 and Date Plotted: Thursday, September 28, 2017
Paper Size: ANSI full bleed D (34.00 x 22.00 inches) Plot Scale: 1"=20' Plot Style: table:BEDC_Accad(E).ctb
Design Name: & Location: \\dep-map1\Cad_Data\BEDC_IJD_Projects\BWS_RWB12\01_Design_Dwg\02_Site_Preparation\01_Civil\HRPS-C-202.00.dwg



- NOTES:**
- REFER TO DWG HRPS-C-100 FOR GENERAL EROSION AND SEDIMENT CONTROL NOTES AND MAINTENANCE AND INSPECTION REQUIREMENTS.
 - CONTRACTOR SHALL PROVIDE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AROUND AREAS OF DISTURBANCE AS THE WORK PROGRESSES.
 - EROSION CONTROLS SHOWN HEREIN REPRESENT THE MINIMUM REQUIRED FOR THE WORK INDICATED. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROLS IN APPROPRIATE LOCATIONS BASED ON THEIR OPERATIONS.
 - THE SILT FENCE SHOWN IS TO INDICATE THE APPROXIMATE LOCATION AND INTENT OF THE SILT FENCE. THE CONTRACTOR SHALL INSTALL SILT FENCE ON THE DOWNGRADE SLOPE OF ALL AREAS TO BE DISTURBED. ALL SILT FENCE SHALL BE INSTALLED PARALLEL TO THE SLOPE.
 - DRAINAGE INLETS WITHIN WORK AREAS SHALL BE PROTECTED FROM SEDIMENTATION.
 - AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARY CEASES FOR 14 DAYS OR MORE WILL BE STABILIZED WITH GRAVEL.
 - SURROUND AREAS WHERE SOIL WILL BE STOCKPILED WITH SILT FENCE AND STABILIZE PER DETAIL 4 ON DWG HRPS-C-300.
 - RESTORE ALL DISTURBED VEGETATED AREAS WITH TOPSOIL AND SEED IN ACCORDANCE TO NYSOT SPECIFICATION SECTION 610.



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GRAPHIC SCALES
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DESIGN LEAD:
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DRAWN BY:
AL
NYC Water & Future
Environmental Protection



PROJECT MANAGER
CHIEF, TUNNEL DESIGN
DIRECTOR, IN HOUSE DESIGN
PATRICK O'CONNOR

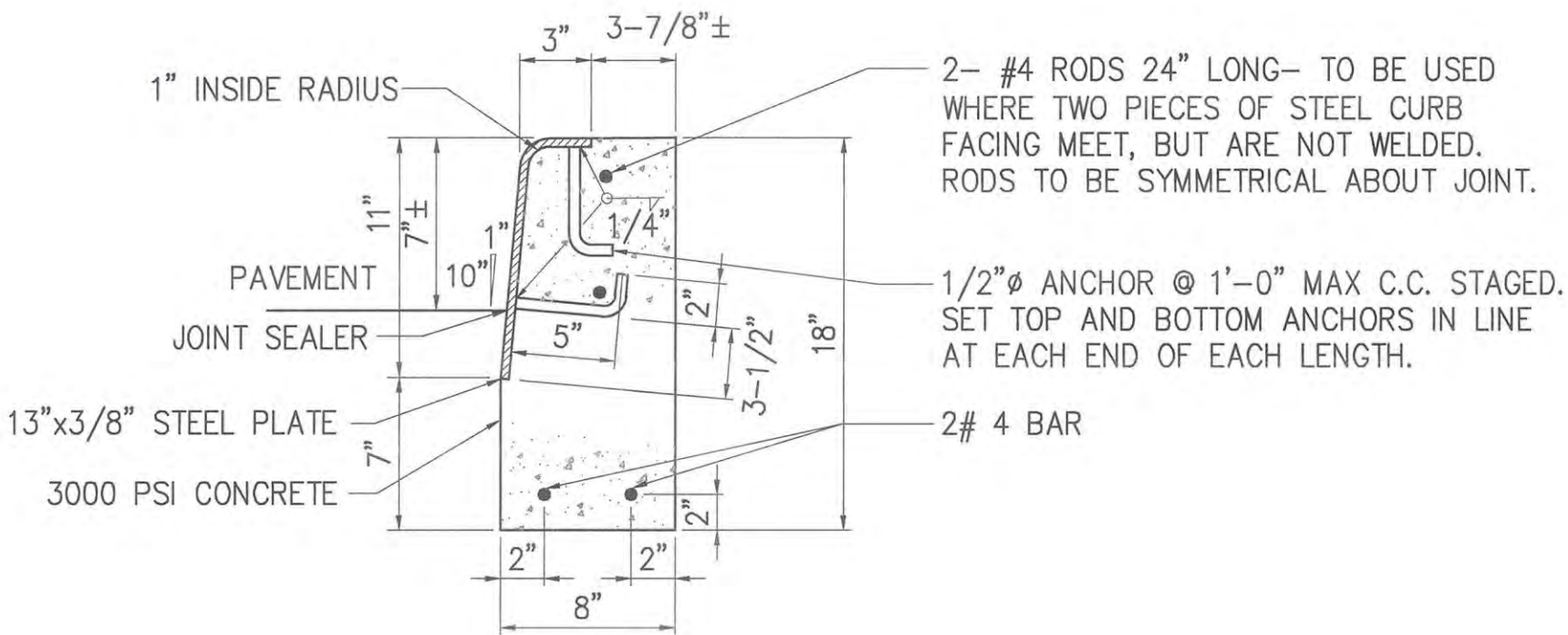
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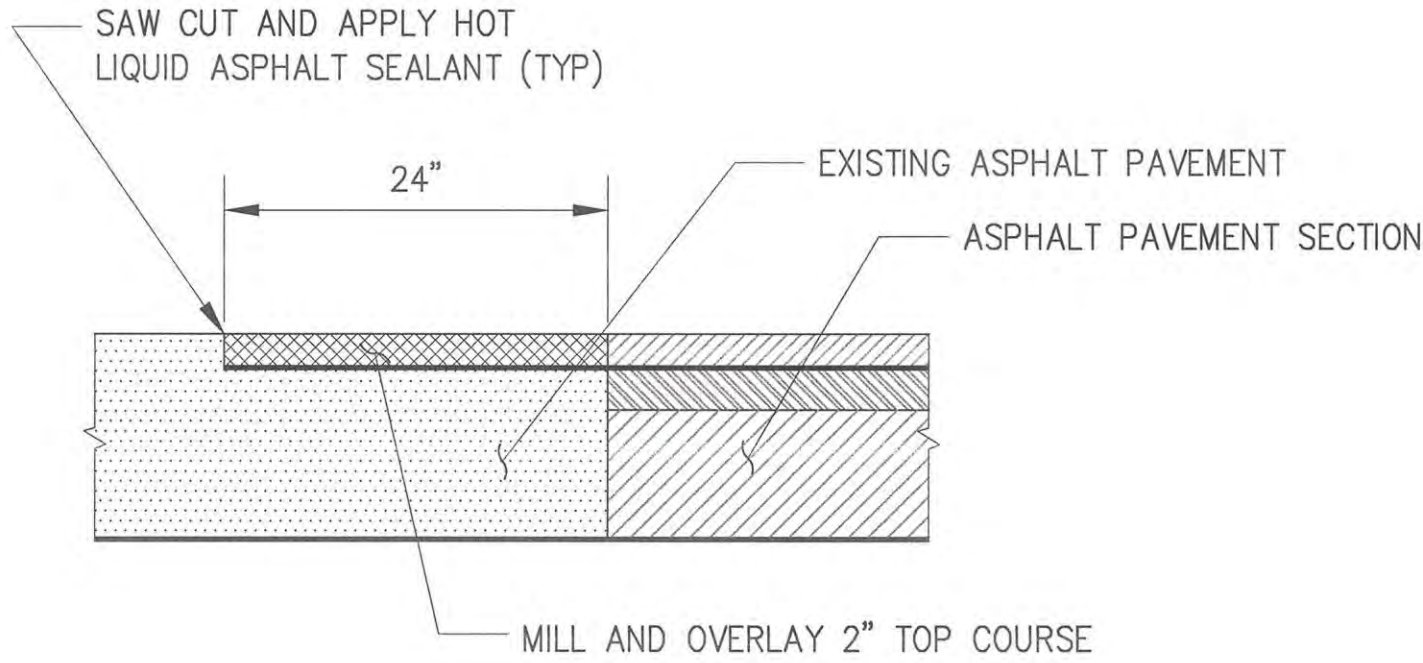
HUDSON RIVER PUMPING STATION IMPROVEMENTS
CIVIL
SHAFT 6B
EROSION AND SEDIMENT CONTROL PLAN
DATE: 9/29/2017
SCALE: 1"=20'
SHEET NO:
4 OF 9
DRAWING NO.
HRPS-C-202.00

STEEL FACE CURB NOTES:

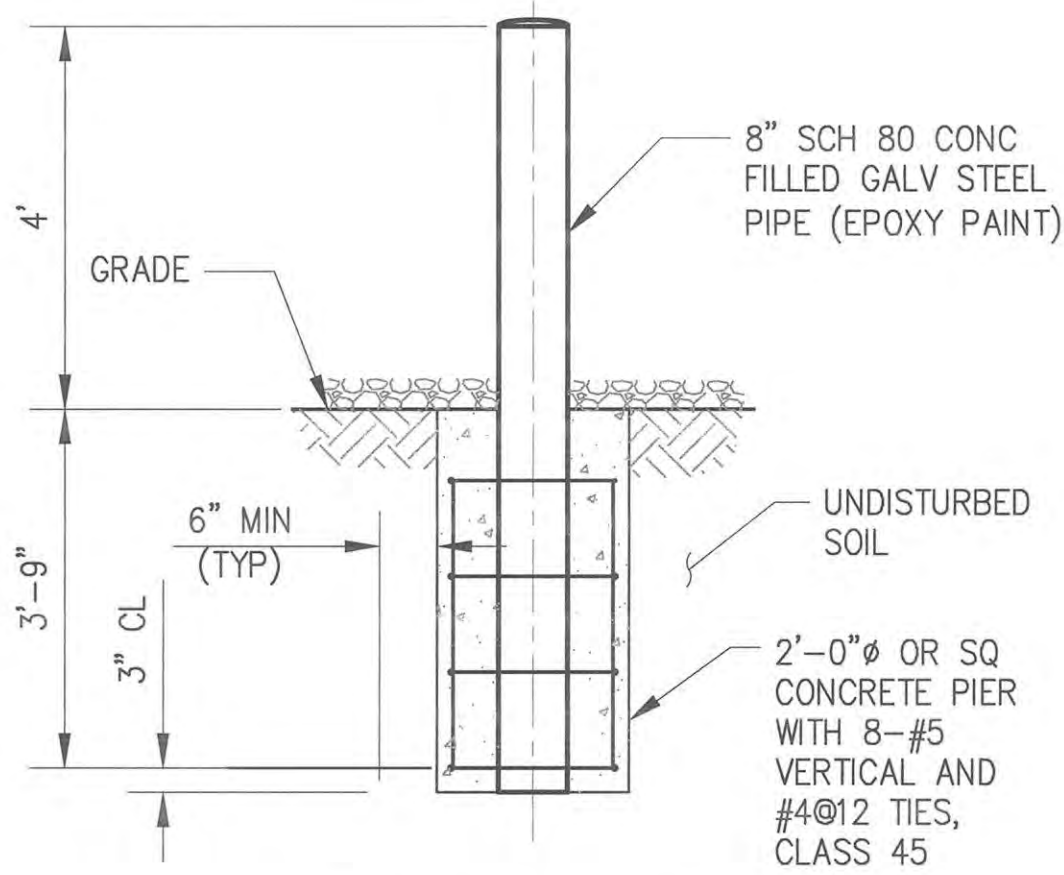
- 1. STRUCTURAL STEEL AS PER ASTM A-36.
- 2. SURFACE TO BE PAINTED SHALL BE THOROUGHLY CLEANED AND THEN PAINTED WITH ONE SHOP COAT OF SUBLIMED RED LEAD. (FEDERAL SPEC. TT-P-86C, CLASS 2)
- 3. CORNER CURB: VERTICAL FACED CURB WILL BE ACCEPTABLE FOR CORNER CURBS, PROVIDING ENDS ARE WRAPPED TO FORM A TRANSITION WITH ADJACENT BATTERED FACE CURBS.



1 STEEL FACE CURB
SCALE: NTS



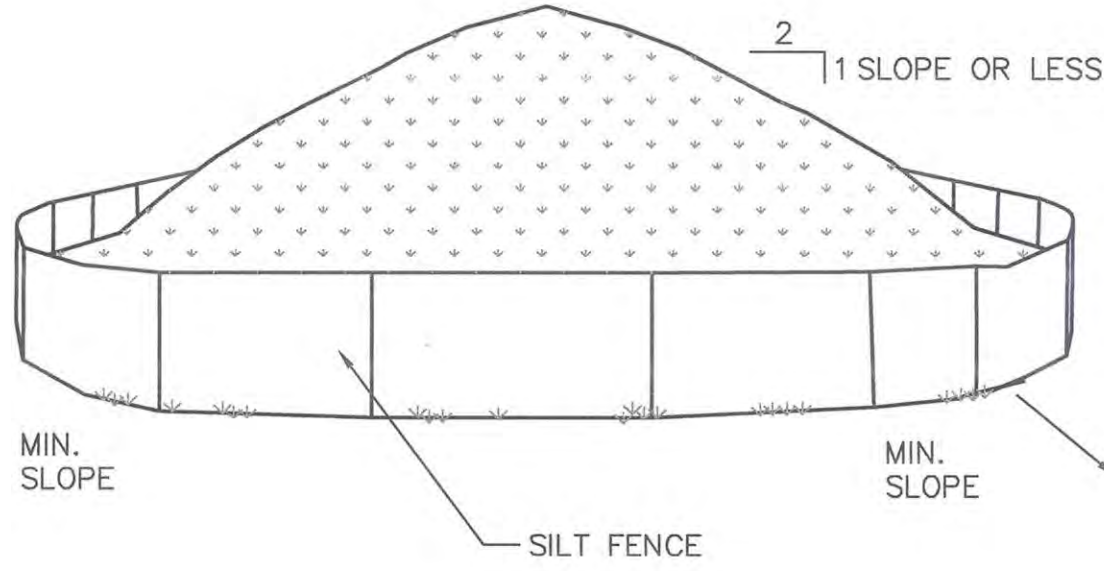
2 ASPHALT BUTT JOINT
SCALE: NTS



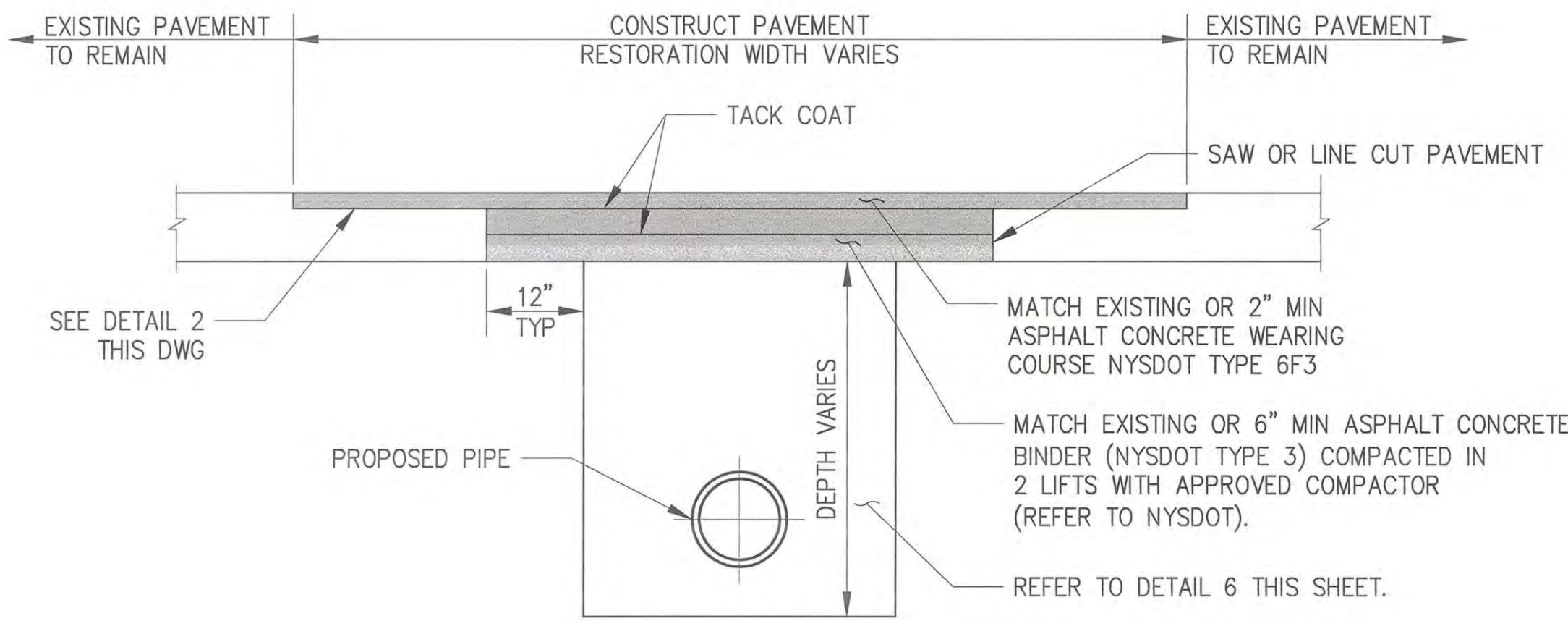
3 BOLLARD
SCALE: NTS

NOTES:

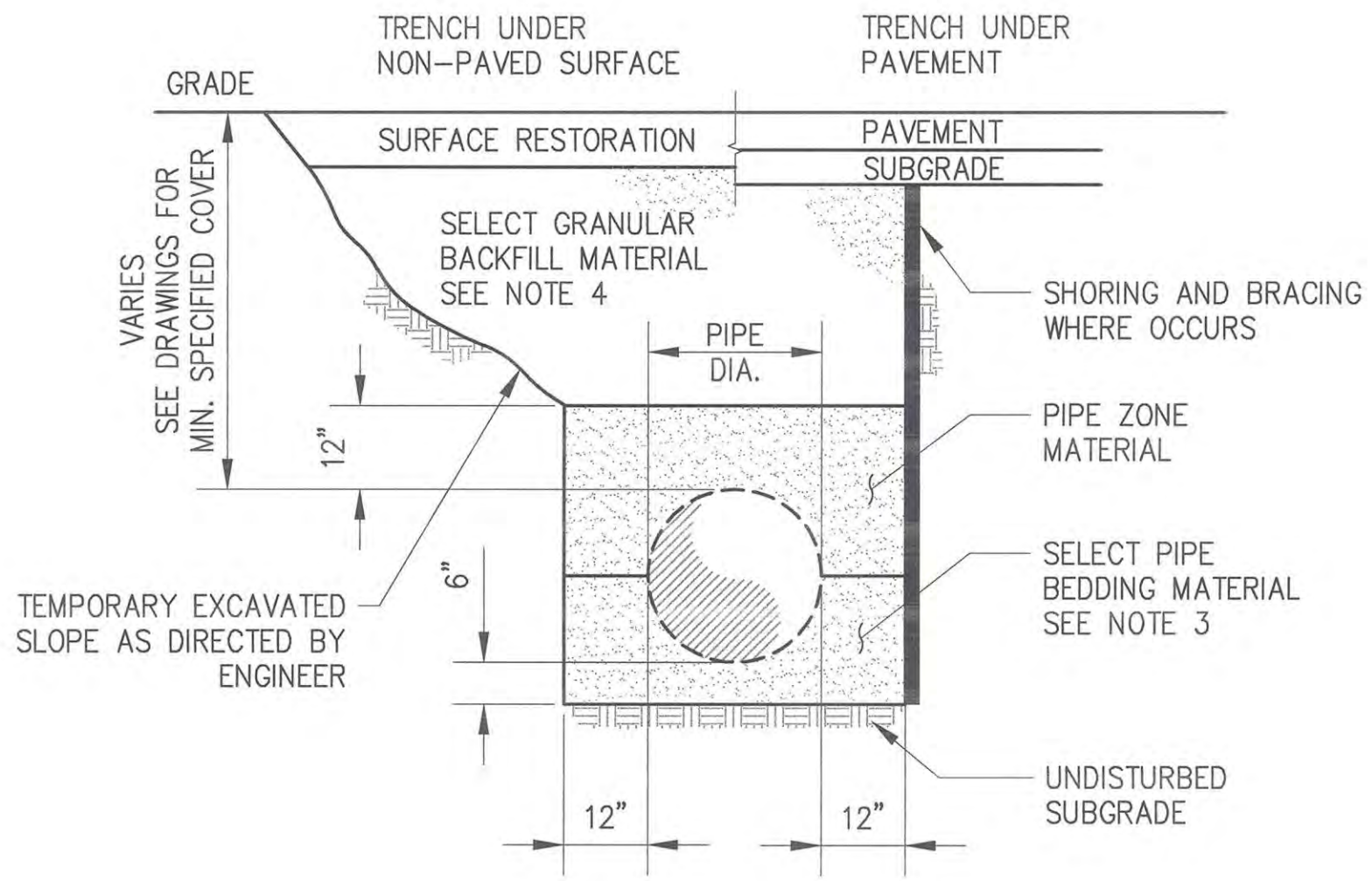
- 1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
- 2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1V:2H.
- 3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
- 4. SEE DETAIL 12 ON DWG HRPS-C-302 FOR INSTALLATION OF SILT FENCE.



4 TEMP SOIL STOCKPILE
SCALE: NTS



5 PAVEMENT RESTORATION
SCALE: NTS



6 PIPE TRENCH
SCALE: NTS

PIPE TRENCH NOTES:

- 1. WHEN PLACING PIPE IN THE TRENCH, FABRIC SLINGS MUST BE UTILIZED. THE USE OF CHAINS OR OTHER DEVICES WHICH MAY DAMAGE THE COATING SYSTEM IS EXPRESSLY PROHIBITED.
- 2. FOR UNPAVED AREA CONTRACTOR SHALL MATCH FINISHED GRADE, WITH TOPSOIL, SEED, AND MULCH WHERE REQUIRED. CROWN TOPSOIL LAYER TO ALLOW FOR SETTLEMENT.
- 3. IF UNSTABLE MATERIAL IS ENCOUNTERED AT THE BOTTOM OF THE TRENCH, IT SHALL BE REMOVED IN ACCORDANCE WITH NYSDOT STANDARD SPECIFICATION SECTION 206 AND BACKFILLED WITH PIPE BEDDING MATERIAL. WHEN THE DEPTH OF UNSTABLE MATERIAL IS DETERMINED BY ENGINEER TO BE EXCESSIVE, LIMITED EXCAVATION AND INSTALLATION OF A GEOTEXTILE FABRIC MAY BE REQUIRED.
- 4. TRENCH BACKFILL MATERIAL SHALL BE SELECT GRANULAR FILL PER NYSDOT STANDARD SPECIFICATION SECTION 203. PIPE BEDDING AND PLACEMENT SHALL CONFORM TO THE REQUIREMENTS OF NYSDOT STANDARD SPECIFICATION SECTION 663.
- 5. PIPES INSTALLED AT SLOPES GREATER THAN 20% SHALL BE ANCHORED WITH PIPE COLLAR THRUST RESTRAINT. SEE DETAIL 9 ON DWG HRPS-C-301.

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5 OF 9

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CHECKED BY: EP	
DESIGN LEAD: GM	
SECTION MANAGER: EP	

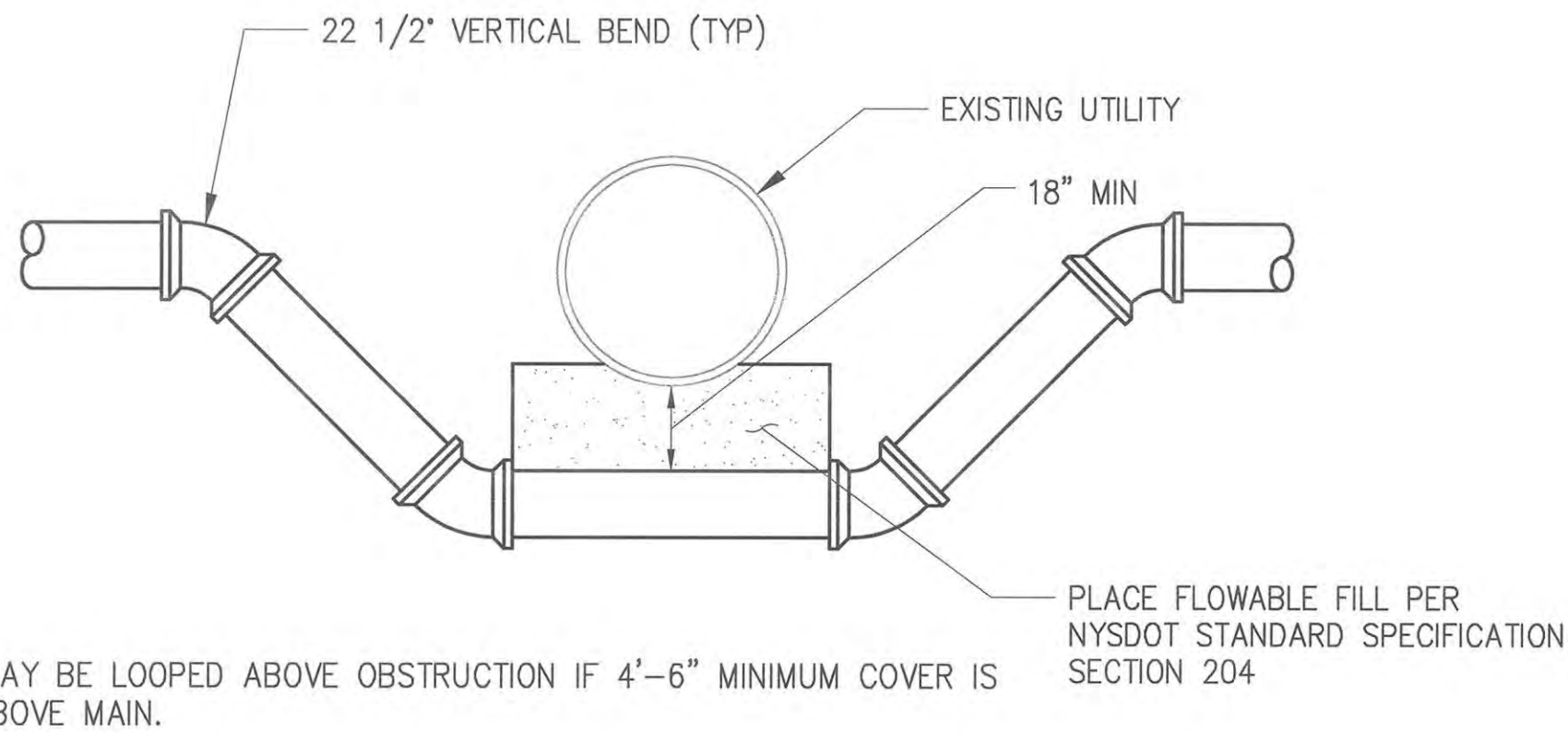


PROJECT MANAGER
CHIEF, TUNNEL DESIGN
DIRECTOR, IN HOUSE DESIGN PATRICK O'CONNOR

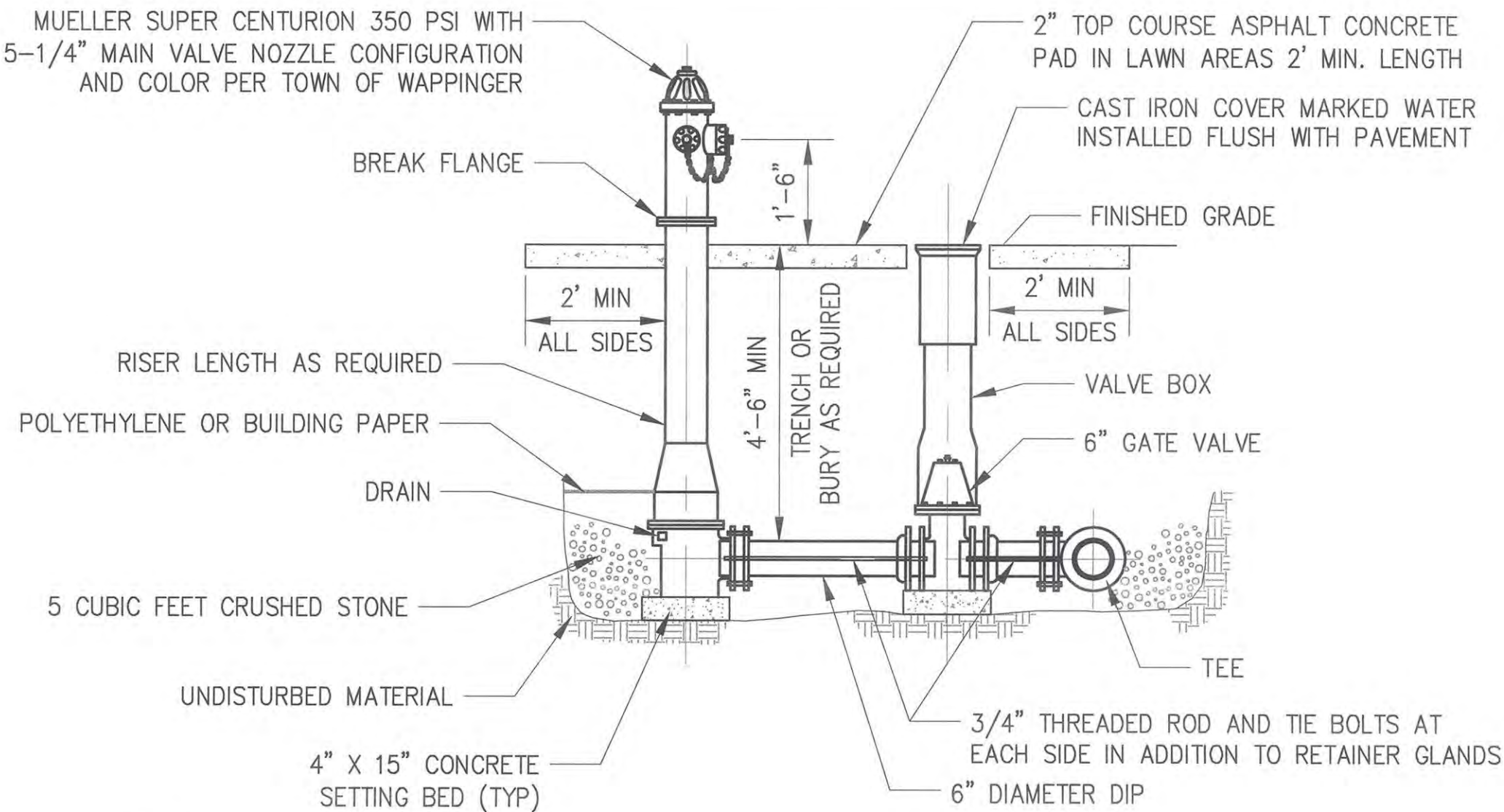
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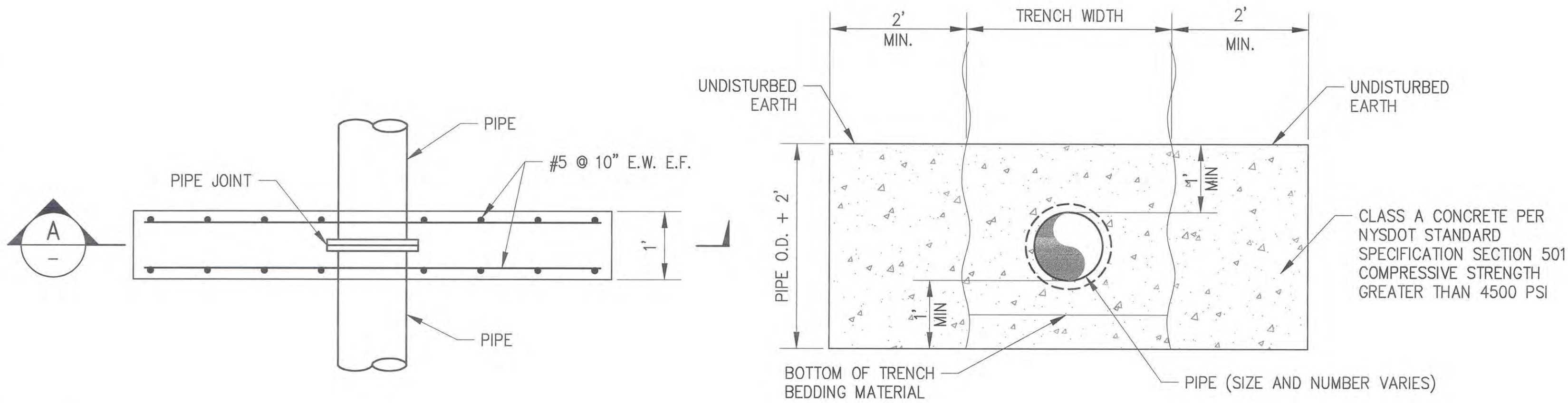
HUDSON RIVER PUMPING STATION IMPROVEMENTS CIVIL DETAILS SHEET 1 OF 3	DATE: 9/29/2017 SCALE: NTS SHEET NO: 5 OF 9 DRAWING NO. HRPS-C-300.00
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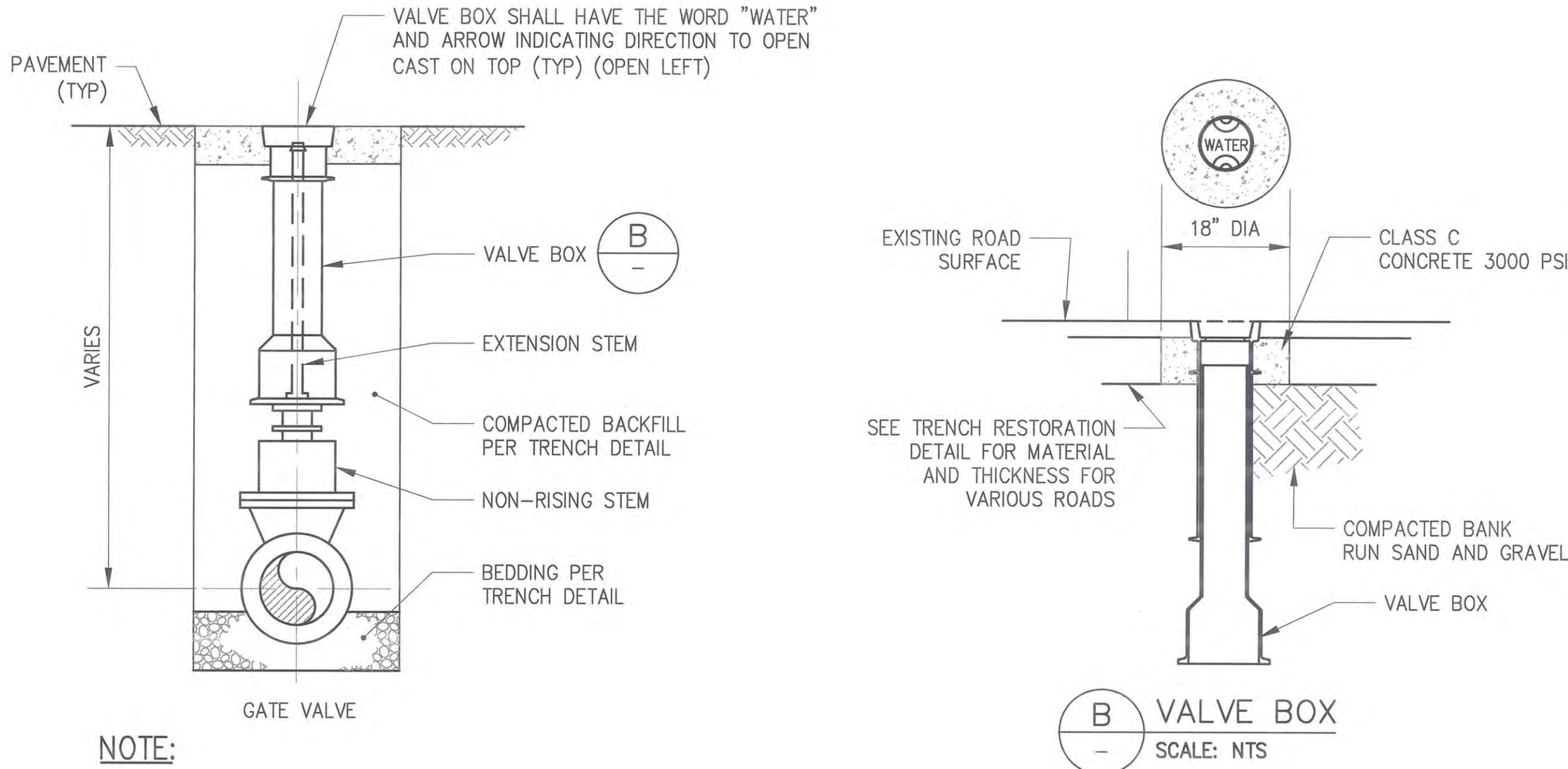
7 UTILITY BY-PASS
SCALE: NTS



8 HYDRANT AND VALVE ASSEMBLY INSTALLATION
SCALE: NTS



9 PIPE COLLAR THRUST RESTRAINT
SCALE: NTS



10 BURIED VALVE INSTALLATION
SCALE: NTS

DESIGNED BY: GM				DRAWN BY: AL			
CHECKED BY: EP				NYC Water Future Environmental Protection			
DESIGN LEAD: GM				PROJECT MANAGER			
SECTION MANAGER: EP				CHIEF, TUNNEL DESIGN			
NO.				DIRECTOR, IN HOUSE DESIGN			
DATE				PATRICK O'CONNOR			
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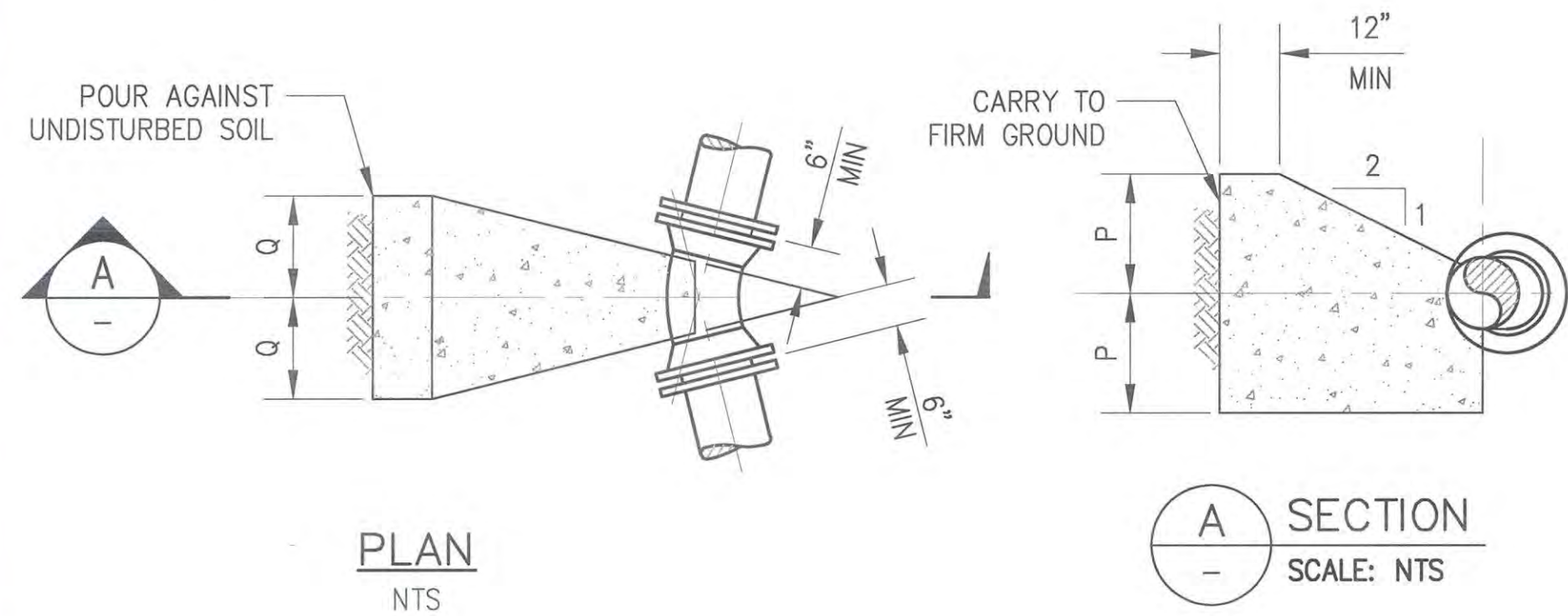
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THRUST BLOCKS FOR TEES, HORIZ. & VERTICAL BENDS AND PLUGS						
THRUST BLOCKS DESIGNED FOR 150 LB. PER SQ. IN. TEST PRESSURE AND 2000 LB. PER SQ. FT. SOIL PRESSURE						
DESC.	DIM.	6"ø	8"ø	12"ø	20"ø	
TEES	N	1'-0"	1'-3"	1'-6"	3'-0"	
	O	1'-4"	1'-10"	3'-3"	3'-6"	
	P	1'-0"	1'-3"	1'-6"	3'-6"	
	Q	1'-4"	1'-10"	3'-3"	4'-3"	
90°	P	0'-9"	1'-0"	1'-3"	2'-7"	
	Q	1'-0"	1'-3"	2'-2"	3'-3"	
	P	0'-6"	0'-9"	1'-0"	1'-8"	
	Q	0'-9"	0'-11"	1'-4"	2'-3"	
22-1/2°	P	0'-5"	0'-6"	0'-8"	1'-4"	
	Q	0'-6"	0'-8"	1'-1"	1'-7"	
VERTICAL DOWNWARD	45°	*	1.4 CY	2.5 CY	5.2 CY	14.4 CY
	22-1/2°	*	0.7 CY	1.3 CY	2.7 CY	7.8 CY
	11-1/4°	*	0.4 CY	0.7 CY	1.4 CY	3.9 CY
	PLUGS	R	2'-0"	2'-6"	3'-0"	6'-0"
		S	2'-8"	3'-8"	6'-6"	7'-0"

THRUST BLOCK SCHEDULE

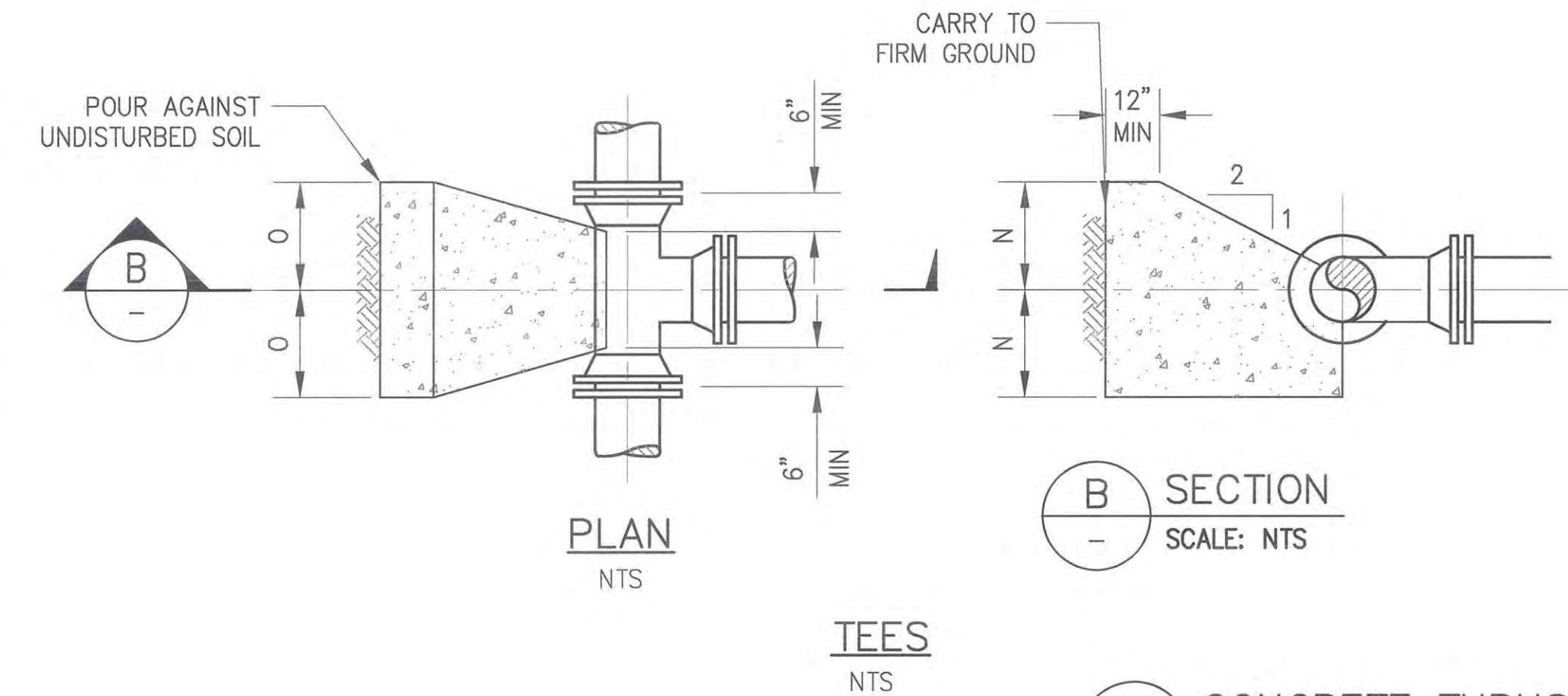
THRUST BLOCK NOTES:

- * MINIMUM CONCRETE ANCHORAGE WITHOUT BACKFILL AND NO GROUND WATER CONDITION.
- THRUST BLOCKS SHALL BE PROVIDED AS DESCRIBED IN NYSDOT STANDARD SPECIFICATION SECTION 663.
- FOR PIPING INSTALLED IN NYSDOT RIGHT-OF-WAY, THRUST BLOCKS SHALL BE DESIGNED IN ACCORDANCE WITH NYSDOT STANDARD SHEETS 663-02 AND 663-03.



HORIZONTAL AND UPWARD VERTICAL BENDS

NTS



TEES

NTS

CONCRETE THRUST BLOCKS

SCALE: NTS

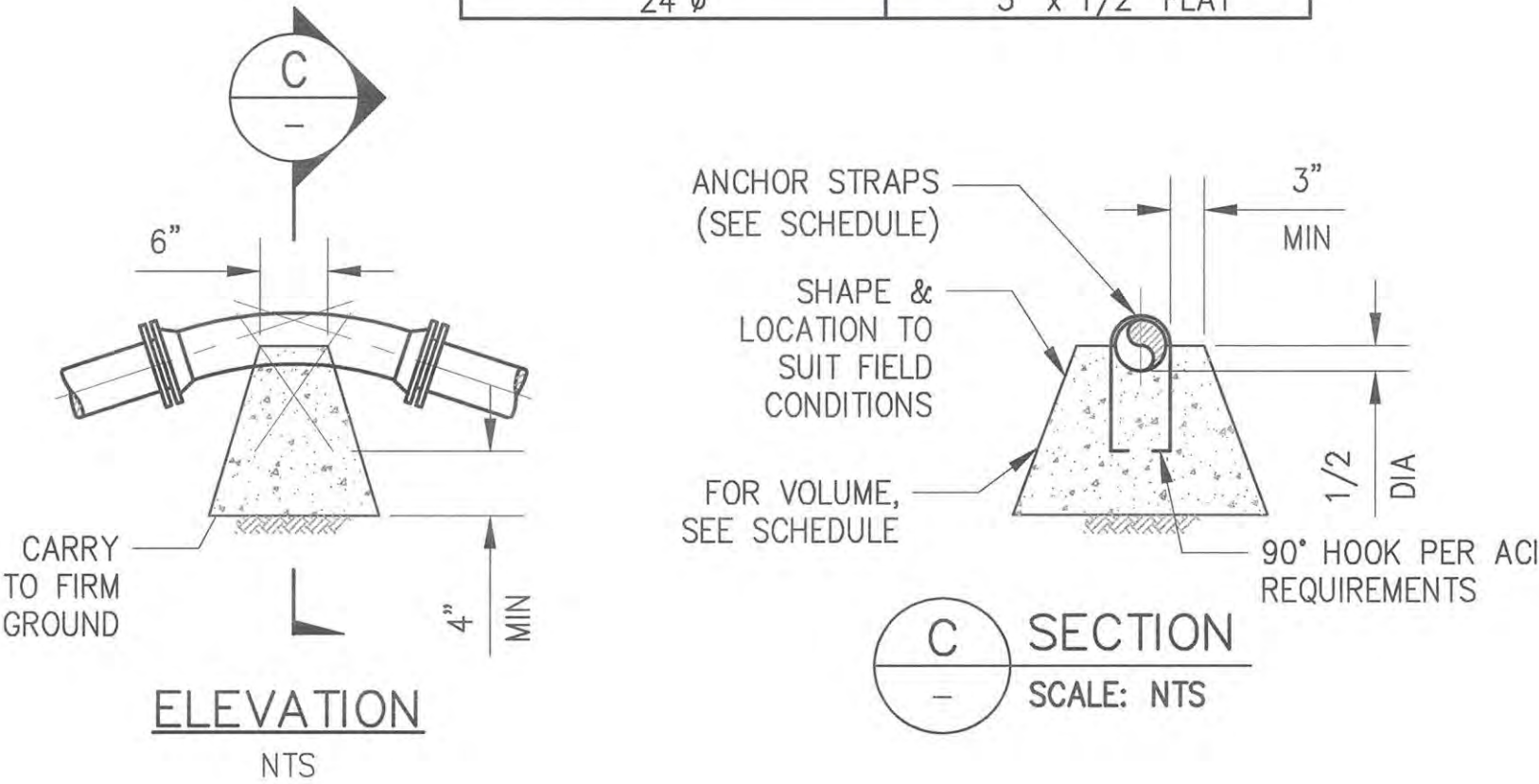
FITTING	MINIMUM LENGTH OF RESTRAINED JOINTS ON EACH SIDE OF FITTINGS					
	150 PSI TEST PRESSURE					225 PSI TEST PRESSURE
	4"ø D.I.P.	6"ø D.I.P.	8"ø D.I.P.	12"ø D.I.P.	20"ø D.I.P.	12"ø D.I.P.
90° BEND, VALVES, CAPS, PLUGS	42'	54'	65'	89'	189'	113'
TEES (BRANCH)	42'	54'	65'	89'	189'	113'
45° BENDS	16'	2'	25'	34'	72'	113'
22 1/2° BENDS	8'	10'	13'	17'	37'	51'
11 1/4° BENDS	4'	5'	6'	9'	18'	26'
5 5/8° BENDS	2'	2'	3'	4'	8'	13'

RESTRAINING LENGTH SCHEDULE

RESTRAINT NOTE:

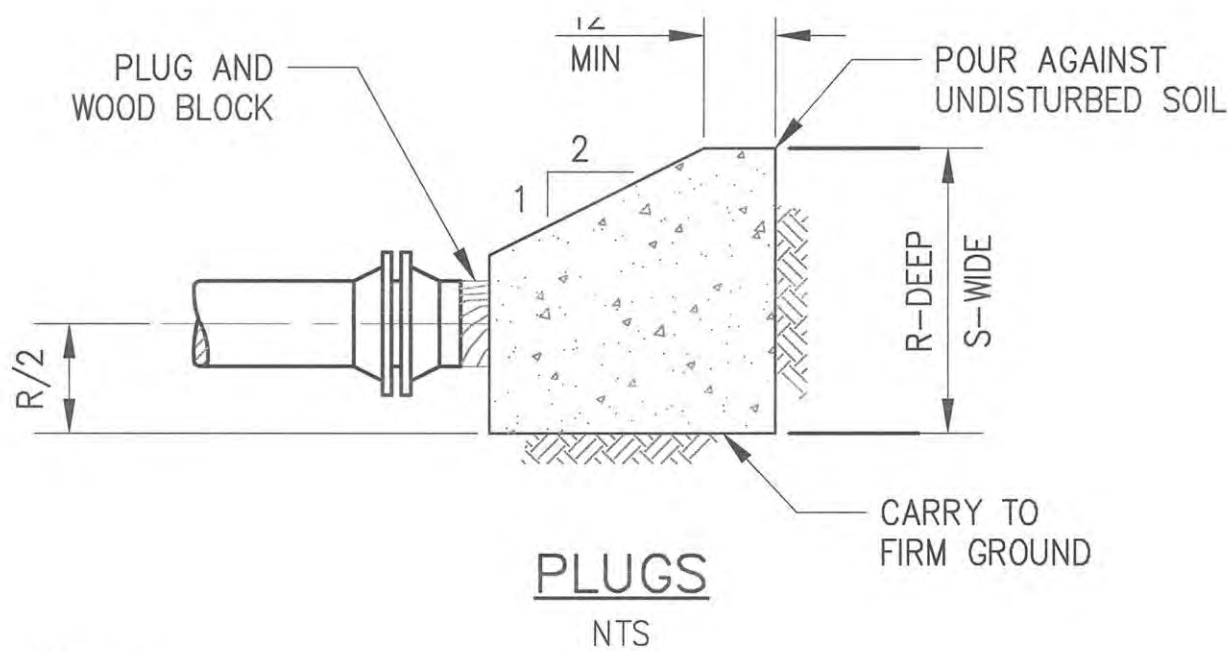
CONTRACTOR SHALL USE THE ABOVE SCHEDULE AND THE CONTRACT PLAN SHEETS TO DETERMINE ACTUAL RESTRAINED LENGTHS REQUIRED. FITTINGS IN CLOSE PROXIMITY TO ONE ANOTHER MAY REQUIRE ADDITIONAL RESTRAINT. FOR EXAMPLE, TWO (2) 22 1/2° BENDS LOCATED WITHIN SEVERAL FEET OF EACH OTHER WILL HAVE THE SAME REACTION AS A 45° BEND AND, AS SUCH, WILL REQUIRE THE LENGTHS OF RESTRAINT SHOWN FOR A 45° BEND.

ANCHOR SCHEDULE FOR VERTICAL DOWNWARD BENDS	
SIZE	STRAP SIZE
6"ø	#4 BAR
8"ø	#5 BAR
12"ø	#7 BAR
16"ø	5" x 1/2" FLAT
24"ø	5" x 1/2" FLAT



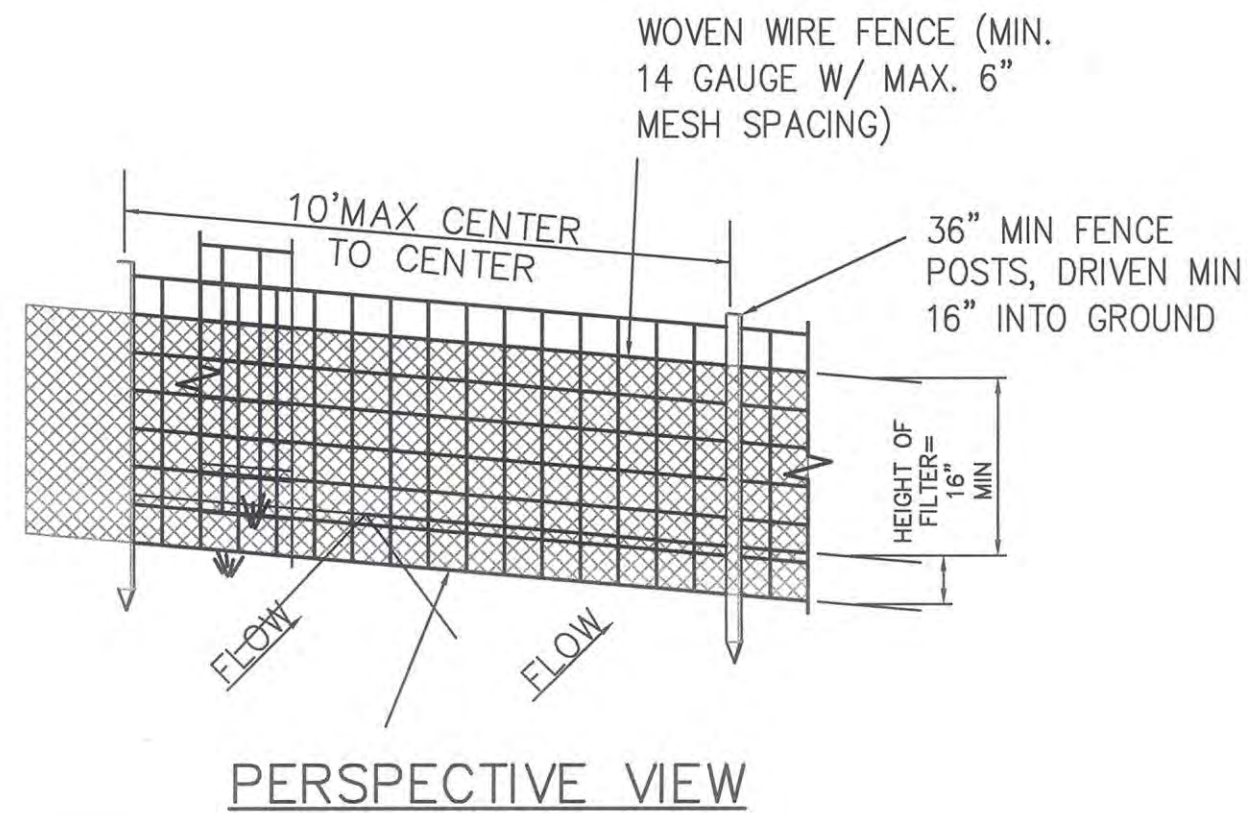
VERTICAL DOWNWARD BENDS

NTS

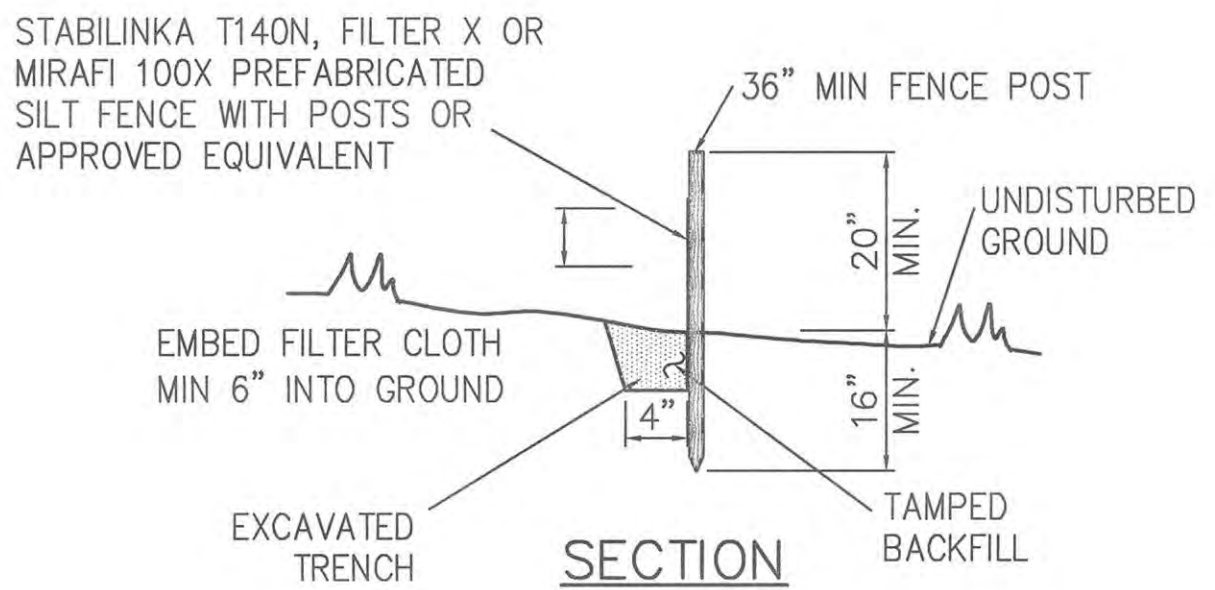


PLUGS

NTS



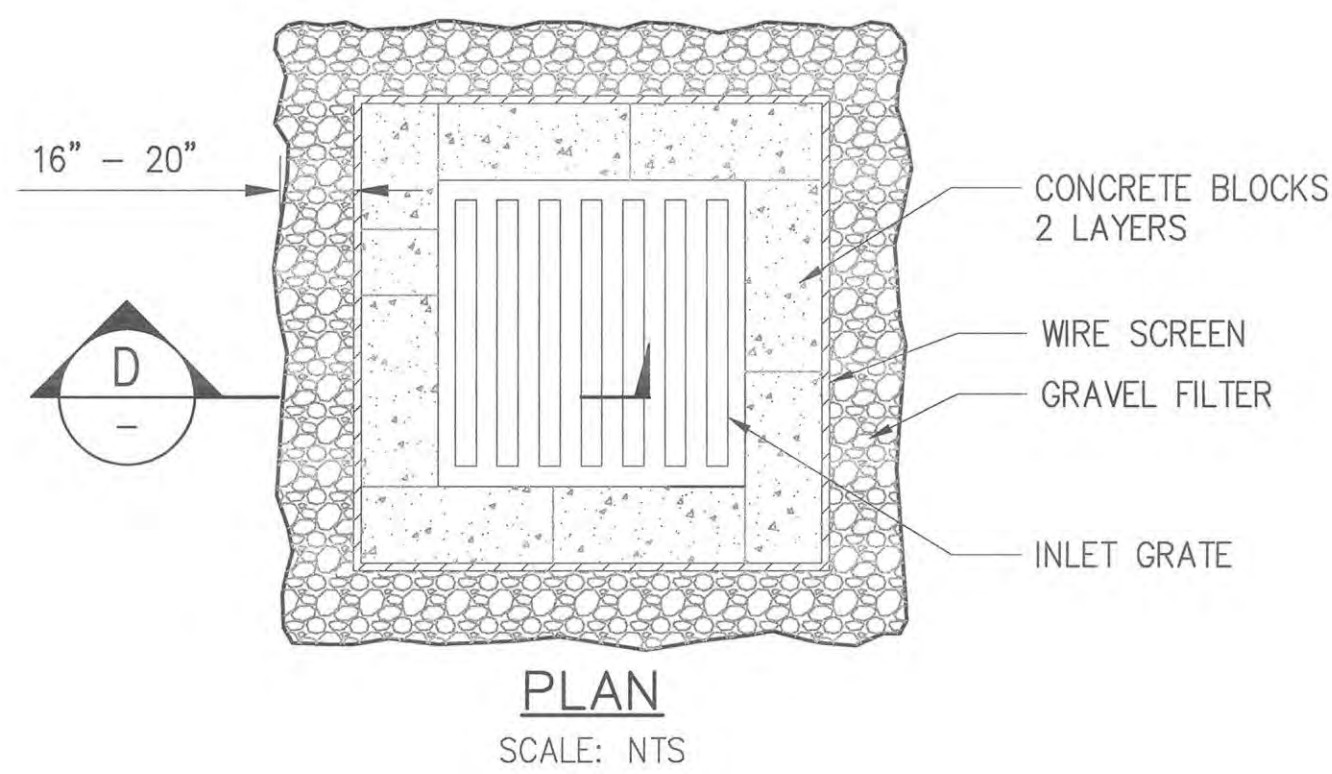
PERSPECTIVE VIEW



SECTION

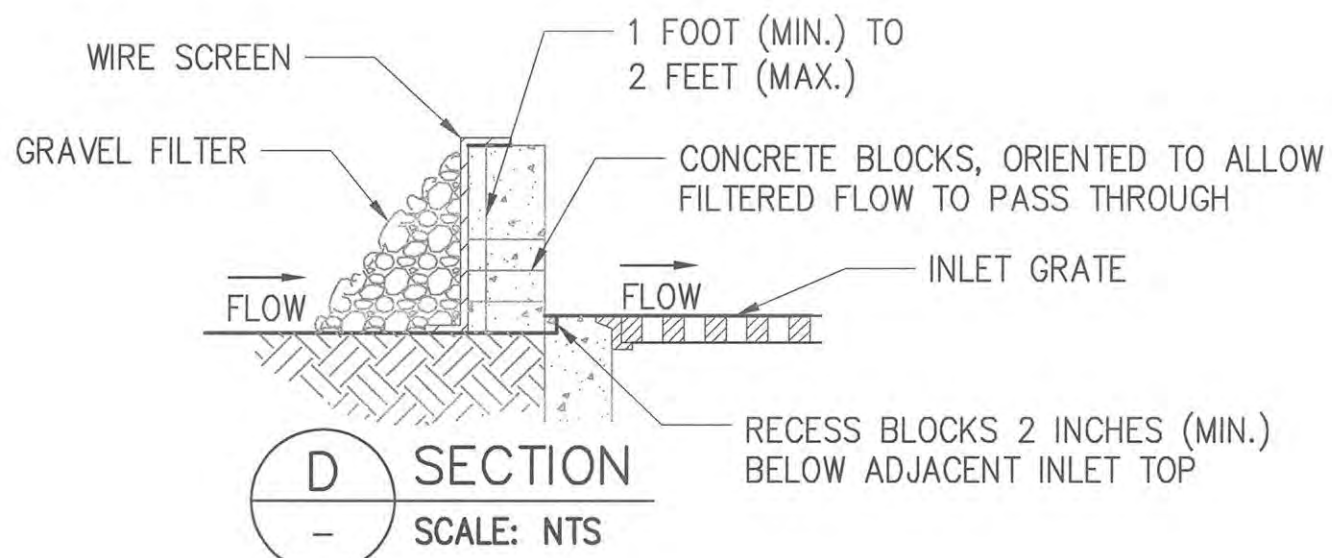
12 SILT FENCE

SCALE: NTS



PLAN

SCALE: NTS



SECTION

SCALE: NTS

13 INLET SILT PROTECTION DETAIL

SCALE: NTS

NYC Environmental Protection RECORD

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HUDSON RIVER PUMPING STATION
IMPROVEMENTS

CIVIL
DETAILS
SHEET 3 OF 3

DATE: 9/29/2017

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7 OF 9

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SECTION MANAGER: EP

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NYC Water & Future Environmental Protection



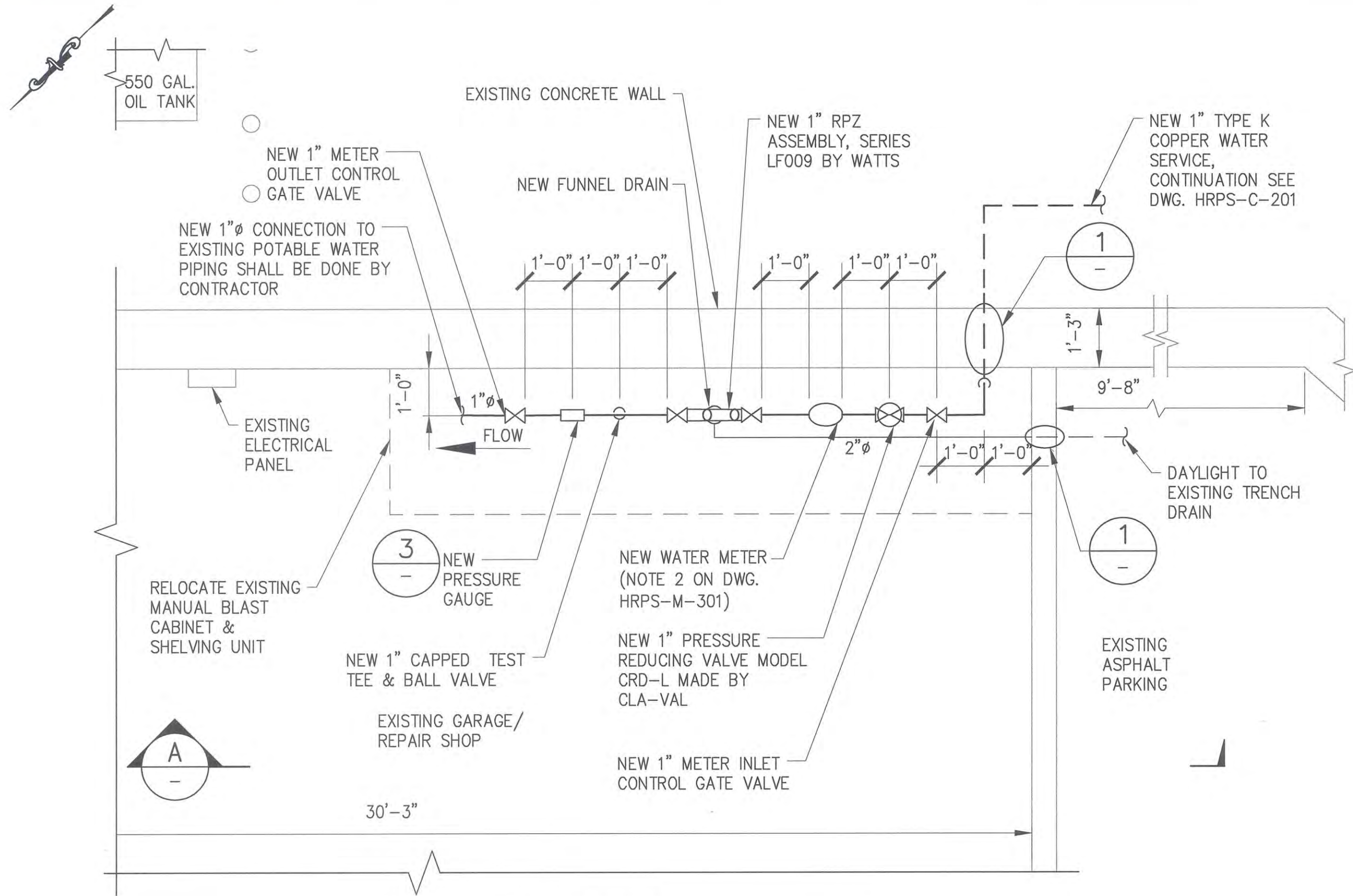
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CHIEF, TUNNEL DESIGN
DIRECTOR, IN HOUSE DESIGN PATRICK O'CONNOR

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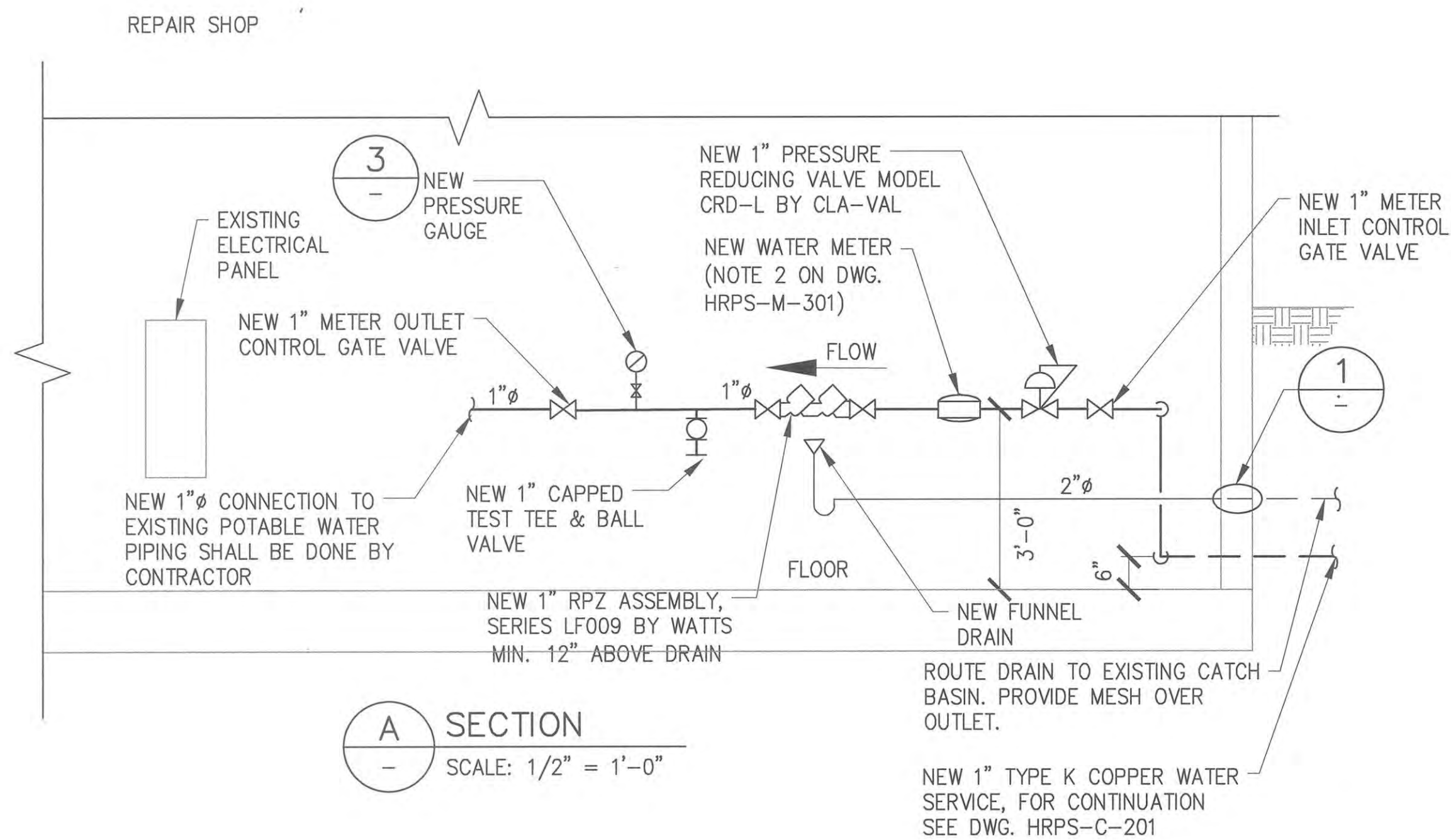
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SHEET NO:
7 OF 9
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HRPS-C-302.00

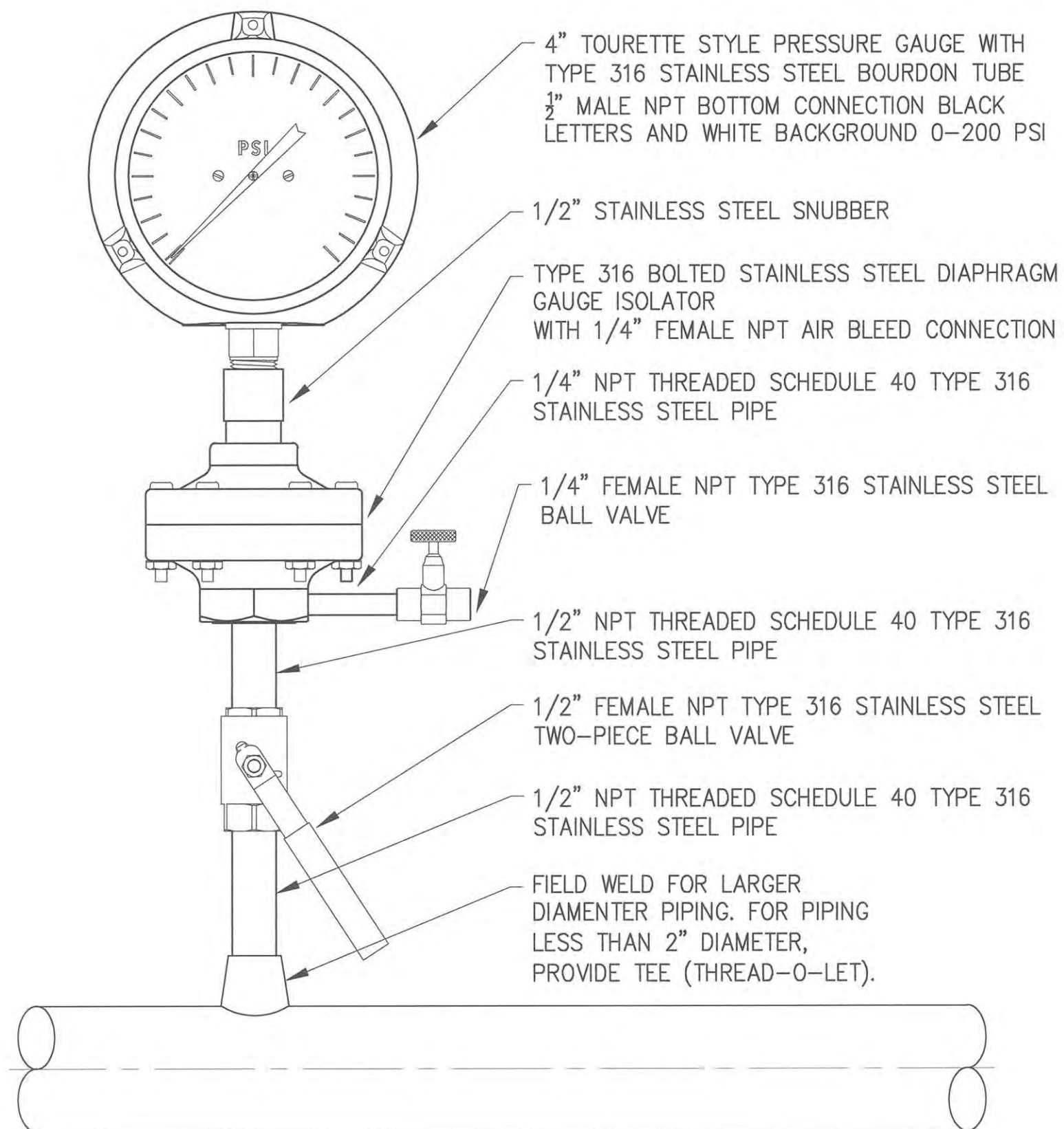
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Drawing Name: & Location: \dep-mupl\Cad_Data\BDC\JHD_Projects\BWS_RMB72_01_Design_Dwg\02_Site_Preparation\02_Mechanical\HRPS-M-300.00.dwg



FLOOR PART PLAN
SCALE: 1/2" = 1'-0"



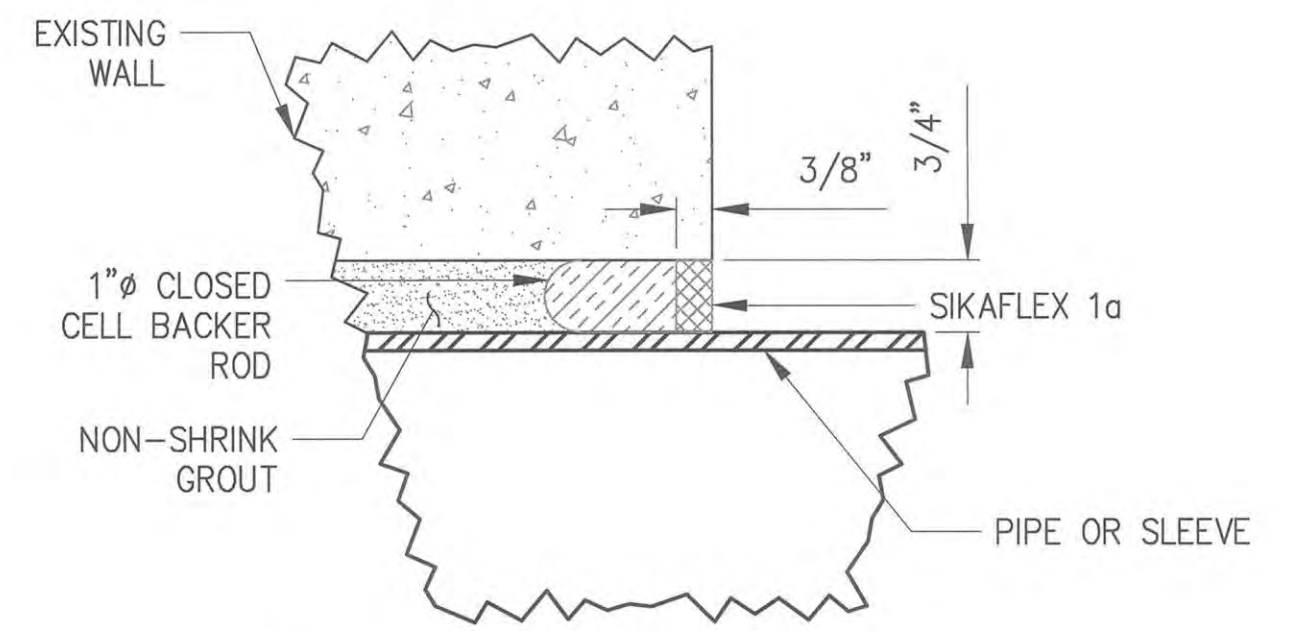
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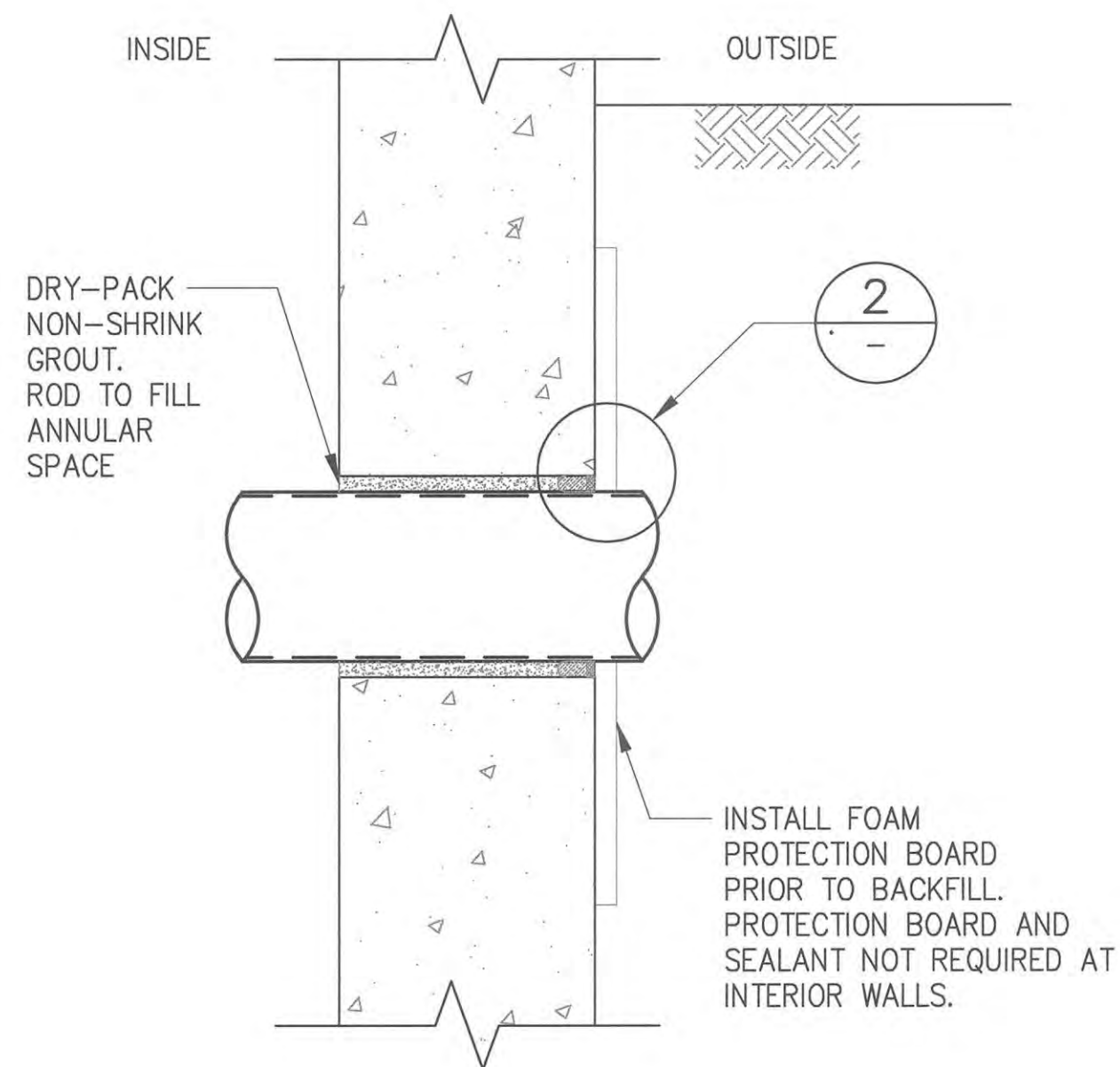
3 PRESSURE GAUGE/SWITCH MOUNTING DETAIL
SCALE: N.T.S.

NOTE:

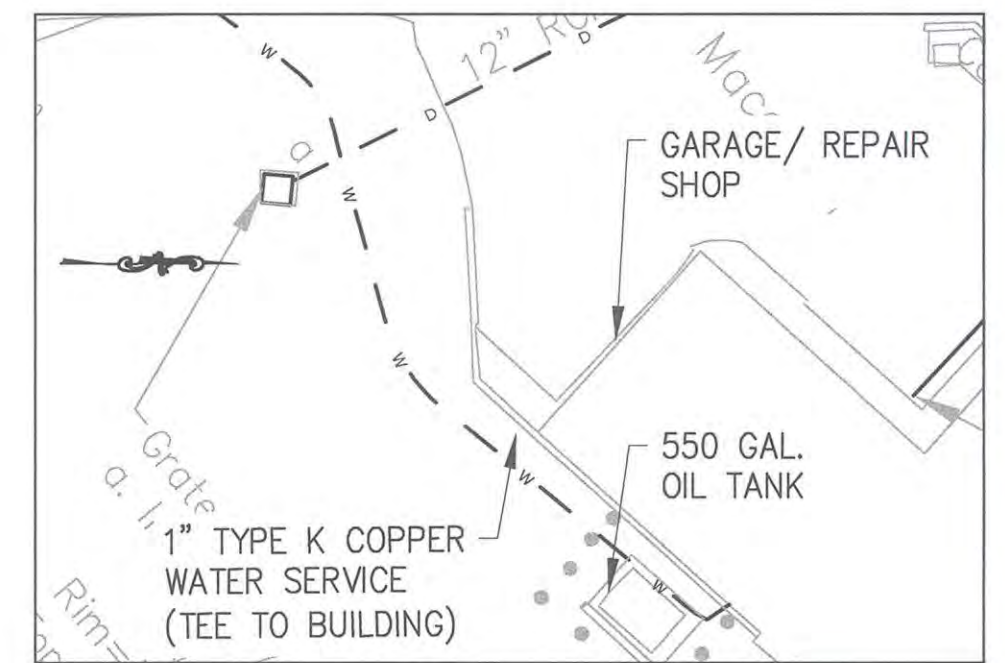
FOR GENERAL NOTES SEE DRAWING HRPS-M-301.00



2 ENLARGED JOINT DETAIL
SCALE: 6" = 1'-0"



1 WALL PENETRATION DETAIL
SCALE: 1-1/2" = 1'-0"



KEY PLAN



NYC Environmental Protection BDC/ED

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SECTION MANAGER:	NB

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NYC Water Future Environmental Protection	



PROJECT MANAGER	IM
CHIEF, TUNNEL DESIGN	
DIRECTOR, IN HOUSE DESIGN	PATRICK O'CONNOR

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HUDSON RIVER PUMPING STATION IMPROVEMENTS
MECHANICAL
HRPS WATER MAIN GARAGE/REPAIR SHOP
FLOOR PART PLAN, SECTION & DETAILS

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Paper Size: ANSI A (8.50 x 11.00 inches) Plot Style Table: (N)_BEDC_BW.ctb
Drawing Name: & Location: \\dep-mop1\Cad_Data\BEDC_JHD_Projects\BWS_RWB12\01_Design_Dwg\02_Site_Preparation\02_Mechanical\HRPS\HRPS-M-301.00.dwg

EQUIPMENT LIST FOR HRPS

Item Number	Description	Manufacturers	Quantities	Locations
1.	1" Diameter Potable Water Service Line, Type K Copper Pipe ½" and ¾" SS Sch. 40 Pipes	Mueller Industries	40 linear feet (1") 1 linear feet (1/2") 1 linear feet (1/4")	HRPS Garage and Repair Shop
2.	1" RPZ Assembly (backflow prevention devices)	Watts Water Technologies Inc. Model # LF009	One (1)	HRPS Garage and Repair Shop
3.	1" Pressure Reducing Valve	CLA-VAL Model CRD-L	One (1)	HRPS Garage and Repair Shop
4.	Water Meter	Provided by Town of Wappinger	One (1)	HRPS Garage and Repair Shop
5.	1" Ball Valve ½" and ¾" Ball Valve-Female NPT SS TP 316 material	Stockham Valves	One (1)	HRPS Garage and Repair Shop
6.	1" Gate Valves	Stockham Valves	Two (2)	HRPS Garage and Repair Shop
7.	Diaphragm Pressure Gauge Assembly ½" Type 316 Bolted Stainless Steel Diaphragm Gauge Isolator with ½" Female NPT Type 316 Stainless Steel Ball Valve Connection ½" Stainless Steel Snubber	Ashcroft S.S. Pressure Gauge Bourdon Tube Type, 4" Diameter Readout, Pressure Ranges: 0 - 200 psi	One (1)	HRPS Garage and Repair Shop
8.	1-inch thick Rigid Polyisocyanurate Thermal Insulation	TRYMER 1800 by ITW Insulation Systems	40 linear feet	HRPS Garage and Repair Shop
9.	Self-regulating Heating Tracing Cable	Chromalox Model SRL5-1CT	100 linear feet	HRPS Garage and Repair Shop
10.	Ground-fault Protection Circuit Breaker	Square D	One (1)	HRPS Garage and Repair Shop
11.	Heat Tracing Control Panel	Square D	One (1)	HRPS Garage and Repair Shop
12.	Pipe Supports	Designed by Contractor	Ten (10)	HRPS Garage and Repair Shop
13.	Funnel Drain - Epoxy Coated Cast Iron Bolt-On	Watts Water Technologies Inc.	One (1)	HRPS Garage and Repair Shop
14.	2" Diameter Ductile Iron Drain Pipe and Fittings	American Cast Iron Company	20 linear feet	HRPS Garage and Repair Shop
15.	Wall penetration sleeve as per Detail-1	Install foam protection board prior to backfill. Dry pack Non-Shrink grout. Rod to fill annular space.	Two (2)	HRPS Garage and Repair Shop

GENERAL NOTES:

- CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE.
- CONTACT TOWN OF WAPPINGERS BUILDING DEPARTMENT FOR INFORMATION ON WATER METER.
- CONTRACTOR SHALL PATCH AND REPAIR TO THE SATISFACTION OF THE ENGINEER ALL AREAS EXPOSED DUE TO REMOVALS AND TO NEW CONSTRUCTION.
- ALL NEW PIPING SHALL BE TYPE "K" COPPER PIPE THAT MEETS ASTM B88 REQUIREMENTS. ALL PIPES INSTALLATION SHALL BE SOLDERED AND EQUIPMENTS SHALL BE CONNECTED WITH COUPLINGS AND/OR THREADED CONNECTION AS REQUIRED. AFTER INSTALLATION PIPING SHALL BE HYDROTESTED @ 150 PSI FOR AN HOUR. ALL BURIED PIPING SHALL BE @ 4' MINIMUM BELOW GRADE LEVEL TO AVOID FREEZING.
- ALL NEW PIPING INSIDE & OUTSIDE GARAGE EXPOSED TO ATMOSPHERE SHALL BE INSULATED WITH 1" THICK RIGID POLYISOCYANURATE THERMAL INSULATION.
- CONTRACTOR SHALL FURNISH AND INSTALL SELF-REGULATING HEATING CABLE WITH ALL NECESSARY ACCESSORIES FOR ALL NEW PIPING FOR FREEZE PROTECTION. HEATING CABLE SHALL BE CHROMALOX MODEL SRL5-1CT WITH A MINIMUM RATING OF 5 WATTS PER FOOT LENGTH OF CABLE.
- PRESSURE REDUCING VALVE SHALL BE AS SPECIFIED ON DRAWING HRPS-M-300.
- NEW PIPING SHALL BE SUPPORTED AS RECOMMENDED BY MANUFACTURERS. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR DEP REVIEW AND APPROVAL.
- CONTRACTOR SHALL FURNISH AND INSTALL A NEW GROUND-FAULT PROTECTION CIRCUIT BREAKER, RATED 15A, 120V, SINGLE PHASE IN THE EXISTING ELECTRICAL LIGHTING PANEL AS INDICATED IN THIS DRAWING. CONTRACTOR SHALL FURNISH AND INSTALL HEAT TRACING POWER CABLES AND CONDUIT FROM THE NEW 15A CIRCUIT BREAKER TO THE HEAT TRACING CABLE. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS, INCLUDING NEC AND THE BUILDING CODE OF THE TOWN OF WAPPINGER.
- CONTRACTOR SHALL FURNISH AND INSTALL A HEAT TRACING CONTROL PANEL IN CONVENIENT LOCATION IN THE GARAGE AS APPROVED BY THE ENGINEER. THE HEAT TRACING CONTROL PANEL DISPLAY SHALL HAVE MINIMUM OF THE FOLLOWING FUNCTION: DISPLAYS OF HEAT TRACING ON/OFF, ROOM TEMPERATURE, HEAT TRACING SYSTEM FAULT, AND CLOCK. HEAT TRACING CABLE ON/OFF ADJUSTABLE TEMPERATURE SETTING KEY.
- AFTER BACKFLOW PREVENTION DEVICE HAS BEEN INSTALLED, IT SHALL BE TESTED BY A CERTIFIED TESTER.
- DRAIN LINES TO BE THREADED WITH TEFLON TAPE.
- EQUIPMENT TYPES AND QUANTITIES LISTED IN TABLE.
- PROVIDE SHOP DRAWINGS FOR THE ENGINEER'S REVIEW AND APPROVAL.

NO.	DATE	DESCRIPTION	APPR'D.
REVISIONS			

DESIGNED BY: MP/CH	SECTION MANAGER: NB
CHECKED BY: MP	
DESIGN LEAD: MP	
SECTION MANAGER: NB	

DRAWN BY: IM




PROJECT MANAGER
CHIEF, TUNNEL DESIGN
DIRECTOR, IN HOUSE DESIGN PATRICK O'CONNOR

WARNING--IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2.

NEW YORK CITY
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HUDSON RIVER PUMPING STATION
IMPROVEMENTS
MECHANICAL
GENERAL NOTES AND EQUIPMENT TABLE

DATE: 9/29/2017
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SHEET NO: 9 OF 9
DRAWING NO.
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