

CONSTRUCTION PLANS FOR: COBB COUNTY-MARIETTA WATER AUTHORITY

NO COBB COUNTY APPROVAL STAMPS ON THIS PLAN SET ARE VALID WITHOUT THE SIGNED SEAL OF THE DESIGN ENGINEER

DOT	SPR	CCWS
ZONING	ESC	SWM
ARBORIST		STRUCTURAL
FIRE	CEMETERY	OSC
	HISTORIC	DESIGN OVERLAY

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DISTURBED AREA: 0.84 AC.

PROJECT:

MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS

CCMWA PROJECT No: 505-4440-40-52-2275

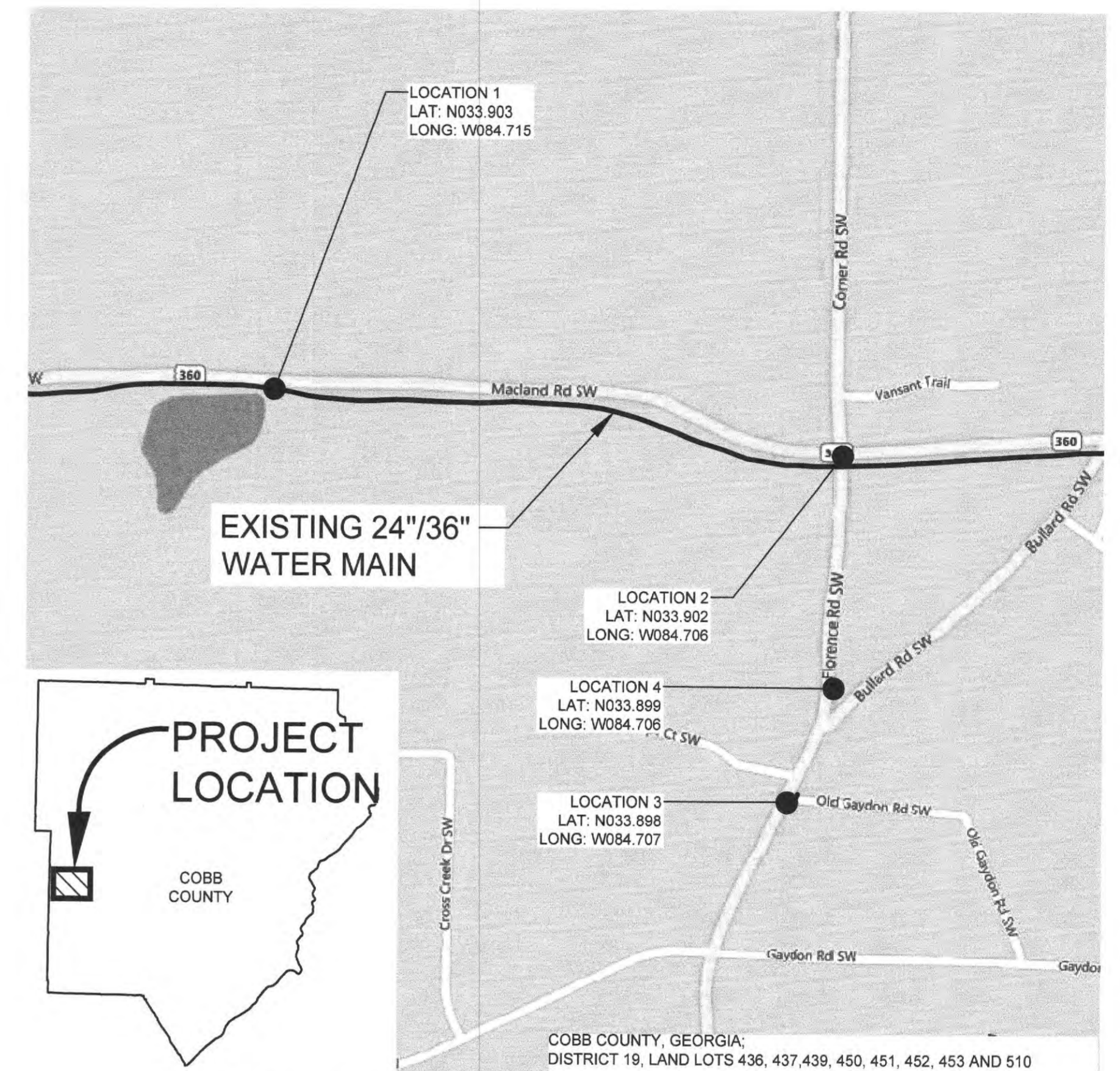
CONSULTING ENGINEER:

ESI

ENGINEERING STRATEGIES, INC.

Phone: (770) 429-0001

AUGUST 2020



PROJECT LOCATION MAP



24 HOUR CONTACT:
JACOB WILSON, P.E., PMP
(770)-514-5350

CCMWA BOARD MEMBERS

JAMES C. SCOTT, JR.	CHAIRMAN
T.DANIEL "DAN" BUYERS	VICE CHAIRMAN
CHARLIE N. CROWDER	SECRETARY
CHARLES "CORKEY" WELCH	MEMBER
JAMES A. BALLI	MEMBER
MICHAEL H. BOYCE	MEMBER
GRIFFIN "GRIF" L. CHALFANT, JR.	MEMBER
GLENN M. PAGE, P.E.	GENERAL MANAGER
GEORGE J. KAFFEZAKIS, P.E.	DIRECTOR OF ENGINEERING

GENERAL INFORMATION

- OWNER:
COBB COUNTY-MARIETTA WATER AUTHORITY
1170 ATLANTA INDUSTRIAL DRIVE
MARIETTA, GEORGIA 30066
(770) 514-5350
- THE COBB COUNTY-MARIETTA WATER AUTHORITY 24-HOUR TELEPHONE NUMBER IS (770) 514-5350.
- ENGINEER:
ENGINEERING STRATEGIES, INC.
3855 SHALLOWFORD ROAD, SUITE 525
MARIETTA, GEORGIA 30062
(770) 429-0001
- THE CONTRACTOR SHALL GIVE A 24-HOUR EMERGENCY TELEPHONE NUMBER AND NAME OF PERSON TO CONTACT IN AN EMERGENCY.
- ALL CONSTRUCTION AND MATERIALS SHALL BE TO COBB COUNTY-MARIETTA WATER AUTHORITY STANDARDS.
- THE CONSTRUCTION EASEMENT REPRESENTS THE LIMITS OF CLEARING FOR THE COMPLETE JOB. THE CONTRACTOR SHALL NOT CLEAR BEYOND THIS LIMIT.
- CONTRACTOR TO PROVIDE AND MAINTAIN OFF STREET PARKING, AND A CONSTRUCTION STORAGE AREA DURING THE ENTIRE CONSTRUCTION PERIOD. THIS AREA WILL NOT BE LOCATED WITHIN THE LIMITS OF DISTURBANCE OF THIS PROJECT.
- AS-BUILTS ARE REQUIRED TO BE SUBMITTED UPON COMPLETION OF CONSTRUCTION.
- EXISTING ROADS SHALL NOT BE OPEN CUT UNLESS PERMISSION IS GRANTED BY THE GEORGIA DOT OR THE COBB COUNTY DOT. A COPY OF THE AUTHORIZATION LETTER FROM THE GEORGIA DOT AND COBB COUNTY DOT MUST BE PROVIDED TO THE OWNER & ENGINEER PRIOR TO CONSTRUCTION.
- IF WORK IS PERFORMED ON A GEORGIA DOT OR A COBB COUNTY RIGHT-OF-WAY A LETTER FROM THE GOVERNING AGENCY IS REQUIRED TO BE SUBMITTED TO THE OWNER & ENGINEER AFTER CONSTRUCTION IS COMPLETE STATING THAT GRASSING, CLEAN-UP, DRAINAGE, ETC. IS ACCEPTABLE.

UNDERGROUND UTILITIES

INFORMATION REGARDING UNDERGROUND UTILITIES ON THESE PLANS IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL REQUEST A FIELD LOCATION THROUGH THE UTILITY PROTECTION CENTER AND ANY UTILITY OWNERS THOUGHT TO HAVE FACILITIES IN THE AREA. THE CONTRACTOR SHALL PROMPTLY COMPARE THESE FIELD-MARKED LOCATIONS WITH THE PROJECT PLANS AND THEN NOTIFY THE ENGINEER OF ANY ANTICIPATED PROBLEMS OR NEED FOR CONTRACT CHANGES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXCAVATE OR CAUSE THE UTILITY TO EXCAVATE FOR THE PURPOSE OF DETERMINING EXACT ELEVATIONS OR LOCATIONS AT UTILITY CROSSINGS AND OTHER CRITICAL LOCATIONS WELL IN ADVANCE OF THE WORK UNDER THIS CONTRACT.

COORDINATION WITH COBB COUNTY

- COBB COUNTY HAS ENACTED A LOCAL ORDINANCE, WHICH REQUIRES STRICT ADHERENCE TO OSHA REGULATIONS SUBPART P, PART 1926 PERTAINING TO TRENCHING AND EXCAVATION. ALL BIDDERS ARE ADVISED TO BE FAMILIAR WITH BOTH THE OSHA REGULATIONS AND THE LOCAL ORDINANCE BEFORE BIDDING THIS PROJECT.
- A TRENCHING AND DITCHING PERMIT IS REQUIRED PRIOR TO ANY WATER AND SEWER MAIN CONSTRUCTION. UTILITY CONTRACTORS MAY OBTAIN THIS PERMIT BY CONTACTING TRACY BROWN AT (770) 258-0271.
- ALL CONSTRUCTION TRAILERS ARE TO BE PERMITTED THROUGH THE PLANNING AND ZONING DEPARTMENT.
- ALL SIGNS ON THIS PROJECT ARE TO BE PERMITTED THROUGH CODE ENFORCEMENT/SIGN DIVISION.
- ALL TRAFFIC CONTROL MEASURES MUST BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST REVISION AND APPROVED BY THE COBB COUNTY DEPARTMENT OF TRANSPORTATION AND/OR THE GEORGIA DEPARTMENT OF TRANSPORTATION PRIOR TO IMPLEMENTATION. THE CONTRACTOR SHALL MODIFY ANY TRAFFIC CONTROL MEASURES AS DIRECTED BY EITHER ENTITY AT NO ADDITIONAL COST TO THE OWNER.
- PRIOR TO ANY STREET CLOSING, PARTIAL OR TOTAL, THE CONTRACTOR MUST OBTAIN A ROAD CLOSING PERMIT FROM THE COBB COUNTY DEPARTMENT OF TRANSPORTATION. FOR LANE CLOSURE - (770) 528-2145, DEVELOPMENT AND INSPECTIONS. FOR TOTAL STREET CLOSURE - (770) 528-1670, CDDOT.
- EROSION CONTROL PRACTICES MUST COMPLY WITH THE MINIMUM BEST MANAGEMENT PRACTICES FOR EROSION CONTROL (COBB COUNTY CODE SECTION 50-75) AND SHALL COMPLY WITH THE STANDARDS AND SPECIFICATIONS IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA"
- THE CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE COBB COUNTY DEVELOPMENT CONTROL DEPARTMENT AT 100 CHEROKEE ST., MARIETTA, GA. AFTER ALL SEDIMENT AND EROSION CONTROL DEVICES ARE INSTALLED ACCORDING TO THE PLANS, CALL DEVELOPMENT CONTROL AT (770) 528-2134 WITH ENOUGH LEAD TIME FOR AN INSPECTION TO MEET THE SCHEDULE.
- COBB COUNTY ACCEPTS NO RESPONSIBILITY FOR THE AMERICANS WITH DISABILITIES ACT (ADA), EXCEPT FOR NOTIFICATION REQUIREMENT.
- ALL CONSTRUCTION TO CONFORM TO APPLICABLE COBB COUNTY DOT SPECIFICATIONS AND IN ACCORDANCE WITH COBB COUNTY ORDINANCES.

WORKMANSHIP

- THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN ALL NECESSARY BARRICADES, SUITABLE AND SUFFICIENT RED LIGHTS, DANGER SIGNALS, AND SIGNS, PROVIDE SUFFICIENT NUMBER OF WATCHMEN, AND TAKE NECESSARY PRECAUTIONS FOR THE PROTECTION OF THE WORK AND THE SAFETY OF THE PUBLIC.
- CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IN THE RIGHT-OF-WAY AT ANY TIME OTHER THAN WORK HOURS.
- CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IN AREAS, WHICH RESTRICT SIGHT DISTANCE AT ANY TIME.
- ROADWAYS ARE TO BE KEPT FREE OF DIRT, MUD, AND OTHER DEBRIS AT ALL TIMES.
- THE ROADWAY AND THE ROADWAY SHOULDERS SHALL BE SHORED PROPERLY DURING ALL TRENCHING ACTIVITY. BACKFILLING SHALL MEET MINIMUM COUNTY OR STATE COMPACTION REQUIREMENTS. NO DROP-OFFS ADJACENT TO THE ROADWAY WILL REMAIN AFTER THE SUSPENSION OF WORK.
- CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AND POSTAL SERVICE THROUGHOUT THE DURATION OF THE PROJECT.
- THE CONTRACTOR SHALL INSTALL TREE PROTECTION DEVICES AT THE SAME TIME AS EROSION CONTROL DEVICES.
- ANY INFRASTRUCTURE (PAVEMENT, DRAINAGE STRUCTURES, CURB AND GUTTER, SIDEWALKS, SIGNALS, ETC.) DAMAGED OR DISPLACED AS THE RESULT OF THIS PROJECT SHALL BE REPLACED BY THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR REPLACING IN AND MATCHING ORIGINAL CONDITION ANY LANDSCAPING THAT HAS BEEN DESTROYED OR REMOVED DUE TO THE INSTALLATION OF THE WATER MAIN.
- THE CONTRACTOR SHALL REPAIR OR REPLACE ANY STORM DRAINAGE INFRASTRUCTURE DAMAGED OR DISTURBED DURING THE CONSTRUCTION PROCESS.

PIPELINE CONSTRUCTION

- THE CONTRACTOR SHALL SCHEDULE ANY SYSTEM SHUTDOWNS, CONNECTIONS TO EXISTING WATER MAINS, AND SERVICE CONNECTIONS WITH THE COBB COUNTY-MARIETTA WATER AUTHORITY, COBB COUNTY WATER SYSTEM, AND PAULDING COUNTY COUNTY WATER SYSTEM.
- THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING THE EXACT LOCATION, SIZE, AND MATERIAL OF ANY EXISTING WATER MAIN PRIOR TO THE PROPOSED CONNECTIONS AS SHOWN ON THE CONTRACT DRAWINGS.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PROPER HORIZONTAL AND VERTICAL ALIGNMENT AS SHOWN ON THE PLANS. BENDS INSTALLED DUE TO CONTRACTOR ERROR OR NEGLIGENCE WILL NOT BE MEASURED FOR PAYMENT.
- ALL PIPES, FITTINGS, VALVES, AND RESTRAINT SYSTEMS SHALL BE ABLE TO WITHSTAND A FIELD TEST PRESSURE 1.5 TIMES WORKING PRESSURE AT THE LOWEST POINT.
- ALL PIPE JOINTS TO HAVE DOUBLE BONDING CABLES. (SEE STANDARD DETAILS)

SITE INFORMATION

- THERE ARE NO CEMETERIES LOCATED WITHIN THE LIMITS OF THIS PROJECT OR ADJACENT TO THIS PROJECT.
- THE COBB COUNTY CEMETERY PRESERVATION COMMISSION RESERVES THE RIGHT TO EXAMINE THIS PROPERTY FOR ETHNIC, CULTURAL AND RELIGIOUS EVIDENCE LOCATED THEREIN. IF ANY ETHNIC, CULTURAL OR RELIGIOUS EVIDENCE IS FOUND DURING DEVELOPMENT, THEN THE COBB COUNTY CEMETERY PRESERVATION COMMISSION MUST BE NOTIFIED AT ONCE AT (770) 528-2035. FAILURE TO DO SO WILL RESULT IN A STOP-WORK ORDER.
- THE TOTAL ACREAGE IMPACT OF THIS PROJECT IS 0.84 AC.
- THERE WILL BE NO PERMANENT EFFECTS CAUSED BY THIS PROJECT, WHICH WOULD RESULT IN THE POTENTIAL OF DOWNSTREAM FLOOD HAZARDS.
- ZONING REGULATIONS OBTAINED FROM COBB PLANNING AND ZONING INDICATE THAT THE PROJECT WILL BE LOCATED IN GC AND HI ZONED AREAS.
- THESE PLANS ARE EXEMPT FROM ZONING REQUIREMENTS PER SEC. 134-3 OF THE COBB COUNTY CODE. HOWEVER, THIS PROJECT SHALL BE REQUIRED TO MEET ALL OTHER DEVELOPMENT CODES, REGULATIONS, ORDINANCES, AND LAWS.

TREE PROTECTION NOTES

- A PRE-CONSTRUCTION CONFERENCE IS REQUIRED PRIOR TO THE ISSUANCE OF THE ON-SITE CONSTRUCTION PERMIT. CALL THE SITE INSPECTIONS SECTION AT (770) 528-2142 TO ARRANGE A MEETING AT THE SITE.
- THE SITE CONTRACTOR SHALL COORDINATE SERVICE ROUTING OF ALL GAS, TELEPHONE, AND ELECTRICAL LINES WITH THE APPROPRIATE UTILITY COMPANY. ALL CONSTRUCTION MUST COMPLY WITH EACH UTILITY'S STANDARDS AND SPECIFICATIONS AND NOT INTERFERE WITH TREE PLANTING SITES OR EXISTING TREES TO BE PRESERVED.
- TREE PROTECTION DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY CLEARING, GRUBBING OR GRADING.
- ROOT SYSTEMS OF SIGNIFICANT TREES, AS INDICATED ON THE PLANS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE FREE-BORED UNDER.
- TREE PROTECTION SHALL BE ENFORCED ACCORDING TO COBB COUNTY STANDARDS. ANY FIELD ADJUSTMENTS TO TREE PROTECTION DEVICE TYPES OR LOCATIONS OR SUBSTITUTIONS OF REPLACEMENT PLANT MATERIALS SHOWN ON THE APPROVED PLANS ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE COBB COUNTY ARBORIST.
- THE INSTALLATION OF EROSION CONTROL DEVICES CAUSES HARM TO TREES. USE SILT FENCE ONLY AS REQUIRED AND LOCATE IT AS FAR FROM TREE PROTECTION ZONES AS POSSIBLE.
- WHEN DIGGING NEAR TREES, THE CONTRACTOR SHALL PRUNE ALL EXPOSED ROOTS ONE (1) INCH IN DIAMETER AND LARGER ON THE SIDE OF THE TRENCH ADJACENT TO THE TREES. PRUNING SHALL CONSIST OF MAKING A CLEAN CUT FLUSH WITH THE SIDE OF THE TRENCH TO PROMOTE NEW ROOT GROWTH.
- PRUNING OF TREE LIMBS TO PROVIDE CLEARANCE FOR EQUIPMENT AND MATERIALS SHALL BE DONE ACCORDING TO STANDARD ARBORICULTURAL PRACTICE (SEE ANSI A300-1995).
- PROTECT THE TRUNKS OF ANY TREES BEING PRESERVED WITHIN THE TEMPORARY OR PERMANENT UTILITY EASEMENTS WITH STRAPPED-ON PLANKING OR SIMILAR PROTECTIVE DEVICE.
- ROOT SYSTEMS OF SIGNIFICANT TREES, AS INDICATED ON PLANS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE FREE BORED UNDER.
- THE INSTALLATION OF EROSION CONTROL DEVICES CAN CAUSE HARM TO TREES. USE SILT FENCE ONLY AS REQUIRED AND LOCATE IT AS FAR FROM TREE PROTECTION ZONES AS POSSIBLE.

COBB DOT NOTES

- SIGNAL NOTE: ALL SIGNAL PLANS MUST BE SUBMITTED TO AND APPROVED BY THE COBB COUNTY TRAFFIC SIGNAL ENGINEER.
 - ANY TRAFFIC SIGNAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT COBB DOT TRAFFIC SIGNAL SPECIFICATIONS BY AN APPROVED TRAFFIC SIGNAL CONTRACTOR.
 - ANY TRAFFIC SIGNAL EQUIPMENT DAMAGED AS A RESULT OF THIS PROJECT SHALL BE REPLACED/UPGRADED BY THE CONTRACTOR/DEVELOPER IMMEDIATELY.
 - DAMAGED LOOPS SHALL BE REPLACED.
 - DEVELOPER/CONTRACTOR IS REQUIRED TO MAINTAIN VEHICLE DETECTION WITHOUT INTERRUPTION FOR ALL TRAFFIC SIGNAL PHASES AFFECTED DURING CONSTRUCTION OF THIS PROJECT. APPROVED VIDEO DETECTION SHALL BE USED FOR PRESENCE DETECTION AND APPROVED VIDEO OR MICROWAVE DETECTION SHALL BE USED FOR PULSE DETECTION. ADDITIONAL POLES/EQUIPMENT MAY BE REQUIRED TO SUPPORT THESE DETECTION DEVICES.
 - CONTACT COBB TRAFFIC SIGNAL ENGINEER AT (770) 528-3664 FOR ANY TRAFFIC SIGNAL RELATED ISSUES. CONTACT THE SIGNAL MAINTENANCE SUPERVISOR AT (770) 528-1699 TO LOCATE ANY SIGNAL EQUIPMENT IF PROPOSED DEVELOPMENT IS WITHIN 450' OR LESS OF A SIGNALIZED INTERSECTION.
 - ANY DRIVE, ACCESS, SIDEWALK/SHOULDER CROSS-SLOPE, IN THE RIGHT OF WAY, IS TO MATCH ½ PER LF (2%, PER ADA).

COORDINATION WITH GEORGIA DEPARTMENT OF TRANSPORTATION

- THE CONTRACTOR SHALL NOTIFY GDOT DISTRICT ENGINEER.
- THE CONTRACTOR SHALL CONTACT GDOT, TO SCHEDULE A PRECONSTRUCTION INSPECTION PRIOR TO ANY DISTURBANCE. THE CONTRACTOR SHALL IMPLEMENT ANY RECOMMENDATIONS AND MODIFICATIONS MADE BY GDOT TO MINIMIZE IMPACT OR DAMAGE AS A RESULT OF THIS INSTALLATION. THIS REQUIREMENT SHALL BE STRICTLY MAINTAINED.
- A GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT) PERMIT IS REQUIRED. APPROVAL OF WORK WITHIN OR ADJACENT TO GDOT RIGHT-OF-WAY IS DEFERRED TO GDOT, CHAMBLEE PERMITTING OFFICE, (770) 986-1771.

CEMETERY PRESERVATION NOTES

THE COBB COUNTY CEMETERY PRESERVATION COMMISSION RESERVES THE RIGHT TO EXAMINE THIS PROPERTY FOR ETHNIC, CULTURAL AND RELIGIOUS EVIDENCE LOCATED THEREIN. IF ANY ETHNIC, CULTURAL OR RELIGIOUS EVIDENCE IS FOUND DURING DEVELOPMENT, THEN THE COBB COUNTY CEMETERY PRESERVATION COMMISSION MUST BE NOTIFIED AT ONCE AT (770) 528-2035. FAILURE TO DO SO WILL RESULT IN A STOP-WORK ORDER.



ESI
ENGINEERING STRATEGIES, INC.
3855 SHALLOWFORD ROAD, SUITE 525
MARIETTA, GA 30062
(770) 429-0001

PROJECT NUMBER: 505-4440-40-52-2275	DATE: AUGUST 2020
REVISION	DATE
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DSGN: DE
DRWN: BL
CHKD: PMR

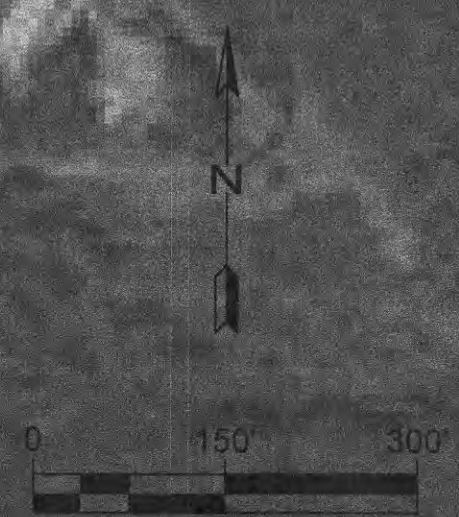
DATE: AUGUST 2020

SCALE: AS SHOWN ON THIS SHEET - IF NOT 1" = 100' USE SCALE AS SHOWN ON THIS SHEET - ADJUST SCALES ACCORDINGLY.

MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS

GENERAL NOTES

SHEET NO.
2



ESI
ENGINEERING STRATEGIES, INC.
 3855 SHALLOWFORD ROAD, SUITE 525
 MARIETTA, GA 30062
 (770) 429-0001

PROJECT NUMBER: 505-4440-40-52-2275	DATE: AUGUST 2020	REVISION	DATE

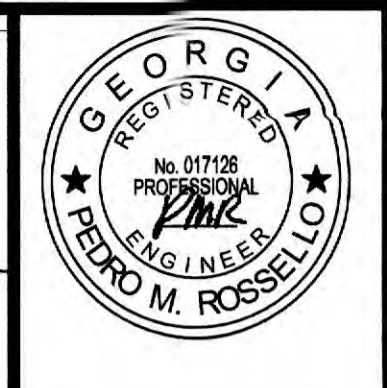
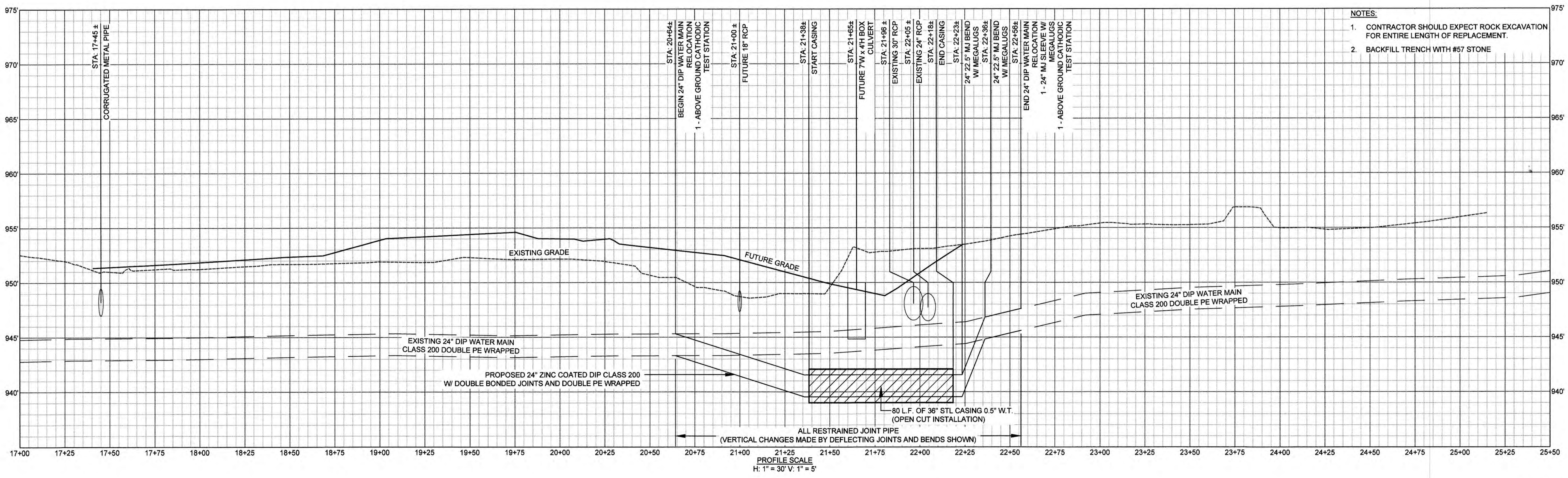
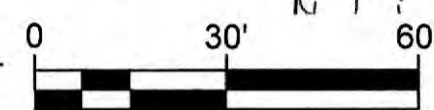
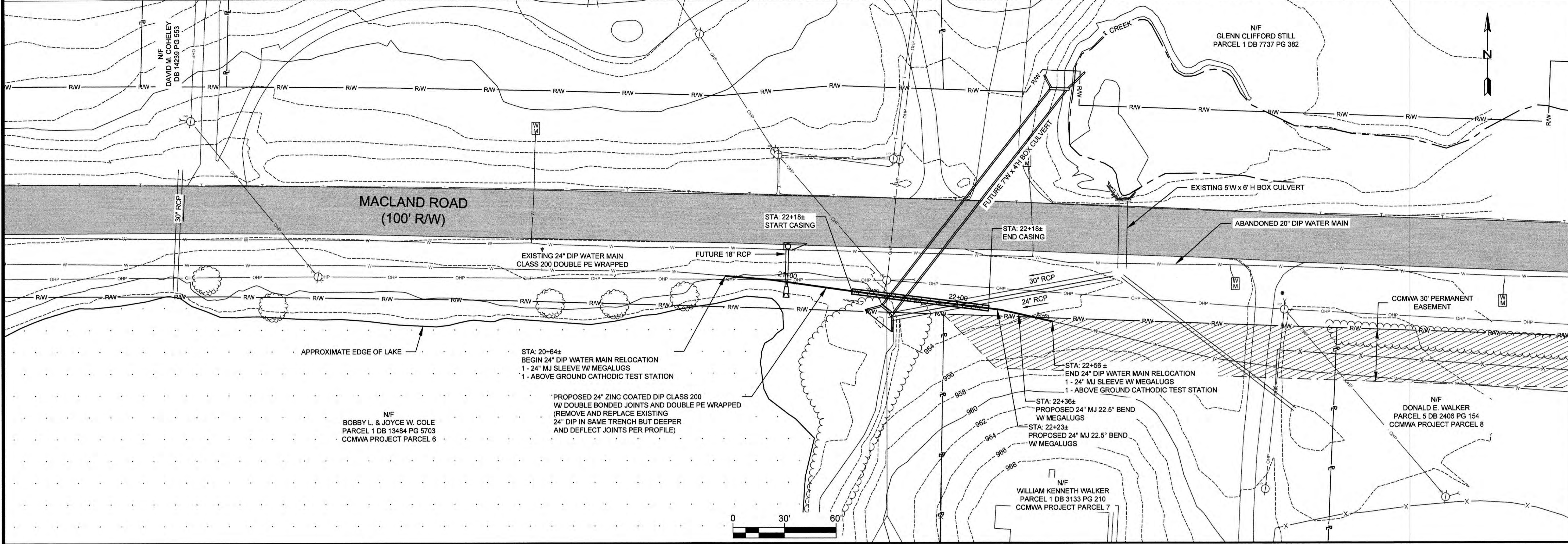
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BAR BELOW IS 1" LONG FOR SCALES SHOWN ON THIS SHEET. IF NOT 1" ADJUST SCALES ACCORDINGLY.

MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS

KEY PLAN

SHEET NO.
 3



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ENGINEERING STRATEGIES, INC.
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MARIETTA, GA 30062
(770) 429-0001

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DATE	REVISION

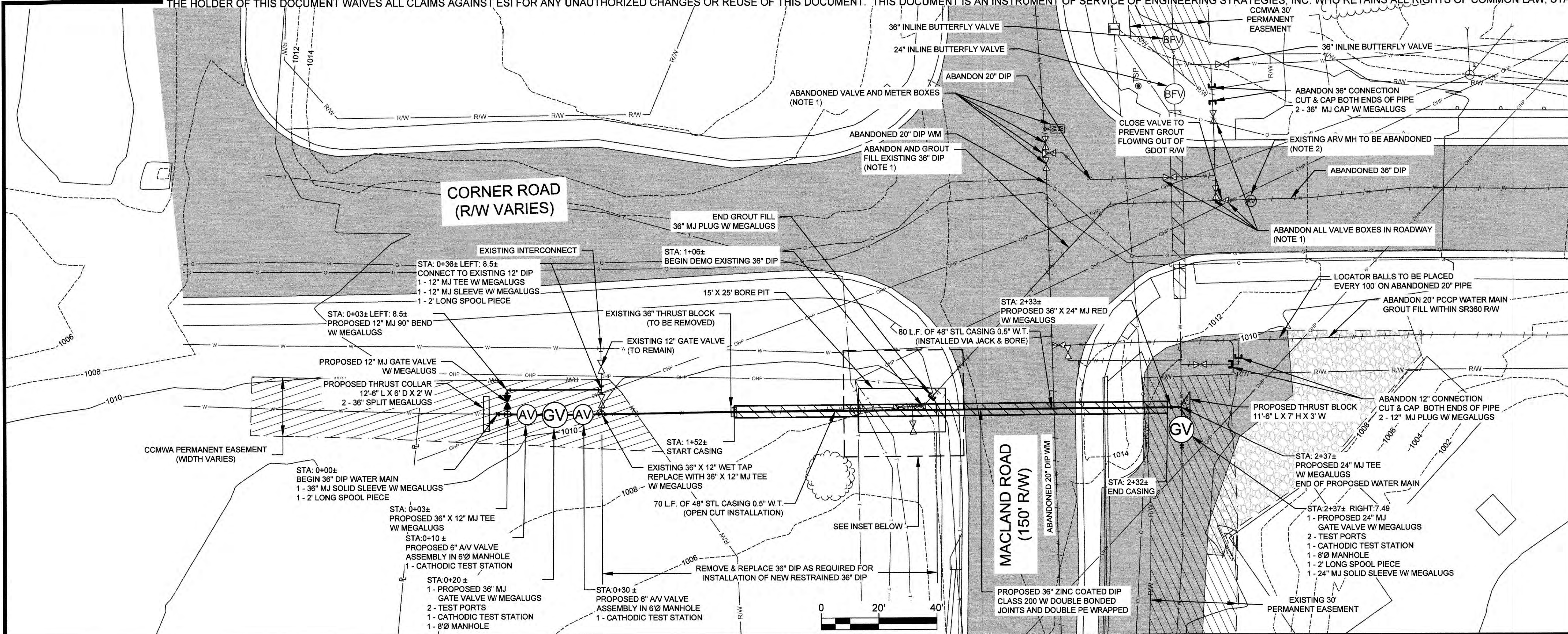
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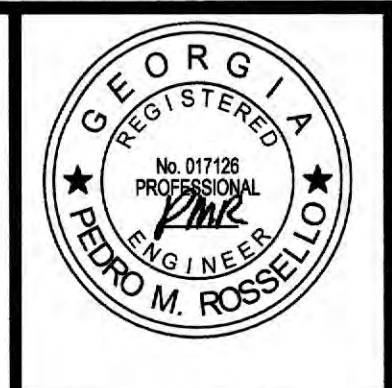
MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS

24-INCH WATER MAIN MODIFICATION PLAN AND PROFILE

SHEET NO. 4

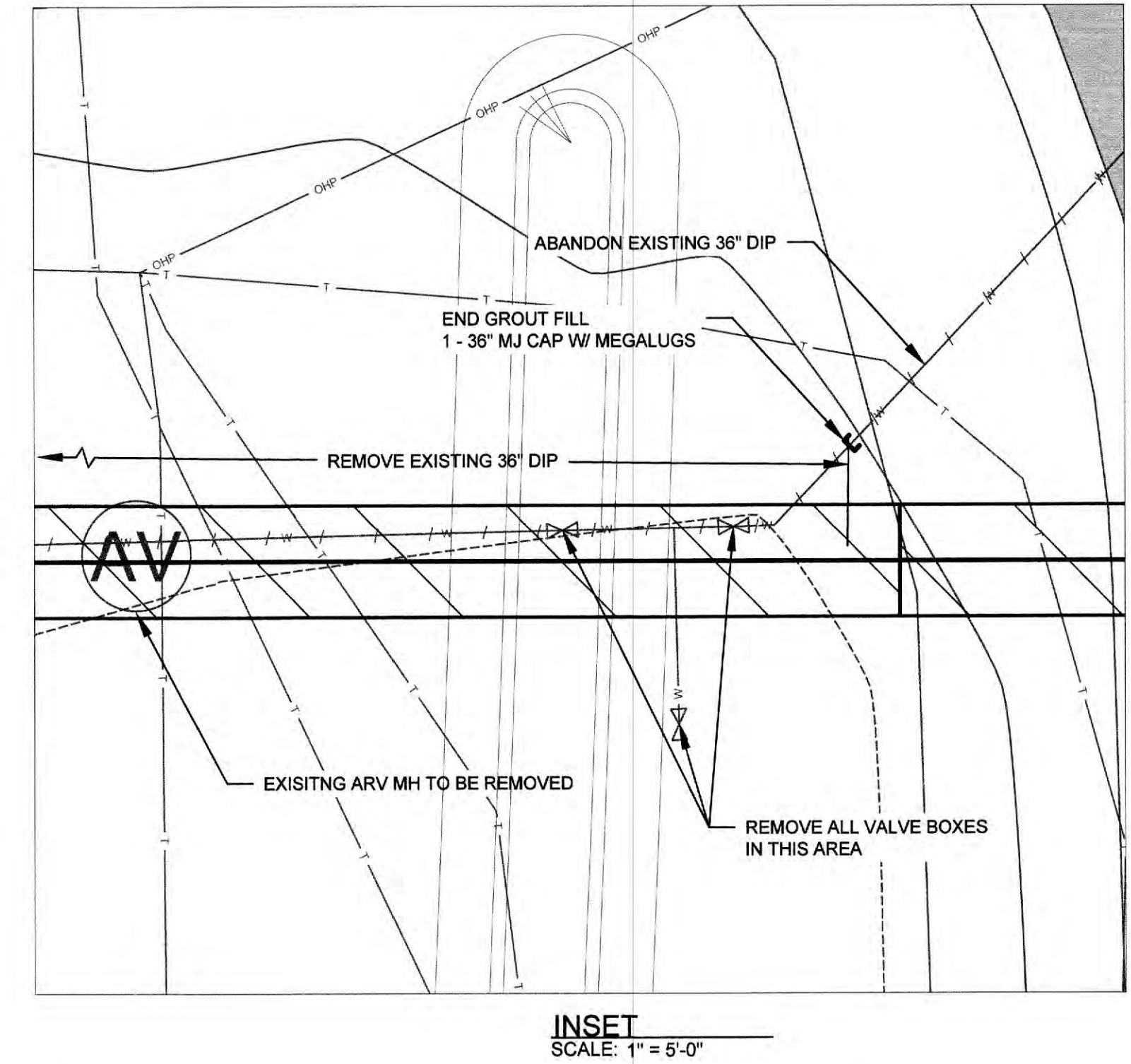
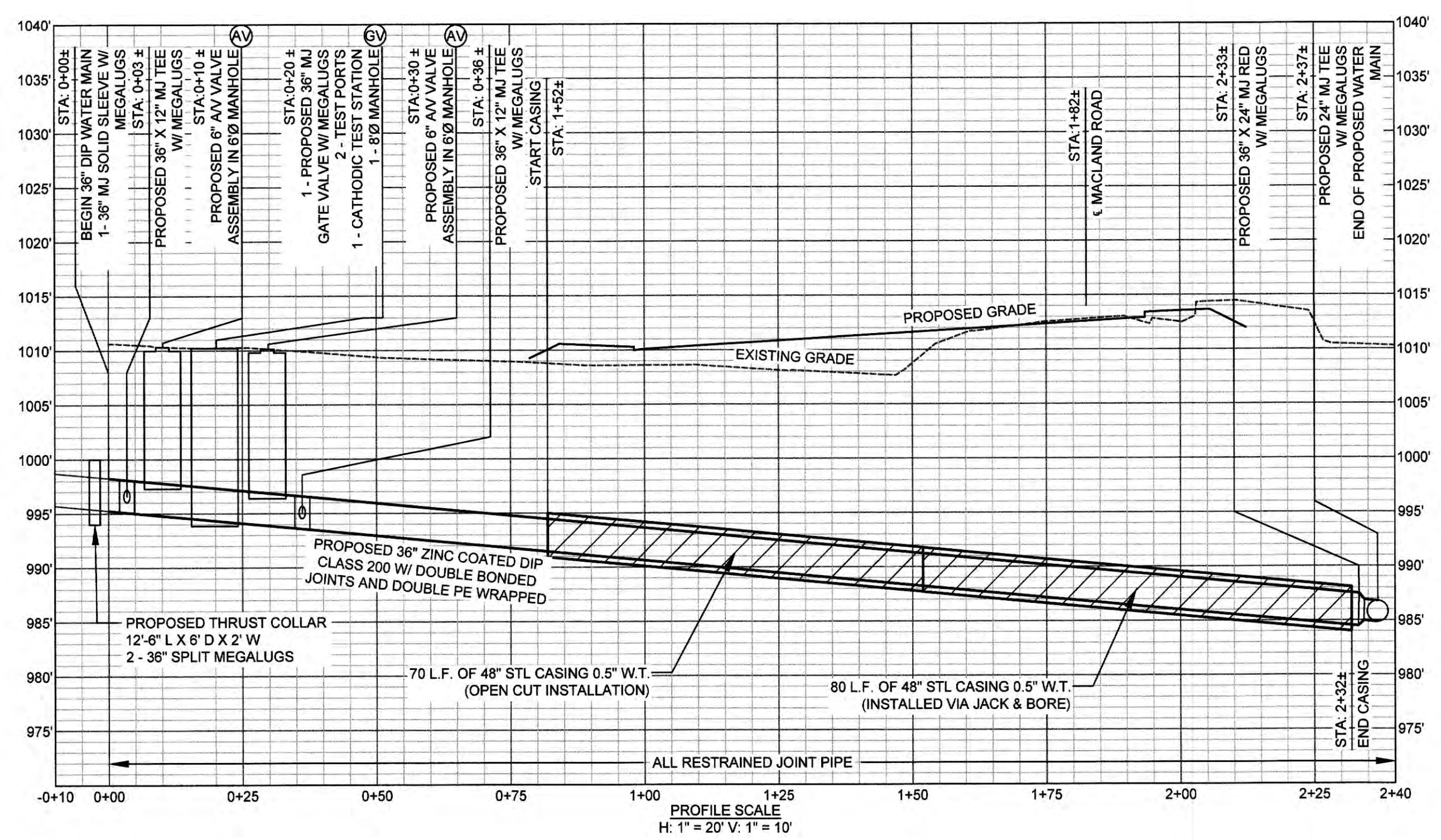


- NOTES:**
1. VALVES TO BE ABANDONED SHALL BE CLOSED. THE VALVE BOX AND EXTENSION STEM (IF PRESENT) SHALL BE REMOVED AND DISPOSED OF IN A LEGAL AND PROPER FASHION.
 2. THE TOP PORTION OF THE MANHOLE STRUCTURE SHALL BE REMOVED IN ORDER TO ESTABLISH A MINIMUM OF 3 FEET COVER FROM SUBGRADE OR FINISH GRADE WHEN NOT UNDER THE PAVEMENT, AND FILLED WITH GRANULAR EMBANKMENT (SAND) OR SUITABLE BACKFILL MATERIAL.
- FOR ARV MANHOLES, THE ISOLATION VALVE SHALL BE CLOSED AND THE AIR VALVE REMOVED AND DISPOSED OF IN A LEGAL AND PROPER FASHION.



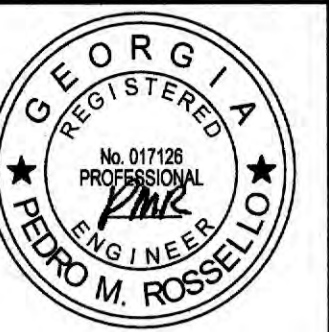
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DSGN: DE
DRAWN: BL
CHECK: PMR
BARS BEYOND 11' LONG FOR SCALES SHOWN ON THIS SHEET. IF NOT 11' LONG ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

MACLARD ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS
36-INCH WATER MAIN
PLAN & PROFILE



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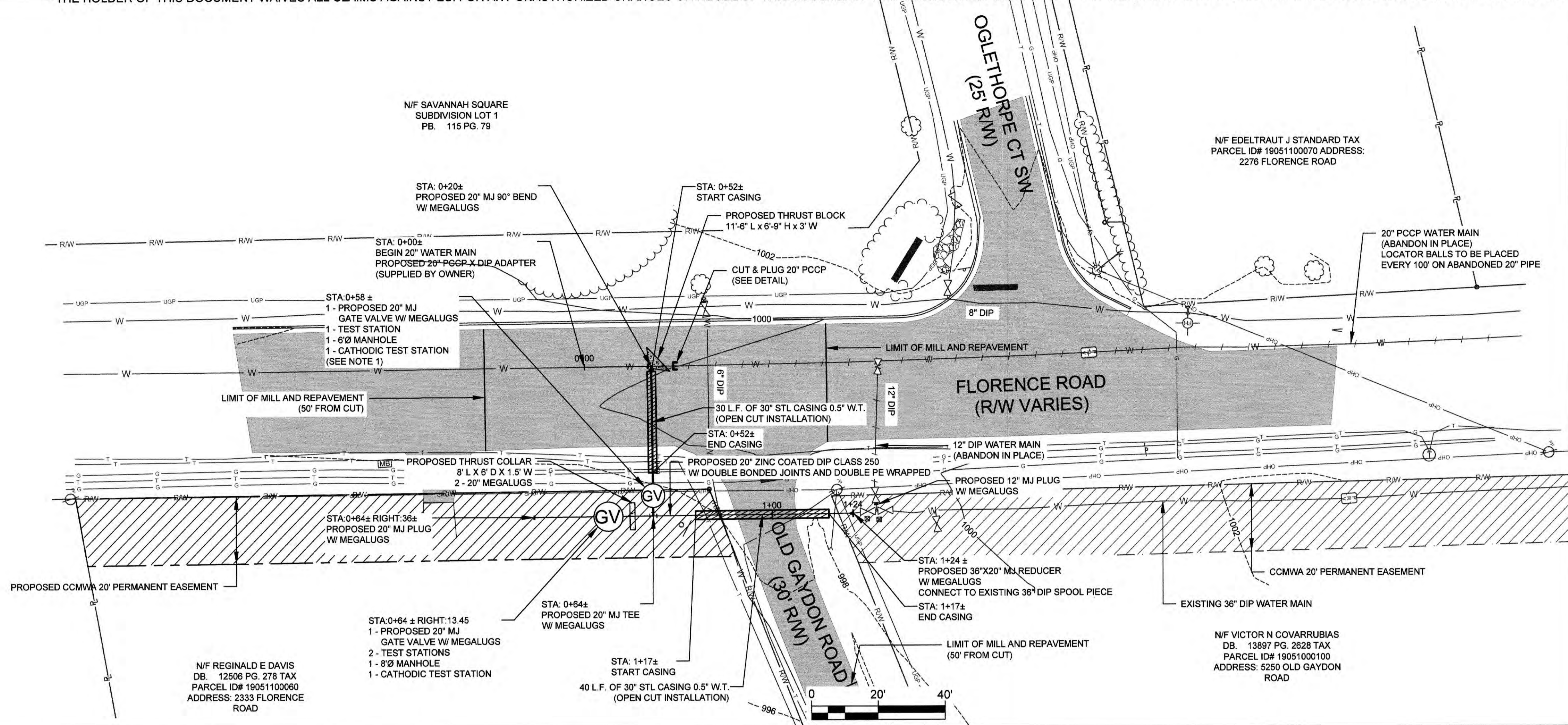
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MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS
FLORENCE ROAD AT OLD GAYDON ROAD
PLAN AND PROFILE

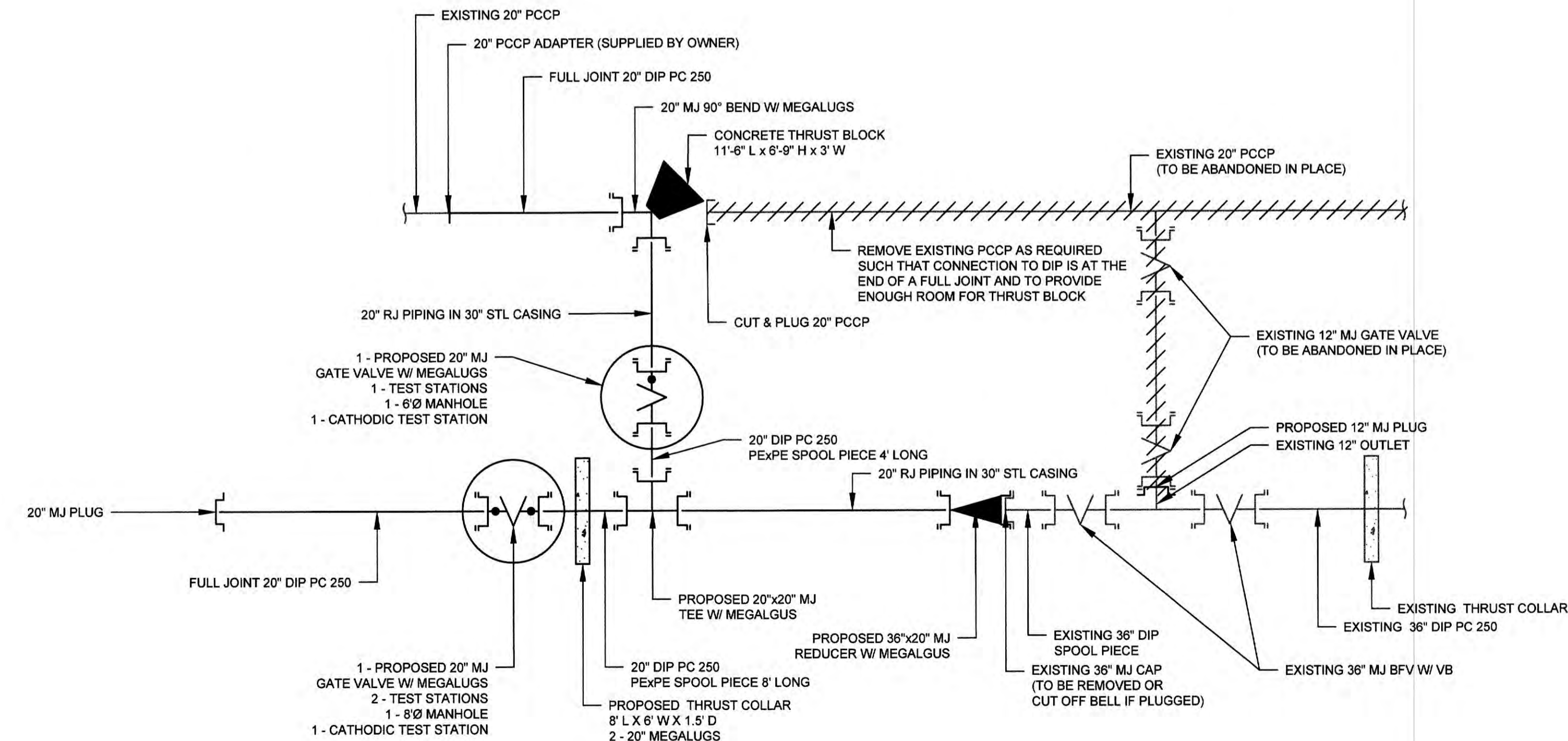
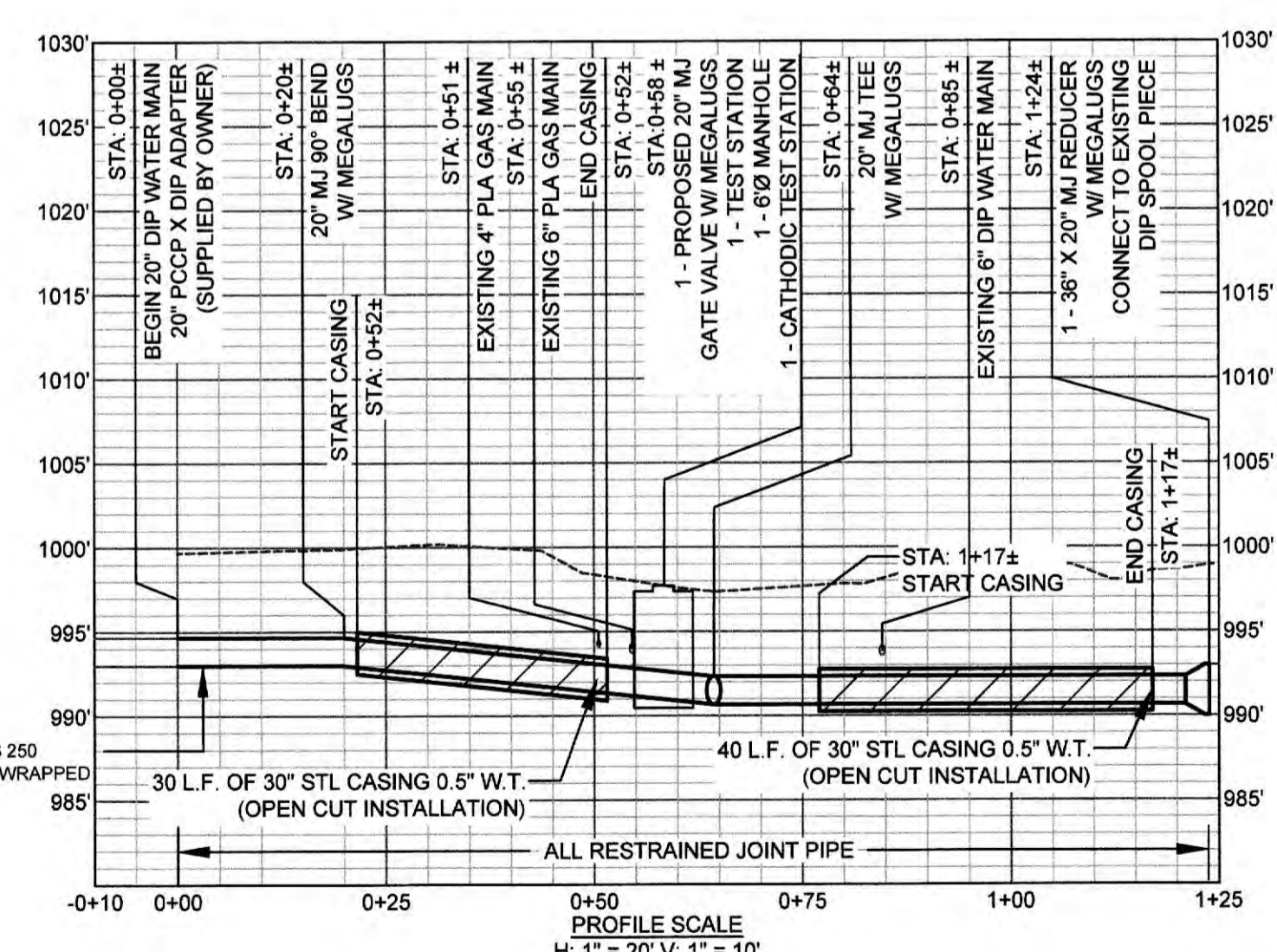
SHEET NO.

6

BID SET



NOTES:
1. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING GAS MAINS PRIOR TO INSTALLATION OF ANY PIPE.



CONNECTION DETAIL
SCALE: NTS



ESI
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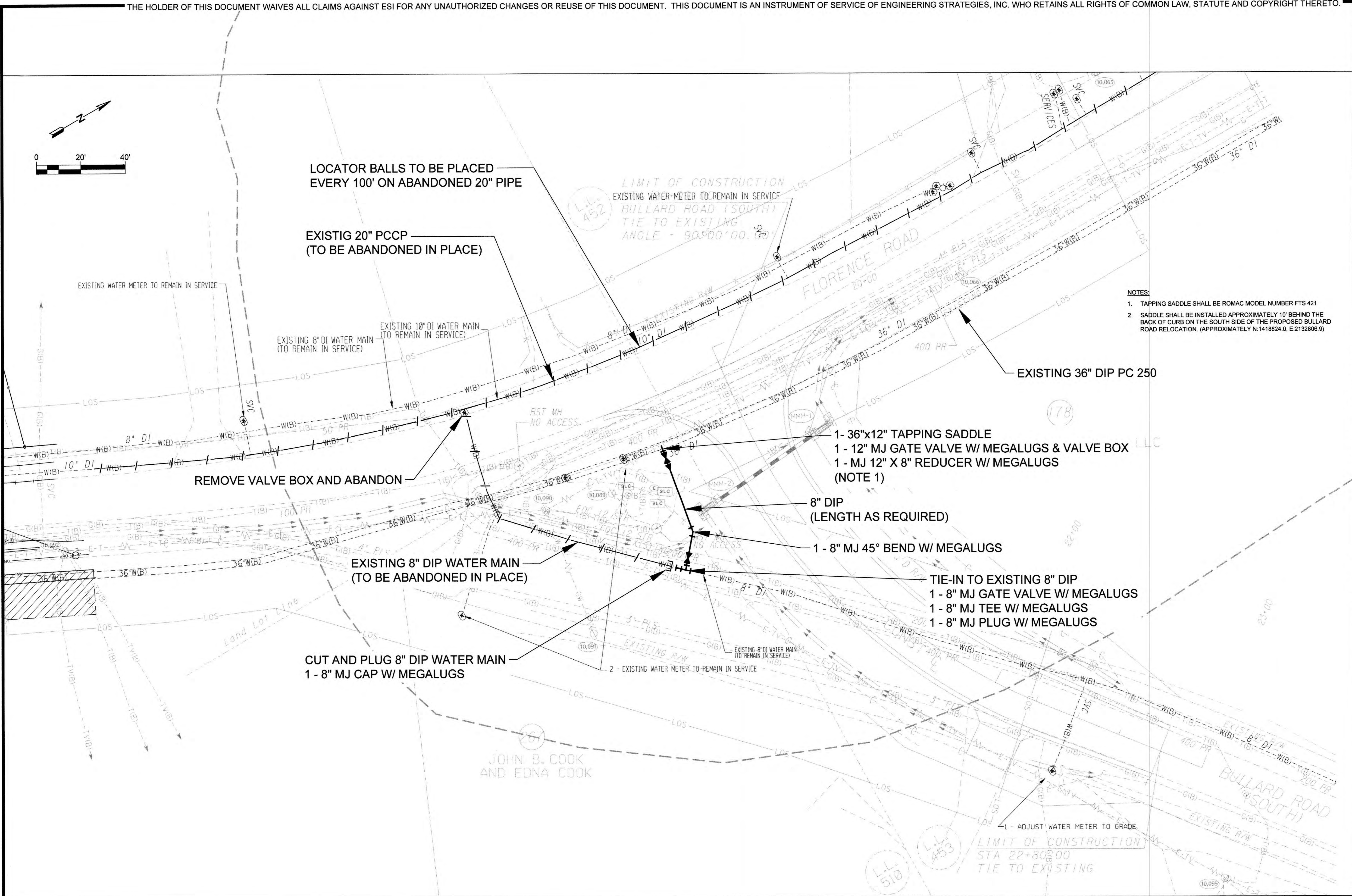
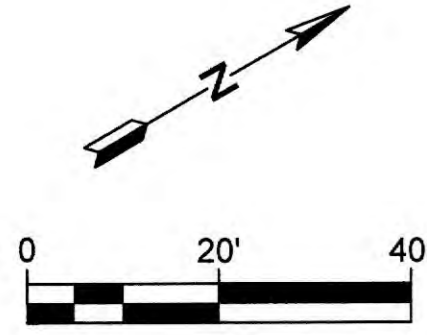
DATE	REVISION

MACLAND ROAD 24-INCH RELOCATION AND
 CORNER/FLORENCE ROAD MODIFICATIONS
 12-INCH OUTLET FLORENCE ROAD
 AT BULLARD ROAD

SHEET NO.

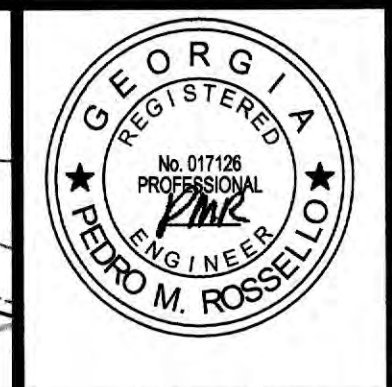
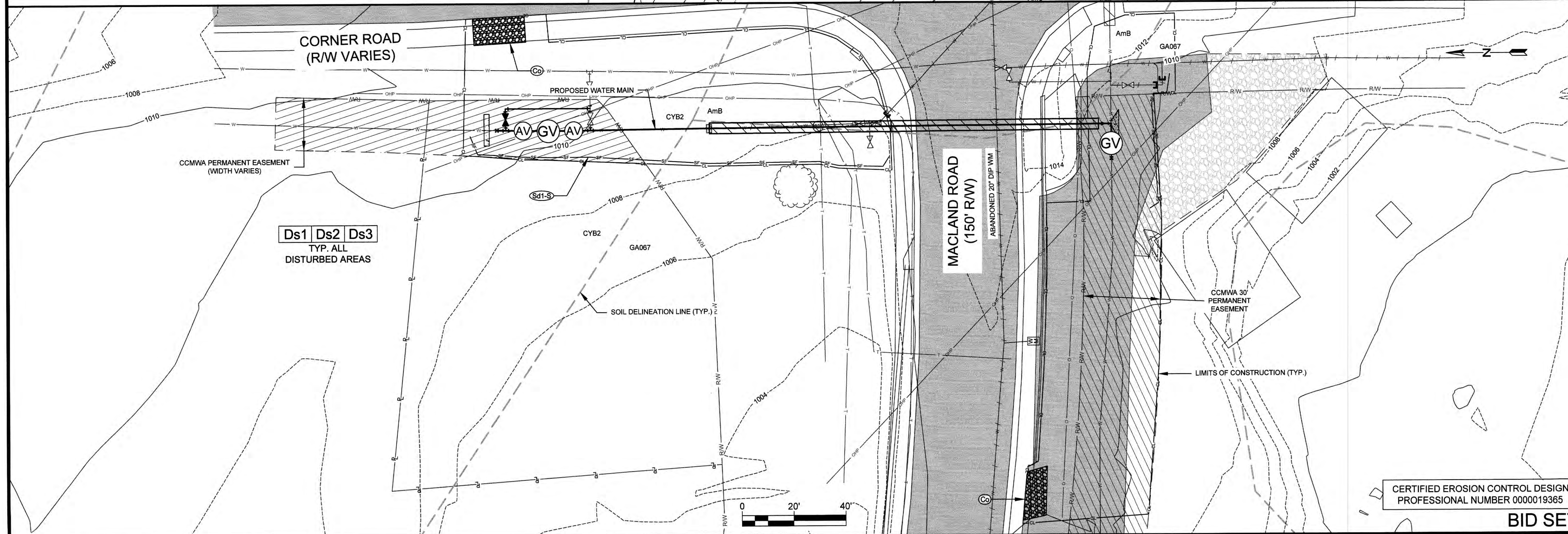
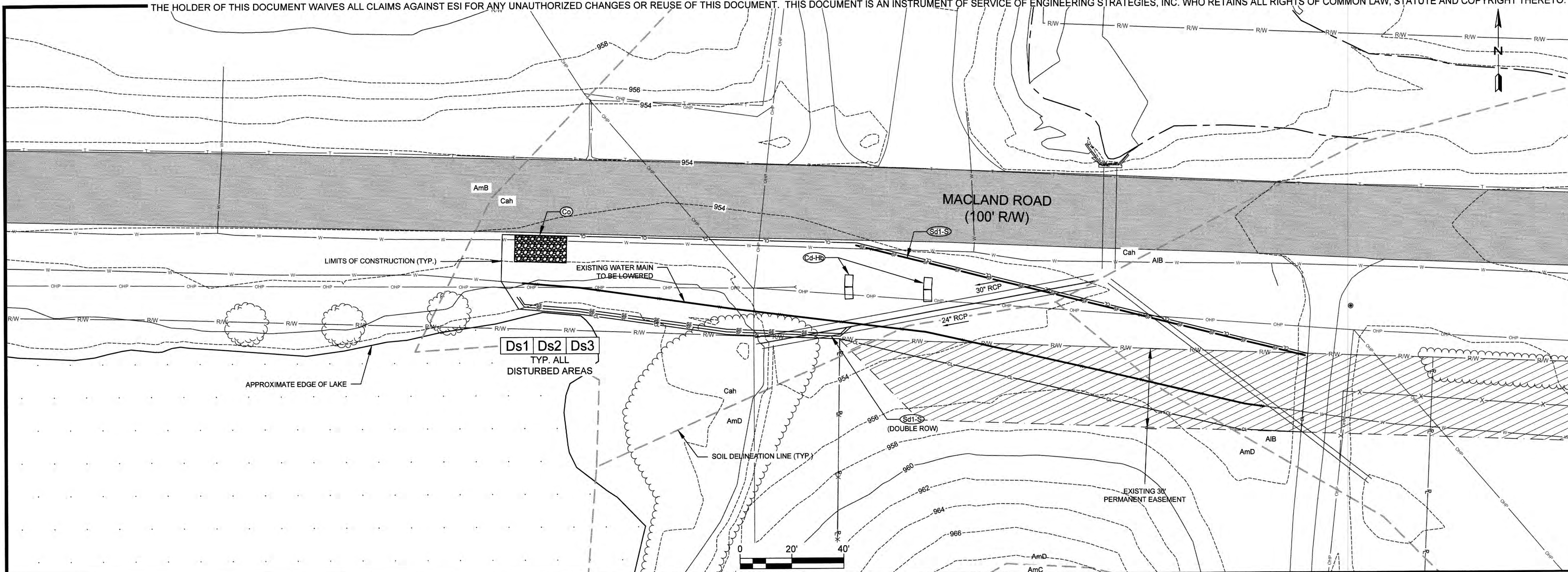
7

BID SET



- NOTES:**
- TAPPING SADDLE SHALL BE ROMAC MODEL NUMBER FTS 421
 - SADDLE SHALL BE INSTALLED APPROXIMATELY 10' BEHIND THE BACK OF CURB ON THE SOUTH SIDE OF THE PROPOSED BULLARD ROAD RELOCATION, (APPROXIMATELY N:1418824.0, E:2132806.9)

L:\CCMVA\macland Rd 24in Relocation & Corner Rd Mod\DWG\Sheets\CS-Bullard Rd.dwg - 8/10/2020



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BAR BELOW IS 1" LONG FOR SCALES BELOW IS 1" LONG FOR SCALES LONG ON THIS SHEET. ADJUST SCALES ACCORDINGLY.

MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS

EROSION CONTROL PLAN LOCATIONS 1 AND 2

SHEET NO.
8

CERTIFIED EROSION CONTROL DESIGN
 PROFESSIONAL NUMBER 0000019365

BID SET



ESI
 ENGINEERING STRATEGIES, INC.
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 MARIETTA, GA 30062
 (770) 425-0001

PROJECT NUMBER: 505-4440-40-52-2275	DATE: AUGUST 2020
REVISION	DATE

DSGN: DE
 DRWN: BL
 CHCK: PMR

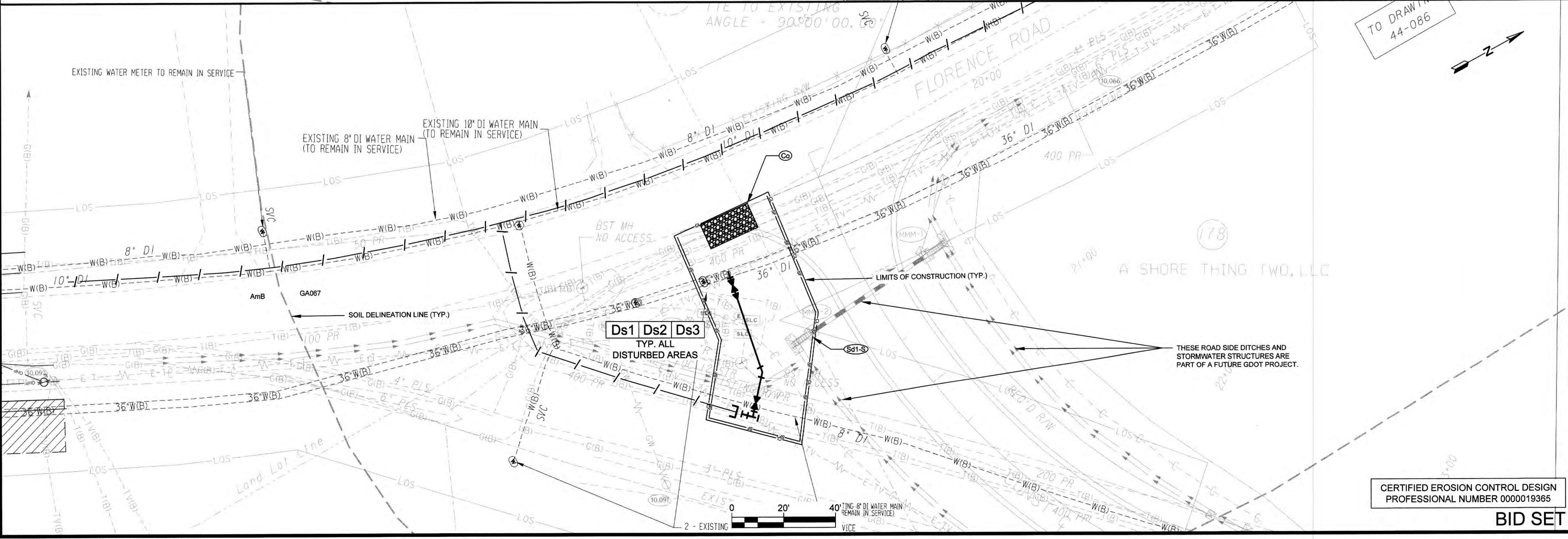
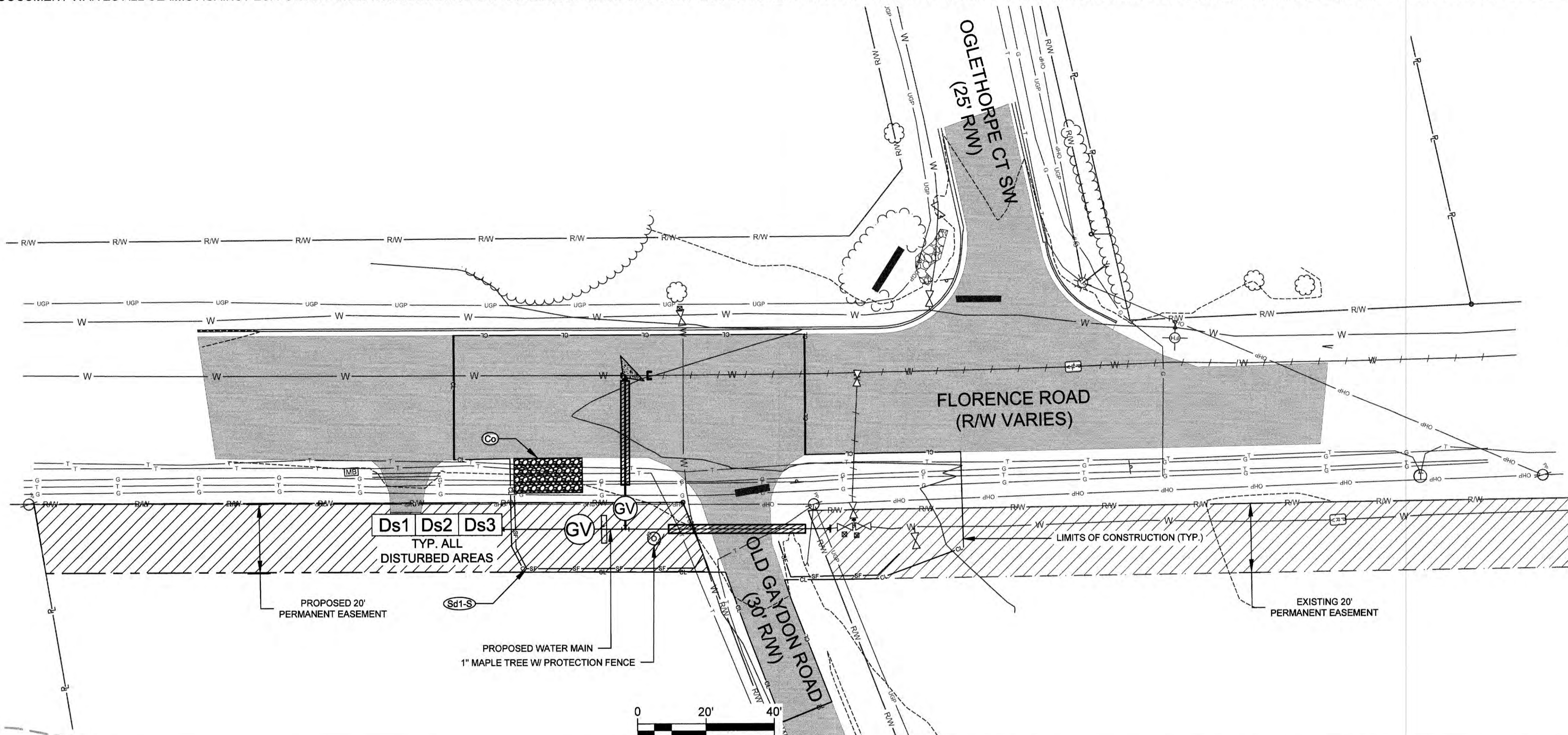
BAR BEYOND 1" LONG FOR SCALES SHOWN ON THIS SHEET. ADJUST SCALES ACCORDINGLY.

MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS

EROSION CONTROL PLAN

LOCATIONS 3 AND 4

SHEET NO. 9



CERTIFIED EROSION CONTROL DESIGN
 PROFESSIONAL NUMBER 0000019365

BID SET

L:\CCM\WMA\MacLand Rd 24in Relocation & Corner Rd Mod\Drawg\Sheets\ESCS-Plan.dwg - 8/10/2020

STORM WATER AND EROSION CONTROL NOTES

- FLOODPLAIN ON THIS PROPERTY FROM ALL WATER COURSES WITH A DRAINAGE AREA EXCEEDING 100 ACRES IS SHOWN. THIS PROJECT DOES LIE WITHIN THE 100-YEAR FLOOD PLAIN PER FEMA FIRM PANEL 13067C0089G, DATED DECEMBER 6, 2008.
- A 25-FOOT UNDISTURBED STATE STREAM BUFFER SHALL BE MAINTAINED ADJACENT TO ALL STREAMS. IN ADDITION, A 50, 75, 100, AND 200-FOOT COBB COUNTY BUFFER SHALL BE MAINTAINED ADJACENT TO ALL STREAMS.
- TOTAL WETLAND AREA = 0.00 ACRES. NATIONAL WETLAND INVENTORY MAPS DO NOT INDICATE WETLANDS TO BE LOCATED WITHIN THE PROJECT AREA. NO WETLAND STUDY WAS CONDUCTED AS PART OF THIS PROJECT.
- SOURCE OF TOPOGRAPHY IS PROVIDED BY TERRAMARK, INC. RECEIVED BY ESI JULY, 2020 AND SUPPLEMENTED WITH DATA PROVIDED BY GDOT AS PART OF PROJECT NUMBER 000649.
- ACCEPTANCE AND/OR SUBSEQUENT ACCEPTANCE OF THESE PLANS DOES NOT CONSTITUTE APPROVAL BY COBB COUNTY OF ANY LAND DISTURBING ACTIVITIES WITHIN WETLAND AREAS. JURISDICTIONAL WATERS OF THE STATE, AREAS OF THREATENED ENDANGERED SPECIES, OR AREAS OF HISTORICAL SIGNIFICANCE. IT IS THE OWNER'S RESPONSIBILITY TO CONTACT THE APPROPRIATE REGULATORY AGENCY FOR ANY REQUIRED APPROVALS.
- COBB COUNTY ASSUMES NO RESPONSIBILITY FOR OVERFLOW OR EROSION OF NATURAL OR ARTIFICIAL DRAINS BEYOND THE EXTENT OF THE STREET RIGHT-OF-WAY, OR FOR THE EXTENSION OF CULVERTS BEYOND THE POINT SHOWN ON THE APPROVED AND RECORDED PLAN. COBB COUNTY DOES NOT ASSUME THE RESPONSIBILITY FOR THE MAINTENANCE OF PIPES IN DRAINAGE EASEMENTS BEYOND THE COUNTY RIGHT-OF-WAY.
- EROSION AND SEDIMENT CONTROL DEVICES SHOWN ARE THE MINIMUM REQUIRED. ADDITIONAL DEVICES MAY BE REQUIRED AS NECESSARY.
- MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE CONTRACTOR.
- PERMANENT GRASSING AND/OR LANDSCAPING SHALL BE INSTALLED WITHIN TWO WEEKS AFTER THE COMPLETION OF ANY LAND DISTURBING ACTIVITY, OR IF ACTIVITY IS DISCONTINUED FOR A PERIOD OF TWO WEEKS OR LONGER.
- A TEMPORARY COVER OF HEAVY MULCH OR MULCH WITH TEMPORARY SEEDING SHALL BE PLACED ON ALL AREAS WHERE PERMANENT COVER CAN NOT BE ESTABLISHED IMMEDIATELY DUE TO SEASONAL LIMITATIONS.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL DEVICES IN GOOD WORKING CONDITION AND CLEANING OUT THE DEVICES BEFORE THEY ARE HALF-FULL OF SEDIMENT.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT UNDER NO CIRCUMSTANCES ANY SEDIMENT, TRASH, OR DEBRIS BE ALLOWED ONTO ADJACENT PROPERTIES, PUBLIC LANDS, OR OUTSIDE OF THE CONSTRUCTION LIMITS.
- CONTRACTOR SHALL BUILD, MAINTAIN, AND USE A CONSTRUCTION EXIT AT ALL SITE ENTRY/EXIT LOCATIONS ADJACENT TO PAVED ROADS.
- ALL EROSION AND SEDIMENT CONTROL DEVICES TO BE USED ARE DETAILED ON THE EROSION CONTROL PLAN OR EROSION CONTROL DETAILS.
- ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL MEET THE MINIMUM REQUIREMENTS OF THE SPECIFICATIONS AND ALL LOCAL, STATE, AND FEDERAL LAWS AS APPLICABLE TO THIS PROJECT. ALL DEVICES SHALL BE PROPERLY INSTALLED AND BE OF SUITABLE MATERIALS. ANY DEVICES JUDGED TO BE INADEQUATE IN MATERIAL AND/OR CONSTRUCTION WILL IMMEDIATELY BE REPLACED WITH NEW OR ADDITIONAL DEVICES TO ENSURE PROPER CONTROL.
- TEMPORARY SILT CONTROL FENCE, TYPE 'S' DOUBLE ROW SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR THROUGHOUT THE LIFE OF THE PROJECT. THE CONTRACTOR SHALL INSPECT FENCE DAILY AND AFTER EVERY RAIN. ACCUMULATED SILT SHALL BE REMOVED AS SOON AS PRACTICAL, BUT NO LATER THAN WHEN FENCE IS HALF FULL. CONTRACTOR SHALL REMOVE THE SILT FENCE WHEN PERMANENT GRASSING HAS BEEN ESTABLISHED.
- ALL EROSION CONTROL DEVICES, THAT ARE NOT DIRECTLY SPECIFIED AS TO INSTALLATION AND MATERIALS, SHALL MEET THE REQUIREMENTS OF THE GA. DEPT. OF TRANSPORTATION, SPECIFICATIONS FOR THE CONSTRUCTION OF ROADS AND BRIDGES, CURRENT EDITION, AND LATEST SUPPLEMENT IN EFFECT AT THE TIME OF BID OPENING OR THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, FIFTH ED. 2000.
- CONSTRUCTION EXITS (CO) SHALL BE REQUIRED AT ALL OTHER LOCATIONS USED FOR INGRESS/EGRESS FROM THE CONSTRUCTION AREA. CONSTRUCTION MATERIAL STORAGE AREAS WILL REQUIRE THE INSTALLATION OF A CONSTRUCTION EXIT TO REDUCE OR ELIMINATE THE TRANSPORT OF MUD FROM THE AREA. SILT FENCE SHALL ALSO BE INSTALLED TO PREVENT SEDIMENT FROM LEAVING THE MATERIAL STORAGE AREA. AFTER DEMOBILIZATION, THE MATERIAL STORAGE AREA SHALL BE SEEDDED AND MULCHED, AND THE SILT FENCE SHALL REMAIN UNTIL THE AREA IS PERMANENTLY STABILIZED.
- MAXIMUM SLOPE FOR CUT OR FILL IS 2H:1V EXCEPT EARTHEN DAM EMBANKMENTS SHALL BE 2.5H:1V.
- ALL FILL SLOPES SHALL HAVE SILT FENCE PLACED AT THE TOE OF THE SLOPE.

COBB COUNTY EROSION CONTROL NOTES

- THE EXISTING AND PROPOSED LANDUSE OF THE PROJECT SITE IS EITHER STATE OR COUNTY ROUTE RIGHT-OF-WAY.
- OWNER/DEVELOPER/PRIMARY PERMITTEE:
COBB COUNTY MARIETTA WATER AUTHORITY
1170 ATLANTA INDUSTRIAL DRIVE
MARIETTA, GEORGIA 30066
- 24-HOUR CONTACT: JACOB WILSON (770) 514.5350
- THIS PROJECT LIES WITHIN DISTRICT 19, LAND LOTS 436, 437, 439, 450, 451, 452, 453 AND 510 OF COBB COUNTY, GEORGIA.
- TOTAL PROJECT AREA: 0.84± ACRES.
- TOTAL DISTURBED AREA: 0.84± ACRES
- ADDITIONAL EROSION CONTROL DEVICES TO BE USED AS REQUIRED BY COBB COUNTY.
- A COBB COUNTY LAND DISTURBANCE PERMIT MUST BE DISPLAYED ON-SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A COUNTY ROAD OR STREET.
- EROSION CONTROL PRACTICES MUST COMPLY WITH THE MINIMUM BEST MANAGEMENT PRACTICES FOR EROSION CONTROL, COBB COUNTY CODE SECTION 50-75, AND SHALL COMPLY WITH THE STANDARDS/SPECIFICATIONS IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
- EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO ANY GRADING ON SITE. PLEASE CALL (770) 528-2134 WITH ENOUGH LEAD TIME FOR AN INSPECTION TO MEET YOUR SCHEDULE.
- DISTURBED AREAS LEFT IDLE FOR MORE THAN FIVE DAYS, AND NOT TO FINAL GRADE, WILL BE ESTABLISHED TO TEMPORARY VEGETATION (DS2). MULCH, TEMPORARY VEGETATION OR PERMANENT VEGETATION SHALL BE COMPLETED ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER DISTURBANCE. ALL AREAS TO FINAL GRADE WILL BE ESTABLISHED TO PERMANENT VEGETATION IMMEDIATELY UPON COMPLETION.
- WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDDED AREAS WITHIN 24 HOURS OF SEEDING.
- EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY GRADING ON SITE. PLEASE CALL WITH ENOUGH LEAD-TIME FOR AN INSPECTION TO MEET YOUR SCHEDULE.
- SEDIMENT AND EROSION CONTROL DEVICES MUST BE CHECKED AFTER EACH STORM EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE-HALF THE CAPACITY

OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED.

- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION AND SEDIMENT CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
- MULCH TEMPORARY VEGETATION ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER DISTURBANCE.
- CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS AND POSTAL SERVICE THROUGHOUT THE DURATION OF THE PROJECT.
- WHEN PLANTING VEGETATION, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER SEEDDED AREA WITHIN 24 HOURS OF SEEDING.
- IN CONCENTRATED FLOW AREAS, ALL SLOPES STEEPER THAN 2.5:1 AND WITH A HEIGHT OF TEN FEET OR GREATER (DOES NOT APPLY TO RETAINING WALLS), AND CUTS AND FILLS WITHIN STREAM BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS. MULCH SHALL BE USED AS A TEMPORARY COVER.
- THE PROFESSIONAL WHO SEALS THIS PLAN CERTIFIES UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATION DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY DIRECT SUPERVISION.
- THE USE OF POLYMERS IS ACCEPTED AS A BMP AS RECOMMENDED BY THE STATE SOIL & WATER CONSERVATION COMMISSION BMP "GREEN BOOK". COBB COUNTY ALSO REQUIRES THAT POLYMERS USED TO STABILIZE CONSTRUCTION SITES MUST BE USED IN CONJUNCTION WITH MULCHING AND OR HYDRO SEEDING.
- UPON NOTIFICATION AND AUTHORIZATION OF THE OWNER AND/OR CONTRACTOR, THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS RESPONSIBLE FOR INSPECTING THE INSTALLATION OF THE BMPs WITHIN 7 DAYS AFTER INITIAL CONSTRUCTION ACTIVITIES BEGIN.
- IF STREAMS ARE ON YOUR SITE, COBB COUNTY WILL REQUIRE THAT THE STREAM BUFFERS BE LEFT UNDISTURBED AND A CONSERVATION EASEMENT OR A RESTRICTIVE COVENANT BE PLACED ON THAT PROPERTY. FOR MORE INFORMATION, PLEASE CONTACT JASON GAINES WITH THE PLANNING DIVISION AT (770) 528-2120 OR AT JASON.GAINES@COBBCOUNTY.ORG.
- NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
- WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

RECEIVING WATERS FOR THIS PROJECT ARE UNNAMED TRIBUTARIES TO POWDER SPRINGS CREEK AND FLORENCE BRANCH.

EROSION CONTROL PROJECT NARRATIVE

THE PROPOSED PROJECT CONSISTS OF WORK IN THREE (4) SEPERATE AREAS IN WEST COBB NEAR THE INTERSECTIN OF MACLAND ROAD AND FLORENCE ROAD.
LOCATION 1 CONSISTS OF LOWERING 400 LF OF EXISTING 24-INCH DUCTILE DIP WATER MAIN ALONG FRONTAGE OF COLE POND TO ACCOMODATE THE INSTALLATION OF A NEW CULERT BEING INSTALLED BY GDOT.
LOCATION 2 INVOLVES THE INSTALLATION OF 230 LF 36-INCH DIP WATER MAIN AND THE ABANDONMENT OF MULTIPLE EXISTING WATER MAINS IN THE INTERSECTION. ALL OF THIS WORK IN TO ACCOMDATE THE PROPOSED GDOT ROAD PROJECT (PI NO 000649).
LOCATION 3 INVOLVS THE ADDITION OF 125 LF OF 20-INCH DIP WATER MAIN AT THE INTERSECTIN OF FLORENCE ROAD AND OLD GAYDON ROAD. THIS WILL EXTEND FROM AND EXISTING 36-INCH DIP MAIN AND TIE-INTO THE EXISTING 20-INCH PCCP WATER MAIN. THE PORTION OF PCCP BETWEEN OLD GAYDON ROAD AND MACLAND ROAD WILL BE ABONONED IN PLACE.
LOCATION 5 INVOLVES ADDING A TAPPING SADDLE AND 12-INCH GATE VALVE NEAR THE INTERSECTION OF FLORENCE ROAD AND BULLARD ROAD. THIS IS TO PROVIDE AN OUT LET FOR COBB COUNTY WATER SYSTEM. ALL WORK WILL BE PERFORMED WITHIN THE STATE AND COUNTY RIGHT-OF-WAY AND PERMANENT EASEMENT OWNED BY CCMWA.
THE TOTAL PROJECT AREA IS 28.0 ACRES AND THE TOTAL DISTURBED AREA IS 12.3 ACRES.

- FOUR (4) TYPES OF EROSION CONTROL MEASURES WILL BE UTILIZED IN THE CONSTRUCTION OF THE PROJECT.
- SILT FENCE - TYPE SENSITIVE (SD1-S) SHALL BE INSTALLED AT APPROPRIATE LOCATIONS TO PREVENT SEDIMENT FROM BEING WASHED OFF OF THE SITE.
 - MULCHING, TEMPORARY AND PERMANENT GRASSING (DS1, DS2 & DS3) SHALL BE USED TO RE-ESTABLISH VEGETATION ON THE DISTURBED AREAS AS CONSTRUCTION PROCEEDS.
 - CONSTRUCTION EXITS (CO) WILL BE USED TO PREVENT SEDIMENT FROM LEAVING THE SITE VIA THE TIRES OF TRUCKS AND CONSTRUCTION EQUIPMENT.
 - HAYBALE CHECKDAMS WILL BE INSTALLED TO PREVENT SEDIMENT FROM CONCENTRATING ALONG DITCHES.

ALL DISTURBED AREAS WILL BE STABILIZED WITH EITHER TEMPORARY OR PERMANENT MEASURES WITHIN 48 HOURS OR PRIOR TO ANY EXPECTED RAINFALL EVENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF A STRONG STAND OF GRASS BEFORE BEING RELEASED FROM HIS CONTRACTUAL OBLIGATIONS. HE WILL BE HELD RESPONSIBLE FOR A PERIOD OF TWELVE MONTHS AFTER ACCEPTANCE OF THE PROJECT TO REPAIR ANY WASHOUT AREAS, ETC.

ON A LINEAR AND NARROW INFRASTRUCTURE PROJECT, SUCH AS THE PIPELINES THAT ARE THE SUBJECT OF THIS ES&PC, IT IS DIFFICULT TO PROVIDE BASINS TO STORE SEDIMENT DUE TO THE DRAINAGE PATTERNS CROSSING A 20' TO 30' SWATH. NORMALLY, EROSION IS PREVENTED WITH VEGETATIVE MEASURES AND THEN SILT FENCE IS USED TO PROVIDE STORAGE FOR ANY SEDIMENT RELEASED. THE TYPICAL STORAGE IN SILT FENCE ACCEPTED BY MOST JURISDICTIONS IS 0.2 CY PER LINEAR FOOT OF SILT FENCE. THE PROJECT WILL CONTAIN 926 LF OF SILT FENCE WHICH WILL PROVIDE STORAGE OF 0.2 CY X 926 LF = 185 CY. THIS IS ADEQUATE STORAGE FOR THE 67 CY X 0.84 DISTURBED ACRES = 56.3 CY.

PERMITTEE CONTACT INFORMATION

COBB COUNTY-MARIETTA WATER AUTHORITY
1170 ATLANTA INDUSTRIAL DRIVE
MARIETTA, GEORGIA 30066
PHONE: (770) 514-5350

PERMITTEE CERTIFICATION STATEMENT

I CERTIFY THAT THE RECEIVING WATER(S) OR THE OUTFALL(S) OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S) WILL BE MONITORED IN ACCORDANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN.

OPERATOR'S PRINTED NAME: _____

SIGNATURE: _____ DATE: _____

CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT CERTIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

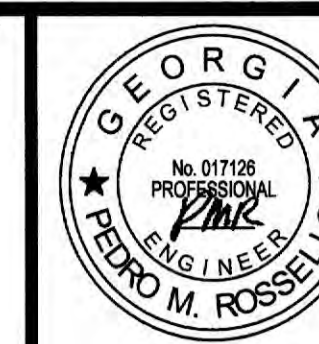
I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100002.

I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR THE MONITORING OF: (A) ALL PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES SHOWN ON THE USGS TOPOGRAPHIC MAP AND ALL OTHER FIELD VERIFIED PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES; OR (B) WHERE ANY SUCH SPECIFIC IDENTIFIED PERENNIAL OR INTERMITTENT STREAM AND OTHER WATER BODY IS NOT PROPOSED TO BE SAMPLED, I HAVE DETERMINED IN MY PROFESSIONAL JUDGMENT, UTILIZING THE FACTORS REQUIRED IN THE GENERAL NPDES PERMIT NO. GAR 100002, THAT THE INCREASE IN THE TURBIDITY OF EACH SPECIFIC IDENTIFIED SAMPLED RECEIVING WATER WILL BE REPRESENTATIVE OF THE INCREASE IN THE TURBIDITY OF A SPECIFIC IDENTIFIED UN-SAMPLED RECEIVING WATER.

I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY DIRECT SUPERVISION.

THE PROPOSED EROSION AND RUNOFF CONTROL MEASURES ARE IN COMPLIANCE WITH THE COBB COUNTY SEDIMENT CONTROL AND FLOOD PROTECTION REGULATIONS AND WILL NOT INCREASE THE RUNOFF RATE FROM THE SITE FOR RAINSTORMS WITH A RETURN PERIOD OF 2, 5, 10, 25, 50 AND/OR 100 YEARS.

Pedro M. Rosello
PEDRO M. ROSSELLO, P.E.
LEVEL II CERTIFIED DESIGN PROFESSIONAL #0000019365
EXP. DATE: 12/06/2021



ESI
ENGINEERING STRATEGIES, INC.
3855 SHALLOWFORD ROAD, SUITE 525
MARIETTA, GA 30062

PROJECT NUMBER: 505-4440-40-52-2275	DATE: AUGUST 2020	REVISION	DATE
		△	

DSGN: DE
DRWN: BL
CHK: PMR
BAR BELOW IS 1" LONG FOR SCALES SHOWN ON THIS SHEET. IF NOT 1" LONG ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

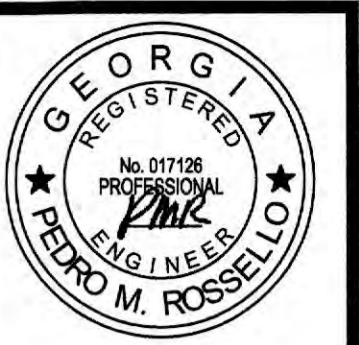
MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS
EROSION CONTROL NOTES AND DETAILS (1 OF 3)

CERTIFIED EROSION CONTROL DESIGN
PROFESSIONAL NUMBER 0000019365

BID SET

SHEET NO.

10



ESI
ENGINEERING STRATEGIES, INC.
3855 SHALLOFORD ROAD, SUITE 525
MARIETTA, GA 30062
(770) 429-0001

PROJECT NUMBER: 505-4440-40-52-2275
DATE: AUGUST 2020

DESIGN: DE	DATE: AUGUST 2020
DRAWN: BL	REVISION
CHECK: PMR	

MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS
EROSION CONTROL NOTES AND DETAILS (2 OF 3)

SHEET NO.

11

CERTIFIED EROSION CONTROL DESIGN
PROFESSIONAL NUMBER 000019365

BID SET

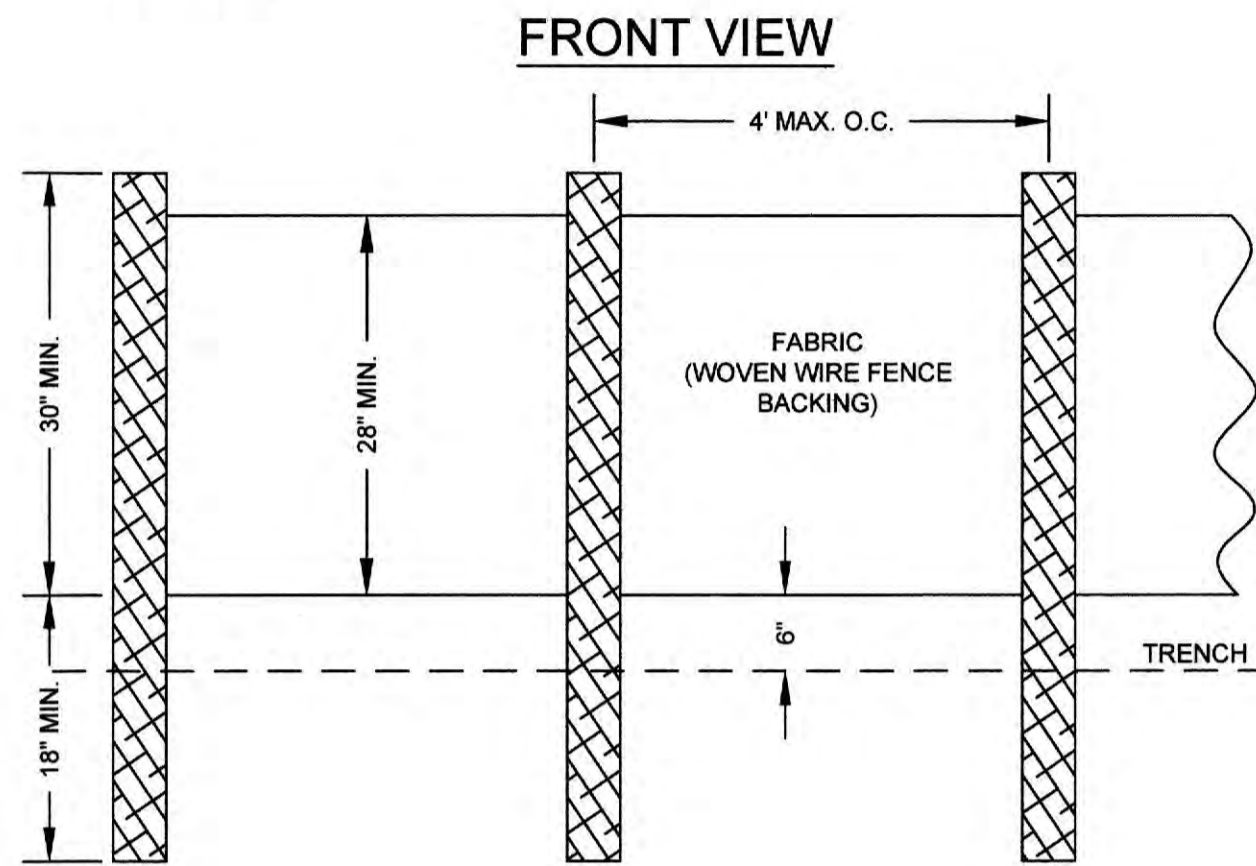
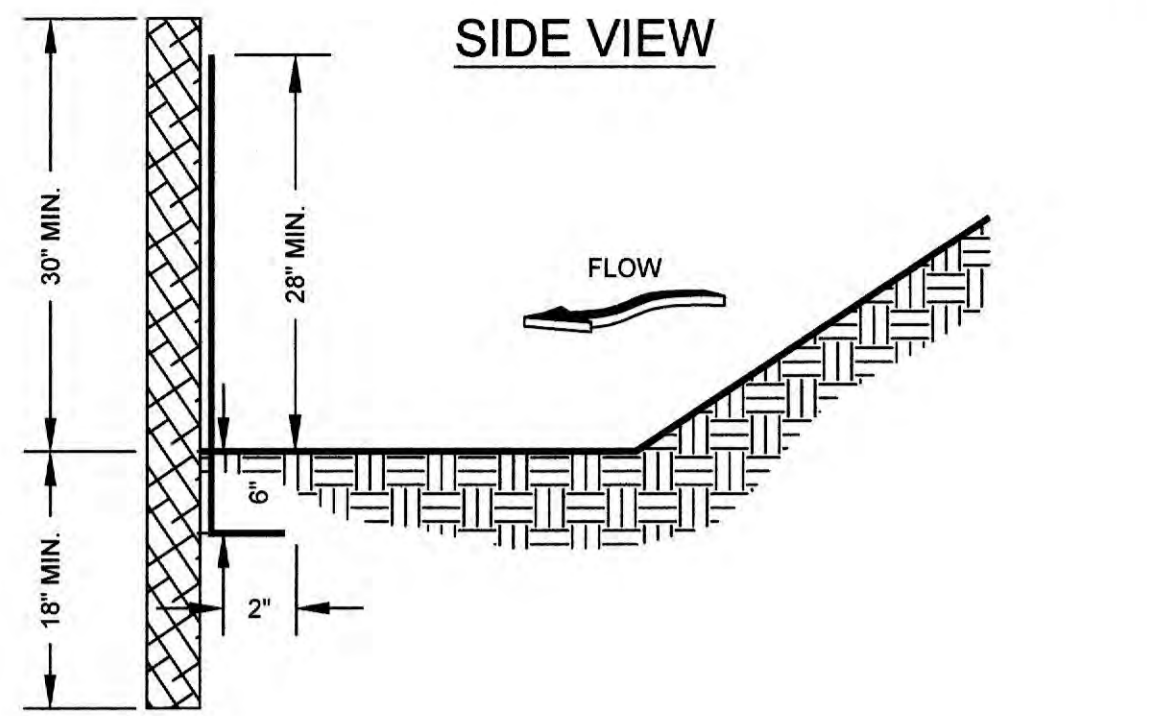
GEORGIA UNIFORM CODING SYSTEM
FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES
GEORGIA SOIL AND WATER CONSERVATION COMMISSION

CODE	PRACTICE	DETAIL	MAP SYMBOL	STRUCTURAL PRACTICES			
				FERTILIZER	LIME STONE	MAINTENANCE	
Cd	CHECKDAM			8 - 10 LB. 30 - 40 LB. (1)	12 LB (10-10-10) 35 LB (6-12-12)	45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10)
Ch	CHANNEL STABILIZATION			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Ce	CONSTRUCTION EXIT			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Cr	CONSTRUCTION ROAD STABILIZATION			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Cc	CONSTRUCTION CURB			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Cd	STREAM DIVERSION CHANNEL			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Di	DIVERSION			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Dn1	TEMPORARY DOWNSTREAM STRUCTURE			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Dn2	PERMANENT DOWNSTREAM STRUCTURE			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
F	FILTER RING			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
G	GABION			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Gr	GRADE STABILIZATION STRUCTURE			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Lv	LEVEL SPREADER			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Rd	ROCK FILTER DAM			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Ra	RETAINING WALL			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Rf	RETRO FITTING			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Sb1	SEDIMENT BARRIER			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Sd	INLET SEDIMENT TRAP			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Sb3	TEMPORARY SEDIMENT BASIN			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Sb4	TEMPORARY SEDIMENT TRAP			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Sk	FLOATING SURFACE SOMMER			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Sb5	SEEP BERM			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)

CODE	PRACTICE	DETAIL	MAP SYMBOL	STRUCTURAL PRACTICES			
				FERTILIZER	LIME STONE	MAINTENANCE	
Sr	TEMPORARY STREAM CROSSING			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
St	STORMDRAIN OUTLET PROTECTION			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Su	SURFACE ROUGHENING			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Tc	TURBIDITY CURTAIN			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Tp	TOPSOILING			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Tr	TREE PROTECTION			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
W	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)

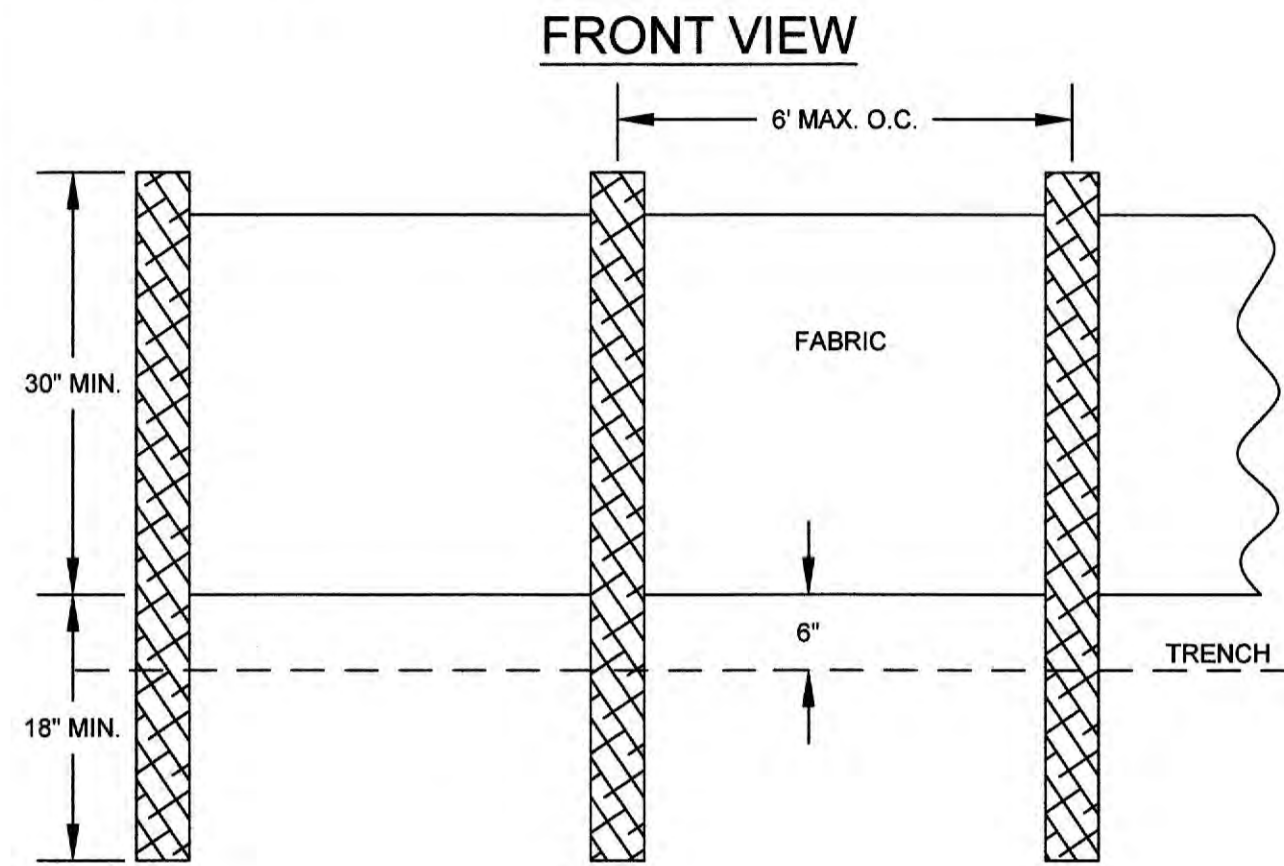
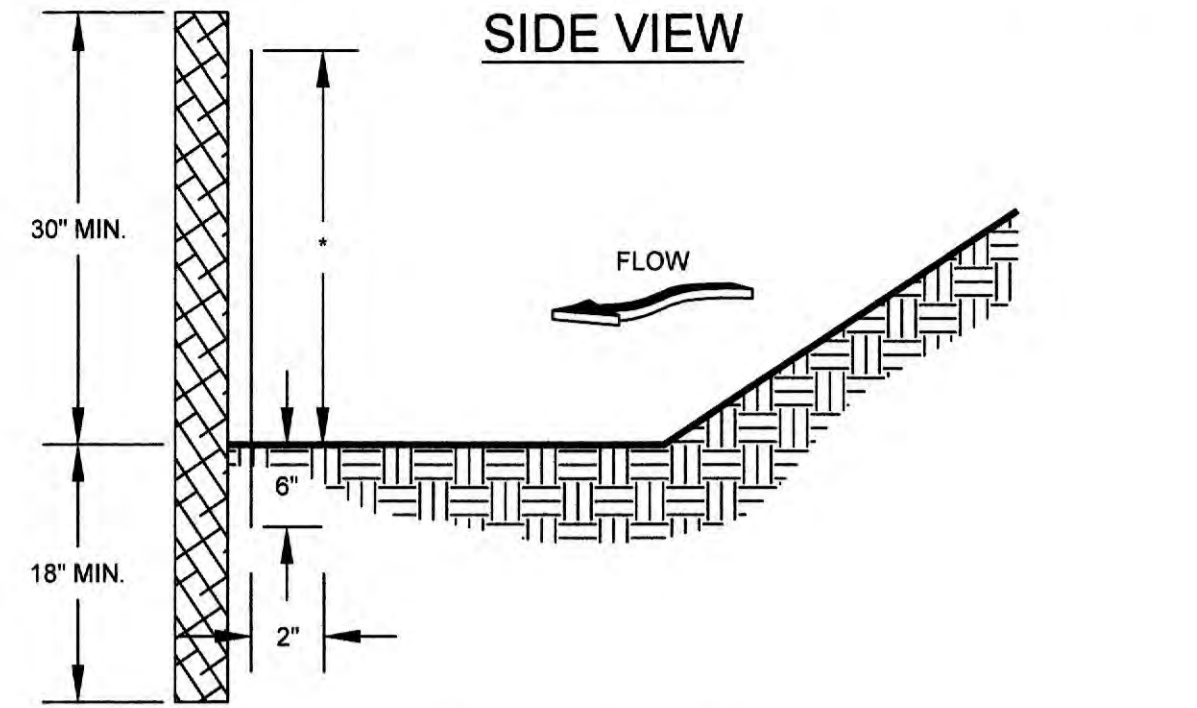
CODE	PRACTICE	DETAIL	MAP SYMBOL	VEGETATIVE PRACTICES			
				FERTILIZER	LIME STONE	MAINTENANCE	
Bf	BUFFER ZONE			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Cd	COASTAL DUNE STABILIZATION (WITH VEGETATION)			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Dd1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Dd2	DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Dd3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Dd4	DISTURBED AREA STABILIZATION (SOCCING)			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Du	DUST CONTROL ON DISTURBED AREAS			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Fl-Co	FLOCCULANTS AND COAGULANTS			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Sb	STREAMBANK STABILIZATION (USING PERM VEGETATION)			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Ss	SLOPE STABILIZATION			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
Tac	TACKIFIERS AND BINDERS			8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)

MONTH	TEMPORARY SEED	RATE/ACRE	RATES/1,000 SQ. FT.		PERMANENT SEED	RATE/ACRE	RATES/1,000 SQ. FT.		
			FERTILIZER	LIME STONE			FERTILIZER	LIME STONE	MAINTENANCE
1) JANUARY	RYEGRASS	40 - 50 LB.	12 LB (10-10-10)	45 LB.	UNHULLED BERMUDA SERICEA LESPEDEZA (2)	8 - 10 LB. 30 - 40 LB. (1)	12 LB (10-10-10) 35 LB (6-12-12)	45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10)
2) FEBRUARY	RYEGRASS	40 - 50 LB.	12 LB (10-10-10)	45 LB.	UNHULLED BERMUDA SERICEA LESPEDEZA (2) FESCUE	8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
3) MARCH	RYE ANNUAL LESPEDEZA WEEPING LOVEGRASS	2 - 3 BU. 20 - 25 LB. 4 - 6 LB.	12 LB (10-10-10) 35 LB (6-12-12) 12 LB (10-10-10)	45 LB. 45 LB. 45 LB.	UNHULLED BERMUDA SERICEA LESPEDEZA (2) FESCUE	8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
4) APRIL	RYE BROWN TOP MILLET ANNUAL LESPEDEZA SUDAN ANNUAL	2 - 3 BU. 30 - 40 LB. 20 - 25 LB. 35 LB.	12 LB (10-10-10) 35 LB (6-12-12) 12 LB (10-10-10) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB. 45 LB.	WEeping LOVEGRASS HULLED BERMUDA BAHIA	4 - 6 LB. 5 - 6 LB. 40 - 60 LB.	12 LB (10-10-10) 12 LB (10-10-10) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
5) MAY	WEeping LOVEGRASS SUDAN GRASS BROWN TOP MILLET	4 - 6 LB. 35 LB. 30 - 40 LB.	12 LB (10-10-10) 35 LB (6-12-12) 12 LB (10-10-10)	45 LB. 45 LB. 45 LB.	WEeping LOVEGRASS HULLED BERMUDA BAHIA	4 - 6 LB. 5 - 6 LB. 40 - 60 LB.	12 LB (10-10-10) 12 LB (10-10-10) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
6) JUNE	WEeping LOVEGRASS SUDAN GRASS BROWN TOP MILLET	4 - 6 LB. 35 LB. 30 - 40 LB.	12 LB (10-10-10) 35 LB (6-12-12) 12 LB (10-10-10)	45 LB. 45 LB. 45 LB.	WEeping LOVEGRASS HULLED BERMUDA BAHIA	4 - 6 LB. 5 - 6 LB. 40 - 60 LB.	12 LB (10-10-10) 12 LB (10-10-10) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
7) JULY	WEeping LOVEGRASS SUDAN GRASS BROWN TOP MILLET	4 - 6 LB. 35 LB. 30 - 40 LB.	12 LB (10-10-10) 35 LB (6-12-12) 12 LB (10-10-10)	45 LB. 45 LB. 45 LB.	WEeping LOVEGRASS SUDAN GRASS BROWN TOP MILLET	4 - 6 LB. 35 LB (6-12-12) 30 - 40 LB.	12 LB (10-10-10) 35 LB (6-12-12) 12 LB (10-10-10)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
8) AUGUST	RYEGRASS WEEPING LOVEGRASS	40 - 50 LB. 4 - 6 LB.	12 LB (10-10-10) 12 LB (10-10-10)	45 LB. 45 LB.	HULLED BERMUDA BAHIA	5 - 6 LB. 40 - 60 LB.	12 LB (10-10-10) 35 LB (6-12-12)	45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10)
9) SEPTEMBER	RYEGRASS TALL FESCUE	40 - 50 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (6-12-12)	45 LB. 45 LB.	TALL FESCUE	30 - 50 LB.	35 LB (6-12-12)	45 LB.	10 LB (10-10-10)
10) OCTOBER	WHEAT	2 - 3 BU.	12 LB (10-10-10)	45 LB.	UNHULLED BERMUDA SERICEA LESPEDEZA (2) FESCUE	8 - 10 LB. 30 - 40 LB. 30 - 50 LB.	12 LB (10-10-10) 35 LB (10-10-10) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
11) NOVEMBER	WHEAT	2 - 3 BU.	12 LB (10-10-10)	45 LB.	UNHULLED BERMUDA FESCUE SERICEA LESPEDEZA	8 - 10 LB. 30 - 50 LB. 30 - 40 LB.	12 LB (10-10-10) 35 LB (10-10-10) 35 LB (6-12-12)	45 LB. 45 LB. 45 LB.	10 LB (10-10-10) 10 LB (10-10-10) 10 LB (10-10-10)
12) DECEMBER	RYE RYEGRASS WHEAT	2 - 3 BU. 40 - 50 LB. 2 - 3 BU.	12 LB (10-10-10) 12 LB (10-10-10) 						



NOTES:
 1. USE STEEL POSTS AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

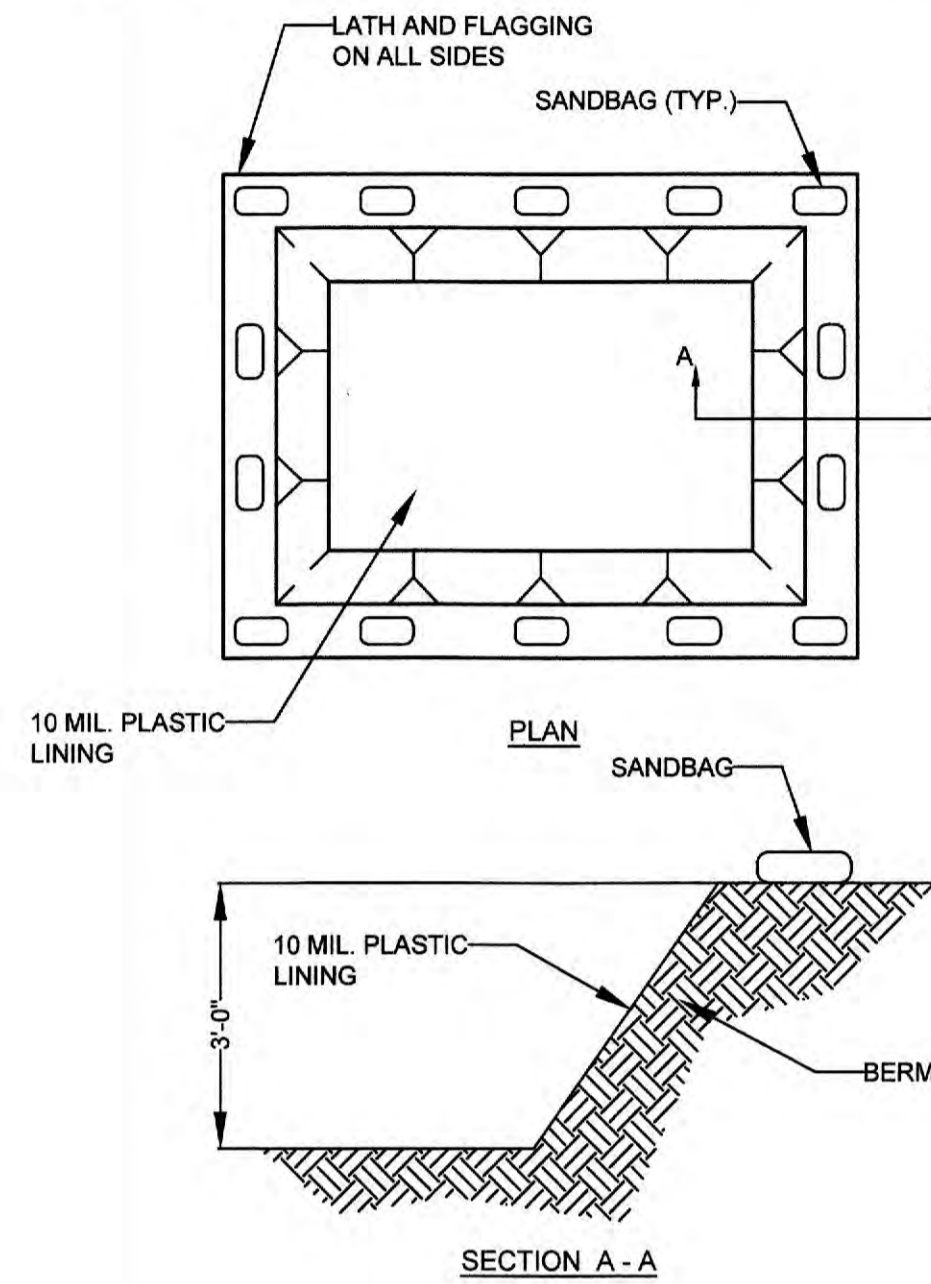
SILT FENCE - TYPE SENSITIVE
 Sd1-S



NOTES:
 1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
 2. HEIGHT (") IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

SILT FENCE - TYPE NON-SENSITIVE
 Sd1-NS

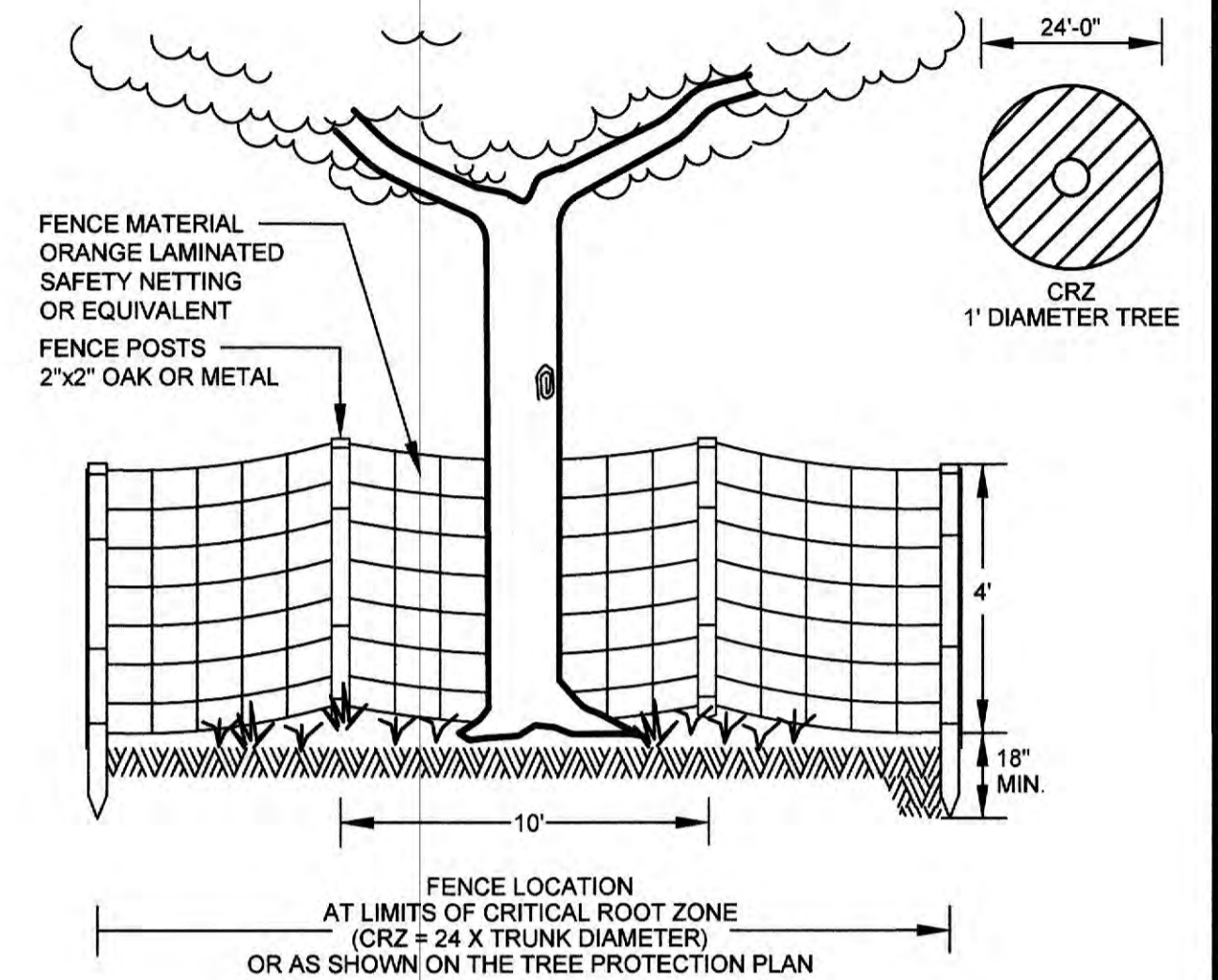
- NOTES:**
1. THE CONTRACTOR SHALL PROVIDE A DESIGNATED AREA FOR CONCRETE WASHDOWN OF TOOLS, CONCRETE MIXER CHUTES, HOPPERS, AND THE REAR OF THE VEHICLES. THIS AREA MUST HAVE A CONCRETE WASHOUT FACILITY AND SHALL BE CONSTRUCTED ACCORDING TO THE DETAIL SHOWN BELOW.
 2. THE CONCRETE WASHOUT FACILITY SHALL BE LOCATED A MINIMUM OF 50 FEET FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES.
 3. WASHOUT DISCHARGE FROM THE CLEANING OF CONCRETE TRUCKS, TOOLS, AND OTHER EQUIPMENT SHALL NOT BE DISCHARGED INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.
 4. EXCESS CONCRETE SHALL NOT BE DISPOSED OF ON-SITE. ALL EXCESS CONCRETE SHALL BE TRANSPORTED OFF-SITE AND DISPOSED OF PROPERLY.
 5. IT IS PROHIBITED TO WASHOUT THE MIXING DRUM OF CONCRETE TRUCKS ON-SITE.



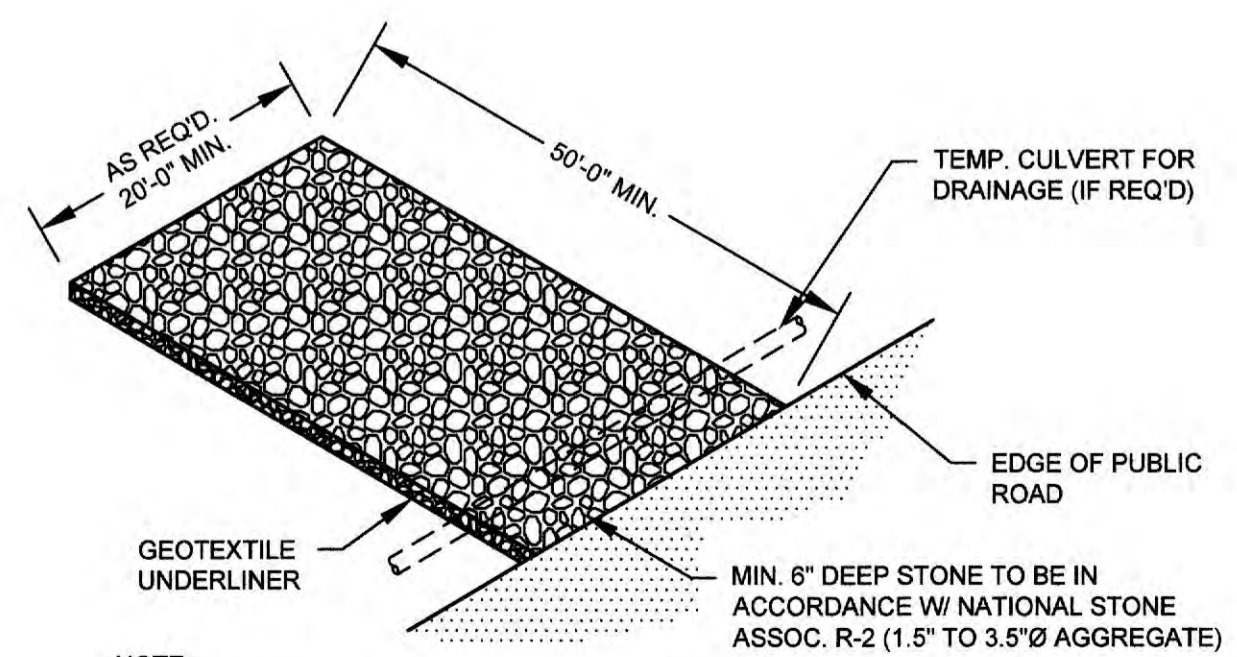
CONCRETE WASH DOWN

DETAIL 416-7
COBB COUNTY WATER SYSTEM
TREE PROTECTION FENCE

MAY, 2001 AGENCY DIRECTOR



- FOR ADDED PROTECTION**
- PROVIDE 4" DEEP WOOD CHIP MULCH OVER ANY UNPROTECTED ROOT ZONE.
 - MAKE CLEAN CUTS ON ROOTS EXPOSED BY GRADING AND BACKFILL IMMEDIATELY.
 - PROVIDE TEMPORARY IRRIGATION WHERE PRACTICAL AND FEASIBLE.



NOTE:
 EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC R.O.W. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1.5 TO 3.5 INCH STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OR SITE ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

TEMPORARY CONSTRUCTION EXIT
 Co



ESI
 ENGINEERING STRATEGIES, INC.
 3855 SHALLOWFORD ROAD, SUITE 525
 MARLBOROUGH, MA 01902
 (771) 429-0001

PROJECT NUMBER: 505-4440-40-52-227/5	DATE: AUGUST 2020
REVISION	DATE
△	

DSGN: DE
 DRWN: BL
 CHCK: PMR

BAR BELOW IS 1" LONG FOR SCALES SHOWN ON THIS SHEET. IF NOT 1" LONG ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS

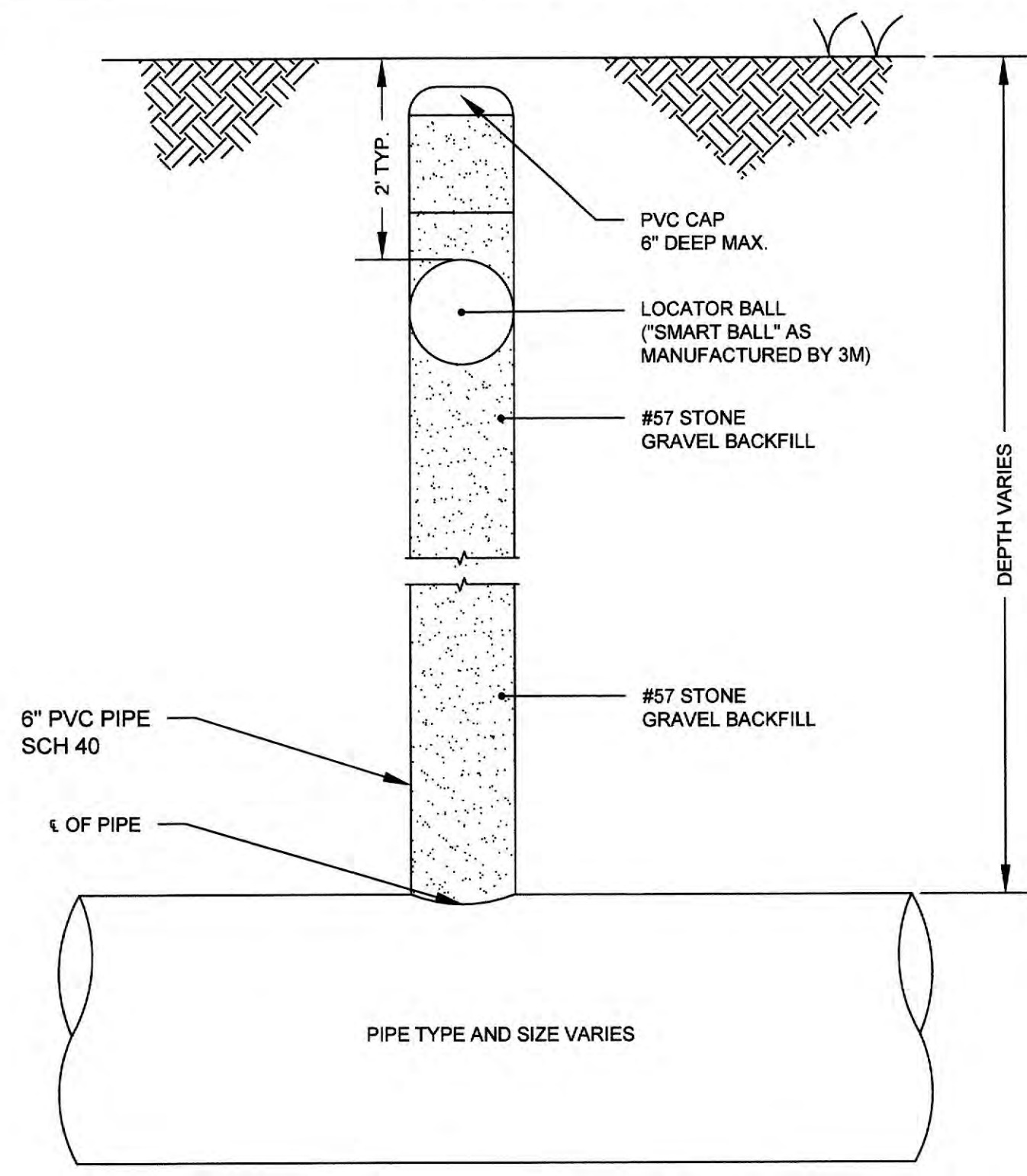
EROSION CONTROL NOTES AND DETAILS (3 OF 3)

CERTIFIED EROSION CONTROL DESIGN
 PROFESSIONAL NUMBER 0000019365

BID SET

SHEET NO.

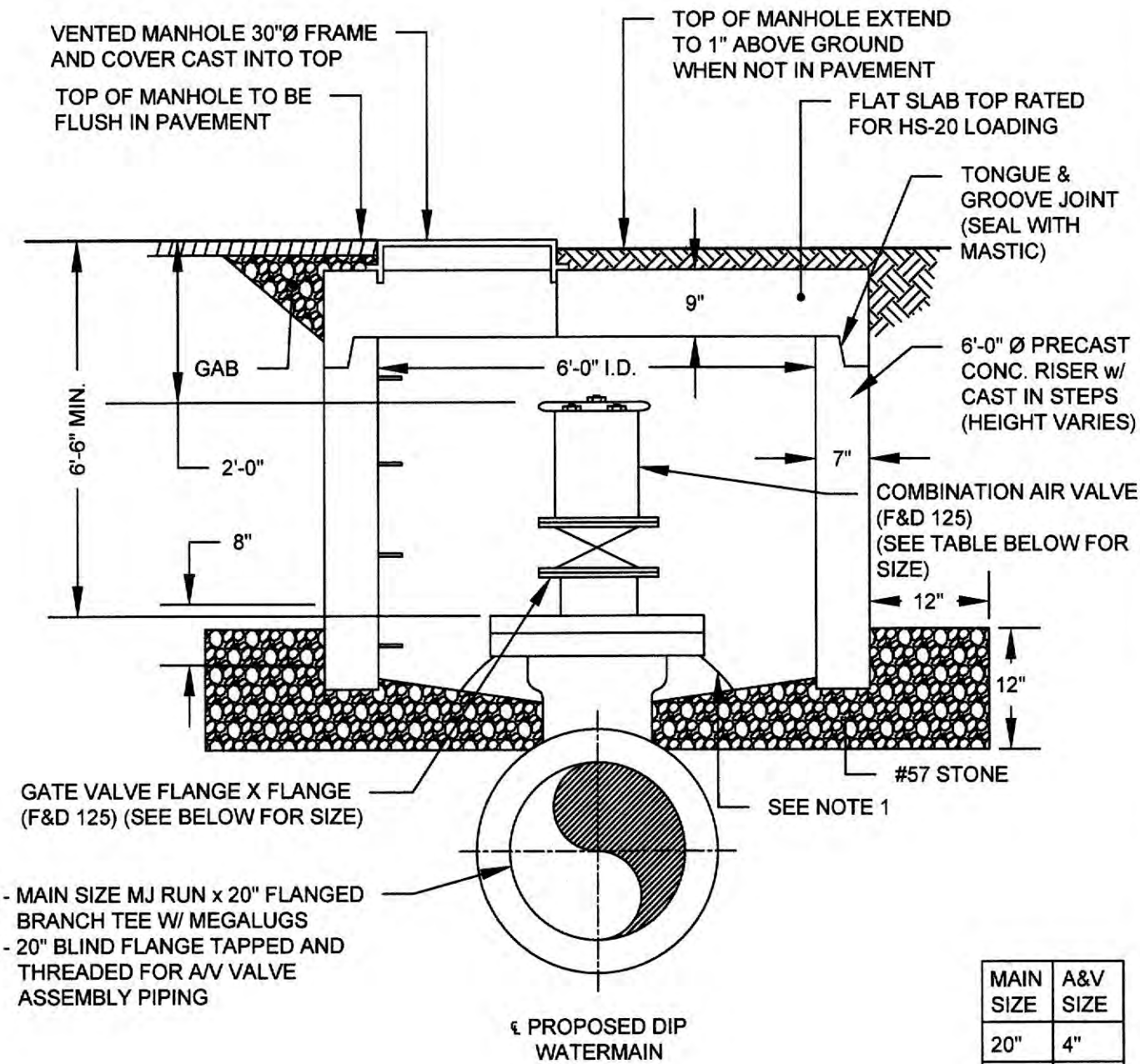
12



PVC AS-BUILT LOCATOR INSTALLATION DETAIL (OUTSIDE OF PAVEMENT)

N.T.S.

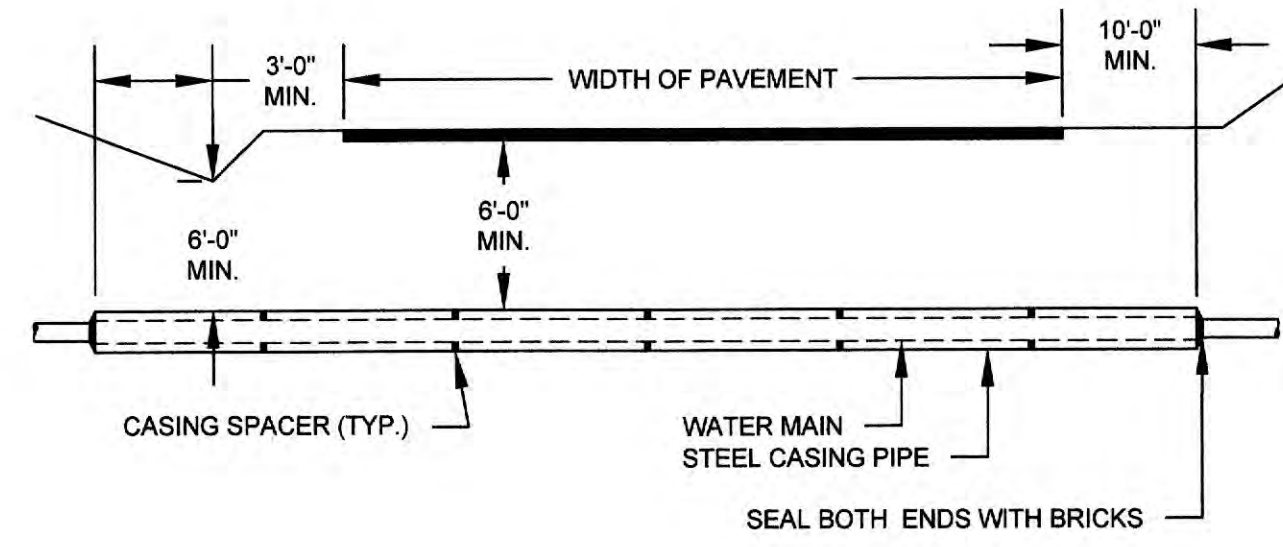
110-B



COMBINATION AIR & VACUUM ASSEMBLY WITH MANWAY DETAIL

N.T.S.

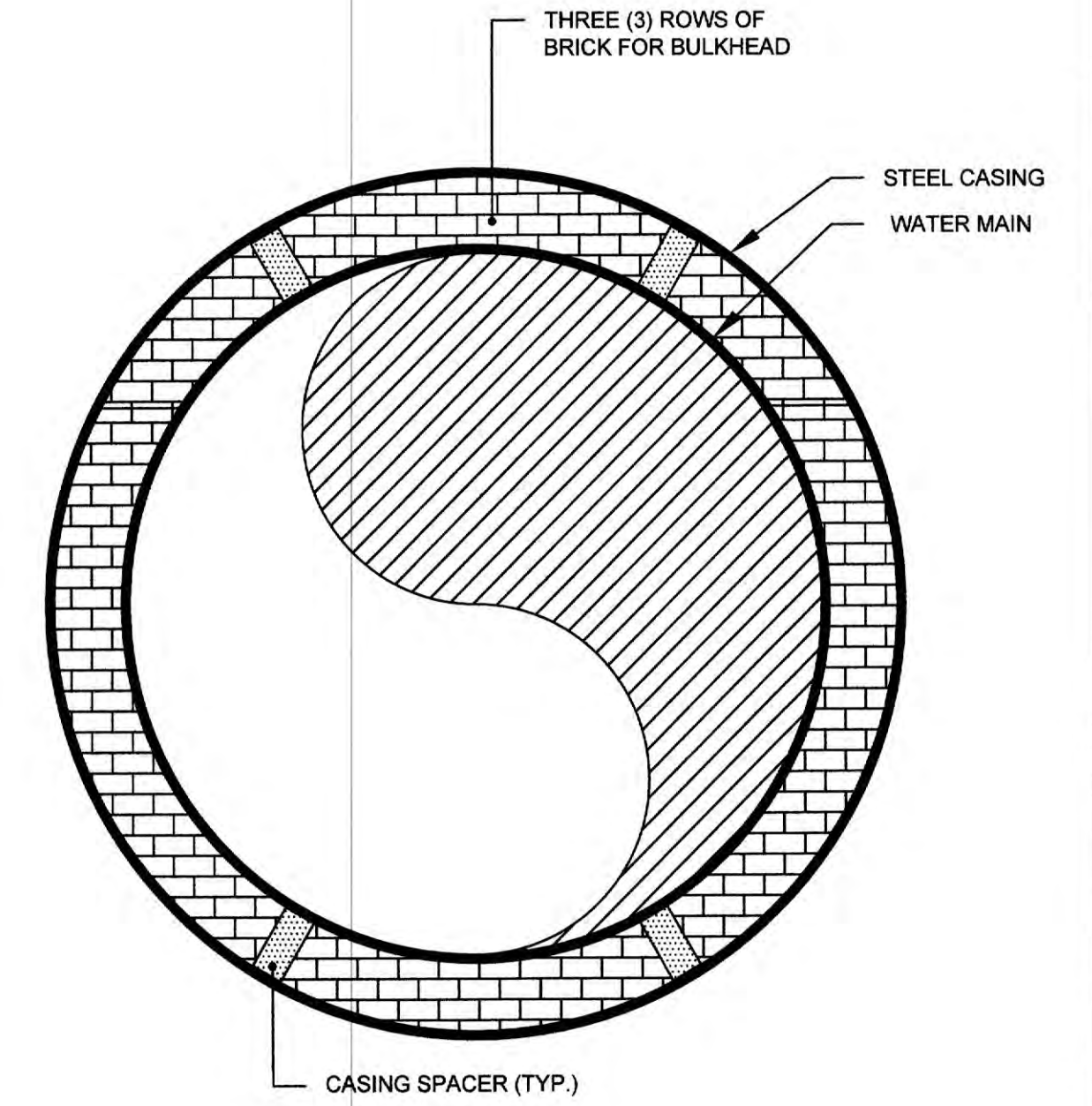
130



TYPICAL ROAD CROSSING DETAIL

N.T.S.

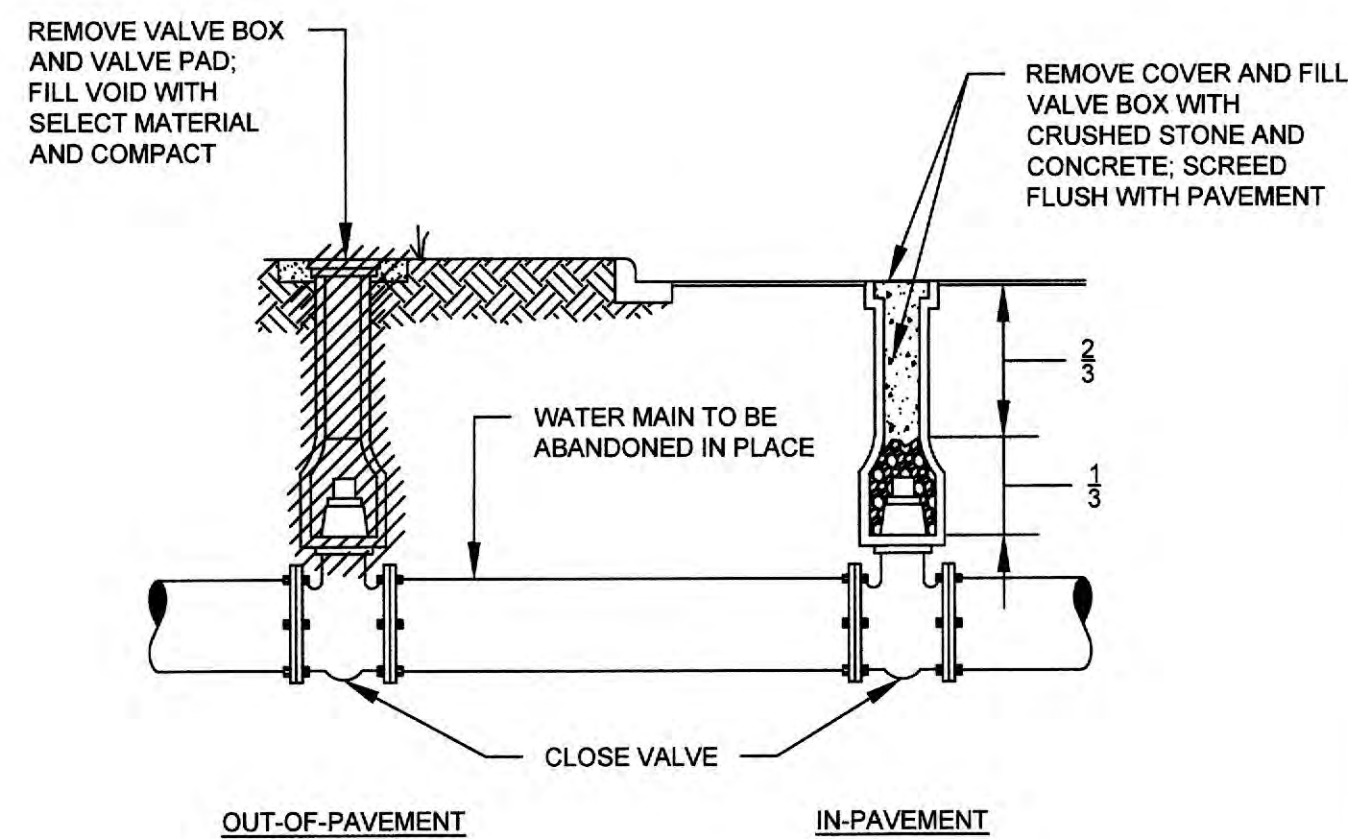
210



TYPICAL CASING SPACER DETAIL

N.T.S.

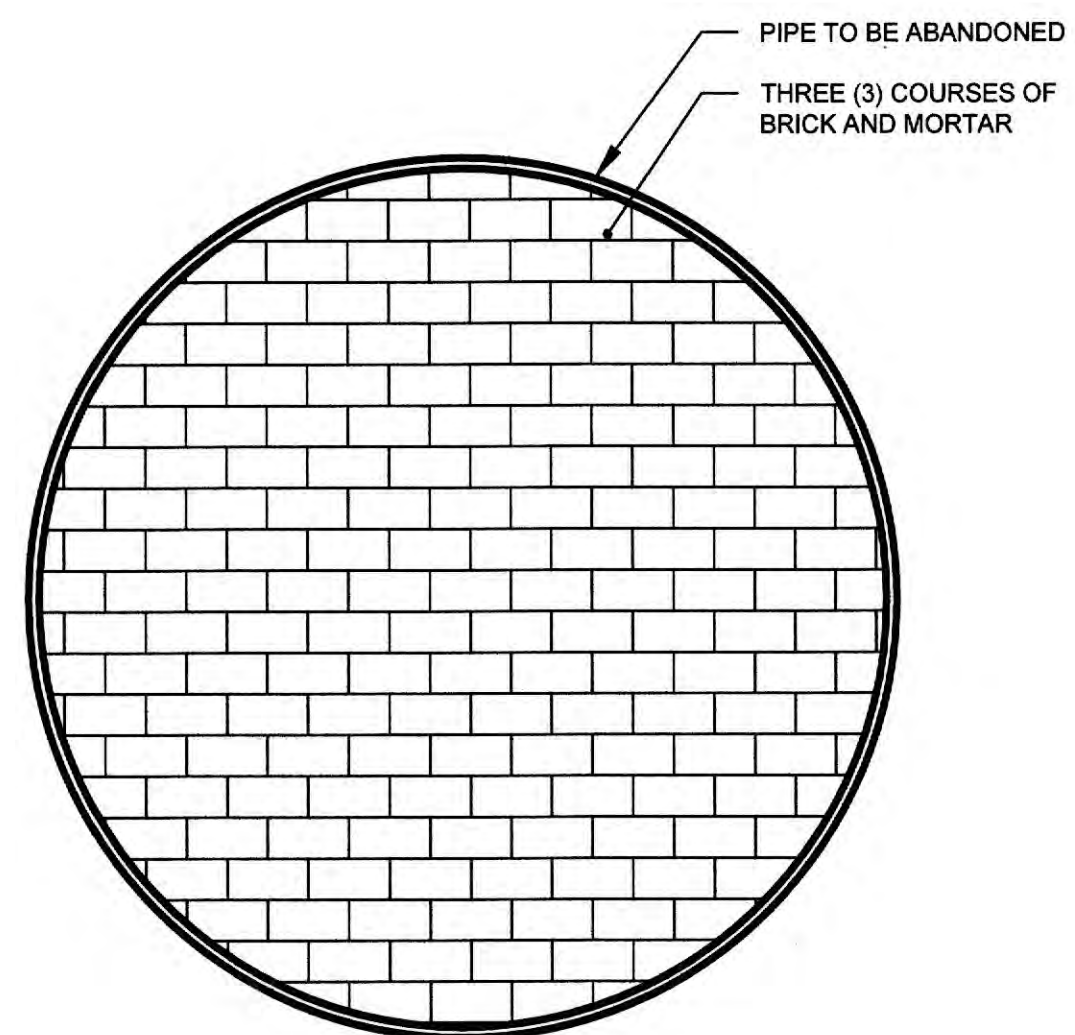
220



VALVE ABANDONMENT DETAIL #2

N.T.S.

160

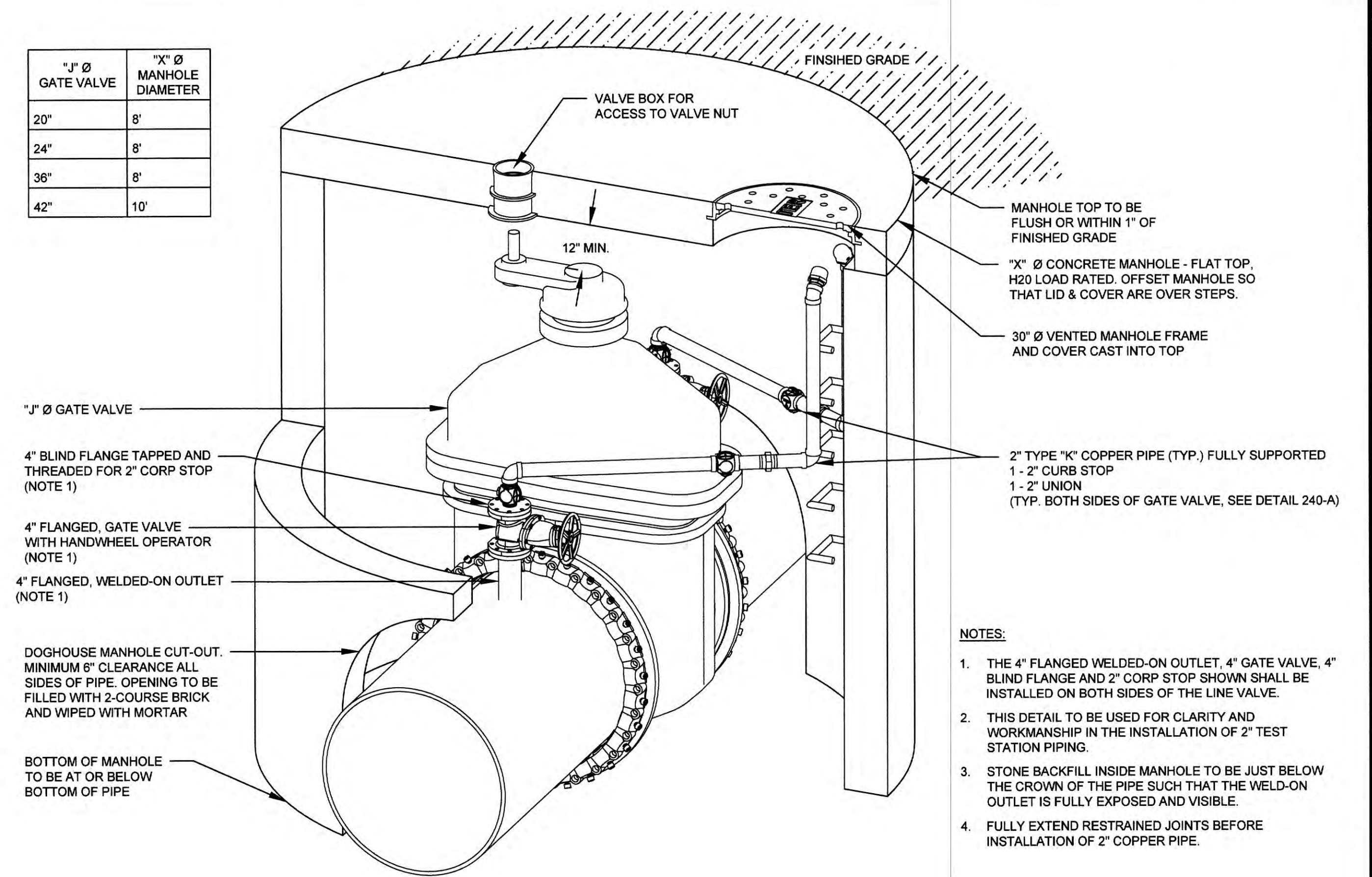


ABANDONED PIPE AND BULKHEAD BRICK DETAIL

N.T.S.

230

"J" Ø GATE VALVE	"X" Ø MANHOLE DIAMETER
20"	8"
24"	8"
36"	8"
42"	10"



GATE VALVE TEST STATION PIPING ARRANGEMENT DETAILS

N.T.S.

240



ESI
ENGINEERING STRATEGIES, INC.
3855 SHALLOWFORD ROAD, SUITE 525
MARIETTA, GA 30062
(770) 429-0001

PROJECT NUMBER: 505-4440-40-52-2275
DATE: AUGUST 2020

DATE	REVISION

DESIGN: DE
DRAWN: BL
CHECK: PMR
R&B REVIEW: 11/10/20 FOR SCALES SHOWN ON THIS SHEET. ADJUST SCALES ACCORDINGLY.

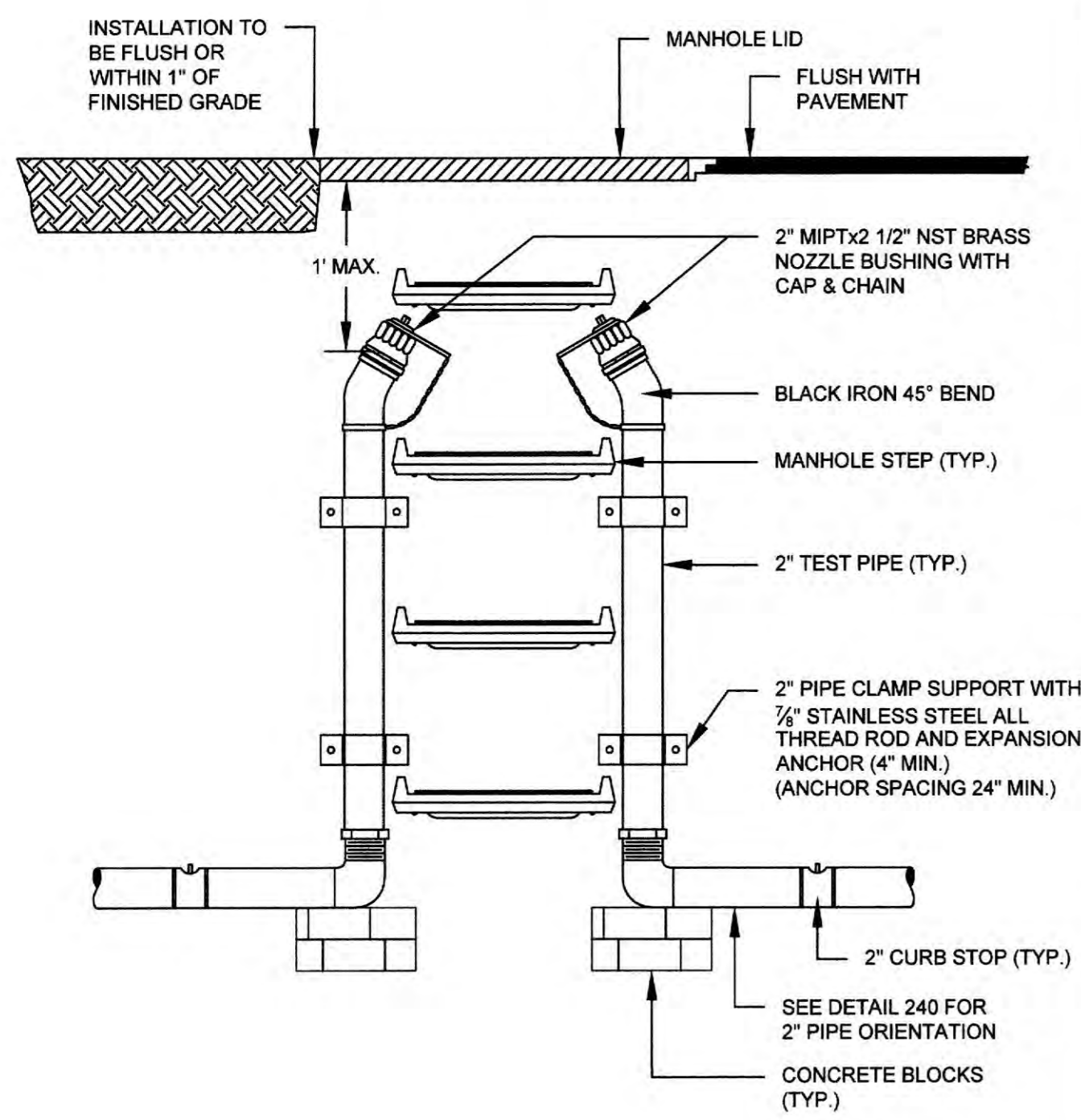
MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS

STANDARD DETAILS (1 OF 4)

SHEET NO.

13

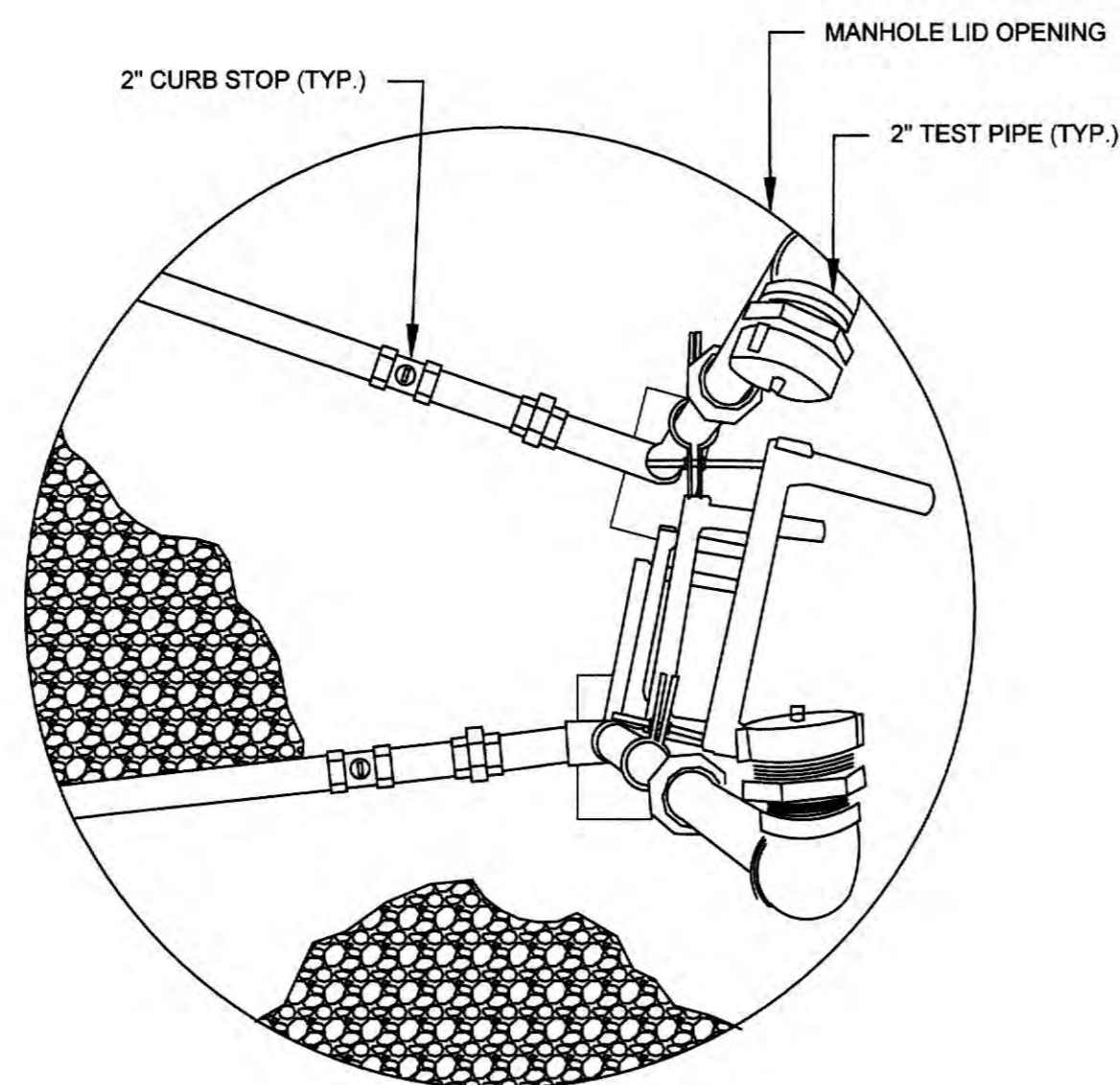
BID SET



- NOTE:**
1. INSULATE BETWEEN DISSIMILAR METALS WITH RUBBER GASKET MATERIAL.
 2. ALL 2" PIPE, FITTINGS AND HARDWARE SHALL BE RATED FOR WORKING PRESSURE OF MINIMUM 300 PSI.

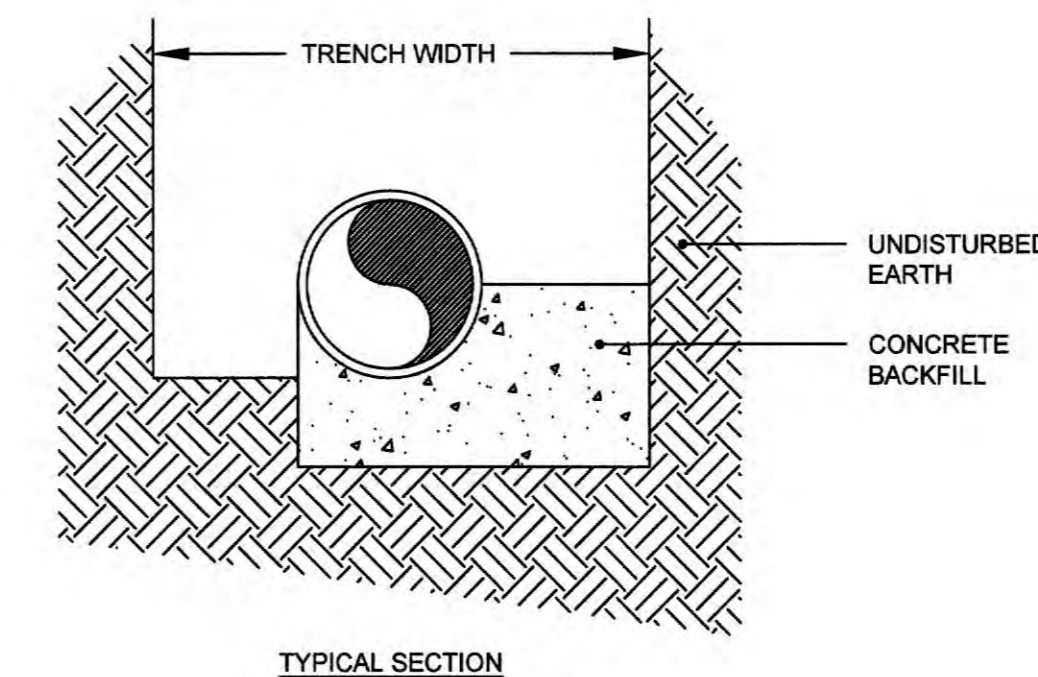
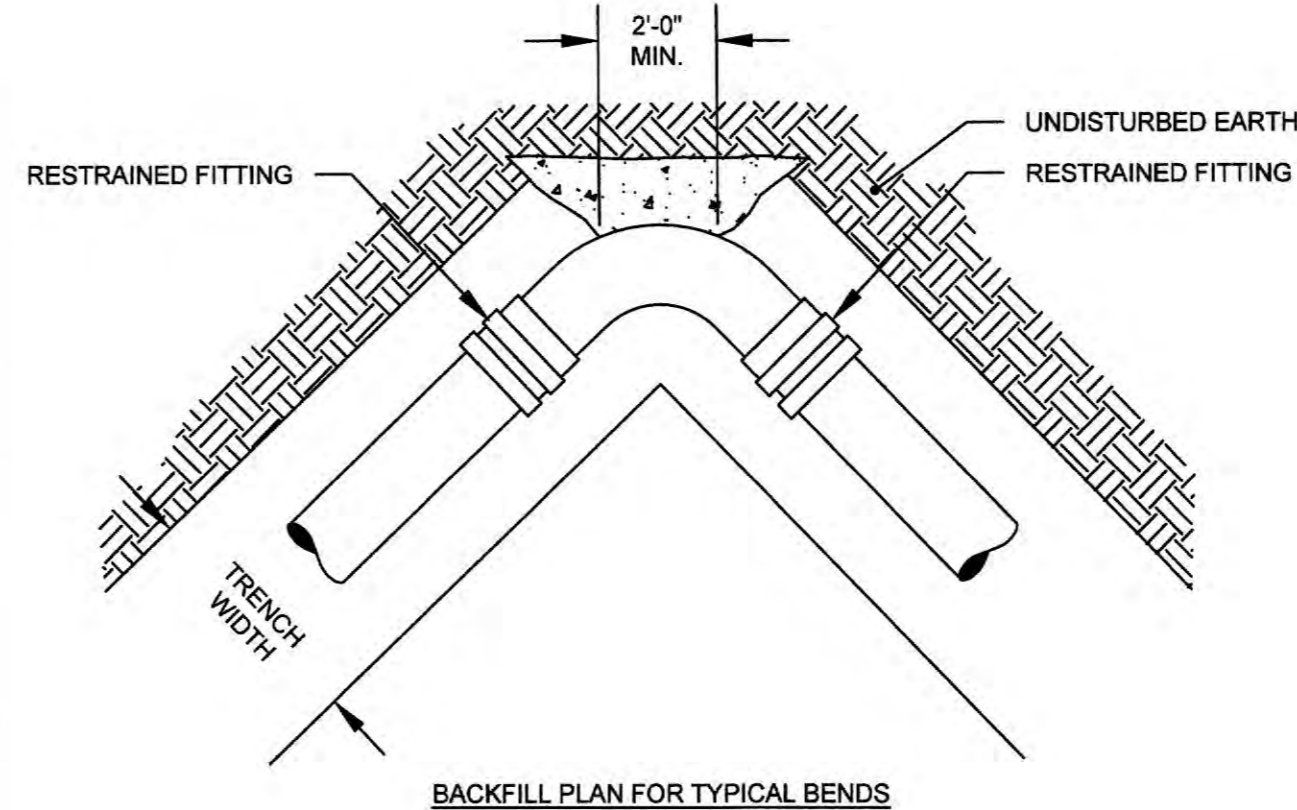
IN-LINE VALVE MANHOLE AND TEST CONNECTIONS DETAIL

N.T.S. (240-A)



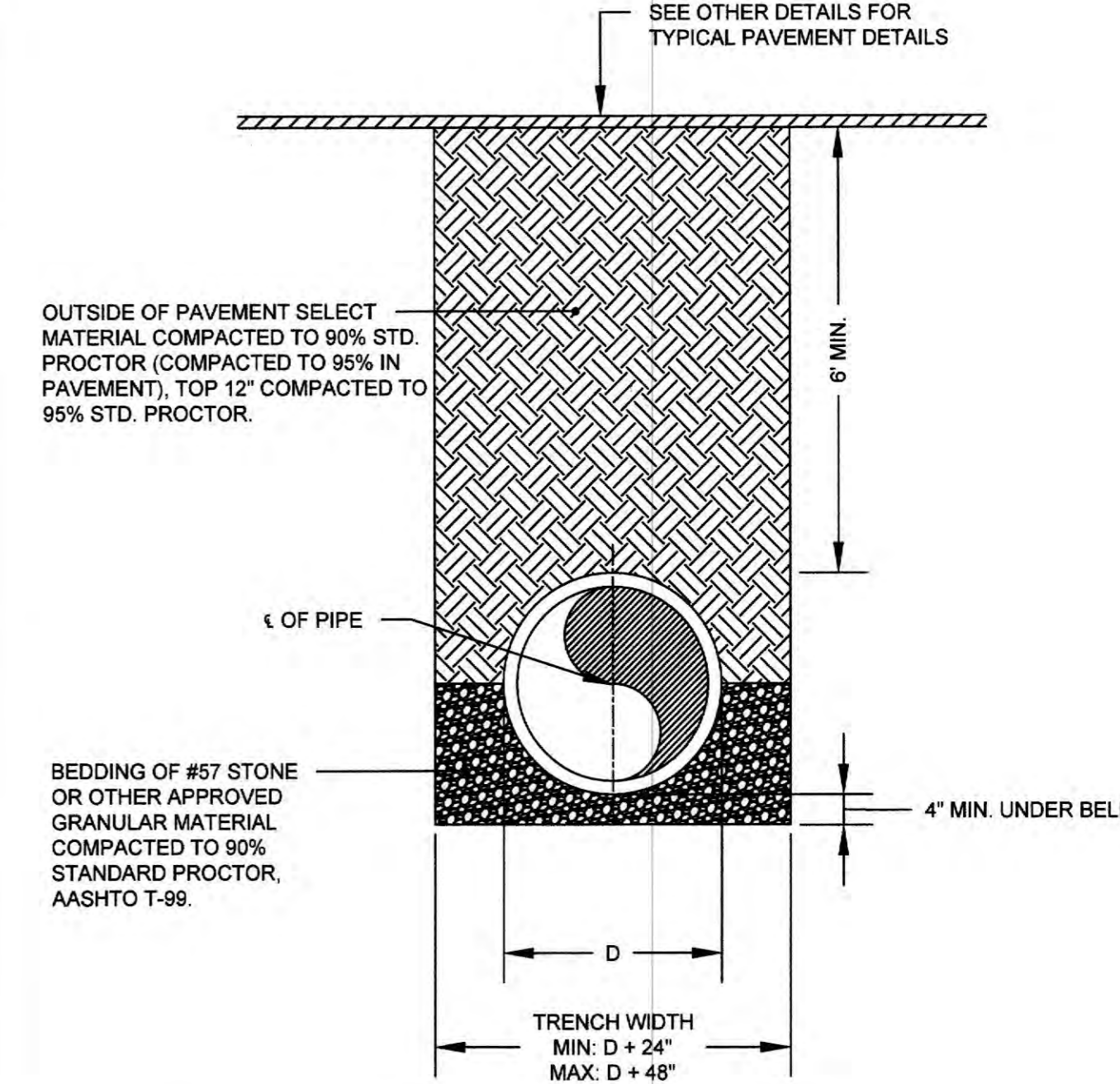
VALVE TEST CONNECTIONS DETAIL

N.T.S. (240-B)



CONCRETE BACKFILL DETAIL

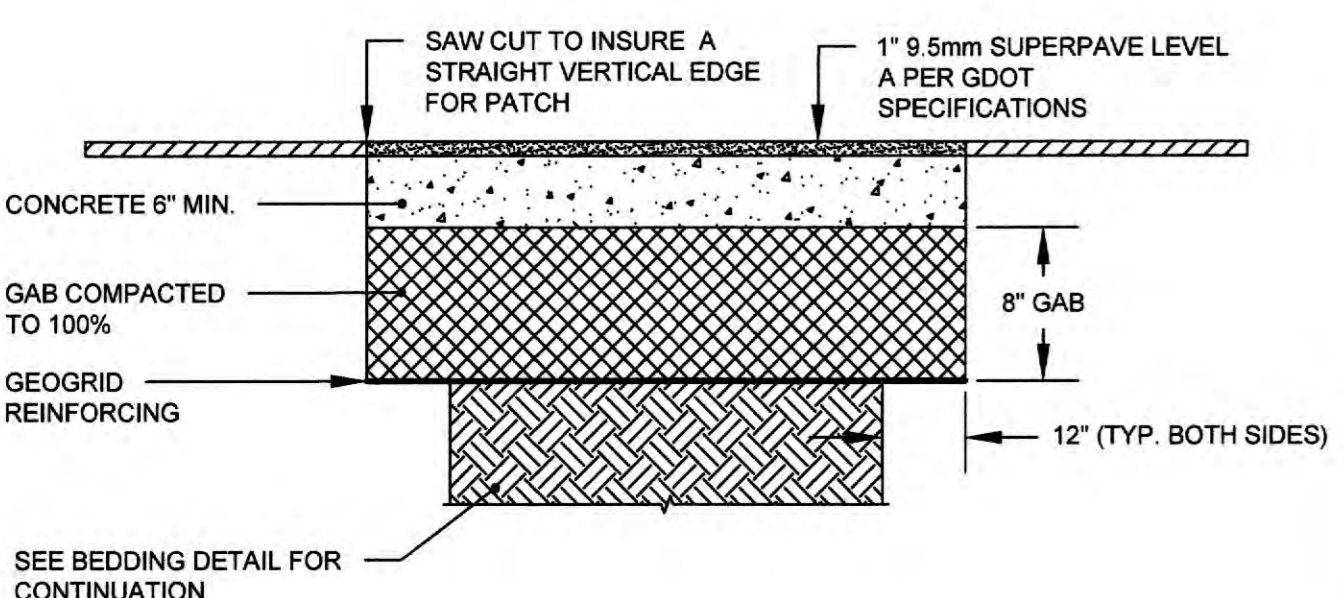
N.T.S. (320)



- NOTES:**
1. TYPE 5 BEDDING SHALL BE USED FOR RESTRAINED JOINT PIPE AND WHERE DEPTH OF COVER EXCEEDS 15 FEET.
 2. PLACE EARTHEN DAM EVERY 200' OF PIPE.

TYPE 5 BEDDING DETAIL

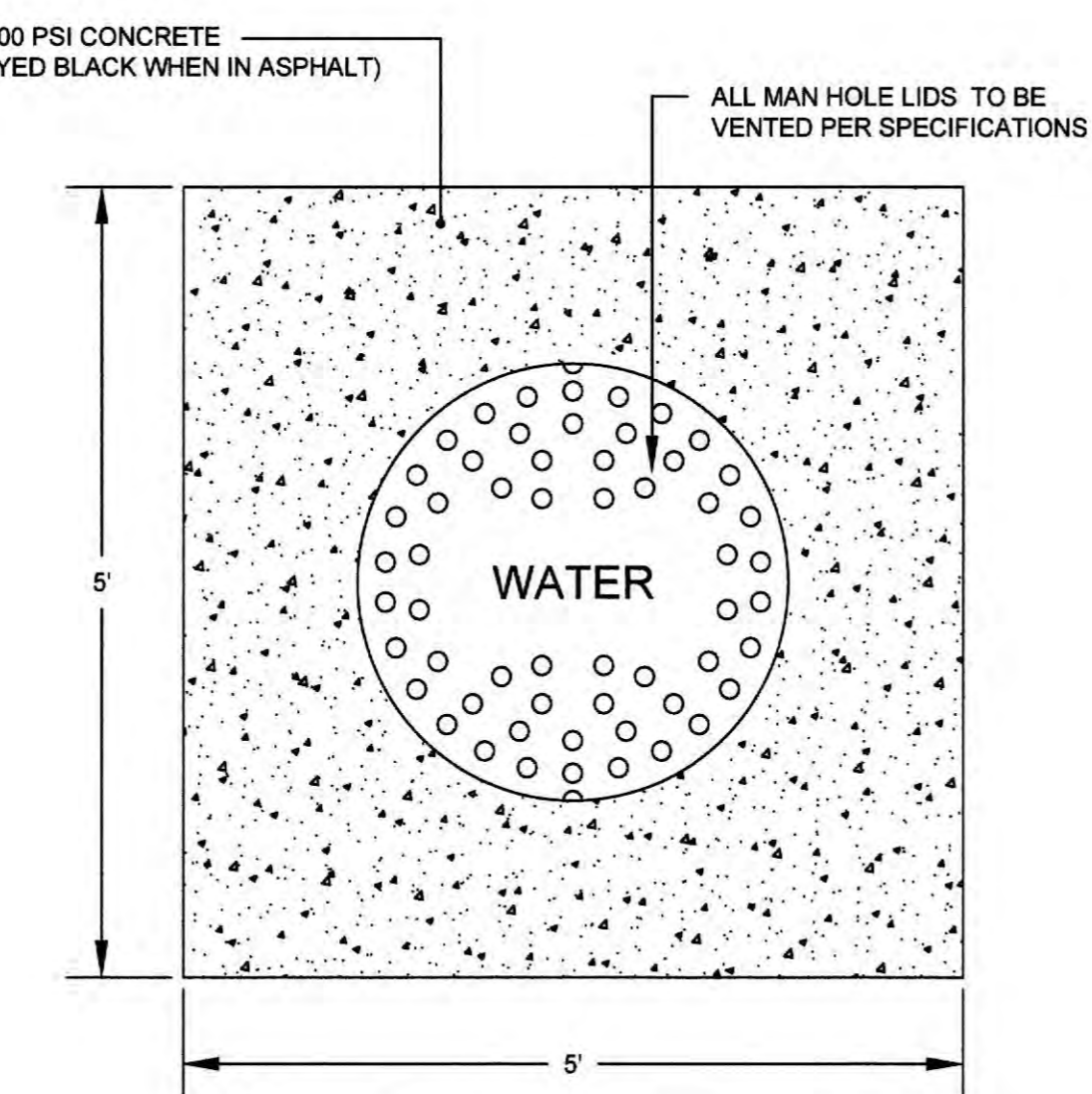
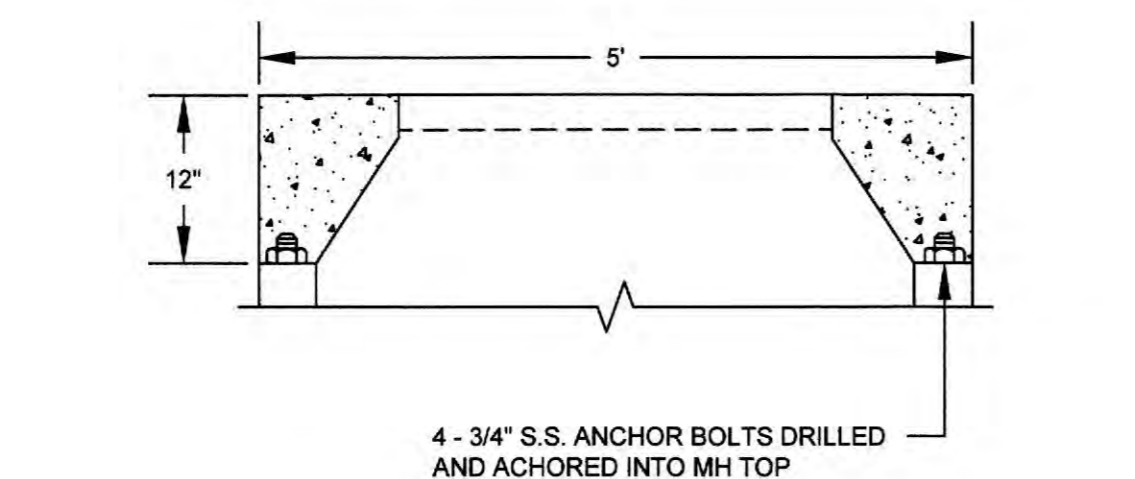
N.T.S. (330B)



- NOTES:**
1. ALL PAVEMENT TO BE SAW CUT
 2. SURFACES TO BE CLEANED AND BITUMINOUS TACK COAT PRIME APPLIED BEFORE PLACEMENT OF ASPHALTIC TOP.

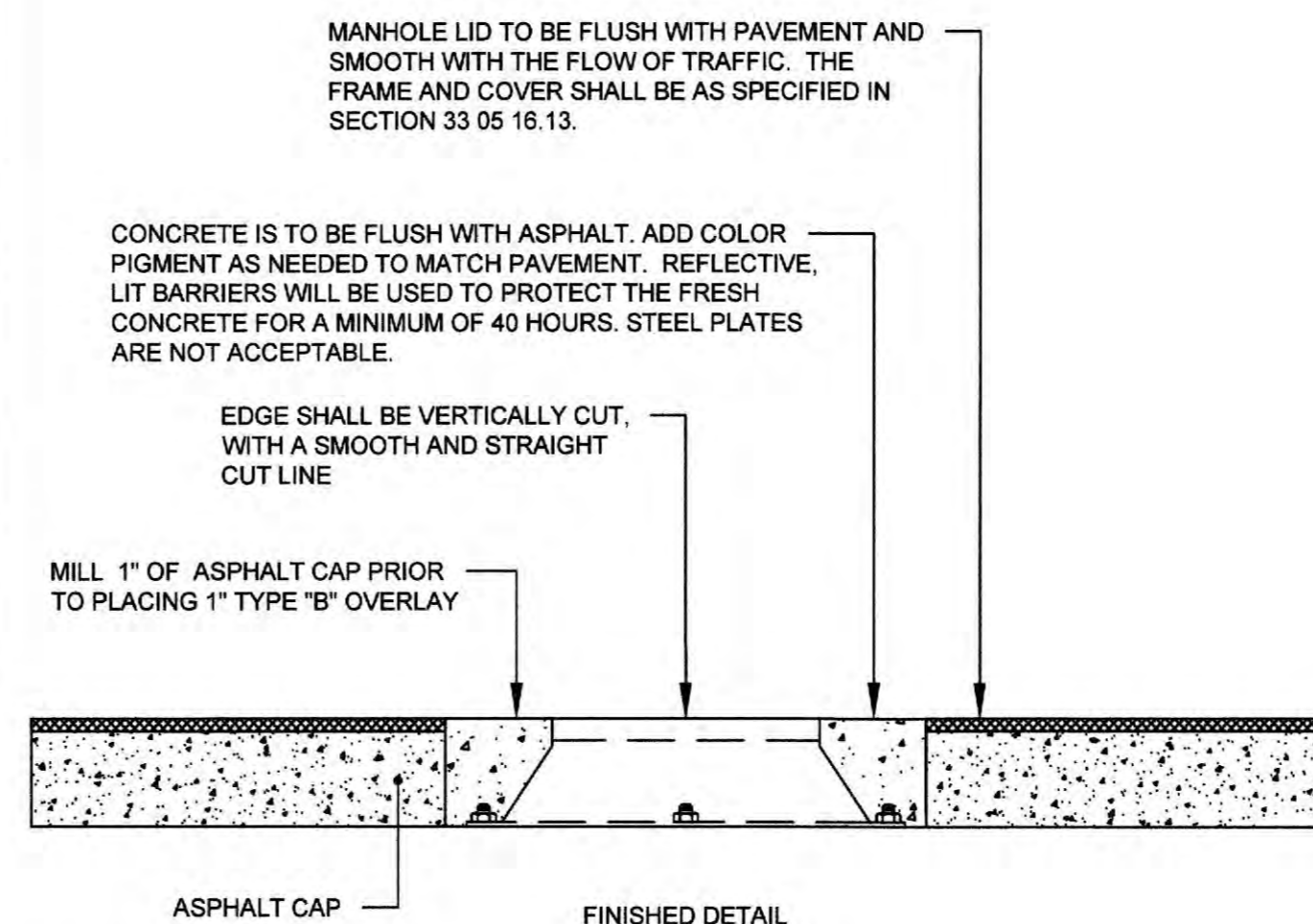
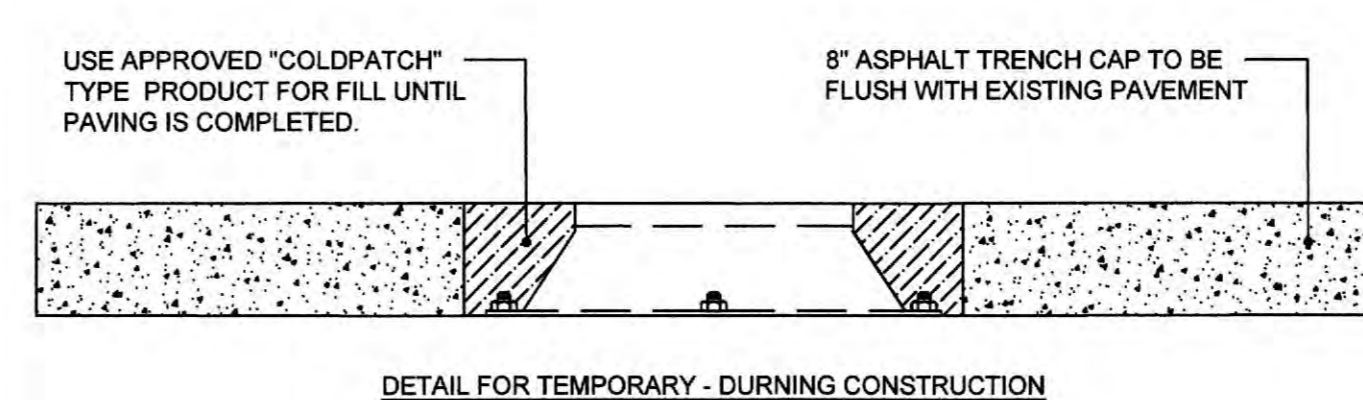
ASPHALT DRIVEWAY REPAIR DETAIL

N.T.S. (340)



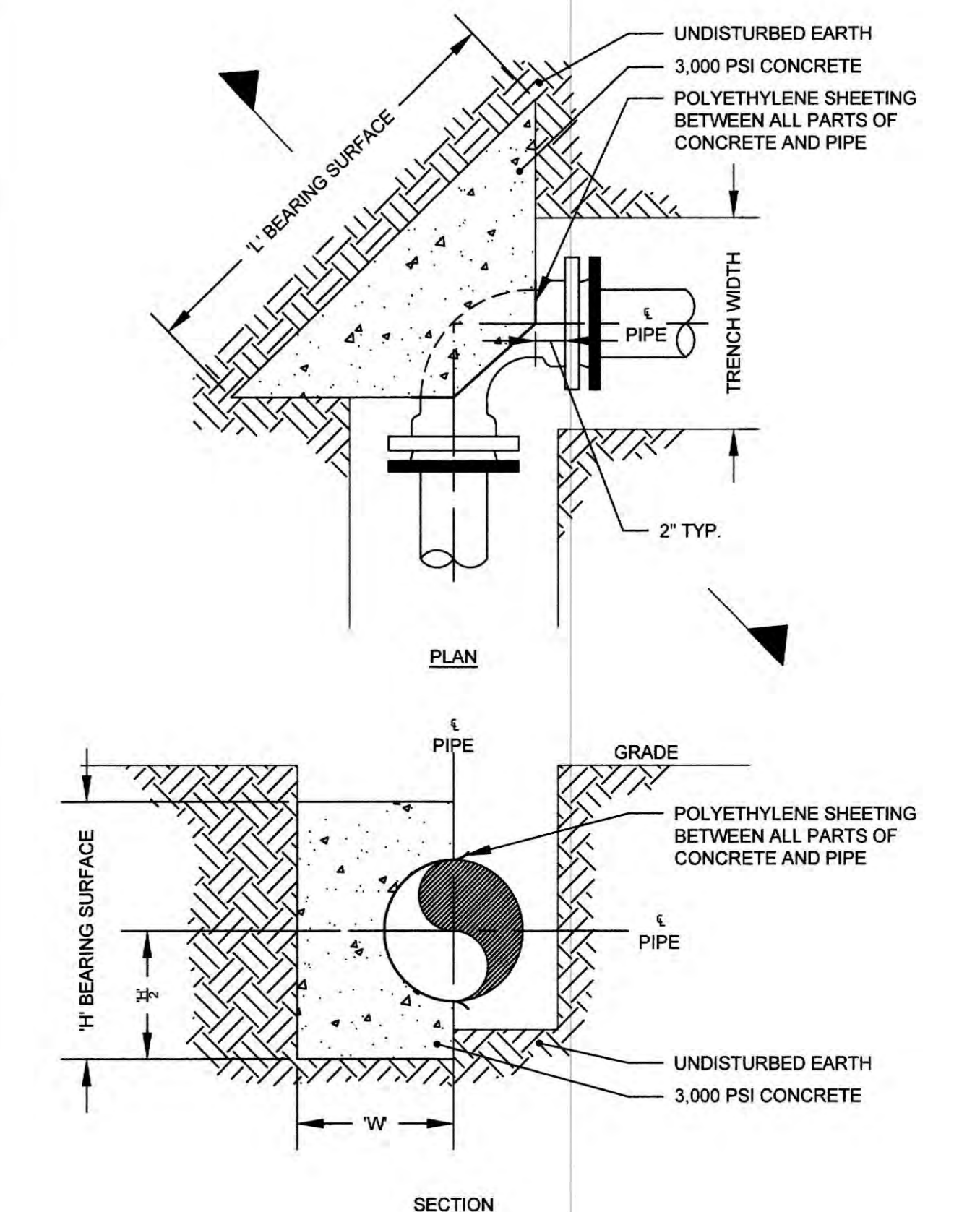
MANHOLE LID & CONCRETE PAD DETAIL #1

N.T.S. (450)



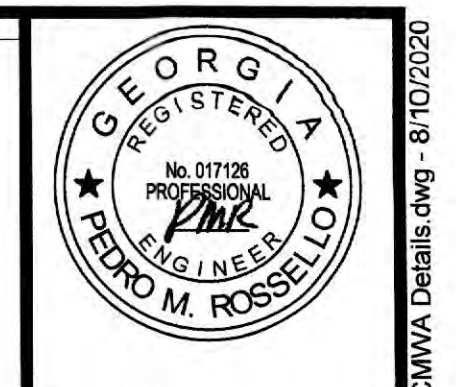
MANHOLE LID & CONCRETE PAD DETAIL #2 DETAIL

N.T.S. (460)



CONCRETE THRUST BLOCKING DETAIL

N.T.S. (330B)



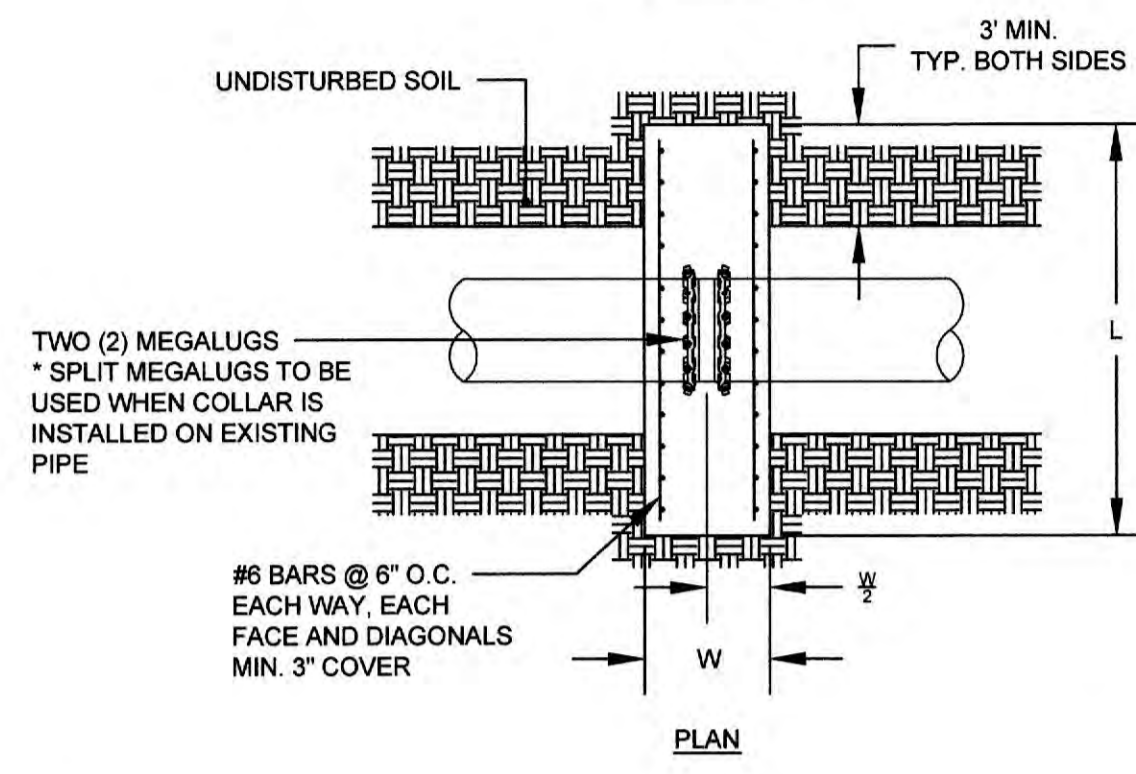
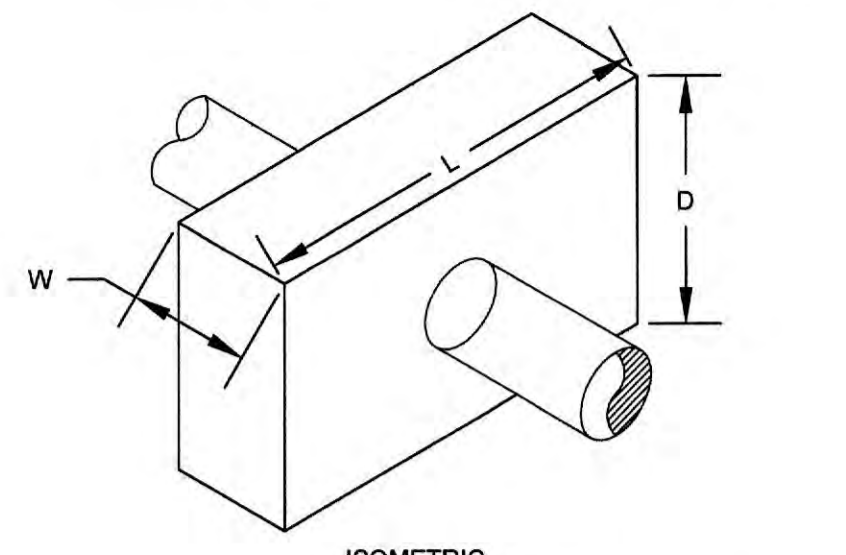
ESI
ENGINEERING STRATEGIES, INC.
3855 SHALLOFWOOD ROAD, SUITE 525
MARIETTA, GA 30062
(770) 429-0001

PROJECT NUMBER: 505-4440-40-52-2275	DATE: AUGUST 2020
REVISION	DATE

DSGN: DE
DRWN: BL
CHK: PMR
BAR BELOW IS 1" LONG FOR SCALES SHOWN ON THIS SHEET. IF NOT 1" SCALES ACCORDINGLY.

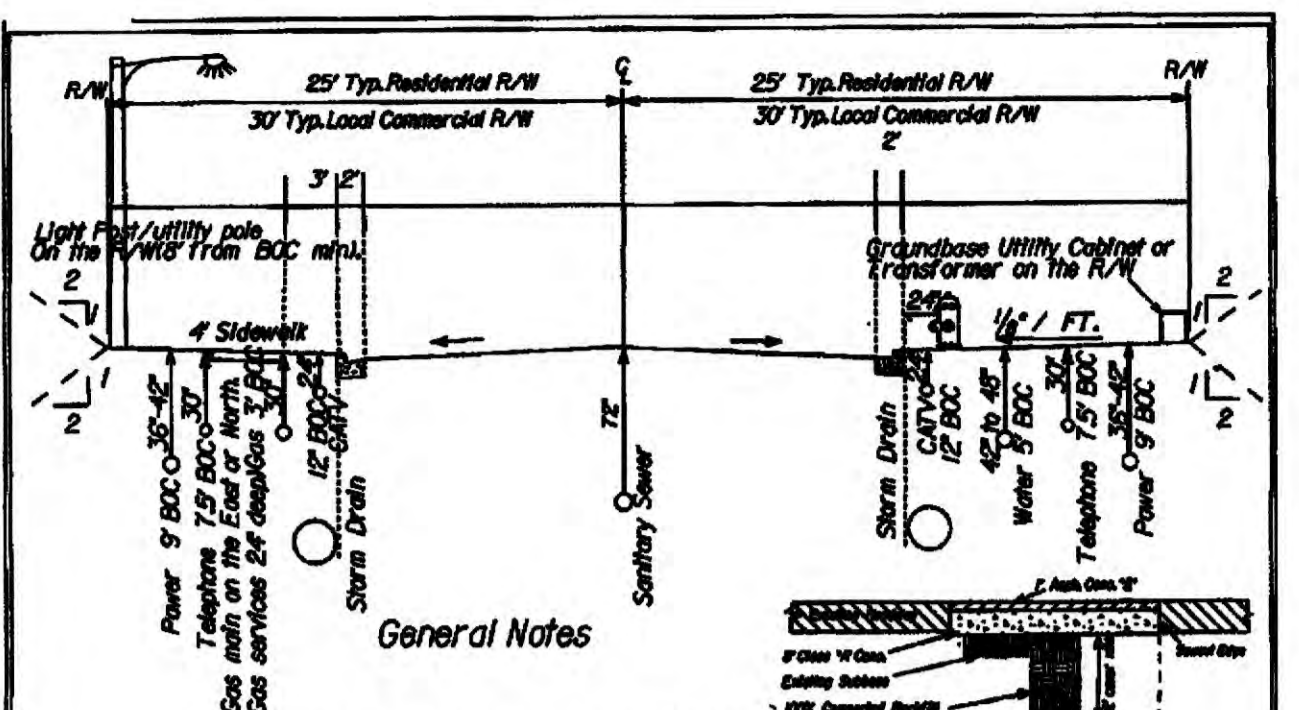
MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS

STANDARD DETAILS (2 OF 4)



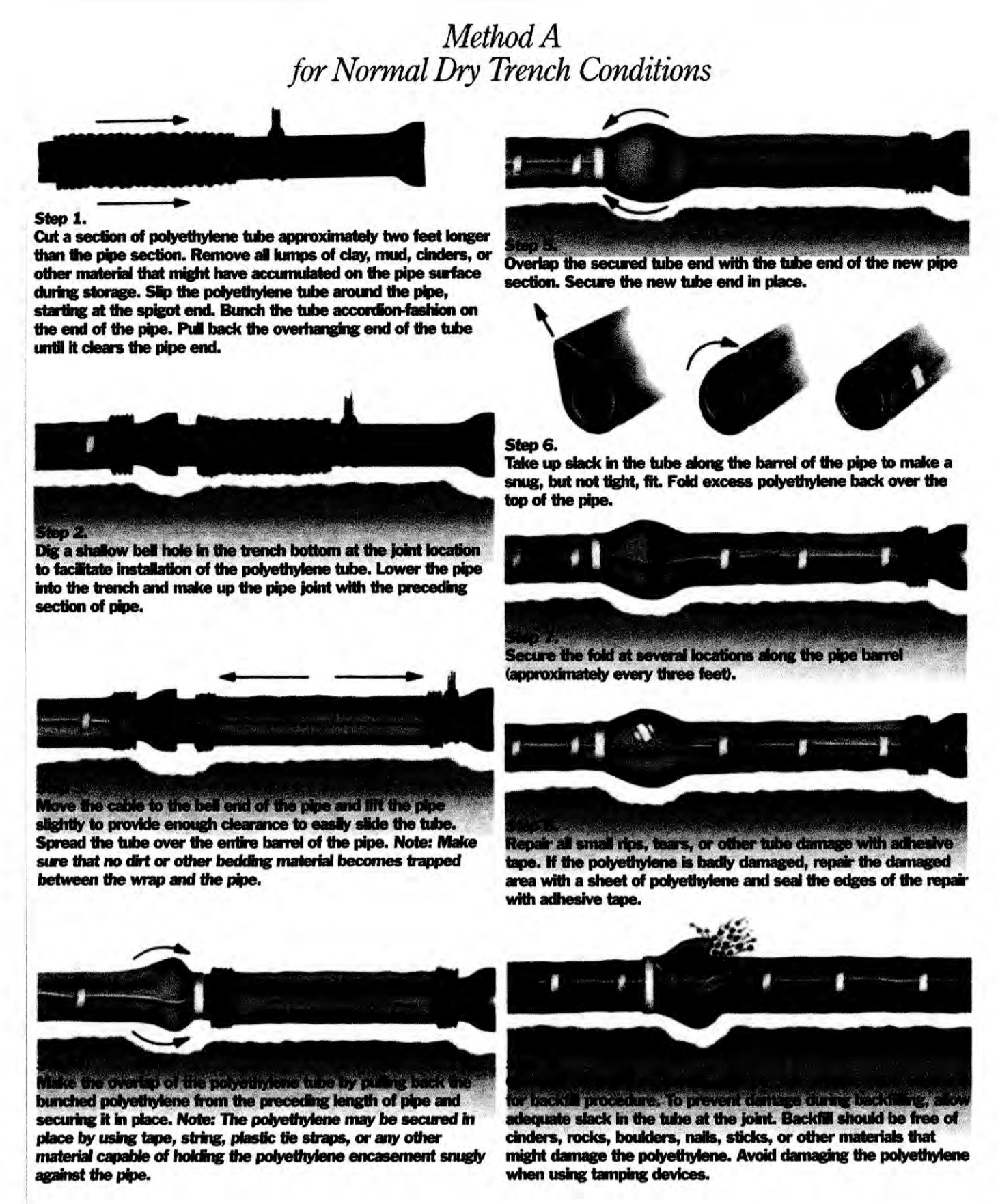
- NOTES:**
1. WHEN INSTALLED ON AN EXISTING DUCTILE IRON PIPE, COLLAR SHALL BE PLACED ON THE FIRST UNRESTRAINED JOINT OF PIPE.
 2. CONCRETE SHALL BE POURED AGAINST UNDISTURBED EARTH EXCEPT WHERE FORMWORK IS A MUST. AFTER CONCRETE IS CURED THE FORMWORK SHALL BE REMOVED.
 3. DIMENSIONS SHALL BE AS SHOWN ON THE DRAWINGS.
 4. CONTRACTOR SHALL NOTIFY ENGINEER IF GROUNDWATER TABLE IS WITHIN TWO FEET BELOW THE BOTTOM OF THE PIPE.
 5. CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
 6. ALL REBARS TO BE ASTM A615 GRADE 60.

CONCRETE THRUST COLLAR DETAIL
N.T.S.

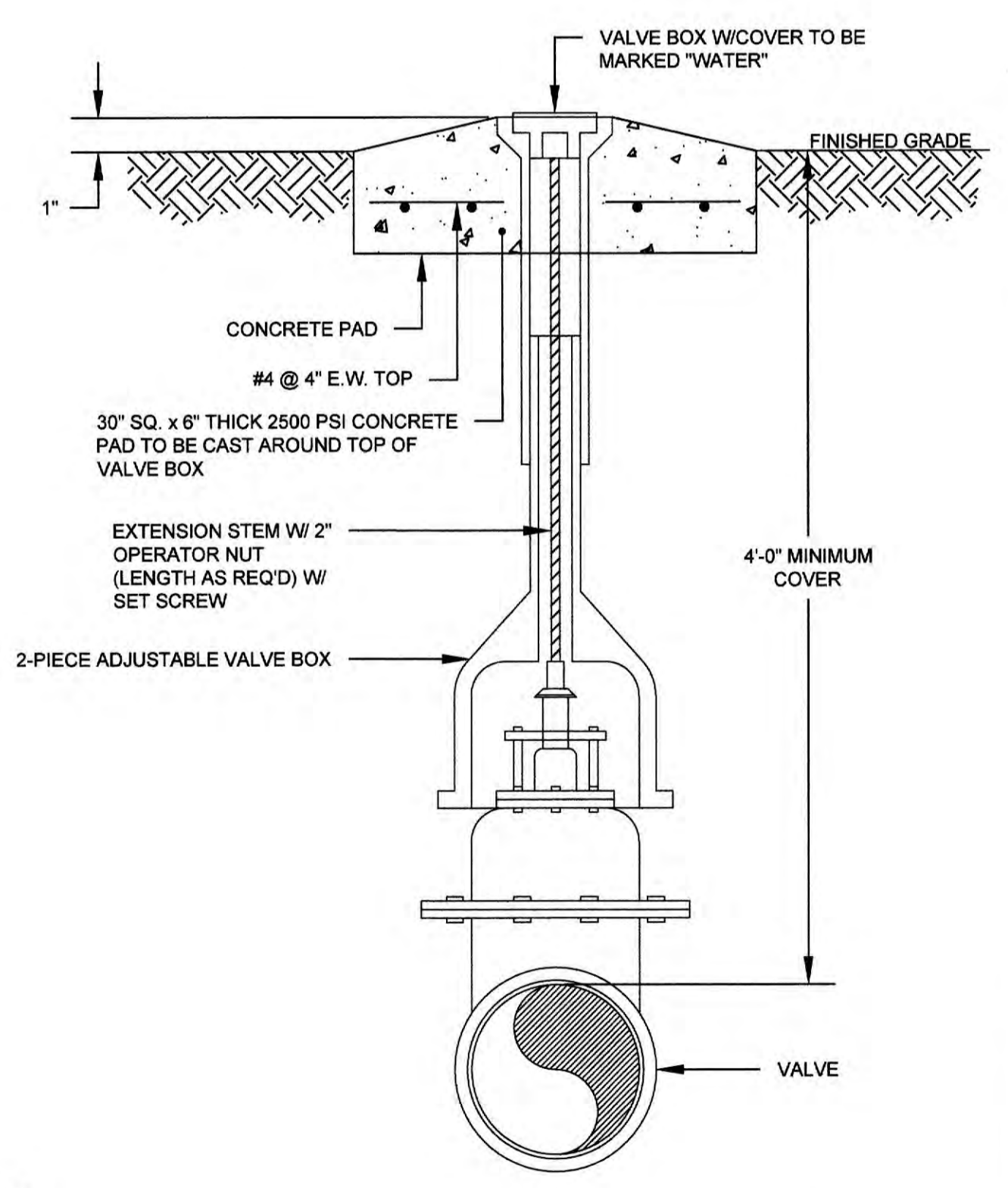
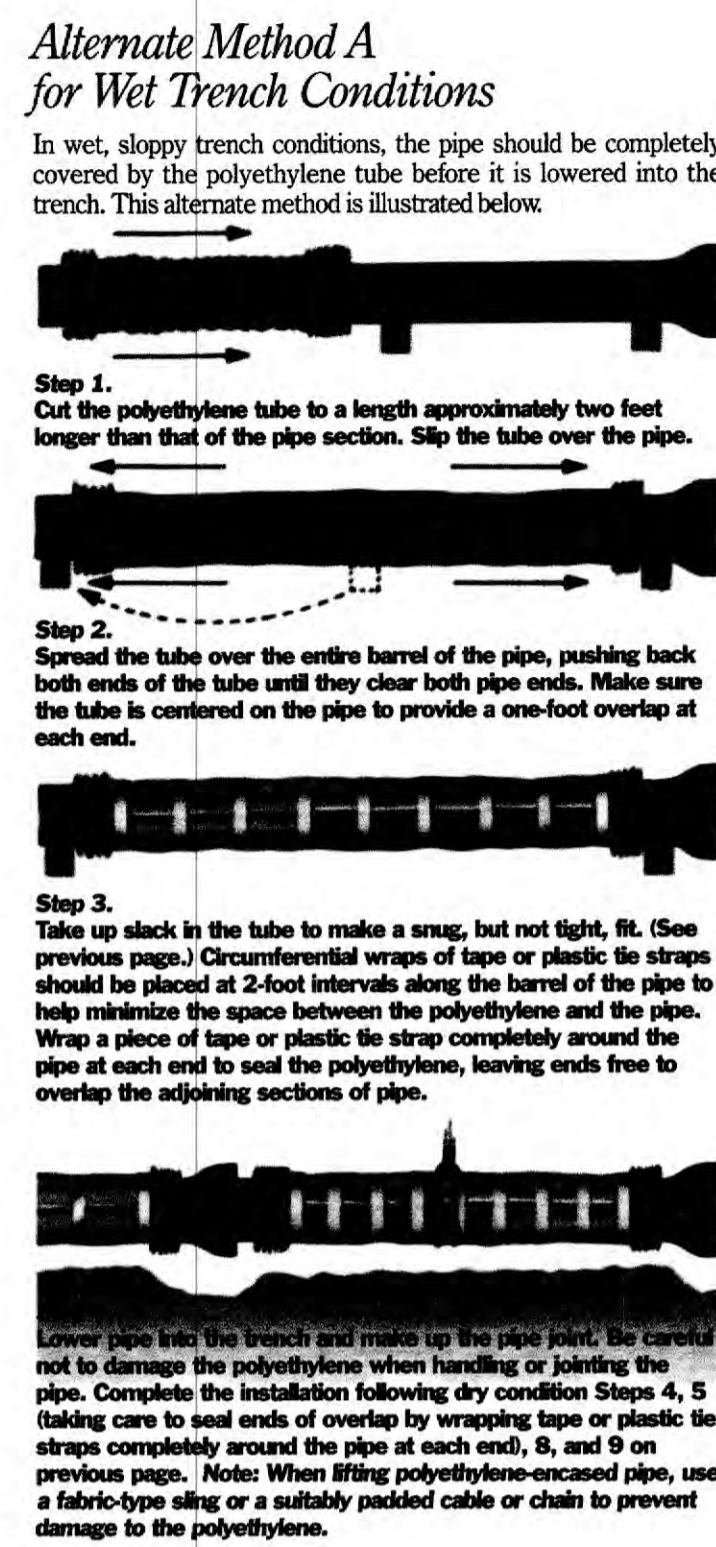


- General Notes**
- Roadway or driveway approval permit is required from COOT Utility Div. 770-529-1643.
- Landscaping structures or Irrigation Systems are NOT allowed in the R/W.
- Trench Repair Detail for road crossing length of cut requires extra road restriping for length of cut.
1. Storm Drain location and size shown as guide only. Design to dictate actual size and location. Utility adjustments to be approved by site Inspector.
 2. Sidewalks are to be placed on the North or East side of street.
 3. Waterline to be placed on the West or South side of street.
 4. SPECIAL NOTES: All signal plans must be submitted to and approved by the Traffic Signal Engineer prior to LDP approval. Any traffic signal work shall be performed in accordance with current Cobb County DOT Traffic Signal Specifications by an approved Traffic Signal Contractor. - Any traffic signal equipment damaged as a result of this project shall be replaced/approved by the contractor/designer immediately. Damaged flags shall be replaced/agreed with Video Detection. - Developer/Contractor is required to maintain video detection without interruption for all traffic signal phases affected during construction of the project. Approved video detection shall be used for presence detection and approved video or microwave detection shall be used for pulse detection. Additional video equipment may be required to support these detection devices. Contact the Traffic Signal Engineer at (770) 529-3264 for any traffic signal related issues. Contact the Signal Maintenance Supervisor at (770) 529-1639 to locate any signal equipment if proposed development is within 450' or less of a signalized intersection.
 5. Street lighting to be designed by power company and approved by COOT Street Light Administrator.
 6. Construction equipment shall not be parked in areas which restrict sight distance to any drives or streets.
 7. Street lane or total road closure permit. The contractor is required to obtain one of those permits prior to beginning any work. Contact COOT Operations at 770-529-1675.
 8. Contractor shall maintain driveway access and posted services at all times.
 9. Any lot structures (garages, sheds, drainage structures, curb, sidewalks, etc.) damaged or displaced as part of this project shall be replaced by the contractor.
 10. Measurements shown above are from the Back of Curb (BOC) to center of structure.
 11. Street trenching repair is required per detail. Contact COOT Utility Division 770-529-1643 for any approval Permits.
 12. No drop-offs adjacent to the roadway after work hours.
 13. 15' Shutoff is required. All poles are to be 8' from back of curb, minimum.
 14. Traffic control devices (signs, signals, markings) and certified flagman are required and shall meet MUTCD Standards latest edition.
- For all commercial and residential work in the R/W.
- DETAIL 80 UTILITY STANDARD**

COBB DOT UTILITY STANDARD DETAIL
N.T.S.

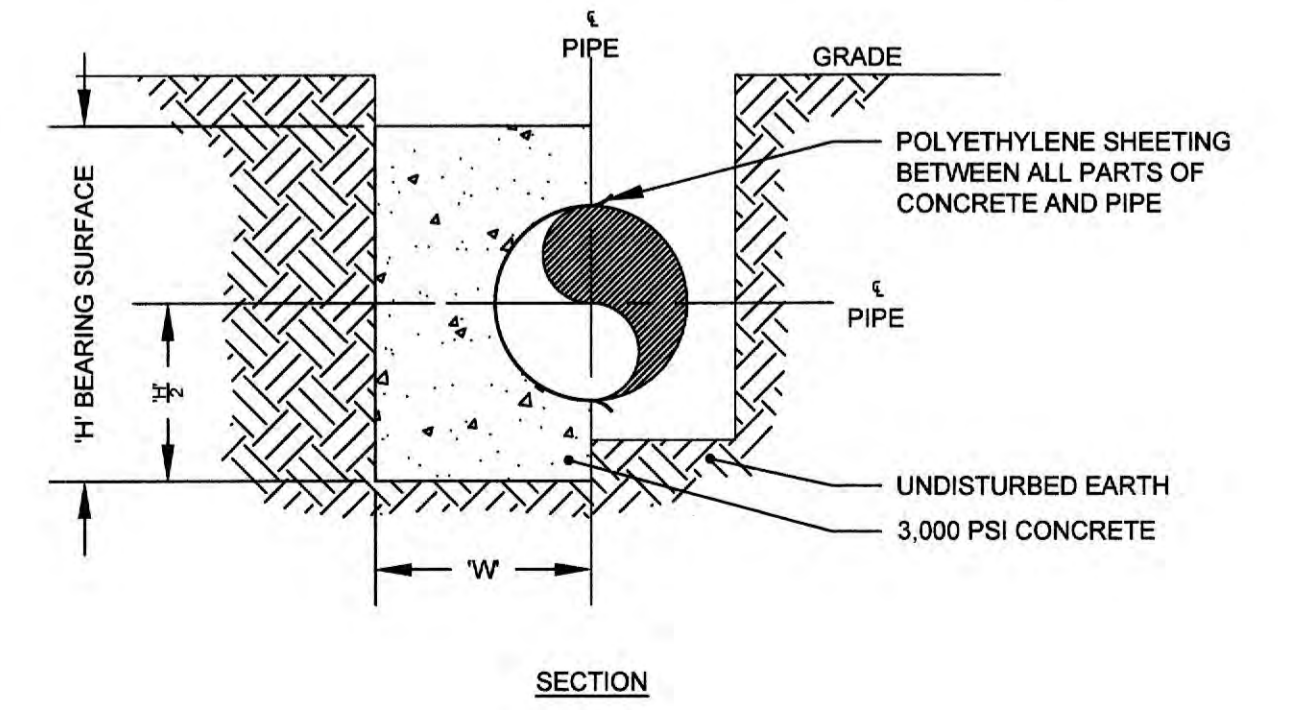
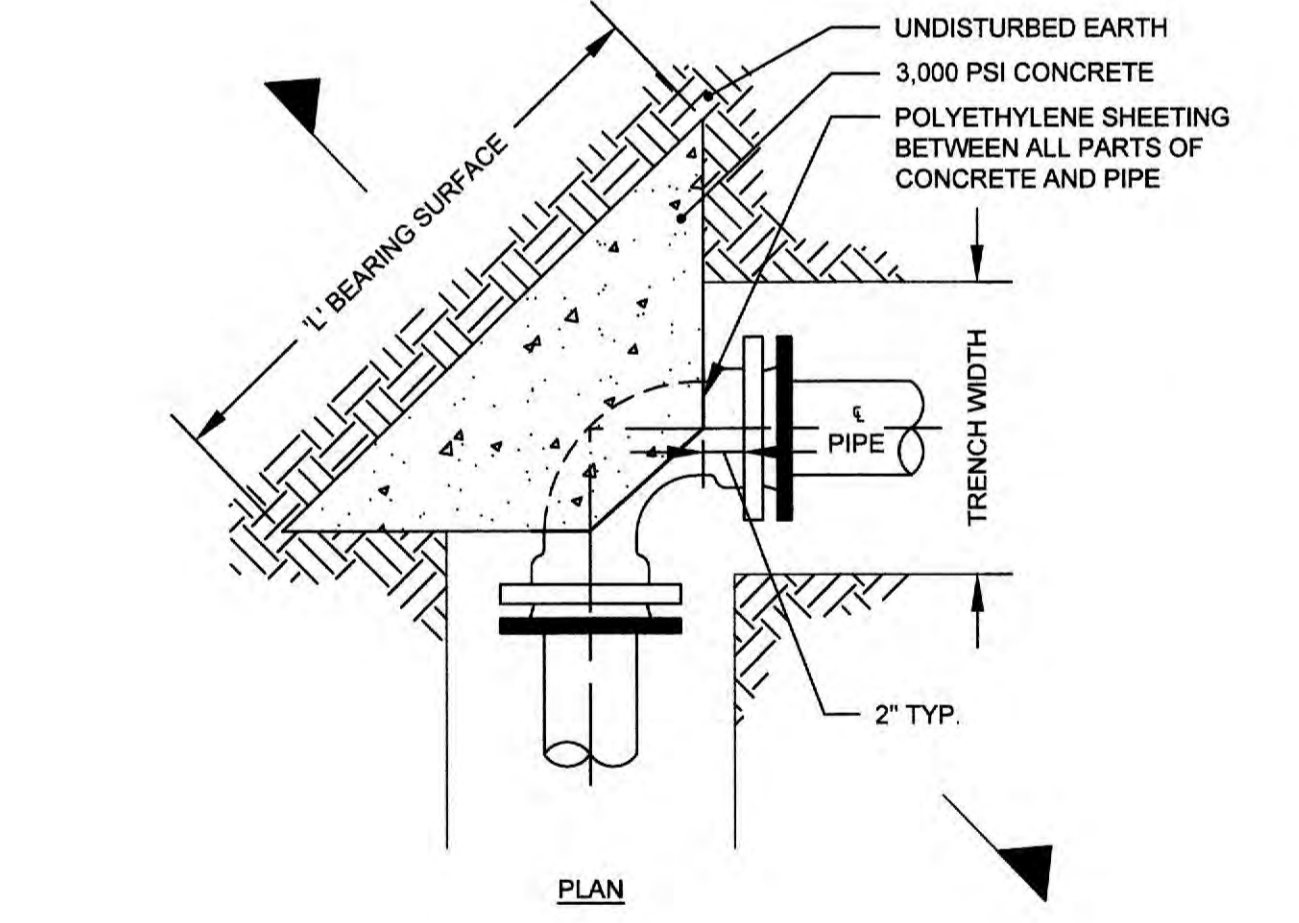


POLYETHYLENE ENCASEMENT INSTALLATION DETAIL
N.T.S.



- NOTES:**
1. CAST AROUND THE TOP OF EACH VALVE BOX A CONCRETE PAD 2'-0" IN DIA. OR 2'-0" SQUARE AND 8" THICK WHEN VALVES ARE LOCATED IN UNPAVED AREAS. PAD NOT REQUIRED IN PAVED AREAS.
 2. IF PRECAST PADS ARE USED, THE VOID BETWEEN THE PRECAST PAD AND THE VALVE BOX SHALL BE FILLED WITH NON-SHRINK EPOXY GROUT.

TYPICAL VALVE BOX AND OPERATOR SETTING DETAIL
N.T.S.



CONCRETE THRUST BLOCKING DETAIL
N.T.S.



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MACLARD ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS

STANDARD DETAILS
(3 OF 4)

SHEET NO.
15



ESI
ENGINEERING STRATEGIES, INC.
3855 SHALLOUFORD ROAD, SUITE 525
MARIETTA, GA 30062
(770) 425-0001

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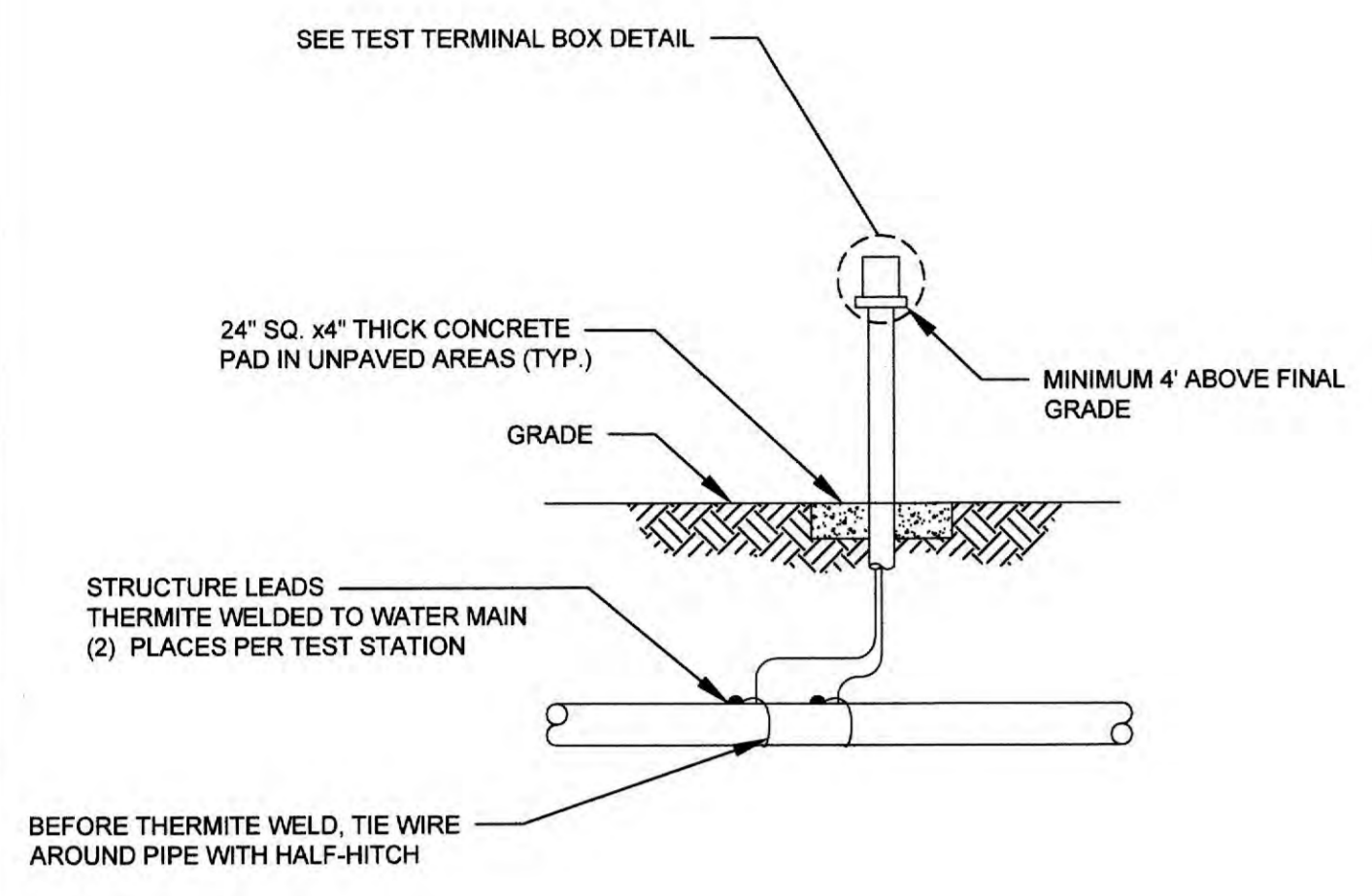
DATE	REVISION

MACLAND ROAD 24-INCH RELOCATION AND CORNER/FLORENCE ROAD MODIFICATIONS
STANDARD DETAILS
(4 OF 4)

SHEET NO.

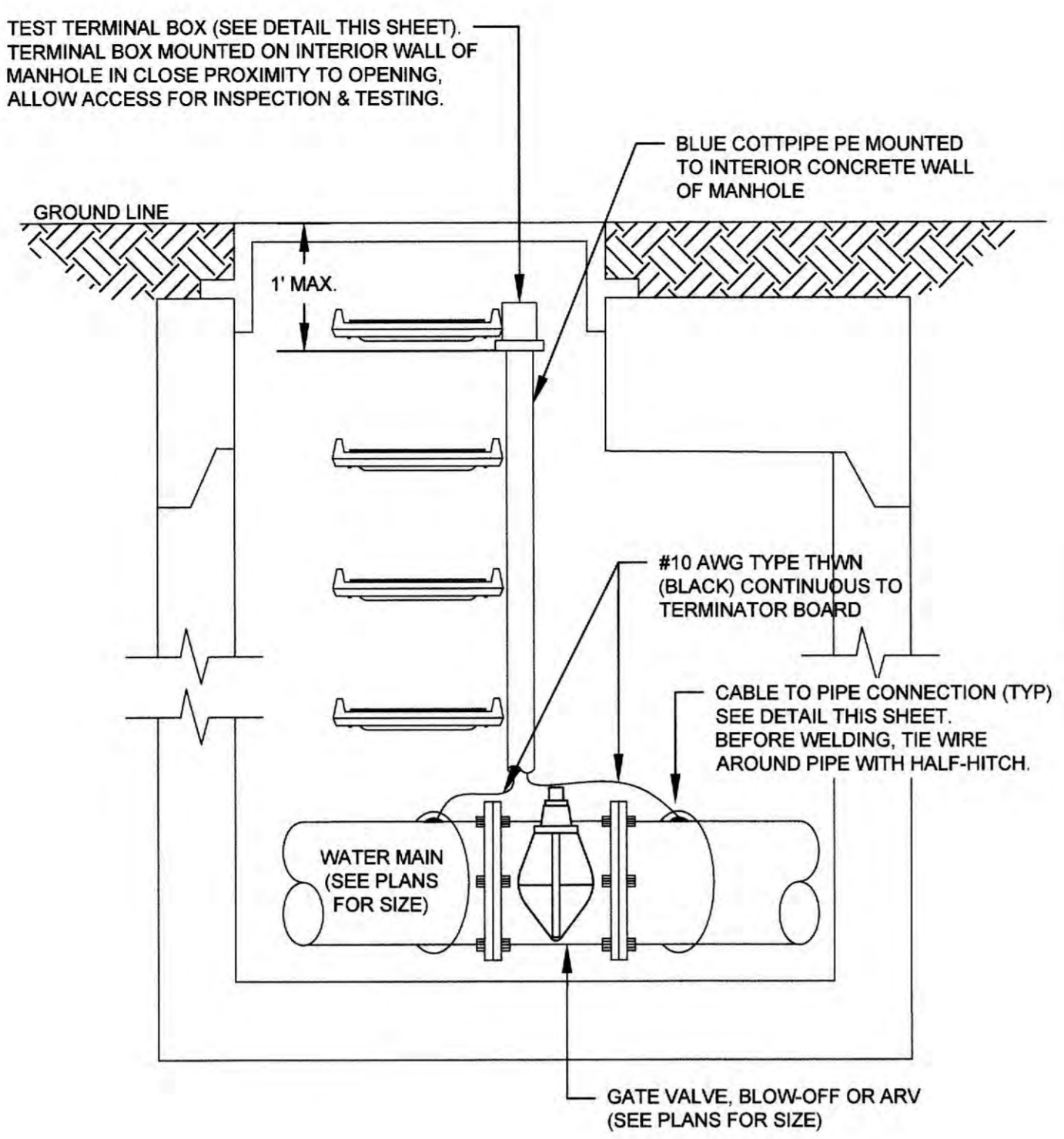
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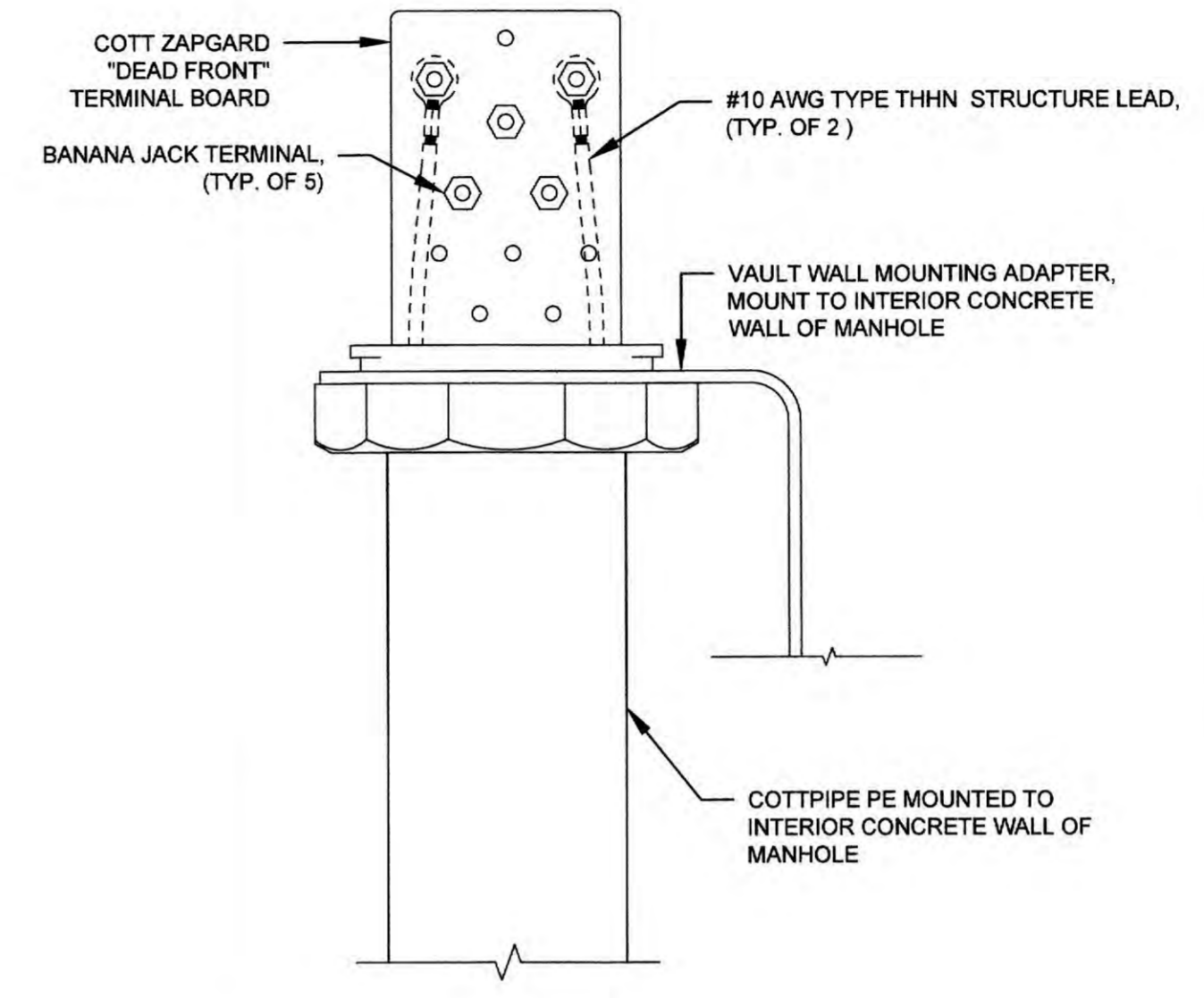


CATHODIC TEST STATION DETAIL
N.T.S.

- NOTES:**
- COTTPPIPE PE BLUE TEST STATION MARKER TO BE USED AT TEST STATION LOCATIONS ONLY.
 - FOR STATIONS INSIDE PAVEMENT, ROUTE CABLES INSIDE ONE 6" SCH. 80 PVC PIPE TO 5-FEET MIN. BEHIND CURB, EDGE OF PAVEMENT OR SIDEWALK BURIED 4-FEET MINIMUM. PLACE 4" WIDE DETECTABLE MARKING TAPE, WITH A MINIMUM 5.0 MIL OVERALL THICKNESS, 12" ABOVE PVC PIPE, MARKED "CAUTION CATHODIC PROTECTION CABLE BURIED BELOW"
 - SEE TEST STATION SCHEDULE, THIS SHEET, FOR LOCATIONS.

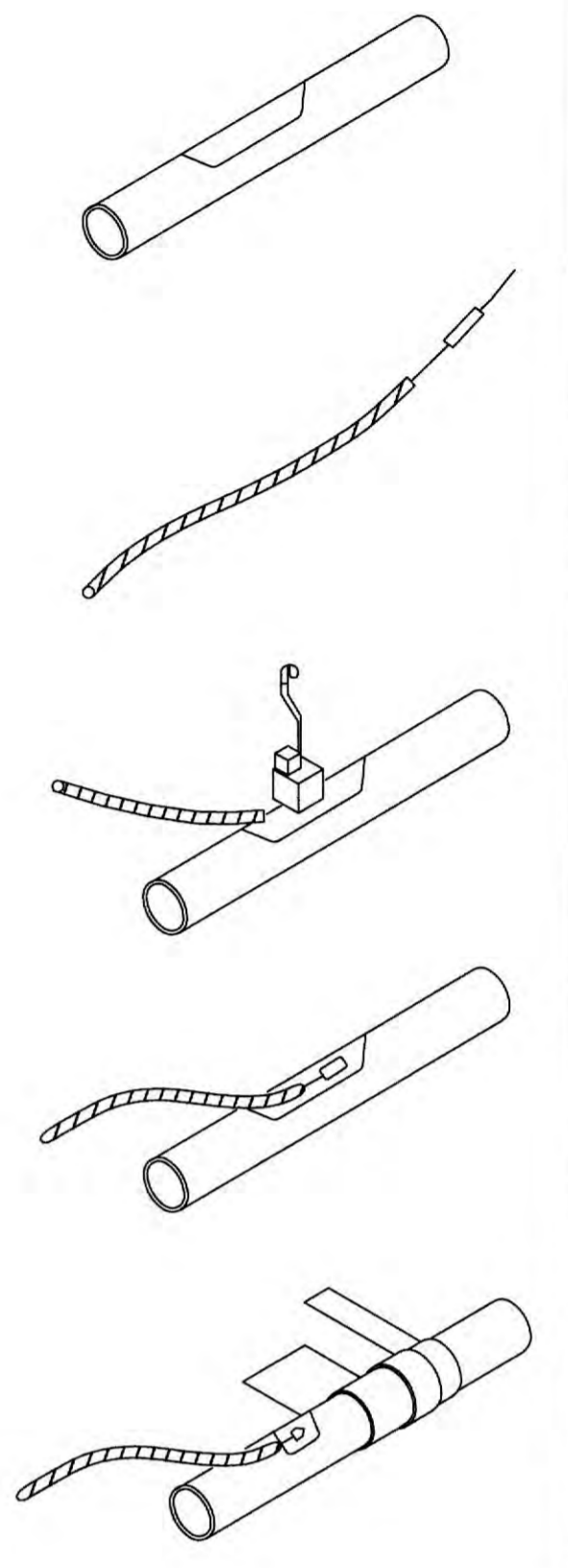


CATHODIC TEST STATION INSIDE MANHOLE DETAIL
N.T.S.

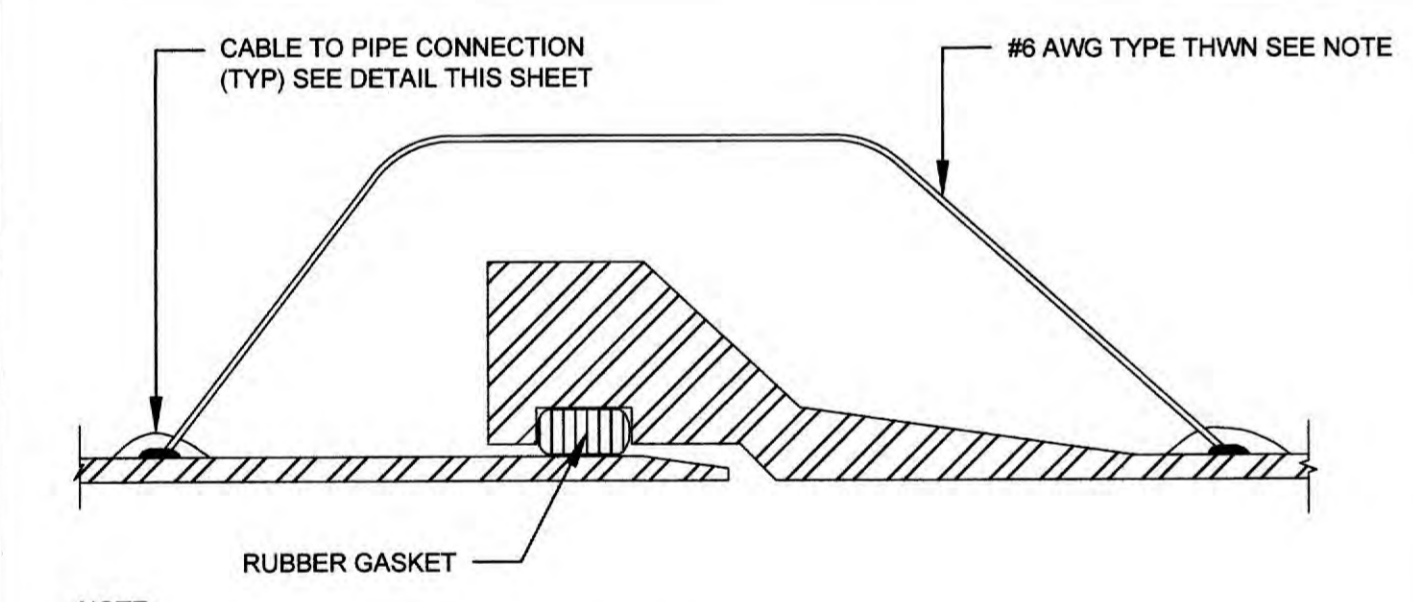


TEST TERMINAL BOX DETAIL
N.T.S.

- STEP 1** FILE PIPE TO BARE METAL AND CLEAN WITH WIRE BRUSH
- STEP 2** STRIP INSULATION FROM WIRE AND SLIP ON COPPER SLEEVE PER MANUFACTURERS INSTRUCTIONS
- STEP 3** PLACE WIRE ON CLEAN PIPE AND HOLD WELDER OVER WIRE FIRMLY AGAINST PIPE AND IGNITE WITH FLINT GUN
- STEP 4** REMOVE SLAG, TEST CONNECTION AND APPLY ROYBOND 747 PRIMER TO WELD AREA
- STEP 5** INSTALL ROYSTON HANDY-CAP OVER WELD AND WRAP AREA WITH POLYETHYLENE TAPE, OR PROTECTOR MASTIC AND TAPE WRAP COATING SYSTEM M-1

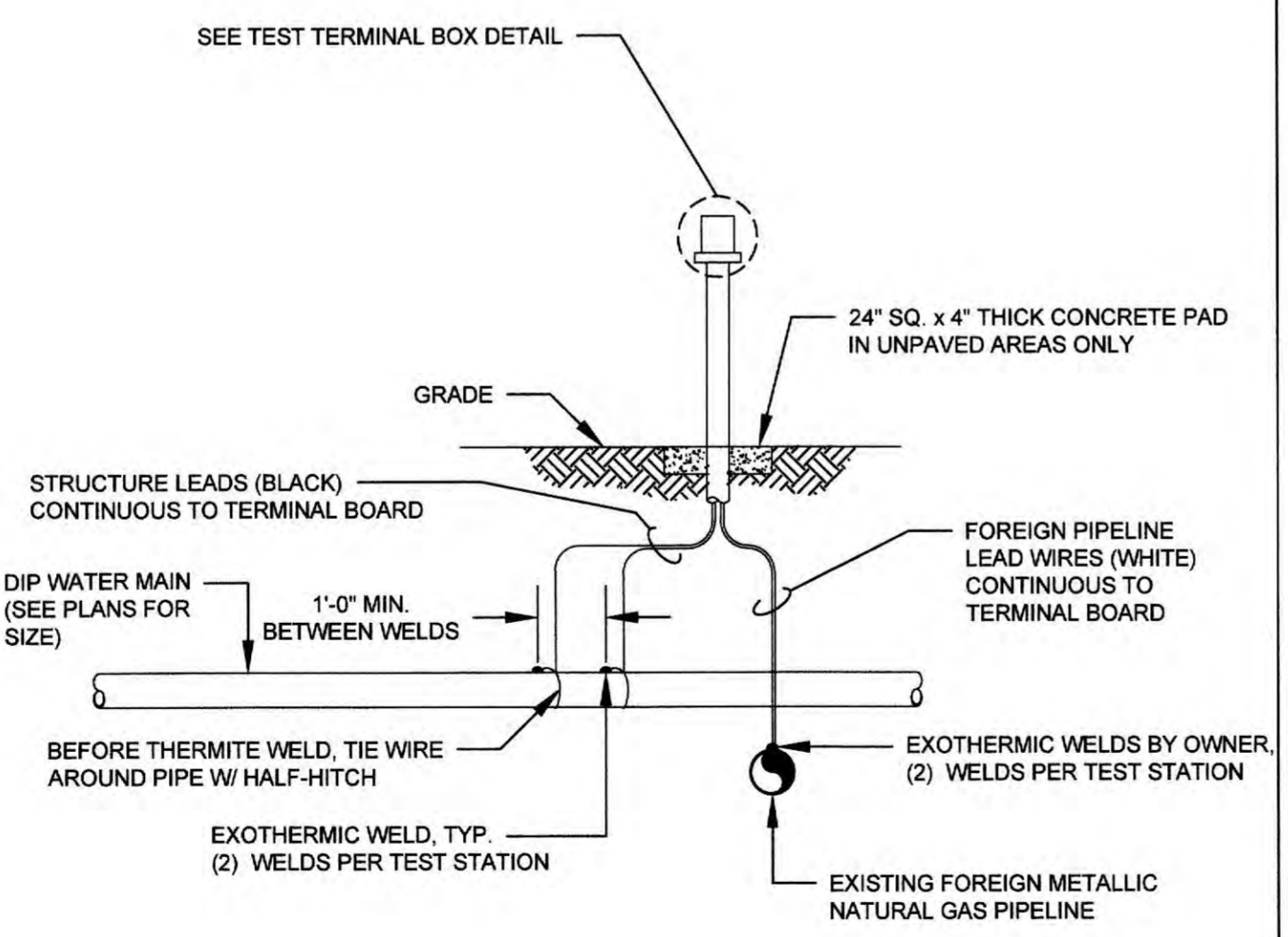


EXOTHERMIC WELD DETAIL
N.T.S.



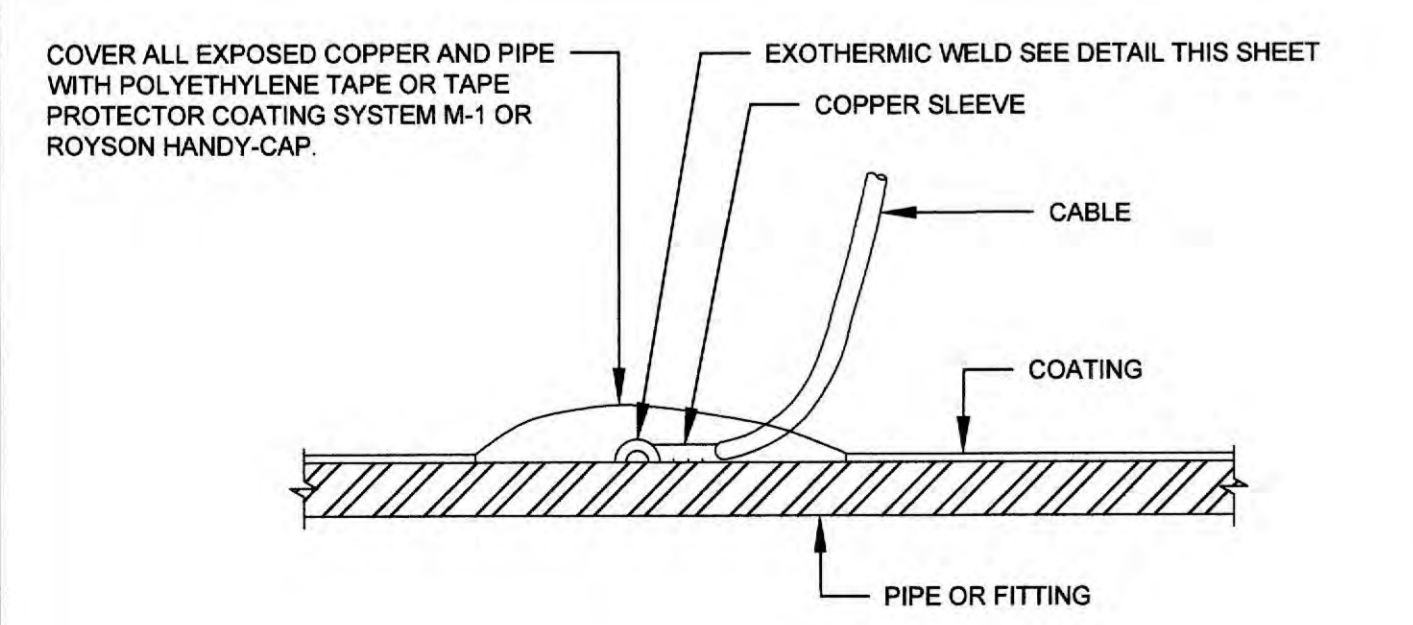
PIPE JOINT BONDING DETAIL
N.T.S.

NOTE:
ALL BURIED PIPE AND FITTINGS WITH JOINT GASKETS SHALL BE BONDED. INSTALL TWO NO. 6 AWG CALBE BONDS, ONE EACH SIDE AT 6" TO 12" FROM THE PIPE CROWN.



FOREIGN PIPELINE CROSSING TEST STATION
N.T.S.

- NOTES:**
- CONNECTIONS TO FOREIGN PIPELINES SHALL BE MADE BY OWNER.



CABLE TO PIPE CONNECTION DETAIL
N.T.S.