

00 91 01 ADDENDUM #1

Owner: Cobb County-Marietta Water Authority
Project: West Side Loop Section 2, 36" Water Main Replacement
Project No.: 505-9005-10-18-0000/CBR18213
Addendum No. 1
Addendum Date: March 27, 2018

The following additions, deletions, modifications, or clarifications shall be made to the appropriate portions of the Contract Documents. Offerors must acknowledge receipt of this Addendum in the space provided on the Bid Form.

ARTICLE 1 – ADDENDUM

- 1.01 Amend the Contract Documents
 - A. Make the additions, modifications, or deletions to the Contract Documents described in this Addendum.
- 1.02 Acknowledge Addenda
 - A. Acknowledge receipt of this Addendum in the Bid Form submitted for this Project. Failure to acknowledge receipt of this addendum in the Bid Form may render the Bid as non-responsive and serve as the basis for rejecting the Bid.

ARTICLE 2 – BID REQUIREMENTS

- 2.01 Section 00 41 13 "Bid Form"
 - A. Delete the "Bid Proposal" form included in Section 00 41 13, Bid Form and replace it with the attached, new "Bid Proposal" form included with this Addendum. Submit only the revised form with the Bid.

ARTICLE 3 – SPECIFICATIONS

- 3.01 Section 01 22 00, Measurement and Payment
 - A. Paragraph 2.60, Page 01 22 00-17.
 - 1. Add new paragraph 2.61, Temporary Pavement immediately following Paragraph 2.60:
2.61 TEMPORARY PAVEMENT
 - A. The lump sum price bid shall include all materials, labor and incidentals necessary for the Contractor to provide temporary pavement as required for compliance with permits issued by Cobb County DOT. Contractor shall coordinate with Cobb County DOT, provide specifications and details as required for permitting, and provide temporary pavement and striping

meeting Cobb County DOT approval. Temporary pavement method selected shall be coordinated with final pavement required. Several options were presented to Cobb County DOT during the design phase and may be acceptable for use on this project:

Method No.	Description	Maximum Length (LF)
1	Steel plate	300
2	8" GAB	1,000
3	6" GAB + 2" Rolled Asphalt Milling	1,000
4	6" GAB + 2" 19mm Superpave	2,000
5	8" 19mm Superpave	2,000

3.02 Section 01 11 00, Summary of Work

A. Paragraph 3.1.B, Page 01 11 00-2.

1. Replace the paragraph with the following:

“B. Constraints on Construction Scheduling and Traffic Control

- i. No road closures along South Gordon nor Cardell will be permitted. This work is expected to be completed under traffic, utilizing lane closures and short periods of flagging operation only if needed. This is based on daily traffic volumes in the area reaching capacity of the roadways – any detours would push nearby roadways over capacity.
- ii. No intersection closures will be permitted. Any proposed modification of lanes within or near a signalized intersection must be closely coordinated with Cobb TMC for signal timing.
- iii. Lane closures will be permitted during the typical hours, 9am – 4pm weekdays. Special consideration may be given depending on specific circumstances to extend these hours either before 9am or after 4pm, or at night or on weekend days. Adequate justification is required for each variance request and should not be expected for the duration of the project.
- iv. Between Mableton Pkwy and Blair Bridge Rd, lane closures will be permitted on school days between 9am – 2pm to allow for Riverside and Bryant School traffic, which begins around 2pm. On non-school weekdays, the previous hours can be followed along this segment. Note that it is preferred that this section of the project be completed in the summer months when the schools are not in session.
- v. Contractor shall plan and sequence the work to accommodate these requirements and include any additional cost as part of the bid.”

3.03 Section 01 31 13, Coordination of Work

A. Paragraph 1.4.A, Page 01 31 13-2.

1. Replace the paragraph with the following: “Refer to 01 11 00, Summary of Work.”

B. Paragraph 1.4.B, Page 01 31 13-2.

1. Replace the paragraph with the following:

“B. Contractor shall coordinate with the Owner to obtain road, lane closure, MOT, utility and other Cobb County DOT permits. Permitting to be completed via the Cobb Electronic Plan (ePlan) Review System.”

3.04 Section 01 35 13, Special Project Procedures

A. Paragraph 1.3.B, Page 01 35 13-2.

1. Add the following to the end of the paragraph, “Refer to Section 01 11 00, Summary of Work for additional information.”

3.05 Section 33 11 13, Water Main Construction

A. Paragraph 2.21 A, Page 33 11 13-8.

1. Revise paragraph to read, “Geogrid soil reinforcement shall be Tensar TriAx 140 Geogrid soil reinforcement or approved equal.”

ARTICLE 4 – DRAWINGS

4.01 Sheet G-1 – General Notes & Drawing Index

A. Revision: Revise Workmanship, Note 2 to read as follows: “Construction equipment shall not be parked in the right-of-way at any time other than work hours unless prior approval has been obtained from Cobb County DOT.”

4.02 Sheet C-14 – Plan and Profile STA 92+00 to 99+00

A. Revision: Revise the detail callout for the connection at STA 95+91 to reference Sheet C-32.

4.03 Sheet ES-17 – Erosion Notes and Uniform Code

A. Revision: Revise the Erosion Control Notes, Note 1 to read as follows: “The existing and proposed land use of the project site is either state route right-of-way, arterial and local collector roads, within property currently owned by the Cobb County or in easement owned by Cobb County Marietta Water Authority.”

B. Revision: Revise the Erosion Control Notes, Note 2 to read as follows: “Owner/Developer/Primary Permittee: Contractor.”

4.04 Replace the following Drawings:

Drawing No.	Drawing Title
C-17	Plan and Profile STA 113+00 to 120+00
C-26	Plan and Profile STA 176+00 to 183+00
C-28	Plan and Profile STA 190+00 to END
C-30	Plan and Profile STA 6+50 to END
C-31	Connection Details (1 of 4)
C-32	Connection Details (2 of 4)
C-33	Connection Details (3 of 4)
C-34	Connection Details (4 of 4)
D-2	Standard Details

Drawing No.	Drawing Title
D-4	Standard Details
D-6	Standard Details
D-7	Standard Details

ARTICLE 5 – APPENDICES

5.01 Not Used.

ARTICLE 6 – BIDDER QUESTIONS AND CLARIFICATIONS

6.01 Question: Sheet G-1 Underground Utilities Note 3 “If there is asbestos pipe present, its removal (if required shall be done by a contractor licensed with the EPD in accordance with the rules of Georgia Department of Resources Environment Protection Division Chapter 391-3-14-04.” Will the credentials of the licensed subcontractor need to be approved by CCMWA prior to the work and will the CCMWA require proof of regulated disposal of the existing asbestos pipe as part of the pay application before processing payments?

Response: Yes.

6.02 Question: Sheet G-1 Workmanship Note 2 “Construction equipment shall not be parked in the right of way at any other time other than work hours.” During the installation of the existing 8 inch water line, road closures were not allowed and current preliminary discussions would indicate that CCDOT will not allow road closures for the Westside Loop Section 2 Project. Workmanship Note 2 would indicate that a contractor will have to move his equipment to an offsite location outside of work hours. Please clarify if this is the intent?

Response: Contractor may park equipment in the right-of-way, provided that it is approved by CCDOT. Note modified with this addendum.

6.03 Question: Sheet G-1 Site Information Note 6 “These plans are exempt from zoning requirements per Section 13403 of the Cobb County Code. However, this project shall be required to meet all other development codes, regulations, ordinances and laws.” Could you be more specific regarding “required to meet all other development codes, regulations ordinances and laws.”?

Response: This is a standard general note for Cobb County plan review. The contractor is required to adhere to Cobb County codes, regulations, ordinances, and laws as would be the case for any project in Cobb County.

6.04 Question: Sheet G-1 Tree Protection Note 3 “Root Systems of significant trees, as indicated on the plans, which are encountered during construction, shall be free-bored under.” There are significant trees that will be encountered mostly at the creek crossings. Will the contractor have to free bore those trees, or will the contractor be allowed to remove those trees?

Response: No trees within the easement limits have been designated to be saved; trees within the easement should be removed.

6.05 Question: If the excavated native material is unable to qualify as suitable backfill and therefore unable to meet the specified compaction requirements, will the contractor be paid to bring on suitable backfill materials from an off site location and will that material be paid for with Bid

Item 59 Subgrade Stabilizer Stone or is the Contractor to assume the risk for the backfill and include this anticipated cost in other Bid Items?

Response: Offsite material for trench backfill should be incidental to the bid. No separate payment will be made. Contractor is also responsible for protecting the stockpiled excavated material from becoming over saturate and would be required to dry the material out for re-use.

6.06 Question: In order to facilitate general staging of materials and equipment the entire right-of-way is going to need to be cleared. Is clearing the full ROW on both sides of the road going to be an issue?

Response: Clearing of the ROWs is acceptable; no separate payment. Must be approved by CCDOT (ROW owner).

6.07 Question: The Factory Shoals intersection crossing is approximately 21' deep to the invert of the pipe. In order to install the pipe at that depth the road will need to be benched down to a depth where pipe laying with trench boxes is possible. This will take up all of the west bound lane of South Gordon Road as well as the shoulder and some of the eastbound lane. Traffic would be limited to one lane during daily construction, but due to depth and width of the work area, the only way to maintain two lanes of traffic during non-working hours will be to build a temporary lane of traffic. The locations that are available inside the ROW are currently parking spots in front of businesses. Is it acceptable to build temporary lanes in what are currently parking lots inside the South Gordon ROW? Will the material necessary to create temporary lanes paid for under unit price?

Response: A bid item for temporary paving has been added with this addendum. Contractor should include cost for temporary paving, lanes, etc., in this item. Note that temporary lanes, use of ROW, etc., is subject to CCDOT approval.

6.08 Question: On the west side of Factory Shoals Road there is a tee that branches to the south. The tee and branch are all approximately 20' to the invert of the pipe. The area where this tee is going to be installed will require closing South Gordon Road west of the intersection. If the DOT does not allow for the road closure will the construction of temporary lanes be paid for?

Response: A bid item for temporary paving has been added with this addendum. Contractor should include cost for temporary paving, lanes, etc., in this item. Note that temporary lanes, use of ROW, etc., is subject to CCDOT approval.

6.09 Question: What geogrid will be required for the length of the pipeline in the road? Is there a unit price to pay for the geogrid?

Response: Material specification for geogrid has been added to the project details with this addendum. Cost for geogrid is incidental to the pipe unit price item. Note that geogrid is only required under pavement.

6.10 Question: If there is a utility pole in conflict where the line leaves the road, will the Authority pay for the utility pole relocation?

Response: This will be reimbursed using the allowance for "Utility Relocation by Others." Owner must issue written approval for relocation of utility for payment to be made using the allowance.

6.11 Question: Will crushed concrete #57 be an acceptable alternate if it is GDOT certified material?

Response: No.

- 6.12 Question: If temporary GAB is required in the pipe trench before pavement is installed will the additional stone be paid for? What item will be used if it is paid for?
- Response: A bid item for temporary paving has been added with this addendum. Contractor should include cost for temporary paving, lanes, etc., in this item. Note that temporary lanes, use of ROW, etc., is subject to CCDOT approval.
- 6.13 Question: The trench detail shows a barrier wall adjacent to the excavated trench. That detail will not work as the excavators will have to straddle the trench. Is the barrier wall shown on the plans a requirement of the DOT or CCMWA? Is that barrier wall to be included in the Traffic Control bid item?
- Response: General detail only. Contractor is responsible for developing traffic control plan and should include costs in the Traffic Control bid item. Contractor is responsible for personnel safety.
- 6.14 Question: Will additional erosion control measures necessary for the creek crossings be paid for under the unit price bid items?
- Response: Items required for compliance with Cobb County Land Disturbance will be paid under the appropriate bid item. Note that the measures shown in the plans have been approved by the County.
- 6.15 Question: Will creek crossing pipes be allowed to cross the creeks with equipment?
- Response: Allowed provided requirements or Nationwide Permit, EPD, and Cobb County Land Disturbance Permit are met.
- 6.16 Question: Will rip rap dams be acceptable for installing the creek crossings?
- Response: Allowed provided requirements or Nationwide Permit, EPD, and Cobb County Land Disturbance Permit are met. No separate payment.
- 6.17 Question: If DOT does not allow for road closures, will night work be an option? Will noise near residential homes eliminate night work as an option?
- Response: Contractor is responsible for obtaining approval from CCDOT if night work is desired. This will likely only be permitted in intersections. Contractor will be responsible for overtime and/or additional expenses on the Owner and Engineer's behalf per the Contract Documents.
- 6.18 Question: Is it correct that the paving section will be 4" of 25mm paving and 5" of 19mm paving flush to the existing paving? The top 1.5" would then be milled and resurfaced at the end of the project.
- Response: Detail revised. Final pavement section is 6.5" of 19mm Superpave and 1.5" of 12.5mm Superpave. Final pavement should be coordinated with Contractor's proposed temporary paving plan.
- 6.19 Question: Does CCMWA have staging lengths in mind for installation and testing. The plans and specs mention installing sections at a time where it is tested and put into service. Is there a limit on the length of sections that can be down at one time?
- Response: No specified length; however, Contractor must coordinate shut-down of the main with CCMWA and satisfy the requirements in Section 01 31 13, Coordination of Work.

6.20 Question: The plans show a minimum 6.5' ditch width and maximum width of 8.5'. When the pipe is deep and the trench is wider at the top will all paving and restoration necessary for deeper installation be paid for at unit prices or is the maximum pay width of 8.5' going to apply.

Response: Maximum width of 8.5' applies.

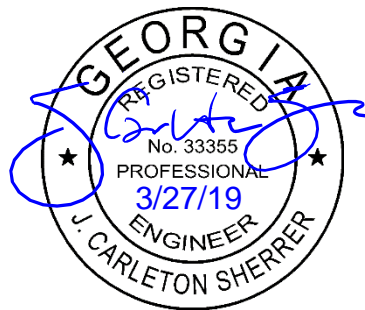
6.21 Question: It is not practical given the time constraints for the trench to be repaved everyday per the asphalt paving replacement detail. What are the minimum requirements for a temporary riding surface prior to permanent paving? Is there a maximum length or duration for a temporary riding surface to be in place before permanent is installed?

Response: A bid item for temporary paving has been added with this addendum. Contractor should include cost for temporary paving, lanes, etc., in this item. Note that temporary lanes, use of ROW, etc., is subject to CCDOT approval.

6.22 Question: SC 5.04.E – This paragraph reads oddly. It starts by listing parties as additional insured which is a non-issue, but then it states "all insurance required by this contract, and such insurance shall be primary with respect to the Additional Named Insured." To my knowledge there are not any additional NAMED insureds. I recommend striking out the word "additional" from this sentence.

Response: Language to remain unchanged.

END OF ADDENDUM NO. 1



**COBB COUNTY - MARIETTA WATER AUTHORITY
WEST SIDE LOOP SECTION 2, 36-INCH WATER MAIN REPLACEMENT
BID PROPOSAL**

ITEM NO.	M&P ITEM	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE BID	EXTENDED AMOUNT
UNIT PRICE ITEMS						
1	2.1	Water Mains 6" DIP, Zinc Coated, PC 350	500	LF	\$	\$
2	2.1	Water Mains 8" DIP, Zinc Coated, PC 350	550	LF	\$	\$
3	2.1	Water Mains 10" DIP, Zinc Coated PC 350	500	LF	\$	\$
4	2.1	Water Mains 12" DIP, Zinc Coated, PC 350	650	LF	\$	\$
5	2.1	Water Mains 16" DIP, Zinc Coated, PC 350	100	LF	\$	\$
6	2.1	Water Mains 20" DIP, Zinc Coated, PC 250	200	LF	\$	\$
7	2.1	Water Mains 36" DIP, Zinc Coated, PC 200	8,990	LF	\$	\$
8	2.1	Water Mains 36" DIP, Zinc Coated, PC 250	12,430	LF	\$	\$
9	2.2	Restrained Joints / Manufacturer's Pipe Restraint 20"	13	EA	\$	\$
10	2.2	Restrained Joints / Manufacturer's Pipe Restraint 36"	270	EA	\$	\$
11	2.2	Restrained Joints / Manufacturer's Pipe Gasket 6"	25	EA	\$	\$
12	2.2	Restrained Joints / Manufacturer's Pipe Gasket 8"	25	EA	\$	\$
13	2.2	Restrained Joints / Manufacturer's Pipe Gasket 10"	25	EA	\$	\$
14	2.2	Restrained Joints / Manufacturer's Pipe Gasket 12"	25	EA	\$	\$
19	2.2	Restrained Joints / MJ Fitting, Retainer Gland 6"	10	EA	\$	\$
20	2.2	Restrained Joints / MJ Fitting, Retainer Gland 8"	20	EA	\$	\$
21	2.2	Restrained Joints / MJ Fitting, Retainer Gland 10"	10	EA	\$	\$
15	2.2	Restrained Joints / MJ Fitting, Retainer Gland 12"	60	EA	\$	\$
16	2.2	Restrained Joints / MJ Fitting, Retainer Gland 16"	5	EA	\$	\$
17	2.2	Restrained Joints / MJ Fitting, Retainer Gland 20"	10	EA	\$	\$
18	2.2	Restrained Joints / MJ Fitting, Retainer Gland 36"	130	EA	\$	\$
19	2.3	Ductile Iron Fittings, Zinc Coated	175,700	LB	\$	\$

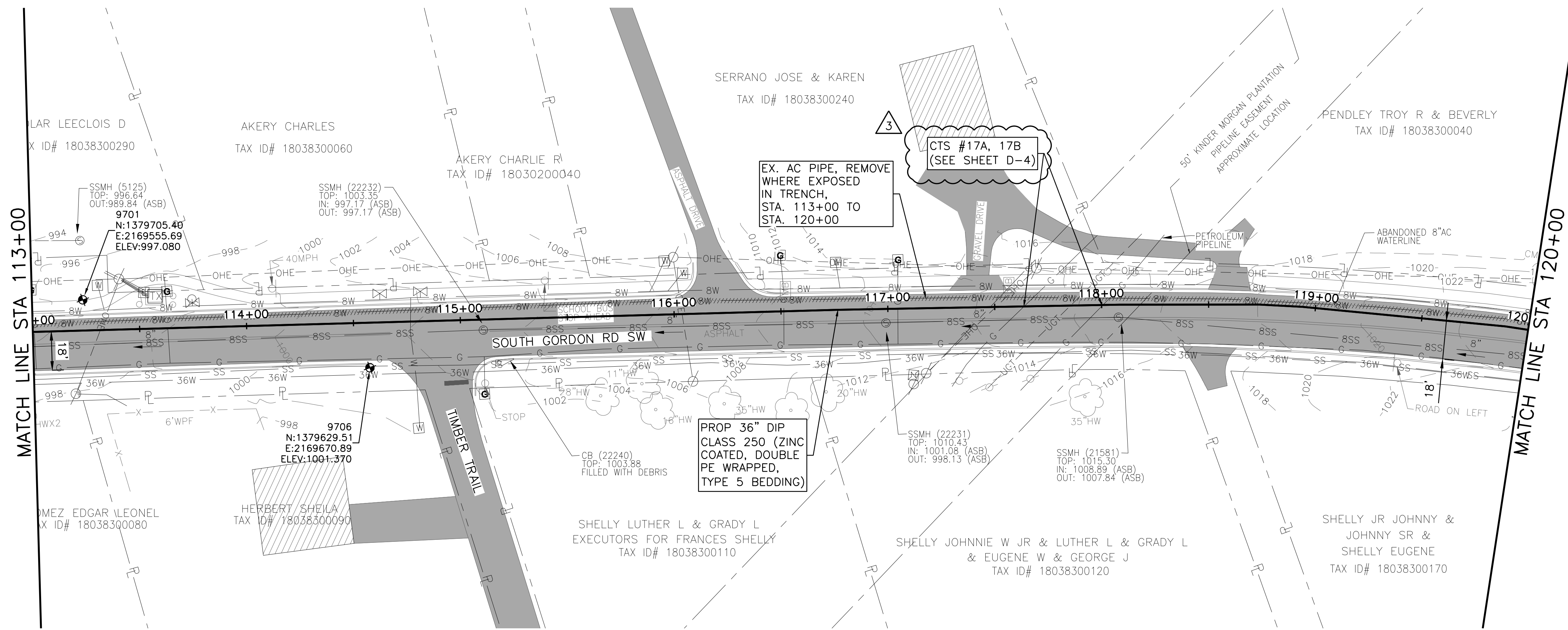
ITEM NO.	M&P ITEM	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE BID	EXTENDED AMOUNT
20	2.4	Valves 8" Gate Valve, MJ x MJ	19	EA	\$	\$
21	2.4	Valves 10" Gate Valve, MJ x MJ	2	EA	\$	\$
22	2.4	Valves 12" Gate Valve, MJ x MJ	6	EA	\$	\$
23	2.4	Valves 16" Gate Valve, MJ x MJ	1	EA	\$	\$
24	2.4	Valves 20" Gate Valve, MJ x MJ	1	EA	\$	\$
25	2.4	Valves 36" Gate Valve, MJ x MJ	9	EA	\$	\$
26	2.5	Air & Vacuum Valve, 6" FLG Combination AVV with 6" FLG Gate Valve on 36" Line	13	EA	\$	\$
27	2.6	Valve Markers	10	EA	\$	\$
28	2.7	Valve Boxes	10	EA	\$	\$
29	2.8	DIP MJ x PCCP Adapters (16" - One Set)	1	EA	\$	\$
30	2.9	Pipe Outlets 4" Flanged Radial Welded-on Outlet on 36" DIP	16	EA	\$	\$
31	2.10	Polyethylene Encasement, 6" Double Encasement	500	LF	\$	\$
32	2.10	Polyethylene Encasement, 8" Double Encasement	550	LF	\$	\$
33	2.10	Polyethylene Encasement, 10" Double Encasement	500	LF	\$	\$
34	2.10	Polyethylene Encasement, 12" Double Encasement	650	LF	\$	\$
35	2.10	Polyethylene Encasement, 16" Double Encasement	100	LF	\$	\$
36	2.10	Polyethylene Encasement, 20" Double Encasement	200	LF	\$	\$
37	2.10	Polyethylene Encasement, 36" Double Encasement	21,420	LF	\$	\$
38	2.11	Bonded Joints, Two Cables Each	1,430	EA	\$	\$
39	2.12	Cathodic Test Station	41	EA	\$	\$
40	2.13	Sample Test Connection	16	EA	\$	\$
41	2.14	Connection #1 STA 1+00 (Old Alabama, 20"/36" DIP Main)	1	LS	\$	\$
42	2.14	Connection #2 STA 46+54 (Brandemere, 16" PCCP Main)	1	LS	\$	\$
43	2.14	Connection #3 STA 95+91 (Pisgah, 8" CCWS Main)	1	LS	\$	\$
44	2.14	Connection #4 STA 142+25 (Factory Shoals, CCWS 8" Main)	1	LS	\$	\$
45	2.14	Connection #6 STA 176+61 (Hillcrest, CCWS 12" Main)	1	LS	\$	\$

ITEM NO.	M&P ITEM	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE BID	EXTENDED AMOUNT
46	2.14	Connection #7 STA 195+44 (Mableton Parkway, 36" DIP Main)	1	LS	\$	\$
47	2.14	Connection #8 STA 10+19 (Factory Shoals, 20" DIP Main)	1	LS	\$	\$
48	2.15	Marker Ball Locator Instrument	1	EA	\$	\$
49	2.16	Marker Ball Installation on Existing Water Main to be Abandoned	210	EA	\$	\$
50	2.17	Marker Ball Installation on Existing Water Main to Remain in Service	40	EA	\$	\$
51	2.18	Marker Ball and Installation on New Water Main	420	EA	\$	\$
52	2.19	Concrete Manhole Assembly, 4' Diameter, for Double MH BOV	12	EA	\$	\$
53	2.19	Concrete Manhole Assembly, Extra Payment for Sections Exceeding Ten VF, 4' Diameter	30	VF	\$	\$
54	2.19	Concrete Manhole Assembly, 6' Diameter, for Air Valves and Single MH BOV	14	EA	\$	\$
55	2.19	Concrete Manhole Assembly, Extra Payment for Sections Exceeding Ten VF, 6' Diameter	30	VF	\$	\$
56	2.19	Concrete Manhole Assembly, 8' Diameter, for Gate Valves	9	EA	\$	\$
57	2.19	Concrete Manhole Assembly, Extra Payment for Sections Exceeding Ten VF, 8' Diameter	30	VF	\$	\$
58	2.20	Flowable Fill Encasement	100	CY	\$	\$
59	2.21	Subgrade Stabilizer Stone	32,500	TON	\$	\$
60	2.22	Miscellaneous Concrete	50	CY	\$	\$
61	2.23	Miscellaneous Reinforcing Steel	5	TON	\$	\$
62	2.24	Remove and Replace Fence (All Sizes and Types)	500	LF	\$	\$
63	2.25	Temporary Silt Fence (Sd1-S)	1,570	LF	\$	\$
64	2.26	Hay Bale Barrier	100	EA	\$	\$
65	2.27	Rip-Rap (12" Thick)	500	SY	\$	\$
66	2.28	Construction Exit (Co)	4	EA	\$	\$
67	2.29	Straw Mulch Stabilization (Dsl)	5,000	SY	\$	\$
68	2.30	Grassing, Temporary (Ds2)	5,000	SY	\$	\$
69	2.30	Grassing, Permanent (Ds3)	5,000	SY	\$	\$
70	2.31	Erosion Control Matting (Slopes)	2,500	SY	\$	\$
71	2.32	Inlet Sediment Trap (Sd2)	75	EA	\$	\$

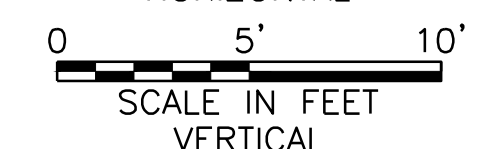
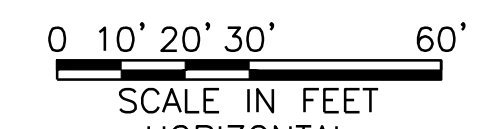
ITEM NO.	M&P ITEM	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE BID	EXTENDED AMOUNT
72	2.33	Storm Drain Outlet Protection (St)	5	EA	\$	\$
73	2.34	Turbidity Curtain (Tc)	4	EA	\$	\$
74	2.35	NPDES Permit Compliance	1	LS	\$	\$
75	2.36	Remove & Replace Guard Rail	100	LF	\$	\$
76	2.37	Remove and Replace Fire Hydrant on Existing CCWS Main	5	EA	\$	\$
77	2.38	Remove & Replace Asphalt Driveways and Parking Lots	500	SY	\$	\$
78	2.39	Remove & Replace Concrete Driveways and Parking Lots	500	SY	\$	\$
79	2.40	Remove & Replace Gravel Driveways and Parking Lots	500	SY	\$	\$
80	2.41	Remove & Replace Concrete Sidewalks	4,400	SY	\$	\$
81	2.42	Remove & Replace Concrete Curb and Gutter	14,880	LF	\$	\$
82	2.43	Paving Sugrade 12" GDOT GAB	26,400	SY	\$	\$
83	2.43	Paving 4" of 25 mm GDOT Superpave	26,400	SY	\$	\$
84	2.43	Paving 3.5" of 19 mm GDOT Superpave	26,400	SY	\$	\$
85	2.44	Asphalt Pavement Milling (1.5" Depth)	64,900	SY	\$	\$
86	2.45	Paving 1.5 inches of GDOT 12.5 mm Superpave	64,900	SY	\$	\$
87	2.46	Thermoplastic Pavement Marking 6" Skip (2:6) White or Yellow	1,180	LF	\$	\$
88	2.46	Thermoplastic Pavement Marking 6" Solid White or Yellow	19,590	LF	\$	\$
89	2.46	Thermoplastic Pavement Marking Hatching White or Yellow	690	SY	\$	\$
90	2.46	Thermoplastic Pavement Marking, Arrow	10	EA	\$	\$
91	2.46	Thermoplastic Pavement Marking 8" Cross Walks	6	PER LANE	\$	\$
92	2.47	Cut and Plug Existing 36" Water Main	4	EA	\$	\$
93	2.48	Abandon Existing CCMWA Valve Manhole and Valve	15	EA	\$	\$
94	2.49	Abandon Existing CCMWA Valve Box and Valve	9	EA	\$	\$
95	2.50	Abandon Existing CCMWA Blowoff Valve	11	EA	\$	\$
96	2.51	Remove and Dispose of Existing Water Main (PCCP/DIP)	1,000	LF	\$	\$
97	2.52	Remove and Dispose of Abandoned AC Pipe 6"	1,600	LF	\$	\$

ITEM NO.	M&P ITEM	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE BID	EXTENDED AMOUNT
98	2.52	Remove and Dispose of Abandoned AC Pipe 8"	11,100	LF	\$	\$
99	2.53	Replace Existing 8" CCWS Sanitary Sewer	500	LF	\$	\$
100	2.53	Replace Existing 10" CCWS Sanitary Sewer	500	LF	\$	\$
101	2.53	Replace Existing 12" CCWS Sanitary Sewer	500	LF	\$	\$
102	2.54	Doghouse Manhole for Sanitary Sewer Connection	5	EA	\$	\$
103	2.55	Remove and Replace 15" Concrete Storm Drain	100	LF	\$	\$
104	2.55	Remove and Replace 18" Concrete Storm Drain	100	LF	\$	\$
105	2.55	Remove and Replace 24" Concrete Storm Drain	100	LF	\$	\$
106	2.55	Remove and Replace 48" Concrete Storm Drain	100	LF	\$	\$
107	2.56	Remove and Replace 12" CMP Storm Drain	100	LF	\$	\$
108	2.56	Remove and Replace 15" CMP Storm Drain	100	LF	\$	\$
109	2.56	Remove and Replace 18" CMP Storm Drain	100	LF	\$	\$
110	2.56	Remove and Replace 24" CMP Storm Drain	100	LF	\$	\$
111	2.56	Remove and Replace 36" CMP Storm Drain	100	LF	\$	\$
112	2.57	Remove and Replace Catch Basin/Curb Inlet	5	EA	\$	\$
113	2.58	Project Signs	3	EA	\$	\$
114	2.59	Traffic Control	1	LS	\$	\$
115	2.60	Mobilization	1	LS	\$	\$
116	2.61	Temporary Paving	1	LS	\$	\$
UNIT PRICE SUB-TOTAL (ITEMS 1 THROUGH 116)						

ITEM NO.	M&P ITEM	DESCRIPTION	EST. QTY	UNIT	UNIT PRICE BID	EXTENDED AMOUNT
ALLOWANCES						
117	A1	Allowance for Force Account Work	1	LS	\$ 1,500,000.00	\$ 1,500,000.00
118	A2	Allowance for Matierals Testing	1	LS	\$ 150,000.00	\$ 150,000.00
119	A3	Allowance for Utility Relocation by Others	1	LS	\$ 400,000.00	\$ 400,000.00
120	A4	Allowance for Landscaping	1	LS	\$ 100,000.00	\$ 100,000.00
121	A5	Allowance for Traffic Control	1	LS	\$ 150,000.00	\$ 150,000.00
122	A6	Allowance for Corrosion Control	1	LS	\$ 100,000.00	\$ 100,000.00
123	A7	Allowance for Water Main Disinfection and Dechlorination	1	LS	\$ 100,000.00	\$ 100,000.00
ALLOWANCE SUB-TOTAL (ITEMS A1 THROUGH A7)						\$ 2,500,000.00
TOTAL BASE BID AMOUNT (UNIT PRICE SUB-TOTAL PLUS ALLOWANCE SUB-TOTAL) - Numbered Here (Written in Words Below):						
_____ dollars and _____ cents						

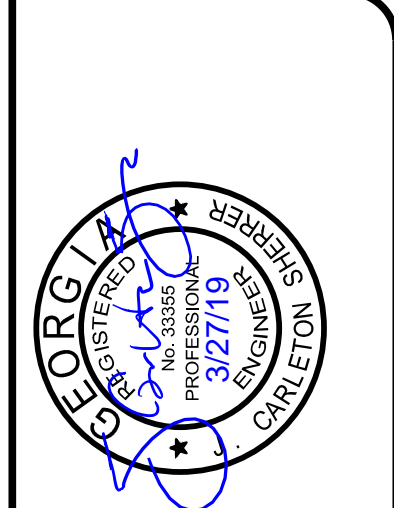
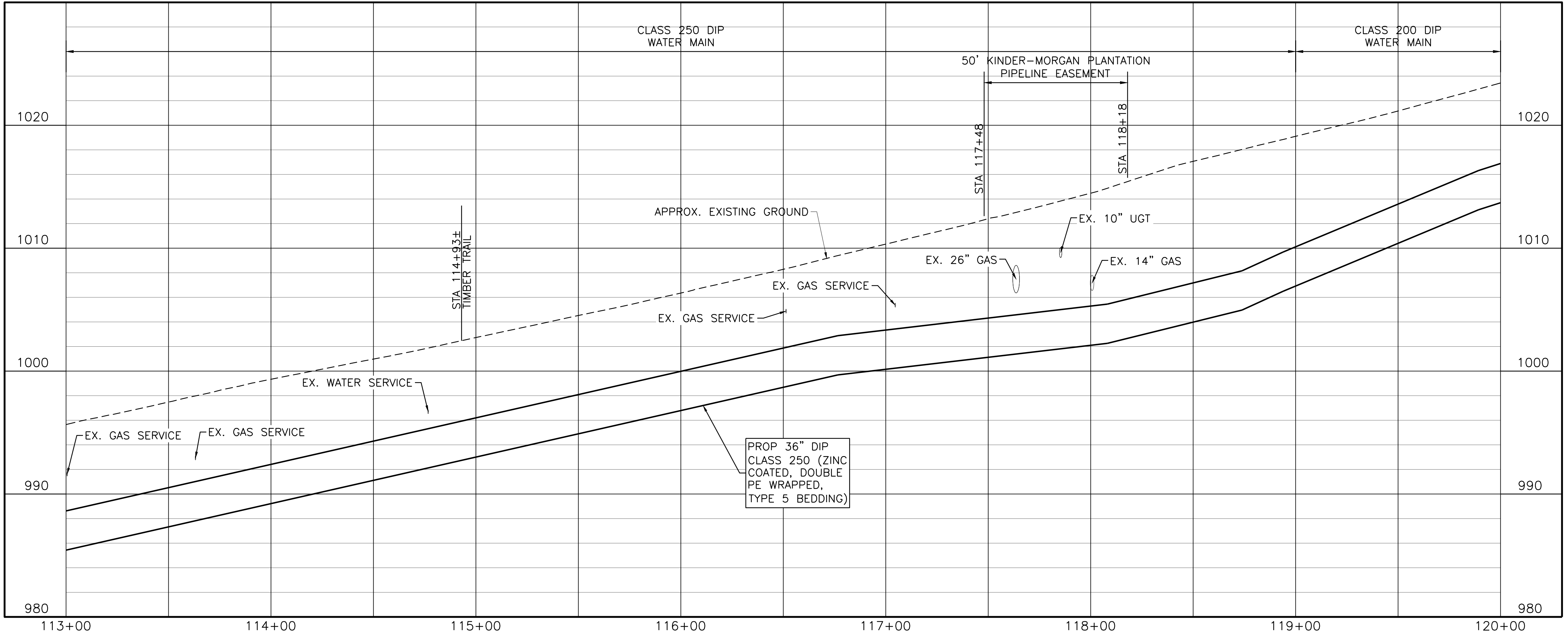


Know what's below.
Call before you dig.



NOTES:

- CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION.



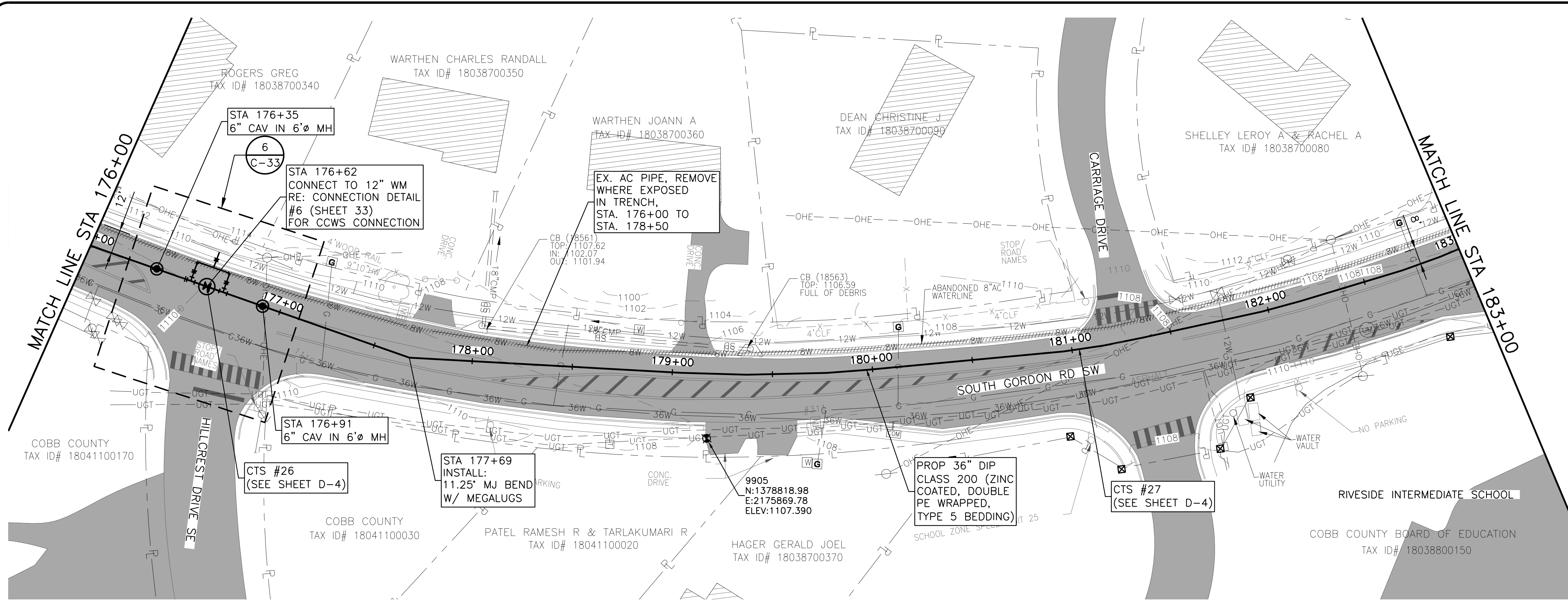
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COBB COUNTY-MARIETTA WATER AUTHORITY
WEST SIDE LOOP SECTION 2
36-INCH WATER MAIN REPLACEMENT
 CIVIL
PLAN AND PROFILE
STA 113+00 TO 120+00

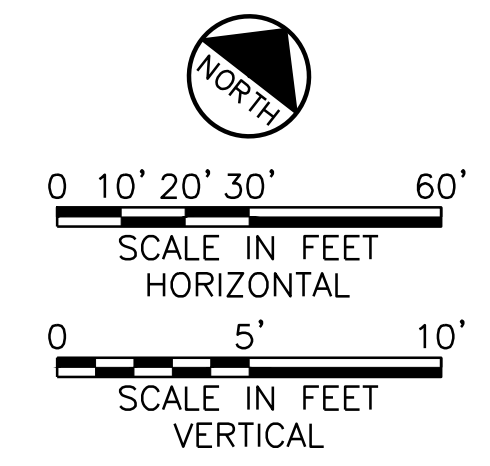
APPENDUM NO. 1	JCS	3/27/19	DESIGNED	FDH	3/7/19	DATE	FILE NAME	JCS
ISSUED FOR BID	JCS	03/01/19	DRAWN	CKM	02/08/19	DATE	CV-ALL-SHTS02.dwg	JCS
ISSUED FOR PERMIT	JCS	02/08/19	REVISION			DATE		JCS
VERIFY SCALE	NO.	BY	ISSUE			DATE		JCS
0								JCS

Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.

SHEET **C-17**
 SEQ. 21

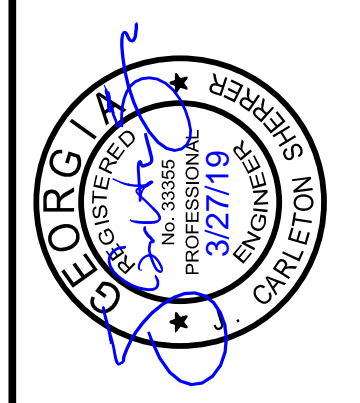


Know what's below.
Call before you dig.



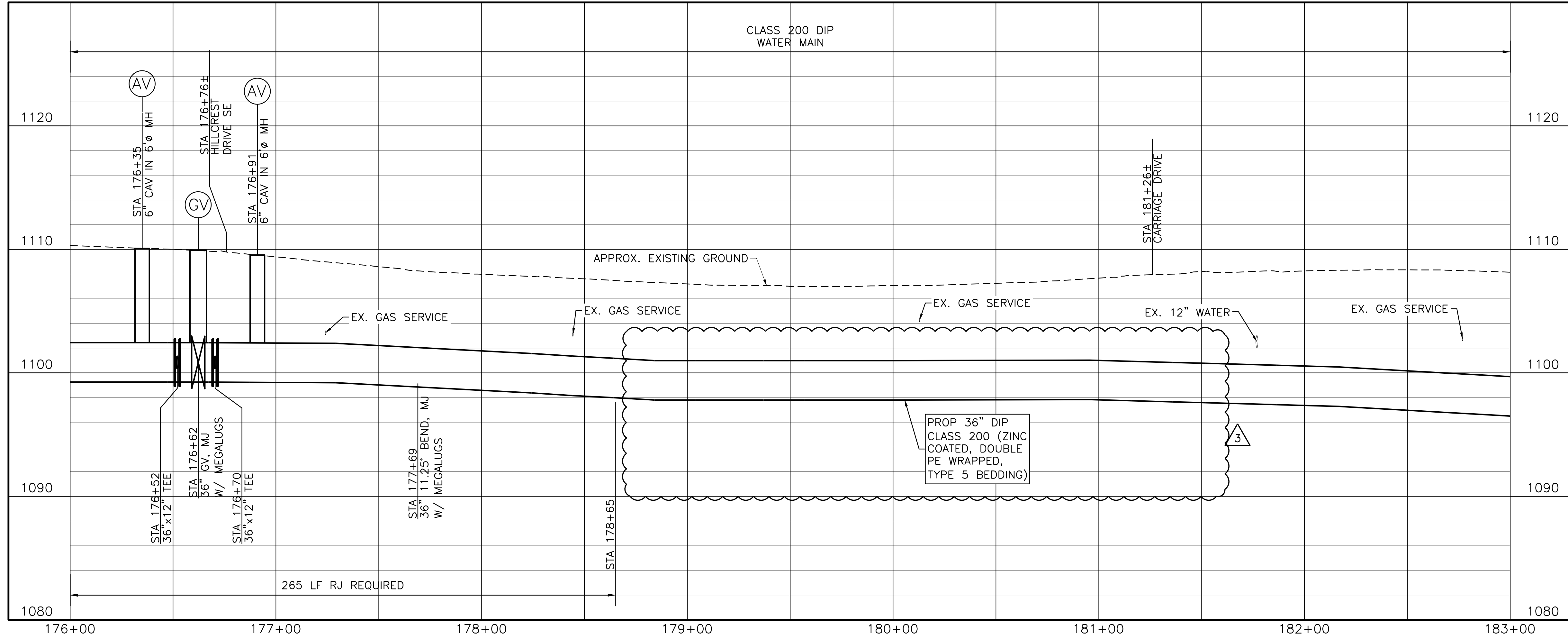
NOTES:

- CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION.



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COBB COUNTY-MARIETTA WATER AUTHORITY
WEST SIDE LOOP SECTION 2
36-INCH WATER MAIN REPLACEMENT
CIVIL
PLAN AND PROFILE
STA 176+00 TO 183+00

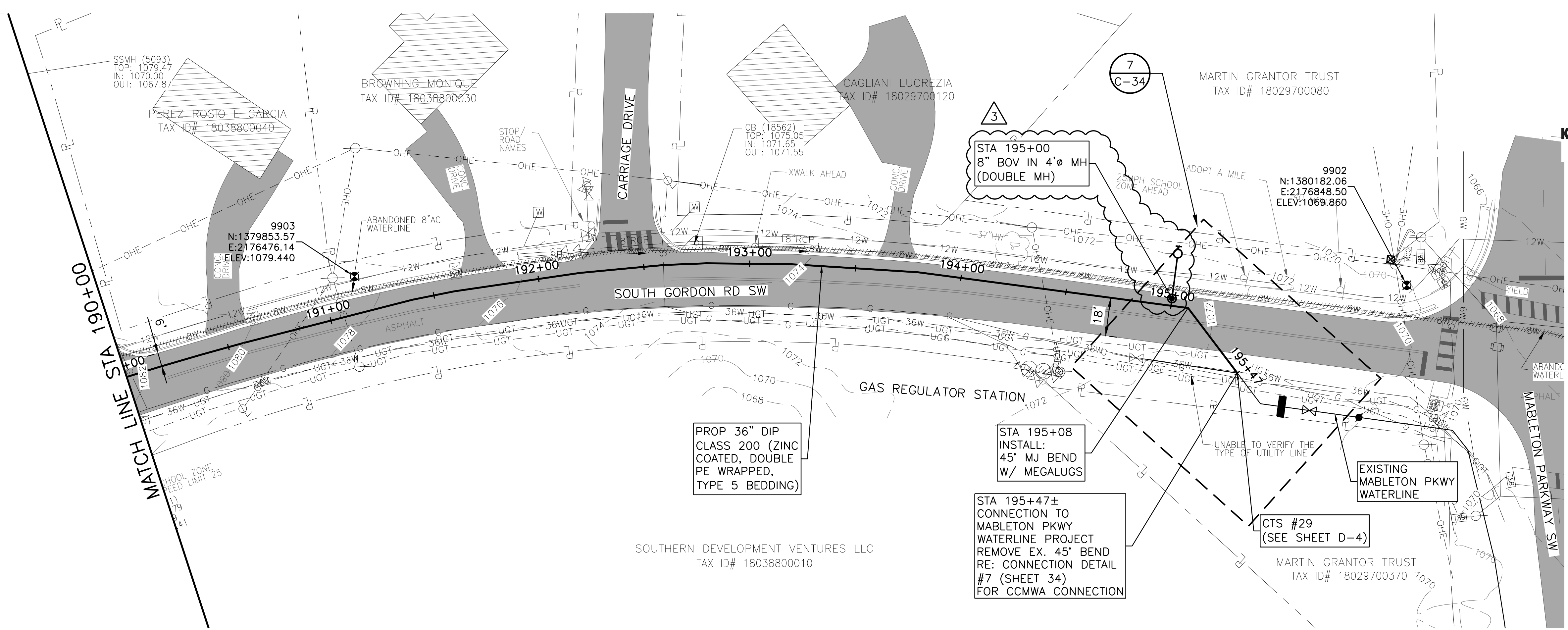


APPENDUM NO. 1	JCS	3/27/19	DESIGNED	FDH
ISSUED FOR BID	JCS	03/01/19	DRAWN	CKM
ISSUED FOR PERMIT	JCS	02/08/19	REVISION	
ISSUE NO.	BY	DATE	CHECKED	JCS
VERIFY SCALE	FILE NAME			CV-ALL-SHT503.dwg
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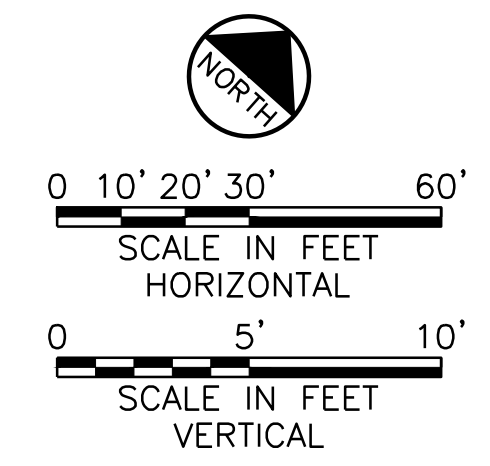
SHEET **C-26**
SEQ. 30

ACAD Ref: 23.0s (LMSTech)
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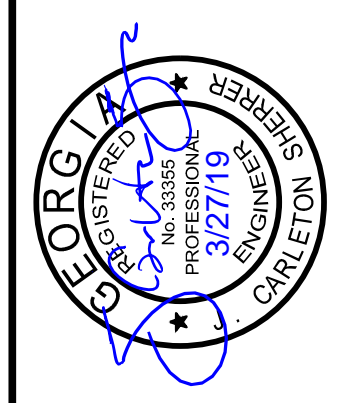
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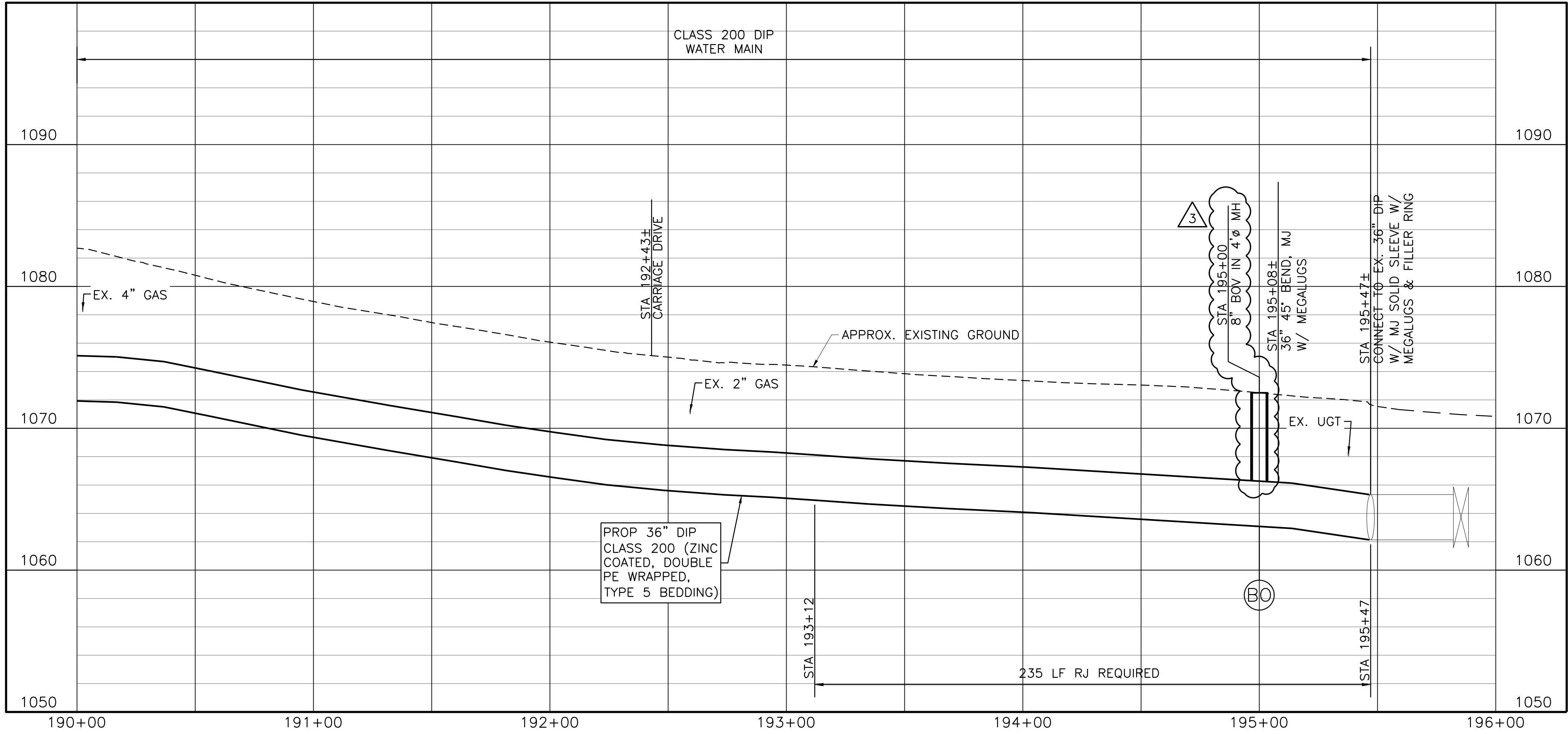
Know what's below.
 Call before you dig.



NOTES:
 1. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION.



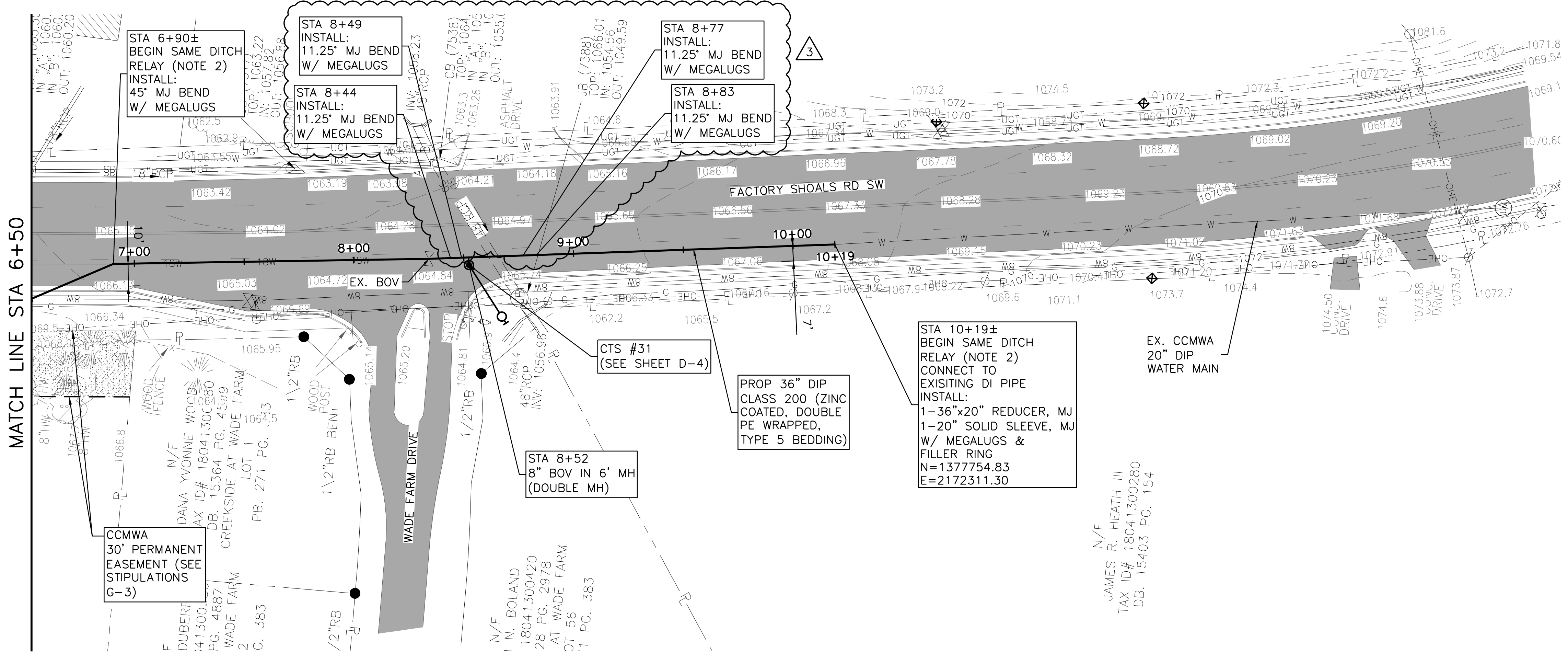
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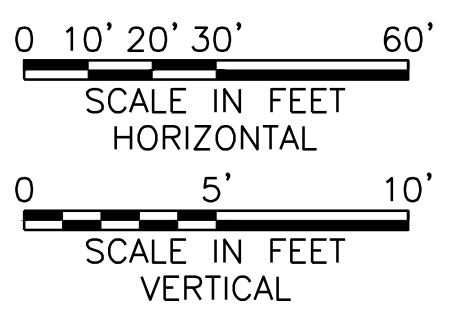
COBB COUNTY-MARIETTA WATER AUTHORITY
 WEST SIDE LOOP SECTION 2
 36-INCH WATER MAIN REPLACEMENT
 CIVIL
 PLAN AND PROFILE
 STA 190+00 TO END

APPENDUM NO. 1	JCS	3/27/19	DESIGNED	FDH
ISSUED FOR BID	JCS	03/01/19	DRAWN	CKM
ISSUED FOR PERMIT	JCS	02/08/19	REVISED	CKM
ISSUE NO.	BY	DATE	CHECKED	JCS
VERIFY SCALE	FILE NAME	CV-ALL-SHTS03.dwg		

ACAD Ref: 23.08 (UMSTech)
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 Last Saved: 3/26/2019 3:26 PM. Saved By: 02618

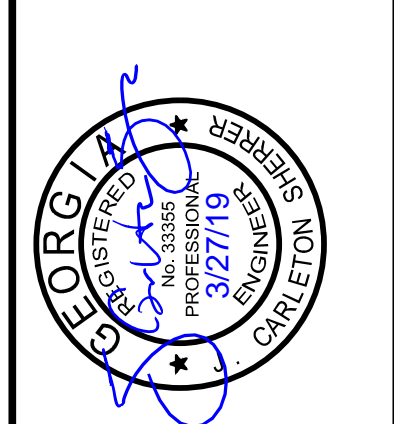
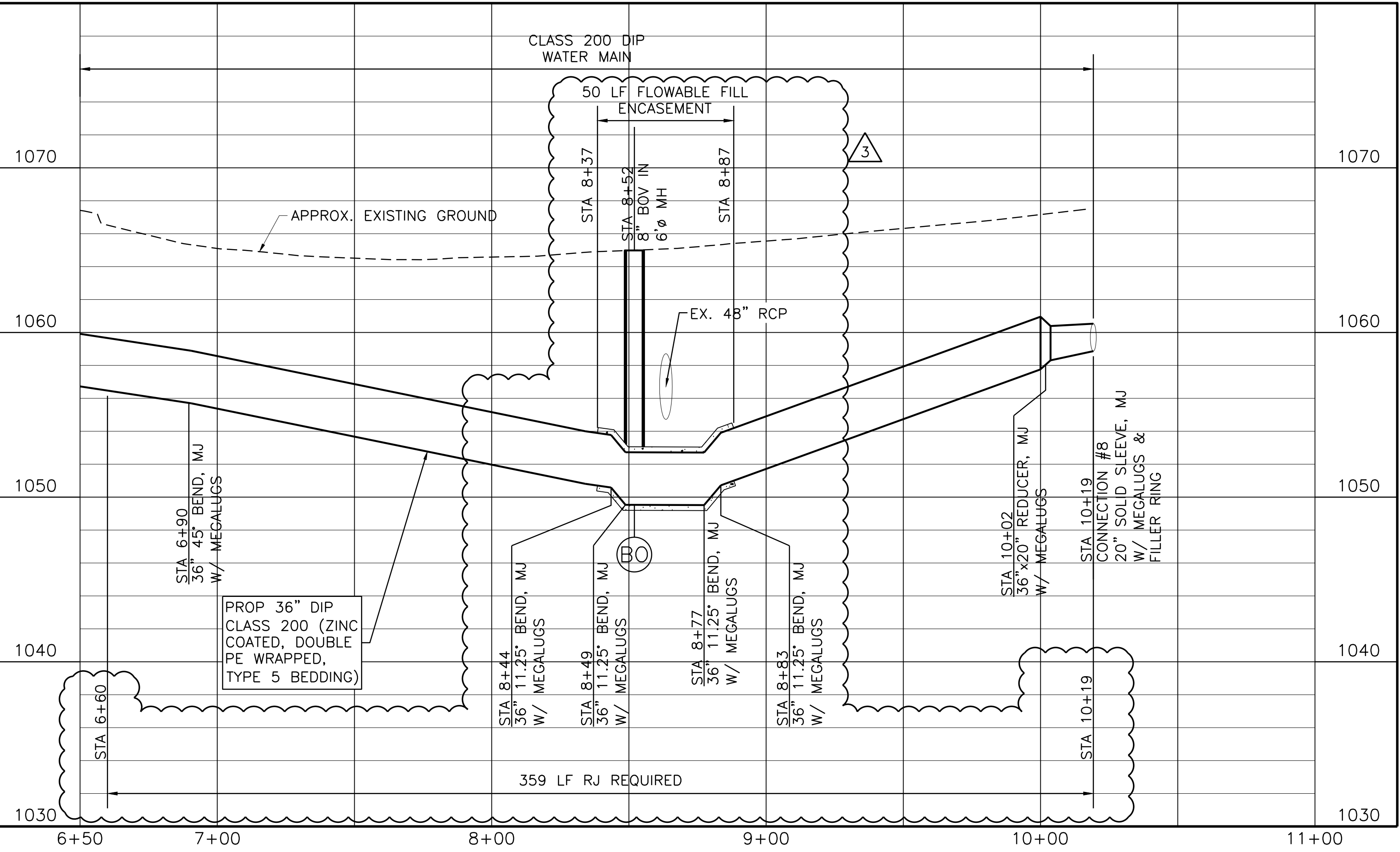


Know what's below.
 Call before you dig.



NOTES:

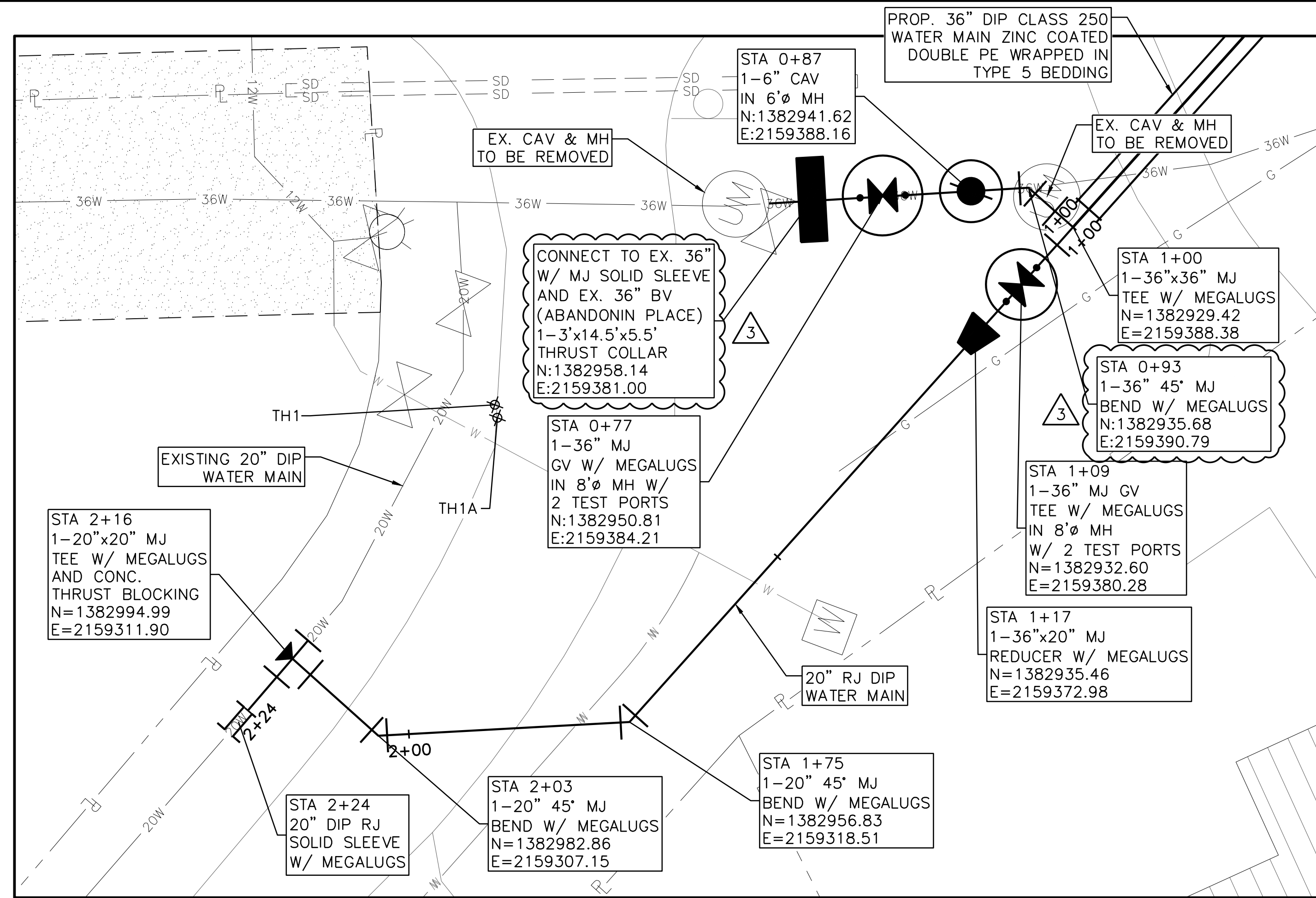
1. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION.
2. CONTRACTOR TO VERIFY LIMIT OF SAME DITCH RELAY BASED ON ACTUAL FIELD CONDITIONS AND REMOVE FULL PIPE JOINTS, BULKHEAD BACKFILL, AND COMPACT AS SPECIFIED. PCCC AND EXISTING STEEL CASING DISPOSED BY CONTRACTOR.



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COBB COUNTY-MARIETTA WATER AUTHORITY
 WEST SIDE LOOP SECTION 2
 36-INCH WATER MAIN REPLACEMENT
 CIVIL
 PLAN AND PROFILE
 STA 6+50 TO END

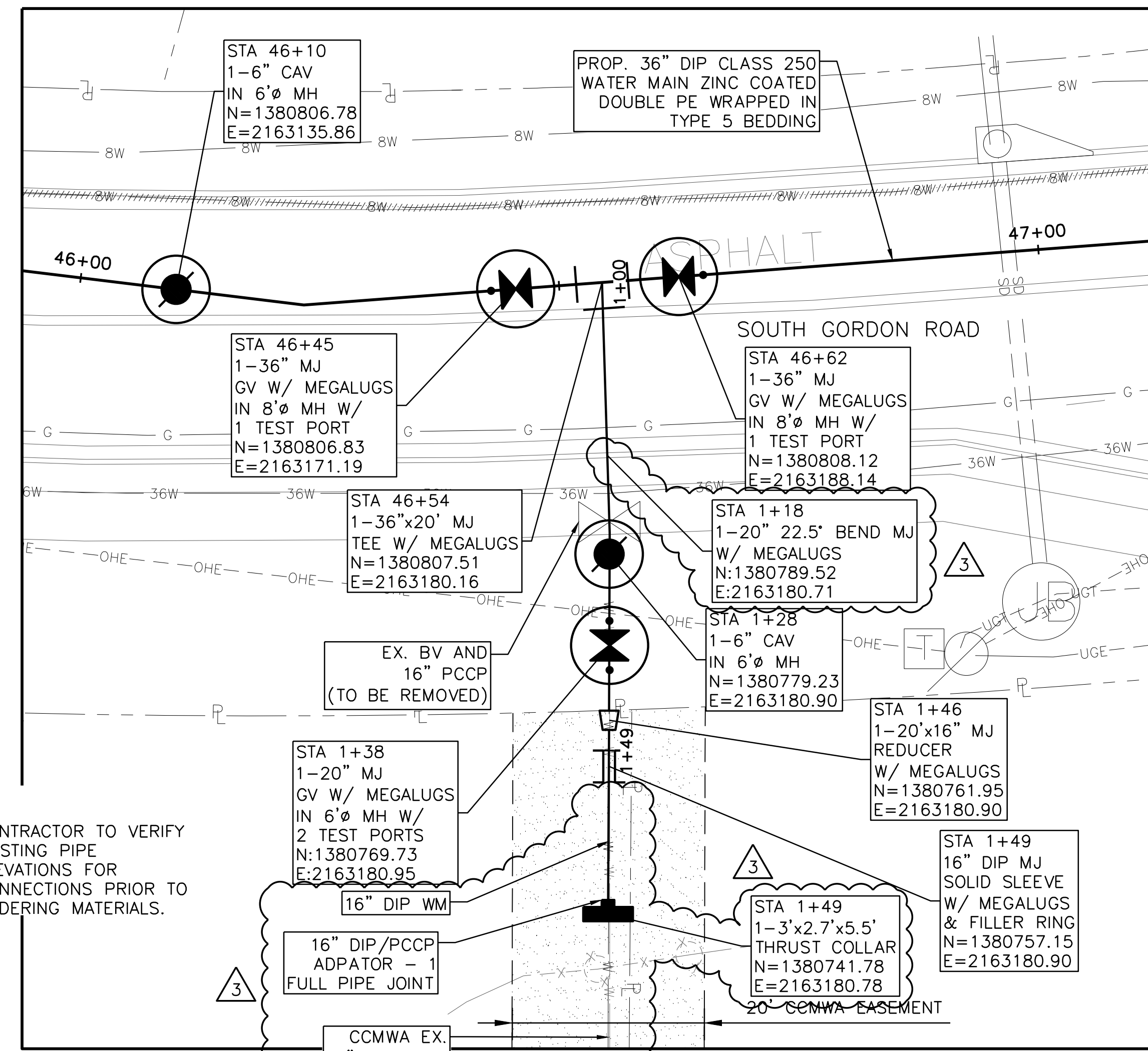
APPENDUM NO. 1	JCS	3/27/19	DESIGNED	FDH
ISSUED FOR BID	JCS	03/01/19	DRAWN	CKM
ISSUED FOR PERMIT	JCS	02/08/19	REVISION	CKM
VERIFY SCALE	BY	DATE	CHECKED	JCS
NO.			FILE NAME	CV-ALL-SHTS04.dwg



DETAIL CONNECTION #1
STA 1+00±

SCALE IN FEET
 HORIZONTAL 0 10' 20' 0 2' 4'

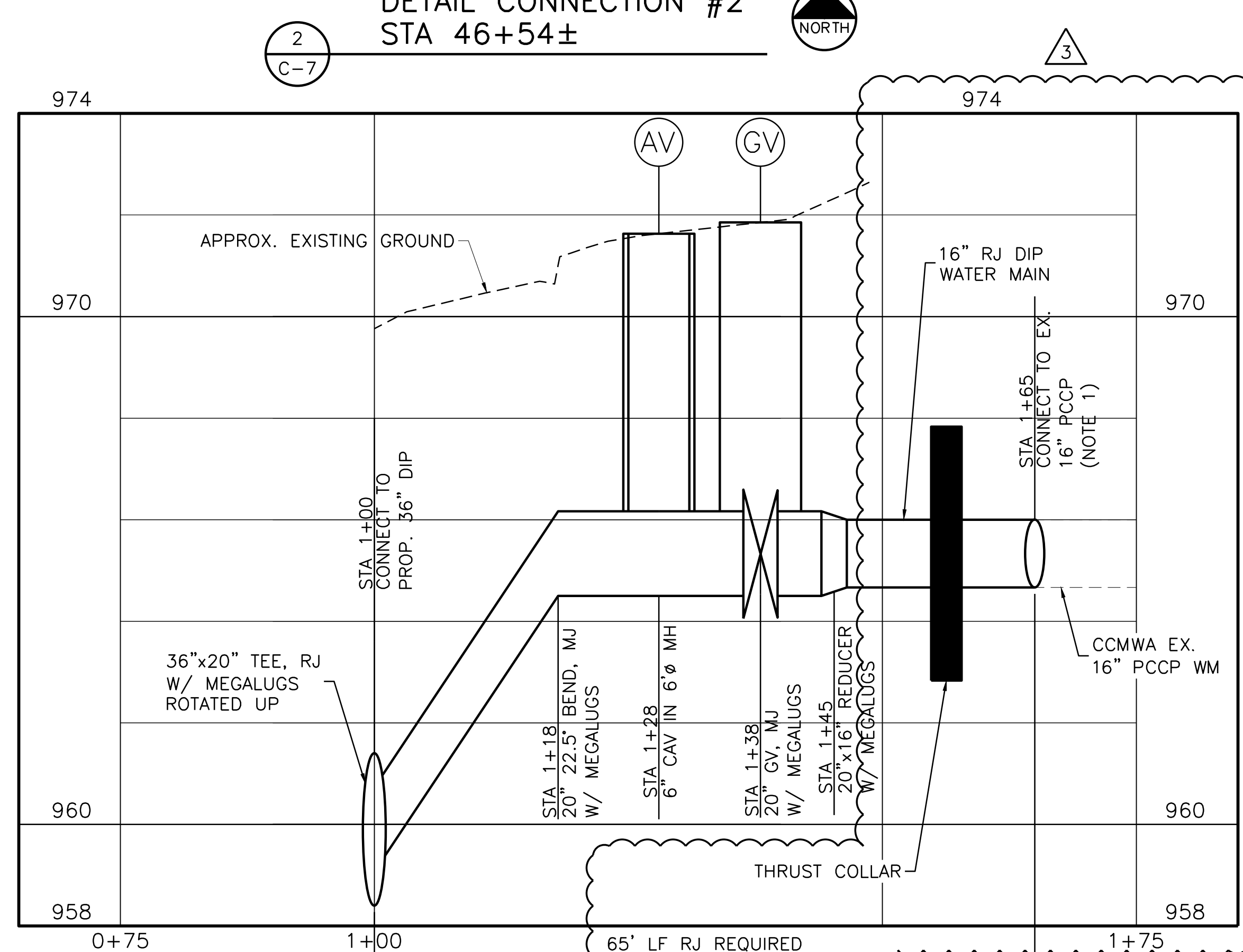
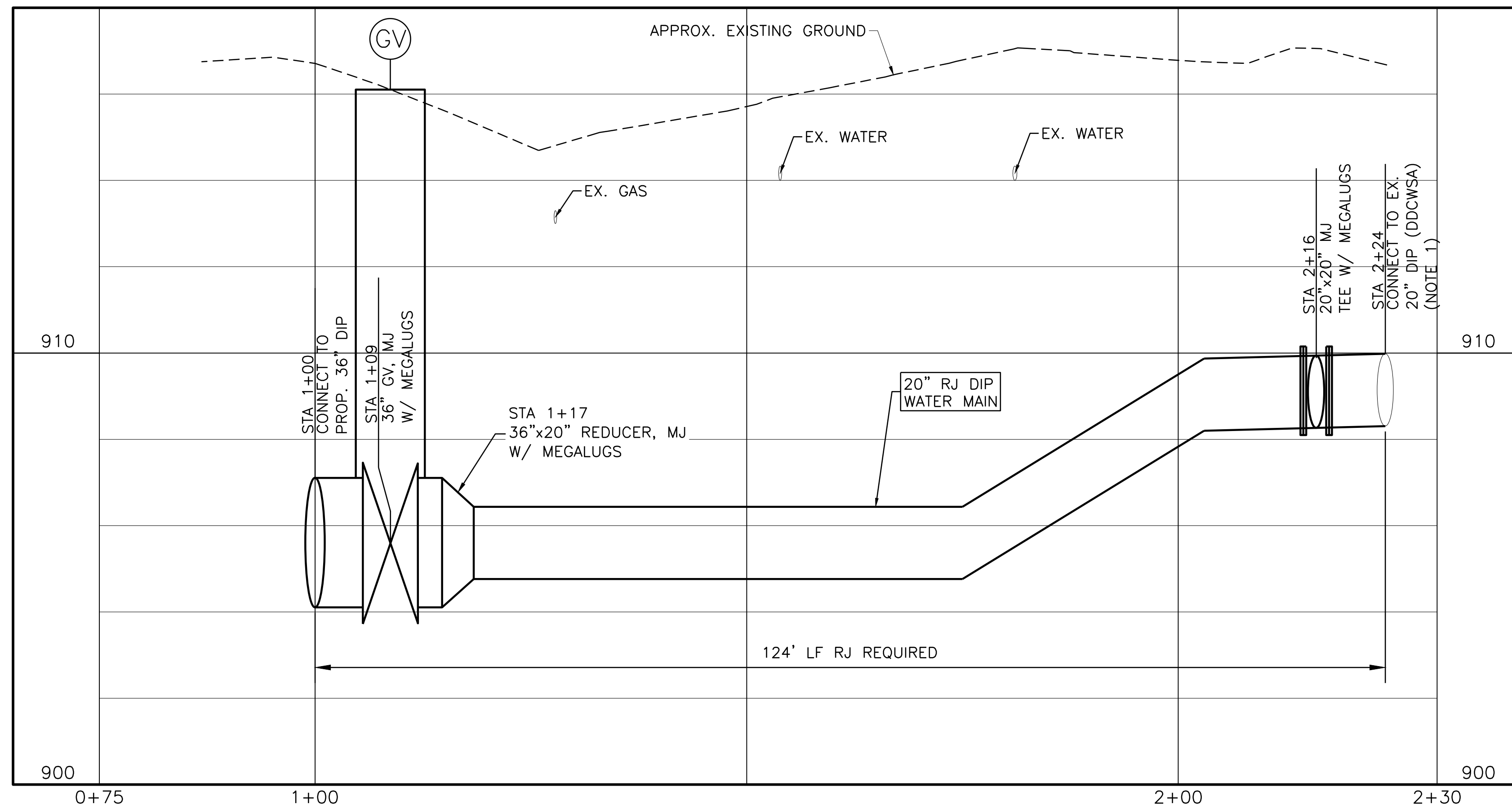
SCALE IN FEET
 VERTICAL 0 2' 4'



NOTES:

1. CONTRACTOR TO VERIFY EXISTING PIPE ELEVATIONS FOR CONNECTIONS PRIOR TO ORDERING MATERIALS.

DETAIL CONNECTION #2
STA 46+54±



NO.	ISSUE	DATE	BY	CHECKED	FILE NAME
0	ISSUED FOR PERMIT	02/08/19	CKM		CV-ALL-SHT_DTL.dwg
1	ISSUED FOR BID	03/01/19	FDH		
2	DESIGNED	3/7/19	JCS		

ADDENDUM NO. 1
 ISSUED FOR BID
 ISSUED FOR PERMIT

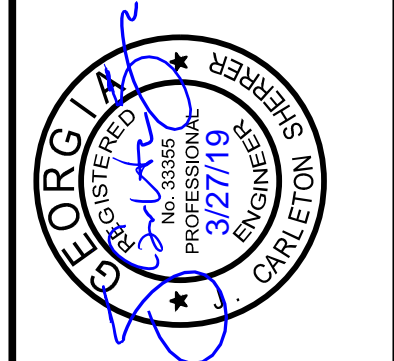
VERIFY SCALE: Bar is one inch on original drawing, if not one inch on this sheet, adjust scale.

SHEET NO. 0

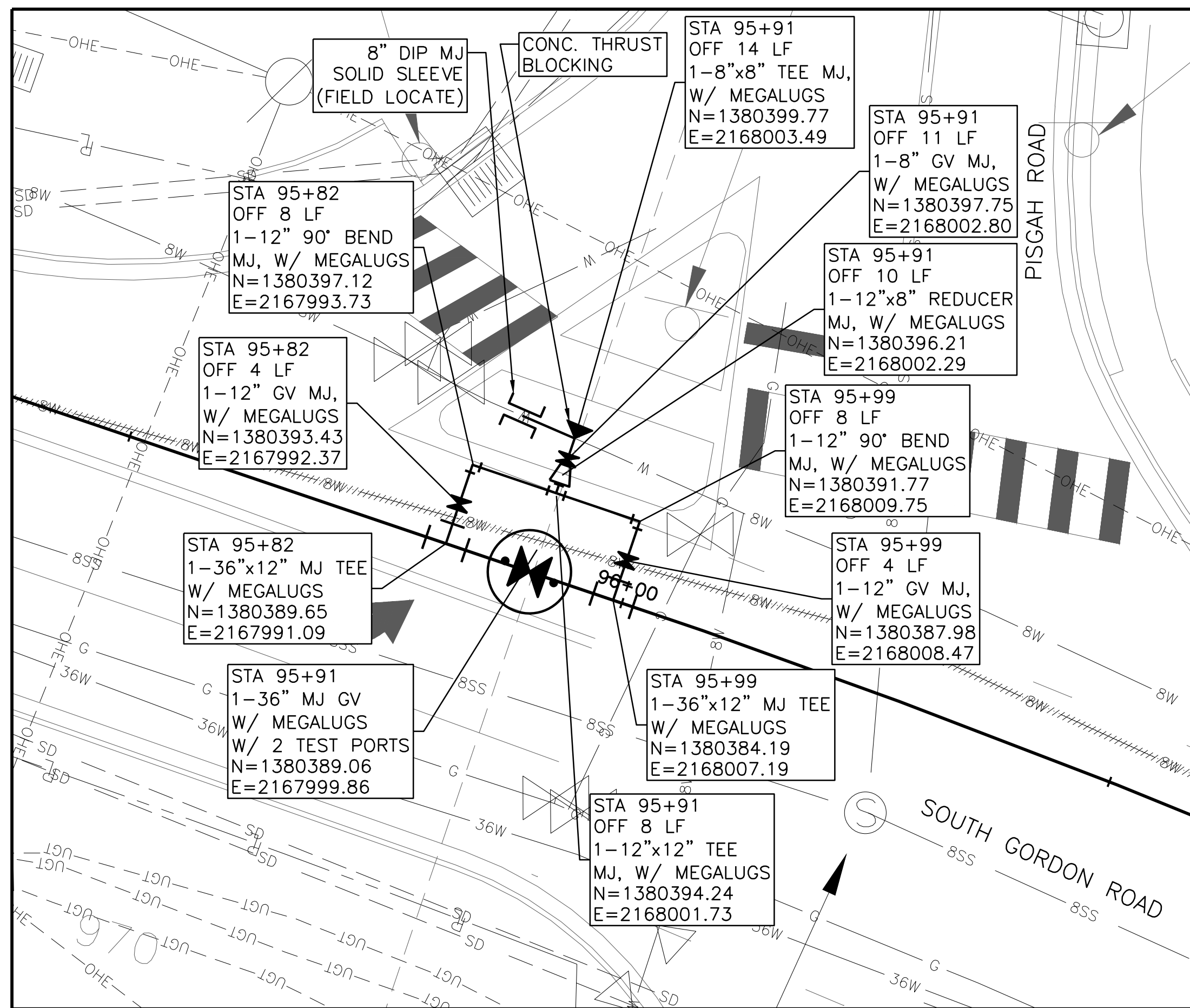
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COBB COUNTY-MARIETTA WATER AUTHORITY
 WEST SIDE LOOP SECTION 2
 36-INCH WATER MAIN REPLACEMENT

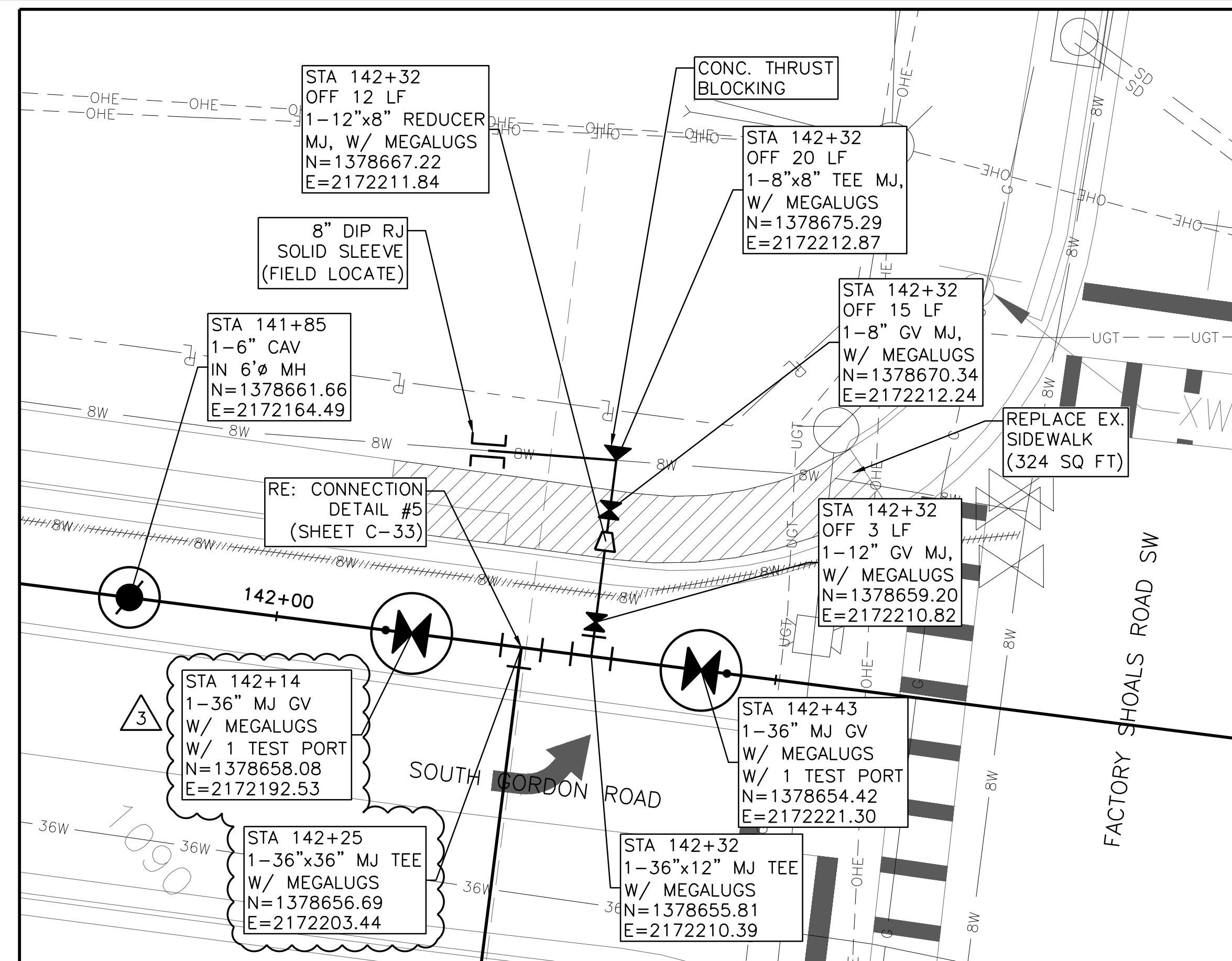
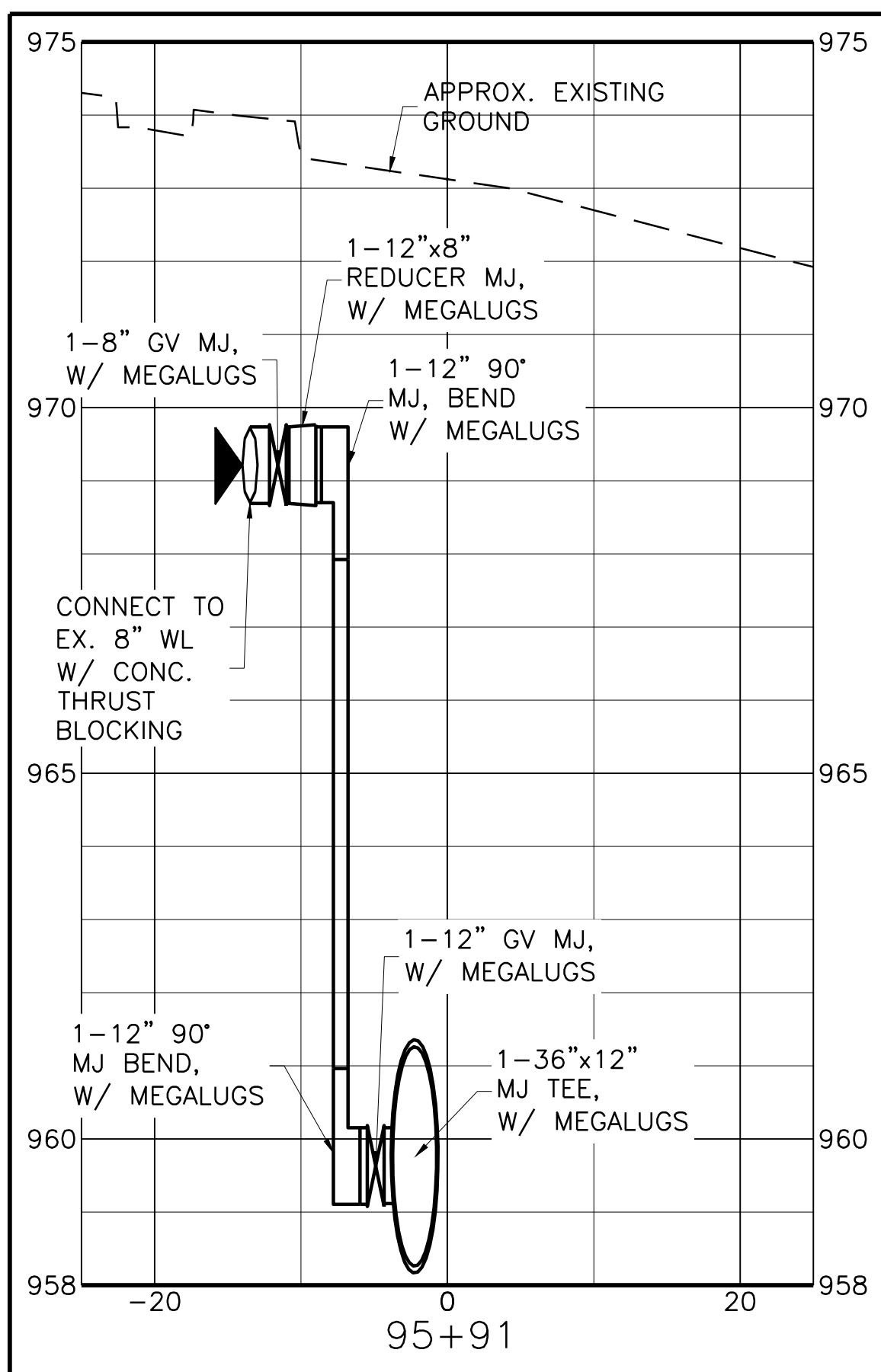
FREES & NICHOLS
 REGISTERED PROFESSIONAL ENGINEERS
 360 Interstate North Parkway,
 Atlanta, GA 30339
 Phone (404) 334-4310
 Web www.freese.com



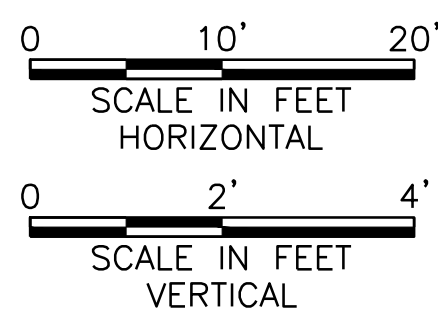
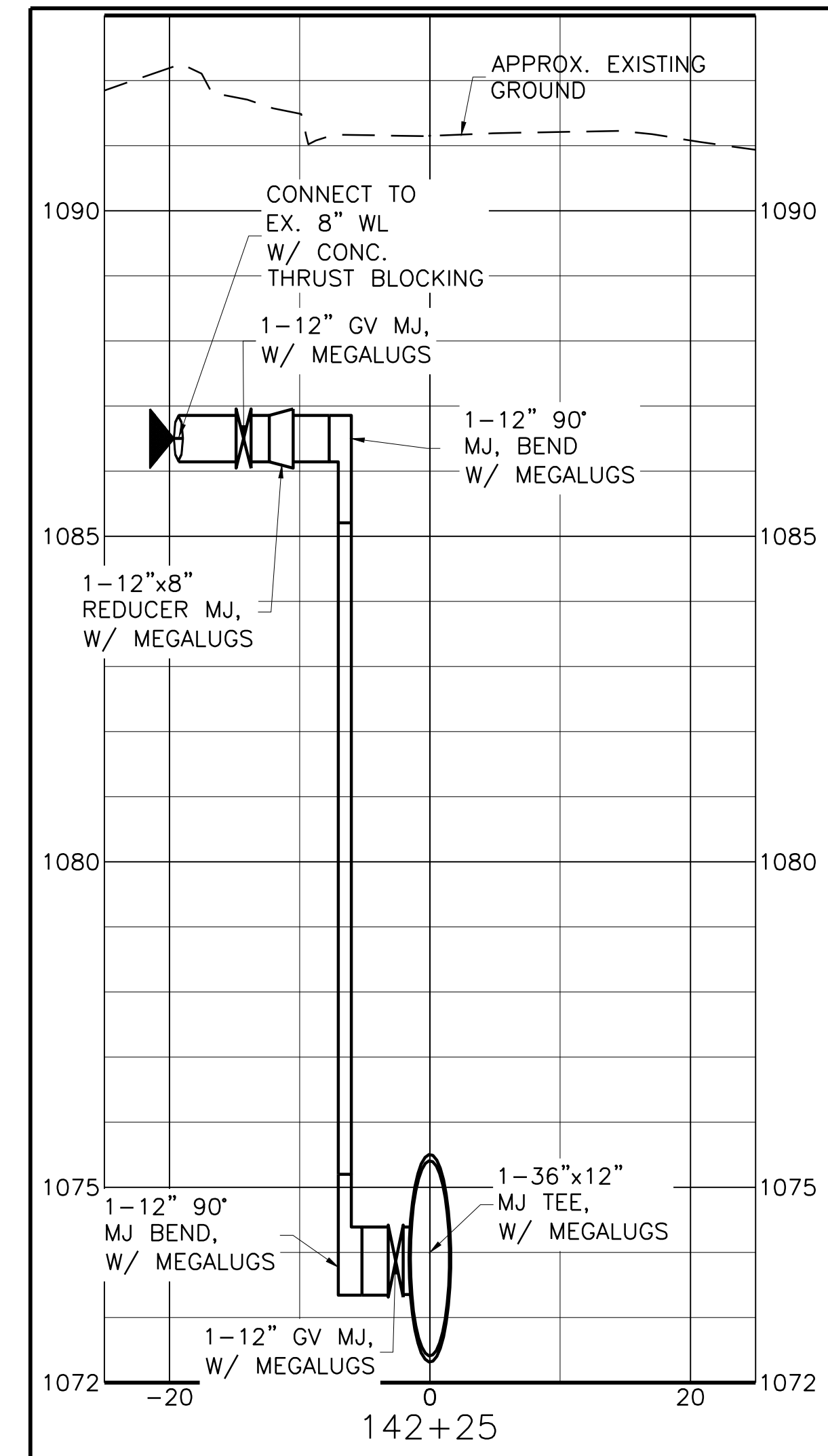
CONNECTION DETAILS (1 OF 4)



DETAIL CONNECTION #3
STA 95+91±

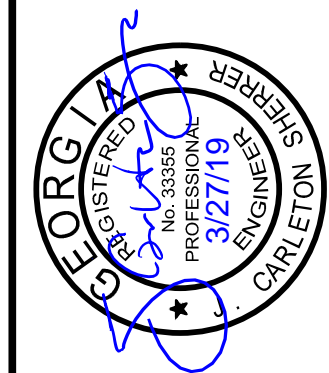


DETAIL CONNECTION #4
STA 142+25±



NOTES:

1. CONTRACTOR TO VERIFY EXISTING PIPE ELEVATIONS FOR CONNECTIONS PRIOR TO ORDERING MATERIALS.
2. ALL VALVE, FITTINGS, AND SPECIALS FOR CONNECTIONS TO BE MJ W/ MEGALUGS FOR RESTRAINT.



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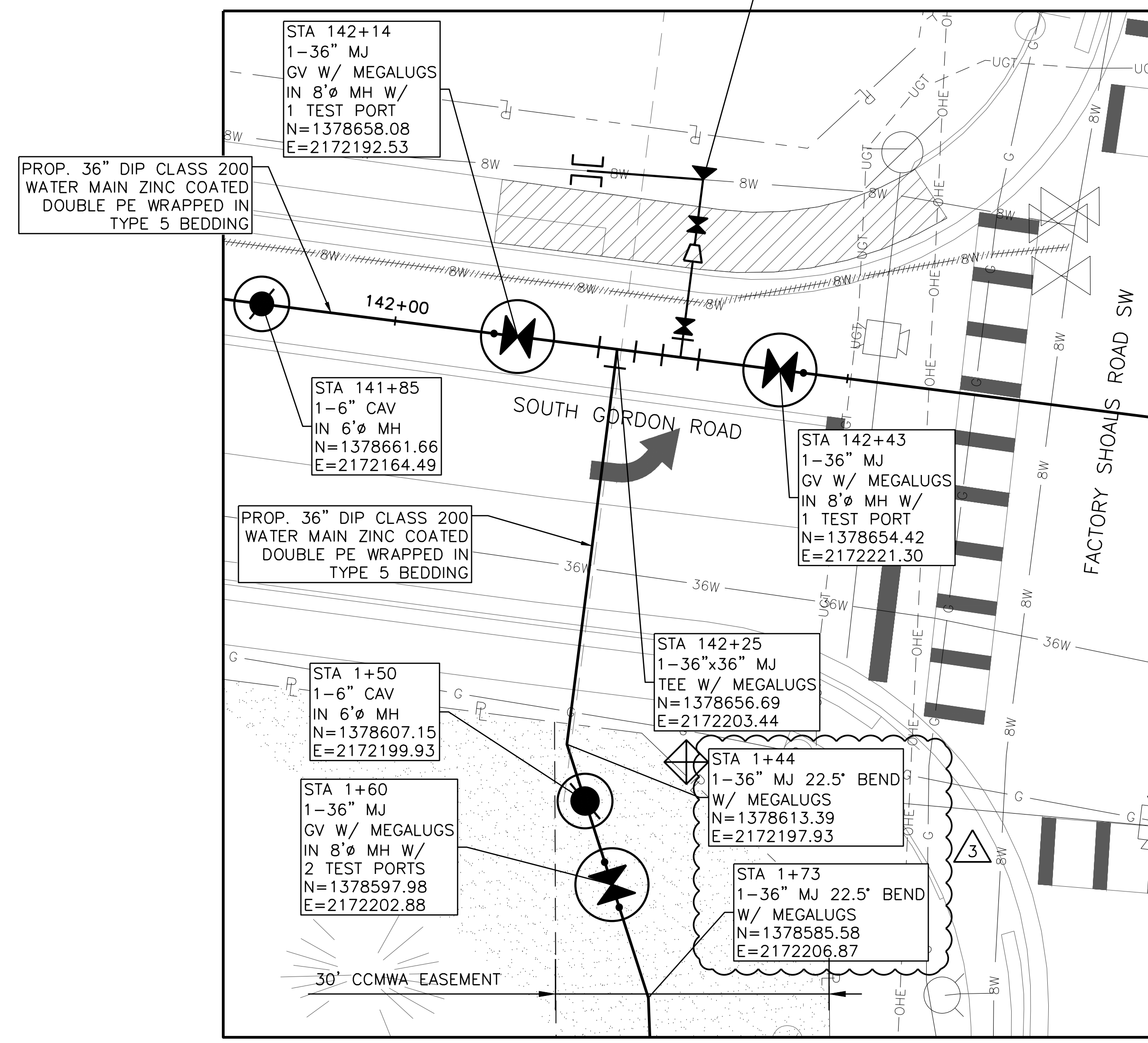
COBB COUNTY-MARIETTA WATER AUTHORITY
WEST SIDE LOOP SECTION 2
36-INCH WATER MAIN REPLACEMENT

CIVIL
PLAN AND PROFILE
CONNECTION DETAILS (2 OF 4)

REV. NO.	DATE	BY	REVISION
1	03/01/19	JCS	ISSUED FOR BID
2	03/01/19	JCS	ISSUED FOR PERMIT
3	02/08/19	JCS	REVISED
4	3/27/19	JCS	DESIGNED
5	3/7/19	JCS	DRAWN

SHEET
C-32
SEQ. 36

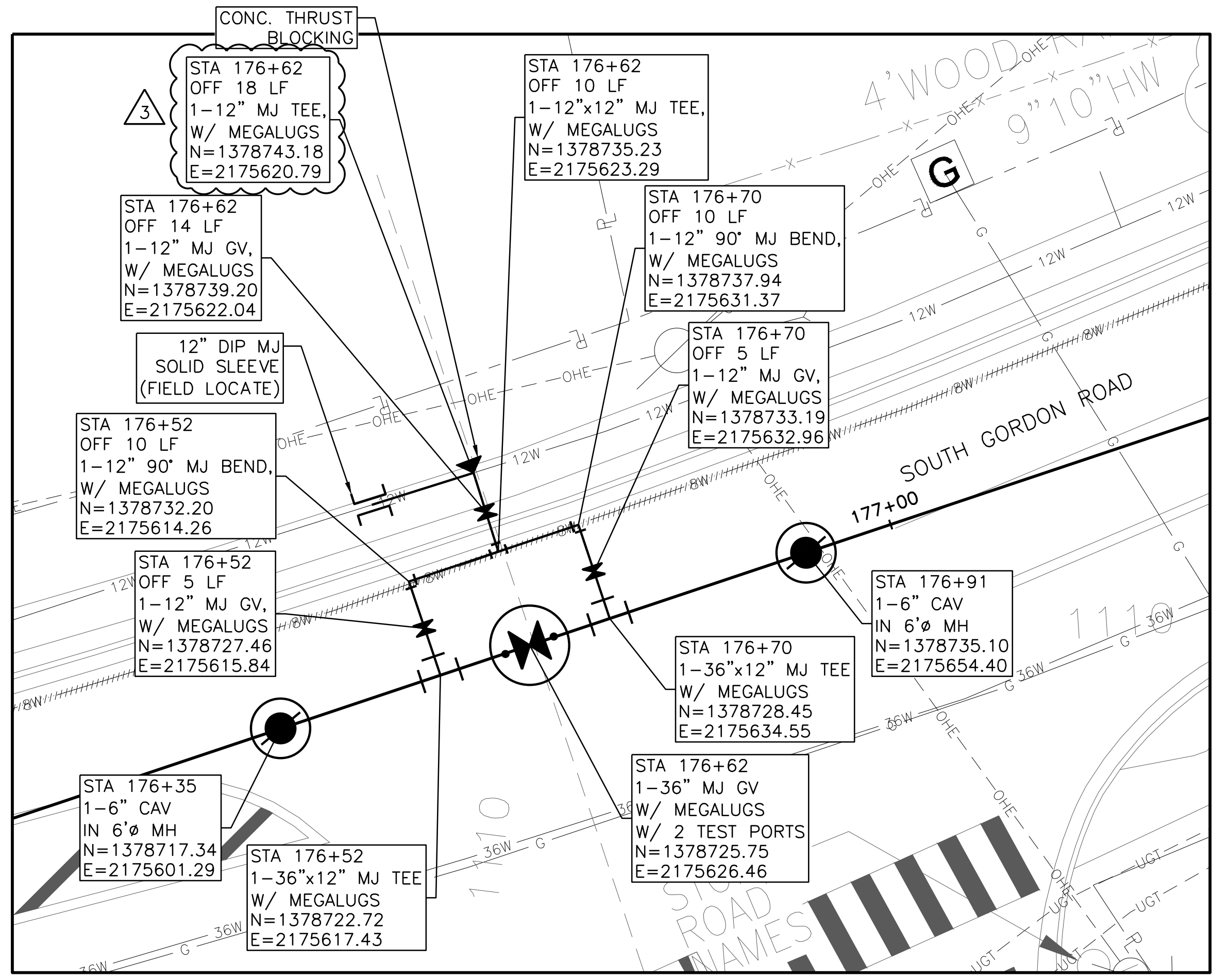
ACAD Ref: 23.0s (UMSTech)
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 Last Saved: 3/26/2019 3:35 PM. Saved By: 02618



DETAIL CONNECTION #5
 STA 142+25±/1+00±

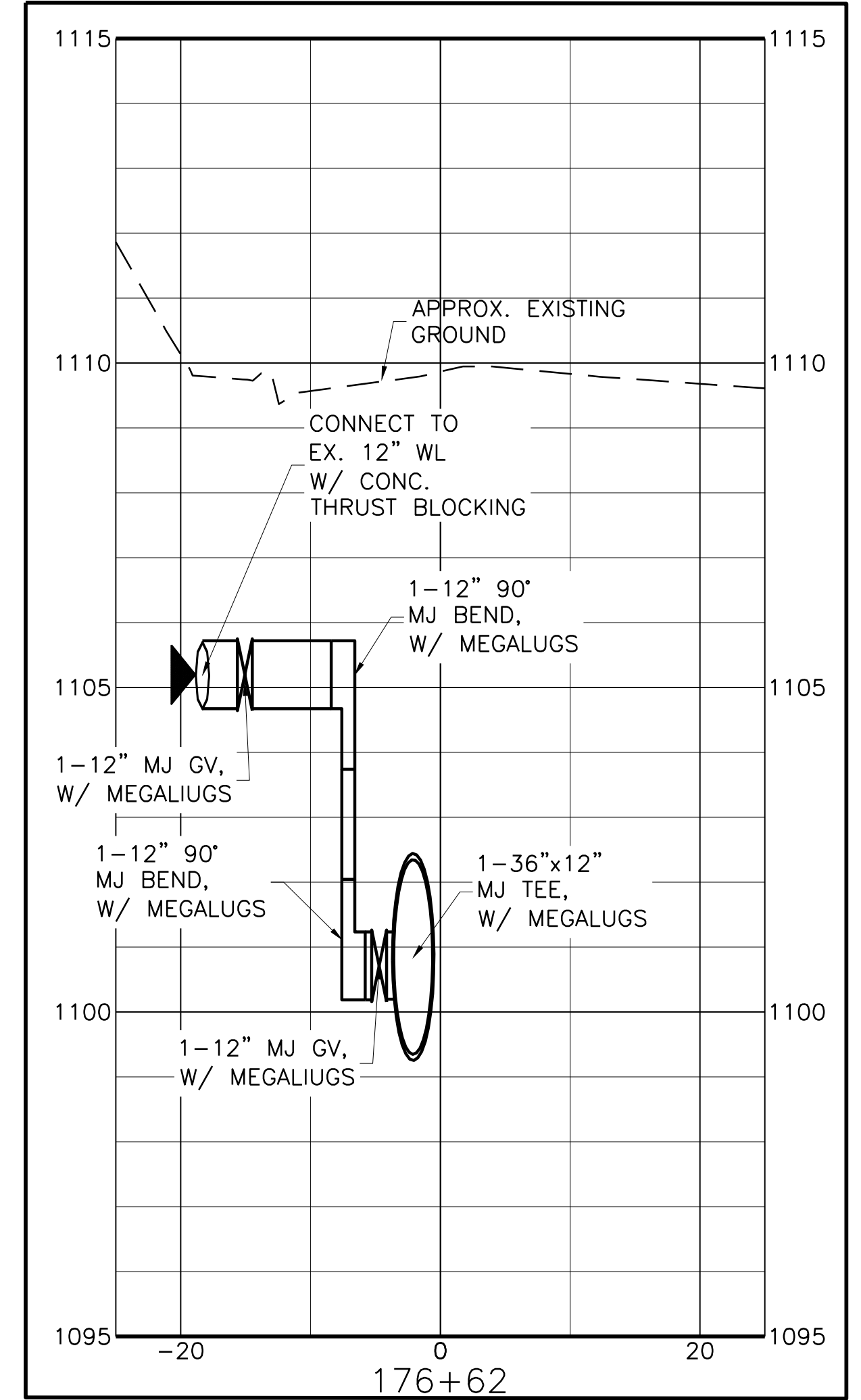
5
 C-21/C-29

NOTE:
 REFER TO SHEET
 C-29 FOR PROFILE

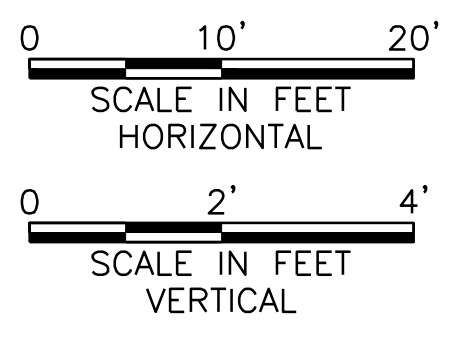


DETAIL CONNECTION #6
 STA 176+62±

6
 C-26

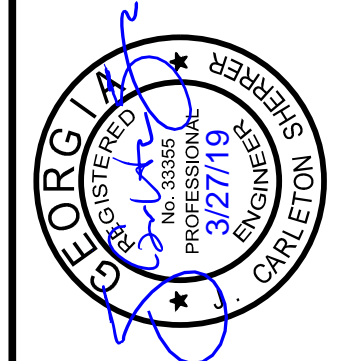


Know what's below.
 Call before you dig.



NOTES:

- CONTRACTOR TO VERIFY EXISTING PIPE ELEVATIONS FOR CONNECTIONS PRIOR TO ORDERING MATERIALS.
- ALL VALVE, FITTINGS, AND SPECIALS FOR CONNECTIONS TO BE MJ W/ MEGALUGS FOR RESTRAINT.

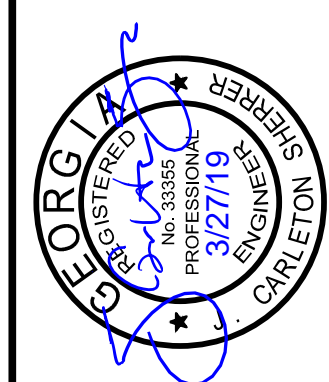


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COBB COUNTY-MARIETTA WATER AUTHORITY
WEST SIDE LOOP SECTION 2
36-INCH WATER MAIN REPLACEMENT
 CIVIL
CONNECTION DETAILS (3 OF 4)

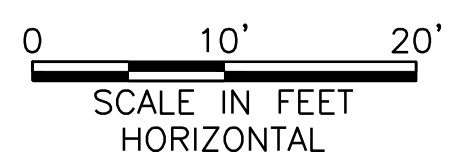
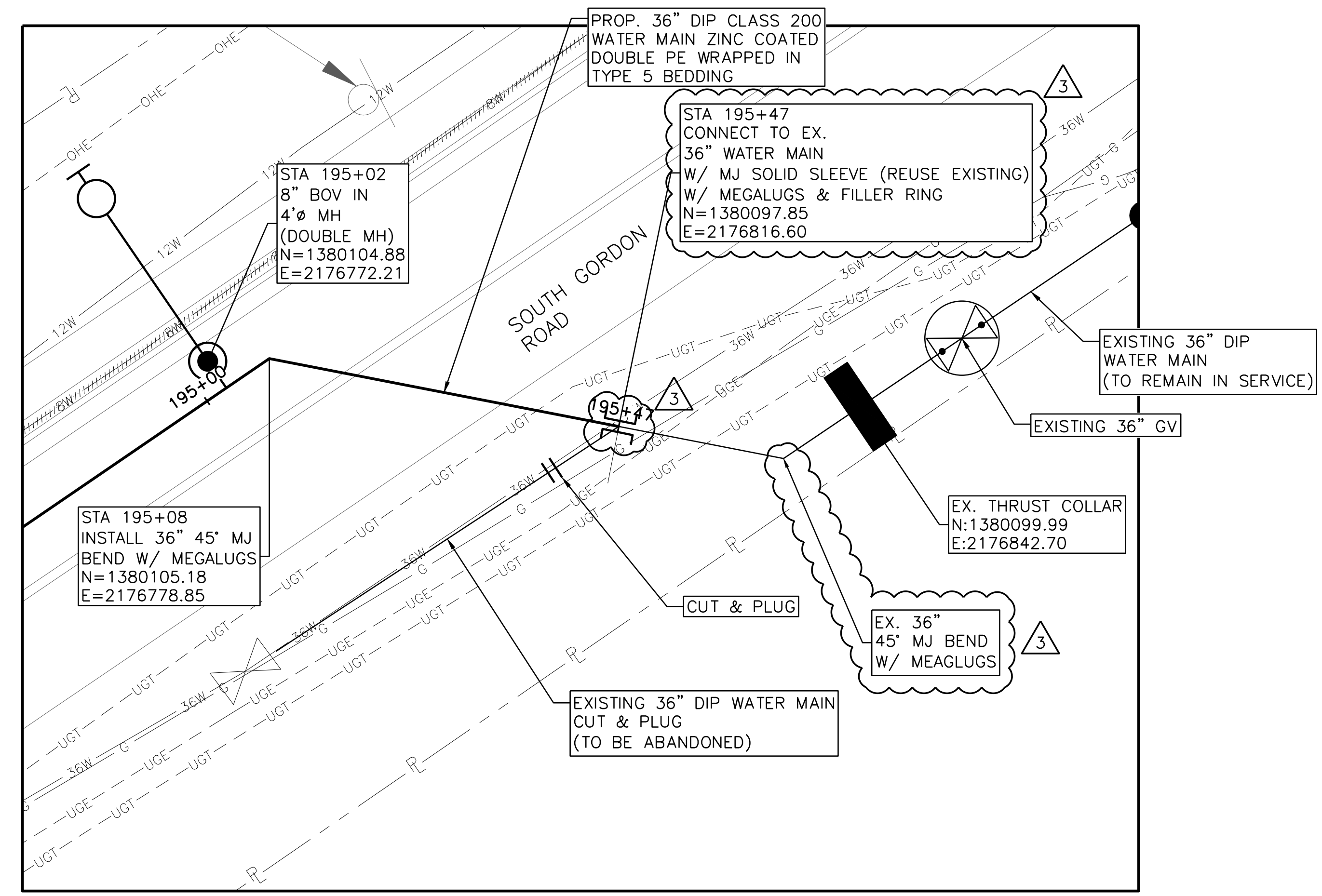
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ADDENDUM NO.	1	ISSUED FOR BID	3/27/19	ISSUED FOR PERMIT	3/27/19	ISSUE	NO.	FILE NAME	CV-ALL-SHT_DTL.dwg
VERIFY SCALE	0	Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.							

SHEET **C-33**
 SEQ. 37



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COBB COUNTY-MARIETTA WATER AUTHORITY
 WEST SIDE LOOP SECTION 2
 36-INCH WATER MAIN REPLACEMENT
 CIVIL
 PLAN AND PROFILE
 CONNECTION DETAILS (4 OF 4)



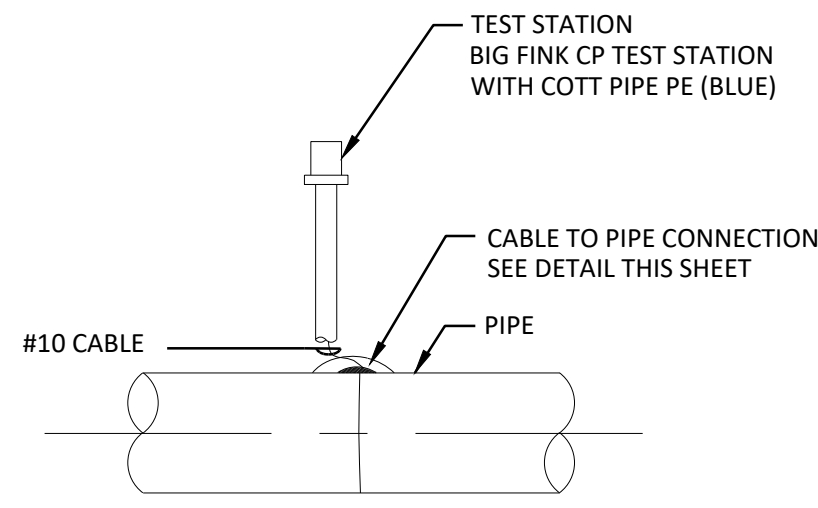
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 C-28

DETAIL CONNECTION #7
STA 195+47±

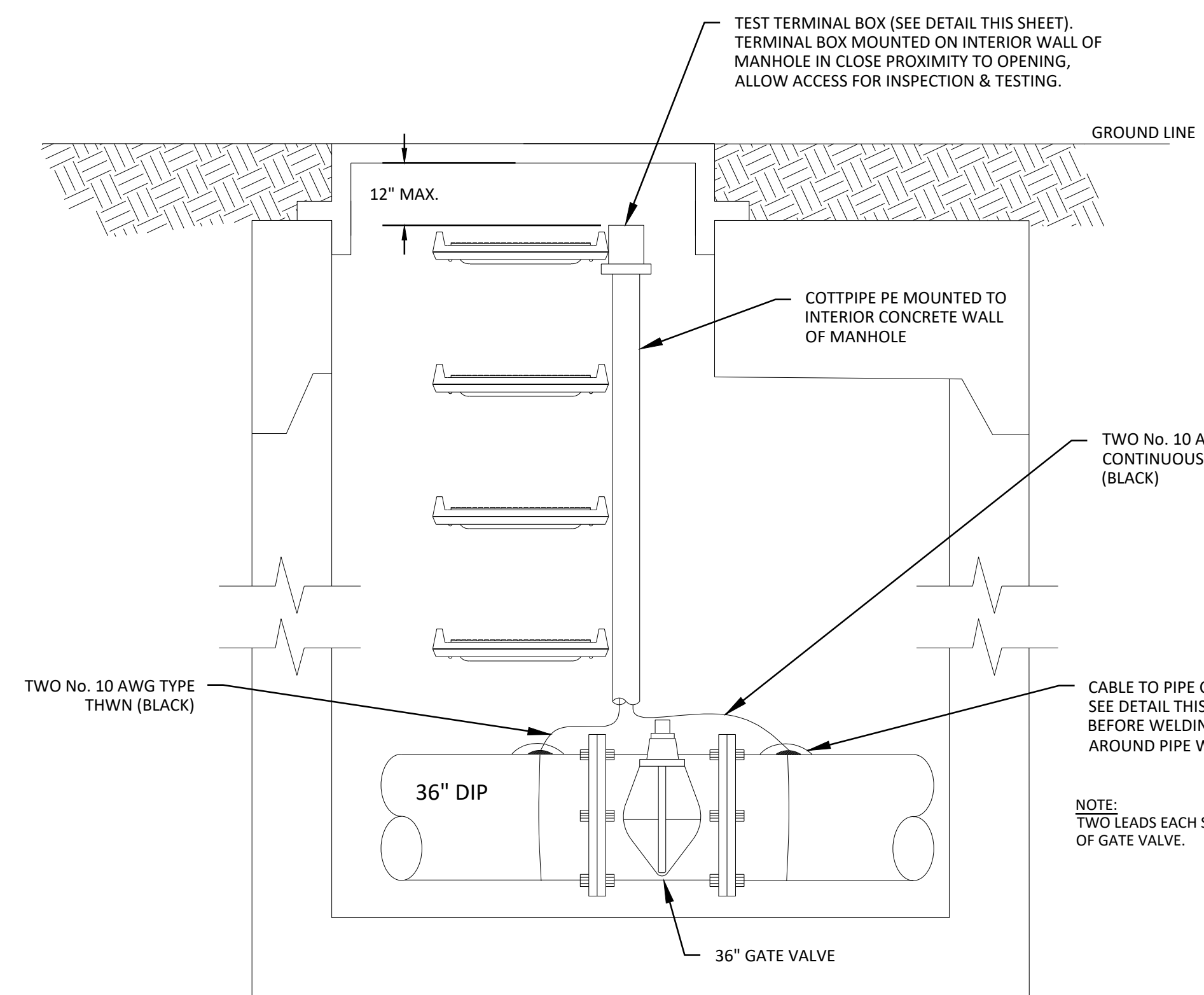
NORTH

NOTE:
 REFER TO SHEET
 C-28 FOR PROFILE

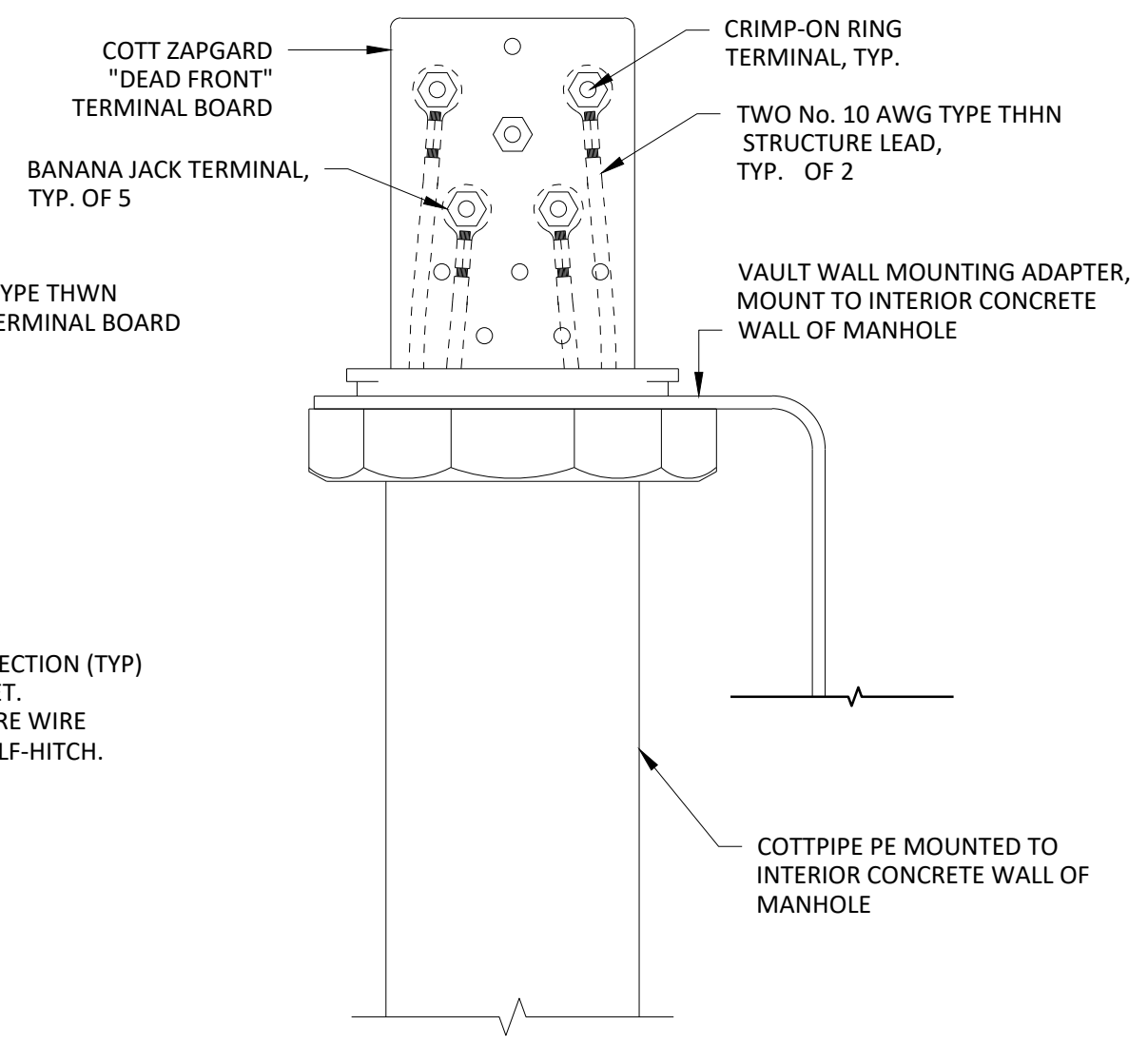
PROJ. NO.	CBR18213
DATE	3/7/19
DESIGNED	FDH
DRAWN	CKM
REVISION	
CHECKED	JCS
FILE NAME	CV-ALL-SHT_DTL.dwg
ADDENDUM NO. 1	JCS 3/27/19
ISSUED FOR BID	JCS 03/01/19
ISSUED FOR PERMIT	JCS 02/08/19
ISSUE NO.	BY
VERIFY SCALE	0
Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.	



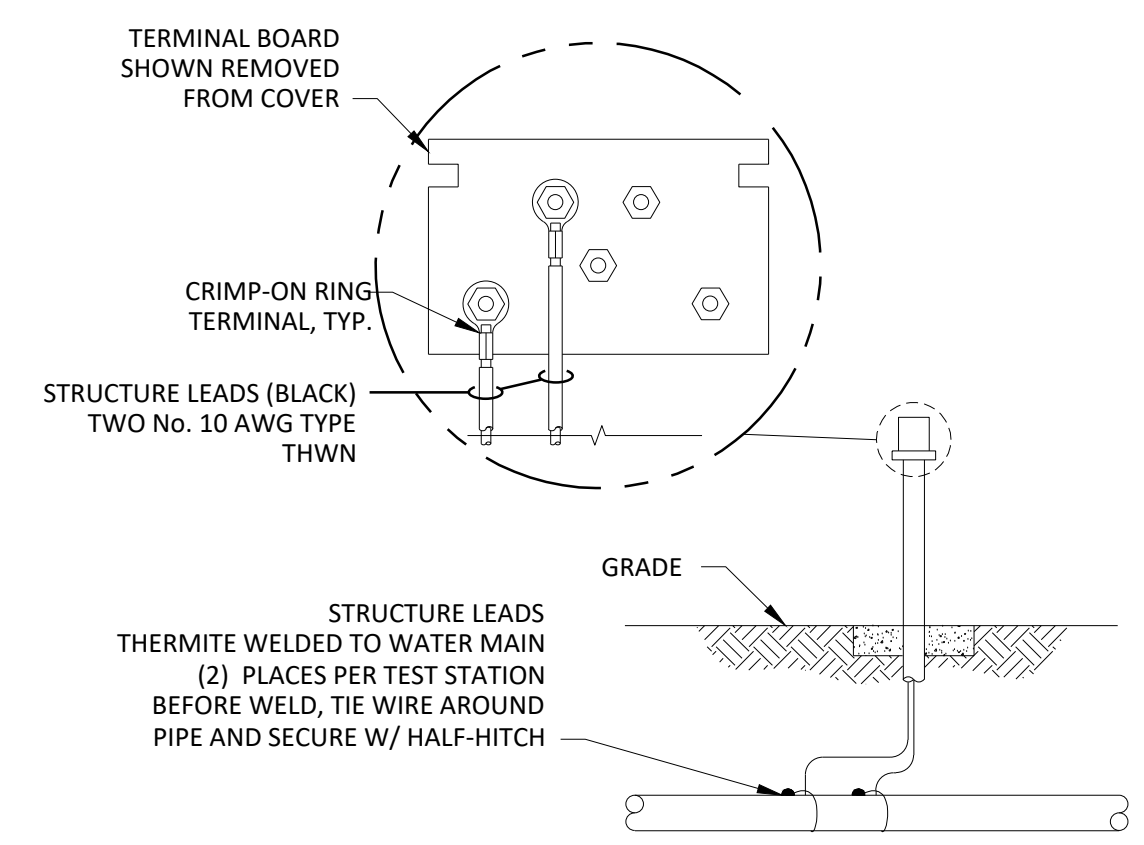
CATHODIC TEST STATION DETAIL
SCALE: N.T.S.



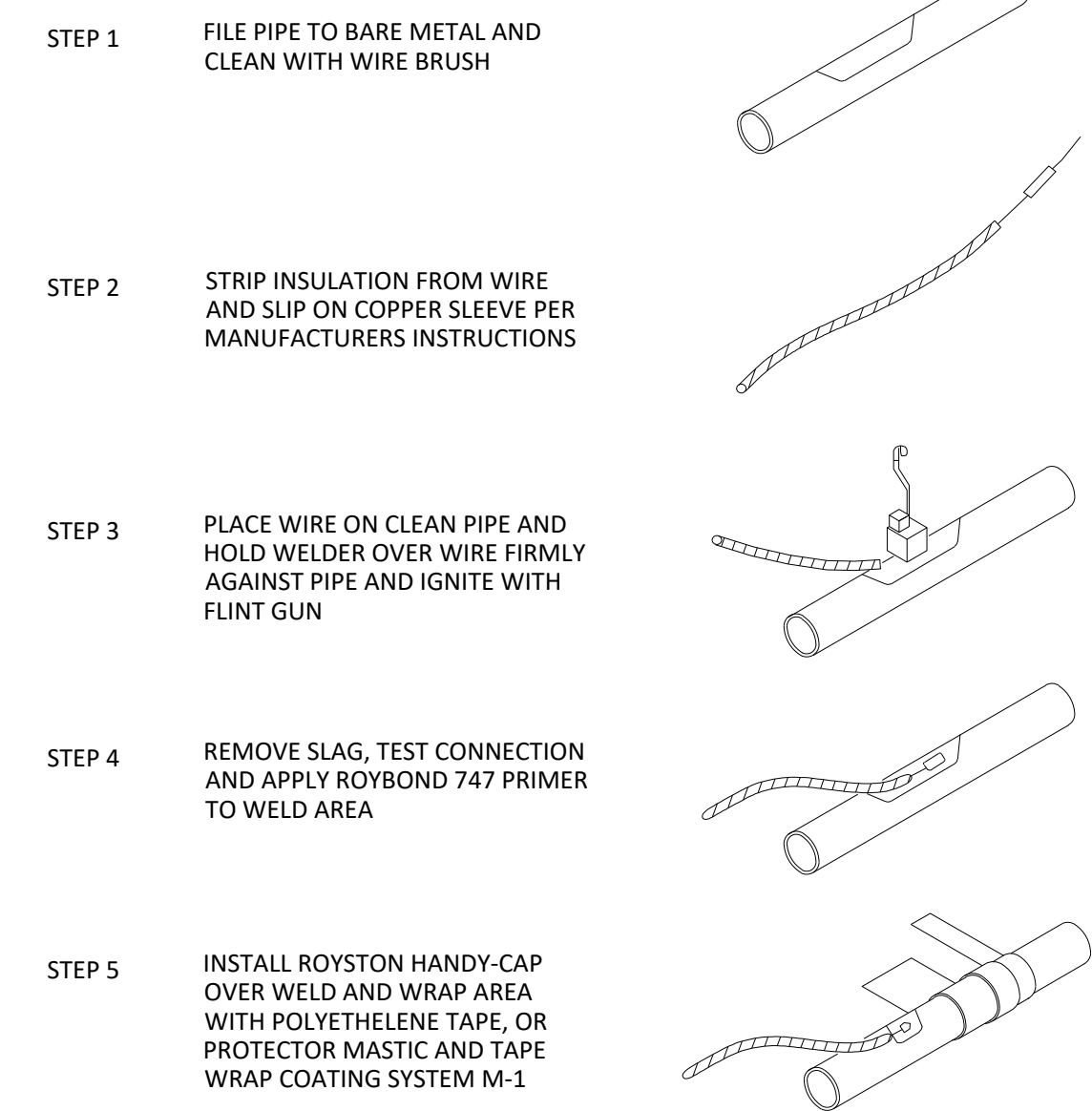
CATHODIC TEST STATION INSIDE MANHOLE
SCALE: N.T.S.



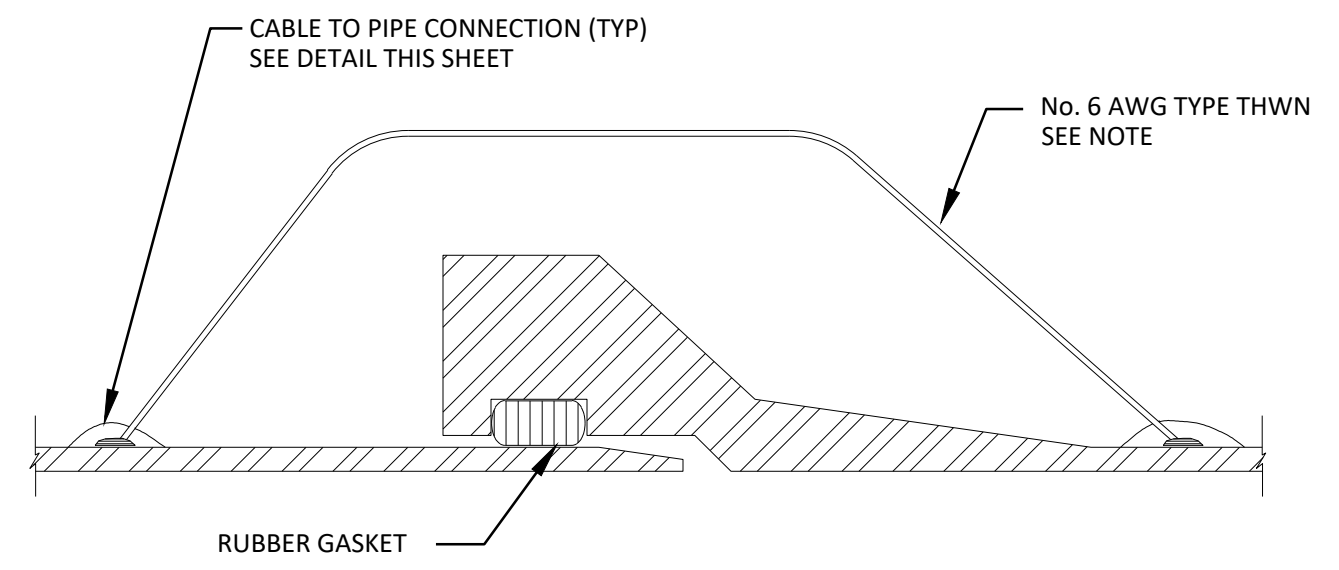
TEST TERMINAL BOX INSIDE MANHOLE
SCALE: N.T.S.



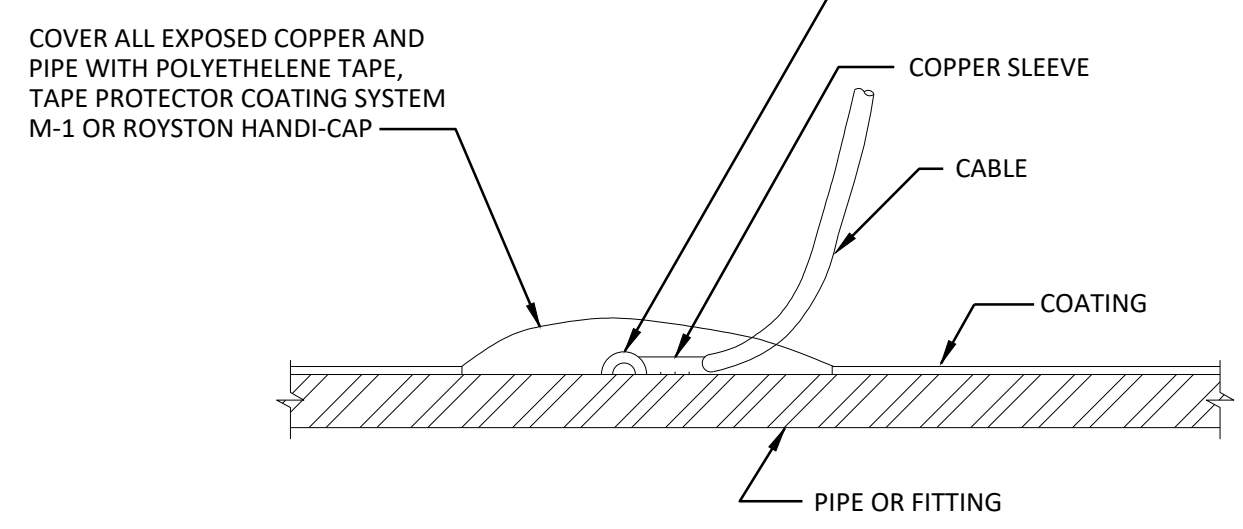
CATHODIC TEST STATION
SCALE: N.T.S.



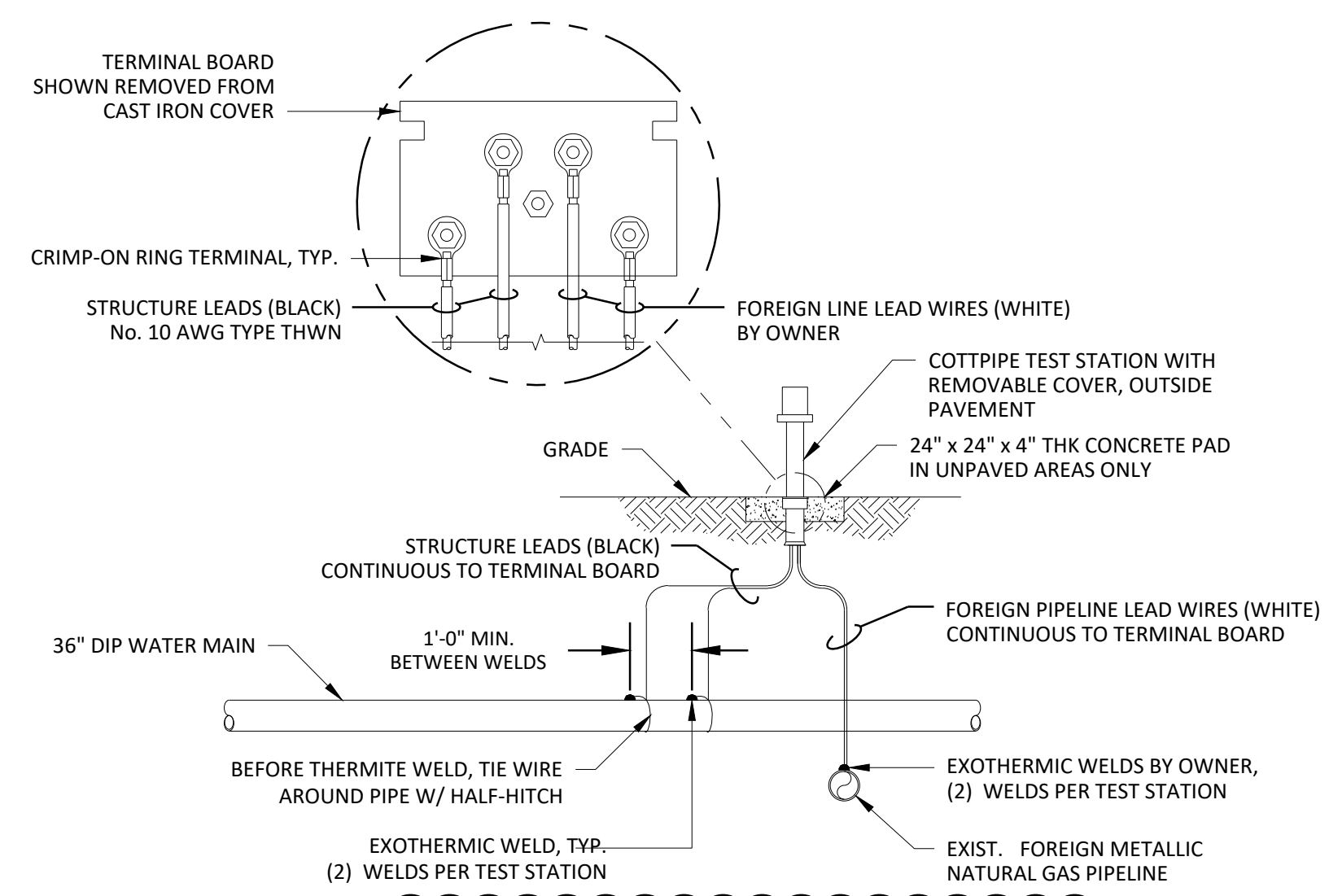
EXOTHERMIC WELD DETAIL
SCALE: N.T.S.



PIPE JOINT DOUBLE BONDING DETAIL
SCALE: N.T.S.

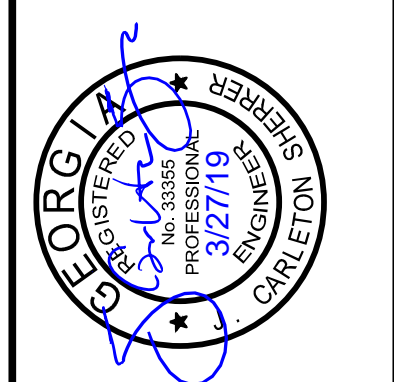


CABLE TO PIPE CONNECTION DETAIL
SCALE: N.T.S.



FOREIGN PIPELINE CROSSING TEST STATION

CATHODIC TEST STATION LOCATION TABLE		
CTS #	STATION	CTS TYPE
1	0+77	GV CTS
2	10+20	ARV CTS
3	18+90	Blowoff CTS
4	28+00	Ground CTS
5	38+00	Ground CTS
6	46+31	ARV CTS
7	46+45	GV CTS
8	46+62	GV CTS
9	53+50	Ground CTS
10	63+50	ARV CTS
11	72+00	Ground CTS
12	78+25	Blowoff CTS
13	88+00	Ground CTS
14	95+91	GV CTS
15	103+25	Blowoff CTS
16	118+00	Ground CTS
17A	118+00	Ground CTS (Foreign)
17B	118+00	Ground CTS (Foreign)
18	125+50	Ground CTS
19	132+00	ARV CTS
20	139+40	Blowoff CTS
21	142+14	GV CTS
22	142+43	GV CTS
23	153+50	Blowoff CTS
24	161+00	Ground CTS
25	166+00	Ground CTS
26	176+62	GV CTS
27	181+00	Ground CTS
28	189+50	Ground CTS
29	195+44	Ground CTS
FACTORY SHOALS		
30	1+60	GV CTS
31	8+52	Blowoff CTS

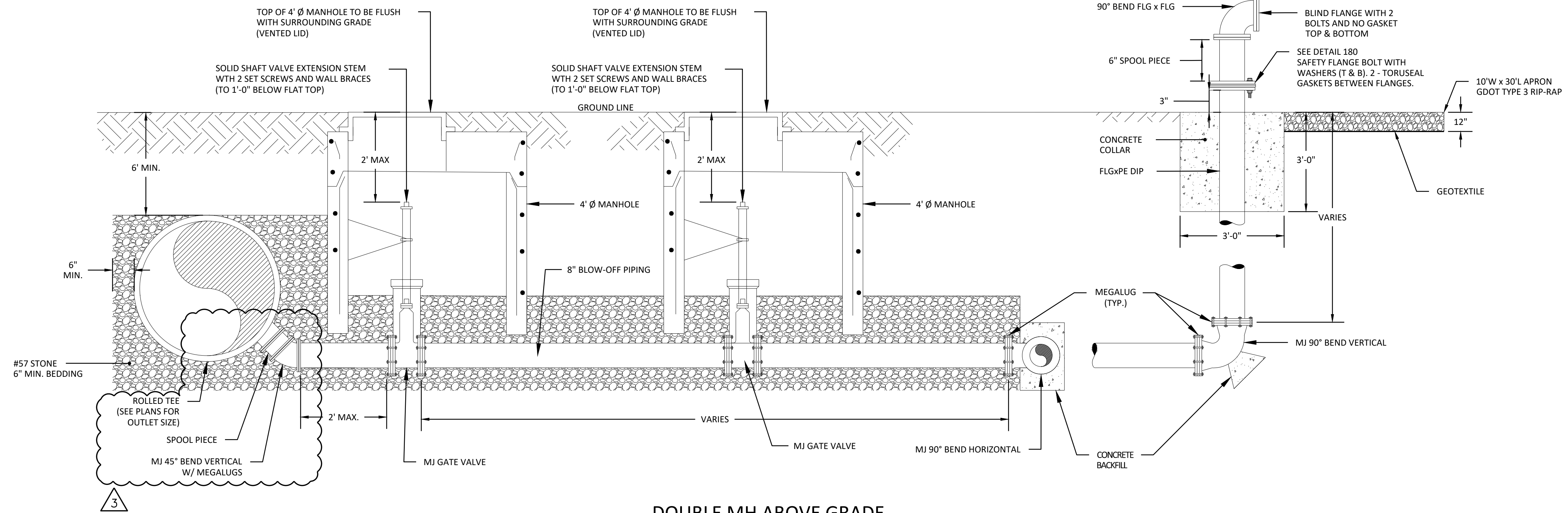


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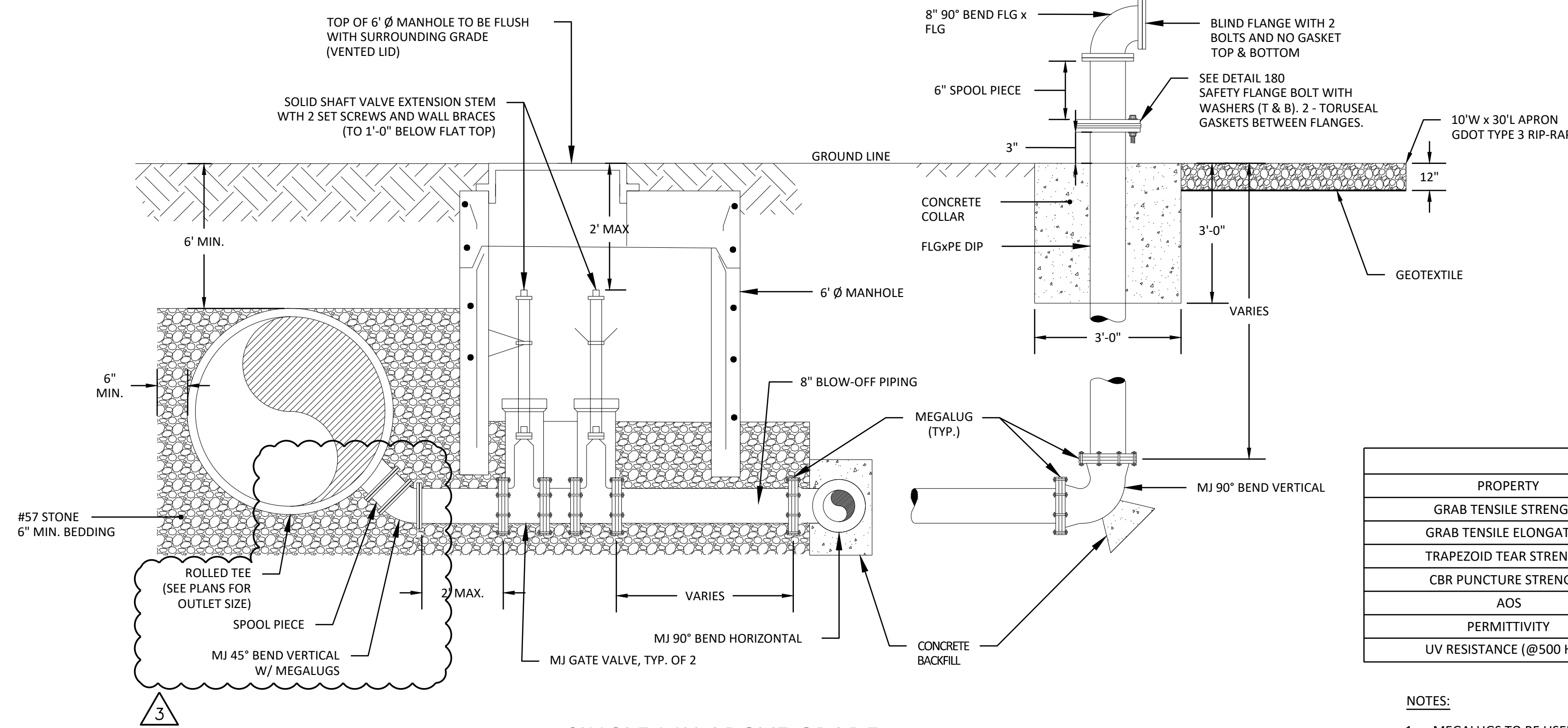
COBB COUNTY-MARIETTA WATER AUTHORITY
WEST SIDE LOOP SECTION 2
36-INCH WATER MAIN REPLACEMENT
CIVIL
STANDARD DETAILS

APPENDUM NO. 1	ISSUED FOR BID	ISSUED FOR PERMIT	ISSUE	NO.	0
DATE	DESIGNED	DRAWN	REVISION	CHECKED	FILE NAME
3/27/19	FDH	CKM		JCS	GN-ALL-DTLS.dwg
3/7/19					

SHEET **D-4**
SEQ. 42



DOUBLE MH ABOVE GRADE



SINGLE MH ABOVE GRADE

TYPE 3 REQUIREMENTS		
SIZE BY VOLUME	APPROX. WEIGHT	PERCENT SMALLER THAN
1.0ft (0.12m)	165lbs (75kg)	100%
0.1ft (0.05m)	15lbs (7kg)	10% - 65%

GEOTEXTILE			
PROPERTY	TEST METHOD	UNITS	MRV
GRAB TENSILE STRENGTH	ASTM D4632-91	LB.	250
GRAB TENSILE ELONGATION	ASTM D4632-91	%	50
TRAPEZOID TEAR STRENGTH	ASTM D4632-91	LB.	100
CBR PUNCTURE STRENGTH	ASTM D62241	LB.	700
AOS	ASTM D4751-87	U.S. STANDARD SIEVE SIZE	#100
PERMITTIVITY	ASTM D4491-92	SEC-1	0.8000
UV RESISTANCE (@500 HRS)	ASTM D4355	% RETAINED	70

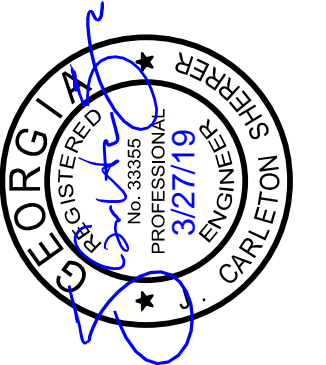
NOTES:

- MEGALUGS TO BE USED WITH ALL MECHANICAL JOINT FITTINGS. PUSH-ON JOINTS TO BE RESTRAINED WITH FAST GRIP GASKETS.
- TEES & BENDS SHALL BE MECHANICAL JOINT WITH MEGALUGS.
- ALL BLOW-OFF PIPING SHALL BE DOUBLE POLY WRAPPED.
- SAFETY FLANGE BOLTS SHALL BE 3/8" Ø GRADE 5 STEEL WITH MINIMUM TENSILE STRENGTH OF 120 KSI. BOLTS, NUTS, AND WASHERS SHALL BE ELECTRO ZINC PLATED. SAFETY FLANGE BOLTS AND ACCESSORIES SHALL BE MANUFACTURED BY BIRMINGHAM FASTENERS OR APPROVED EQUAL.
- USE AMERICAN RED RUBBER FLAT GASKET (TORUSEAL) OR APPROVED EQUAL.

BLOWOFF VALVE INSTALLATION DETAIL

N.T.S.

120



FREESSE & NICHOLS
 360 Interstate North Parkway,
 Suite 250
 Atlanta, GA 30339
 Phone (404) 334-4310
 Web - www.freesse.com

COBB COUNTY-MARIETTA WATER AUTHORITY
 WEST SIDE LOOP SECTION 2
 36-INCH WATER MAIN REPLACEMENT

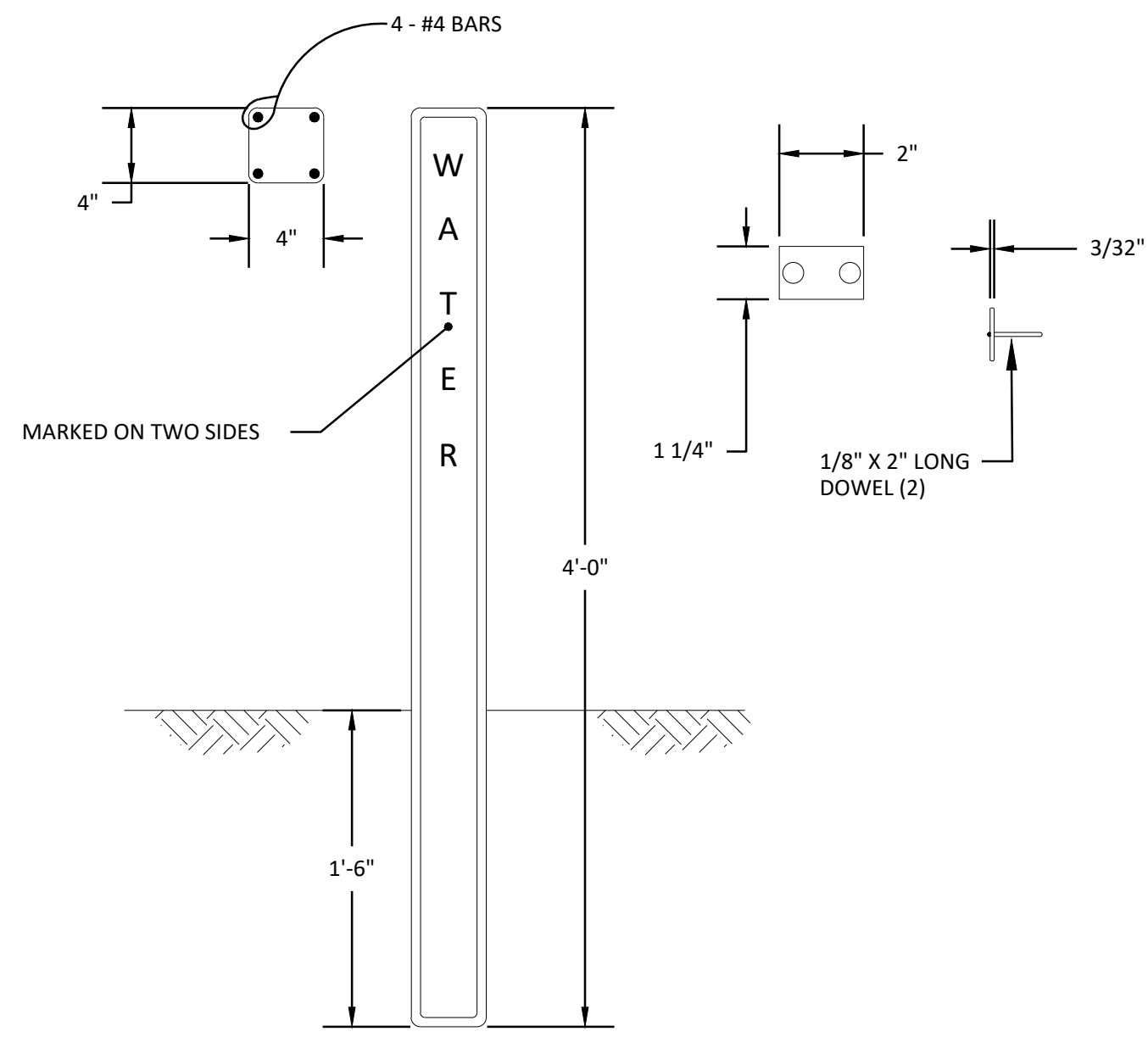
CIVIL

STANDARD DETAILS

PROJ. JOB NO.	CBR18213	DATE	3/7/19	DESIGNED	FDH	DRAWN	CKM	CHECKED	JCS
ADDENDUM NO.	1	ISSUED FOR	BID	ISSUED FOR	PERMIT	ISSUE	NO.	FILE NAME	GN-ALL-DTLS.dwg
VERIFY SCALE	0	NO.	1	Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.					

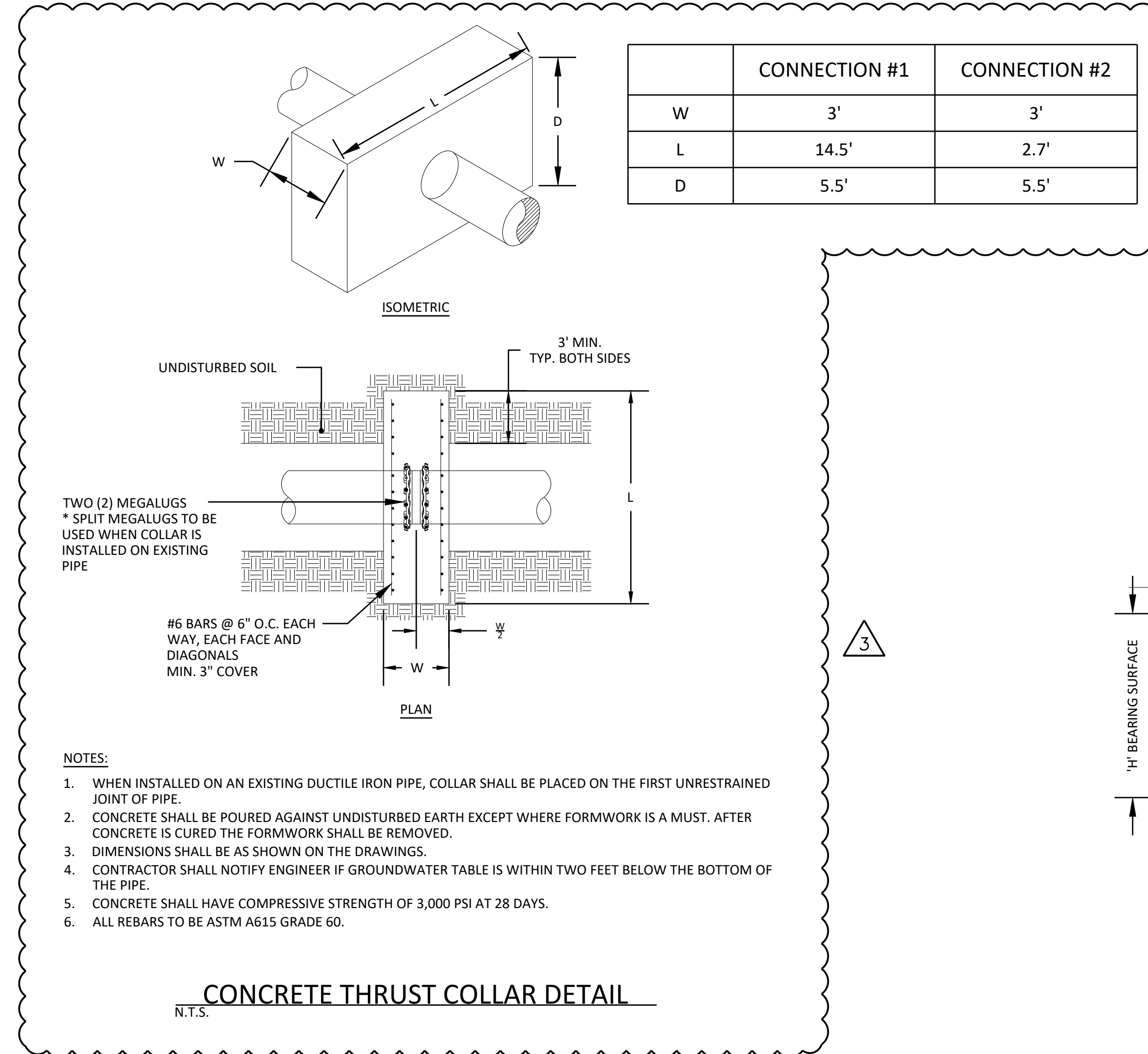
SHEET D-6

SEQ. 44



NOTE: ALUMINUM PLATE CAST IN SIDE OF MARKER POST. DISTANCE (NEAREST FOOT) FROM ϵ OF POST TO ϵ OF VALVE BOX AND DIRECTION ARROW TO BE STAMPED INTO PLATE WITH STEEL DIE AFTER MARKER IS SET.

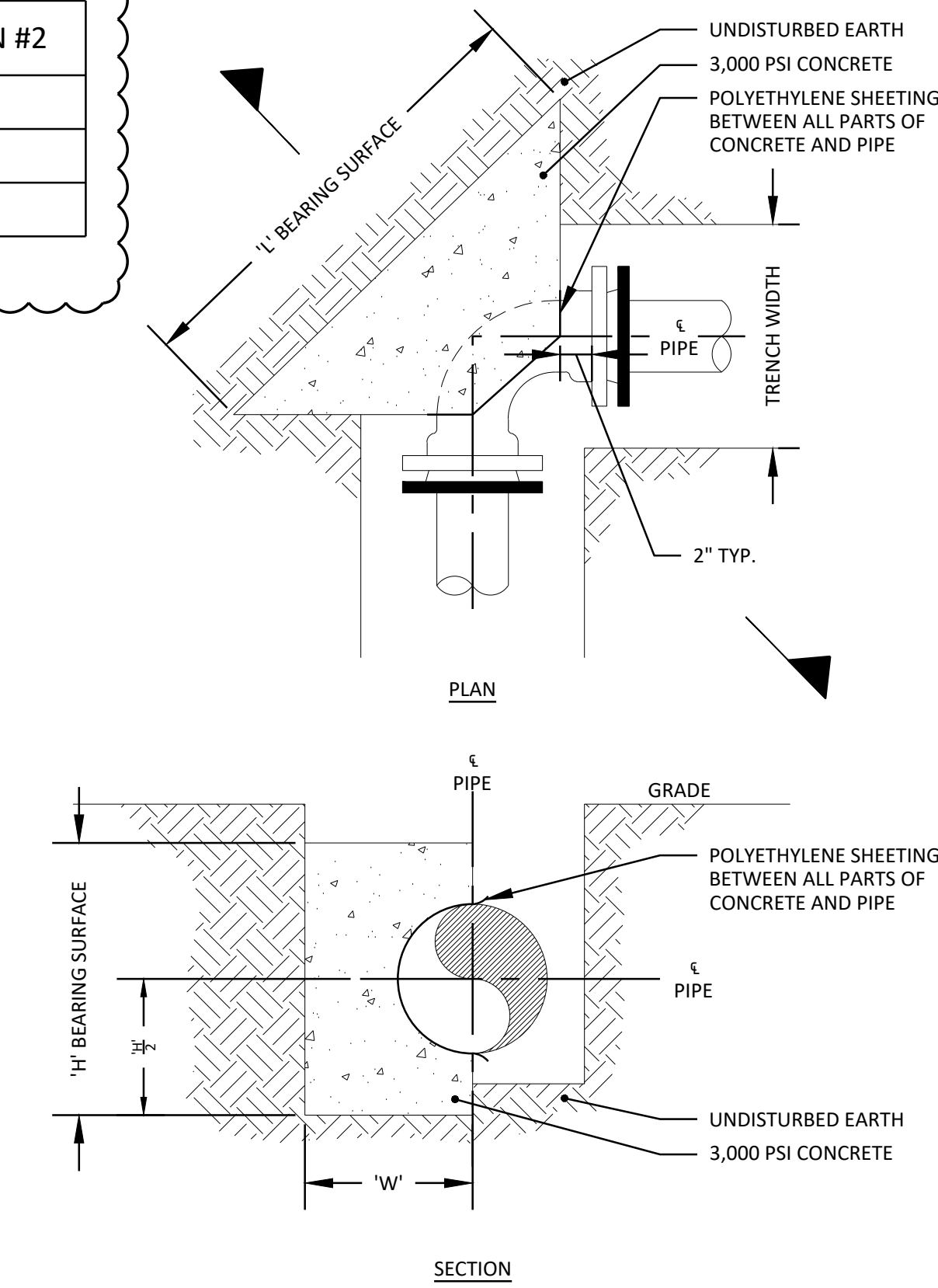
CONCRETE VALVE MARKER
N.T.S. (413)



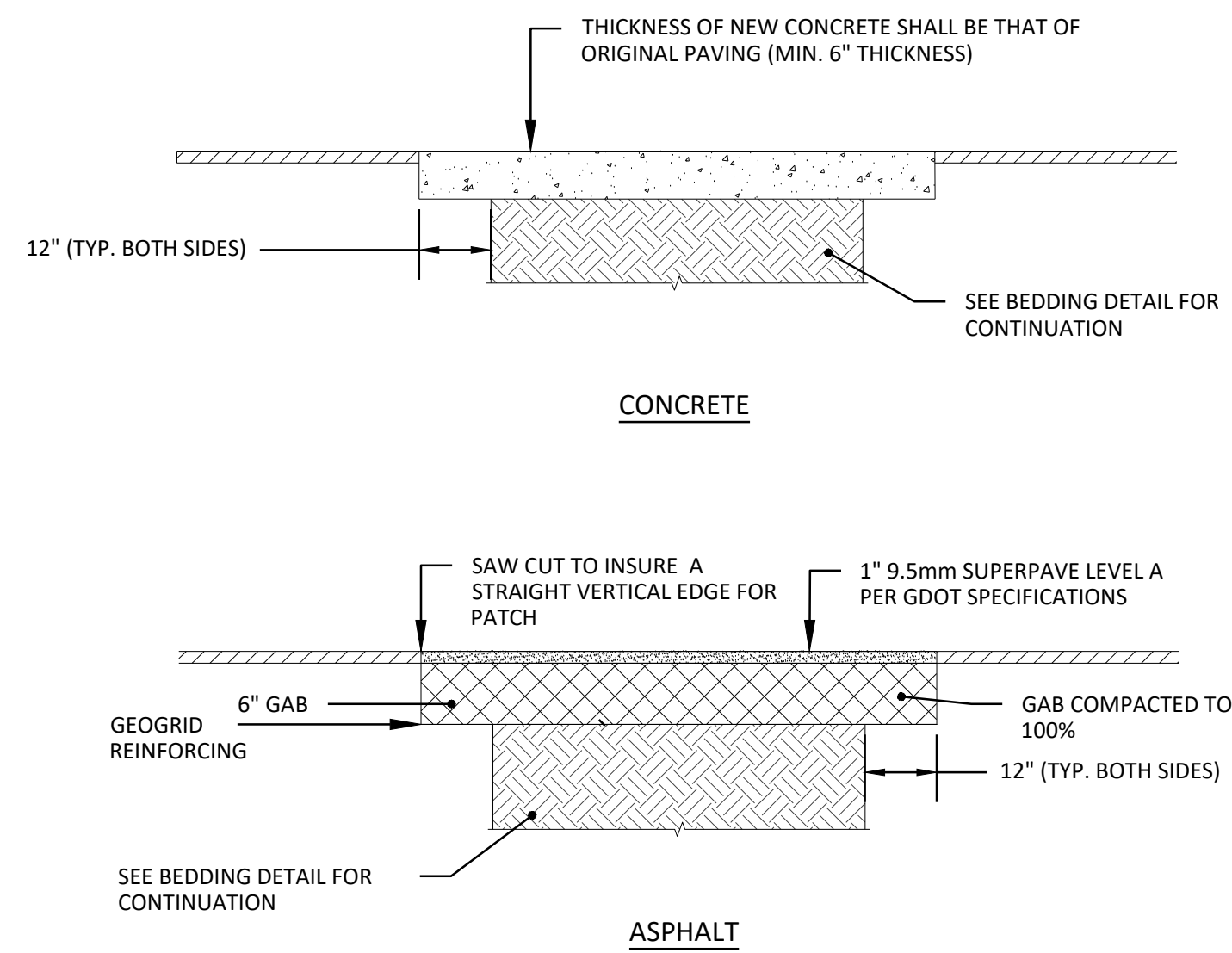
NOTES:

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.



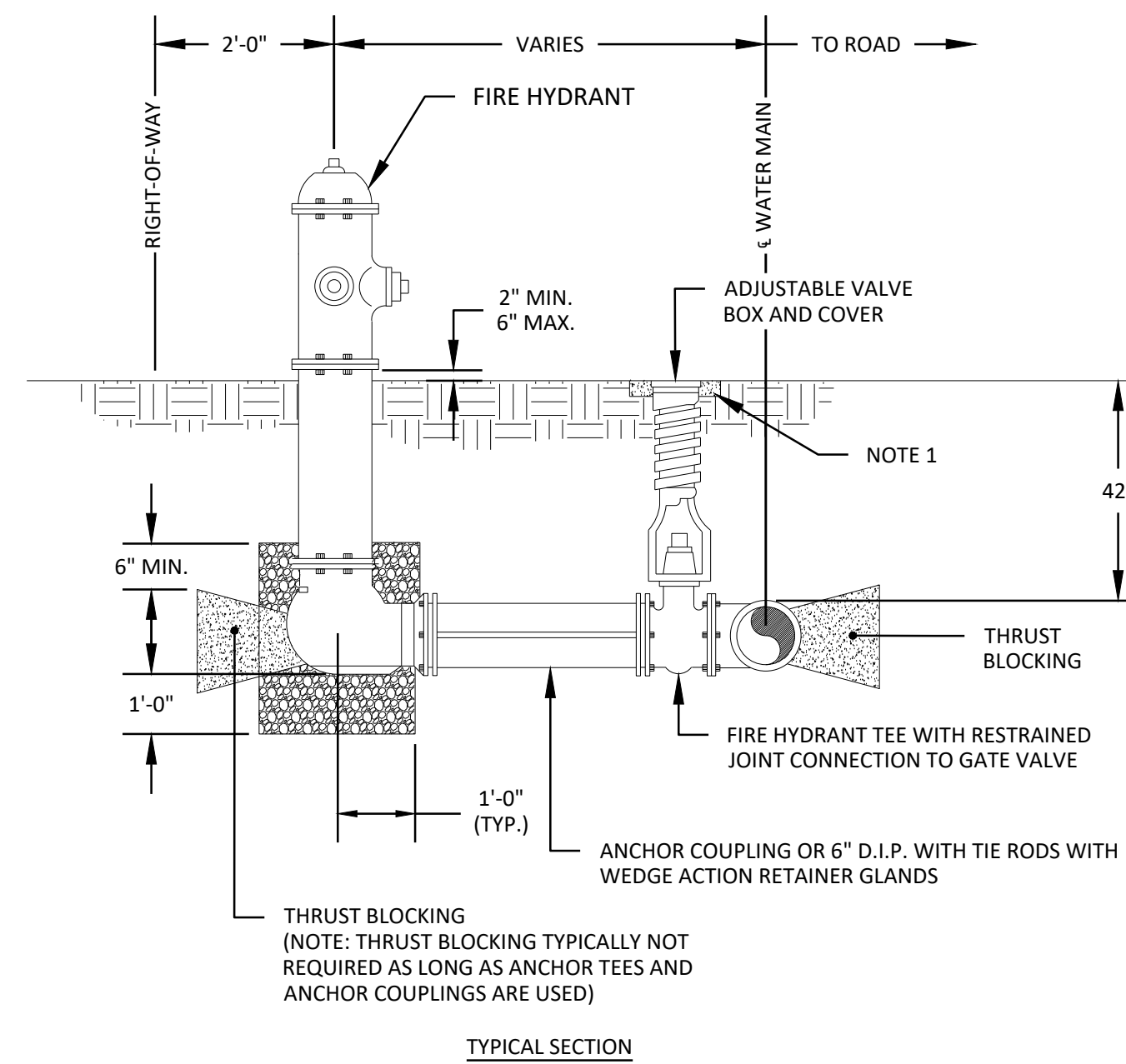
**CONCRETE THRUST BLOCKING DETAIL
(FOR CONNECTIONS TO EX. MAINS)**
N.T.S.



NOTES:

1. ALL PAVEMENT TO BE SAW CUT
2. SURFACES TO BE CLEANED AND BITUMINOUS TACK COAT PRIME APPLIED BEFORE PLACEMENT OF ASPHALTIC TOP.
3. DRIVEWAY RESURFACING TO BE PROVIDED TO PROPERTY/RIGHT-OF-WAY LINE TO MATCH EXISTING SURFACE.

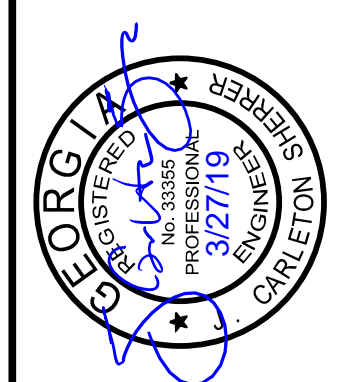
DRIVEWAY REPAIR DETAIL
N.T.S. (470)



NOTES:

1. 18" x 4" THICK (ROUND OR CIRCULAR CONCRETE COLLAR REQUIRED IN UNPAVED AREAS)
2. TIE RODS TO BE ALLOY STEEL WITH MIN. TENSILE STRENGTH OF 125,000 P.S.I. RODS TO BE COATED WITH BITUMINOUS PAINT AFTER INSTALLATION.
3. WEDGE ACTION RETAINER GLANDS SHALL BE EBAA IRON MEGALUB, FOR UNI-FLANGE SERIES 1400, OR EQUAL.

**FIRE HYDRANT INSTALLATION
(ROADWAY STANDARD) CCWS DETAIL 2713-3**
N.T.S.



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COBB COUNTY-MARIETTA WATER AUTHORITY
WEST SIDE LOOP SECTION 2
36-INCH WATER MAIN REPLACEMENT

CIVIL

STANDARD DETAILS

APPENDUM NO. 1	JCS	3/27/19	DESIGNED	FDH
ISSUED FOR BID	JCS	03/01/19	DRAWN	CKM
ISSUED FOR PERMIT	JCS	02/08/19	REVISED	
ISSUE NO.			DATE	CHECKED
0				JCS
1				JCS

Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.

SHEET **D-7**
SEQ. 45