

# BGJWSC PUMP STATION 2002

# FORCE MAIN REPLACEMENT

## BGJWSC PROJECT #2014

NOTE:  
CONTRACTOR TO NOTIFY BGJWSC  
PLANNING AND CONSTRUCTION  
DIVISION 48 HOURS BEFORE  
STARTING WORK.



**OWNER**  
**BRUNSWICK-GLYNN**  
**JOINT WATER & SEWER COMMISSION**  
1703 GLOUCESTER ST  
BRUNSWICK, GA 31520  
(912) 261-7144

**COMMISSION MEMBERS:**

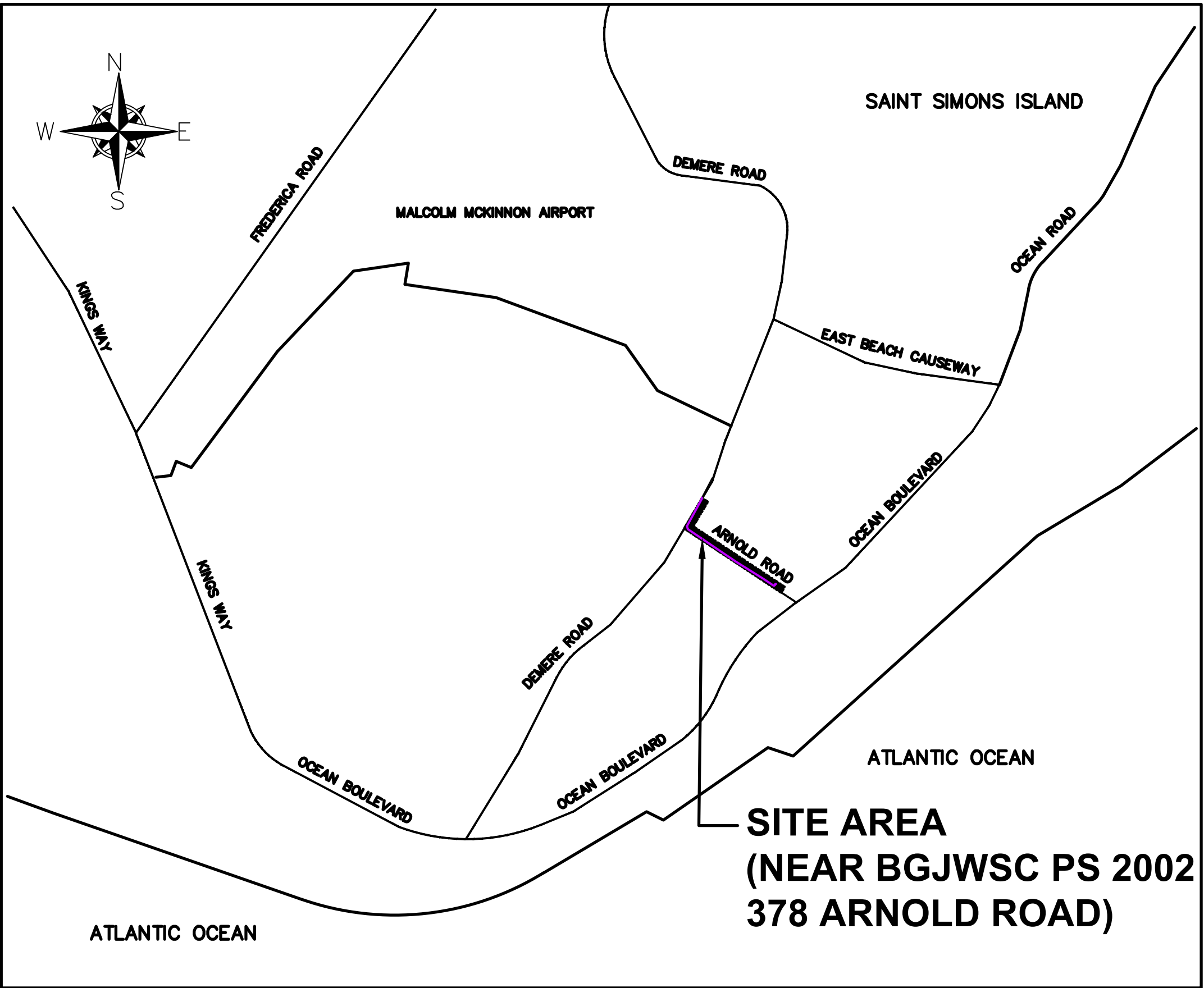
**BEN TURNIPSEED, P.E. - CHAIRMAN**  
**BOB DUNCAN - VICE-CHAIRMAN**  
**CHARLES S. COOK**  
**CORNELL L. HARVEY**  
**WAYNE NEAL**  
**TRIPP STEPHENS**  
**CHAD STRICKLAND**

**EXECUTIVE DIRECTOR:**

**ANDREW BURROUGHS, P.E.**

**24-HOUR CONTACT**

**JASON VO, P.E.**  
(912) 324-9905



VICINITY MAP  
N.T.S.

START: N31° 08' 29.91", W81° 22' 51.76"  
END: N31° 08' 37.20", W81° 23' 00.35"  
DISTURBED ACREAGE: 0.35 ACRES  
TOTAL SITE ACREAGE: 0.35 ACRES

**ENGINEER**  
**T. R. LONG ENGINEERING, P.C.**  
114 NORTH COMMERCE STREET  
HINESVILLE, GEORGIA 31313  
(912) 368-5664

DRAWING LEGEND		
DESCRIPTION	PROPOSED	EXISTING
RIGHT OF WAY	— R/W —	— R/W —
EDGE OF PAVEMENT	— — — — —	— — — — —
DITCH CENTERLINE	— — — — —	— — — — —
SANITARY SEWER	— 8"S —	— 8"S —
WATER LINE	— 10"W —	— 10"W —
FORCE MAIN	— FM —	— FM —
UNDERGROUND GAS LINE	— 8"G —	— 8"G —
CONTOURS	— 81 —	— 81 —
STORM DRAINAGE PIPE	— — — — —	— — — — —
ELEVATION	± FG: 78.15	X 81.90
SILT FENCE NON-SENSITIVE	(Sd1-NS)	
SILT FENCE SENSITIVE	(Sd1-S)	
INLET PROTECTION	(Sd2-P)	
CHECK DAM- HAY BALE	(Cd-Hb)	
CHECK DAM - RIP RAP	(Cd-Rp)	
CONSTRUCTION EXIT	(Co)	
STORM OUTLET PROTECTION	(St)	
SILT FENCE	— — — — —	
MULCHING	(Ds1)	
TEMPORARY GRASSING	(Ds2)	
PERMANENT GRASSING	(Ds3)	
FIRE HYDRANT	(Fh)	
SEWER MANHOLE	(Sm)	
WATER VALVE	(Wv)	
DRAINAGE FLOW	(Df)	
WATER METER	(Wm)	
BENCHMARK	(Bm)	
WELL	(Wl)	
GUY POLE	(Gp)	
IRON PIN	(Ip)	
TELEPHONE PEDESTAL	(Tp)	
POWER POLE	(Pp)	

CIVIL ENGINEERING PLANS

C1.1	TITLE SHEET
C1.2	GENERAL NOTES
C1.3	SHEET INDEX
C2.1-2.5	UTILITY PLAN
C2.6-2.7	FORCE MAIN PROFILE
C3.1	TRAFFIC PLAN
C4.1-4.3	EROSION CONTROL PLANS
C4.4-4.5	EROSION CONTROL NOTES
C5.1-5.5	SITE DETAILS

HINESVILLE:  
114 North Commerce Street  
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CSWCC# 000075362

GEORGIA  
REGISTERED  
ENGINEER  
T. R. LONG  
NO. 237348  
PROFESSIONAL

BRUNSWICK-GLYNN JOINT WATER & SEWER COMMISSION

BGJWSC PUMP STATION 2002  
FORCE MAIN REPLACEMENT  
PROJECT # 2014

SHEET NAME:  
TITLE  
SHEET

REVISIONS:  
1. 02/10/2021 TR.L.  
2. 08/08/2021 BGJWSC  
3. 09/09/2021 BGJWSC  
4.  
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INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TR.L.  
PROJECT #: 2021-01

SHEET NUMBER:  
C.I.I



Paving Notes

1. All work shall comply with all applicable codes, regulations, and/or local standards imposed by local utility, city, county, and state. It is the contractor's responsibility that all the construction be in accordance with the Glynn County and GDOT standard details and specifications.
2. Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by AGC of American Inc., and the safety and health regulations for construction issued by the U.S. Department of Labor.
3. Contractor shall provide all necessary barricades, sufficient lights, signs and other traffic control methods as may be necessary for the protection and safety of the public and shall be provided and maintained throughout all construction adjacent to and within all roadways. Contractor shall submit traffic control plan to Glynn County ROW Coordinator for approval.
4. The contractor shall take necessary measures to separate work areas from pedestrian traffic and to insure safe pedestrian passage at all times.
5. All signs, pavement markings, and other traffic control devices shall conform to the Manual of Uniform Traffic Control Devices. A minimum clearance of two feet shall be maintained between the face of curb and any part of a traffic sign or light pole. Contractor shall coordinate installation of all signs, pavement markings, and other traffic control devices with other contractors on signs or light poles.
6. Contractor shall saw-cut to provide smooth transitions at tie-ins to existing edges of pavement and at cold joints of recently paved asphalt.
7. Joints or score marks are to be sharp and clean without showing edges of jointing tool.
8. Contractor shall saw-cut tie-ins at existing curbs as necessary to ensure smooth transitions, contractor shall saw-cut and transition to meet existing pavement as necessary and as directed by inspector to insure positive drainage. (Typical at all intersections)
9. Paving contractor shall install paper breakaway edges at cold joints or saw-cut as required to insure a straight, full-depth joint face immediately prior to installing abutting hot asphalt.
10. All dimensions are to back of curb unless indicated otherwise.
11. Contractor shall be responsible for cost of pavement replacement where utility lines are extended across existing asphalt.
12. Asphalt surface course shall be laid with the direction of traffic in all drive lanes within parking fields.
13. Base and asphalt thickness are minimum required. Refer to specifications for type of paving and base to be used.
14. All concrete shall be Class A 4000 P.S.I. unless noted otherwise. Do not pour any concrete before forms are inspected and approved by the inspector.
15. All ramps constructed are not to exceed a slope of 1:12. All sidewalks shall not have a cross-slope greater than 1:50
16. Concrete dumpster pads to be flush with pavement unless indicated otherwise.
17. See Detail sheets for additional details on striping, signs, etc.

Inspection Notes

1. Each day when any type of construction activity has taken place at a primary permittee's site, certified personnel provided by the primary permittee shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment and (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of off-site sediment tracking. These inspections must be conducted until a notice of termination is submitted.
2. The primary permittee will measure rainfall once every 24 hours except any non-working Saturday, non-working Sunday, and non-working federal holiday until a notice of termination is submitted. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.
3. Certified personnel (provided by the primary permittee) shall inspect the following at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches rainfall or greater (unless such storm ends after 5:00 pm on any Friday holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first): a) disturbed areas of the primary permittee's construction site; b) areas used by the primary permittee for storage of materials that are exposed to precipitation; and c) structural control measures. Erosion and sediment control measures identified in the plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters(s). For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with part IV.D.4.a.(4). These inspections must be conducted until a notice of termination is submitted.
4. Certified personnel (provided by the primary permittee) shall inspect at least once per month during the term of this permit (i.e., until a notice of termination is received by EPD) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving waters(s). Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s)
5. Based on the result of each inspection, the site description, and the pollution prevention and control measures identified in the erosion, sedimentation, and pollution control plan, the plan shall be revised as appropriate not later than seven (7) calendar days following each inspection. Implementation of such changes shall be made as soon as practical but in no case later than seven (7) calendar days following each inspection.
6. A report of each inspection that includes the name(s) of certified personnel making each inspection, the date(s) of each inspection, construction phase (i.e., initial intermediate or final), major observations relating to the implementation of the erosion, sedimentation, and pollution control plan, and actions taken in accordance with part IV.D.4.a.(5). of the permit shall be made and retained at the site or be ready available at a designated alternate location until the entire site or that portion of a construction project that has been phased has undergone final stabilization and a notice of termination is submitted to EPD. Such reports shall be readily available by end of the second business day and/or working day and shall identify all incidents of best management practices that have not been properly installed and/or maintained as described in the plan. Where the report does not identify any incidents, the inspection report shall contain a certification that the best management practices are in compliance with the erosion, sedimentation, and pollution control plan. The report shall be signed in accordance with part V.G.2 of 2013 NPDES Stand Alone Permit.

Site Grading Notes

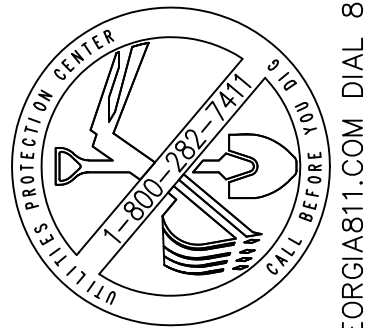
1. RCP storm drain pipe is Class III reinforced concrete conforming to ASTM C-76. PVC storm drain pipe is SDR35. HDPE storm drain pipe is ADS N-12 1B WT.
2. Dimensions on buildings are for grading purposes only and are not to be used to lay-out footings. Refer to Structural Drawings for foundation information.
3. Grading contractor shall notify and cooperate with all utility companies or firms having facilities on or adjacent to the site before disturbing, altering, removing, relocating, adjusting or connecting to said facilities. Contractor shall pay all costs in connection with the alteration of or relocation of the facilities. Contractors shall raise or lower tops of existing manholes to remain as required to match finished grades.
4. Grading contractor shall cooperate and work with all other contractors performing work on this project to insure proper and timely completion of this project.
5. The grading contractor shall use whatever measures are required to prevent silt and construction debris from flowing onto adjacent properties. Contractor shall comply with all local erosion, conservation, and siltation ordinances. Contractors shall remove all temporary erosion control structures upon completion of permanent drainage facilities and not before the establishment of a stand of grass sufficient to prevent erosion.
6. For any work on the state or city right-of-way, the grading contractor shall:
  - A. Not store material, excess dirt, or equipment in the right-of-way. The pavement shall be kept free from any mud or excavation waste from trucks or other equipment. On completion of the work, all excess material shall be removed from the right-of-way.
  - B. Provide all necessary and adequate safety precautions such as signs, flags, light barricades, and flag-men as required by the local authorities and in accordance with solely responsible for and hold harmless the City, State, Architect, Engineer, and Owner from any claims for damage done to existing private property, public utilities, or to the traveling public.
  - C. Complete work to the satisfaction of the City Public Works Department and obtain a letter from the Department stating that the work is acceptable.
7. Grading contractor shall take all available precautions to control dust. Contractor shall control dust by sprinkling, or by other methods as directed by Engineer and/or Owner's representative, at no additional cost to Owner.
8. Site grading contractor shall terminate all storm drain pipes five feet maximum from building unless otherwise noted.
9. Storm sewer lead-ins to building shall not be installed until building plans are completed and locations established on the architectural plans. Lead-ins may change 15' horizontally and 3' vertically prior to installation at no additional cost to the owner. Contractor shall request and receive written approval from prime contractor prior to installation of lead-ins. Contractor shall coordinate locations, size, and invert elevations of storm sewers with approved building plumbing plans.
10. All excavating is unclassified and shall include all materials encountered.
11. Before any machine work is done, contractor shall stake out and mark the items established by the site plan, control points shall be preserved at all times during the course of the project. Lack of proper working points and grade stakes may require satisfaction owner must approved staked items prior to construction.
12. Temporary erosion control devices to be installed prior to beginning of grading. Contractor shall maintain all temporary erosion control devices and shall remove silt contractor at least once a week.
13. Contractor to coordinate all work with other utility installations not covered in these plans, (Electric, Telephone, Gas, Cable, Etc.) and allow for their operations and construction to be performed.
14. Cut and fill slopes are not to exceed 3:1 unless otherwise noted.
15. In no case shall any paved areas be less than a slope of 1.0%. All accessible sidewalks and aisle slopes not to exceed 2% cross-slope.
16. Contractor shall repair or replace in-kind any damage that occurs as result of his work.
17. All linear footage for all utility pipes are approximate, actual installed quantities may vary.
18. Grading contractor shall restore to grade and compaction all areas disturbed by building construction prior to base and paving operations commencing.
19. Grading contractor shall maintain all weather construction access roads as required by general contractor.

Site Utility Notes

1. The site utility plan is for sanitary sewer and water line construction only. Do not use for grading or storm sewer construction.
2. All pipe lengths are horizontal distances and are approximate.
3. All domestic water and sanitary sewer stubs to be terminated 5 feet outside of the building unless otherwise noted. The end of these service lines shall be tightly plugged or capped and marked until such time as connection is made inside building by plumbing contractor.
4. Site utility contractor shall provide all the materials and appurtenances necessary for the complete installation of the utilities. All pipe and fittings shall be inspected by the Water Department Inspector prior to being covered. The inspector must also be present during pressure testing and disinfection of laterals and his signature of approval is required.
5. All work shall comply with all applicable codes, regulations, and/or local standards imposed by local utility and Glynn County.
6. The site utility contractor shall make arrangements with the local utility authorities for connection to the existing mains and pay all applicable fees.
7. All water lines shall have a minimum cover of 36" above top of pipe.
8. Contractor shall adjust location of proposed water lines as required to avoid conflicts with storm sewer or other utilities at no extra cost.
9. Based on the current edition of the international plumbing code, cleanouts are required at a maximum spacing of 100 feet on utility lead-ins to building. Contractor to provide a cleanout within 5 feet of building and at all bends.
10. The site utility contractor shall cooperate and work with all other contractors on the site.
11. All materials shall be U.L. listed and approved by the local utility company unless directed otherwise by the Engineer.
12. The existing utility facilities and locations shown on the drawings are taken from readily available information. The actual locations of the utility facilities may vary somewhat from the locations shown or indicated on the drawings. The site utility contractor shall contact all agencies with utility facilities in the vicinity of the work and shall locate all underground facilities before beginning work. The contractor shall project all utility facilities and repair any damages resulting from their work, in conformance with the contract documents and specifications and relocate if required.
13. All sanitary sewer pipe shall be SDR-26 meeting ASTM D3034 with gasket type joints meeting ASTM F477.
14. Utility lead-ins to building shall not be installed until building plans are completed and locations established on the architectural plumbing plans. Lead-ins my change 15' horizontally and 3' vertically prior to installations at no additional cost to the owner. Utility contractor shall request and receive written approval from prime contractor prior to installation of lead-ins. Location, size and invert elevations of sanitary sewer shall be coordinated with the approved plumbing plans for the building.
15. Building plumbing contractor shall pay all cost for water meters, meter boxes, valves, etc. to provide a complete job per local authority requirements.
16. Restrained joints shall be provided at all tees, elbows, and bends of sufficient size to comply with minimum standards of BGJWSC.
17. Should latent soil conditions necessitate, contractor shall install special supports for piping and/or appurtenances including the removal of unsuitable material and backfilling with gravel or other material. Contractor shall perform any such work as directed by the civil engineer and/or soils engineer at no cost to owner.
18. Contractor to coordinate all work with other utility installations not covered in these plans (Electric, Telephone, Gas, Cable, etc.) and allow for their operations and construction to be prepared.
19. The site utility contractor shall coordinate and pay for all sanitary sewer connections. Sanitary sewer connection final tie-in to the existing manhole(s) shall not be made until completion of the proposed system and all manholes have been brought above ground to insure sediment does not enter system. Lines shall be properly cleaned, if needed.
20. Site utility contractor to coordinate with irrigation contractor to provide power in conduit to irrigation controller per manufacturers recommendations. Verify exact location of controller with owner prior to installation.

NOTES:

- ALL WATER AND SEWER CONSTRUCTION SHALL CONFORM WITH THE REQUIREMENTS OF THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE JOINT WATER & SEWER COMMISSION. IN THE EVENT OF A DISCREPANCY BETWEEN THESE CONSTRUCTION PLANS AND THE AFOREMENTIONED STANDARDS AND SPECIFICATIONS, THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS SHALL TAKE PRECEDENCE UNLESS THE DEVIATION HAS BEEN APPROVED IN WRITING BY THE JWSC.
- THE MINIMUM HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER LINES, SEWER LINES AND STORM DRAINS SHALL CONFORM TO THE LATEST GEORGIA EPD REQUIREMENTS.
  - A. AT CROSSINGS, PIPE JOINTS SHALL BE AS FAR AS POSSIBLE AND EQUIDISTANT FROM THE POINT OF CROSSING WITH THE WATER MAIN ON TOP. SEPARATION SHALL BE MEASURED FROM THE OUTSIDE EDGE OF THE PIPE TO THE OUTSIDE EDGE OF THE PIPE. A FULL LENGTH OF PIPE MUST BE CENTERED AT THE CROSSING.
  - B. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST 6" FROM ALL JOINTS IN THE SEWER FORCE MAIN.
- A MINIMUM DISTANCE OF 20' OR TWO TIMES THE DEPTH OF THE MAIN, WHICHEVER IS GREATER, SHALL BE MAINTAINED FROM ALL BUILDINGS, FOUNDATIONS AND THE TOP OF BANK OF ALL PONDS. ANY DEVIATION FROM THIS REQUIREMENT MUST BE APPROVED IN WRITING BY THE JWSC.
- PRESSURE AND LEAKAGE TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE JWSC.
- DISINFECTION OF WATER MAINS SHALL BE PERFORMED IN ACCORDANCE WITH THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE JWSC.
- AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF THE WORK, THE CONTRACTOR SHALL NOTIFY THE UTILITIES PROTECTION CENTER (UPC) AT 1-800-282-7411 TO REQUEST UNDERGROUND UTILITY LOCATE SERVICE.
- THE CONTRACTOR SHALL PROVIDE IN WRITING ANY REQUESTS TO WORK ON WEEKENDS & HOLIDAYS. REQUESTS SHALL BE SUBMITTED TO THE OWNER AND ENGINEER FOR CONSIDERATION A MINIMUM OF 48 HOURS PRIOR TO THE REQUESTED WEEKEND & HOLIDAY.
- THE CONTRACTOR SHALL CREDIT THE JWSC BY CHANGE ORDER FOR INSPECTION SERVICES FOR OVERTIME WORK PERFORMED ON SUNDAYS OR LEGAL HOLIDAYS. THE AMOUNT OF CREDIT TO JWSC SHALL BE \$50.00 PER HOUR, PER INSPECTION SERVICESAT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF THE WORK, THE CONTRACTOR SHALL NOTIFY THE UTILITIES PROTECTION CENTER (UPC) AT 1-800-282-7411 TO REQUEST UNDERGROUND UTILITY LOCATE SERVICE.



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THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS CONTAINED WITHIN THIS SET OF DOCUMENTS AND SHALL REPORT ANY DISCREPANCIES TO T. R. LONG ENGINEERING, P.C. FOR IMMEDIATE RESOLUTION.



HINESVILLE:  
114 North Commerce Street  
Hinesville, Georgia 31313  
(912) 368-5664  
SAVANNAH:  
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(912) 335-1046



BGJWSC PUMP STATION 2002  
FORCE MAIN REPLACEMENT  
PROJECT # 2014



SHEET NAME:

GENERAL  
NOTES

REVISIONS:

1. 02/10/2021 TRL
2. 08/08/2021 BGJWSC
3. 09/09/2021 BGJWSC
- 4.
- 5.
- 6.
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- 9.
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INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TRL  
PROJECT #: 2021-01

SHEET NUMBER:

CI.2

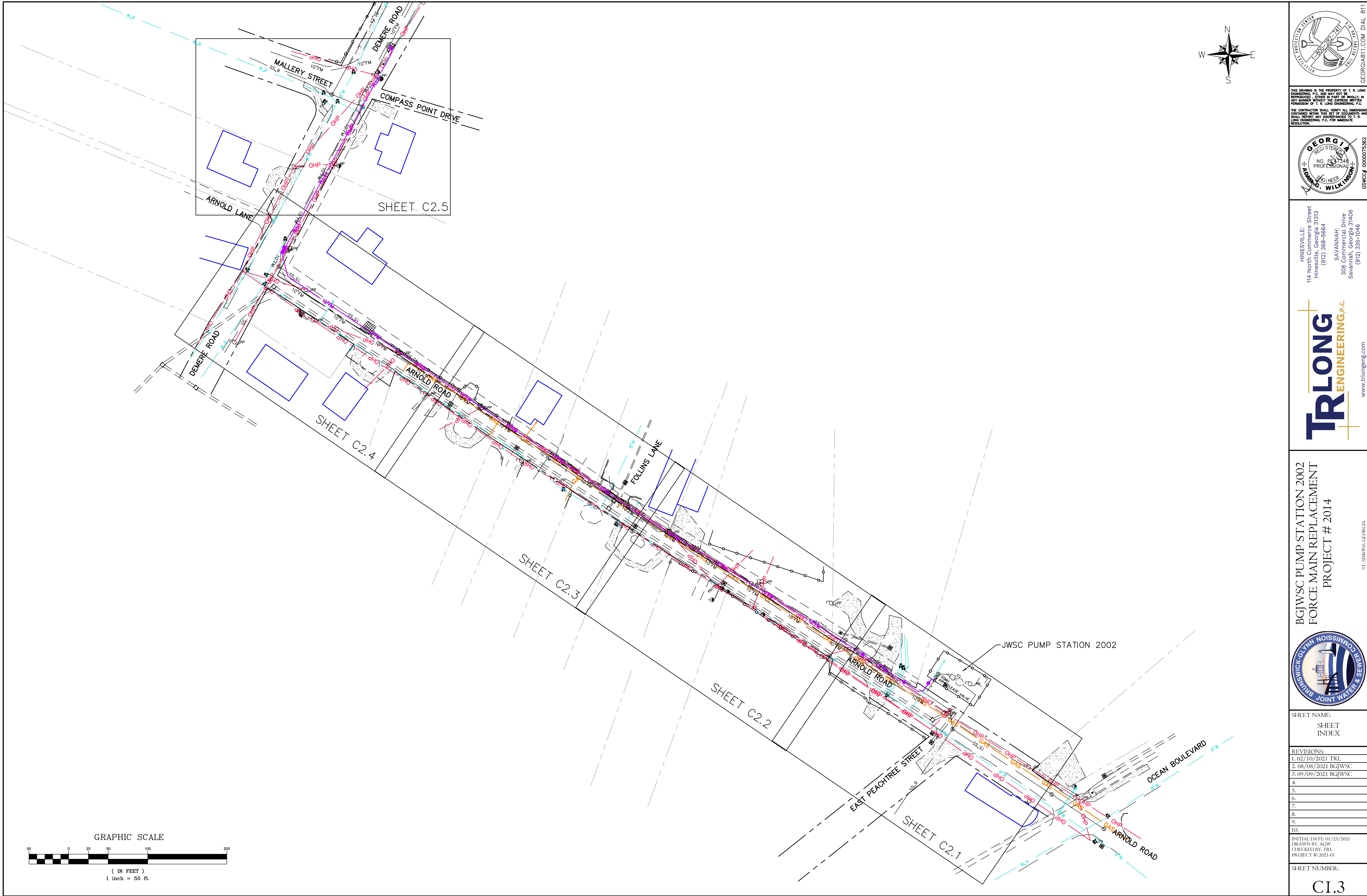
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CSWC# 000075362

www.trlongeng.com

ST. SIMONS, GEORGIA





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PROJECT # 2014

PROJECT # 2014

REVISIONS:

1.	02/10/2021	TRL
2.	08/08/2021	BGJWSC
3.	09/09/2021	BGJWSC
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INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TRL  
PROJECT #: 2021-01

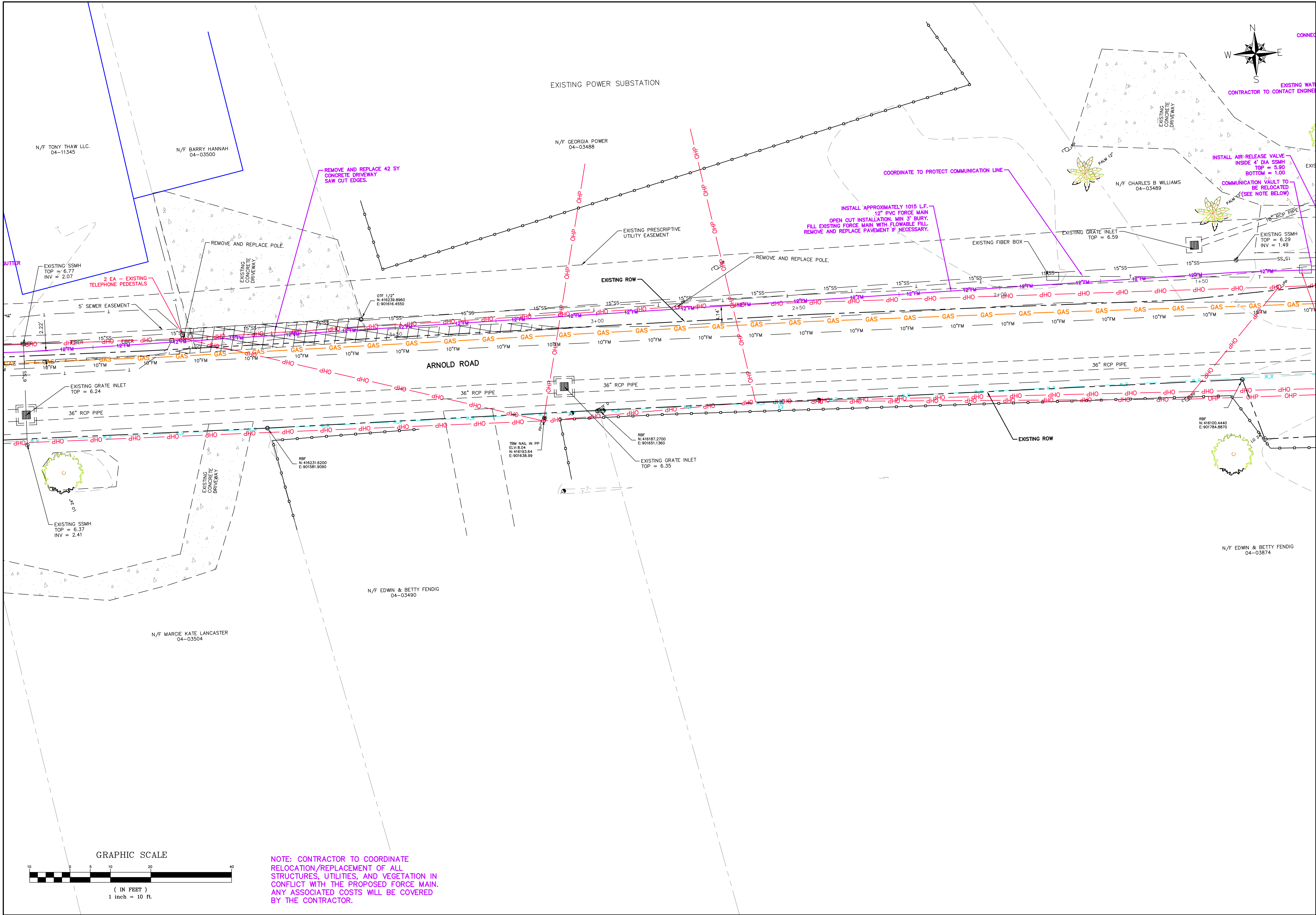
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REGISTERED PROFESSIONAL ENGINEER  
NO. 927348  
STATE OF GEORGIA  
T. R. LONG  
WILKINSON

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GEORGIA  
REGISTERED PROFESSIONAL ENGINEER  
T. R. LONG  
WILKINSON

PROJECT # 2021-01

REVISIONS:

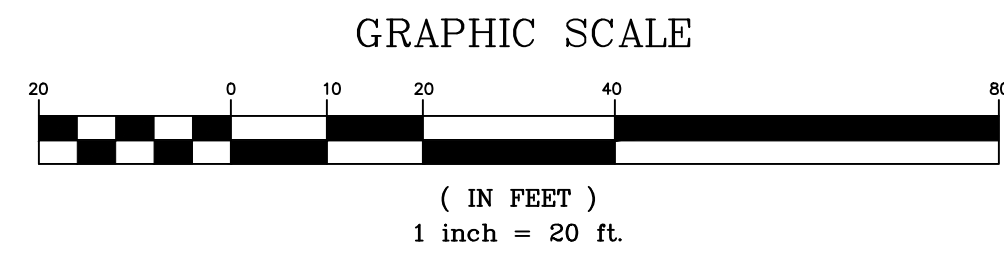
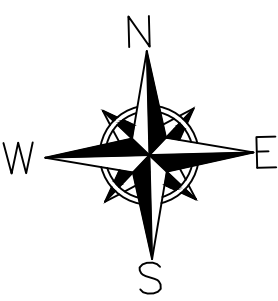
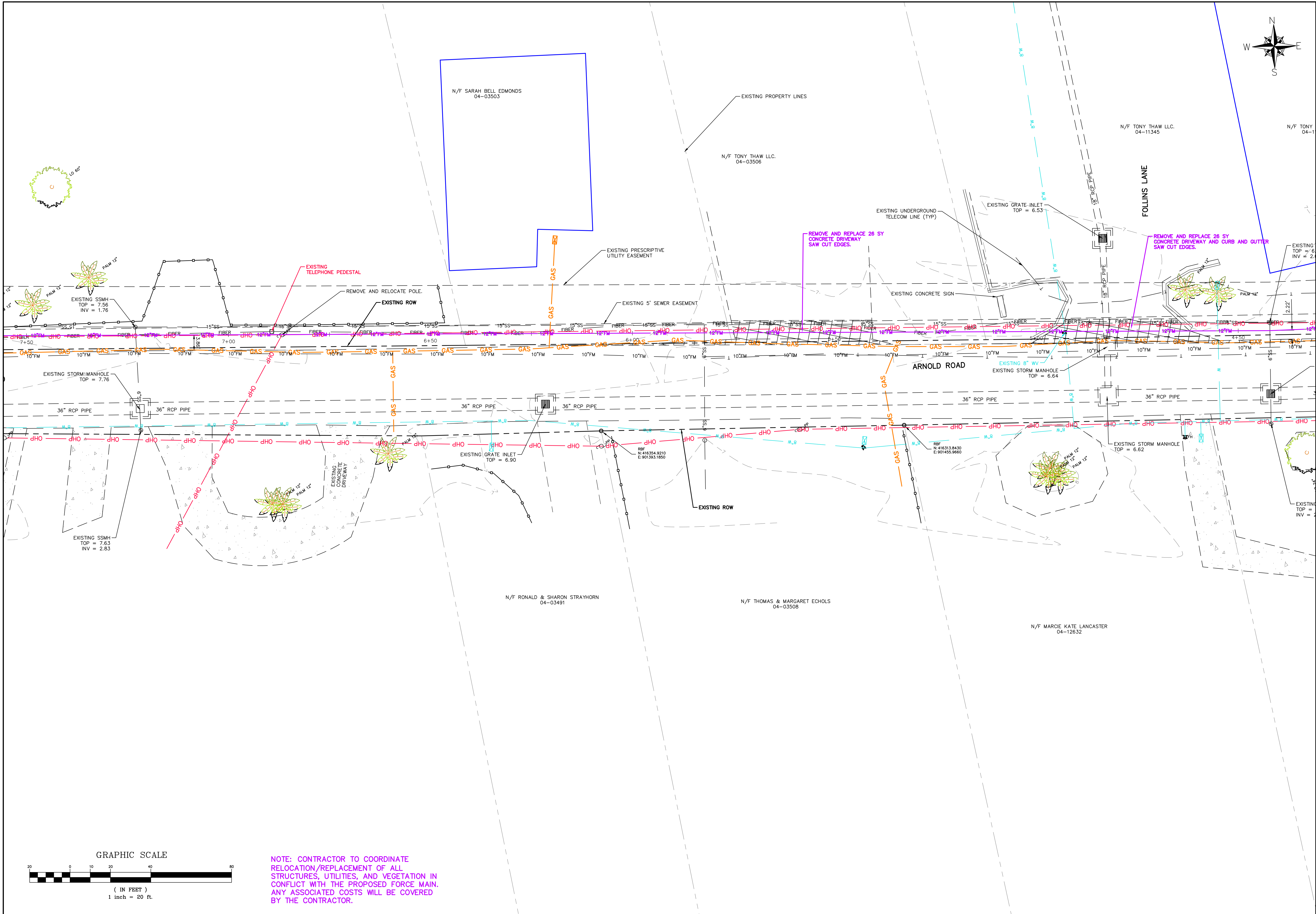
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INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TRL  
PROJECT # 2021-01

SHEET NUMBER:

C2.2





NOTE: CONTRACTOR TO COORDINATE RELOCATION/REPLACEMENT OF ALL STRUCTURES, UTILITIES, AND VEGETATION IN CONFLICT WITH THE PROPOSED FORCE MAIN. ANY ASSOCIATED COSTS WILL BE COVERED BY THE CONTRACTOR.

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REGISTERED PROFESSIONAL ENGINEER  
NO. 297348  
T. R. LONG  
WILKINSON

CSWC# 000075362

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ST. SIMONS, GEORGIA

PROJECT # 2014

BRUNSWICK-GLYNN JOINT WATER & SEWER COMMISSION

SHEET NAME:  
UTILITY  
PLAN

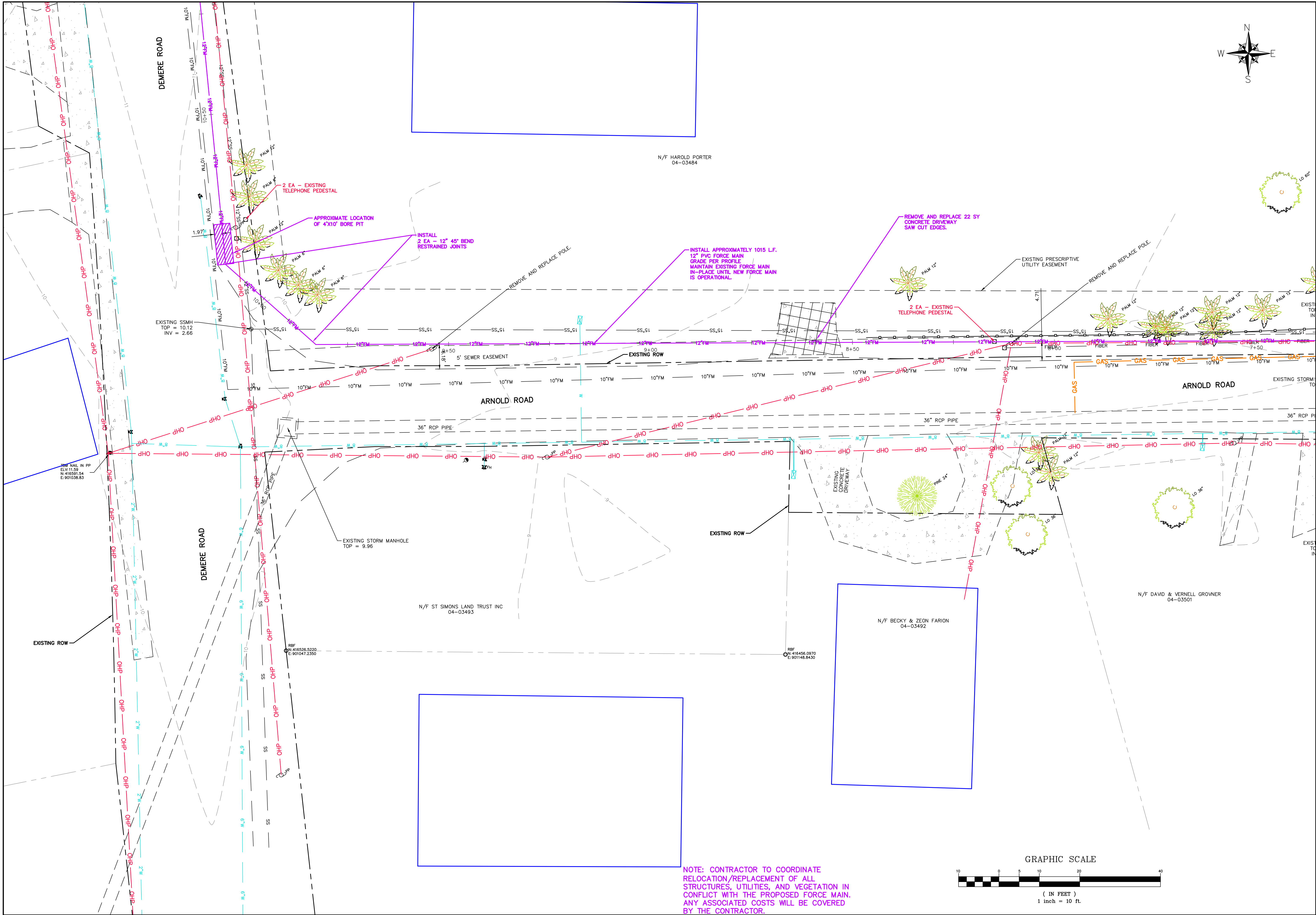
REVISIONS:

1.	02/10/2021	TRL
2.	08/08/2021	BGJWSC
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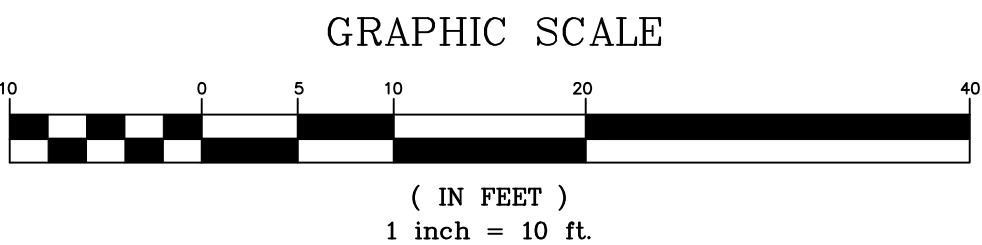
INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TRL  
PROJECT #: 2021-01

SHEET NUMBER:  
C2.3





NOTE: CONTRACTOR TO COORDINATE RELOCATION/REPLACEMENT OF ALL STRUCTURES, UTILITIES, AND VEGETATION IN CONFLICT WITH THE PROPOSED FORCE MAIN. ANY ASSOCIATED COSTS WILL BE COVERED BY THE CONTRACTOR.



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REGISTERED PROFESSIONAL ENGINEER  
NO. 237348  
T. R. LONG  
WILKINSON

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(912) 368-5664

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308 Commercial Drive  
Savannah, Georgia 31406  
(912) 335-1046

TR LONG  
ENGINEERING, P.C.

www.trlongeng.com

PROJECT # 2014

SHEET NAME:  
UTILITY  
PLAN

REVISIONS:

1.	02/10/2021	TRL
2.	08/08/2021	BGJWSC
3.	09/09/2021	BGJWSC
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INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TRL  
PROJECT #: 2021-01

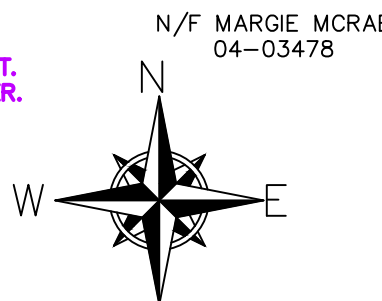
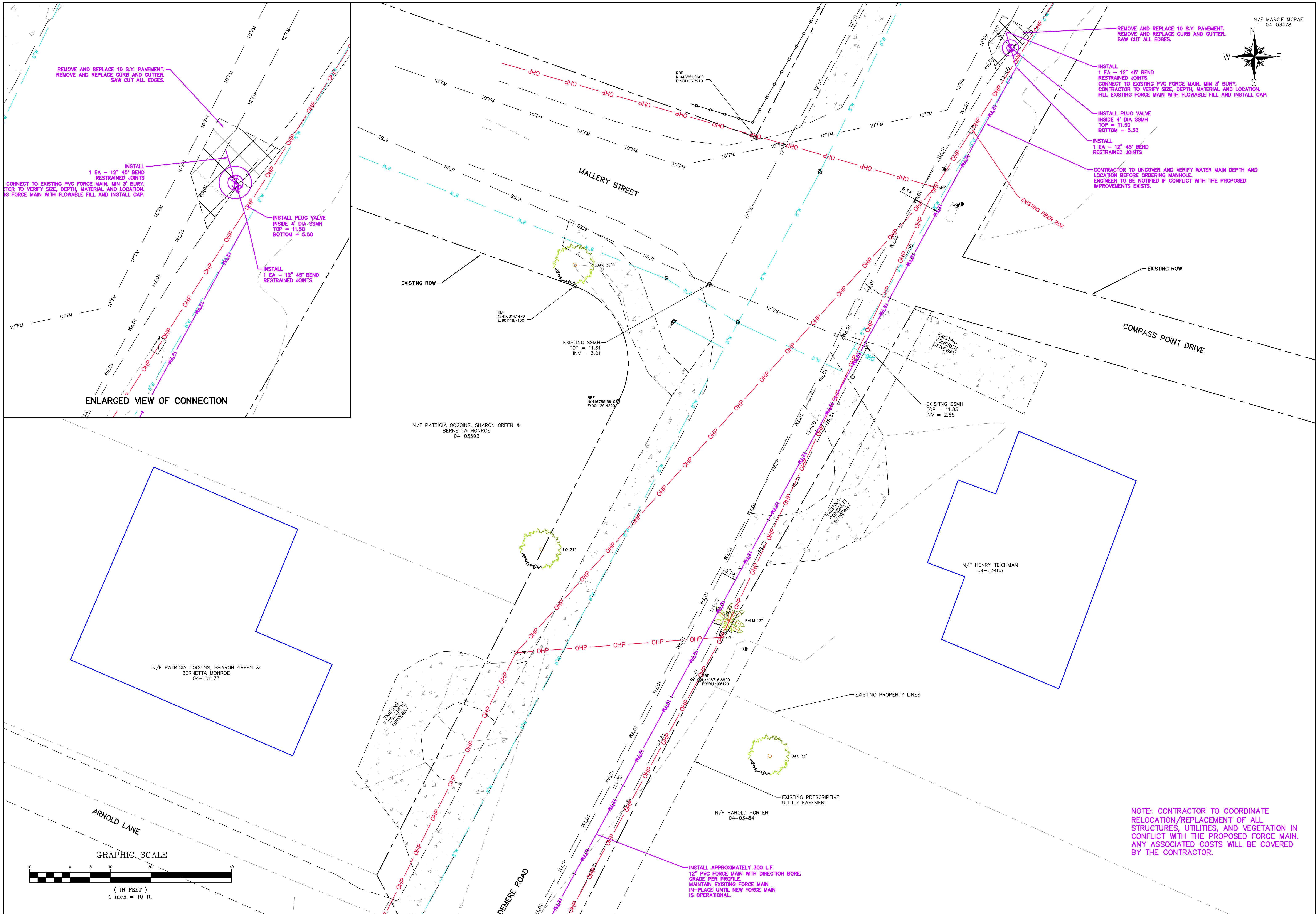
SHEET NUMBER:  
C2.4

GEORGIA811.COM DIAL 811

CSWCC# 0000075362

ST. SIMONS, GEORGIA





N/F MARIE MORAE  
04-03478

REMOVE AND REPLACE 10 S.Y. PAVEMENT.  
REMOVE AND REPLACE CURB AND GUTTER.  
SAW CUT ALL EDGES.

INSTALL  
1 EA - 12" 45° BEND  
RESTRAINED JOINTS  
CONNECT TO EXISTING PVC FORCE MAIN, MIN 3' BURY.  
CONTRACTOR TO VERIFY SIZE, DEPTH, MATERIAL AND LOCATION.  
FILL EXISTING FORCE MAIN WITH FLOWABLE FILL AND INSTALL CAP.

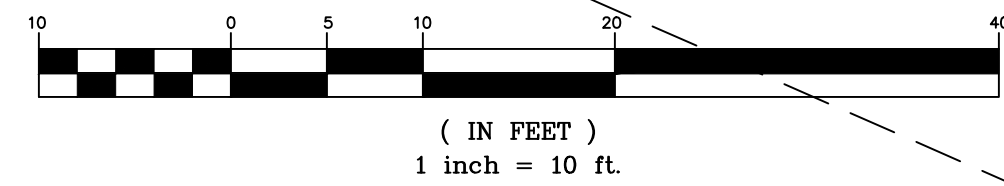
INSTALL  
1 EA - 12" 45° BEND  
RESTRAINED JOINTS

CONTRACTOR TO UNCOVER AND VERIFY WATER MAIN DEPTH AND  
LOCATION BEFORE ORDERING MANHOLE.  
ENGINEER TO BE NOTIFIED IF CONFLICT WITH THE PROPOSED  
IMPROVEMENTS EXISTS.

ENLARGED VIEW OF CONNECTION

ARNOLD LANE

GRAPHIC SCALE



N/F PATRICIA GOGGINS, SHARON GREEN &  
BERNETTA MONROE  
04-03593

N/F HENRY TEICHMAN  
04-03483

N/F HAROLD PORTER  
04-03484

NOTE: CONTRACTOR TO COORDINATE  
RELOCATION/REPLACEMENT OF ALL  
STRUCTURES, UTILITIES, AND VEGETATION IN  
CONFLICT WITH THE PROPOSED FORCE MAIN.  
ANY ASSOCIATED COSTS WILL BE COVERED  
BY THE CONTRACTOR.

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PROJECT # 2014

PROJECT # 2014

BRUNSWICK-GLYNN NOISSHUM CREEK  
JOINT WATER & SEWER COMMISSION

SHEET NAME:  
UTILITY  
PLAN

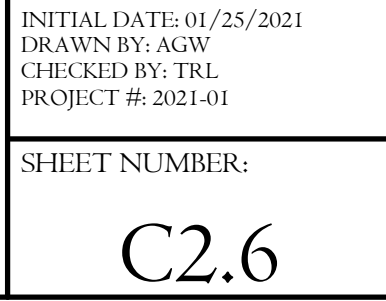
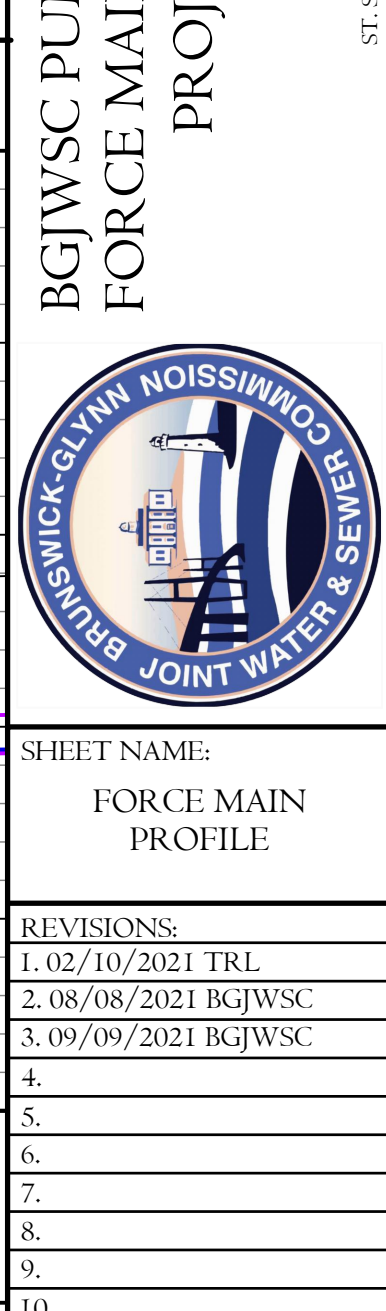
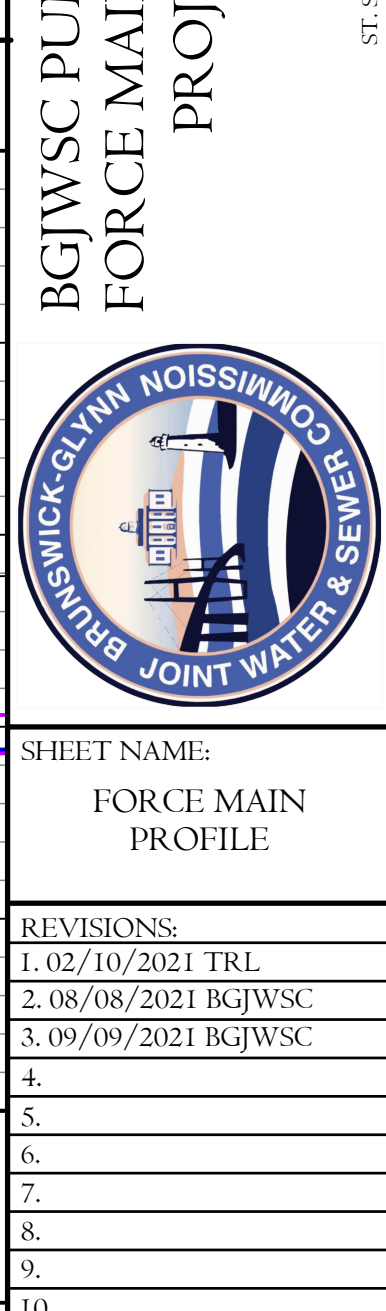
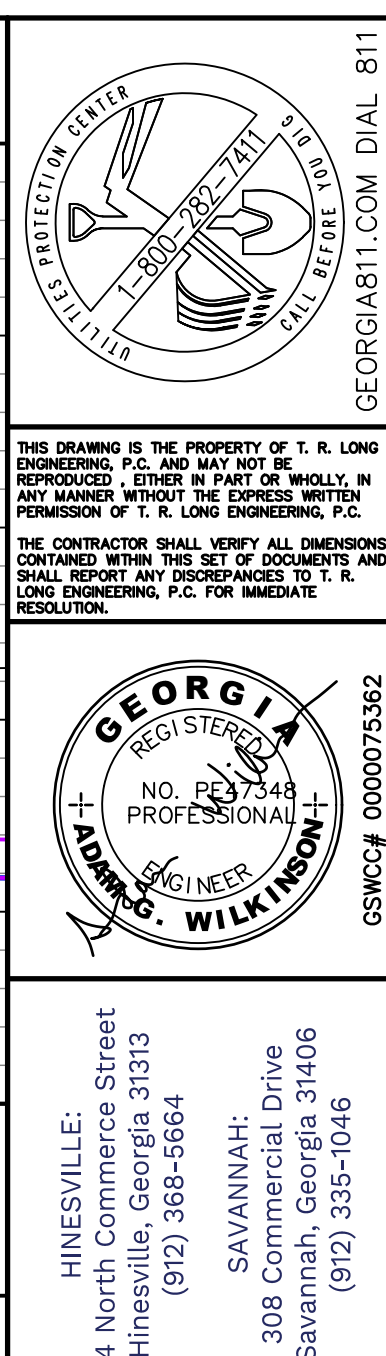
REVISIONS:

1.	02/10/2021	TRL
2.	08/08/2021	BGJWSC
3.	09/09/2021	BGJWSC
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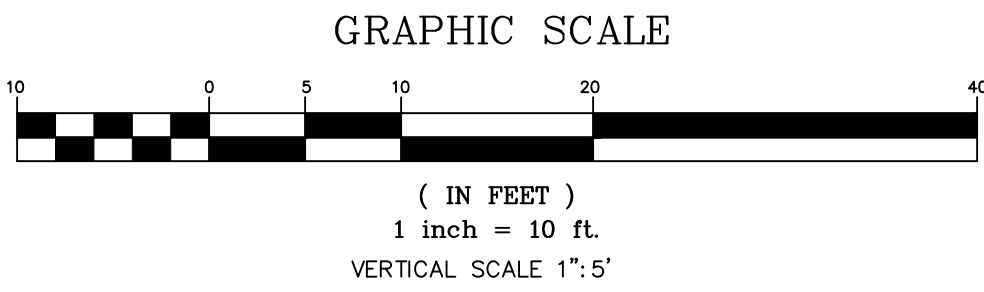
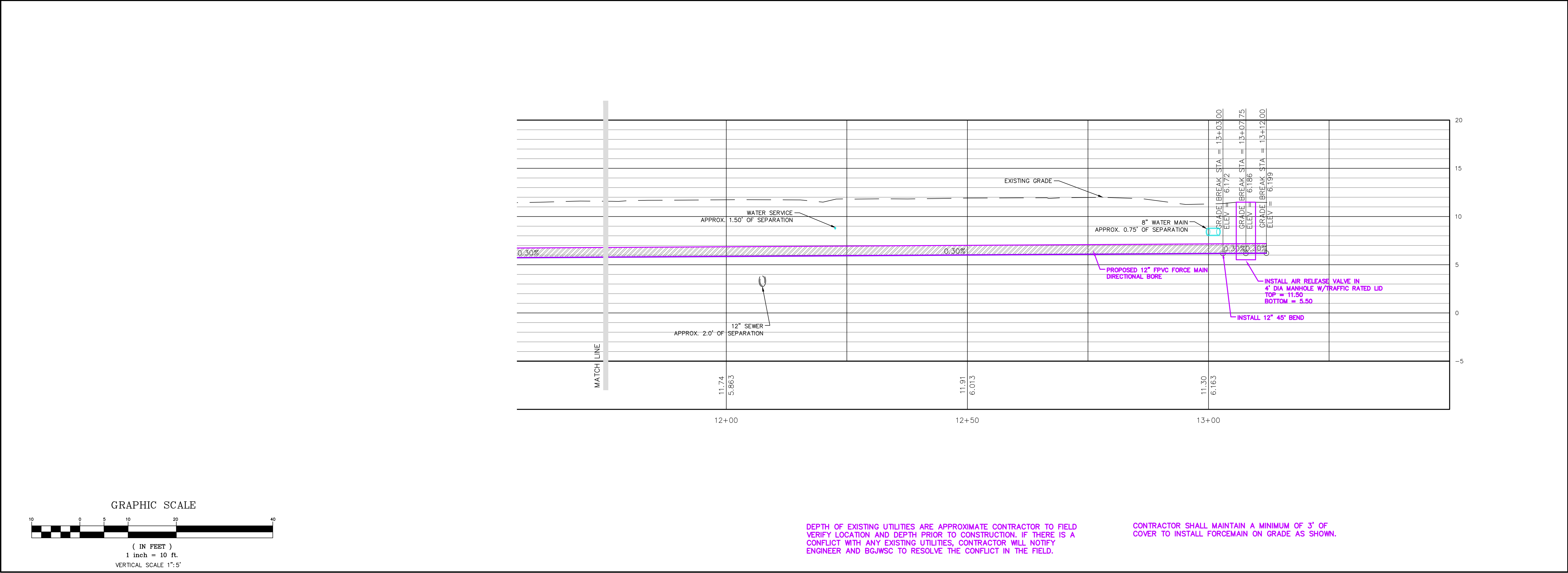
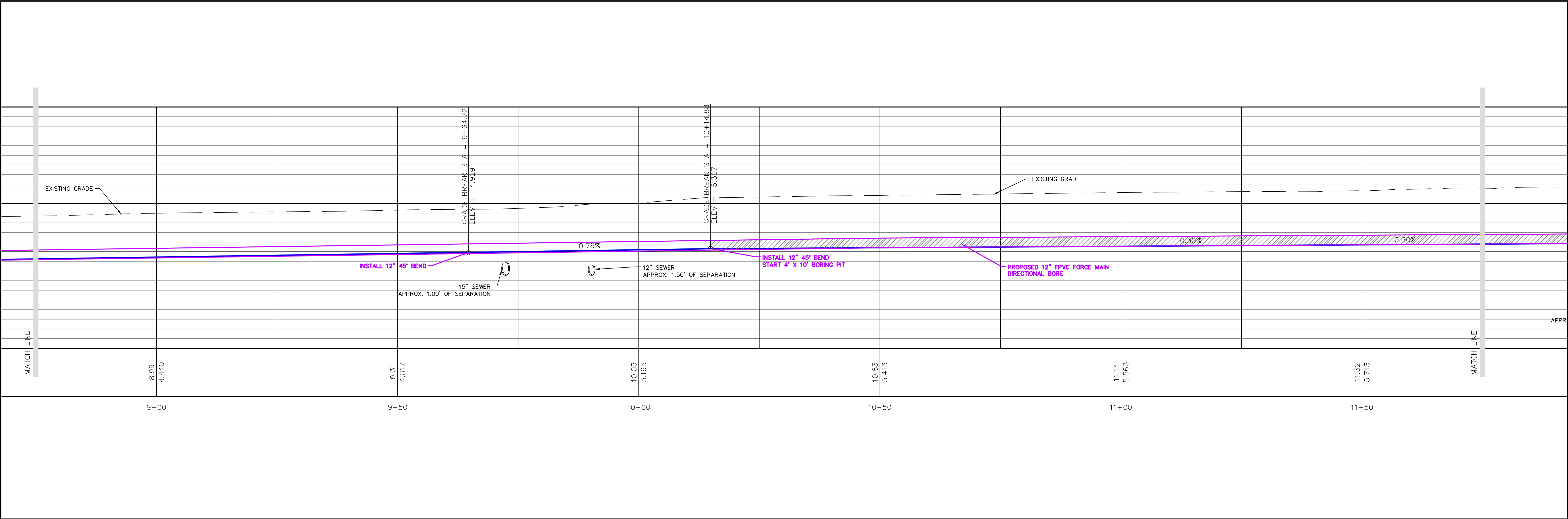
INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TRL  
PROJECT # 2021-01

SHEET NUMBER:  
C2.5









DEPTH OF EXISTING UTILITIES ARE APPROXIMATE CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH PRIOR TO CONSTRUCTION. IF THERE IS A CONFLICT WITH ANY EXISTING UTILITIES, CONTRACTOR WILL NOTIFY ENGINEER AND BGJWSC TO RESOLVE THE CONFLICT IN THE FIELD.

CONTRACTOR SHALL MAINTAIN A MINIMUM OF 3' OF COVER TO INSTALL FORCEMAIN ON GRADE AS SHOWN.

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NO. 237348  
STATE OF GEORGIA  
T. R. LONG  
WILKINSON

CSWCC# 000075362

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BGJWSC PUMP STATION 2002  
FORCE MAIN REPLACEMENT  
PROJECT # 2014

ST. SIMONS, GEORGIA

SHEET NAME:  
FORCE MAIN  
PROFILE

REVISIONS:

1.	02/10/2021	TRL
2.	08/08/2021	BGJWSC
3.	09/09/2021	BGJWSC
4.		
5.		
6.		
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8.		
9.		
10.		

INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TRL  
PROJECT #: 2021-01

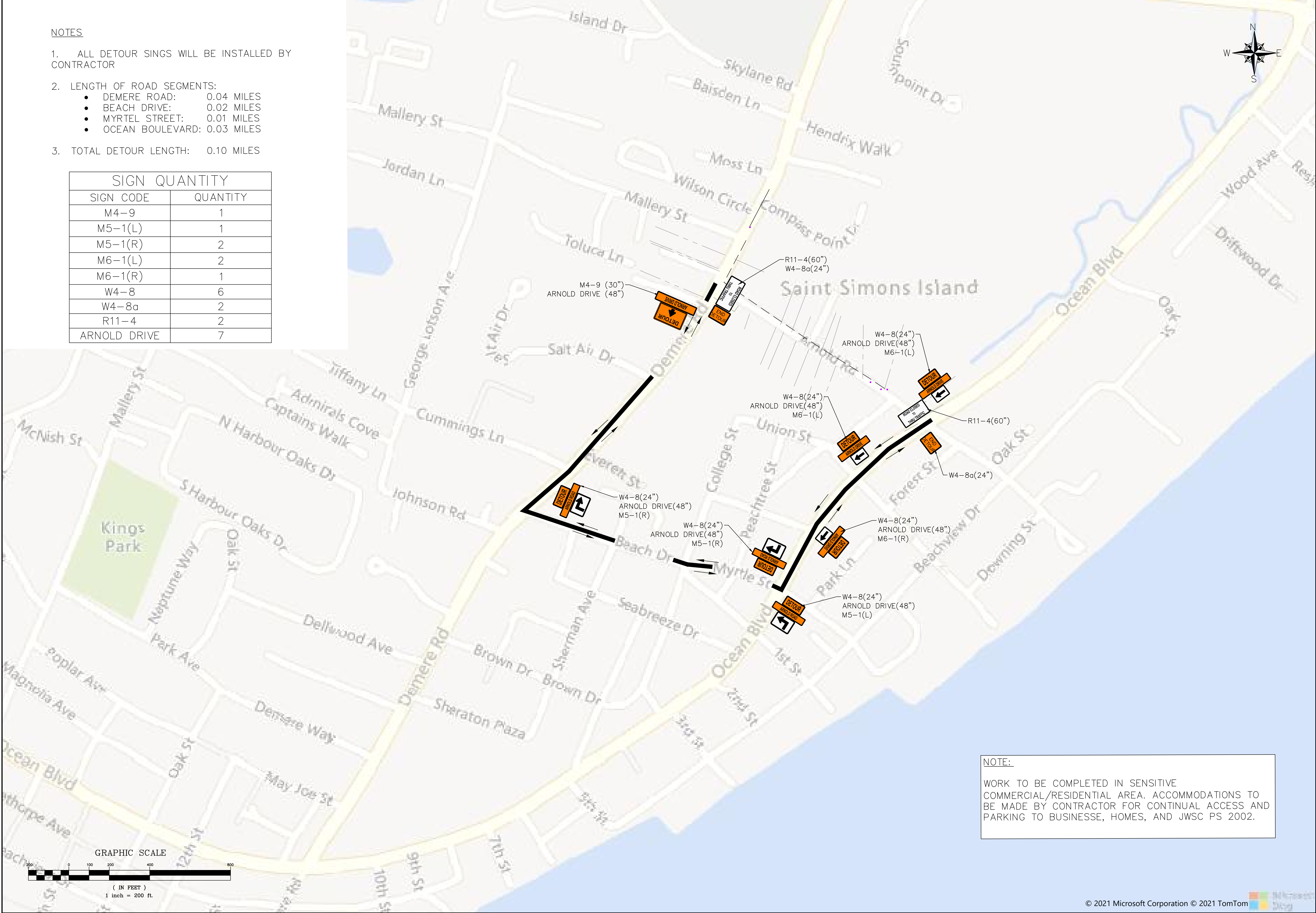
SHEET NUMBER:  
**C2.7**



NOTES

1. ALL DETOUR SIGNS WILL BE INSTALLED BY CONTRACTOR
2. LENGTH OF ROAD SEGMENTS:
- DEMERE ROAD: 0.04 MILES
  - BEACH DRIVE: 0.02 MILES
  - MYRTLE STREET: 0.01 MILES
  - OCEAN BOULEVARD: 0.03 MILES
3. TOTAL DETOUR LENGTH: 0.10 MILES

SIGN QUANTITY	
SIGN CODE	QUANTITY
M4-9	1
M5-1(L)	1
M5-1(R)	2
M6-1(L)	2
M6-1(R)	1
W4-8	6
W4-8a	2
R11-4	2
ARNOLD DRIVE	7



NOTE:

WORK TO BE COMPLETED IN SENSITIVE COMMERCIAL/RESIDENTIAL AREA. ACCOMMODATIONS TO BE MADE BY CONTRACTOR FOR CONTINUAL ACCESS AND PARKING TO BUSINESSES, HOMES, AND JWSC PS 2002.

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WILKINSON

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BGJWSC PUMP STATION 2002  
FORCE MAIN REPLACEMENT  
PROJECT # 2014

BRUNSWICK-GLYNN-JOHNSON  
JOINT WATER & SEWER DISTRICT

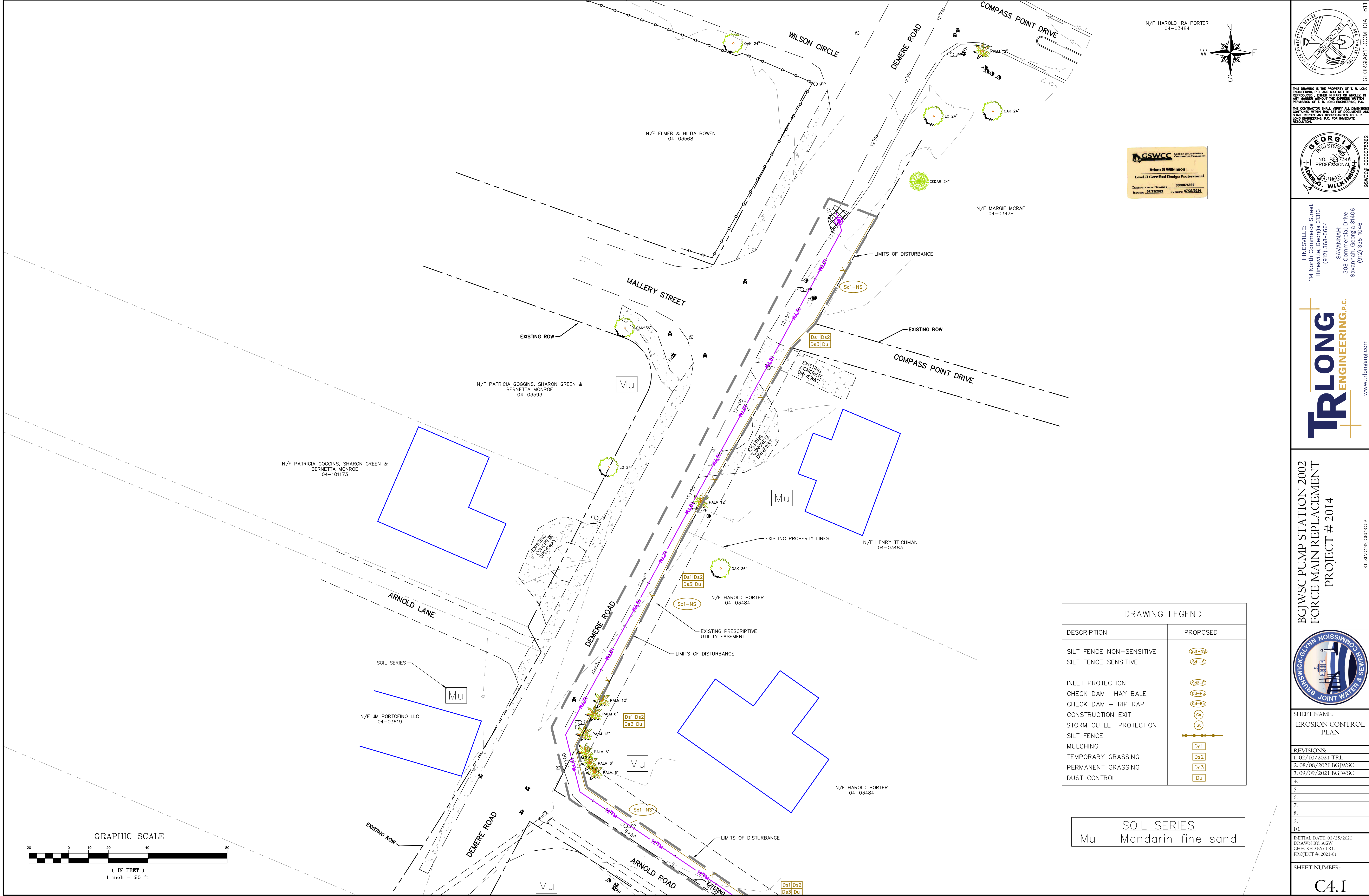
SHEET NAME:  
TRAFFIC CONTROL PLAN

REVISIONS:
1. 02/10/2021 TRL
2. 08/08/2021 BGJWSC
3. 09/09/2021 BGJWSC
4.
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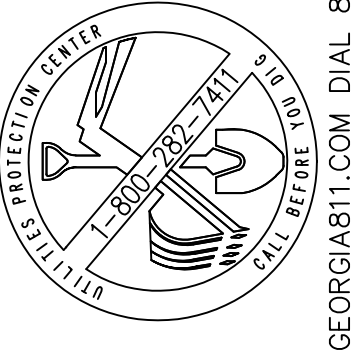
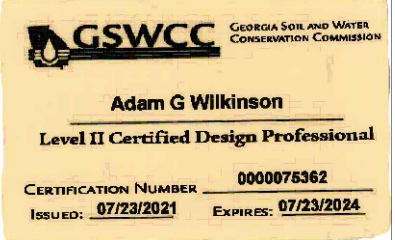
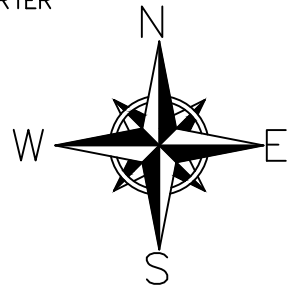
INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TRL  
PROJECT #: 2021-01

SHEET NUMBER:  
**C3.I**





N/F HAROLD IRA PORTER  
04-03484



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BGJWSC PUMP STATION 2002  
FORCE MAIN REPLACEMENT  
PROJECT # 2014



SHEET NAME:  
EROSION CONTROL  
PLAN

REVISIONS:	
1.	02/10/2021 TRL
2.	08/08/2021 BGJWSC
3.	09/09/2021 BGJWSC
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INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TRL  
PROJECT #: 2021-01

SHEET NUMBER:

C4.I

#### DRAWING LEGEND

DESCRIPTION	PROPOSED
SILT FENCE NON-SENSITIVE	Sd1-NS
SILT FENCE SENSITIVE	Sd1-S
INLET PROTECTION	Sd2-F
CHECK DAM - HAY BALE	Cd-Hb
CHECK DAM - RIP RAP	Cd-Rp
CONSTRUCTION EXIT	Ce
STORM OUTLET PROTECTION	St
SILT FENCE	
MULCHING	Ds1
TEMPORARY GRASSING	Ds2
PERMANENT GRASSING	Ds3
DUST CONTROL	Du

#### SOIL SERIES

Mu - Mandarin fine sand

#### GRAPHIC SCALE



( IN FEET )  
1 inch = 20 ft.





DRAWING LEGEND

DESCRIPTION	PROPOSED
SILT FENCE NON-SENSITIVE	Sd1-NS
SILT FENCE SENSITIVE	Sd1-S
INLET PROTECTION	Sd2-P
CHECK DAM- HAY BALE	Cd-Hb
CHECK DAM - RIP RAP	Cd-Rp
CONSTRUCTION EXIT	Co
STORM OUTLET PROTECTION	St
SILT FENCE	
MULCHING	Ds1
TEMPORARY GRASSING	Ds2
PERMANENT GRASSING	Ds3
DUST CONTROL	Du

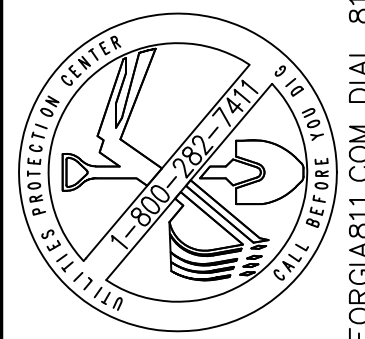
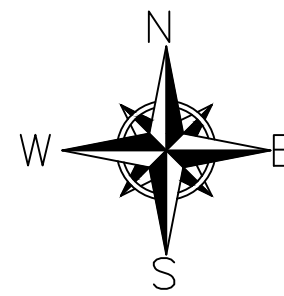
SOIL SERIES

Mu - Mandarin fine sand

GRAPHIC SCALE



( IN FEET )  
1 inch = 20 ft.



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BGJWSC PUMP STATION 2002  
FORCE MAIN REPLACEMENT  
PROJECT # 2014



SHEET NAME:  
EROSION CONTROL  
PLAN

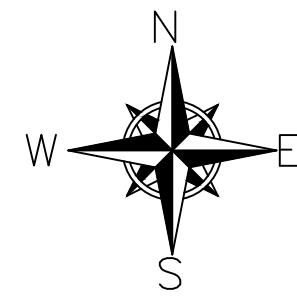
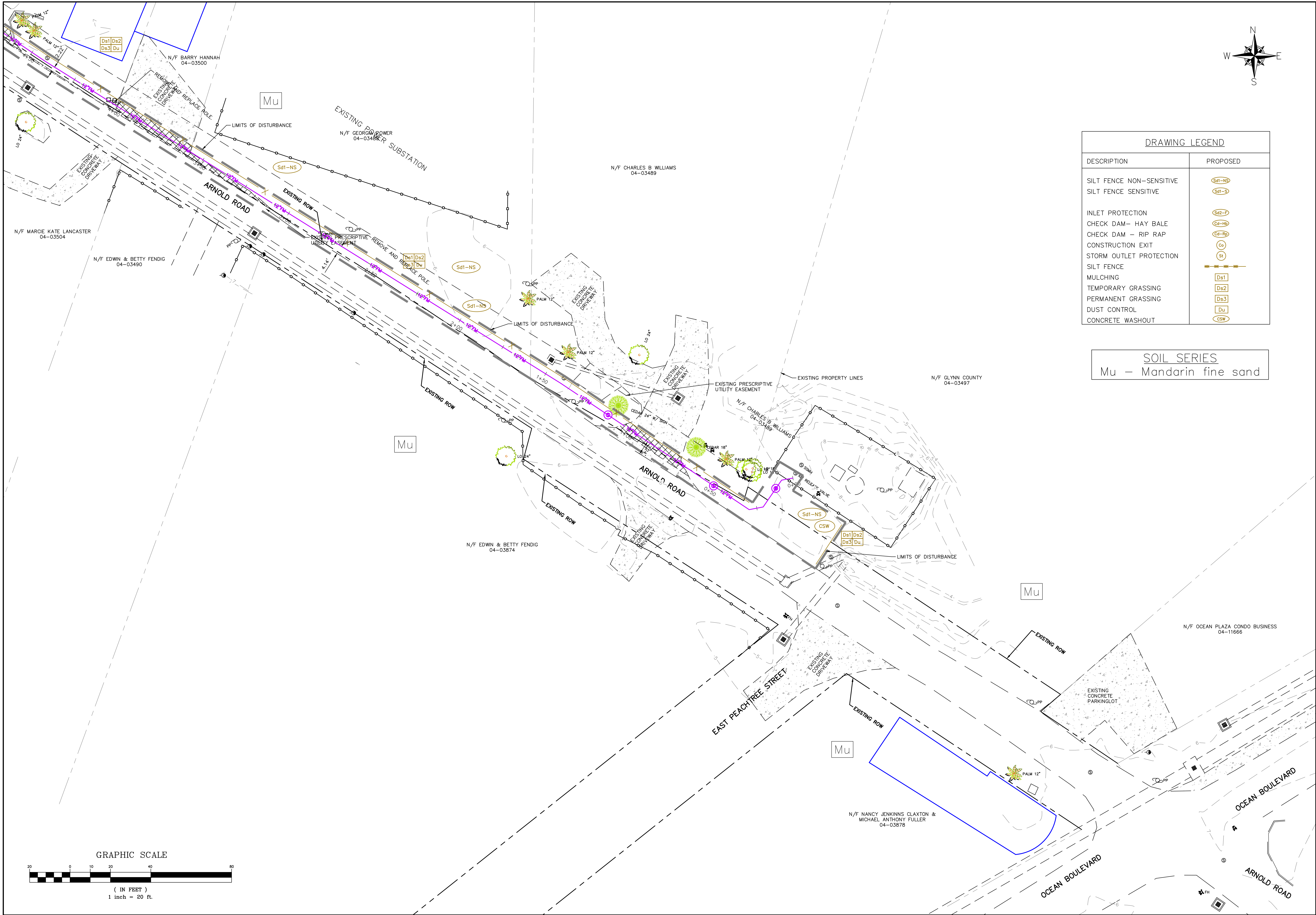
REVISIONS:
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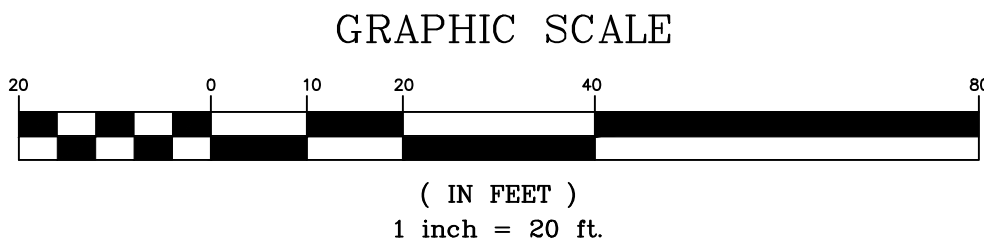
C4.2





DRAWING LEGEND	
DESCRIPTION	PROPOSED
SILT FENCE NON-SENSITIVE	Sd1-NS
SILT FENCE SENSITIVE	Sd1-S
INLET PROTECTION	Sd2-F
CHECK DAM- HAY BALE	Cd-Hb
CHECK DAM - RIP RAP	Cd-Rp
CONSTRUCTION EXIT	Ce
STORM OUTLET PROTECTION	St
SILT FENCE	
MULCHING	Ds1
TEMPORARY GRASSING	Ds2
PERMANENT GRASSING	Ds3
DUST CONTROL	Du
CONCRETE WASHOUT	Csw

SOIL SERIES  
Mu - Mandarin fine sand



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ST. SIMONS, GEORGIA

BGJWSC PUMP STATION 2002  
FORCE MAIN REPLACEMENT  
PROJECT # 2014

SHEET NAME:  
EROSION CONTROL  
PLAN

REVISIONS:

1.	02/10/2021	TRL
2.	08/08/2021	BGJWSC
3.	09/09/2021	BGJWSC
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INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TRL  
PROJECT #: 2021-01

SHEET NUMBER:  
**C4.3**







EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST  
STAND ALONE CONSTRUCTION PROJECTS

SWDC: COASTAL GEORGIA  
PROJECT NAME: BGJWSC PUMP STATION 2002 FORCE MAIN REPLACEMENT ADDRESS: ARNOLD STREET  
CITY/COUNTY: SAINT SIMONS DATE ON PLANS: 01/25/2021  
NAME & EMAIL OF PERSON FILLING OUT CHECKLIST: Adam Wilkinson, awilkinson@trifongeng.com

EROSION, SEDIMENT & POLLUTION CONTROL PLAN CHECKLIST (CONTINUED)

30. REQUIREMENT: PROVIDE COMPLETE REQUIREMENTS OF INSPECTIONS AND RECORD KEEPING BY THE PRIMARY PERMITTEE.\*

RESPONSE:

• EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (a) ALL AREAS AT THE PRIMARY PERMITTEE SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT; AND (b) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR OFF THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRIPPING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

• MEASURE AND RECORD RAINFALL WITHIN DISTURBED AREAS OF THE SITE THAT HAVE NOT MET FINAL STABILIZATION ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.

• CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (a) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (b) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (c) STRUCTURAL CONTROL MEASURES, EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY, WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.a.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

• CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION HAS BEEN SUBMITTED) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE AREA OF THE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).

• BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL, BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.

• A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION ACTIVITY RELATING TO THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.a.(5) OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION PROJECT THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN, WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT

31. REQUIREMENT: PROVIDE COMPLETE REQUIREMENTS OF SAMPLING FREQUENCY AND REPORTING OF SAMPLING RESULTS.\*

RESPONSE:

SAMPLING FREQUENCY

• THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORMWATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN IN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.

• HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.

• SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS:

- FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORMWATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO THE COMPLETION OF MASS GRADING OPERATIONS, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION;
- IN ADDITION TO (A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO SUBMITTAL OF A NOT, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST;
- THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMPs IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT UNTIL THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS DETERMINE THAT BMPs ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED;
- WHERE SAMPLING PURSUANT TO (A), (B) OR (C) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV.D.4.a.(6), MUST INCLUDE A WRITTEN JUSTIFICATION IN THE INSPECTION REPORT WHY SAMPLING WAS NOT PERFORMED, PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING OBLIGATIONS UNDER (A), (B), OR (C) ABOVE; AND
- EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIREMENT, (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIREMENT, (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.

\*NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR SAMPLING AT ANY TIME OF THE DAY OR WEEK.

REPORTING.

• THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C. BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. SAMPLING AND ANALYSIS OF ANY STORM WATER DISCHARGE(S) OR THE RECEIVING WATER(S) BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A SIMILAR MANNER TO THE EPD. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. SAMPLING REPORTS MUST BE SUBMITTED TO EPD USING THE ELECTRONIC SUBMITTAL SERVICE PROVIDED BY EPD. SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

• ALL SAMPLING REPORTS RESULTS SHALL INCLUDE THE FOLLOWING INFORMATION:

- THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS;
- THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND MEASUREMENTS;
- THE DATE(S) ANALYSES WERE PERFORMED;
- THE TIME(S) ANALYSES WERE INITIATED;
- THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES;
- REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED;
- THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC., USED TO DETERMINE THESE RESULTS;
- RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU;" AND
- CERTIFICATION STATEMENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN.

• ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE DISTRICT OFFICE OF THE EPD ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

32. REQUIREMENT: PROVIDE COMPLETE DETAILS FOR RETENTION OF RECORDS AS PER PART IV.F. OF THE PERMIT.\*

RESPONSE: THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI:

- A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
- A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT;
- THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT;
- A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
- A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4. OF THIS PERMIT;
- A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND
- DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.a.(2) OF THIS PERMIT.

2. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPORTS (INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION) OR OTHER REPORTS REQUESTED BY THE EPD, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI. OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE

33. REQUIREMENT: DESCRIPTION OF ANALYTICAL METHODS TO BE USED TO COLLECT AND ANALYZE THE SAMPLES FROM EACH LOCATION.\*

RESPONSE: ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED). THE GUIDANCE DOCUMENT TITLED "NPDES STORMWATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.

- SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.
- SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.
- LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.
- MANUAL, AUTOMATIC, OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFIED EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.
- SAMPLING AND ANALYSIS OF THE EROSION OR OUTFALLS BEYOND MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV. E.

STORM WATER IS TO BE SAMPLED FOR NEPHELOMETRIC TURBIDITY UNITS (NTU) AT THE OUTFALL LOCATION. A DISCHARGE OF STORM WATER INTO A RAINFALL OR GREATER UNLESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (a) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (b) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (c) STRUCTURAL CONTROL MEASURES, EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY, WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.a.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

34. REQUIREMENT: APPENDIX B RATIONALE FOR NTU VALUES AT ALL OUTFALL SAMPLING POINTS WHERE APPLICABLE.\*

RESPONSE: SURFACE WATER DRAINAGE AREA, SQUARE MILES

	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
75	100	150	200	400	750	750	750	750
100	100	150	200	400	750	750	750	750
150	100	150	200	400	750	750	750	750
200	100	150	200	400	750	750	750	750
250	100	150	200	400	750	750	750	750
300	100	150	200	400	750	750	750	750
350	100	150	200	400	750	750	750	750
400	100	150	200	400	750	750	750	750
450	100	150	200	400	750	750	750	750
500	100	150	200	400	750	750	750	750
550	100	150	200	400	750	750	750	750
600	100	150	200	400	750	750	750	750
650	100	150	200	400	750	750	750	750
700	100	150	200	400	750	750	750	750
750	100	150	200	400	750	750	750	750
800	100	150	200	400	750	750	750	750
850	100	150	200	400	750	750	750	750
900	100	150	200	400	750	750	750	750
950	100	150	200	400	750	750	750	750
1000	100	150	200	400	750	750	750	750

APPENDIX B  
NEPHELOMETRIC TURBIDITY UNIT (NTU) TABLE

35. REQUIREMENT: DELINEATE ALL SAMPLING LOCATIONS IF APPLICABLE, PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED.\*

RESPONSE: FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORM WATER OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:

- THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORM WATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY, WHERE APPROPRIATE. THE UPSTREAM SAMPLE FROM ACROSS THE RECEIVING WATER(S) MUST BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.
- THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORM WATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY, WHERE APPROPRIATE. SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.
- SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORMWATER OUTFALL CHANNEL(S).
- CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER CHANNEL.
- THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
- THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.
- PERMITTEES DO NOT HAVE TO SAMPLE SHEETFLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL, THAT HAS BEEN CERTIFIED BY THE DESIGN PROFESSIONAL THAT THE SURFACE OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR LANDSCAPED ACCORDING TO THE PLAN (UNIFORMLY COVERED WITH LANDSCAPING MATERIALS IN PLANNED LANDSCAPED AREAS), OR EQUIVALENT PERMANENT STABILIZATION MEASURES AS DEFINED IN THE MANUAL. (EXCLUDING A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET CROP PERENNIALS APPROPRIATE FOR THE REGION).
- ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORM WATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PART III.D.3. OR III.D.4., WHICHEVER IS APPLICABLE.

36. REQUIREMENT: DESCRIPTION OF APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE INCLUDING: (1) INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPs, (2) INTERMEDIATE GRADING AND DRAINAGE BMPs, AND (3) FINAL BMPs. FOR CONSTRUCTION SITES WHERE THERE WILL BE NO MASS GRADING AND THE INITIAL PERIMETER CONTROL BMPs, INTERMEDIATE GRADING AND DRAINAGE BMPs, AND FINAL BMPs ARE THE SAME, THE PLAN MAY COMBINE ALL OF THE BMPs INTO A SINGLE PHASE.\*

RESPONSE: USE ITEM 28 FOR A DESCRIPTION OF ALL INITIAL AND INTERMEDIATE BMPs AND ITEM 26 FOR A DESCRIPTION OF ALL FINAL BMPs. PLEASE SEE THE EROSION CONTROL PLAN TO SEE WHERE THESE BMPs ARE TO BE IMPLEMENTED.

37. REQUIREMENT: GRAPHIC SCALE AND NORTH ARROW.

RESPONSE: THE CORRECT GRAPHIC SCALE AND NORTH ARROW ARE SHOWN ON ALL SHEETS WHERE APPLICABLE.

38. REQUIREMENT: EXISTING AND PROPOSED CONTOUR LINES WITH CONTOUR LINES DRAWN AT AN INTERVAL, IN ACCORDANCE WITH THE FOLLOWING:

Map Scale	Ground Slope	Contour Intervals, ft.
1 inch = 100ft or larger scale	Flat 0 - 2% Rolling 2 - 8% Steep 8% +	0.5 or 1 1 or 2 2.5 or 10

RESPONSE: CONTOURS ARE SHOWN IN 1' INTERVALS.

39. REQUIREMENT: USE OF ALTERNATIVE BMPs WHOSE PERFORMANCE HAS BEEN DOCUMENTED TO BE EQUIVALENT TO OR SUPERIOR TO CONVENTIONAL BMPs AS CERTIFIED BY A DESIGN PROFESSIONAL (UNLESS DISAPPROVED BY EPD OR THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION). PLEASE REFER TO THE ALTERNATIVE BMP GUIDANCE DOCUMENT FOUND AT WWW.GASWCC.ORG.

RESPONSE: NO ALTERNATIVE BMPs WILL BE USED.

40. REQUIREMENT: USE OF ALTERNATIVE BMP FOR APPLICATION TO THE EQUIVALENT BMP LIST. PLEASE REFER TO APPENDIX A-2 OF THE MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA 2016 EDITION.\*

RESPONSE: NO ALTERNATIVE BMPs WILL BE USED.

41. REQUIREMENT: DELINEATION OF THE APPLICABLE 25-FOOT OR 50-FOOT UNDISTURBED BUFFERS ADJACENT TO STATE WATERS AND ANY ADDITIONAL BUFFERS REQUIRED BY THE LOCAL ISSUING AUTHORITY. CLEARLY NOTE AND DELINEATE ALL AREAS OF IMPACT.

RESPONSE: THERE ARE NO 25-FOOT OR 50-FOOT UNDISTURBED BUFFERS REQUIRED FOR THE SITE. THERE ARE NO STATE WATERS ADJACENT TO THE SITE AND NO ADDITIONAL BUFFERS ARE REQUIRED BY THE LOCAL ISSUING AUTHORITY.

42. REQUIREMENT: DELINEATION OF ON-SITE WETLANDS AND ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE.

RESPONSE: THERE ARE NO ON-SITE WETLANDS AND STATE WATERS LOCATED ON AND WITHIN 200' OF THE SITE.

43. REQUIREMENT: DELINEATION AND ACREAGE OF CONTRIBUTING DRAINAGE BASINS ON THE PROJECT SITE.

RESPONSE: ALL DRAINAGE BASIN INFORMATION IS SHOWN IN THE HYDROLOGY STUDY PROVIDED WITH THESE PLANS.

44. REQUIREMENT: DELINEATE ON-SITE DRAINAGE AND OFF-SITE WATERSHEDS USING USGS 1"=2000' TOPOGRAPHICAL SHEETS.

RESPONSE: A HYDROLOGY REPORT INCLUDING A DRAINAGE NARRATIVE, DRAINAGE CALCULATIONS AND DELINEATION OF PRE AND POST DEVELOPED CONDITIONS IS PROVIDED WITH THESE PLANS ALONG WITH THE USGS TOPOGRAPHICAL SHEET.

RESPONSE: THE PRE-DEVELOPMENT RUNOFF COEFFICIENT IS 73. THE POST-DEVELOPMENT RUNOFF COEFFICIENT IS 73.

45. REQUIREMENT: AN ESTIMATE OF THE RUNOFF COEFFICIENT OR PEAK DISCHARGE FLOW OF THE SITE PRIOR TO AND AFTER CONSTRUCTION ACTIVITIES ARE COMPLETED.

RESPONSE: THE PRE-DEVELOPMENT RUNOFF COEFFICIENT IS 73. THE POST-DEVELOPMENT RUNOFF COEFFICIENT IS 73.

46. REQUIREMENT: STORM-DRAIN PIPE AND WEIR VELOCITIES WITH APPROPRIATE OUTLET PROTECTION TO ACCOMMODATE DISCHARGES WITHOUT EROSION-DENTIFY/DELINEATE ALL STORM WATER DISCHARGE POINTS.

RESPONSE: THE STORM-DRAIN PIPE AND WEIR VELOCITIES ARE SHOWN ON THE EROSION CONTROL PLAN AS WELL AS APPROPRIATE OUTLET PROTECTION FOR EACH.

47. REQUIREMENT: SOIL SERIES FOR THE PROJECT SITE AND THEIR DELINEATION

RESPONSE: THE SOIL SERIES IS SHOWN ON THE INITIAL EROSION CONTROL PLAN.

48. REQUIREMENT: THE LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION.

RESPONSE: THE LIMITS OF DISTURBANCE ARE SHOWN ON EACH EROSIONS CONTROL SHEET.

49. REQUIREMENT: PROVIDE A MINIMUM OF 67 CUBIC YARDS OF SEDIMENT STORAGE PER ACRE DRAINED USING A TEMPORARY SEDIMENT BASIN, RETROFITTED DETENTION POND, AND/OR EXCAVATED INLET SEDIMENT TRAPS FOR EACH COMMON DRAINAGE LOCATION. SEDIMENT STORAGE VOLUME MUST BE IN PLACE PRIOR TO AND DURING ALL LAND DISTURBANCE ACTIVITIES UNTIL FINAL STABILIZATION OF THE SITE HAS BEEN ACHIEVED. A WRITTEN JUSTIFICATION EXPLAINING THE DECISION TO USE EQUIVALENT CONTROLS WHEN A SEDIMENT BASIN IS NO ATTAINABLE MUST BE INCLUDED IN THE PLAN FOR EACH COMMON DRAINAGE LOCATIN IN WHICH A SEDIMENT BASIN IS NOT PROVIDED. A WRITTEN JUSTIFICATION AS TO WHY 67 CUBIC YARDS OF STORAGE IS NOT ATTAINABLE MUST ALSO BE GIVEN. WORKSHEETS FROM THE MANUAL INCLUDED FOR STRUCTURAL BMPs AND ALL CALCULATIONS USED BY THE STORAGE DESIGN PROFESSIONAL TO OBTAIN THE REQUIRED SEDIMENT WHEN USING EQUIVALENT CONTROLS. WHEN DISCHARGING FROM SEDIMENT BASINS AND IMPOUNDMENTS, PERMITTEES ARE REQUIRED TO UTILIZE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE, UNLESS IMFEASIBLE. IF OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE ARE NOT FEASIBLE, A WRITTEN JUSTIFICATION EXPLAINING THIS DECISION MUST BE INCLUDED IN THE PLAN.

RESPONSE: THE REQUIRED SEDIMENT STORAGE IS (0.35 ACRES)(67CY/ACRE) = 23.45 CY. THE SILT FENCE WILL PROVIDE THE REQUIRED SEDIMENT STORAGE.

50. REQUIREMENT: LOCATION OF BEST MANAGEMENT PRACTICES THAT ARE CONSISTENT WITH AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. USE UNIFORM CODING SYMBOLS FROM THE MANUAL, CHAPTER 6, WITH LEGEND.

RESPONSE: THE BMPs SHOWN AND DESCRIBED IN THIS PANS ARE CONSISTENT AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA CALLS FOR.

51. REQUIREMENT: PROVIDE DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES. SPECIFICATIONS MUST, AT A MINIMUM, MEET THE GUIDELINES SET FORTH IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.

RESPONSE: DETAILED DRAWINGS ARE PROVED ON THE SHEETS LABELED "DETAILS" IN THIS PLAN.

52. REQUIREMENT: PROVIDE VEGETATIVE PLAN, NOTING ALL TEMPORARY AND PERMANENT VEGETATIVE PRACTICES. INCLUDE SPECIES, PLANTING DATES AND SEEDING, FERTILIZER, LIME AND MULCHING RATES. VEGETATIVE PLAN SHALL BE SITE SPECIFIC FOR APPROPRIATE TIME OF YEAR THAT SEEDING WILL TAKE PLACE AND FOR THE APPROPRIATE GEOGRAPHIC REGION OF GEORGIA.

RESPONSE: PLEASE SEE THE DETAILS SHEET FOR THE VEGETATIVE PLAN.

OTHER EROSION CONTROL NOTES

1. SHADED AREAS SHOWN ON GRADING PHASE EROSION CONTROL PLANS REPRESENT CRITICAL WORK ZONES. AT THE END OF EACH WORK DAY ALL SLOPES 2:1 OR STEEPER AND HIGHER THAN 5 FEET SHALL RECEIVE SURFACE ROUGHENING, POLYMERS, AND EROSION CONTROL MATTING. ADDITIONALLY, ALL FILL SLOPES SHALL RECEIVE A DIVERSION DIKE AND TEMPORARY DOWN DRAINS ALONG THE TOP OF THE SLOPE PREVENTING DRAINAGE SPILLING OVER THE EDGE AND DOWN THE FACE OF THE SLOPE. THE TEMPORARY DOWN DRAINS SHALL BE CONSTRUCTED WITH PERFORATED STAND PIPES AT THE TOP OF THE SLOPE AND RECONSTRUCTED EACH DAY AS THE SLOPE INCREASES IN HEIGHT.

2. THIS PLAN HAS BEEN PREPARED TO MEET THE REQUIREMENTS UNDER THE STATE OF GEORGIA, DEPARTMENT OF NATURAL RESOURCES, ENVIRONMENTAL PROTECTION DIVISION (EPD), GENERAL PERMIT NO. GAR 100002-INFRASTRUCTURE DEVELOPMENT FOR AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FOR INFRASTRUCTURE.

AUTHORIZED DISCHARGES:

• ALL DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT WILL RESULT IN LAND DISTURBANCE EQUAL TO OR GREATER THAN ONE ACRE. PART I.C.1.4.C

• ALL DISCHARGES COVERED BY THIS PERMIT SHALL BE COMPOSED ENTIRELY OF STORMWATER EXCEPT AS PROVIDED IN PART I.C.2 AND PART III.A.2 OF THE PERMIT. PART III.A.1

• AUTHORIZED MIXED STORMWATER DISCHARGES: PART I.C.2  
a. THE INDUSTRIAL SOURCE OR ACTIVITY OTHER THAN CONSTRUCTION IS LOCATED ON THE SAME SITE AS THE CONSTRUCTION ACTIVITY AND IS AN INTEGRAL PART OF THE CONSTRUCTION ACTIVITY.

b. THE STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES ARE OCCURRING ARE IN COMPLIANCE WITH THE TERMS OF THIS PERMIT.

c. STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE AREAS OF THE SITE WHERE INDUSTRIAL ACTIVITY OTHER THAN CONSTRUCTION IS LOCATED ARE IN COMPLIANCE WITH A DIFFERENT PERMIT OR INDIVIDUAL PERMIT AUTHORIZING SUCH DISCHARGES AND THE DISCHARGES ARE IN COMPLIANCE WITH A DIFFERENT NPDES PERMIT.

• AUTHORIZED NON-STORMWATER DISCHARGES: PART III.A.2

- FIRE FIGHTING ACTIVITIES
- FIRE HYDRANT FLUSHING
- POTABLE WATER SOURCES INCLUDING WATER LINE FLUSHING
- IRRIGATION DRAINAGE
- AIR CONDITIONING CONDENSATE
- F. SPRINGS
- UNCONTAMINATED GROUND WATER
- FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS OR POLLUTANTS







**CONCRETE WASHOUT AREA**  
PURPOSE – PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORM WATER FROM CONCRETE WASTE BY CONDUCTING WASHOUT OFFSITE, OR PERFORMING ONSITE WASHOUT IN A DESIGNATED AREA TO PREVENT POLLUTANTS FROM ENTERING SURFACE WATERS OR GROUNDWATER.

CONDITIONS OF USE – CONCRETE WASHOUT AREA BEST MANAGEMENT PRACTICES ARE IMPLEMENTED ON CONSTRUCTION PROJECTS WHERE:

- CONCRETE IS USED AS A CONSTRUCTION MATERIAL.
- IT IS NOT POSSIBLE TO DISPOSE OF ALL CONCRETE WASTEWATER AND WASHOUT OFFSITE (READY MIX PLANT, ETC.).
- CONCRETE TRUCKS, PUMPER, OR OTHER CONCRETE COATED EQUIPMENT ARE WASHED ONSITE.

**DESIGN AND INSTALLATION SPECIFICATIONS**

- IMPLEMENTATION – THE FOLLOWING STEPS WILL HELP REDUCE STORMWATER POLLUTION FROM CONCRETE WASTES:
- PERFORM WASHOUT OF CONCRETE TRUCKS OFFSITE OR IN DESIGNATED CONCRETE WASHOUT AREAS ONLY.
  - DO NOT WASH OUT CONCRETE TRUCKS ONTO THE GROUND, OR INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.
  - DO NOT ALLOW EXCESS CONCRETE TO BE DUMPED ONSITE, EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS.
  - CONCRETE WASHOUT AREAS MAY BE PREFABRICATED CONCRETE WASHOUT CONTAINERS, OR SELF-INSTALLED STRUCTURES (ABOVE-GRADE OR BELOW-GRADE).
  - PREFABRICATED CONTAINERS ARE MOST RESISTANT TO DAMAGE AND PROTECT AGAINST SPILLS AND LEAKS. COMPANIES MAY OFFER DELIVERY SERVICE AND PROVIDE REGULAR MAINTENANCE AND DISPOSAL OF SOLID AND LIQUID WASTE.
  - IF SELF-INSTALLED CONCRETE WASHOUT AREAS ARE USED, BELOW-GRADE STRUCTURES ARE PREFERRED OVER ABOVE-GRADE STRUCTURES BECAUSE THEY ARE LESS PRONE TO SPILLS AND LEAKS.
  - SELF-INSTALLED ABOVE-GRADE STRUCTURES SHOULD ONLY BE USED IF EXCAVATION IS NOT PRACTICAL.

- EDUCATION – THE FOLLOWING EDUCATION PRACTICES ARE RECOMMENDED:
- DISCUSS THE CONCRETE MANAGEMENT TECHNIQUES DESCRIBED IN THIS BEST MANAGEMENT PRACTICE WITH THE READY-MIX CONCRETE SUPPLIER BEFORE ANY DELIVERIES ARE MADE.
  - EDUCATE EMPLOYEES AND SUBCONTRACTORS ON THE CONCRETE WASTE MANAGEMENT TECHNIQUES DESCRIBED IN THIS SECTION.
  - ARRANGE FOR CONTRACTOR'S SUPERINTENDENT OR LEVEL 1A CERTIFIED PERSONNEL TO OVERSEE AND ENFORCE CONCRETE WASTE MANAGEMENT PROCEDURES.
  - A SIGN SHOULD BE INSTALLED ADJACENT TO EACH TEMPORARY CONCRETE WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

CONTRACTS – INCORPORATE REQUIREMENTS FOR CONCRETE WASTE MANAGEMENT INTO CONCRETE SUPPLIER AND SUBCONTRACTOR AGREEMENTS.

- LOCATION AND PLACEMENT – THE FOLLOWING GUIDELINES SHALL BE USED WHEN LOCATING AND PLACING THE CONCRETE WASH-OUT AREA:
- LOCATE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE AREAS SUCH AS STORM DRAINS, OPEN DITCHES, OR WATER BODIES, INCLUDING WETLANDS.
  - ALLOW CONVENIENT ACCESS FOR CONCRETE TRUCKS, PREFERABLY NEAR THE AREA WHERE THE CONCRETE IS BEING POURED.
  - IF TRUCKS NEED TO LEAVE A PAVED AREA TO ACCESS WASHOUT, PREVENT TRACK-OUT WITH A CONSTRUCTION EXIT.
  - THE NUMBER OF FACILITIES YOU INSTALL SHOULD DEPEND ON THE EXPECTED DEMAND FOR STORAGE CAPACITY.
  - ON LARGE SITES WITH EXTENSIVE CONCRETE WORK, WASHOUTS SHOULD BE PLACED IN MULTIPLE LOCATIONS FOR EASE OF USE BY CONCRETE TRUCK DRIVERS.

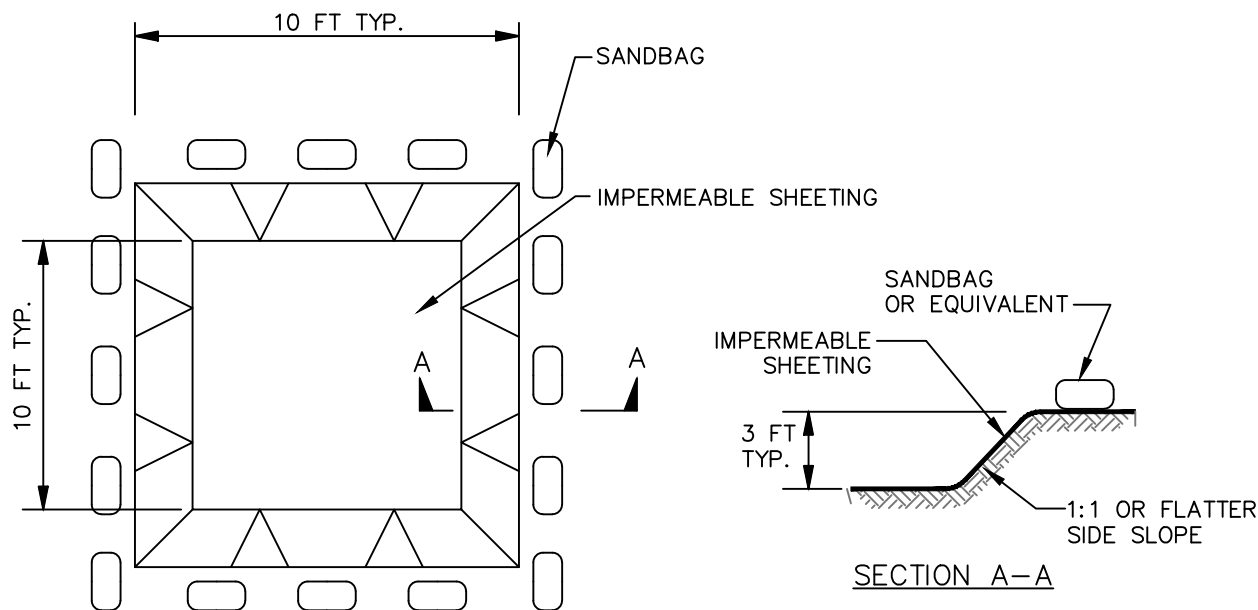
- ONSITE TEMPORARY CONCRETE WASHOUT FACILITY, TRANSIT TRUCK WASHOUT PROCEDURES:
- TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 50 FT. FROM SENSITIVE AREAS INCLUDING STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES.
  - CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
  - APPROXIMATELY 7 GALLONS OF WASH WATER ARE USED TO WASH ONE TRUCK CHUTE.
  - APPROXIMATELY 50 GALLONS ARE USED TO WASH OUT THE HOPPER OF A CONCRETE PUMP TRUCK
  - WASHOUT OF CONCRETE TRUCKS SHALL BE PERFORMED IN DESIGNATED AREAS ONLY.
  - CONCRETE WASHOUT FROM CONCRETE PUMPER BINS CAN BE WASHED INTO CONCRETE PUMPER TRUCKS AND DISCHARGED INTO DESIGNATED WASHOUT AREA OR PROPERLY DISPOSED OF OFFSITE.
  - ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF PER APPLICABLE SOLID WASTE REGULATIONS. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.

- TEMPORARY ABOVE-GRADE CONCRETE WASHOUT FACILITY
- TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAILS WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT., BUT WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
  - PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

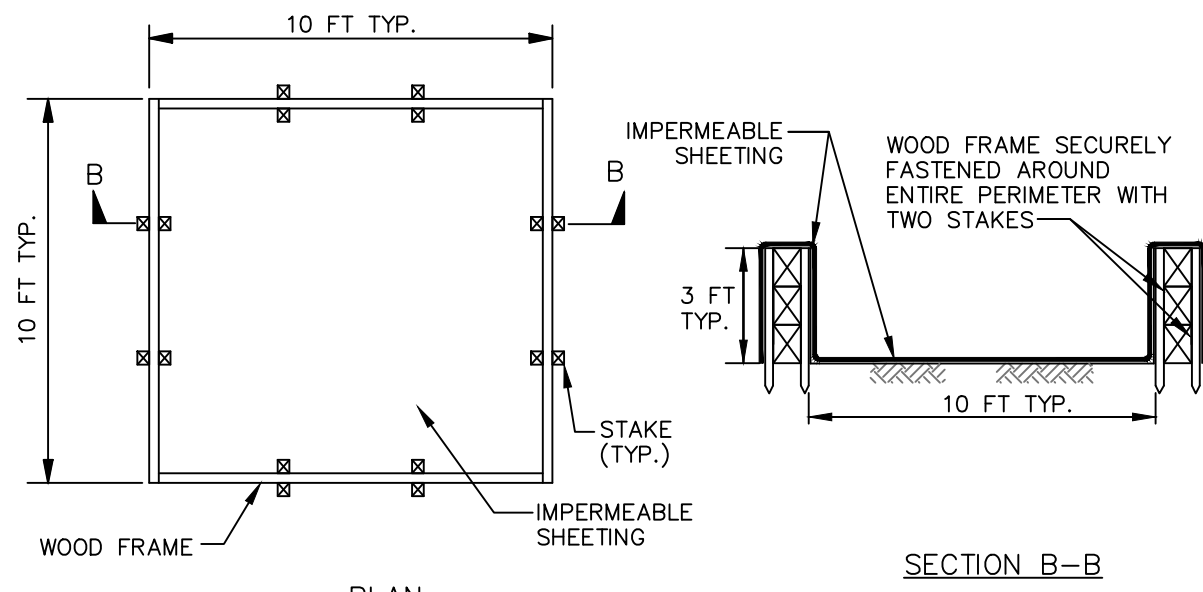
- TEMPORARY BELOW-GRADE CONCRETE WASHOUT FACILITY
- TEMPORARY CONCRETE WASHOUT FACILITIES (TYPE BELOW GRADE) SHOULD BE CONSTRUCTED WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT. THE QUANTITY AND VOLUME SHOULD BE SUFFICIENT TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
  - PLASTIC LINING MATERIAL SHALL BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
  - LINER SEAMS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
  - SOIL BASE SHALL BE PREPARED FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE PLASTIC LINING MATERIAL.

- INSPECTION AND MAINTENANCE
- INSPECT AND VERIFY THAT CONCRETE WASHOUT BMPS ARE IN PLACE PRIOR TO THE COMMENCEMENT OF CONCRETE WORK.
  - DURING PERIODS OF CONCRETE WORK, INSPECT DAILY TO VERIFY CONTINUED PERFORMANCE.
  - CHECK OVERALL CONDITION AND PERFORMANCE.
  - CHECK REMAINING CAPACITY (% FULL).
  - IF USING SELF-INSTALLED WASHOUT FACILITIES, VERIFY PLASTIC LINERS ARE INTACT AND SIDEWALLS ARE NOT DAMAGED.
  - IF USING PREFABRICATED CONTAINERS, CHECK FOR LEAKS.
  - WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES.
  - WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
  - IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
  - DO NOT DISCHARGE LIQUID OR SLURRY TO WATERWAYS, STORM DRAINS OR DIRECTLY ONTO GROUND.
  - DO NOT USE SANITARY SEWER WITHOUT LOCAL APPROVAL.
  - PLACE A SECURE, NON-COLLAPSING, NON-WATER COLLECTING COVER OVER THE CONCRETE WASHOUT FACILITY PRIOR TO PREDICTED WET WEATHER TO PREVENT ACCUMULATION AND OVERFLOW OF PRECIPITATION.
  - REMOVE AND DISPOSE OF HARDENED CONCRETE AND RETURN THE STRUCTURE TO A FUNCTIONAL CONDITION. CONCRETE MAY BE REUSED ONSITE OR HAULED AWAY FOR DISPOSAL OR RECYCLING.
  - WHEN YOU REMOVE MATERIALS FROM THE SELF-INSTALLED CONCRETE WASHOUT, BUILD A NEW STRUCTURE; OR, IF THE PREVIOUS STRUCTURE IS STILL INTACT, INSPECT FOR SIGNS OF WEAKENING OR DAMAGE, AND MAKE ANY NECESSARY REPAIRS. RE-LINE THE STRUCTURE WITH NEW PLASTIC AFTER EACH CLEANING.

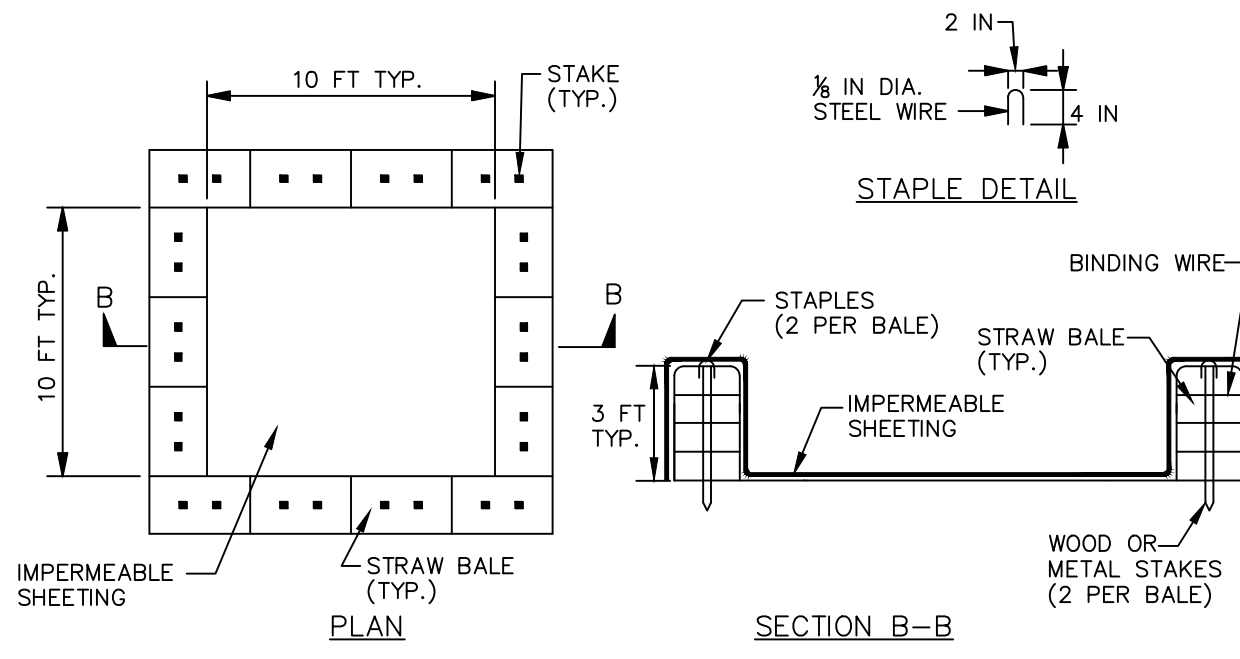
- REMOVAL OF TEMPORARY CONCRETE WASHOUT FACILITIES
- WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE, SLURRIES AND LIQUIDS SHALL BE REMOVED AND PROPERLY DISPOSED OF.
  - MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
  - HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.



PLAN  
EXCAVATED WASHOUT STRUCTURE



PLAN  
WASHOUT STRUCTURE WITH WOOD PLANKS



SECTION B-B  
WASHOUT STRUCTURE WITH STRAW BALES

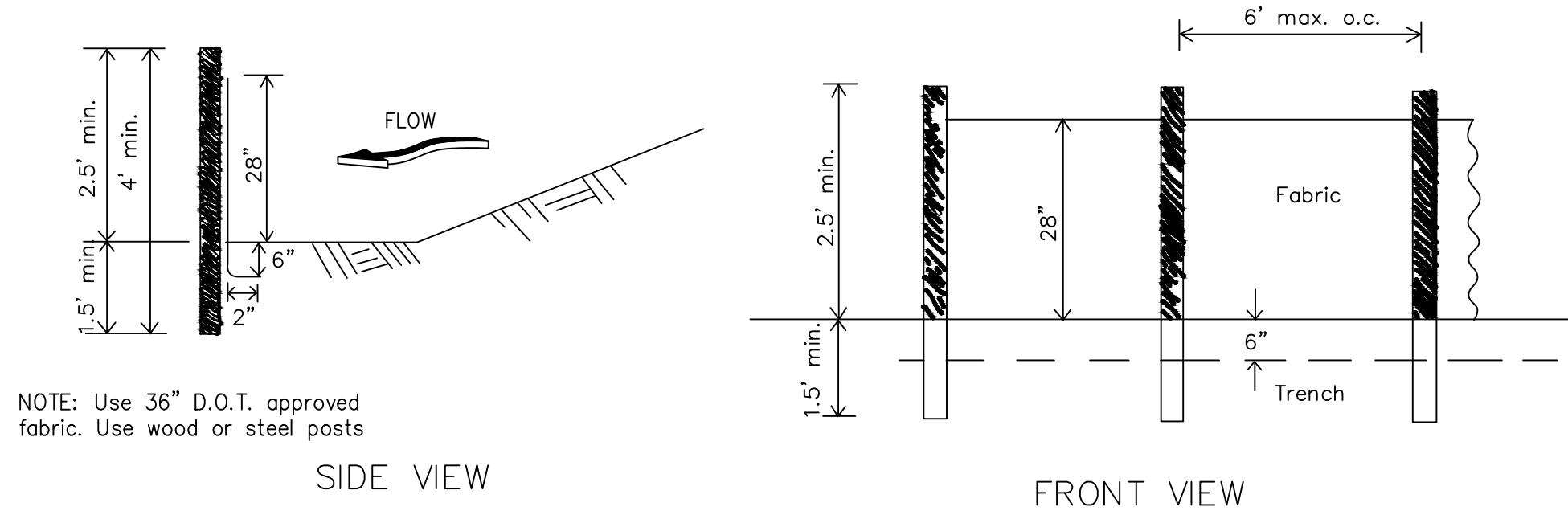
**CONSTRUCTION SPECIFICATIONS**

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

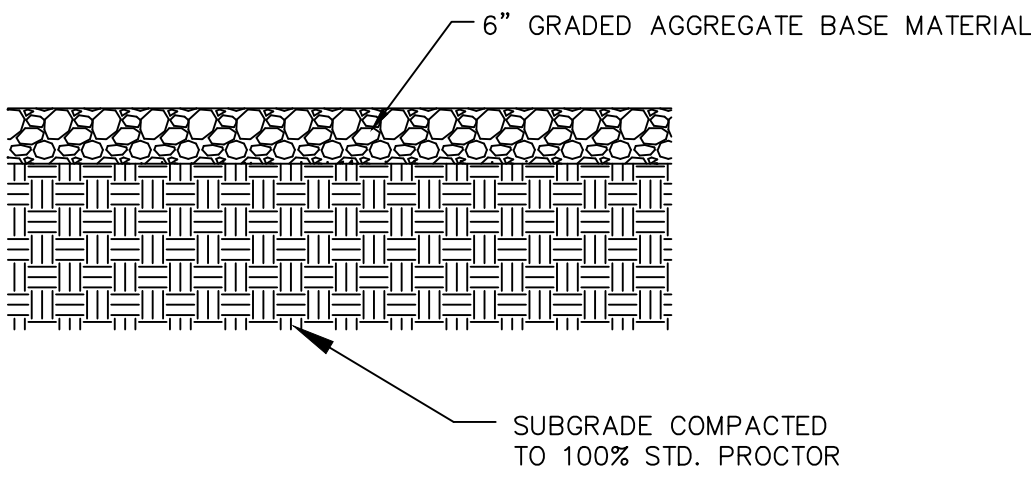
NOTE: WASHOUT OF THE CONCRETE TRUCK DRUM AT THE CONSTRUCTION SITE IS PROHIBITED

**CONCRETE WASHOUT DETAIL**

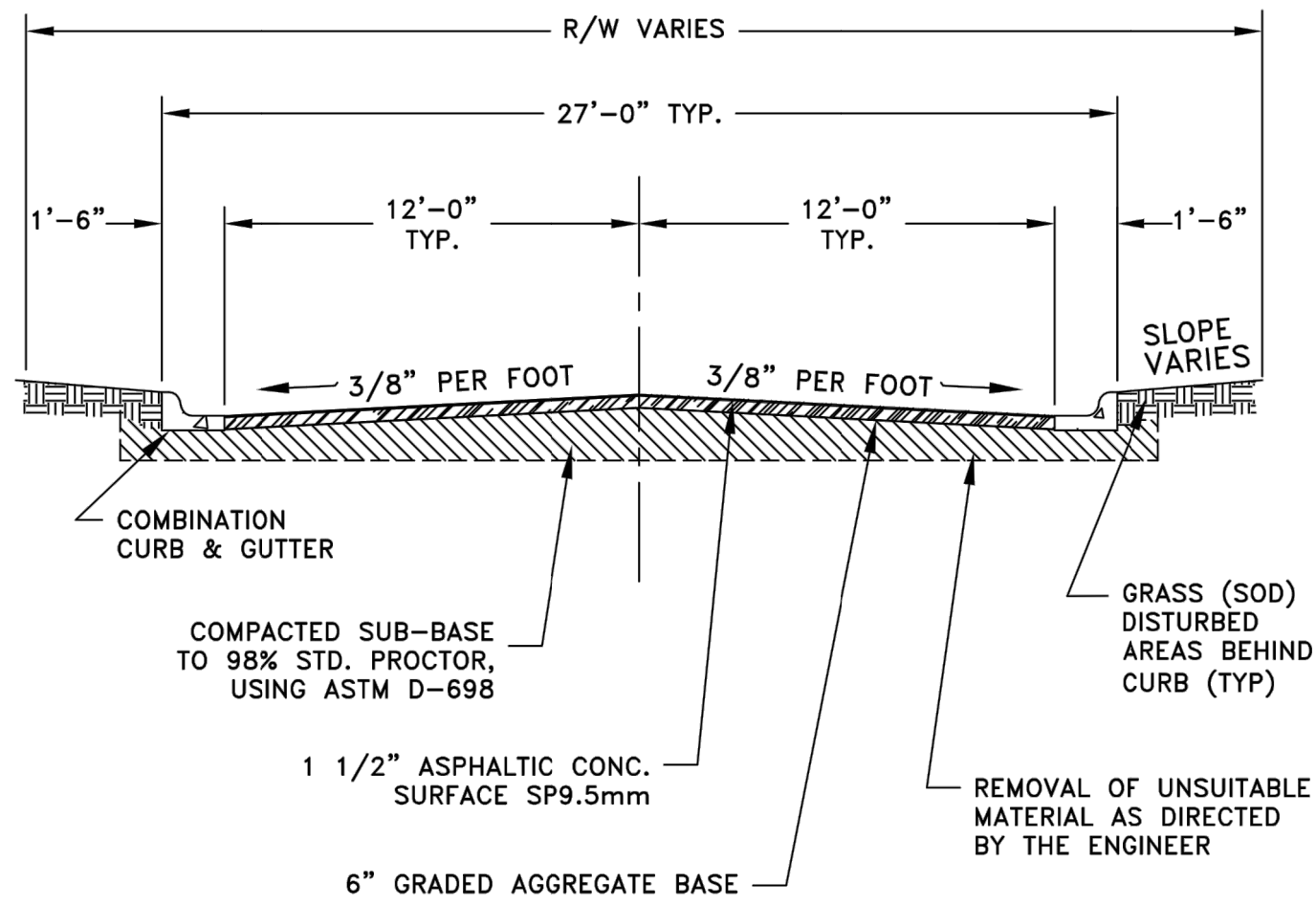
CSW



SILT FENCE – TYPE NS (Sd1-NS)  
Non-Sensitive – Type A



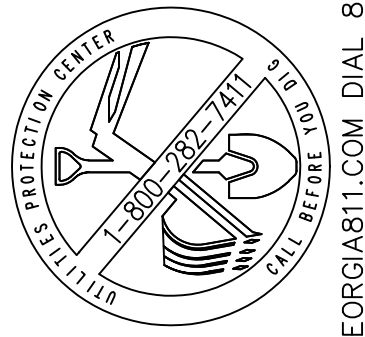
GRAVEL ROAD/PARKING LOT DETAIL



GLYNN COUNTY, GEORGIA  
DEPARTMENT OF ENGINEERING SERVICES  
SEWER SYSTEM STANDARD CONSTRUCTION DETAILS  
TYPICAL SECTION THRU ROADWAY

APPENDIX P-2

DATE: 02/06



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TR LONG  
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BGJWSC PUMP STATION 2002  
FORCE MAIN REPLACEMENT  
PROJECT # 2014



SHEET NAME:  
SITE  
DETAILS

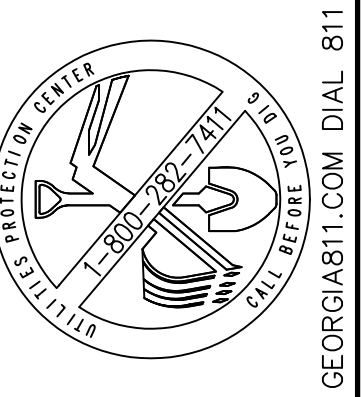
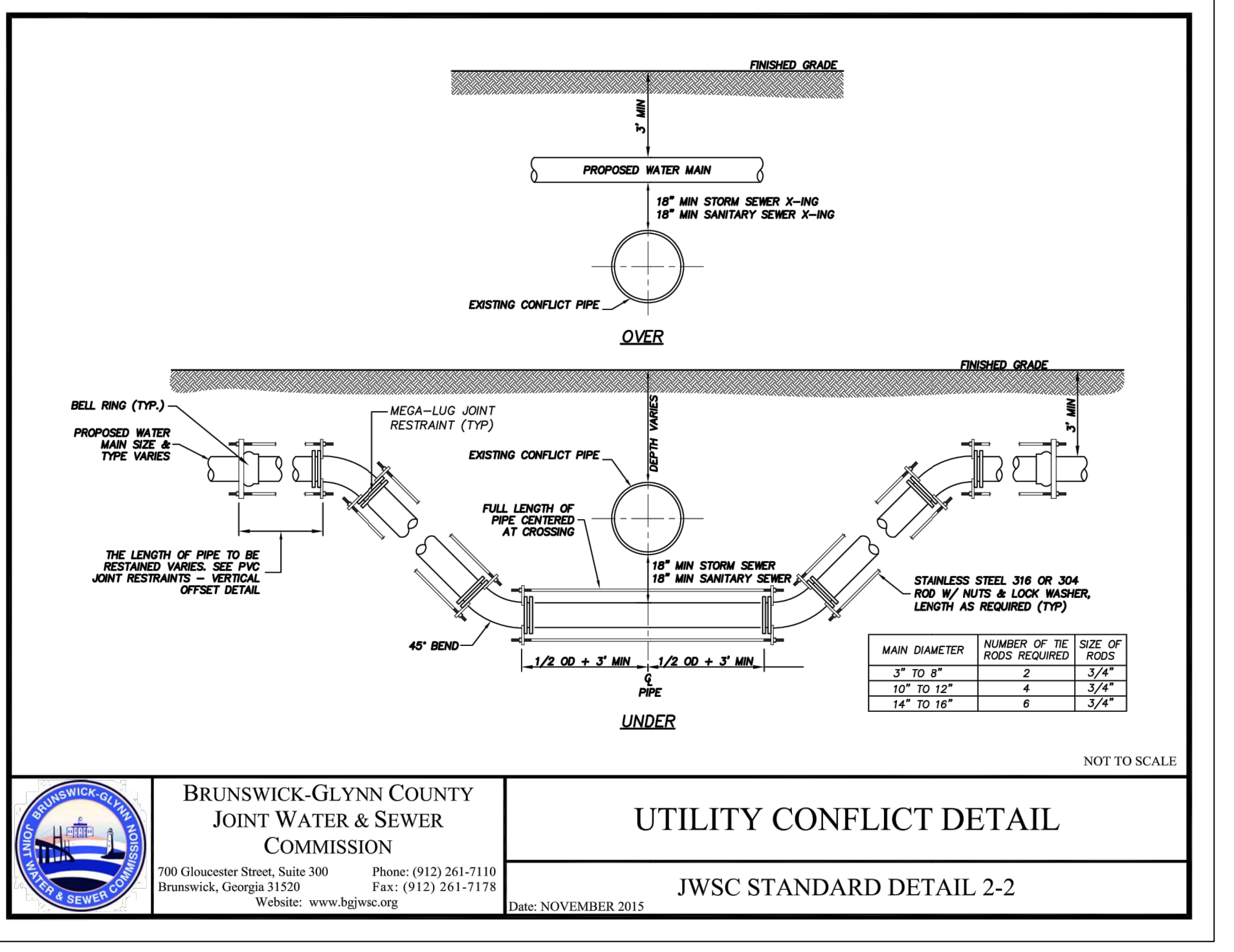
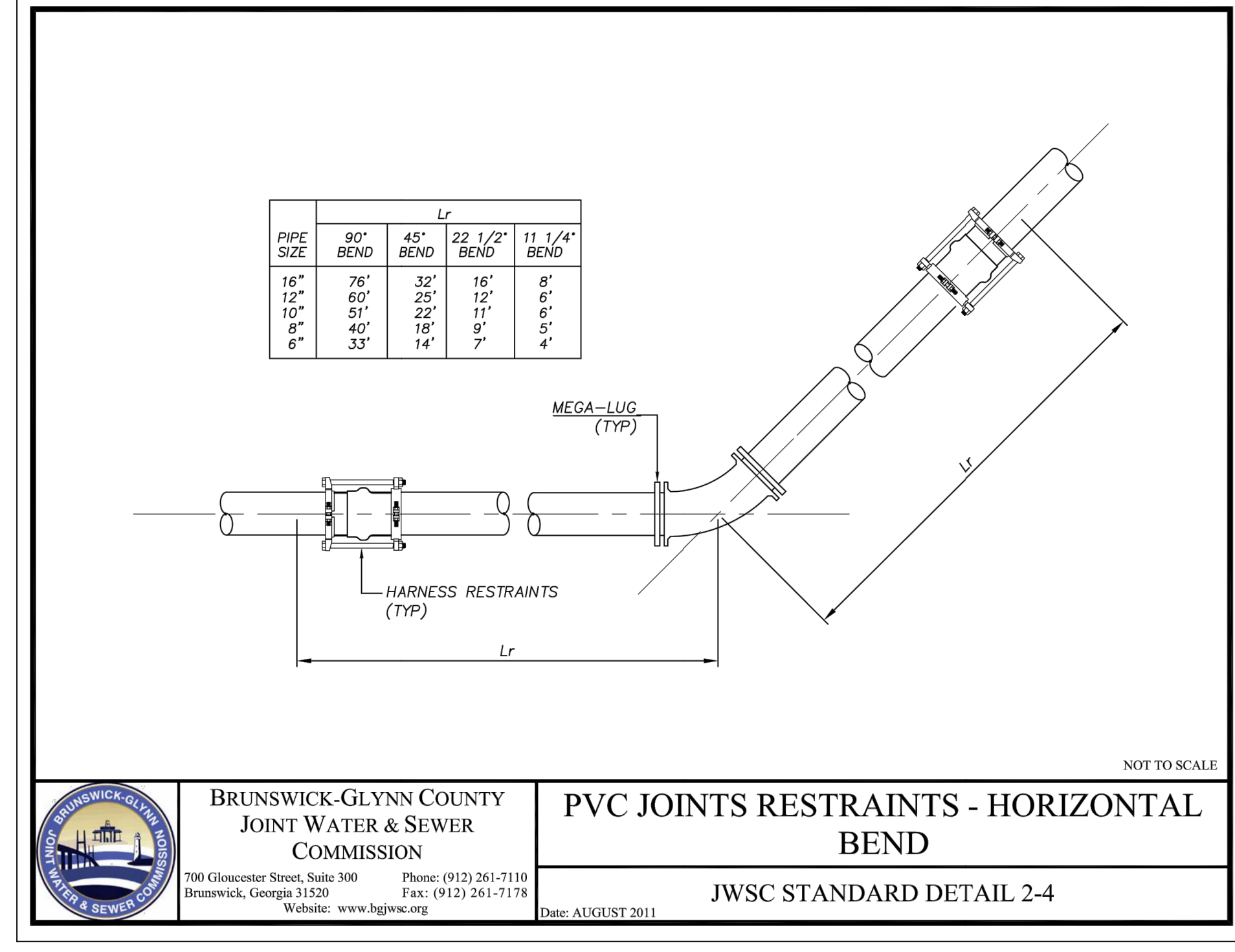
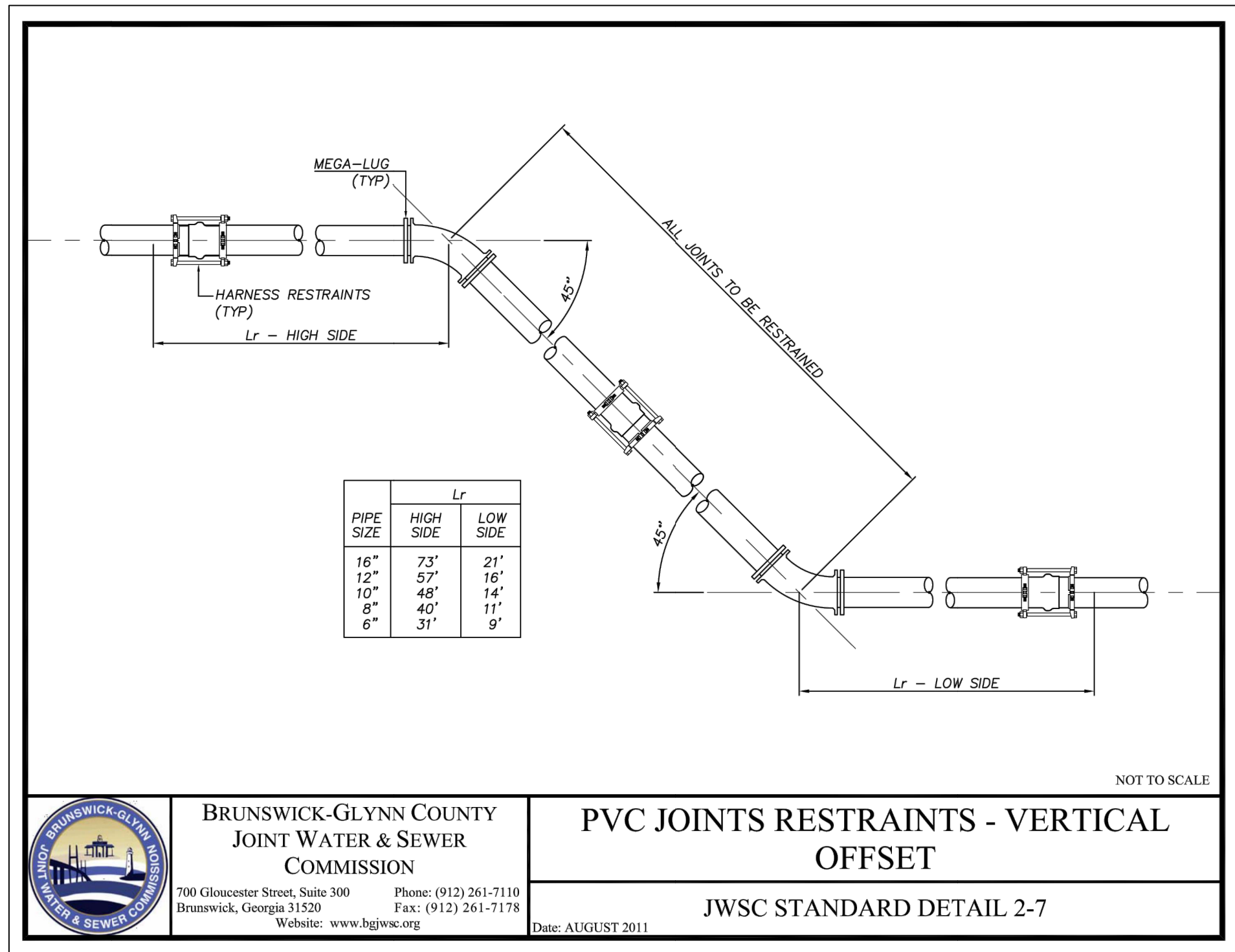
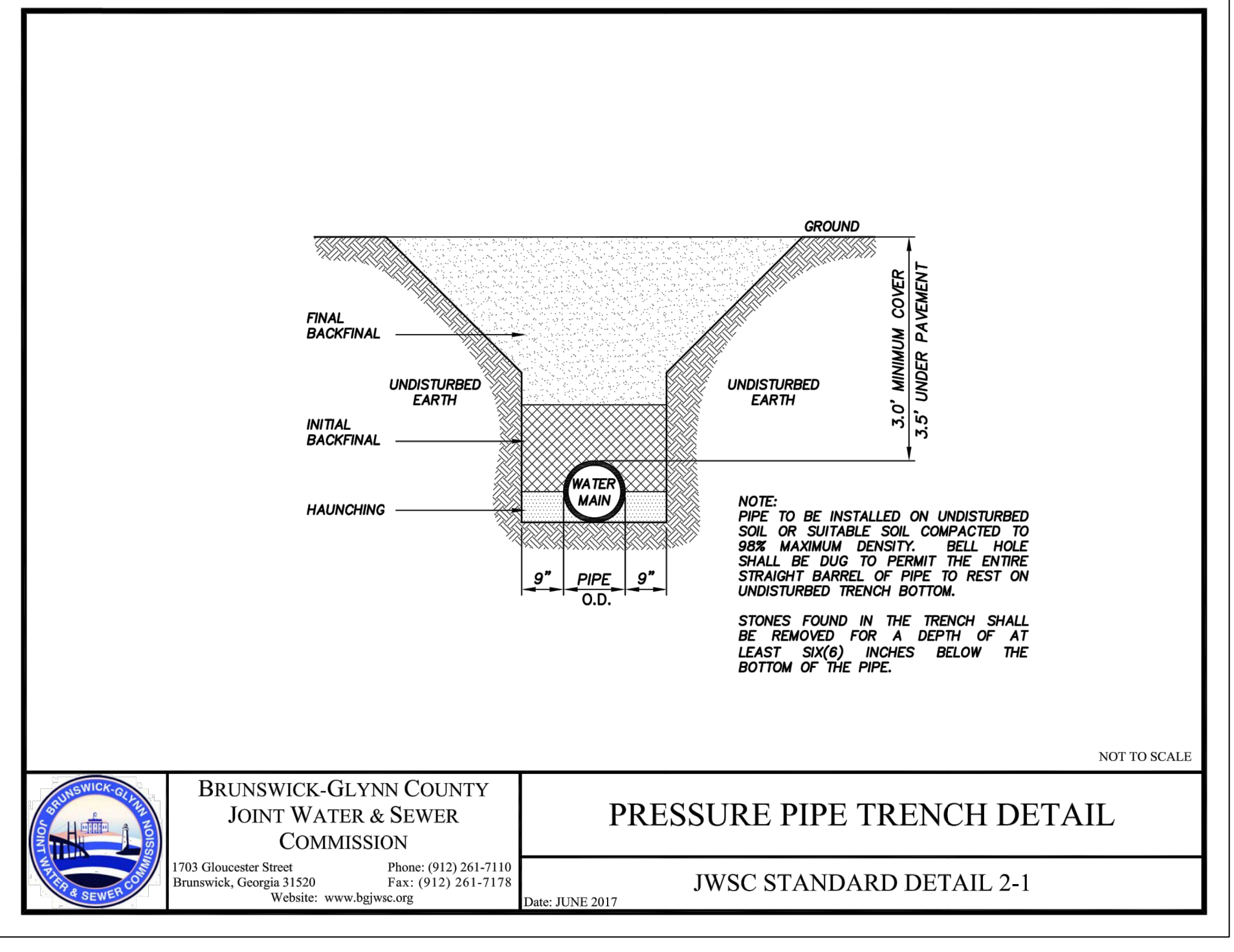
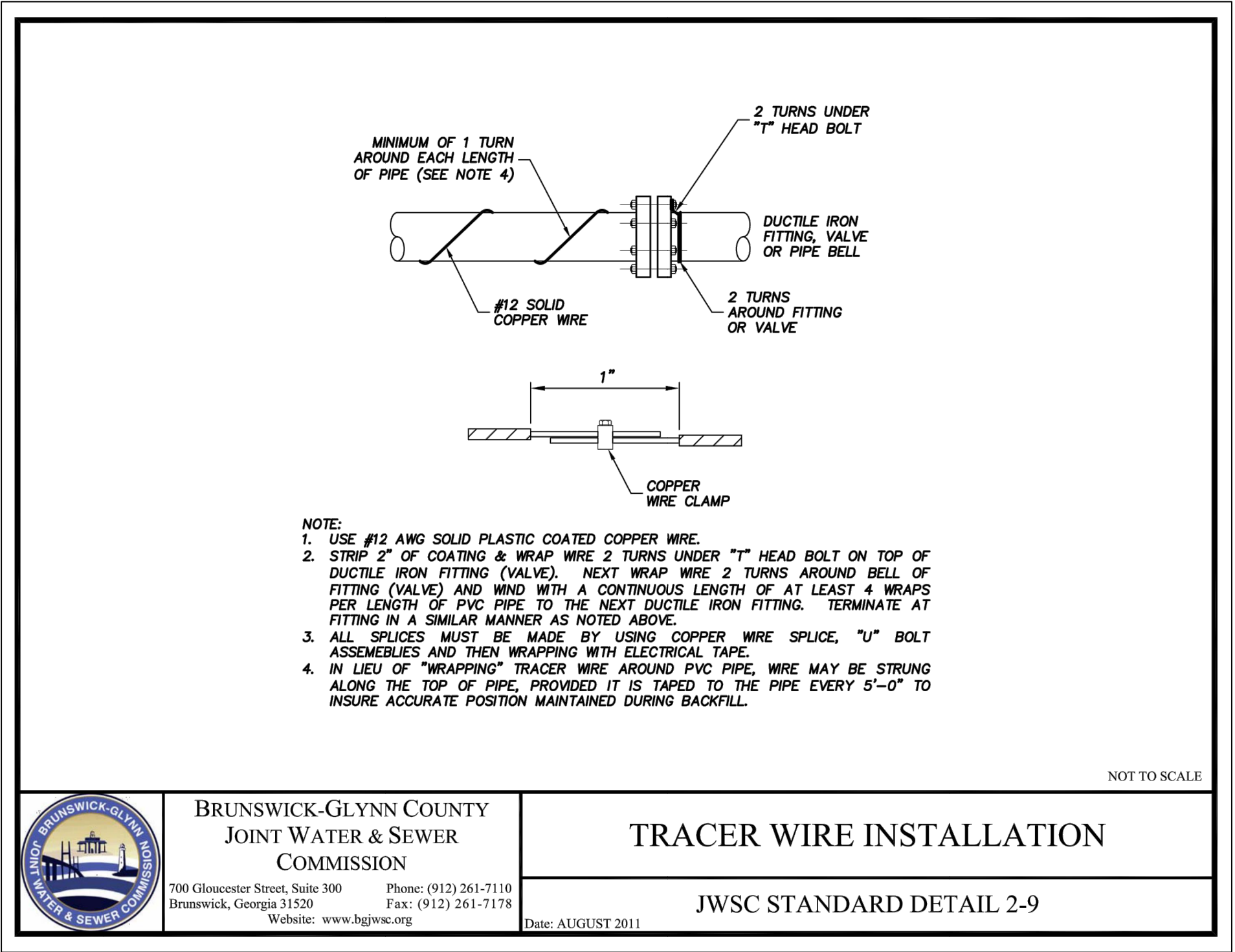
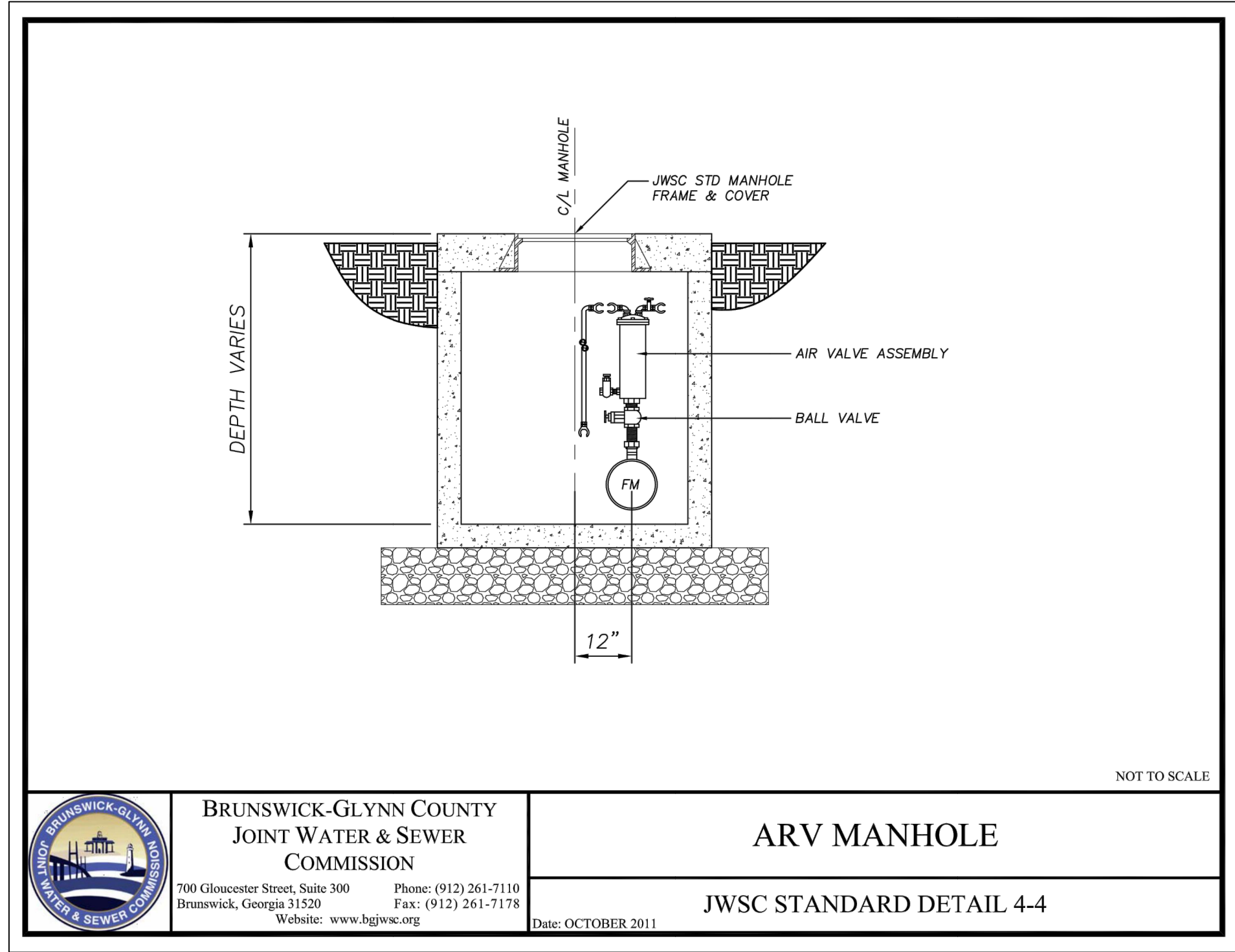
REVISIONS:	
1.	02/10/2021 TRL
2.	08/08/2021 BGJWSC
3.	09/09/2021 BGJWSC
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INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TRL  
PROJECT #: 2021-01

SHEET NUMBER:

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FORCE MAIN REPLACEMENT  
PROJECT # 2014



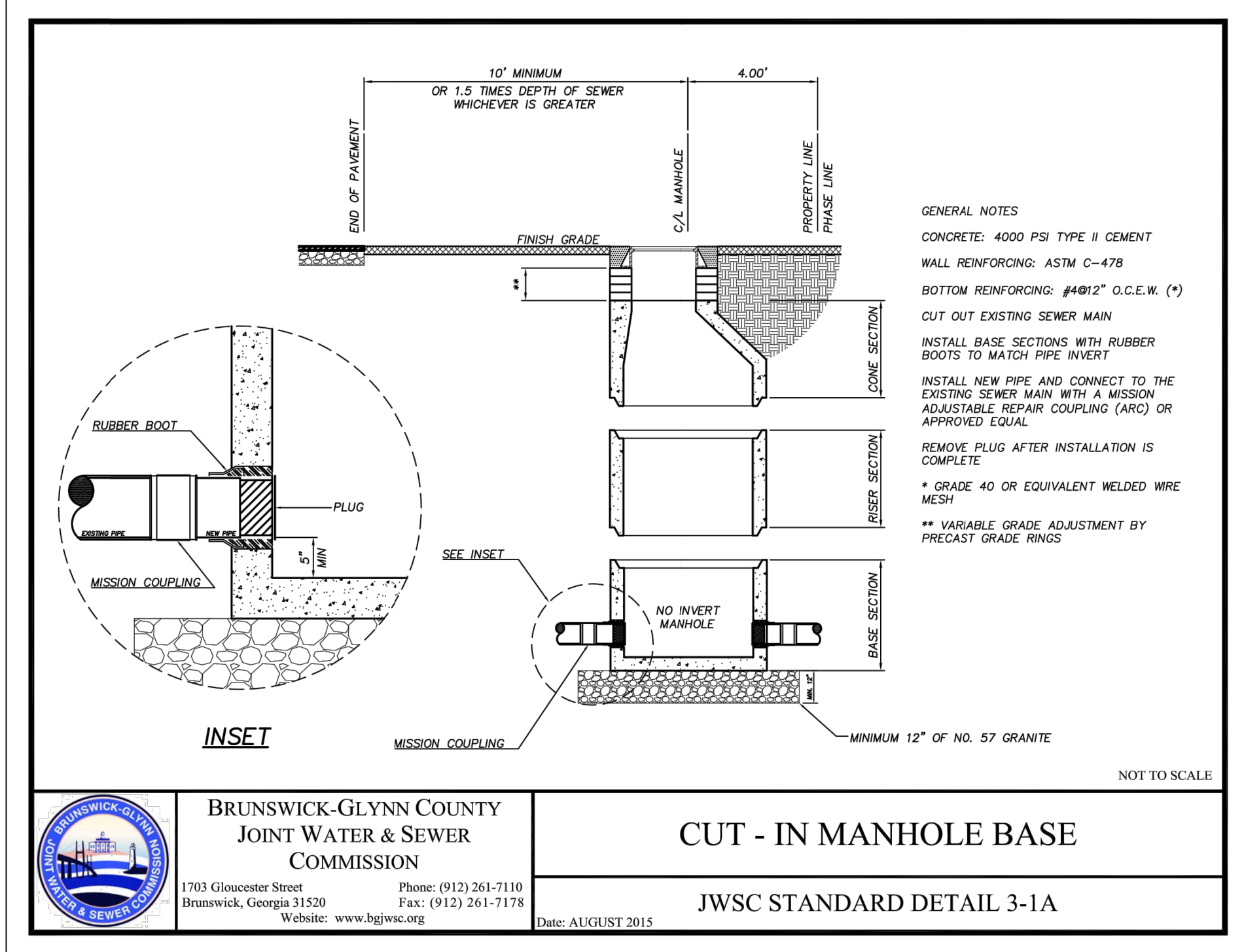
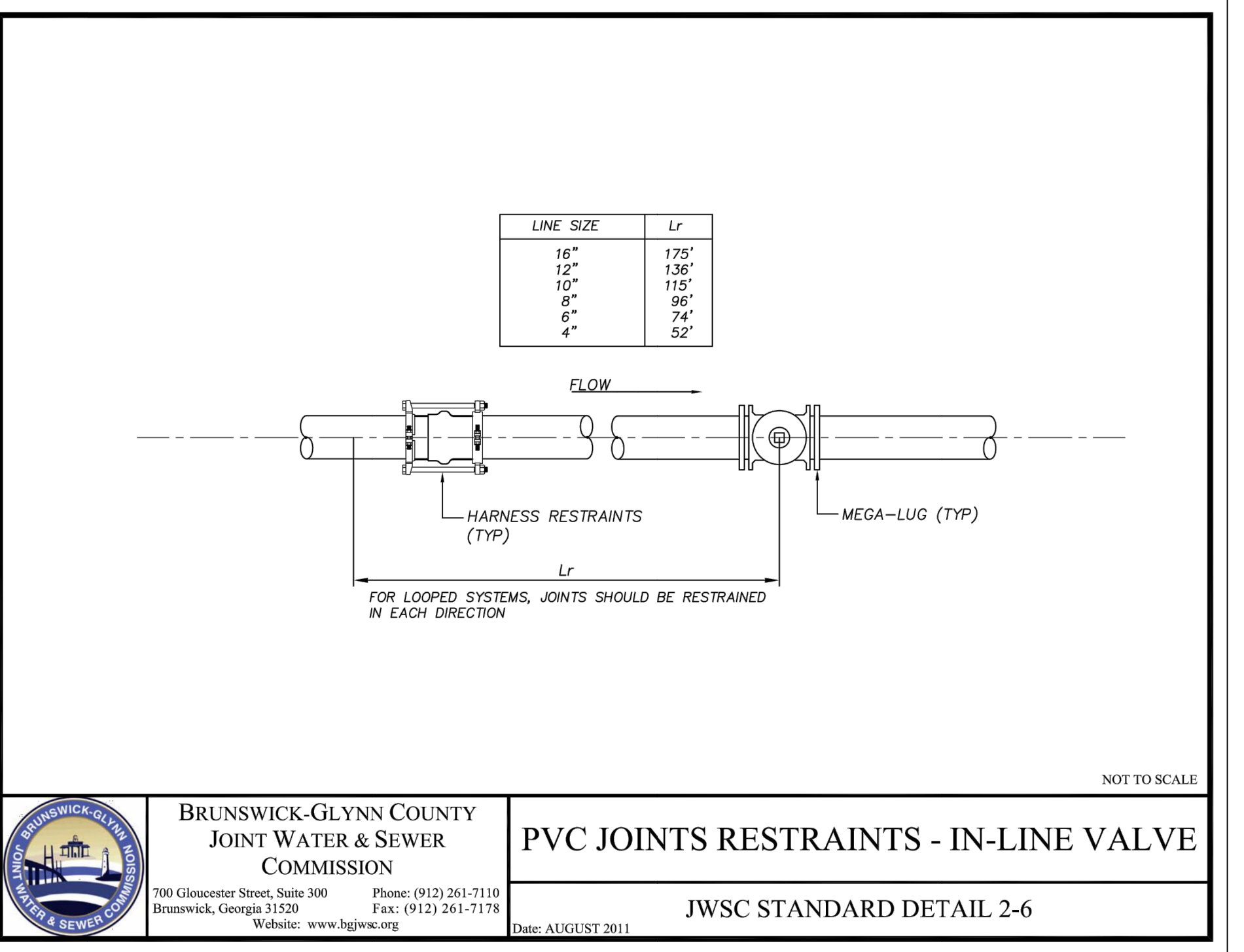
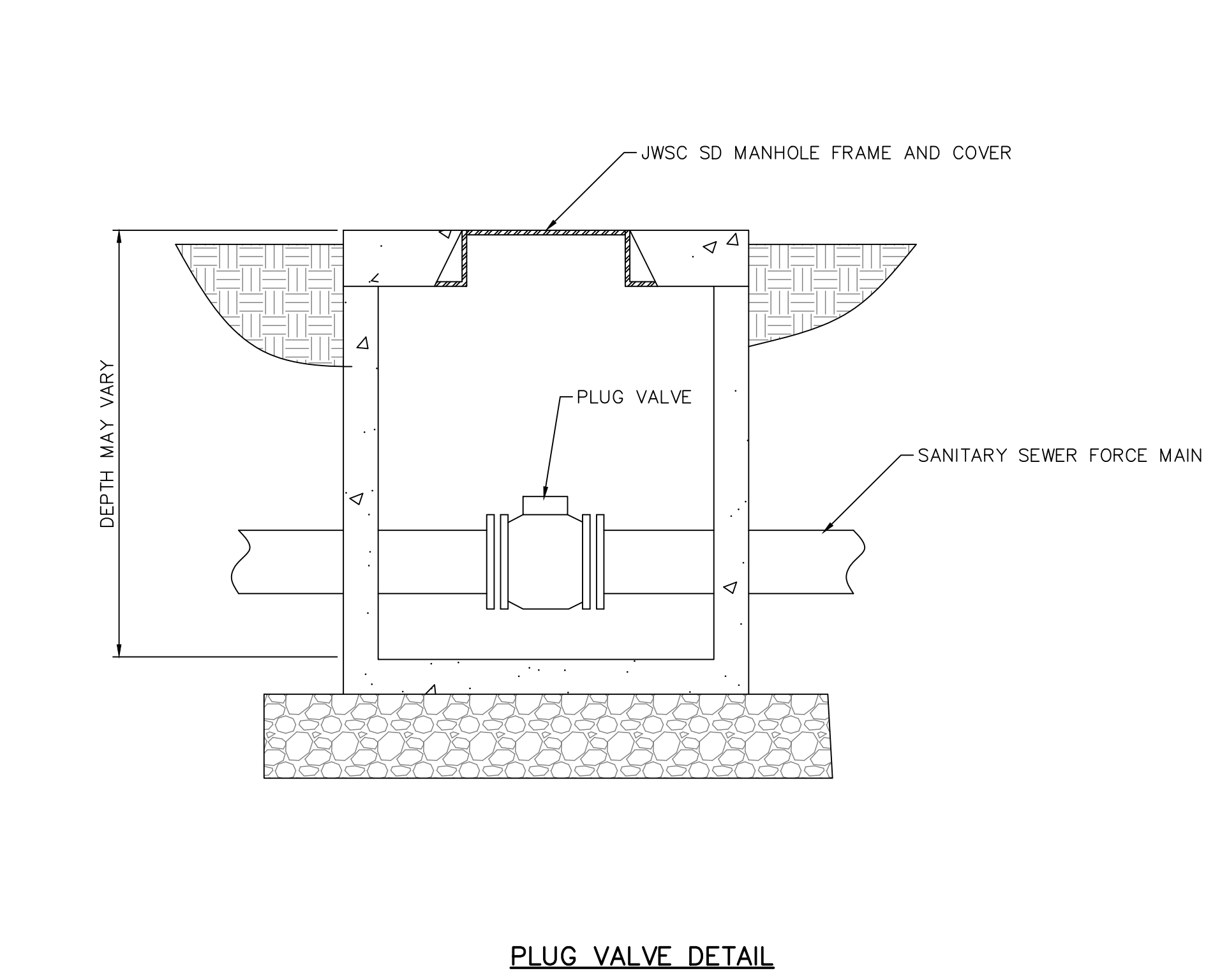
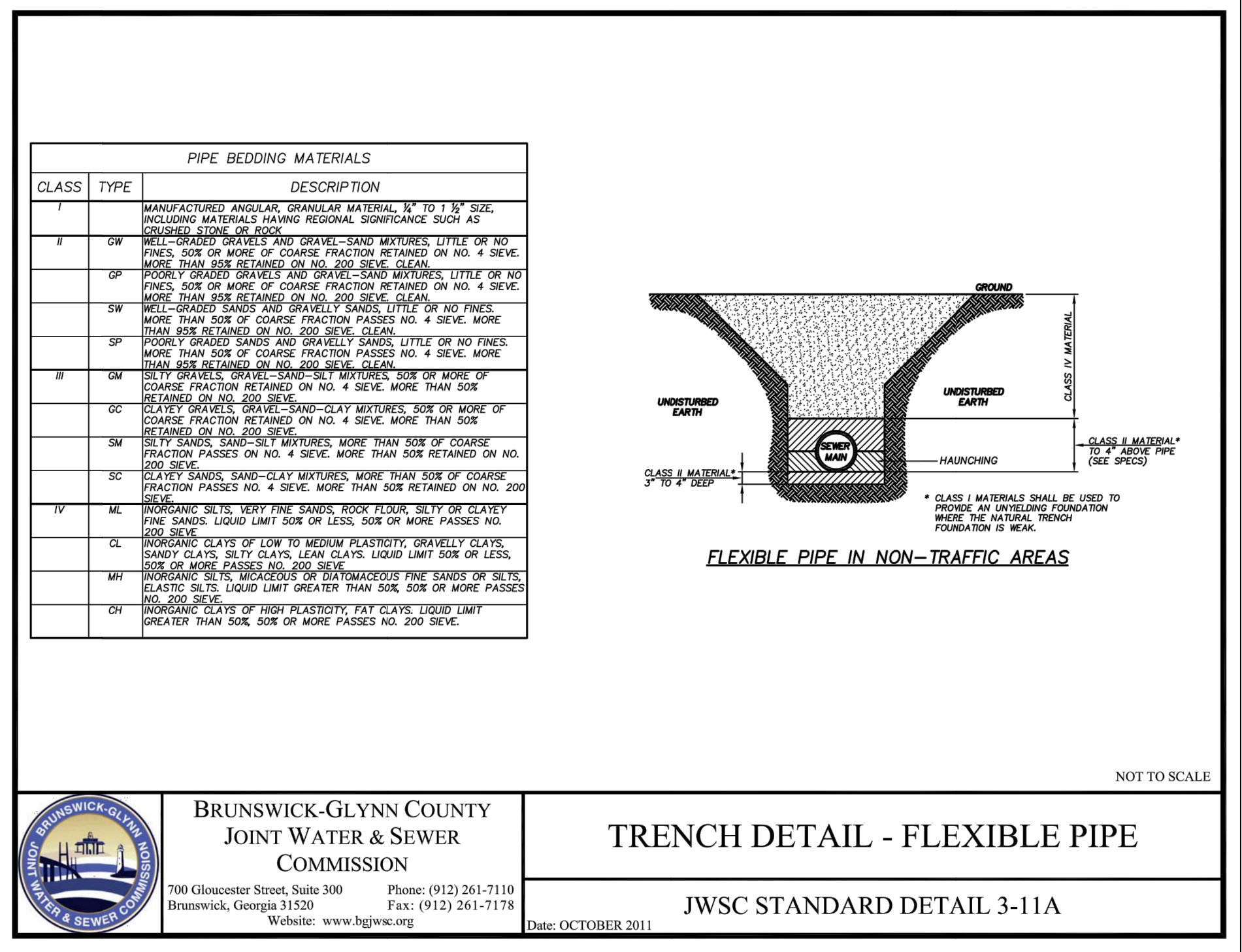
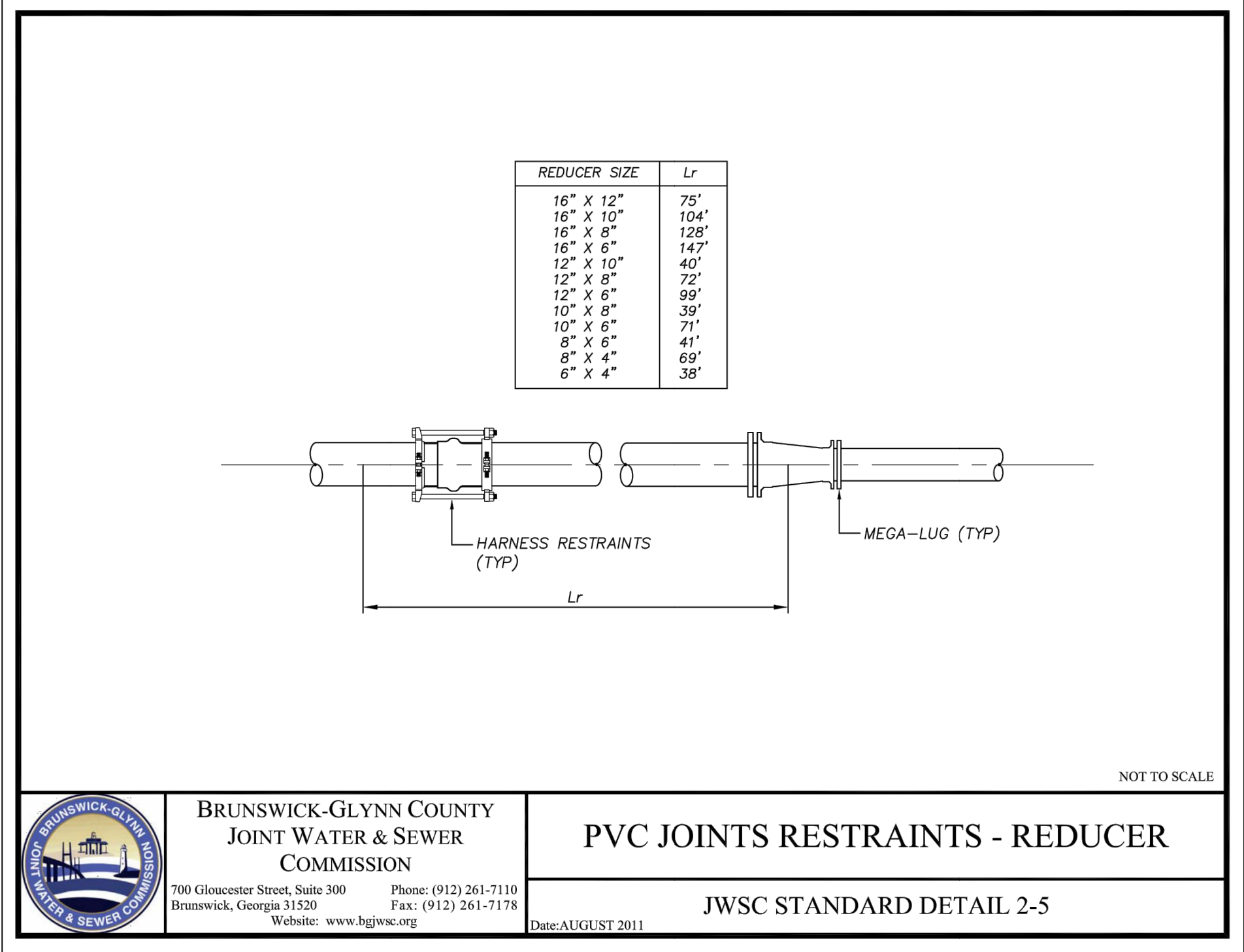
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SITE  
DETAILS

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3. 09/09/2021 BGJWSC
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PROJECT #: 2021-01

SHEET NUMBER:  
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PROJECT # 2014

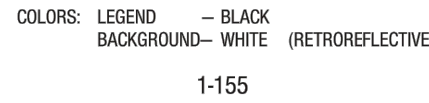
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3. 09/09/2021 BGJWSC  
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PROJECT #: 2021-01

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C5.4

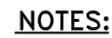




1. ALL LATERAL STREET CURBS MUST BE COVERED WITH STEEL PLATES OF SUFFICIENT THICKNESS TO SPAN THE CUT WITHOUT NOTICEABLE DEFLECTION. THESE PLATES TO REMAIN IN PLACE UNTIL THE CONCRETE BASE HAS GAINED SUFFICIENT STRENGTH TO WITHSTAND TRAFFIC LOADS (24 HOUR MINIMUM.)
2. ON CUTS EXCEEDING 150 FEET IN LENGTH, THE CONCRETE IN TRENCH WILL BE BROUGHT FLUSH WITH THE EXISTING PAVEMENT. THE EXISTING PAVEMENT SHALL BE SAW CUT TO A STRAIGHT EDGE AND THE ENTIRE WIDTH OF THE ROADWAY RESURFACES WITH A MINIMUM OF 1" OF "TYPE F" ASPHALT TOPPING OR SURFACE COURSE.

## APPENDIX P-3

DATE: 02/06



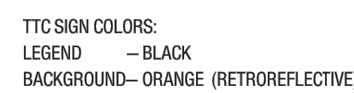
1. ALL GRADED AGGREGATE MUST COMPLY WITH THE CONTRACT PAVEMENT SPECIFICATIONS.
2. THE GRADED AGGREGATE SHALL BE PLACED IN NO MORE THAN 6" LIFTS AND COMPACTED TO STANDARD PROCTOR (ASTM D698). THE IN-PLACE DENSITY IS TO BE TESTED BY ASTM D2922 OR ASTM D1556.
3. LONGITUDINAL CUTS EXCEEDING 150 FT IN LENGTH, THE GRADED AGGREGATE IN THE TRENCH WILL BE BROUGHT FLUSH WITH THE EXISTING PAVEMENT AND THE ENTIRE WIDTH OF THE ROADWAY RESURFACED WITH A MINIMUM OF 1" OF SP9.5MM ASPHALT OR SURFACE COURSE.
4. SEE DETAILS A-27 OR B-24 (LAYING CONDITIONS FOR D.I.P. PIPE) FOR PIPE BEDDING.
5. FILTER FABRIC MATERIAL SHALL BE EQUAL OR EQUIVALENT TO MIRAFI 140, MANUFACTURED BY FIBER INDUSTRIES, INC.

DATE: 02/06

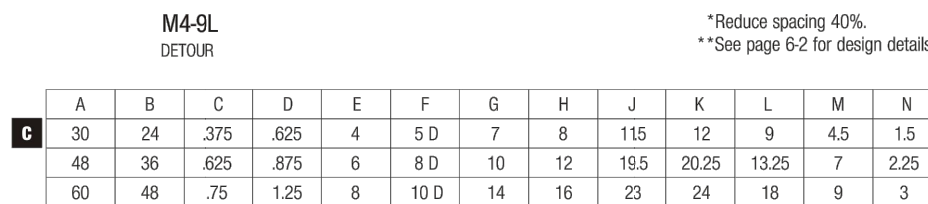


A	B	C	D	E	F	G	H	J
12	6	0.375	0.375	1.5	38*	4.653	4.778	1.5
24	12	0.375	0.625	3	68*	9.243	9.618	1.5
30	15	0.375	0.625	3.5	88*	12.324	12.824	1.5

COLORS: LEGEND, BORDER — BLACK  
BACKGROUND — ORANGE (RETROREFLECTIVE)



2-172



TTC SIGN COLORS:  
LEGEND — BLACK  
BACKGROUND— ORANGE (RETROREFLECTIVE)

2-173



A	B	C	D	E	F	G	H	J	K	L	M	N	P
12*	9*	-	-	4.359	6.25	1.5	4.25	3.375	4.125	0.25	0.5	1.5	0.375
21	15	0.375	0.625	7.313	10.625	2.375	7	5.875	7.125	0.375	0.625	1.5	0.5
30	21	0.375	0.625	10.188	14.875	3.375	10	10.125	8.375	0.5	0.875	1.5	0.5

\*12 x 9 IS FOR BICYCLE AUXILIARIES ONLY AND SHALL BE WHITE ON GREEN

COLORS: LEGEND, BORDER — BLACK  
BACKGROUND — WHITE (RETROREFLECTIVE)

COLORS: INTERSTATE ROUTE SIGN, GENERAL SERVICES:  
LEGEND, BORDER — BLUE (RETROREFLECTIVE)  
BACKGROUND — WHITE (RETROREFLECTIVE)

COLORS: COUNTY ROUTE SIGN:  
LEGEND, BORDER — YELLOW (RETROREFLECTIVE)  
BACKGROUND — BLUE (RETROREFLECTIVE)

COLORS: GENERAL INFORMATION, BICYCLE\*:  
LEGEND, BORDER — GREEN (RETROREFLECTIVE)  
BACKGROUND — WHITE (RETROREFLECTIVE)



A	B	C	D	E	F	G	H	J	K
12*	9*	-	-	4.5	4.25	4.25	4.5	1.5	0.375
21	15	0.375	0.625	7.5	7	7.125	7.5	1.5	0.5
30	21	0.375	0.625	10.5	10	10.25	10.75	1.5	0.5

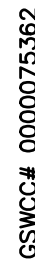
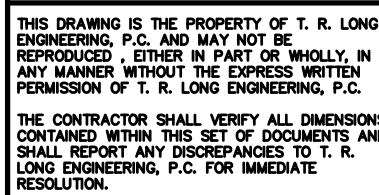
\*12 x 9 IS FOR BICYCLE AUXILIARIES ONLY AND SHALL BE WHITE ON GREEN

COLORS: LEGEND, BORDER — BLACK  
BACKGROUND — WHITE (RETROREFLECTIVE)

COLORS: INTERSTATE ROUTE SIGN, GENERAL SERVICES:  
LEGEND, BORDER — BLUE (RETROREFLECTIVE)  
BACKGROUND — WHITE (RETROREFLECTIVE)

COLORS: COUNTY ROUTE SIGN:  
LEGEND, BORDER — YELLOW (RETROREFLECTIVE)  
BACKGROUND — BLUE (RETROREFLECTIVE)

COLORS: GENERAL INFORMATION, BICYCLE\*:  
LEGEND, BORDER — GREEN (RETROREFLECTIVE)  
BACKGROUND — WHITE (RETROREFLECTIVE)

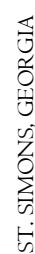


**HINESVILLE:**  
14 North Commerce Street  
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308 Commercial Drive  
Savannah, Georgia 31406  
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BGJWSC PUMP STATION 2002  
 FORCE MAIN REPLACEMENT  
 PROJECT # 2014



SHEET NAME:

## SITE DETAILS

REVISIONS:
1. 02/10/2021 TRL
2. 08/08/2021 BGJWSC
3. 09/09/2021 BGJWSC
4.
5.
6.
7.
8.
9.
10.

INITIAL DATE: 01/25/2021  
DRAWN BY: AGW  
CHECKED BY: TRL  
PROJECT #: 2021-01

SHEET NUMBER:

C5.5