



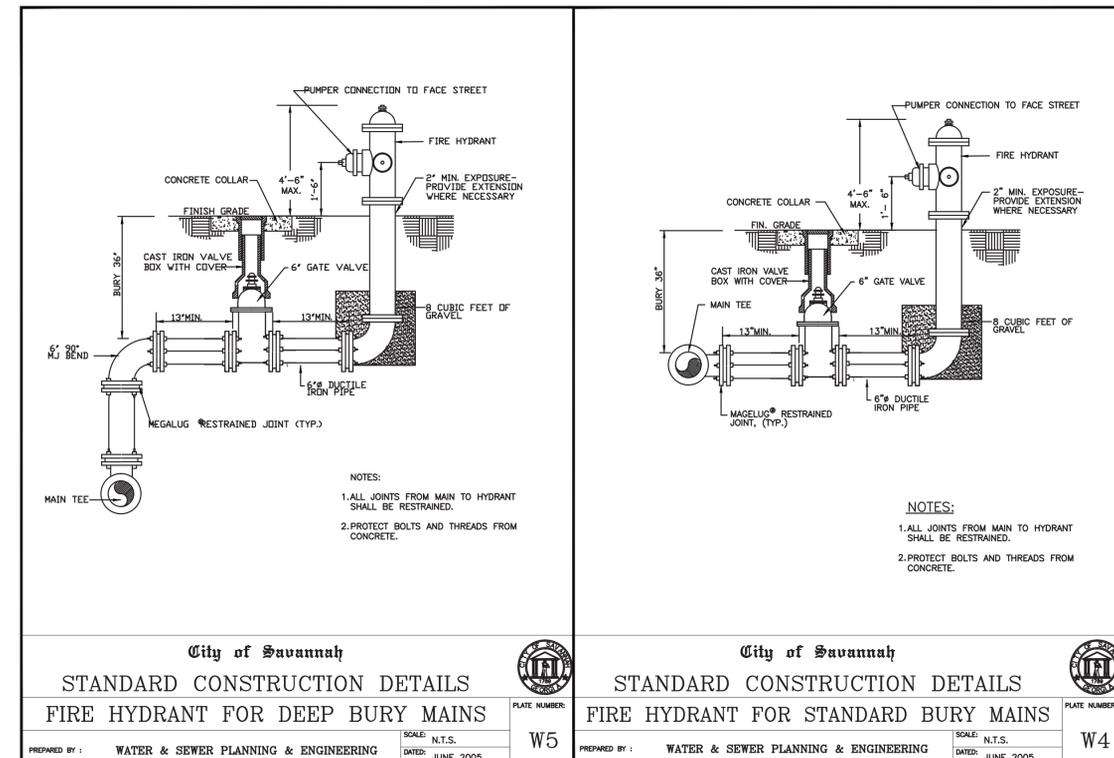
| STATE | PROJECT NUMBER | SHEET NO. | TOTAL |
|-------|--------------------|-----------|-------|
| GA. | NHS00-0002-00(921) | 344 J | 973 |

REV. 8/11/11

**DONALDSON,
GARRETT,
&
ASSOCIATES, INC.**
MACON • CHARLOTTE
4875 RIVERSIDE DRIVE P.O. BOX 7306
MACON, GA 31210
(478)474-5350 Fax: (478) 477-2534
http://www.dg-a.com

SPECIFICATIONS

- A. All hydrant installation work shall be coordinated with the City of Savannah Conveyance Department a minimum of 5 working days prior to construction. Contact Frank Banks at 912-651-6584.
- B. Contractor shall coordinate all work to include methods, procedures and schedules with the City of Savannah Operations Department. Contact Frank Banks (912-651-6584) 5 working days prior to construction.
- C. Fire hydrants shall be installed in accordance with the following requirements. Refer to the construction details for additional information.
 1. General - Hydrants shall be manufacturer's current model design and construction. All units to be complete including joint assemblies. Physical characteristics and compositions of various metal used in the hydrant components shall meet the requirements as specified in ANSI/AWWA C502 latest revision. Hydrant shall be suitable for working pressure of 150 psi and shall be hydrostatically factory tested to 300 psi.
 2. Bonnet - Bonnet shall be of the dry reservoir type. Bonnet must have a lubricating fitting for ease of lubrication. All parts shall be removable through top of hydrant without removing entire barrel section from safety 10 flange.
 3. Nozzles and Caps - The hydrant shall have two (2) 2 1/2-inch connection and one (1) 4 1/2" steamer connection, National standard threads. Nozzles shall be bronze and have interlocking lugs to prevent blowout. Nozzle caps shall not be equipped with chains.
 4. Seat Ring - Seat ring shall be bronze to bronze. The bronze shall be Grade A, B, D, or E.
 5. Drain Valves and Openings - Positive operating drain valves shall be provided to assure drainage of fire hydrant when the main valve is closed. Drain openings shall have bronze bushings.
 6. Main Valve - Valve shall be designed to close with the pressure and remain closed. Valve shall be bronze Grade A, B, D, or E, that will resist rocks or other foreign matter. Valve shall have a full 4 1/2-inch opening.
 7. Barrel and Safety Flanges - Hydrant shall have a safety-type vertical barrel with a minimum 3 1/2-foot bury and be designed with safety flange and/or bolts to protect the barrel and stem from damage and to eliminate flooding when hydrant is struck. Bury depth shall be cast on barrel of hydrant. All risers necessary for deeper bury applications shall be provided by the hydrant manufacturer. A maximum riser height of 1' shall be allowed.
 8. Operating Stop and Nut - Hydrant shall have a positive stop feature to permit opening of hydrant without over travel of stem. The operating stop shall be located at the bottom of the hydrant by means of a capnut or stop nut at the end of the main valve stem. Operating nut shall be bronze, 1 1/4", point to flat, pentagon.
 9. Bolts and Nuts - Bolting materials shall develop the physical strength requirements of ASTM A307. Bolts, studs, washers and nuts shall be made from a corrosion-resistant material such as low zinc bronze, monel, stainless steel or low alloy steel conforming to ASTM A242.
 10. Inlet - Bottom inlet of hydrant shall be provided with mechanical joint connection as specified and shall be 6-inch nominal diameter.
 11. Direction of Opening - Hydrants shall be designed to close "right" or clockwise and open "left" or counter-clockwise.
 12. Coatings - All inside portions of the hydrant shall be coated in accordance with ANSI/AWWA C550 latest revision. The exterior portion of hydrant above ground level shall be painted with two (2) coats of red primer paint equivalent to Hydrant Hide Red Setter #9050 as manufactured by Pennsbury Coatings Corporation. After the hydrant has been accepted and placed in service, the exterior, above-ground portion of the hydrant shall be painted with two (2) coats of yellow hydrant enamel equivalent to Hydrant Hide Old Yeller #9032 as manufactured by Pennsbury Coatings Corporation.
 13. Joint Assemblies - Mechanical joint assemblies shall conform to ANSI/AWWA C111/A21.11 latest revision.
 14. Inspection and Affidavit - Hydrants furnished under this specification shall be subject to inspection and acceptance by City personnel, and, if required, shall have full access to manufacturer's facilities for inspection and observation of tests. Manufacturer is also required to furnish the City with an affidavit of compliance with specifications covering all materials and test procedures relating to construction of the hydrants.
 15. Detail W5 is for new construction activities and can require a water disruption/outage. Detail W4 is for construction where a water disruption/outage is not allowed.
 16. All fire hydrant extensions require a 12 gauge copper tracing wire. The wire shall be connected to the supplying water main's tee and installed along the hydrant lead to the hydrant's traffic flange.
 17. Hydrant lead wet tap connections, on relocated water mains, will not be allowed until GDOT has satisfactorily performed/approved a 150 psi pressure test, on the relocated water main, for a minimum of two hours.
 18. All work must be complete between 3 a.m. and 6 a.m. Contractor shall coordinate all water disruptions/outages with affected property owners a minimum of 5 working days in advance.
- D. TAPPING VALVES:
All tapping valves shall be provided with a standard flange on one end for bolting to the tapping sleeve. The outlet end shall be mechanical joint, flanged for bolting to a standard tapping machine. All tapping valves shall be resilient seat. No double disc shall be permitted. In all other respects, tapping valves shall comply with the requirements for gate valves. Tapping valves and tapping sleeves 12" diameter and smaller shall be compatible with the Mueller tapping machine.
- E. TAPPING SLEEVES:
Tapping sleeves shall be compact ductile iron mechanical joint type conforming to ANSI/AWWA C153/A21.53 for fitting 4"-16" of ANSI/AWWA C110/A21.10 for fittings larger than 16", latest revision. They shall be sized to fit the intercepted pipe and be equivalent to Mueller H-615/715. All tapping sleeves and valves shall be pressure tested prior to tapping. The tapping sleeve shall include the necessary pressure test port.
- F. All pipes, valves and other appurtenant materials to be American made.



City of Savannah

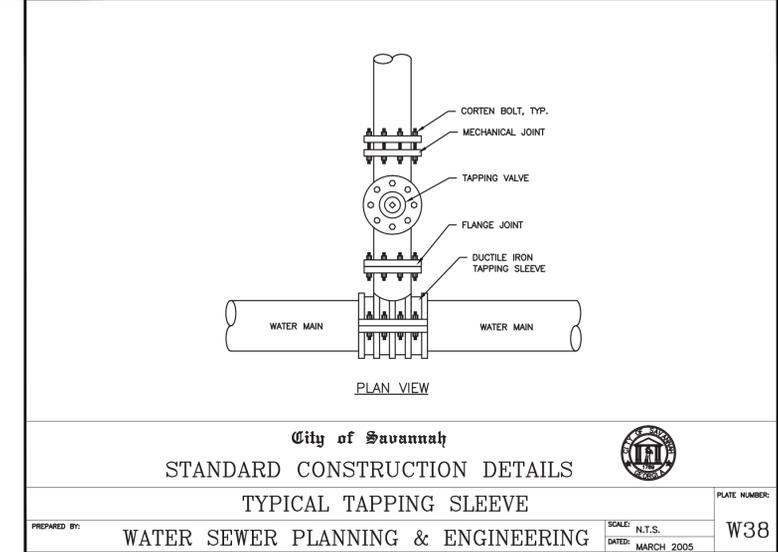
STANDARD CONSTRUCTION DETAILS
FIRE HYDRANT FOR DEEP BURY MAINS

PREPARED BY: WATER & SEWER PLANNING & ENGINEERING SCALE: N.T.S. DATE: JUNE 2005

City of Savannah

STANDARD CONSTRUCTION DETAILS
FIRE HYDRANT FOR STANDARD BURY MAINS

PREPARED BY: WATER & SEWER PLANNING & ENGINEERING SCALE: N.T.S. DATE: JUNE 2005



City of Savannah

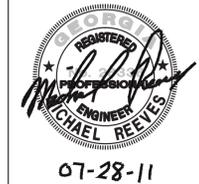
STANDARD CONSTRUCTION DETAILS
TYPICAL TAPPING SLEEVE

PREPARED BY: WATER SEWER PLANNING & ENGINEERING SCALE: N.T.S. DATE: MARCH 2005

USE ON CONSTRUCTION

| | | |
|-----------------------------------|---------|--------------------------|
| UTILITY PLANS WATER & SANITARY | | |
| 10 | 8/11/11 | FIRE HYDRANT RELOCATIONS |
| NO. | DATE | DESCRIPTION OF REVISION |

J & F A Joint Venture
Jordan, Jones & Goulding, Inc.
Freeman & Vaughn Engineering, Inc.



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|---|------------------|---------------------|-----------|
| GEORGIA DEPARTMENT OF TRANSPORTATION HARRY S. TRUMAN PARKWAY PHASE V | | | |
| UTILITY PLANS - WATER & SANITARY SPECIFICATIONS AND DETAILS | | | |
| DESIGNED: MRR | CHECKED: | DATE: JULY 28, 2011 | 24.37 J |
| DRAWN: MEH | JOB NO. 2132.001 | SCALE: AS SHOWN | SHEET REV |