Addendum to Chapter 23 – Water Mains

Issued: June 1, 2012

1. Delete Section 23.03(B)(4)(c) – Retainer Glands and insert the following:

   23.03(4)(c): All retainer glands shall utilize a wedge action principle or grip ring principle to fully restrain the fitting and pipe together. Wedge Action Retainer Glands shall be ductile iron with heat-treated ductile iron wedges and twist-off torque nut bolts. Ductile iron shall be per ASTM A536 grade 65-45-12. Wedges shall have a minimum hardness of 370 BHN. The gland shall allow for a minimum deflection of 3° and allow joint movement after installation. The gland shall be provided with torque limiting twist-off nuts with an additional fixed hex head to allow for removal and reinstallation of the gland. Twist-off torque nut bolts shall be coated or lubricated in a manner to prevent corrosion and premature twist-off of the torque limiting twist-off nuts. Additional requirements include:

Specification Item	**Ductile Iron Pipe**	**PVC Pipe**
Pressure Rating, 6" – 12" pipe:	350 psi	305 psi (DR 14)
Pressure Rating, 16" pipe:	350 psi	235 psi (DR 18)
Pressure Rating, 24" and larger:	250 psi	N/a
Color:	Black	Red
Acceptable Manufacturers:	EBAA Iron Megalug Series 1100 Ford Uni-Flange Series 1400 STAR Stargrip 3000 SIGMA One-Lok SLD TYLER UNION TUFGRIP	EBAA Iron Megalug Series 2000PV STAR PVC Stargrip 4000E9408985 TYLER UNION TUFGRIP PVC FORD Uni-Flange Series 1500

   Acceptable manufacturers are required to meet all stated specifications requirements. Failure to meet requirements shall be cause for rejection.

2. Revise existing Section 23.07(F) - Tracer Wirer by adding the following paragraph:

   All water main reconstructions (loops for conflicting utilities) as shown on LSP 301 shall have tracer installed when using PVC pipe. When reconstruction is performed on ductile iron pipe or cast iron pipe, tracer wire shall be terminated on both ends of the loop directly to the existing pipe using an exothermic welded connection, or a stainless steel Cathodi-Clamp™. Polyethylene encasement shall be (re)installed over the areas of the existing pipe where the tracer is terminated extending from a minimum of two (2) feet past the connection point of the new PVC pipe to a minimum of two (2) feet past the wire termination point on the existing water main.

3. Revise existing Section 23.10(A) - Water Service Construction or Reconstruction by adding the following paragraph:

   Whenever a water service is reconstructed that provides fire protection (fire service), the Contractor shall obtain the necessary Underground Fire Sprinkler Permit through the City's Building and Safety Department, Bureau of Fire Prevention. The Contractor shall comply with the requirements of the permit and anticipate and arrange any necessary inspections of the fire service reconstruction.

4. Add new Section 23.03(B)(4)(d):

   23.03(B)(4)(d): Mechanical Joint Restraint Adaptors for connection of MJ valves to MJ fittings and MJ fittings to MJ fittings shall be a bolt-through positive restraint mechanism meeting working pressure specifications of AWWA C153 for compact fittings and manufactured of ductile iron conforming to ASTM A536, 80-55-06. MJ adaptors shall connect standard mechanical joint fittings (AWWA C110 or C153) and valves at a linear distance not to exceed three (3) inches and without attachment to pipe. MJ adaptors shall be installed with standard styrene butadiene rubber (SBR) MJ gaskets conforming to the latest revision of AWWA C111 be supplied with an NSF 61, 7-mil. fusion bonded epoxy coating. The bolts and nuts shall be ASTM A193 Type 304 Stainless Steel Acceptable manufacturer shall be
   Foster Adaptor.