UPDATE LOG FOR TECHNICAL PROVISIONS		
Date	**Item(s) Changed**	**Page**
08/2021	**TECHNICAL PROVISIONS** **DIVISION 4 – VALVE SPECIFICATIONS** **The entire technical provisions document has been revised. Please replace the entire document dated 10/13 with the attached document dated 08/2021** The font and format throughout the entire document has been revised to reflect that of the new branding.	**All**
08/2021	**DIVISION 4 – VALVE SPECIFICATIONS** **The following sections have been revised:** 4.1.2 Submittals 4.1.3 Valve Testing 4.2.2 Actuators 4.2.3 Valve Ends 4.2.4 Painting and Coating 4.2.5 Recycled Water Identification 4.2.6 Wax Tape 4.3 Gate Valves 4.4 Eccentric Plug Valves (non-lubricated) ~~4.5 Ball Valves~~ 4.~~6~~5 Butterfly Valves ~~4.7 Triple Offset Metal-Seated Butterfly Valves~~ 4.~~8~~6 Check Valves ~~4.8.4 12-inch and Larger~~ ~~4.8.2 Smaller than 12-inch~~ 4.~~9~~7 Air and Vacuum Valves 4.~~9~~7.1 General 4.~~9~~7.2 Water Systems 4.~~9~~7.3 Wastewater Systems 4.~~10~~8 Hydraulic Operated Control Valves 4.~~10~~8.1 General 4.~~10~~8.2 Basic Valve 4.~~10~~8.3 Pressure Relief Valve (Sole-Source Item per Approved List of Materials 4.~~10~~8.4 Pressure Reducing Valve (Sole-Source Item per Approved List of Materials 4.~~10~~8.5 Altitude Valve ~~4.10.6 Pump Control Valve for Well Pumping Plant~~ ~~4.10.7 Pump Control Valve for Booster Pumps~~ 4.~~11~~9 Fire Hydrants 4.9.1 Service Application 4.9.2 Bolts and Nuts	4-1 4-2 4-3 4-4 4-5 4-6 4-7 4-8 4-9 4-10 4-11 4-12

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DIVISION 4

VALVE SPECIFICATIONS

4.1 General

4.1.1 Scope

Contractor shall furnish all labor, equipment, and material and perform all operations necessary for installation of valves, as shown on the Drawings and specified herein. All valves shall be new and of current manufacture. Replacement parts for the valves shall be available and generally in stock from suppliers within a 100-mile radius of the project site. All valves shall be wrapped in 8 mils of polyethylene, per AWWA C105.

4.1.2 Submittals

Valves shall be selected from the District's Approved Materials List.

Prior to ordering valves, Contractor shall submit data on all valves with all options identified on the submittal including, but not limited to:

1. Size(s) proposed for use.
2. Valve dimensions.
3. Pressure rating.
4. Materials of construction.
5. End connections.
6. Actuator manufacturer's catalog data and detail construction sheets showing the dimensions, materials, number of turns, and required torque input of the actuator to be used.
7. Manufacturer's catalog data and proof of National Sanitation Foundation (NSF) certification on the lining materials to be used.
8. All other requirements specified herein.

An affidavit from the valve manufacturer showing the following shall be submitted for review and approval by the District prior to delivery of the valves:

1. Actuators used, if applicable, were furnished and installed by the valve manufacturer.
2. Valves have successfully passed hydrostatic testing, per Section 4.1.3, below, and passed coating tests by the valve manufacturer.
3. Affidavit of compliance shall be provided for all valves certifying that they meet or exceed the requirements set forth in these specifications.

4.1.3 Valve Testing

All valves shall be factory tested in accordance with AWWA Sections C503, C504, C507, C508, C509, C512, C515, or C517 for the respective type of valve and any additional requirements specified herein. Where AWWA requirements conflict with these specifications, the more stringent of the two shall be used. Factory hydrostatic tests shall be in each direction. Valve coatings shall be dry film tested and holiday detected prior to shipment to the field. Valves delivered to the site prior to successful testing and holiday detection shall be rejected. An affidavit of compliance shall be provided for all valves certifying that they meet or exceed the requirements set forth in these specifications. At no cost to the District, staff may request field-testing of the valves prior to installation.

4.2 General Requirements

4.2.1 Pressure Rating

Valves shall be rated for the working pressure and test pressure of the pipeline for which they are being installed. Unless specified otherwise, valves shall have a minimum working pressure of 150 psi.

4.2.2 Actuators

Unless specified otherwise, above-ground valves shall be furnished with hand wheel operators oriented to create the least obstruction and easiest access for operation. Buried actuators shall be furnished with 2-inch-square operating nut, valve stem extension, and valve can in accordance with the Standard Drawings. Valve actuators shall conform to the operating requirements of AWWA Standard C507 or C504, as applicable, and shall be designed to hold open and fully closed without creeping or fluttering.

Unless specified otherwise, valves shall be mounted with a manual gear actuator and meet the following requirements:

- Gear actuators shall be sized and supplied, per AWWA C504 Class 150 or 250 "B."

- Provide stop limiting devices in the actuators in the OPEN and CLOSED positions. Actuators components located between the input and the stop-limiting devices shall be designed to withstand without damage a pull of 200 pounds for handwheel and an input torque of 300 foot-pounds for 2-inch AWWA operating nuts when operating against the stops for worm gear operators or 450 foot-pounds for traveling nut operators.

- Gear actuators shall be enclosed having stainless steel fasteners, lubricated with oil or grease, and provided with seals on shafts to prevent entry of dirt and/or water into the actuator. The actuator, for above-ground ball, butterfly, and plug valve applications, shall contain a dial indicating the position of the valve disc. For below-ground applications, the valves shall be provided with a ground level position indictor (if specified on the construction drawings). Valve actuators shall open by turning counterclockwise.

- Unless specified otherwise, valves 3-inch through 36-inch shall be provided with self-locking traveling nut actuator of the manufacturer's most current design. Valves 42-inch and larger shall be equipped with self-locking worm gear of a one-piece design, bronze or ductile iron, and accurately machine cut. The worm gear shall be hardened alloy steel (ASTM A322, Grade G41500; or ASTM A148, Grade 105-85), thread-ground and polished. Helix angle of the worm gear shall be designed and cut at 3.5 degrees or less to prevent creep, unless other means to prevent creep are employed as approved by Owner's engineer. The actuator shall prevent creeping of the valve under all flow conditions. Reduction gearing shall meet maximum torque and pull design requirements. The reduction gearings shall operate in a proper lubricant.

- Actuators shall be manufactured by AUMA, Mastergear, EIM, Limitorque, Pratt, or approved equal.

- Electric Motor Actuator (if applicable) shall be Limitorque L120 series with weatherproof enclosure, 120 VAC single phase where indicated, on/off controls (pulse modulation) with operating timing between 60 and 90 seconds (full open to full closed), local control package including pad lockable local off remote switch, open/closed outputs, as specified an analog transmitter (4-20 mA) for position, and top-mounted hand wheel. The valve gear box and electric motor actuator combination shall be sized to the full pressure rating of the valve.

4.2.3 Valve Ends

Valve ends shall be as shown on the design drawings or standard drawings. Flanges shall conform to dimensions and drilling to ANSI B16.1, Class 125 (250 psi maximum) or ANSI B16.2, Class 250 (300 psi maximum) to match the pressure rating of the pipeline. Contractor shall match valve flanges and pipeline flanges for compatibility. For flanges installed on existing fittings, the Contractor shall pothole and field verify the existing flange type, size, and drilling pattern prior to ordering the valves.

Grooved couplings and pipe spools shall be installed on steel pipelines adjacent to all valves twelve (12) inches and smaller, in accordance with the District's standard drawings. Valves fourteen (14) inches and larger do not require grooved couplings.

4.2.4 Painting and Coating

All ferrous valves shall be epoxy-coated with a minimum dry film thickness of 10 mils, unless otherwise specified. The valve surface preparation before applying the coating shall be SSPC SP10 near white metal. All coated surfaces shall be visually and/or electrically examined for minimum thickness and/or defects using non-destructive testing means. Interior ferrous epoxy-coated surfaces shall be holiday free, as determined by a low-voltage wet sponge test, per AWWA C550. Epoxy lining and coating of valves in the field is prohibited.

Powder epoxy lining and coating materials shall contain 100 percent solids in accordance with AWWA C213, shall be applied in one or more coats, and shall conform to the coating manufacturer's recommendations.

Repairs made to manufacturer's applied linings shall be performed by a company approved by the valve manufacturer, by qualified personnel, and in a facility where the environment can be controlled.

1. Below-Grade: The interior and exterior ferrous surfaces shall have a factory-applied fusion-bonded epoxy coating, in accordance with AWWA C550. If, in the opinion of the manufacturer, fusion-bonded epoxy would not be practical for the valve design, an equivalent coating in 2-part liquid epoxy is acceptable.

2. Above-Grade: The interior ferrous surfaces shall have a factory-applied fusion-bonded epoxy coating, in accordance with AWWA C550. If, in the opinion of the manufacturer, fusion-bonded epoxy would not be practical for the valve design, an equivalent coating in 2-part liquid epoxy is acceptable.

4.2.5 Recycled Water Identification

Valves for recycled water shall be identified with purple-colored coating, identification labels, or signs.

4.2.6 Wax Tape

Below-grade valves shall be wrapped/sleeved with a three-part, cold-applied wax tape coating system, as described by NACE RPO375 and AWWA C217, in accordance with the District's Approved Materials List. Wax tape is also required where indicated on the Approved Plans.

1. Primer: Primer shall be a blend of petrolatums, plasticizers, and corrosion inhibitors having a paste-like consistency. The primer shall have the following properties:
   Color Brown
   Pour Point 37.8º C - 43.3º C (100º -110º F)
   Flash Point 176.7º C (350º F)
   Coverage 0.41 L/M2 (1 gal/100 sq. ft.)

2. Wax Tape: Wax tape shall consist of a plastic-fiber felt, saturated with a blend of petrolatums, plasticizers, and corrosion inhibitors, forming a tape coating that is easily form-able over irregular surfaces. The tape shall have the following properties:
   Color Brown
   Saturant Pour Point 46.1º C - 48.9º C (115º - 120º F)
   Thickness 1.27 - 1.78 mm (50 - 70 mils)
   Tape Width 150mm (6")
   Dielectric Strength 170 volts/mil

3. Tape Outerwrap: Wrapper shall be a polyvinylidene chloride plastic with three (3) 50-gauge plies wound together as a single sheet. The wrapper shall have the following properties:
   Color Clear
   Thickness 0.0381 mm (1.5 mils)
   Dielectric Strength 2000 volts/mil
   Tape Width 150mm (6")
   Water Absorption Negligible

4.3 Gate Valves

Where shown on the design drawings, valves 12-inch and smaller shall be resilient-seated gate valves, in accordance with AWWA C-509 or AWWA C-515 (latest). Unless specified otherwise, valves shall have the following:

1. Ductile iron bodies and covers (ASTM A-536)
2. Non-rising bronze stems opened by turning left (counterclockwise)
3. Two (2) "O" ring stem seals, as required by AWWA C509

4. Rubber (EPDM) encapsulated ductile iron disc (ASTM A-536); minimum thickness of the rubber seating area shall be 1/4-inch.
5. Valve shall have a full opening flow-way of equal diameter of the normal size of connecting pipe with smooth unobstructed waterways free from any sediment pockets.
6. Low-friction torque-reduction thrust washers or bearings shall be provided on the stem collar.
7. All bolts and nuts used in the construction of RWGVs shall be Type 316 stainless steel.
8. Resilient-seated gate valves shall be leak-tight at their rated pressure.

4.4 Eccentric Plug Valves (non-lubricated)

All plug valves shall be eccentric plug valves with rectangular ports and selected from the District's Approved Materials List (or approved equal).

Valves shall be of the non-lubricated eccentric type with resilient faced plugs. Valves that require more than 250 psi shutoff per the valve schedule shall be furnished with ANSI B16.5 300 lb. flanged end connections and drilled to the ANSI 300 lb. drilling. Valves that require less than 250 psi shutoff per the valve schedule shall be furnished with ANSI B16.1 125/150 lb. flanged end connections and drilled to the ANSI 150 lb. drilling.

Valve Bodies that require more than 250 psi shutoff per the valve schedule shall be of ASTM A216, Grade WCB cast steel. Valve Bodies that require less than 250 psi per the valve schedule shall be of ASTM A536 Ductile Iron Grade 65-45-12. Ports shall be rectangular. Round ports are not acceptable. Bodies for 4-inch and larger valves shall be furnished with a .125-inch (3mm) welded overlay seat of not less than 90 percent pure nickel. Seat area shall be raised, with raised surface completely covered with weld to ensure that the plug face contacts only nickel. Screwed-in seats shall not be acceptable.

Plugs that require more than 250 psi shutoff per the valve schedule shall be of ASTM A216, Grade WCB cast steel. Plugs that require less than 250 psi per the valve schedule shall be of ASTM A536 Ductile Iron Grade 65-45-12. The plug shall have a cylindrical seating surface eccentrically offset from the center of the plug shaft. The interference between the plug face and body seat, with the plug in the closed position, shall be externally adjustable in the field with the valve in the line under pressure. Plug shall be resilient faced with Chloroprene (CR) or Acrylonitrile-Butadiene (NBR) suitable for use with sewage or water.

Valves shall have sleeve type metal bearings and shall be of sintered, oil impregnated permanently lubricated type 316 ASTM A743 Grade CF-8M in 0.5 - 36-inch sizes. In valves larger than 36-inch, the upper and lower plug journals shall be fitted with ASTM A-240 type 316 stainless sleeves with bearings of ASTM B30, Alloy C95400 aluminum bronze. Non-metallic bearings shall not be acceptable.

Valve shaft seals shall be of the multiple V-ring type and shall be externally adjustable and repackable without removing the bonnet or actuator from the valve under pressure. Valves utilizing O-ring seals or non-adjustable packing shall not be acceptable.

Valve pressure ratings that require more than 250 psi shutoff per the valve schedule shall be rated for a minimum of 450 psi. Valve pressure ratings that require less than 250 psi per the valve schedule shall be rated for a minimum of 285 psi. Each valve shall be given a hydrostatic and seat test at the factory **in both directions** with test results being certified and submitted to the District for review and approval.

A.) Valves that require more than 250 psi shutoff per the valve schedule shall have a hydrostatic shell test using 675 psi. Valves that require less than 250 psi shutoff per the valve schedule shall have a hydrostatic shell test using 450 psi for sizes 4”-12” and 375 psi for sizes 14” and larger. No leakage is permitted. The test duration shall be as required to determine the integrity of the pressure boundary after test pressure has been applied.

B.) Valves that require more than 250 psi shutoff per the valve schedule shall have a seat leakage test with 450 psi water. Valves that require less than 250 psi shutoff per the valve schedule shall have a seat leakage test with 285 psi water. No leakage is permitted.

4.5 Butterfly Valves

All butterfly valves shall be designed and manufactured in accordance with AWWA C-504 (latest).

Unless specified otherwise, valves materials shall be as follows:

1. Body – Ductile iron body ASTM A-536 (65-45-12).
2. Bearings – Teflon lined, fiberglass backed.
3. Disc – Ductile iron ASTM A-536 (65-45-12).
4. Disc Edge – Stainless Steel Type 316.
5. Top Stub Shaft – Stainless Steel ASTM A-276 Type 304 or 17-4 PH.
6. Bottom Stub Shaft – Stainless Steel ASTM A-276 Type 304 or 17-4 PH.
7. Packing – Rubber (EPDM).

8. Bottom Cover and Cap (if applicable) – Ductile iron ASTM A-536 (65-45-12), if available.
9. Cap Screws – Stainless Steel Type 304.
10. Squeeze Pins (if applicable) – Stainless Steel ASTM A-276 Type 316.
11. Taper Pins (if applicable) – Stainless Steel ASTM A-564 Type 630.
12. Lockwashers (if applicable) – Stainless Steel Type 316.
13. Hex Nuts (if applicable) – Stainless Steel Type 316.
14. Key – Steel.
15. Thrust Bearing Stub (if applicable) – Stainless Steel Type 316.
16. Thrust Collar – Bronze ASTM B-505.
17. Thrust Collar Shims – Brass Alloy.
18. Groove Pin (if applicable) – Steel.
19. Bottom Cover Gasket – Non Asbestos Material ASTM F104.
20. Spring Pin – Stainless Steel Type 420.
21. O-Ring – Rubber (EPDM).
22. Packing Retainer – Nylon.
23. Seat – Rubber (EPDM Peroxide Cure).
24. Valve Coating Interior – 16 mils holiday free NSF epoxy coating.
25. Valve Coating Exterior – 10 mils non-holiday free NSF epoxy coating.

Valve seats shall be mounted on the valve body. Resilient seats on the valve disc will not be permitted. Valves twenty (20) inches and smaller in diameter shall have a rubber seat permanently bonded to the valve body. Valve seats for valves twenty-four (24) inches and larger in diameter shall be field-replaceable and constructed of a one-piece, continuous ring. Whenever internal retaining rings and screws are used with rubber seats, they shall be Type 316 stainless steel.

4.6 Check Valves

Check valves shall be swing-type, lever and weight or lever and spring, designed and manufactured in accordance with AWWA C-508 (latest). Valves shall be flanged, ductile-iron body, bronze or resilient Buna N seat with stainless steel shaft. The seat and plug shall be hand-replaceable in the field. The full-flow area through the body shall be equal to or greater than the cross-sectional area of the equivalent pipe size.

4.7 Air and Vacuum Valves

4.7.1 General

Air and vacuum valves shall be designed to permit automatic escape of large quantities of air from a pipeline when the line is being filled, permit air to enter the pipeline when the line is being emptied, and allow accumulating air to escape while the pipeline is in operation and under pressure.

Air and vacuum valves shall be kept clean and free from dirt, earth, debris, and other deleterious materials prior to, during, and after installation and construction. Each valve shall be protected by the use of an approved canvas or plastic bag or sack completely covering valve and securely fastened to valve riser.

Combination air valves shall comply with AWWA C512 except for those listed on the District's Approved Material's list that have been tested and found to be acceptable by the District. Valve bodies and all valve seats shall consist of materials compatible with 150 percent of the minimum design pressure identified on the plans with zero leakage.

4.7.2 Water Systems

Air and vacuum valves shall be combination valves and shall have cast iron bodies and covers, stainless steel floats rated 1,000 psi, all bronze or stainless steel internal working parts, and stainless steel pressure seats. Valves shall be epoxy lined and coated, in accordance with Section 4.2.4. Inlets shall be flanged or threaded, as specified, and outlets shall be threaded and the same nominal sizes as the inlets, minimum. Valves shall be subjected to a factory hydrostatic test at a pressure equal to 200% of the rated working pressure with no harmful deflections or other defects.

Air and vacuum valve outlets shall be adequately screened to prevent the entrance of foreign substances or materials. Air and vacuum valves assemblies shall be installed in accordance with the Standard Drawings. Where valves contain more than a single outlet, each outlet shall be adequately screened.

4.7.3 Wastewater Systems

For wastewater applications, combination air valves shall be specifically designed to operate with liquids containing solid particles such as wastewater effluents and liquids that can cause chemical build-up. The valve shall have an air gap which separates the liquid from the sealing mechanism, ensuring optimum valve operation.

Air and vacuum valves shall be combination valves with composite bodies and covers. Operating parts shall be made of specially selected corrosion resistant polymer materials. Float rod and spring shall be made of stainless steel. Inlets shall be flanged or threaded as specified.

Air and vacuum valves shall be furnished with a shut-off valve, blow-off valve, quick disconnect coupling and a backflushing hose [minimum length of six (6) feet].

Wastewater combination air valves shall be manufactured by ARI or an approved equal.

4.8 Hydraulic Operated Control Valves

4.8.1 General

Hydraulic operated control valves shall be furnished and installed, as specified herein and shown on the Construction Drawings. The basic valve shall be provided with external systems to modulate the pressure to the diaphragm to provide the specific control desired.

4.8.2 Basic Valve

The valve shall be a hydraulic operated diaphragm-actuated globe, as shown on the Drawings. It shall contain a resilient synthetic rubber disc having a rectangular cross-section and contained on 3½ sides by a disc retainer and forming a tight seal against a single removable seat insert. The diaphragm assembly containing a valve stem shall be fully guided at both ends by a bearing in the valve cover and an integral bearing in the valve seat. This diaphragm assembly shall be the only moving part and shall form a sealed chamber in the upper portion of the valve separating operating pressure from line pressure. The diaphragm shall consist of nylon fabric bonded with synthetic rubber and shall not be used as a seating surface. Packing glands and/or stuffing boxes are not permitted and there shall be no pistons operating the valve. All necessary repairs shall be possible without removing the valve from the line. The body and cover materials shall be as specified on the plans. The main trim shall be 303 stainless steel. The rubber components shall be Buna N synthetic rubber. The valve body and cover, interior and exterior, shall be epoxy coated. Coating shall be applied using the fusion method and shall have a minimum coating thickness of 12 mils.

4.8.3 Pressure Relief Valve (Sole-Source Item per Approved List of Materials)

In general, the pressure relief valve shall consist of the basic valve with pilot control system which will maintain a constant upstream pressure by bypassing or relieving excess pressure and shall maintain close pressure limits without causing surges. The pilot control shall be a direct acting adjustable spring-loaded diaphragm valve designed to permit flow when controlling pressure exceeds spring setting. The pilot control system shall operate such that as excess line pressure is dissipated the main valve shall gradually close to a positive, drip-tight seating. The pilot control system shall be cast bronze ASTM B-62 with 303 stainless steel trim. The pressure relief valve shall have pressure relief ranges of 20 to 200 psi unless specified otherwise. The valve shall be furnished complete with an external Y-strainer, flow control valve, three shut-off valves and connecting tubing. In-body “Flow-Clean” strainers shall not be used.

4.8.4 Pressure Reducing Valve (Sole-Source Item per Approved List of Materials)

In general, the pressure-reducing valve shall consist of the basic valve and pilot control system to maintain a constant downstream pressure regardless of varying inlet pressure. The pilot control shall be a direct-acting adjustable spring-loaded normally open diaphragm valve designed to permit flow when controlled pressure is less than the spring setting. The control system shall include a fixed orifice. The pilot control system shall be cast bronze ASTM B-62 with 303 stainless steel trim. The pressure reducing valve shall have pressure reducing ranges of 15 to 75 psi unless specified otherwise. The valve shall be furnished complete with a restriction tube fitting, external Y-strainer, closing speed control valve, opening speed control valve, three shut-off valves, and connecting tubing.

4.8.5 Altitude Valve

The altitude valve shall consist of the basic valve and pilot control system which shall control the high water level in a storage reservoir. The valve shall be available in various models to provide choices of one-way flow, two-way flow, two-way flow with delayed opening for return flow, or one-way flow with delayed opening. The valve shall be a non-throttling type valve and shall remain fully open until a shut-off point in the reservoir is reached. The pilot control shall be of a diaphragm actuated 3-way type that operates on the differential pressure between the height of the water in the reservoir and an adjustable spring-load. The entire valve and control system shall be designed so that no surface water can be drawn into the pilot system or main valve at any time. The pilot control system shall be cast bronze ASTM B-62 with 303 stainless steel trim. Unless specified otherwise, the valve shall be a two-way type which closes at high water level in the reservoir and opens for return flow when pressure at the valve inlet lowers below the reservoir pressure. The valve shall only require connection to the reservoir to sense the reservoir pressure level. Unless specified otherwise the valve shall have a range of 5 to 40 feet of water. The valve shall be furnished complete with an external Y-strainer, three shut-off valves, and connecting tubing.

4.9 Fire Hydrants

Fire hydrants shall be wet-barrel-type designed and manufactured in accordance with AWWA C-503. Hydrants shall be as specified on the Drawings and shall be installed in accordance with the Standard Drawings. The fire hydrant body shall be ductile iron or bronze. Protective coatings and painting shall be in accordance with Section 4.2.4 herein and the Standard Drawings.

Hydrants shall generally have the following number and size of outlets as directed by the fire department of jurisdiction:

1. Residential: One (1) 2½-inch outlet and one (1) 4-inch outlet
2. Commercial (Super): Two (2) 2½-inch outlets and one (1) 4-inch outlet.

4.9.1 Service Application

1. Fire hydrants shall be installed on potable water mains only. Fire hydrants shall not be installed on untreated or recycled water mains.

2. Wet-barrel hydrants shall generally be used for pressures up to 200 PSI. System pressures above 200 PSI and up to 250 PSI require high-pressure wet-barrel hydrants, in accordance with the Approved Materials List.

4.9.2 Bolts And Nuts

1. Fire Hydrants shall be installed with bolts and nuts, in accordance with the Standard Drawings.

2. Breakoff bolts and nuts shall be zinc-plated ASTM A307, Grade A, carbon steel with the center of the bolt filled with silicon.

3. Regular flange bolts shall be in accordance with Technical Provisions, Division 12, Section 12.2.