ADEM AIS Variance Request

Date:	Monday, July 06, 2026
Project:	Stickney WTP Filter and SCADA Upgrades
To:	John Laney, ADEM Project Manager
From:	Heath Hardy, P.E. Project Manager
Subject:	AIS Variance Request – Butterfly Valves

Mr. Laney,

On behalf of the Mobile Water and Sewer System (MAWSS), we are requesting an Availability AIS Waiver for eleven (11) 8-Inch Cast-Iron Body Butterfly Valves, thirteen (13) 14-Inch Cast-Iron Body Butterfly Valves, twenty-five (25) 24-Inch Cast-Iron Body Butterfly Valves, and twenty (20) 12-Inch Cast-Iron Body Butterfly Valves for the above mentioned project.

Background/Explanation

MAWSS is receiving Drinking Water State Revolving Fund (DWSRF) Loans for the design and construction of the Stickney WTP Filter and SCADA Upgrades project. This project is subject to AIS requirements, per the DWSRF Loan conditions.

The project includes the installation of a sixty-nine (69) various sized butterfly valves required for the process improvements included within the filter upgrades project. These valves are necessary for controlling the filters during normal operation and backwashing processes. Replacement of the existing butterfly valves must be done in conjunction with the replacement of the process piping within the filter piping gallery and is a critical path item for the overall filter and SCADA upgrades project.

The Notice to Proceed date for this project was June 8, 2026. The Contract allows for 730 contract days, making the Final Completion date June 7, 2028. The valve package that is compliant with AIS standards and the project specifications has a lead time of 40-42 weeks. Based on the Prime Contractor's current construction schedule, waiting for these valves to arrive could set completion of the project back as far as February 2029. Lead time for equivalent foreign valves is 14-16 weeks, which would allow the Contractor to complete the project within their contractual completion dates. The Contractor's supporting documentation for this variance request has been included at the end of this letter as **Appendix A**.

Relevant Excerpts from Project Plans & Specifications:

Relevant excerpts from the project specifications have been included at the end of this letter as **Appendix B**.

Previous Waiver Precedent:

On August 12, 2022 the EPA approved a Timing-Based Availability AIS Waiver Request for the Reno-Stead Water Reclamation Facility 4MGD Expansion project for the City of Reno, Nevada. This AIS waiver request was made due to delivery delays on 12-Inch and 24-Inch domestic butterfly valves that would result in an undue, multiple-month delay on the project. We believe that, for the Stickney WTP Filter & SCADA Upgrades project, the lead time for a domestic butterfly valves will cause an undue, multiple-month delay. This AIS Waiver Decision Memorandum has been included at the end of this letter as **Appendix C**.

If the Alabama Department of Environmental Management has any further questions regarding this waiver request, please send all correspondence to:

Heath Hardy, P.E.
HDR Engineering, Inc.
Cell: (850) 429-8925
Email: heath.hardy@hdrinc.com

Sincerely,
HDR Engineering, Inc.

Heath Hardy, P.E.
Project Manager

Cc:
Doug Cote, MAWSS
Marcus Stacy, Volkert

This waiver request was submitted to the EPA by the state of Alabama and applies only to the project in the subject line. All supporting correspondence and/or documentation from contractors, suppliers or manufacturers included as a part of this waiver request was done so by the recipient to provide an appropriate level of detail and context for the submission. There may be documents with project diagrams, schedules, and supplier correspondence in formats that do not meet the Federal accessibility requirements for publication on the Agency's website. Hence, these exhibits have been omitted from this waiver publication. They are available upon request by emailing DWSRFWaiver@epa.gov.

APPENDIX B

Relevant Project Specification

4. Install in closed position.
5. Place valve on firm footing in trench to prevent settling and excessive strain on connection to pipe.
6. After installation, backfill up to top of box for a minimum distance of 4 feet on each side of box.

D. Support exposed valves and piping adjacent to valves independently to eliminate pipe loads being transferred to valve and valve loads being transferred to the piping.

E. Wax Tape Coating System:

1. After installation, coat all buried nuts and bolts with a wax tape coating system in accordance with:
   a. AWWA C217.
   b. Manufacturer's printed instructions.
2. Cut strips of wax tape and apply them around all bolts and nuts so that there are no voids or spaces under the tape.
3. Apply a sufficient amount of tape to completely encapsulate all bare metal.

F. For threaded valves, provide union on one side within 2 feet of valve to allow valve removal.

G. Install valves accessible for operation, inspection, and maintenance.

3.2 FIELD QUALITY CONTROL

A. Wax Tape Coating Testing:

1. Inspect each wax tape-wrapped component.
   a. Verify primer was applied to substrate surfaces.
   b. Ensure the wax tape has fully encapsulated all portions of the substrate.
   c. Ensure that the wax tape is in intimate contact with the substrate.
   d. Verify that the wax tape has been applied to the specified thickness.
2. Do not backfill until this inspection is complete and the wax tape application is approved by the Engineer.

3.3 ADJUSTMENT

A. See section 40 05 57 for adjustment requirements.

3.4 VALVE SCHEDULE

A. Unless shown otherwise on Drawings and drawing schedules, provide valves as follows:

1. *TO REMAIN

FILTER NO.	VALVE NAME (NUMBER)	SIZE (IN)	VALVE TYPE	WORKING PRESSURE (PSIG)	ACTUATOR	Valve Function
1	WASTE DRAIN VALVE*	24	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
1	BAY A EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
1	BAY A BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
1	BAY A AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE

FILTER NO.	VALVE NAME (NUMBER)	SIZE (IN)	VALVE TYPE	WORKING PRESSURE (PSIG)	ACTUATOR	Valve Function
1	BAY A RE-WASH VALVE	8	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
1	BAY B EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
1	BAY B BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
1	BAY B AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
1	BAY B RE-WASH VALVE	8	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
2	WASTE DRAIN VALVE*	24	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
2	BAY A EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
2	BAY A BACKWASH VALVE	24	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
2	BAY A AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
2	BAY A RE-WASH VALVE*	8	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
2	BAY B EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
2	BAY B BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
2	BAY B AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
2	BAY B RE-WASH VALVE*	8	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
3	WASTE DRAIN VALVE*	24	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
3	BAY A EFFLUENT VALVE*	14	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	MODULATING[2]

FILTER NO.	VALVE NAME (NUMBER)	SIZE (IN)	VALVE TYPE	WORKING PRESSURE (PSIG)	ACTUATOR	Valve Function
3	BAY A BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
3	BAY A AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
3	BAY A RE-WASH VALVE*	8	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
3	BAY B EFFLUENT VALVE*	14	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	MODULATING[2]
3	BAY B BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
3	BAY B AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
3	BAY B RE-WASH VALVE*	8	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
4	WASTE DRAIN VALVE*	24	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
4	BAY A EFFLUENT VALVE*	14	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	MODULATING[2]
4	BAY A BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
4	BAY A AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
4	BAY A RE-WASH VALVE	8	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
4	BAY B EFFLUENT VALVE*	14	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	MODULATING[2]
4	BAY B BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
4	BAY B AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
4	BAY B RE-WASH VALVE	8	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE

FILTER NO.	VALVE NAME (NUMBER)	SIZE (IN)	VALVE TYPE	WORKING PRESSURE (PSIG)	ACTUATOR	Valve Function
5	WASTE DRAIN VALVE*	24	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
5	BAY A EFFLUENT VALVE*	14	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	MODULATING[2]
5	BAY A BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
5	BAY A AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
5	BAY A RE-WASH VALVE	8	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
5	BAY B EFFLUENT VALVE*	14	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	MODULATING[2]
5	BAY B BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
5	BAY B AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
5	BAY B RE-WASH VALVE	8	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
6	BAY A RE-WASH VALVE*	8	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
6	BAY A EFFLUENT VALVE*	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR*	MODULATING[2]
6	BAY A BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
6	BAY A AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
6	BAY B RE-WASH VALVE*	8	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
6	BAY B EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
6	BAY B BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE

FILTER NO.	VALVE NAME (NUMBER)	SIZE (IN)	VALVE TYPE	WORKING PRESSURE (PSIG)	ACTUATOR	Valve Function
6	BAY B AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
7	BAY A RE-WASH VALVE	8	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
7	BAY A EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
7	BAY A BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
7	BAY A AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
7	BAY B RE-WASH VALVE*	8	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
7	BAY B EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
7	BAY B BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
7	BAY B AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
8	BAY A RE-WASH VALVE*	8	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
8	BAY A EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
8	BAY A BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
8	BAY A AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
8	BAY B RE-WASH VALVE*	8	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
8	BAY B EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
8	BAY B BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE

FILTER NO.	VALVE NAME (NUMBER)	SIZE (IN)	VALVE TYPE	WORKING PRESSURE (PSIG)	ACTUATOR	Valve Function
8	BAY B AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
9	BAY A RE-WASH VALVE	8	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
9	BAY A EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
9	BAY A BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
9	BAY A AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
9	BAY B RE-WASH VALVE	8	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
9	BAY B EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
9	BAY B BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
9	BAY B AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
10	BAY A RE-WASH VALVE*	8	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
10	BAY A EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
10	BAY A BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
10	BAY A AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE
10	BAY B RE-WASH VALVE*	8	BFV	<50	PNEUMATIC* WITH MANUAL GEAR OPERATOR*	OPEN/CLOSE
10	BAY B EFFLUENT VALVE	14	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	MODULATING[2]
10	BAY B BACKWASH VALVE	24	BFV	<50	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE

FILTER NO.	VALVE NAME (NUMBER)	SIZE (IN)	VALVE TYPE	WORKING PRESSURE (PSIG)	ACTUATOR	Valve Function
10	BAY B AIR SCOUR VALVE	12	BFV	<10	PNEUMATIC WITH MANUAL GEAR OPERATOR	OPEN/CLOSE

FILTER NO.	VALVE NAME (NUMBER)	GALLERY SIDE	SIZE (IN)	VALVE TYPE	WORKING PRESSURE (PSIG)	ACTUATOR	VALVE FUNCTION
NA	PRESSURE RELIEF VALVE (PRV-4202)	EAST	12”	PRESSURE RELIEF	<50	NA	NA
NA	CHECK VALVE (CV-4202)	EAST	24”	TILTING DISK	<50	NA	NA
NA	AIR RELEASE VALVE (ARV-4202)	EAST	8”	AIR RELEASE VALVE	<50	NA	NA
NA	EAST BACKWASH CONTROL VALVE	EAST	24”	BFV	<50	ELECTRIC[1]	MODULATING
NA	FILTERS NO. 1-5 BACKWASH ISOLATION VALVE	EAST	24”	BFV	<50	MANUAL	OPEN/CLOSE
NA	EAST/WEST CROSSOVER ISOLATION VALVE	EAST	24”	BFV	<50	MANUAL	OPEN/CLOSE
NA	PRESSURE RELIEF VALVE (PRV-4201)	WEST	12”	PRESSURE RELIEF	<50	NA	NA
NA	CHECK VALVE (CV-4201)	WEST	24”	TILTING DISK	<50	NA	NA
NA	AIR RELEASE VALVE (ARV-4201)	WEST	8”	AIR RELEASE VALVE	<50	NA	NA
NA	WEST BACKWASH CONTROL VALVE	WEST	24”	BFV	<50	ELECTRIC[1]	MODULATING
NA	FILTERS NO. 6-10 BACKWASH ISOLATION VALVE	WEST	24”	BFV	<50	MANUAL	OPEN/CLOSE

SYMBOLOGY KEY

1. ELECTRIC – 460 volt, 3 PH, 60Hz, PROVIDE WITH GEARED OPERATOR FOR MANUAL OPERATION.
2. MODULATING VALVES MOUNTED WITH INTEGRAL FLOW TUBE FOR FLOW MEASUREMENT.

*VALVE TO REMAIN BUT PIPING/FITTING TO BE REPLACED.

General Note:

Refer to section 40 70 06A – Schedule of Instrumentation for process systems for valve tag numbers.

SECTION 40 05 64
BUTTERFLY VALVES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Butterfly valves.

B. Related Sections include but are not necessarily limited to:

1. Procurement and Contracting Requirements
2. Division 01 - General Requirements.
3. Section 40 05 51 - Valves: Basic Requirements.
4. Section 40 05 67 - Pneumatic Valve Actuators

1.2 QUALITY ASSURANCE

A. Referenced Standards:

1. American Society of Mechanical Engineers (ASME):
   a. B16.5, Pipe Flanges and Flanged Fittings - NPS 1/2 Through NPS 24.
2. ASTM International (ASTM):
   a. A48, Standard Specification for Gray Iron Castings.
   b. A126, Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.
   c. A276, Standard Specification for Stainless Steel Bars and Shapes.
   d. A395, Standard Specification for Ferritic Ductile Iron Pressure-Retaining Castings for Use at Elevated Temperatures.
   e. A436, Standard Specification for Austenitic Gray Iron Castings.
   f. A536, Standard Specification for Ductile Iron Castings.
3. American Water Works Association (AWWA):
   a. C504, Standard for Rubber-Seated Butterfly Valves.
4. Manufacturers Standardization Society of the Valve and Fittings Industry Inc. (MSS):
   a. SP-67, Butterfly Valves.

1.3 SUBMITTALS

A. Shop Drawings:

1. For valves 8 IN and larger, furnish "Affidavit of Compliance" with Owner in accordance with AWWA C504.

B. Operation and Maintenance Manuals:

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Subject to compliance with the Contract Documents, the following manufacturers are acceptable:

- [redacted]
- [redacted]
- [redacted]

B. Design based on the [redacted] line of butterfly valves.

C. Submit request for substitution in accordance with Section 01 25 00 prior to bid opening.

2.2 BUTTERFLY VALVES (AWWA C504)

A. Comply with AWWA C504.

B. Materials:

1. Valve bodies:
   a. ASTM A126, Class B or ASTM A536 Grade 65-45-12 ductile iron.
   b. Wafer valves may be constructed of ASTM A48, Class 40 cast iron.
2. Valve shafts:
   a. Stainless steel, 18-8, Type 304 or 316.
3. Valve discs:
   a. Potable and non-potable water:
      1) ASTM A48, Class 40 cast iron.
      2) ASTM A536, Grade 65-45-12 ductile iron.
      3) ASTM A436, Type 1 alloy cast iron.
      4) Bronze in accordance with AWWA C504.
   b. Air and similar applications: ASTM A48, Class 40 cast iron.
4. Valve seats:
   a. Potable water and air below 180 DegF:
      1) Buna-N.
5. Mating surfaces:
   a. Valves less than 30 IN: ASTM A276, 18-8, stainless steel or bronze.

C. Design Requirements:

1. Seat type:
   a. Resilient.
   b. Comply with AWWA C504.
2. Exposed and submerged valves 24 IN and larger:
   a. Body type: Short body flange.
   b. Working pressure: Rated for 150 psi (Class 150B per AWWA C504).

2.3 ACCESSORIES

A. Refer to Drawings and/or valve schedule for type of actuators.

1. Furnish actuator integral with valve.

B. Refer to Section 40 05 67 for actuator requirements.

PART 3 - EXECUTION

3.1 INSTALLATION

A. See Section 40 05 51 Valve Basic Requirements.

END OF SECTION