MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

Scouting Number	2025-056
Item to be Scouted	Axial Flow Control Valve
Days to be scouted	21
Response Due By	03/19/2025
Description	Stainless steel class 300 axial flow surge control valve suitable for 12000 gallons per minute (GPM) flow high pressure drop
Notify Requester Immediately	
State item to be used in	New Mexico

Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	BABA
Describe the manufacturing processes (elaborate to provide as much detail as possible)	metal casting, 6 axis high precision machining, assembly, computational fluid dynamics analysis, hydraulic testing
Provide dimensions / size / tolerances / performance specifications for the item	the valve is expected to be sized for a nominal 12" class 300 flange connection Additional specs and drawings available once NDA is in place. Type V726 Stainless Steel Axial Surge Relief/Pressure Breaking Valve: a. The following valve is expected to require an AIS and BABA waiver: b. Service conditions: 1) Valve will exist on dead branch service in a conditioned space except when required for overpressure protection. The downstream side of the valve will see nominal static pressures of 2.6 psig vacuum to 3 psig static during normal operation, with approximately 6.8 psi dynamic pressure generated downstream during full flow. The service water is corrosive and requires Type 316 stainless steel for corrosion resistance- no dissimilar metals shall be connected within the wetted portions of the valve. The water is expected to be free of large particulates but will have approximately 7 ppm of particulates under the 5-micron size, with 90 percent of those particulates below 1 micron. Sensing tubes shall be designed to either allow flushing or be immune from clogging with sediment in the application after long periods of no actuation of the valve. Water temp ranges from 35 degrees F to 70 degrees F, and valve altitude is 4,276 feet above sea level. 2) The valve shall be suitable for installation with straight pipe runs of under 2 times the diameter upstream and 4 times the diameter downstream and with concentric reducers to the valve body without adverse affecting performance. The valve shall be installed as shown on the Drawings. 3) The valve shall not have damaging cavitation or vibration occur to the valve itself under any operating conditions in the installed normal operating conditions. The valve shall be designed to prevent cavitation zone attachment to any portion of the valve. The downstream pipe shall not have incipient damaging cavitation but is allowed to have constant cavitation. Cavitation definitions hall be interpreted per ISA RP75.23, with sigma values determined by manufacturer test data c. Construction: Axial Surge Relief Valve, axial flow design; ASME Class 300 flanges; cage-guided piston, pilot-operated, completely self-contained and

	requiring no external power source(s); valve shall consist of an integrally cast, one-piece steel body; the valve inner body containing the piston movement shall be integrally cast with the outer body; weld-on flanges and welded or fabricated body components shall not be permitted; valve piston (plug) shall be located on the discharge (low pressure) side of the valve. d. The surge relief valve shall be completely self-contained and require no external power source(s) such as, but not limited to, electric, pneumatic, or hydraulic power. e. Surge relief design shall be suitable for Peak Shaving (over-pressure duration for a limited period of time). The response time of the valve(s) shall be such that the system is able to maintain the pressure below MATP (maximum allowable transient pressure). f. Body material Duplex 2205 Stainless Steel. Material of internals 22 percent Chromium duplex stainless steel, with a rated working pressure of 750 psig in accordance with ASME B16.34; flanges per ASME B16.5 RF Raised Face. Materials shall be NSF 61 compliant. g. Set point pressure shall be 350 psig. Set point accuracy shall be within 1 percent of set pressure. h. An internal overpressure-protecting device shall be incorporated to act as a secondary independent override (backup pilot), set at a higher set pressure (min 5 percent or 15 psi) than the main set point control, providing redundancy to primary pilot. i. Flow rate: max 12,000 gpm. j. The opening characteristic, i.e. the percentage of valve stroke vs. percentage of total capacity, shall be linear. k. Valve shall achieve tight shutoff with allowable seat leakage per ANSI/FCI 70-2 Class VI, at full operating differential. l. Any spurious openings of the valve shall not be allowed. m. Complete pressure, seat leakage and functional testing shall be performed at the factory. Pressure testing shall be in accordance with ASME B16.34. Functional testing shall demonstrate valve opening at set points. n. Provisions shall be available for set point testing and calibration on-site. A replaceable cartridge filter should be included in the main system for use during calibration and testing. o. Adjustment nuts, dials, or features used to modulate cracking pressure shall be lockable or include a lockable cap to prevent unauthorized adjustments. p. Manufacturer and Product: Mokveld Model RZD-SR-RCX.
List required materials needed to make the product, including materials of product components	Type 316 stainless steel, duplex 2205 stainless steel
Are there applicable certification requirements?	Yes
Details	ANSI/NSF 61
Are there applicable regulations?	No
Are there any other stndards, requirements, etc.?	Yes

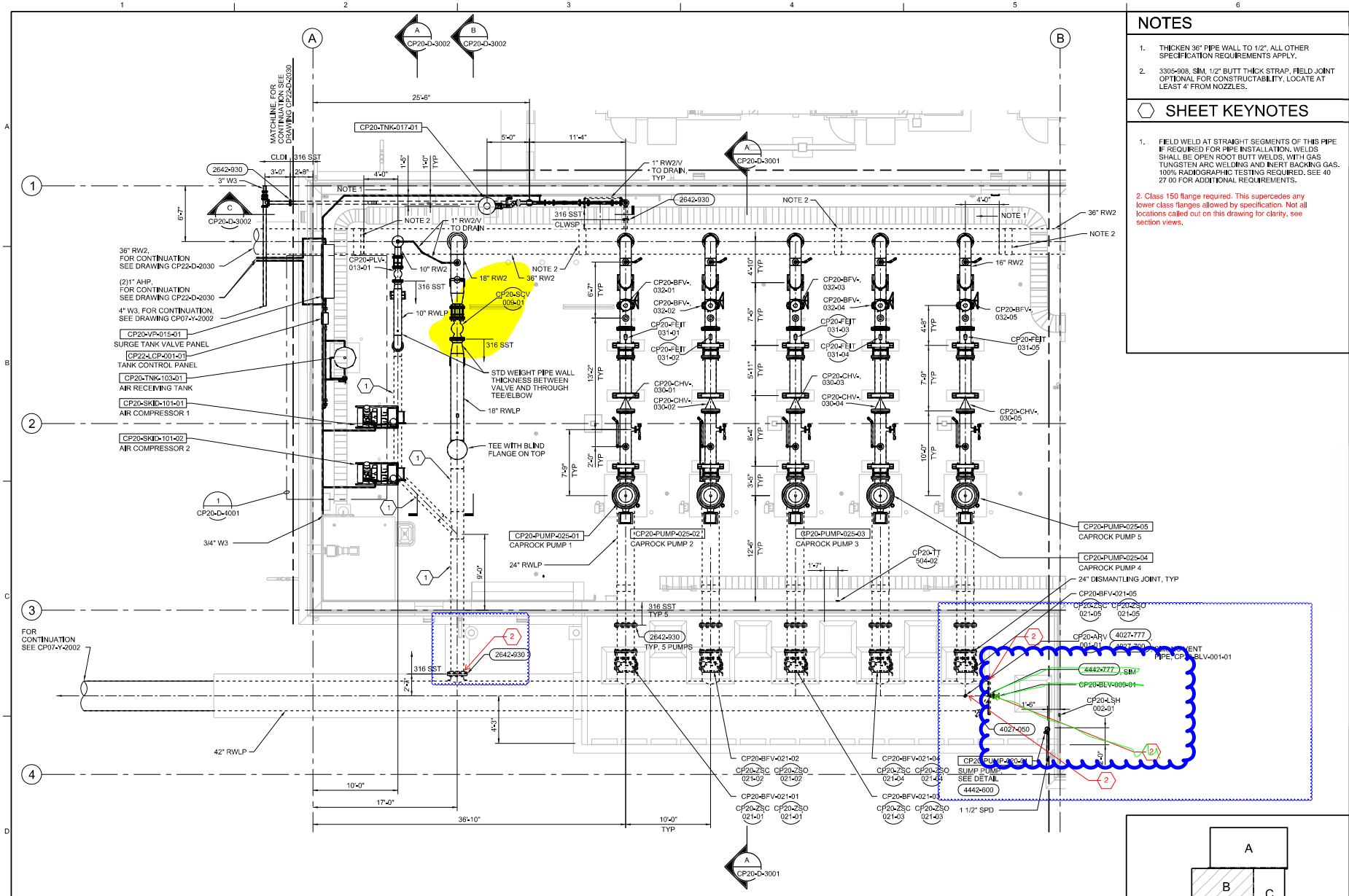
Details	ASME B16.34 ASME B16.5 ISA RP75.23
NAICS 1	332911 Industrial valve manufacturing
NAICS 2	
Additional Technical Comments	Additional performance testing in factory and the installed condition to prove adherence to technical criteria will be required

Section 4: Business Information

Estimated potential business volume	One-time purchase of a single unit
Estimated target price / unit cost information (if unavailable explain)	150,000 USD per unit
When is it needed by?	Manufacturer would need a compliant and developed product and a fixed fee scope of supply contract for the installing contractor in as little as 3-4 months. Actual manufacturing would probably be about 8-12 months from February, at the earliest.
Describe packaging requirements	palletized for shipment
Where will this item be shipped?	Southwest of San Jon, New Mexico, for large conveyance pump station (not yet existing)

Additional Comments

Is there other information you would like to include?	As requested. For questions on BABA Compliance: United States Bureau of Reclamation (USBR) Ken Richard (Krichard@usbr.gov) Approval of waiver is required for the finalization of design and technical requirements of the project. Segments of eastern new mexico, including clovis (whose population supports cannon air force base) face reduction or loss of potable water supply if this project is not built.



PLAN
3/16"=1'-0"

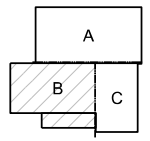
NOTES

1. THICKEN 36" PIPE WALL TO 1/2", ALL OTHER SPECIFICATION REQUIREMENTS APPLY.
2. 3305-908, SIM, 1/2" BUTT THICK STRAP, FIELD JOINT OPTIONAL FOR CONSTRUCTABILITY, LOCATE AT LEAST 4" FROM NOZZLES.

SHEET KEYNOTES

1. FIELD WELD AT STRAIGHT SEGMENTS OF THIS PIPE IF REQUIRED FOR PIPE INSTALLATION. WELDS SHALL BE OPEN ROOT BUTT WELDS, WITH GAS TUNGSTEN ARC WELDING AND INERT BACKING GAS. 100% RADIOGRAPHIC TESTING REQUIRED. SEE 40 27 00 FOR ADDITIONAL REQUIREMENTS.

2. Class 150 flange required. This supercedes any lower class flanges allowed by specification. Not all locations called out on this drawing for clarity, see section views.



KEY PLAN

SCOTT CROOK
NEW MEXICO
28925
PROFESSIONAL ENGINEER
DECEMBER 9, 2024

NO.	DATE	DR	REVISION	CHK	BY	APVD
DSGN	S CROOK	N HUBER		J SIMMONDS	D GRIGSBY	

ENMWUA
EASTERN NEW MEXICO WATER UTILITY AUTHORITY

CAPROCK PUMP STATION

Jacobs

PUMP STATION
PROCESS MECHANICAL
PLAN
AREA B

100% PERMITTING SUBMITTAL

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	DECEMBER 2024
PROJ	D3299318
DWG	CP20-D-2032
SHEET	194

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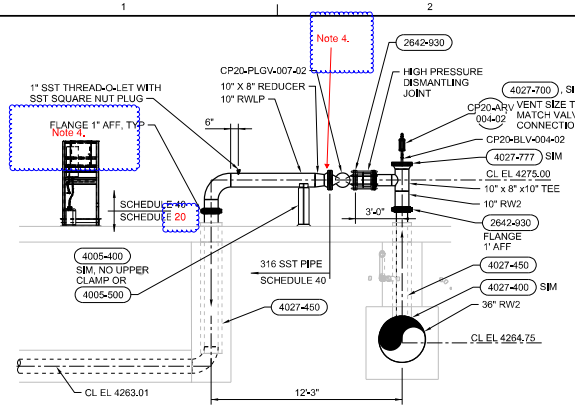
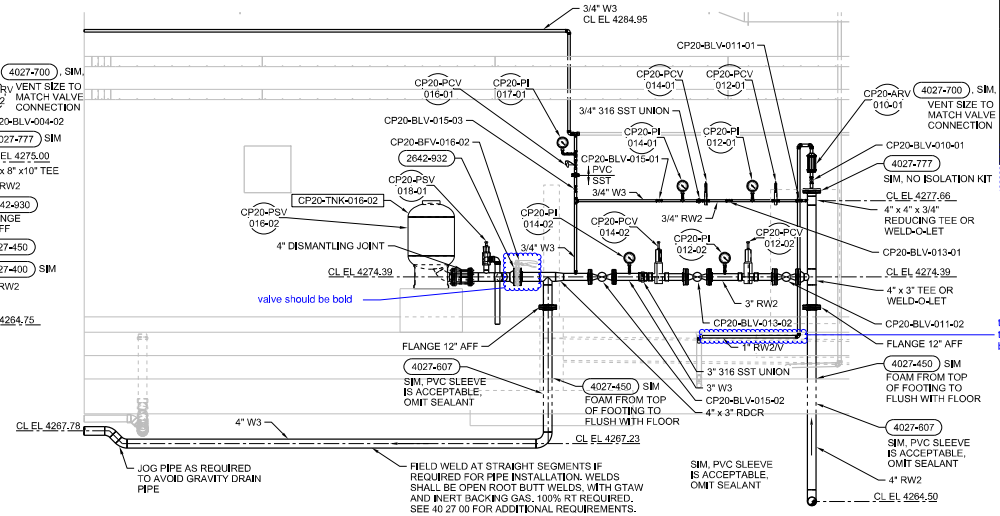
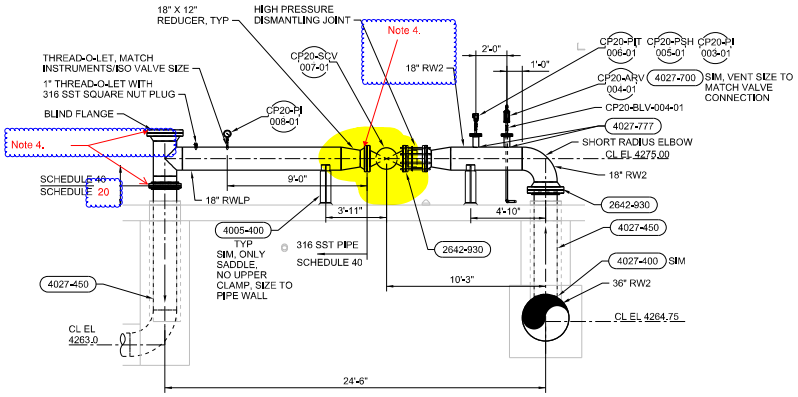


A SECTION
1/4"=1'-0"
CP20-D-2032



C SECTION
3/8"=1'-0"
CP20-D-2032



B SECTION
1/4"=1'-0"
CP20-D-2032

GENERAL SHEET NOTES

1. W3 DEPICTED IN SECTION IS SST UNTIL BURIED TRANSITION TO CLDI PIPE IN YARD PIPING.
2. FOR SMALL DIA VALVE TAGS, SEE P&ID.
3. CONTRACTOR DESIGNED PIPE SUPPORTS SHALL ALLOW REMOVAL AND DISASSEMBLY OF VALVES AND OTHER COMPONENTS. DESIGN SUPPORTS TO ALLOW MOVEMENT DUE TO PIPE THERMAL EXPANSION.
4. Class 150 flange/blind flange at this location. This requirement supercedes any lower pressure class allowed by specification.

SCOTT CROOK NEW MEXICO 28925 PROFESSIONAL ENGINEER
DECEMBER 9, 2024

NO.	DATE	DSGN	REVISION	CHK	BY	APVD
		DR	N HUBER	J SIMONDS	D GRIGSBY	
		S CROOK				

Jacobs

ENMWUA
EASTERN NEW MEXICO WATER UTILITY AUTHORITY

CAPROCK PUMP STATION

PUMP STATION
PROCESS MECHANICAL SECTIONS

100% PERMITTING SUBMITTAL

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	DECEMBER 2024
PROJ	D3299318
DWG	CP20-D-3002
SHEET	196

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