

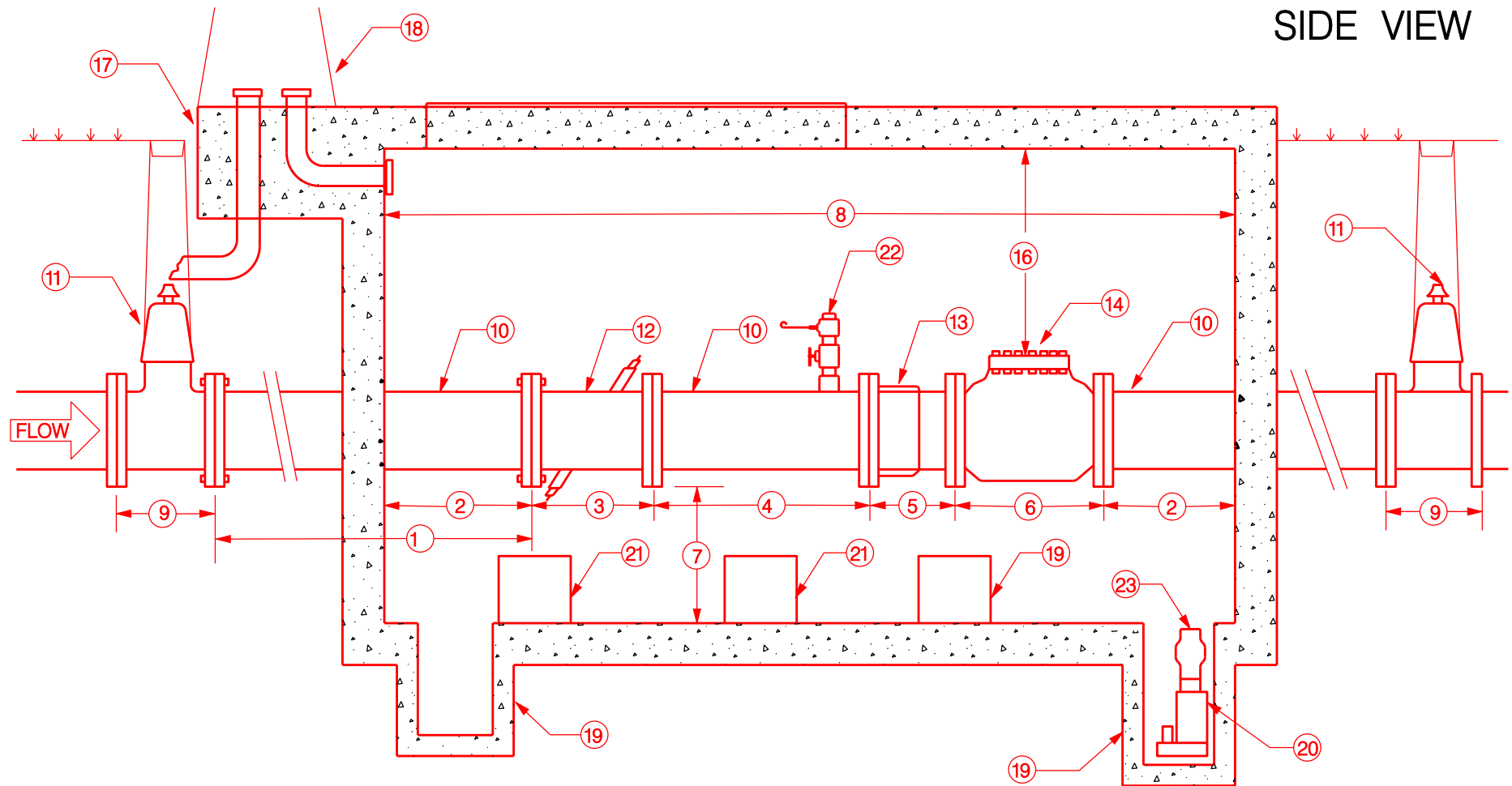
City Of Lewisville
Department of Public Services

Castle Hills 12 Inch Meter Vault
Specification

The enclosed drawings are non-engineered depictions of a 12" Meter Vault
They are not intended to reflect building standards for load bearing,
electrical connectivity or any other engineering requirement



SIDE VIEW



1. OPTIMUM OF 15 FEET, MINIMUM OF 5 FEET OF UN-INTERRUPTED FLOW PRIOR TO THE METER. (GATE VALVES MUST EXTEND BEYOND THE METER VAULT AND ENCLOSURE PEDESTAL A MINIMUM OF 5 FEET.)
2. 24" MINIMUM CLEARANCE BETWEEN ANY APPURTENANCES AND VERTICAL METER VAULT WALLS.
3. 19.7" APPROXIMATE LENGTH OF TRANSIT TIME METER.
4. 36" MINIMUM UN-INTERRUPTED FLOW BETWEEN METER AND DISMANTLING JOINT.
5. 15" NOMINAL LENGTH OF DISMANTLING JOINT.
6. 24 1/8" APPROXIMATE LENGTH OF CHECK VALVE.
7. 24" MINIMUM CLEARANCE BETWEEN THE VAULT FLOOR AND METER ASSEMBLY.
8. 12" APPROXIMATE INTERNAL LENGTH OF METER VAULT.
9. 14" APPROXIMATE LENGTH OF GATE VALVE.
10. ALL PIPING FROM GATE VALVE TO GATE VALVE WILL BE DUCTILE IRON PIPE.
11. MUELLER CO. 2360 SERIES 12" GATE VALVE OR EQUAL.
12. ENDRESS = HAUSER 12" PROSONIC FLOW 93C IN-LINE TRANSIT-TIME METER.
13. ROMAC INDUSTRIES, INC. 12" DJ405 DISMANTLING JOINT OR EQUAL.
14. MUELLER CO. 12" 2600 SERIES CHECK VALVE OR EQUAL.

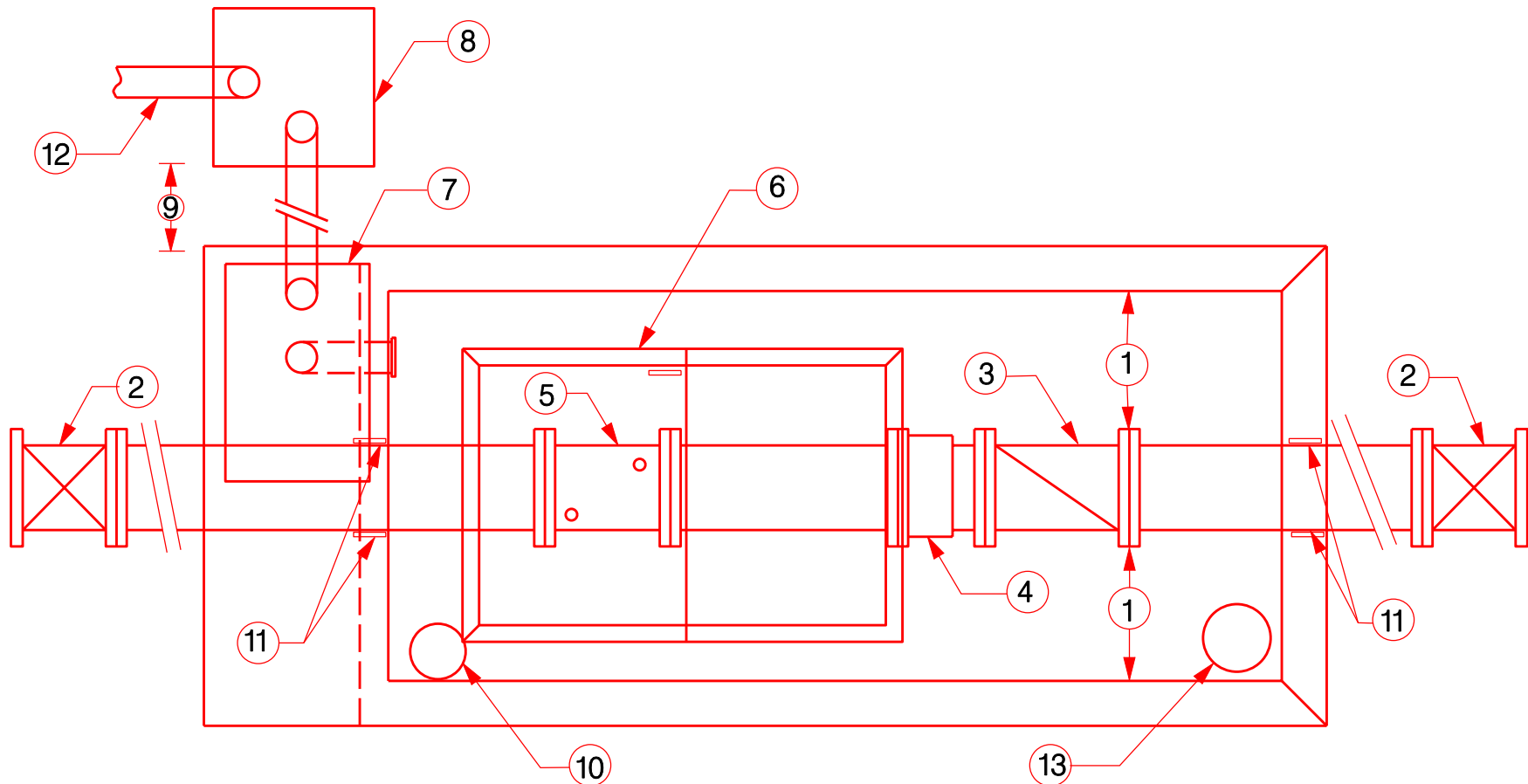
15. 12" DIAMETER BY 18" DEEP SUMP HOLE.
16. 36" MINIMUM CLEARANCE BETWEEN VAULT CEILING AND TALLEST POINT OF METER ASSEMBLY.
17. RE-ENFORCED CONCRETE 18" DEEP FOOTER FOR METER ELECTRONICS ENCLOSURE.
18. CABINET BASE
19. 12" DIAMETER BY 24" DEEP SUMP HOLE.
20. SUMP PUMP, 3/4 HP, SUBMERSIBLE CAST IRON, RATED COMMERCIAL/INDUSTRIAL GRAINGER ITEM: 3BB80 OR EQUAL.
21. 12" CUBE REINFORCED SUPPORT BASES BASES CENTERED UNDER METER ASSEMBLY.
22. PRESSURE TRANSMITTER W/2" GATE VALVE
23. 2" CHECK VALVE FOR SUMP PUMP

CASTLE HILLS 12" METER SPEC. PG. 1 OF 3
NON-ENGINEERED DRAWINGS
NOT TO SCALE

NOTE:
DETAIL SUBJECT TO CHANGE PER DIRECTION
OF CITY OF LEWISVILLE ENGINEERING DIVISION

Revisions:

No.	Description	Date

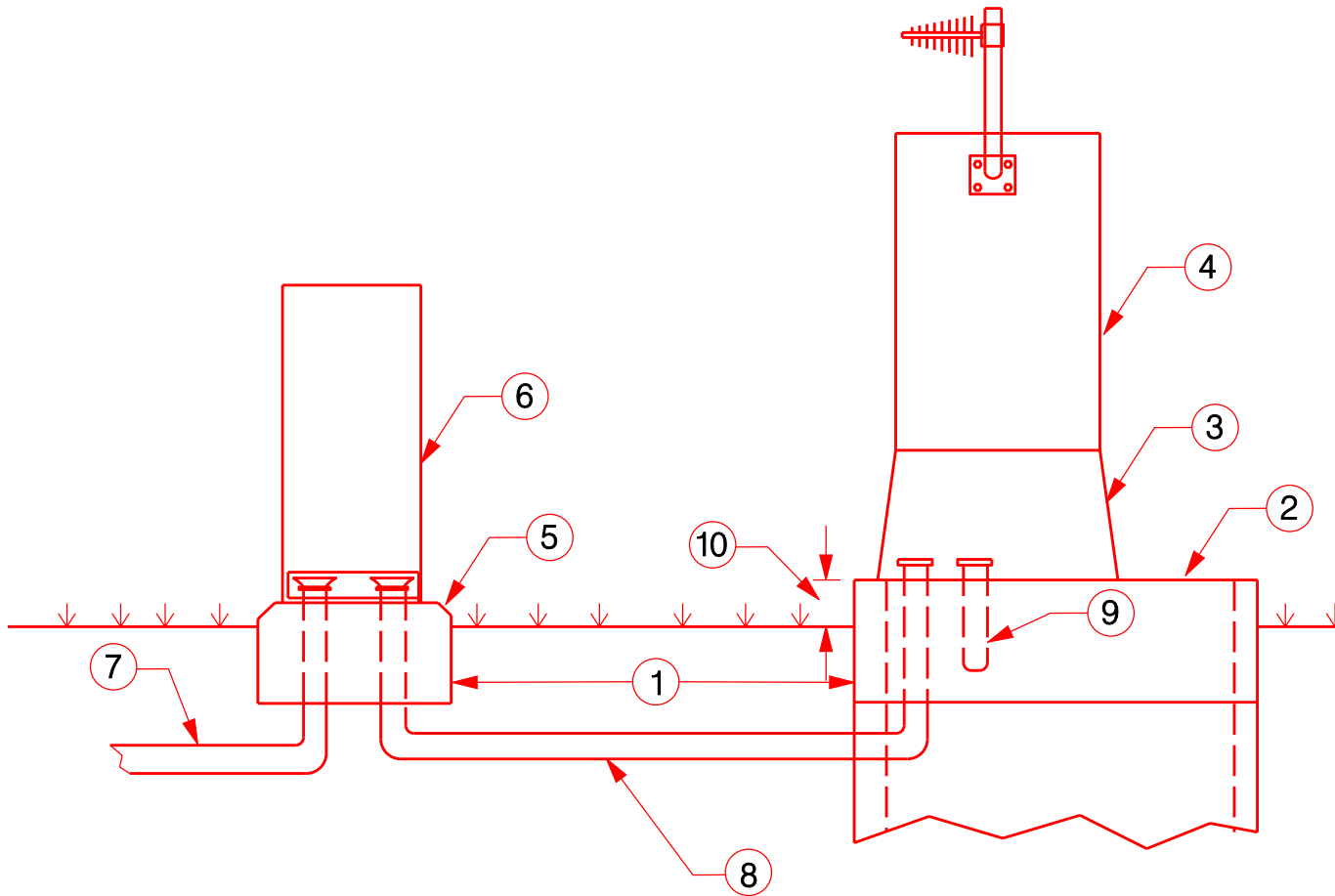


- 1. 24" MINIMUM CLEARANCE BETWEEN ANY APPURTENCES AND VERTICAL METER VAULT WALL
- 2. GATE VALVE
- 3. CHECK VALVE
- 4. DISMANTLING JOINT
- 5. PROSONIC FLOW TRANSIT-TIME METER
- 6. USF FABRICATION INC. THD 48" X 72" ALUMINUM ACCESS DOORS OR EQUAL
- 7. QUAZITE TRAFFIC SIGNAL CABINET BASE 39 3/8"W X 27 5/8"D X 18" H PART NUMBER PH2436AA
- 8. REINFORCE CONCRETE PEDESTAL FOR ELECTRICAL SERVOCE
- 9. 5' MINIMUM CLEARANCE BETWEEN POWER PEDESTAL AND METER VAULT
- 10. 12" DIAMETER BY 18" DEEP SUMP PUMP HOLE.
- 11. WATER TIGHT LINK SEAL OR APPROVED EQUAL.
- 12. CONDUIT FOR POWER LINE FEED
- 13. 12" DIAMETER BY 24" DEEP SUMP PUMP HOLE.

CASTLE HILLS 12" METER SPEC. PG. 2 OF 3
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1. 5' MINIMUM CLEARANCE BETWEEN METER VAULT AND ELECTRICAL SERVICE SUPPORT PEDESTAL.
2. METER VAULT
3. QUAZITE TRAFFIC SIGNAL CABINET BASE 39 3/8" W X 27 5/8" D X 18" H PART NUMBER PH2436AA.
4. NAZTEC, INC. NEMA M30 BASE MOUNT NEMA CABINET ENCLOSURE. NO. SHELVES, INCLUDES POWER PANEL, BLANK PANEL, ANTENNA MOUNTING HARDWARE, FANLIGHT PANEL-#2 CORBIN LOCK, NO POLICE DOOR.
5. ELECTRICAL SERVICE SUPPORT PEDESTAL SERVICE TYPE PS.
6. TESCO SERVICE PEDESTAL MODEL 26-00 FOR ITEMS 5 & 6, USE TXDOT STANDARD PLAN FOR ELECTRICAL DETAILS ELECTRICAL SERVICE SUPPORT PEDESTAL SERVICE TYPE PS ED (6) - 03
7. CONDUIT FOR ELECTRICAL SERVICE LINE.
8. CONDUIT FOR ELECTRICAL SERVICE LOAD.
9. CONDUIT FOR POWER AND COMMUNICATIONS TO VAULT.
10. METER VAULT 4" ABOVE GRADE.

CASTLE HILLS 12" METER SPEC. PG. 3 OF 3
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Standard Details
Castle Hills 12" Meter
Vault Assembly

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Department of
Community
Development
Office No. 972-219-3490
Fax No. 972-219-3487
www.cityoflewisville.com

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12" Meter Vault Parts

Item	Vendor	Part Number
Endress + Hauser Time Transit Meter 12"	Pantech Controls	93C3H-LHLC2AACBAAC
Eurtherm Chessel Chart Recorder 4 Channel	Pantech Controls	392
Enclosure:M30 base mount NEMA cabinet	NAZTEC Inc.	M30
Motorola Moscad-L remote terminal unit	Automated Computer Systems	RTU
Antenna matched to radio frequency	Automated Computer Systems	ANT
Antenna cable and connector's	Automated Computer Systems	CAB1
Polyphaser surge protector	Automated Computer Systems	SUGE
Asbuilt drawings and O&M manuals	Automated Computer Systems	INST1
Modify existing SCADA software 3 computers	Automated Computer Systems	DRWG
Modify existing FIU Applications 3 FIU's	Automated Computer Systems	DV1
Operator Training	Automated Computer Systems	DV2
Programing of new MOSCAD-L-TU	Automated Computer Systems	TN
Startup and testing modifications	Automated Computer Systems	PRGRTU
ROMAC Industries Dismantling Joint 12 in.	Ferguson Waterworks	STARTUO
Muller Resilient-Wedge Gate Valve Flange x MJ 12 in. (2 per Site)	Ferguson Waterworks	SP-DJ40512
Bolt and Gasket Set 12" (2 per site)	Ferguson Waterworks	MA23601912OL
Muller Swing type gravity operated check valve FL x FL 12 in	Ferguson Waterworks	FBGSETZ12
Dayton Sump Pump,submersible,cast iron	Grainger	SP-MA26000612
Standon Pipe Saddle Support Flange 12 in (2 per site)	Ferguson Waterworks	3BB80
Standon Pipe Saddle Support Pipe 12 in (1 per site)	Ferguson Waterworks	SP-MS8912
TESCO Service Pedestal	TESCO Controls Inc	SP-SS9212
Vault Access Doors 12 in meter U.S.F. Fabrication 48"x72"	Ferguson Waterworks	26-000
Link-Seal Modular sealing system for 12 in meter vault (2 per site)	Ferguson Waterworks	SP-BJDAL4872
Ductile iron pipe 12" by 36" flanged spool (meter outflow)	Municipal Water Works	SP-LCS1816SP-LCS575C
Pressure Transmitter 1/4 NPT	Grainger	2HLT1 x 1/4 NPT
Check Valve 2" (Sump Pump)	Lowes / Home Depot	2" Check 5x5

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Item 12-inch line size dual path Transit Time ultrasonic flow meter with a NEMA 6P rated epoxy coated carbon steel spool with ANSI 150-pound flanged ends and remote electronics in a NEMA 4X enclosure with integral LCD display of the flow rate and total flow with a 4-20MA and frequency output plus two programmable relays and 45-foot interconnecting cable.	Model Endress + Hauser Proline Prosonic Flow Model 93C	Part Number 93C3H-LHLC2AACBAAC	Vendor PanTech Controls	
Eurotherm Chessel Chart Recorder	Model 392	392-1-1-3000	PanTech Controls	
Enclosure: M30 base mount NEMA cabinet enclosure-No Shelves. Includes Power Panel, Blank Back Panel, Antenna Mounting Hardware, Fan/Lighted Panel-#2 Corbin Lock, No Police Door. Includes Quazite PH2436AA Cabinet Base.	Naztec M30	M30	NAZTEC Inc.	
Motorola Moscad-L remote terminal unit with radio and I/O Module	RTU		Automated Computer Systems	
Antenna matched to radio frequency	ANT		Automated Computer Systems	
Antenna Cable and connectors	CAB1		Automated Computer Systems	
Polyphaser Surge Protector	Surge		Automated Computer Systems	
Installation and set up of above equipment	Inst1		Automated Computer Systems	
Asbuilt drawings and O&M Manuals	DRWG		Automated Computer Systems	
Modify existing SCADA Software	DV1		Automated Computer Systems	
Modify existing FIU Applications	DV2		Automated Computer Systems	

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Programming of New Moscad	PRGRTU		Automated Computer Systems	
Start up and testing of Modifications	Startup		Automated Computer Systems	
Operator Training	TRN		Automated Computer Systems	
Dismantling Joint	DJ405	DJ405 12"	Municipal Water Works	
Mueller Resisient-Wedge Gate Valve Flange x MJ	A260	A2630-16 OR A2630-12"	Municipal Water Works	2 per Vault
Mueller Swing Type Spring and Lever Check Valve with FL x FL	A-2600-6-02	A-2600-6-02 12"	Municipal Water Works	
U.S.F. Fabrications Floor Access Door	THD Trough frame, Heavy Duty,Double	THD 48" X 72"		
Dayton Sump Pump, Submersible Cast Iron Sump Pump,Rated Commercial/Industrial	Grainger BB80	3BB80	Grainger	
Standon Pipe Saddle Support	S92	S92 12"	Municipal Water Works	
Standon Flanged Cradle Support (2 per vault)	S96	S92 12"	Municipal Water Works	
Ductile Iron pipe spools 36"			Municipal Water Works	
TESCO Service Pedestal	26-000			

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