

RECORD OF PROCEEDINGS

**MINUTES OF A REGULAR
MEETING OF THE BOARD OF DIRECTORS OF
THE FOREST VIEW ACRES WATER DISTRICT
AND THE BOARD OF DIRECTORS OF THE
WATER ACTIVITY ENTERPRISE
HELD
April 25, 2018**

A regular meeting of the Board of Directors of the Forest View Acres Water District and the Board of Directors of the Water Activity Enterprise (referred to hereafter as "Board") was held on Wednesday, April 25, 2018, at 6:00 p.m., at the Monument Sanitation District, 130 2nd Street, Monument, Colorado. This meeting was open to the public.

ATTENDANCE

In attendance were Directors:

Gene Ashe
Anne Bevis
Brad Hogan
Eck Zimmermann

Also in attendance were:

Joel Meggers; Community Resource Services ("CRS")
Clyde Penn; ORC, LLC
Martin Taylor, Resident
Nancy Wilkins, Resident
Hans C. Tuft, Resident
Curtis Rockwood, Resident
Cortney Brand, Leonard Rice
Greg Roush, Leonard Rice
Stephanie Luce, Leonard Rice

ADMINISTRATIVE MATTERS

Director Ashe called the meeting to order at 6:00 p.m. and noted that Hans Zimmermann informed the board that he would not be attending the meeting and his absence was excused.

Agenda - Mr. Meggers distributed for the Board's approval the proposed agenda. Director Bevis moved to approve the agenda as presented. Upon a second by Director Eck Zimmermann vote was taken and motion carried unanimously.

Minutes - The Board reviewed the minutes of the March 28, 2018 regular meeting. Director Bevis moved the minutes be approved as presented. Upon a second by Director Eck Zimmermann, vote was taken and motion carried unanimously.

RECORD OF PROCEEDINGS

Public Comment – Mr. Rockwood and Mr. Tuft presented their Rockwood Minor Subdivision development. The board, JDS Hydro and ORC reviewed and discussed how to provide the property water service and not impact the water tank. It was determined that the service line be installed on the northeast side of the tank and be installed far enough away from the tank as to not impact its foundation. The site would have to be restored to its original condition after work had been completed. It was also required that the owners sign a waiver letter from the district addressing the pressure boosting system noting that they understand that the district would not be providing adequate water pressure and that they would be responsible for their own private boosting system to achieve adequate water pressure for their site.

Mr. Rockwood also offered to contribute \$250,000 to FVAWD to improve and relocate the District's water tank that is currently located on the property of the Water District. The board commented that they would take his proposal under consideration.

Conduct Public Hearing for Tap Fee

Director Eck Zimmermann moved to open the public hearing on changing the tap fee amount that the district charges. Director Eck Zimmermann noted that no one from the public had any comment. Director Eck Zimmermann then closed the public hearing. The board reviewed and discussed raising the amount of the tap fee to cover their future costs of improving the water system and improving the reliability of the districts water resources. Director Bevis proposed increasing the tap fee to \$25,000. Her proposal did not receive a second. Director Eck Zimmermann proposed increasing the tap fee to \$30,000 per tap. Upon a second by Director Hogan, vote was taken and motion carried, Director Bevis abstaining, the tap fee will be \$30,000 per tap beginning May 1, 2018 and the fee resolution will be revised accordingly.

Review and Approve Updated Policies

Director Ashe presented a redline of all the updated policies the board had been working on. Director Eck Zimmermann moved that the version Gene presented be accepted with a few minor revisions and that Director Ashe create a clean version. Director Eck Zimmermann moved to approve. Upon second by Director Bevis, vote was taken and motion carried unanimously.

LEGAL BUSINESS

Director Bevis moved that the Board enter Executive Session pursuant to Section 24-6-402(4) (e), C.R.S to develop negotiation strategies for water resource planning purposes. Upon a second by Director Hogan, a vote was taken and the motion carried unanimously.

RECORD OF PROCEEDINGS

The Executive Session was entered at approximately 7:05 p.m. and exited at approximately 8:15p.m. Director Hogan moved that the Board adjourn the Executive Session. Upon second by Director Bevis, a vote was taken and the motion carried unanimously.

The board directed Leonard Rice to finalize their water resource report and distribute it to the board when it was complete.

CAPITAL ITEMS

Monthly Report prepared by JDS Hydro – Mr. McGinn presented the JDS Hydro report to the Board a copy of which is attached to these minutes and incorporated herein.

Capital Improvement Plan Update

Director Bevis and Mr. McGinn of JDS Hydro presented the Capital Improvement Plan to the Board. Director Eck Zimmermann moved to approve the Capital Improvement Plan with some minor revisions. Upon second by Director Hogan, vote was taken and the motion carried unanimously.

Construction Standards Update – Director Bevis and Mr. McGinn of JDS Hydro presented the latest version of the Construction Standards to the Board. Director Bevis moved to approve the Construction Standards. Upon second by Director Eck Zimmermann, vote was taken and the motion carried unanimously.

Map Updates for Easements – Mr. McGinn reported that this project was complete.

OPERATIONS & MAINTENANCE

Operations Report – Mr. Penn presented the March/April 2018 Operations report for the Board's review, a copy of which is attached to these minutes and incorporated herein.

Review and Consider Proposals to Raise and Paint Three Fire Hydrants – The board directed ORC to research and report back to the board the hydrants that need to be raised and require maintenance.

FINANCIAL MATTERS

Payment of Claims - Mr. Meggers requested the Board approve the payment of claims for April represented by check numbers 04534 – 04550 totaling \$18,787.16. Director Eck Zimmerman moved to approve the payables as presented. Upon a second by Director Bevis, vote was taken and motion carried unanimously.

Check #2645 received at meeting from Hans Tuft for \$32,000 paying water tap fees for 4909 & 4910 Redstone Ridge Road.

RECORD OF PROCEEDINGS

Monthly Cash Position and Unaudited Financial Statements - Mr. Meggers reviewed the monthly cash position and unaudited financial statements.

DIRECTOR'S
ITEMS

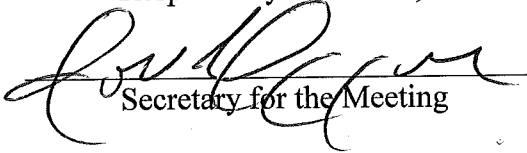
None.

OTHER
BUSINESS

No other business came before the Board.

ADJOURNMENT There being no further business to come before the Board, upon motion duly made by Director Eck Zimmermann, seconded by Director Bevis, the meeting was adjourned at approximately 9:20 p.m.

Respectfully submitted,

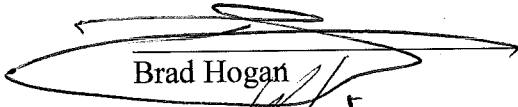


Secretary for the Meeting

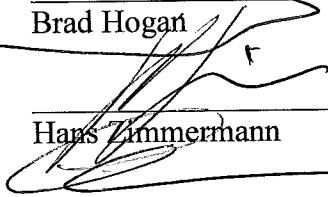
THESE MINUTES ARE APPROVED AS THE OFFICIAL APRIL 25, 2018 MINUTES OF THE FOREST VIEW ACRES WATER DISTRICT BY THE BOARD OF DIRECTORS SIGNING BELOW:

Anne Bevis

Eugene Ashe



Brad Hogan



Hans Zimmermann

Eck Zimmermann

Date: April 20, 2018
To: Forest View Acres Water District
Re: Project Updates

This letter is to provide a monthly update to the water district on engineering work completed by JDS.

Rockwood Minor Subdivision New Taps

JDS has been in communication with Curtis Rockwood regarding new taps to the water system for the three lots in the Rockwood Minor Subdivision. JDS prepared a memo outlining the original approved service line arrangement, issues with the various options and the request from Curtis to tap his third lot (4910 Redstone Ridge Road) at the end of a cul-de-sac. JDS and ORC have both visited the site since. Below are a few additional observations:

- The service lines were not installed in the same location near the tank as originally approved and while installing the service lines, the tank overflow line was broken. Per Gabby's inspection, the tank overflow is too small and filled with debris so repairing it will actually help the tank overflow work better.
- The original route approved for the water line from the tank to 4910 Redstone Ridge Road goes through some very hard rock and it would be extremely difficult to excavate to the required 5.5 feet to install a water line along this route.
- Operations measured the pressure near the end of the cul-de-sac and found it even lower than the original 75 psi noted. A minimum of 20 psi at the location of the pressure boosting pump would be required for proper operation.

Construction Standards

The construction standard drawings were updated per the board comments and revised versions are attached.

Attachments:

- Draft Water System Standard Specification Drawings
- Draft Spreadsheet of Water System Standard Approved Manufacturers and Specifications

CIP Review

JDS prepared drawings for the CIP and sent them to Anne Bevis to be incorporated into the document. JDS also completed further review of the document, including providing costs for recent projects.

System Maps

Additional easements were obtained by FVAWD at the end of 2017 and sent to JDS. JDS is working on adding the easements to the system map books. They should be added and the revised maps posted at the following DropBox by May 11th. Here is the DropBox link:

https://www.dropbox.com/sh/sqwr8fmf5dirnu3/AADlrn3m_oNAwbjWFdvTwBia?oref=e

Please feel free to call me directly if you have any questions or if any additional information is requested.

Sincerely,
Gwen Dall
JDS-Hydro Consultants, Inc.

Forest View Acres Water District CONSTRUCTION STANDARDS

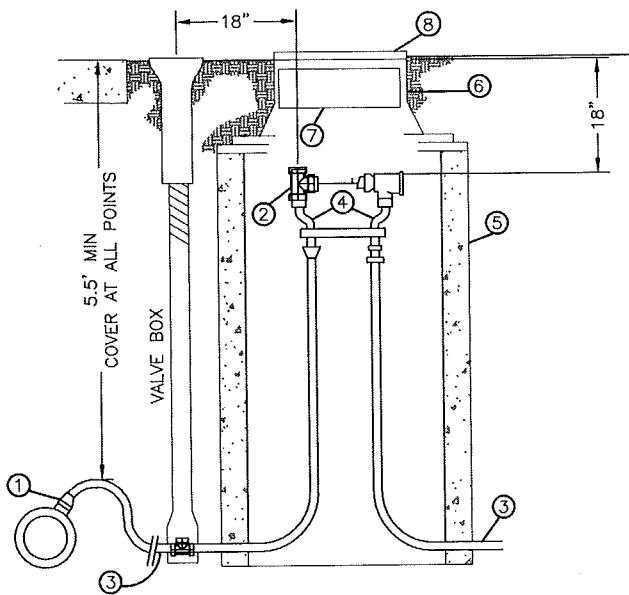
The following approved manufacturers and standard drawings are to be used in conjunction with the latest edition of the Forest View Acres Water District (FVAWD) Rules and Regulations. FVAWD retains the power to impose additional and/or more stringent requirements on all or part of any project as necessary to insure reliability and quality of the FVAWD water system. Prior to construction involving the FVAWD water system or for variance requests contact Community Resource Services (303) 381-4960 or (719) 488-2110. A minimum of 48 hours notice is required prior to any work involving the existing water system.

Water System Standard Approved Manufacturers and Specifications

COMPONENT	APPROVED MANUFACTURERS	MODEL	SPECIFICATIONS
PVC Tapping Saddle	A.Y. McDonald	4855A	Two stainless steel straps, ductile iron body, shop coat finish, designed for use on PVC or C-900.
	Mueller	BR2S	
Service Line Pipe	Cresline	CE Blue Flexible Pipe	DR9, NSF-61, 200 PSI with Stainless Steel Stiffeners
	ADS	Potable Water Service Tubing	
Corporation Stop	Mueller	300 Ball	AWWA C-800, NSF-61, Ground Key??
	A.Y. McDonald	NL Ball Style Corporation Stop - 74701B	
Meter Setter	A.Y. McDonald	NL Meter Setter - 737-2--WDCC 33	Copper Flare x Copper Flare, NSF-61
Curb Stop	A.Y. McDonald	NL Ball Style Curb Stop - 76100Q	AWWA C800, NSF-61
Meters	Badger	Model 25 LL 5/8" x 3/4" - 3/4 Bore (3/4 x 7 1/2)	AMR and ERT compatible, NSF 61
Fire Hydrants	AVK	Nostalgic	Straight line opening mechanism, self draining, AWWA C502, NSF-61
	Kennedy	Guardian	
	Clow Valve Co.	Medallion	
Gate Valves 3" and Larger	Mueller	A-2361 or A-2362	Non-rising, 2 inch operating nut, open left, with o-ring stem seal. FBE coated interior and exterior. AWWA C-515 or C509, C550, NSF61
	M&H Valve Company	4067 or 7000	
	American	Series 2500	
	Kennedy	KS-RW or KS-FW	
	Clow Valve Co.	2638 or 2639	
PVC Main Line Pipe	JM Eagle	Blue Brute, C-900	AWWA C-900, ASTM D1784, ASTM D3139, NSF 61, DR18 (235 PSI rating), Bell ends with elastometric gaskets.
	Diamond Plastics	Diamond C-900	
	Vinyl Tech	C900-07 PVC	
	North American Pipe Corporation	C900-07 PVC	
Mechanical Joint Restraints for PVC Pipe	EBAA Iron Inc.	Series 2000PV	AWWA C-900, ASTM D1784, ASTM D3139, NSF 61, DR18 (235 PSI rating)
Mechanical Joint Fittings	Star Pipe Products	MJ Fittings	AWWA 153, Ductile Iron ASTM A536, Gaskets ANSI A21.11/AWWA 111
Ductile Iron Flanged Fittings	Star Pipe Products	Flanged Fittings	AWWA C110, Ductile Iron ASTM A536, Class 125, Flange Drilling ANSI B16.1

Water System Standard Specification Drawings

W-1	Curb Stop and Meter Pit Installation
W-2	Service Tapping Detail - 3/4" thru 2"
W-3	Fire Hydrant Installation
W-4	Air/Vacuum Relief Valve Vault
W-5	Pressure Reducing Vault
W-6	Pressure Reducing Vault with Meter
W-7	Typical Trench Cross Section
W-8	Thrust Block Data
W-9	Typical Inline Gate Valve Assembly
W-10	Applications for Mechanical Joint Restraints
W-11	Restrained MJ Pipe Length Data



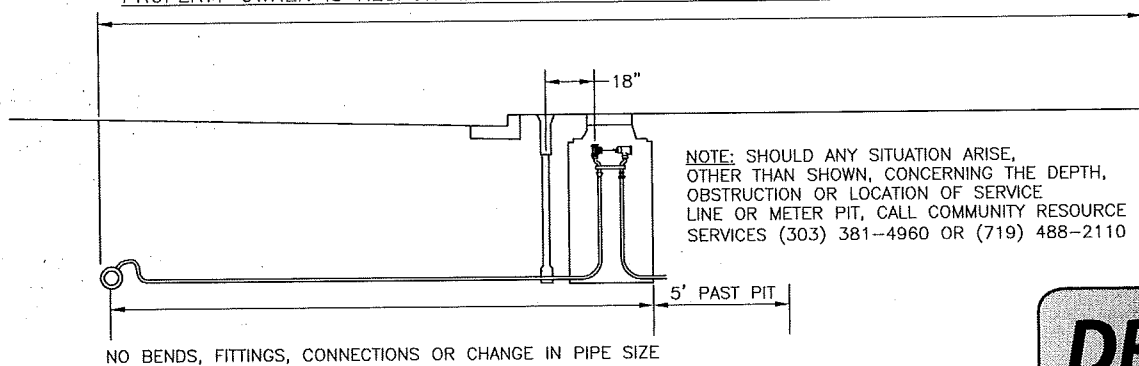
LEGEND

- ① SADDLE, CORPORATION STOP AND INSULATOR
- ② LOCKING SHUT OFF VALVE
- ③ SERVICE LINE – COPPER (TYPE K) OR PE, DR9, 200 PSI CRESTLINE CE BLUE WITH STAINLESS STEEL STIFFENERS
- ④ 3/4" METER YOKE WITH CHECK VALVE, VARIANCE REQUIRED FOR OTHER SERVICE LINE SIZES
- ⑤ METER PIT: 24" DIAMETER, 4' MINIMUM DEPTH
- ⑥ METER PIT BELL AND LID
- ⑦ PLASTIC RECESSED FROST LID
- ⑧ 2" HOLE IN METER LID

NOTES:

1. WATER METER AND REMOTE READ DEVICE FURNISHED AND INSTALLED BY FOREST VIEW ACRES WATER DISTRICT PERSONNEL.
2. SERVICE LINE MUST HAVE A MINIMUM COVER OF 5.5 FEET.
3. WATER DISTRICT PERSONNEL SHALL INSPECT THE SERVICE LINE FROM THE MAIN TO THE METER PRIOR TO BACKFILLING.
4. INSIDE METER SETTINGS WILL NOT BE PERMITTED.
5. OUTBUILDINGS SUPPLIED WITH WATER SHOULD BE CONNECTED TO PROPERTY OWNER'S SERVICE LINE NO LESS THAN FIVE (5) FEET AFTER THE METER PIT.
6. METER PITS AND CURB STOPS SHALL BE LOCATED IN GRASSY, LANDSCAPED AREAS, UNLESS OTHERWISE APPROVED BY THE BOARD OF DIRECTORS PRIOR TO INSTALLATION. METER PITS CANNOT BE PLACED IN DRIVEWAYS, SIDEWALKS OR UNDER PARKING AREAS.
7. ALL METER SETTINGS MUST BE INSPECTED BY FOREST VIEW ACRES WATER DISTRICT PERSONNEL BEFORE BEING BACKFILLED. METERS WILL NOT BE SET/APPROVED UNLESS METER SETTING AND SERVICE LINE ARE IN FULL COMPLIANCE WITH THE RULES AND REGULATIONS, STANDARD DRAWINGS AND APPROVED PROJECT DRAWINGS AS APPLICABLE.
8. DOMESTIC WATER SERVICES SHALL RUN AT A NINETY (90) DEGREE ANGLE FROM WATER MAIN WITH NO BENDS, NO CHANGES IN PIPE SIZE OR MATERIAL, AND NO CONNECTIONS UNTIL FIVE (5) FEET PAST THE METER PIT. NO JOINTS ARE PERMITTED WITHIN THE METER PIT EXCEPT THOSE SHOWN ON THE STANDARD DRAWINGS.

PROPERTY OWNER IS RESPONSIBLE FOR ENTIRE SERVICE LINE FROM CURB STOP TO HOME



NOTE: SHOULD ANY SITUATION ARISE, OTHER THAN SHOWN, CONCERNING THE DEPTH, OBSTRUCTION OR LOCATION OF SERVICE LINE OR METER PIT, CALL COMMUNITY RESOURCE SERVICES (303) 381-4960 OR (719) 488-2110

DRAFT

PIPING NOTES:

1. ALL NEW 3/4" SERVICES TO CONSIST OF PIPE TAPPING SADDLE, SOFT COPPER TUBING TYPE K PIPING OF SPECIFIED SIZE ON DRAWINGS, CORPORATION STOPS, AND ANGLE-HEAD VALVE IN PIT.
2. SERVICE TAPS – SERVICE TAPS TO BE WET TAPPED AND COMPLETED AFTER WATER MAIN HAS BEEN PRESSURE-TESTED, DISINFECTED, AND CHARGED. EXISTING TAPS ARE TO BE LEFT OPERATIONAL UNTIL NEW SERVICE LINES ARE READY TO BE "PULLED" OR OPEN CUT INTO EXISTING METER PITS AND WET TAPPED INTO THE NEW WATER MAIN. AFTER NEW SERVICES ARE COMPLETE, ALL EXISTING TAPS ARE TO BE ABANDONED. COORDINATE ALL NEW TAPS WITH THE FOREST VIEW ACRES WATER DISTRICT TO RESPECTIVE WATER USERS CAN BE NOTIFIED FOR TEMPORARY WATER SERVICE SHUTDOWNS.
3. ALL NEW PIPING SHALL BE PRESSURE TESTED AND DISINFECTED/FLUSHED ACCORDING TO DISTRICT PROVIDED SPECIFICATIONS PRIOR TO CONNECTION TO ANY EXISTING WATER MAINS OR COMPLETING ANY DOMESTIC/COMMERCIAL WATER TAPS.

CURB STOP AND METER PIT INSTALLATION

Drawn: JDS-HYDRO CONSULTANTS, INC.
 Date: MARCH 2018
 Scale: N.T.S.

Revised:
 Revised:
 Revised:

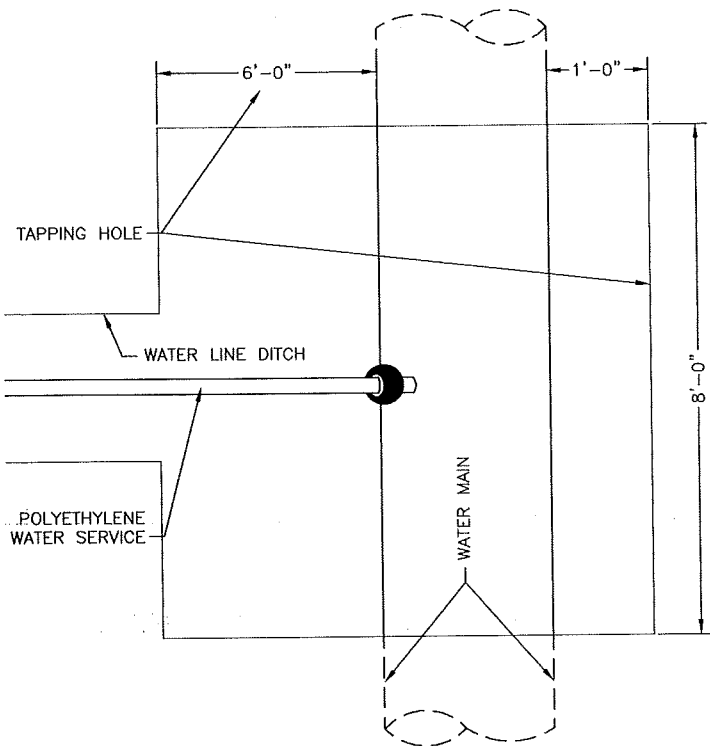
WATER SYSTEM
 STANDARD SPECIFICATIONS

Forest View Acres
 WATER DISTRICT

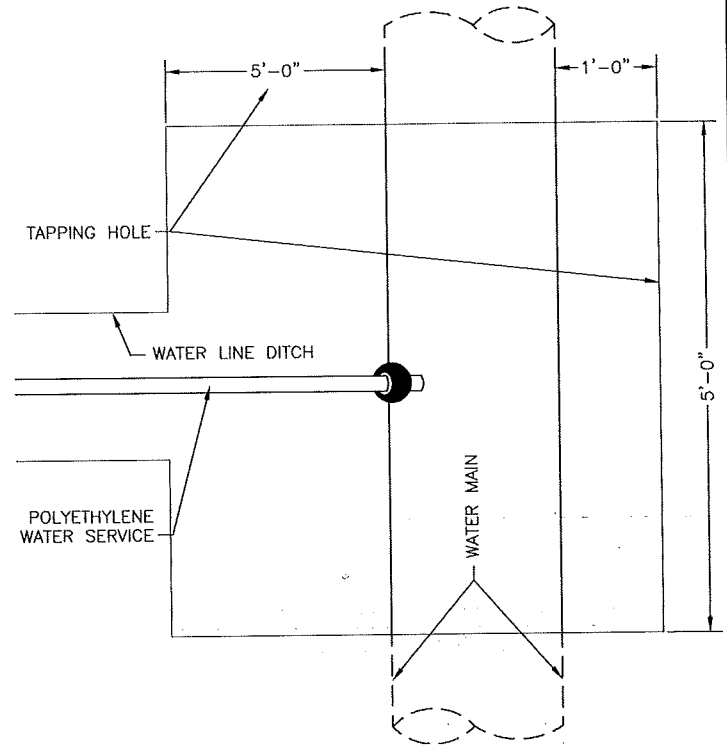
W-1

SERVICE TAPS 1-1/2" & 2" TAPPING SADDLE
VARIANCE REQUIRED

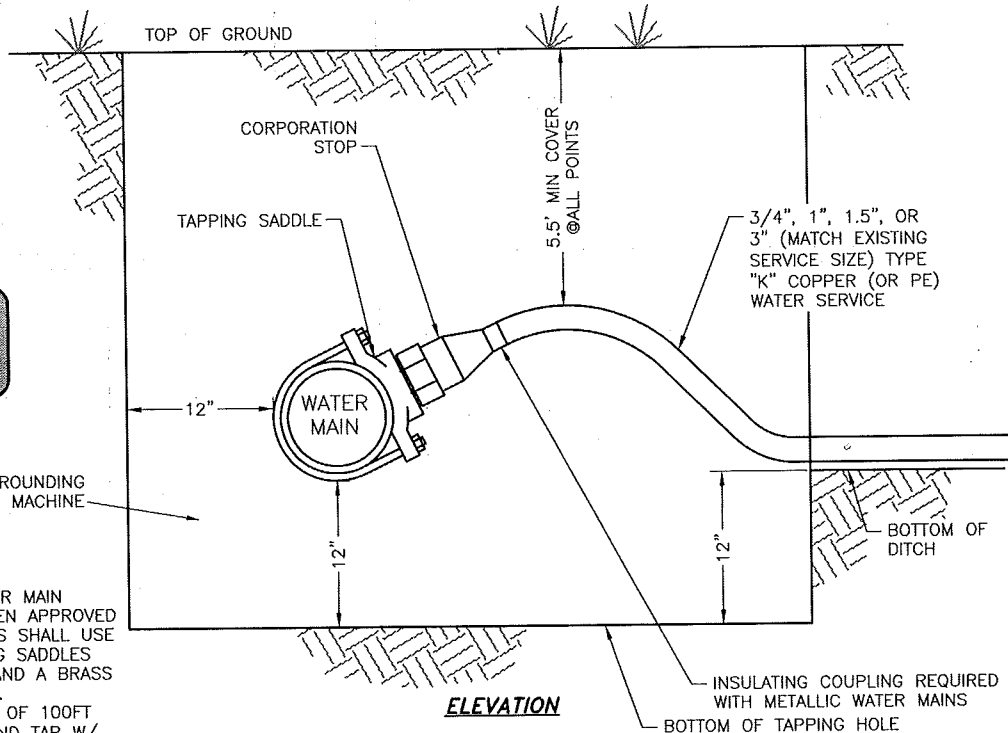
SERVICE TAPS 3/4" & 1" CORPORATION ONLY
VARIANCE REQUIRED FOR 1" TAP



PLAN



PLAN



ELEVATION

DRAFT

ALLOW 12" CLEARANCE SURROUNDING MAIN FOR TAPPING MACHINE

NOTE:

1. DIRECT TAPS TO THE WATER MAIN SHALL BE MADE ONLY WHEN APPROVED BY THE DISTRICT. ALL TAPS SHALL USE TAPPING SADDLES. TAPPING SADDLES SHALL HAVE TWO BANDS AND A BRASS CORPORATION CONNECTION.
2. SERVICE LINES IN EXCESS OF 100FT SHOULD BE 1" SERVICE AND TAP W/ 3/4" METER.

SERVICE TAPPING DETAIL - 3/4" THROUGH 2"

Drawn: JDS-HYDRO CONSULTANTS, INC.
Date: APRIL 2018
Scale: N.T.S.

Revised:
Revised:
Revised:

WATER SYSTEM
STANDARD SPECIFICATIONS

DRINKING WATER
WATER DISTRICT

W-2

Forest View Acres Water District

Operations Report – March / April

Prepared by Gabrielle Begeman and Clyde Penn

ORC Water Professionals

Arapahoe Water Plant

- The plant produced 12% of demand
- Purged Chlorine Analyzer as Needed
- Plant Ran Occasionally – During SWP Backwashes and Pond Level Sensor Malfunction
- Plant Checks, Mixed Chemicals

Booster Pump Station

- Checked Booster Station

Distribution

- Meters Read on 26 March and 25 April 2018
- Monthly BACTI's Sample / Nitrate Samples at AWP & SWP

Surface Water Plant

- The plant produced 88% of demand
- Plant stayed online most of the month, flow rate; running at 35 - 38 gpm, inlet pressure holding around 85 – 95 psi. Inlet Pressure Dropping a little bit, Backwashing about every 30 - 60 hours – still making more water then backwashing.
- Issues with the sensor on Backwash Pond giving false high readings causing the plant to trip off and not restart – Replaced sensor with an old sensor that was at the plant – new sensor on hand
- Completed monthly MOR report for state – No Violations
- Pulled Raw Water BACT Samples – Two Times
- Recycle Line Cracked – Parts on Order to Repair
- Plant Checks, Mixed Chemicals

Locates

- Completed 3 Locates for the Month
 - o Shiloh Pines – Tree Removal
 - o Forest View – Planting Trees
 - o Pixie Park – New Service Connections

Meters

- Installed New Head on Old Meter that wasn't working – Working Now

Projects

- Shelving AWP – Not Started
- Quarterly Well Level vs Production – Will have by Board Meeting

Production for the Month of January 2018

Year	Month	SWTP Production - BW	% of Total	AWP Production	% of Total	Total Production	Total Water Sold	Percentage Discrepancy
2018	Jan	1,488,302	99%	12,965	1%	1,501,267	1,084,766	27.74%
	Feb	1,573,180	92%	132,550	8%	1,705,730	1,129,429	33.79%
	Mar	1,156,615	88%	152,361	12%	1,308,976	1,052,902	19.56%
	Apr							
	May							
	Jun							
	Jul							
	Aug							
	Sep							
	Oct							
	Nov							
	Dec							
Total		4,218,097	93%	297,876	7%	4,515,973	3,267,097	27.65%

2018 Water Leaks:

11 February 2018 – Forest View and Red Forest: Repaired by J&K; Flowed Hydrants after Repairs



COLORADO
Division of Water Resources
Department of Natural Resources

FORM 3.1/3.2 WELL MEASUREMENT VERIFICATION FORM-VER. 08/01/17

<http://water.state.co.us/groundwater/GWAdmin/UseAndMeasurement>

REASON FOR VERIFICATION (CHOOSE ONLY ONE)

3.1 FORM (TFM): Re-verify TFM Replace TFM Repair/Reprogram TFM No Prev. TFM Re-seal TFM
 3.2 FORM (PCC): New PCC Re-verify PCC Modification Date (if re-verified due to system modification): _____

METER LOCATION AND ASSOCIATED WELL INFORMATION:

WDID 1: [] [] [] [] [] [] WDID 2: [] [] [] [] [] [] WDID 3: [] [] [] [] [] [] WDID 4: [] [] [] [] [] []
 UTM E: 5109206 UTM N: 4328459 Well Description: Permit No 39865 F

TAMPER RESISTANT SEAL INFORMATION

Meter Seal No.: _____ New Seal No.: _____ Other: _____ Seal No. _____ New Seal No. _____
 Register Seal No.: _____ New Seal No.: _____ Other: _____ Seal No. _____ New Seal No. _____

REPLACED TFM INFORMATION

Meter Serial No.: _____ Register Serial No.: _____
 Date New TFM Installed: _____ Date Previous TFM Removed: _____ Previous TFM: Reading Estimate

POWER METER INFORMATION:

Serial No.: _____ Mfr.: Unknown Reading: _____ Mult.: _____ No. Digits: _____ Power Company: _____

INSTALLED TFM INFORMATION (TFM ONLY):

Meter Serial No.: 74586709 Register Serial No.: _____ Mfr. Sensus Model: Omni
 Multiplier: 1 No. Rec. Digits: 8 Units: Ac-Ft Gal Ac-In Cu-Ft K-Factor (if adj.) _____
 Vanes: Y No Unknown
 OD: 2.37" ID: 2" U/S Straight Pipe: 24" = 12" Dia. D/S Straight Pipe: 12" = 6" Dia.

TEST METER LOCATION AND DISCHARGE PIPE INFORMATION:

OD: 2.37" Wall Thickness: 0.29" ID: 1.89" U/S Straight Pipe: 10" = 5" Dia. D/S Straight Pipe: 4" = 2" Dia.
 Discharge (One or more): Open discharge/low pressure Sprinkler Drip Pressurized Other:

TEST METER (COLLINS TUBE): Standard Overhung

GPM Factor: _____ Stop Clamp Settings:

	1	2	3	4	5	6	7	8	9	10
Front:										
Back:										
	2-Point		2-Point		2-Point		10-Point			
Avg. off/B:										

Avg. Collins: _____ x GPM factor
 Avg. QT (gpm): _____ (0,000.0)

INSTALLED FLOW METER

	Totalizer Readings	Elapsed Time (min:sec)	Instantaneous (gpm) (Min. 10)	
Stop:	<u>52850610</u>	<u>15:28</u>		
Start:	<u>52849210</u>	<u>0:00</u>		
Total:	<u>1400</u>	<u>15.47</u> (Dec. Min.)		
		Avg. Ql (gpm) (0,000.0)	<u>90.5</u>	TFM Reading

TEST METER (ULTRASONIC OR VOLUMETRIC)

	Reading (gal)	Elapsed Time (min:sec)	Avg. QT (gpm) (0,000.0)
Stop:	<u>1410</u>	<u>16:02</u>	<u>87.3</u>
Start:	<u>10</u>	<u>0:00</u>	
Total:	<u>1400</u>	<u>16.03</u> (Dec. Min.)	Spacer Setting: <u>0.85</u> " (Ultrasonic Meter Only)

CALIBRATION COEFFICIENT (TFM ONLY)

$$QT = \frac{87.3}{90.5} = 0.965 \text{ (to 0.000)}$$

For CC greater than 1.050 or less than 0.950, Owner/Agent is REQUIRED to complete Owner/Agent Info and Variance Request (Page 2).

STABILIZATION (PCC ONLY)

Time (24:00)	Pumping Level or Discharge Rate (ft) (gpm)	Pressure (psi)
1		
2		
3		
4		
5		

DETERMINATION OF PD AND PCC (PCC ONLY)

No. Revs.	Time (sec)	Rate (rev/sec)	Avg. Rate (0.0000)
1			
2			
3			
4			
5			

Pt: _____
 Ct: _____
 Kh: _____

PD = Avg. Rate x 3.6 x Pt x Ct x Kh = _____ kW (to 0.00)

PCC = (5433 x PD) ÷ (QT) = _____ kWh/af (to 0.0)

STATIC WATER LEVEL (PCC ONLY)

Pump run time prior to arrival: _____
 Static Water Level (Decimal Feet from Discharge Centerline): _____
 Time of Static Water Level Measurement: _____
 If Water Levels cannot be obtained, provide reason: _____

For PCC, Owner/Agent is REQUIRED to complete Owner/Agent Info and Variance Request (Page 2).

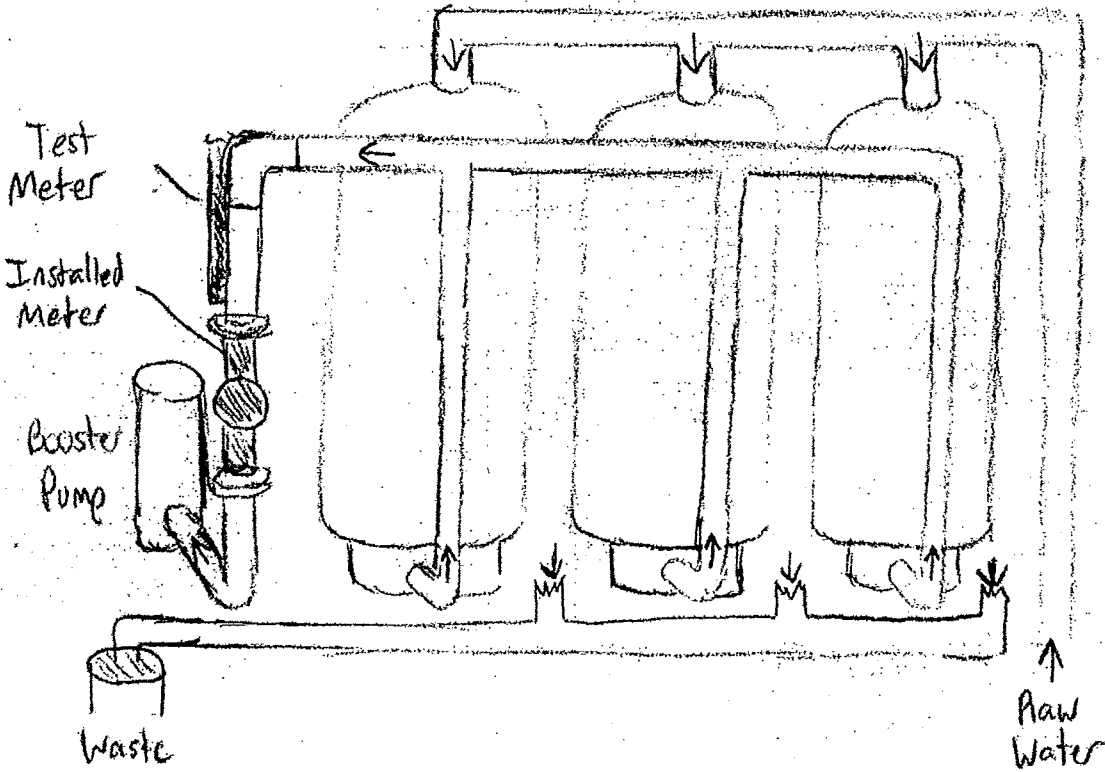
SPRINKLER INFORMATION (PCC ONLY)

End Gun: On Off None Sprinkler: On Off Tested Sprinkler Speed (%): _____ Normal Speed? Yes No
 Position from North: _____ o'clock Pump HP: _____ Pressure Regulators Installed and Functional?: Yes No

If re-verified due to system modifications, describe:

TESTING PROCEDURE PHOTO/SKETCH, ADDITIONAL CALCULATIONS AND COMMENTS

Describe testing procedure including sketch or photo documenting the well/meter configuration, outlets and test procedure. If programmable meter calibration (i.e. K-Factor) is modified, explain reason for modification (i.e. measured flowrate before/after). Include detailed description of system under normal operating conditions.



See Attached Photos

OWNER/AGENT INFO: Name: Clude Penn Entity: ORC Water Professionals Title: Sr. Operations Mgr
 Address: 11919 W. I-70 Frontage, 116A City: Wheat Ridge State: CO Zip: 80033 Phone: 719-200-8141

CERTIFIED TESTER STATEMENT

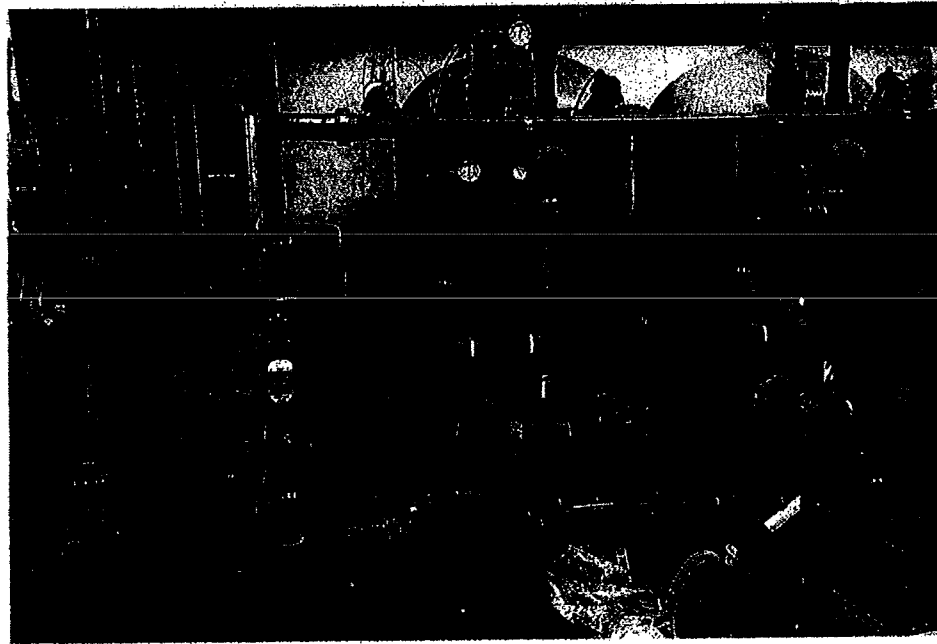
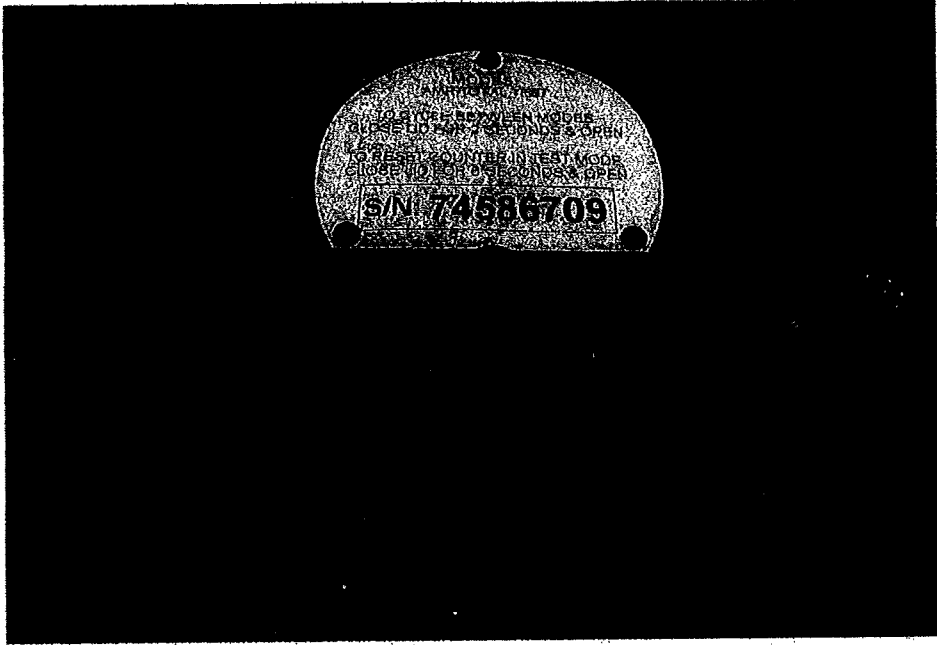
I hereby state that I am currently a person approved by the State Engineer to conduct well tests pursuant to the appropriate Rules Governing the Measurement of Ground Water Diversions. I have personally conducted measurement verification (TFM or PCC) of the above-described measurement device as required by the Rules/Program Standard. I understand that falsifying this test can subject me to a fine of up to \$500.

Tester Name: Anders Olson Date of Well Test: 2/23/17 Time of Well Test: 1:00
 Tester Signature: Anders C. Olson Test Meter Serial No.: N2P1177 Test Meter Manufacturer: Polysarics

OWNER/AGENT VARIANCE REQUEST (ONLY REQUIRED FOR VARIANCE REQUEST)

As Owner or Owner Agent, I hereby request a variance to Measurement Rules for use of a Correction Coefficient or Power Conversion Coefficient as represented on this test. I understand that this Coefficient (TFM or PCC) will be utilized to calculate diversions associated with this meter.

Name (Print): _____ Signature: _____ Date: _____





REASON FOR VERIFICATION (CHOOSE ONLY ONE)

3.1 FORM (TFM): Re-verify TFM Replace TFM Repair/Reprogram TFM No Prev. TFM Re-seal TFM
 3.2 FORM (PCC): New PCC Re-verify PCC Modification Date (if re-verified due to system modification): _____

METER LOCATION AND ASSOCIATED WELL INFORMATION:

WDID 1: [] [] [] [] [] [] [] [] [] [] WDID 2: [] [] [] [] [] [] [] [] [] []
 WDID 3: [] [] [] [] [] [] [] [] [] [] WDID 4: [] [] [] [] [] [] [] [] [] []
 UTM E: [] [] [] [] [] [] [] [] [] [] UTM N: [] [] [] [] [] [] [] [] [] [] Well Description: _____

TAMPER RESISTANT SEAL INFORMATION

Meter Seal No.: _____ New Seal No.: _____ Other: _____ Seal No. _____ New Seal No. _____
 Register Seal No.: _____ New Seal No.: _____ Other: _____ Seal No. _____ New Seal No. _____

REPLACED TFM INFORMATION

Meter Serial No.: _____ Register Serial No.: _____
 Date New TFM Installed: _____ Date Previous TFM Removed: _____ Previous TFM: Reading Estimate _____

POWER METER INFORMATION:

Serial No.: _____ Mfr.: Unknown Reading: _____ Mult.: _____ No. Digits: _____ Power Company: _____

INSTALLED TFM INFORMATION (TFM ONLY):

Meter Serial No.: 70589655 Register Serial No.: _____ Mfr. SENSUS Model: Q.Mal
 Multiplier: _____ No. Rec. Digits: 8 Units: Ac-Ft Gal Ac-In Cu-Ft K-Factor (if adj.) _____
 OD: 2.37" ID: 1.89" U/S Straight Pipe: 6" = 3" Dia. D/S Straight Pipe: 4" = 2" Dia.

TEST METER LOCATION AND DISCHARGE PIPE INFORMATION:

OD: _____" Wall Thickness: _____" ID: _____" U/S Straight Pipe: _____" = _____" Dia. D/S Straight Pipe: _____" = _____" Dia.
 Discharge (One or more): Open discharge/low pressure Sprinkler Drip Pressurized Other: _____

TEST METER (COLLINS TUBE): Standard Overhung

GPM Factor: _____ Stop Clamp Settings:

	1	2	3	4	5	6	7	8	9	10
Front:										
Back:										
	2-Point		2-Point		2-Point		10-Point			
Avg. of F/B:										
Avg. Collins:	_____ x GPM factor									
Avg. QT (gpm):	_____ (0,000.0)									

INSTALLED FLOW METER

	Totalizer Readings	Elapsed Time (min:sec)	Instantaneous (gpm) (Min. 10)
Stop:	<u>23920575</u>	<u>15:23</u>	
Start:	<u>23920025</u>	<u>0:00</u>	
Total:	<u>550</u>	<u>15.38</u> (Dec. Min.)	
		Avg. QJ (gpm) (0,000.0)	<u>35.8</u> TFM Reading

TEST METER (ULTRASONIC OR VOLUMETRIC)

	Reading (gal)	Elapsed Time (min:sec)	Avg. QT (gpm) (0,000.0)
Stop:	<u>560</u>	<u>14:36</u>	<u>36.8</u>
Start:	<u>10</u>	<u>0:00</u>	
Total:	<u>550</u>	<u>14.60</u> (Dec. Min.)	Spacer Setting: <u>0.85</u> " (Ultrasonic Meter Only)

CALIBRATION COEFFICIENT (TFM ONLY)

QT = 36.8 = 1.028 (to 0.000)
 QJ = 35.8
 For CC greater than 1.050 or less than 0.950, Owner/Agent is REQUIRED to complete Owner/Agent Info and Variance Request (Page 2).

STABILIZATION (PCC ONLY)

Time (24:00)	Pumping Level or Discharge Rate (ft)	Discharge Rate (gpm)	Pressure (psi)
1 _____	_____	_____	_____
2 _____	_____	_____	_____
3 _____	_____	_____	_____
4 _____	_____	_____	_____
5 _____	_____	_____	_____

DETERMINATION OF PD AND PCC (PCC ONLY)

No. Revs.	Time (sec)	Rate (rev/sec)	Avg. Rate (0.0000)
1 _____	_____	_____	_____
2 _____	_____	_____	_____
3 _____	_____	_____	_____
4 _____	_____	_____	_____
5 _____	_____	_____	_____

PD = Avg. Rate x 3.6 x Pt x Ct x Kh = _____ kW (to 0.00)
 PCC = (5433 x PD) ÷ (QT) = _____ kWh/af (to 0.0)

STATIC WATER LEVEL (PCC ONLY)

Pump run time prior to arrival: _____
 Static Water Level (Decimal Feet from Discharge Centerline): _____
 Time of Static Water Level Measurement: _____
 If Water Levels cannot be obtained, provide reason: _____

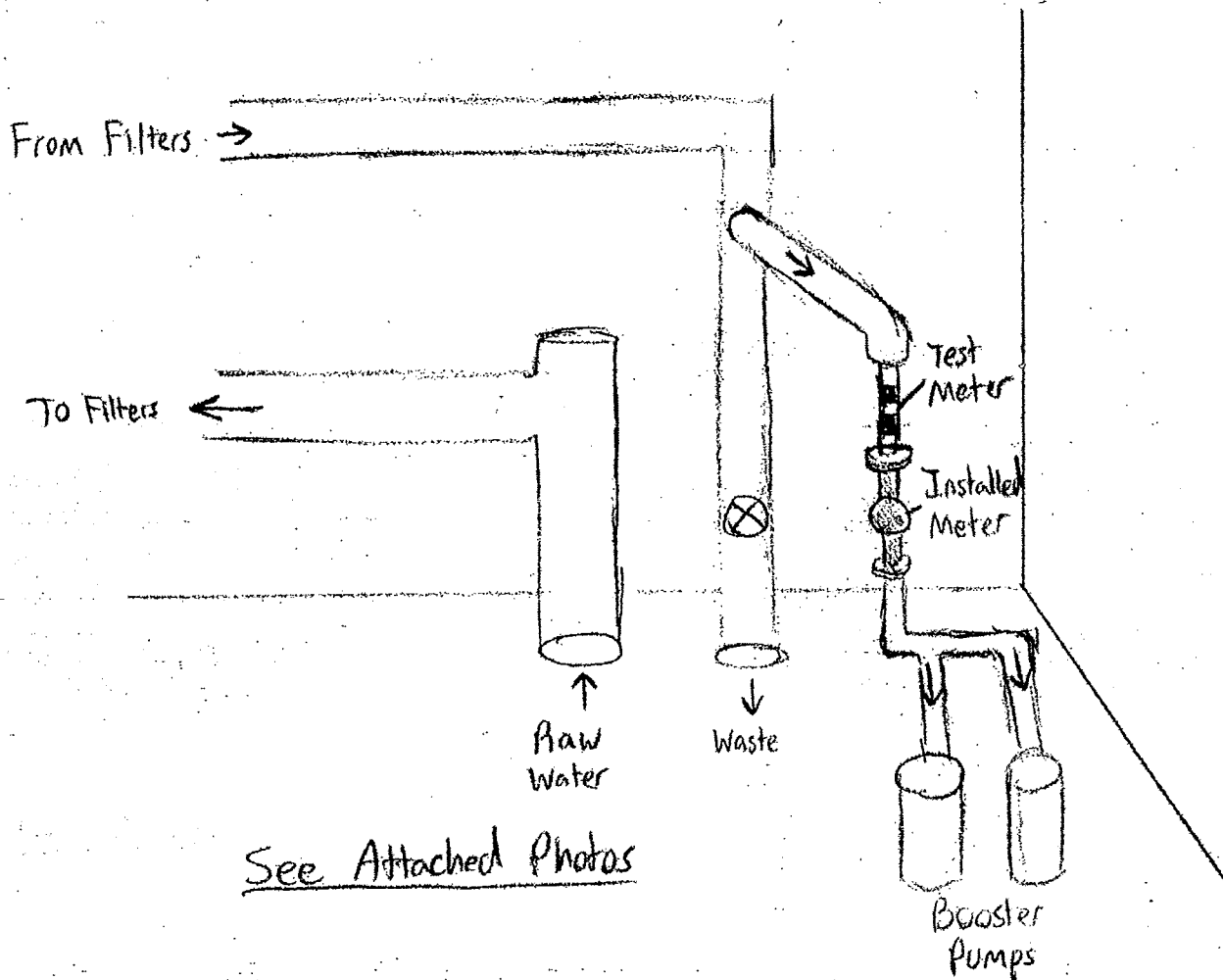
For PCC, Owner/Agent is REQUIRED to complete Owner/Agent Info and Variance Request (Page 2).

SPRINKLER INFORMATION (PCC ONLY)

End Gun: On Off None Sprinkler: On Off Tested Sprinkler Speed (%): _____ Normal Speed? Yes No
 Position from North: _____ o'clock Pump HP: _____ Pressure Regulators Installed and Functional? Yes No
 If re-verified due to system modifications, describe: _____

TESTING PROCEDURE PHOTO/SKETCH, ADDITIONAL CALCULATIONS AND COMMENTS

Describe testing procedure including sketch or photo documenting the well/meter configuration, outlets and test procedure. If programmable meter calibration (i.e K-Factor) is modified, explain reason for modification (i.e. measured flowrate before/after). Include detailed description of system under normal operating conditions.



OWNER/AGENT INFO: Name: Clyde Penn Entity: OPC Water Professionals Title: Sr. Operations Mgr.
 Address: 11919 W. 1-70 Frontage 116A City: Wheat Ridge State: CO Zip: 80033 Phone: 719-200-8141

CERTIFIED TESTER STATEMENT

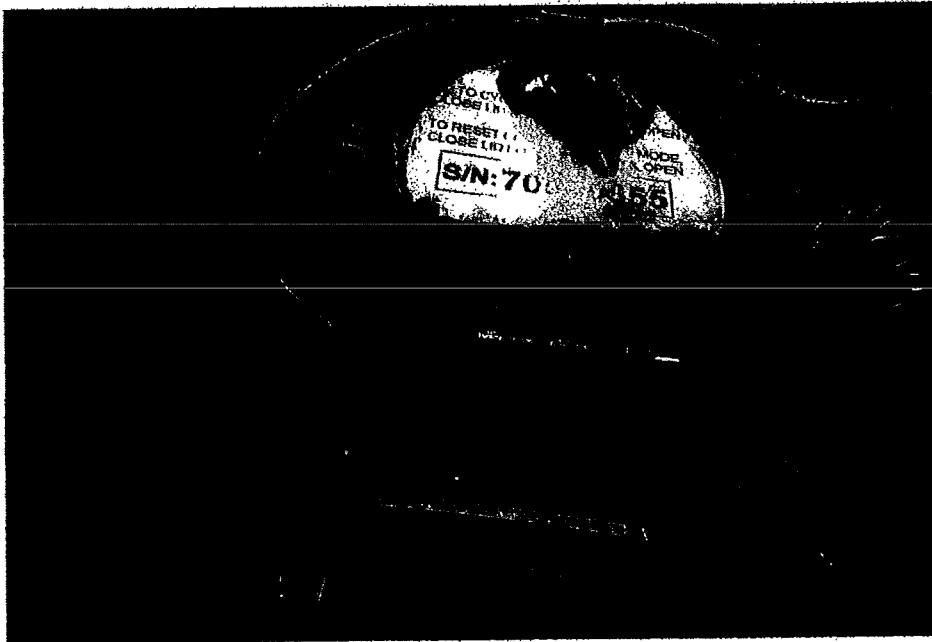
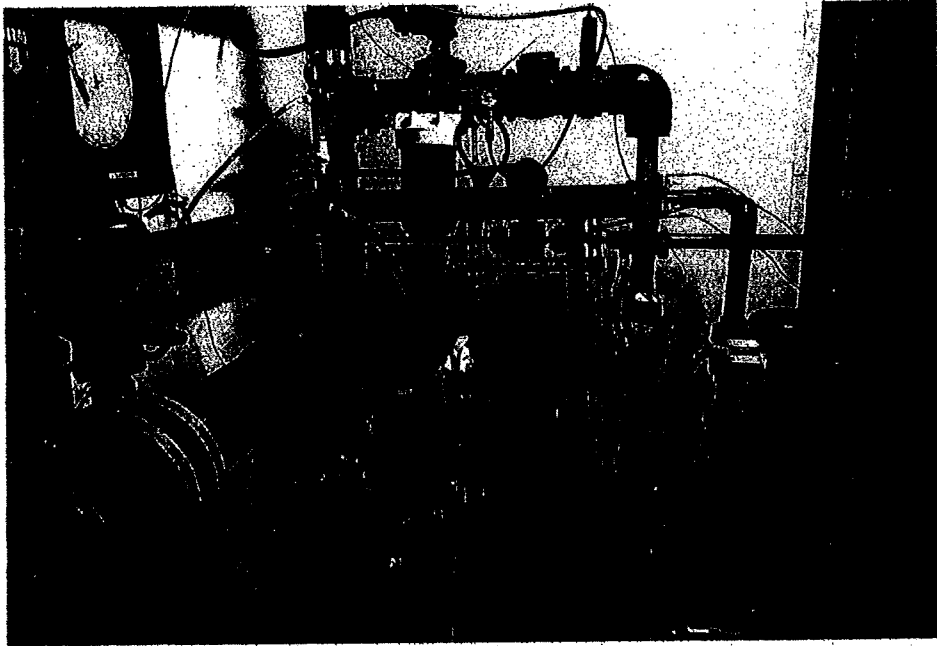
I hereby state that I am currently a person approved by the State Engineer to conduct well tests pursuant to the appropriate Rules Governing the Measurement of Ground Water Diversions. I have personally conducted measurement verification (TFM or PCC) of the above-described measurement device as required by the Rules/Program Standard. I understand that falsifying this test can subject me to a fine of up to \$500.

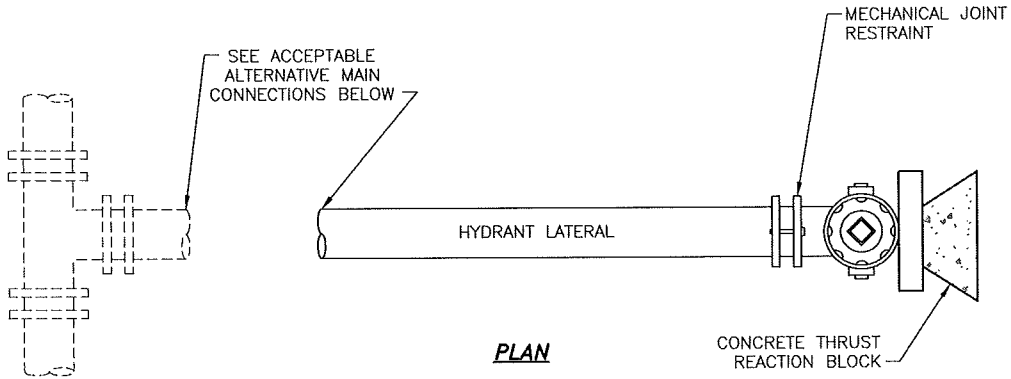
Tester Name: Anders Olson Date of Well Test: 2/23/17 Time of Well Test: 2:00
 Tester Signature: Anders C. Olson Test Meter Serial No.: N2P1177 Test Meter Manufacturer: Polysonics

OWNER/AGENT VARIANCE REQUEST (ONLY REQUIRED FOR VARIANCE REQUEST)

As Owner or Owner Agent, I hereby request a variance to Measurement Rules for use of a Correction Coefficient or Power Conversion Coefficient as represented on this test. I understand that this Coefficient (TFM or PCC) will be utilized to calculate diversions associated with this meter.

Name (Print): _____ Signature: _____ Date: _____

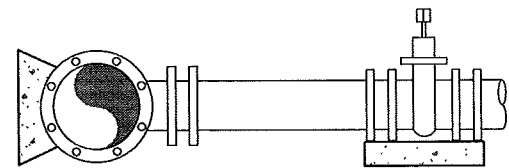




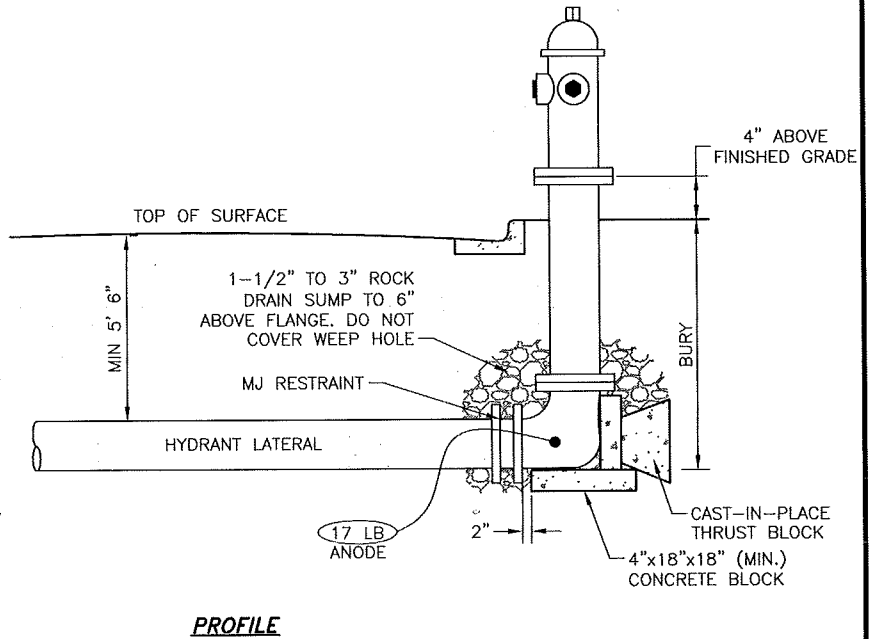
CONCRETE THRUST BLOCK (TYP.)
SEE DWG W-8

TAPPING SLEEVE WITH VALVE

ANCHOR HYD. TEE AND VALVE



MJ HYD. TEE WITH 30" (MIN.) SPACER PIPE AND VALVE. USE MECHANICAL JOINT RESTRAINT AT EACH MECHANICAL JOINT



DRAFT

NOTES:

1. ALL JOINTS BETWEEN HYDRANT AND TEE MUST BE RESTRAINED.
2. WHEN LATERAL IS GREATER THAN ONE PIPE LENGTH, RESTRAINT IS REQUIRED AT EACH COUPLING.

FIRE HYDRANT INSTALLATION

Drawn: JDS-HYDRO CONSULTANTS, INC.
Date: MARCH 2018
Scale: N.T.S.

Revised:
Revised:
Revised:

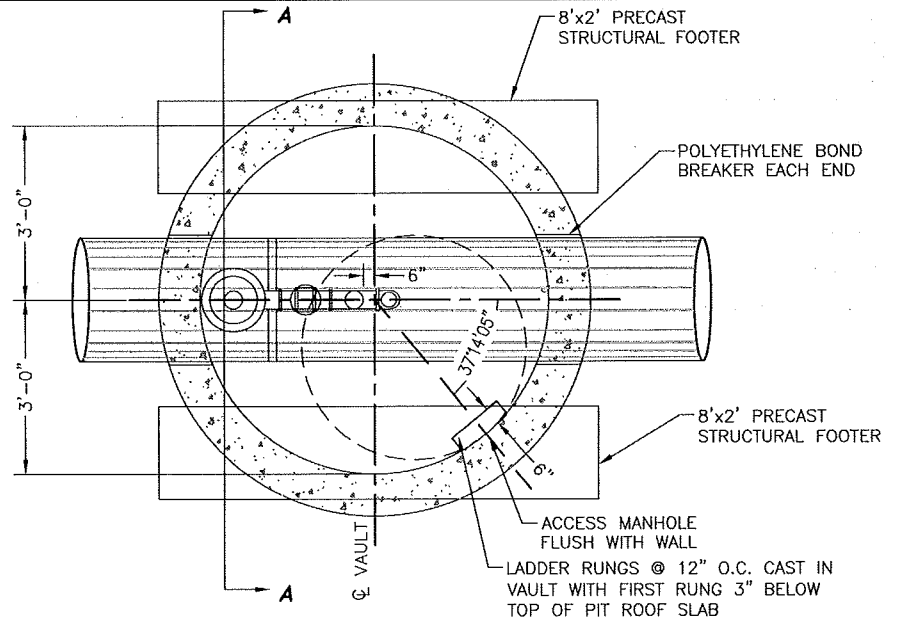
WATER SYSTEM
STANDARD SPECIFICATIONS

FORESTVIEW AGENCIES
WATER DISTRICT

W-3

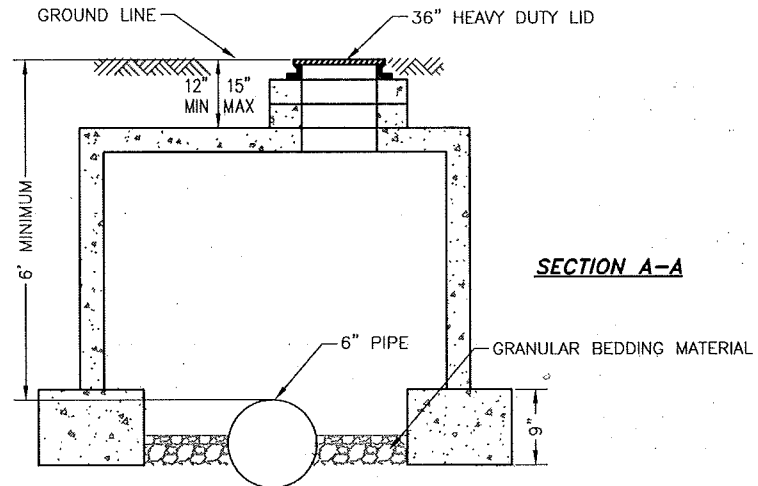
LEGEND

- (A) 1" CORPORATION TAPERED THREADS INLET WITH 1" FEMALE IRON PIPE OUTLET (MUELLER OR FORD)
- (B) 1" CLOSE THREADED BRASS NIPPLE
- (C) 1" THREADED GATE VALVE WITH STANDARD OPENING NUT
- (D) 1" THREADED INLET VAL-MATIC AIR/VACUUM COMBINATION AIR VALVE, MODEL 201C
- (E) 1"x90° PLASTIC ELBOW
- (F) 1"x90° BRASS THREADED ELBOW
- (G) 1" QUICK COUPLER
- (H) 1" THREADED BRASS NIPPLE
- (I) 1" ROMAC MODEL 202BS TAPPING SADDLE OR APPROVED EQUAL
- (J) 1"x1" TEE
- (K) PRESSURE GAUGE 4" FACE (MIN.), 0-150 P.S.I. (MIN.) NOT LESS THAN 150% OF DESIGN PRESSURE "WEKSLER # EA 14 D" OR NON-CORROSIVE BODY EQUAL, GLYCERIN FILLED MAX. 2 P.S.I. INCREMENTS

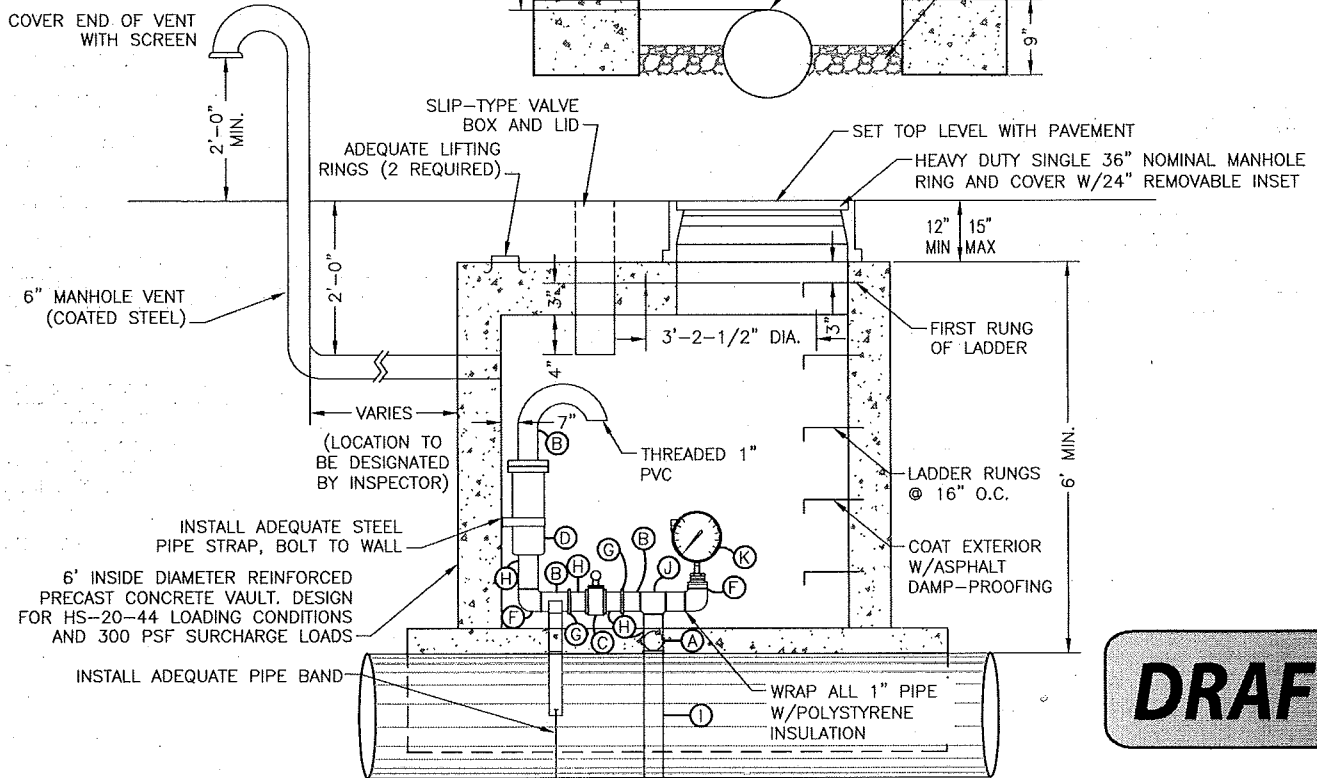


NOTES:

1. ALL CONCRETE WORK SHALL COMPLY WITH LATEST ACI-318 SPECIFICATIONS.
2. ALL SUPPORT MATERIALS SHALL BE GIVEN 2 COATS OF RUST INHIBITIVE PAINT.
3. ALL LADDER RUNGS MUST LINE UP BOTH HORIZONTALLY AND VERTICALLY.
4. ALL SMALL DIAMETER PIPE AND AIR RELEASE VALVE SHALL BE WRAPPED WITH INSULATION AND TAPED.



SECTION A-A



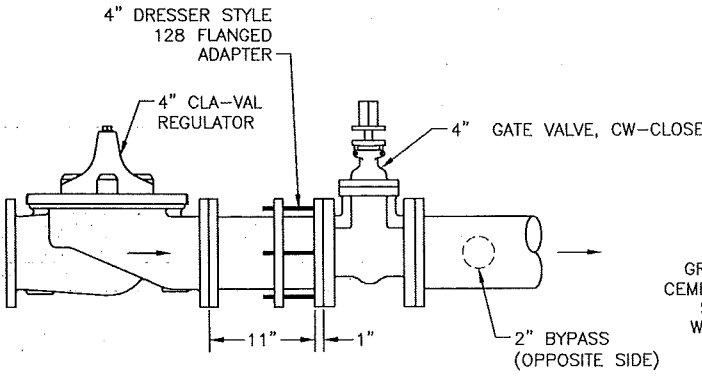
DRAFT

AIR/VACUUM RELIEF VALVE VAULT

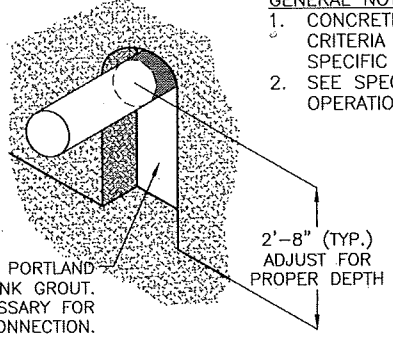
Drawn: JDS-HYDRO CONSULTANTS, INC.
 Date: MARCH 2018
 Scale: N.T.S.

Revised:
 Revised:
 Revised:

WATER SYSTEM
 STANDARD SPECIFICATIONS



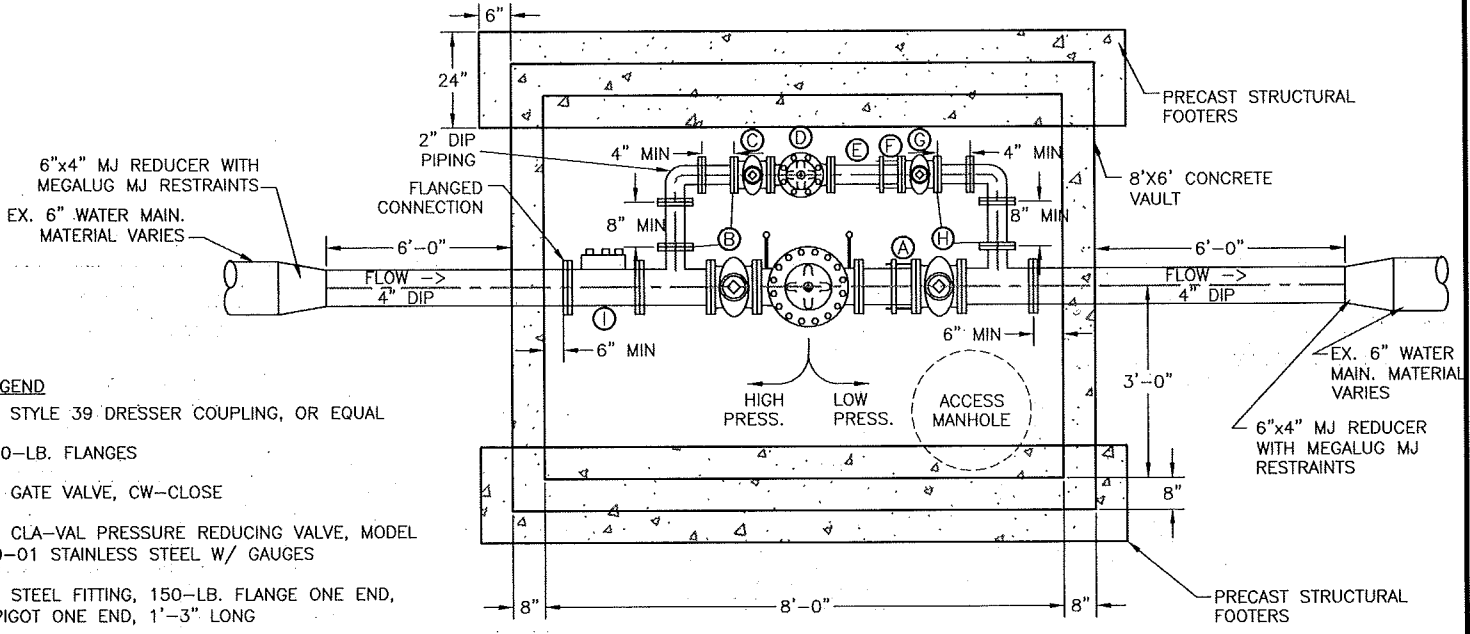
DETAIL A - FLANGED ADAPTOR



DETAIL B - PIPE ARCH

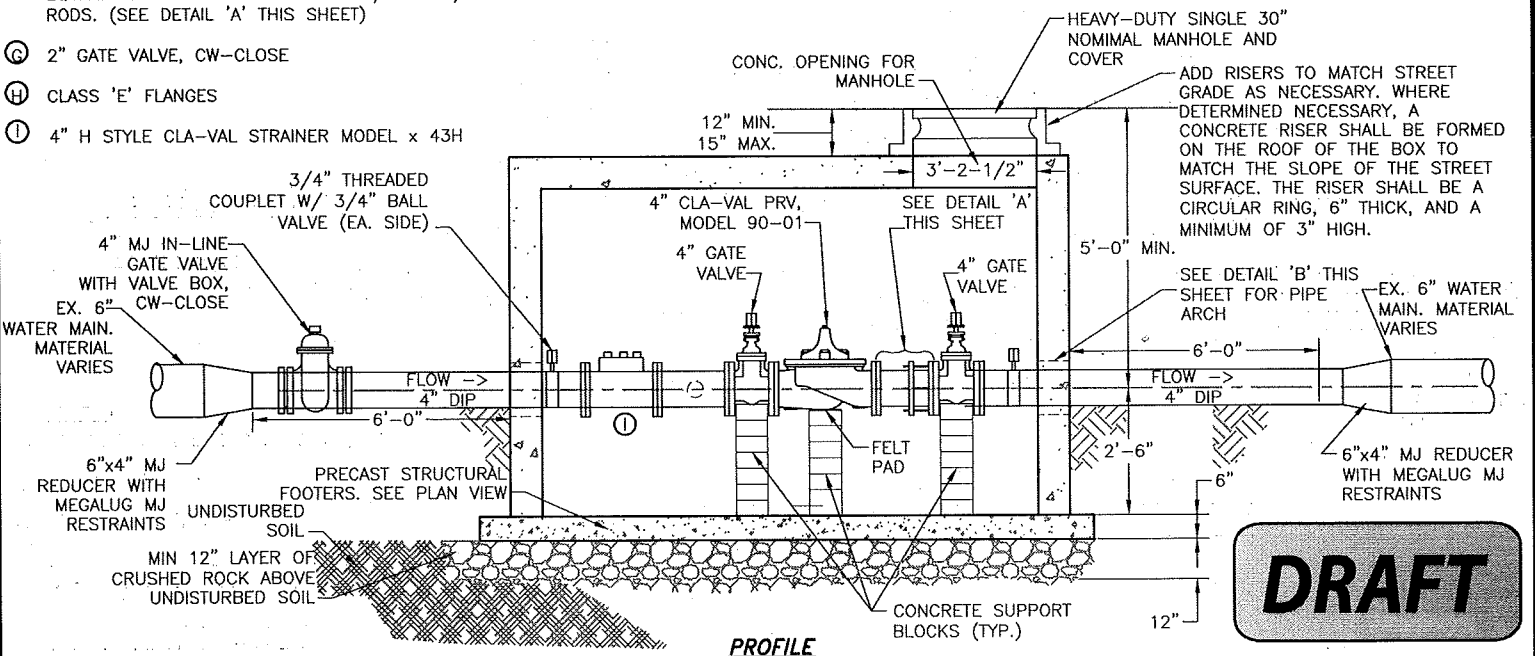
GENERAL NOTES:
 1. CONCRETE VAULTS SHALL MEET ALL CRITERIA AS OUTLINED IN PROJECT SPECIFIC SPECIFICATIONS.
 2. SEE SPECIFICATIONS FOR PRV OPERATION.

GROUT FULL W/ PORTLAND CEMENT NON-SHRINK GROUT. SEAL AS NECESSARY FOR WATER-TIGHT CONNECTION.



PLAN

- LEGEND**
- (A) 4" STYLE 39 DRESSER COUPLING, OR EQUAL
 - (B) 150-LB. FLANGES
 - (C) 2" GATE VALVE, CW-CLOSE
 - (D) 2" CLA-VAL PRESSURE REDUCING VALVE, MODEL 90-01 STAINLESS STEEL W/ GAUGES
 - (E) 2" STEEL FITTING, 150-LB. FLANGE ONE END, SPIGOT ONE END, 1'-3" LONG
 - (F) 2" DRESSER STYLE 128 FLANGED ADAPTER OR EQUAL. TIE BACK TO REGULATOR W/ TWO 3/4" RODS. (SEE DETAIL 'A' THIS SHEET)
 - (G) 2" GATE VALVE, CW-CLOSE
 - (H) CLASS 'E' FLANGES
 - (I) 4" H STYLE CLA-VAL STRAINER MODEL x 43H



PROFILE

DRAFT

PRESSURE REDUCING VAULT

Drawn: JDS-HYDRO CONSULTANTS, INC.
 Date: APRIL 2018
 Scale: N.T.S.

Revised:
 Revised:
 Revised:

WATER SYSTEM
 STANDARD SPECIFICATIONS

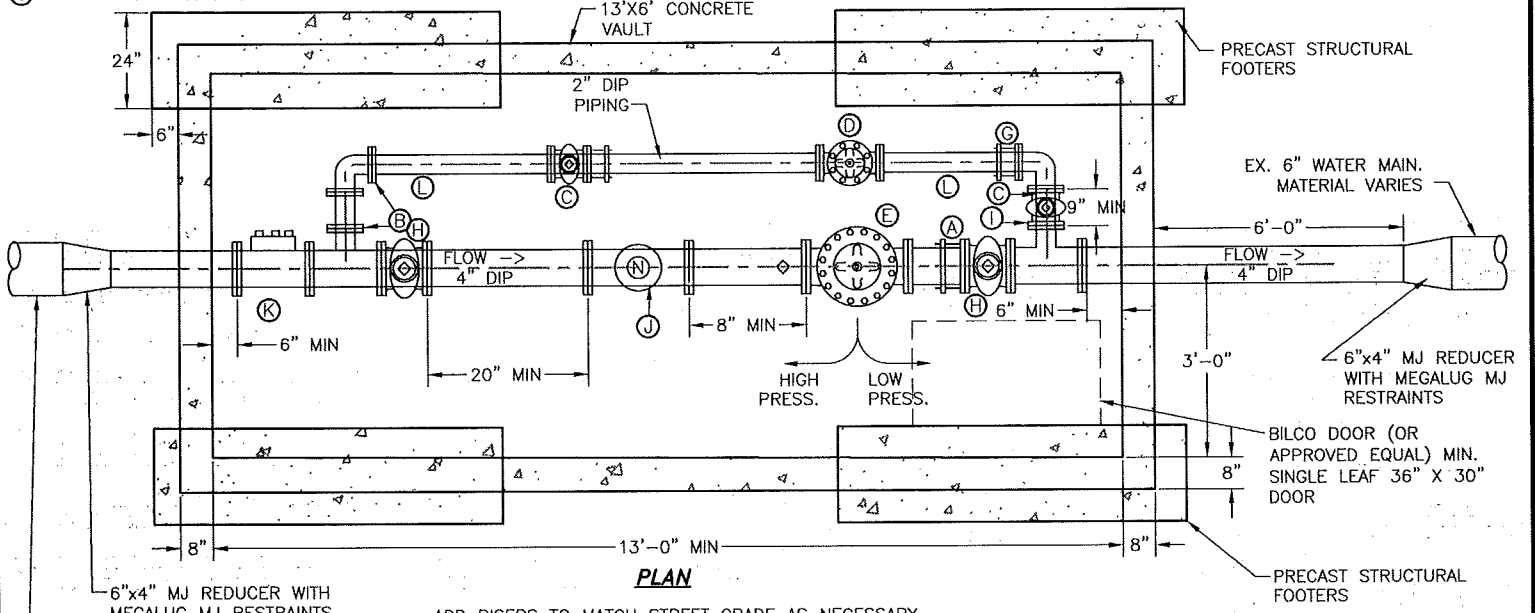
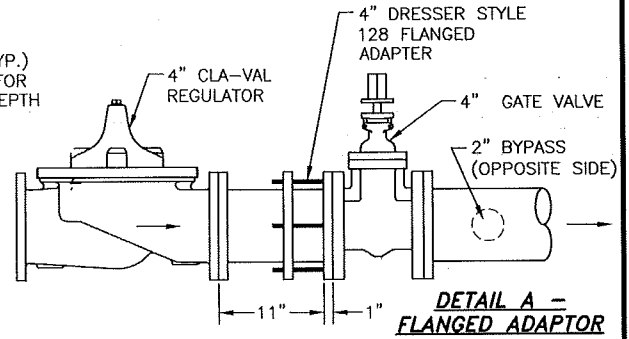
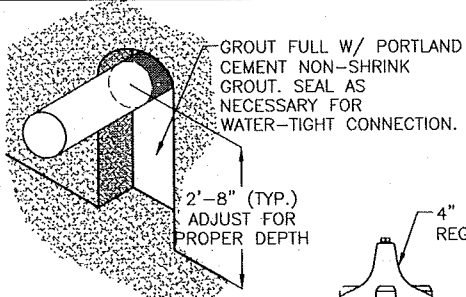
W-5

LEGEND

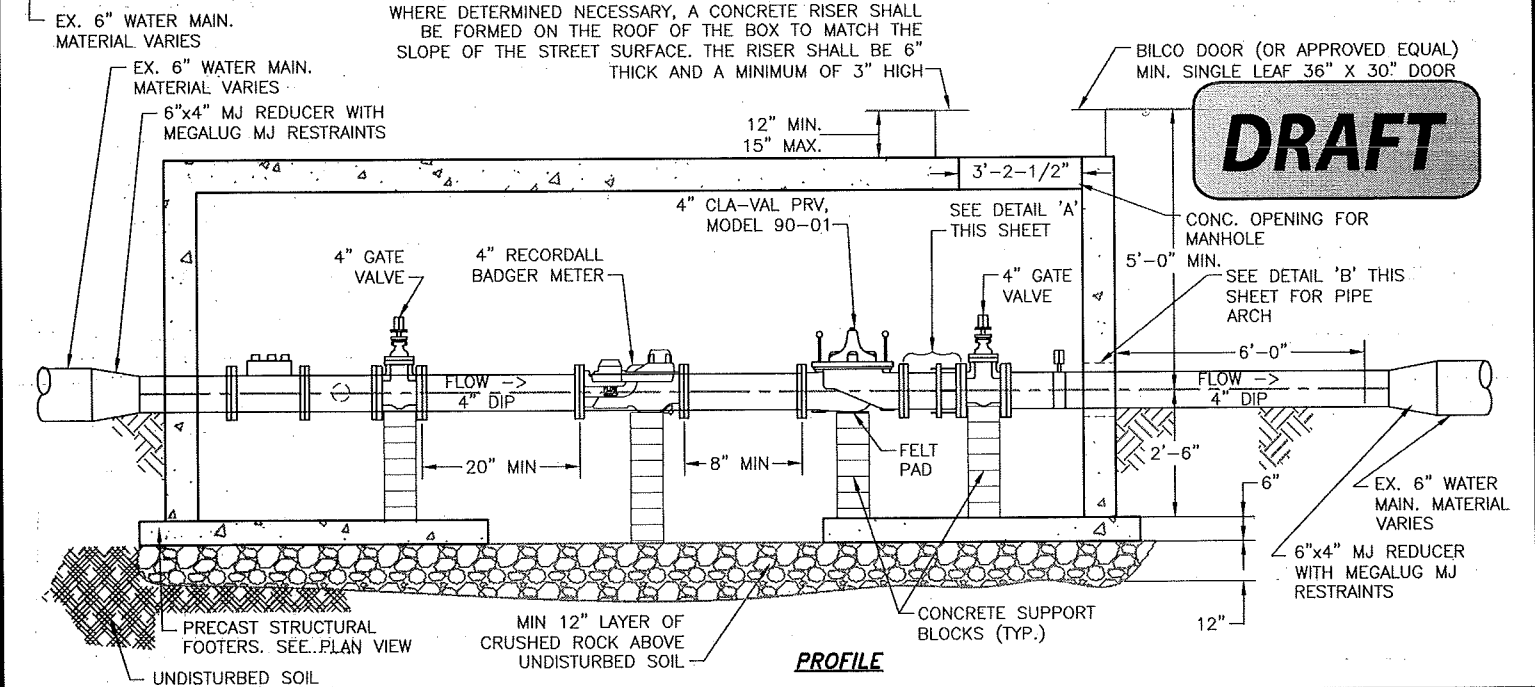
- (A) 4" STYLE 39 DRESSER COUPLING, OR EQUAL
- (B) 150-LB. FLANGES
- (C) 2" GATE VALVE, CW-CLOSE
- (D) 2" CLA-VAL PRESSURE REDUCING VALVE, MODEL 90-0, SS W/ INLET/OUTLET PRESSURE GAUGES
- (E) 4" CLA-VAL PRESSURE REDUCING VALVE, MODEL 90-01, SS W/ INLET/OUTLET PRESSURE GAUGES
- (F) 2" STEEL FITTING, 150-LB. FLANGE ONE END, SPIGOT ONE END, 1'-3" LONG
- (G) 2" DRESSER STYLE 128 FLANGED ADAPTER OR EQUAL. TIE BACK TO REGULATOR W/ TWO 3/4" RODS. (SEE DETAIL 'A' THIS SHEET)
- (H) 4" GATE VALVE, CW-CLOSE
- (I) CLASS 'E' FLANGES
- (J) 4" FLANGED BADGER METER MODEL RECORDALL
- (K) 4" H STYLE CLA-VAL STRAINER MODEL X43H
- (L) THREADED TAP W/ PRESSURE GAUGE

GENERAL NOTES:

1. CONCRETE VAULTS SHALL MEET ALL CRITERIA AS OUTLINED IN PROJECT SPECIFIC SPECIFICATIONS.
2. SEE SPECIFICATIONS FOR PRV OPERATION.

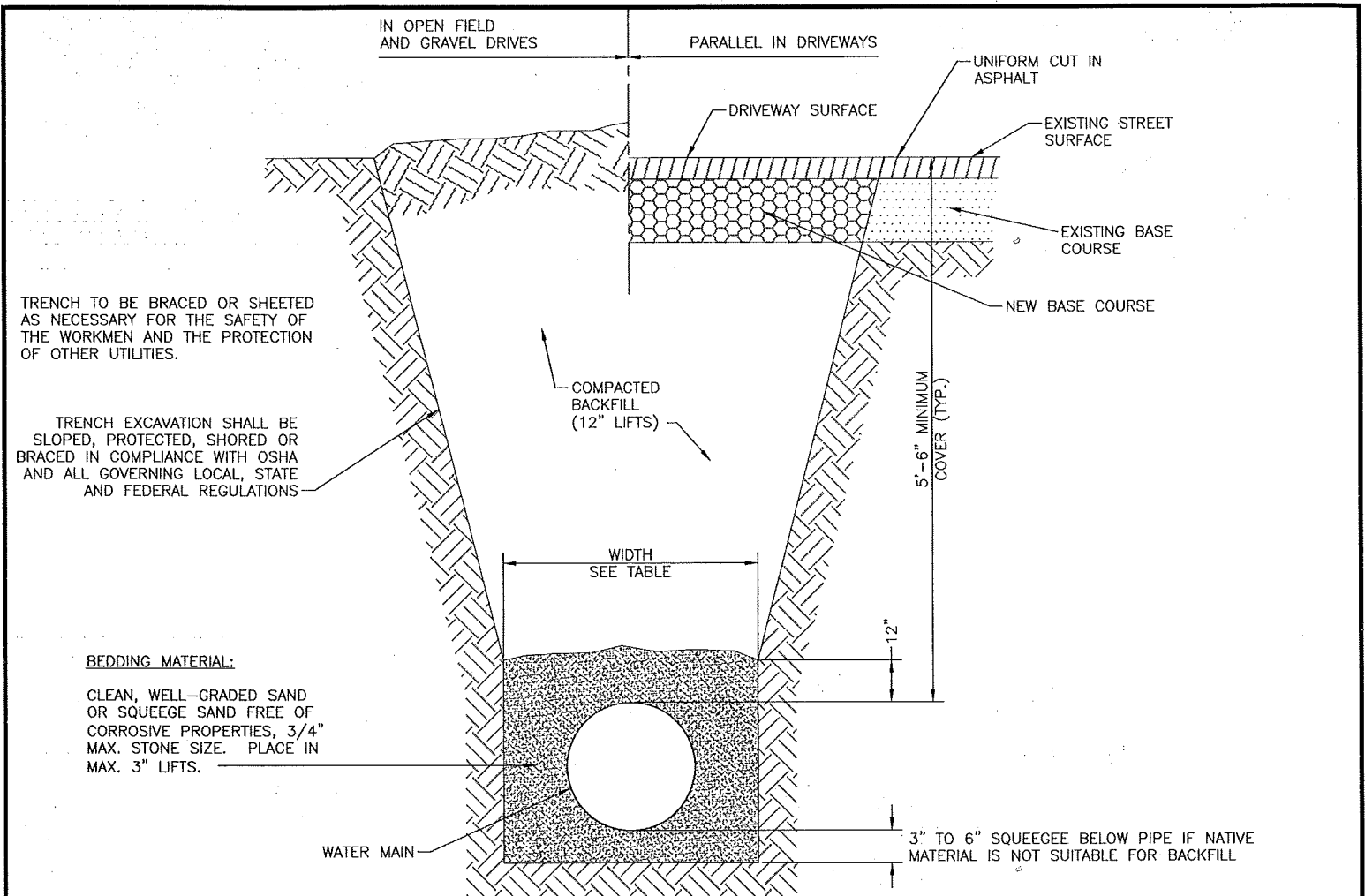


ADD RISERS TO MATCH STREET GRADE AS NECESSARY. WHERE DETERMINED NECESSARY, A CONCRETE RISER SHALL BE FORMED ON THE ROOF OF THE BOX TO MATCH THE SLOPE OF THE STREET SURFACE. THE RISER SHALL BE 6" THICK AND A MINIMUM OF 3" HIGH



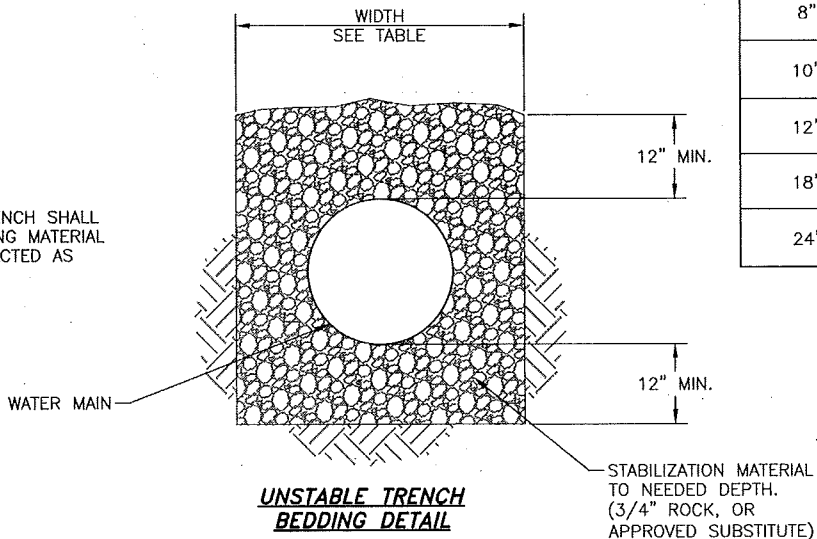
DRAFT

PRESSURE REDUCING VALVE VAULT WITH METER



TYPICAL TRENCH SECTION

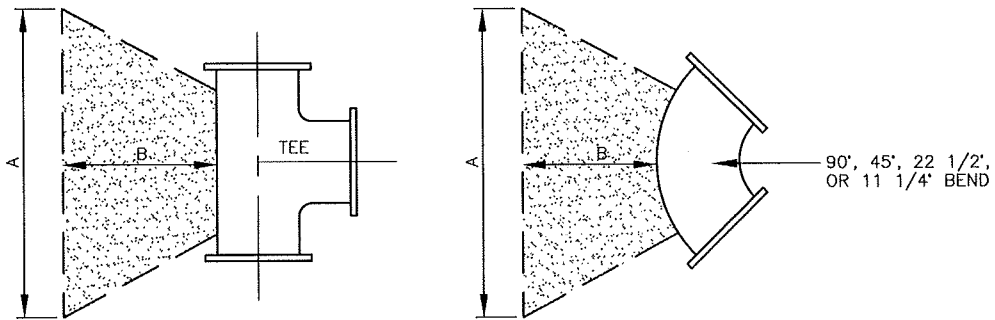
PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	2'-2"	3'-0"
6"	2'-2"	3'-0"
8"	2'-2"	3'-0"
10"	2'-4"	3'-0"
12"	2'-6"	3'-6"
18"	2'-10"	3'-9"
24"	3'-2"	4'-3"



NOTE:
 AN OVER-EXCAVATED TRENCH SHALL BE REFILLED WITH BEDDING MATERIAL AND THOROUGHLY COMPACTED AS PER THE SPECIFICATIONS.

DRAFT

TYPICAL TRENCH CROSS-SECTION

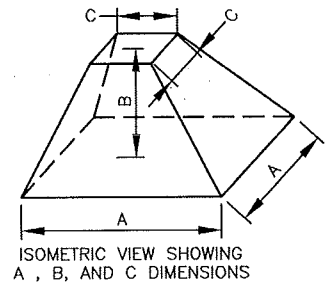


DIMENSIONS AND VOLUMES
(SEE ISOMETRIC VIEW)

SIZE	TEE			90°			45°			22 1/2°			11 1/4°		
	in. A	in. B	c.y. VOL	in. A	in. B	c.y. VOL	in. A	in. B	c.y. VOL	in. A	in. B	c.y. VOL	in. A	in. B	c.y. VOL
4"	2'-6"	0'-10"	1/8	2'-6"	0'-10"	1/8	2'-6"	0'-10"	1/8	2'-6"	0'-10"	1/8	2'-6"	0'-10"	1/8
6"	3'-2"	2'-5"	1/2	3'-6"	3'-0"	3/4	3'-2"	2'-5"	1/2	2'-6"	0'-10"	1/8	2'-6"	0'-10"	1/8
8"	4'-0"	2'-6"	3/4	4'-10"	3'-1"	1-1/4	4'-0"	2'-6"	3/4	2'-6"	0'-10"	1/4	2'-6"	0'-10"	1/8
10"	4'-4"	3'-0"	1	5'-3"	3'-3"	1-1/2	4'-4"	3'-0"	1	2'-8"	1'-7"	1/4	2'-6"	0'-10"	1/8
12"	4'-10"	3'-1"	1-1/4	5'-7"	3'-5"	1-3/4	4'-10"	3'-1"	1-1/4	2'-8"	1'-7"	1/4	2'-6"	0'-10"	1/8
20"	5'-3"	3'-3"	1-1/2	5'-10"	3'-7"	2-0	5'-3"	3'-3"	1/2	3'-2"	2'-5"	1/2	2'-8"	1'-7"	1/4

NOTES:

1. THE MINIMUM A AND B DIMENSIONS FOR ANY BLOCK IS 1'-6". DIMENSION C FOR ALL PIPE 12" OR LESS SHALL BE 1'-6".
2. THRUST BLOCK DIMENSIONS AND VOLUMES FOR DEAD ENDS SHALL BE THE SAME AS FOR TEES.
3. THE ABOVE VOLUMES ARE ROUNDED TO THE NEAREST PORTION OF A CUBIC YARD.
4. NUTS AND BOLTS SHALL REMAIN ACCESSIBLE AND FREE OF SPLASHED CONCRETE. A BOND BREAKER IS REQUIRED BETWEEN FITTINGS AND CONCRETE.



DRAFT

THRUST BLOCK DATA

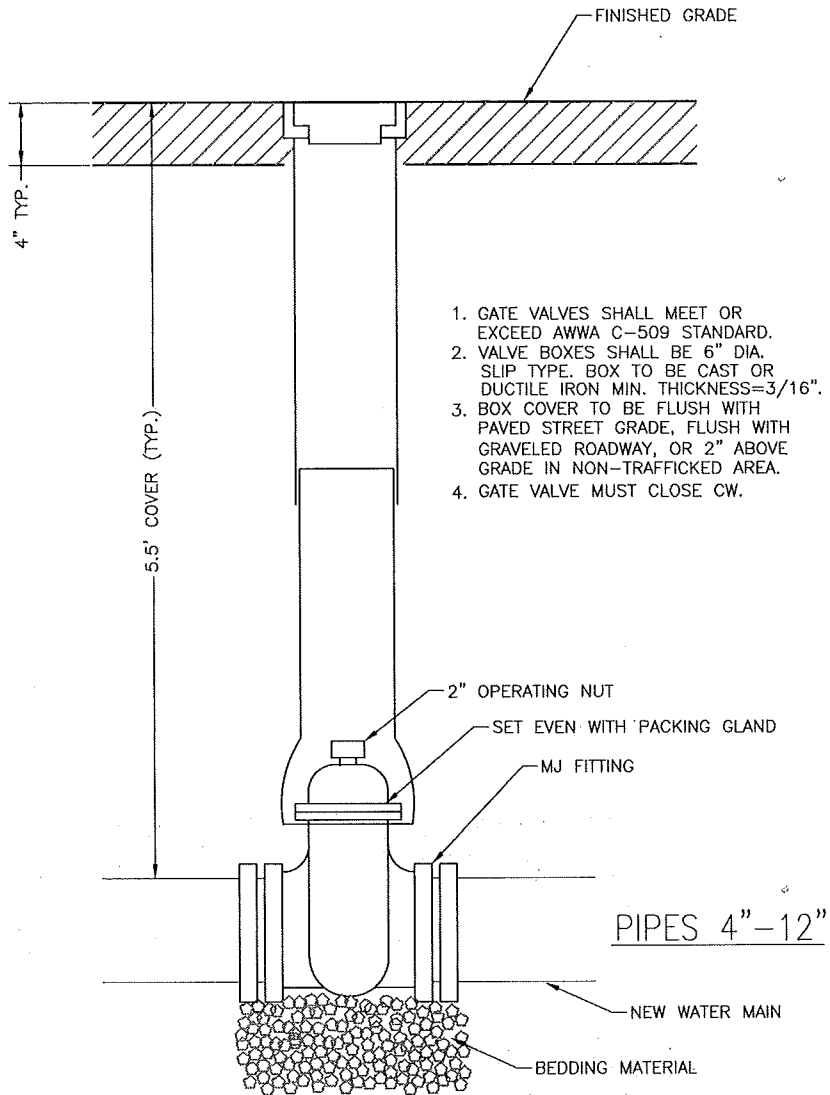
Drawn: JDS-HYDRO CONSULTANTS, INC.
Date: MARCH 2018
Scale: N.T.S.

Revised:
Revised:
Revised:

WATER SYSTEM
STANDARD SPECIFICATIONS

FOR A VIEW AND
WATER SYSTEM

W-8



DRAFT

TYPICAL IN-LINE GATE VALVE ASSEMBLY

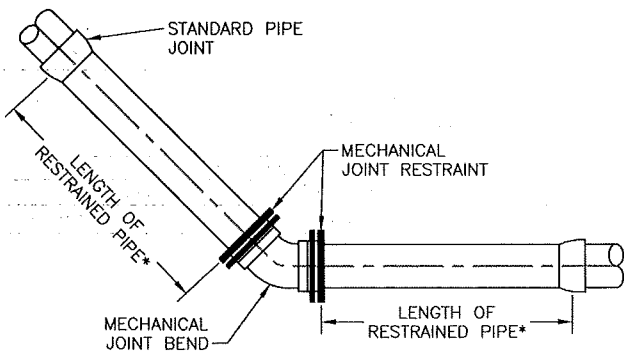
Drawn: JDS-HYDRO CONSULTANTS, INC.
 Date: MARCH 2018
 Scale: N.T.S.

Revised:
 Revised:
 Revised:

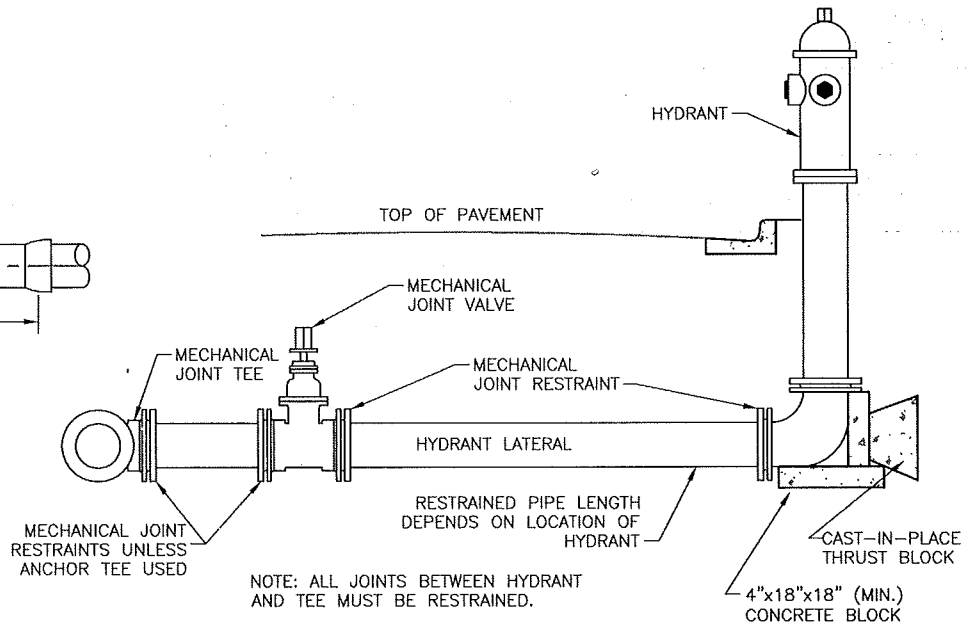
WATER SYSTEM
 STANDARD SPECIFICATIONS

First View, Auto
 WATER DISTRICT

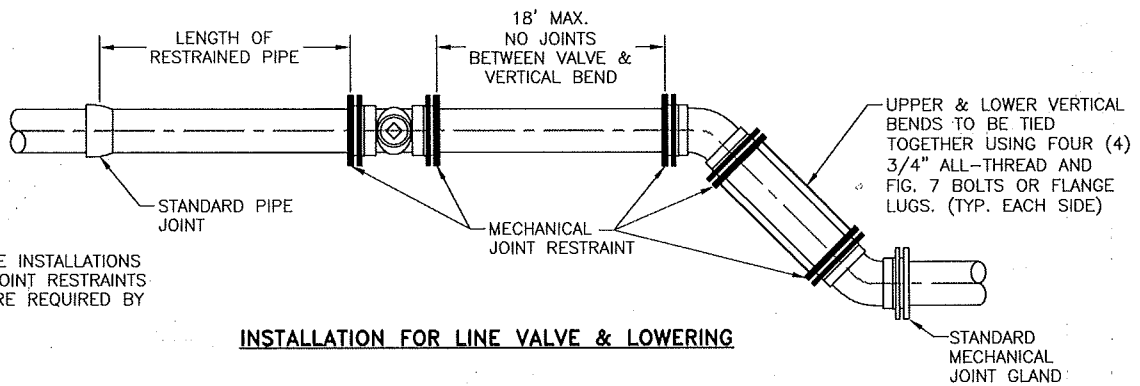
W-9



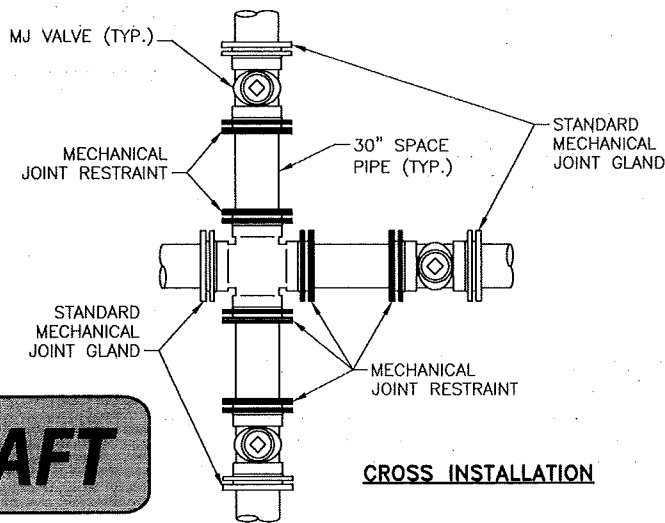
NO THRUST REACTION
BLOCK REQUIRED
INSTALLATION FOR BENDS



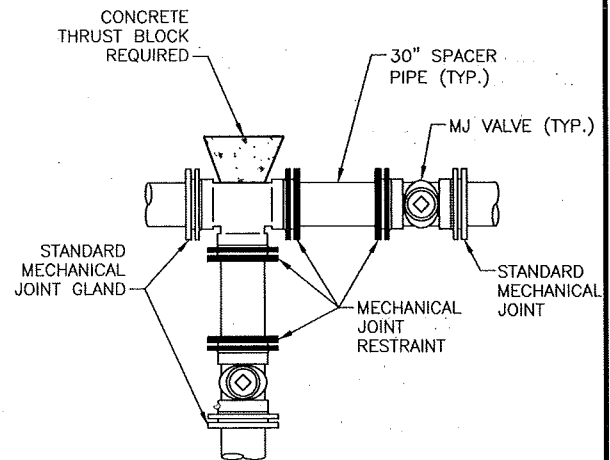
INSTALLATION FOR BENDS



INSTALLATION FOR LINE VALVE & LOWERING



CROSS INSTALLATION



TEE INSTALLATION

- NOTES:**
1. MECHANICAL JOINTS SHALL BE APPROVED ACCORDING TO MATERIAL SPECIFICATION FOR DIP AND PVC PIPE.
 2. LENGTH OF PIPE REQUIRING JOINT RESTRAINT SHALL BE DETERMINED FROM CHART ON DRAWING W-11.
 3. RESTRAINED JOINT PVC PIPE SHALL NOT BE USED FOR LOWERINGS.

DRAFT

APPLICATIONS FOR MECHANICAL JOINT RESTRAINTS

Drawn: JDS-HYDRO CONSULTANTS, INC.
Date: MARCH 2018
Scale: N.T.S.

Revised:
Revised:
Revised:

WATER SYSTEM
STANDARD SPECIFICATIONS

WATER DEPARTMENT

W-10

RESTRAINED M.J. PIPE LENGTH (FT)

6-INCH DUCTILE IRON AND PVC

TYPE OF FITTING	STATIC PRESSURE (PSI)		
	<100	100-150	150-200
90° BEND, TEE, VALVE OR PLUG	12	18	24
45° BEND	5	8	10
22-1/2' BEND	2	4	5
11-1/4' BEND	1	2	2

16-INCH DUCTILE IRON AND PVC

TYPE OF FITTING	STATIC PRESSURE (PSI)		
	<100	100-150	150-200
90° BEND, TEE, VALVE OR PLUG	29	43	58
45° BEND	12	18	24
22-1/2' BEND	6	9	12
11-1/4' BEND	3	4	6

8-INCH DUCTILE IRON AND PVC

TYPE OF FITTING	STATIC PRESSURE (PSI)		
	<100	100-150	150-200
90° BEND, TEE, VALVE OR PLUG	16	24	32
45° BEND	7	10	13
22-1/2' BEND	3	5	6
11-1/4' BEND	2	2	3

18-INCH DUCTILE IRON AND PVC

TYPE OF FITTING	STATIC PRESSURE (PSI)		
	<100	100-150	150-200
90° BEND, TEE, VALVE OR PLUG	32	48	64
45° BEND	14	20	27
22-1/2' BEND	7	10	13
11-1/4' BEND	3	5	7

12-INCH DUCTILE IRON AND PVC

TYPE OF FITTING	STATIC PRESSURE (PSI)		
	<100	100-150	150-200
90° BEND, TEE, VALVE OR PLUG	23	34	45
45° BEND	9	14	19
22-1/2' BEND	5	7	9
11-1/4' BEND	2	3	4

20-INCH DUCTILE IRON AND PVC

TYPE OF FITTING	STATIC PRESSURE (PSI)		
	<100	100-150	150-200
90° BEND, TEE, VALVE OR PLUG	35	52	70
45° BEND	15	22	29
22-1/2' BEND	7	10	14
11-1/4' BEND	3	5	7

24-INCH DUCTILE IRON AND PVC

TYPE OF FITTING	STATIC PRESSURE (PSI)		
	<100	100-150	150-200
90° BEND, TEE, VALVE OR PLUG	41	61	81
45° BEND	17	25	34
22-1/2' BEND	8	12	16
11-1/4' BEND	4	6	8

NOTES:

1. PRESSURES GREATER THAN 200 PSI REQUIRE SPECIAL DESIGN APPROVED BY THE DISTRICT.
2. LENGTH IS BASED ON MINIMUM 5'-0" OF GROUND COVER AND SOIL COMPACTED TO 95% OF STANDARD PROCTOR DENSITY AT OPTIMUM MOISTURE.
3. APPROVED METHODS OF RESTRAINED PIPE BEYOND INITIAL FITTING SHALL BE:
 - A. FOR DUCTILE IRON PIPE, 1100 SERIES MEGALUG BY EBAA IRON OR EQUAL ON MECHANICAL JOINT PIPE OR DOUBLE 1100 SERIES MEGALUG BY EBAA IRON OR EQUAL ON PUSH ON JOINT PIPE.
 - B. FOR PVC PIPE, SERIES 1500 OR SERIES 2800 RESTRAINTS BY EBAA IRON OR EQUAL.

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RESTRAINED M.J. PIPE LENGTH DATA

Drawn: APPLICATION FOR MECHANICAL JOINT RESTRAINTS	Revised:
Date: MARCH 2018	Revised:
Scale: N.T.S.	Revised:

WATER SYSTEM
STANDARD SPECIFICATIONS

DRAFT

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