

Abbreviations

AC	Asphalt Concrete	(N)	North
ASSY	Assembly	(NE)	Northeast
AVE.	Avenue	(NW)	Northwest
BFV	Butterfly Valve	N.T.S.	Not to Scale
BLKG	Blocking	O.D.	Outside Diameter
CB	Catch Basin	O/S	Offset
CI	Cast Iron	PERF.	Perforated
CL	Centerline	PVC	Polyvinyl Chloride
CMP	Corrugated Metal Pipe	PVMT	Pavement
CO	Cleanout	PRV	Pressure Reducing Valve
CONC	Concrete	RBC	Rebar and Cap
CPLG	Coupling	RT.	Right
CSBC	Crushed Surfacing Base Course	R/W	Right-of-Way
CSTC	Crushed Surfacing Top Course	S	Slope
DI	Ductile Iron	(S)	South
DWY.	Driveway	SD	Storm Drain
(E)	East	SDCB	Storm Drain Catch Basin
EC	Erosion Control	SDMH	Storm Drain Manhole
ELEV.	Elevation	SHT.	Sheet
EXIST.	Existing	SS	Sanitary Sewer
EOP	Edge of Pavement	SSCO	Sanitary Sewer Cleanout
FLG	Flange	SSMH	Sanitary Sewer Manhole
FND	Found	SST	Stainless Steel
FOC	Face of Curb	ST	Street
GV	Gate Valve	STA.	Station
INV.	Invert	STD.	Standard
I.E.	Invert Elevation	(SE)	Southeast
INT.	Intersection	(SW)	Southwest
I.P.	Iron Pipe	TELE.	Telephone
LT.	Left	TESC	Temporary Erosion and Sediment Control
LF	Linear Feet	TRANS.	Transition
MAX.	Maximum	TYP.	Typical
MD	Measure Down	U.N.O.	Unless Noted Otherwise
MIN.	Minimum	(W)	West
MH	Manhole		
MJ	Mechanical Joint		

Legends

Existing Linetypes		Existing Symbols	
	Existing Building		Existing Yard Light
	Existing Cable TV - Buried		Existing Hydrant
	Existing Centerline Road		Existing Water Meter
	Existing Concrete		Existing Gate Valve
	Existing Creek/Ditch		Existing Water Vault
	Existing Curb		Existing Mail Box
	Existing Fence		Existing Sign
	Existing Gas		Existing Conifer Tree
	Existing Guardrail		Existing Deciduous Tree
	Existing Gravel		Existing Shrub
	Existing Gutter Line		Existing Power Pole
	Existing Pavement Edge		Existing Power Pole Anchor
	Existing Power - Aerial		Existing Power Transformer
	Existing Power - Buried		Existing Power Vault
	Existing Retaining Wall		Existing Sewer Cleanout
	Existing Right-Of-Way		Existing Sewer Manhole
	Existing Sanitary Sewer		Existing Storm Culvert
	Existing Sidewalk		Existing SDCB
	Existing Storm Drain		Existing SDMH
	Existing Telephone - Buried		Existing Telephone Pole
	Existing Toe of Slope		Existing Telephone Pole Anchor
	Existing Top of Slope		Existing Telephone Riser
	Existing Brush Line		
	Existing Water		
Proposed Linetypes		Proposed Symbols	
	Proposed Water Line		Proposed Fire Hydrant
			Survey Control Point

Survey Control Data				
Point No.	Northing	Easting	Elev.	Description
1	2498.1450	3052.5310	309.90	S1 SET PK NAIL
50	2909.0925	3375.8972	299.92	EXIST-COR
52	2814.7220	3032.2104	302.28	EXIST-COR
59	1813.5652	3077.8993	310.22	EXIST-COR
62	2241.6826	1829.7238	303.69	EXIST-COR
63	2940.8076	2184.4756	290.09	EXIST-COR
64	2916.2396	2172.0091	289.90	EXIST-COR
100	2769.3269	3337.9112	302.03	PT51

Sheet Index		
Sheet No.	Drawing No.	Sheet Title
General		
1	G1	Cover Sheet
2	G2	Sheet Index, Legend & General Notes
Site Plan		
3	C1	Site Plan
Details		
4	D1	Notes and Details



Drawing Index
Scale: 1" = 100'

General
Sheet Index, Legend & General Notes

Pacific Fibre Products
Fire Line Extension
Molalla, Oregon

Horizontal Scale: ---
Vertical Scale: ---
Datum: ---
Survey Book: ---
Project Phase: ---
Project Milestone: ---

Revision Date:
March 18, 2015



G
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Project Manager: JJJ
Designed by: JJJ
CAD by: KR
Checked by: JJJ
Approved by: ---

Project Number:
0812.0104

Drawing Number:
G2

Sheet Number:
2 of 4

811
Know what's below.
Call 811 before you dig.

CAUTION: LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE AND MAY NOT BE ACCURATE OR ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY LOCATION AND DEPTH OF UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION.

DRAWING: T:\CIVIL\30\PROJECTS\08120104\ACT\CONTRACT DRAWINGS\GENERAL\DWG; LAYOUT TAB: 02; PLOT DATE: 3/18/2015 3:34:39 PM; DRAWING SAVE DATE: 3/18/2015 2:29:52 PM; PLOTTED BY: KRUGERS; PROFILE: GIBBS & OLSON STANDARD - CWD IMPRINT; 2015; PLOT DEVICE: GIBBS-OLSON STANDARD MONOCHROME C10; PAPER SIZE: GIBBS & OLSON - PLANSHEET D SIZE (34.00 X 22.00 INCHES)

Water System Notes:

- SPECIFICATIONS FOR ALL MATERIALS AND CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE CITY OF MOLALLA SPECIFICATIONS, EXCEPT AS NOTED HEREIN.
- ALL REFERENCES TO AWWA SPECIFICATIONS SHALL MEAN THEIR LATEST REVISION.
- WHERE EXISTING SERVICE MUST BE INTERRUPTED, THE CONTRACTOR SHALL NOTIFY THE CITY AND ALL CUSTOMERS AFFECTED AS TO THE DATE AND DURATION OF THE INTERRUPTION. NOTIFICATION MUST BE DONE 72 HOURS IN ADVANCE OF INTERRUPTION. THE CONTRACTOR SHALL SCHEDULE CONSTRUCTION TO PROVIDE MINIMUM INTERRUPTION OF SERVICE.
- WATER LINE SHALL BE PVC PIPE AND SHALL CONFORM TO AWWA C900 WITH GASKETS MEETING ASTM F427 AND JOINTS IN COMPLIANCE WITH ASTM D3139.
- WATER LINES SHALL HAVE COVER OF MINIMUM 36 INCHES BELOW FINISH GRADE.
- ALL POTABLE WATER MAINS SHALL MAINTAIN A SEPARATION OF 10 FEET LATERALLY AND/OR 18 INCHES VERTICALLY ABOVE NON-POTABLE PIPELINES. DEVIATION REQUIRES CITY APPROVAL.
- GATE VALVES SHALL BE RESILIENT WEDGE PER LATEST REVISION OF AWWA C-515. BUTTERFLY VALVES SHALL BE PER AWWA C7504.
- CONTRACTOR SHALL POT-HOLE ALL EXISTING UTILITIES INCLUDING BUT NOT LIMITED TO WATER LINES, WATER SERVICES, SEWER LATERALS, STORM SEWERS, GAS, POWER, TELEPHONE, CABLE, ETC. PRIOR TO CONSTRUCTING NEW WATER MAIN TO ALLOW VERTICAL ADJUSTMENTS OF NEW WATER MAIN AS NECESSARY.
- ALL TEES, BENDS, HYDRANTS AND BLOW-OFF LOCATIONS SHALL, UNLESS OTHERWISE NOTE, HAVE A POURED-IN-PLACE CONCRETE THRUST BLOCK. THRUST BLOCKS SHALL BE A MINIMUM OF 2,500 PSI CONCRETE.
- PIPE BEDDING AND BACKFILL MATERIAL SHALL CONFORM TO ODOT STD. SPECIFICATIONS 00405.12 AND 00405.13 AND BE COMPACTED TO A MINIMUM OF 95% MOD PER ASTM D1557.
- PAVEMENT RESTORATION SHALL BE HMA PER THE TYPICAL TRENCH DETAIL, THIS SHEET.
- BACTERIOLOGICAL SAMPLES SHALL BE TAKEN BY THE CONTRACTOR IN PRESENCE OF CITY STAFF.
- NO CONNECTIONS WILL BE ALLOWED TO AN EXISTING WATERLINE UNTIL AFTER SUCCESSFUL FLUSHING, BACTERIOLOGICAL, AND PRESSURE TESTING THE NEW WATER MAIN. CONTRACTOR WILL BE REQUIRED TO PROVIDE TEMPORARY CAPS, BLOCKING AND A BACKFLOW PREVENTION DEVICE TO FILL, FLUSH AND TEST THE NEW WATER MAIN.
- DISINFECTION AND HYDROSTATIC TESTING SHALL CONFORM TO SECTIONS 01140.50 AND 01140.51 OF THE STANDARD SPECIFICATIONS. PIPELINES SHALL BE FLUSHED AND THEN CHLORINATED AND A SATISFACTORY BACTERIOLOGICAL REPORT OBTAINED PRIOR TO PERFORMING HYDROSTATIC TESTING AND BEFORE PLACING ANY WATER MAINS INTO SERVICE. THE HIGHLY CHLORINATED WATER USED FOR DISINFECTION SHALL NOT BE DISCHARGED INTO SURFACE WATERS. APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS CONCERNING DISCHARGE SHALL BE FOLLOWED. SUBMIT CHLORINATION/DECHLORINATION PLAN FOR APPROVAL ONE WEEK PRIOR TO WORK.
- MARKING TAPE SHALL BE INSTALLED 12 INCHES OVER ALL WATER LINES INCLUDING SERVICE LINES. MARKER TAPE SHALL BE BLUE, 3 INCHES WIDE AND READ "CAUTION BURIED WATERLINE BELOW".
- DETECTABLE TRACER WIRE SHALL BE ATTACHED TO ALL WATERLINES. TRACER WIRE SHALL BE ATTACHED TO TOP OF PIPE WITH 2 WRAPS OF DUCT TAPE EVERY 10 FEET. TRACER WIRE SHALL BE #14 AWG HIGH CARBON 1055 GRADE STEEL, HDPE INSULATION, RATED FOR DIRECT BURIAL.
- RECORD DRAWINGS ARE REQUIRED. THE CONTRACTOR SHALL SUPPLY REDLINES OF RECORD AND SUBMIT TO THE CITY AND PACIFIC FIBRE AT COMPLETION OF PROJECT.

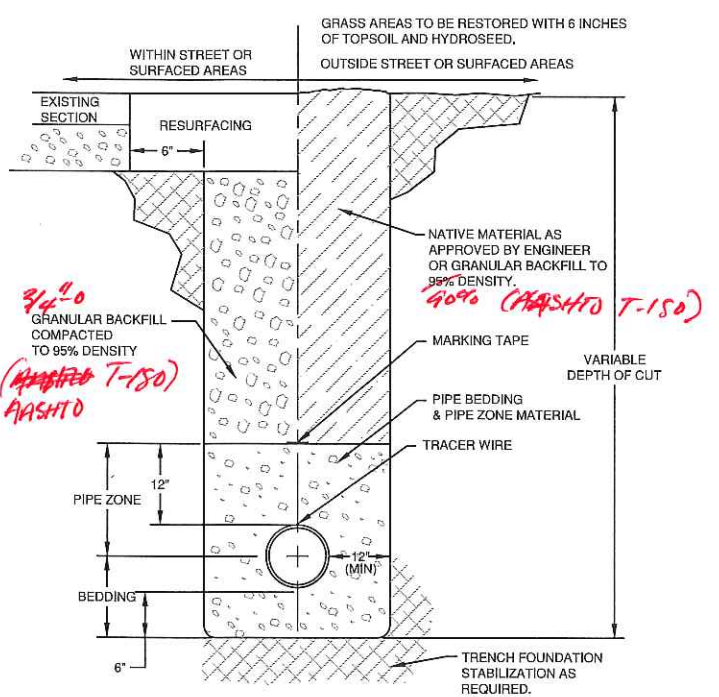
2015 ODOT/AWWA STANDARD SPECIFICATIONS FOR CONSTRUCTION.

FVI-CITY HAS DOOR HANGERS IF NEEDED, NOT REQUIRED FOR NOTIFICATION.

NO BUTTERFLY VALVES ALLOWED

SEE NOTES FOR ROADWAY SECTION IN PUBLIC R/W ONLY

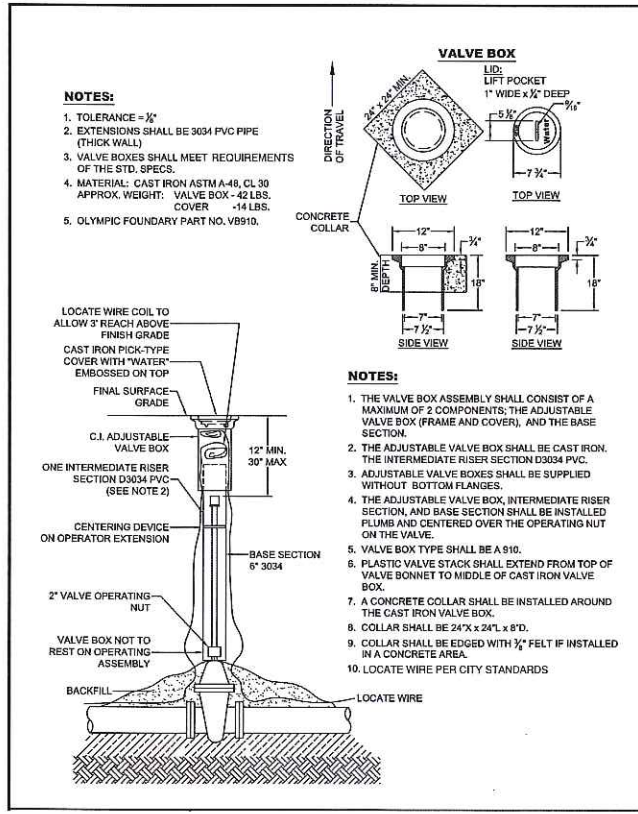
** SEE PROVIDED STANDARDS*



- NOTES:
- ALL CUTS IN PAVEMENT SHALL BE SAW CUT.
 - ALL CUT EDGES SHALL BE SAND SEALED.
 - RESURFACING TO BE MIN. 3" HMA ASPHALT OR MATCH EXISTING WHICHEVER IS GREATER.
 - THIS TRENCH BACKFILL REQUIREMENT APPLIES TO ALL UNDERGROUND CONDUITS.
 - GRANULAR BACKFILL SHALL EXTEND 2 FT. BEYOND EDGE OF STREET OR SURFACED AREA.
 - BACKFILL SHALL BE PLACED AND COMPACTED IN A MAX. OF 6" LIFTS IN PAVEMENT AND A MAXIMUM OF 12" LIFTS OUTSIDE PAVEMENT.

TYPICAL TRENCH DETAIL

N.T.S.

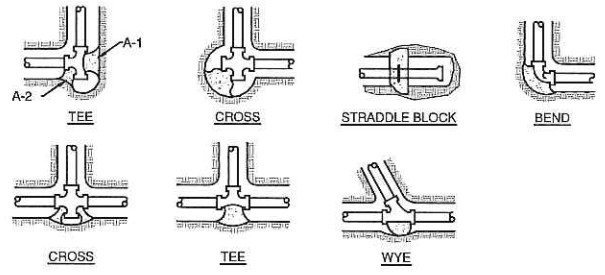


VALVE BOX DETAIL

N.T.S.

FITTING SIZE	TEE, WYE DEAD END OR HYDRANT	(HORIZONTAL) BEARING AREA OF THRUST BLOCKS IN SQUARE FEET					
		STRADDLE BLOCK	90° BEND OR PLUGGED CROSS	TEE PLUGGED ON RUN	45° BEND	22-1/2° BEND	11-1/4° BEND
4	1.0	1.6	1.4	1.9	1.4	1.0	---
6	2.1	3.7	3.0	4.3	3.0	1.6	1.0
8	3.8	6.5	5.3	7.6	5.4	2.9	1.5
10	5.9	10.2	8.4	11.8	8.4	4.6	2.4
12	8.5	14.7	12.0	17.0	12.0	6.6	3.4
14	11.5	---	16.3	23.0	16.3	8.9	4.6
16	15.0	26.1	21.3	30.0	21.3	11.6	6.0
18	19.0	---	27.0	39.0	27.0	14.6	7.6
20	23.5	40.8	33.3	47.0	33.3	18.1	9.4
24	34.0	58.8	48.0	68.0	48.0	26.2	13.6

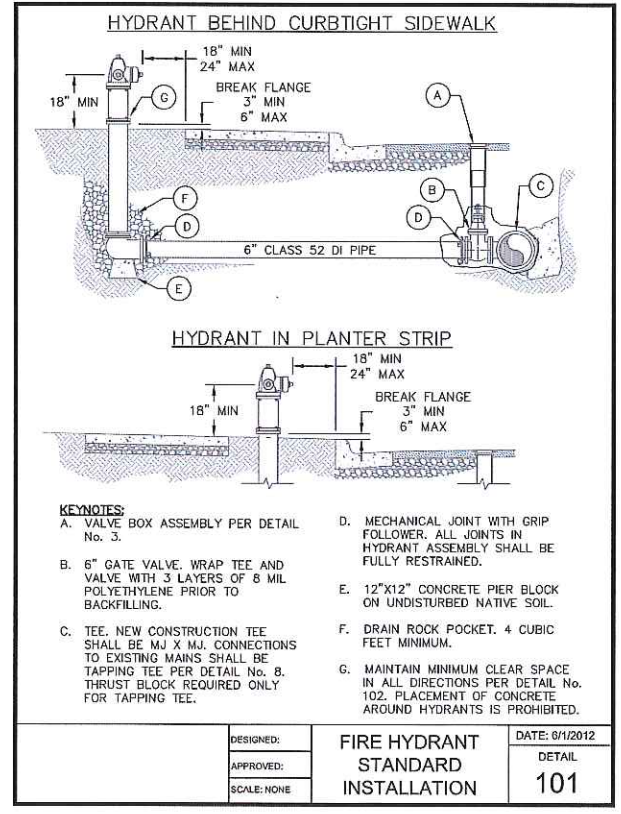
NOTE: ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 2,000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE/150) X (2,000/SOIL BEARING STRESS) X (TABLE VALUE)



- NOTES:
- CONCRETE BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
 - ALL CONCRETE TO BE CLASS 3000 MINIMUM.
 - INSTALL ISOLATION MATERIAL BETWEEN PIPE AND/OR FITTINGS BEFORE POURING CONCRETE BLOCKING.
 - CONCRETE SHALL BE KEPT CLEAR OF ALL JOINTS AND ACCESSORIES.
 - THIS DETAIL ALSO APPLIES TO VERTICAL UP BENDS, EXCEPT BEARING AREA SHALL BE THE BOTTOM OF THE TRENCH.

THRUST BLOCKING DETAIL

N.T.S.



- KEYNOTES:
- VALVE BOX ASSEMBLY PER DETAIL No. 3.
 - 6" GATE VALVE. WRAP TEE AND VALVE WITH 3 LAYERS OF 8 MIL POLYETHYLENE PRIOR TO BACKFILLING.
 - TEE. NEW CONSTRUCTION TEE SHALL BE MJ X MJ. CONNECTIONS TO EXISTING MAINS SHALL BE TAPPING TEE PER DETAIL No. 8. THRUST BLOCK REQUIRED ONLY FOR TAPPING TEE.
 - MECHANICAL JOINT WITH GRIP FOLLOWER. ALL JOINTS IN HYDRANT ASSEMBLY SHALL BE FULLY RESTRAINED.
 - 12"x12" CONCRETE PIER BLOCK ON UNDISTURBED NATIVE SOIL.
 - DRAIN ROCK POCKET. 4 CUBIC FEET MINIMUM.
 - MAINTAIN MINIMUM CLEAR SPACE IN ALL DIRECTIONS PER DETAIL No. 102. PLACEMENT OF CONCRETE AROUND HYDRANTS IS PROHIBITED.

DESIGNED:	FIRE HYDRANT STANDARD INSTALLATION	DATE: 8/1/2012
APPROVED:		DETAIL 101
SCALE: NONE		

Notes and Details

Pacific Fiber Products
Fire Line Extension
Molalla, Oregon

Horizontal Scale: ---
Vertical Scale: ---
Datum: ---
Survey Book: ---
Project Phase: ---

Project Milestone: ---

Revision Date:
March 18, 2015



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Project Manager: JJJ
Designed by: JJJ
CAD by: KR
Checked by: JJJ
Approved by: ---

Project Number:
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Drawing Number:
D1

Sheet Number:
4 of 4

DRAWING: 1: CIVIL 3D PROJECTS/104104/ACT CONTRACT DRAWINGS/DETAILS/DWG. LAYOUT TAB: D1. PLOT DATE: 3/17/2015 1:57:14 PM. DRAWING SAVE DATE: 3/17/2015 1:47:38 PM. PLOTTED BY: JUDIA PROFILE: GIBBS & OLSON STANDARD - CDD IMPERIAL 2014. PLOT DEVICE: GIBBS & OLSON - DWG TO PDF.PCL. PLOT STYLE TABLE: GIBBS-OLSON STANDARD MONOCHROME.CTB. PAPER SIZE: GIBBS & OLSON - PLANSHEET D SIZE (34.00 X 22.00 INCHES)

