

Pacific Fibre Products Fire Line Extension Molalla, Oregon

Project Directory

Owner

Pacific Fibre Products
Longview, WA 98632
Phone: (360) 577-7112
Project Manager: James Bobst

Civil Engineers

Gibbs & Olson, Inc.
Jerrit Jolma, P.E.
1157 3rd Avenue, Suite 219
Longview, Washington 98632
Phone: (360) 425-0991



Vicinity Map
Scale: 1" = 500'

General
Cover Sheet

Pacific Fibre Products
Fire Line Extension
Molalla, Oregon

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

Project Milestone: ----

Revision Date:
March 31, 2015



3/31/2015
G
GIBBS & OLSON
www.gibbs-olson.com

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

Project Number:
0812.0104

Drawing Number:
G1

Sheet Number:
1 of 4



**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_3D\PROJECTS\08120104\CONTRACT DRAWINGS\GENERAL\DWG_LAYOUT TAB: 02_PLOT DATE: 3/31/2015 3:58:33 PM, DRAWING SAVE DATE: 3/18/2015 3:34:49 PM, PLOTTED BY: KROGERS
 PROFILE: GIBBS & OLSON STANDARD, 2015, PLOT DEVICE: GIBBS & OLSON - DWG TO PDF.PC3, PLOT STYLE TABLE: GIBBS-OLSON STANDARD MONOCHROME.CTB, PAPER SIZE: GIBBS & OLSON - PLANSHEET D SIZE (34.00 X 22.00 INCHES)

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	OFFSET	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
CSCC	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 Water Line

Proposed Symbols

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	3077.9993	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 31, 2015



3/31/2015



GIBBS & OLSON
 www.gibbs-olson.com

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

Project Number:
0812.0104

Drawing Number:
G2

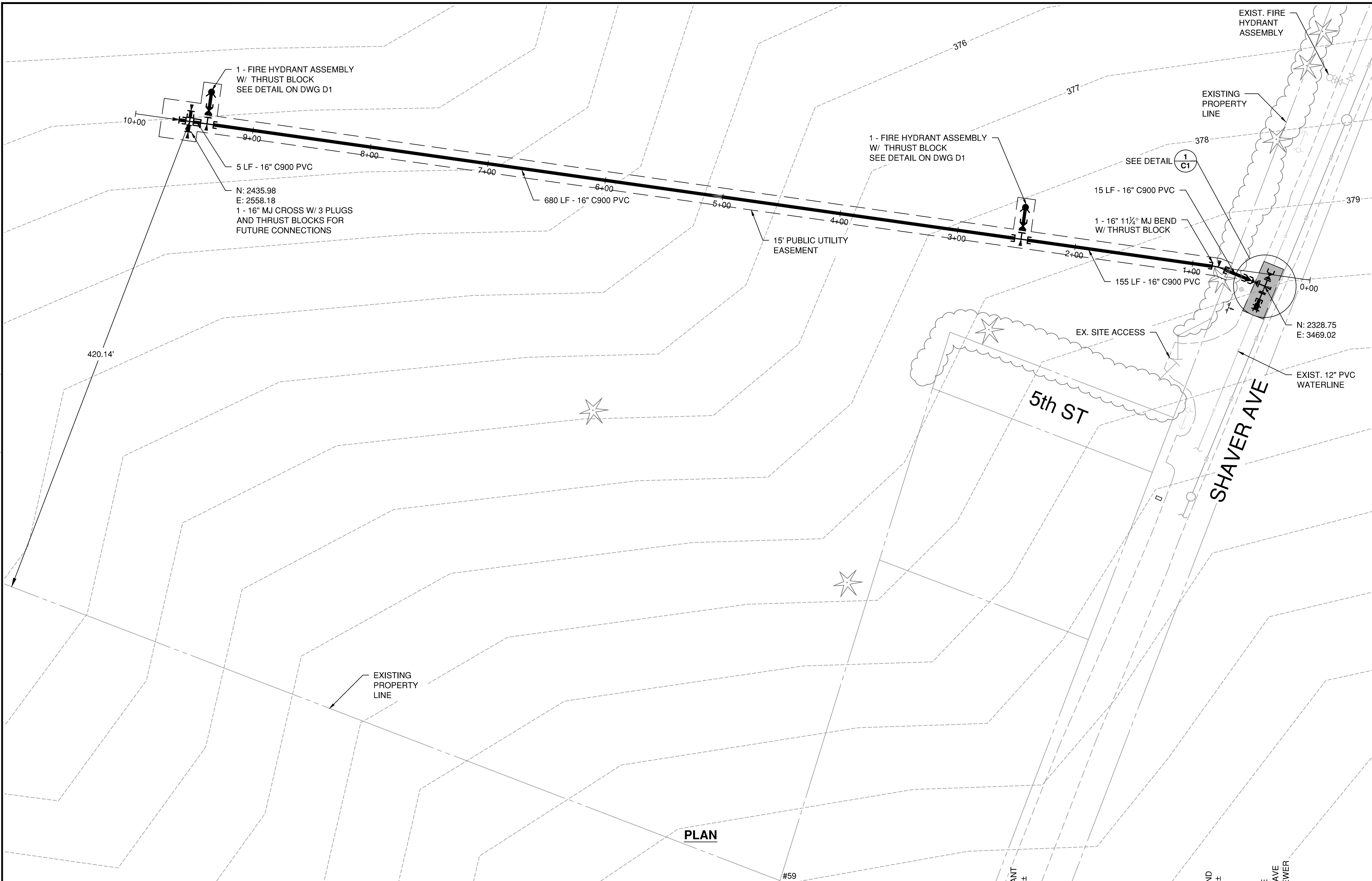
Sheet Number:
2 of 4



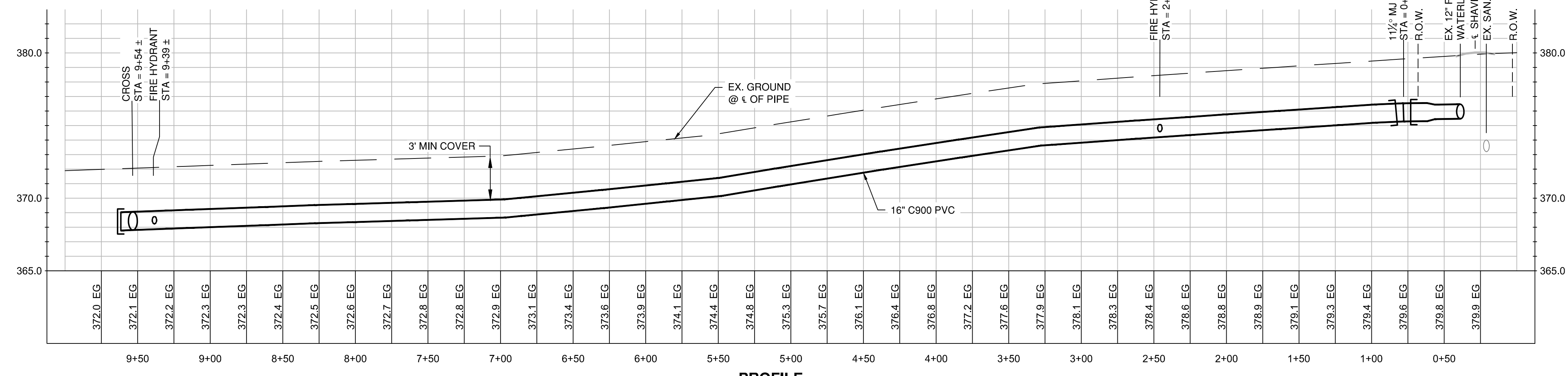
Know what's below.
 Call 811 before you dig.

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.

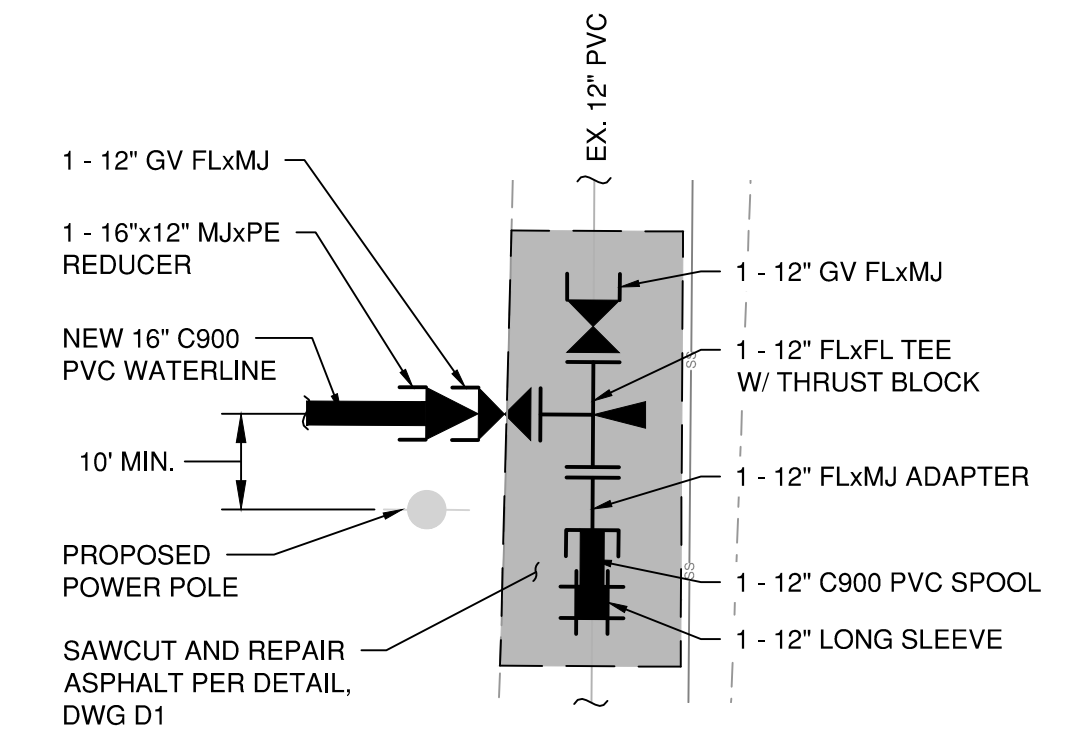
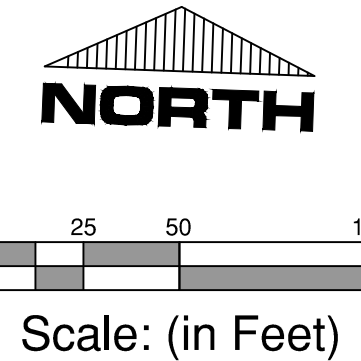
DRAWING: T:\CIVIL\30\PROJECTS\08120104\ACT\CONTRACT DRAWINGS\WATER\DWG LAYOUT TAB: C1 50, PLOT DATE: 4/1/2015 8:36:01 AM, DRAWING SAVE DATE: 3/31/2015 4:09:49 PM, PLOTTED BY: KRUGERS
 PROFILE: GIBBS & OLSON STANDARD - E30 IMPERIAL, 2015, PLOT DEVICE: GIBBS & OLSON - DWG TO PDF PLOT, PLOT STYLE: TABLE: GIBBS-OLSON STANDARD MONOCHROME.ctb, PAPER SIZE: GIBBS & OLSON - PLANSHEET D SIZE (34.00 X 22.00 INCHES)



PLAN



PROFILE
 HORIZONTAL SCALE: 1"=50'
 VERTICAL SCALE: 1"=5'



CONNECTION DETAIL
 N.T.S.

Site Plan	----	----
Pacific Fibre Products		
Fire Line Extension		
Molalla, Oregon		

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

Revision Date:
March 31, 2015



3/31/2015
GIBBS & OLSON
 www.gibbs-olson.com

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

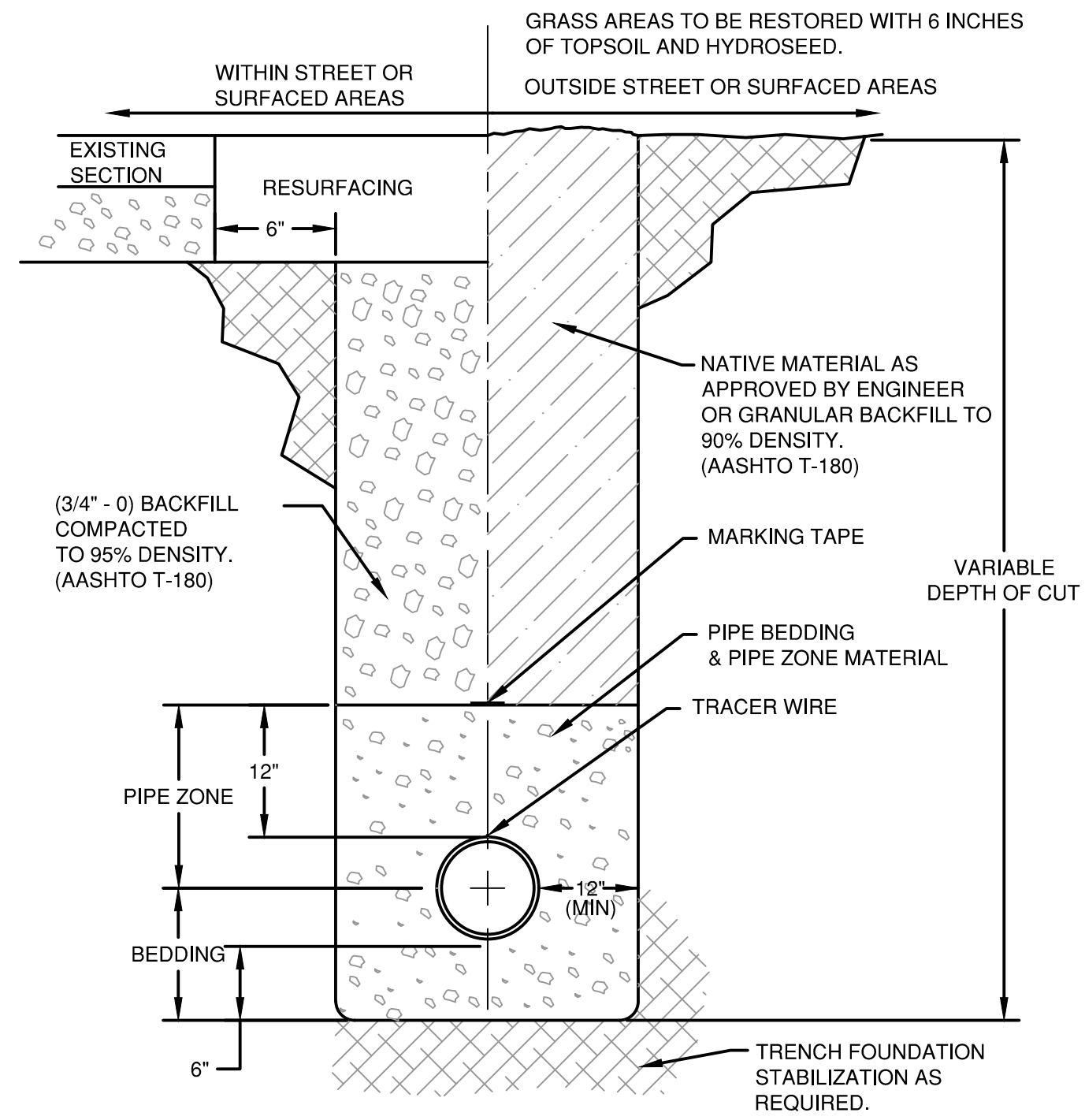
Project Number:
0812.0104

Drawing Number:
C1

Sheet Number:
3 of 4

Water System Notes:

- SPECIFICATIONS FOR ALL MATERIALS AND CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE 2015 ODOT/APWA SPECIFICATIONS FOR CONSTRUCTION.
- 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 PRESSURE CLASS 235 DR18 WITH GASKETS MEETING ASTM F477 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.
- CONTRACTOR SHALL POTHOLE 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 AASHTO T-180 AND BE COMPACTED TO A MINIMUM OF 95% MDD WITHIN STREET SURFACES AND 90% MDD OUTSIDE OF STREET SURFACES, PER TYPICAL TRENCH DETAIL.
- 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 AND TESTED BY A THIRD PARTY TESTING COMPANY.
- NO CONNECTIONS WILL BE ALLOWED TO BE MADE 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 WITH THE CITY OF MOLALLA STANDARD 3.03 - WATERLINE TESTING.
- 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.



- 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.

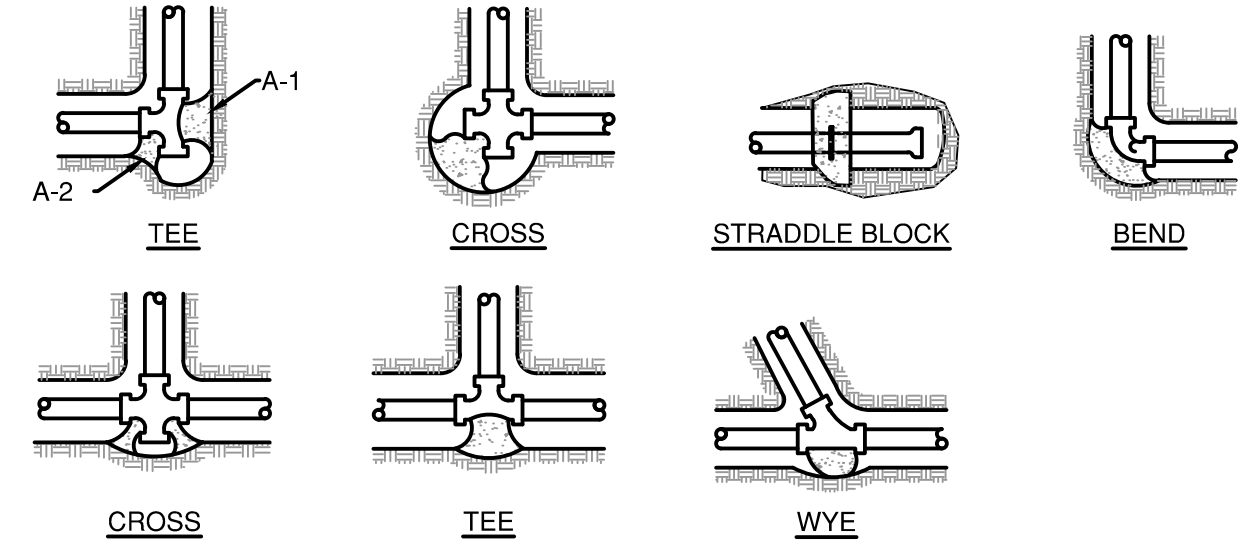
TYPICAL TRENCH DETAIL

N.T.S.

(HORIZONTAL)
BEARING AREA OF THRUST BLOCKS IN SQUARE FEET

FITTING SIZE	TEE, WYE DEAD END OR HYDRANT	STRADDLE BLOCK	90° BEND OR PLUGGED CROSS	TEE PLUGGED ON RUN		45° BEND	22-1/2° BEND	11-1/4° BEND
				A-1	A-2			
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	1.0
10	5.9	10.2	8.4	11.8	8.4	4.6	2.4	1.2
12	8.5	14.7	12.0	17.0	12.0	6.6	3.4	1.7
14	11.5	---	16.3	23.0	16.3	8.9	4.6	2.3
16	15.0	26.1	21.3	30.0	21.3	11.6	6.0	3.0
18	19.0	---	27.0	38.0	27.0	14.6	7.6	3.8
20	23.5	40.8	33.3	47.0	33.3	18.1	9.4	4.7
24	34.0	58.8	48.0	68.0	48.0	26.2	13.6	6.8

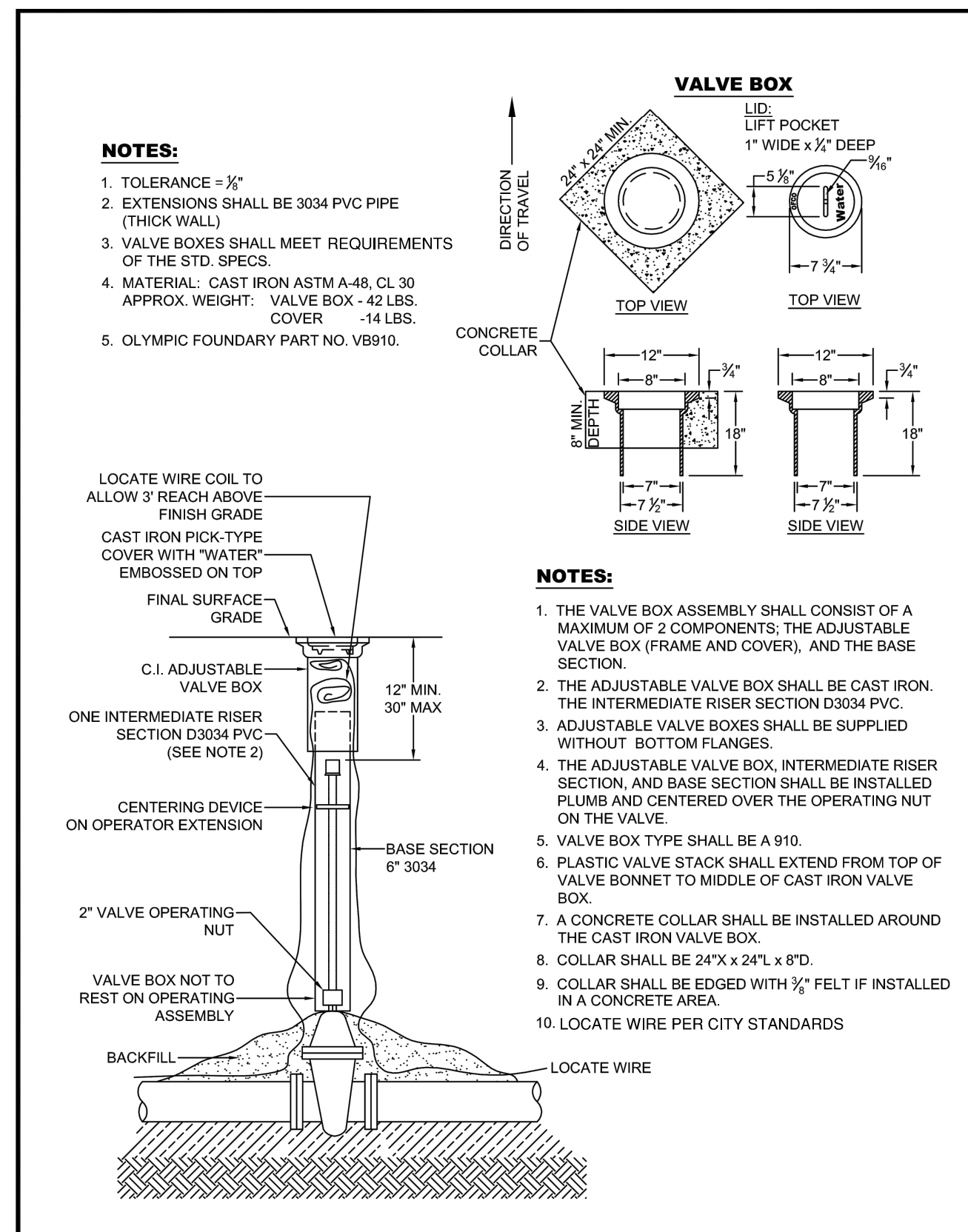
NOTE:
ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 2,000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION:
BEARING AREA = (TEST PRESSURE/150) X (2,000/SOIL BEARING STRESS)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



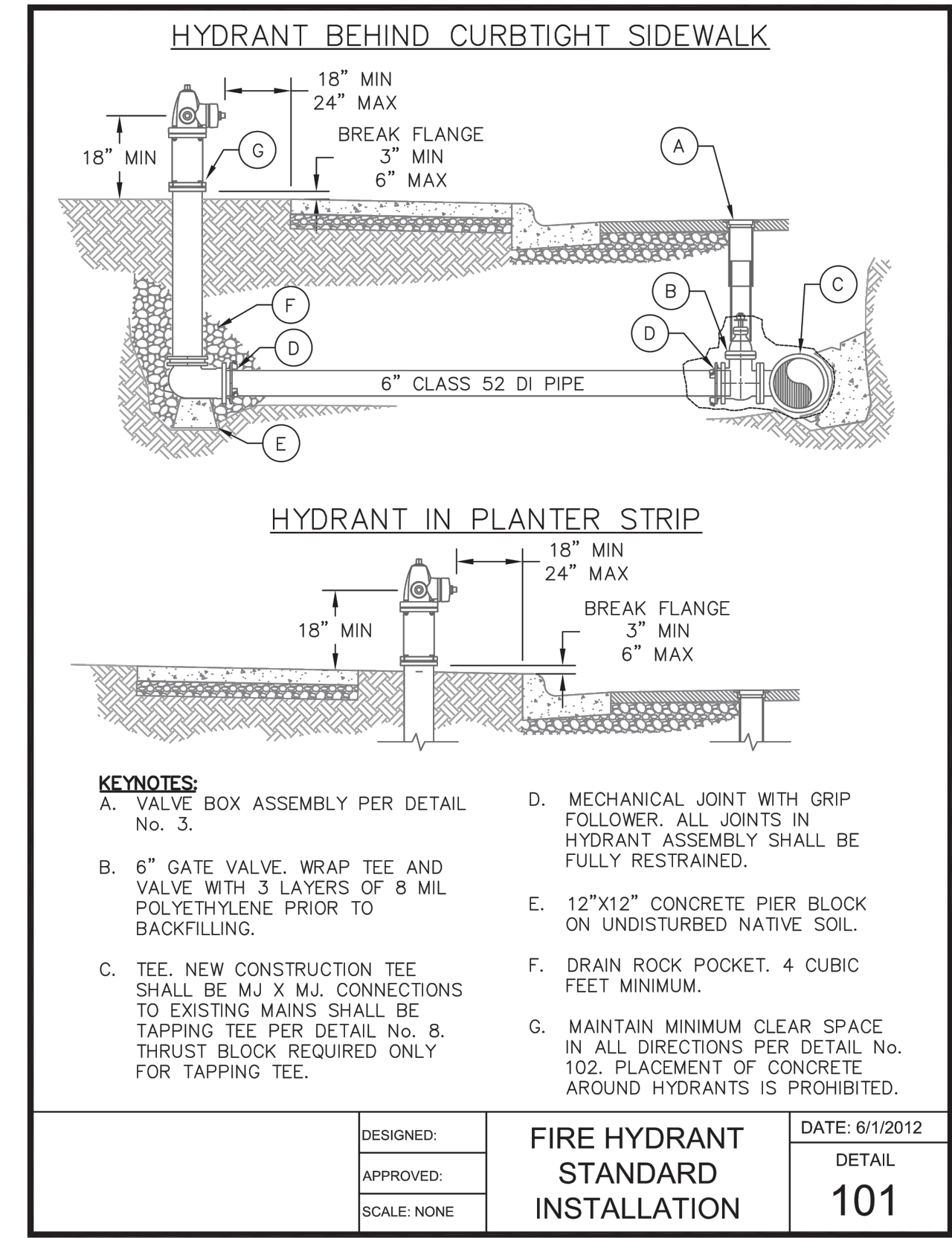
- NOTES:
- TOLERANCE = 1/8"
 - EXTENSIONS SHALL BE 3034 PVC PIPE (THICK WALL)
 - VALVE BOXES SHALL MEET REQUIREMENTS OF THE STD. SPECS.
 - MATERIAL: CAST IRON ASTM A-48, CL 30 APPROX. WEIGHT: VALVE BOX - 42 LBS. COVER - 14 LBS.
 - OLYMPIC FOUNDRY PART NO. V9910.

NOTES:

- THE VALVE BOX ASSEMBLY SHALL CONSIST OF A MAXIMUM OF 2 COMPONENTS, THE ADJUSTABLE VALVE BOX (FRAME AND COVER), AND THE BASE SECTION.
- THE ADJUSTABLE VALVE BOX SHALL BE CAST IRON. THE INTERMEDIATE RISER SECTION D3034 PVC.
- ADJUSTABLE VALVE BOXES SHALL BE SUPPLIED WITHOUT BOTTOM FLANGES.
- THE ADJUSTABLE VALVE BOX, INTERMEDIATE RISER SECTION, AND BASE SECTION SHALL BE INSTALLED PLUMB AND CENTERED OVER THE OPERATING NUT ON THE VALVE.
- VALVE BOX TYPE SHALL BE A 910.
- PLASTIC VALVE STACK SHALL EXTEND FROM TOP OF VALVE BONNET TO MIDDLE OF CAST IRON VALVE BOX.
- A CONCRETE COLLAR SHALL BE INSTALLED AROUND THE CAST IRON VALVE BOX.
- COLLAR SHALL BE 24" X 24" X 8"D.
- COLLAR SHALL BE EDGED WITH 3/4" FELT IF INSTALLED IN A CONCRETE AREA.
- LOCATE WIRE PER CITY STANDARDS

VALVE BOX DETAIL

N.T.S.



KEYNOTES:

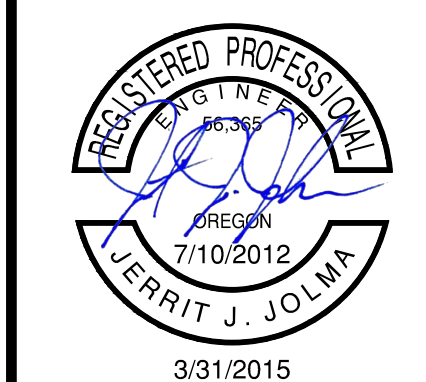
- VALVE BOX ASSEMBLY PER DETAIL No. 3.
- 6" GATE VALVE, WRAP TEE AND VALVE WITH 3 LAYERS OF 8 MIL POLYETHYLENE PRIOR TO BACKFILLING.
- NEW CONSTRUCTION TEE SHALL BE MJ X MJ. CONNECTIONS TO EXISTING MAINS SHALL BE TAPPING TEE PER DETAIL No. 8. THRUST BLOCK REQUIRED ONLY FOR TAPPING TEE.
- MECHANICAL JOINT 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: 6/1/2012
APPROVED:		DETAIL
SCALE: NONE		101

DRAWING: T:\CIVIL\30\PROJECTS\08120104\CONTRACT DRAWINGS\DETAILS.DWG, LAYOUT TAB: D1, PLOT DATE: 3/17/2015 11:57:14 PM, DRAWING SAVE DATE: 3/17/2015 1:47:38 PM, PLOTTED BY: JOLIMA PROFILE: GIBBS & OLSON STANDARD 2014, PLOT DEVICE: GIBBS & OLSON - DWG TO PDF.PC3, PLOT STYLE: GIBBS-OLSON STANDARD MONOCHROME.ctb, PAPER SIZE: GIBBS & OLSON - PLANISHEET D SIZE (34.00 X 22.00 INCHES)

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 31, 2015



3/31/2015
GIBBS & OLSON
www.gibbs-olson.com

Project Manager: JJJ
Designed by: JJJ
CAD by: KR
Checked by: JJJ
Approved by: ---
Project Number:
0812.0104
Drawing Number:
D1
Sheet Number:
4 of 4