

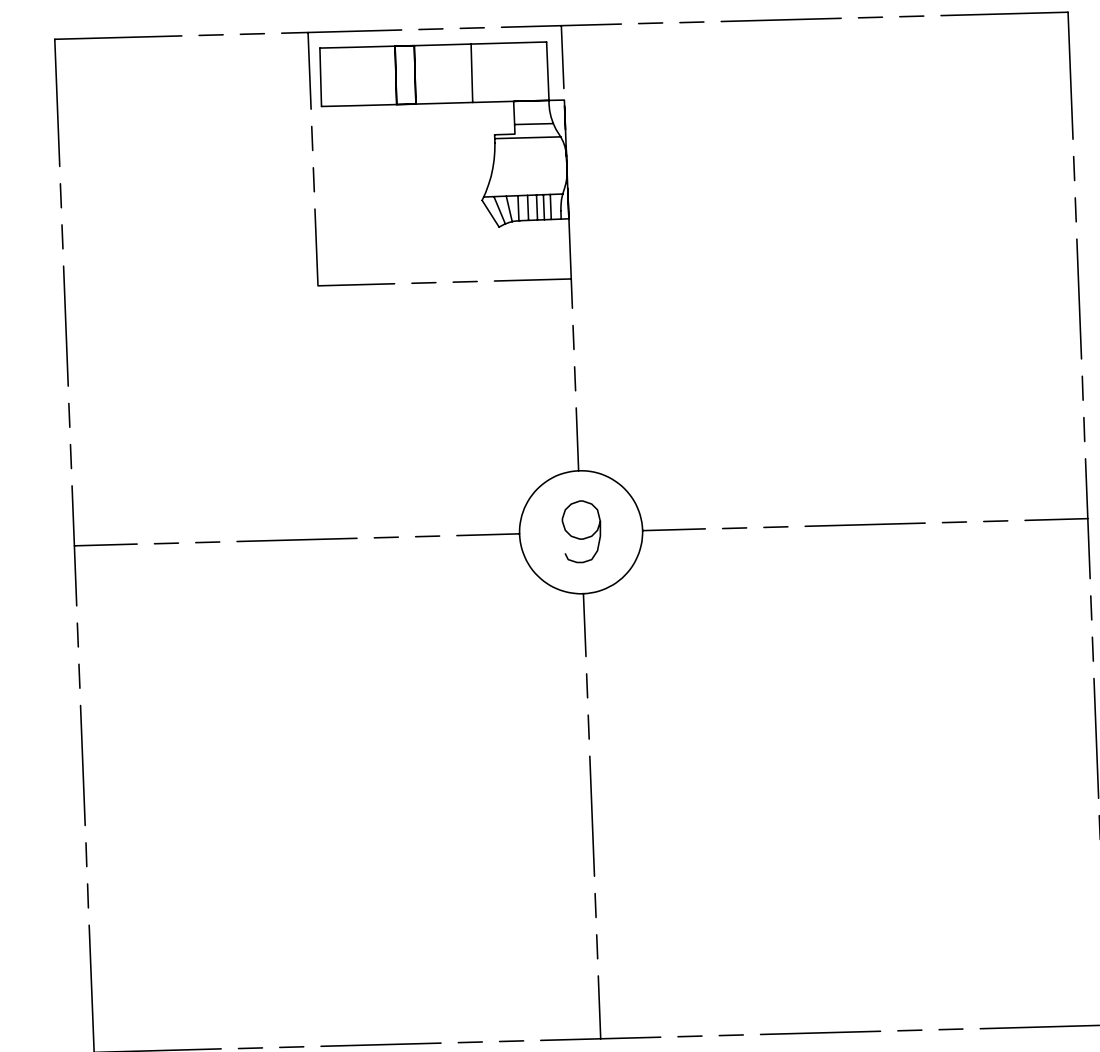
# US 10 FARGO

## CONSTRUCTION DRAWINGS FOR PIPELINE RELOCATION

WEST FARGO, NORTH DAKOTA

R 139 N

R 49 W



### LOCATION MAP

NE 1/4, OF NW 1/4, SEC. 9, T139N, R49W  
CASS COUNTY, NORTH DAKOTA

#### Bill of Materials:

ITEM	SIZE	MATERIAL DESCRIPTION	QUANTITY	
1	8"	PIPE, 8 5/8" O.D., 0.322" W.T., API 5L-X52 PSL2, 14-16 MIL FBE, PEB 30 DEG.	2000	FT
2	8"	PIPE, 8 5/8" O.D., 0.322" W.T., API 5L-X52 PSL2, 14-16 MIL FBE, 20-40 MIL ARO, PEB 30 DEG.	560	FT
3	6"	PIPE, 6 5/8" O.D., 0.280" W.T., API 5L-X52 PSL2, 14-16 MIL FBE, PEB 30 DEG.	2080	FT
4	6"	PIPE, 6 5/8" O.D., 0.280" W.T., API 5L-X52 PSL2, 14-16 MIL FBE, 20-40 MIL ARO, PEB 30 DEG.	560	FT
5	8"	BEND, INDUCTION, 8 5/8" O.D., 0.322" W.T. (MIN), 45 DEG, 6D BEND, API 5L-X52 PSL2, 14-16 MIL FBE, 2'-0" FRONT TANGENT (MIN), 2'-0" REAR TANGENT (MIN), PEB 30 DEG.	8	EA
6	8"	BEND, INDUCTION, 8 5/8" O.D., 0.322" W.T. (MIN), 33 DEG, 6D BEND, API 5L-X52 PSL2, 14-16 MIL FBE, 2'-0" FRONT TANGENT (MIN), 2'-0" REAR TANGENT (MIN), PEB 30 DEG.	1	EA
7	8"	BEND, INDUCTION, 8 5/8" O.D., 0.322" W.T. (MIN), 30 DEG, 6D BEND, API 5L-X52 PSL2, 14-16 MIL FBE, 2'-0" FRONT TANGENT (MIN), 2'-0" REAR TANGENT (MIN), PEB 30 DEG.	7	EA
8	6"	BEND, INDUCTION, 6 5/8" O.D., 0.280" W.T. (MIN), 45 DEG, 6D BEND, API 5L-X52 PSL2, 14-16 MIL FBE, 2'-0" FRONT TANGENT (MIN), 2'-0" REAR TANGENT (MIN), PEB 30 DEG.	8	EA
9	6"	BEND, INDUCTION, 6 5/8" O.D., 0.280" W.T. (MIN), 43 DEG, 6D BEND, API 5L-X52 PSL2, 14-16 MIL FBE, 2'-0" FRONT TANGENT (MIN), 2'-0" REAR TANGENT (MIN), PEB 30 DEG.	1	EA
10	6"	BEND, INDUCTION, 6 5/8" O.D., 0.280" W.T. (MIN), 30 DEG, 6D BEND, API 5L-X52 PSL2, 14-16 MIL FBE, 2'-0" FRONT TANGENT (MIN), 2'-0" REAR TANGENT (MIN), PEB 30 DEG.	7	EA

**FOR CLIENT REVIEW & APPROVAL**  
 DATE: 04-03-2012

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**Index Of Drawings**

1. COVER SHEET
2. P&P 1
3. P&P 2
4. P&P 3
5. P&P 4

#### General Notes:

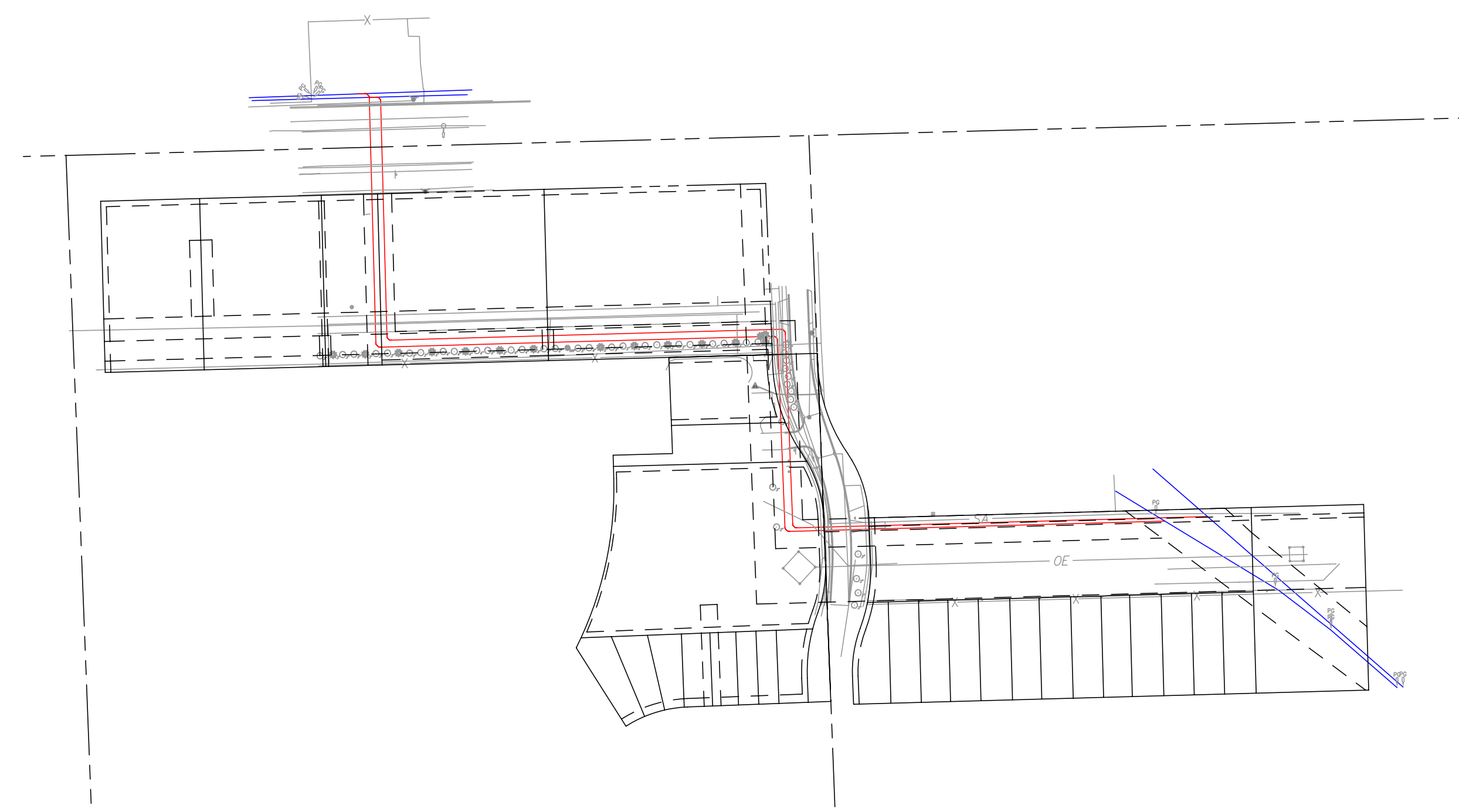
1. INFORMATION CONTAINED ON THESE DRAWINGS MUST BE CONSIDERED PROJECT SPECIFIC AND MUST NOT BE USED FOR ANY OTHER PURPOSE.
2. INFORMATION PERTAINING TO NEW ROADWAYS, EXISTING LINE LOCATIONS, RIGHT-OF-WAY BOUNDARIES, AND ALL ELEVATION DATA MUST BE CONSIDERED AS APPROXIMATE ONLY.
3. CONTRACTOR MUST FIELD-VERIFY ALL INFORMATION SHOWN PRIOR TO CONSTRUCTION.
4. COMPANY TO FURNISH SUBCONTRACTOR TO PERFORM NON-DESTRUCTIVE TESTING OF ALL WELDS, PER COMPANY STANDARDS.
5. REFER TO PROJECT PLAN FOR SITE ACCESS REQUIREMENTS AND EASEMENT RESTRICTIONS.
6. CONTRACTOR TO FURNISH AND MAINTAIN SAFETY AND SECURITY MEASURES AS NECESSARY TO ENSURE PUBLIC SAFETY.
7. APPROPRIATE EROSION AND SILTATION CONTROLS MUST BE USED, AND ALL EXPOSED SOIL AND OTHER FILLS MUST BE PERMANENTLY STABILIZED AT THE EARLIEST PRACTICAL DATE. ANY TYPE OF LAND DISTURBANCE PERMIT THAT MAY BE REQUIRED SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO BEGINNING ANY OF THE CONSTRUCTION ACTIVITIES. ALL CONTROLS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEPARTMENT OF NATURAL RESOURCES AND/OR LOCAL GOVERNING AUTHORITY.
8. PIPELINE RELOCATION WILL PROCEED ROAD CONSTRUCTION. METHOD OF CONSTRUCTION SHALL BE OPEN TRENCH.

#### Utility Notes:

1. THE LOCATIONS OF BURIED AND ABOVE GROUND UTILITIES SHOWN ARE APPROXIMATE, ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE COMPANY, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE.
2. BURIED AND ABOVE GROUND UTILITY LOCATION, IDENTIFICATION, MARKING, AND PROTECTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
3. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND COMPANY. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES REMAINS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
4. CONTRACTOR MUST CONTACT NORTH DAKOTA ONE CALL SYSTEM, INC. 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION. NORTH DAKOTA ONE CALL SYSTEM, INC. PHONE NUMBER 1-800-795-0555 OR 811.

#### Construction Notes:

1. ALL WORK PERFORMED BY CONTRACTOR/SUBCONTRACTOR, INCLUDING TASKS THAT AFFECT THE OPERATIONS OR INTEGRITY OF THE PIPELINE (COVERED TASKS) PER THE DEFINITIONS SET FORTH IN DOT REGULATIONS 49 CFR PARTS 192 OR 195 (OPERATOR QUALIFICATIONS REQUIREMENTS), MUST BE PERFORMED OR SUPERVISED BY QUALIFIED INDIVIDUALS AS DEFINED IN SUCH OO REQUIREMENTS. CONTRACTOR AGREES TO FURNISH COMPANY REPRESENTATIVE WITH ALL OO DOCUMENTATION PRIOR TO START OF WORK.
2. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH ALL COMPANY STANDARDS AND SHALL CONFORM TO ANSI B31.4 LATEST EDITION.
3. THE EXCAVATIONS FOR THIS PROJECT SHALL BE CARRIED OUT IN ACCORDANCE WITH O.S.H.A. REGULATIONS. PROVISIONS FOR WORKER PROTECTION WITHIN EXCAVATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
4. CONTRACTOR TO EXCAVATE AND RESTORE DISTURBED AREAS TO ORIGINAL CONDITIONS, INCLUDING TOPSOIL CONSERVATION, DOUBLE DITCHING PROVISIONS, ETC. SEE BID DOCUMENTS/SCOPE OF WORK FOR PROJECT-SPECIFIC REQUIREMENTS.
5. REMOVAL, RELOCATION, OR REPAIR OF FIELD TILE SHALL BE PERFORMED BY CONTRACTOR.
6. CONTRACTOR SHALL INSTALL CATHODIC PROTECTION TEST STATIONS AT LOCATIONS SHOWN OR AS DIRECTED BY COMPANY REPRESENTATIVE.
7. THE EXISTING PIPELINE WILL BE MARKED BY COMPANY. VEHICLE AND EQUIPMENT CROSSINGS OF THE PIPELINE SHALL BE KEPT TO A MINIMUM AND SHALL ONLY BE IN THE DESIGNATED AREA(S).
8. MINIMUM DEPTH OF PIPE COVER IS 5 FEET, UNLESS OTHERWISE NOTED.
9. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO ANY FABRICATION.
10. CONTRACTOR TO MAKE 1 DEGREE TO 1 1/2 DEGREE FIELD BENDS WITH ONE PIPE DIAMETER MINIMUM SPACING BETWEEN BENDS AS REQUIRED FOR FINAL ALIGNMENT.
11. CONTRACTOR TO EXPOSE EXISTING LINE(S) AS REQUIRED FOR TIE-IN OR FIELD BEND(S) FOR FINAL ALIGNMENT.
12. CONTRACTOR TO CUT, CAP AND ABANDON CARRIER AND/OR CASING PIPE AS SPECIFIED.
13. CONTRACTOR TO REMOVE AND PROPERLY DISPOSE OF THE CARRIER/CASING PIPE THAT IS RECLAIMED BY THIS PROJECT AS SPECIFIED.
14. CONTRACTOR TO CUT, CAP, AND FILL EXISTING CASING/CARRIER PIPE TO BE ABANDONED IN PLACE WITH APPROVED FILL (60 PSI MIN. TEST @ 28 DAYS) AS SPECIFIED.
15. CONTRACTOR TO BACK BEVEL PIPE FOR BUTT WELDING AS NECESSARY.
16. CONTRACTOR TO INSTALL TOR'S AS SPECIFIED.
17. CONTRACTOR TO VERIFY THAT MINIMUM PIPE I.D. FOR PIPE, BENDS, AND FITTINGS IS MET AND SHALL RUN AN APPROPRIATE SIZING PLATE.
18. CONTRACTOR TO TRANSPORT ALL EXCESS NEW PIPE (FULL JOINTS ONLY) TO A SPECIFIED COMPANY FACILITY.
19. CONTRACTOR TO DISPOSE OF ALL NEW AND USED PIPE SCRAPS AT A NON-COMPANY FACILITY.
20. AVAILABLE PIPELINE DATA INDICATES EXISTING PIPE MAY BE COATED WITH COAL TAR COATING. CONTRACTOR TO FIELD VERIFY COATING ON EXISTING PIPE AND INSTALL CORRESPONDING TIE-IN GIRTH WELD COATING PER COMPANY STANDARD. CONTRACTOR SHALL ASSUME ALL COAL TAR COATING TO BE ASBESTOS-CONTAINING AND TREAT PER COMPANY STANDARD.
21. CONTRACTOR SHALL MAINTAIN, ON SITE, A SPILL CLEAN UP KIT IN THE EVENT OF A CONTAMINANT RELEASE FROM THE EQUIPMENT.
22. CONTRACTOR TO FURNISH WELDER NAMES FOR VERIFICATION OF QUALIFICATIONS BY COMPANY, OR WELDERS SHALL BE TESTED, PRIOR TO CONSTRUCTION. WELDER TESTING/QUALIFICATIONS SHALL BE PER COMPANY STANDARDS.



**1-800-795-0555 or 811**



DESIGN DATA
DESIGN CODE: ASME B31.4 DOT 195
MEASURED LENGTH: TRENCH : TOTAL : RECLAIM : DESIGN PRESSURES=

PIPE SPECIFICATIONS
EXISTING PIPE:
REROUTED PIPE:

LEGEND
EXISTING PIPELINE
PROPOSED PIPELINE
PIPELINE EASEMENT

**NOTES:**

1. THE MAGELLAN PIPELINE COMPANY, LP DOES NOT GUARANTEE THE ACCURACY OF THE INFORMATION SHOWN ON THIS DRAWING NOR DOES IT ACCEPT ANY RESPONSIBILITY FOR ERRORS IN LOCATION OR FOR FAILURE TO INDICATE ANY SUCH FACILITIES.
2. CONTRACTOR TO LOCATE AND VERIFY ELEVATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
3. A MINIMUM CLEARANCE OF 2 FEET BETWEEN THE PROPOSED PIPELINE AND ANY EXISTING FACILITIES SHALL BE MAINTAINED.
4. CONTRACTOR TO INSTALL WARNING TAPE 2' ABOVE PIPELINE IN TRENCHES.
5. ALL EXISTING PIPE BETWEEN TIE-IN POINTS SHALL BE RECLAIMED.

**ENGINEERS**  
**ARCHITECTS**  
**SURVEYORS**  
**SCIENTISTS**

**Farnsworth GROUP**  
20 ALLEN AVENUE, SUITE 200  
ST LOUIS, MISSOURI 63119  
(314) 962-7900 / (314) 962-1253 Fax

REVISION NUMBER	DRAWN BY	DATE REVISED	CHECKED BY	PROJECT ENGINEER	APPROVED BY
 <b>MAGELLAN PIPELINE COMPANY, L.P.</b>					
<b>RELOCATIONS OF THE 8" LINE AND 6" LINE FOR ROUTE 10 EXPANSION</b>					
CASS COUNTY			NORTH DAKOTA		
DRAWN BY	FGI/RCD	SCALE 1" = 200'	A.F.E. ?		
DATE DRAWN	03-27-12	DRAWING NO.			
CHECKED BY	FGI/RMD	<b>COVER</b>			
PROJECT ENGINEER	CRD				
APPROVED BY	??				