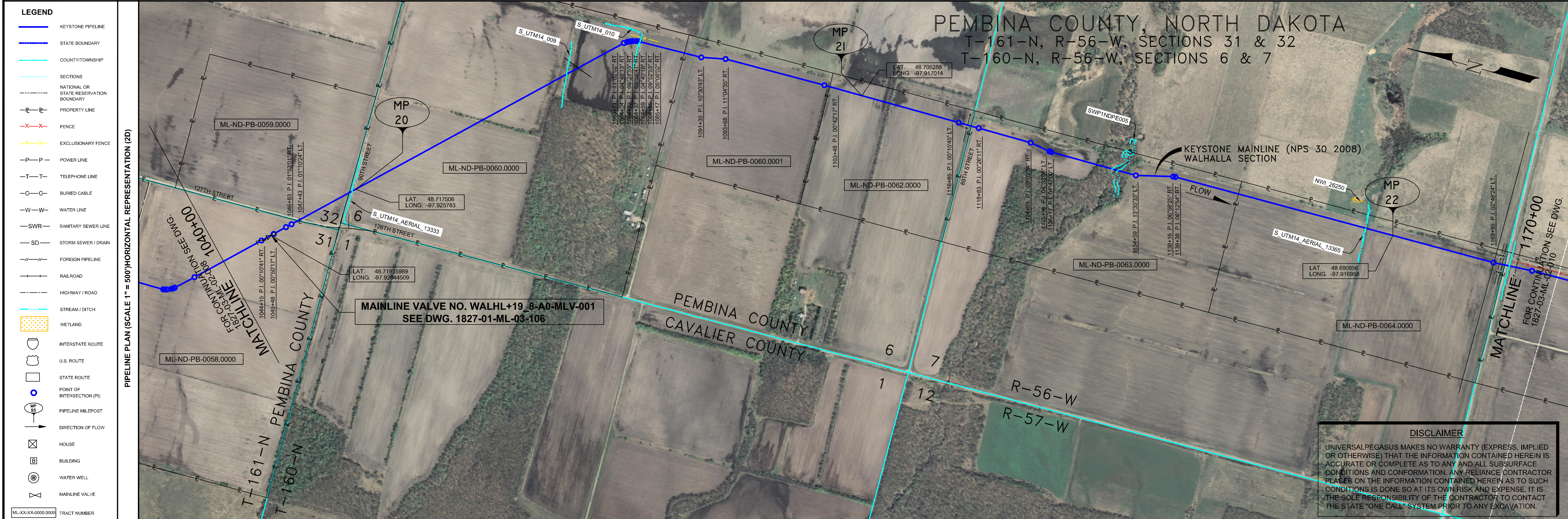


- GENERAL NOTES**
- 1) ALL CHAINAGES ARE IN FEET UNLESS OTHERWISE SPECIFIED.
  - 2) DATUM ELEVATION AND PROJECTION ARE BASED ON MEAN SEA LEVEL AND NAD 83.
  - 3) FIELD PIPE LOCATING REQUIRED TO DETERMINE PLACEMENT OF PIPELINE WITHIN PERMANENT EASEMENT.
  - 4) UNLESS OTHERWISE NOTED, 48 INCHES MINIMUM COVER EXCEPT 36 INCHES IN AREAS OF CONSOLIDATED ROCK.
  - 5) NO ACTUAL AS-BUILT GROUND SHOTS WERE TAKEN AT THIS LOCATION. THE PROFILE REPRESENTS A PROJECTION FROM SHOTS TAKEN AT 150' TO 250' INTERVALS.
  - 6) THE TYPE OF COATING APPLIED TO THE FIELD WELDS DURING THE ORIGINAL CONSTRUCTION WAS TWO COMPONENT LIQUID EPOXY. THE COATING PRODUCTS USED WERE DENSO 7200 OR SPC SP-2888.
  - 7) THE SUBSTANTIAL CONSTRUCTION COMPLETION DATE, BASED ON CALIPER PIG RUN, WAS AUGUST 11, 2009 FOR M.P. 0.30 TO M.P. 31.03 AND AUGUST 12, 2009 FOR M.P. 31.03 TO M.P. 66.63.
  - 8) ORIGINAL IN-SERVICE DATE OF THE KEYSTONE PIPELINE (PHASE 1): JUNE 30, 2010.
  - 9) CPS CALCULATION DATE: MAY 2010.
  - 10) ORION STATION SERIES NUMBER: 1182700.
  - 11) TO DETERMINE THE MILE POST AT A GIVEN LOCATION, ADD THE 3D STATION NUMBER FROM THIS SEGMENT TO STATION NUMBER 0+00 AND DIVIDE BY 5280.



**OPERATING AND TEST PRESSURE**

1. THE MAXIMUM OPERATING PRESSURE (MOP) IS 1400 PSIG.
2. THE MINIMUM TEST PRESSURE WAS 180 PSIG.

**BILL OF MATERIALS (3D)**

ITEM NO.	DESCRIPTION	QUANTITY
1	30" O.D. X 0.438" W.T. API-SLX-70 W/FBE COATING	7.497
2	30" O.D. X 0.388" W.T. API-SLX-70 W/FBE COATING	5.166
3	30" O.D. X 0.516" W.T. API-SLX-70 W/FBE COATING & ABRASION RESISTANT OVERCOAT	320
403	MAINLINE VALVE ASSEMBLY WALHL+19_8-A0-MLV-001 (+24)	1 EA

**REFERENCE DRAWINGS**

REF. NO.	DRAWING NO.	REV. NO.	DRAWING TITLE
403	1827-01-ML-03-106	03	MAINLINE VALVE WALHL+19_8-A0-MLV-001
	1827-01-ML-03-107	00	MAINLINE VALVE WALHL+19_8-A0-MLV-001

**REVISIONS**

NO.	DATE	REV. BY	CHKD. BY	APP'D. BY	ENV. APP'D.	DESCRIPTION
1	5/17/08	UEI	RDG	LAG	SEC	ISSUE FOR CONSTRUCTION
2	5/27/08	UEI	GTC	LAG	SEC	ADDED CROSSING DETAILS ISSUED FOR AS-BUILT
3	5/11/10	UEI				REPLACES COVERAGE OF IFC DRAWINGS 1827-03-ML-02-009 1827-03-ML-02-014 1827-03-ML-02-015

**ENGINEERING RECORDS**

DRAWN BY	INITIAL	DATE	ENV. APP'D.	INITIAL	DATE
UEI		09/12/21			

**PROFESSIONAL ENGINEER**

NAME	STATE	LIC#	REV#	DATE
LOYS A. GRAY, III	ND	PE5714		

**SCALE:** 0 125 250 500 Feet

**TransCanada**  
In business to deliver

KEYSTONE MAINLINE (NPS 30 2008) WALHALLA SECTION

FR# 1827 SPREAD 1A DISCIPLINE 03

**AS-BUILT ALIGNMENT**

M.P. 19.73 TO M.P. 22.19  
SHEET 9 OF 14 SHEETS  
STA. 1041+56 TO STA. 1171+63 (3D)  
DRAWING NO. 1827-03-ML-02-009 REV: 3

**LEGEND**

- KEYSTONE PIPELINE
- STATE BOUNDARY
- COUNTY/TOWNSHIP
- SECTIONS
- NATIONAL OR STATE RESERVATION BOUNDARY
- PROPERTY LINE
- FENCE
- EXCLUSIONARY FENCE
- POWER LINE
- TELEPHONE LINE
- BURIED CABLE
- WATER LINE
- SANITARY SEWER LINE
- STORM SEWER / DRAIN
- FOREIGN PIPELINE
- RAILROAD
- HIGHWAY / ROAD
- STREAM / DITCH
- WETLAND
- INTERSTATE ROUTE
- U.S. ROUTE
- STATE ROUTE
- POINT OF INTERSECTION (PI)
- PIPELINE MILEPOST
- DIRECTION OF FLOW
- HOUSE
- BUILDING
- WATER WELL
- MAINLINE VALVE

**PIPELINE SCHEMATIC**

**HORIZONTAL STATIONS (2D)**

1041+56	MATCHLINE	1041+56	
1042+02	5.0' C.V.R.	1044+15	P.I. 104705171 RT.
1046+03	FOR VALVE ASSEMBLY SEE DWG. 1827-01-ML-03-106	1044+97	WALHL+19_8-A0-MLV-001
1046+07	WALHL+19_8-A0-MLV-001	1045+11	WALHL+19_8-A0-MLV-001
1047+04	P.I. 104705171 RT.	1045+48	P.I. 104705171 RT.
1047+08	P.I. 104705171 RT.	1045+83	P.I. 104705171 RT.
1047+12	P.I. 104705171 RT.	1046+15	P.I. 104705171 RT.
1047+16	P.I. 104705171 RT.	1046+48	P.I. 104705171 RT.
1047+20	P.I. 104705171 RT.	1046+81	P.I. 104705171 RT.
1047+24	P.I. 104705171 RT.	1047+15	P.I. 104705171 RT.
1047+28	P.I. 104705171 RT.	1047+48	P.I. 104705171 RT.
1047+32	P.I. 104705171 RT.	1047+81	P.I. 104705171 RT.
1047+36	P.I. 104705171 RT.	1048+15	P.I. 104705171 RT.
1047+40	P.I. 104705171 RT.	1048+48	P.I. 104705171 RT.
1047+44	P.I. 104705171 RT.	1048+81	P.I. 104705171 RT.
1047+48	P.I. 104705171 RT.	1049+15	P.I. 104705171 RT.
1047+52	P.I. 104705171 RT.	1049+48	P.I. 104705171 RT.
1047+56	P.I. 104705171 RT.	1049+81	P.I. 104705171 RT.
1048+00	M.P. 20	1050+15	P.I. 104705171 RT.
1048+04	5.0' C.V.R.	1050+48	P.I. 1104351 RT.
1048+08	7.0' C.V.R.	1050+81	P.I. 1104351 RT.
1048+12		1051+15	P.I. 1032043 RT.
1048+16		1051+48	P.I. 1104351 RT.
1048+20		1051+81	P.I. 1104351 RT.
1048+24		1052+15	P.I. 1032043 RT.
1048+28		1052+48	P.I. 1104351 RT.
1048+32		1052+81	P.I. 1104351 RT.
1048+36		1053+15	P.I. 1032043 RT.
1048+40		1053+48	P.I. 1104351 RT.
1048+44		1053+81	P.I. 1104351 RT.
1048+48		1054+15	P.I. 1032043 RT.
1048+52		1054+48	P.I. 1104351 RT.
1048+56		1054+81	P.I. 1104351 RT.
1049+00		1055+15	P.I. 1032043 RT.
1049+04		1055+48	P.I. 1104351 RT.
1049+08		1055+81	P.I. 1104351 RT.
1049+12		1056+15	P.I. 1032043 RT.
1049+16		1056+48	P.I. 1104351 RT.
1049+20		1056+81	P.I. 1104351 RT.
1049+24		1057+15	P.I. 1032043 RT.
1049+28		1057+48	P.I. 1104351 RT.
1049+32		1057+81	P.I. 1104351 RT.
1049+36		1058+15	P.I. 1032043 RT.
1049+40		1058+48	P.I. 1104351 RT.
1049+44		1058+81	P.I. 1104351 RT.
1049+48		1059+15	P.I. 1032043 RT.
1049+52		1059+48	P.I. 1104351 RT.
1049+56		1059+81	P.I. 1104351 RT.
1050+00		1060+15	P.I. 1032043 RT.
1050+04		1060+48	P.I. 1104351 RT.
1050+08		1060+81	P.I. 1104351 RT.
1050+12		1061+15	P.I. 1032043 RT.
1050+16		1061+48	P.I. 1104351 RT.
1050+20		1061+81	P.I. 1104351 RT.
1050+24		1062+15	P.I. 1032043 RT.
1050+28		1062+48	P.I. 1104351 RT.
1050+32		1062+81	P.I. 1104351 RT.
1050+36		1063+15	P.I. 1032043 RT.
1050+40		1063+48	P.I. 1104351 RT.
1050+44		1063+81	P.I. 1104351 RT.
1050+48		1064+15	P.I. 1032043 RT.
1050+52		1064+48	P.I. 1104351 RT.
1050+56		1064+81	P.I. 1104351 RT.
1051+00		1065+15	P.I. 1032043 RT.
1051+04		1065+48	P.I. 1104351 RT.
1051+08		1065+81	P.I. 1104351 RT.
1051+12		1066+15	P.I. 1032043 RT.
1051+16		1066+48	P.I. 1104351 RT.
1051+20		1066+81	P.I. 1104351 RT.
1051+24		1067+15	P.I. 1032043 RT.
1051+28		1067+48	P.I. 1104351 RT.
1051+32		1067+81	P.I. 1104351 RT.
1051+36		1068+15	P.I. 1032043 RT.
1051+40		1068+48	P.I. 1104351 RT.
1051+44		1068+81	P.I. 1104351 RT.
1051+48		1069+15	P.I. 1032043 RT.
1051+52		1069+48	P.I. 1104351 RT.
1051+56		1069+81	P.I. 1104351 RT.
1052+00		1070+15	P.I. 1032043 RT.
1052+04		1070+48	P.I. 1104351 RT.
1052+08		1070+81	P.I. 1104351 RT.
1052+12		1071+15	P.I. 1032043 RT.
1052+16		1071+48	P.I. 1104351 RT.
1052+20		1071+81	P.I. 1104351 RT.
1052+24		1072+15	P.I. 1032043 RT.
1052+28		1072+48	P.I. 1104351 RT.
1052+32		1072+81	P.I. 1104351 RT.
1052+36		1073+15	P.I. 1032043 RT.
1052+40		1073+48	P.I. 1104351 RT.
1052+44		1073+81	P.I. 1104351 RT.
1052+48		1074+15	P.I. 1032043 RT.
1052+52		1074+48	P.I. 1104351 RT.
1052+56		1074+81	P.I. 1104351 RT.
1053+00		1075+15	P.I. 1032043 RT.
1053+04		1075+48	P.I. 1104351 RT.
1053+08		1075+81	P.I. 1104351 RT.
1053+12		1076+15	P.I. 1032043 RT.
1053+16		1076+48	P.I. 1104351 RT.
1053+20		1076+81	P.I. 1104351 RT.
1053+24		1077+15	P.I. 1032043 RT.
1053+28		1077+48	P.I. 1104351 RT.
1053+32		1077+81	P.I. 1104351 RT.
1053+36		1078+15	P.I. 1032043 RT.
1053+40		1078+48	P.I. 1104351 RT.
1053+44		1078+81	P.I. 1104351 RT.
1053+48		1079+15	P.I. 1032043 RT.
1053+52		1079+48	P.I. 1104351 RT.
1053+56		1079+81	P.I. 1104351 RT.
1054+00		1080+15	P.I. 1032043 RT.
1054+04		1080+48	P.I. 1104351 RT.
1054+08		1080+81	P.I. 1104351 RT.
1054+12		1081+15	P.I. 1032043 RT.
1054+16		1081+48	P.I. 1104351 RT.
1054+20		1081+81	P.I. 1104351 RT.
1054+24		1082+15	P.I. 1032043 RT.
1054+28		1082+48	P.I. 1104351 RT.
1054+32		1082+81	P.I. 1104351 RT.
1054+36		1083+15	P.I. 1032043 RT.
1054+40		1083+48	P.I. 1104351 RT.
1054+44		1083+81	P.I. 1104351 RT.
1054+48		1084+15	P.I. 1032043 RT.
1054+52		1084+48	P.I. 1104351 RT.
1054+56		1084+81	P.I. 1104351 RT.
1055+00		1085+15	P.I. 1032043 RT.
1055+04		1085+48	P.I. 1104351 RT.
1055+08		1085+81	P.I. 1104351 RT.
1055+12		1086+15	P.I. 1032043 RT.
1055+16		1086+48	P.I. 1104351 RT.
1055+20		1086+81	P.I. 1104351 RT.
1055+24		1087+15	P.I. 1032043 RT.
1055+28		1087+48	P.I. 1104351 RT.
1055+32		1087+81	P.I. 1104351 RT.
1055+36		1088+15	P.I. 1032043 RT.
1055+40		1088+48	P.I. 1104351 RT.
1055+44		1088+81	P.I. 1104351 RT.
1055+48		1089+15	P.I. 1032043 RT.
1055+52		1089+48	P.I. 1104351 RT.
1055+56		1089+81	P.I. 1104351 RT.
1056+00		1090+15	P.I. 1032043 RT.
1056+04		1090+48	P.I. 1104351 RT.
1056+08		1090+81	P.I. 1104351 RT.
1056+12		1091+15	P.I. 1032043 RT.
1056+16		1091+48	P.I. 1104351 RT.
1056+20		1091+81	P.I. 1104351 RT.
1056+24		1092+15	P.I. 1032043 RT.
1056+28		1092+48	P.I. 1104351 RT.
1056+32		1092+81	P.I. 1104351 RT.
1056+36		1093+15	P.I. 1032043 RT.
1056+40		1093+48	P.I. 1104351 RT.
1056+44		1093+81	P.I. 1104351 RT.
1056+48		1094+15	P.I. 1032043 RT.
1056+52		1094+48	P.I. 1104351 RT.
1056+56		1094+81	P.I. 1104351 RT.
1057+00		1095+15	P.I. 1032043 RT.
1057+04		1095+48	P.I. 1104351 RT.
1057+08		1095+81	P.I. 1104351 RT.
1057+12		1096+15	P.I. 1032043 RT.
1057+16		1096+48	P.I. 1104351 RT.
1057+20		1096+81	P.I. 1104351 RT.
1057+24		1097+15	P.I. 1032043 RT.
1057+28		1097+48	P.I. 1104351 RT.
1057+32		1097+81	P.I. 1104351 RT.
1057+36		1098+15	P.I. 1032043 RT.
1057+40		1098+48	P.I. 110435