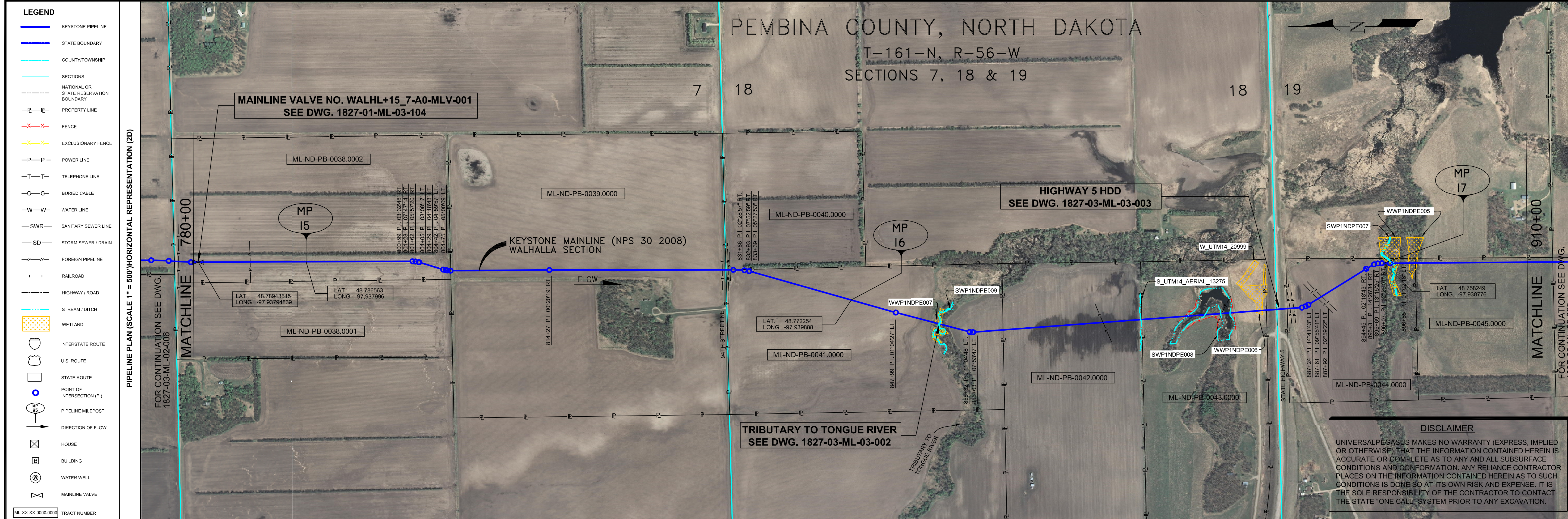


- GENERAL NOTES**
- 1) ALL CHAINAGES ARE IN FEET UNLESS OTHERWISE SPECIFIED.
 - 2) DATUM ELEVATION AND PROJECTION ARE BASED ON MEAN SEA LEVEL AND NAD 83.
 - 3) FIELD PIPE LOCATING REQUIRED TO DETERMINE PLACEMENT OF PIPELINE WITHIN PERMANENT EASEMENT.
 - 4) UNLESS OTHERWISE NOTED, 48 INCHES MINIMUM COVER 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. 66.93.
 - 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: 1162700.
 - 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 1440 PSIG.
 2. THE MINIMUM TEST PRESSURE WAS 900 PSIG.

BILL OF MATERIALS (3D)

ITEM NO.	DESCRIPTION	QUANTITY
1	30" O.D. X 0.438" W.T., API-SLX-70 WFBE COATING	11,301'
3	30" O.D. X 0.516" W.T., API-SLX-70 WFBE COATING & ABRASION RESISTANT OVERCOAT	234'
4	30" O.D. X 0.622" W.T., API-SLX-70 WFBE COATING & ABRASION RESISTANT OVERCOAT	1,456'
402	MAINLINE VALVE ASSEMBLY WALHL+15_7-A0-MLV-001 (+24)	1 EA

PIPELINE MARKERS

MARKER TYPE	QUANTITY
PIPELINE MARKERS	11 EA
PIPELINE WARNING SIGNS	0 EA
CATHODIC TEST STATION	3 EA
AERIAL MARKER	1 EA

REFERENCE DRAWINGS

REF. NO.	DRAWING NO.	REV. NO.	DRAWING TITLE
402	1827-01-ML-03-104	05	MAINLINE VALVE WALHL+15_7-A0-MLV-001
	1827-01-ML-03-105	00	MAINLINE VALVE WALHL+15_7-A0-MLV-001
O.C.	1827-03-ML-03-002	03	TRIBUTARY TO TONGUE RIVER-OPEN CUT
HDD	1827-03-ML-03-003	02	HIGHWAY 5 HDD

REVISIONS

NO.	DATE	REV. BY	CHKD. BY	APPRD. BY	DESCRIPTION
1	5/17/09	UEI	RDG	LAG	ISSUED FOR CONSTRUCTION
2	10/11/11	UEI	RDG	LAG	ISSUED FOR AS-BUILT
					1827-03-ML-02-007
					REPLACES COVERAGE OF IFC DRAWINGS
					1827-03-ML-02-010,
					1827-03-ML-02-011,
					1827-03-ML-02-012

PIPELINE SCHEMATIC

STATION	DESCRIPTION
780+00	MATCHLINE 780+00
781+20	MATCHLINE 781+20
781+40	781+42 WALHL+15_7-A0-MLV-001 FOR VALVE ASSEMBLY MATERIAL SEE DWG. 1827-01-ML-03-104
781+54	781+54 6.4' CVR.
786+25	786+25 4.6' CVR. POWERLINE
786+64	786+64 POWERLINE HT. = UNK.
791+73	791+73 6.5' CVR.
792+00	M.P. 15
802+20	802+20 P.I. 0.023246' RT.
802+45	802+45 P.I. 0.074714' RT.
802+63	802+63 P.I. 0.057207' RT.
804+05	804+05 P.I. 0.030817' LT.
804+27	804+27 P.I. 0.041843' LT.
804+51	804+51 P.I. 0.041843' LT.
804+64	804+64 P.I. 0.043937' LT.
804+97	804+97 P.I. 0.057009' LT.
811+70	811+70 5.1' CVR.
814+22	814+22 P.I. 0.072019' RT.
815+44	815+44 P.I. 0.072019' RT.
830+01	830+01 TELEPHONE LINE
830+78	830+78 TELEPHONE LINE
831+07	831+07 EDGE OF ROAD
831+16	831+16 CL 94TH STREET NE
831+38	831+38 CL 94TH STREET NE
831+43	831+43 WATER SUPPLY LINE
831+54	831+54 OVERHEAD POWERLINE
832+76	832+76 POWERLINE HT. = 30'
833+09	833+09 P.I. 0.022857' RT.
833+43	833+43 P.I. 0.075259' RT.
833+58	833+58 P.I. 0.075259' RT.
837+42	837+42 3.6' CVR.
843+49	843+49 5.2' CVR.
844+80	844+80 M.P. 16
852+23	852+23 P.I. 0.010427' LT.
857+49	857+49 CL 104TH ST. NE
857+50	857+50 CL 104TH ST. NE
857+51	857+51 TOP BANK
857+52	857+52 TOP BANK
857+53	857+53 TOP BANK
857+54	857+54 WATER EDGE TO TONGUE RIVER
857+55	857+55 WATER EDGE TO TONGUE RIVER
857+56	857+56 WATER EDGE
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