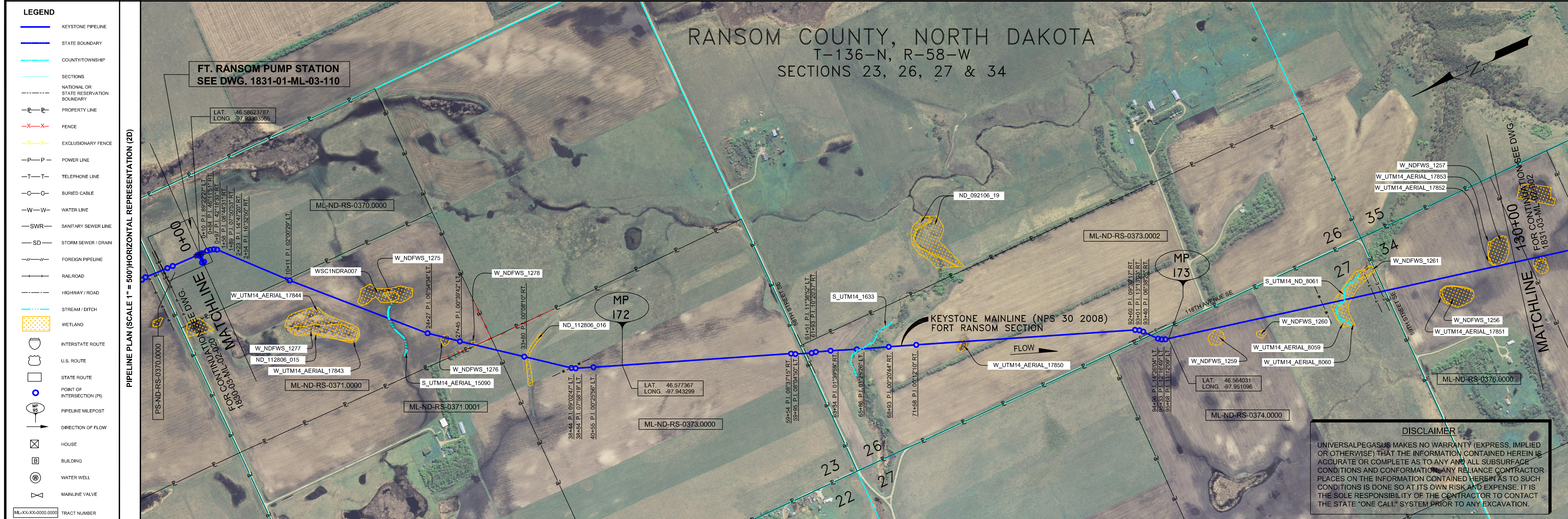


- GENERAL NOTES**
- 1) ALL CHAINAGES ARE IN FEET UNLESS OTHERWISE SPECIFIED.
 - 2) DATUM ELEVATION AND PROJECTION ARE BASED ON MEAN SEA LEVEL AND NAD 83.
 - 3) FIELD PIPE LOCATING REQUIRED TO DETERMINE PLACEMENT OF PIPELINE WITHIN PERMANENT EASEMENT.
 - 4) UNLESS OTHERWISE NOTED, 48 INCHES MINIMUM COVER 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 T200 OR SPC SP-2888.
 - 7) THE SUBSTANTIAL CONSTRUCTION COMPLETION DATE, BASED ON CALIPER PIG RUN, WAS AUGUST 07, 2009 FOR M.P. 163.73 TO M.P. 195.68 AND SEPTEMBER 01, 2009 FOR M.P. 195.68 TO M.P. 218.50.
 - 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 9038+16 AND DIVIDE BY 5280.



- OPERATING AND TEST PRESSURE**
1. THE MAXIMUM OPERATING PRESSURE (NOP) IS 140 PSIG.
 2. THE MINIMUM TEST PRESSURE WAS 160 PSIG.

BILL OF MATERIALS (3D)

ITEM NO.	DESCRIPTION	QUANTITY
1	30" O.D. X 0.438" W.T. API 5LX-70 WFBE COATING	133'
2	30" O.D. X 0.386" W.T. API 5LX-70 WFBE COATING	12,460'
3	30" O.D. X 0.516" W.T. API 5LX-70 WFBE COATING & ABRASION RESISTANT OVERCOAT	317'
FR-1A	30" - 30' 3 DIA RAD WELD FITTING 0.515" W.T. Y-70	1 EA
FR-1B	30" - 30' 3 DIA RAD WELD FITTING 0.515" W.T. Y-70	1 EA
FR-3A	30" - 45' 3 DIA RAD WELD FITTING 0.429" W.T. Y-70	1 EA
FR-3B	30" - 45' 3 DIA RAD WELD FITTING 0.429" W.T. Y-70	1 EA
410	FORT RANSOM PUMP STATION ASSEMBLY (+127)	1 EA

REFERENCE DRAWINGS

REF. NO.	DRAWING NO.	REV. NO.	DRAWING TITLE
410	1831-01-ML-03-110	4	FORT RANSOM PUMP STATION
	1831-01-ML-03-111	6	FORT RANSOM PUMP STATION
	1831-01-ML-03-112	6	FORT RANSOM PUMP STATION
	1831-01-ML-03-113	7	FORT RANSOM PUMP STATION
	1831-01-ML-03-114	7	FORT RANSOM PUMP STATION

REVISIONS

NO.	DATE	REV. BY	CHKD. BY	APPRD. BY	DESCRIPTION
1	5/7/09	UEI	RDG	LAG	ISSUED FOR CONSTRUCTION
2	9/17/09	UEI			ISSUED FOR AS-BUILT
					1831-03-ML-02-001
					REPLACES COVERAGE OF IFC DRAWINGS.
					1831-03-ML-02-001
					1831-03-ML-02-002

ENGINEERING RECORDS

DRAWN BY	INITIAL	DATE	ENY. APPRD.	INITIAL	DATE
UEI		10/01/25			

PROFESSIONAL ENGINEER

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

SCALE: 0 125 250 500 Feet

AS-BUILT ALIGNMENT

M.P. 171.18 TO M.P. 173.64
SHEET 1 OF 19 SHEETS
STA. 0+00 TO STA. 130+22 (3D)

DRAWING NO. 1831-03-ML-02-001
REV. 2

PIPELINE SCHEMATIC

STATIONING	DESCRIPTION
0+00	CENTERLINE OF MAINLINE
0+10	TEE
0+28	1488 PUMP STATION ASSEMBLY MATERIAL SEE DWG. 1831-01-ML-03-110
0+51	1742 WATER EDGE 18+15 CL CREEK
0+80	1949 WATER EDGE
1+04	20+01 WATER EDGE
1+38	24+35 P.I. 0554247 LT. 25+25 BEGIN SLOUGH 26+25 CL SLOUGH 26+75 END SLOUGH 27+45 P.I. 0023242 LT.
1+89	29+11 FENCE (BARBED WIRE)
2+30	33+88 P.I. 0009010 RT. 34+28 CL SLOUGH 34+43 END SLOUGH
2+54	37+92 WATER SUPPLY LINE 5.0' CVR.
3+00	38+44 P.I. 0092247 LT. 38+84 P.I. 0758191 LT. 40+55 P.I. 0022596 LT.
3+45	42+30 4.5' CVR. 43+44 4.0' CVR. 43+46 4.0' CVR.
3+88	59+54 P.I. 0837415 RT. 59+55 P.I. 0834350 LT.
4+28	60+76 EDGE OF ROAD SE 60+85 EDGE OF ROAD SE 61+10 FIBER OPTIC CABLE
4+51	61+45 P.I. 1128521 LT. 61+45 P.I. 1020371 RT. 63+45 P.I. 0139350 RT. 65+74 WATER EDGE 66+01 P.I. 0125226 LT. 66+66 WATER EDGE 68+72 WATER EDGE 69+43 P.I. 0022044 RT. 69+43 P.I. 0022044 RT.
4+88	71+26 P.I. 0012101 RT.
5+28	75+43 BEGIN SLOUGH 75+88 5.2' CVR. 76+86 END SLOUGH 79+78 8.0' CVR.
6+28	82+80 P.I. 0920717 RT. 83+21 P.I. 1313033 RT. 84+08 FIBER OPTIC CABLE 84+08 FIBER OPTIC CABLE 84+31 EDGE OF ROAD SE 84+35 EDGE OF ROAD SE 85+17 P.I. 1426194 LT. 85+22 M.P. 73 85+80 P.I. 1112091 LT. 85+82 M.P. 73 86+20 BEGIN SLOUGH 86+20 CL SLOUGH 86+20 END SLOUGH 100+48 END SLOUGH
6+88	111+13 WATER SUPPLY LINE 5.0' CVR.
7+28	112+38 BEGIN SLOUGH 113+69 END SLOUGH 116+82 TELEPHONE LINE 116+85 FIBER OPTIC CABLE 117+11 EDGE OF ROAD SE 117+40 8.0' CVR. 117+43 EDGE OF ROAD SE 117+43 EDGE OF ROAD
7+88	125+25 BEGIN SLOUGH 125+46 CL SLOUGH 128+10 END SLOUGH

ENVIRONMENTAL MITIGATION/RECLAMATION STATIONS (2D)

STATIONING	DESCRIPTION
0+00	TOPSOIL SALVAGE METHOD
0+28	STREAMS
0+51	WETLANDS
0+80	TIMING CONSTRAINTS
1+04	STATIONS
1+38	MONITORING
1+89	RECLAMATION
2+30	SPECIAL CONSIDERATIONS