PRELIMINARY SURVEY COORDINATE AND CURVE DATA - ND 18, 9 miles north of junction ND 46

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	SS-8-018(088)064	81	1

HORIZONTAL ALIGNMENT

PNT	STATION	NORTHING	EASTING
ND 18 (Chain: SCL18)			
BEGIN Sec Cor	432+85.05	415933.02	2790320.38
END	468+88.59	412332.95	2790478.53

CURVE DATA

ARC DEFINITION

US PUBLIC LAND SURVEY DATA

DESC.	SEC-TWP-RGE	NORTHING	EASTING
NW Cor Sec 23 T-138-N R- 52-W		415933.02	2790320.38
SW Cor Sec 23 T-138-N R- 52-W		410652.47	2790552.36

SURVEY CONTROL POINTS

PNT	NORTHING	EASTING	ELEV	STATION	OFFSET
CONTROL POINT DESCRIPTION					
PRIMARY CONTROL					
GPS 1	417209.32	2790182.67	940.70	N/A	N/A
#5 Rebar, flush with ground					
GPS 2	410600.72	2787895.46	939.97	N/A	N/A
#5 Rebar w/ 1 1/2" cap					
SECONDARY CONTROL					
RTK 1338	413708.89	2790487.45	927.74	455+14.36	69' Lt
RTK 1337	413792.88	2790340.41	924.04	454+24.00	74' Rt

REFERENCE MARKERS

R Mkr #	NORTHING	EASTING	STATION	OFFSET
65	413917.34	2790432.31	453+03.69	23' Lt

All coordinates and measurements on this document derived from the International Foot definition.

INITIALIZING BENCH MARK
NDGPS Stations (OPUS)

- [x] NAVD-88
- [ ] NGVD-29
- [ ] GEOID 09
- [ ] _____
- [x] GEOID 12B

- [ ] Assumed Coordinates
- [x] All coordinates on this sheet are Cass County ground coordinates. They are derived from the NAD83(2011) reference frame; North Dakota South Zone Combination Factor (cf) = 0.9998875

REGISTERED PROFESSIONAL LAND SURVEYOR
Zahn, Robert D.
LS 3659
06/05/18
NORTH DAKOTA

NOTES: Sheet 1 of 1

Date Survey Completed 11/01/16