

KEYSTONE PIPELINE PROJECT - U.S. PHASE IV (STEELE CITY SEGMENT)

1 2 3 5 6 8 9 10 11
5, 5, 6, 6, 6, 7, 7, 10, 10

0199-XX-P2-XXX.X-XXX.X-1

KEYSTONE PHASE IV, US PIPELINE PROJECT - STEELE CITY SEGMENT PIPELINE ROUTE VARIATION FORM	
1	VARIATION TYPE: Refinement: <input type="text"/> Reroute: <input checked="" type="checkbox"/> X Centerline: <input checked="" type="checkbox"/> X Valve Site: <input type="text"/> Pump Station: <input type="text"/>
2	LOCATION: Sketch: <input type="text"/> Attached Pictures: <input type="text"/> See attached. State: <input type="text"/> SD, NE County: <input type="text"/> Multiple Township: <input type="text"/> Multiple Range: <input type="text"/> Multiple Section: <input type="text"/> Multiple Centerline: <input type="text"/> 11/18/2010 Quad Map: <input type="text"/> N/A Aerial Map: <input type="text"/> See attached map sheet MP: <input type="text"/> XXX.X to <input type="text"/> XXX.X
3	REASON FOR ROUTE VARIATION (Please include reason for route variation): <p>This report consists of 11 proposed route variations. These route variations are proposed to either avoid laying the pipeline along drainage features and/or avoid crossing a meandering stream multiple times. The reason for the route variation is listed in the "Supplemental Info" tab.</p> <p>The route variations have been proposed based on a combination of Flyover video of Centerline, LIDAR data, Pictometry and other aeriels.</p>
	DETAIL ROUTE VARIATION (Please describe route variation in detail): <p>Listed in "Supplemental Info" Tab.</p> <p>No new landowners have been affected by the proposed route variations.</p>
	ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.): <p>Listed in "Cost Analysis" Tab.</p>
9	Originator: <input type="text"/> Engineering Date: <input type="text"/> 7/5/2011
10	Received by: <input type="text"/> Date: <input type="text"/> 7/5/2011 Fax to: ?
11	Assigned Tracking Number: <input type="text"/> 0199-XX-P2-XXX.X-XXX.X-1
12	Filed by: <input type="text"/> Date: <input type="text"/> Fax to: ?

Keystone Phase IV, US - Supplemental Information for Route Variation Report 0199

Prepared: 2011-07-11

RV ID	MP Start	MP End	State	County	Section	Township	Range	Original Length (ft)	Reroute Length (ft)	Change in Length (ft)	Max. Perp. Deviation (ft)	Reason for Variation	Brief Variation Description	Additional Impacts/Comments	Number of New Landowners impacted by reroute	Number of Landowners on current route impacted by reroute	Number of tracts purchased on original route.	Civil Survey Complete?	Civil Survey Needed (ft)	Moves Pump Station?	Moves Valve Site?	In Co-located Area?	Biological Survey Complete for Existing Corridor?	Cultural Survey Complete for Existing Corridor?	Biological Survey Complete for Proposed Corridor?	Cultural Survey Complete for Proposed Corridor?	Estimated Length Requiring new Environmental Surveys (ft)	Originator
0199-01	364.713	379.548	SD	Perkins	34	14N	10E	2,578	2,672	94	234	To avoid multiple creek crossings (EPH) near MP 364.8	Route variation starts at MP 364.7 and deviates -28.5° southwest from C/L for -484 ft. It continues southeast for -317 ft and continues further southeast towards the C/L for -1.871 ft where it rejoins it near MP 365.2.	- Eliminates 2 of the 3 current creek crossings (both ~< 10 ft).	0	1		NO	2,672	NO	NO	NO	Yes	Yes	No	No	2,672	Engineering
0199-02	378.908	379.548	SD	Meade	17	12N	12E	3,382	3,411	29	214	To avoid laying pipeline along drainage feature (EPH) near MP 379.1	Route variation starts at MP 378.9 and deviates -9° southwest for -1,389 ft. Then, it turns southeast for -2,022 ft to rejoin the C/L near MP 379.5. Along its path, it crosses the unnamed tributary (EPH) only once and at a better crossing location, -220 ft west of its current location.	- Eliminates 1 of the 2 current creek crossings (~<10 ft).	0	1		NO	3,411	NO	NO	NO	Yes	Yes	No	No	3,411	Engineering
0199-03	447.594	448.106	SD	Haakon	4	4N	20E	2,702	2,768	66	270	To avoid laying pipeline along drainage feature near MP 447.9	Route variation starts at MP 447.6 and deviates -20° northeast for -768 ft. Then continues further south for -1,999 ft to rejoin the C/L at the PI near MP 448.1.	-Eliminate paralleling a drainage for -1100 ft.	0	2		NO	2,768	NO	NO	NO	Yes	Yes	No	No	2,768	Engineering
0199-05	470.809	471.261	SD	Haakon	16,15	2N	23E	2,386	2,371	-15	120	To make a better creek crossing (INT) near MP 470.9	Route variation starts at MP 470.8 and deviates -28° north of current C/L for -745 ft. Then turns south for -1,626 ft to rejoin the C/L near MP 471.3. Along its path it crosses the unnamed tributary (INT) only once and at a better crossing location - 91 ft north of its current location.	- Eliminates 2 of the 3 current creek crossings (both ~ < 10 ft). - Partial variation inside current environmental survey corridor.	0	2		NO	2,371	NO	NO	NO	Yes	Yes	No	No	300	Engineering
0199-06	475.897	476.713	SD	Haakon	20, 21	2N	24E	4,308	4,314	6	70	To avoid drainage feature and keep sufficient distance from the levee.	Route variation starts at MP 475.9 and deviates slightly (-2.5°) south of current C/L for -1,939 ft. Then turns northeast for -2,375 ft to rejoin the C/L near MP 476.7.	- Variation inside current environmental survey corridor.	0	2		NO	4,314	NO	NO	NO	Yes	Yes	No	No	2,500	Engineering
0199-08	532.302	533.063	SD	Lyman	26	104N	79W	4,020	4,136	116	260	To avoid drainage features near MP 532.6	Route variation starts at MP 532.3 and deviates slightly (-6°) north of current C/L for -1,785 ft. Then turns south for -2,351 ft to rejoin the C/L near MP 533.1.	- Avoids an ineligible Cultural site near MP 532.6	0	2		NO	4,136	NO	NO	NO	Yes	Yes	No	No	3,000	Engineering
0199-09	562.215	562.837	SD	Tripp	4,9	99N	77W	3,286	3,309	23	150	To avoid multiple creek crossings (INT) near MP 562.7	Route variation starts at MP 562.2 and deviates slightly (-3°) west of current C/L for -2,677 ft. Then turns east for -632 ft to rejoin the C/L near MP 562.8. Along its path it crosses the unnamed tributary (INT) only once and at a better crossing location - 123 ft. west of its current location.	- Eliminates 2 of the 3 current creek crossings (average ~ 12 ft). - Eliminates crossing a PEM Wetland - Partial variation inside current environmental survey corridor.	0	2		NO	3,309	NO	NO	NO	Yes	Yes	No	No	1,600	Engineering
0199-10	818.343	818.876	NE	Saline	26	6N	1E	2,817	2,474	-343	510	To avoid multiple creek crossings (INT) near MP 818.7 and mitigate a sharp PI.	Route variation starts at MP 818.3 and deviates -30° west of current C/L for -1,085 ft. Then turns east for -1,389 ft to rejoin the C/L near MP 818.9. Along its path it crosses the unnamed tributary (INT) only once and at a better crossing location - 220 ft. west of its current location.	- Eliminates 2 of the 3 current creek crossings (average ~ 10 ft).	0	2		NO	2,474	NO	NO	NO	Yes	Yes	No	No	2,474	Engineering
0199-11	825.433	826.544	NE	Saline	20, 29	5N	2E	4,989	5,093	104	366	To avoid multiple creek crossings (INT) near MP 825.8 and a side slopes.	Route variation starts at MP 825.4 and deviates -22° east of current C/L for -977 ft. Then slightly turns southwest for -4,134 ft to rejoin the C/L at the PI near MP 826.5. Along its path it crosses the unnamed tributary (INT) only once and at a better crossing location -315 ft. east of its current location.	- Eliminates 2 of the 3 current creek crossings (average ~ <10 ft).	0	2		NO	5,950	NO	NO	NO	Yes	Yes	No	No	5,000	Engineering

Keystone Phase IV, US - Cost Analysis for Route Variation Report 0199

Prepared: 2011-07-11

RV ID	Additional length (ft)	Cost \$360/ft	Additional length of wetland construction (ft)	Cost \$195/ft	Additional length of side hill construction (ft)	Cost \$19/ft	Additional bore length (ft)	Cost \$540/ft	Additional Waterbody crossings	Cost (\$77,250/EA btw 10' - 19') (\$32,500/EA < 10')	Cost of Environmental survey (\$5,300/mile)	Cost of Civil survey (\$5,000/mile)	Approximate cost for land purchased on current centerline	Miscellaneous cost for additional impacts	Total Cost
0199-01	94	\$ 33,793.37	0	\$ -	0	\$ -	0	\$ -	-2	\$ (65,000.00)	\$ 2,681.65	\$ 2,529.85	\$ -		\$ (25,995.13)
0199-02	29	\$ 10,438.03	0	\$ -	0	\$ -	0	\$ -	-1	\$ (32,500.00)	\$ 3,424.12	\$ 3,230.30	\$ -		\$ (15,407.54)
0199-03	66	\$ 23,665.41	0	\$ -	0	\$ -	0	\$ -	0	\$ -	\$ 2,778.00	\$ 2,620.76	\$ -	\$ (50,000.00)	\$ (20,935.83)
0199-05	-15	\$ (5,439.06)	0	\$ -	0	\$ -	0	\$ -	-2	\$ (65,000.00)	\$ 301.14	\$ 2,244.97	\$ -		\$ (67,892.96)
0199-06	6	\$ 2,100.16	0	\$ -	0	\$ -	0	\$ -	0	\$ -	\$ 2,509.47	\$ 4,085.28	\$ -	\$ (20,000.00)	\$ (11,305.09)
0199-08	116	\$ 41,764.76	0	\$ -	-400	\$ (7,600.00)	0	\$ -	0	\$ -	\$ 3,011.36	\$ 3,916.76	\$ -	\$ (60,000.00)	\$ (18,907.11)
0199-09	23	\$ 8,336.31	0	\$ -	0	\$ -	0	\$ -	-2	\$ (154,500.00)	\$ 1,606.06	\$ 3,133.70	\$ -		\$ (141,423.93)
0199-10	-343	\$ (123,446.51)	0	\$ -	0	\$ -	0	\$ -	-2	\$ (154,500.00)	\$ 2,483.32	\$ 2,342.75	\$ -		\$ (273,120.44)
0199-11	104	\$ 37,357.81	0	\$ -	0	\$ -	0	\$ -	-2	\$ (65,000.00)	\$ 5,018.94	\$ 4,822.70	\$ -		\$ (17,800.55)

Overall Estimated Costs of Routes Variations= \$ (592,788.58)

KEYSTONE PIPELINE PROJECT - U.S. PHASE IV (STEELE CITY SEGMENT)

RV-0194-0197, RV-0199-0200, RV-0209, RV-0213-0217, RV-0219-0220, RV-0224, RV-0227-0230

KEYSTONE XL PIPELINE PROJECT - STEELE CITY SEGMENT PIPELINE ROUTE VARIATION FORM	
1	VARIATION TYPE: Refinement: <input type="text"/> Reroute: <input checked="" type="checkbox"/> X Centerline: <input checked="" type="checkbox"/> X Valve Site: <input checked="" type="checkbox"/> X Pump Station: <input type="text"/>
2	LOCATION: Sketch: <input type="text"/> Attached Pictures: <input type="text"/> See attached State: <input type="text"/> Multiple County: <input type="text"/> Multiple Quad Map: <input type="text"/> N/A Township: <input type="text"/> Multiple Range: <input type="text"/> Multiple Aerial Map: <input type="text"/> See attached map sheet Section: <input type="text"/> Multiple Centerline: <input type="text"/> 11/18/2010 MP: <input type="text"/> XXX.X to <input type="text"/> XXX.X
3	REASON FOR ROUTE VARIATION (Please include reason for route variation): The Reason for each Route Variation (RV) is given with the respective RV file. These reroutes are proposed based on aerial/pictometry/Lydar/flyover analysis of current line through Montana, South Dakota, and Nebraska.
	DETAIL ROUTE VARIATION (Please describe route variation in detail): See respective Route Variation Files. No new landowners were affected by the proposed route variations. RVs included: Discussed prior to 6/20/2011: Western Prairie Fringe Orchid Reroute (RV-0194) John Harter Reroute (RV-0195) Buzek Reroute (RV-0197) Discussed during 6/20/2011 Meeting: Reroute away from sidehill (SOM Land) (RV-0209) Discussed during 6/21/2011 Meeting: Reroutes to avoid creek Crossings (RV-0199) MP 475 Reroute (RV-0200) Reroutes to lessen/reduce PIs (RV-0213) Reroutes to avoid waterwell; fence (RV-0214) Reroutes to avoid creeks, dropoffs, wetlands, etc. (RV-0215) Reroutes to avoid sideslopes/hills (RV-0216) Reroutes to avoid pivot centers (RV-0217) Discussed during 8/10/2011 Meeting: HWY 73 Reroute (RV-0196) HWY 56 Reroute (RV-0219) Bad River HDD realignment reroute (RV-0220) MP 396 Reroute (RV-0224) Yellowstone River HDD Entry Pt (RV-0227) PI Breakdowns of all previous RV's for new CL (RV-0228 and RV-0229) CK-MLV-06 and CK-11 Valves relocation (RV-0230)
	ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.): <div style="border: 1px solid black; height: 40px; width: 100%;"></div>
	Is there an increase/decrease in the number of crossings? Yes <input type="text"/> No <input type="text"/> If yes, please list: <input type="text"/> <input type="text"/>
9	Originator: <input type="text"/> Multiple Date: <input type="text"/> 8/12/2011
10	Received by: <input type="text"/> Date: <input type="text"/> 8/12/2011 Fax to: ?
11	Assigned Tracking Number: <input type="text"/> RV-0194-0197, RV-0199-0200, RV-0209, RV-0213-0217, RV-0219-0220, RV-0224, RV-0227-0230
12	Filed by: <input type="text"/> Date: <input type="text"/> Fax to: ?

RV-0194-0197, RV-0199-0200, RV-0209, RV-0213-0217, RV-0219-0220, RV-0224, RV-0227-0230

KEYSTONE PIPELINE PROJECT - U.S. PHASE IV (STEELE CITY SEGMENT)

KEYSTONE PIPELINE PROJECT - U.S. PHASE IV (STEELE CITY SEGMENT) ROUTE VARIATION AUTHORIZATION FORM			
Date:	8/12/2011	Tracking Number:	RV-0194-0197, RV-0199-0200, RV-0209, RV-0213-0217, RV-0219-0220, RV-0224, RV-0227-0230
Description:	Western Prairie Fringe Orchid Reroute (RV-0194) John Harter Reroute (RV-0195) Buzek Reroute (RV-0197) Reroute away from sidehill (SOM Land) (RV-0209)	MP: XXXX to XXXX	Originated By: Multiple
Universal Field - Land	Doug Reichley	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Variation Form Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comments:	<i>Pending civil survey</i>	Date: 6/20, 6/21, & 8/10/11	If Rejected Why? <i>By S. King 10/5/11</i>
TransCanada - Engineering	Meera Kothari	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 6/20, 6/21, & 8/10/11
Comments:	and by David Gulen on the 6/20 and 6/21 meetings.	If Rejected Why?	
Exp - Engineering	Butch Wallace	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 6/20, 6/21, & 8/10/11
Comments:		If Rejected Why?	
TransCanada - Construction	Bobby Curbow	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 6/20, 6/21, & 8/10/11
Comments:		If Rejected Why?	
Exp - Environmental	Jonathan Minton	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 6/20, 6/21, & 8/10/11
Comments:		If Rejected Why?	
AECOM - Risk Assessment	Heidi Tillquist	Variation: Approved <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: _____
Comments:	N/A.	If Rejected Why?	
Facilities	Sandra Gigovic	Variation: Approved <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: _____
Comments:	N/A. Does not affect Facilities.	If Rejected Why?	
TransCanada - PM (NE)	Robert Bradley	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 8/10/2011
Comments:		If Rejected Why?	
TransCanada - Senior PM	Alan Lietz	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 6/20, 6/21, & 8/10/11
Comments:	<i>conditional approvals pending appropriate regulatory approvals</i>	If Rejected Why?	
TransCanada - Manager	Steve Marr	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 8/9/11
Comments:		If Rejected Why?	
Forward to:	Doug Reichley <input checked="" type="checkbox"/> Meera Kothari <input checked="" type="checkbox"/> Butch Wallace <input checked="" type="checkbox"/> Bobby Curbow <input checked="" type="checkbox"/>	Jonathan Minton <input checked="" type="checkbox"/> Heidi Tillquist <input checked="" type="checkbox"/> Robert Bradley <input checked="" type="checkbox"/> Sandra Gigovic <input type="checkbox"/>	Alan Lietz <input checked="" type="checkbox"/> Steve Marr <input checked="" type="checkbox"/>

RV-0194-0197, RV-0199-0200, RV-0209, RV-0213-0217, RV-0219-0220, RV-0224, RV-0227-0230

KEYSTONE PIPELINE PROJECT - U.S. PHASE IV (STEELE CITY SEGMENT)

RV-0194, 0195, 0197, RV-0199-0200, RV-0209, RV-0213-0217

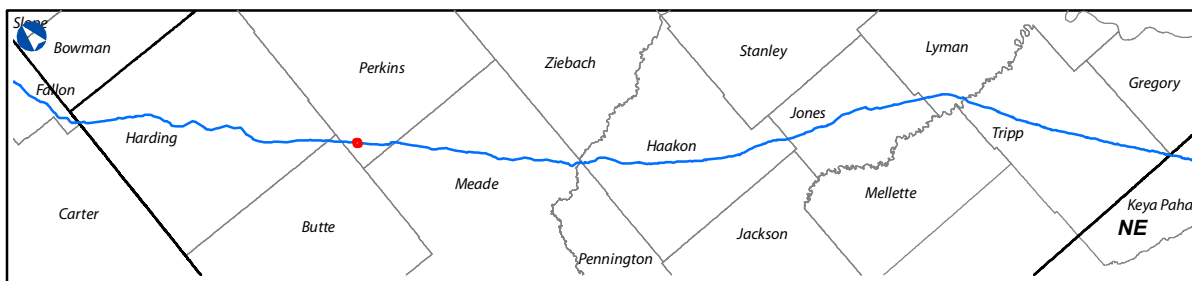
KEYSTONE XL PIPELINE PROJECT - STEELE CITY SEGMENT PIPELINE ROUTE VARIATION FORM	
1	VARIATION TYPE: Refinement: <input type="text"/> Reroute: <input checked="" type="checkbox"/> X Centerline: <input checked="" type="checkbox"/> X Valve Site: <input checked="" type="checkbox"/> X Pump Station: <input type="text"/>
2	LOCATION: Sketch: <input type="text"/> Attached Pictures: <input type="text"/> See attached State: <input type="text"/> Multiple County: <input type="text"/> Multiple Quad Map: <input type="text"/> N/A Township: <input type="text"/> Multiple Range: <input type="text"/> Multiple Aerial Map: <input type="text"/> See attached map sheet Section: <input type="text"/> Multiple Centerline: <input type="text"/> 11/18/2010 MP: <input type="text"/> XXX.X to <input type="text"/> XXX.X
3	REASON FOR ROUTE VARIATION (Please include reason for route variation): The Reason for each Route Variation (RV) is given with the respective RV file. These reroutes are proposed based on aerial/pictometry/Lydar/flyover analysis of current line through Montana, South Dakota, and Nebraska.
	DETAIL ROUTE VARIATION (Please describe route variation in detail): See respective Route Variation Files. No new landowners were affected by the proposed route variations. RVs included: Discussed prior to 6/20/2011: Western Prairie Fringe Orchld Reroute (RV-0194) John Harter Reroute (RV-0195) Buzek Reroute (RV-0197) Discussed during 6/20/2011 Meeting: Reroute away from sidehill (SOM Land) (RV-0209) Discussed during 6/21/2011 Meeting: Reroutes to avoid creek Crossings (RV-0199) MP 475 Reroute (RV-0200) Reroutes to lessen/reduce PIs (RV-0213) Reroutes to avoid waterwell; fence (RV-0214) Reroutes to avoid creeks, dropoffs, wetlands, etc. (RV-0215) Reroutes to avoid sideslopes/hills (RV-0216) Reroutes to avoid pivot centers (RV-0217)
	ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.): <div style="border: 1px solid black; height: 40px; width: 100%;"></div>
	Is there an Increase/decrease in the number of crossings? Yes <input type="text"/> No <input type="text"/> If yes, please list: <input type="text"/>
9	Originator: <input type="text"/> Multiple Date: <input type="text"/> 8/12/2011
10	Received by: <input type="text"/> Date: <input type="text"/> 8/12/2011 Fax to: ?
11	Assigned Tracking Number: <input type="text"/> RV-0194, 0195, 0197, RV-0199-0200, RV-0209, RV-0213-0217
12	Filed by: <input type="text"/> Date: <input type="text"/> Fax to: ?

RV-0194, 0195, 0197, RV-0199-0200, RV-0209, RV-0213-0217

KEYSTONE PIPELINE PROJECT - U.S. PHASE IV (STEELE CITY SEGMENT)

KEYSTONE PIPELINE PROJECT - U.S. PHASE IV (STEELE CITY SEGMENT) ROUTE VARIATION AUTHORIZATION FORM		
Date: 8/12/2011	Tracking Number: RV-0194, 0195, 0197, RV-0199-0200, RV-0209, RV-0213-0217	MP: XXX.X to XXX.X
Description: Western Prairie Fringe Orchid Reroute (RV-0194); John Harter Reroute (RV-0195); Buzek Reroute (RV-0197); Reroute away from sidehill (SOM Land) (RV-0209); Reroutes to avoid creek crossings (RV-0199); MP 475 Reroute (RV-0200); Reroutes to lessen/produce PIs (RV-0213); Reroutes to avoid waterwell, fence (RV-0214);	Originated By: Multiple	Variation Form Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Universal Field - Land Doug Reichley	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 6/20, 6/21, & 8/10/11
Comments: <i>Pending Survey</i>	If Rejected Why? <i>By G. Fij 10/5/11</i>	
TransCanada - Engineering Meera Kothari	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 6/20, 6/21, & 8/10/11
Comments: and by David Gulen on the 6/20 and 6/21 meetings. <i>for meera Kothari.</i>	If Rejected Why?	
Exp - Engineering Butch Wallace	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 6/20, 6/21, & 8/10/11
Comments:	If Rejected Why?	
TransCanada - Construction Bobby Curbow	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 6/20, 6/21, & 8/10/11
Comments:	If Rejected Why?	
Exp - Environmental Jonathan Minton	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 6/20, 6/21, & 8/10/11
Comments: <i>Pending Survey Completion</i>	If Rejected Why?	
TransCanada - Environmental Stephen Craycroft	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 6/20, 6/21, & 8/10/11
Comments:	If Rejected Why?	
Facilities: Sandra Gigovic	Variation: Approved <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date:
Comments: N/A. Does not affect Facilities.	If Rejected Why?	
AECOM - Risk Assessment Heidi Tillquist	Variation: Approved <input type="checkbox"/> Rejected <input type="checkbox"/>	Date:
Comments: N/A	If Rejected Why?	
TransCanada - Senior PM Alan Lietz	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/>	Date: 6/20, 6/21, & 8/10/11
Comments: <i>Conditional approval pending approval of regulatory agencies</i>	If Rejected Why?	
TransCanada - Manager Steve Marr	Variation: Approved <input type="checkbox"/> Rejected <input type="checkbox"/>	Date:
Comments:	If Rejected Why?	
Forward to:	Doug Reichley <input checked="" type="checkbox"/> Jonathan Minton <input checked="" type="checkbox"/> Alan Lietz <input checked="" type="checkbox"/>	Meera Kothari <input checked="" type="checkbox"/> Stephen Craycroft <input checked="" type="checkbox"/> Steve Marr <input checked="" type="checkbox"/>
	Butch Wallace <input checked="" type="checkbox"/> Heidi Tillquist <input checked="" type="checkbox"/>	
	Bobby Curbow <input checked="" type="checkbox"/> Sandra Gigovic <input type="checkbox"/>	

RV-0194, 0195, 0197, RV-0199-0200, RV-0209, RV-0213-0217



LEGEND

- MILEPOST
- PHASE IV CL (2010-11-18)
- - - PROPOSED ROUTE VARIATION
- ▭ SECTION LINE
- ACCESS ROAD
- ⊙ PUMP STATION
- ⊗ VALVE SITE
- ▭ 300 FT CORRIDOR
- ▭ PROPERTY PARCEL
- ▭ CULTURAL SITE
- ▨ WETLAND
- ▨ WATERBODY

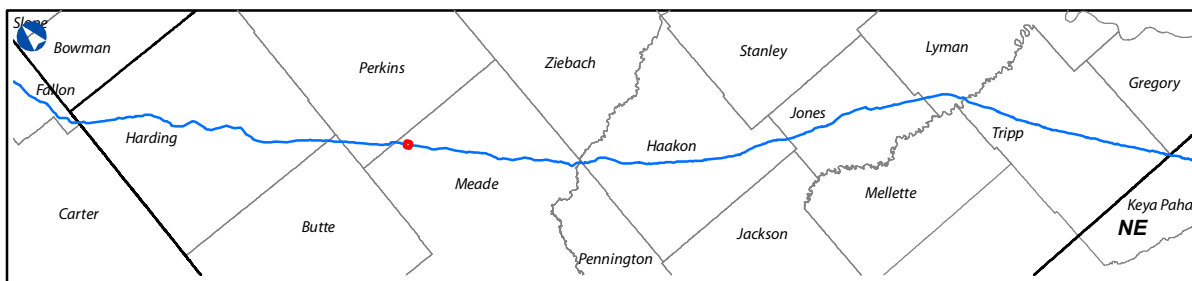
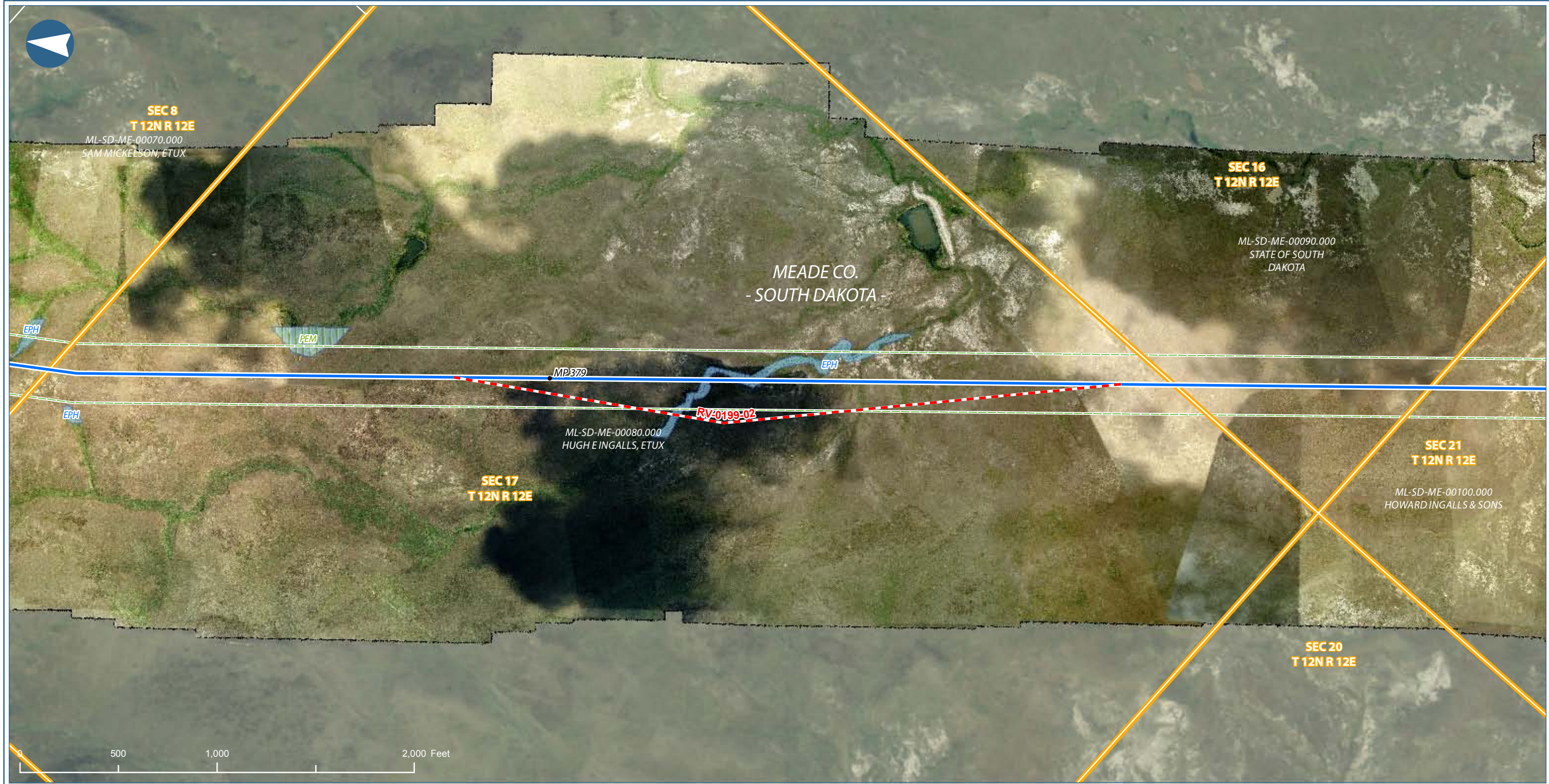
Keystone Phase IV, US
Proposed Route Variation 0199-01

COUNTY:	PERKINS	DRAWN BY:	PD
STATE:	SD	CHECKED BY:	JP
SHEET:	1 OF 1	APPROVED BY:	RG
RV FULL:	0199-XX-P2-XXX.X-XXX.X-1		
REVISION	DATE		
PRELIMINARY			
PROJECT:	THES0050388X	DWG:	XL-00-P-9178
DATE:	2011-06-28	REV. NO.:	0

PREPARED BY:
exp Energy Services Inc.
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Tallahassee, FL 32308
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LEGEND

●	MILEPOST		300 FT CORRIDOR
	PHASE IV CL (2010-11-18)		PROPERTY PARCEL
	PROPOSED ROUTE VARIATION		CULTURAL SITE
	SECTION LINE		WETLAND
	ACCESS ROAD		WATERBODY
	PUMP STATION		
	VALVE SITE		

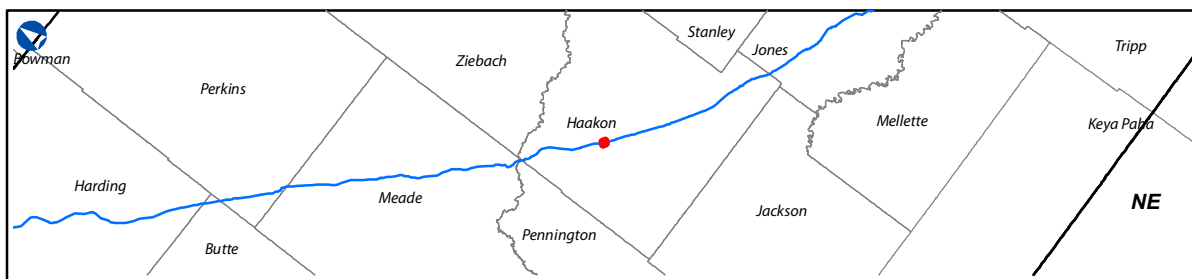
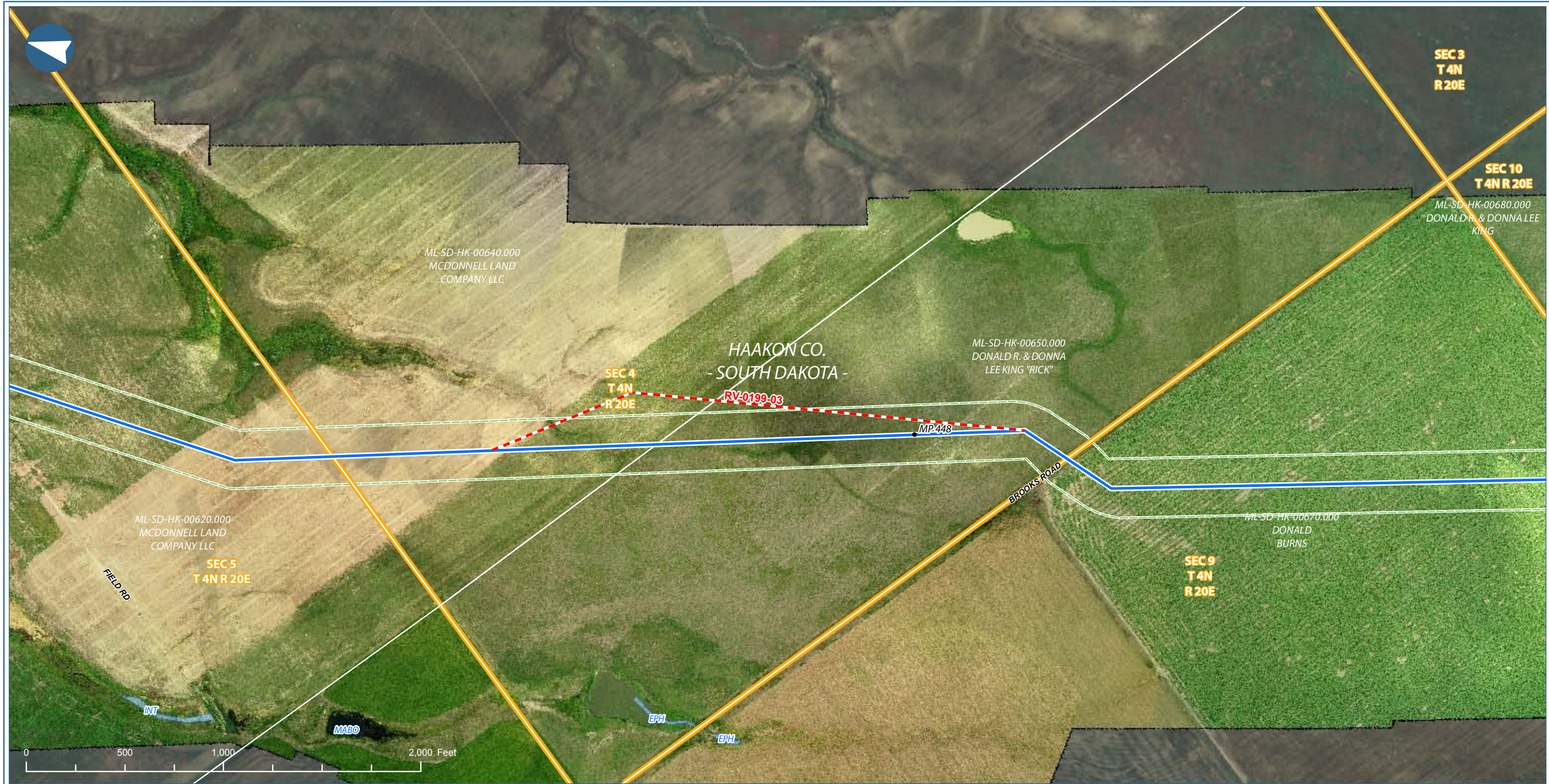
Keystone Phase IV, US
Proposed Route Variation 0199-02

COUNTY:	MEADE	DRAWN BY:	PD
STATE:	SD	CHECKED BY:	JP
SHEET:	1 OF 1	APPROVED BY:	RG
RV FULL:	0199-XX-P2-XXX.X-XXX.X-1		
REVISION	DATE		
PRELIMINARY			
PROJECT:	THES0050388X	DWG:	XL-00-P-9178
DATE:	2011-06-28	REV. NO.:	0

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LEGEND

●	MILEPOST		300 FT CORRIDOR
	PHASE IV CL (2010-11-18)		PROPERTY PARCEL
	PROPOSED ROUTE VARIATION		CULTURAL SITE
	SECTION LINE		WETLAND
	ACCESS ROAD		WATERBODY
	PUMP STATION		HORIZONTAL DIRECTIONAL DRILL
	VALVE SITE		

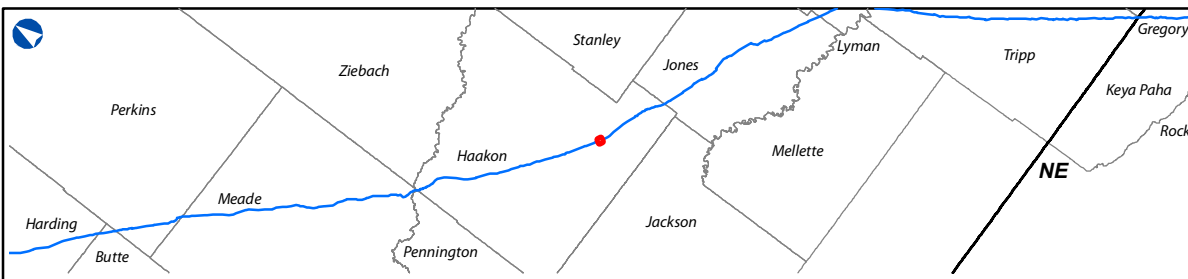
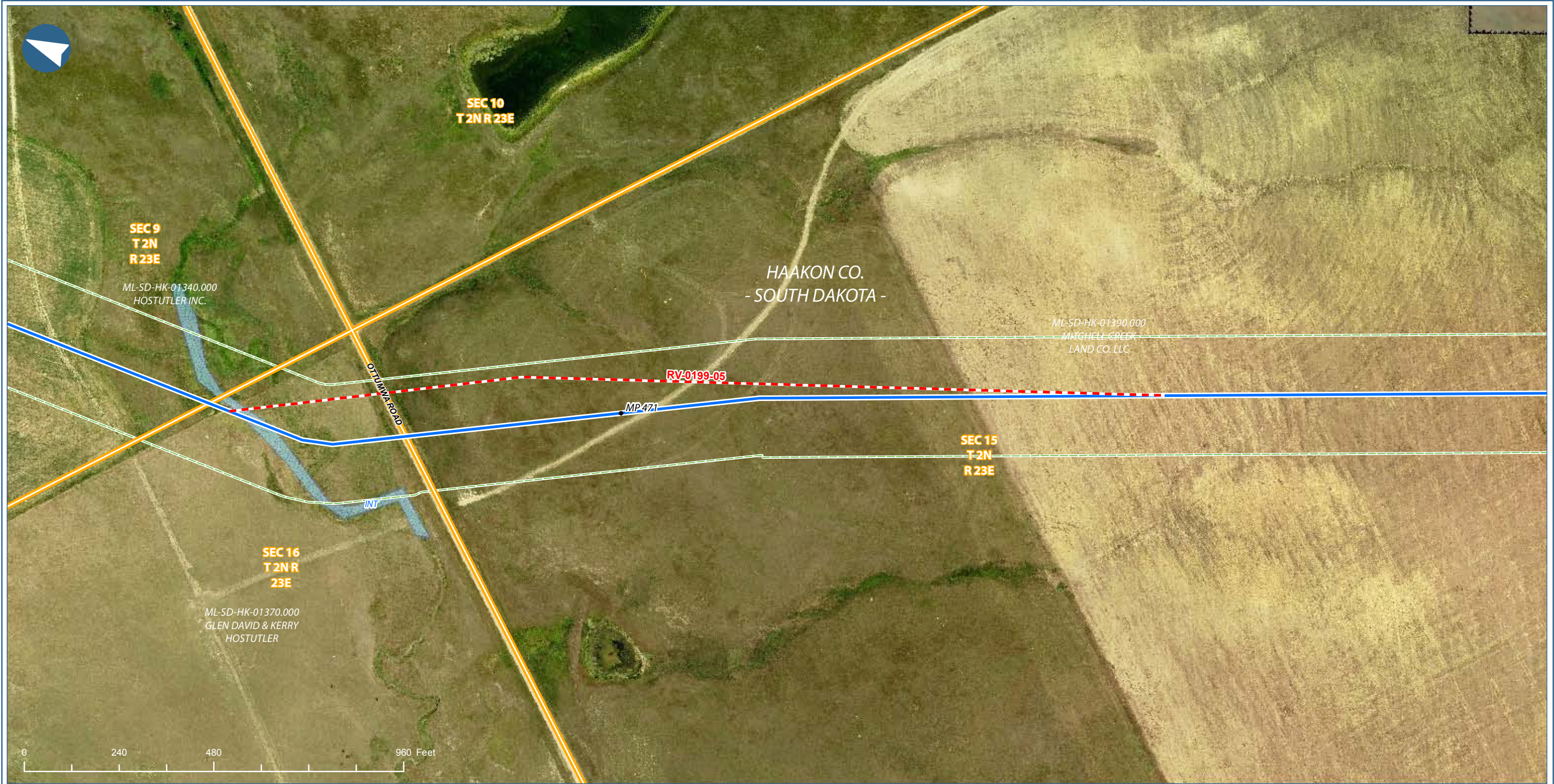
Keystone Phase IV, US
Proposed Route Variation 0199-03

COUNTY:	HAAKON	DRAWN BY:	PD
STATE:	SD	CHECKED BY:	JP
SHEET:	1 OF 1	APPROVED BY:	RG
RV FULL:	0199-XX-P2-XXX.X-XXX.X-I		
REVISION	DATE		
PRELIMINARY			
PROJECT:	THES0050388X	DWG:	XL-00-P-9178
DATE:	2011-06-27	REV. NO.:	0

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LEGEND

●	MILEPOST	□	300 FT CORRIDOR
—	PHASE IV CL (2010-11-18)	□	PROPERTY PARCEL
- - -	PROPOSED ROUTE VARIATION	□	CULTURAL SITE
□	SECTION LINE	▨	WETLAND
—	ACCESS ROAD	■	WATERBODY
⊙	PUMP STATION	⊙	HORIZONTAL DIRECTIONAL DRILL
⊗	VALVE SITE		

Keystone Phase IV, US
Proposed Route Variation 0199-05

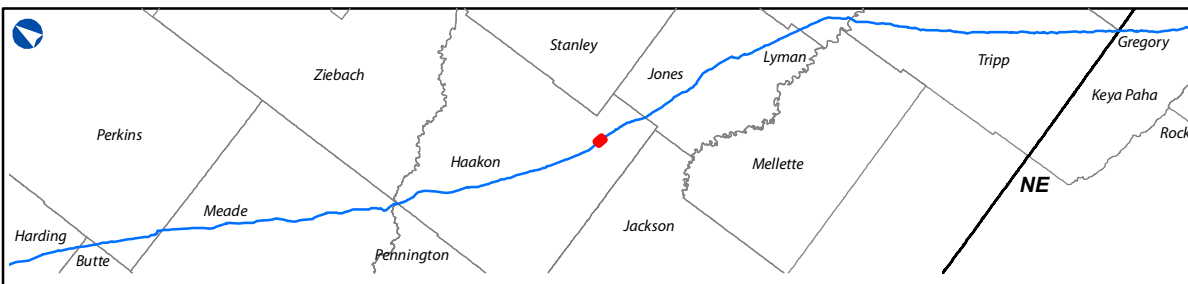
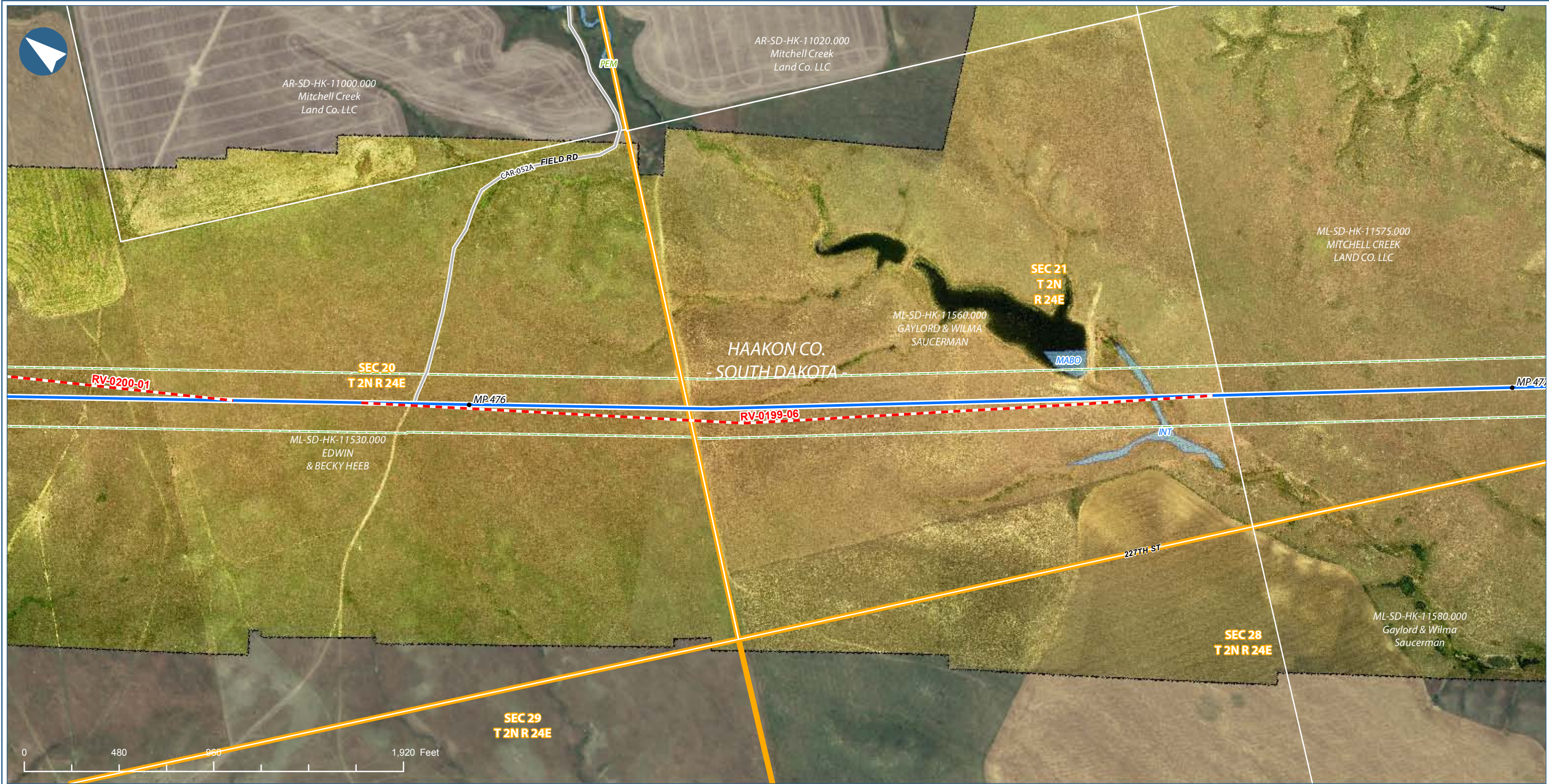
COUNTY:	HAAKON	DRAWN BY:	PD
STATE:	SD	CHECKED BY:	JP
SHEET:	1 OF 1	APPROVED BY:	RG
RV FULL:	0199-XX-P2-XXX.X-XXX.X-I		
REVISION	DATE		
PRELIMINARY			
PROJECT:	THES0050388X	DWG:	XL-00-P-9178
DATE:	2011-06-27	REV. NO.:	0

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PROPOSED ROUTE VARIATION 0199-06



LEGEND

●	MILEPOST	▭ (dashed green)	300 FT CORRIDOR
— (blue)	PHASE IV CL (2010-11-18)	▭ (grey)	PROPERTY PARCEL
- - - (red)	PROPOSED ROUTE VARIATION	▭ (orange)	CULTURAL SITE
▭ (orange)	SECTION LINE	▨ (green)	WETLAND
— (grey)	ACCESS ROAD	▨ (blue)	WATERBODY
⊙	PUMP STATION	— (yellow)	HORIZONTAL DIRECTIONAL DRILL
⊗	VALVE SITE		

Keystone Phase IV, US
Proposed Route Variation 0199-06

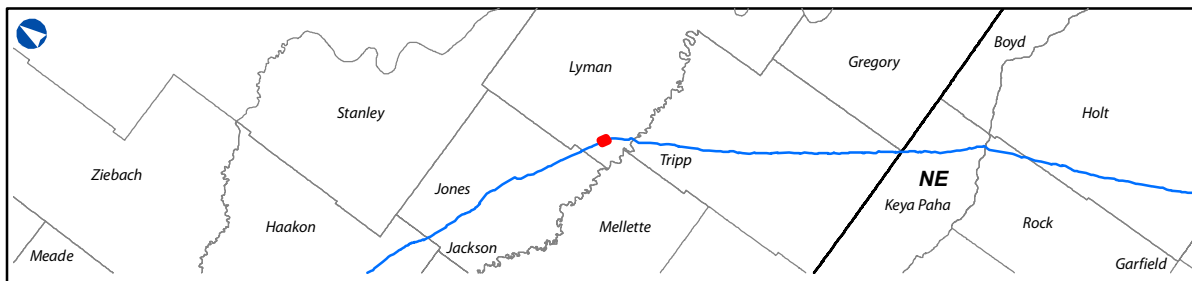
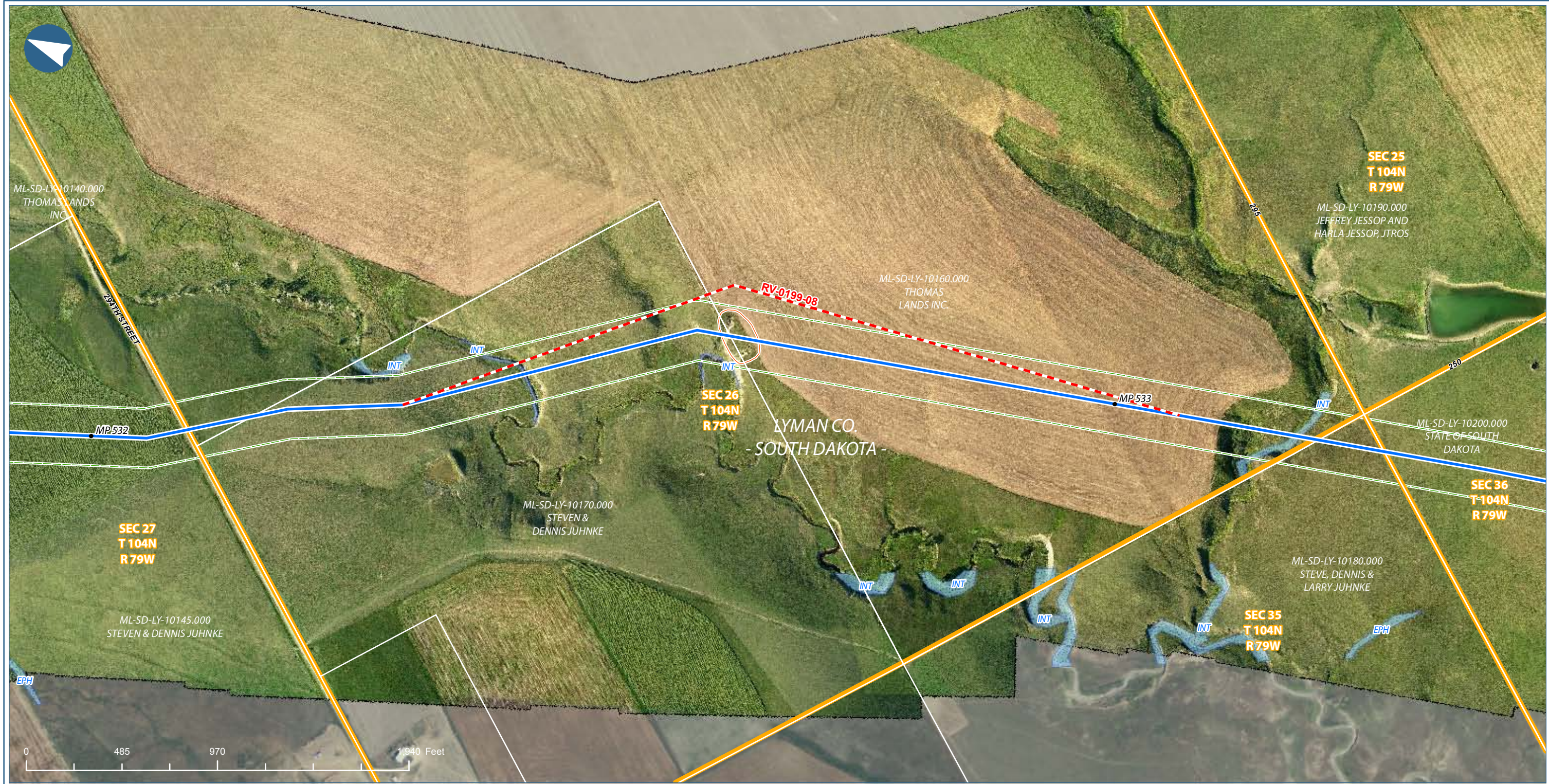
COUNTY:	HAAKON	DRAWN BY:	PD
STATE:	SD	CHECKED BY:	JP
SHEET:	1 OF 1	APPROVED BY:	RG
RV FULL:	0199-XX-P2-XXX.X-XXX.X-I		
REVISION			DATE
PRELIMINARY			
PROJECT:	THES0050388X	DWG:	XL-00-P-9178
DATE:	2011-06-27	REV. NO.:	0

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PROPOSED ROUTE VARIATION 0199-08



LEGEND

- MILEPOST
- PHASE IV CL (2010-11-18)
- - - PROPOSED ROUTE VARIATION
- ▭ SECTION LINE
- ACCESS ROAD
- ⊙ PUMP STATION
- ⊗ VALVE SITE
- ▭ 300 FT CORRIDOR
- ▭ PROPERTY PARCEL
- ▭ CULTURAL SITE
- ▨ WETLAND
- ▨ WATERBODY
- ⊙ HORIZONTAL DIRECTIONAL DRILL

Keystone Phase IV, US

Proposed Route Variation 0199-08

COUNTY:	LYMAN	DRAWN BY:	PD
STATE:	SD	CHECKED BY:	JP
SHEET:	1 OF 1	APPROVED BY:	RG
RV FULL:	0199-XX-P2-XXX.X-XXX.X-I		
REVISION	DATE		

PRELIMINARY

PROJECT:	THES0050388X	DWG:	XL-00-P-9178
DATE:	2011-06-27	REV. NO.:	0

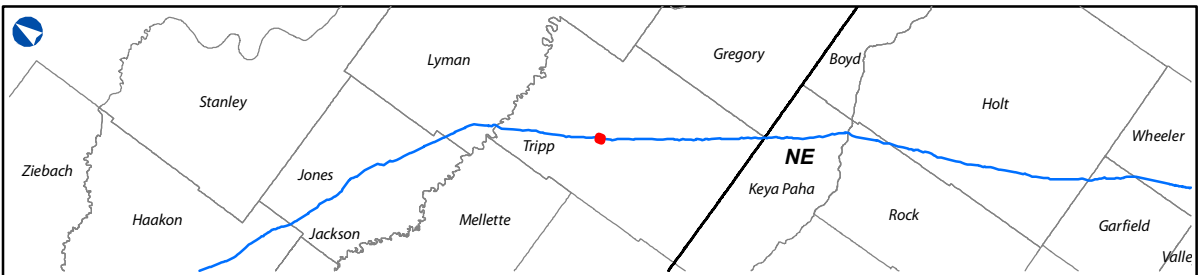
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LEGEND

●	MILEPOST		300 FT CORRIDOR
	PHASE IV CL (2010-11-18)		PROPERTY PARCEL
	PROPOSED ROUTE VARIATION		CULTURAL SITE
	SECTION LINE		WETLAND
	ACCESS ROAD		WATERBODY
	PUMP STATION		HORIZONTAL DIRECTIONAL DRILL
	VALVE SITE		

Keystone Phase IV, US
Proposed Route Variation 0199-09

COUNTY:	TRIPP	DRAWN BY:	PD
STATE:	SD	CHECKED BY:	JP
SHEET:	1 OF 1	APPROVED BY:	RG
RV FULL:	0199-XX-P2-XXX.X-XXX.X-I		
REVISION	DATE		
PRELIMINARY			
PROJECT:	THES0050388X	DWG:	XL-00-P-9178
DATE:	2011-06-27	REV. NO.:	0

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