

KEYSTONE PIPELINE PROJECT - U.S. PHASE IV (STEELE CITY SEGMENT) PIPELINE ROUTE VARIATION FORM			
1	VARIATION TYPE:		
	Refinement: <input type="checkbox"/>	<input checked="" type="checkbox"/>	Reroute: <input type="checkbox"/>
	Centerline: <input checked="" type="checkbox"/>	Valve Site: <input type="checkbox"/>	Pump Station: <input type="checkbox"/>
2	LOCATION:		
	Sketch: <input type="checkbox"/>	<input checked="" type="checkbox"/> Attached	Pictures: <input type="checkbox"/>
	State: <input type="checkbox"/>	<input type="checkbox"/> SD	County: <input type="checkbox"/>
	Township: <input type="checkbox"/>	<input type="checkbox"/> 2N	Range: <input type="checkbox"/>
	Section: <input type="checkbox"/>	<input type="checkbox"/> 1, 6	Centerline: <input type="checkbox"/>
		<input type="checkbox"/> 3/26/2010	MP: <input type="checkbox"/>
		<input type="checkbox"/>	to <input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/> 464.81 <input type="checkbox"/> to <input type="checkbox"/> 465.37
3	REASON FOR ROUTE VARIATION (Please include reason for route variation):		
<p>The centerline currently passes through a pond at MP 465. This reroute is proposed to accommodate landowner's (Hostutler Family LLC) request to locate the centerline at a less severe crossing of the waterbody, as specified by the landowner. The proposed reroute has been civil surveyed based on Landowner's recommendation.</p>			
DETAIL ROUTE VARIATION (Please describe route variation in detail):			
<p>The proposed reroute starts at MP 464.8 and deviates slightly (~4°) from the centerline towards the southeast. It continues in this direction for ~1,420 ft. Along its path it crosses the waterbody at the location specified by the landowner, ~75 ft northeast of its current crossing location. The proposed reroute then turns towards the south and continues 1,590 ft to rejoin the centerline at ~MP 465.4.</p> <p>The proposed reroute has been civil surveyed.</p>			
ADDITIONAL IMPACTS (Please include any additional impacts which may affect cost; crossings, induction bends, etc.):			
<p>The proposed reroute is ~10 ft longer than the current centerline. It avoids crossing the waterbody at a severe location.</p>			
Is there an increase/decrease in the number of crossings? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
If yes, please list: <input type="text"/>			
COST ANALYSIS (costs incurred or saved from the route variation)			
Additional length of route realignment:	<input type="text"/>	ft.	\$ <input type="text"/>
Additional length of side-hill construction:	<input type="text"/>	ft.	\$ <input type="text"/>
Additional length of wetland construction:	<input type="text"/>	ft.	\$ <input type="text"/>
Additional bore length (Road, RR):	<input type="text"/>	ft.	\$ <input type="text"/>
Additional foreign line/pipeline crossings:	<input type="text"/>	EA	\$ <input type="text"/>
Additional water body crossing (streams, ponds, etc.):			
	35 - 65' +	<input type="text"/>	EA
	10' - 19'	<input type="text"/>	EA
	Less than 10'	<input type="text"/>	EA
Additional survey required:			
	Civil:	<input type="text"/>	mile
	Cultural:	<input type="text"/>	mile
	Biological:	<input type="text"/>	mile
Miscellaneous costs saved or added due to route variation from ADDITIONAL IMPACTS listed above:	<input type="text"/>		
Overall estimated costs of the route variation:	\$ <input type="text"/> 9,471 (See "Additional Impacts" above)		

4
LAND / UNIVERSAL FIELD *Doug Reichley*

a) Is a new landowner affected by the proposed variation? Yes No

b) Is proposed realignment outside the easement/workspace? Yes No

c) Is realignment proposed to satisfy landowner request? Yes No

-If yes, name of landowner(s)/track number(s): ML-SD-HK-01280 (Hostutler Family LLC)

d) Has all the evaluation criteria been examined/provided for this specific discipline? Yes No

If no, please explain why: _____

5
ENGINEERING/CONSTRUCTION / STATE PM *David Guien*

a) Maximum deviation perpendicular to proposed alignment: 100 ft.

b) Has the centerline been staked for construction? Yes No

c) Does route variation affect HDD crossing alignment? Yes No

d) Is realignment proposed for engineering/construction reasons? Yes No

e) Will the route variation require the relocation of a pump station? Yes No

f) Has all the evaluation criteria been examined/provided for this specific discipline? Yes No

If no, please explain why: _____

6
ENVIRONMENTAL / TROW *Jonathan Minton*

a) Has the corridor been environmentally surveyed? Yes No

b) Has the proposed variation been environmentally surveyed? Yes No

c) Was variation proposed to satisfy environmental issues? Yes No

d) Was realignment proposed to satisfy agency request? Yes No

-If yes, name of agency(s): _____

e) Environmental features:

Added (+): 1 pond and 2 ephemeral streams Subtracted (-): 1 pond

Wetland ID # for newly impacted wetlands: _____

f) Has all the evaluation criteria been examined/provided for this specific discipline? Yes No

If no, please explain why: _____

7
ENGINEERING / FACILITIES AND HYDRAULICS *Sandra Gigovic*

a) Will the route variation require the relocation of a pump station? Yes No

b) Will route variation impact hydraulics? Yes No

c) Are additional valves required at HCA's or water crossing? **N/A to PS Engineer** Yes No

d) Has all the evaluation criteria been examined/provided for this specific discipline? Yes No

If no, please explain why: _____

8
STAKEHOLDER RELATIONS / TCPL *Bud Andersen*

a) Does the variation result in any new stakeholders? Yes No

b) Does the variation require follow-up with specific stakeholder groups? Yes No

c) Was the variation proposed to satisfy stakeholder request? Yes No

-If yes, please specify issue type (as it aligns to stakeholder database): _____

d) Has all the evaluation criteria been examined/provided for this specific discipline? Yes No

If no, please explain why: _____

9

Originator: Land

Date: 10/6/2010

10

Received by: _____

Date: 10/6/2010

Fax to: ?

11

Assigned Tracking Number: 0187-SD-P2-464.8-465.4-I

12

Filed by: _____

Date: _____

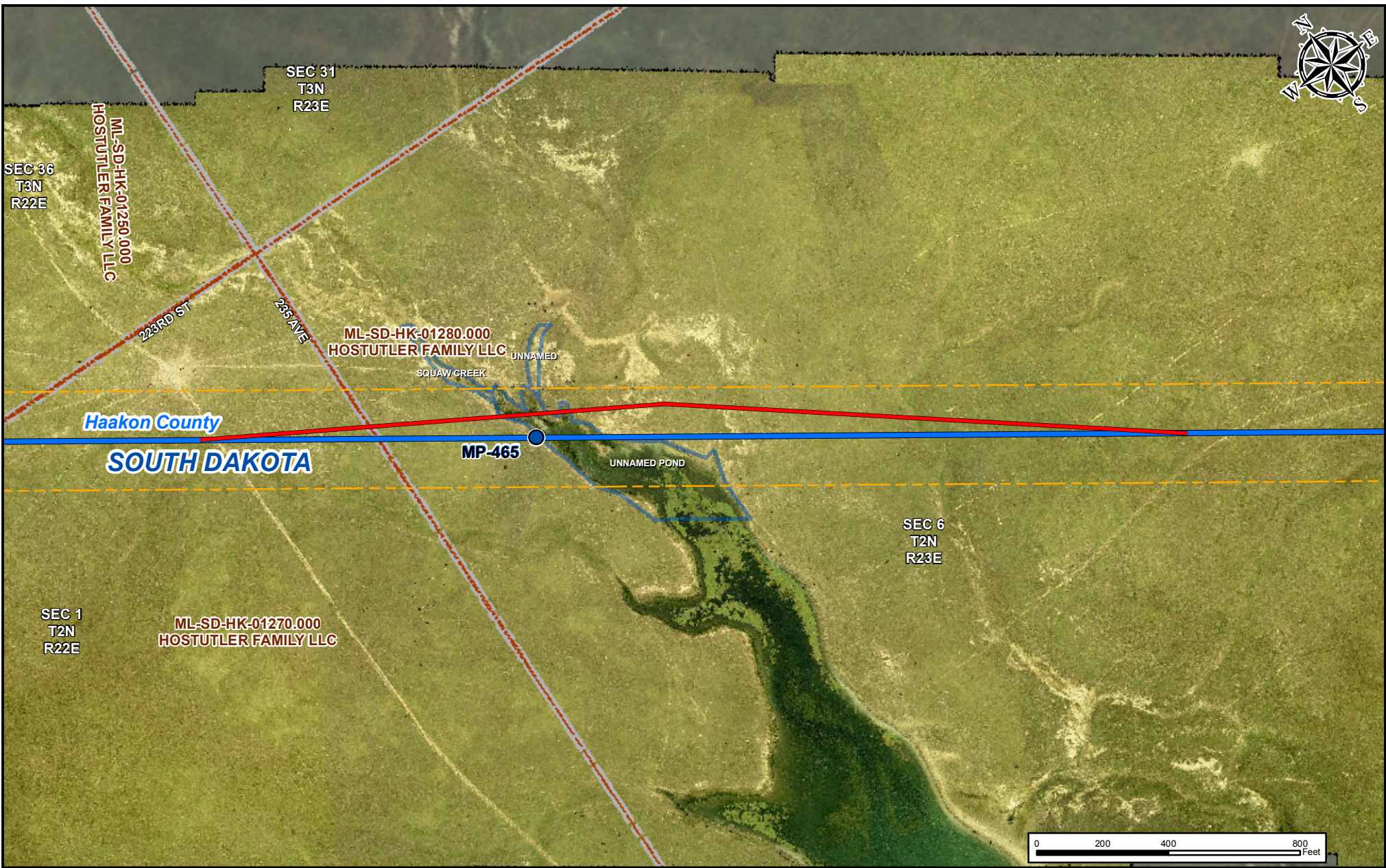
Fax to: ?

0187-SD-P2-464.8-465.4-I

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

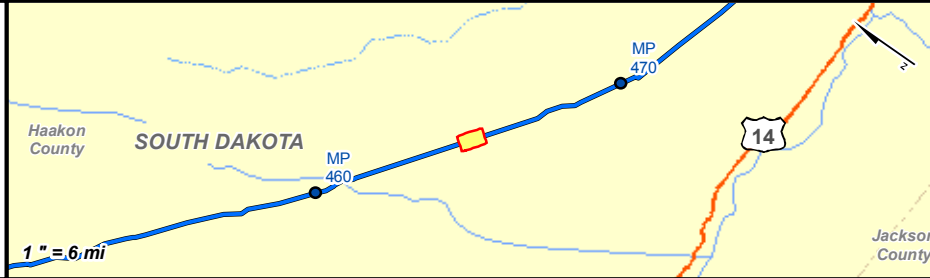
0187-SD-P2-464.8-465.4-1

KEYSTONE PIPELINE PROJECT - U.S. PHASE IV (STEELE CITY SEGMENT) ROUTE VARIATION AUTHORIZATION FORM	
Date: <input type="text" value="10/6/2010"/> Description: <input type="text" value="Reroute to avoid crossing at a severe location of a waterbody."/>	Tracking Number: <input type="text" value="0187-SD-P2-464.8-465.4-1"/> MP: <input type="text" value="464.8"/> to <input type="text" value="465.4"/> Originated By: <input type="text" value="Land"/> Variation Form Attached: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Universal Field - Land Doug Reichley Comments: <input type="text"/>	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/> <i>Doug Reichley</i> <input type="text"/> Date: <input type="text" value="10/6/2010"/> If Rejected Why? <input type="text"/>
State PM - Construction / Eng. David Guien Comments: <input type="text"/>	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/> <i>David Guien</i> <input type="text"/> Date: <input type="text" value="10/25/2010"/> If Rejected Why? <input type="text"/>
Trow - Environmental Jonathan Minton Comments: <input type="text" value="The route variation still does not avoid the pond as delineated in the field."/>	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/> <i>Jonathan Minton</i> <input type="text"/> Date: <input type="text" value="10/8/2010"/> If Rejected Why? <input type="text"/>
AECOM - Risk Assessment Heidi Tillquist Comments: <input type="text" value="This reroute does not significantly alter risk to HCAs and, therefore is acceptable from a risk perspective."/>	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/> <i>Heidi Tillquist</i> <input type="text"/> Date: <input type="text" value="10/19/2010"/> If Rejected Why? <input type="text"/>
Project Management Butch Wallace Comments: <input type="text"/>	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/> <i>R.E. Wallace</i> <input type="text"/> Date: <input type="text" value="10/6/2010"/> If Rejected Why? <input type="text"/>
Stakeholder Relations Bud Andersen Comments: <input type="text"/>	Variation: Approved <input type="checkbox"/> Rejected <input type="checkbox"/> <input type="text"/> Date: <input type="text"/> If Rejected Why? <input type="text"/>
Facilities: Sandra Gigovic Comments: <input type="text"/>	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/> <i>Sandra Gigovic</i> <input type="text"/> Date: <input type="text" value="10/19/2010"/> If Rejected Why? <input type="text"/>
TransCanada: Alan Lietz Comments: <input type="text"/>	Variation: Approved <input checked="" type="checkbox"/> Rejected <input type="checkbox"/> <i>Alan Lietz</i> <input type="text"/> Date: <input type="text" value="10/26/2010"/> If Rejected Why? <input type="text"/>
Forward to: Butch Wallace <input checked="" type="checkbox"/> Jonathan Minton <input checked="" type="checkbox"/> Heidi Tillquist <input checked="" type="checkbox"/> David Guien <input checked="" type="checkbox"/> Bud Andersen <input checked="" type="checkbox"/> Alan Lietz <input checked="" type="checkbox"/> Doug Reichley <input checked="" type="checkbox"/> Sandra Gigovic <input checked="" type="checkbox"/>	
Dispute Resolution, if Required: Yes <input type="checkbox"/> No <input type="checkbox"/> Comments: <input type="text"/>	Teleconference Required: Yes <input type="checkbox"/> No <input type="checkbox"/> Decision: <input type="text"/>
Database - <input type="text"/> Filed By: <input type="text"/> Date: <input type="text"/> Fax to: ? <input type="text"/>	Database - <input type="text"/> Filed By: <input type="text"/> Date: <input type="text"/> Fax to: ? <input type="text"/>



Legend

- Milepost
- Centerline (2010-03-26)
- Proposed Route Variation
- 300ft Corridor
- Parcel Boundary
- Waterbody
- Section Line
- County Boundary
- State Boundary



KEYSTONE US PROJECT - PHASE IV PROPOSED ROUTE VARIATION 0187 HAAKON COUNTY, SD					
	DATE	PROJECT	MAP PARAMETERS		
	OCT. 04, 2010	50388X	PROJECTION: UTM 14, NAD83, US FT SCALE: 1" = 400', 1:4,800		
DRAWN BY	CHECKED BY	APPROVED BY	ROUTE VARIATION NUMBER	SHEET	REV.
CPA	NJA	WSF	0187-SD-P2-464.8-465.4-I	001	0