

WATERBODY DATA FORM

Centerline Re-Route Access Road Ancillary Facility Other:

Feature ID #: S6ALY002

Stream/Waterbody Name (if known): SEDLANO CREEK

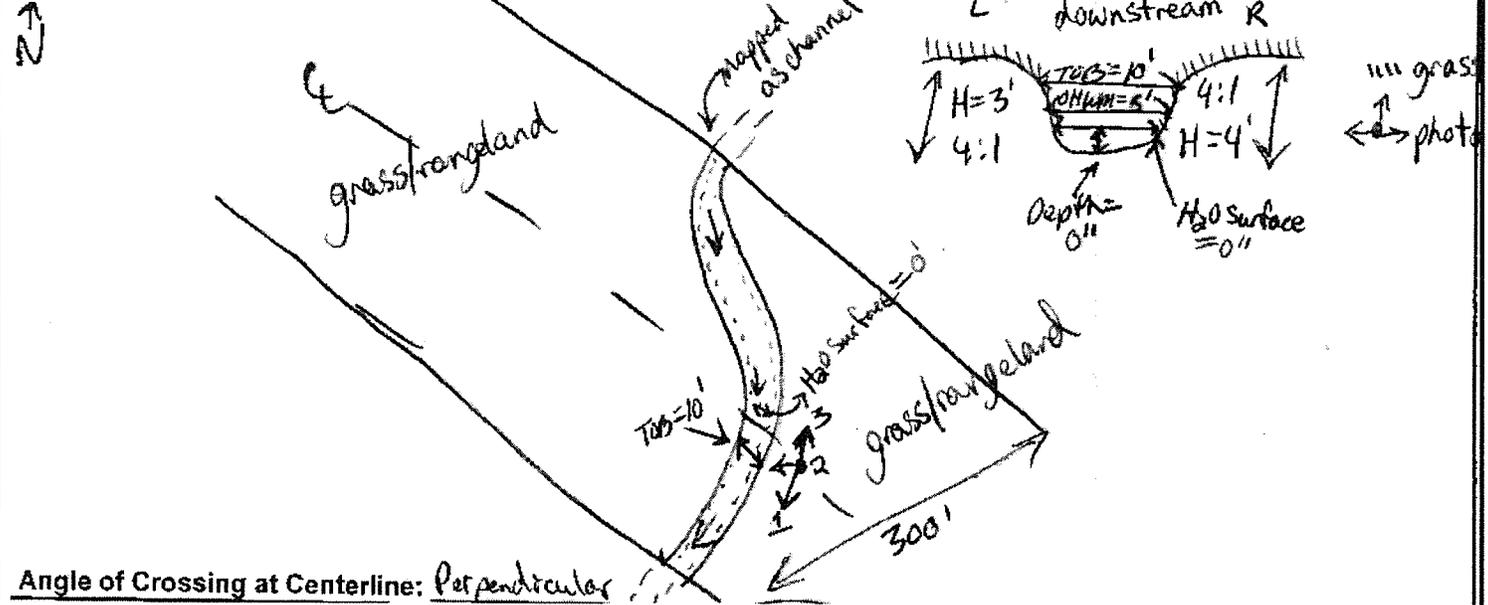
Associated Wetland ID #: N/A

Date: 7/7/08	Project Name & No.: Keystone XL-10623-007-803A	Milepost: 528.8
Investigators: 6A	State/County: SD/ LYMAN	Quad Name: VIVIAN SE
Logbook No.: 2	Logbook Page No.:	Tract No.: ML-SD-LY-10170.000
		Picture No.: S6ALY002_SW,W,NE

PHYSICAL ATTRIBUTES

Waterbody Sketch Plan

Please include: Directional & North Arrow, Centerline, Length of feature, Distances from Centerline, Photo Locations, and Survey corridor



Angle of Crossing at Centerline: Perpendicular

Waterbody Type	<input type="checkbox"/> Lake <input type="checkbox"/> Pond <input type="checkbox"/> Borrow Pit <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ag. Ditch <input type="checkbox"/> Other:
Stream Flow	<input type="checkbox"/> Fast <input type="checkbox"/> Moderate <input type="checkbox"/> Slow <input type="checkbox"/> Very Slow <input checked="" type="checkbox"/> None
Subsurface Flow?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown
OHWM Width (ft.):	8'
Flow type	<input type="checkbox"/> Perennial (Flows year round) <input type="checkbox"/> Seasonal (Continuous flow \geq 3 months) <input checked="" type="checkbox"/> Intermittent (Flows $<$ 3 months) <i>Dry bed in some spots</i> <input type="checkbox"/> Ephemeral (Flows only in response to rainfall)
Sinuosity	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering
Stream Width (ft.)	Top of Bank (at crossing location): 10' Water Surface (at crossing location): NONE
Stream Depth (in.)	<input checked="" type="checkbox"/> 0-3 <input type="checkbox"/> 3-6 <input type="checkbox"/> 6-12 <input type="checkbox"/> 12-18 <input type="checkbox"/> 18-24 <input type="checkbox"/> 24-36 <input type="checkbox"/> 36-48 <input type="checkbox"/> 48-60 <input type="checkbox"/> 60+
OHWM Indicator	<input checked="" type="checkbox"/> Clear natural line on bank <input type="checkbox"/> Wrack line <input type="checkbox"/> Shelving <input type="checkbox"/> Scour <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Bent, matted or missing vegetation <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Water staining <input type="checkbox"/> Soil character changes <input type="checkbox"/> Sediment deposition <input type="checkbox"/> Sediment sorting <input type="checkbox"/> Litter and debris <input type="checkbox"/> Leaf litter disturbed <input type="checkbox"/> Other:
Bank Height (ft.) (looking downstream)	Left: <input type="checkbox"/> 0-2 <input checked="" type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8+ Right: <input type="checkbox"/> 0-2 <input checked="" type="checkbox"/> 2-4 <input type="checkbox"/> 4-6 <input type="checkbox"/> 6-8 <input type="checkbox"/> 8+
Bank Slope (looking downstream)	Left: <input checked="" type="checkbox"/> 4:1 <input type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input type="checkbox"/> Vertical Right: <input checked="" type="checkbox"/> 4:1 <input type="checkbox"/> 3:1 <input type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input type="checkbox"/> Vertical

Date: 7/7/08	Project Name & No.: Keystone XL-10623-007-803A	Milepost: 529.8
--------------	--	-----------------

QUALITATIVE ATTRIBUTES

Water Appearance (check all that apply)	Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on surface <input type="checkbox"/> Floating algal mats <input type="checkbox"/> Water Color: N/A Slightly Turbid <input type="checkbox"/> Very Turbid <input type="checkbox"/> Greenish color <input type="checkbox"/> Obvious surface scum <input type="checkbox"/>
	Other: N/A, DRY BED
Stream Substrate %	Silts 60% Cobbles Bedrock Sands Gravel Concrete Muck Vegetation: 10% Other: CLAY Explain: 30%
Aquatic Habitats (check all that apply)	Sand Bar <input type="checkbox"/> Gravel Riffles <input type="checkbox"/> In-stream emergent plants: <input checked="" type="checkbox"/> MOIST SOIL, NO WATER, CAREX Gravel Bar <input type="checkbox"/> Deep Pools <input type="checkbox"/> JUNCUS Mud Bar <input checked="" type="checkbox"/> Bank root systems <input type="checkbox"/> In-stream submerged plants: <input type="checkbox"/> Undercut Banks <input type="checkbox"/> Overhanging trees/shrubs <input type="checkbox"/> Fringing Wetlands: <input type="checkbox"/>
Aquatic Organisms Observed (check all that apply)	Waterfowl <input type="checkbox"/> Fish (adult) <input type="checkbox"/> Turtles <input type="checkbox"/> Other: SONG BIRDS IN AREA Snakes <input type="checkbox"/> Fish (juvenile) <input type="checkbox"/> Frogs <input type="checkbox"/>
	Invertebrates:
Riparian Zone	Width of natural vegetation zone from edge of active channel out onto flood plain (FT): 50 Circle vegetative layers: trees <input type="checkbox"/> shrubs <input type="checkbox"/> herbs <input checked="" type="checkbox"/> <input type="checkbox"/> Significant bare areas within riparian zone <input type="checkbox"/> Evidence of non-buffered concentrated flows
Tributary is	<input type="checkbox"/> Natural <input type="checkbox"/> Artificial (Man-Made) <input type="checkbox"/> Manipulated
Channel Condition:	Channelization or Braiding <input type="checkbox"/> Unnatural straightening <input type="checkbox"/> Downtcutting <input type="checkbox"/> Dikes/Berms <input type="checkbox"/> Excessive bank erosion <input type="checkbox"/> Other
Disturbances	Livestock access to riparian zone <input checked="" type="checkbox"/> Manure in stream or on banks <input checked="" type="checkbox"/> Waste discharge pipes present <input type="checkbox"/> Other:

Describe Habitat Characteristics, Aquatic & Terrestrial Diversity:	Habitat ID No.:
GRASS/RANGELAND (WESTERN WHEAT GRASS, YELLOW SWEET CLOVER, DOWNY BROME, CHEAT GRASS) -SONG BIRDS IN AREA. LAND BRIDGE IN CHANNEL FOR CATTLE TO CROSS.	

Comments (e.g. pipeline crossing angle, construction constraints, erosion potential, existing disturbances, and meanders)
CATTLE ACCESS AND TRACKS THROUGHOUT STREAM CHANNEL. CROSSES CL.

STREAM QUALITY High <input type="checkbox"/> Moderate <input type="checkbox"/> Low <input checked="" type="checkbox"/>
