



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E.
Aberdeen, South Dakota 57401



IN REPLY REFER TO:
DESCRM
MC-208

MAR 17 2011

MEMORANDUM

TO: Superintendent, Fort Berthold Agency

FROM: ^{Acting} Regional Director, Great Plains Region

SUBJECT: Environmental Assessment Addendum and Finding of No Significant Impact

In compliance with the regulations of the National Environmental Policy Act (NEPA) of 1969, as amended, for an addendum to Environmental Assessment to authorize land use for gathering pipelines connecting the Two Shields Butte Skunk Creek #2-8-17H Well Pad to the Arrow Phase 1B-South Pipeline gathering pipeline on the Fort Berthold Indian Reservation, an Addendum has been completed and a Finding of No Significant Impact (FONSI) has been issued.

All the necessary requirements of the National Environmental Policy Act have been completed. Attached for your files is a copy of the EA Addendum, FONSI and Notice of Availability. The Council on Environmental Quality (CEQ) regulations require that there be a public notice of availability of the FONSI (1506.6(b)). Please post the attached notice of availability at the Agency and Tribal buildings for 30 days.

If you have any questions, please call Marilyn Bercier, Regional Environmental Scientist, Division of Environment, Safety and Cultural Resources Management, at (605) 226-7656.

Attachment

cc: Tex Hall, Chairman, Three Affiliated Tribes (with attachment)
Elgin Crows Breast, Tribal Historic Preservation Officer (with attachment)
Derek Enderud, BLM, Bureau of Land Management (with attachment)
Jonathon Shelman, Corps of Engineers (with attachment)
Jeff Hunt, One Stop Shop, Fort Berthold Agency

**Finding of No Significant Impact
Arrow Pipeline, LLC**

**Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines
Connecting the Two Shields Butte Skunk Creek #2-8-17H Well Pad to the Arrow Phase
1B-South Pipeline**

The U.S. Bureau of Indian Affairs (BIA) received a proposal for an Addendum to the Environmental Assessment to construct and install oil, gas, and water gathering pipelines on trust land originating from the northwestern side of the Two Shields Butte Skunk Creek #2-8-17H well pad and joining the existing Arrow Phase 1B-South Pipeline. Associated federal actions by BIA include determinations of effect regarding cultural resources and approvals of leases, rights-of-way and easements.

Potential of the proposed action to impact the human environment is analyzed in the attached Environmental Assessment (EA), as required by the National Environmental Policy Act. Based on the recently completed addendum to the EA, I have determined the proposed project will not significantly affect the quality of the human environment. No Environmental Impact Statement is required for any portion of the proposed activities.

This determination is based on the following factors:

1. Agency and public involvement was solicited and environmental issues related to the proposal were identified.
2. Protective and prudent measures were designed to minimize impacts to air, water, soil, vegetation, wetlands, wildlife, water resources, and cultural resources. The potential for impacts was disclosed for both the proposed action and the No Action alternative.
3. Guidance from the U.S. Fish and Wildlife Service has been fully considered regarding wildlife impacts, particularly in regard to threatened or endangered species. This guidance includes the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) (MBTA), the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.) (NEPA), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) (BGEPA), Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds", and the Endangered Species Act (16 U.S.C. 1531 et seq.) (ESA).
4. The proposed action was designed to avoid adverse effects to historic, archaeological, cultural, and traditional properties, sites, and practices. The Tribal Historic Preservation Officer has concurred with BIA's determination that no historic properties will be affected.
5. Environmental justice was fully considered.
6. Cumulative effects to the environment are either mitigated or minimal.
7. No regulatory requirements have been waived or require compensatory mitigation measures.
8. The proposed project will improve the socioeconomic condition of the affected Indian community.

Acting


Regional Director – Great Plains Regional Office

3-17-11
Date

**ENVIRONMENTAL ASSESSMENT
Addendum**

United States Bureau of Indian Affairs

**Great Plains Regional Office
Aberdeen, South Dakota**



Arrow Pipeline, LLC

**Addendum to Environmental Assessment to Authorize Land Use for Gathering
Pipelines Connecting the Two Shields Butte Skunk Creek #2-8-17H Well Pad to the
Arrow Phase 1B-South Pipeline**

Fort Berthold Indian Reservation

March 2011

For information contact:
Bureau of Indian Affairs, Great Plains Regional Office
Division of Environment, Safety and Cultural Resources Management
115 4th Avenue SE, Aberdeen, South Dakota 57401
(605) 226-7656

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1. Purpose and Need for the Proposed Action

Kodiak Oil & Gas (USA), Inc. (Kodiak) is drilling an exploratory oil and gas well on the Fort Berthold Indian Reservation to evaluate and possibly develop the commercial potential of natural resources. Developments have been proposed on land held in trust by the United States in Dunn County, North Dakota. The Bureau of Indian Affairs (BIA) is the surface management agency for potentially affected tribal lands and individual allotments. The BIA also holds title to subsurface mineral rights. The economic development of available resources and associated BIA actions are consistent with BIA's general mission. Leasing and development of mineral resources offers substantial economic benefits to the Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nations and to individual tribal members.

The purpose of the proposed action is to authorize the land use by Arrow Pipeline, LLC (Arrow) for the construction and installation of three gathering pipelines: one oil line, one gas line, and one water line, all of which will not individually exceed a diameter of 8 inches. The proposed gathering pipelines would transport oil, gas, and produced water from productive wells to markets and disposal facilities. A buried electrical line may be installed in the future.

2. Authorities

Oil and gas exploration and development activities are conducted under authority of the Indian Mineral Leasing Act of 1938 (25 United States Code [USC] 396a, et seq.), the Indian Mineral Development Act of 1982 (25 USC 2101, et seq.), and the Energy Policy Act of 2005 (42 USC 15801, et seq.).

3. Legal Land Description for Proposed Action

The Two Shields Butte Skunk Creek #2-8-17H gathering pipelines would be located on tribal land originating from the northwestern side of the well pad, approximately 7 miles south of Mandaree, North Dakota, in the NW¼ NE¼ of Section 8, Township (T) 148 North (N), Range (R) 93 West (W), 5th Prime Meridian (P.M.), Dunn County, North Dakota, and terminating in the NW¼ SE¼ of Section 5, T148N, R93W, 5th P.M., Dunn County, North Dakota.

4. Scope of Work for Proposed Action

Arrow proposes to construct and install oil, gas, and water gathering pipelines on trust land originating from the northwestern side of the Two Shields Butte Skunk Creek #2-8-17H well pad and joining the existing Arrow Phase 1B-South Pipeline. Oil, gas, and water pipelines would be buried in either two 2.5-foot-wide trenches, spaced 5.0 feet apart, or one 5.0-foot-wide trench. Oil and gas pipelines would be no larger than 8 inches in diameter and constructed of steel. The water pipeline would also be no larger than 8 inches in diameter and constructed of Fiberspar[®] or similar material. Approximately 2,608 feet of pipe, respective to the product type, would be needed to connect the Two Shields Butte #2-8-17 well pad to the existing Arrow Phase 1B-South Pipeline (Appendix A). All construction disturbances would occur within a 100-foot temporary construction right-of-way (ROW) while a permanent 50-

foot-wide ROW would be maintained and subjected to permanent disturbance in the form of vehicular traffic and associated maintenance, if required. The aforementioned ROWs have been surveyed for impacts to natural and cultural resources with no significant findings. In total, approximately 5.98 acres will be temporarily disturbed as a result of activities associated with the construction of the proposed gathering pipelines. Pipeline plats are provided in Appendix A.

5. Surveys

SWCA Environmental Consultants (SWCA) conducted natural resource surveys for threatened and endangered species, migratory birds, bald and golden eagles, and wetlands on November 5, 2010. BIA Environmental Specialist Darryl Turcotte approved the location and alignment of the gathering lines. No protected species including threatened and endangered species, migratory birds, or bald/golden eagles were observed during the natural resource survey. Additionally, no wetland areas or intermittent/perennial waterbodies will be impacted as a result of construction activities. The proposed pipelines will be directionally drilled under “Woman” creek to avoid open cut and impact.

SWCA conducted Class I literature review of the project area and on November 5, 2010, SWCA inventoried approximately 13 acres of ROW and disturbed areas for cultural resources, using an intensive pedestrian methodology (Kohler 2011¹). The results of the Class I survey revealed a potentially significant cultural resource located directly east of the Two Shields Butte Skunk Creek #2-8-17H access road, resulting in the pipeline alignment being routed east of the cultural resource to adequately avoid impacting to the resource.

A cultural resource inventory of this pipeline route was conducted by personnel of SWCA Environmental Consultants, using an intensive pedestrian methodology. Approximately 13 acres were inventoried on November 5, 2010 (Kohler 2011). No historic properties were located that appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.6) for inclusion on the National Register. As the lead federal agency, and as provided for in 36 CFR 800.5, on the basis of the information provided, BIA reached a determination of **no historic properties affected** for this undertaking. This determination was communicated to the THPO on February 16, 2011; however the THPO did not respond within the allotted 30 day comment period.

6. Potential Effects

Potential impacts to cultural resource sites would occur as a result of direct disturbance and/or the loss of sites eligible for the National Register of Historic Places. Further, potential impacts to natural resources may include the loss of native vegetation and wildlife habitats; soil

¹ Kohler, Todd A

2011 North Dakota Negative Results Cultural Resources Report for A Class I and Class III Cultural Resources Inventory of the Arrow/Kodiak Two Shields Butte 2-8-17H Gathering Line, Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants, Bismarck, North Dakota.

removal and mixing; and erosion during construction. However, potential impacts as a result of the proposed action were mitigated via field survey and subsequent avoidance of any eligible cultural resource sites within the proposed ROW, implementing a stormwater pollution prevention plan and best management practices, completing reclamation of the pipeline corridors with native grasses and other appropriate native vegetation, and stockpiling and re-using topsoil for reclamation.

Potential indirect impacts include noise and other disturbances to wildlife during construction and the introduction of noxious weeds. Impacts would be mitigated through avoidance of any federally listed threatened or endangered species or wetlands, avoidance of nesting migratory birds, implementing best management practices to control the introduction of noxious weeds, and minimizing the length of time between trenching, pipeline burial, and reclamation. These mitigation measures are consistent with the approved National Environmental Policy Act (NEPA) document, which received a finding of no significant impact (FONSI) (October 2010).

Resource surveys and the supplementary assessment of the potential impacts of the proposed action were completed (November 2010); based on those surveys and the mitigation measures committed to by Arrow, no significant impacts to natural and cultural resources are anticipated.

7. Applicable National Environmental Policy Act (NEPA) Document(s)

Environmental Assessment: Arrow Midstream Holdings, LLC, Oil, Gas, and Water Gathering System Phase 1B - South (BIA 12 – 14) (March 2010).

8. Other Relevant Documentation

Final Environmental Assessment: Skunk Creek 2-8-17H, Skunk Creek 4-8-17H, Skunk Creek 4-10-11H, Skunk Creek 12-10-11H, and Two Shields Butte 5-7-8H Well Pads, Kodiak Oil and Gas Company (USA), Inc, (January 2010).

9. NEPA Adequacy Criteria

This document has identified a previously prepared NEPA document, *Environmental Assessment: Arrow Midstream Holdings, LLC, Oil, Gas, and Water Gathering System Phase 1B - South (BIA 12 – 14) (March 2010)*, which adequately describes the environmental consequences of the newly proposed action, described herein, and meets the following NEPA Adequacy Criteria.

1. The proposed action is substantially the same action and at the site specifically analyzed in the existing NEPA document.
2. The range of alternatives is reasonable with respect to the current proposed action in the existing NEPA document, which appropriately considers and analyzes current environmental concerns, interests, and resource values.

3. The existing analysis and conclusions are adequate in the existing NEPA document. The analysis is still valid in light of new studies or resource assessment information.
4. The methodology and analytical approach used in the existing NEPA document continues to be appropriate for the proposed action.
5. The direct and indirect impacts of the proposed action are unchanged from those identified in the existing NEPA document.
6. The cumulative impacts that would result from implementation of the proposed action are unchanged from those analyzed in the existing NEPA document.
7. A 30-day comment period involving public input and interagency review was used in the development of the existing NEPA document.

Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines Connecting the Two Shields Butte Skunk Creek #2-8-17H Well Pad to the Arrow Phase 1B-South Pipeline (March 2011)

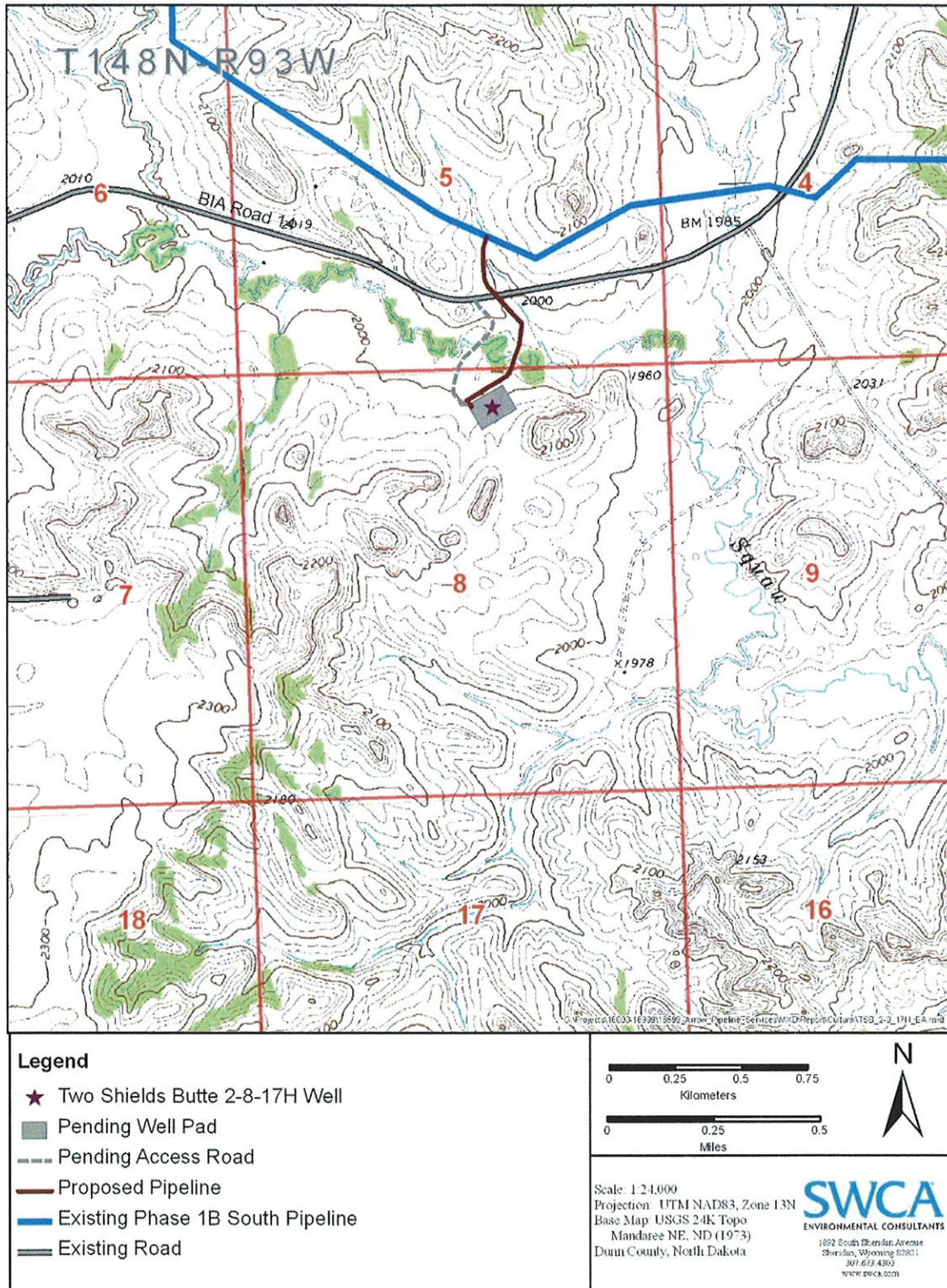


Figure 1. Proposed Two Shields Butte Skunk Creek #2-8-17H gathering pipeline and associated well pad.

Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines Connecting the Two Shields Butte Skunk Creek #2-8-17H Well Pad to the Arrow Phase 1B-South Pipeline (March 2011)



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E.
Aberdeen, South Dakota 57401



IN REPLY REFER TO:
DESCRM
MC-208

FEB 16 2011

Elgin Crows Breast, THPO
Mandan, Hidatsa and Arikara Nation
404 Frontage Road
New Town, North Dakota 58763

Dear Mr. Crows Breast:

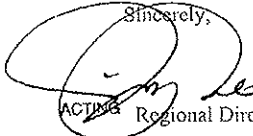
We have considered the potential effects on cultural resources of a proposed Arrow gathering line in Dunn County, North Dakota. Approximately 13 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the area depicted in the enclosed report. No historic properties were located which appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.4) for inclusion on the National Register of Historic Places. No properties were located that appear to qualify for protection under the American Indian Religious Freedom Act (42 USC 1996).

As the surface management agency, and as provided for in 36 CFR 800.5, we have therefore reached a determination of **no historic properties affected** for this undertaking. Catalogued as **BIA Case Number AAO-1891/FB/11**, the proposed undertaking, location, and project dimensions are described in the following report:

Kohler, Todd
(2011) A Class I and Class III Cultural Resources Inventory of the Arrow Kodiak Two Shields Butte 2-8-17H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants for Arrow Pipeline, L.J.C, Tulsa, OK.

If your office concurs with this determination, consultation will be completed under the National Historic Preservation Act and its implementing regulations. The Standard Conditions of Compliance will be adhered to.

If you have any questions, please contact Dr. Carson N. Murdy, Regional Archaeologist, at (605) 226-7656.

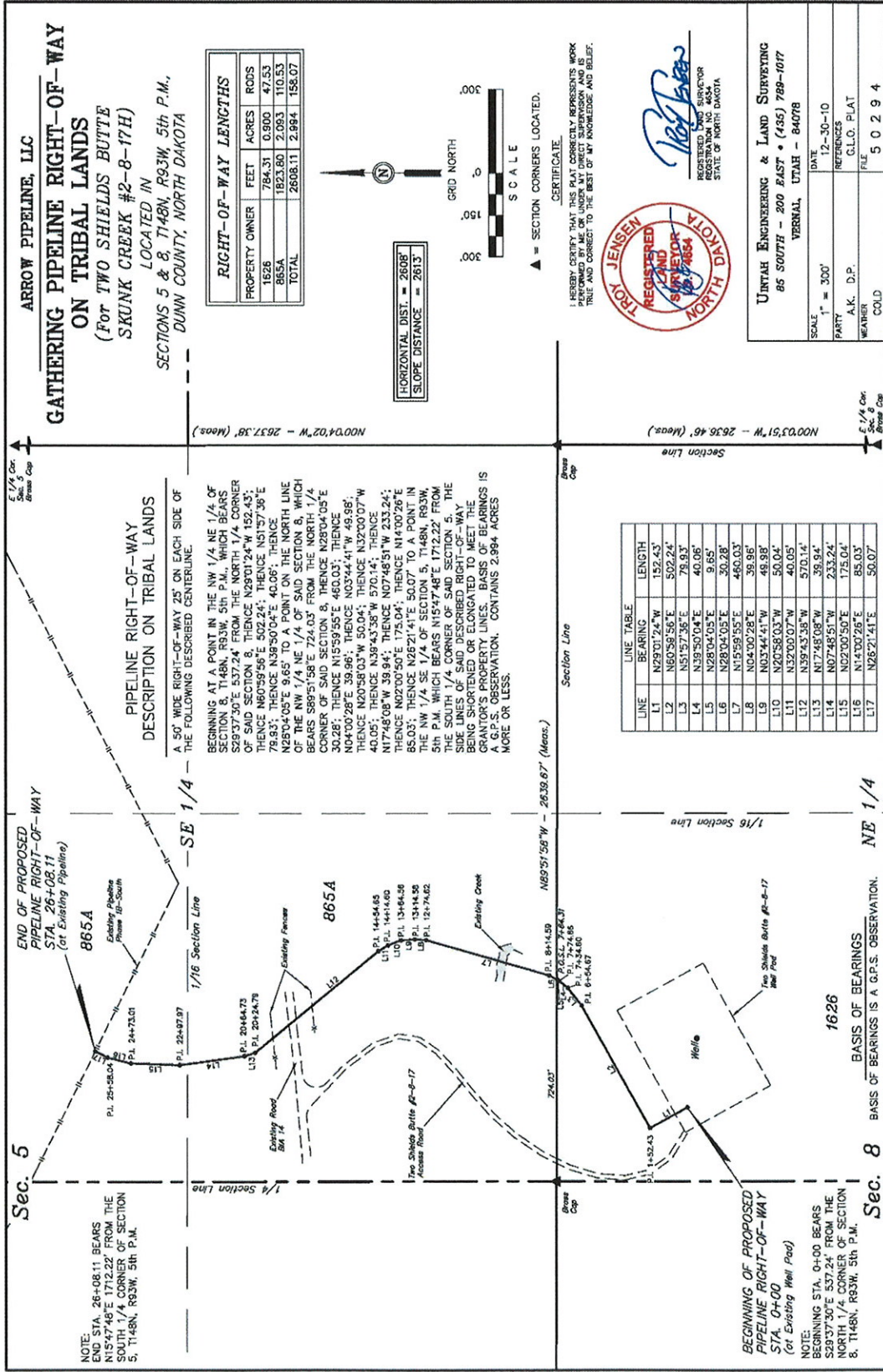
Sincerely,

ACTING Regional Director

Enclosure

cc: Chairman, Three Affiliated Tribes
Superintendent, Fort Berthold Agency

APPENDIX A
Pipeline Layout and Pipeline Right-of-Way
for Two Shields Butte Skunk Creek #2-8-17H Gathering Pipelines

Addendum to Environmental Assessment to Authorize Land Use for Gathering Pipelines Connecting the Two Shields Butte Skunk Creek #2-8-17H Well Pad to the Arrow Phase 1B-South Pipeline (March 2011)



Notice of Availability and Appeal Rights

Arrow Pipeline: Gathering Pipelines Connecting the Two Shields Butte Skunk Creek #2-8-17H Well Pad to the Arrow Phase 1B-South Pipeline

The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals related to an Addendum to Authorize Land Use for Gathering Pipelines Connecting the Two Shields Butte Skunk Creek #2-8-17H Well Pad to the Arrow Phase 1B-South Pipeline on the Fort Berthold Reservation as shown on the attached map. Construction by Arrow Pipeline, LLC is expected to begin in 2011.

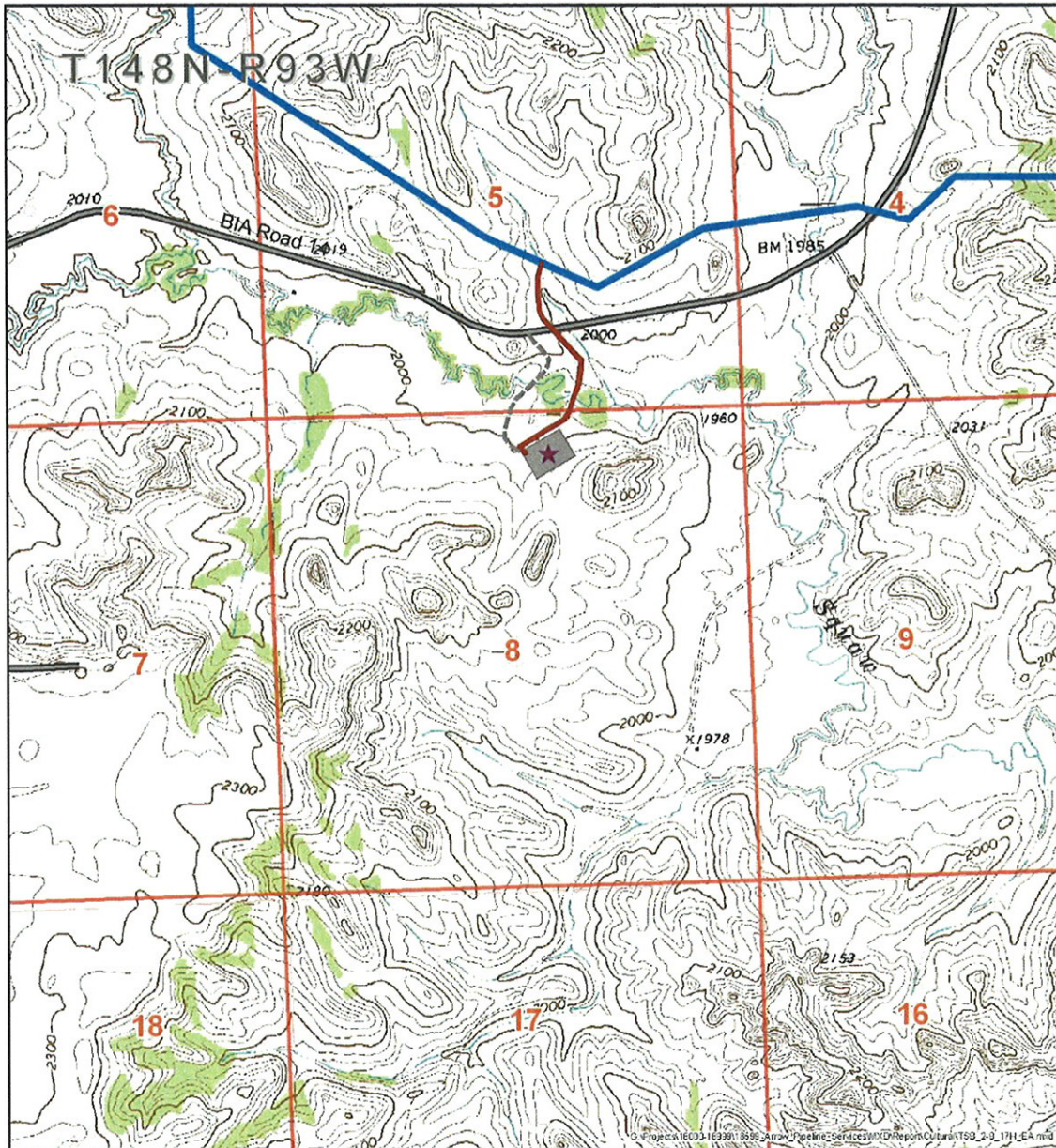
An environmental assessment (EA) determined that proposed activities will not cause significant impacts to the human environment. An environmental impact statement is not required. Contact Howard Bemer, Superintendent at 701-627-4707 for more information and/or copies of the EA and the Finding of No Significant Impact (FONSI).

The FONSI is only a finding on environmental impacts – it is not a decision to proceed with an action and *cannot* be appealed. BIA’s decision to proceed with administrative actions *can* be appealed until April 16, 2011, by contacting:

**United States Department of the Interior
Office of Hearings and Appeals
Interior Board of Indian Appeals
801 N. Quincy Street, Suite 300, Arlington, Va 22203.**

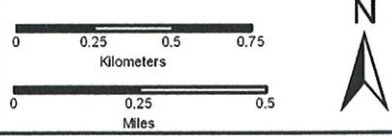
Procedural details are available from the BIA Fort Berthold Agency at 701-627-4707.

Project locations



Legend

- ★ Two Shields Butte 2-8-17H Well
- Pending Well Pad
- - - Pending Access Road
- Proposed Pipeline
- Existing Phase 1B South Pipeline
- Existing Road



Scale: 1:24,000
 Projection: UTM NAD83, Zone 13N
 Base Map: USGS 24K Topo
 Mandaree NE, ND (1973)
 Dunn County, North Dakota

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