



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E., Suite 400
Aberdeen, South Dakota 57401

IN REPLY REFER TO:
DESCRM
MC-208

JUL 05 2012

MEMORANDUM

TO: Superintendent, Fort Berthold Agency

FROM: 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, an Addendum has been completed and a Finding of No Significant Impact (FONSI) has been issued. The EA authorizes land use for pipelines connecting the Kodiak Skunk Creek #4-7-8-1H, -1H3, -8H, Skunk Creek #12-7-8-9H, -9H3, -16H3, and Skunk Creek #4-18-17-1H, -1H3 wells to the existing Arrow KOG Skunk Creek #13-18-17-16H, -16H3 pipeline system on the Fort Berthold Indian Reservation.

All the necessary requirements of the National Environmental Policy Act have been completed. Attached for your files is a copy of the Addendum, FONSI and Notice of Availability. The Council on Environmental Quality (CEQ) regulations require that there be a public notice of availability of the (40 C.F.R. Section 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)
Mike Cook, SWCA (with attachment)
Carson Hood/Fred Fox, MHA Energy Dept (with attachment)
Jonathon Shelman, Corps of Engineers
Jeff Hunt, Fort Berthold Agency

Finding of No Significant Impact

Arrow Pipeline, LLC

*Addendum to Environmental Assessment to Authorize Land Use for Pipelines
Connecting the Kodiak Skunk Creek #4-7-8-1H, -1H3, -8H, Skunk Creek #12-7-8-9H,
-9H3, -16H3, and Skunk Creek #4-18-17-1H, -1H3 Wells to the Existing Arrow KOG
Skunk Creek #13-18-17-16H, -16H3 Pipeline System*

*Fort Berthold Indian Reservation
Dunn County, North Dakota*

The U.S. Bureau of Indian Affairs (BIA) has received a proposal to authorize land use for Pipelines Connecting the Kodiak Skunk Creek #4-7-8-1H, -1H3, -8H, Skunk Creek #12-7-8-9H, -9H3, -16H3, and Skunk Creek #4-18-17-1H, -1H3 Wells to the Existing Arrow KOG Skunk Creek #13-18-17-16H, -16H3 Pipeline System on the Fort Berthold Reservation. The pipelines would be located on trust land, entirely within Dunn County, North Dakota, originating at the southeast side of the proposed Skunk Creek #4-7-8-1H, -1H3, -8H well pad, in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 7, Township (T) 148 North (N), Range (R) 92 West (W). The pipelines would trend southeast through Sections 7 and 18, T148N, R92W, and terminate at the approved Arrow KOG #13-18-17-16H, -16H3 pipeline system (tie-in) in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 13, T148N, R93W. Associated federal actions by BIA include determinations of impacts and effects regarding environmental resources for developments on tribal lands.

The potential of the proposed actions to impact the human environment is analyzed in the attached addendum to an existing EA, as required by the National Environmental Policy Act. Based on the recently completed addendum to the EA, I have determined that 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 solicited for the preceding NEPA document was sufficient to ascertain potential environmental concerns associated with the currently proposed project.
2. Protective and prudent measures were designed to minimize impacts to air, water, soil, vegetation, wetlands, wildlife, public safety, water resources, and cultural resources. The remaining potential for impacts was disclosed for both the proposed actions 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.), the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250), Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds", and the Endangered Species Act (16 U.S.C. 1531 et seq.).
4. The proposed actions are designed to avoid adverse effects to historic, archaeological, cultural and traditional properties, sites and practices. Compliance with the procedures of the National Historic Preservation Act is complete.
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 projects will improve the socio-economic condition of the affected Indian community.


Regional Director


Date

Notice of Availability and Appeal Rights

Arrow Pipeline, LLC: Addendum to Environmental Assessment to Authorize Land Use for Pipelines Connecting the Kodiak Skunk Creek #4-7-8-1H, -1H3, -8H, Skunk Creek #12-7-8-9H, -9H3, -16H3, and Skunk Creek #4-18-17-1H, -1H3 Wells to the Existing Arrow KOG Skunk Creek #13-18-17-16H, -16H3 Pipeline System

The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals for Pipelines Connecting the Kodiak Skunk Creek #4-7-8-1H, -1H3, -8H, Skunk Creek #12-7-8-9H, -9H3, -16H3, and Skunk Creek #4-18-17-1H, -1H3 Wells to the Existing Arrow KOG Skunk Creek #13-18-17-16H, -16H3 Pipeline System on the Berthold Reservation as shown on the attached map. Construction by Arrow Pipeline is expected to begin in 2012.

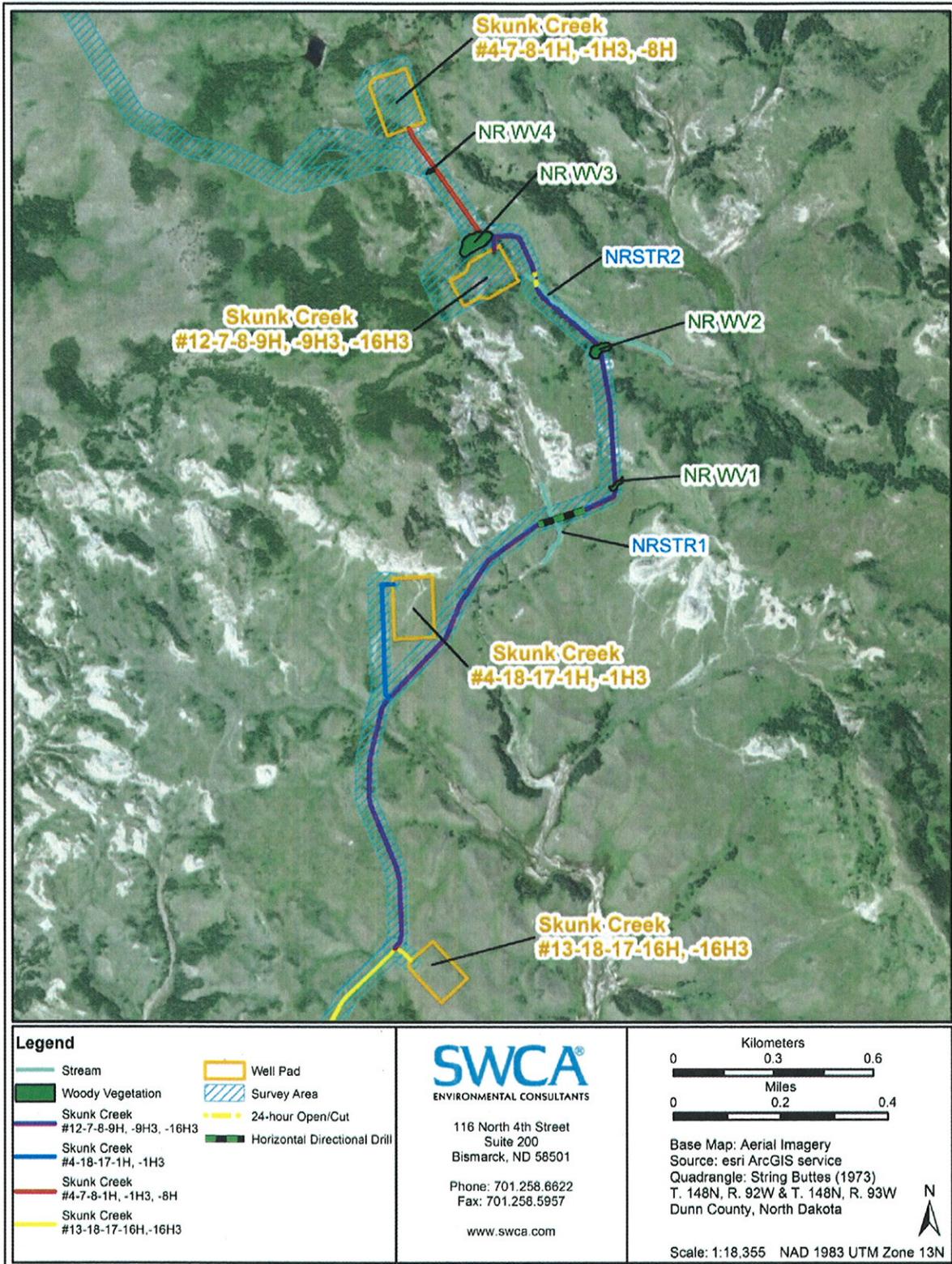
An environmental assessment (EA) determined that proposed activities will not cause significant impacts to the human environment. An environmental impact statement is not required. Contact Earl Silk, Superintendent at 701-627-6570 for more information and/or copies of the EA and the Finding of No Significant 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 August 2, 2012, 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.



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 Pipelines
Connecting the Kodiak Skunk Creek #4-7-8-1H, -1H3, -8H, Skunk Creek #12-7-8-9H,
-9H3, -16H3, and Skunk Creek #4-18-17-1H, -1H3 Wells to the Existing Arrow KOG
Skunk Creek #13-18-17-16H, -16H3 Pipeline System**

Fort Berthold Indian Reservation

June 2012

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

The purpose of the proposed action is to authorize the land use by Arrow Pipeline, LLC (Arrow) for the construction and installation of three pipelines including one crude oil pipeline, one natural gas pipeline, and one produced water pipeline. As proposed, the Kodiak Skunk Creek #4-7-8-1H, -1H3, -8H, Skunk Creek #12-7-8-9H, -9H3, -16H3, and Skunk Creek #4-18-17-1H, -1H3 pipeline system (pipelines) would transport oil, natural gas, and produced water to markets and approved disposal sites. A buried electrical line may be installed within the approved right-of-way (ROW) in the future.

Developments have been proposed on land held in trust by the United States in Dunn County, North Dakota, where the Bureau of Indian Affairs (BIA) is the surface management agency for potentially affected individual allotments. 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.

2. Authorities

Oil and gas exploration and development activities are conducted under the 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 pipelines would be located on trust land, entirely within Dunn County, North Dakota, originating at the southeast side of the proposed Skunk Creek #4-7-8-1H, -1H3, -8H well pad, in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 7, Township (T) 148 North (N), Range (R) 92 West (W). The pipelines would trend southeast through Sections 7 and 18, T148N, R92W, and terminate at the approved Arrow KOG #13-18-17-16H, -16H3 pipeline system (tie-in) in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 13, T148N, R93W (Figure 1).

Skunk Creek #4-7-8-1H, -1H3, -8H Pipeline System

The Skunk Creek #4-7-8-1H, -1H3, -8H pipeline system would be located on trust land originating from the southeast side of the well pad, approximately 11.5 miles southeast of Mandaree, North Dakota, in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 7, T148N, R92W. The proposed pipeline system would traverse southeast and connect with the proposed Skunk Creek #12-7-8-9H, -9H3, -16H3 pipeline system in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 7, T148N, R92W, 5th Prime Meridian (P.M.).

Skunk Creek #12-7-8-9H, -9H3, -16H3 Pipeline System

The Skunk Creek #12-7-8-9H, -9H3, -16H3 pipeline system would be located on trust land, approximately 12 miles southeast of Mandaree, North Dakota, originating near the northeast

corner of the well pad in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 7, T148N, R92W. The pipeline would trend due east then turn south-southeast across Section 7, T148N, R92W, then trend west-southwest through Section 18, T148N, R92W, and finally trend south-southeast through the NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 13, T148N, R93W. The pipelines would connect to the approved Skunk Creek #13-18-17-16H, -16H3 pipeline system in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 13, T148N, R93W (Figure 1).

Skunk Creek #4-18-17-1H, -1H3 Pipeline System

The Skunk Creek #4-18-17-1H, -1H3 pipeline system would be located on trust land originating near the northwest corner of the well pad, approximately 12 miles southeast of Mandaree, North Dakota, in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 18, T148N, R92W, 5th P.M., Dunn County, North Dakota. The proposed pipeline system would travel west from the well pad then south through the east side of Section 13, T148N, R93W, and tie in with the proposed Skunk Creek #12-7-8-9H, -9H3, -16H3 pipeline system in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 13, T148N, R93W, 5th P.M., Dunn County, North Dakota.

4. Scope of Work for Proposed Action

Each of the proposed pipeline systems would include one oil, one gas, and one water pipeline. Each pipeline system 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 greater than 8 inches in diameter and constructed of new steel. The water pipeline would also be no greater than 8 inches in diameter and constructed of Fiberspar[®] or similar corrosion-resistant material. All construction disturbances would occur within a 120-foot-wide temporary construction ROW. A permanent 50-foot ROW would be maintained between each pipeline system's respective well pad and associated tie in point, unless otherwise noted. Pipeline plats are provided in Appendix A.

Skunk Creek #4-7-8-1H, -1H3, -8H Pipeline System

Approximately 2,784 feet of new steel pipe (i.e., 1,392 feet of oil and gas pipeline) and 1,392 feet of Fiberspar or similar pipe would be needed to connect the Skunk Creek #4-7-8-1H, -1H3, -8H wells to the proposed Skunk Creek #12-7-8-9H, -9H3, -16H3 pipeline system. Approximately 3.835 acres would be disturbed as a result of activities associated with the construction of the proposed pipeline system.

Skunk Creek #12-7-8-9H, -9H3, -16H3 Pipeline System

Approximately 17,866 feet of new steel pipe (i.e., 8,933 feet of oil and gas pipeline) and 8,933 feet Fiberspar or similar pipe would be needed to connect the Skunk Creek #12-7-8-9H, -9H3, -16H3 wells to the approved Skunk Creek #13-18-17-16H, -16H3 pipeline system. Approximately 24.609 acres would be disturbed as a result of activities associated with the construction of the proposed pipeline system.

Skunk Creek #4-18-17-1H, -1H3 Pipeline system

Approximately 2,476 feet of new steel pipe (i.e., 1,238 feet of oil and gas pipe) and 1,238 feet of Fiberspar or similar pipe would be needed to connect the Skunk Creek #4-18-17-1H, -1H3 wells to the proposed Skunk Creek #12-7-8-9H, -9H3, -16H3 pipeline system. Approximately 3.410 acres would be disturbed as a result of activities associated with the construction of the proposed pipeline system.

5. Materials Information and Corrosion Rates

Steel Pipe

Arrow proposes to construct the oil and gas pipelines using new steel pipe rated by the American Petroleum Institute (API) as 5L X52. Arrow would ensure that each steel pipe segment is coated with approximately 14 to 16 millimeters of fusion bonded epoxy coating. Further, Arrow would deploy an active cathodic protection system for all steel pipe, which further reduces the likelihood of external corrosion. Arrow would ensure that each steel pipe segment is allotted a 1/16-inch corrosion allowance; however, because of the non-corrosive nature of Bakken crude and the low concentrations of hydrogen sulfide, Arrow does not anticipate any external or internal corrosion during the operating lifetime of the pipe, which, at a minimum, is estimated to be 50 years.

Fiberspar or Similar Pipe

Arrow proposes to construct the produced water pipeline using a material known as Fiberspar or one with the same corrosion-resistant characteristics as Fiberspar. This type of material is not subject to internal or external corrosion.

6. Spill Response Plan

Arrow has developed a Spill Response Plan (Plan) (Middick 2011¹) for the Phase 3 Southwest pipeline. The spill preventative measures and monitoring protocols, notification procedures, spill detection and on-scene spill mitigation procedures, response activities, contacts, training and drill procedures, and response plan review and update procedures, as referenced in the Plan, apply to the proposed pipelines. A copy of the Plan has been filed with the BIA and Arrow has legally committed to adhering to the procedures and requirements as defined by federal law (Title 49 Code of Federal Regulations [CFR] 194). Arrow has committed to submitting a spill response plan, specific to this proposed project, to the BIA prior to the commencement of construction activities.

7. Pipeline Marking Procedures

Arrow adheres to the requirements of 49 CFR 192.707 with regard to the marking of buried pipelines. Specifically, Arrow would place pipeline markers within 1,000 feet of one another,

¹ Middick, A. 2011. *Operations Monitoring and Spill Response Plan*. Blackshare Environmental Solutions. Oklahoma City, Oklahoma.

at all public road crossings, railroad crossings, creek crossings, and fence crossings, and at all points of major direction change.

8. Quality Control/Quality Assurance Measures

Arrow purchases steel pipe that is rated as API 5L X52 and inspects all pipe while at the mill to ensure quality. Arrow is also present to ensure that external epoxy coating is applied to a minimum thickness of 14 millimeters. During construction, all welds are visually inspected for quality and completeness by qualified professionals. Once welds have passed visual inspection, they are subjected to 100 percent non-destructive testing. After passing these tests, the weld areas are covered for corrosion protection. After the weld areas have been covered, the external coating of the pipe is inspected using a jeepmeter to detect holes and cracks. The pipe is lowered into the trench and buried. Prior to being put into service, the steel pipe is hydrotested to approximately 1.5 times the minimum design pressure of 1,180 pounds per square inch gauge (psig). The produced water pipe is designed to sustain a minimum pressure of 750 psig and is hydrotested to approximately 900 psig prior to being approved for service.

9. Valve Locations

Two valves would be installed at each end of the proposed pipelines. One valve would be installed at the well location while the second valve would be installed at the proposed tie-in. The installation of two valves would allow Arrow to isolate the proposed pipelines if required.

10. Reclamation

Interim Reclamation

Reclamation would continue to occur over the life of the pipelines. Initial reclamation would be required after initial construction and then following any maintenance work or additions of infrastructure. Reclamation would be required before final abandonment of the decommissioned pipeline. Successful reclamation would at all times be the responsibility of the system's operator.

Trenches would be back-filled immediately after the pipe is installed and testing is complete, assuming frozen or saturated soils are not present. Back-fill piles would be stored opposite of the topsoil piles during construction. If construction occurs during winter, Arrow would partially fill the trench with useable, non-frozen, back-fill soil to the extent possible and cover the entire ROW including the trench with straw. The trench would be back-filled and topsoil distributed as soon as practicable after the soil has defrosted. Topsoil piles would be covered to eliminate the potential for rill erosion and subsequent loss of soil during spring snow melt and precipitation events.

Applicable short- and long-term best management practices would be used to minimize and control erosion in disturbed areas. To reduce compaction, the ROW would be plowed before the stockpiled topsoil is distributed.

The disturbed areas would be reclaimed and contoured as soon as possible after construction is complete (fall/spring). The ROW would be covered with stockpiled topsoil and seeded with a seed mixture determined by the BIA. Arrow would control noxious weeds within the ROW and other applicable facilities by approved chemical or mechanical methods. If seeding of the ROW does not occur due to growing season constraints, Arrow would deploy approved weed-free hay across the entire ROW. The presence of hay across the ROW would reduce the potential for excessive erosion as a result of spring snow melt and precipitation.

The entire ROW would be monitored for erosion, subsidence, and noxious weeds. In areas where problems are found to occur, reclamation efforts would continue until the BIA feels the ROW is successfully reclaimed. Reclamation is considered successful when:

- seeded areas are established;
- adjacent vegetative communities spread back into the disturbed areas; and
- noxious weeds are under control.

If after two growing seasons the new seeding is not successful, the BIA may require additional efforts to establish vegetation. For noxious weeds, a survey was conducted on the ROW prior to the construction commencing. The BIA has developed a weed management plan to treat known or likely to occur noxious weed species.

Final Reclamation

Final reclamation would occur when the pipelines are decommissioned. All disturbed areas would be reclaimed, reflecting the BIA's view of oil and natural gas liquid exploration and production as temporary intrusions on the landscape. All facilities would be removed. Work areas would be leveled or backfilled as necessary, scarified, recontoured, and seeded. It is economically and environmentally unfeasible to excavate and remove the decommissioned pipelines. Instead, the pipelines would be purged with water of any natural gas liquids remaining in the lines and abandoned in place.

11. Surveys

SWCA Environmental Consultants (SWCA) conducted natural resource surveys for threatened and endangered habitat, migratory bird nesting habitat, bald and golden eagles and nests, and wetlands/waterbodies on May 4, 2012. BIA Environmental Specialist Chris McLaughlin was present for on-site inspections of the proposed alignment of the pipelines on May 7, 2012, to ensure measures are taken to minimize impacts to sensitive resources. Migratory bird habitat is prevalent in the survey area and Arrow has committed to following one of the following three listed mitigation procedures in order to reduce the potential for impact on migratory birds and their nests: 1) conduct construction outside of the migratory bird breeding season (i.e., July 16–January 31); 2) regularly mow vegetation in the ROW prior to February 1 and maintain through July 15; or 3) conduct a field survey for nesting migratory birds within five days of construction commencement. SWCA identified the presence of one intermittent stream (NRST1) and one perennial stream (NRSTR 2) within the

survey corridor during the field survey (Figure 1). Arrow intends to bore/directionally drill under the intermittent stream and complete a section drag for the perennial drainage. SWCA also identified areas of woody vegetation which would be removed, mulched, and mixed back into the topsoil during construction.

Cultural resource inventories of these pipelines were conducted by personnel of SWCA Environmental Consultants, using an intensive pedestrian methodology. Approximately 53 acres were inventoried between September 7, 2011 and May 5, 2012 (Cox 2012). 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 June 4, 2012; however, the THPO did not respond within the allotted 30 day comment period.

Cox, Matthew

(2012) A Class I and Class III Cultural Resources Inventory of the Arrow Skunk Creek #4-18-17-1H, -1H3 and Skunk Creek #4-7-8-1H, -1H3, -8H Pipeline Systems and an Addendum to the Class I and Class III Cultural Resource Inventory of the Arrow Skunk Creek #12-7-8-9H3, -9H, -16H3 Pipeline System, Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants for Arrow Pipeline, LLC, Tulsa, OK.

12. Operator-Committed Measures

- NRSTR1 – Cross stream through trenchless methodology (i.e., bore or horizontal directional drill).
- NRSTR2, 24-hour open cut – All disturbance including trenching, pipeline placement, and trench filling must be completed within a 24-hour period.
- Woody Vegetation – Avoid removal of woody stemmed vegetation when possible. However, if removed mulch woody stems and mix with topsoil.

13. Potential Effects

Potential direct impacts to cultural resource sites would occur as a result of disturbance and/or the loss of sites eligible for the National Register of Historic Places. However, no cultural resources were recorded during the Class III cultural resource surveys.

Potential direct impacts to natural resources may include the loss of native vegetation and wildlife habitat, soil disturbance, and erosion during construction that may adversely affect air and water quality. Impacts would be mitigated by using best management practices during construction to minimize disturbance. Once construction activities are completed, reclamation

would take place within six months and would include the return of topsoil and contouring, and seeding of native vegetation.

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) (April 2011).

14. Applicable NEPA Document(s)

- *Environmental Assessment and Finding of No Significant Impact: Arrow Pipeline, LLC Phase 2 Southeast Pipeline* (April 2011)

15. Relevant NEPA Document(s)

- *Addendum to Environmental Assessment to Authorize Land Use for Pipelines Connecting the KOG Skunk Creek 13-18-17-16H and 13-18-17-16H3 Wells to the Existing Arrow Phase 2 Southeast Pipeline*

16. NEPA Adequacy Criteria

This document has identified two previously prepared NEPA documents (Sections 14 and 15) which adequately describe the environmental consequences of the newly proposed action described herein, and meet the following NEPA Adequacy Criteria.

1. The proposed action is substantially the same action and at the site specifically analyzed in the existing NEPA documents.
2. The range of alternatives is reasonable with respect to the current proposed action in the existing NEPA documents, which appropriately consider and analyze current environmental concerns, interests, and resource values.
3. The existing analysis and conclusions are adequate in the existing NEPA documents. 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 documents 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 documents.
6. The cumulative impacts that would result from implementation of the proposed action are unchanged from those analyzed in the existing NEPA documents.

*Addendum to Environmental Assessment to Authorize Land Use for Pipelines Connecting the Kodiak Skunk Creek #4-7-8-1H, -1H3, -8H, Skunk Creek #12-7-8-9H, -9H3, -16H3, and Skunk Creek #4-18-17-1H, -1H3 Wells to the Existing Arrow KOG Skunk Creek #13-18-17-16H, -16H3 Pipeline System
(June 2012)*

7. A 30-day comment period involving public input and interagency review was used in the development of the existing NEPA documents.

Addendum to Environmental Assessment to Authorize Land Use for Pipelines Connecting the Kodiak Skunk Creek #4-7-8-1H, -1H3, -8H, Skunk Creek #12-7-8-9H, -9H3, -16H3, and Skunk Creek #4-18-17-1H, -1H3 Wells to the Existing Arrow KOG Skunk Creek #13-18-17-16H, -16H3 Pipeline System (June 2012)

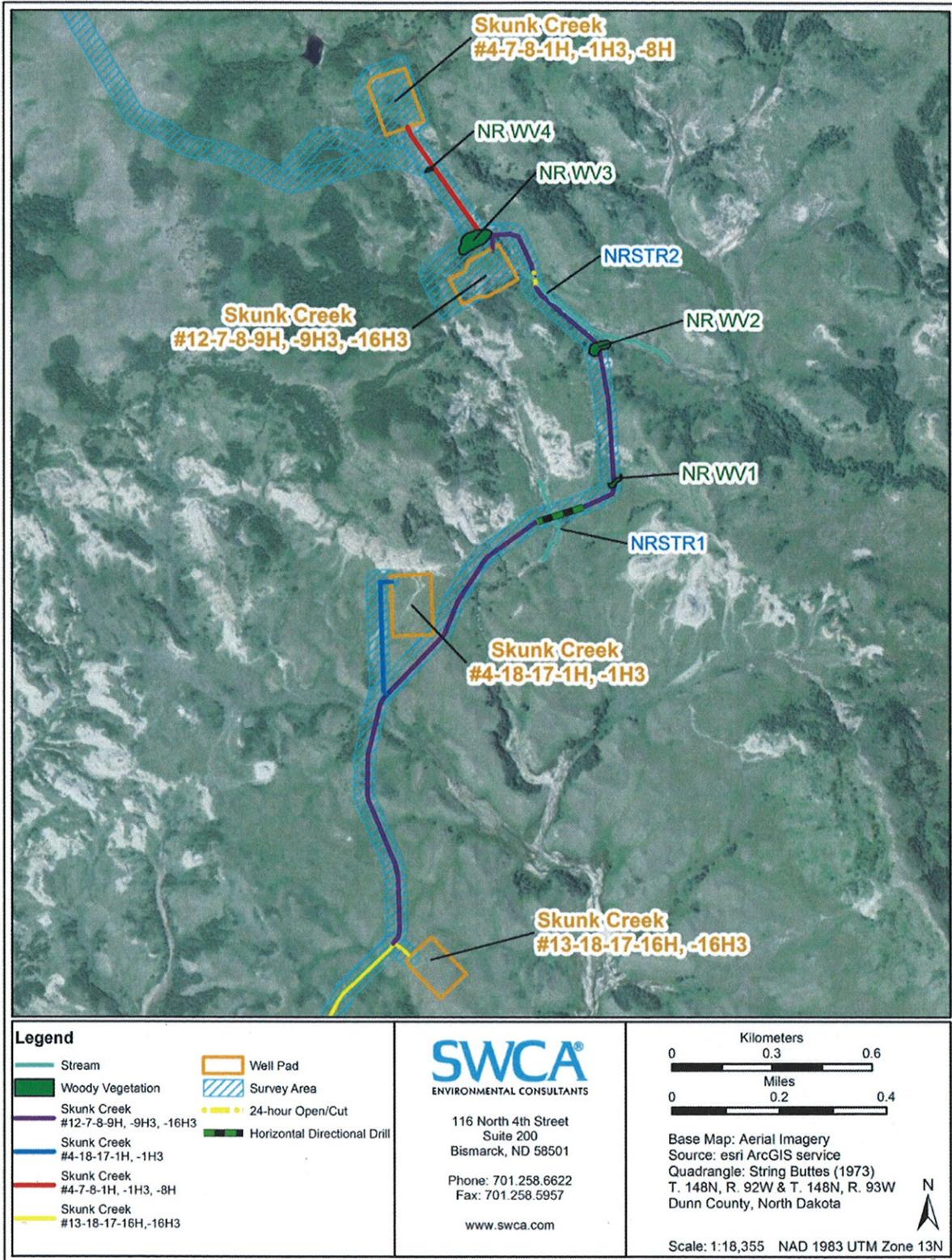


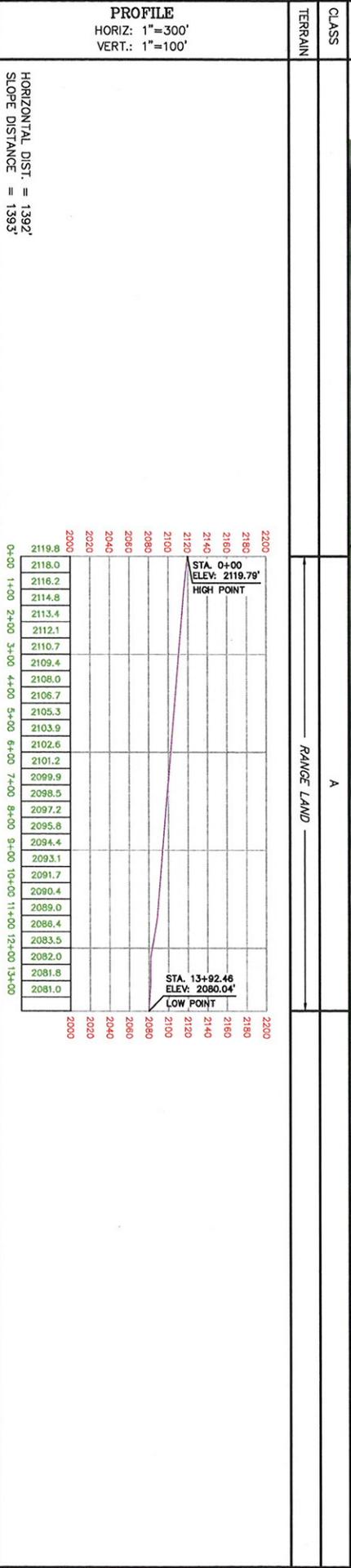
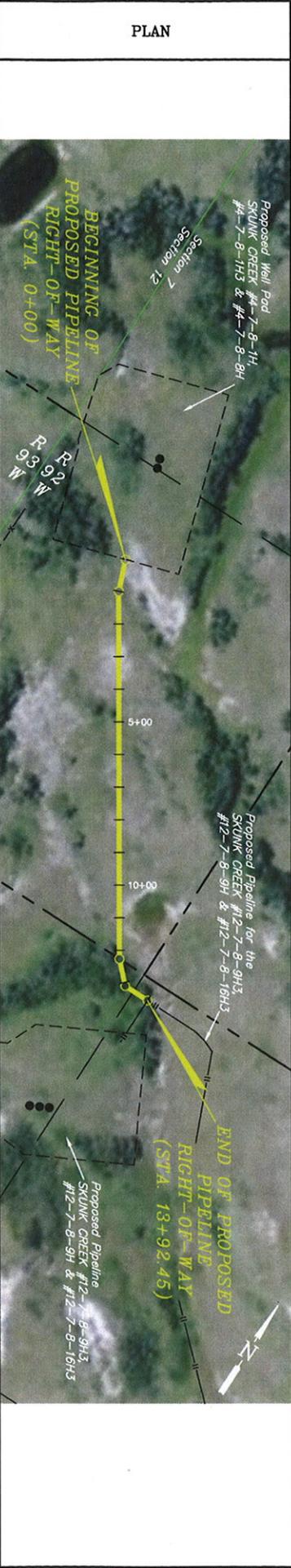
Figure 1. Proposed Arrow Skunk Creek Pipeline Systems.

APPENDIX A

Pipeline Layout and Pipeline Right-of-Way for the Kodiak Skunk Creek #4-7-8-1H, -1H3, -8H, Skunk Creek #12-7-8-9H3, -9H, -16H3, and Skunk Creek #4-18-17-1H, -1H3 Pipeline System

OWNER:	17041-C LOT 2 SEC. 7 T148N, R92W, 5th P.M.	12+25.94 S 1/2 SEC. 7 T148N, R92W, 5th P.M.	13+92.45
RODAGE:	74.30	10.09	
OWNERSHIP *SEE PLAN VIEW			

STATIONING	0+00	10+00.04 P.I. 11'59'43" L	12+25.83 P.I. 11'54'36" L 12+25.94 P.O.S.L.	13+10.77 P.I. 45'07'43" L
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<p>PROFILE HORIZ.: 1"=300' VERT.: 1"=100'</p> <p>HORIZONTAL DIST. = 1392' SLOPE DISTANCE = 1393'</p>	<p>EASEMENT WORKSPACE</p> <p>FINAL EASEMENT</p> <p>TEMP. EASEMENT</p> <p>ADJUSTMENT</p>	<p>CLASS MATERIAL</p> <p>MATERIAL SUMMARY</p> <p>CASING</p> <p>COATING</p> <p>TERRAIN</p>	<p>PROJECT DATA</p> <p>SURVEYED BY: A.K.</p> <p>DRAWN BY: J.L.</p> <p>DATE: 01-25-12</p>	<p>SCALE: AS SHOWN</p> <p>DRAWING# 5 1 5 2 9</p> <p>SHEET# 1 OF 1</p>	<p>SECTION 7 LOCATED IN 5th P.M. PLANN COUNTY NORTH DAKOTA</p>	<p>ARROW PIPELINE, LLC. SKUNK CREEK #4-7-8-1H #4-7-8-1H3 & #4-7-8-9H PIPELINE PLAN & PROFILE</p>
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Upper Engineering & Land Surveying
1015 14th St SW
Fargo ND 58103
(701) 785-1011

PIPELINE RIGHT-OF-WAY DESCRIPTION

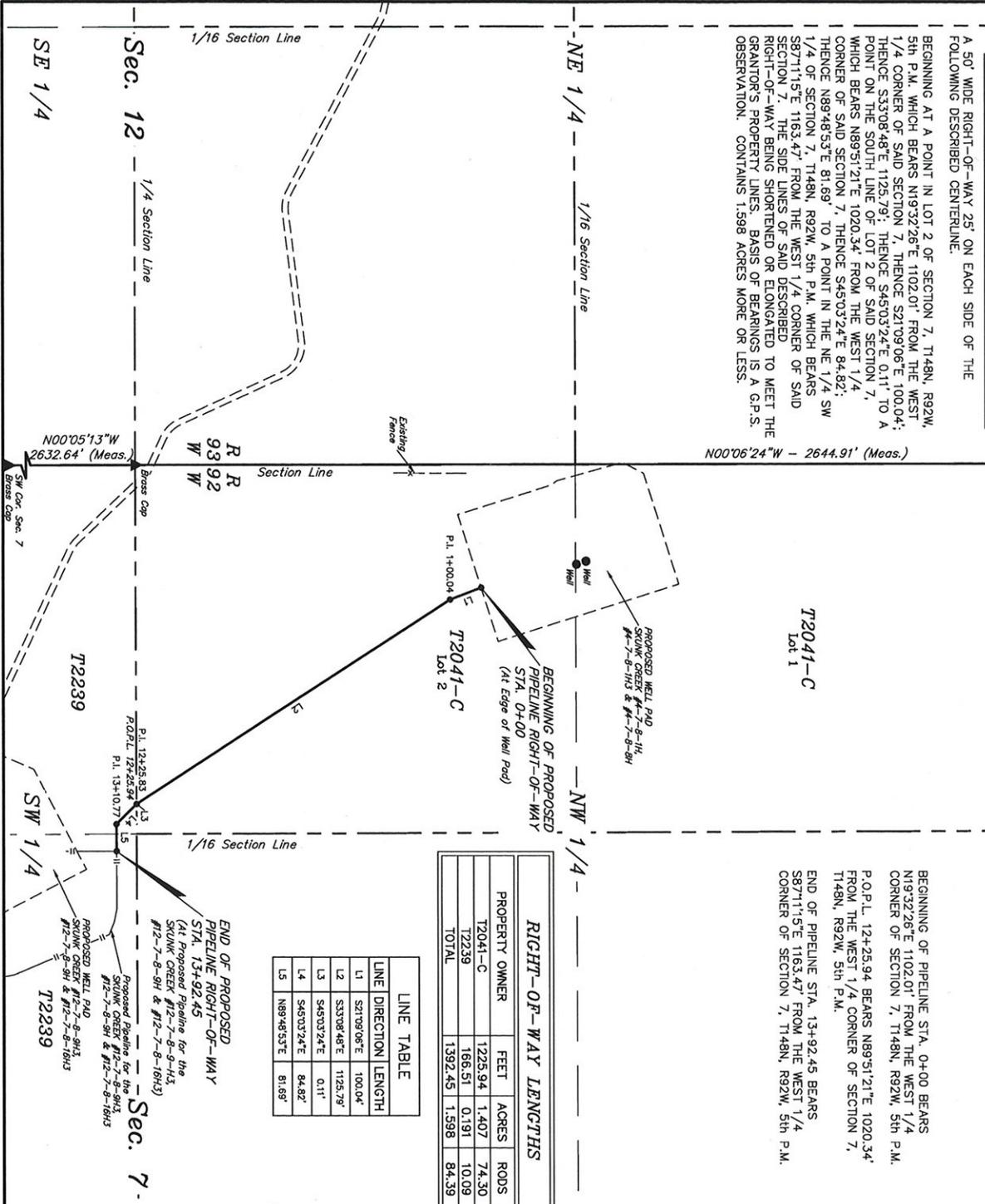
A 50' WIDE RIGHT-OF-WAY 25' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.
 BEGINNING AT A POINT IN LOT 2 OF SECTION 7, T148N, R92W, 5th P.M. WHICH BEARS N19°32'26"E 1102.01' FROM THE WEST 1/4 CORNER OF SAID SECTION 7, THENCE S21°09'06"E 100.04'; THENCE S33°08'48"E 1123.79'; THENCE S45°03'24"E 0.11' TO A POINT ON THE SOUTH LINE OF LOT 2 OF SAID SECTION 7, WHICH BEARS N89°51'21"E 1020.34' FROM THE WEST 1/4 CORNER OF SAID SECTION 7, THENCE S45°03'24"E 84.82'; THENCE N89°48'53"E 81.69' TO A POINT IN THE NE 1/4 SW 1/4 OF SECTION 7, T148N, R92W, 5th P.M. WHICH BEARS S87°11'57"E 1163.47' FROM THE WEST 1/4 CORNER OF SAID SECTION 7, THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANATOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 1.598 ACRES MORE OR LESS.

PIPELINE RIGHT-OF-WAY DESCRIPTION

A 50' WIDE RIGHT-OF-WAY 25' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.
 BEGINNING AT A POINT IN LOT 2 OF SECTION 7, T148N, R92W, 5th P.M. WHICH BEARS N19°32'26"E 1102.01' FROM THE WEST 1/4 CORNER OF SECTION 7, T148N, R92W, 5th P.M. CORNER OF SECTION 7, THENCE S21°09'06"E 100.04'; THENCE S33°08'48"E 1123.79'; THENCE S45°03'24"E 0.11' TO A POINT ON THE SOUTH LINE OF LOT 2 OF SAID SECTION 7, WHICH BEARS N89°51'21"E 1020.34' FROM THE WEST 1/4 CORNER OF SECTION 7, THENCE S45°03'24"E 84.82'; THENCE N89°48'53"E 81.69' TO A POINT IN THE NE 1/4 SW 1/4 OF SECTION 7, T148N, R92W, 5th P.M. WHICH BEARS S87°11'57"E 1163.47' FROM THE WEST 1/4 CORNER OF SAID SECTION 7, THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANATOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 1.598 ACRES MORE OR LESS.

PIPELINE RIGHT-OF-WAY DESCRIPTION

A 50' WIDE RIGHT-OF-WAY 25' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.
 BEGINNING OF PIPELINE STA. 0+00 BEARS N19°32'26"E 1102.01' FROM THE WEST 1/4 CORNER OF SECTION 7, T148N, R92W, 5th P.M. CORNER OF SECTION 7, THENCE S21°09'06"E 100.04'; THENCE S33°08'48"E 1123.79'; THENCE S45°03'24"E 0.11' TO A POINT ON THE SOUTH LINE OF LOT 2 OF SAID SECTION 7, WHICH BEARS N89°51'21"E 1020.34' FROM THE WEST 1/4 CORNER OF SECTION 7, THENCE S45°03'24"E 84.82'; THENCE N89°48'53"E 81.69' TO A POINT IN THE NE 1/4 SW 1/4 OF SECTION 7, T148N, R92W, 5th P.M. WHICH BEARS S87°11'57"E 1163.47' FROM THE WEST 1/4 CORNER OF SAID SECTION 7, THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANATOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 1.598 ACRES MORE OR LESS.



PROPERTY OWNER	FEET	ACRES	RODS
T2041-C	1225.94	1.407	74.30
T2239	166.51	0.191	10.09
TOTAL	1392.45	1.598	84.39

LINE	DIRECTION	LENGTH
L1	S21°09'06"E	100.04'
L2	S33°08'48"E	1123.79'
L3	S45°03'24"E	0.11'
L4	S45°03'24"E	84.82'
L5	N89°48'53"E	81.69'

END OF PROPOSED PIPELINE RIGHT-OF-WAY
 STA. 13+92.45
 (At Proposed Pipeline for the SKUNK CREEK #4-7-8-1H, #4-7-8-1H3 & #4-7-8-8H)
 Proposed Pipeline for the SKUNK CREEK #4-7-8-1H, #4-7-8-1H3 & #4-7-8-8H

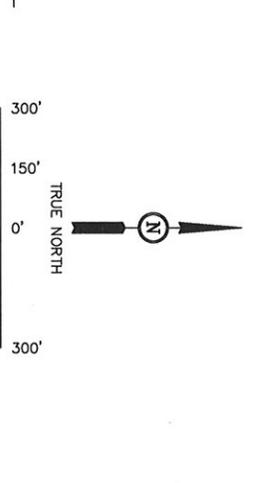
TROY JENSEN
 REGISTERED LAND SURVEYOR
 05-08-12
 154654

REGISTERED LAND SURVEYOR
 STATE OF NORTH DAKOTA

REVISIONS:
 REV. 05-08-12
 REV. 03-28-12
 REV. 03-26-12
 REV. 02-03-12

I HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

CERTIFICATE



ARROW PIPELINE, LLC

PIPELINE RIGHT-OF-WAY ON TRIBAL LANDS

(For SKUNK CREEK #4-7-8-1H, #4-7-8-1H3 & #4-7-8-8H)

LOCATED IN
 SECTION 7, T148N, R92W, 5th P.M.,
 DUNN COUNTY, NORTH DAKOTA

UTAH ENGINEERING & LAND SURVEYING
 85 SOUTH • 200 EAST • (435) 789-1017
 VERNAL, UTAH - 84078

SCALE 1" = 300'

PARTY	A.K.	J.L.
WEATHER	FILE	5 1 5 2 8

ARROW PIPELINE, LLC
SKUNK CREEK #4-7-8-1H, #4-7-8-1H3 & #4-7-8-8H
PIPELINE RIGHT-OF-WAY
SECTION 7, T148N, R92W, 5th P.M.

TOTAL PIPELINE RIGHT-OF-WAY ON TRIBAL LANDS

TOTAL LENGTH OF RIGHT-OF-WAY IS 1392.45' OR 0.264 MILES. WIDTH OF RIGHT-OF-WAY IS 50' (25' PERPENDICULAR ON EACH SIDE OF THE CENTERLINE). CONTAINS 1.598 ACRES MORE OR LESS.

ENGINEER'S AFFIDAVIT

STATE OF MONTANA }
COUNTY OF RICHLAND } SS

TROY JENSEN, BEING FIRST DULY SWORN DEPOSES AND STATES THAT HE IS THE REGISTERED LAND SURVEYOR, FOR ARROW PIPELINE, LLC, THAT THESE SURVEYS WERE MADE BY HIM (OR UNDER HIS SUPERVISION): THAT HE HAS EXAMINED THE FIELD NOTES OF THE SURVEYS OF THE PIPELINE RIGHT-OF-WAY AS DESCRIBED AND SHOWN ON THIS MAP, THAT THIS MAP WAS PREPARED UNDER HIS DIRECTION FROM SAID FIELD NOTES; AND THAT SAID RIGHT-OF-WAY, 0.264 MILES IN LENGTH BEGINNING AND ENDING AS SHOWN ON THIS MAP IS ACCURATELY REPRESENTED.




REGISTERED LAND SURVEYOR
REGISTRATION NO. 4654
STATE OF NORTH DAKOTA

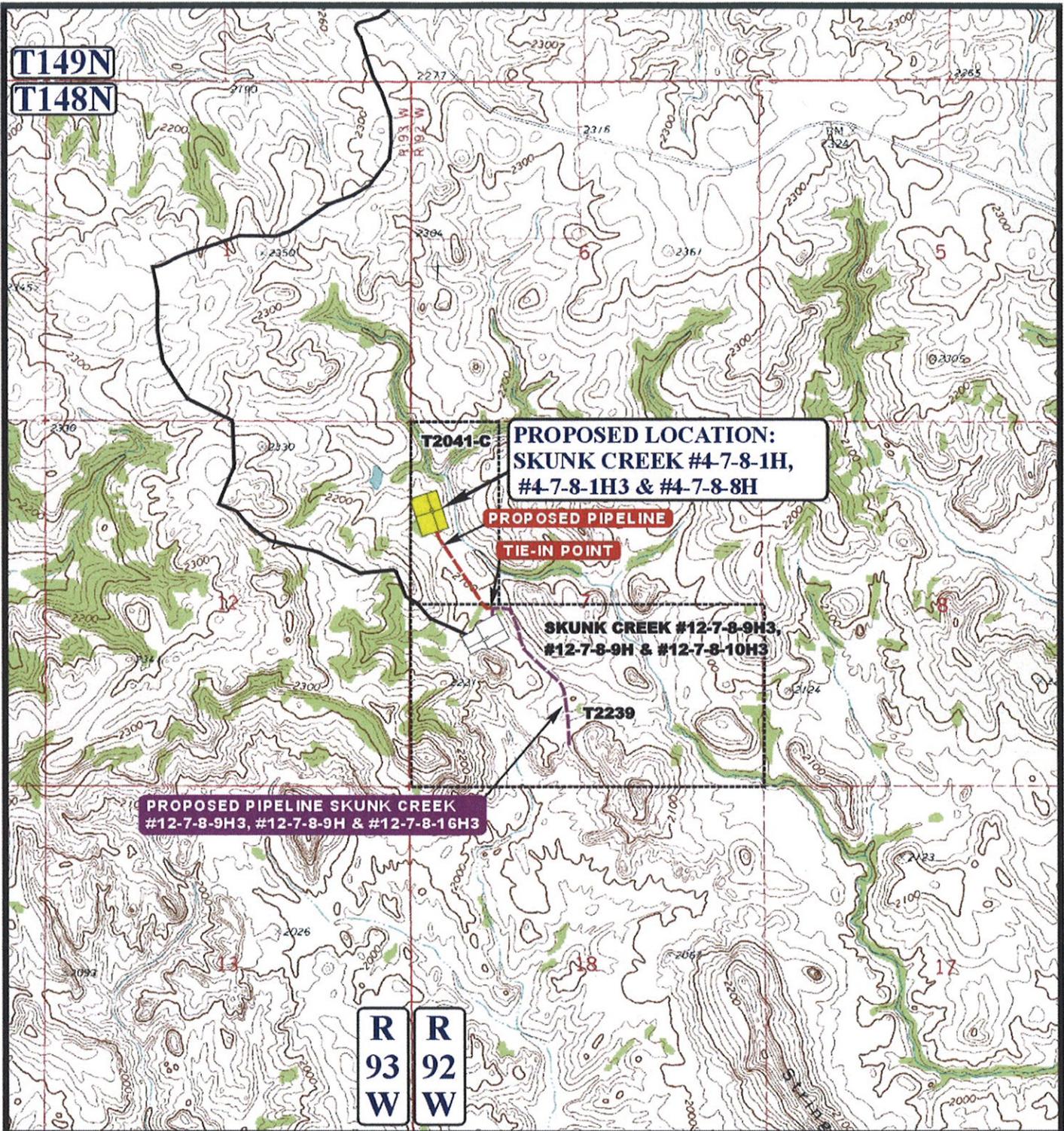
APPLICANT'S CERTIFICATE

I, JOHN M. DOLAN, DO HEREBY CERTIFY THAT I AM THE V.P. OF ENGINEERING FOR ARROW PIPELINE, LLC, HEREINAFTER DESIGNATED THE APPLICANT; THAT TROY JENSEN WHO SUBSCRIBED TO THE FOREGOING AFFIDAVIT, IS EMPLOYED BY THE APPLICANT AS A LAND SURVEYOR AND THAT HE WAS DIRECTED BY THE APPLICANT TO SURVEY THE LOCATION OF THIS PIPELINE RIGHT-OF-WAY, 0.264 MILES IN LENGTH BEGINNING AT STA. 0+00 AND ENDING AT STA. 13+92.45, THAT SAID PIPELINE RIGHT-OF-WAY IS ACCURATELY REPRESENTED ON THIS MAP; THAT SUCH SURVEY AS REPRESENTED ON THIS MAP HAS BEEN ADOPTED BY THE APPLICANT AS THE DEFINITE LOCATION OF THE RIGHT-OF-WAY THEREBY SHOWN; AND THAT THE MAP HAS BEEN PREPARED TO BE FILED WITH THE SECRETARY OF THE INTERIOR OR HIS DULY AUTHORIZED REPRESENTATIVE AS PART OF THE APPLICATION FOR SAID RIGHT-OF-WAY TO BE GRANTED THE APPLICANT, ITS SUCCESSORS AND ASSIGNS, WITH THE RIGHT TO CONSTRUCT, MAINTAIN, AND REPAIR IMPROVEMENTS, THEREON AND THEREOVER, FOR SUCH PURPOSES, AND WITH THE FURTHER RIGHT IN THE APPLICANT, ITS SUCCESSORS AND ASSIGNS TO TRANSFER THIS RIGHT-OF-WAY BY ASSIGNMENT, GRANT, OR OTHERWISE.

APPLICANT

V.P. OF ENGINEERING

TITLE



APPROXIMATE TOTAL PIPELINE DISTANCE = 1,392' +/-

LEGEND:

- PROPOSED ACCESS ROAD
- EXISTING PIPELINE
- PROPOSED PIPELINE
- PROPOSED PIPELINE (SERVICING OTHER WELLS)

ARROW PIPELINE, LLC

**SKUNK CREEK #4-7-8-1H, #4-7-8-1H3 & #4-7-8-8H
SECTION 7, T148N, R92W, 5th P.M.**



U&L S Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP 12 22 11
MONTH DAY YEAR
SCALE: 1" = 2000' DRAWN BY: B.D.H. REVISED: 06-04-12 **D TOPO**

PIPELINE RIGHT-OF-WAY DESCRIPTION

A 50' WIDE RIGHT-OF-WAY 25' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:
 BEGINNING AT A POINT IN THE NE 1/4 SW 1/4 OF SECTION 7, T148N, R92W, 5th P.M., WHICH BEARS S79°48'11"E 1180.82' FROM THE WEST 1/4 CORNER OF SAID SECTION 7, THENCE N00°02'23"W 151.95'; THENCE N89°51'52"E 175.02'; THENCE S78°08'09"E 40.04'; THENCE S67°57'10"E 39.71'; THENCE S22°59'50"E 310.05'; THENCE S10°59'54"E 226.66'; THENCE S92°39'32"E 40.01'; THENCE S35°00'34"E 40.03'; THENCE S47°5'54"E 704.75'; THENCE S35°01'45"E 39.99'; THENCE S21°59'12"E 63.97'; THENCE S08°05'45"E 508.01'; THENCE S02°00'08"E 844.08'; THENCE S10°25'10"W 39.98'; THENCE S22°27'00"W 18.40' TO A POINT ON THE SOUTH LINE OF THE SE 1/4 SW 1/4 OF SAID SECTION 7, WHICH BEARS S89°53'42"W 165.88' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 7, THENCE S22°27'00"W 21.62'; THENCE S67°27'02"W 317.29'; THENCE S74°00'24"W 470.72'; THENCE S68°03'34"W 40.06'; THENCE S55°59'46"W 566.99'; THENCE S45°59'11"W 39.97'; THENCE S34°00'23"W 485.42'; THENCE S24°00'21"W 325.58'; THENCE S35°00'05"W 39.99'; THENCE S45°00'11"W 767.58' TO A POINT ON THE WEST LINE OF LOT 2 OF SECTION 18, T148N, R92W, 5th P.M. WHICH BEARS N00°06'37"W 734.46' FROM THE WEST 1/4 CORNER OF SAID SECTION 18, THENCE S45°00'11"W 76.49'; THENCE S35°56'57"W 39.98'; THENCE S26°06'15"W 40.02'; THENCE S15°06'35"W 526.83'; THENCE S03°00'02"W 103.76' TO A POINT ON THE SOUTH LINE OF THE SE 1/4 NE 1/4 OF SECTION 13, T148N, R93W, 5th P.M. WHICH BEARS S89°57'33"W 239.34' FROM THE EAST 1/4 CORNER OF SAID SECTION 13, THENCE S03°00'02"W 256.24'; THENCE S00°05'51"W 39.99'; THENCE S11°03'39"E 40.01'; THENCE S21°29'58"E 670.05'; THENCE S10°57'56"E 5.58' TO A POINT ON THE EAST LINE OF THE NE 1/4 SE 1/4 OF SECTION 13, WHICH BEARS S00°05'17"E 964.22' FROM THE EAST 1/4 CORNER OF SAID SECTION 13, THENCE S10°57'56"E 132.48'; THENCE S00°05'17"E 512.73'; THENCE S12°03'48"W 118.17' TO A POINT ON THE WEST LINE OF LOT 4 OF SAID SECTION 18, WHICH BEARS N00°05'17"W 909.66' FROM THE SOUTHEAST CORNER OF SAID SECTION 13, THENCE S12°03'48"E 14.27'; THENCE S23°51'30"W 39.96' TO A POINT IN THE SE 1/4 SE 1/4 OF SECTION 13, WHICH BEARS N01°22'12"W 859.42' FROM THE SOUTHEAST CORNER OF SAID SECTION 13. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 10.254 ACRES MORE OR LESS.

ARROW PIPELINE, LLC
 PIPELINE RIGHT-OF-WAY
 ON TRIBAL LANDS
 (For SKUNK CREEK #12-7-8-9H3,
 #12-7-8-9H & #12-7-8-16H3)
 LOCATED IN
 SECTIONS 7 & 18, T148N, R92W, 5th P.M. &
 SECTION 13, T148N, R93W, 5th P.M.,
 DUNN COUNTY, NORTH DAKOTA

PROPERTY OWNER	FEET	ACRES	RODS
12239	3240.63	3.720	196.40
12045	3839.19	4.407	232.68
1784-A	787.09	0.903	47.70
2238-B	1066.10	1.224	64.61
TOTAL	8933.01	10.254	541.39

CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN CORRECTLY REPRESENTS WORK PERFORMED BY ME OR UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF.



Troy Jensen
 REGISTERED LAND SURVEYOR
 REGISTRATION NO. 4654
 STATE OF NORTH DAKOTA

REVISED: 05-08-12 J.L.
 REVISION: 12-16-11

SHEET 1 OF 3

UTAH ENGINEERING & LAND SURVEYING
 85 SOUTH - 200 EAST • (435) 789-1017
 VERNAL, UTAH - 84078

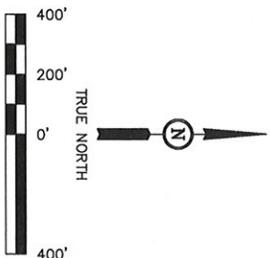
SCALE	1" = 400'	DATE	12-09-11
PARTY	A.K. S.B.	REFERENCES	G.L.O. PLAT
WEATHER	COLD	FILE	5 1 3 5 9 - A

ARROW PIPELINE, LLC

**PIPELINE RIGHT-OF-WAY
ON TRIBAL LANDS**

(For SKUNK CREEK #12-7-8-9H3,
#12-7-8-9H & #12-7-8-16H3)

LOCATED IN
SECTIONS 7 & 18, T148N, R92W, 5th P.M. &
SECTION 13, T148N, R93W, 5th P.M.,
DUNN COUNTY, NORTH DAKOTA



▲ = SECTION CORNERS LOCATED.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN CORRECTLY REPRESENTS WORK PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



REGISTERED LAND SURVEYOR
REGISTRATION NO. 4854
STATE OF NORTH DAKOTA

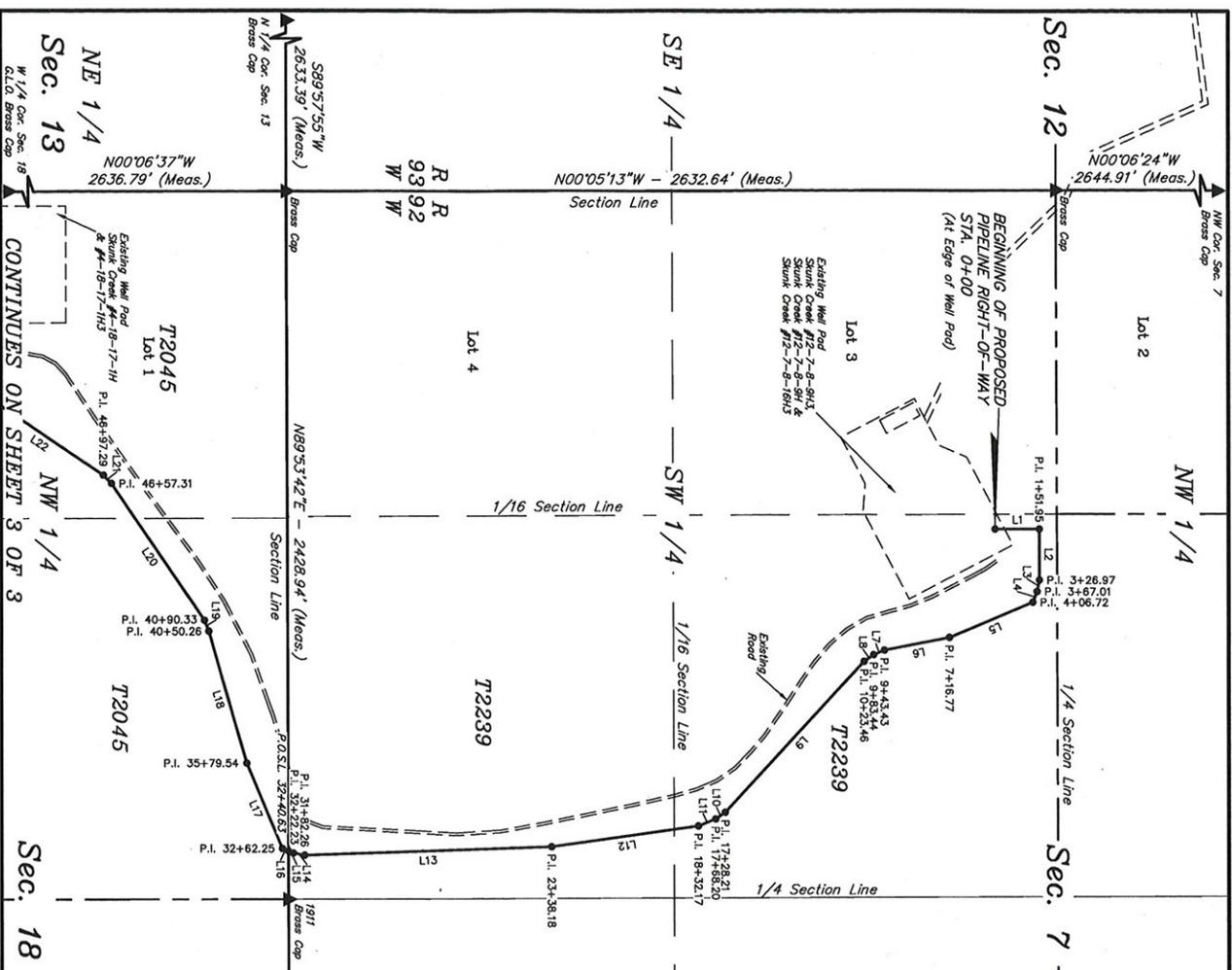
REVISED: 05-08-12 J.L.
REVISED: 12-16-11

SHEET 2 OF 3

UTAH ENGINEERING & LAND SURVEYING
85 SOUTH - 200 EAST • (435) 789-1017
VERNAL, UTAH - 84078

SCALE	1" = 400'	DATE	12-09-11
PARTY	A.K. S.B.	REFERENCES	G.L.O. PLAN
WEATHER	COLD	FILE	5 1 3 5 9 - B

LINE	DIRECTION	LENGTH
L1	N00°02'23"W	151.95'
L2	N89°51'52"E	175.02'
L3	S78°08'09"E	40.04'
L4	S67°57'10"E	39.71'
L5	S22°59'50"E	310.05'
L6	S10°59'54"E	226.66'
L7	S22°59'32"E	40.01'
L8	S35°00'34"E	40.03'
L9	S47°15'54"E	704.75'
L10	S38°01'45"E	39.99'
L11	S21°59'12"E	63.97'
L12	S08°05'45"E	506.01'
L13	S02°00'08"E	844.08'
L14	S10°28'10"W	39.98'
L15	S22°27'00"W	18.40'
L16	S22°27'00"W	21.62'
L17	S67°27'02"W	317.29'
L18	S74°00'24"W	470.72'
L19	S89°03'34"W	40.06'
L20	S55°59'46"W	566.99'
L21	S45°59'11"W	39.97'
L22	S34°00'23"W	485.42'



BEGINNING OF PIPELINE STA. 0+00 BEARS S79°48'11"E 1180.82' FROM THE WEST 1/4 CORNER OF SECTION 7, T148N, R92W, 5th P.M.
P.O.P.L. 32+40.63 BEARS S89°53'42"W 165.88' FROM THE SOUTH 1/4 CORNER OF SECTION 7, T148N, R92W, 5th P.M.

CONTINUES ON SHEET 3 OF 3

ARROW PIPELINE, LLC
SKUNK CREEK #12-7-8-9H3,
#12-7-8-9H & #12-7-8-16H3
PIPELINE RIGHT-OF-WAY
SECTIONS 7 & 18, T148N, R92W, 5th P.M. &
SECTIONS 13, T148N, R93W, 5th P.M.

TOTAL PIPELINE RIGHT-OF-WAY ON TRIBAL LANDS

TOTAL LENGTH OF RIGHT-OF-WAY IS 8933.01' OR 1.692 MILES. WIDTH OF RIGHT-OF-WAY IS 50' (25' PERPENDICULAR ON EACH SIDE OF THE CENTERLINE). CONTAINS 10.254 ACRES MORE OR LESS.

ENGINEER'S AFFIDAVIT

STATE OF MONTANA }
COUNTY OF RICHLAND } SS

TROY JENSEN, BEING FIRST DULY SWORN DEPOSES AND STATES THAT HE IS THE REGISTERED LAND SURVEYOR, FOR ARROW PIPELINE, LLC, THAT THESE SURVEYS WERE MADE BY HIM (OR UNDER HIS SUPERVISION); THAT HE HAS EXAMINED THE FIELD NOTES OF THE SURVEYS OF THE PIPELINE RIGHT-OF-WAY AS DESCRIBED AND SHOWN ON THIS MAP, THAT THIS MAP WAS PREPARED UNDER HIS DIRECTION FROM SAID FIELD NOTES; AND THAT SAID RIGHT-OF-WAY, 1.692 MILES IN LENGTH BEGINNING AND ENDING AS SHOWN ON THIS MAP IS ACCURATELY REPRESENTED.




REGISTERED LAND SURVEYOR
REGISTRATION NO. 4654
STATE OF NORTH DAKOTA

APPLICANT'S CERTIFICATE

I, JOHN M. DOLAN, DO HEREBY CERTIFY THAT I AM THE V.P. OF ENGINEERING FOR ARROW PIPELINE, LLC, HERINAFTER DESIGNATED THE APPLICANT; THAT TROY JENSEN WHO SUBSCRIBED TO THE FOREGOING AFFIDAVIT, IS EMPLOYED BY THE APPLICANT AS A LAND SURVEYOR AND THAT HE WAS DIRECTED BY THE APPLICANT TO SURVEY THE LOCATION OF THIS PIPELINE RIGHT-OF-WAY, 1.692 MILES IN LENGTH BEGINNING AT STA. 0+00 AND ENDING AT STA. 89+33.01, THAT SAID PIPELINE RIGHT-OF-WAY IS ACCURATELY REPRESENTED ON THIS MAP; THAT SUCH SURVEY AS REPRESENTED ON THIS MAP HAS BEEN ADOPTED BY THE APPLICANT AS THE DEFINITE LOCATION OF THE RIGHT-OF-WAY THEREBY SHOWN; AND THAT THE MAP HAS BEEN PREPARED TO BE FILED WITH THE SECRETARY OF THE INTERIOR OR HIS DULY AUTHORIZED REPRESENTATIVE AS PART OF THE APPLICATION FOR SAID RIGHT-OF-WAY TO BE GRANTED THE APPLICANT, ITS SUCCESSORS AND ASSIGNS, WITH THE RIGHT TO CONSTRUCT, MAINTAIN, AND REPAIR IMPROVEMENTS, THEREON AND THEREOVER, FOR SUCH PURPOSES, AND WITH THE FURTHER RIGHT IN THE APPLICANT, ITS SUCCESSORS AND ASSIGNS TO TRANSFER THIS RIGHT-OF-WAY BY ASSIGNMENT, GRANT, OR OTHERWISE.

APPLICANT

V.P. OF ENGINEERING

TITLE



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E., Suite 400
Aberdeen, South Dakota 57401



IN REPLY REFER TO:
DESCRM
MC-208

JUN 04 2012

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 proposed Arrow gathering lines and reroutes in Dunn County, North Dakota. Approximately 53 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:

Cox, Matthew

(2012) A Class I and Class III Cultural Resources Inventory of the Arrow Skunk Creek #4-18-17-1H, -1H3 and Skunk Creek #4-7-8-1H, -1H3, -8H Pipeline Systems and an Addendum to the Class I and Class III Cultural Resource Inventory of the Arrow Skunk Creek #12-7-8-9H3, -9H, -16H3 Pipeline System, Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants for Arrow Pipeline, LLC, Tulsa, OK.

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

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

Sincerely,

Regional Director

Enclosure

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