



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

OCT 28 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, an Addendum has been completed and a Finding of No Significant Impact (FONSI) has been issued. The addendum authorizes land use for Arrow-Petro-Hunt gathering pipelines connecting six proposed wells to the Arrow Phase 3 Southwest Pipeline 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 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 (40 C.F.R. Part 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)
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 Arrow-Petro-Hunt Gathering Pipelines Connecting the Proposed:

Fort Berthold #147-94-1A-12-1H

Fort Berthold #147-94-3A-10-1H

Fort Berthold #148-94-9D-04-1H, -2H

Fort Berthold #148-94-17D-08-1H, -2H

Fort Berthold #148-94-35D-26-1H, -2H

Fort Berthold #147-94-2A-11-1H, -2H

Wells to the Arrow Phase 3 Southwest Pipeline

Dunn County, North Dakota

The U.S. Bureau of Indian Affairs (BIA) received a proposal to authorize land use for an Addendum to Environmental Assessment to Authorize Land Use for Arrow-Petro-Hunt Gathering Pipelines Connecting the Proposed: Fort Berthold #147-94-1A-12-1H, Fort Berthold #147-94-3A-10-1H, Fort Berthold #148-94-9D-04-1H, -2H, Fort Berthold #148-94-17D-08-1H, -2H, Fort Berthold #148-94-35D-26-1H, -2H and Fort Berthold #147-94-2A-11-1H, -2H Wells to the Arrow Phase 3 Southwest Pipeline on the Fort Berthold Reservation. 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

10/28/11
Date

ENVIRONMENTAL ASSESSMENT Addendum

United States Bureau of Indian Affairs

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



Arrow Pipeline, L.L.C

**Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines Connecting the Proposed:**

Fort Berthold #147-94-1A-12-1H

Fort Berthold #147-94-3A-10-1H

Fort Berthold #148-94-9D-04-1H, -2H

Fort Berthold #148-94-17D-08-1H, -2H

Fort Berthold #148-94-35D-26-1H, -2H

Fort Berthold #147-94-2A-11-1H, -2H

Wells to the Arrow Phase 3 Southwest Pipeline

Fort Berthold Indian Reservation

October 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

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; and #148-94-17D-08-1H,-2H;
#148-94-35D-26-1H, -2H, #147-94-2A-11-1H,-2H*

TABLE OF CONTENTS

	<u>Page</u>
1. Purpose and Need for the Proposed Action.....	1
2. Authorities	1
3. Legal Land Description for Proposed Action.....	1
3.1 Fort Berthold #147-94-1A-12-1H Gathering Pipelines	1
3.2 Fort Berthold #147-94-3A-10-1H Gathering Pipelines	2
3.3 Fort Berthold #148-94-9D-04-1H,-2H Gathering Pipelines.....	2
3.4 Fort Berthold #148-94-17D-08-1H,-2H Gathering Pipelines.....	2
3.5 Fort Berthold #148-94-35D-26-1H, -2H and Fort Berthold #147-94-2A-11-1H, -2H Gathering Pipelines	2
4. Scope of Work for the Proposed Action.....	3
4.1 Fort Berthold #147-94-1A-12-1H Gathering Pipelines	3
4.2 Fort Berthold #147-94-3A-10-1H Gathering Pipelines	3
4.3 Fort Berthold #148-94-9D-04-1H, -2H Gathering Pipelines	3
4.4 Fort Berthold #148-94-17D-08-1H, -2H Gathering Pipelines.....	4
4.5 Fort Berthold #148-94-35D-26-1H, -2H / Fort Berthold #147-94-2A-11-1H, -2H Gathering Pipelines	4
5. Resource Surveys.....	4
6. Potential Effects.....	7
7. Materials Information and Corrosion Rates.....	8
Steel Pipe.....	8
Fiberspar® or Similar Pipe	8
8. Spill Response Plan	8
9. Pipeline Marking Procedures.....	8
10. Quality Control/Quality Assurance Measures	9
11. Valve Locations	9
12. Reclamation	9
13. Applicable National Environmental Policy Act (NEPA) Document(s).....	10
14. NEPA Adequacy Criteria	11

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
Figure 1. Proposed FB #147-94-1A-12-1H gathering pipelines.....	12
Figure 2. Proposed FB #147-94-3A-10-1H gathering pipelines.....	13
Figure 3. Proposed FB #148-94-9D-04-1H, -2H gathering pipelines.....	14
Figure 4. Proposed FB #148-94-17D-08-1H, -2H, gathering pipelines.....	15
Figure 5. Proposed FB #148-94-35D-26-1H, -2H & FB #147-94-2A-11-1H, -2H, gathering pipelines	16

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-
2A-11-1H, -2H*

LIST OF APPENDICES

Appendix

- A. Pipeline Layout and Pipeline Right-of-Way for FB #147-94-1A-12-1H
- B. Pipeline Layout and Pipeline Right-of-Way for FB #147-94-3A-10-1H
- C. Pipeline Layout and Pipeline Right-of-Way for FB #148-94-9D-04-1H, -2H
- D. Pipeline Layout and Pipeline Right-of-Way for FB #148-94-17D-08-1H,-2H
- E. Pipeline Layout and Pipeline Right-of-Way for FB #148-94-35D-26-1H, -2H & FB 147-94-2A-11-1H, -2H

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

1. Purpose and Need for the Proposed Action

Petro-Hunt, LLC (Petro-Hunt) is proposing to drill ten exploratory oil and gas wells including the Fort Berthold (FB) #147-94-1A-12-1H, FB #147-94-3A-10-1H, FB #148-94-9D-04-1H, -2H FB #148-94-17D-08-1H, -2H, FB #148-94-35D-26-1H, -2H, and the FB #147-94-2A-11-1H, -2H, located on 5 well pads on the Fort Berthold Indian Reservation, to evaluate and possibly develop the commercial potential of natural resources. The FB #148-94-35D-26-1H, -2H and FB #147-94-2A-11-1H, -2H wells will be constructed on one quadruple well pad. The FB #148-94-9D-04-1H, -2H wells, as well as the FB #148-94-17D-08-1H, -2H wells, will be constructed on dual well pads. The remaining two wells, FB #147-94-1A-12-1H and FB #147-94-3A-10-1H wells will be located on single well pads.

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 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.

The purpose of the proposed action is to authorize the land use by Arrow Pipeline, LLC (Arrow) for the construction and installation of fifteen gathering pipelines (one set of three for each proposed well pad): five oil lines, five gas lines, and five water lines, 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, and if electrical lines are installed in association with this project or to provide service to this project, they will be installed underground within the approved ROW.

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

3.1 Fort Berthold #147-94-1A-12-1H Gathering Pipelines

The FB #147-94-1A-12-1H gathering pipelines would be located on trust land originating from the southeast corner of the well pad, approximately 10.6 miles south-southeast of Mandaree, North Dakota, in the NW1/4 NE1/4 of Section 1, Township (T) 147 North (N), Range (R) 94 West (W), 5th Prime Meridian (P.M.), Dunn County, North Dakota. The proposed gathering

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

pipelines will travel south and merge with the proposed FB #147-94-3A-10-1H gathering pipelines and subsequently connect to the proposed Arrow Phase 3 SW gathering pipeline system.

3.2 Fort Berthold #147-94-3A-10-1H Gathering Pipelines

The FB #147-94-3A-10-1H gathering pipelines would be located on trust land originating from the north corner of the well pad, approximately 10.1 miles south-southeast of Mandaree, North Dakota, in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 3, T147 N, R94 W, 5th P.M., Dunn County, North Dakota. The proposed gathering pipelines will traverse east across Sections 3, 2, and 1 T147 N, R94 W, then turn north into Section 36, T148 N, R94 W, 5th P.M., Dunn County, North Dakota where it will tie in with the Arrow Phase 3 SW gathering system in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 36, T148 N, R94W, 5th P.M.

3.3 Fort Berthold #148-94-9D-04-1H,-2H Gathering Pipelines

The FB #148-94-9D-04-1H, 2H gathering pipelines would be located on trust land originating from the south side of the well pad, approximately 6.0 miles south of Mandaree, North Dakota, in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 9, T148N, R94 W, 5th P.M., Dunn County, North Dakota. The proposed gathering pipelines will travel south across the east side of Section 16, and merge with the proposed FB #148-94-17D-08-1H, -2H gathering pipelines in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 21, T148N, R94 W, 5th P.M., Dunn County, North Dakota. Overall, these gathering pipelines are part of the Arrow Phase 3SW gathering system.

3.4 Fort Berthold #148-94-17D-08-1H,-2H Gathering Pipelines

The FB #148-94-17D-08-1H, -2H gathering pipelines would be located on trust land originating from the northwest corner of the well pad, approximately 6.8 miles south of Mandaree, North Dakota, in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 17, T148N, R94 W, 5th P.M., Dunn County, North Dakota. The proposed gathering pipelines will travel east around the well pad then south and east across parts of Sections 17, 16, 21, and 22, T148N, R94 W, 5th P.M., Dunn County, North Dakota and tie into the proposed Phase 3 SW gathering system in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 22, T148 N, R94 W, 5th P.M., Dunn County, North Dakota.

3.5 Fort Berthold #148-94-35D-26-1H, -2H and Fort Berthold #147-94-2A-11-1H, -2H Gathering Pipelines

The FB #148-94-35D-26-1H, -2H and FB #147-94-2A-11-1H, -2H gathering pipelines would be located on trust land originating from the south side of the well pad, approximately 10.2 miles south-southeast of Mandaree, North Dakota, in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 2, T147 N, R94 W, 5th P.M., Dunn County, North Dakota. The proposed gathering pipelines will travel south-southeast and merge with the proposed FB #147-94-3A-10-1H gathering pipelines in the NE $\frac{1}{4}$

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

NE¼ of Section 2, T147N, R94W, 5th P.M., Dunn County, North Dakota and consequently become part of the proposed Phase 3 SW gathering system.

4. Scope of Work for the Proposed Action

Each of the proposed gathering pipeline system 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 steel. The water pipeline would also be no greater than 8 inches in diameter and constructed of Fiberspar[®] or similar material. All of the construction disturbances would occur within a 120-foot-wide temporary construction right-of-way (ROW). A permanent 50-foot ROW would be maintained between the well pad and each associated tie in point.

4.1 Fort Berthold #147-94-1A-12-1H Gathering Pipelines

The FB #147-94-1A-12-1H gathering pipeline would transport oil, gas, and produced water to the approved Phase 3 SW Gathering System. Pipelines would originate from the southeast corner of the FB #147-94-1A-12-1H well pad, traverse south, and tie in to the proposed FB #147-94-3A-10-1H gathering pipeline system subsequently becoming part of the proposed Phase 3 SW Gathering System.

Approximately 327 feet of oil, gas, and water pipe would be needed to connect the FB #147-94-1A-12-1H well to the proposed FB #147-94-3A-10-1H gathering pipelines. Approximately 0.90 acre will be disturbed as a result of activities associated with the construction of the proposed gathering pipelines.

4.2 Fort Berthold #147-94-3A-10-1H Gathering Pipelines

The FB #147-94-3A-10-1H gathering pipelines would transport oil, gas, and produced water to the approved Phase 3 SW Gathering System. Pipelines would originate from the north side of FB #147-94-3A-10-1H well pad, traverse east and north, then merge with the approved Phase 3 SW Gathering System.

Approximately 16,851 feet of oil, gas, and water pipe would be needed to connect the FB #147-94-3A-10-1H well to the approved Phase 3 SW Gathering System. Approximately 46.4 acres will be disturbed as a result of activities associated with the construction of the proposed gathering pipelines.

4.3 Fort Berthold #148-94-9D-04-1H, -2H Gathering Pipelines

The FB #148-94-9D-04-1H, 2H gathering pipelines would transport oil, gas, and produced water to the proposed FB #148-94-17D-08-1H, -2H gathering pipelines. Pipelines would

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

originate from the south side of the FB #148-94-9D-04-1H,-2H well pad, travel south and merge with the proposed FB #148-94-17D-8-1H,-2H gathering pipelines which subsequently becomes part of the Phase 3 SW Gathering System.

Approximately 5,804 feet of oil, gas, and water pipe would be needed to connect the FB148-94-9D-04-1H, -2H well pad to the proposed FB 148-94-17D-8-1H, 2H gathering pipelines. With a 100-foot temporary construction ROW, a total of approximately 13.32 acres will be disturbed as a result of activities associated with the construction of the proposed gathering pipelines.

4.4 Fort Berthold #148-94-17D-08-1H, -2H Gathering Pipelines

The FB #148-94-17D-08-1H, -2H pipeline would transport oil, gas, and produced water from the well site to the approved Phase 3 SW Gathering System. Pipelines would originate from the north side of the FB #148-94-17D-08-1H,-2H well pad, travel east and tie-in with the approved Phase 3 SW Gathering System.

Approximately 9,472 feet of oil, gas, and water line would be needed to connect the FB #148-94-17D-08-1H, 2H well pad to the approved Phase 3 SW Gathering System. Approximately 26.09 acres will be disturbed as a result of activities associated with the construction of the proposed gathering pipelines.

4.5 Fort Berthold #148-94-35D-26-1H, -2H / Fort Berthold #147-94-2A-11-1H, -2H Gathering Pipelines

The FB #148-94-35D-26-1H,-2H and FB 147-94-2A-11-1H, -2H would transport oil, gas, and produced water to the approved Phase 3 SW Gathering System. Pipelines would originate from the south side of the well pad, transverse south and merge with the proposed FB #147-94-3A-10-1H gathering pipelines, which subsequently become part of the approved Phase 3 SW Gathering System.

Approximately 1,056 feet of oil, gas, and water pipe would be needed to connect the FB #148-94-35D-26-1H,-2H and FB #147-94-2A-11-1H,-2H well to the proposed FB #147-94-3A-10-1H gathering pipelines. Approximately 2.91 acres will be disturbed as a result of activities associated with the construction of the proposed gathering pipeline.

5. Resource Surveys

SWCA Environmental Consultants (SWCA) conducted natural resource surveys for threatened and endangered species and habitat, migratory birds and nesting habitat, bald and golden eagles including nests, and wetlands for the FB #147-94-1A-12-1H, FB #147-94-3A-10-1H, FB #148-94-9D-04-1H, -2H, FB #148-94-17D-08-1H,-2H, FB #148-94-35D-26-1H,-2H/FB #147-94-2A-11-1H,-2H gathering pipelines on June 22, 23 and 30, 2011. BIA Environmental Specialist, Jeff Desjarlais, approved the proposed alignments on June 22 (FB #147-94-1A-12-1H; FB 148-94-35D-26-1H, 2H, FB #147-94-2A-11-1H, 2H, FB #148-94-9D-04-1H, -2H, and FB #148-94-17D-08-1H, 2H) and July 6, 2011 (FB 147-94-3A-10-1H). No threatened and endangered species or

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

bald/golden eagle individuals or nests were observed during any of the natural resource surveys. SWCA biologists identified four intermittent streams (two at FB #148-94-9D-04-1H, -2H gathering pipeline alignment and one at both the FB #148-94-17D-08-1H, 2H and FB #147-94-3A-10-1H) that showed signs of ordinary high water mark (OHWM). Arrow has committed to using a horizontal directional drilling method to avoid surface disturbance to these drainages.

Wildlife observed during natural resource surveys includes, upland sandpiper (*Bartramia longicauda*), Wilson's snipe (*Gallinago delicata*), eastern kingbird (*Tyrannus tyrannus*), gray catbird (*Dumetella carolinensis*), brown thrasher (*Toxostoma rufum*), yellow warbler (*Dendroica petechia*), spotted towhee (*Pipilo maculatus*), clay colored-sparrow (*Spizella pallida*), grasshopper sparrow (*Ammodramus savannarum*), vesper sparrow (*Pooecetes gramineus*), bobolink (*Dolichonyx oryzivorus*), meadowlark (*Sturnella neglecta*) red-winged blackbird (*Agelaius phoeniceus*).

Herbaceous vegetation observed within the project area includes blanket flower (*Gaillardia aristata*), blue flax (*Linum lewissii*), canadian anemone (*Anemone canadensis*), common dandelion (*Taraxacum officinalis*), common mullein (*Verbascum thapsus*), common spikerush (*Eleocharis palustris*), common threesquare (*Schoenoplectus pungens*), common yarrow (*Achillea millefolium*), crested wheatgrass (*Agropyron cristatum*), cudweed sagewort (*Artemisia ludoviciana*), Daisy fleabane (*Erigeron strigosus*), downy paintbrush (*Castilleja sessiliflora*), fiddleleaf hawksbeard (*Crepis runcinata*), field sowthistle (*Sonchus arvensis*), fringed sagewort (*Artemisia frigida*), goatsbeard (*Tragopogon dubius*), junegrass (*Koeleria macrantha*), Kentucky bluegrass (*Poa pratensis*), lambert crazyweed (*Oxytropis lambertii*), little bluestem (*Schizachyrium scoparium*), prairie coneflower (*Ratibida columnifera*), prairie cordgrass (*Spartina pectinata*), prairie milkvetch (*Astragalus adsurgens*), prairie rose (*Rosa arkansana*), purple coneflower (*Echinacea angustifolia*), silver sagebrush (*Artemisia cana*), silver scurfpea (*Psoralea argophylla*), small-leaf pussytoes (*Antennaria parvifolia*), smooth brome (*Bromus inermis*), smooth oxeye (*Heliopsis helianthoides*), spiny sow thistle (*Sonchus asper*), wavyleaf thistle (*Cirsium undulatum*), western sagewort (*Artemisia campestris*), western wallflower (*Erysimum asperum*), western wheatgrass (*Pascopyrum smithii*), wood lily (*Lilium philadelphicum*), and yellow sweetclover (*Melilotus officinalis*). Woody vegetation observed within the project area includes: silver buffaloberry (*Shepherdia argentea*), western snowberry (*SymFBoricarpos occidentalis*), and American elm (*Ulmus americana*).

Historic properties, or cultural resources, on federal or tribal lands are protected by many laws, regulations and agreements. The National Historic Preservation Act of 1966 (16 USC 470 et seq.) at Section 106 requires, for any federal, federally assisted or federally licensed undertaking, that the federal agency take into account the effect of that undertaking on any district, site, building, structure or object that is included in the National Register of Historic Places (National Register) before the expenditure of any federal funds or the issuance of any federal license. Cultural resources is a broad term encompassing sites, objects, or practices of

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

archaeological, historical, cultural and religious significance. Eligibility criteria (36 CFR 60.6) include association with important events or people in our history, distinctive construction or artistic characteristics, and either a record of yielding or a potential to yield information important in prehistory or history. In practice, properties are generally not eligible for listing on the National Register if they lack diagnostic artifacts, subsurface remains or structural features, but those considered eligible are treated as though they were listed on the National Register, even when no formal nomination has been filed. This process of taking into account an undertaking's effect on historic properties is known as "Section 106 review," or more commonly as a cultural resource inventory.

The area of potential effect (APE) of any federal undertaking must also be evaluated for significance to Native Americans from a cultural and religious standpoint. Sites and practices may be eligible for protection under the American Indian Religious Freedom Act of 1978 (42 USC 1996). Sacred sites may be identified by a tribe or an authoritative individual (Executive Order 13007). Special protections are afforded to human remains, funerary objects, and objects of cultural patrimony under the Native American Graves Protection and Repatriation Act (NAGPRA, 25 USC 3001 et seq.).

Whatever the nature of the cultural resource addressed by a particular statute or tradition, implementing procedures invariably include consultation requirements at various stages of a federal undertaking. The MHA Nation has designated a Tribal Historic Preservation Officer (THPO) by Tribal Council resolution, whose office and functions are certified by the National Park Service. The THPO operates with the same authority exercised in most of the rest of North Dakota by the State Historic Preservation Officer (SHPO). Thus, BIA consults and corresponds with the THPO regarding cultural resources on all projects proposed within the exterior boundaries of the Fort Berthold Reservation.

Cultural resource inventories of these pipeline routes were conducted by personnel of SWCA Environmental Consultants, using an intensive pedestrian methodology. For the Fort Berthold 148-94-35D-26-1H/Fort Berthold 148-94-35D-26-2H/Fort Berthold 147-94-2A-11-1H/Fort Berthold 147-94-2A-11-2H gathering line project approximately 5.4 acres were inventoried on June 22, 2011 (Schleicher 2011a)*, and for the Fort Berthold 147-94-1A-12-1H pipeline approximately 4.7 acres were inventoried on June 22-23, 2011 (Schleicher 2011b). 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 these undertakings. This determination was communicated to the THPO on August 22, 2011; however, the THPO did not respond within the allotted 30 day comment period. For the Fort Berthold 148-94-9D-4-1H/Fort Berthold 148-94-9D-4-2H gathering line project approximately 27.3 acres were inventoried on June 21, 2011 (Schleicher 2011c), and for the Fort Berthold 148-94-17D-8-1H/Fort Berthold

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

148-94-17D-8-2H gathering line project approximately 46.2 acres were inventoried between June 21-23, 2011 (Schleicher 2011d). 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. On the basis of the information provided, BIA reached a determination of no historic properties affected for these undertakings. This determination was communicated to the THPO on September 22, 2011; however, the THPO did not respond within the allotted 30 day comment period. For the Fort Berthold 147-94-3A-10-1H gathering line project approximately 85.8 acres were inventoried between June 21 and June 30, 2011 (Schleicher 2011e). Two archaeological sites were located, one of which may possess the quality of integrity and meet at least one of the criteria (36 CFR 60.6) for inclusion on the National Register. On the basis of the information provided, BIA reached a determination of no historic properties affected for this undertaking, provided the potentially eligible site is avoided. This determination was communicated to the THPO on September 27, 2011; however, the THPO did not respond within the allotted 30 day comment period.

6. 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. All 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.

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 and would include the return of topsoil and contouring, and seeding of native vegetation. Arrow commits to beginning the reclamation process no later than 6 months after construction activities are completed.

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) (September 2011).

7. 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 gathering 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.

8. Spill Response Plan

Arrow has developed a Spill Response Plan (Plan) (Middick 2011¹) for the Phase 3SW 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.

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

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

10. 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.

11. 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 gathering pipelines if required.

12. Reclamation

Interim Reclamation

Reclamation would continue to occur over the life of the pipeline. 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. A 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 top-soil piles during construction. If construction is to occur during winter, Arrow will 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 top-soil distributed as soon as practicable after the soil has defrosted. Top-soil piles would be covered to eliminate the potential for rill erosion and subsequent loss of soil during spring snow melt and precipitation events.

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

Applicable short- and long-term BMPs 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 reseeded 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 will deploy approved weed free hay across the entire ROW. The presence of hay across the ROW will reduce the potential for excessive erosion as a result of spring snow melt and precipitation.

The entire ROW would be monitored for erosion, subsidence, or 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 pipeline is decommissioned. All disturbed areas would be reclaimed, reflecting the BIA's view of oil and gas exploration and production as temporary intrusions on the landscape. All facilities would be removed. Access roads and work areas would be leveled or backfilled as necessary, scarified, recontoured, and seeded. Exceptions to these reclamation measures might occur if the BIA approves assignment of an access road either to the BIA roads inventory or to concurring surface allottees. It is economically and environmentally unfeasible to excavate and remove the decommissioned pipeline. Instead it would be purged with water of any natural gas remaining in the lines and abandoned in place.

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

Environmental Assessment: Arrow Pipeline, LLC Phase 3 Southwest Pipeline (September 2011).

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

14. NEPA Adequacy Criteria

This document has identified a previously prepared NEPA document, *Environmental Assessment: Arrow Pipeline, LLC, Phase 3 Southwest Pipeline* (2011), 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
 Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
 #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
 11-1H, -2H*

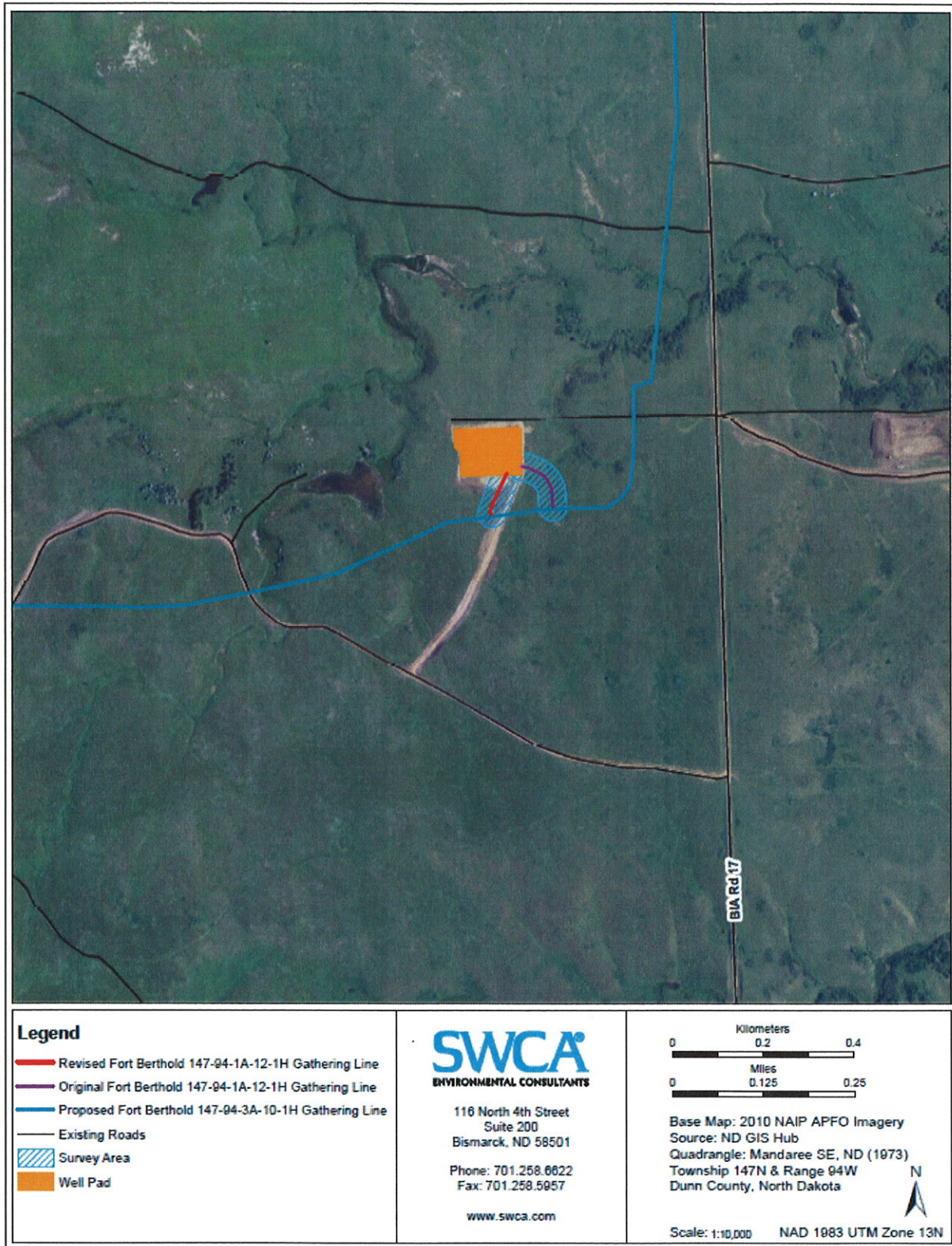


Figure 1. Proposed FB #147-94-1A-12-1H gathering pipelines

*Addendum to Environmental Assessment to Authorize Land Use for
 Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
 #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
 11-1H, -2H*

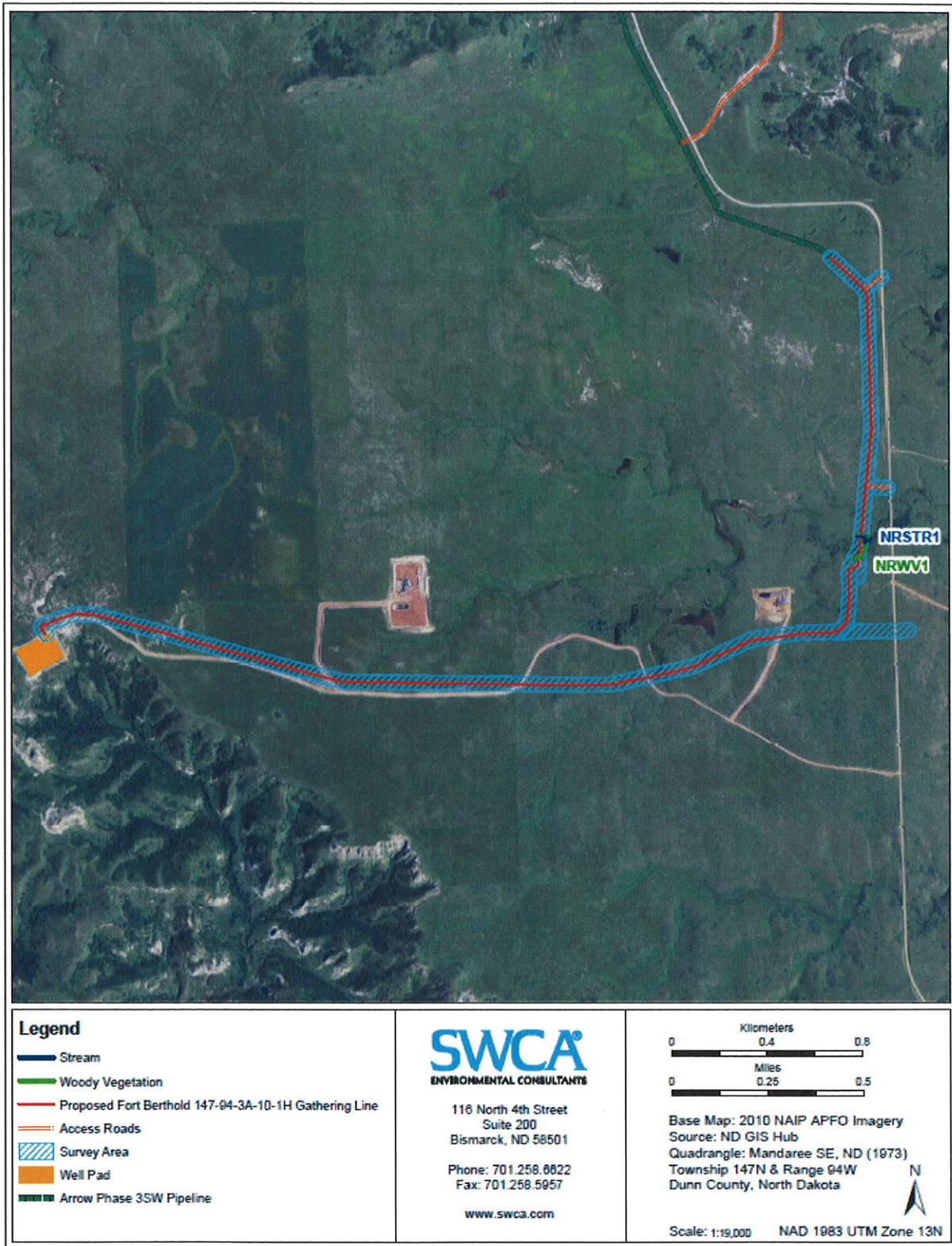


Figure 2. Proposed FB #147-94-3A-10-1H gathering pipelines

*Addendum to Environmental Assessment to Authorize Land Use for
 Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
 #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
 11-1H, -2H*

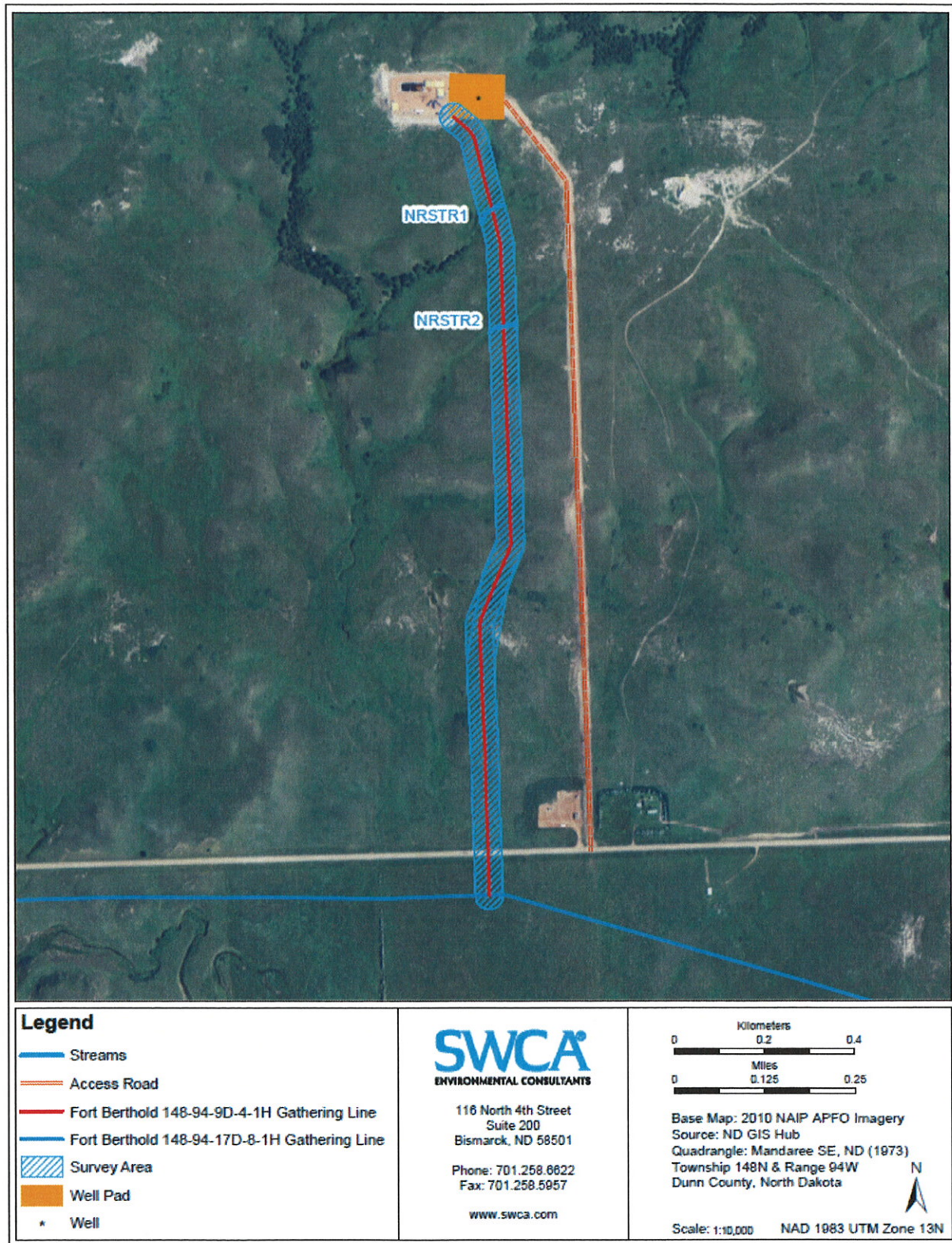


Figure 3. Proposed FB #148-94-9D-04-1H, -2H gathering pipelines

*Addendum to Environmental Assessment to Authorize Land Use for
 Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
 #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
 11-1H, -2H*

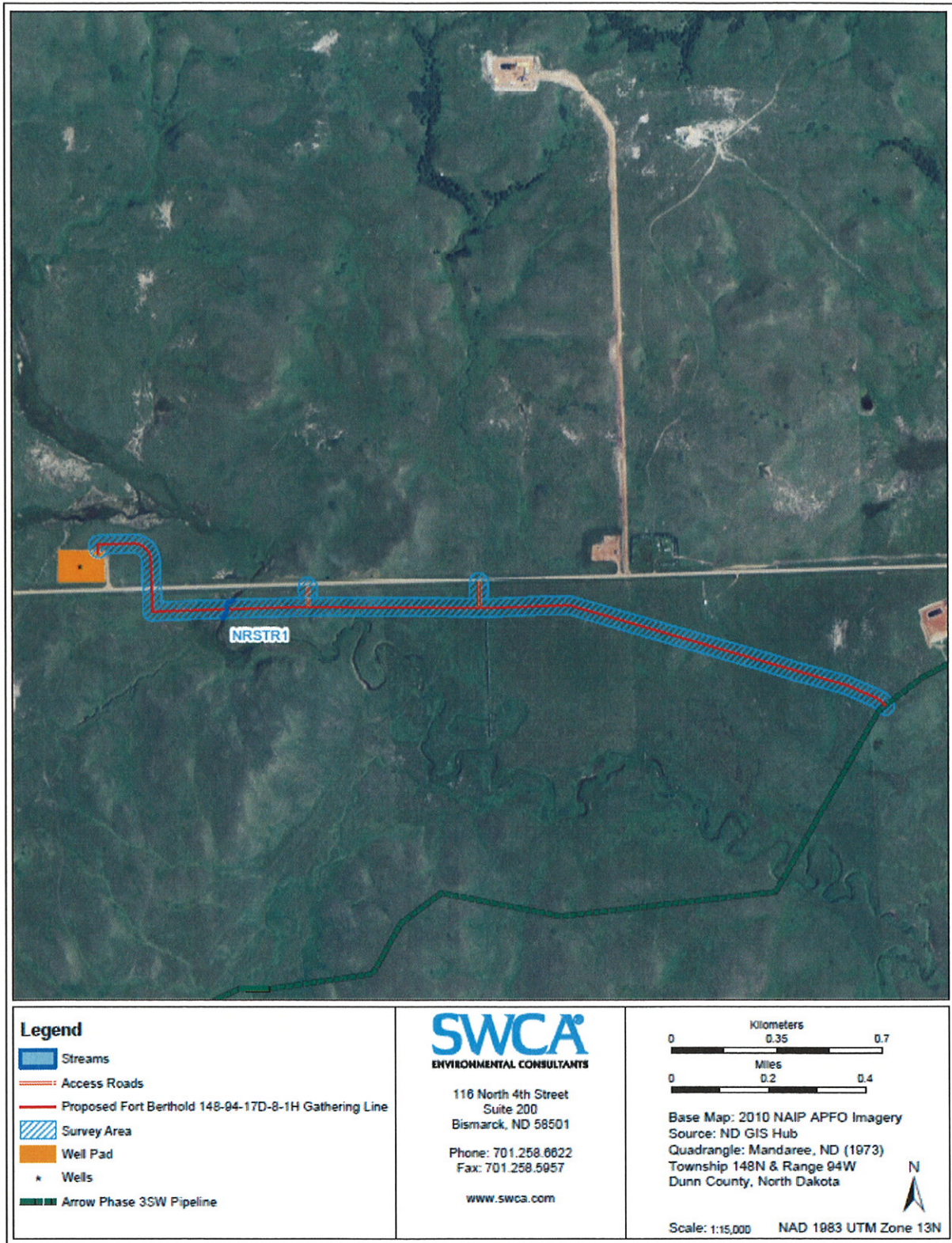


Figure 4. Proposed FB #148-94-17D-08-1H, -2H, gathering pipelines

*Addendum to Environmental Assessment to Authorize Land Use for
 Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
 #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
 11-1H, -2H*

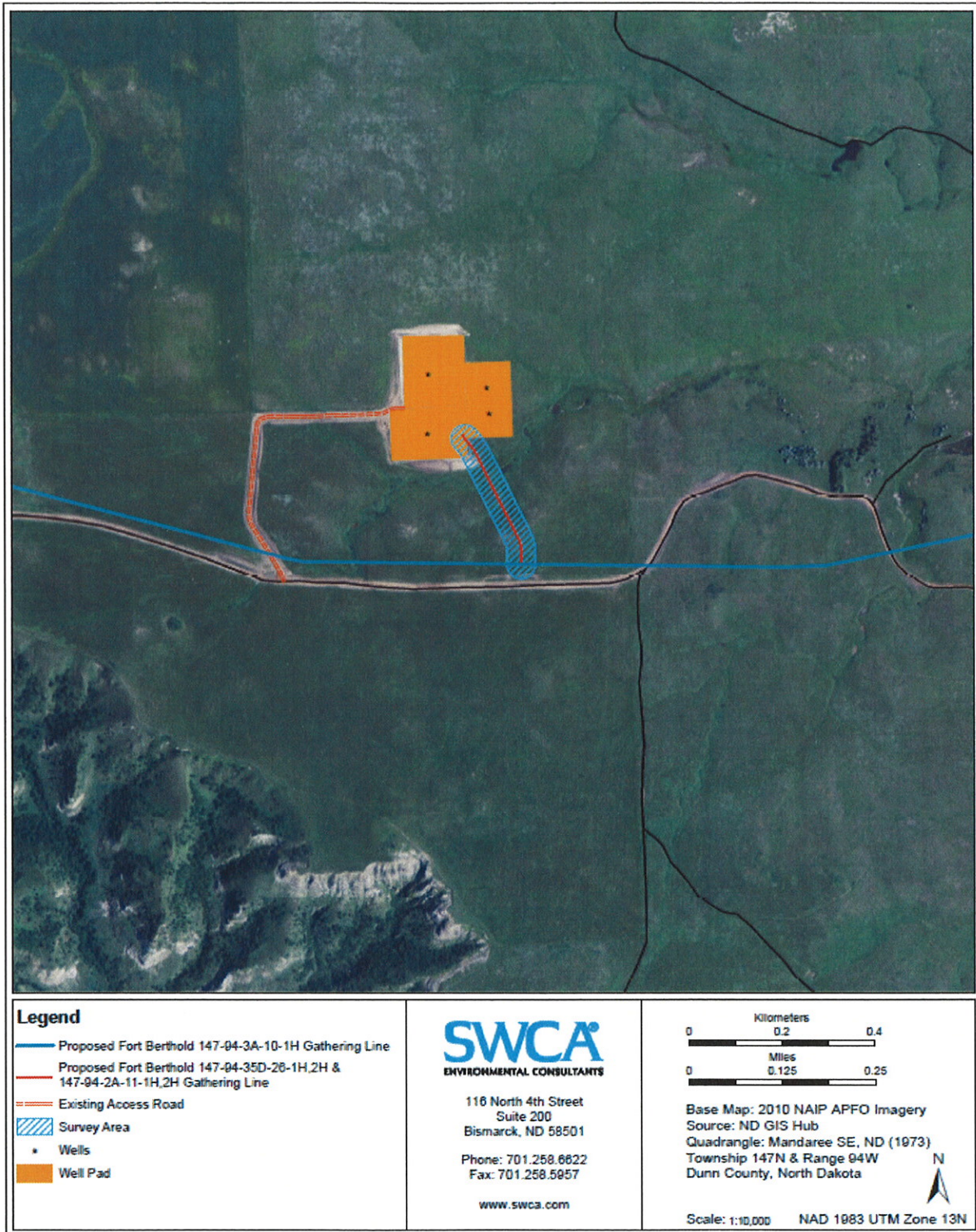


Figure 5. Proposed FB #148-94-35D-26-1H, -2H & FB #147-94-2A-11-1H, -2H, gathering pipelines

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*



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

AUG 22 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 two gathering pipelines in Dunn County, North Dakota. Approximately 10.1 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the areas depicted in the enclosed reports. No historic properties were located that 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 these undertakings. Catalogued as **BIA Case Number AAO-1980/FB/11**, the proposed undertakings, locations, and project dimensions are described in the following reports:

Schleicher, Jolene

(2011a) A Class I and Class III Cultural Resources Inventory of the Arrow Fort Berthold 148-94-36D-25-1H, 2H and Fort Berthold 147-94-2A-11-1H, 2H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants for Arrow Pipeline, LLC, Tulsa, OK.

(2011b) A Class I and Class III Cultural Resources Inventory of the Arrow Fort Berthold 147-94-1A-12-1H Gathering Pipeline, 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,

ACTING Regional Director

Enclosures

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

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*



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

AUG 22 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 two gathering pipelines in Dunn County, North Dakota. Approximately 10.1 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the areas depicted in the enclosed reports. No historic properties were located that 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 these undertakings. Catalogued as **BIA Case Number AAO-1980/FB/11**, the proposed undertakings, locations, and project dimensions are described in the following reports:

Schleicher, Jolene

(2011a) A Class I and Class III Cultural Resources Inventory of the Arrow Fort Berthold 148-94-36D-25-1H, 2H and Fort Berthold 147-94-2A-11-1H, 2H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants for Arrow Pipeline, LLC, Tulsa, OK.

(2011b) A Class I and Class III Cultural Resources Inventory of the Arrow Fort Berthold 147-94-1A-12-1H Gathering Pipeline, 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,

ACTING Regional Director

Enclosures

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

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*



IN REPLY REFER TO:
DESCRM
MC-208

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

SEP 27 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 two gathering pipelines in Dunn County, North Dakota. Approximately 89 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the areas depicted in the enclosed reports. Two archaeological sites (32DU306, 32DU1594) were revisited; no trace of 32DU306 could be found within the project area of potential effect, but 32DU1594 may 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 these undertakings, as site 32DU1594 will be avoided. Catalogued as **BIA Case Number AAO-1980/FB/11**, the proposed undertakings, locations, and project dimensions are described in the following reports:

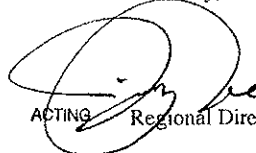
Schleicher, Jolene

- (2011a) A Class I and Class III Cultural Resources Inventory of the Arrow Fort Berthold 148-94-29B-32-1H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota. SWCA Environmental Consultants for Arrow Pipeline, LLC, Tulsa, OK.
- (2011b) A Class I and Class III Cultural Resources Inventory of the Arrow Fort Berthold 147-94-3A-10-1H Gathering Pipeline, 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,


ACTING Regional Director

Enclosures

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

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

REFERENCES

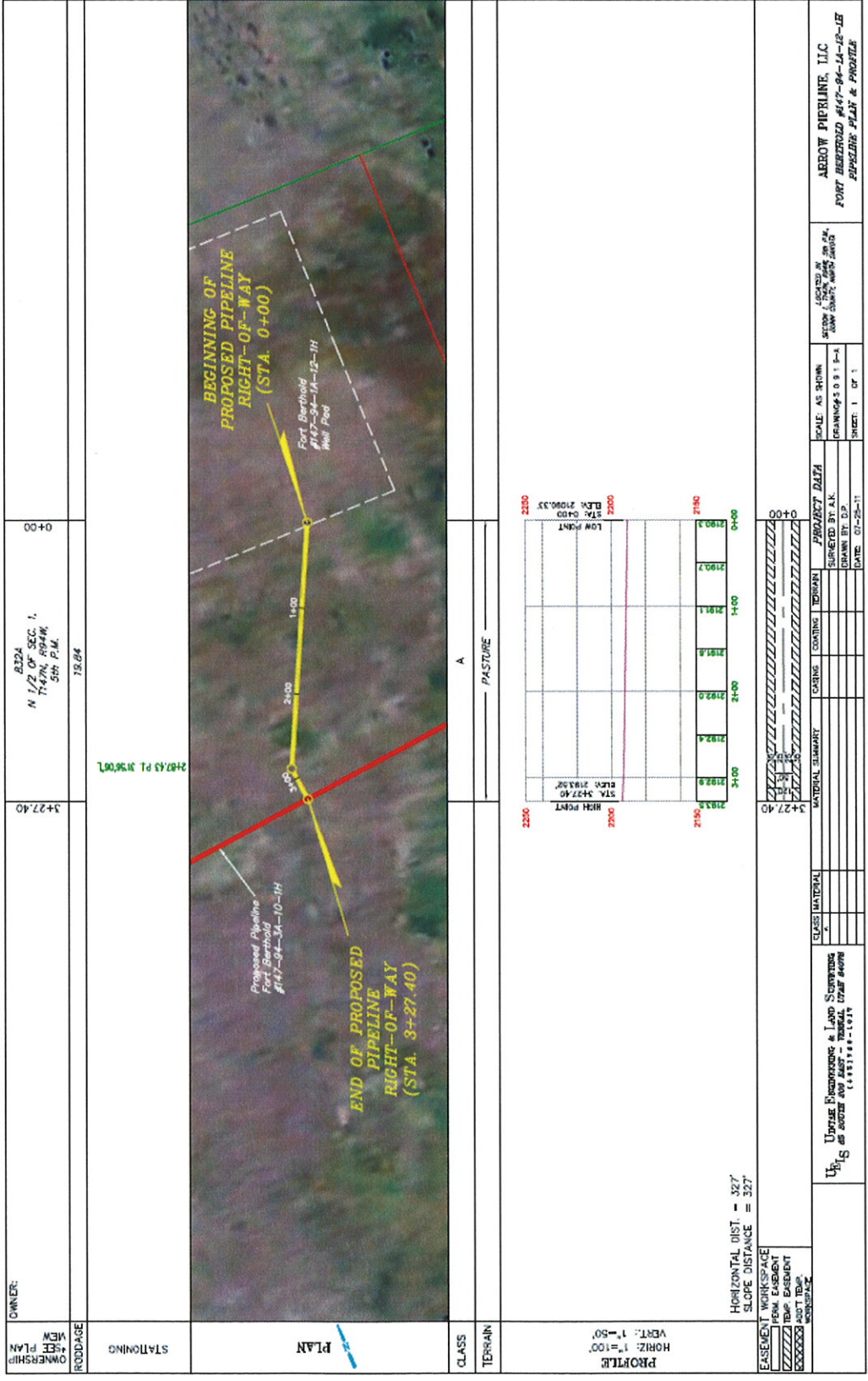
- Schleicher, Jolene and Judith Cooper. 2011. A Class I and Class III Cultural Resources Inventory of the Arrow Fort Berthold 147-94-1A-12-1H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota. Prepared by SWCA Environmental Consultants for Arrow Pipeline.
- . 2011a. A Class I and Class III Cultural Resources Inventory of the Arrow Fort Berthold 147-94-3A-10-1H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota. Prepared by SWCA Environmental Consultants for Arrow Pipeline.
- . 2011b. A Class I and Class III Cultural Resources Inventory of the Arrow Fort Berthold 148-94-9D-04-1H, -2H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota. Prepared by SWCA Environmental Consultants for Arrow Pipeline.
- . 2011c. A Class I and Class III Cultural Resources Inventory of the Arrow Fort Berthold 148-94-17D-08-1H, -2H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota. Prepared by SWCA Environmental Consultants for Arrow Pipeline.
- . 2011d. A Class I and Class III Cultural Resources Inventory of the Arrow Fort Berthold 148-94-35D-26-1H, -2H and Fort Berthold 147-94-2A-11-1H, -2H Gathering Pipeline, Fort Berthold Indian Reservation, Dunn County, North Dakota. Prepared by SWCA Environmental Consultants for Arrow Pipeline.

*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

APPENDIX A

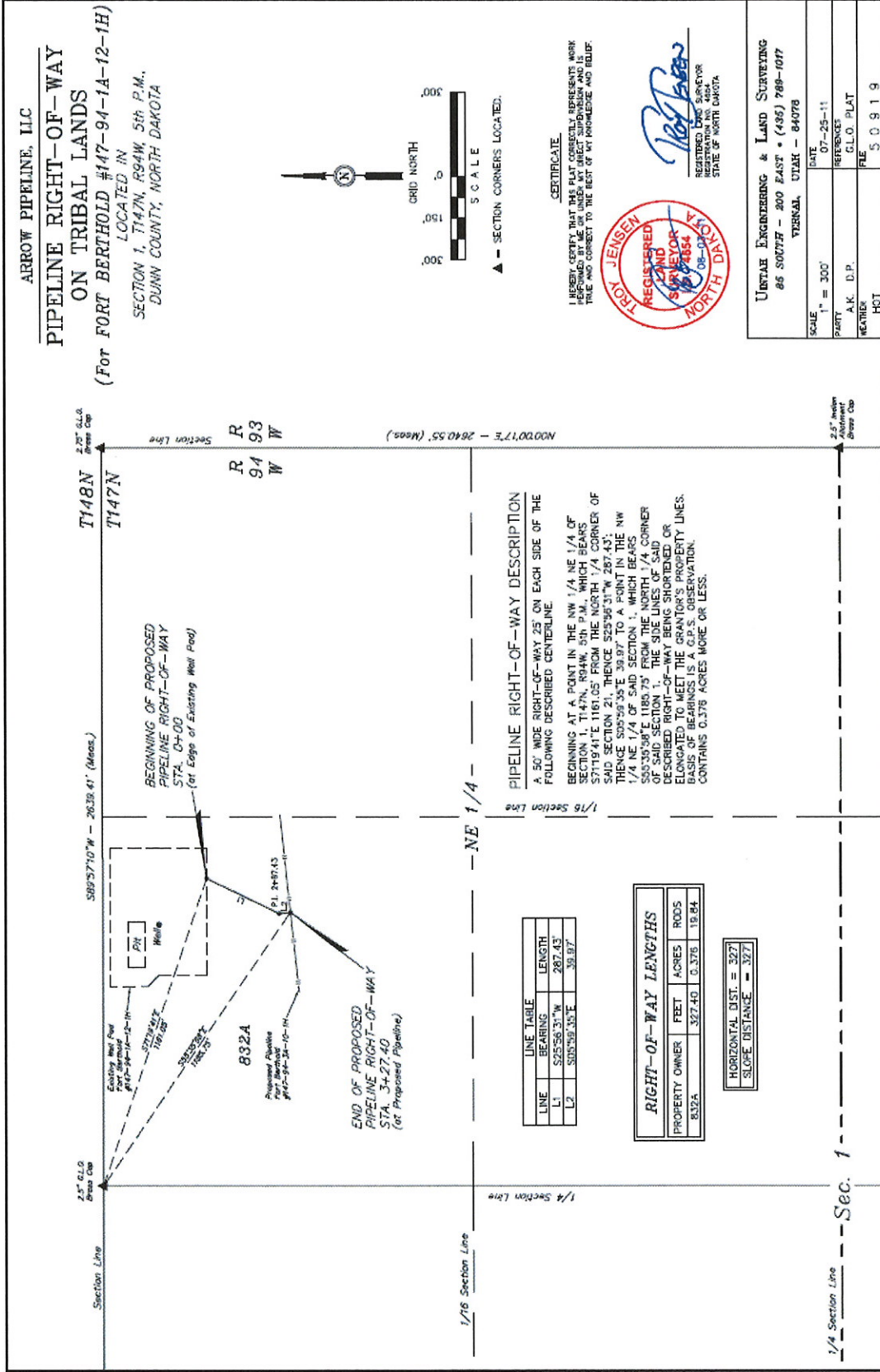
Pipeline Layout and Pipeline Right-of-Way For FB #147-94-1A-12-1H

**Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H**



OWNER:	B32A SEC. 1, N 1/2 OF SW 1/4, 5th P.M., 18.84		0+00
ROD/DATA	3+27.40		
STATIONING	2+87.63 P.L. 3196781		
PLAN	<p>Proposed Pipeline Fort Berthold #147-94-3A-10-1H</p> <p>Fort Berthold #147-94-1A-12-1H Prod Pool</p> <p>BEGINNING OF PROPOSED PIPELINE RIGHT-OF-WAY (STA. 0+00)</p> <p>END OF PROPOSED PIPELINE RIGHT-OF-WAY (STA. 3+27.40)</p>		
CLASS	A PASTURE		
TERRAIN			
PROFILE	<p>HORIZONTAL DIST. = 327'</p> <p>SLOPE DISTANCE = 327'</p> <p>VERT. 1"=50'</p> <p>HORIZ. 1"=100'</p>		
EASEMENT WORKSPACE	<p>PERM. EASEMENT</p> <p>TEMP. EASEMENT</p> <p>EXISTING EASEMENT</p>		
UPLIFT	Uplift Elevation & Load Spacing (7/24/2014)		
CLASS MATERIAL	2		
VEGETATION			
CONCRETE			
STEEL			
PIPE			
PROJECT DATA	SCALE: AS SHOWN		
DESIGNED BY	ARROW PIPELINE, LLC		
CHECKED BY	PORT BERTHOLD #147-94-1A-12-1H		
DRAWN BY	PAPERLINE PLAN & PROFILE		
DATE	07-25-11		
SHEET	1 OF 1		

Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H

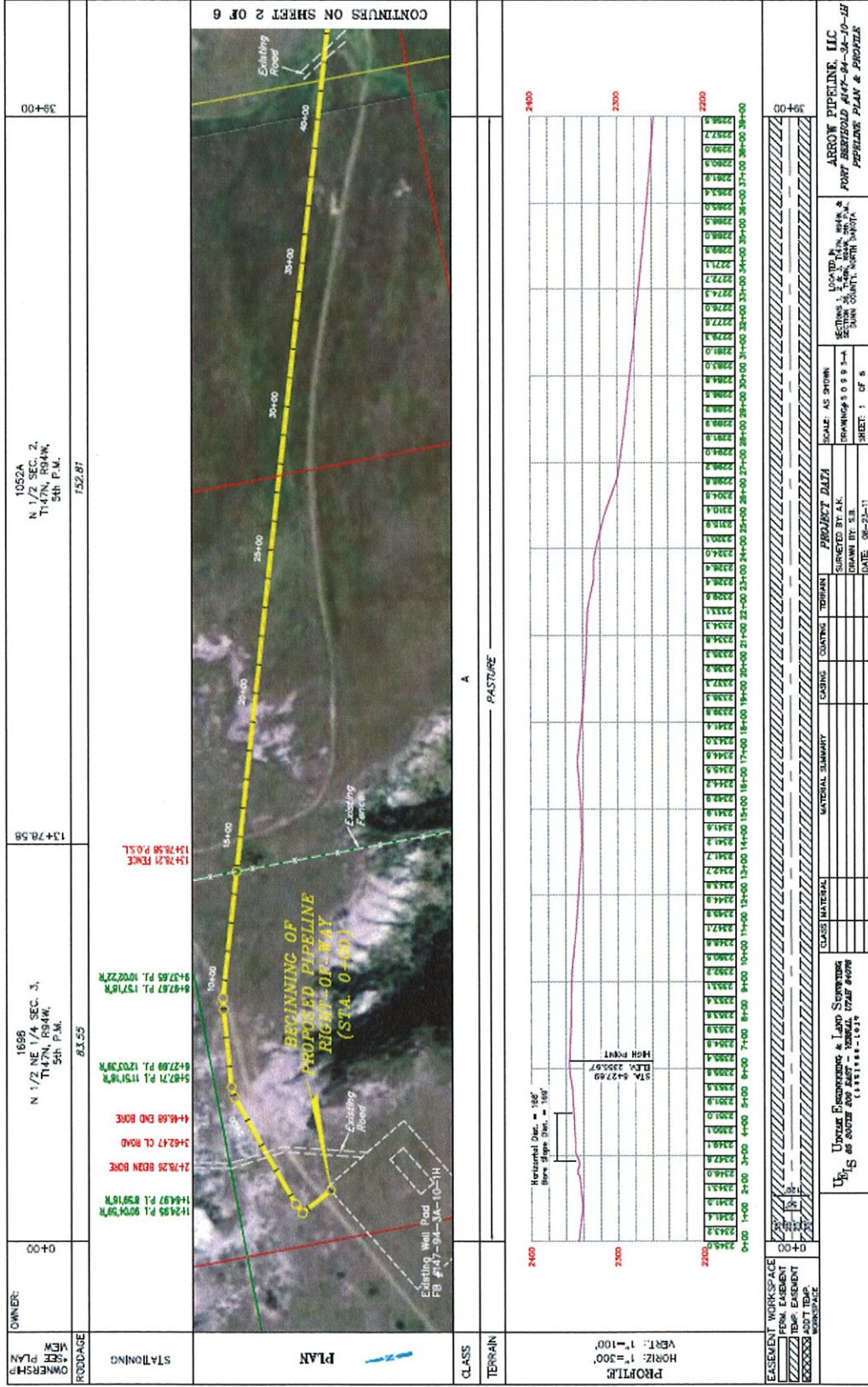


*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

APPENDIX B

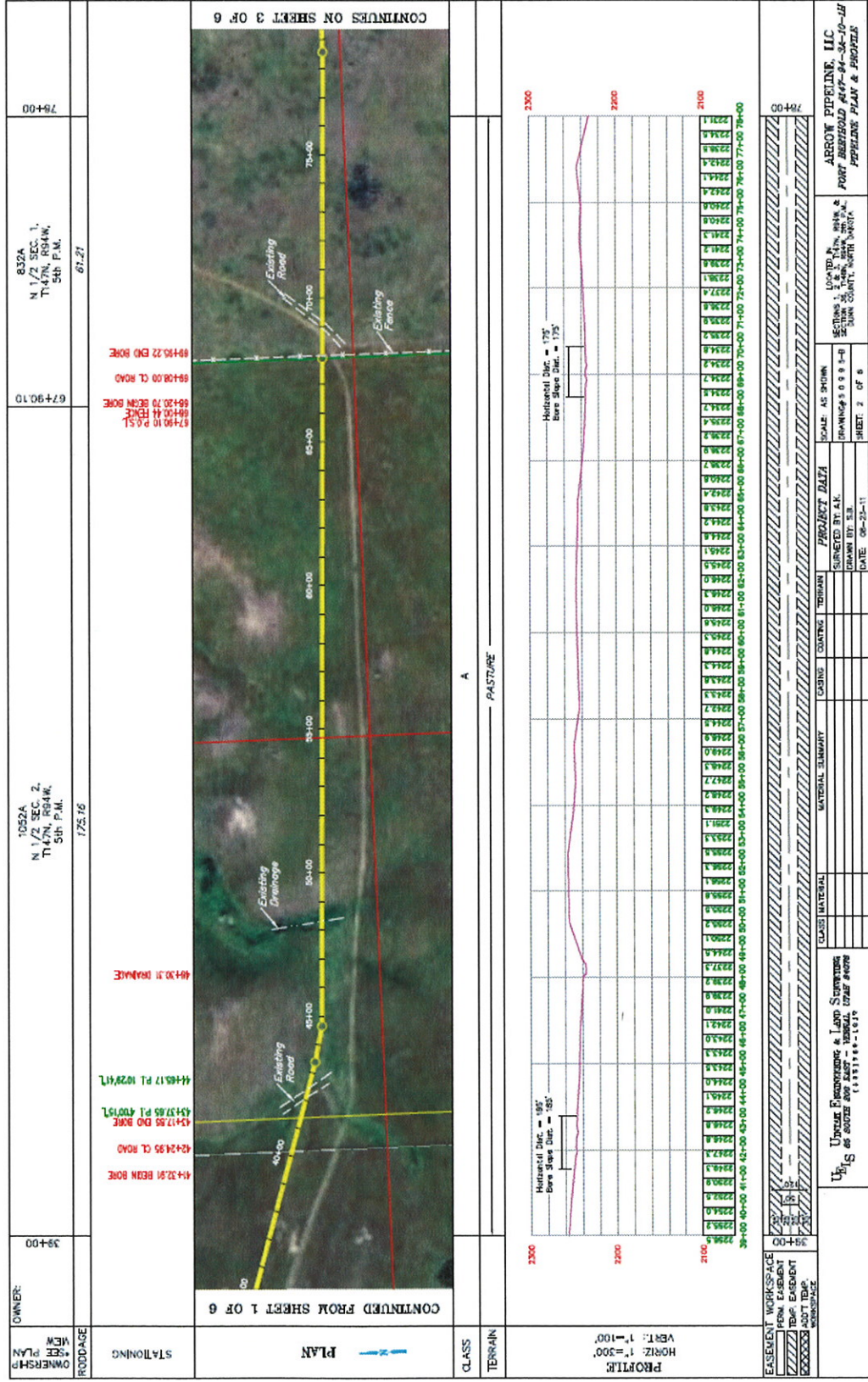
Pipeline Layout and Pipeline Right-of-Way For FB #147-94-3A-10-1H

Addendum to Environmental Assessment to Authorize Land Use for Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H



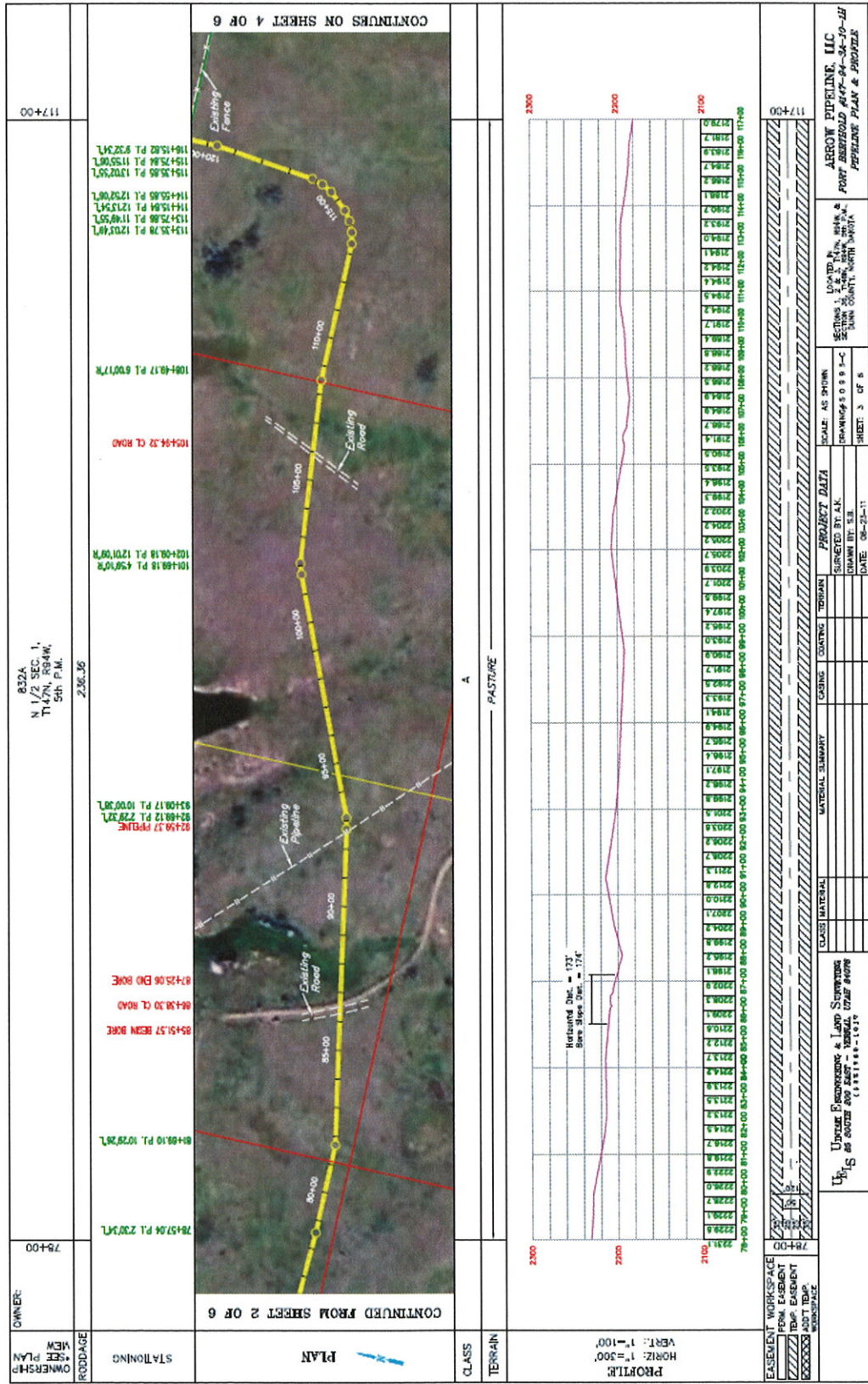
OWNER:	1696 N 1/2 NE 1/4 SEC. 3, T42N, R34W, 5th P.M.	13+78.58	1052A N 1/2 SEC. 2, T11N, R34W, 5th P.M.	39+00
RODDATE:	83.55		152.87	
STATIONING:	0+00			
PLAN:	<p>16455 P1 89°18'N</p> <p>14457 P1 89°18'N</p> <p>27°28'28" BORN BORN</p> <p>3+62.47 CL ROAD</p> <p>4+68.68 END BORN</p> <p>6+27.09 P1 120°39'N</p> <p>6+27.21 P1 120°39'N</p> <p>6+27.87 P1 102°22'N</p> <p>6+27.85 P1 102°22'N</p> <p>15+78.58 P.O.S.L.</p> <p>15+78.58 P.O.S.L.</p>			
CLASS:	A			
TERRAIN:	PASTURE			
PROFILE:	<p>HORIZONTAL CURVE - 168'</p> <p>VERTICAL CURVE - 168'</p> <p>STA. 6+27.89</p> <p>ELV. 2025.67</p> <p>HIGH POINT</p>			
EASEMENT WORKSPACE:	<p>00' EASEMENT</p> <p>10' EASEMENT</p> <p>15' EASEMENT</p> <p>20' EASEMENT</p> <p>25' EASEMENT</p>			
PROJECT DATA:	<p>SCALE: AS SHOWN</p> <p>DESIGNED BY: A.K.</p> <p>DRAWN BY: S.B.</p> <p>DATE: 08-29-11</p> <p>SHEET: 1 OF 8</p>			
LOCATION:	<p>LOCATED IN SECTION 2, T11N, R34W, 5TH P.M., SUNDAY COUNTY, NORTH DAKOTA</p> <p>ARROW PIPELINE, LLC</p> <p>FORT BERTHOLD #147-94-3A-10-1H</p> <p>FEEDLINE PLAN & PROFILE</p>			

Addendum to Environmental Assessment to Authorize Land Use for
 Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H

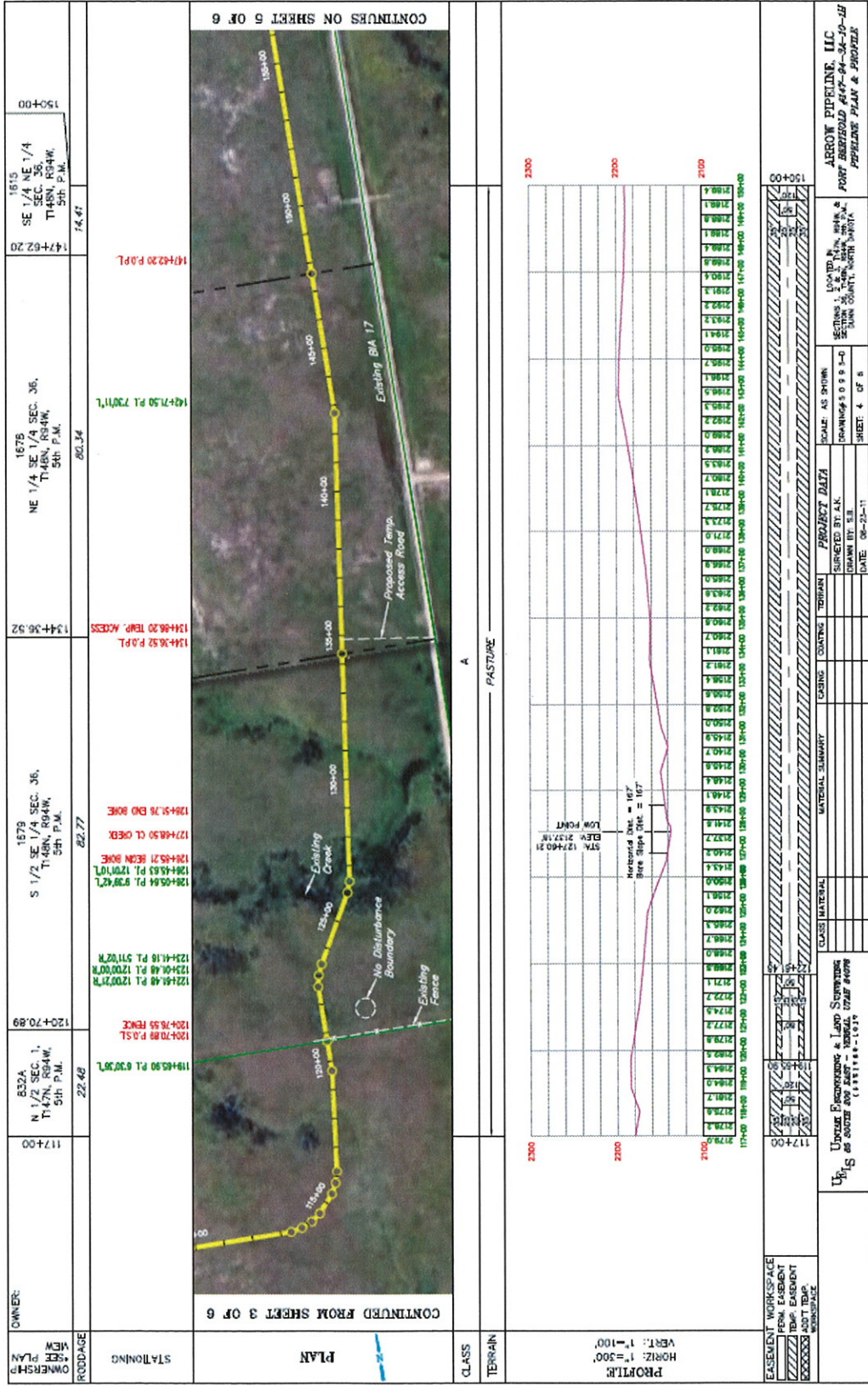


OWNER:	1052A N 1/2 SEC. 2, T147N, R034W, S18 E.M.	67+90.10	832A N 1/2 SEC. 1, T147N, R034W, S18 E.M.	74+00
OWNER'S PLAN				
STATIONING	175.16		61.21	
ROADAGE				
CLASS	A PASTURE			
TERRAIN				
EASEMENT WORKSPACE	Uprate Engineering & Land Surveying 116 S. 20th St. Suite 101 Fort Berthold, ND 58120 (701) 338-1111			
PERM EASEMENT	Uprate Engineering & Land Surveying 116 S. 20th St. Suite 101 Fort Berthold, ND 58120 (701) 338-1111			
ADJUST TRAP	Uprate Engineering & Land Surveying 116 S. 20th St. Suite 101 Fort Berthold, ND 58120 (701) 338-1111			
WORKSPACE	Uprate Engineering & Land Surveying 116 S. 20th St. Suite 101 Fort Berthold, ND 58120 (701) 338-1111			
PROJECT DATA	SCALE: AS SHOWN SUBMITTED BY: AK DRAWN BY: E.R. DATE: 08-25-11			
MATERIAL	MATERIAL EMBOY	LOSING	CONCRETE	TERRAIN
ARROW PIPELINE, LLC FORT BERTHOLD #147-94-3A-10-1H PIPELINE PLAN & PROFILE				

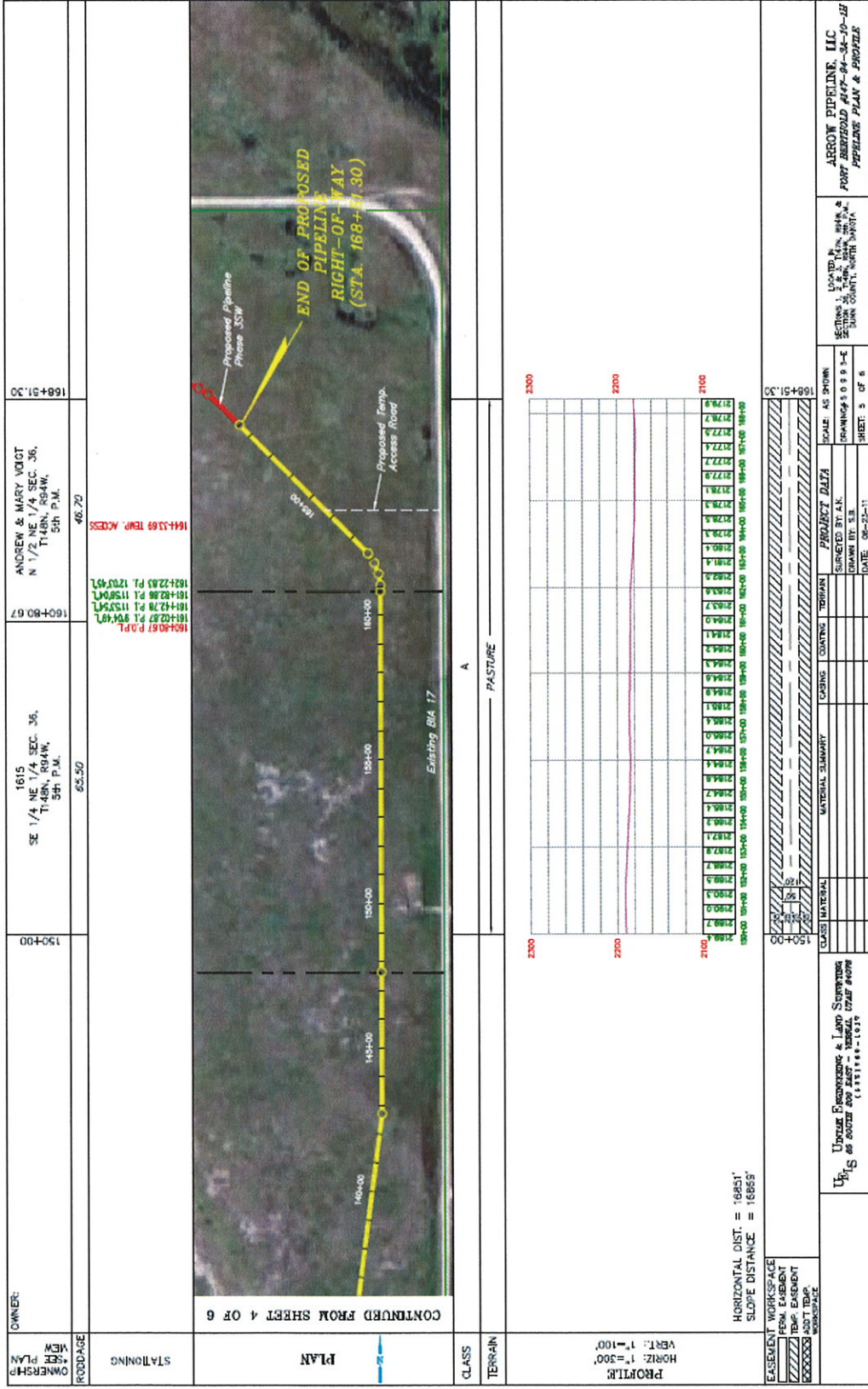
Addendum to Environmental Assessment to Authorize Land Use for
 Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H



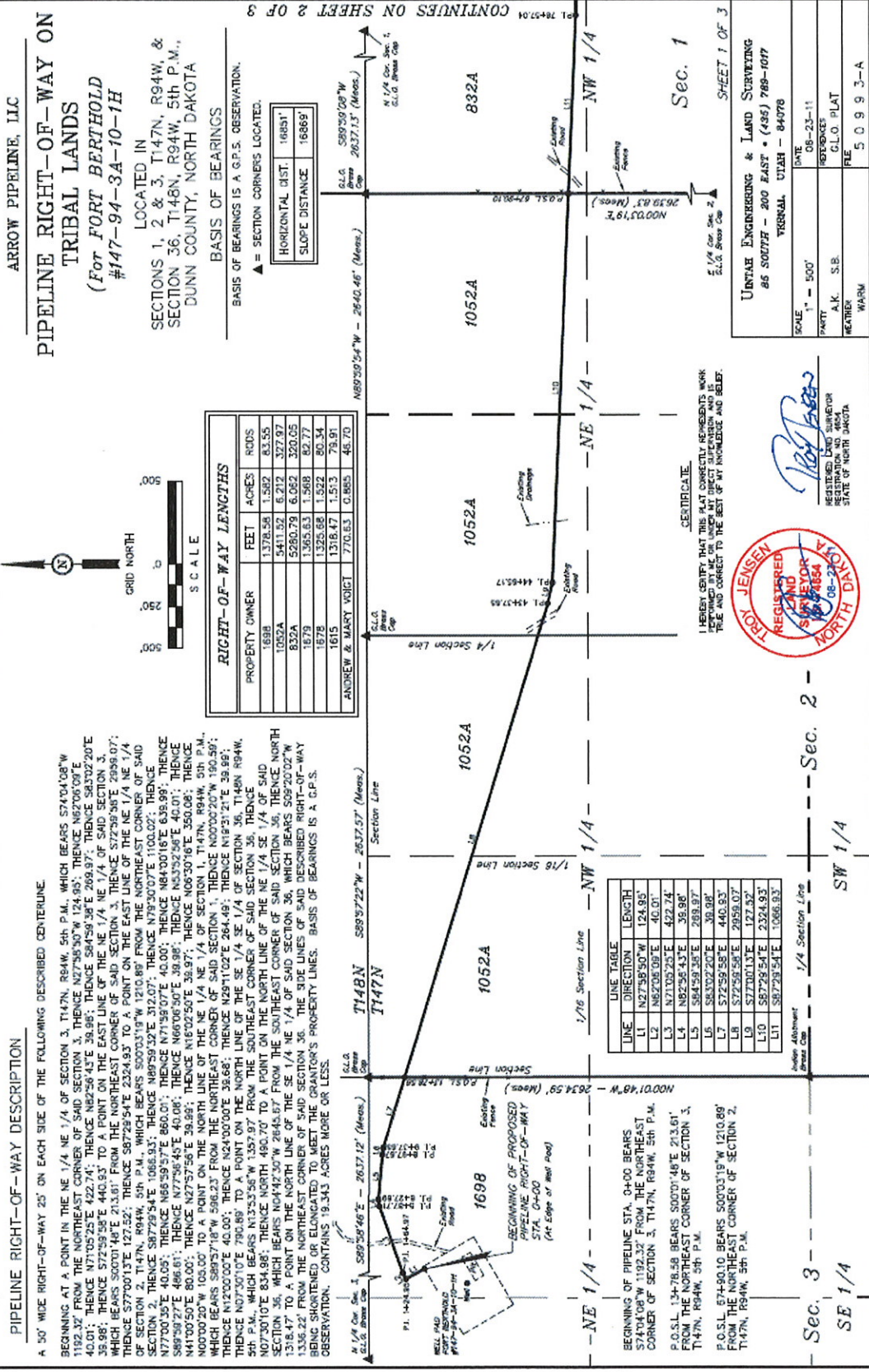
**Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H**



Addendum to Environmental Assessment to Authorize Land Use for
 Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H



Addendum to Environmental Assessment to Authorize Land Use for Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H



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 NE 1/4 OF SECTION 3, T147N, R94W, 5th P.M., WHICH BEARS S74°04'08"W 1102.17' FROM THE NORTHEAST CORNER OF SAID SECTION 3, THENCE S27°50'30"W 124.95', THENCE N27°05'00"E 40.01', THENCE S72°05'25"E 422.74', THENCE N82°56'43"E 39.98', THENCE S41°32'20"E 39.98', THENCE S72°59'58"E 440.93' TO A POINT ON THE EAST LINE OF THE NE 1/4 NE 1/4 OF SAID SECTION 3, WHICH BEARS S00°01'48"E 213.81' TO THE NORTHEAST CORNER OF SAID SECTION 3, THENCE S72°59'58"E 2956.07', THENCE S77°00'13"E 122.52', THENCE S87°29'54"E 2324.93' TO A POINT ON THE EAST LINE OF THE NE 1/4 NE 1/4 OF SECTION 2, T147N, R94W, 5th P.M., WHICH BEARS S00°03'19"W 1210.89' FROM THE NORTHEAST CORNER OF SAID SECTION 2, THENCE S87°29'54"E 1066.93', THENCE N89°59'39"E 312.07', THENCE N79°30'07"E 1100.02', THENCE N77°00'35"E 40.09', THENCE N65°59'57"E 860.01', THENCE N71°59'07"E 40.00', THENCE N84°00'18"E 639.99', THENCE S89°59'27"E 486.61', THENCE N27°57'58"E 39.98', THENCE N66°06'50"E 40.01', THENCE N83°52'58"E 40.01', THENCE N41°00'50"E 80.00', THENCE N27°57'58"E 39.98', THENCE N16°02'50"E 350.08', THENCE N09°00'20"W 100.00' TO A POINT ON THE NORTH LINE OF THE NE 1/4 NE 1/4 OF SECTION 1, T147N, R94W, 5th P.M., WHICH BEARS S89°57'19"W 596.23' FROM THE NORTHEAST CORNER OF SAID SECTION 1, THENCE N07°00'20"W 190.59', THENCE N12°00'00"E 40.00', THENCE N24°00'00"E 35.68', THENCE N29°11'02"E 284.49', THENCE N19°31'21"E 39.98', THENCE N07°30'10"E 790.89' TO A POINT ON THE NORTH LINE OF THE SE 1/4 SE 1/4 OF SECTION 36, T146N, R94W, 5th P.M., WHICH BEARS N33°35'58"W 1357.97' FROM THE SOUTHEAST CORNER OF SAID SECTION 36, THENCE S40°30'10"E 834.98', THENCE NORTH 460.70' TO A POINT ON THE NORTH LINE OF THE NE 1/4 NE 1/4 OF SECTION 36, THENCE SAID SECTION 36, WHICH BEARS N04°42'30"W 246.61' FROM THE SOUTHWEST CORNER OF SAID SECTION 36, THENCE NORTH 1318.12' TO A POINT ON THE EAST LINE OF SAID SECTION 36, WHICH BEARS S08°20'02"W 1318.12' TO A POINT ON THE WEST LINE OF SAID SECTION 36, THE SIDELINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE QUANTITIES OF PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 19.343 ACRES MORE OR LESS.

RIGHT-OF-WAY LENGTHS

PROPERTY OWNER	FEET	ACRES	RODS
1698	1378.39	1.582	83.55
1052A	5411.92	6.212	327.87
832A	5280.79	6.052	320.05
1679	1365.63	1.568	82.77
1678	1325.68	1.522	80.34
1615	1318.47	1.513	79.91
ANDREW & MARY VOICIT	770.63	0.885	48.70

BASIS OF BEARINGS IS A G.P.S. OBSERVATION. ▲ = SECTION CORNERS LOCATED.

HORIZONTAL DIST.	SLOPE DISTANCE
16851'	16889'

PIPELINE RIGHT-OF-WAY
 BEGINNING OF PROPOSED PIPELINE RIGHT-OF-WAY STA. 0+00 (At Edge of road)
 BEGINNING OF PIPELINE STA. 0+00 BEARS S74°04'08"W 1192.32' FROM THE NORTHEAST CORNER OF SECTION 3, T147N, R94W, 5th P.M. P.O.S.L. 574-94-10 BEARS S00°03'19"W 1210.89' FROM THE NORTHEAST CORNER OF SECTION 2, T147N, R94W, 5th P.M.

LINE TABLE

LINE	DIRECTION	LENGTH
L1	N27°58'50"W	124.95'
L2	N82°56'08"E	40.01'
L3	N21°05'25"E	422.74'
L4	N82°56'43"E	39.98'
L5	S84°59'25"E	2956.07'
L6	S83°02'20"E	39.98'
L7	S72°59'58"E	440.93'
L8	S72°59'58"E	2956.07'
L9	S77°00'13"E	122.52'
L10	S87°29'54"E	2324.93'
Adjustment		1066.93'

PIPELINE RIGHT-OF-WAY
 BEGINNING OF PIPELINE STA. 0+00 BEARS S74°04'08"W 1192.32' FROM THE NORTHEAST CORNER OF SECTION 3, T147N, R94W, 5th P.M. P.O.S.L. 574-94-10 BEARS S00°03'19"W 1210.89' FROM THE NORTHEAST CORNER OF SECTION 2, T147N, R94W, 5th P.M.

RIGHT-OF-WAY LENGTHS

PROPERTY OWNER	FEET	ACRES	RODS
1698	1378.39	1.582	83.55
1052A	5411.92	6.212	327.87
832A	5280.79	6.052	320.05
1679	1365.63	1.568	82.77
1678	1325.68	1.522	80.34
1615	1318.47	1.513	79.91
ANDREW & MARY VOICIT	770.63	0.885	48.70

CONTINUES ON SHEET 2 OF 3

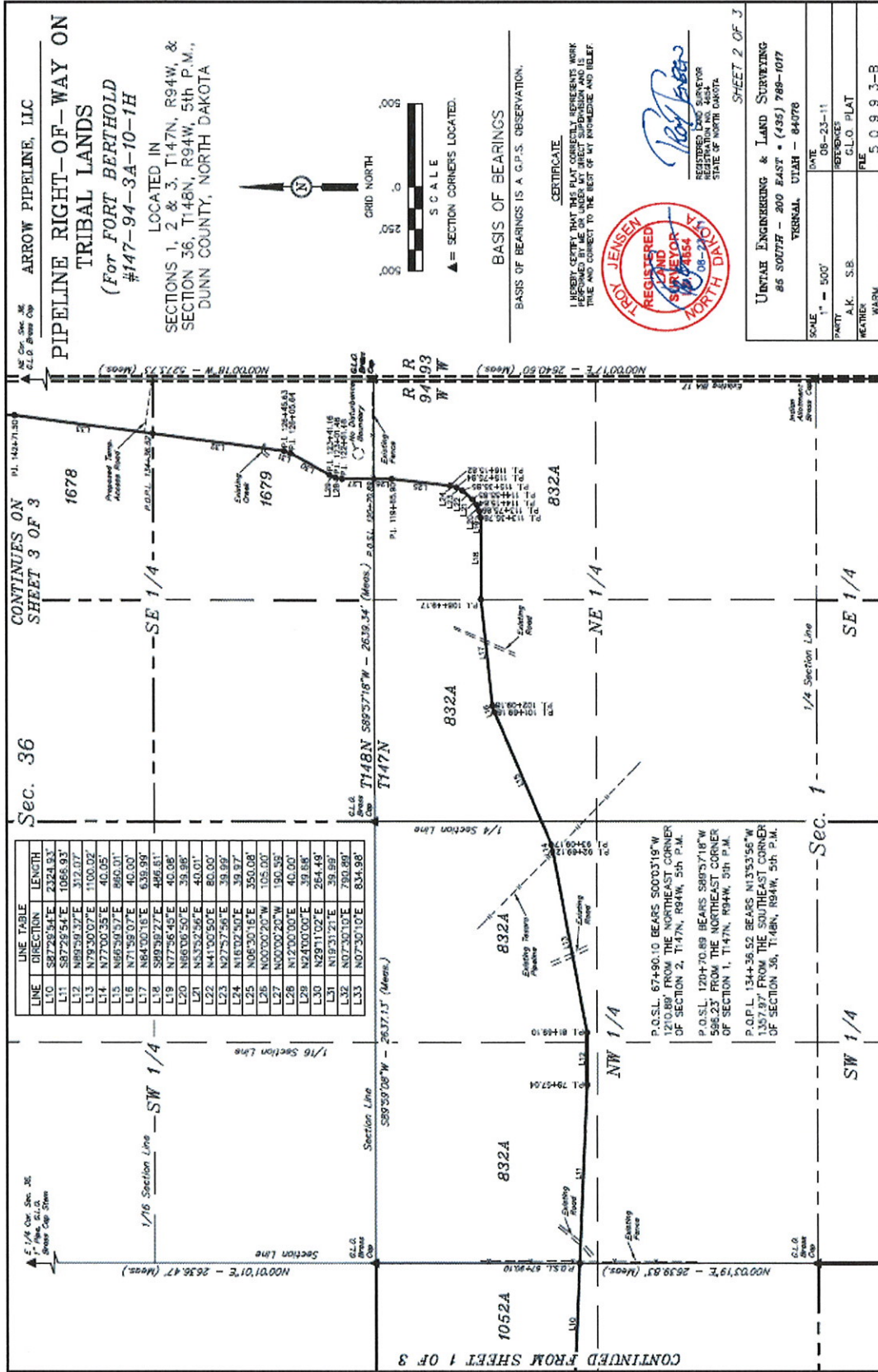
UNTRAE ENGINEERING & LAND SURVEYING
 86 SOUTH 200 EAST • (435) 789-1077
 TIRRELL, UTAH - 844078

DATE: 08-23-11
 PARTY: UNTRAE
 A.K.A.: S.B.
 G.L.O. PLAT: 50993-A
 BEARING: WARM

SCALE: 1" = 500'
 REGISTERED LAND SURVEYOR
 STATE OF NORTH DAKOTA

SECTION 1
 SHEET 1 OF 3

Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H



LINE	DIRECTION	LENGTH
L10	S87°20'34"E	2324.93
L11	S87°20'54"E	1066.93
L12	N89°58'17"E	312.07
L13	N73°00'29"E	1100.07
L14	N73°00'35"E	40.05
L15	N69°38'17"E	465.05
L16	N71°58'07"E	40.00
L17	S89°38'27"E	466.81
L18	S89°38'15"E	639.94
L19	N87°36'45"E	40.00
L20	N86°00'50"E	39.89
L21	N41°50'50"E	80.00
L22	N27°57'56"E	39.89
L23	N16°02'30"E	39.87
L24	N06°30'15"E	350.08
L25	N00°00'20"W	105.00
L26	N00°00'20"W	190.35
L27	N12°00'00"E	40.00
L28	N24°00'00"E	39.88
L29	N29°11'02"E	264.49
L30	N19°31'21"E	39.89
L31	N07°30'10"E	780.89
L32	N07°30'10"E	834.98
L33	N07°30'10"E	834.98

P.O.S.L. 67+40.10 BEARS S00°03'18"W 120.89' FROM THE NORTHEAST CORNER OF SECTION 2, T147N, R94W, 5th P.M.

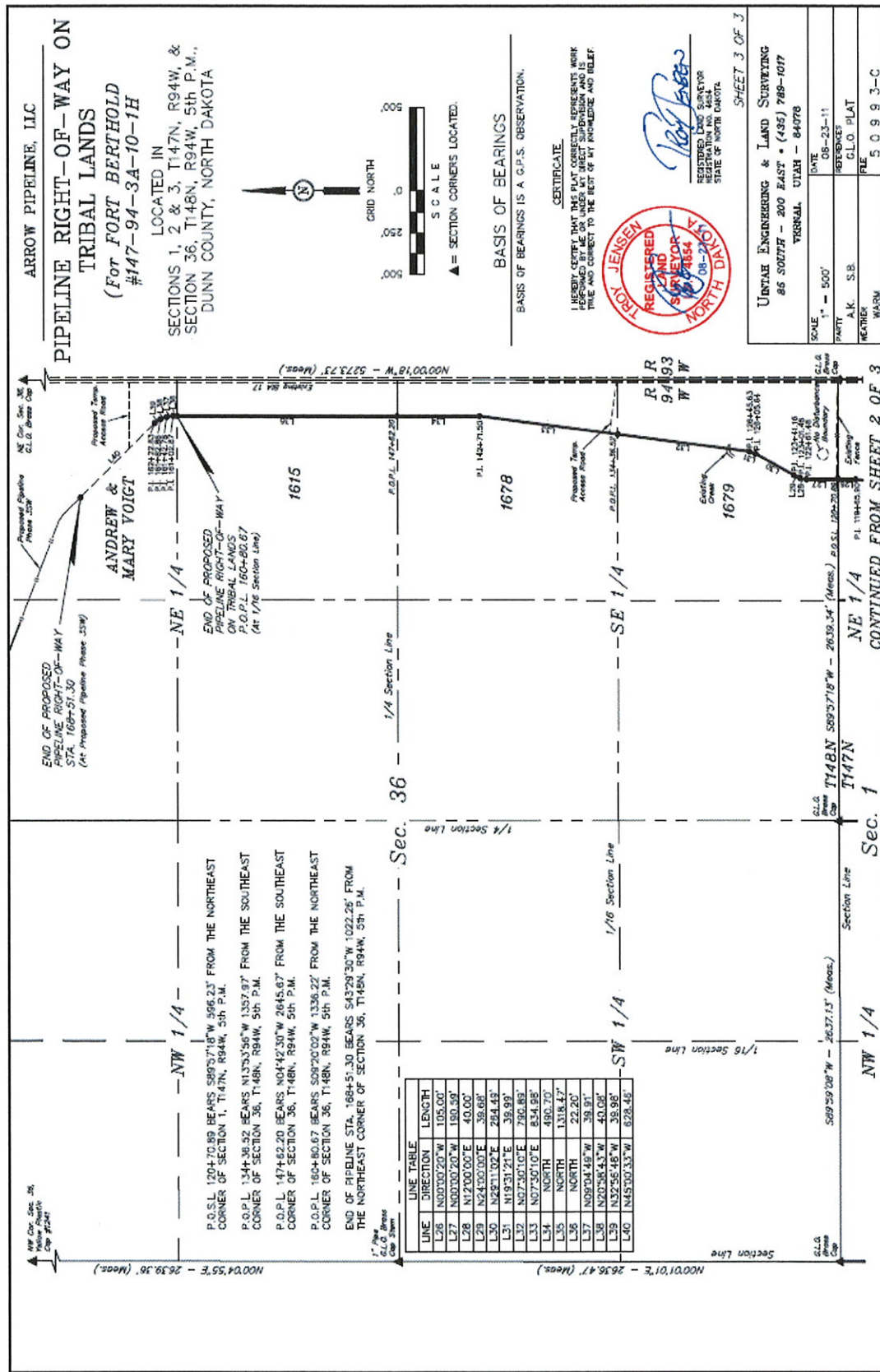
P.O.S.L. 120+70.89 BEARS S89°37'18"W 586.23' FROM THE NORTHEAST CORNER OF SECTION 1, T147N, R94W, 5th P.M.

P.O.P.L. 134+36.50 BEARS N13°16'57"W 1357.87' FROM THE SOUTHEAST CORNER OF SECTION 36, T148N, R94W, 5th P.M.

CONTINUED FROM SHEET 1 OF 3

Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H

Addendum to Environmental Assessment to Authorize Land Use for

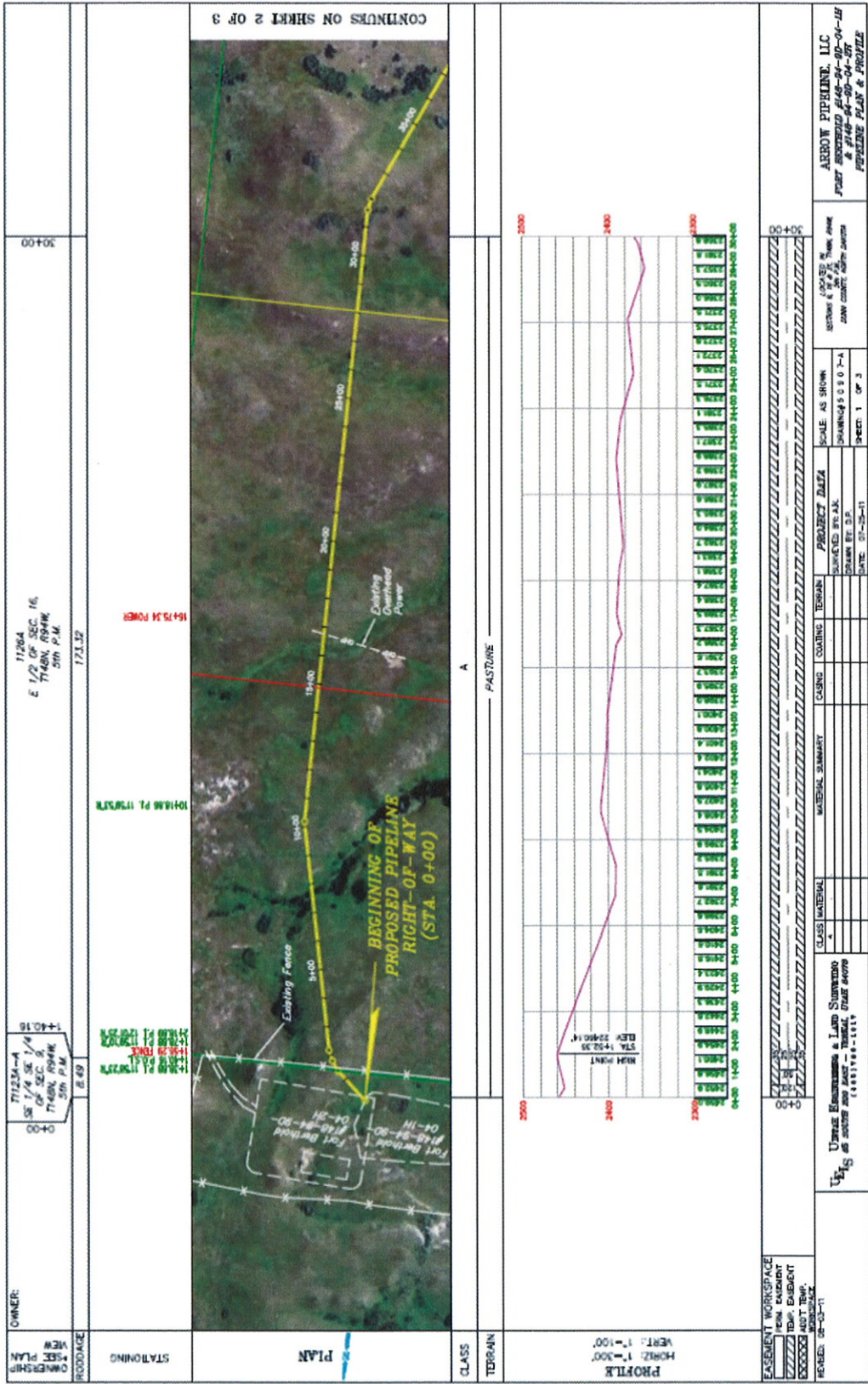


*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

APPENDIX C

**Pipeline Layout and Pipeline Right-of-Way
For FB #148-94-9D-04-1H, -2H**

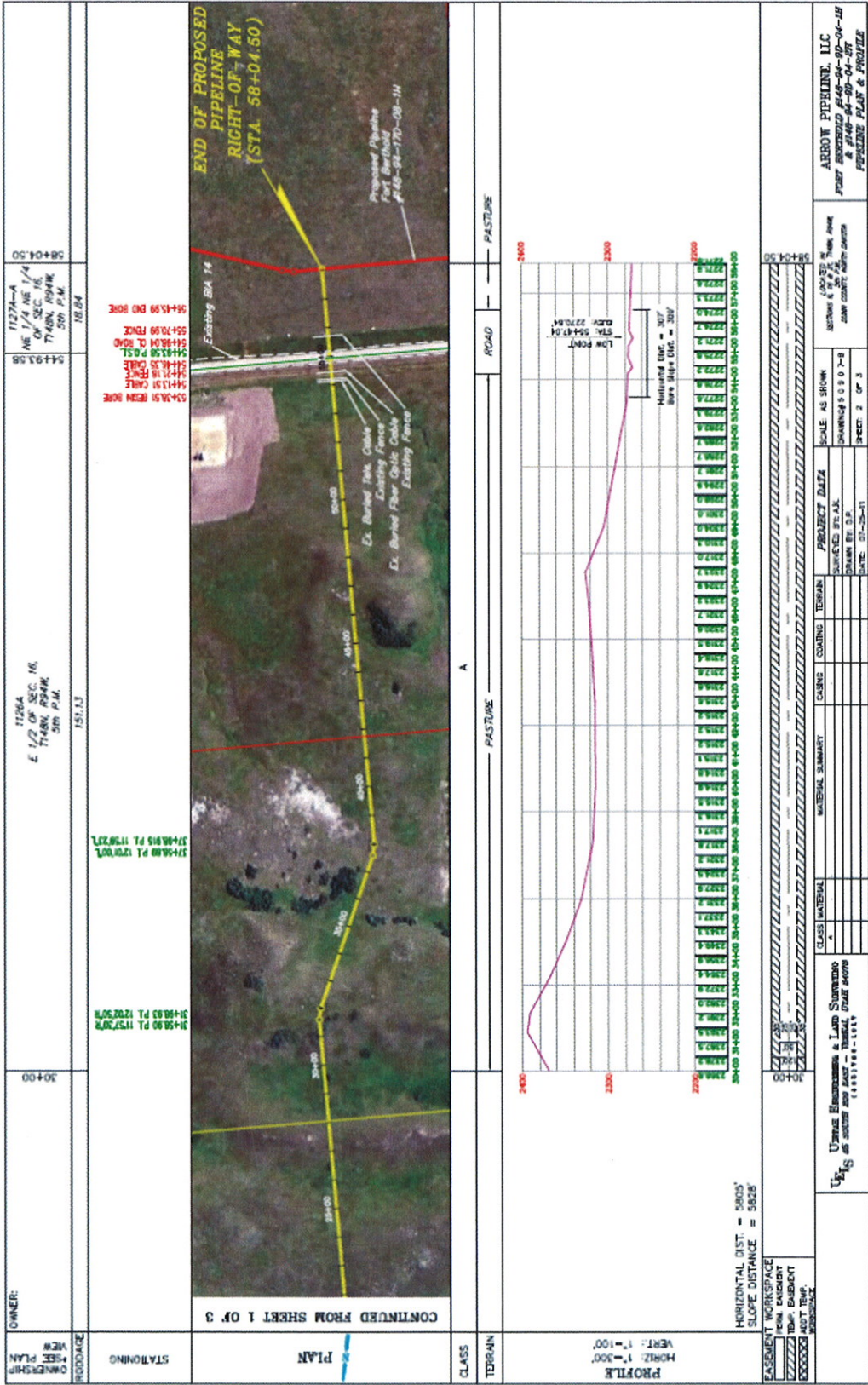
Addendum to Environmental Assessment to Authorize Land Use for
 Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H



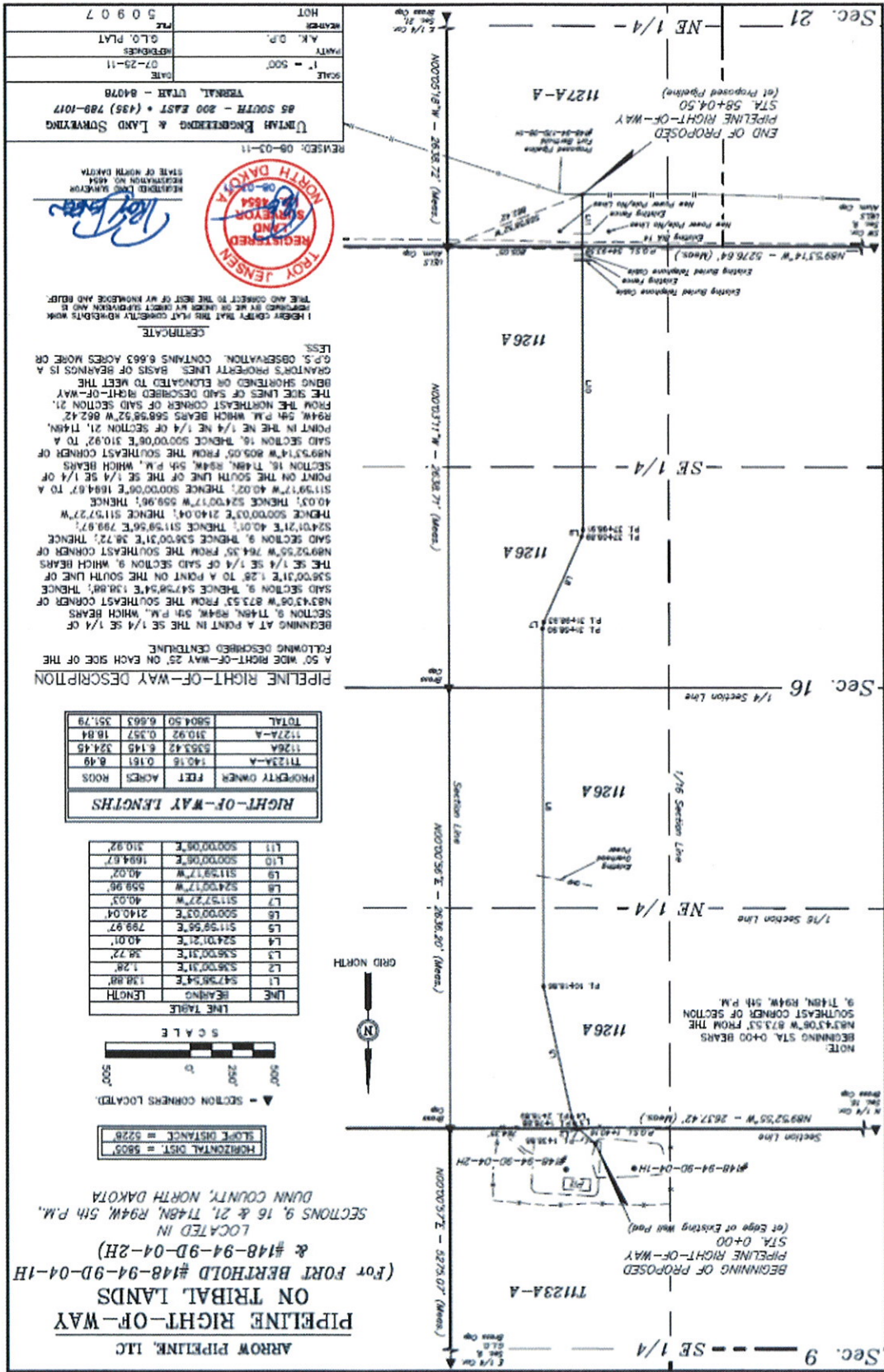
ARROW PIPELINE, LLC
 PROJECT #148-94-04-1H
 & 148-94-04-04-1H
 PIPELINE PLAN & PROFILE

Upland Easements & Land Surrender
 Upland Easements & Land Surrender
 Upland Easements & Land Surrender

Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H



**Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H**

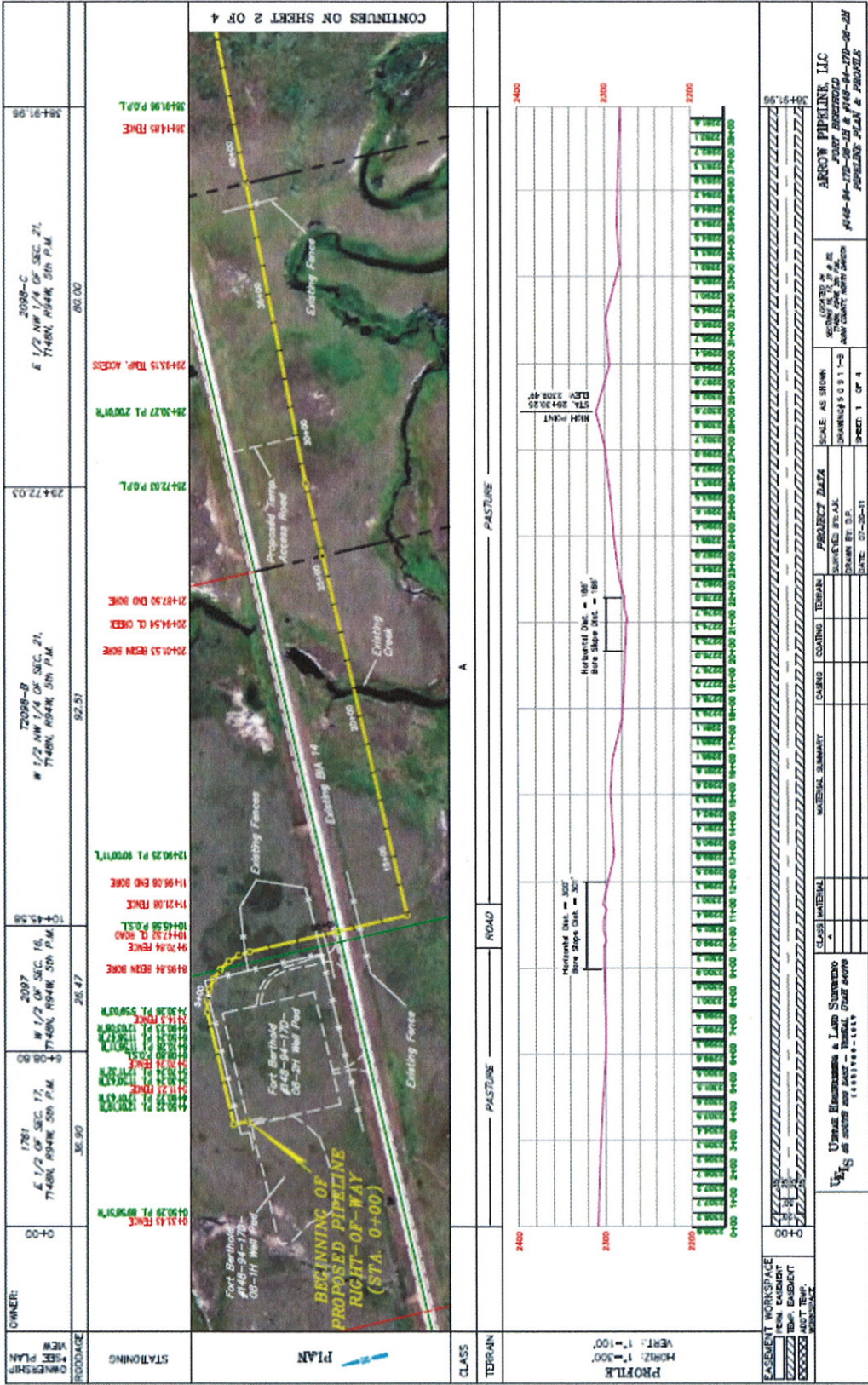


*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

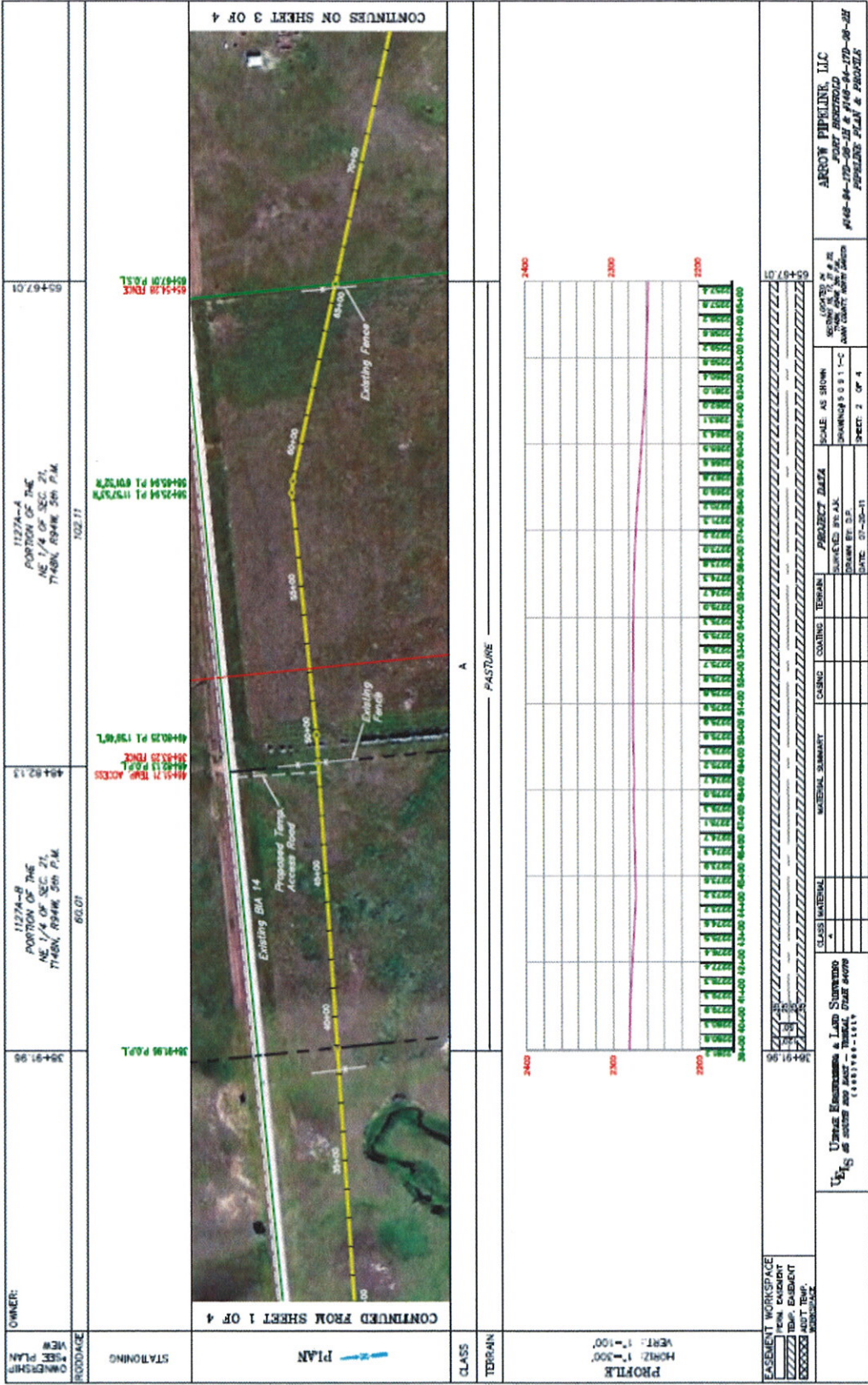
APPENDIX D

**Pipeline Layout and Pipeline Right-of-Way
For FB 148-94-17D-08-1H, -2H**

**Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H**

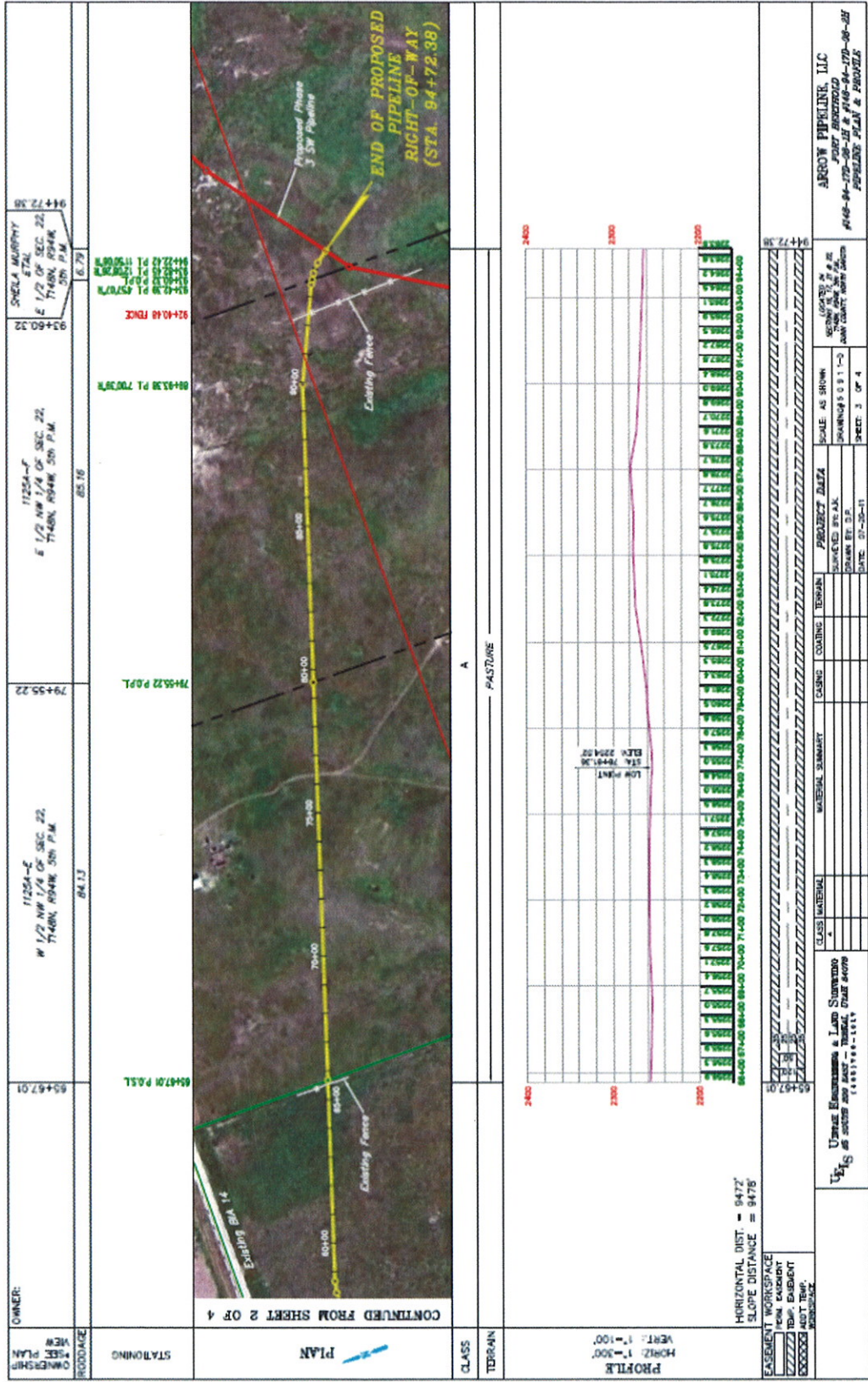


Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H

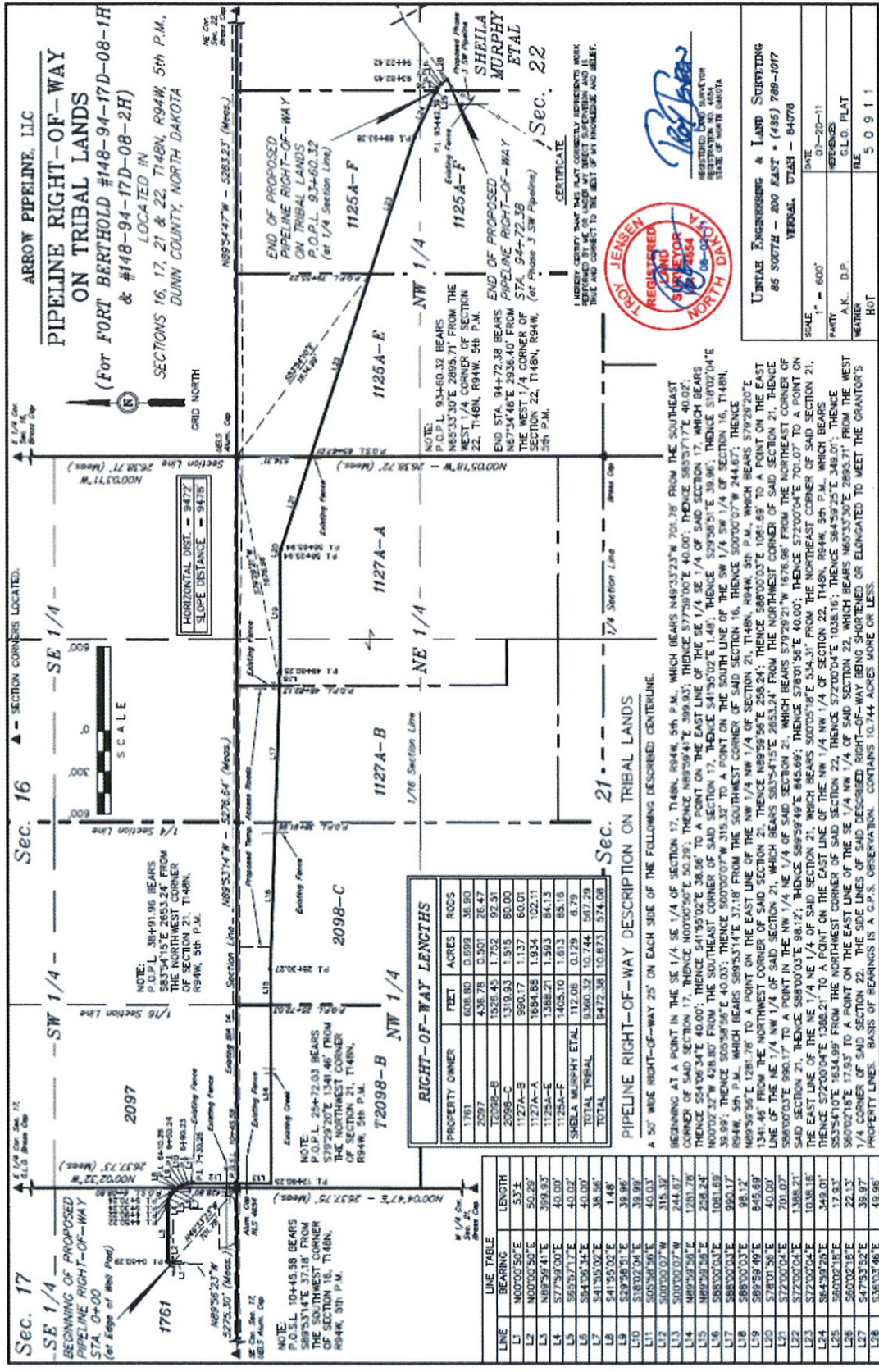


EASEMENT WORKSPACE PERMITS CONSENT ABOUT TEMP WORKSHEET	U.S. Utility Engineers & Land Surveyors 4400 S. 19th Street, Suite 100 Lincoln, NE 68502-1114 TEL: 402-426-7111	CLASS MATERIAL MAINTENANCE SUMMARY CHANGING LOGGING TERMINAL PRODUCT DATA SURVEYED BY: A.K. DRAWING: 5511-C SHEET: 2 OF 4 DATE: 01-30-11	SCALE AS SHOWN DRAWING: 5511-C SHEET: 2 OF 4	SECTION: 21 TOWNSHIP: 94N RANGE: 34W	ARROW PIPELINE, LLC 4400 S. 19th Street, Suite 100 Lincoln, NE 68502-1114 TEL: 402-426-7111
					U.S. Utility Engineers & Land Surveyors 4400 S. 19th Street, Suite 100 Lincoln, NE 68502-1114 TEL: 402-426-7111

**Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H**



**Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H;
#148-94-17D-08-2H;
#148-94-17D-08-1H, -2H;
#147-94-2A-11-1H, -2H**

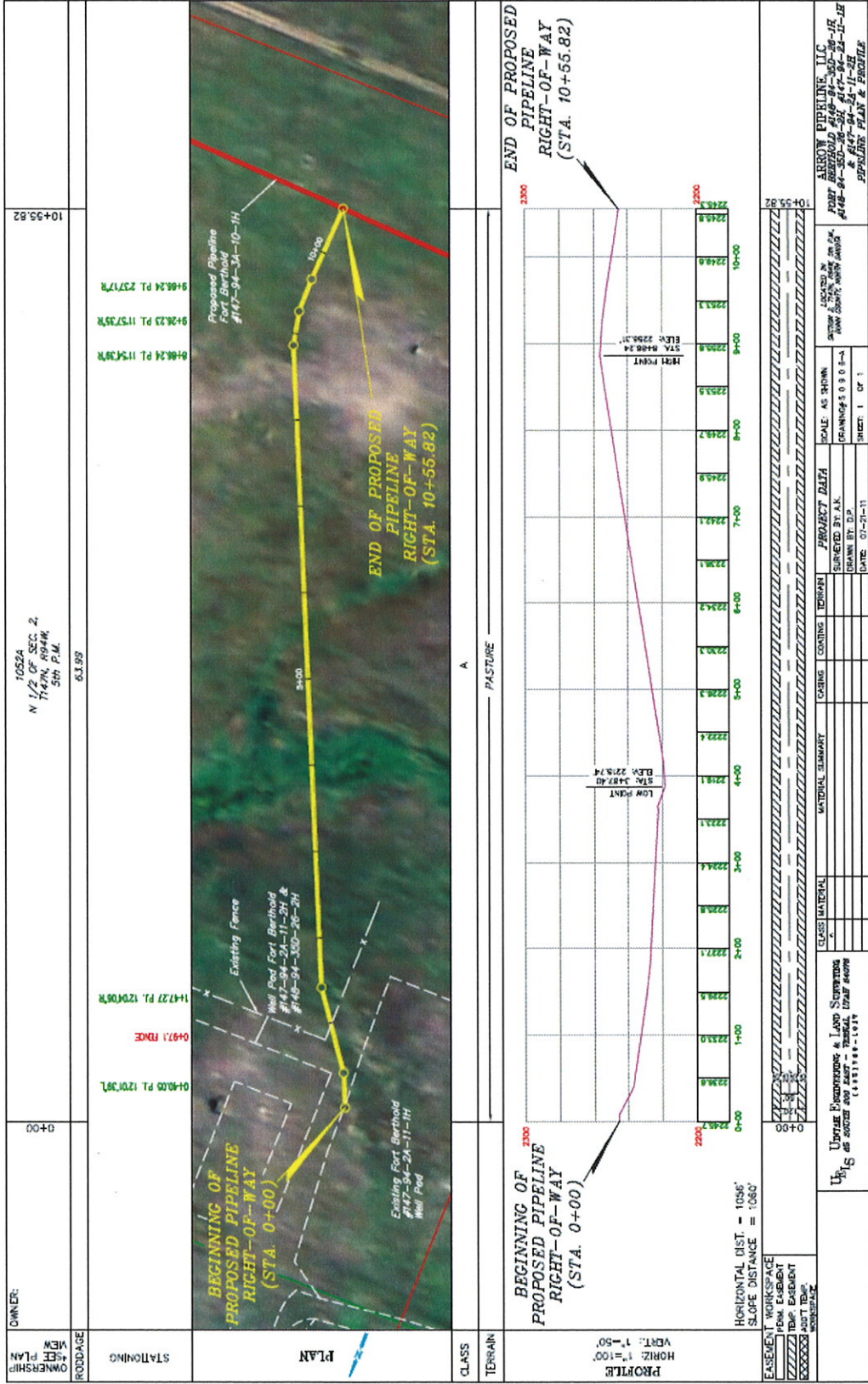


*Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H;
#148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-
11-1H, -2H*

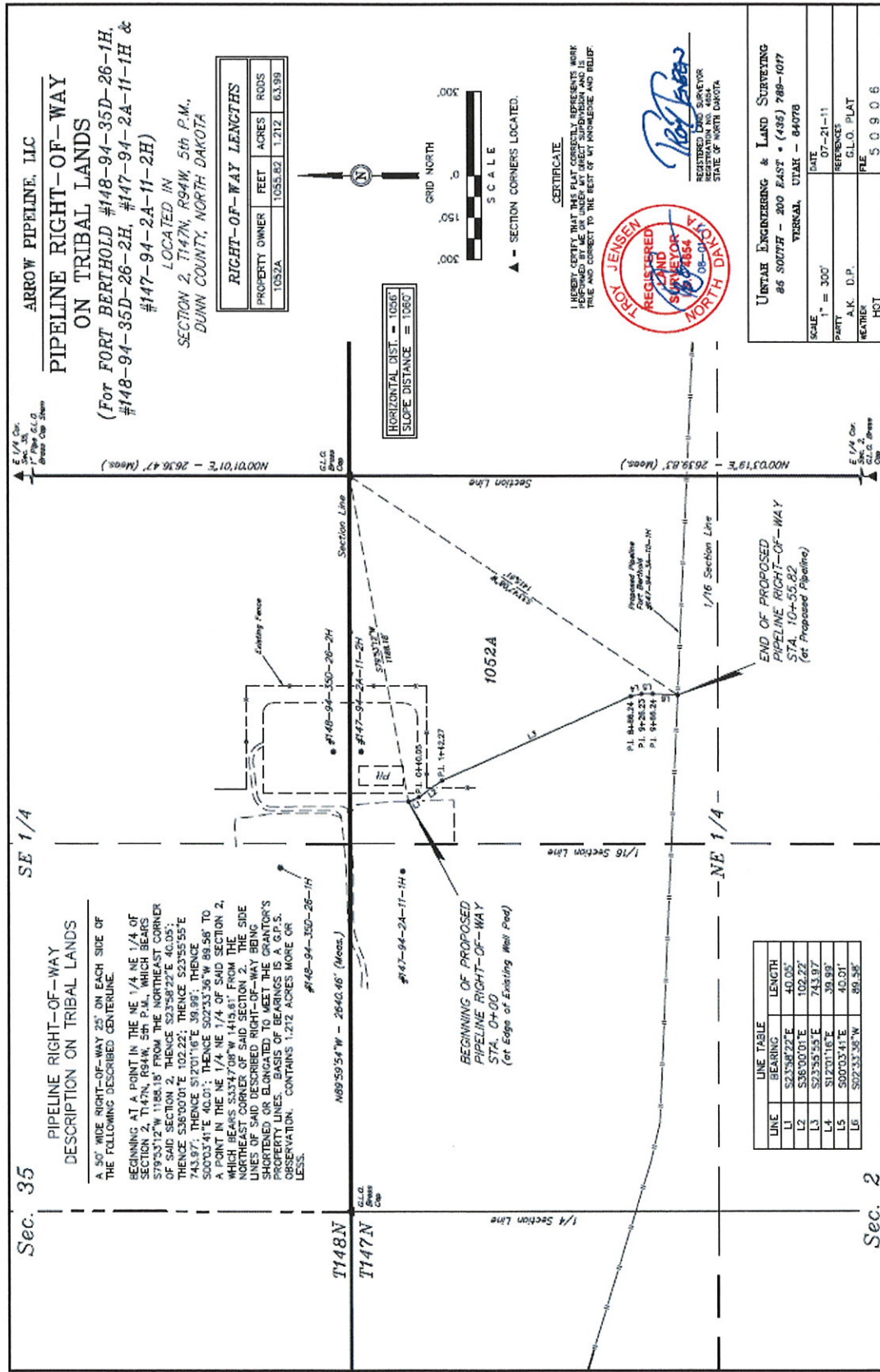
APPENDIX E

**Pipeline Layout and Pipeline Right-of-Way
For FB #148-94-35D-26-1H, -2H & FB #147-94-2A-11-1H, -2H**

**Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H**



**Addendum to Environmental Assessment to Authorize Land Use for
Arrow-Petro-Hunt Gathering Pipelines: Fort Berthold #147-94-1A-12-1H; #147-94-3A-10-1H; #148-94-9D-04-1H, -2H; #148-94-17D-08-1H, -2H; and #148-94-35D-26-1H, -2H, #147-94-2A-11-1H, -2H**



Notice of Availability and Appeal Rights

Arrow Pipeline: Addendum to Environmental Assessment to Authorize Land Use for

Arrow-Petro-Hunt Gathering Pipelines Connecting the Proposed:

Fort Berthold #147-94-1A-12-1H

Fort Berthold #147-94-3A-10-1H

Fort Berthold #148-94-9D-04-1H, -2H

Fort Berthold #148-94-17D-08-1H, -2H

Fort Berthold #148-94-35D-26-1H, -2H

Fort Berthold #147-94-2A-11-1H, -2H

Wells to the Arrow Phase 3 Southwest Pipeline

The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals related to an Addendum to Environmental Assessment to Authorize Land Use for Arrow-Petro-Hunt Gathering Pipelines Connecting the Proposed: Fort Berthold #147-94-1A-12-1H, Fort Berthold #147-94-3A-10-1H, Fort Berthold #148-94-9D-04-1H, -2H, Fort Berthold #148-94-17D-08-1H, -2H, Fort Berthold #148-94-35D-26-1H, -2H, Fort Berthold #147-94-2A-11-1H, -2H, Wells to the Arrow Phase 3 Southwest Pipeline on the Fort Berthold Reservation as shown on the attached map. Construction by Arrow Pipeline, LLC is expected to begin in 2011.

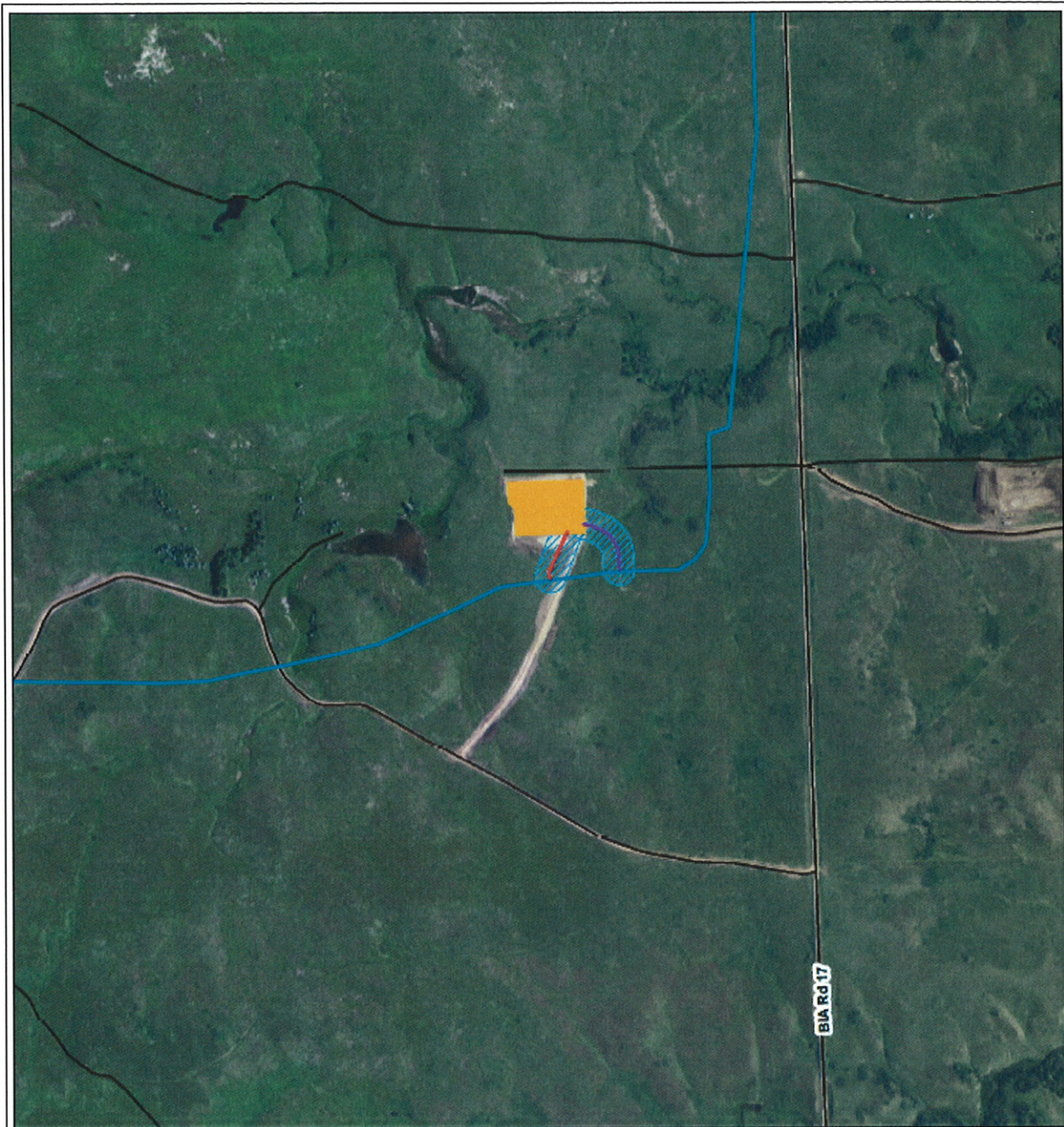
An environmental assessment (EA) determined that proposed activities will not cause significant impacts to the human environment. An environmental impact statement is not required. Contact Earl Silk, Superintendent at 701-627-4707 for more information and/or copies of the EA and the Finding of No Significant 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 November 26, 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

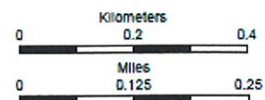
- Revised Fort Berthold 147-04-1A-12-1H Gathering Line
- Original Fort Berthold 147-04-1A-12-1H Gathering Line
- Proposed Fort Berthold 147-04-3A-10-1H Gathering Line
- Existing Roads
- Survey Area
- Well Pad



116 North 4th Street
Suite 200
Bismarck, ND 58501

Phone: 701.258.6622
Fax: 701.258.5957

www.swca.com



Base Map: 2010 NAIP APFO Imagery
Source: ND GIS Hub
Quadrangle: Mandaree SE, ND (1973)
Township 147N & Range 94W
Dunn County, North Dakota



Scale: 1:10,000 NAD 1983 UTM Zone 13N