**BASIN ELECTRIC**
**POWER COOPERATIVE**

1717 EAST INTERSTATE AVENUE
BISMARCK, NORTH DAKOTA 58503-0564
PHONE 701-223-0441
FAX: 701/224-5336

RECEIVED
MAY 27 2005
ND PUBLIC SERVICE COMMISSION
PUBLIC UTILITIES DIVISION

May 26, 2005

Ms. Illona A. Jeffcoat-Sacco
Executive Secretary
Public Service Commission
600 East Boulevard Avenue, Dept 408
Bismarck, ND 58505-0480

Re: Route Permit No. 95 for Antelope Valley Station Raw Water Pipeline
Beulah, North Dakota

Dear Ms. Jeffcoat-Sacco:

Basin Electric Power Cooperative's contractor ENSR has completed the pedestrian survey for nesting passerines within the 150 foot right-of-way (ROW) and a survey for nesting raptors within 0.5 mile of the construction ROW. ENSR's report is attached. The results were verbally communicated, without comment, to Mr. Bill Bicknell of the U.S. Fish and Wildlife Service on May 24, 2005.

ENSR also completed a Tree and Shrub Inventory during the week of May 24th, 2005. This report will be finalized by week ending June 3, 2005 and will be then submitted to the Commission.

The current construction schedule calls for the contractor to mobilize the week of May 23rd and will initiate preliminary activity regarding fence and ROW in select areas the week of ending June 3rd. Initial topsoil stripping and associated activity may begin in earnest the week of June 13th. The pipe material is expected to be beginning delivery the week of June 20th with pipeline laying activity beginning shortly thereafter.

The main pipeline placement activity will begin at the section of the pipeline that is located just west and across from the Coteau Mine Office Complex and will progress southerly towards the Antelope Valley Station. This effort is expected to be completed in late September 2005. This section of pipeline is within Coteau's West Mine Permit area. This portion of the project is first as to facilitate the pipeline work prior to Coteau's mine development efforts.

It is anticipated that the two county and one state highway crossing road bores will be performed concurrently in the July/August timeframe.

The weekly construction report process to the Public Service Commission will begin on May 31, which will encompass the activity of the preceding week.

**49** **PU-04-109** Pages: 11
Breeding Bird Survey Report
by Basin Electric Power Coop Inc. by
05/27/2005 CC: Comm Legal Illona Pat .

If you have any questions and or concerns regarding the performance of the survey, or the results, please contact me at (701) 355-5635.

Sincerely,

Cris Miller

Cris Miller
Environmental Coordinator

cm:mev
cc: Bill Bicknell, USFWS
Joe Bichler, B&W
Scott Wiseman, BEPC

# BREEDING BIRD SURVEY REPORT

## FOR THE ANTELOPE VALLEY STATION RAW WATER PIPELINE PROJECT

**Prepared for**

**U.S. Fish and Wildlife Service**
**Bismarck, North Dakota**

**by**

**BASIN ELECTRIC POWER COOPERATIVE**

**May 2005**

Basin Electric Power Cooperative (BEPC) is proposing to construct a raw water pipeline to supply cooling water from Lake Sakakawea to the Antelope Valley Station (AVS) and Dakota Gasification and Coteau (lignite mine) facilities in Mercer County, North Dakota. The AVS Raw Water Pipeline Project would be constructed approximately 8 miles northwest of the town of Beulah (**Figure 1-1**). The proposed 42-inch-diameter, approximately 8.9-mile-long pipeline would replace the existing water supply pipeline. The proposed pipeline would be constructed parallel to the existing pipeline for over 67 percent of the alignment and within the existing corridor, which was used to complete the corridor compatibility analysis for the existing pipeline in 1977. The proposed pipeline would begin at the existing water pumphouse, which is located immediately adjacent to Renner Bay of Lake Sakakawea within the Hille State Game Management Area, and end at the AVS. BEPC anticipates that construction activities would occur from June 2005 through mid-2006.

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) (16 USC 703-711) and Executive Order (EO) 13186 (66 Federal Register [FR] 3853). The MBTA serves to protect migratory birds from deleterious impacts. EO 13186 was enacted to, among other things, ensure that environmental analyses of federal actions evaluate the impacts of actions and agency plans on migratory birds. Other elements of EO 13186 state that the federal agency should restore and enhance the habitat for migratory birds and abate the detrimental alteration of the environment from pollution. EO 13186 also states that emphasis should be placed on species of concern, priority habitats, and key risk factors.

Because the proposed construction for the AVS Water Pipeline Project is scheduled to occur during the breeding season for migratory bird species, the U.S. Fish and Wildlife Service has expressed concern that construction activities may not comply with the intent of the MBTA and Executive Order 13186 (66 FR 3853), and that construction activities could potentially affect populations of important migratory bird species in the project area. As a result, BEPC has committed to conducting pedestrian surveys for nesting passerines (e.g., perching birds) within the 150-foot-wide construction right-of-way (ROW) and within 0.5-mile of the construction ROW for nesting raptors prior to construction activities in 2005. Breeding bird surveys were conducted on May 16 and May 17, 2005.

**Habitats**

The proposed water pipeline route traverses approximately 4.9 miles of rangeland, 4.0 miles of cultivated cropland, and less than 0.1 mile of wetlands and waters of the U.S. (i.e., intermittent creek) (**Figure 1-2**). Rangeland areas that occur along the proposed route primarily consist of a variety of grasses, grass-like plants, and forbs. Dominant species include western wheatgrass (*Agropyron smithii*), prairie junegrass (*Koeleria pyramidata*), blue grama (*Bouteloua gracilis*), Kentucky bluegrass (*Poa pratensis*), smooth bromegrass (*Bromus inermis*), upland sedges (*Carex* spp.), fringed sage (*Artemisia frigida*), and milkvetch (*Astragalus* spp.) species. Shrubs observed within these areas occurred in small groupings and included western snowberry (*Symphoricarpos occidentalis*), chokecherry (*Prunus virginiana*), buffaloberry (*Sheperdia* *canadensis*), gooseberry (*Ribes setosa*), wild rose (*Rosa arkansana*), serviceberry (*Amelanchier alnifolia*), and skunkbush (*Rhus trilobata*).

Four herbaceous and shrub/scrub wetlands are crossed by the proposed route. Dominant species observed in herbaceous wetlands included reed canarygrass (*Phalaris arundinacea*), various sedges (*Carex* spp.), and curly dock (*Rumex crispus*). Common species observed in shrub/scrub wetlands included plains cottonwood (*Populus deltoides*) saplings, sandbar willow (*Salix exigua*), reed canarygrass, various sedges, and curly dock. Species observed along the intermittent creek included box elder (*Acer negundo*), green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus americana*), chokecherry, reed canarygrass, stinging nettle (*Urtica dioicea*), and smooth bromegrass.

Shrubs and trees also were observed along the proposed route in two shelterbelt areas and other abandoned areas within or adjacent to an electric transmission corridor. Tree and shrub species observed in these areas included Siberian elm (*Ulmus sibericus*), plains cottonwood, green ash, wild plum (*Prunus americana*), Russian olive (*Eleaganus angustifolia*), chokecherry, cherry (shrub species) (*Prunus* sp.), hawthorn (*Crataegus rotundifolia*), lilac, and caragana (introduced shrub). Cultivated cropland traversed by the proposed route included fields of wheat, pea, and alfalfa.

**Methods**

Surveys for nesting passerines were conducted by positioning three biologists approximately 40 feet apart within the 150-foot-wide construction ROW in grassland and shrubland habitats and slowly walking the ROW and scanning ahead for flushing birds. When a bird was flushed, the biologists immediately went to that location and carefully looked for a nest. In addition, all trees and shrubs that were in the ROW were carefully examined for nest sites.

Surveys for nesting raptors were conducted by examining trees and shrubs within 0.5 mile of the ROW boundary and along access roads. Areas that included trees and shrubs outside of the construction ROW also were examined by walking within close proximity where access was available.

In addition to looking for nest sites, the biologists also looked for territorial and breeding behavior (e.g., mated pairs, territorial defense, birds carrying nest material, transporting food) as an indication of a potential active nest site or territory.

The following information was recorded during the surveys:

- General weather conditions during the survey (e.g., date, temperature, wind, and cloud cover).

- Notes on bird behavior were recorded in an effort to evaluate potential use of an area (e.g., soaring, foraging, nest building, possible courtship, etc.).

- A global positioning system location recording was taken for all nest sites, and notes on observations regarding species (if known), nest type, nest height, habitat, and activity status were recorded and plotted on 7.5-minute topographic survey maps.

**Results**

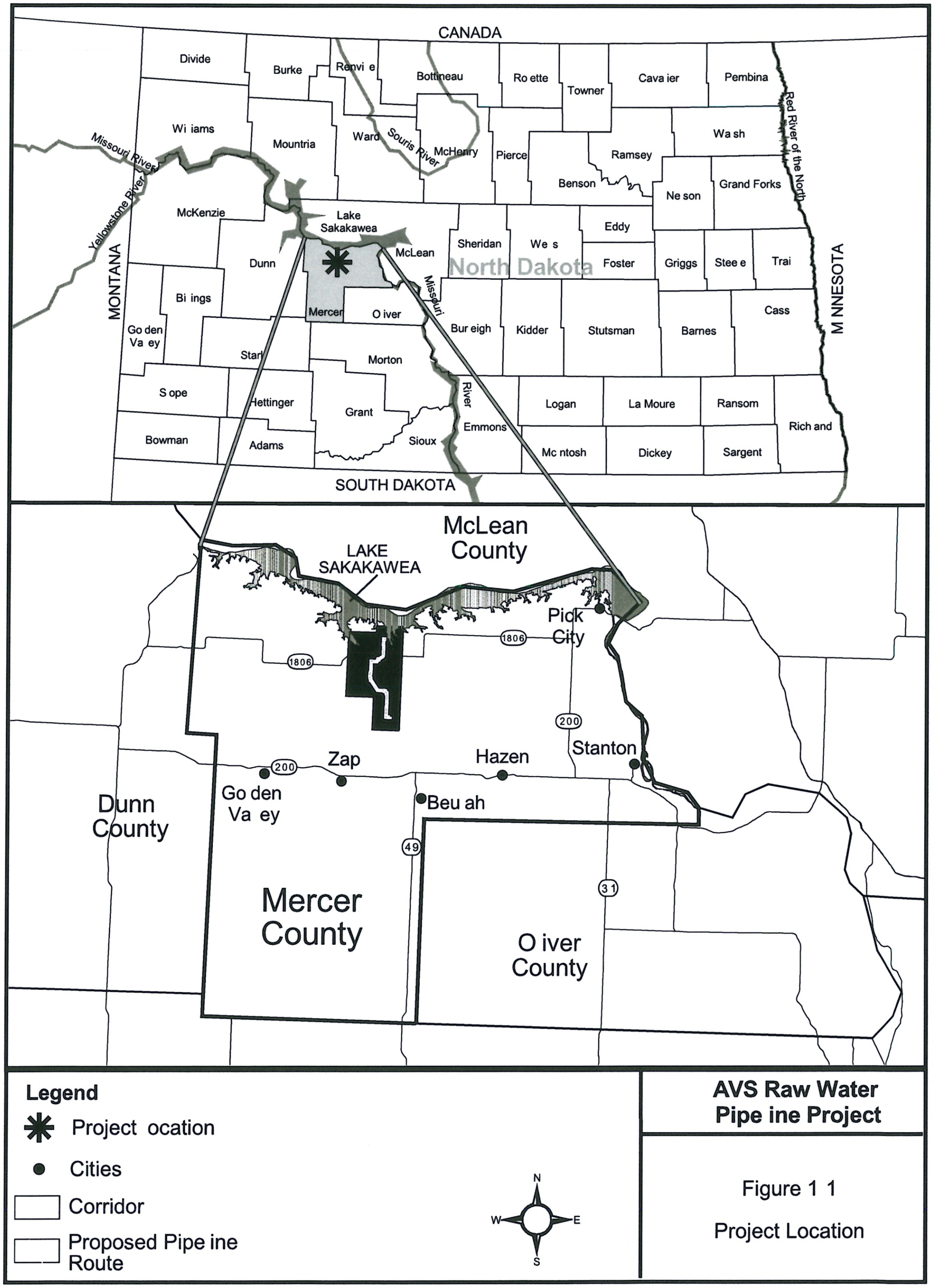
A total of 15 nests were identified during the survey period (May 16 and May 17, 2005). Of the 15 nests, 8 active passerine nests were documented within the 150-foot-wide construction ROW, including 4 robin nests, 2 tree swallow nests, 1 mourning dove nest, and a recently tended nest of unknown species (perhaps brown thrasher) (**Figures 1-3** through **1-5**). No active raptor nests were documented within 0.5 mile of the proposed construction ROW. However, a dead northern harrier was discovered within the construction ROW near County Road 15, presumably hit by an automobile.

**Impact Assessment**

BEPC's proposed construction schedule would overlap the breeding season for many migratory bird species. Thus, the proposed project could cause direct and indirect effects to some migratory birds within the project area, if present. As noted above, no nesting raptors were found within 0.5-mile from the construction ROW. As a result, potential impacts to raptors would be limited to indirect effects associated with increased noise levels and human presence during construction activities.

Based on the proposed construction schedule (within the breeding bird season) and the results of the breeding bird survey, impacts to eight active passerine nest sites would include nest abandonment and the loss of eggs or young, resulting in the loss of productivity for that breeding season. Although indirect impacts to other nesting passerines also could occur to active nest sites located outside of the construction ROW, the level of impacts would be dependent on a number of variables including the distance of the nest site from construction activity, the species' relative sensitivity to disturbance, breeding phenology, and possible topographic shielding.

Executive order 13186 requires federal agencies to avoid or minimize negative impact to migratory bird populations and to identify where unintentional "take" is likely to have a measurable negative effect on migratory bird populations. Effects to non-sensitive nesting birds (which do not have significantly reduced populations) would not result in long-term or significant population-level effects, given the stability of local populations and the abundance of available habitat outside of the proposed ROW, and the linear nature of the project over a relatively large geographic range. Based on the bird species (American robin, tree swallow, mourning dove) that would be directly impacted from construction activities, the proposed pipeline project would not result in population-level impacts to migratory bird species in the project region.




**AVS Raw Water Pipe ine Project**

Figure 1 1

Project Location

**Legend**

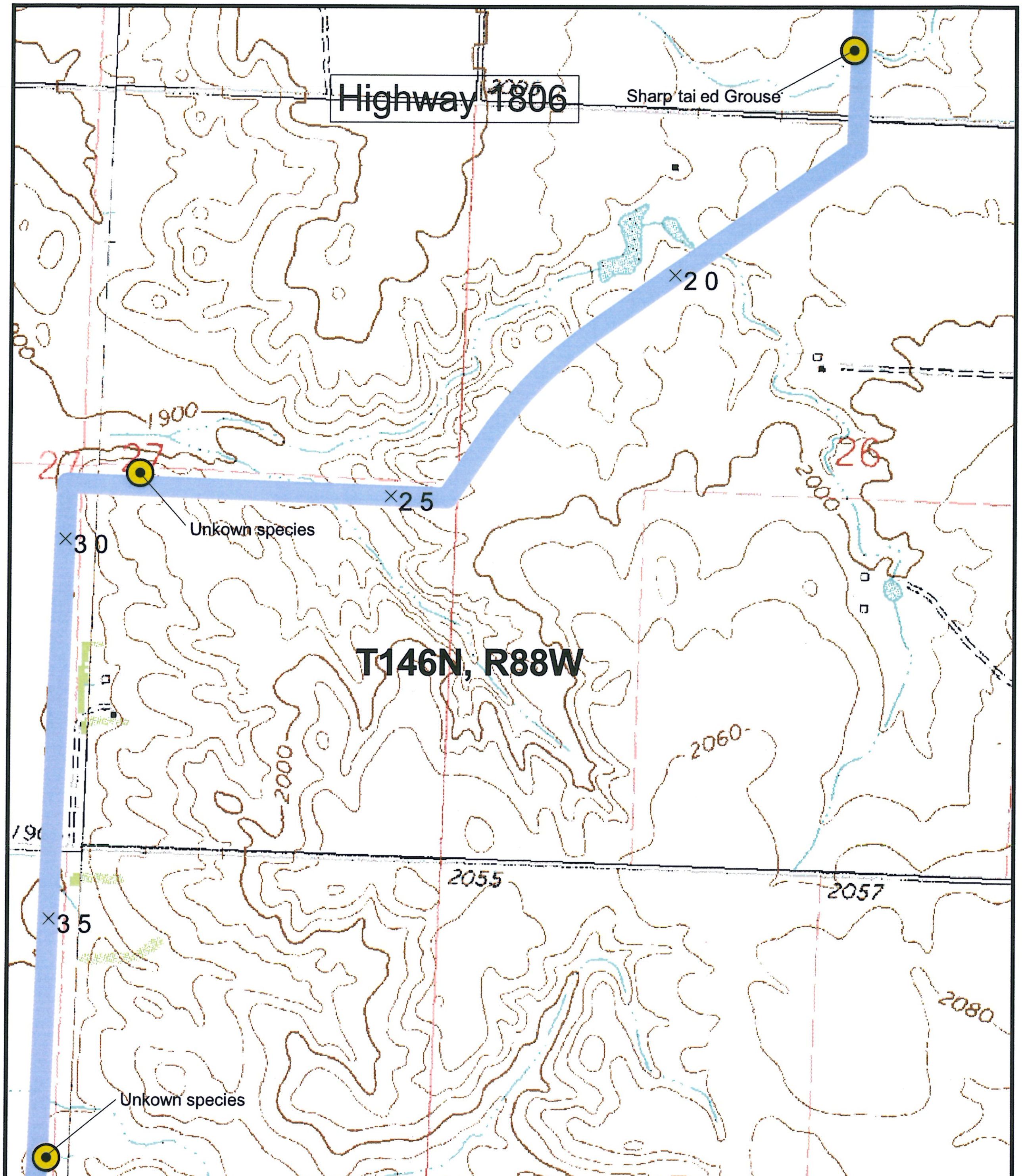
Corridor Boundary
Proposed Pipe ine Route
Existing Pipe ine
Coteau Office Comp ex
Ante ope Va ey Station
Dakota Gasification Faci ity
Existing Water Pumphouse

N E S W

0 75 0 0 75 Mi e

**AVS Raw Water Pipe ine Project**

Figure 1 2
Existing Corridor and Proposed Pipe ine Route




**Legend**

Construction ROW (150 feet)

nactive Nest

N
W E
S

0 1000 Feet

**AVS Raw Water Pipe ine Project**

Figure 1 3

Avian Survey Findings
May 2005

5/26/05


**Legend**

Construction ROW (150 feet)

Active Nest

nactive Nest

Dead Bird found in ROW

N
W E
S

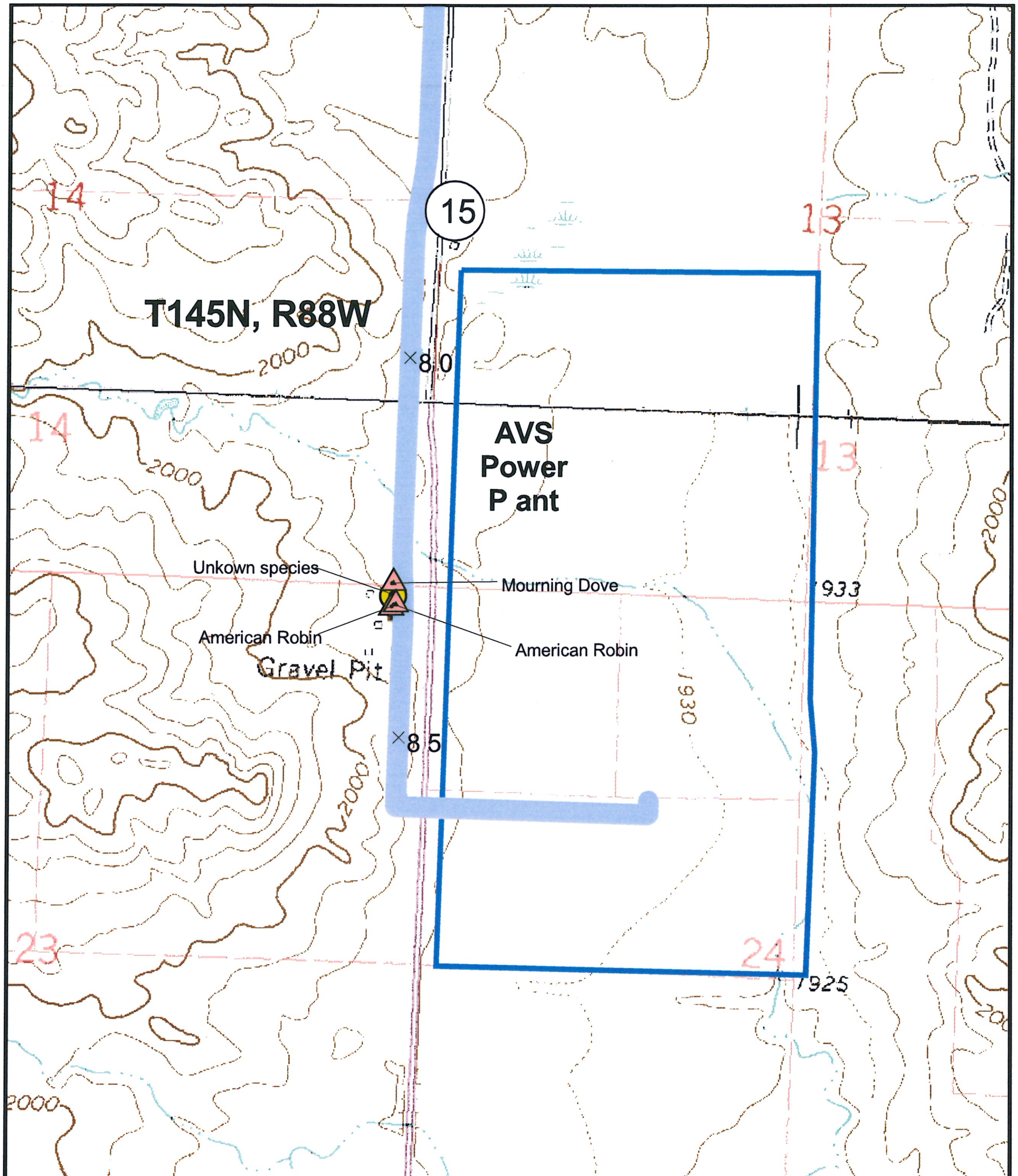
0 1000 Feet

**AVS Raw Water Pipe ine Project**

Figure 1 4

Avian Survey Findings
May 2005

5/25/05




**Legend**

Construction ROW (150 feet)

Active Nest

nactive Nest

N

W E

S

0 1000 Feet

**AVS Raw Water Pipe ine Project**

Figure 1 5

Avian Survey Findings
May 2005

5/25/05