



Manfred R. Ohnstad 1914 - 1987
Bradley J. Burgum 1952 - 2010

June 8, 2012

Lukas D. Andrud*
Duane R. Breiting* Retired
Susan L. Ellison*
Sean M. Fredricks*
Robert G. Hoy*
John A. Juelson
Ross V. Keller*
Delvin J. Losing*
Marshall W. McCullough
Christopher M. McShane*
Michael D. Nelson*
Brian D. Neugebauer*
Robert E. Rosenbold*
John T. Shockley*
Sara K. Sorenson*
Michel W. Stefanowicz
Daniel R. Twichell, Retired
David L. Wanner

Peggy J. Buchholz, PLS
Office Administrator

*Also licensed in Minnesota

Mr. Dwight Comfort
North Dakota State Engineer's Office
900 East Boulevard Avenue, Dept. 770
Bismarck, ND 58505-0850

Re: Sargent County Water Resource District - NOTICE OF DECISION
APPLICATION FOR SURFACE DRAIN NO. 4007
dated April 19, 2012
Tom Mund, Applicant

Dear Dwight:

Enclosed is the original APPLICATION FOR SURFACE DRAIN NO. 4007 dated April 19, 2012, for Tom Mund, approved by the Sargent County Water Resource District at its meeting on May 17, 2012. Also enclosed is a copy of the Sargent County Water Resource District's NOTICE OF DECISION the Board issued to the Applicant. The NOTICE OF DECISION contains the conditions the Board attached to the permit.

As always, please let me know if you need anything further.

Sincerely,

OHNSTAD TWICHELL, P.C.

Sean M. Fredricks

SMF:dms
Enc.

cc: Sherry Hosford
Chad Engels
Troy Gilbertson

In the Matter of APPLICATION FOR SURFACE DRAIN NO. 4007

Dated April 19, 2012

Applicant: Tom Mund

STATE OF NORTH DAKOTA)
) ss.
COUNTY OF CASS)

**AFFIDAVIT OF SERVICE
BY MAIL**

Sean M. Fredricks, being first duly sworn and being of legal age, deposes and says that
on the 8th day of June, 2012, he served the following:

**NOTICE OF DECISION of Sargent County Water Resource District Regarding
APPLICATION FOR SURFACE DRAIN NO. 4007
Dated April 19, 2012
Tom Mund, Applicant**

upon the following parties, by placing a true and correct copy in envelopes addressed as follows:

Tom Mund

Dwight Comfort
Office of the State Engineer
900 East Boulevard Avenue
Bismarck, ND 58505-0850

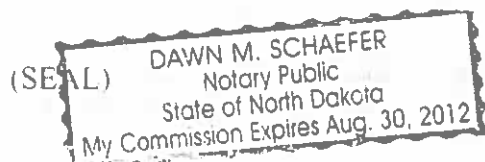
Troy Gilbertson
North Dakota Department
of Transportation
503 – 38th Street SW
Fargo, ND 58103

and deposited the same, with postage prepaid, in the United States mail at West Fargo,
North Dakota.

S. M. Fredricks
Sean M. Fredricks

Subscribed and sworn to before me this 8th day of June, 2012.

Dawn M. Schaefer
Notary Public, Cass County, ND



AFFIDAVIT REGARDING APPLICATION FOR SURFACE DRAIN NO. 4007

STATE OF NORTH DAKOTA)
) ss.
COUNTY OF SARGENT)

Thomas W. Mund, being first duly sworn, deposes and states as follows:

1. I previously filed *Application for Surface Drain No. 4007* dated April 19, 2012 (the "Application"), with the North Dakota State Engineer's office and with the Sargent County Water Resource District (the "District") in Sargent County, North Dakota.

2. Under the Application, I seek to install and construct a drainage system on the following real property in Sargent County, North Dakota:

The West Half of Section 28, Township 132 North, Range 55 West, Sargent County, North Dakota.

3. The District previously approved the Application, with certain conditions, along with conditions attached by the North Dakota State Engineer's office.

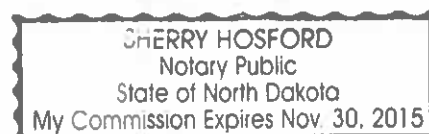
4. The approved Application, and all supporting materials, including the District's NOTICE OF DECISION, is attached to this Affidavit.

Thomas W. Mund
Thomas W. Mund

Subscribed and sworn to before me this 28th day of August, 2012.

Sherry Hosford
Notary Public, Sargent County, ND
My Commission Expires:

(SEAL)





June 8, 2012

Manfred R. Ohnstad 1914 - 1987
Bradley J. Burgum 1952 - 2010

Lukas D. Andrud*

Duane R. Breitmig,* Retired

Susan L. Ellison*

Sean M. Fredricks*

Robert G. Hoy*

John A. Juelson

Ross V. Keller*

Delvin J. Loring*

Marshall W. McCullough

Christopher M. McShane*

Michael D. Nelson*

Brian D. Neugebauer*

Robert E. Rosenvold*

John T. Shockley*

Sara K. Sorenson*

Michel W. Stefanowicz

Daniel R. Twichell, Retired

David L. Wanner

Peggy J. Buchholz, PLS

Office Administrator

* Also licensed in Minnesota

Tom Mund

RE: Tom Mund

-- APPLICATION FOR SURFACE DRAIN NO. 4007

Sargent County Water Resource District -- NOTICE OF DECISION

Greetings:

This letter is to inform you of the Sargent County Water Resource District's decision regarding APPLICATION FOR SURFACE DRAIN NO. 4007 dated April 19, 2012, for Tom Mund. Under the application, Applicant seeks to construct and install a drain pipe in the West Half of Section 28 in Willey Township, Sargent County, North Dakota. The project will include ten segments of pipe in various locations in the West Half of Section 28, installed in trenches constructed by Applicant. The system will ultimately outlet into a pond in the northeast corner of the Northwest Quarter of Section 28. The pond currently outlets into State Highway 13 right of way. The outlet into the Highway 13 right of way will not change.

According to records on file with the Sargent County Recorder's Office, Tom and Shirley Mund own the West Half of Section 28 of Willey Township.

In accordance with Section 89-02-01-09.1 of the North Dakota Administrative Code, the Sargent County Water Resource District approved APPLICATION FOR SURFACE DRAIN NO. 4007 at its meeting on May 17, 2012, subject to the conditions attached by the State Engineer's office, and subject to the following conditions:

- 1) That Applicant obtain easements from the owner of any land, besides land owned by Applicant, on which Applicant will construct the tile system;
- 2) That Applicant notify the Sargent County Water Resource District in advance of any proposed alterations to outlet locations, or addition of any outlets;
- 3) That Applicant notify the Sargent County Water Resource District in advance of any proposed improvements to the tile system, or any proposed increase in the capacity or drainage area of the tile system and, if necessary, submitting an additional permit application; and

Tom Mund
June 8, 2012
Page 2

4) That Applicant obtain all other necessary and requisite licenses, permits, registrations, and/or approvals from all applicable federal, state, county, and municipal governments, and any other applicable governmental entities.

The Sargent County Water Resource District recommends that you record this NOTICE OF DECISION along with the approved permit with the Sargent County Recorder's Office: enclosed for your convenience is an Affidavit for recording purposes. Your permit will become effective once you return the applicable items above to my office. Please note that if, at any time, you fail to comply with the conditions above, your permit will no longer be valid.

With regard to your obligation to obtain all other requisite licenses, permits, registrations, and/or approvals, you are solely responsible for notifying the local NRCS office regarding any applicable Swampbuster issues, the Corps of Engineers regarding any applicable Section 404 issues, and the North Dakota Department of Health regarding any applicable water quality issues, and for obtaining any requisite permits from those agencies, or any other applicable agencies. Note the Board is not responsible for your obligations regarding other permitting authorities.

Please note any aggrieved party may appeal a decision of the Board to the District Court in accordance with N.D. Cent. Code §§ 61-16.1-54 and 28-34-01. Further, please note any aggrieved party may appeal a decision of the State Engineer in accordance with Section 61-03-22 and Chapter 28-32 of the North Dakota Century Code.

Sincerely,

OHNSTAD TWICHELL, P.C.



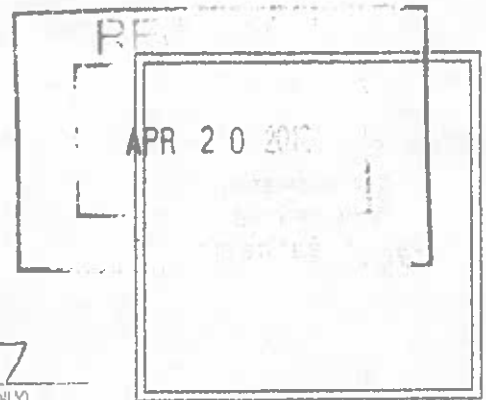
Sean M. Fredricks

Enc. (Drainage Application)

cc: Dwight Comfort -- North Dakota State Engineer's Office
Sherry Hosford
Chad Engels
Troy Gilbertson -- North Dakota Department of Transportation



APPLICATION FOR SURFACE DRAIN
OFFICE OF THE STATE ENGINEER
Water Development Division
SFN 2830 (8/11)



I, the undersigned, am applying for a permit under NDCC Section 61-32-03, to drain a pond, slough, lake, or sheetwater, or any series thereof, which has a watershed area comprising 80 acres or more.

No. 4007
(OSE USE ONLY)

This application must be accompanied by FSA aerial photos or equivalent showing the location of the proposed drain(s).

(1) WATER RESOURCE DISTRICT IN WHICH PROJECT IS LOCATED: <u>Sargent County Water Resource District</u>				
(2) LEGAL DESCRIPTION - DRAIN CENTERLINE: [use separate sheet(s) if necessary]	NW 1/4	SECTION 28	TOWNSHIP 132 N.	RANGE 55 W.
	SW 1/4	SECTION 28	TOWNSHIP 132 N.	RANGE 55 W.
	1/4	SECTION	TOWNSHIP	RANGE
(3) LEGAL DESCRIPTION - DRAIN OUTLET: <u>NE 1/4 NW 1/4</u> SECTION <u>28</u> TOWNSHIP <u>132 N.</u> RANGE <u>55 W.</u>				
(4) PURPOSE: <u>To convey surface water entering from south and west to NE corner of property.</u>				
(5) Drain Method: <input type="checkbox"/> Pumping <input type="checkbox"/> Filling <input checked="" type="checkbox"/> Gravity				
(6) DESCRIPTION OF AREA TO BE DRAINED: <u>See Attachment A</u>				
TOTAL Drainage Area Acres <u>Approx. 787</u>		Project Drainage Area Acres <u>Approx. 787</u>		
Water Area Acres <u>Approx. 22</u>		Average Depth of Water Feet <u>Approx. 3</u>		
(7) DESCRIPTION OF DRAIN: <u>Install pipe in various locations (See Attachment A and Map)</u>				
Pumping Rate (if applicable) <u>N/A</u> gpm <u>N/A</u> cfs		Fill Volume (if applicable) <u>N/A</u> cubic yards		Bottom Width (B) Feet <u>Pipe only; N/A</u>
TOTAL Length of Drain Feet <u>See Attachment A</u>		Length of Drain Project Feet <u>See Attachment A</u>		Side Slopes (S) :1 Foot <u>Pipe only; N/A</u>
(8) Anticipated completion date: <u>November 30, 2012</u>		(9) Assessment drain? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		Maximum Cut (D) Feet <u>Approx. 6' for Pipe Installation</u>
(10) Do you own the land to be drained in fee? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If NO, give the name and address of the legal landowner(s):				

The filing of this application and its approval does not relieve the applicant and/or landowner(s) from any responsibility or liability for damages resulting from the construction, operation or failure of this drain.

APPLICANT'S CERTIFICATION

I understand that I must undertake and agree to pay the expense incurred in making an investigation. If the investigation discloses that the quantity of water to be drained will flood or adversely affect downstream lands, I will be required to obtain flowage easements and must file the easements in the office of the county recorder before a permit may be issued. My signature below acknowledges that I have read and agree to these statements, and will adhere to the conditions given on the back of this application.

NAME (PRINT OR TYPE): <u>Tom Mund</u>	DATE SUBMITTED: <u>4-19-12</u>
ADDRESS: _____	PHONE NO: <u>701-680-1601</u>
CITY, STATE, ZIP CODE: <u>Milnor, ND 58060</u>	
SIGNATURE (Owner of the land on which the project is located or legal entity sponsoring project): <u>Thomas Mund</u>	

DRAIN APPLICATION No. 4007

Under North Dakota Century Code Section 61-32-03, a water resource district may not grant a permit to drain until an investigation determines that the quantity of water to be drained will not flood or adversely affect downstream lands. The investigation must include a written evaluation of the factors given in North Dakota Administrative Code Section 89-02-01-09.2, which will then become a permanent part of the permit record.

Therefore, the Water Resource District is required to provide written responses to each of the factors listed below. Additional sheets may be attached as necessary. Upon completion, this signed form is to be returned to the State Engineer's Office along with the original drain permit application. A signed copy of this completed form must also be provided to the permit applicant.

89-02-01-09.2. Evaluation of applications – Factors considered. The state engineer, for applications of statewide or interdistrict significance, and the board, for all applications to drain, shall consider the following factors:

1. The volume of water proposed to be drained and the impact of the flow or quantity of this water upon the watercourse into which the water will be drained.

See attached responses to items 1-8.

2. Adverse effects that may occur to the lands of lower proprietors. This factor is limited to the project's hydrologic effects such as erosion, duration of floods, impact of sustained flows, and impact on the operation of downstream water control devices.
3. The engineering design and other physical aspects of the drain.
4. The project's impact on flooding problems in the project watershed.
5. The project's impact on ponds, sloughs, streams, or lakes having recognized fish and wildlife values.
6. The project's impact on agricultural lands.
7. Whether easements are required.
8. Other factors unique to the project.

Signature: _____



Chairman or secretary of Water Resource District Board

Date: May 17, 2012

DRAIN APPLICATION No. 4007

1. **The volume of water proposed to be drained and the impact of the flow or quantity of this water upon the watercourse into which the water will be drained.**

The project consists of installing buried pipes (adjacent to existing pipes) in order to increase the capacity of an existing system that connects pothole depressions. The volume of water proposed to be drained is unchanged from the existing condition. Impacts appear to be negligible as the depressions will be drained down and provide floodwater storage during extreme events. The pipes are anticipated to meter the flow.

2. **Adverse effects that may occur to the lands of lower proprietors. This factor is limited to the project's hydrologic effects such as erosion, duration of floods, impact of sustained flows, and impact on the operation of downstream water control devises.**

The adverse affects to lands of lower proprietors appears to be negligible. Erosion, sustained flows, and impacts to downstream water control devises do not appear to be a concern with this project. The project would likely benefit downstream parties during larger flood events as opposed to the possibility of the potholes filling and flowing uncontrolled without the project in place.

3. **The engineering design and other physical aspects of the drain.**

As shown on the application to drain.

4. **The project's impact on flooding problems in the project watershed.**

Flooding problems in the watershed are characterized by prairie potholes that are increasing in depth due to a lack of natural drainage outlets. The purpose of the project is to provide an outlet for prairie potholes. Because the outlets are not open ditches, but rather small diameter pipes, the project may be a benefit to flooding due to the ability of the system to meter flows as opposed to uncontrolled overtopping of the depressions.

5. **The project's impact on ponds, sloughs, streams, or lakes having recognized fish and wildlife values.**

According to the general literature, runoff from agricultural watersheds tend to be high in nutrients that may accelerate eutrophication of downstream water bodies. Direct impact to the wetlands on the property being improved is addressed by the Natural Resource Conservation Service.

6. The project's impact on agricultural lands.

The purpose of the project is to improve agricultural lands. Downstream impacts to agricultural lands do not appear to be a concern for the reasons discussed above.

7. Whether easements are required.

None.

8. Other factors unique to the project.

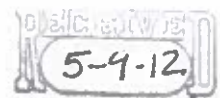
Conditions placed on the project by the State Engineer and Sargent County WRD.



State of North Dakota

Office of the State Engineer

900 EAST BOULEVARD AVE. • BISMARCK, ND 58505-0850
701-328-2750 • FAX 701-328-3696 • <http://swc.nd.gov>



S. Hosford

May 3, 2012

James Bosse, Chairman
Sargent County Water Resource District
355 Main Street S
Suite 1
Forman, ND 58032-4149

Dear Chairman Bosse:

I have completed a preliminary review of the Application to Drain Number 4007 received from Tom Mund of Milnor, ND. This application requests a permit to install drainpipe in the W½ Section 28, Township 132 North Range 55, Willey Township. There will be ten (10) segments of pipe placed of various sizes and length. The Attachment explaining the pipes and function also states that they will most likely be place by first trenching and then laying in the pipes. The outlet from the system will discharge into a surface pond at the NE corner of this half section.

This project has been determined to not be of either statewide or interdistrict significance. Therefore, it is the responsibility of the Sargent County Water Resource District Board to review this application to drain, pursuant to NDCC §61-32-03. In evaluating the application, the Board should follow the procedures described in NDAC §89-02-01-09.1, the second portion of which describes the procedure to be followed when processing a drainage application determined to not be of either statewide or interdistrict significance. NDAC §89-02-01-09.2 defines the factors the Board must consider when evaluating the application.

If the Board should have any information that would indicate that the project would cause additional drainage, such information must be forwarded to the State Engineer for review prior to the Board's action. The local NRCS office should be contacted for possible Swampbuster implications and the US Corps of Engineers for any 404 implications. Copies of this application are being provided to the NRCS and the Corps at their request. A courtesy copy is also given to the North Dakota Health Department for their information.

Enclosed is the original application as well as an evaluation sheet. The Board's decision must be indicated on the back side of the application with signature and date. Please sign and date the completed evaluation sheets also, then the original application and evaluation sheet should be returned to this office where these documents will be kept on file. Have copies of the application and the evaluation sheet made, which you can provide to the applicant, and a copy of each kept by the District for your records. Please contact me at 328-4949 if you have any questions concerning this correspondence.

Sincerely,

Dwight Comfort
Regulatory Section

DC /1219

TODD SANDO, P.E.
STATE ENGINEER

ATTACHMENT A

Parts 6 and 7 of Application for Surface Drain

To facilitate surface drainage in the West $\frac{1}{2}$ of Section 28, pipes are proposed for installation in locations where open cuts/drains are not feasible and where existing pipe are not adequately sized to handle the drainage. Drainage enters the West $\frac{1}{2}$ of Section 28 from the west and from the south through existing culvert crossings. *Please refer to the enclosed map for existing culvert crossings.*

Each proposed pipe was sized to meet a 10-year event in coordination with regression equations from USGS Report 92-4020. The flow was found for each pipe location and was then analyzed with a proposed pipe area (including existing pipe area). The flow assumes the pipes are flowing full at the time of the event. Following is a summary of the drainage areas, proposed and existing pipe sizes and approximate lengths, flows, and outlet velocities. *Please refer to the enclosed map for proposed pipe locations.*

- Pipe 1: Drainage area determined to be 67 acres (0.105 square miles)
Proposed 18" x 380' pipe and existing 6" pipe – total area provided equals 1.96 square feet
Flow for the 10-year event equals 10 cubic feet per second (cfs)
Velocity through the proposed pipe configuration equals 5.3 ft/sec
- Pipe 2: Drainage area determined to be 74 acres (0.116 square miles)
Proposed 18"x 335' pipe and existing 6" pipe – total area provided equals 1.96 square feet
Flow for the 10-year event equals 11 cubic feet per second (cfs)
Velocity through the proposed pipe configuration equals 5.7 ft/sec
- Pipe 3: Drainage area determined to be 81 acres (0.127 square miles)
Proposed 18"x 350' pipe and existing 6" pipe – total area provided equals 1.96 square feet
Flow for the 10-year event equals 12 cubic feet per second (cfs)
Velocity through the proposed pipe configuration equals 6.0 ft/sec
- Pipe 4: Drainage area determined to be 17 acres (0.027 square miles)
Proposed 12"x 300' pipe – area provided equals 0.79 square feet
Flow for the 10-year event equals 4 cubic feet per second (cfs)
Velocity through the proposed pipe configuration equals 5.4 ft/sec
- Pipe 5: Drainage area determined to be 438 acres (0.684 square miles)
Proposed 30"x 360' pipe and existing 10" pipe – total area provided equals 5.11 square feet
Flow for the 10-year event equals 33 cubic feet per second (cfs)
Velocity through the proposed pipe configuration equals 6.5 ft/sec

- Pipe 6: Drainage area determined to be 465 acres (0.727 square miles)
Proposed 30"x 560' pipe and existing 10" pipe – total area provided equals 5.11 square feet
Flow for the 10-year event equals 34 cubic feet per second (cfs)
Velocity through the proposed pipe configuration equals 6.8 ft/sec
- Pipe 7: Drainage area determined to be 26 acres (0.041 square miles)
Proposed 12"x 600' pipe – area provided equals 0.79 square feet
Flow for the 10-year event equals 5 cubic feet per second (cfs)
Velocity through the proposed pipe configuration equals 6.5 ft/sec
- Pipe 8: Drainage area determined to be 36 acres (0.056 square miles)
Proposed 12" x 570' pipe – area provided equals 0.79 square feet
Flow for the 10-year event equals 6 cubic feet per second (cfs)
Velocity through the proposed pipe configuration equals 8.0 ft/sec
- Pipe 9: Drainage area determined to be 112 acres (0.175 square miles)
Proposed 18" x 390' pipe and existing 6" pipe – total area provided equals 1.96 square feet
Flow for the 10-year event equals 15 cubic feet per second (cfs)
Velocity through the proposed pipe configuration equals 7.5 ft/sec
- Pipe 10: Drainage area determined to be 11 acres (0.017 square miles)
Proposed 6" x 415' pipe and existing 6" pipe – total area provided equals 0.39 square feet
Flow for the 10-year event equals 3 cubic feet per second (cfs)
Velocity through the proposed pipe configuration equals 7.5 ft/sec

As a note, all information used for this analysis was provided by contour maps and aerial photos. Field surveys were not conducted as part of this project.

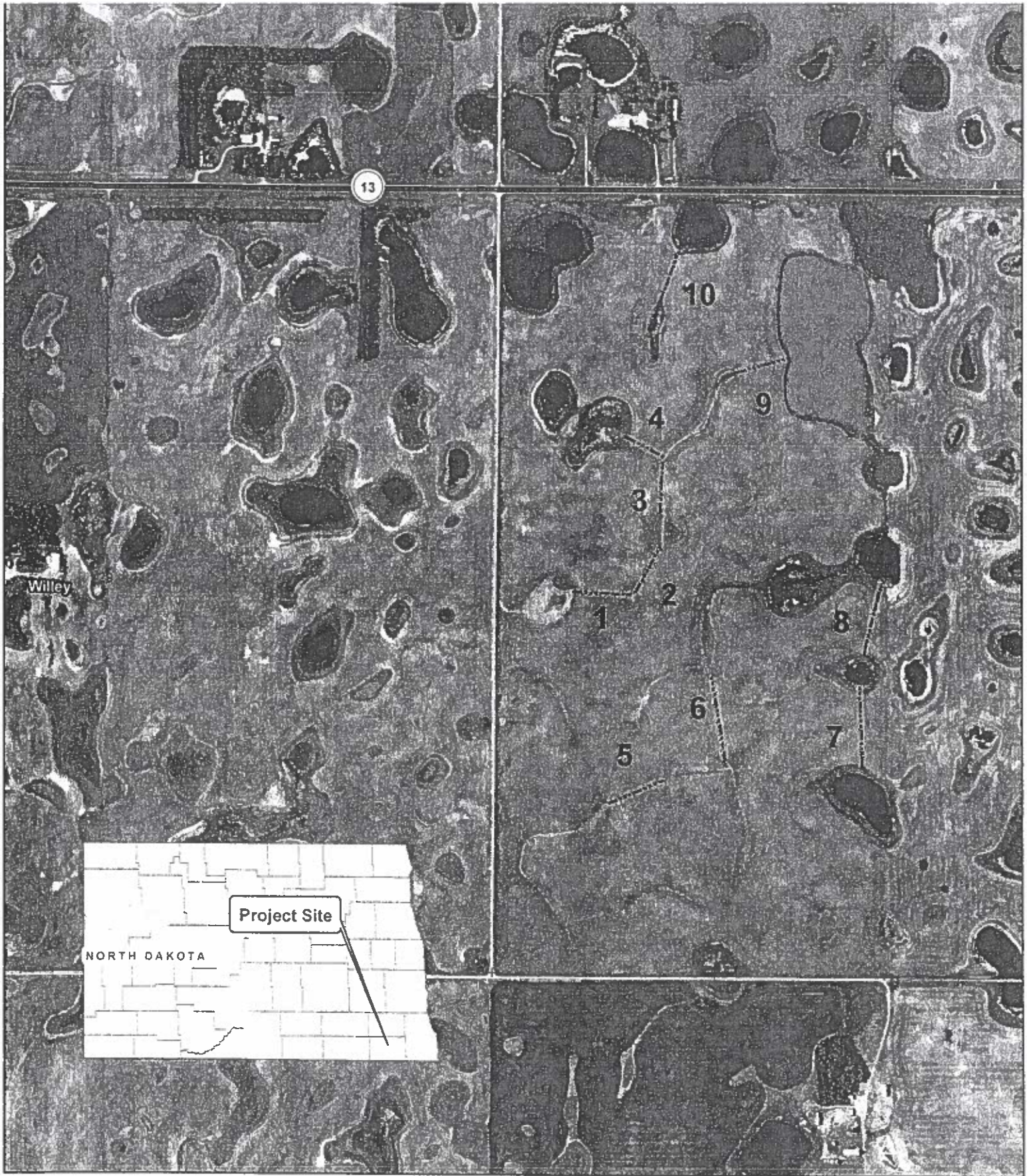
The proposed pipe material is anticipated to be high density polyethylene (HDPE) and would be installed as per the manufacturer's recommendations. The proposed installation would likely require a trench.



Tom Mund
T132N, R55W Section 28

Sargent Co.
Drain Permit No. 4007



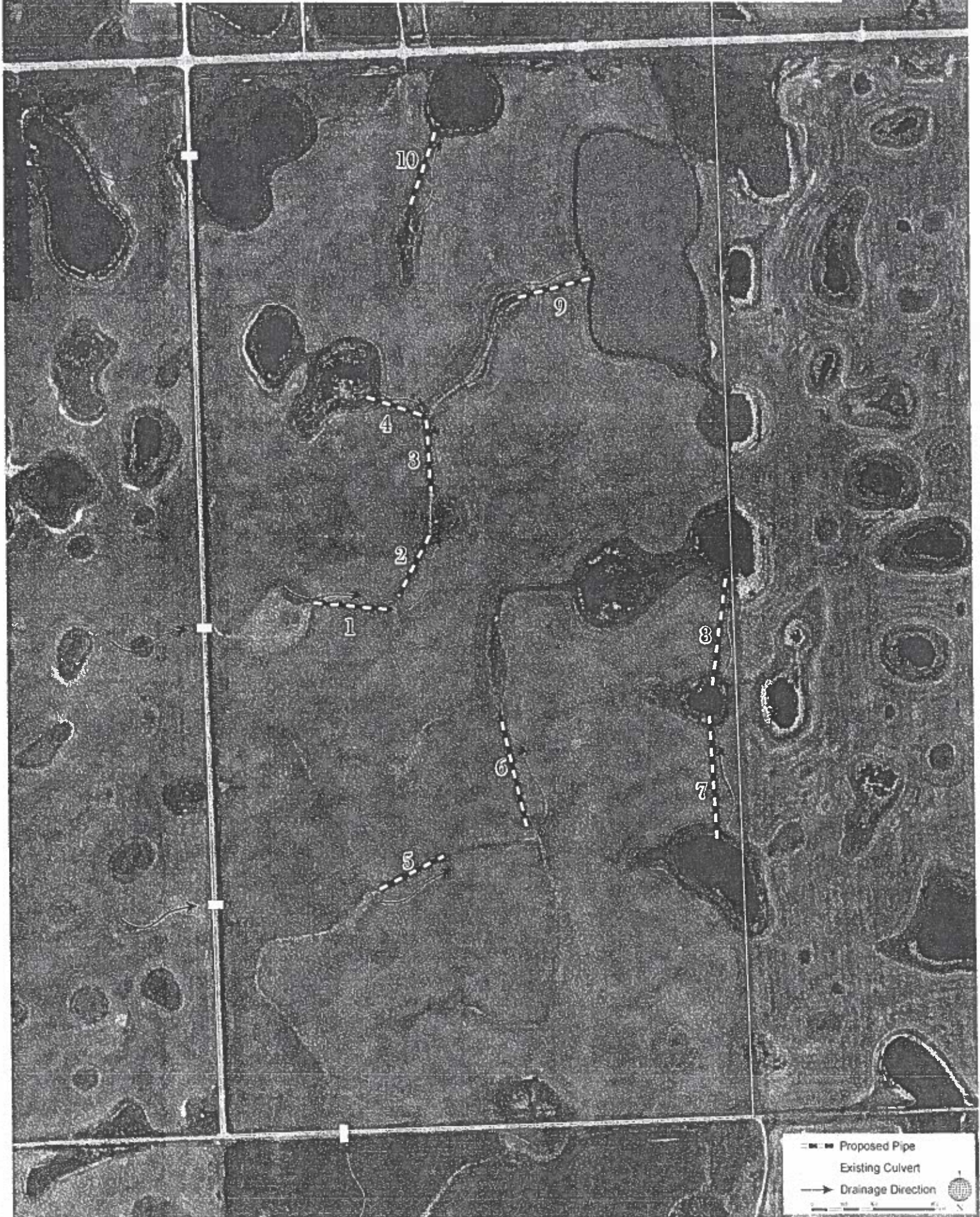


Tom Mund
T132N, R55W Section 28

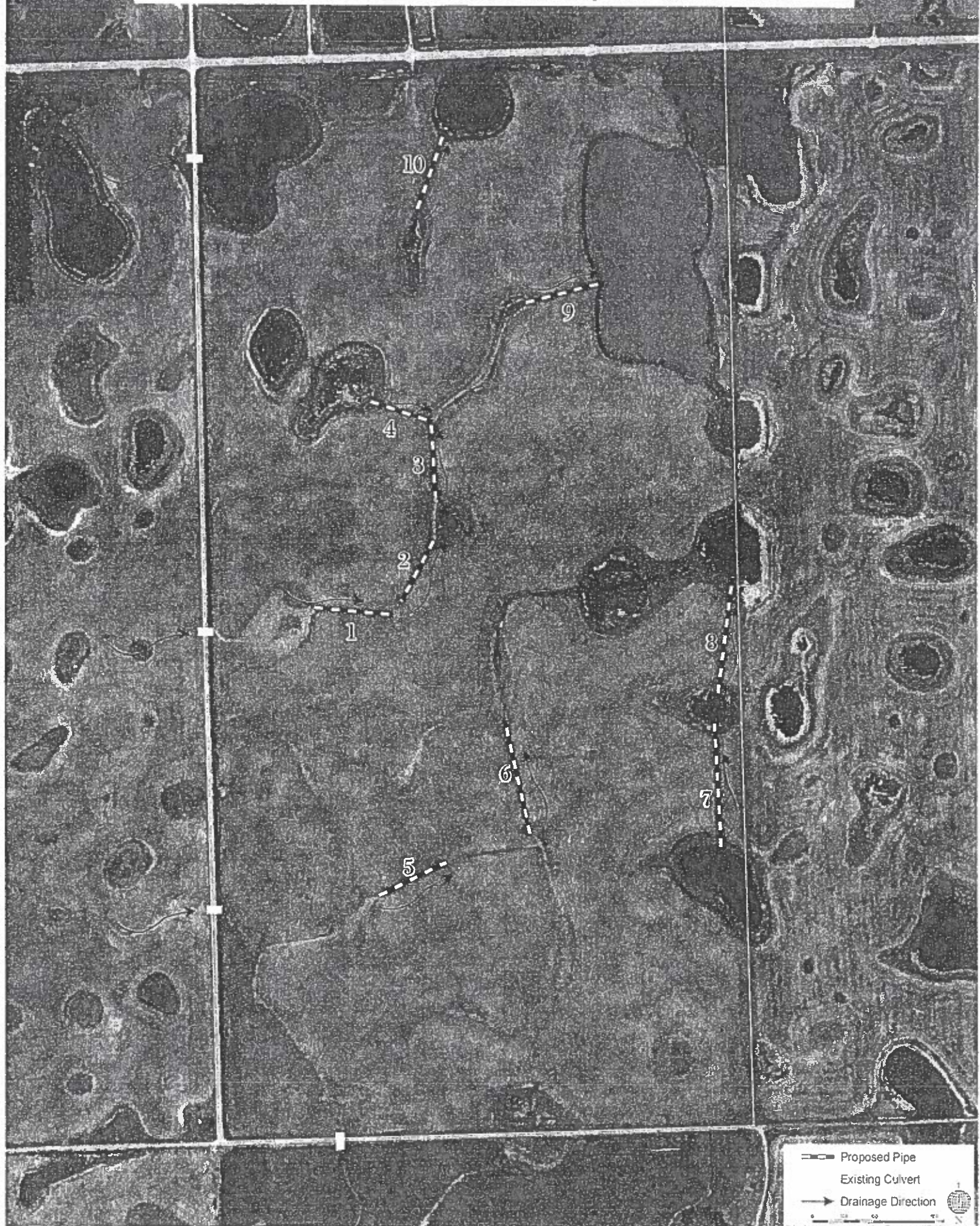
Sargent Co.
Drain Permit No. 4007

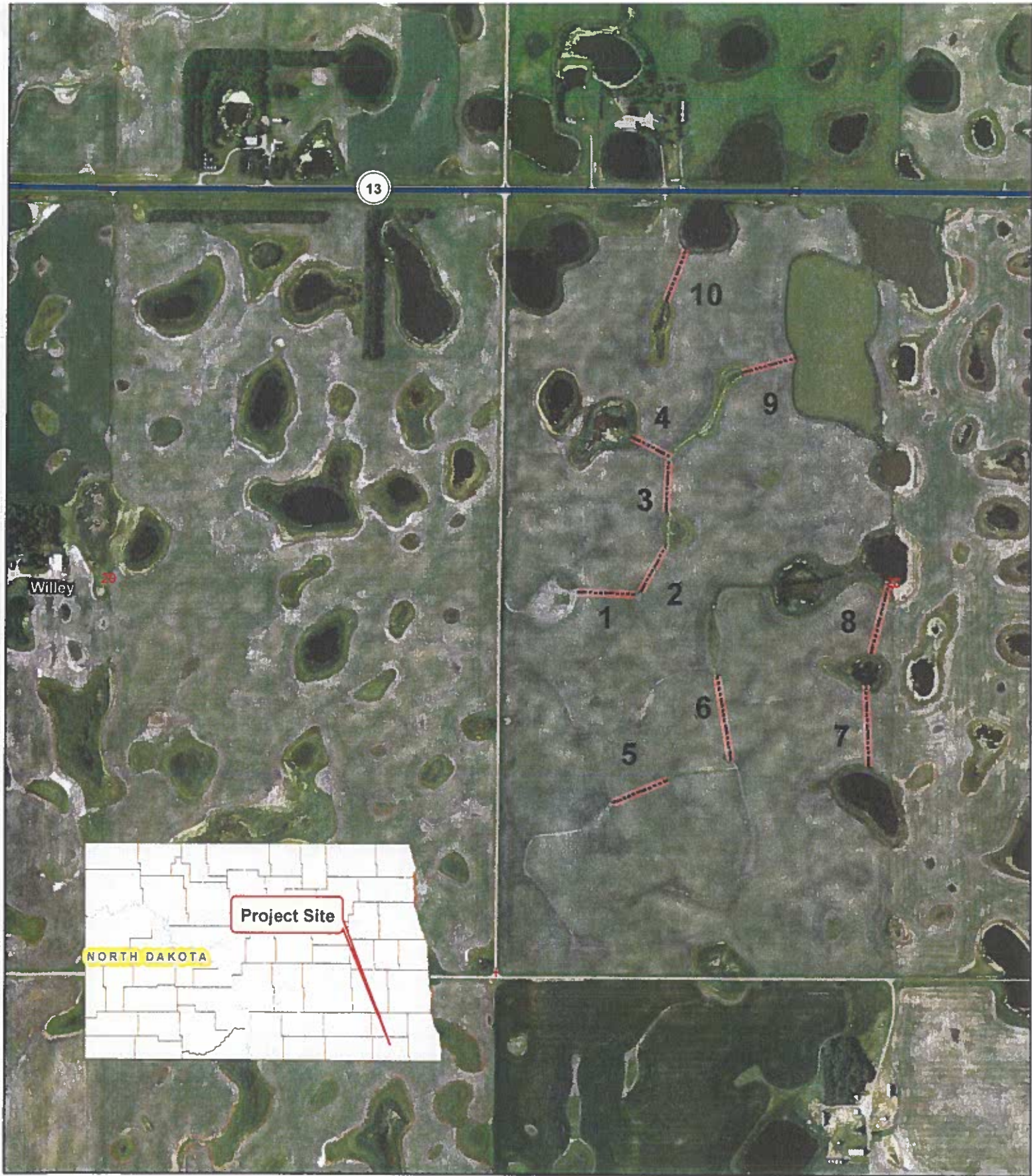


West 1/2 - Section 20 - T152-R55
Willey Township - Sargent County, North Dakota



West 112 - Section 20 - 1102-1000
Willey Township - Sargent County, North Dakota

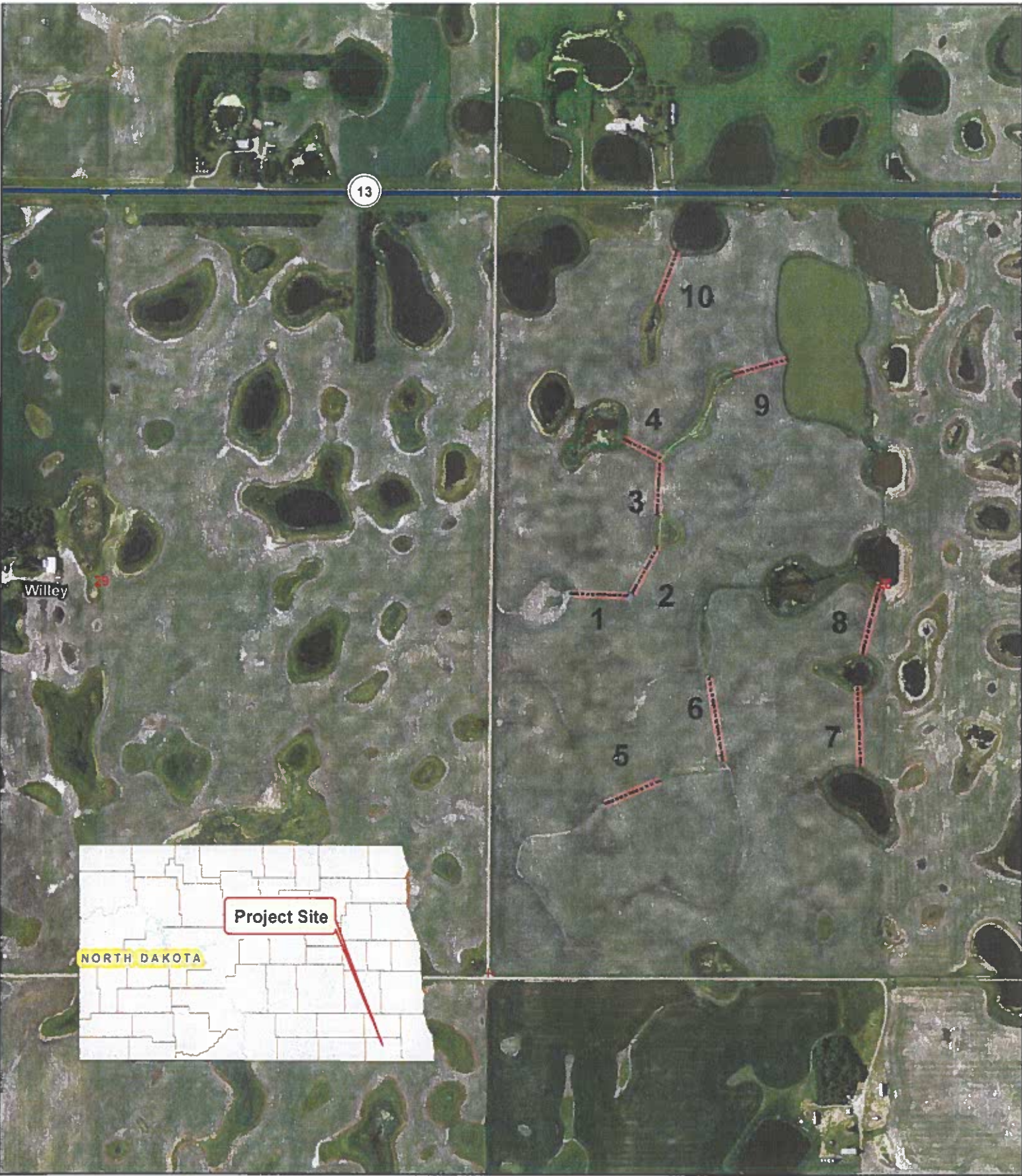




Tom Mund
T132N, R55W Section 28

Sargent Co.
Drain Permit No. 4007





Tom Mund
T132N, R55W Section 28

Sargent Co.
Drain Permit No. 4007



West 1/2 - Section 28 - 1152-R55
Willey Township - Sargent County, North Dakota



West 1/2 - Section 28 - 1132-R55
Willey Township - Sargent County, North Dakota

