



FEASIBILITY REPORT

FOR

PROPOSED BIG PINE TRAIL IMPROVEMENTS

Prepared for:

City of Crosslake, Minnesota

Issued: January 2020

WSN No. 2019-13070

Brainerd/Baxter Office:

*7804 Industrial Park Road
P.O. Box 2720*

Baxter, MN 56425-2720

Phone: 218-829-5117

Fax: 218-829-2517

CERTIFICATION

Feasibility Report

For

Proposed Big Pine Trail Improvements

Crosslake, Minnesota

By

WIDSETH SMITH NOLTING

7804 Industrial Park Road ■ P.O. Box 2720 ■ Baxter, MN 56425

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

For Review

01/02/2020 9:10:03 PM

David S. Reese, P.E.
Professional Engineer

23432

Reg. No.

Date

Feasibility Report
For
PROPOSED BIG PINE TRAIL IMPROVEMENTS
Crosslake, Minnesota

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STATEMENT OF PURPOSE

The City of Crosslake, in accordance with current City policy and State of Minnesota requirements, has initiated a Feasibility Study of street improvements for Big Pine Trail. This is a non-petitioned project. For special assessment projects, State of Minnesota Statute 429 requires that a Feasibility Report be prepared. The City of Crosslake has authorized Widseth Smith Nolting to prepare a Feasibility Report for street improvements on Big Pine Trail from the intersection with CSAH 3 eastward to the end of the City-maintained roadway (approximately 7,950 feet). The purpose of this report is the following:

- Summarize existing conditions,
- Outline proposed improvements,
- Estimate improvement costs,
- Estimate the assessment cost based on the current City assessment policy

EXISTING CONDITIONS

Big Pine Trail is approximately 7,950 feet in total length. The western point of beginning is the intersection with CSAH 3. The eastern point of ending is at a branch style turnaround on the southeast side of Big Pine Lake where the City street ends near the property boundary with State-managed land (DNR). Along the road corridor, the roadway crosses the shared boundary between the City of Crosslake and Mission Township; however, the roadway is entirely maintained by the City of Crosslake. **Exhibit C-1** shows the project location and area setting. Approximately 3,160 feet of the roadway lies entirely within three State-managed (DNR) parcels with no known defined right-of-way other than prescriptive easement. The next 1,835 feet of roadway is abutted by State land on the south side. A platted right of way, dedicated to the public, is provided for approximately 4,790 feet of the roadway and is 66-feet in width. The roadway is not centered within the platted right of way in some areas and appears to encroach onto private property on the east end. Along the north side, Big Pine Trail serves 37 abutting residential lake parcels and one 2.3-acre abutting non-lake land parcel. Big Pine Hollow and Big Pine Drive extend from Big Pine Trail northward to serve 3 non-lake parcels with indirect access and 11 additional residential lake properties with indirect access to Big Pine Trail. Along the south side, Big Pine Trail serves 21 residential non-lake properties with direct access, one 4.2-acre land property with indirect access and one 12.3-acre land property with indirect access. This property count is based on property ownership depicted in the Crow Wing County GIS database. The original plats contained many narrow, platted lots. In many instances, multiple adjoining lots are currently owned by one property owner and have been consolidated into one lot per current ordinances or built upon with one single residence and/or outbuildings.

A survey of the existing roadway location with respect to right of way location has not been completed at the time of this study. County GIS mapping appears to indicate possible encroachment of the roadway onto private properties on the east end. Utilities such as natural gas, cable, telephone and electric were not located by Gopher State One Call for this study; however, they should be anticipated to be in the right of way at various locations. There are no

City-owned utilities within the right of way. Private utilities may exist within the project area. Vegetation clearing width, on average, is at least 10' from the edge of the bituminous roadway surface on each side of the road. The roadway is bordered by wooded DNR land and residential lots on both sides of the roadway. The bituminous road surface ranges from 20.5 feet to 22 feet in width. Ditching and drainage along the roadway ranges from fair to poor. No significant erosion was noted along the edges of the roadway section. The roadway has bituminous gutter in some areas to help prevent erosion and manage runoff along steeper road grades. Pavement coring was not completed for this feasibility study to determine the thickness of the bituminous pavement.

Other items that were noted during the field review and study:

- Initial observations are that underground utility relocation does not appear to be necessary; however, there are power poles and telephone pedestals that were noted to be within 4-5 feet of the pavement edge in some locations. Relocation of these facilities will require further review.
- Road runoff currently sheds to adjacent wetlands and lowlands.
- The roadway is not striped.
- No soil borings were completed for this study. The soil survey for this area indicates soils that may be anticipated within the project area consist of 1-2 feet of loamy sands overlying sands and loamy sands. A copy of the Soil Survey Map is included in the Appendices.
- Existing driveway approaches consist of both bituminous pavement and gravel. There is a public boat access and a paved branch style turn-around at the end of the roadway.
- Traffic count data has not been obtained for Big Pine Trail.
- Normal traffic type is anticipated to be passenger vehicles and service vehicles; however, the Rock Dam replacement project construction (being coordinated by Crow Wing County Highway Department) is planned to occur during January/February 2020. The project will require hauling rock material on Big Pine Trail along its entire length to access the Dam location. This heavy construction traffic is anticipated to cause stress and cracking of the existing pavement and is one of the factors the City of Crosslake is

proposing to reconstruct Big Pine Trail in the summer of 2020.

- There are three areas within the roadway where geotextile fabric was placed between the bituminous layers when the roadway was overlaid in 1999. This was done due to weak subgrade soils in these areas.
- Based on approximately 74 residential lots served, in addition to a public lake access, Big Pine Trail is classified as a Major Rural Roadway.

PROPOSED IMPROVEMENTS

Drawings **C-03A to C-03C** illustrate the roadway as proposed using MNTPO LIDAR Contours and County Parcel mapping overlay. Right of way and actual road location should be verified by field survey. Big Pine Trail has the potential to serve additional future parcels with increased traffic load and is categorized by the City as a Major Rural Roadway. The current City design standard for a Major Rural Roadway is a minimum 24-foot wide rural bituminous roadway section. The proposed road cross-section for Big Pine Trail is a 24-foot wide bituminous surface as illustrated in Drawing **C-04**.

The proposed road surface (pavement) width is 24 feet. Two-foot aggregate shoulders are proposed. Bituminous gutter may be utilized in some areas. Project cost estimates will be based on full depth reclamation (FDR) of the current bituminous surface and additional compacted Class 5 to allow for widening and for supplementing the base and shaping in preparation for paving; the base will extend one foot beyond the edge of the proposed pavement for a total width of 26 feet and will be covered with aggregate shouldering material to finish the shoulder work. No culverts were noted during the site review. The need for culverts will be further evaluated during design.

The pavement section that is proposed includes two lifts of compacted bituminous, 1 inch of wearing course and 2 inches of base course pavement. The pavement is proposed have a centerline striping. An average 5-foot wide in-slope area is anticipated to require topsoil and turf establishment on each side of the road. Sod is not proposed for this project; turf establishment would be consistent with MnDOT seed mixtures for roadways in residential areas. The branch-style turn-around area is proposed to be re-constructed at the east end of the roadway where public road maintenance ends.

Drainage along the roadway will be directed to existing drainage ways and adjacent low areas.

Minor ditching and/or swaling will be completed where necessary.

Tree and/or brush removal may be necessary in some areas to meet the standard clear zone width or in grading areas. However, no significant grade or alignment changes are planned that would require a significant disturbance within the right of way or within maintained prescriptive areas.

Existing driveway approaches will require minor adjustment in elevation to match the new road surface elevation which is anticipated to be 1 to 2 inches higher than the present roadway surface. This may require removal of the ends of existing paved driveways which would be replaced in kind. Class 5 aggregate surfacing will be used to transition from the new bituminous surface into existing gravel approaches. A 1 to 2-foot bituminous kick-out apron is typically extended by the paver at driveway entrances.

PROJECT COSTS

Estimated costs for the proposed improvements are included in the Appendices. The costs are intended to convey a general and approximate estimate of the costs that will probably be incurred in 2020 in carrying out the proposed work. Costs can vary widely depending upon many factors such as weather, economic conditions, size of project, cost of materials, and the workload of available contractors. Actual costs can only be determined by bidding the project. Other costs that may be incurred include legal costs and easement acquisition for the project if it is determined this is necessary. This cost cannot be precisely estimated at this time.

The total estimated cost for this project is approximately \$664,300. These costs include a 10% construction contingency for unforeseen conditions that may be encountered during construction, and engineering design, bidding, construction administration costs, administrative, and legal costs for a typical special assessment project.

The City's policy regarding street improvements is to assess the amount the properties benefit from the construction. Costs not assessed directly to abutting and/or benefited properties will be paid by the City through general tax revenues, bond funds, or dedicated road improvement funds.

PROJECT IMPLEMENTATION

The City contracted a licensed appraiser, Nagell Appraisals, Inc. to provide a benefit opinion that has been used to determine the assessment value for the special benefit realized by these improvements. A copy of the benefit opinion report is provided in the Appendices.

SPECIAL ASSESSMENT BENEFIT VALUE (RANGE) PER LOT TYPE

Single Family (Lake Homesite, Direct access)	\$5,000-\$10,000 per Homesite
Single Family (Lake Homesite, Indirect access)	\$2,500-\$5,000 per Homesite
Single Family (Non-Lake, Direct access)	\$4,000-\$8,000 per Homesite
Single Family (Non-Lake, Indirect access)	\$2,000-\$4,000 per Homesite
Land (Non-lake, Direct access, 0.5 to 10 acres)	\$2,000-\$4,000 per Homesite
Land (Non-lake, Direct access, 10+ acres)	\$50-\$300 per acre

The amount the City has determined to assess, based on the ranges of benefit provided by the appraiser for each type of property, is provided as follows for each category of property. This results in the following estimate of total project assessment:

Single Family (Lake Homesite, Direct access)	$\$5,000 \text{ per Homesite} \times 37 = \$185,000$
Single Family (Lake Homesite, Indirect access)	$\$2,500 \text{ per Homesite} \times 11 = \$ 27,500$
Single Family (Non-Lake, Direct access)	$\$4,000 \text{ per Homesite} \times 21 = \$ 84,000$
Single Family (Non-Lake, Indirect access)	$\$2,000 \text{ per Homesite} \times 3 = \$ 6,000$
Land (Non-lake, Direct access, 0.5 to 10 acres)	$\$2,000 \text{ per Homesite} \times 1 = \$ 2,000$
Land (Non-lake, Direct access, 10+ acres)	$\$ 50 \text{ per acre} \times 16.5 \text{ ac} = \$ \underline{825}$

Total Estimated Project Assessment	\$305,325
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PROJECT COST ESTIMATE (ROUNDED)

Construction	\$562,900
Engineering/Admin/Legal	<u>\$101,400</u>
	\$664,300

CROSSLAKE ASSESSMENT POLICY

Estimated Assessed Value	\$305,325 (46%)
Estimated City Cost	\$358,975 (54%)

ESTIMATED ANNUAL PAYMENTS

Based on a 10-Year Period at 5% Interest

\$5,000.....	\$648
\$4,000.....	\$518
\$2,500.....	\$324
\$2,000.....	\$259

CONCLUSIONS AND RECOMMENDATIONS

The proposed improvements in the project area are necessary, cost-effective, and feasible; no insurmountable construction issues appear to exist. If this project is ordered to be constructed by the City Council, it is recommended the project be completed in conjunction with the other City roadway improvements proposed for 2020 to obtain competitive pricing under one contract.

Upon acceptance of the feasibility report by the City Council, a public hearing will be scheduled, and the results of the study will be presented to abutting and/or non-abutting benefited property owners to review the proposed improvements, estimated costs, and estimated assessments for the benefited properties. When the hearing has been completed and public testimony has been received, the City Council may choose to discontinue the project, modify the project, or pass a resolution ordering the improvements. If the project is continued, final plans, specifications, and bidding documents will be prepared by the Project Engineer. After the project has been legally advertised and bids have been received, the City will review the projected costs based on the bids received. If the lowest responsible bid is acceptable, the Council will proceed with a contract for construction. An assessment roll is typically prepared after the final construction costs are tallied but may be scheduled as soon as the project is awarded to the successful bidder if the City Council chooses. A final assessment hearing will be held to hear upon any objections and/or concerns pertaining to the assessments from the property owners being assessed and, if the assessments are subsequently approved by the City Council, a 30-day appeal period will begin whereby property owners may, in accordance with Ch. 429 statutes, appeal their personal assessment. After the 30-day appeal period, the assessment roll will be certified to the County Auditor for placement on the property tax rolls of the County for taxes payable in the subsequent year. Property owners may, after the assessment roll is approved by the City Council, pay their individual assessments in full during the 30-day appeal period and avoid the interest that will accrue at the rate set by the City Council per annum for the period of assessment set by the Council.

It is recommended the City review the findings of this Feasibility Study and its applicability to the City's finances, capital improvement program, and assessment policy. If there are changes the City Council wishes to make regarding the proposed scope of project, or the recommended improvements, then those should be amended in the report. When the Council is ready to move forward to the next step in the assessment process, the following tentative schedule and resolutions should be anticipated:

Completed	Resolution Ordering Preparation of Report on Improvement
January 6, 2020	Resolution Receiving Feasibility Report and Calling Hearing
January 13, 2020	Notice of Hearing on Improvement
January 31, 2020	Hearing on Improvement
January 31, 2020	Resolution Ordering Improvement and Preparation of Plans
February 28, 2020	Resolution Approving Plans and Ordering Advertisement for Bids
March 31, 2020	Resolution Accepting Bid (Note: The City Council may, at its discretion, proceed at this point with preparation of the assessment roll and schedule the hearing on assessment)
May-Sept 2020	Construction
October 12, 2020	Resolution Declaring Cost to be Assessed and Ordering Preparation of Assessment
October 12, 2020	Resolution for Hearing on Proposed Assessment
October 19, 2020	Notice of Hearing on Proposed Assessment
November 9, 2020	Hearing on Assessment
November 9, 2020	Resolution Adopting Assessment
December 9, 2020	Certificate to County Auditor for Certifying the Assessments

DATE:	DEC. 2019
SCALE:	AS SHOWN
DRAWN BY:	ADG
CHECKED BY:	DSR
JOB NUMBER:	2019-13070

DATE:	DEC. 2019
SCALE:	AS SHOWN
DRAWN BY:	ADG
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STATE OF THE STATE OF MINNESOTA,
I, JAMES A. KELLY, LICENSED PROFESSIONAL ENGINEER UNDER
THE ENGINEERING ACT, DO HEREBY CERTIFY THAT THE
DATE OF THE STATE OF MINNESOTA
DATE: ---
LIC. NO. 20132

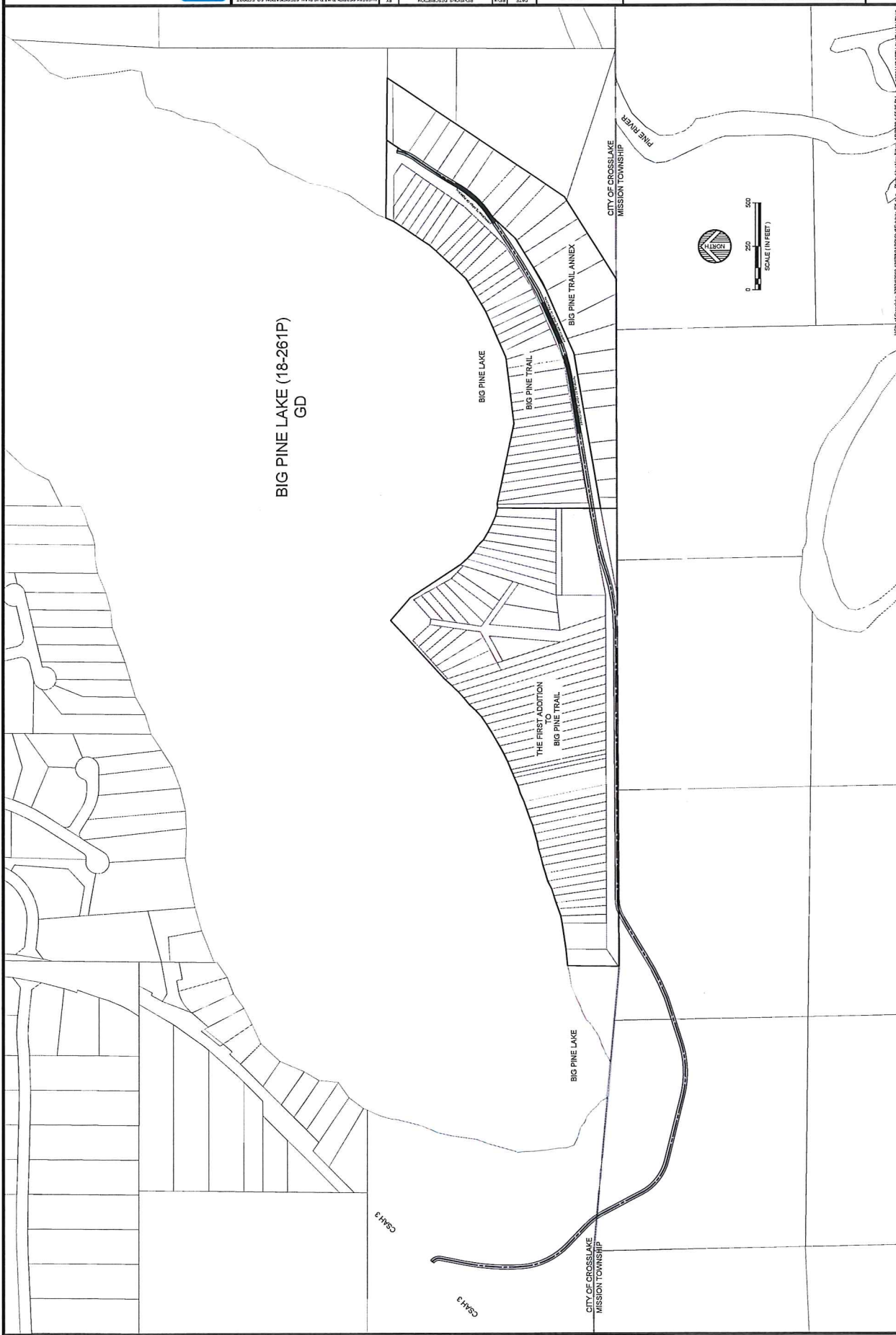
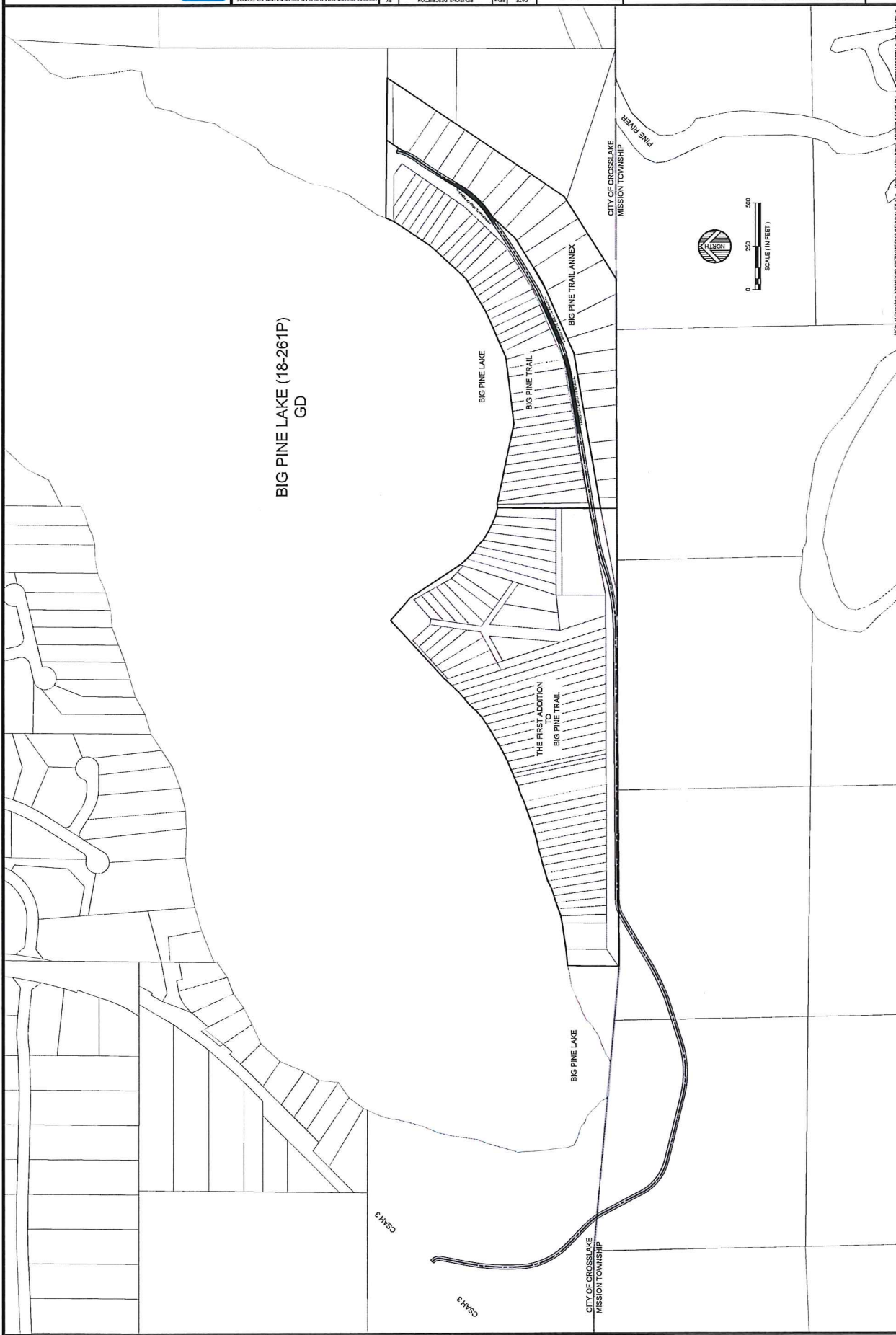
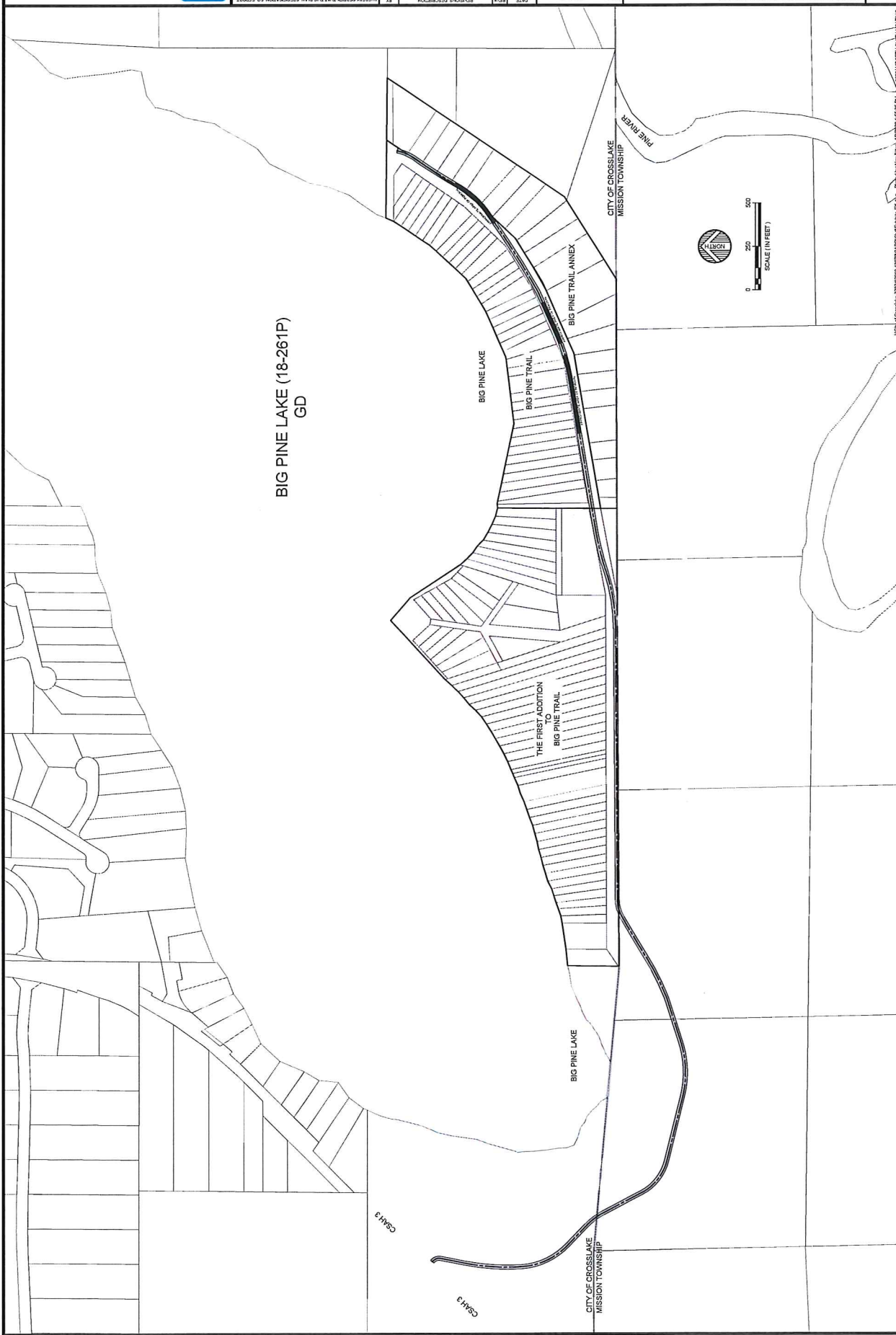
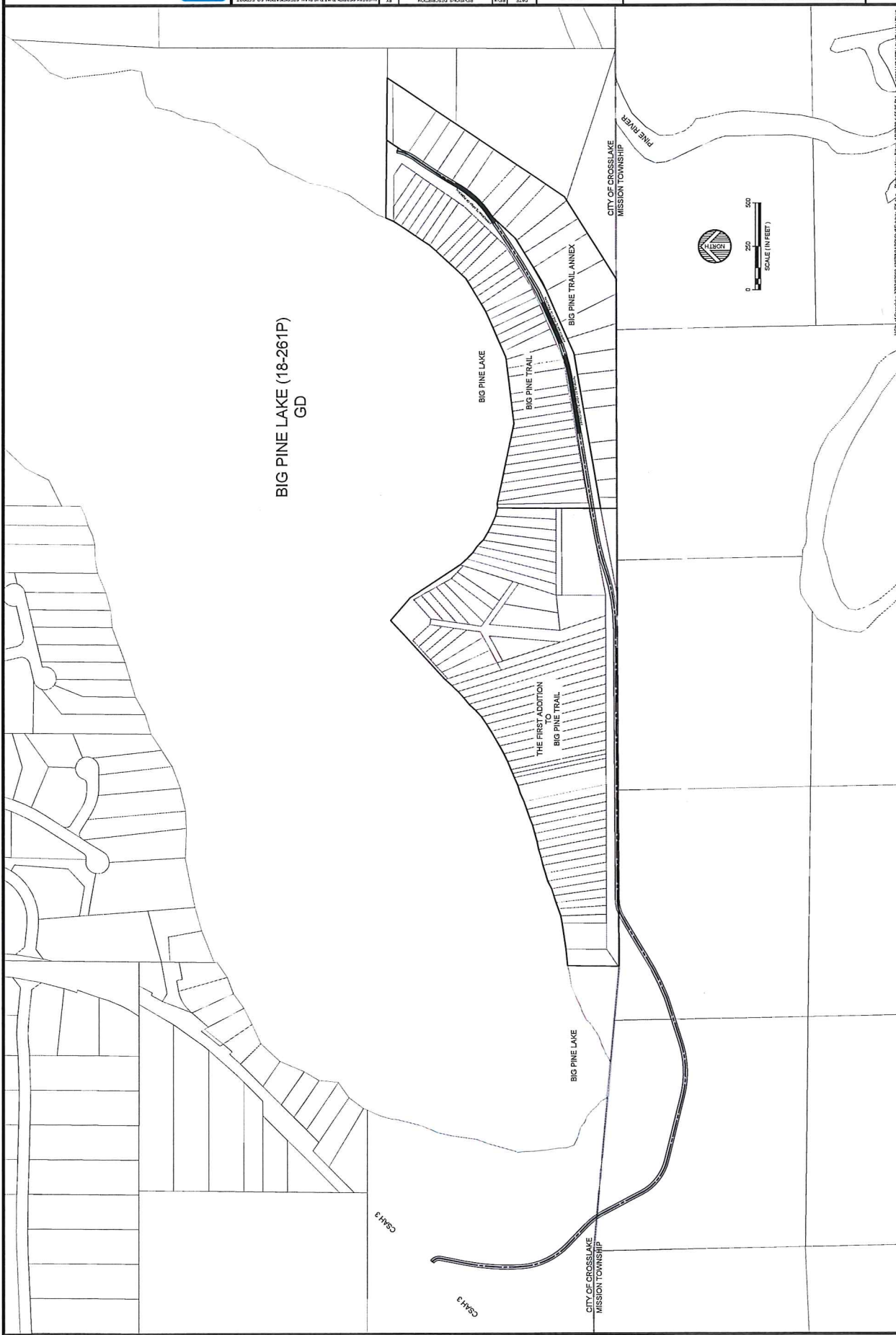
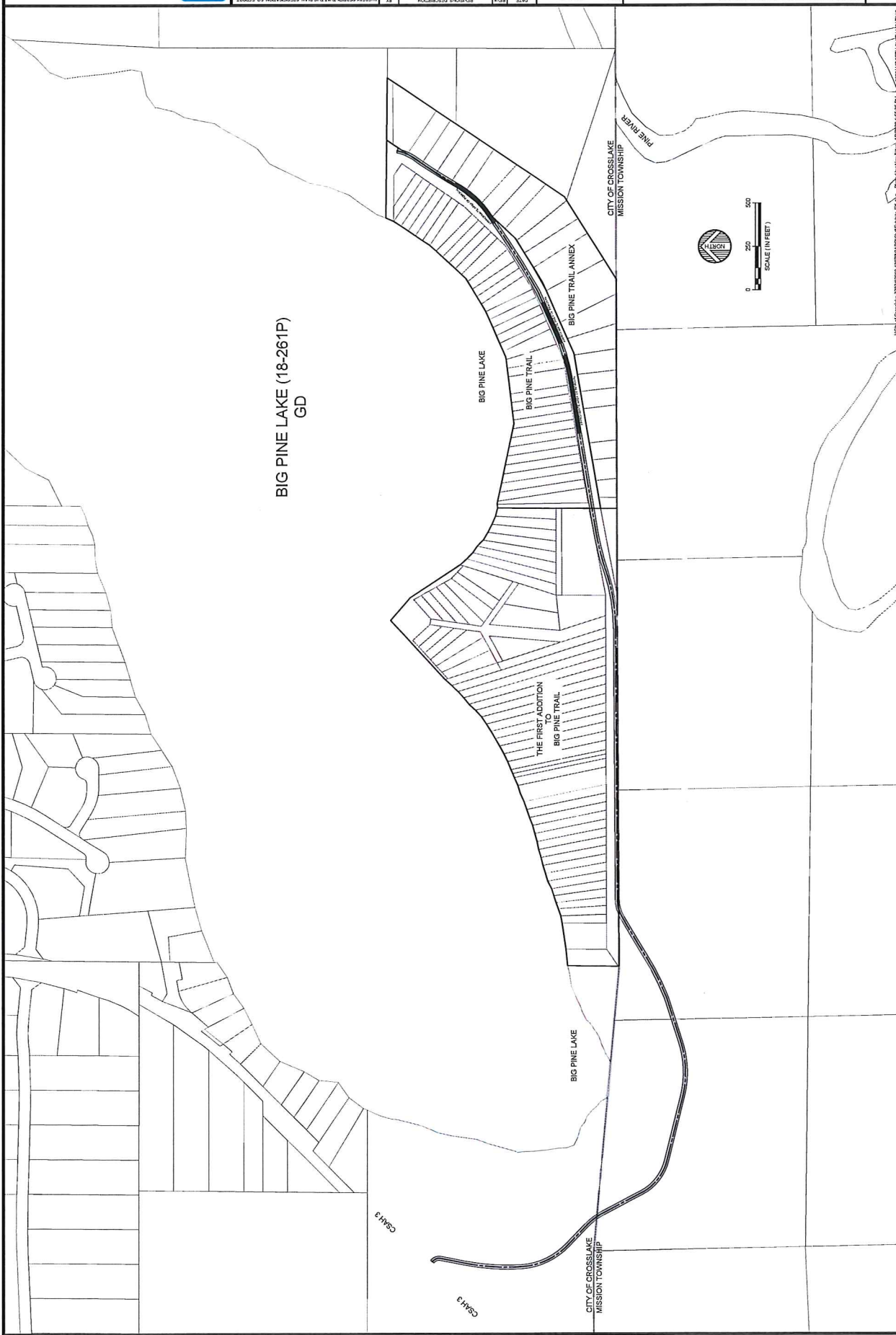
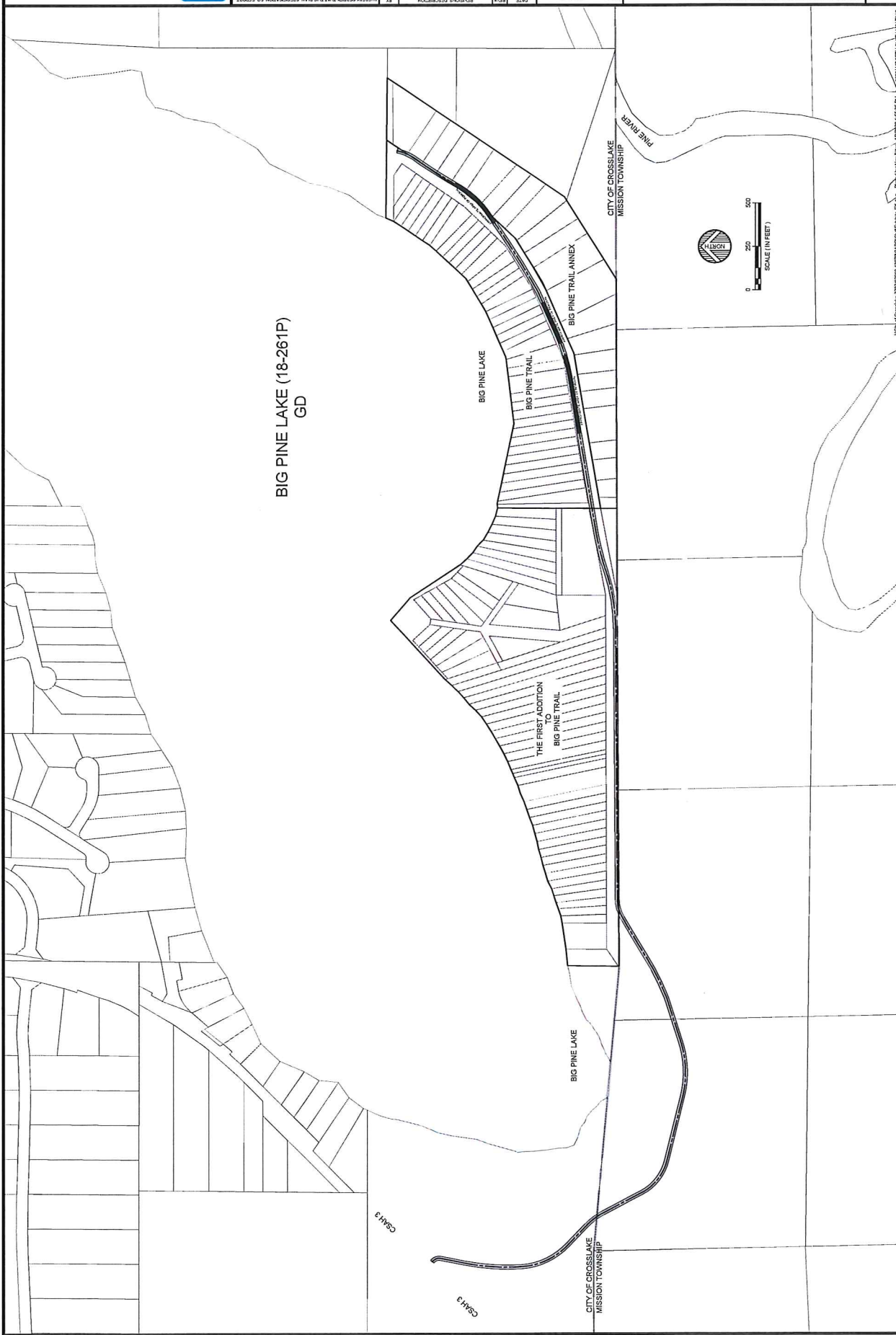
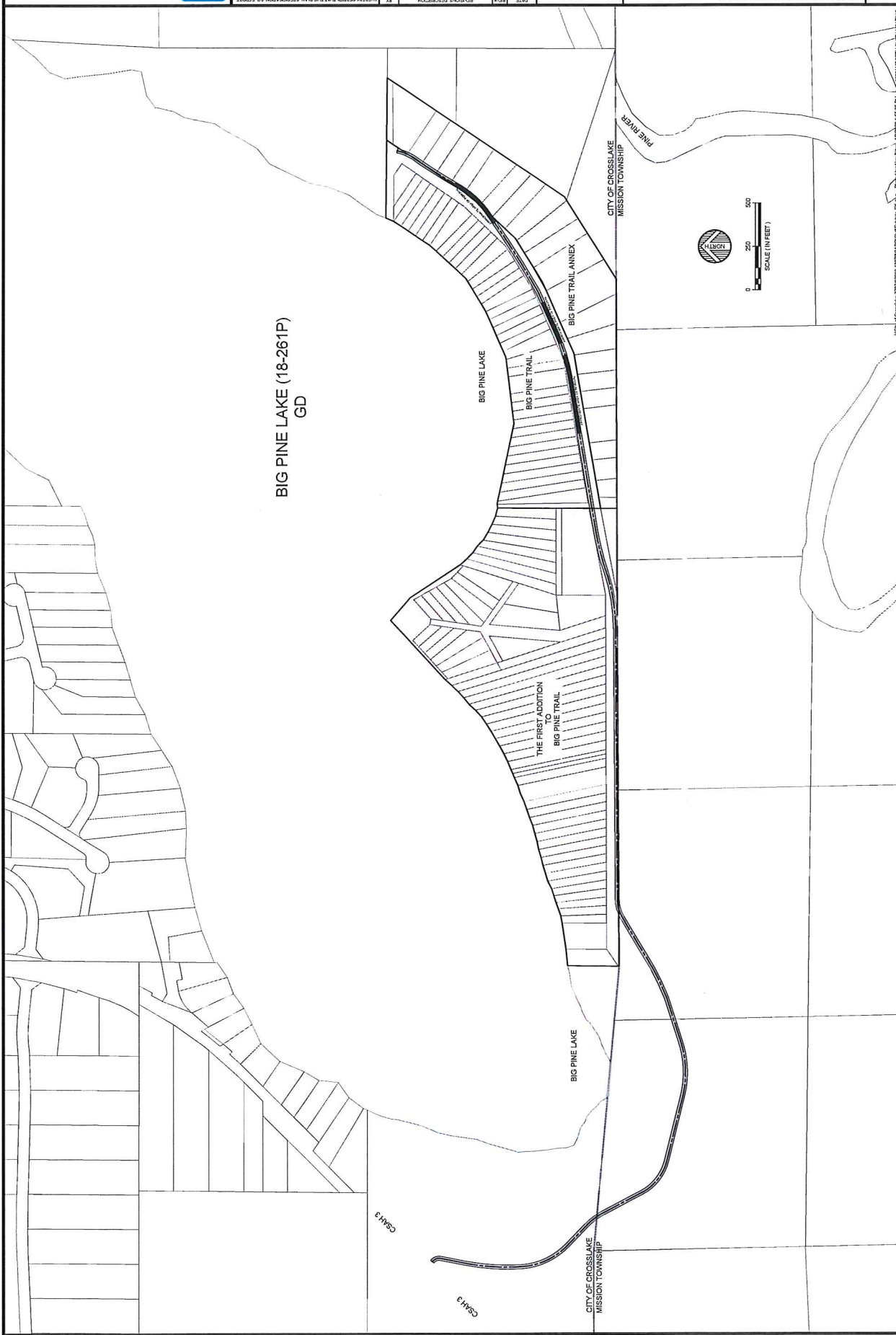
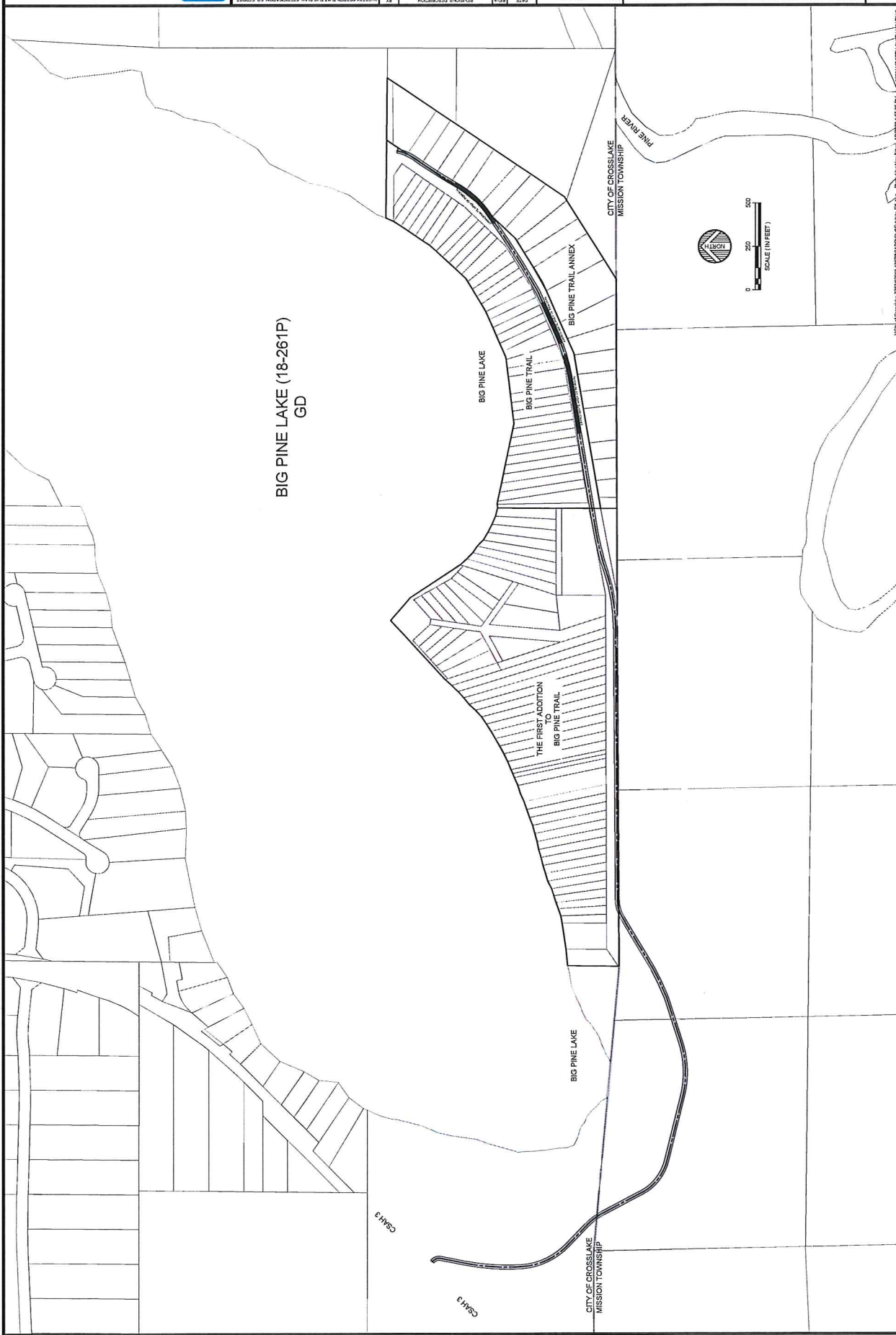
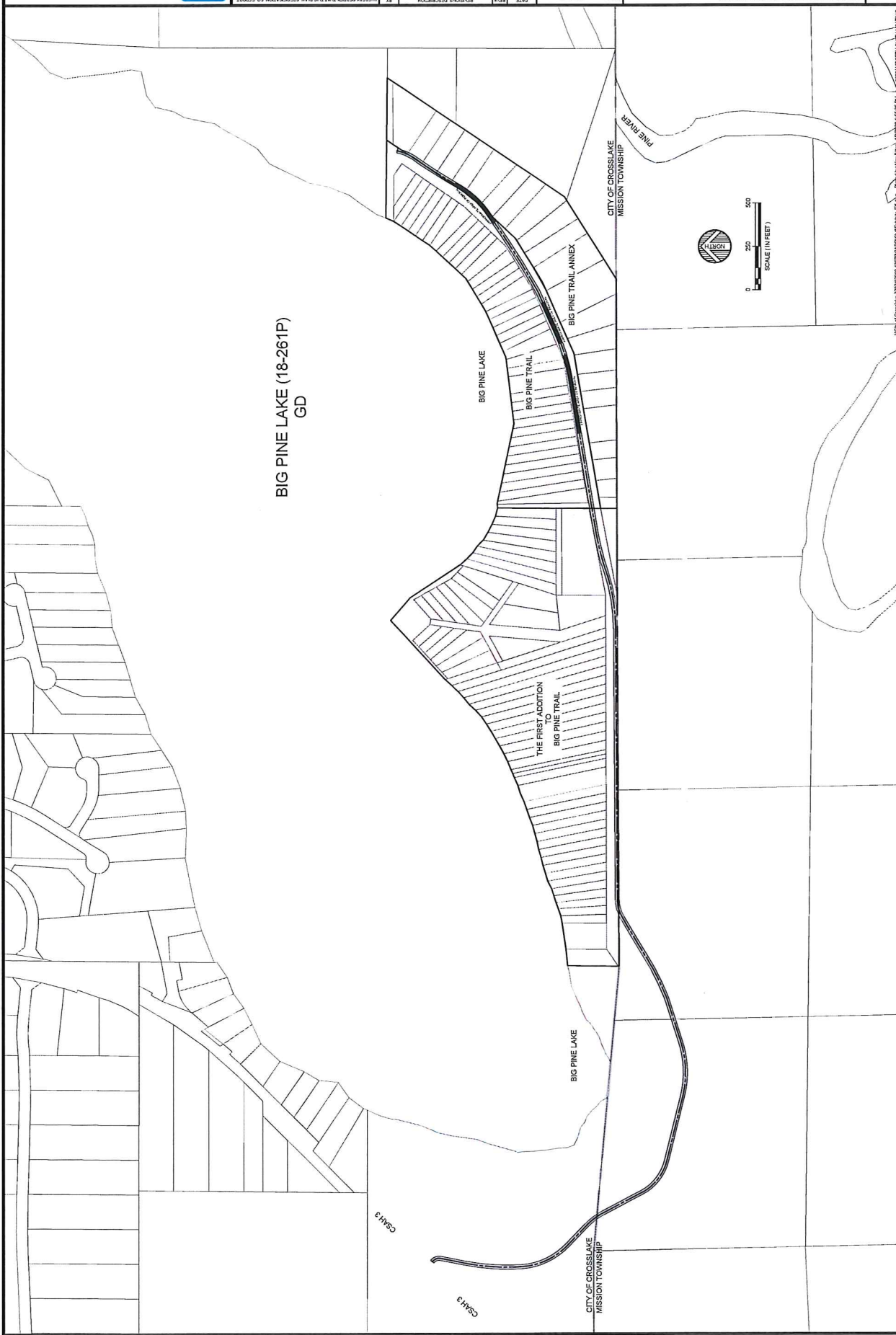
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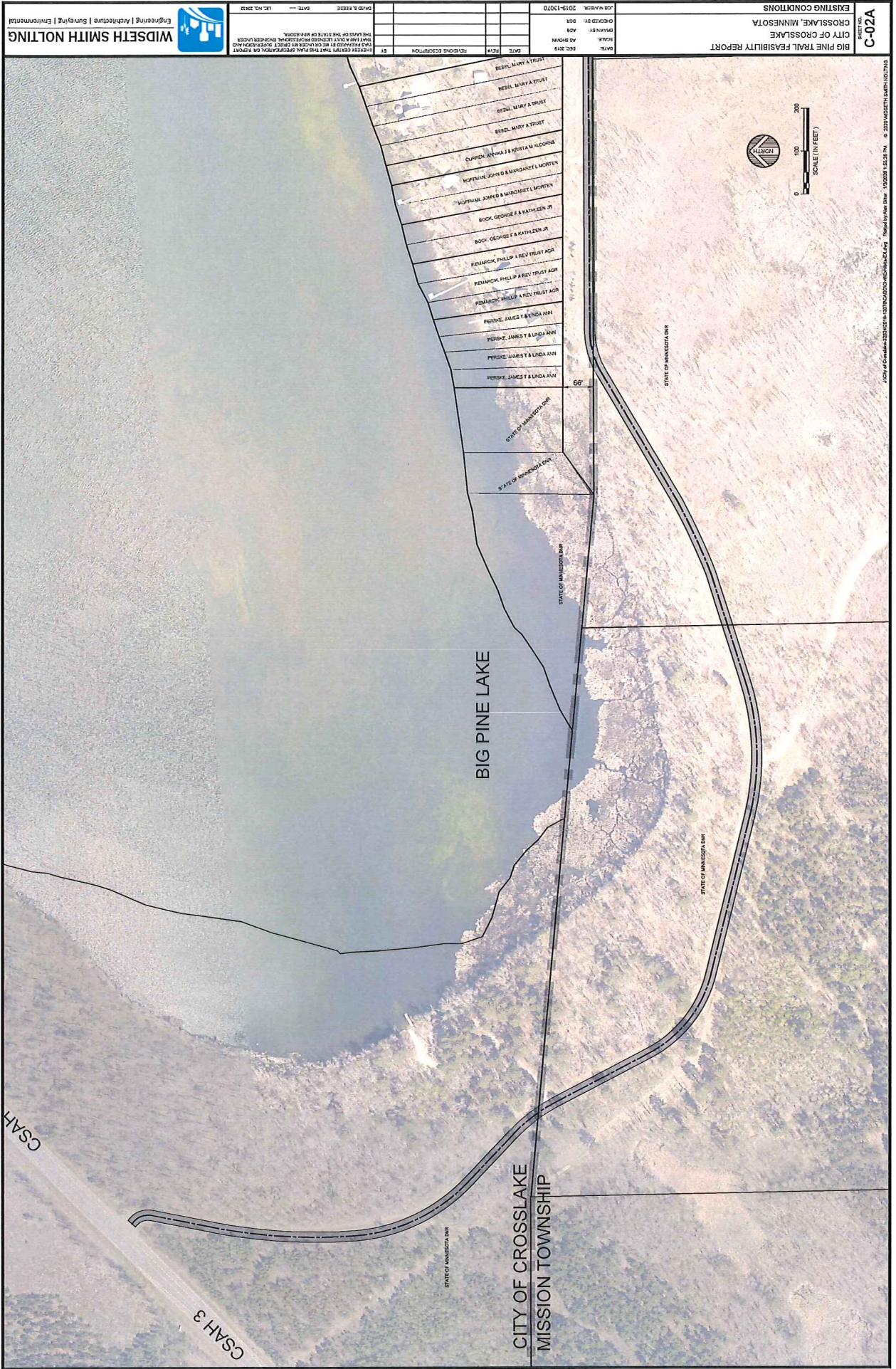
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DATE: ---
LIC. NO. 20132



WIDETH SMITH NOLTING
Engineering | Architecture | Surveying | Environmental







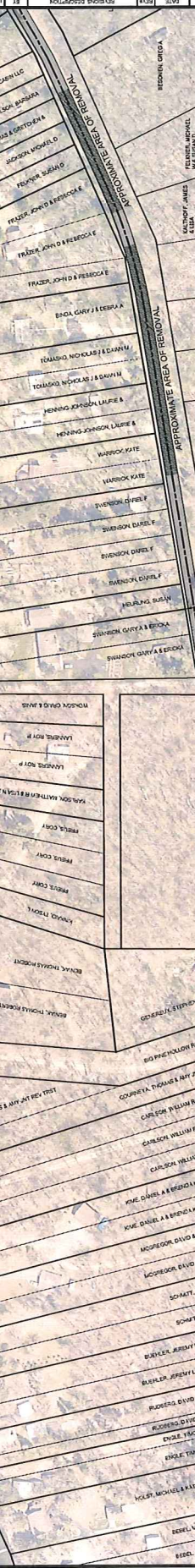
DATE: 2019-10-10	PROJECT: BIG PINE LAKE
DRAWN BY: JDN	CHECKED BY: JDN
SCALE: AS SHOWN	DATE: 2019-10-10

NO.	OWNER NAME	ADDRESS
1	WIDSETH SMITH NOLTING	1000 1ST AVE N
2	WIDSETH SMITH NOLTING	1000 1ST AVE N
3	WIDSETH SMITH NOLTING	1000 1ST AVE N

DATE: 2019-10-10	PROJECT: BIG PINE LAKE
DRAWN BY: JDN	CHECKED BY: JDN
SCALE: AS SHOWN	DATE: 2019-10-10

DATE: 2019-10-10	PROJECT: BIG PINE LAKE
DRAWN BY: JDN	CHECKED BY: JDN
SCALE: AS SHOWN	DATE: 2019-10-10

DATE: 2019-10-10	PROJECT: BIG PINE LAKE
DRAWN BY: JDN	CHECKED BY: JDN
SCALE: AS SHOWN	DATE: 2019-10-10

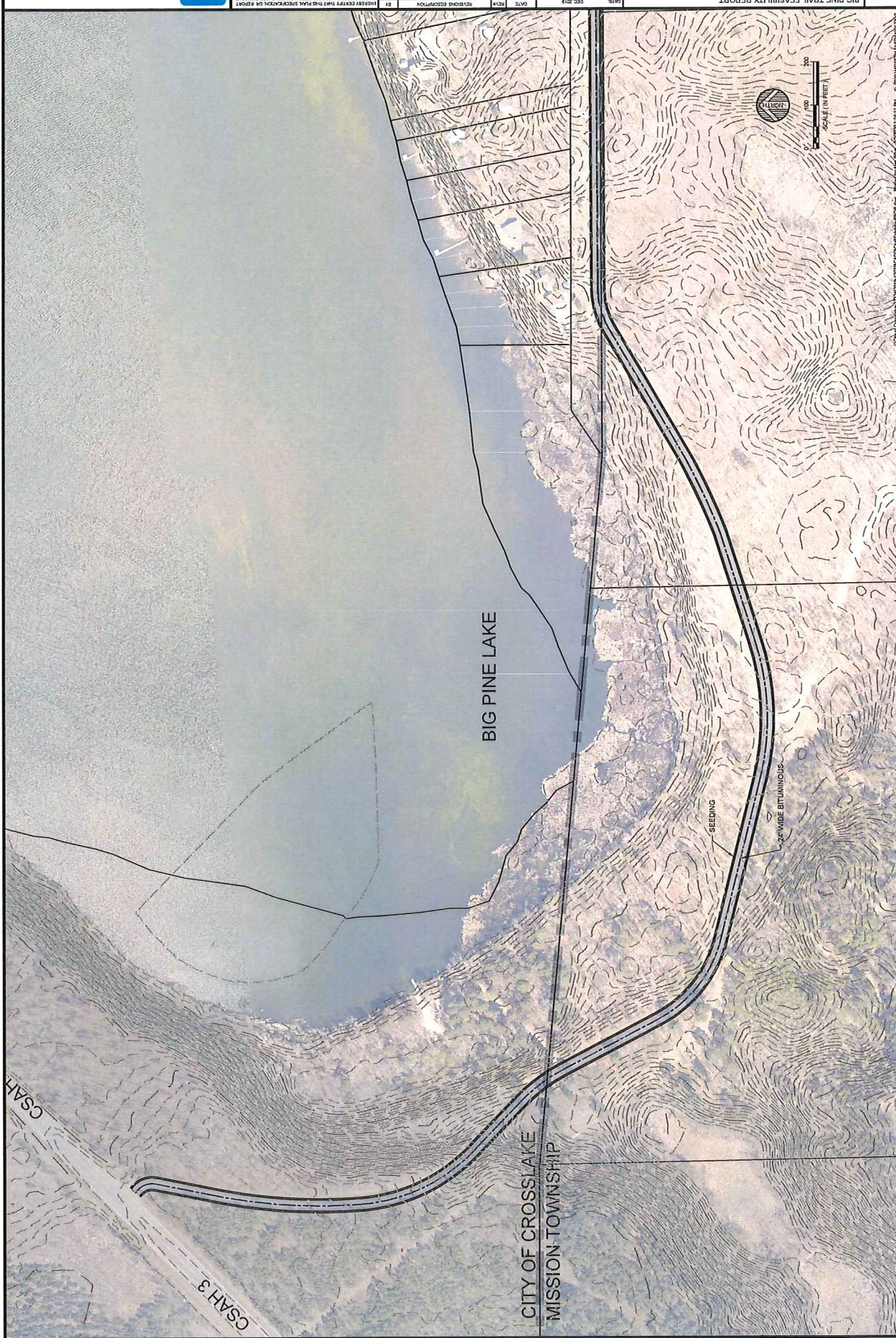


JOB NUMBER	2019-13070
CHECKED BY:	DSR
DRAWN BY:	ACA
SCALE:	AS SHOWN

STATE OF MINNESOTA
COUNTY OF _____
I, _____, a duly licensed professional engineer under
the laws of the State of Minnesota, do hereby certify that
the foregoing is a true and correct copy of the _____
as the same appears in the records of the _____
of the County of _____, State of Minnesota.
GIVEN UNDER MY HAND AND SEAL OF OFFICE
THIS _____ DAY OF _____, 20____.



WIDETH SMITH NOLTING
Engineering | Architecture | Surveying | Environmental



C-03B

BIG PINE TRAIL FEASIBILITY REPORT
CITY OF CROSSLAKE, MINNESOTA
PROPOSED IMPROVEMENTS

DATE: DEC. 2018
DRAWN BY: JAC
CHECKED BY: GSR
JOB NUMBER: 2018-12070

DATE	REVISION DESCRIPTION

DATE: DEC. 2018
DRAWN BY: JAC
CHECKED BY: GSR
JOB NUMBER: 2018-12070

WIDSETH SMITH NOLTING
Engineering | Architecture | Surveying | Environmental



C-303-C

PROPOSED IMPROVEMENTS
CITY OF CROSSLAKE, MINNESOTA
BIG PINE TRAIL FEASIBILITY REPORT

DATE DEC. 2018
DRAWN BY AOB
CHECKED BY CSR
JOB NUMBER 2018-12070

DATE NOV. 14, 2018
REVISION DESCRIPTION
BY

DESIGNED BY
CHECKED BY
DATE NOV. 14, 2018

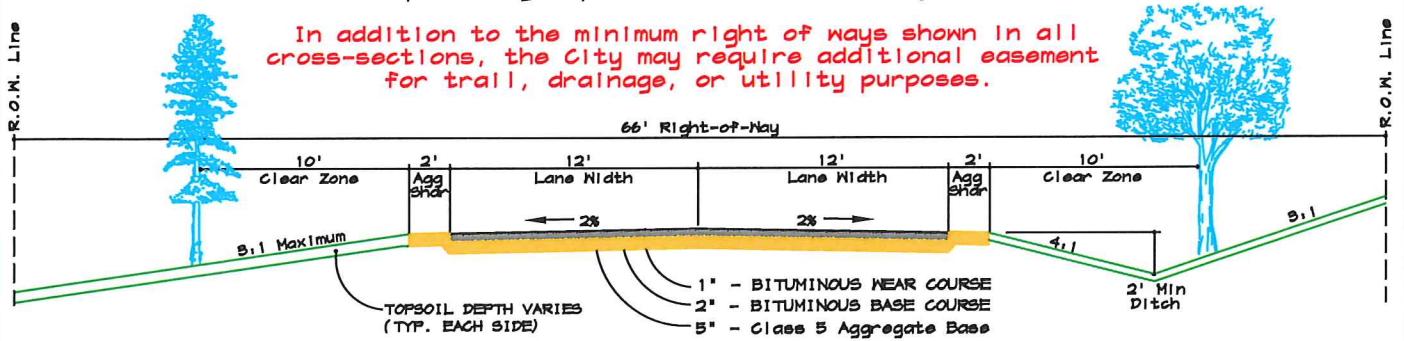
WIDSETH SMITH NOLTING
Engineering | Architecture | Surveying | Environmental



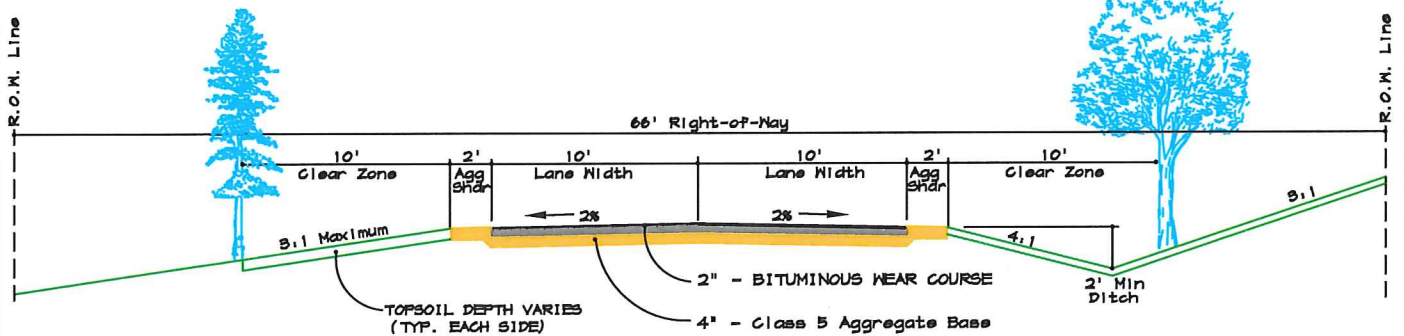
CITY OF CROSSLAKE Minimum Sections for City Maintained Roadways

Assumes 30 mph Design Speed and Granular Subgrade Material

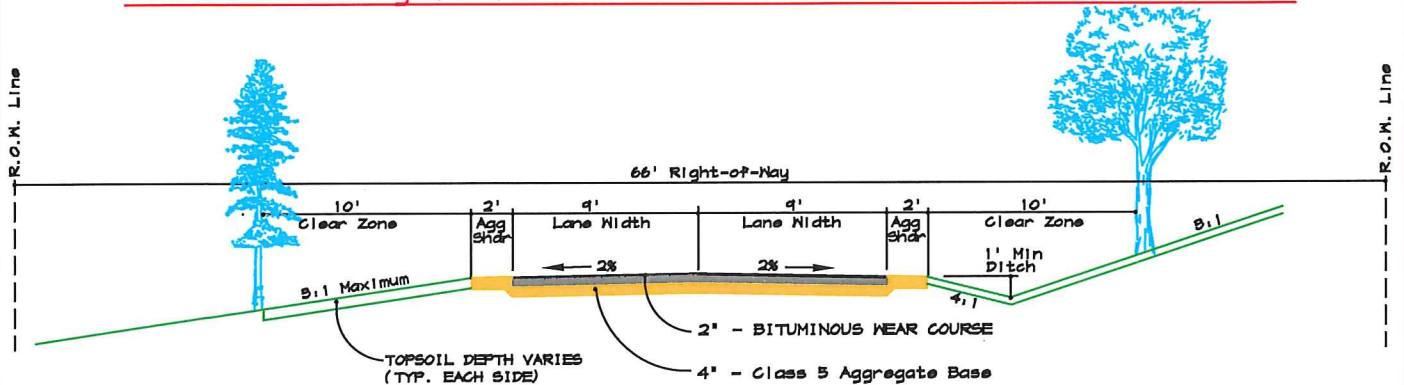
In addition to the minimum right of ways shown in all cross-sections, the City may require additional easement for trail, drainage, or utility purposes.



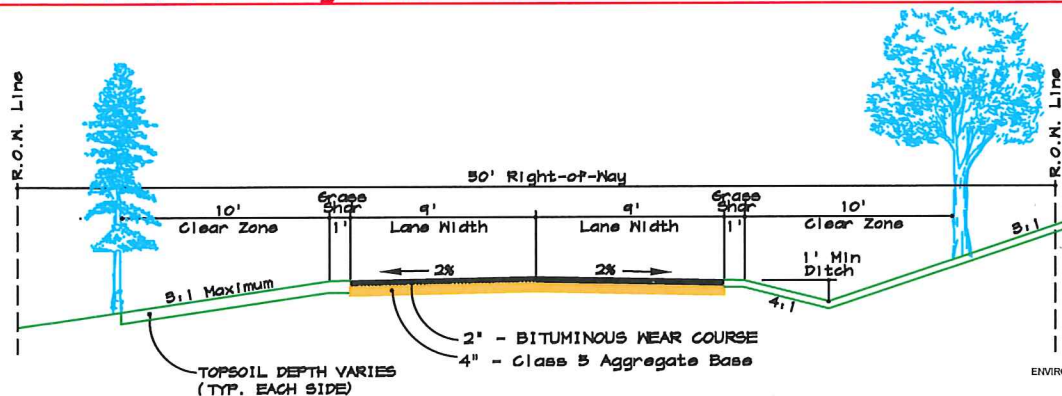
Major Rural Roadway (RJ) - Over 40 lots (410+ ADT)



Rural Roadway (RR) - 26 lots to 40 lots (260 to 400 ADT)



Minor Rural Roadway (RN) - 11 to 25 lots (110 to 250 ADT)



Lanes and Accesses (L or A) - 0 to 10 lots (0 to 100 ADT)



APPENDICES

Report Type

Real Estate Consulting
Letter Report

Effective Date

March 25, 2019

Client

City of Crosslake
Attn: Dave Reese, PE, City Engineer
7804 Industrial Park Road
Baxter, MN 56425

Subject Property**Street Improvement Project**

Big Pine Trail
Crosslake, MN 56442



File # V1903002

Prepared By:

Ethan Waytas, MAI, Appraiser
William R. Waytas, SRA, Appraiser

Nagell Appraisal Incorporated

12805 Highway 55, Suite 300
Plymouth, Minnesota 55441
Tel: 952.544.8966 | Fax: 952.544.8969

NAGELL APPRAISAL INCORPORATED

12805 Highway 55 #300
Plymouth, MN 55441
Established in 1968

Minneapolis 952-544-8966
St. Paul 651-209-6159
Central Fax 952-544-8969

City of Crosslake
Attn: Dave Reese, PE, City Engineer
7804 Industrial Park Road
Baxter, MN 56425

April 1, 2019

To Dave Reese:

Per your request, this is a letter report is to assist the city for guidance regarding a potential street improvement project within the city (see attached map for the location of the street in the project). The proposed project is the reconstruction of Big Pine Trail.

This report is not an appraisal, but rather provides a preliminary opinion of a general range of market benefit, if any, for similar properties.

SCOPE OF ASSIGNMENT

In accordance with your request, a drive-by viewing of the properties has been made along with some general market comments regarding benefit (if any) for the proposed street improvement project as it relates to the subject market. As noted in the engagement letter, no specific sales data has been collected for this assignment. The general market comments are based on past appraisals, experience, and market information.

Pictures of the streets were taken on March 25, 2019 by William R. Waytas. The appraiser also viewed aerial/satellite image on the county GIS website and Google street view images. A project feasibility report was provided and has been retained in the appraiser's workfile.

PROJECT

The City of Crosslake is proposing to reconstruct Big Pine Trail, which a road that services residential properties on Pine Lake.

Per request, you desire to know the benefit (if any) as it impacts properties in the project area.

Motivation for the road improvement project stems from deteriorating road surface and base.

AREA DESCRIPTION

The City of Crosslake is a northern Minnesota Community located just north of Brainerd. The Twin Cities are about 2.5 hours to the south, which makes the area an appealing summer destination for cabin owners. The Whitefish Chain of Lakes is a set of 14 interconnected lakes situated between the communities of Crosslake, Pequot Lakes, and Pine River. The chain has some of the highest valued lakefront in Minnesota. Access to most shopping and surrounding communities is within 30 minutes. Highway 3 is the major road that provides access to surrounding communities. Most existing buildings in the area are of average to good+ quality. No apparent adverse influences.

The population for Crosslake in 2010 was 2,141, up from 1,893 in 2000—a 13.1% increase. The 2017 estimated population is 2,251, a 5.1% increase.

Single family homes generally range in value between \$50,000 and \$2,000,000+ in the City Limits with an average of about \$430,000 (MLS statistics). The city is a mixture of residential (lake front and non-lake front), industrial, and commercial. Most homes are average to good quality.

SUBJECT PROPERTIES

The project area consists of single-family residential homes on Pine Lake, residential homes with no lake frontage, some privately owned recreational land, and publicly owned recreational land.

Note: Many of the lake lots are comprised of multiple PIDs to create one "homesite". For purposes of this letter, a homesite is defined as the parcels that make-up a total residential property, that allows for the structure, garage, and driveway. It might also considered to be the site that would be legally allowed to be built upon (many of the PIDs are too narrow for standalone development).

EXISTING STREETS & UTILITIES

Physical Condition of the Existing Road: The existing road improvements are asphalt, with no curb or gutter. The city did not indicate when the road was originally paved. The existing road varies in width, but in general appears to be about 20' wide. The road condition is rated to be fair. There are signs of transverse, alligator, and longitudinal cracking.

Physical Condition of Existing Utilities: There is no public sewer or water in the project area.

There is no storm sewer in the project area.

Functional Design of the Road: The existing paved road is dated, in fair condition, and does have substantial large cracks. The road condition is rated to be fair. There are signs of transverse, alligator, and longitudinal cracking.

Roads in poor to fair condition do not meet the expectations of typical market participants in this suburban market for re-development, resale price, and/or updating the current uses. Overall, the existing street improvements are in Fair condition, are beginning to look dated and reflect likewise on the adjoining and side street properties.

PROPOSED ROAD IMPROVEMENT

The city is proposing to reconstruct Big Pine Trail, which serves the residential properties on Pine Lake.

The road appears to be the same width, around 20'. The city will grind the existing asphalt down and repack the base. This will improve the road base. On top of the improved base will be new asphalt.

Note: Per city, full depth pavement reclamation (FDR):

Consists of utilizing a road reclaimer machine to grind and blend the full depth of the existing bituminous pavement thickness to a gravel consistency for use as road base material prior to paving a new bituminous pavement surface on top of the reclaimed material. This method minimizes the recurrence of crack reflection through an overlay of the existing pavement and supplements the existing road base material lending additional strength to the roadway.

There are no proposed utility updates, or curb and gutter.

Given the existing condition of the road and traffic, the proposed project is logical.

If any of the above descriptions change, the benefit due to the project could differ.

HIGHEST AND BEST USE

The subject project area is located in the southern portion of the city. The properties in the project area are single-family residential (lake and non-lake lots), recreational land, and publicly owned land.

Owners in the subject area appear to typically update their property as needed when site and building components wear out or become dated. Owners in the overall area commonly pave their driveways or maintain parking lots as needed, recognizing it adds value when done. Therefore, it is logical to update the road to the subject properties as needed, as these are essential property characteristics that are expected in this market.

An informed buyer would consider the condition of the road and traffic flow/management. A well-constructed and good condition road provides aesthetic appeal to a property and efficient/safe traffic flow. Given a choice, a potential informed buyer would likely prefer a newer road with good traffic flow over a deteriorating road with fair traffic flow.

If replacement of components of real estate near the end of their economic life in a home or building is postponed, it can be costlier in the long run; delays in replacing components can result in incurring higher interim maintenance costs and potential difficulty in marketing the property. Also, it is typical for the cost of the replacement of an improvement to increase over time. That said it is logical and prudent for market participants to update/replace dated components when needed. Therefore, the highest and best use of the surrounding properties in the project area is for the continued residential use with the proposed infrastructure improvements.

DISCUSSION OF MARKET BENEFIT

Listed below are the factors that will be taken into consideration concerning the potential benefit to the properties.

<u>Description</u>	<u>Existing Improvements</u>	<u>Change</u>
1) Road Surface	Fair	New, paved, good
2) Base Condition	Old, city reports unstable	Appears to be new
3) Curb	None	None
4) Drainage	None	None
5) Storm Sewer	None	None
6) City water	None	None
7) City sewer	None	None
8) Sidewalk	None	None
9) Street Lights	Average	Average
10) Functional Design of Road	Dated	Good
11) Traffic Management	Average	Average
12) Pedestrian Use (biking, walking, etc.)	Fair	Good
13) Median	n/a	n/a
14) Road Proximity to Properties	n/a	n/a
15) Dust	n/a	n/a
16) Visual Impact on Properties	Fair	Good

Based on the preceding grid, the subject properties will improve in 5 of the 16 categories. Market participants generally recognize that roads need replacing when nearing the end of a long economic life. A typical buyer in the subject market commonly prefers a good condition paved road surface road versus an inferior condition paved road surface. In addition to visual benefit, new street improvements provide better and safer use for pedestrians (biking, walking, stroller, rollerblading, etc.) and drivers. The new streets will enhance potential for re-development and/or updating the current properties. Properties that indirectly/directly abut or have driveways/access that exit on the new street will benefit.

Based on past appraisals, experience, and general market information, it is not uncommon for properties similar to those in the subject market to realize an increase in price for new street improvements.

Discussion of Market Benefit – Continued

Given the scope of the project, the age/quality/condition of houses, properties in the area with newer street improvements could see an average price benefit of:

- **Single family (lake homesite, direct access)** \$5,000 to \$10,000 per homesite
(larger lots on the upper end of range)
- **Single family (lake homesite, indirect access)** \$2,500 to \$5,000 per homesite
(larger lots on the upper end of range)
- **Single family (non-lake, direct access)** \$4,000 to \$8,000 per homesite
(larger lots on the upper end of range)
- **Single family (non-lake, indirect access)** \$2,000 to \$4,000 per homesite
(larger lots on the upper end of range)
- **Land (non-lake, direct access, 0.5 to 10 acres)** \$2,000 to \$4,000 per acre
(larger lots on the lower end of range)
- **Land (10+ acres, non-lake, direct access)** \$50 to \$300 per acre
(larger lots on the lower end of range)

Corner lots are based at a pro-rata percentage using street frontage. So if 75% of the frontage is being improved while 25% on the side street(s) is not, then the multiplier would be 75% of the benefit.

CONCLUSION

The benefit amount noted above should not be construed or relied on as being an appraisal, but are general observations based on the overall market. If an appraisal were made on the individual properties, the actual benefit amount could vary from market observations above.

If you have additional questions, please do not hesitate to contact us.

Sincerely,



Ethan Waytas, MAI
Certified General MN 40368613

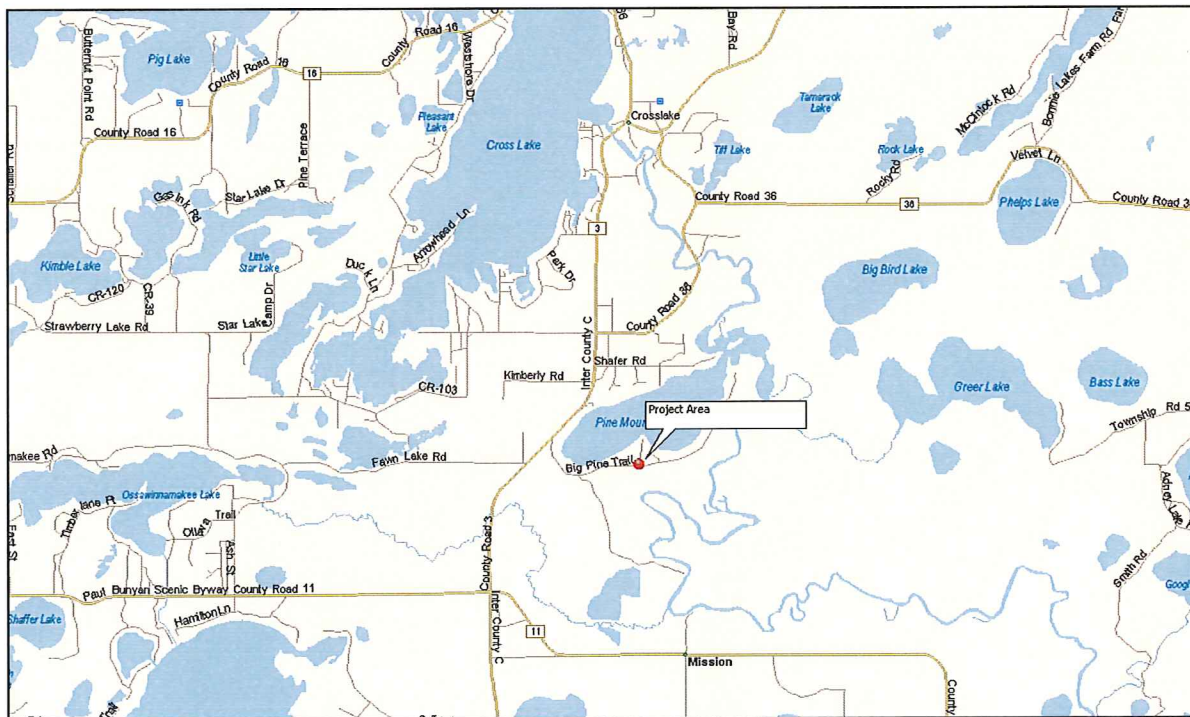


William R. Waytas, SRA
Certified General MN 4000813

Enclosures: Location Map, Aerial Map View of Project, Subject Photos, Qualifications, Engagement Letter

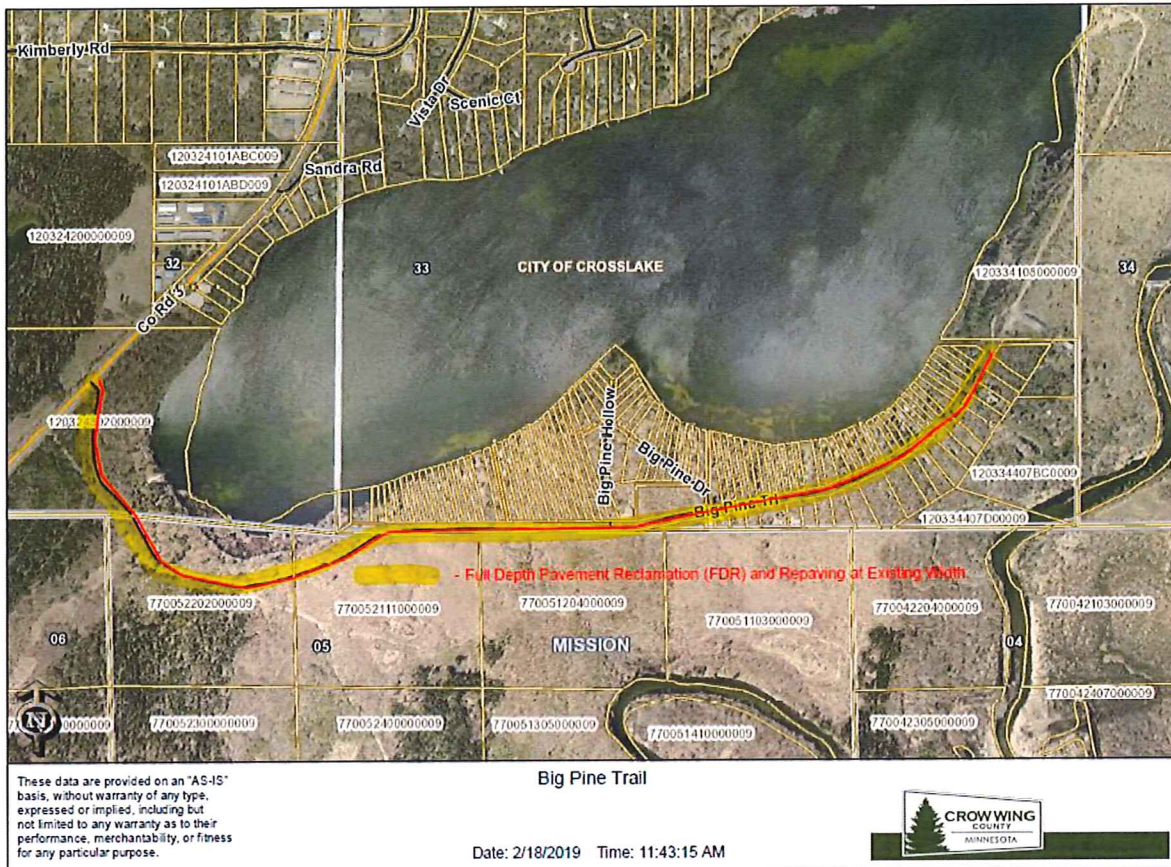
www.nagellmn.com

LOCATION MAP



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FEASIBILITY REPORT PROJECT AREA



The red line reflects the project.

SUBJECT PHOTOGRAPHS



Street scene



Street scene



Street scene



Street scene

Subject Photographs – continued



Street scene



Street scene



Street scene



Street scene

QUALIFICATIONS

Appraisal Experience

Presently and since 2006, **Ethan Waytas, MAI** has been employed as an employee of Nagell Appraisal Incorporated, an independent appraisal firm (10 employees) who annually prepare 1,500 +/- appraisal reports of all types. He is currently a full time licensed certified general real estate appraiser, partner, and director of the company's IT department.

Properties appraised:

- **Commercial** - low and high-density multi-family, retail, office, industrial, restaurant, church, strip-mall, fast-food, convenience stores, auto-service and repair, cinema, numerous special use properties, golf courses, and subdivision analysis.
- **Residential** – single-family residences, hobby farms, lakeshore, condominiums, townhouses, REO and land.
- **Eminent Domain** – extensive partial and total acquisition appraisal services provided to numerous governmental agencies and private owners.
- **Special Assessment** – numerous street improvement and utilities projects for both governmental and private owners.
- **Clients** - served include banks, savings and loan associations, trust companies, corporations, governmental bodies, relocation companies, attorneys, REO companies, accountants and private individuals.
- **Area of Service** - most appraisal experience is in the greater Twin Cities Metro Area (typically an hour from downtown metro). Numerous assignments throughout Minnesota.

Testimony

-- Court, commission, mediation testimony, etc. has been given

Professional Membership, Associations & Affiliations

License: Certified General Real Property Appraiser, MN License #40368613

Holds the MAI designation from the Appraisal Institute

Education

-- Graduate of the University of Minnesota: College of Science and Engineering, Twin Cities Campus
Bachelor of Science in Computer Science, with distinction, 3.86 GPA.

-- General & Professional Practice Courses & Seminars

-- Basic Appraisal Procedures
-- Basic Appraisal Principles
-- 2012-2013 15-Hour National Uniform Standards of Professional Appraisal Practice
-- General Appraiser Sales Comparison Approach
-- General Appraiser Income Approach – Part 1
-- General Appraiser Income Approach – Part 2
-- Advanced Income Capitalization
-- General Appraiser Report Writing and Case Studies
-- Real Estate Finance, Statistics and Valuation Modeling
-- 2014-2015 7-hour National USPAP Update Course
-- General Appraiser Site Valuation & Cost Approach
-- Advanced Market Analysis and Highest & Best Use
-- Advanced Concepts & Case Studies
-- Quantitative Analysis

Curriculum Vitae -- continued

Appraisal Experience

Presently and since 1985, **William R. Waytas** has been employed as a full time real estate appraiser. Currently a partner and President of the Nagell Appraisal & Consulting, an independent appraisal firm (10 employees) who annually prepare 1,500 +/- appraisal reports of all types. Mr. Waytas was employed with Iver C. Johnson & Company, Ltd., Phoenix, AZ from 1985 to 1987.

Properties appraised:

- **Commercial** - low and high-density multi-family, retail, office, industrial, restaurant, church, strip-mall, fast-food, convenience stores, auto-service and repair, hotel, hotel water park, bed & breakfast, cinema, marina, numerous special use properties, and subdivision analysis.
- **Residential** – single-family residences, hobby farms, lakeshore, condominiums, townhouses, REO and land.
- **Eminent Domain** – extensive partial and total acquisition appraisal services provided to numerous governmental agencies and private owners.
- **Special Assessment** – numerous street improvement and utilities projects for both governmental and private owners.
- **Review** – residential, commercial and land development.
- **Clients** - served include banks, savings and loan associations, trust companies, corporations, governmental bodies, relocation companies, attorneys, REO companies, accountants and private individuals.
- **Area of Service** - most appraisal experience is in the greater Twin Cities Metro Area (typically an hour from downtown metro). Numerous assignments throughout Minnesota.

Professional Membership, Associations & Affiliations

License: Certified General Real Property Appraiser, MN License #4000813.

Appraisal Institute: SRA, Senior Residential Appraiser Designation,
General Associate Member

Employee Relocation Council: CRP Certified Relocation Professional Designation.

International Right-Of-Way Association: Member

HUD/FHA: On Lender Selection Roster and Review Appraiser

DNR: Approved appraiser for Department of Natural Resources

Testimony

-- Court, deposition, commission, arbitration & administrative testimony given.

Mediator

-- Court appointed in Wright County.

Committees

- President of Metro/Minnesota Chapter, 2002, Appraisal Institute.
- Chairman of Residential Admissions, Metro/MN Chapter, AI.
- Chairman Residential Candidate Guidance, Metro/Minnesota Chapter, AI.
- Elm Creek Watershed Commission, Medina representative 3 years.
- Medina Park Commission, 3 years.

Curriculum Vitae -- continued

Education

- Graduate of Bemidji State University, Minnesota. B.S. degree in Bus. Ad.
- During college, summer employment in building trades (residential and commercial).
- Graduate of Cecil Lawter Real Estate School. Past Arizona Real Estate License.
- **General & Professional Practice Courses & Seminars**
- Course 101-Introduction to Appraising Real Property.
- Numerous Standards of Professional Practice Seminar.
- Fair Lending Seminar.
- Eminent Domain & Condemnation Appraising.
- Eminent Domain (An In-Depth Analysis)
- Property Tax Appeal
- Eminent Domain
- Business Practices and Ethics
- Scope of Work
- Construction Disturbances and Temporary Loss of Going Concern
- Uniform Standards for Federal Land Acquisitions (Yellow Book Seminar)
- Partial Interest Valuation Divided (conservation easements, historic preservation easements, life estates, subsurface rights, access easements, air rights, water rights, transferable development rights)
- **Commercial/Industrial/Subdivision Courses & Seminars**
- Capitalization Theory & Techniques
- Highest & Best Use Seminar
- General & Residential State Certification Review Seminar
- Subdivision Analysis Seminar.
- Narrative Report Writing Seminar (general)
- Advanced Income Capitalization Seminar
- Advanced Industrial Valuation
- Appraisal of Local Retail Properties
- Appraising Convenience Stores
- Analyzing Distressed Real Estate
- Evaluating Commercial Construction
- Fundamentals of Separating Real Property, Personal Property and Intangible Business Assets
- **Residential Courses & Seminars**
- Course 102-Applied Residential Appraising
- Narrative Report Writing Seminar (residential)
- HUD Training session local office for FHA appraisals
- Familiar with HUD Handbook 4150.1 REV-1 & other material from local FHA office.
- Appraiser/Underwriter FHA Training
- Residential Property Construction and Inspection
- Numerous other continuing education seminars for state licensing & AI

Speaking Engagements

- Bankers
- Auditors
- Assessors
- Relocation (Panel Discussion)

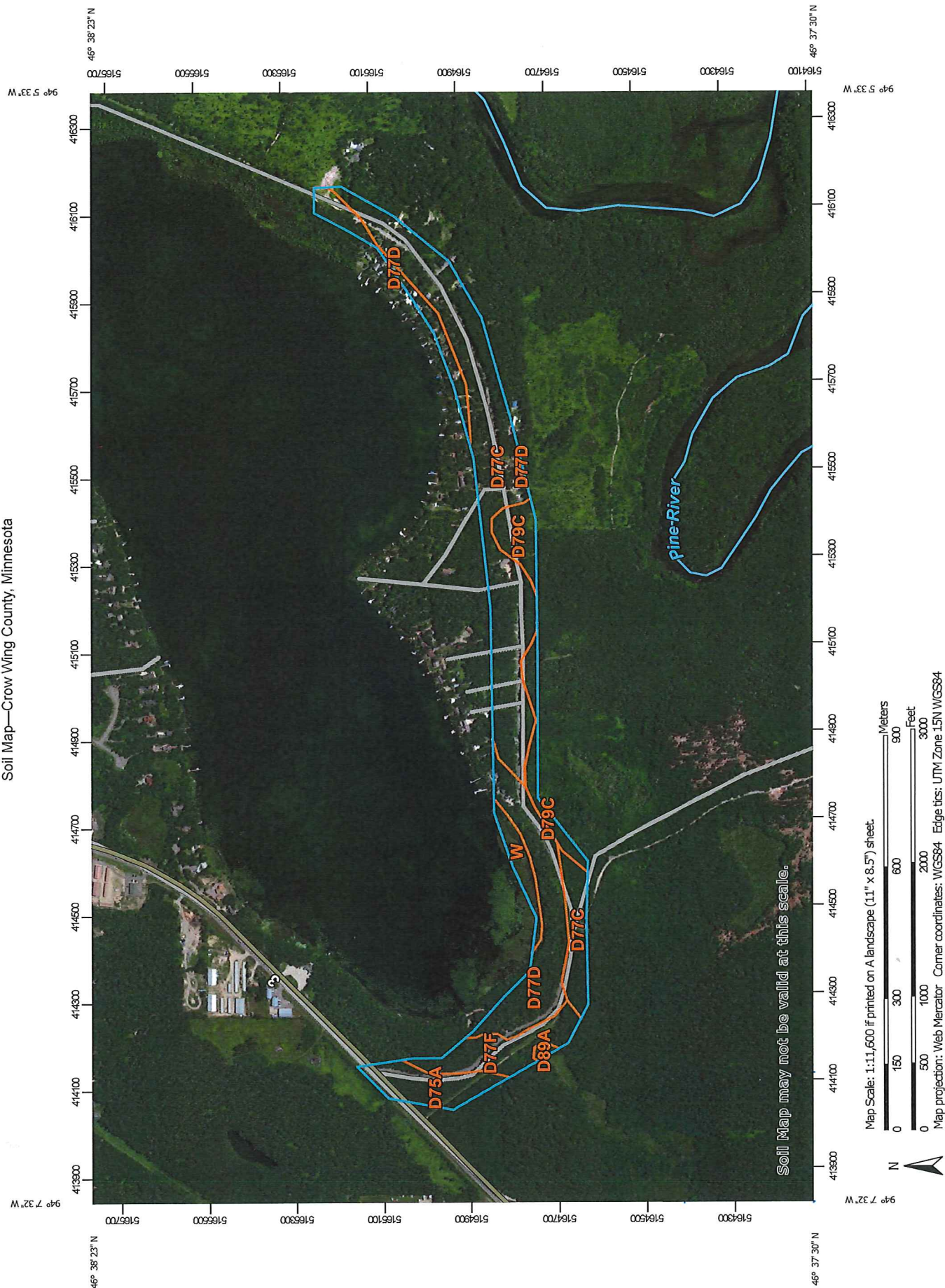
Publications

- Real Estate Appraisal Practice (book): Acknowledgement
- Articles for Finance & Commerce and Minnesota Real Estate Journal





































CITY OF CROSSLAKE
BIG PINE TRAIL IMPROVEMENTS
Estimate of Project Cost
January 3, 2020

ITEM NO.	SPEC. NO.	ITEM DESCRIPTION	UNIT	ESTIMATED UNIT PRICE	ESTIMATED PROJECT TOTALS	
					EST. QTY.	AMOUNT
1	2021.501	MOBILIZATION	LUMP SUM	\$18,000.00	1	\$18,000.00
2	2101.505	CLEARING	ACRE	\$5,000.00	0.50	\$2,500.00
3	2101.505	GRUBBING	ACRE	\$5,000.00	0.50	\$2,500.00
4	2101.524	CLEARING	TREE	\$300.00	10	\$3,000.00
5	2101.524	GRUBBING	TREE	\$300.00	10	\$3,000.00
6	2104.502	REMOVE MAIL BOX SUPPORT	EACH	\$40.00	27	\$1,080.00
7	2104.504	REMOVE BITUMINOUS PAVEMENT	SQ YD	\$2.50	2,200	\$5,500.00
8	2105.507	SUBGRADE EXCAVATION (P)	CU YD	\$12.00	1,200	\$14,400.00
9	2105.507	GRANULAR BORROW (P)	CU YD	\$24.00	1,200	\$28,800.00
10	2211.509	AGGREGATE BASE, CLASS 5 (CV)	TON	\$15.00	2,650	\$39,750.00
11	2215.504	FULL DEPTH RECLAMATION	SQ YD	\$1.50	17,200	\$25,800.00
12	2360.504	TYPE SP 9.5 WEARING COURSE MIX (2,C)	TON	\$70.00	1,280	\$89,600.00
13	2360.504	TYPE SP 12.5 NON-WEARING COURSE MIX (2,C)	TON	\$70.00	2,560	\$179,200.00
14	2360.504	DRIVEWAY RECONSTRUCTION	EACH	\$600.00	77	\$46,200.00
15	2540.602	MAIL BOX SUPPORT	EACH	\$115.00	27	\$3,105.00
16	2563.601	TRAFFIC CONTROL	LUMP SUM	\$1,200.00	1	\$1,200.00
17	2573.501	EROSION CONTROL SUPERVISOR	LUMP SUM	\$500.00	1	\$500.00
18	2573.501	STABILIZED CONSTRUCTION EXIT	LUMP SUM	\$600.00	1	\$600.00
19	2573.503	SILT FENCE, TYPE MS	LIN FT	\$2.00	3,500	\$7,000.00
20	2573.540	SEDIMENT CONTROL LOG TYPE STRAW	LIN FT	\$3.00	2,000	\$6,000.00
21	2574.507	COMMON TOPSOIL BORROW (CV)	CU YD	\$22.00	1,000	\$22,000.00
22	2574.508	FERTILIZER TYPE 1	POUND	\$1.00	1,000	\$1,000.00
23	2575.505	SEEDING	ACRE	\$500.00	2.00	\$1,000.00
24	2575.508	SEED, MIXTURE 21-111	POUND	\$2.00	200	\$400.00
25	2575.508	SEED, MIXTURE 25-151	POUND	\$3.50	500	\$1,750.00
26	2575.508	HYDRAULIC MULCH MATRIX	POUND	\$1.50	5,200	\$7,800.00
REMARKS CV = COMPACTED VOLUME P = PLANNED QUANTITY			TOTAL ESTIMATED CONSTRUCTION COST			\$511,685.00
			CONSTRUCTION CONTINGENCY (10%)			\$51,200.00
			SUBTOTAL CONSTRUCTION (ROUNDED)			\$562,900.00
			ENGR, ADMIN, LEGAL (18%)			\$101,400.00
			TOTAL ESTIMATED PROJECT COST			\$664,300.00

Soil Map—Crow Wing County, Minnesota



MAP LEGEND

	Area of Interest (AOI)		Spoil Area
	Area of Interest (AOI)		Stony Spot
	Soils		Very Stony Spot
	Soil Map Unit Polygons		Wet Spot
	Soil Map Unit Lines		Other
	Soil Map Unit Points		Special Line Features
	Special Point Features		Water Features
	Blowout		Streams and Canals
	Borrow Pit		Transportation
	Clay Spot		Rails
	Closed Depression		Interstate Highways
	Gravel Pit		US Routes
	Gravelly Spot		Major Roads
	Landfill		Local Roads
	Lava Flow		Background
	Marsh or swamp		Aerial Photography
	Mine or Quarry		
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Crow Wing County, Minnesota
Survey Area Data: Version 15, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 12, 2014—Aug 23, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
D75A	Graycalm loamy sand, pitted, 0 to 3 percent slopes	5.2	7.4%
D77C	Graycalm-Grayling complex, 2 to 15 percent slopes	33.3	46.9%
D77D	Graycalm-Grayling complex, 12 to 25 percent slopes	17.1	24.0%
D77F	Graycalm-Grayling complex, 25 to 45 percent slopes	6.3	8.8%
D79C	Graycalm-Rifle complex, 0 to 10 percent slopes	6.4	9.0%
D89A	Lougee-Totagatic-Bowstring complex, 0 to 1 percent slopes, frequently flooded	0.3	0.5%
W	Water	2.4	3.3%
Totals for Area of Interest		71.1	100.0%

