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## **Notice of intent for storm water discharges associated with construction activities under a general WPDES permit : scope ID: 93C049. 1998**

Foth and Van Dyke and Associates, Inc.

Green Bay, Wisconsin: Foth and Van Dyke, 1998

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# **Nicolet Minerals**

**C O M P A N Y**

**Rhineland Office:** 7 N. Brown Street, 3rd Floor • Rhineland, WI 54501-3161 • Ph: 715.365.1450 • Fax: 715.365.1457

**Crandon Office:** 104 W. Madison Street, P.O. Box 336 • Crandon, WI 54520-0336 • Ph: 715.478.3393 • Fax: 715.478.3641

**Web Site:** [www.crandonmine.com](http://www.crandonmine.com)

December 4, 1998

Mr. Paul Luebke  
Bureau of Wastewater Management  
Wisconsin Department of Natural Resources  
P.O. Box 7921  
Madison, WI 53707-7921

Ms. Char Hauger  
U.S. Army Corps of Engineers  
St. Paul District  
190 Fifth Street East  
St. Paul, MN 55101

Dear Mr. Luebke and Ms. Hauger:

Re: Crandon Project - *Notice of Intent for Storm Water Discharges*

Nicolet Minerals Company (NMC) is pleased to submit the attached updated *Notice of Intent for Storm Water Discharges Associated with Construction Activities under a General WPDES Permit* for its Crandon Project. The updated notice has been prepared in accordance with Chapter NR 216, Wis. Admin. Code, and is submitted in conjunction with two additional documents related to project surface water management. The first is an application for a wastewater discharge permit. The second is a report titled *Preliminary Engineering Report for Wastewater Treatment Facilities for the Crandon Project*. These latter two documents have been prepared pursuant to Chapter 147, Wis. Stats., and Chapter NR 108, Wis. Admin. Code, respectively.

The notice includes a completed and signed Wisconsin Department of Natural Resources (WDNR) Form 3400-161 and an attachment and seven figures providing information requested on Form 3400-161. NMC is requesting that the notice be reviewed as expeditiously as possible such that permitting activities associated with the project can continue in a timely manner.

Mr. Paul Luebke  
Ms. Char Hauger  
December 4, 1998  
Page 2

If you or your staff have any questions regarding the notice, please contact me at  
(715) 478-3393.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Reid". The signature is fluid and cursive, with a large initial "G" and a distinct "R".

Gordon Reid  
*Manager of Engineering*  
Nicolet Minerals Company

GR:lmc

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**Notice of Intent for Storm Water Discharges  
Associated with Construction Activities under a  
General WPDES Permit**

Scope ID: 93C049

Prepared for  
**Nicolet Minerals Company**  
Rhineland, Wisconsin

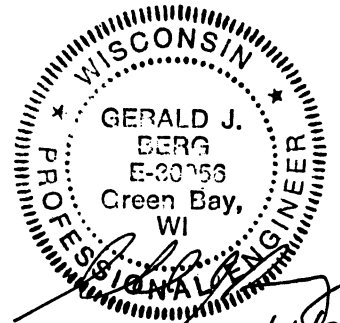
Prepared by  
**Foth & Van Dyke and Associates Inc.**

Originally Issued August 1995  
Updated December 1998



*Gerald W. Sevick*  
12/4/98

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*Gerald J. Berg*  
12/4/98

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**Foth & Van Dyke 1998**

2737 S. Ridge Road, P.O. Box 19012, Green Bay, Wisconsin 54304, 920/497-2500, FAX: 920/497-8516

**Notice of Intent  
for Storm Water Discharges Associated with Construction Activities  
under a General WPDES Permit**

**Nicolet Minerals Company  
Crandon Project**

**Contents**

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**Notice of Intent**

**Attachment 1**

<b>Figure 1</b>	-	<b>Project Area</b>
<b>Figure 2</b>	-	<b>Site Layout</b>
<b>Figure 3</b>	-	<b>Discharge Pipeline and Soil Absorption System</b>
<b>Figure 4</b>	-	<b>Surface Water Mitigation Level I and II Soft Water Pipeline Routes</b>
<b>Figure 5</b>	-	<b>Surface Water Mitigation Level I and II Hard Water Pipeline Routes</b>
<b>Figure 6</b>	-	<b>Proposed Wetland Compensation Site Location</b>
<b>Figure 7</b>	-	<b>Wetland Compensation Site Grading Plan</b>

~~\$200.00 Application Fee~~

This form is authorized by s. 147.025, Wis. Stats. Submittal of a completed form to the Department is mandatory for any owner of a construction site storm water discharge who must apply for a permit in accordance with 40 CFR Part 122, Chapter 147, Wis. Stats., and Chapter NR 216, Wis. Adm. Code. Failure to submit a completed form to the Department at least 14 working days prior to the date on which construction is scheduled to commence may result in fines not to exceed \$10,000 per day, pursuant to s. 147.21(2), Wis. Stats. Personally identifiable information on this form may be used for other water quality program purposes.

Submission of this NOTICE OF INTENT constitutes notice that the party identified in Section I of this form intends to be authorized by a general WPDES permit issued for storm water discharges associated with construction activity in the State of Wisconsin. Becoming a permittee obligates such discharges to comply with the terms and conditions of the general permit. An erosion control plan and storm water management plan meeting the requirements of Chapter NR 216, Wis. Adm. Code, must be completed before filing this NOTICE OF INTENT.

ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.

SECTION I: OWNER/OPERATOR INFORMATION

Name Nicolet Minerals Company	Contact Person Gordon Reid
Mailing Address 7 North Brown Street, 3rd Floor	Title Manager of Engineering
City, State, Zip Code Rhineland, WI 54501-3161	Telephone Number (715) 478-3393

SECTION II: CONTRACTOR INFORMATION (when known)

Name Contractor Not Yet Selected	Contact Person
Mailing Address	Title
City, State, Zip Code	Telephone Number

SECTION III: CONSTRUCTION SITE INFORMATION

Site Name: Nicolet Minerals Company County: Forest

Location Address: -- ☐ City of ☒ Township of, or ☐ Village of Lincoln/Nashville

Mailing Address: 7 North Brown Street, 3rd Floor

City: Rhineland State: WI Zip Code: 54501-3161

Quarter Quarter -- Quarter: SW Section: 30 Township: 35 N Range: 13E

Is this site wholly contained on the above quarter quarter section? (Y or No) No

\*Use more space if needed to describe site location. (see Item 1 of Attachment 1 and Figures 1 - 7)

Total Area of Construction Site: (see Item 2 of Attachment 1) Acres Total Estimated Disturbed Area: (see Item 2 of Attachment 1) Acres

Percent of Site Impervious: (including rooftops) Before Construction: <1 % After Construction (see Item 3 of Attachment 1) %

Type of Construction (check all that apply):

☐ Residential ☐ Commercial ☐ Industrial ☐ Reconstruction

☐ Utility ☐ Transportation (if applicable, list WDOT Project Number)

☒ Other (describe) Mining project including construction of wastewater discharge and mitigation water pipelines and wetland compensation site.

Does your construction site's storm water discharge to: (check all that apply)

☐ Storm drain system - infiltrates to groundwater

☐ Storm drain system to surface water - enter system owner's name and receiving waters:

☒ Directly or indirectly to waters of the state - enter name of river, lake, wetland: See Item 4 of Attachment 1

☒ Infiltration to groundwater occurs on site

Has the storm water discharge leaving the site been sampled and analyzed for pollutants? (Y or N): X - discharges have not yet begun

**SECTION IV: ADDITIONAL INFORMATION**

Project Start Date: (see Item 5 of Attachment 1) Project End Date (see Item 5 of Attachment 1)

Identify proposed management practices to reduce pollutants in storm water discharges: (check all that apply)

☒ Oil/Water Separator      ☒ Erosion Controls      ☒ Detention/Desiltation Ponds  
☒ Sedimentation Controls      ☒ Overhead Coverage      ☒ Grass Lined Ditches  
☐ Porous Pavement      ☐ Rooftop Runoff Goes to Infiltration Area  
☐ Infiltration Practice (please describe) \_\_\_\_\_  
☒ Other (please describe) (see Item 6 of Attachment 1) \_\_\_\_\_

Has a Construction Site Erosion Control Plan and Storm Water Management Plan been completed for this site in conformance with the "Wisconsin

Construction Site Best Management Practices Handbook"? (Y or N) Yes (Note: These must be completed before a permit may be issued.)  
(see Item 6 of Attachment 1)

Is the Construction Site Erosion Control Plan and Storm Water Management Plan in compliance with Local Sediment and Erosion Controls?

(Y or N) not applicable If Y, please list the name of the local agency: (see Item 7 of Attachment 1)Do you have an existing WPDES permit? (Y or N) No If Y, please list: (see Item 8 of Attachment 1)

Is your construction site located in a county, city, village or town with an ordinance in effect prior to January 1, 1994, that establishes standards for

erosion control at commercial building sites? (Y or N) No If Yes, please specify jurisdiction: \_\_\_\_\_

If Yes to the above, has your construction site received erosion control plan review by the above jurisdiction (needed to waive the \$200 fee due with this

NOTICE OF INTENT pursuant to s. NR 216.43(4), Wis. Adm. Code)? (Y or N) not applicable If Yes, please specify the date of the review and the  
name and title of the reviewer: \_\_\_\_\_**SECTION V: CERTIFICATION**

"I certify under penalty of law that this document and attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person, or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including development and implementation of the construction site erosion control and storm water management plan, will be complied with."

Owner/Operator Printed Name <u>Don Cumming</u>	Title <u>President</u>	Telephone Number <u>(715) 365-1450</u>
Owner/Operator Signature <u>Don Cumming</u>	Date Signed <u>Dec. 4, 1998</u>	

Please complete if Notice of Intent is prepared by a consultant or someone other than an employee of the site Owner/Operator.

Preparer Printed Name <u>Gerald W. Seveck, P.E.</u>	Firm <u>Foth &amp; Van Dyke</u>
Mailing Address <u>P.O. Box 19012</u>	Title <u>Vice President</u>
City, State, Zip Code <u>Green Bay, WI 54307-9012</u>	Telephone Number <u>(920) 497-2500</u>
Signature of Preparer <u>Gerald W. Seveck</u>	Date Signed <u>12/4/98</u>

Submit via certified or registered mail with \$200.00 application fee  
(unless exempt) to:

Wisconsin Department of Natural Resources  
 Bureau of Wastewater Management  
 Construction Site Storm Water Management Program  
 P.O. Box 7921  
 Madison, WI 53707-7921

LEAVE BLANK - DNR USE ONLY	
Date Received	
Application Complete? (Y/N)	
Construction Site ID #	



## **Attachment 1**

### **Notice of Intent for Storm Water Discharges Associated with Construction Activities under a General WPDES Permit**

#### **Nicolet Minerals Company Crandon Project**

#### **ITEM 1: SITE LOCATION ADDRESS**

The site includes the following areas which will be disturbed during construction:

- Project site, which includes the following:
  - site access road,
  - plant site,
  - tailings management area (TMA),
  - tailings pipeline/access road and drain down sump,
  - railroad spur,
  - potable water supply well,
  - Creek 19-14 mitigation well and pipelines,\*
  - Skunk Lake mitigation pipeline,\*
  - soil absorption system (SAS) and pipeline ;
- Wetland compensation site.

These areas are shown on the attached Figures 1 through 7

#### **ITEM 2: AREA OF CONSTRUCTION SITE AND TOTAL ESTIMATED DISTURBED AREA**

The total area of the project site which may be disturbed is approximately 564 acres. Of this area, the plant site and TMA will encompass approximately 116 and 282 acres, respectively. The soil absorption site will encompass approximately 90 acres. The remaining 76 acres of the disturbed area will include the site and TMA access road corridors; the railroad spur; and the pipelines for potable water, the soil absorption system, and surface water mitigation. An approximate 57 acre area will be disturbed as part of the construction of the project's planned wetland compensation site.

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\*Initial construction will involve mitigation facilities for Creek 19-14 and Skunk Lake only.

### **ITEM 3: PERCENT OF SITE IMPERVIOUS AFTER CONSTRUCTION**

Areas which will be impervious after construction will be located at the plant site, TMA, and SAS as shown on Figures 1 and 2 and will include the following:

- The paved portion of the site access road.
- At the plant site:
  - the pre-production ore storage area;
  - the concentrator building;
  - the service building;
  - the wastewater treatment facilities building;
  - other smaller buildings on the plant site;
  - the tailings pipeline ditch on the plant site;
  - wastewater storage basins 5, 6 and 7; and
  - the two discharge lagoons.
- At the TMA and tailings pipeline/access road:
  - the TMA cells;
  - the reclaim pond;
  - the tailings pipeline ditch; and
  - the drain down sump (Basin 4).
- At the soil absorption site:
  - 40 foot x 40 foot building

The total percentage impervious after construction for each of these areas will be as follows:

		<u>% Impervious</u>	<u>Approximate Acres Impervious</u>
•	Site Access Road (paved portion)	= 100	9
•	Plant site	= 22	25
•	TMA and Tailings Pipeline/Access Road	= 42*	72
•	Soil Absorption Site	= <1	<1

\*Based on construction of TMA cell 1 during initial project construction.

No new impervious areas are anticipated along the wastewater and mitigation discharge pipeline corridors or at the wetland compensation site.

#### **ITEM 4: DISCHARGES DIRECTLY OR INDIRECTLY TO WATERS OF THE STATE**

Construction runoff at the project site which will discharge to surface waters include the following point source discharge outfalls from basins to be constructed by NMC. The locations of the basins and point source discharge outfalls are shown on Figure 2.

Runoff Drainage Area	Routed to Basin Number	Discharged to Outfall Number <sup>1</sup>
Plant site - southwest area	1	001
Plant site - southeast area	2	002
Plant site - construction material storage area	3	003
Tailings pipeline ditch/access road <sup>2</sup>	4	004
Plant site - pre-production ore storage area <sup>3</sup>	TCRB <sup>4</sup>	005
Plant site - central area <sup>3</sup>	TCRB <sup>4</sup>	005
Plant site - northwest area	8	008
TMA site - discharge lagoon	9	009
TMA site - southern area	10	010
TMA site - east area	11	011
TMA site - northeast area	12	012
TMA site - northern area	13	013
TMA site - northwest area	14	014

<sup>1</sup> Outfall 007 is the discharge to the soil absorption system of treated wastewaters generated during operation and closure of the mine and mill, and will not include construction runoff. Outfalls 015, 016, and 017 are for potential discharges of treated wastewater to soft water mitigation sites. A separate WPDES permit application using Form 3400-150 has been submitted to the Wisconsin Department of Natural Resources for treated water discharges generated during operation of the mine and mill. Refer to this application for information concerning the discharge from outfalls 007, 015, 016, and 017. The project does not include an outfall 006.

<sup>2</sup> This outfall will only be active during a portion of the project's construction period. Once contact water generation commences, discharges from basin 4 will be directed to the project's TMA or to its wastewater treatment system, with, in the latter case, subsequent discharge through outfall 007.

<sup>3</sup> This outfall will only be active during a portion of the project's construction period. During operation, runoff from this drainage area will not be discharged to the outfall shown. Instead, the runoff will be collected and routed to the wastewater treatment system, with discharge of the treated wastewater to the soil absorption system via outfall 007.

<sup>4</sup> TCRB = Temporary Construction Runoff Basin.

Plant site and TMA surface water drainage discharges will occur during construction and operations from basins located downstream from both facilities. Runoff from disturbed areas will be routed through runoff basins that will discharge to natural drainageways located within the Little Sand Lake (outfalls 001, 002 and 004), Swamp Creek (outfalls 003, 005 and 008), Duck Lake (outfall 009), Deep Hole Lake (outfall 010), Hemlock Creek (outfalls 011 and 012), or the Bur Oak Swamp and Skunk Lake (013 and 014) drainage basins.

Construction runoff generated at the wetland compensation site will be discharged to the north/south ditch shown on Figure 7. The north/south ditch ultimately discharges to Dutchess Creek located to the southwest of the site (Figure 6).

#### **ITEM 5: PROJECT START DATE AND PROJECT END DATE**

Project construction will commence after the issuance of the required permits from state and Federal agencies, currently expected in the first quarter of 2001. Initial project construction will occur for approximately 36 months. Initial project construction includes development of the underground mine, construction of the plant site, site access road, TMA cell 1, the reclaim pond, the tailings pipeline/access road, the railroad spur, the soil absorption system and discharge pipeline, and the wetland compensation site. Additional project construction will occur in subsequent years during construction of TMA cells 2 and 3. Final project construction activities will take place during site reclamation, which is projected to occur over a 4-year period starting in year 31 after initial project permits are issued.

#### **ITEM 6: SITE EROSION CONTROL PLAN AND STORM WATER MANAGEMENT PLAN**

Information concerning NMC's plans for controlling erosion during construction are included in the project's updated December 1998, *Mine Permit Application* submitted by NMC to the WDNR. Information concerning site surface water controls during construction, operation, and closure are also included in the *Mine Permit Application*. The information included in the *Mine Permit Application* concerning erosion control and site surface water control meets the requirements of Subchapter III of NR 216 for a Construction Site Erosion Control Plan and a Storm Water Management Plan.

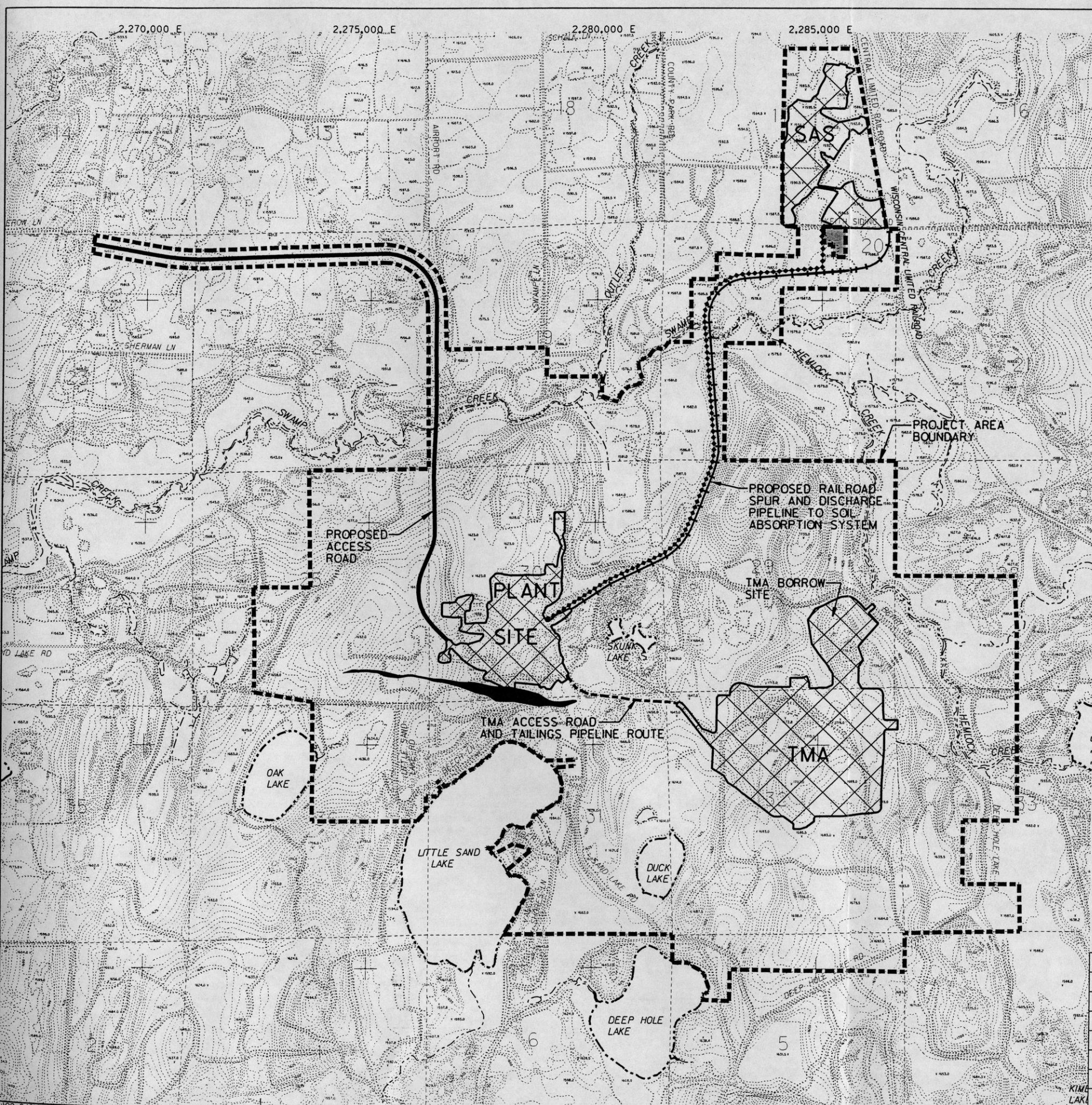
#### **ITEM 7: COMPLIANCE WITH LOCAL SEDIMENT AND EROSION CONTROLS**

Nicolet Minerals Company is not aware of any local requirements concerning sediment and erosion controls which would be applicable to construction activities for this project.

#### **ITEM 8: WPDES PERMIT**

In addition to this *Notice of Intent for Storm Water Discharges Associated with Construction Activities Under a General WPDES Permit*, Nicolet Minerals Company has made separate application to the Wisconsin Department of Natural Resources for a WPDES permit for a new discharge to a soil absorption system via a new outfall 007, and discharges of mitigation water to soft water bodies via new outfalls 015, 016, and 017. The discharges would occur during operation and closure of the facility and would not include construction runoff.





LEGEND

- LAKES
- STREAMS
- EXISTING ROAD
- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- SECTION LINE
- ORE BODY
- PROPOSED ACCESS ROAD
- PROPOSED TMA ACCESS ROAD AND TAILINGS PIPELINE ROUTE
- PROPOSED RAILROAD SPUR
- PROPOSED FACILITIES
- PROJECT AREA BOUNDARY
- PROPOSED SOIL ABSORPTION SYSTEM PIPELINE
- PROPERTY NOT INCLUDED WITHIN PROJECT AREA

NOTES:

- TOPOGRAPHIC BASE MAP DIGITIZED FROM 1" = 1000' SCALE, 5' CONTOUR INTERVAL MAP PREPARED BY AERO-METRIC ENGINEERING, INC., SHEBOYGAN, WISCONSIN. DATE OF PHOTOGRAPHY APRIL 28, 1976.
- HORIZONTAL DATUM BASED ON WISCONSIN STATE PLANE COORDINATE SYSTEM - NORTH ZONE.
- VERTICAL DATUM BASED ON MEAN SEA LEVEL DATUM. CONTOUR INTERVAL IS 5 FEET.
- SECTION LINES DIGITIZED FROM 7.5' SERIES USGS MAPS.
- ORE BODY OUTLINE IS REPRESENTATIVE OF THE SUBCROP AT THE BASE OF THE OVERBURDEN.

110,000 N

Foth & Van Dyke

REVISED	DATE	BY	DESCRIPTION
Δ	11/98	MLD2	REVISED FOR 1998 UPDATE
CHECKED BY:	JKS1	DATE:	MAY '95
APPROVED BY:	PAE	DATE:	MAY '95
APPROVED BY:	GWS	DATE:	MAY '95

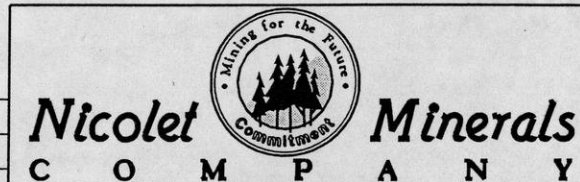


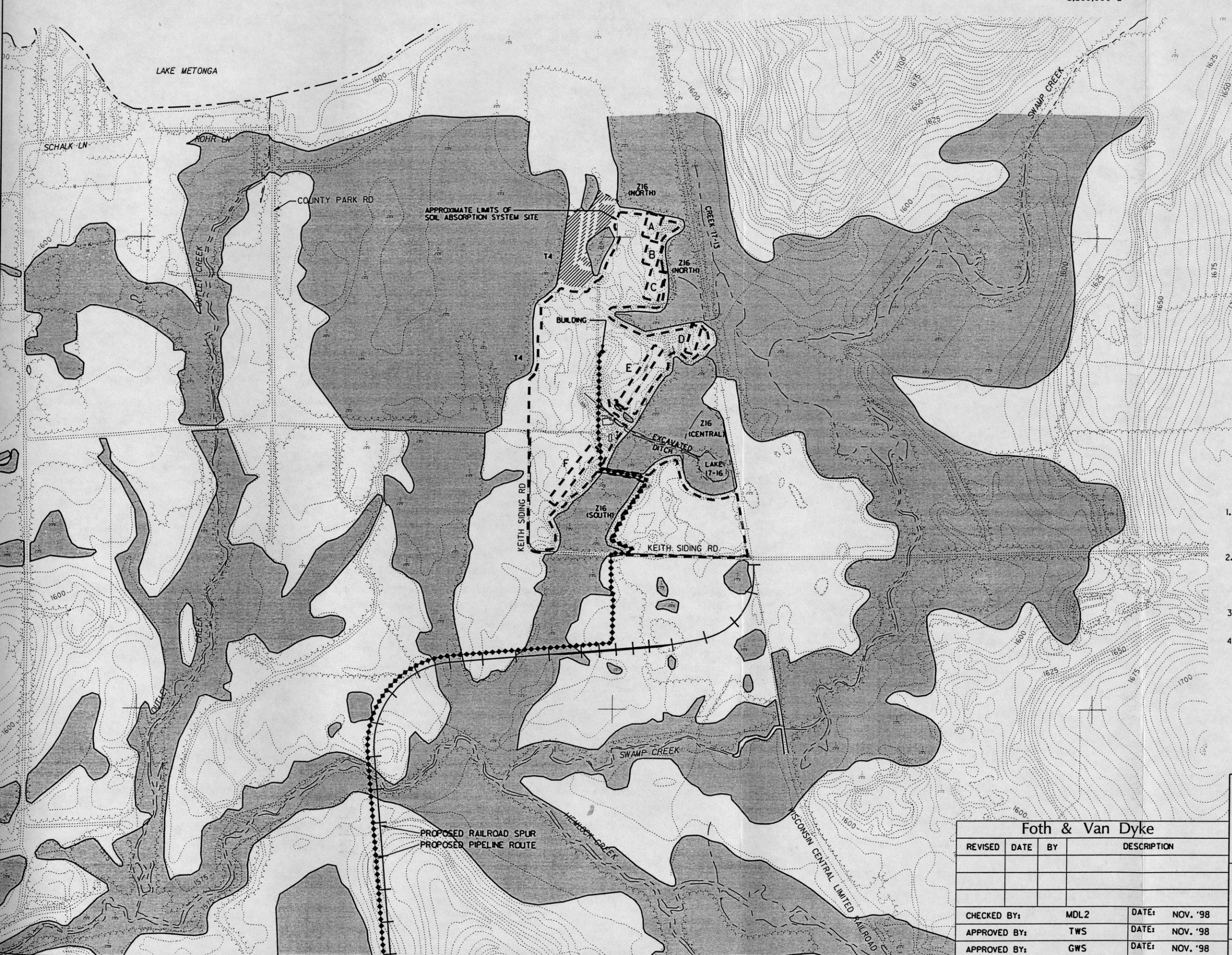
FIGURE 1  
PROJECT AREA

Scale: 0 1200' 2400' Date: MAY, 1995  
Prepared By: Foth & Van Dyke By: JRB2 93C049









## LEGEND

- LAKES
- STREAMS
- EXISTING ROAD
- EXISTING CONTOUR
- SWAMP/WETLAND
- TRAILS
- TREES
- RAILROAD
- WETLANDS
- PROPOSED SOIL ABSORPTION SYSTEM LOCATION
- PROPOSED SAS PIPELINE ROUTE
- PROPOSED RAILROAD SPUR
- APPROXIMATE LIMITS OF SOIL ABSORPTION SYSTEM SITE
- Z16 WETLAND NAME
- DISTURBED WETLAND AREA NOT PREVIOUSLY DELINEATED AS A WETLAND

## NOTES:

- SAS TOPOGRAPHY AND WETLAND SPOT ELEVATIONS NORTH OF KEITH SIDING ROAD FROM SURVEY COMPLETED BY FOTH & VAN DYKE IN LATE SUMMER, 1998. CONTOUR INTERVAL IS ONE FOOT.
- TOPOGRAPHY, WATER BODIES, WETLANDS, ETC. OUTSIDE SAS AREA BASED ON TOPOGRAPHIC BASE MAP DIGITIZED FROM THE 1" = 1000' SCALE 5 FOOT CONTOUR INTERVAL MAP PREPARED BY AERO-METRIC ENGINEERING INC., SHEBOYGAN, WI. DATE OF PHOTOGRAPHY APRIL 28, 1976.
- HORIZONTAL DATUM BASED ON WISCONSIN STATE PLANE COORDINATE SYSTEM - NORTH ZONE.
- VERTICAL DATUM BASED ON MEAN SEA LEVEL DATUM.

125,000 N

Foth &amp; Van Dyke

REVISED	DATE	BY	DESCRIPTION
CHECKED BY:		MDL2	DATE: NOV. '98
APPROVED BY:		TWS	DATE: NOV. '98
APPROVED BY:		GWS	DATE: NOV. '98



**Nicolet Minerals**  
C O M P A N Y

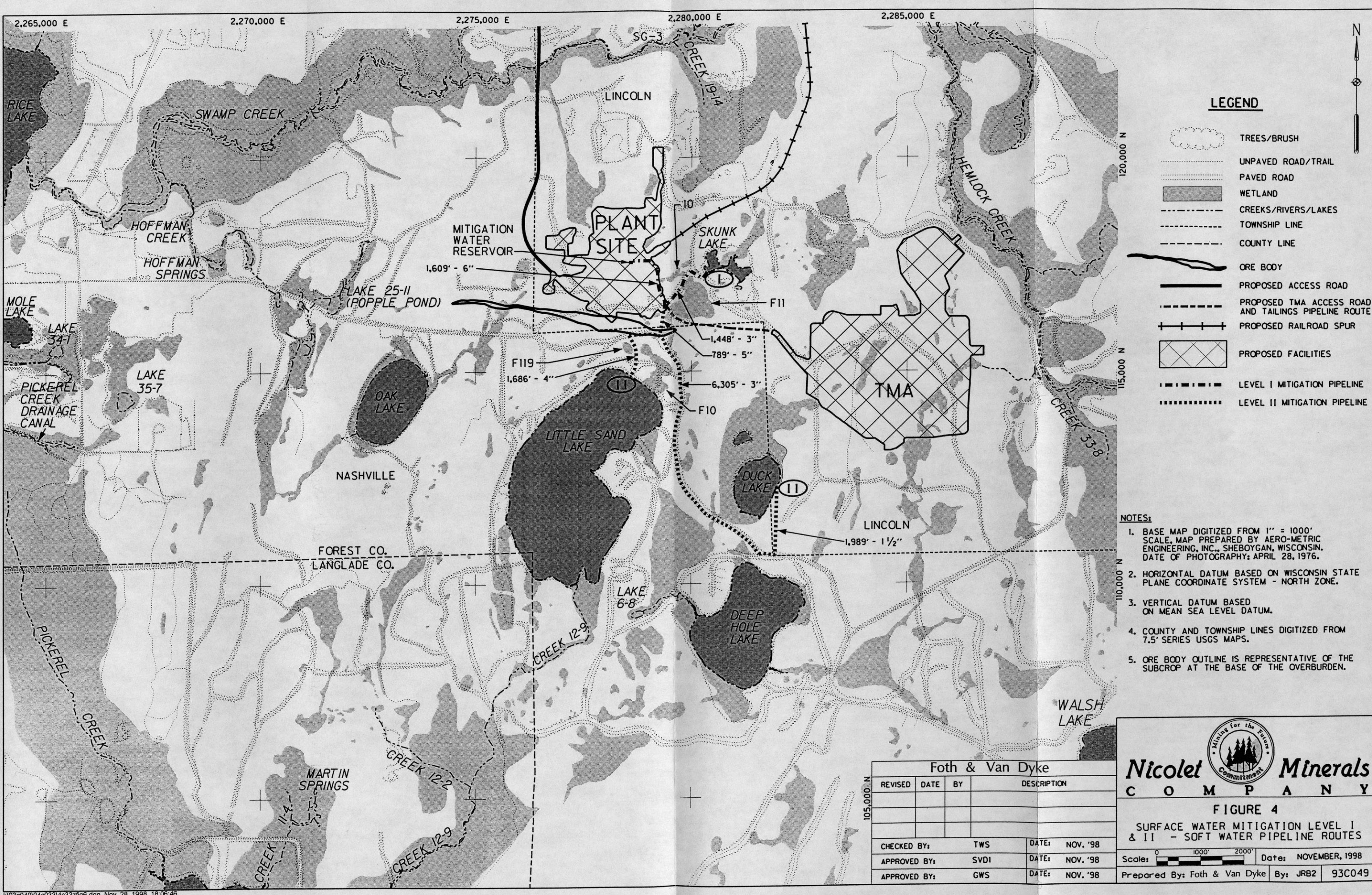
## FIGURE 3

DISCHARGE PIPELINE AND  
SOIL ABSORPTION SYSTEM

Scale: 0 500' 1000' Date: NOVEMBER, 1998

Prepared By: Foth & Van Dyke By: JOW 93C049

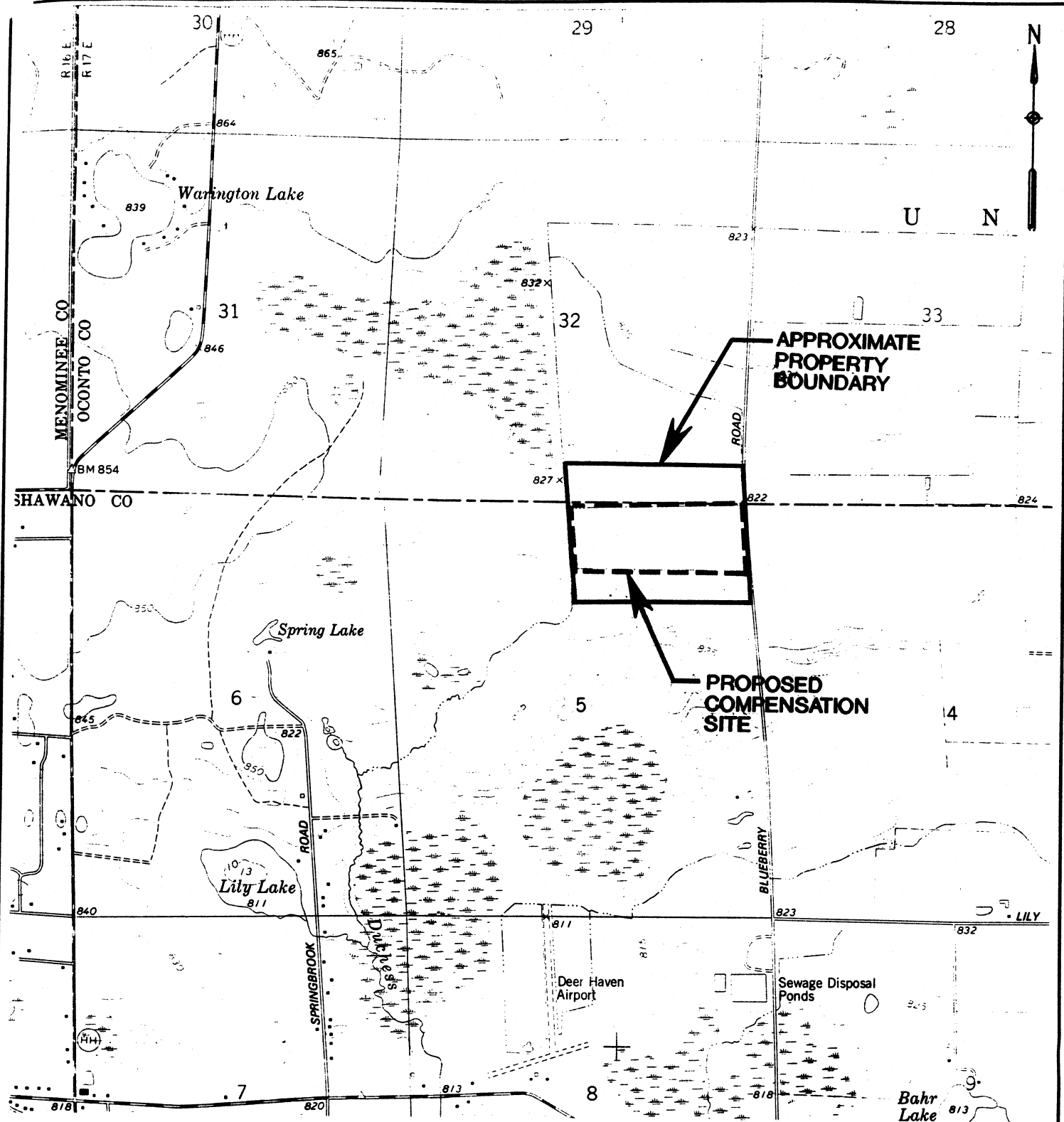













SOURCE: U.S.G.S. 7.5 MINUTE TOPOGRAPHIC  
 QUADRANGLE - CECIL, 1974  
 OCONTO & SHAWANO COUNTY, WISCONSIN

Foth & Van Dyke			
REVISED	DATE	BY	DESCRIPTION
CHECKED BY:		JKS1	DATE: JULY '95
APPROVED BY:		RFS	DATE: JULY '95
APPROVED BY:		GWS	DATE: JULY '95



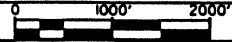
# Nicolet Minerals

## C O M P A N Y

**FIGURE 6**

**WETLAND COMPENSATION SITE LOCATION**

Scale: 0 1000' 2000'

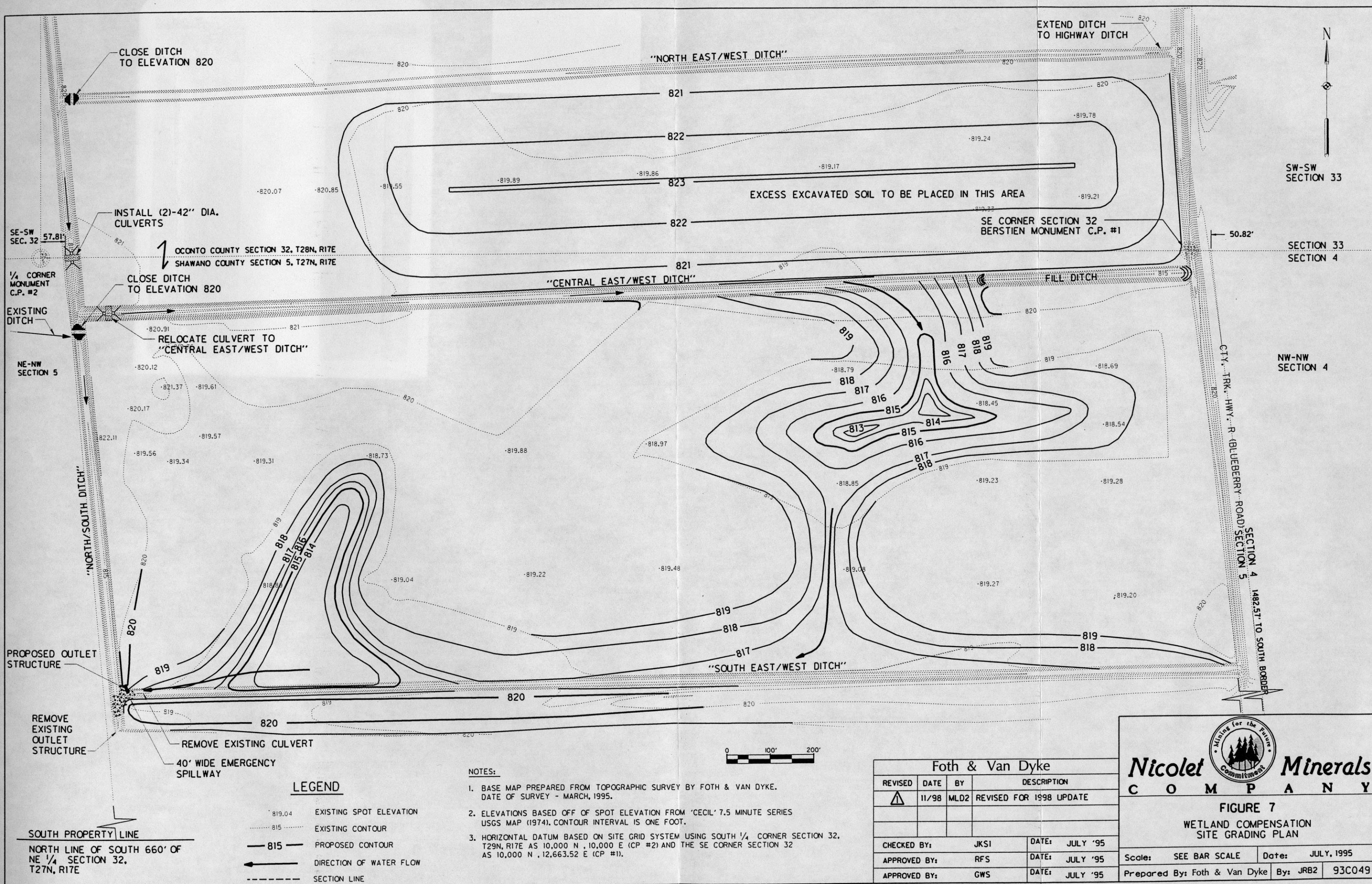


Date: NOVEMBER, 1998

Prepared By: Foth & Van Dyke

By: JR82

93C049



NOTES:

1. BASE MAP PREPARED FROM TOPOGRAPHIC SURVEY BY FOTH & VAN DYKE. DATE OF SURVEY - MARCH, 1995.
2. ELEVATIONS BASED OFF OF SPOT ELEVATION FROM 'CECIL' 7.5 MINUTE SERIES USGS MAP (1974). CONTOUR INTERVAL IS ONE FOOT.
3. HORIZONTAL DATUM BASED ON SITE GRID SYSTEM USING SOUTH 1/4 CORNER SECTION 32, T29N, R17E AS 10,000 N, 10,000 E (CP #2) AND THE SE CORNER SECTION 32 AS 10,000 N, 12,663.52 E (CP #1).

Foth & Van Dyke			
REVISED	DATE	BY	DESCRIPTION
△	11/98	MLD2	REVISED FOR 1998 UPDATE
CHECKED BY:		JKS1	DATE: JULY '95
APPROVED BY:		RFS	DATE: JULY '95
APPROVED BY:		GWS	DATE: JULY '95



**Nicolet Minerals**  
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**FIGURE 7**  
WETLAND COMPENSATION  
SITE GRADING PLAN

Scale: SEE BAR SCALE Date: JULY, 1995  
Prepared By: Foth & Van Dyke By: JR82 93C049