



March 21, 2011

Wisconsin Department of Natural Resources  
Mining Coordinator – WA/5  
101 South Webster Street  
PO Box 7921  
Madison, WI 53707-7921

Dear Director:

Re: Notice of Intent to Drill  
Wisconsin Administrative Code NR 130.10

Gogebic Taconite, LLC submits to your agency a Notice of Intent to Drill per the requirements of the above standard. Included, you will find:

- A General Drilling Map
- An Aerial Photo Map
- A Drilling Plan
- Reclamation Cost Estimate
- Site Photos

Any questions should be directed to our Hurley office at (715) 561-2601. Our mailing address is:

Gogebic Taconite, LLC  
402 Silver Street  
Hurley, WI 54534

Sincerely,

A handwritten signature in blue ink, appearing to read "William T. Williams".

William T. Williams  
President

## DRILLING PLAN

### OVERVIEW

This Exploration Project will consist of the drilling of 8 holes. The holes will be drilled by corehole techniques. A rock sample will be collected and analyses will be performed offsite.

The drillholes will be drilled through the Ironwood-Iron Formation on an angle near perpendicular to the bedding. The Ironwood –Iron Formation dips at 60 to 70 degrees from the horizontal in a north by northwest direction. The Ironwood –Iron Formation is a sedimentary rock formation of Paleoproterozoic age.

### SITING

The project site is located in Ashland and Iron Counties of Wisconsin. The project area has been commercially forested and existing roads will be used to access the drilling sites as well as serving as locations for the drilling sites.

The drilling contractor will use compact core drilling machines to fit the size constraints of the existing roads. It is not proposed to create new roads for accessing the drilling project.

The drill sites will each be approximately 50 feet by 25 feet in size.

Site preparation would include stockpiling any topsoil material in the drill site area. Since the sites are located on existing disturbances, it is anticipated that no topsoil will be encountered. The site will be provided with grading and drainage control as described below.

### DRAINAGE CONTROL

An 80 cubic foot capacity Sedimentation Sump will be excavated in soil. The sump will serve as sedimentation control for the drilling activity. All surface runoff occurring within the drilling site will be directed into the sump. Also, surface runoff will be diverted away from the drillsite by the use of berms, hay bale dikes and/or ditches. This activity will allow for a controlled work area for any surface runoff to be directed into sedimentation control before leaving the drillsite. See sketch for conceptual detail.

### METHOD

The surface soils will be drilled to the top of bedrock. A steel pipe casing will be installed into the bedrock to serve as a surface casing. The hollow center drill bit and drill steel is inserted through the larger diameter surface casing to access the bedrock. Drill water is pumped through the center of the drill steel to cool and lubricate the drill bit. Rock cuttings are flushed out between the outside of the drill steel and the bedrock. A rock core sample remains in the interior of the drill steel and is removed by wireline methods.

Rock samples collected from the drilling will be catalogued and boxed on site. The samples and boxes will be moved offsite for further processing.

The water used to flush the cuttings will be directed into the sedimentation sump. Water from the sedimentation sump will be reused to flush cuttings from the borehole. Additional water is added to the closed loop system as the hole is advanced.

No drilling additives or muds are proposed to be used in this project.

An option to using the sedimentation sump as a water source would be a tanked system to collect the drill water and cuttings. At the end of drilling, the tanks would be removed to a central location to empty the cuttings and drill water. The drill water would be placed into a sump and allowed to clarify before discharging. The cuttings would be collected for additional analytical work.

#### WATER SOURCE

Water will be obtained from either Ballou Creek or Tyler's Fork. On Ballou Creek, an existing bridge will be used to access the stream. On Tyler's Fork, Moore Park Road has access to the water's edge. Temporary pumps will be used for withdrawing water as needed. If dry conditions are encountered to where the water withdraw would impact the stream flow, water can be obtained from local municipal sources.

A water truck will be used or water lines will be installed from the water intake to the drilling sites. The determination of the method of water transport will be made to best fit the circumstances.

#### ABANDONMENT PLAN

Once the drilling and testing have been completed, the drill steel and core bit will be removed from the hole. All drillholes will be grouted with neat cement or concrete grout. Grouting procedures will follow requirements as set forth by the Wisconsin Administrative Code Chapter NR130, Section NR 130.06(1). After grouting activity has been completed, the drill rig will be removed from the site.

#### SITE RECLAMATION

Once the drill rig has been removed from the site, the area will be regraded to match its original contours. The Sedimentation Sump shall be filled in. Slopes will be graded to conform to the pre-existing topography.

In the event that any topsoil that had been stockpiled, it will be returned to the site and spread once regrading is completed.

All sites shall be seeded to establish vegetation. Composite soil samples will be collected. The samples will be submitted to the local agronomy center for available nutrient analysis. The analysis will provide a recommended fertilizer application rate.

Soil preparation may include raking, discing or harrowing to loosen the soil.

The seeding mixture will consist of the following varieties:

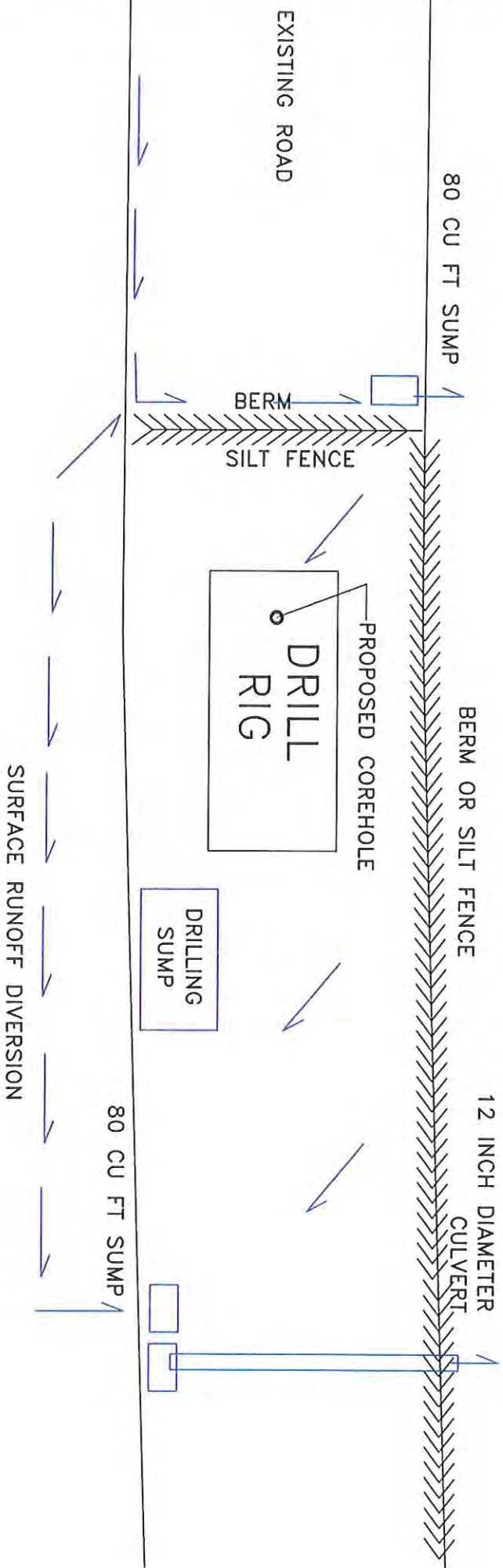
- 40% Kentucky Bluegrass
- 25% Red Fescue
- 5% Redtop
- 20% Perennial Ryegrass
- 10% White Clover

Application rate shall be at 65 pounds per acre or 1.5 pounds per 100 square feet.

Once fertilizer and seed have been applied, the seeded area will be raked, disked, harrowed or other method in order to cover the seed.

Mulching material shall consist of straw or hay in an air-dry condition, wood excelsior fiber or wood chips. Mulch shall be spread at a thickness of ½ to 1-1/2 inches. Compacted bales are to be broken and loosened to create a loose blanket over the seeded area.

The pre-existing roads shall be graded and left in place for future use by the landowner. If the road is aggregate surfaced, grading will be performed to establish drainage towards the ditchline. Culverts will be left in place. If culverts are removed, berms will be created across the roadway to divert surface drainage off the roadbed.



TYPICAL SITE LAYOUT  
NO SCALE

293.13 (2)(b) Minimum standards for exploration, prospecting and mining shall include the following:

1. Grading and stabilization of excavation, sides and benches  
All excavations shall be graded as to provide stable slopes.
2. Grading and stabilization of deposits of refuse;  
Not Applicable. No refuse will be generated. Rock samples shall be removed from the site prior to reclamation activity.
3. Stabilization of merchantable by-products;  
Not Applicable. No by-products will be generated. Rock samples shall be removed from the site prior to reclamation activity.
4. Adequate diversion and drainage of water from the exploration, prospecting or mining site;  
Surface Runoff shall be diverted away from the drill site by means of ditches and/or earthen berms.
5. Backfilling;  
Each drillhole shall be grouted with neat cement or fine concrete grout. Each drill site shall be backfilled as to remove any unstable slopes. The drill site shall be backfilled as to blend into the original contour that was in place prior to the exploration activity taking place.
6. Adequate covering of all pollutant-bearing minerals or materials;  
Any pollutant-bearing minerals or materials identified will be isolated from exposure to water and atmosphere.
7. Removal and stockpiling, or other measures to protect topsoils prior to exploration, prospecting, or mining.  
Topsoil is not anticipated to be encountered since the proposed activity will occur on previously disturbed areas. Any topsoil encountered will be isolated, removed and stockpiled.
8. Adequate vegetative cover;  
Refer to the Abandonment Plan for details of applying vegetative cover.
9. Water Impoundment;  
This program will use small sumps for providing drill water to the drilling machine. The sumps are in a closed loop in that the water from the drill is



returned to the sump for reuse. Start up water is transported to the site by trucks or by pipelines installed specifically for the drilling project.

10. Adequate screening of the prospecting or mining site.

Not Applicable. The activity is for an exploration site. However, the site is compact in size and located in a forested area approximately one mile from public roads.

11. Identification and prevention of pollution as defined in s. 281.01 (10) resulting from leaching of waste materials;

The drilling program is not anticipated to create waste materials or to cause leaching from waste materials. In the event that a waste material is identified that would create a leaching problem, that material will be removed from the site and disposed of in an approved disposal site.

12. Identification and prevention of significant environmental pollution.

Procedures will be made to identify sources of pollution to air, water and land. For example, stormwater techniques will be used to divert surface runoff away from the drilling activity. Any surface runoff into the drilling area will be diverted to sedimentation sumps prior to leaving the site. Drill cuttings will be disposed of by disposing in designated areas. Any toxic or hazardous wastes and other solid waste shall be disposed of into solid or hazardous waste facilities or otherwise in an environmentally friendly manner.

293.46 (2)(c) Minimum standards for reclamation of exploration sites, where appropriate, and for prospecting and mining sites shall conform to s.293.01 (23) and include provision for the following:

1. Disposal of all toxic and hazardous wastes, refuse, tailing and other solid waste in solid or hazardous waste disposal facilities licensed under ch.289 or 291 or otherwise in an environmentally friendly manner;

No toxic or hazardous wastes, refuse, tailing and other solid waste material are anticipated. If toxic or hazardous wastes, refuse, tailing or other solid waste material is identified, it will be disposed of in solid or hazardous waste disposal facilities or in an environmentally friendly manner.

2. Sealing off tunnels, shafts or other underground openings, and prevention of seepage in amounts which may be expected to create a safety, health or environmental hazard, unless the applicant can demonstrate alternative uses of tunnels, shafts or other

openings which do not endanger public health and safety and which conform to applicable environmental protection laws and rules.

Not Applicable. This Exploration Project will consist of drilling coreholes. No tunnels, shafts or other large openings will be made.

3. Management, impoundment or treatment of all underground or surface runoff waters from open pits or underground prospecting or mining sites so as to prevent soil erosion, flooding, damage to agricultural lands or livestock, wild animals, pollution of surface or subsurface waters or damage to public health or safety.

Not Applicable. No open pits or underground prospecting will be included within the Exploration activity.

4. Removal of all surface structures, unless they are converted to an alternative use.

Not Applicable. No surface structures are proposed within this Exploration activity.

5. Prevention or reclamation of substantial surface subsidence.

Not Applicable. No activity that would cause surface subsidence to occur is proposed.

6. Preservation of topsoil for purposes of future use in reclamation.

The majority of the Exploration Activity will occur on previously disturbed areas. Any topsoil encountered will be stockpiled for redistribution upon reclamation activity.

7. Revegetation to stabilize disturbed soils and prevent air and water pollution, with the objective of reestablishing a variety of populations of plants and animals indigenous to the area immediately prior to exploration, prospecting or mining.

Revegetation will occur after regrading and site preparation.

8. Minimization of disturbance to wetlands.

Not Applicable. The proposed Exploration Activity is to occur on previously disturbed areas.



Gogebic Taconite, LLC  
Notice of Intent to Drill  
Reclamation Cost Estimate  
March 21, 2011

Location	Activity	Number	Units	Unit Cost	Tot Cost	Location Cost
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Site P02

Regrading	2	Hours D6 dozer	\$110	\$220	
Seed	2	Pounds Seed	\$4	\$8	
Mulch	10	Straw Bales	\$10	\$100	
Seed Labor	4	Hours Labor	\$50	\$200	
<b>TOTAL</b>					<b>\$528</b>

Site P09

Regrading	2	Hours D6 dozer	\$110	\$220	
Seed	2	Pounds Seed	\$4	\$8	
Mulch	10	Straw Bales	\$10	\$100	
Seed Labor	4	Hours Labor	\$50	\$200	
<b>TOTAL</b>					<b>\$528</b>

Site P17

Regrading	2	Hours D6 dozer	\$110	\$220	
Seed	2	Pounds Seed	\$4	\$8	
Mulch	10	Straw Bales	\$10	\$100	
Seed Labor	4	Hours Labor	\$50	\$200	
<b>TOTAL</b>					<b>\$528</b>

Site P18

Regrading	2	Hours D6 dozer	\$110	\$220	
Seed	2	Pounds Seed	\$4	\$8	
Mulch	10	Straw Bales	\$10	\$100	
Seed Labor	4	Hours Labor	\$50	\$200	
<b>TOTAL</b>					<b>\$528</b>

Site P22

Regrading	2	Hours D6 dozer	\$110	\$220	
Seed	2	Pounds Seed	\$4	\$8	
Mulch	10	Straw Bales	\$10	\$100	
Seed Labor	4	Hours Labor	\$50	\$200	
<b>TOTAL</b>					<b>\$528</b>

Site 148R

Regrading	2	Hours D6 dozer	\$110	\$220	
Seed	2	Pounds Seed	\$4	\$8	
Mulch	10	Straw Bales	\$10	\$100	
Seed Labor	4	Hours Labor	\$50	\$200	
<b>TOTAL</b>					<b>\$528</b>

Site P24

Regrading	2	Hours D6 dozer	\$110	\$220	
Seed	2	Pounds Seed	\$4	\$8	
Mulch	10	Straw Bales	\$10	\$100	
Seed Labor	4	Hours Labor	\$50	\$200	
<b>TOTAL</b>					<b>\$528</b>

Site P26

Regrading	2	Hours D6 dozer	\$110	\$220	
Seed	2	Pounds Seed	\$4	\$8	
Mulch	10	Straw Bales	\$10	\$100	
Seed Labor	4	Hours Labor	\$50	\$200	
<b>TOTAL</b>					<b>\$528</b>

**TOTAL PROJECT ESTIMATED RECLAMATION COST**

**\$4,224**

P02 Site  
Existing Conditions  
March 15, 2011



Site P02 View Looking North



Site P02 View Looking West



Site P02 View Looking East



Site P09  
Existing Conditions  
March 15, 2011



Site P09 Looking East



Site P09 Looking North



Site P09 Looking West



Site P17  
Existing Conditions  
March 15, 2011



Site P17 Looking East



Site P17 Looking North



Site P17 Looking South



Site 18  
Existing Conditions  
March 15, 2011



Site P18 Looking East



Site P18 Looking West

Site P22  
Existing Conditions  
March 15, 2011



Site P22 Looking East



Site P22 Looking South



Site P22 Looking West



Site P24  
Existing Conditions  
March 15, 2011



Site P24 Looking NE



Site P24 Looking SE



Site P24 Looking SW



Drillsite 148R  
Existing Conditions  
March 15, 2011



Site 148R View Looking NE



Site 148R View Looking SE



Site 148R View Looking SW



Site P26  
Existing Conditions  
March 15, 2011



Site P26 Looking NE



Site P26 Looking SE



Site P26 Looking SW



Access Road  
Existing Conditions  
March 4, 2011

Bridge over Ballou Creek



Access Road  
Existing Conditions  
March 4, 2011



Road near P22 looking West



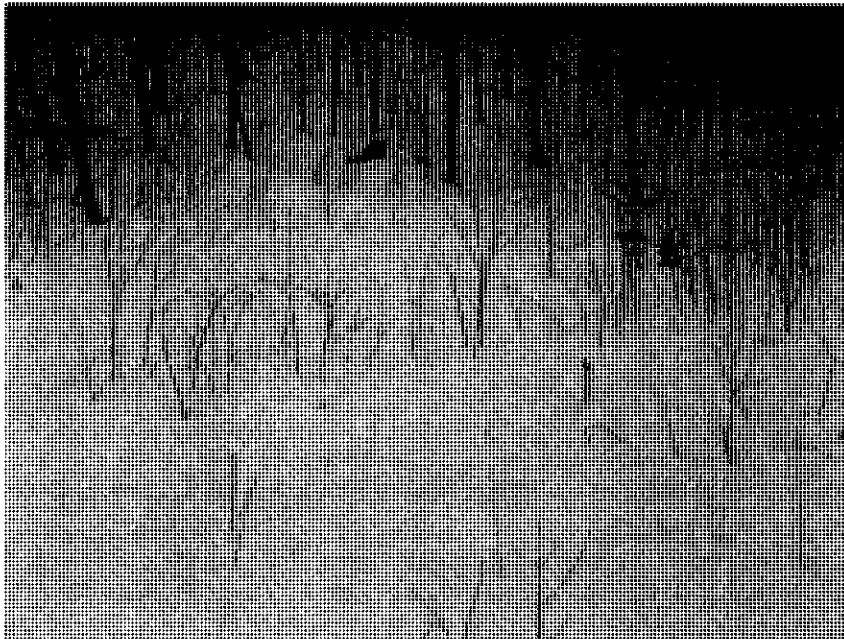
Road between P22 & P24



Access Road  
Existing Conditions  
March 4, 2011



Existing Culvert near P22



Log Landing near P22



Access Road  
Existing Conditions  
March 4, 2011



Log Landing near P22



Access Road near P24

Access Road  
Existing Conditions  
March 4, 2011



Access Road near 148R



Access Road near P26