

NON-METALLIC MINING RECLAMATION PLAN

Operator: Haas Sons, Inc.

Owner: William Savina, Thomas Dusick Etal, Derks Trust

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Summary

This reclamation plan has been developed to provide information about the existing site of the proposed mine, the proposed site operations, and how the mine will be reclaimed to the proposed post mining land use.

This reclamation plan is for an existing gravel pit north side of 105th Ave, in the town of Delmar in Chippewa county. There is an existing gravel pit, forest, and wetland at this site. The wetland areas around the site consist of fresh meadow, hardwood swamp, and open water. The upland forest is maple, birch, and oak. There are also undergrowth within the upland forest of native trees. The open gravel pit is currently in use and has no trees or grasses growing in it. Neighboring properties consist of woodland, agriculture, and wetlands.

The operator will mine sand and gravel in the existing pit as well as expand into new area around the existing mine from the natural hogback deposit that exists at the property.

A. Site Information

1. Landowner

Landowner: William Savina
Address: 118 W 8th Ave.
City, State, ZIP: Stanley WI, 54768

2.Landowner

Landowner: Thomas Dusick Etal
Address: 15979 296th St.
City, State, ZIP: Cornell WI, 54732

3.Landowner

Landowner: Matthew & Jodi Derks Trust
Address: 11183 320th St.
City, State, ZIP: Boyd WI, 54726

Applicant: Haas Sons, Inc.
Address: 203 E Birch St.
City, State, ZIP: Thorp, WI 54771

4. Lease:

The operator has signed a lease with the landowner for the purpose of mining sand and gravel on their properties.
See attached lease (Appendix C).

5. Legal Description:

Parcel No: 22905-1721-00000000, 22905-1712-00000000, 22905-1724-00020000, and 22905-1713-00020000

NE NW SUBJECT TO GRAVEL & SOIL LEASE TO JOHN S OLYNICK INC UNTIL 9/1/2021 PER D#800817. INC EASEMENT PER DOC #885932.

NW NE SUBJECT TO GRAVEL & SOIL LEASE TO JOHN S OLYNICK INC UNTIL 09/01/2021 PER DOC #800817. INC EASEMENT PER DOC #885932.

SE NW EX THE S 350' OF THE E 175' SUBJECT TO GRAVEL & SOIL LEASE PER DOC #865042.

SW NE EX THE S 750' INCLUDES EASEMENT LIFE ESTATE TO CHARLES F DUSICK SUBJECT TO GRAVEL & SOIL LEASE TO JOHN S OLYNICK INC UNTIL 09/2021 PER D#803106. ALSO INC EASEMENT PER DOC #885932.

6. Property Owners Within 660 Feet of Project Site

Steven & Cynthia Derks Trust 33640 115 th Ave. Boyd WI, 54726	John & Denise Molloy 10371 320 th St. Boyd WI, 54726
Charles Briggs 11338 330 th St. Boyd WI, 54726	Gregory Derks Trust 33928 115 th Ave Boyd WI 54726
Joshua Chwala 600 N Clark St. Thorp WI 54771	Curtis Zais PO Box 465 Thorp WI 54771
Matthew & Jodi Derks Trust 11183 320 th St. Boyd WI, 54726	

7. Soil Information

During site investigations the operator documented the following soils horizon thicknesses in the test holes.

A horizon – 4-6 inches of topsoil

B horizon – 2-3 feet of clay subsoil

Using the soil survey estimates the maximum volume of topsoil for the entire mine site is approximately 9,280 cubic yards of topsoil and approximately 46,400 cubic yards of subsoil.

B. Site Operations

1. Description of Materials to be Extracted

Sand and Gravel to be mined at the site.

2. Extraction and Processing to be Conducted at the Site

The existing driveway from 105th Ave will be used to access the site. In general, Sand and gravel will be mined in an approximate order of cells and restored in a similar order of mining direction.

Sand and gravel will be mined, crushed, washed, and removed from the site. A portable crushing and washing plant will be used to process the material and stockpile it on site. Sand and gravel will be excavated and transported using standard mining equipment such as bulldozers, excavators, loaders, haul trucks, and conveyors.

There may be ponds created by berming up overburden to catch stormwater and will be used as wash ponds. Water for material washing process will be pumped from these ponds. No high-capacity wells will be installed or used to support material processing.

No flocculants or other chemicals will be used to support material processing. No waste materials that are generated off-site will be hauled to the mine, stockpiled or used in site reclamation.

Topsoil may be hauled to the mine to be stored in a stockpile, to be resold later for municipal or private jobs.

3. Volumes of Materials

A sequence of mine cells is planned to systematically mine and reclaim the site. The anticipated area of disturbance and estimated volume of raw materials to be removed during the life of the mine is as follows.

Cell	Area (acre)	During 1 st two years (cubic yards)	During Full Life of Operation (cubic yards)
1	12	0	160,000
2	5.3	100,000	212,000
3	6.3	0	252,000
Total	23.6	100,000	624,000

Site Dewatering and Effluent Discharge

Dewatering will not be anticipated at the site.

4. Stormwater Permits/Management

The operator will obtain a Wisconsin DNR Nonmetallic Mining stormwater permit and manage stormwater in accordance with the standards established in the permit. At a minimum stormwater will be contained within the mine boundaries for all rainfall events up to the 25-year, 24-hour frequency storm (4.87 inches).

Soil berms created during topsoil and subsoil stripping will be stabilized and used to contain and direct stormwater runoff towards the excavated floor of the mine where it will infiltrate. Stormwater will be managed this way over the entire life of the mine. A notice of intent will be sent to the DNR. The Quarry will be internally drained and there will be no outfalls.

5. Erosion Control & Permits

All topsoil and subsoil stockpiles will be graded to a slope of 3:1 or flatter and stabilized as soon as conditions allow to conserve soil and limit erosion. Silt fence will be installed along all soil stockpiles to control erosion. Berms will be stabilized using best management practices including seeding, mulching, erosion control mat, hydro-seeding, etc. Erosion and sediment control best management practices will be installed as determined by the Wisconsin Erosion Control Product Acceptability List (PAL) Channel and Slope Erosion Control Matrices (Appendix F).

6. Reclamation Activities During Operations

A process of contemporaneous reclamation will be used to systematically mine and reclaim the site. Under this process the site will be reclaimed as soon as possible after materials have been extracted and processed using the planned cell sequence.

Cell 1 is the existing mine site and everything above the water elevation is currently mined. Cell 2 will be the first to mined and reclaimed followed by cell 3. Cell 1 will be reclaimed at the end of mining operations as shown on final site map.

At the beginning of the mining operations for each cell all the topsoil (estimated 4-6 inches) will be stripped and stockpiled in berms. Following topsoil stripping operations all the subsoil (estimated 2-3 feet) will be stripped and stockpiled in berms that are separate from the topsoil berms. All berms will be shaped to a 3:1 slope or flatter and seeded with DOT Seed Mix 20.

Mining operations will then excavate, process, and remove sand and gravel from the site.

When excavation of sand and gravel in a cell is complete, rough grading work will be performed to create slopes around the perimeter of the mine that are 3:1 or flatter.

Subsoil will then be placed over the slopes and flat lying areas of mine to a depth of 12 inches or more. Topsoil will then be placed over the subsoil to a depth of 4 inches or more.

The site will then be seeded. Areas with slopes steeper than 5:1 will have straw mulch applied. Areas flatter than 5:1 will not receive mulch.

7. Timetable/Sequence of Operations

<u>Location</u>	<u>Activity</u>
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Cell 1	This will take approximately 3 years. This is the existing mine and the only material remaining in cell is below water elevation. The cell will be mined from west to east creating a pond towards the driveway entrance. Cell 1 will be reclaimed when mining operations are complete as shown on final site map.
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Cell 2	Mining sand and gravel with standard mining equipment will start on the south boundary of this cell and proceed north to extract the layer of sand and gravel above water elevation. Once the north boundary is reached material will be mined from the north to south boundary below the water elevation creating the pond shown on final site map. This will take approximately 3 years. Once mining in cell 2 is complete cell 2 will be restored.
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Phase 3	Mining sand and gravel with standard mining equipment will start on the east boundary of this cell and proceed west to remove the material above the water elevation. Once west boundary is reached sand and gravel will be mined below the water table from west to east creating the final pond as shown on
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final site map. This will take approximately 4 years. Cell 3 will be reclaimed after the mining cell 3 is complete.

Timetable

Estimated period of operation/extraction for each cell:

Cell 1	3 years
Cell 2	3 years
Cell 3	4 years
Total	10 years

C. Final Site

1. Disposition of Structures and Roads

The current driveway that enters from 150th Ave will remain in place.

Structures such as the scale house and scale will be removed prior to final reclamation. The ponds that were created during mining will remain in place as shown on the Final Site Map (See Appendix C – Cross Sections). There are no areas of concentrated flow entering, leaving, or within the reclaimed mine site.

2. Soil Reapplication & Reconditioning

Overburden piles will be leveled off or used on slopes. This work will be done with scrapers or bulldozers. Slopes will be stabilized using best management practices including seeding, mulching, erosion control mat, hydro-seeding, etc. Erosion and sediment control best management practices will be installed as determined by the Wisconsin Erosion Control Product Acceptability List (PAL) Channel and Slope Erosion Control Matrices (Appendix F).

Subsoil material will then be removed from the berms with excavators or loaders and transported in dump trucks to the area in the mine to be reclaimed. Trucks will be routed to limit traffic over areas where subsoil has already been applied. Trucks will dump subsoil and bulldozers will spread the material to be 12-24 inches thick on the slopes and floor of the mine. The use of tracked equipment while spreading subsoil will limit soil compaction.

Topsoil material will then be removed from the berms with excavators or loaders and transported in dump trucks to the area in the mine to be reclaimed. Trucks will be routed to limit traffic over areas where subsoil or topsoil has already been applied. Trucks will dump topsoil and bulldozers will spread the material to be 4-6 inches thick on the slopes and floor of the mine. The use of tracked equipment while spreading topsoil will limit

soil compaction.

In the event that rubber tire equipment cannot be routed to prevent subsoil and topsoil compaction deep tillage equipment will be used to alleviate compaction in the upper 12 to 14 inches of the soil profile.

3. Safety Assurances

To address safety concerns with a pond proposed on the final site map. A slope will be no steeper than 3:1 and shall be extended no less than 6 feet vertically below the lowest seasonal water level (NR135.10(3)). This will allow for safe exit from the pond.

4. Seeding Plan

Seeding will be selected to achieve the post mining land use that is planned for each designated area. Areas that will be reclaimed to wildlife habitat will be seeded to native grasses. Seed will be broadcast seeded and rolled to improve seed – soil contact. DNR Seed Mix 2 will be used in these areas and applied at the rates listed (see Appendix B). The wildlife pond area will be allowed to vegetate below the water line using natural seed distribution without seeding by the operator.

5. Future Use

The mine site will be reclaimed to establish a wildlife pond shown on final site map.

6. Criteria for Successful Reclamation.

The site will be successful reclaimed when the site achieves stability, and all mining operation are complete. To measure stability vegetation must cover the site and be associated with DNR seed mix 2. An average 70% vegetative cover of the site and will have very little to no erosion with no major gullies and topsoil depth will be an average of 4 inches or more. Site monitoring will be conducted to assess the success of vegetation establishment and monitor the site for invasive or noxious plant species. Areas poor vegetation establishment shall be examined to determine the cause. Invasive or noxious species will be spot treated with herbicide according to the product label or hand removal and disposed of properly.