

Griggs-Lang Consulting Geologists, Inc.
8 Brunswick Road Troy, New York 12180
Phone: (518) 270-5920
Fax: (518) 270-5921

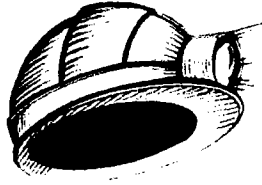
**MOMBACCUS EXCAVATING, INC.
BLUESTONE MINE**

**Amanda Drive
Town of Rochester, Ulster County, New York**

MINED LAND-USE PLAN (SITE PLAN)

**FOR
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AND
THE TOWN OF ROCHESTER**

September 2006



Griggs-Lang Consulting Geologists, Inc.
679 Plank Road Clifton Park, New York 12065
Phone: (518) 373-7078 Fax: (518) 373-7080

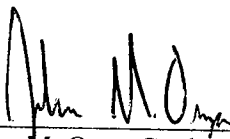
**MOMBACCUS EXCAVATING, INC.
BLUESTONE MINE**

**Amanda Drive
Town of Rochester, Ulster County, New York**

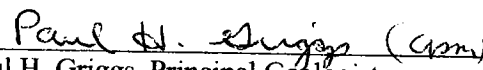
**MINED LAND-USE PLAN (SITE PLAN)
FOR
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AND THE TOWN OF ROCHESTER**

Respectfully submitted by: Mr. Keith Kortright, President
Mombaccus Excavating, Inc.

Prepared by: Griggs-Lang Consulting Geologists, Inc.



John M. Orza, Geologist



Paul H. Griggs, Principal Geologist

Date: September 8, 2006

TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.0 PROPOSED PROJECT	1
2.1 Applicant.....	1
2.2 Project Need.....	1
2.3 Overview of Project Design.....	2
3.0 MINING PLAN	4
3.1 Mining Site	4
3.2 Water Resources	5
3.2.1 Water Table	5
3.2.2 Drainage	5
3.2.3 Wetlands.....	5
3.2.3.1 NYSDEC Wetland	5
3.2.3.2 Federal Wetlands.....	6
3.3 Bedrock.....	6
3.4 Soils	6
3.5 Type of Mine and Mining Method	7
3.5.1 Type of Mine	7
3.5.2 Mining Method.....	7
3.5.3 Setbacks.....	8
3.5.4 Disposition of Vegetation.....	8
3.5.5 Soil Storage Areas and Berms.....	8
3.5.6 Lift Configuration.....	9
3.5.7 Access/Truck Routes.....	9
3.5.8 Hours of Operation.....	10
3.5.9 Processing.....	11
3.5.10 Sequence and Direction of Mining.....	11
3.5.10.1 Entrance Road.....	11
3.5.10.2 Initial Development.....	11
3.5.10.3 Direction of Mining	11
3.5.11 Office.....	12
3.6 Methods for Preventing Pollution and Soil Erosion	12
3.6.1 Dust and Noise Control	12
3.6.1.1 Dust	12
3.6.1.1 Noise	13
3.6.2 Potential Impacts to Surface Water	17
3.6.2.1 Stormwater Run-off Control	17
3.6.3 Potential Impacts to Groundwater	19
3.6.3.1 Quality.....	19
3.6.3.2 Quantity.....	19
3.6.4 Visual Analysis.....	20
3.6.4.1 Methodology	20
3.6.4.2 Inventory of Aesthetic Resources	21
3.6.4.3 Distance of View.....	21
3.6.4.4 Analysis.....	21
3.6.4.5 Findings.....	22
3.6.4.6 Conclusions.....	24
4.0 RECLAMATION PLAN	24
4.1 Land-Use Objective	24
4.2 Reclamation Method.....	26
4.2.1 Final Grading and Face Stabilization	26
4.2.2 Revegetation.....	26

4.2.3 Haulageways	27
4.2.4 Disposal of Stockpiles and Removal of Equipment	27
4.2.5 Drainage	28
4.3 Reclamation Schedule	28

Appendix

Completed Environmental Assessment Form, Part 1
October 18, 2006 Letter from New York Natural Heritage Program
Projected Sound Level Calculations

(In Pockets)

Location Map showing Truck Route
Mining Plan (Site Plan) Map, dated July 3, 2006
Reclamation Plan Map, dated July 3, 2006
Typical Sections, dated July 3, 2006
Viewshed Map, dated July 3, 2006
Line-of-Sight Cross Sections, dated July 3, 2006

1.0 INTRODUCTION

The following report for Mombaccus Excavating, Inc. of Kerhonkson, New York is submitted as required by the New York State Mined Land Reclamation Law and rules and regulations promulgated thereunder. This report is also submitted as part of the applicant's request for a special use permit from the Town of Rochester and includes the requirements for Site Plan Review as designated in Section 140-49 of the Town's zoning code.

The report covers the planned Bluestone Mine located in the Town of Rochester, Ulster County, New York. The site is located at the end of Amanda Drive (private road owned by the applicant) off Rogue Harbor Road, as shown on the Location Map in the Appendix.

The report consists of a Mining Plan describing the existing site, how the mine will be worked and measures to mitigate potential environmental impacts, a Reclamation Plan describing how the mine will be reclaimed and an Appendix containing a completed Environmental Assessment Form (Part 1), a Location Map, a Mining Plan (Site Plan) Map (showing adjacent parcels, existing conditions and near future planned improvements) with soils and slopes inlay, a Reclamation Plan Map (showing the condition of the site upon completion of reclamation), Typical Sections (showing existing and proposed topography), a Viewshed Map (showing potential zones of visibility) and Line-of-Sight Cross Sections.

2.0 PROPOSED PROJECT

2.1 Applicant

The applicant, Mombaccus Excavating, Inc. (Mombaccus), is a local, family owned company established in 1987. The family has owned and mined other properties in the area and has been providing high quality construction materials locally since the early 1960's. Mombaccus has removed aggregates on this same homestead parcel as part of past developments of this property including the construction of ponds. Mombaccus supplies the growing need for construction aggregates for use in residential, commercial and industrial construction and maintenance. The materials produced at the sites have been used in the construction of most of the homes and driveways in the area. Mombaccus and its related companies employ about 12 people.

2.2 Project Need

Construction materials, such as crushed stone and sand and gravel, are a necessity of modern life. These materials are used on a daily basis in every walk of life all across the United States in roads,

bridges, buildings, drainage courses and slope stabilization, landfills, construction projects, homes, commercial and residential developments. Construction materials make it possible to have safe roads and bridges, homes and comfortable offices, hospitals and stores. Each year 9,942 pounds of crushed stone and sand and gravel are produced for each person in New York State¹.

According to the Mineral Information Institute, every American born will need 1.71 million pounds of stone, sand and gravel in their lifetime.

The foremost necessities of the mining industry are:

- Mines must be sited where the raw material is found in sufficient quantity and quality to provide a viable source.
- Construction materials are high tonnage, low unit cost products.
- Local sources of construction materials require less transportation. Less transportation means less wear and tear on the highways, less environmental impact to areas along trucking routes and less cost to the end user.

Acute shortages of construction materials exist locally, particularly in downstate New York, and Ulster County. Potential sources must compete against residential/commercial development and restrictive zoning. The natural resources in the state must be identified, evaluated and protected in order to sustain economic growth and to maintain and improve existing infrastructure.

Mining companies such as Mombaccus are attempting to meet the ongoing market demand generated by every person that uses roads, bridges, sidewalks, driveways, homes, buildings, hospitals, malls, landfills and other similar conveniences of modern life.

2.3 Overview of Project Design

Keith and Gary Kortright have built their homes in the southern area of the homestead parcel. Keith now wants to build a new home in the northern area of the homestead parcel. At present, the topography in the proposed area for Keith's new home is not conducive to home construction. In order to construct a home, it must be re-graded to the design of the reclamation plan.

¹ Source: United States Geologic Survey (Year 2002 production by State and Commodity) and New York State (estimated July 1, 2002 population from the Population Division, U.S. Census Bureau released December 22, 2004).

The area of the planned Bluestone Mine is rural in nature and contains very few homes. The closest residents are the applicants' homes and one of their employees.

The site is zoned "R-1" according to the Town of Rochester Zoning Map. Mining is a permitted use under the Town of Rochester zoning code by Special Use Permit.

This application is for the grading of a parcel for development of a single family residence that has a mining component to it. Since removal of over twenty vertical feet of consolidated stone over a multi-year period is necessary to accomplish this, a State permit to mine the parcel is required. In order to meet the requirements for State and Town approval, the applicant purposely designed the mine to be low intensity and minimize the impact on the surrounding community. The major design factors to accomplish these goals are outlined below and described in more detail throughout the report:

- *Limited hours of operation*—Mombaccus has voluntarily agreed to limit hours of operation to 7 a.m. to 5 p.m., Monday through Friday. No mining will occur on weekends or legal holidays.
- *Increased Setbacks*—The New York State legislature gave sole authority to regulate mining, including setbacks, to NYSDEC. NYSDEC requires a setback of at least 25 feet from all property lines, rights-of-way and easements. Mombaccus has voluntarily agreed to increase the setbacks from all of the adjacent properties as appropriate to contain potential impacts. In addition, the mining limits are situated such that there are only three residences within 2,300 feet of any excavation area. The three residences consist of the applicants' homes and one of their employees. Only three additional residences are within one-half mile of any excavation area. The increased setbacks and surrounding residences are shown on the Mining and Reclamation Plan Maps.
- *No Processing*—Many mine operations include processing plants that crush, screen and wash the sand and gravel into products suitable for sale. Mombaccus has voluntarily agreed that no processing will be done at the planned Bluestone Mine. This reduces the intensity of the operation by reducing the amount of equipment that will operate at the mine, thereby reducing potential impacts.
- *No Sale to Drive-up Customers*—Almost all mines in New York sell to drive-up customers. By voluntarily agreeing not to do so, Mombaccus has effectively controlled the number and amount of trucks that will haul material from the site. The truck drivers hauling material from the site will follow the same truck route, will quickly become

familiar with the route and will haul on a regular schedule. This practice greatly contributes to Mombaccus' ability to limit the hours of operation. Additionally, since there are no sales to drive-up customers, no signage will be needed.

- *Limited truck trips*—Since the method of extraction is a slow process, there will be very few truck trips in a given day. There will likely be frequent days when no material will be hauled off-site.
- *Limited Equipment*—Typically, the only equipment operating at the mine will be a mechanical hammer to break the rock, an excavator with a ripper bucket will rip and peel back rock and one front end loader loading approximately four trucks each hour (a maximum of 40 truck trips over a ten hour day). Typically, only one truck will be on the property at any time.

3.0 MINING PLAN

3.1 Mining Site

The proposed mine site is located entirely on lands owned by Mombaccus Estates, Ltd., an affiliate of Mombaccus Excavating, Inc. The life of mine area consists of an approximately 7.5+/- acre excavation area and an access road of approximately 2+/- acres for a total of 9.5+/- acres.

Mombaccus Estates, Ltd and the Kortright family, owns several parcels in the vicinity of the planned mining site. The parcels together make up the homestead parcel. A few of the parcels to the south have been sold off. The property lines of the applicant and surrounding properties are shown on the Mining Plan Map. Construction aggregates have been removed from several of these parcels for development purposes, including the construction of ponds. The property lines of the applicant shown have been overlaid from a survey map (referenced in the titleblock), while the surrounding property lines are taken from the appropriate tax maps from the Towns of Rochester and Wawarsing. The names and lot numbers of the adjoining property owners are shown on the Mining Plan Map.

The mining site encompasses a portion of a small bedrock ridge that trends roughly southwest-northeast. The bedrock to be mined is made up of a feldspathic and quartz sandstone commonly referred to as "bluestone," interbedded with thin layers of shaly partings.

The topography in and around the mine site ranges from gentle to steep slopes and near vertical bedrock outcrops. Due to the varying topography and reclamation objective, the area to be developed must be graded to a relatively flat area. The topography shown on the Mining and

Reclamation Plan Maps is derived from a combination of the Kerhonkson, NY 7.5' USGS digital elevation model and site specific topographical survey.

The mining site consists of and is bounded on all sides by wooded lands and bedrock outcrop. The wooded lands are made up of a mix of deciduous and evergreen mature trees as well as younger trees and some dense undergrowth. Areas on top of the ridge generally contain smaller trees and light undergrowth. Extensive wooded lands exist for distances well over a mile to the northwest, west and southwest and over a half mile to the north, south and east. Only wooded lands within the life of mine area will be removed for mining.

The majority of the adjacent parcels are land locked with no residences on them. The mine site is situated such that there are only three residences within 2,300 feet of the main excavation area with the nearest residence being more than 1,550 feet away. These three residences consist of the applicants' homes and one of their employees. Only three additional residences are within one-half mile of the main excavation area.

Amanda Drive is a private road owned by the applicant.

About 9.5 acres will be mined over the life of the mine, as outlined in red on the Mining Plan Map and Reclamation Plan Map in the Appendix.

3.2 Water Resources

3.2.1 Water Table

A small, groundwater fed pond that was previously created by mining, exists on the parcel of land (owned by the applicant) to the south of the life of mine area, just west of the base of the entrance road. The water surface was measured at an elevation of 789 feet amsl, more than 175 feet above the proposed lower limit of excavation. There are no seeps or springs within the proposed life of mine area or in the steep slopes above the proposed final floor adjacent to the life of mine area. The water table is not expected to be encountered during mining.

3.2.2 Drainage

There are no intermittent or perennial drainages within the life of mine area.

3.2.3 Wetlands

3.2.3.1 NYSDEC Wetland

There are no State regulated wetlands in or adjacent to the project site.

3.2.3.2 Federal Wetlands

The United States Army Corps of Engineers (ACOE) has jurisdiction over wetlands that are smaller than those regulated by NYSDEC. A mapped federal wetland exists to the south and west of the life of mine area. The location and ACOE code for this wetland is shown on the Mining and Reclamation Plan Maps.

The ACOE regulates activities in the wetlands but does not require a setback from the wetland. No mining activities are proposed in or adjacent to this wetland. No runoff from mined areas to the wetland will occur and no significant impacts to the wetland due to the mine will occur.

3.3 Bedrock

The bedrock at the site is at or near the surface and outcrops in many locations within the parcel to be mined. The bedrock in this area consists of thin beds of feldspathic and quartz sandstone with some interbedded layers of very thin shaly partings.

3.4 Soils

The life of mine area is overlain primarily by the Arnot-Lordstown-Rock outcrop complex, moderately steep (ARD). The unit is made up of about 35 percent Arnot very bouldery silt loam and very bouldery loam; 30 percent Lordstown very bouldery silt loam and very bouldery loam; 20 percent rock outcrop; and 15 percent other soils. The Arnot soils are shallow, somewhat excessively drained and moderately well drained; and the Lordstown soils are moderately deep and well drained. These very bouldery soils formed in glacial till. The relief is dependant upon bedrock but generally has a stair-step appearance with overall slopes ranging from 15 to 25 percent. Permeability is moderate in both soils and runoff is very rapid.

In wooded areas, such as what exists at and around the project site, the typical Arnot soil profile consists of two inches of very dark grayish brown very bouldery silt loam, overlying about 14 inches of yellowish brown, friable, very channery loam subsoil. The typical Lordstown profile consists of a dark brown, very bouldery silt loam surface layer four inches thick overlying 32 inches of yellowish brown, friable subsoil.

The Arnot-Lordstown-Rock outcrop complex comprises about 87% of the life of mine area.

About 9% of the site of the site (predominantly the entrance road) consists of the Lordstown-Arnot-Rock outcrop complex (LOC), which is as described above with very minor variation with the

Lordstown comprising about 40 percent; the Arnot 30 percent; and 15 percent each of rock outcrop and other soils.

The remaining 4% of the site (predominantly the entrance road) consists of the Arnot-Oquaga-Rock outcrop complex, very steep (ARF) and the Scriba and Morris very bouldery soils, gently sloping (SEB). The ARF unit is made up of about 40 percent Arnot very bouldery silt loam; 30 percent Oquaga very bouldery silt loam; 20 percent rock outcrop; and 10 percent other soils. The Arnot soils are shallow, somewhat excessively drained and moderately well drained; and the Oquaga soils are moderately deep and well to excessively drained. These very bouldery soils formed in glacial till on hillsides valley sides and mountains. Slopes range from 35 to 70 percent. Permeability is moderate in both soils and runoff is very rapid.

Typically, the Arnot subsoil is directly under the forest litter and humus extending to a depth of 14 inches. It is friable, brown, very bouldery silt loam in the upper 3 inches and friable, brown, very channery silt loam in the lower 11 inches. The typical Oquaga profile in a wooded area consists of subsoil directly under the forest litter and humus extending to a depth of 26 inches. It is very friable, strong brown, very bouldery silt loam in the upper 5 inches and friable and very friable, yellowish red, very channery loam in the lower 21 inches.

The Scriba and Morris very bouldery soils, gently sloping (SEB) unit consists of deep, somewhat poorly drained soils formed in glacial till on glaciated uplands. They are found on broad flats and concave foot and toe slopes. Slopes range from 3 to 8 percent. These soils rarely occur together. Permeability is moderate above the fragipan in both soils, is slow in the fragipan and substratum of the Scriba soils and is slow or moderately slow in the in the fragipan and substratum of the Morris soils. Most areas of these soils receive runoff and seepage from upland areas.

The locations of the mapped soils are shown in the soils and slopes inlay on the Mining Plan Map in the Appendix.

3.5 Type of Mine and Mining Method

3.5.1 Type of Mine

The mine will be a surface consolidated sandstone mine.

3.5.2 Mining Method

The mine will be worked using hammering and ripping mechanical removal techniques. Salable lumber will be selectively removed. A bulldozer or equivalent will remove non-salable lumber and

brush. Overburden will be pushed into perimeter berms within the permit term area. Silt fences will be installed as necessary along the perimeter of the life of mine area or any other area deemed necessary. The perimeter berms and silt fencing will help maintain internal drainage until the faces and benches are established. Starting at the top, a mechanical hammer will break the rock vertically to create manageable size pieces. An excavator with a ripper bucket will then peel back the stone in the floor along planes of relative weakness in the stone. When material is to be hauled off-site, a front-end loader or the ripper bucket will be loaded into on-road trucks and hauled about 2.5 miles to Mombaccus Excavating, Inc. Mine (DEC ID#30578) on Rochester Center Road to be processed at their existing processing plant. The material from the Bluestone Mine will supplement the material at the Mombaccus Excavating, Inc. Mine (MEI) and enable Mombaccus to provide a wider range of products.

No increases in production, output or hours of operation or any changes in equipment or mining method are being proposed or implied for the MEI mine as a result of this application.

Stripping operations are a relatively minor part of the overall operation and will occur a few weeks per year when necessary. Active excavation and loading will occur on the mine floor throughout the construction season.

Parts of the life of mine area not in active excavation will remain wooded to optimize screening of the mine.

3.5.3 Setbacks

Increased setbacks have been incorporated into the mine plan. Setbacks from excavation areas range from over 660 feet to the north, over 1100 feet to the south, over 230 feet to the west and a 50-foot setback to the east. All setbacks exceed the state minimum of 25 feet. Mining will continue to the limits indicated on the Mining and Reclamation Plan Maps.

3.5.4 Disposition of Vegetation

Salable lumber will be selectively removed. Stumps and non-salable brush and lumber will be chipped and incorporated into final reclamation as mulch or hauled to a NYSDEC approved landfill. It will not be mixed with any soil storage piles or berms.

3.5.5 Soil Storage Areas and Berms

Very limited soil overburden exists at the site. The area to be mined is predominantly exposed bedrock or very thin soil and forest litter mixed with eroded bedrock sandstone from outcrops.

