SMS strategic mining solutions
www.miningstrategy.com
Geologists & Mining Consultants

April 22, 2021

NYSDEC- Region 6 Utica Sub-Office-Permits
207 Genesee St. State Office Building
Utica, NY 13501

Re: Application ID: 6-3038-00081/00003; Tom Sunderlin/White Lake Granite Quarry

Dear Mr. Goodale,

Thank you for comments outlined in your NOIA letter dated April 26, 2021. Please find the following summarized response in this letter Addendum and revised Mine & Reclamation Plans for the White Lake Granite Quarry project site.

Department comments and responses of the applicant are presented in summary for the convenience of the reviewer.

1. *Describe and illustrate in the narrative and Mining Plan Map all erosion and sediment control structures that will be installed to retain all storm water on site, if any.*

The proposed White Lake Granite Quarry is designed to operate above the water table and without surface water discharge. The receiving portion of the site that will be established as mining support area is underlain by Adams Series soils which are characterized as "excessively drained". However, during initial ground disturbance and subsequent periods of stabilization erosion sediment control devices may be needed to contain localized surface water drainage. If need arises, silt sock/silt fencing or equivalent devices will be installed in downslope portions of the disturbed area to contain potential drainage. Notes have been added to the revised Mine Plan Map in areas where E & S controls may be needed, as requested. However, should need arise E & S controls will be deployed **in any portion** of the affected area where the potential for surface water discharge may occur.

2. *All soils and overburden stockpiled for reclamation must be stored within the permit term area (affected area) which is ultimately in the life of mine.*

For clarification, all soils and overburden storage piles shall be placed within the approved affected area. Also, no mining related activity or disturbance shall occur outside the approved affected area throughout the life of the mine.

3. *Describe and illustrate in the narrative and Mining Plan Map a general location of the portable processing plant and stockpiles.*

The operator requests that occasional temporary processing of waster rock fragments be permitted as necessary to produce limited quantities of crushed stone for use making on site

improvements or for external sales based on market demand, if any. The plant will be placed within the mining support area in the general location of the "portable processing plant area" note added to the revised Mine Plan Map. Based on necessity of safe and efficient operations the plant will need to be placed on relatively flat ground roughly at the lowest elevation practicable.

With regards to potential additional noise impacts related to the portable plant operations, a portable crushing plant rated at a capacity of less than 150 tph generates less than 82 dBA measured at 50 feet. The sound level is less than most of the equipment modeled in the NIA (refer to Section 4.2.1.2 of the MLUP). Calculation of the plant operating simultaneously with all other equipment will not add to sound levels emanating from the site. It should also be noted that attenuation of sound from distance, barriers and vegetation will further diminish the potential for impacts to receptors.

4. *Include in the blasting section that all blast events will be monitored with a seismograph at the property line, or a nearby receptor if a complaint is received.*

Blast monitoring will be conducted as directed in the MLR Permit using a properly calibrated seismograph placed at a location designed to measure ground vibration and air overpressure at or near the property line of the project site. If an alternative location of seismograph monitoring becomes prudent it should be determined by Department staff with input from the Agency and the Blaster-in-Charge. The applicant is amenable to placement of the seismograph as directed by the regulating community.

5. *Describe the final grade of all slopes, besides the vertical bedrock face, during the reclamation process.*

Proposed final grade is generally shown on the revised Reclamation Plan Map included with this submittal. Final grade of all slopes not shown as vertical or sub-vertical shall be no steeper than 1.5 to 1. For instance, the quarry floor will be backfilled using native residual rocky waste fragments to a slope 1.5 to 1 or less and subsequently covered with soil overburden for revegetation. The mining support area will be finish graded to approximate original contour, covered with soil overburden and seeded for revegetation. Please also refer to Section 5.0 of the MLUP for a detailed description of proposed final reclamation.

6. *The Department does not anticipate any significant impacts from mining activities during the proposed hours of operations, except drilling and blasting activities. Revise hours of operation for these activities.*

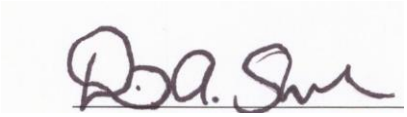
Blasting activities, when necessary, are proposed to occur during the seasonal operating period of mid to late April to early November. The hours during which blasting is proposed will be between the hours of 9am-3pm with no more than two events to occur in a single day. Blast monitoring will be conducted as required in the MLR Permit using a properly calibrated seismograph placed at a location designed to measure ground vibration and air overpressure at or near the property line of the project site or alternative location determined by the Department.

7. *The proposed application illustrates all excavation within a 5.2 acre area of the 26.7 acre life of mine. Does the applicant anticipate excavating outside the 5.2 acre area in the future for granite reserves or unconsolidated minerals within the life of mine? If so, the modification would need to be reviewed through SEQRA.*

The applicant/operator does not plan or anticipate excavation beyond the proposed 5.2 acre excavation area shown on the revised plans. Mining of unconsolidated materials is not proposed and there are no plans to conduct any type of mining or excavation beyond that described in this Addendum and the MLUP. The applicant is aware that any changes to the permitted activity will require an application to modify and full review under SEQR as well as Agency and local approvals.

Please feel free to contact me with questions. Thank you very much.

Sincerely,

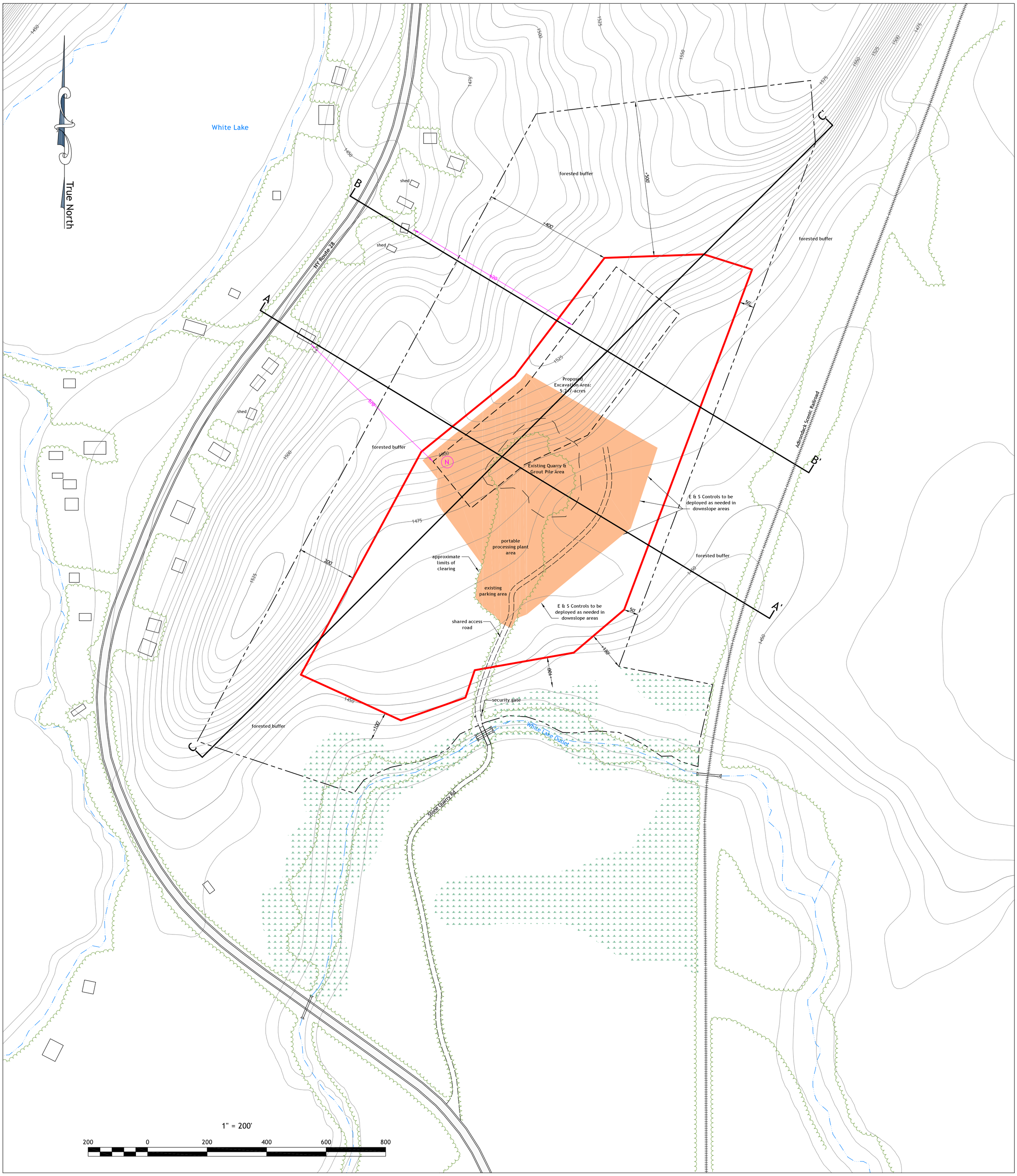


David A. Shank, PG
Strategic Mining Solutions, LLC

ec. Chris Lucidi, NYSDEC Mined Land Reclamation
Andrew Abbott, NYSDEC Mined Land Reclamation
Adirondack Park Agency
Tom Sunderlin, Applicant/Owner

Enclosures:

- Deed: September 20, 2005 (not included)
- Deed: March 14, 2012 (not included)
- "MINE PLAN MAP" dated February 15, 2021; last revised April 2021
- "RECLAMATION PLAN MAP" dated February 15, 2021; last revised April 2021



MINE PLAN MAP

White Lake Granite Quarry

NYSDEC Mine ID: pending

Town of Forestport/Oneida County, NY

Mapping & Consulting Services by:

strategic mining solutions

prospecting • planning • permitting • problem solving

MAP DETAILS

- Date: February 15, 2021
- Scale: 1 inch = 200 feet
- Datum: Mean Sea Level
- USGS Quad: Woodgate, NY
- Contour Interval: 5 feet
- Drafted by: DAS

REVISIONS

Date	Description	By
4/2021	Revisions requested by APA & DEC.	DAS

LEGEND

- Property Line (Red Rock Quarry Assc.)
- Life of Mine Boundary (Proposed)
- Excavation Area (Proposed)
- 1450 Contour Line: 25'
- Contour Line: 5'
- Stream/Edge of Water
- Wetland Area
- Building/Structure
- Adirondack Scenic Railroad
- Road: Unpaved
- Road: Paved
- Treeline/Hedge
- Culvert
- Minimum Distance for Noise Calculations

ACREAGE SUMMARY

- Red Rock Quarry Assc. LLC : 60.0+/-acres
- Life of Mine Area: 26.6+/-acres
- Affected Area (Permit term 2021-2026: 8.8+/-acres

NOTES

- Base topography from 10-meter DEM of Woodgate 7.5 min. USGS quadrangle.
- Surface features digitized from 2017 high-resolution (1-foot) natural color orthophoto.
- Wetlands: from USFWS National Wetlands Inventory application & delineation of northern wetland boundary.

True North

White Lake

NY Route 28

shed

shed

shed

forested buffer

forested buffer

forested buffer

forested buffer

forested buffer

partially to fully back-filled & revegetated floor

Deepest el. 1465 +/-
floor el. 1445 +/-

shared access road

security gate

White Lake Outlet

Stone Quarry Rd

Adirondack Scenic Railroad

A

A'

B

B'

C

C'

400'

200'

100'

50'

50'

130'

180'

1450

1475

1500

1525

1550

1575

1600

1625

1650

1675

1" = 200'

200 0 200 400 600 800

RECLAMATION PLAN MAP

White Lake Granite Quarry

NYSDEC Mine ID: pending

Town of Forestport/Oneida County, NY

Mapping & Consulting Services by:

strategic mining solutions
prospecting • planning • permitting • problem solving

MAP DETAILS

- Date: February 15, 2021
- Scale: 1 inch = 200 feet
- Datum: Mean Sea Level
- USGS Quad: Woodgate, NY
- Contour Interval: 5 feet
- Drafted by: DAS

REVISIONS

Date	Description	By
4/2021	Revisions requested by APA & DEC.	DAS

LEGEND

- Property Line (Red Rock Quarry Assc.)
- Life of Mine Boundary
- Crest of Highwall
- Contour Line: 25'
- Contour Line: 5'
- Stream/Edge of Water
- Wetland Area
- Building/Structure
- Adirondack Scenic Railroad
- Road: Unpaved
- Road: Paved
- Treeline/Hedge
- Culvert

ACREAGE SUMMARY

Red Rock Quarry Assc. LLC : 60.0+/-acres

Area to be reclaimed over the life of the mine: 26.6+/-acres

NOTES

- Base topography from 10-meter DEM of Woodgate 7.5 min. USGS quadrangle.
- Surface features digitized from 2017 high-resolution (1-foot) natural color orthophoto.
- Wetlands: from USFWS National Wetlands Inventory application & delineation of northern wetland boundary.

April 28, 2021

Adirondack Park Agency
PO Box 99
1133 NY Route 86
Ray Brook, NY 12977-0099

Re: Project Permit: 2021-0075; Tom Sunderlin/White Lake Granite Quarry

Dear EPS Staab,

Thank you for comments outlined in your NIPA letter dated April 20, 2021. Please find the following summarized response in this letter Addendum and revised Mine & Reclamation Plans for the White Lake Granite Quarry project site.

Agency comments and responses of the applicant are presented in summary for the convenience of the reviewer.

1. *General Information Request Item 13- Wetlands: Please revise the maps titled "Mine Plan Map and Reclamation Plan Map, prepared by SMS to also include the portion of wetlands described as being located on the southeastern property corner and depicted on the enclosed wetlands air photo interpretation, to show a 100-foot buffer from wetlands in this area to the proposed LOMB. Field verification of wetlands may be required if the proposal changes to include development or mining activities near the 100-foot wetland buffer.*

The proposed LOMB is revised as requested to avoid wetlands and the 100-foot buffer. The adjustment results in a 0.1+/-acre reduction in the proposed LOMA to 26.6+/-acres. Land disturbance of any kind is not proposed to occur in wetlands or the 100-foot buffer.

2. *GIR Item 14- Local Government Notice Form: Please have the LGN form completed, signed by the appropriate town official and submitted to the Agency.*

The LGN Form was emailed to the Town of Forestport Town Clerk Tracy Terry on April 26, 2021.

3. *GIR Item 2 – Current Property Owners: For the current deed of record for this project site, please provide the cover page filed in the Oneida County Clerk's Office that shows the recordation date and Book/Page or Instrument Number. Please also provide the following deeds of record:*

    - *Deed to Nicholas Gentile, Thomas Sunderlin, Jr. and Marin Zarnock from Nicholas Gentile, dated September 30, 1993 and recorded in Book 2664, page 360, including cover page; and*

- *Deed recorded on September 28, 2005 under the Instrument number 2005-020580, including cover page.*

Please find the requested deeds appended to this Addendum.

4. *Supplemental Information Request Item 5- Operation Profile: The proposed hours of operation for the mineral extraction, including facility construction, maintenance, extraction operations, material processing (i.e., screening and crushing), material loading and transportation, are proposed to operate from April-November, Monday -Friday 6am-7pm and Saturday 7am-12pm, with no operation occurring on Sundays or legal holidays.*

   Due to the proximity of the proposed mineral extraction with respect to numerous year-round and seasonal residences, please reduce the proposed hours of operation to start later and end earlier Monday-Friday to mitigate potential impacts to adjoining landowners.

As a measure of good faith and out of respect to the neighbors the applicant will agree to reduce the proposed hours of operation, as requested. However, it should be noted that with regards to potential impacts from truck traffic and noise that neighbors should expect no change resulting from the proposed project, regardless of operational hours.

Truck traffic resulting from the operation, even as it is fully developed, will be 20 per day or less. **The proposed maximum volume of truck traffic represents a less than 1% increase over existing levels on NY Route 28. The vast majority of days truck traffic will be less than five and often zero.** This due to the nature of the proposed low-intensity dimension stone mining.

The potential impacts from noise from the proposed action were addressed in Section 4.2 (Noise Impact Assessment) of the MLUP. The NIA analyzed potential impacts from noise on the nearest and most sensitive receptors under a worst-case scenario and determined that the proposed activity will not result in an increase sound above the existing ambient level. Two main factors influence the affect of noise on the nearest receptors; the proposed mine is small in scale with methods and impacts very different than typical aggregate quarries. The project site is located behind topographic and forested barriers which very effectively attenuate sound from mining activities.

The applicant proposes the following reduced hours of operations for day-to-day activities at the project site; Monday-Friday 7am-6pm, Saturday 7am-12pm with no operations on Sundays or legal holidays.

   Please provide separate hours of operations for crushing and transportation activities appropriate for the dense residential character of the area to mitigate any potential adverse impacts to adjoining landowners.

The applicant proposes the following reduced hours of operations for crushing (processing ancillary rock for use as aggregate) activities at the project site; Monday-Friday 8am-4pm, Saturday 8am-12pm with no operations on Sundays or legal holidays. Due to the necessity of flexible transportation options and minimal traffic volume, the applicant contends that truck traffic be permitted during normal hours of operations stated above (M-F 7am-6pm, Sat 7am-12pm, no Sundays or legal holidays).

5. *SIR Item 6 – Blasting Information: Please provide a Blasting Plan that addresses the following:*

   - *Pertinent safety requirements;*
   - *Limits of blasting work;*
   - *Scheduled start date(s), frequency and length of blasting operations and blast monitoring operations;*
   - *Demonstrate compliance with the project plans prepared for the site: and*
   - *Include all steps necessary to ensure the proposed blasting activity does not damage neighboring properties.*

With regard to safety requirements, blasting operations conducted throughout NY State are regulated under 6 NYCRR 422.2 with specific Conditions of the MLR Permit written to address safety and environmental concerns unique to each project site. All proposed blasting is required to be supervised by a NY Licensed Blaster accredited by the NY Department of Labor Standard Occupational Classification #47-5301. Standards of conduct for blasting operations in NY are defined under the regulation 12 NYCRR 61-4.8. All aspects of blasting operations are to be conducted in accordance with the law which is designed to ensure the safety of those conducting blasting as well as the surrounding community. All blasting operations proposed at the White Lake Quarry will be supervised by a NY Licensed Blaster in accordance with the law.

Proposed limits of blasting operations at the project site shall occur within the 5.2+/-acre excavation area depicted on the Mine and Reclamation Plan Maps (dated February 15; last revised April 2021). It should be noted that blasting is proposed to be utilized only when necessary as an alternative to expandable grouts, mechanized removal and other means. Please refer to Section 3.2.1 of the MLUP where methods of extraction are described.

Blasting activities, when necessary, are proposed to occur during the seasonal operating period of mid to late April to early November. The hours during which blasting is proposed will be between the hours of 9am-3pm with no more than two events to occur in a single day. Blast monitoring will be conducted as required in the MLR Permit using a properly calibrated seismograph placed at a location designed to measure ground vibration and air overpressure at or near the property line of the project site.

All mining and support operations at the project site shall be conducted in compliance with all local state and federal laws and regulations. The operator should expect site inspections to occur at least annually to ensure compliance.

The proposed blasting activities are minimal in nature, as described in Section 3.2.1 of the MLUP. Blasting in the proposed dimension stone quarry operation uses a small fraction of explosive agent in comparison to aggregate quarries. This type of blasting does not induce measurable ground vibrations or air overpressure due to its minimal nature. The NY Licensed Blaster is required under the law to conduct blasting in a manner that ensures protection of those onsite

and within the surrounding community. Records of each event shall be kept for inspection by NYSDEC and/or APA staff as required.

6. *SIR Item 7 – Mine Plan Map: Please revise this map top also include the following:*
    - *Proposed limits of vegetative clearing and a label for the existing limits of vegetative clearing;*
    - *Revise the affected area and its corresponding calculation to also include the entire excavation area; and*
    - *Wetland revisions described in Item 1 above.*

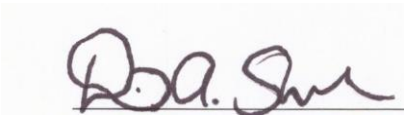
The limits of existing vegetative clearing are indicated on the revised Mine Plan Map with a "Treeline/Hedge" line and note. The maximum potential limits of clearing to the LOMB are shown on the revised Reclamation Plan Map. In reality, clearing will not reach the LOMB but rather will be constrained to the minimum space necessary to conduct safe and efficient operations. The operator is further incentivized to limit the area to be affected under the financial burden of the reclamation bond, which increases as more area is affected.

The proposed affected area for the initial five-year permit term has been revised to include 8.8+/-acres. Only the portion of the proposed excavation area shown in orange hatch is intended to be affected over the initial permit term. The area is depicted as such to aid NYSDEC in establishing an appropriate value to be held in the bond.

The proposed LOMB is revised as requested to avoid wetlands and the 100-foot buffer. The adjustment results in a 0.1+/-acre reduction in the proposed LOMA to 26.6+/-acres. Land disturbance of any kind is not proposed to occur in wetlands or the 100-foot buffer.

Please feel free to contact me with questions. Thank you very much.

Sincerely,



David A. Shank, PG
Strategic Mining Solutions, LLC

ec. Chris Lucidi, NYSDEC Mined Land Reclamation
Andrew Abbott, NYSDEC Mined Land Reclamation
Tom Sunderlin, Applicant/Owner

Enclosures:
- Deed: September 20, 2005
- Deed: March 14, 2012
- "MINE PLAN MAP" dated February 15, 2021; last revised April 2021
- "RECLAMATION PLAN MAP" dated February 15, 2021; last revised April 2021

COPY

SHERIFF'S DEED

This indenture made the 20th day of September, 2005, between Daniel G. Middaugh, 6065 Judd Road, Oriskany, New York, 13424 as Sheriff of the County of Oneida in the State of New York, party of the first part, and Martin Zarnock, Sr., 8192 Woods Highway, Whitesboro, New York, 13492, party of the second part.

WHEREAS, a certain execution was issued on the 24th day of May, 2005 on a judgment obtained in the Supreme Court of the County of Oneida, State of New York entered on October 30, 1995 in an action between John Catera, as plaintiff, and Nicholas Gentile, as defendant in favor of John Catera, the judgment creditor, against Nicholas Gentile, judgment debtor, in the amount of $11,072.56, together with interest from October 30, 1995, as same appears on the judgment roll filed in the office of the Oneida County Clerk on October 30, 1995, and

WHEREAS, said execution was directed and delivered to the Sheriff of Oneida County commanding him to satisfy said judgment out of the real and personal property of the judgment debtor and said Sheriff, by virtue of and in obedience to the command of said execution, levied on and seized all right, title and interest which the judgment debtor, Nicholas Gentile so had of, in and to the premises herein conveyed and described, and on the 9th day of September, 2005, sold the premises at public auction at the Oneida County Courthouse, Utica, New York, and having first given public notice of the time and place of such sale by advertising, posting and serving such notice according to the law, at which sale such premises were struck off to Martin Zarnock, Sr. for the sum of One and 00/100 Dollars ($1.00), he being the highest bidder and that being the highest sum bidden for such premises.

WHEREUPON, the Sheriff of Oneida County, after receiving from the party of the second part the sum so bidden as aforesaid, gave to

Marty Zarnock, Sr. the proofs of publication, posting and service of the notice of such sale as directed by law to be given.

NOW THIS INDENTURE WITNESSETH, that said party of the first part, by virtue of the said execution, and in pursuance of the act in such cases made and provided, and in consideration of the sum of money so bidden, as aforesaid to him duly paid, has sold and by these presents does grant and convey to the said party of the second part, his heirs, successors and assigns, all of the estate, right, title and interest which the said defendant, Nicholas Gentile, had on the 30th day of October, 1995 or at any time thereafter, in and to all that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the Town of Forestport, County of Oneida, State of New York, described as follows:

All that certain plot, piece or parcel of land, situate in the Town of Forestport, County of Oneida, and State of New York, beginning at a spruce tree being the northeast corner of Lot No. 8, Adgate's Eastern Purchase, Miller & Swanton Tract; running thence north 87 degrees W., along the northerly line of said Lot Eight 1000 ft. (more or less) to a spruce tree cornered and marked; thence southwesterly to a stake standing S. 80 degrees E., 500 ft., from S.W. corner of F. Gaus' camp site (now or formerly) on White Lake; thence south 60 ½ degrees E., to the corner of the outlet of White Lake; thence down the stream as it winds and turns 462 ft. to the center of the highway bridge (said highway being known in 1989 as Stone Quarry Road); thence down the center of said stream to the westerly bounds of the Mohawk and Malone Railway Company's property (now or formerly); thence northerly along the westerly bounds of said railway company's property to the place of beginning, containing 60 acres of land more or less.

The above described premises are the same premises which were conveyed to Nicholas Gentile, Thomas J. Sunderlin, Jr. and Martin Zarnock by Quitclaim Deed of Nicholas J. Gentile, dated September 30, 1993 and recorded September 30, 1993 in the Oneida County Clerk's Office in Book of Deeds 2664 at page 360.

To have and to hold the premises herein granted unto the party of the second part, his heirs, successors and assigns forever.

That said party of the second part shall quietly enjoy said premises.

IN WITNESS WHEREOF, the party of the first part has hereunto set his hand and seal on the day and year first above written.

Daniel G. Middaugh
Oneida County Sheriff

State of New York
County of Oneida

On this 20th day of September, 2005, before me personally appeared Daniel G. Middaugh, to me personally known and known to me to be the Sheriff of Oneida County and the same person described who executed the within instrument and he acknowledged to me that he executed same.

Carolyn J Battelene
Notary Public

Carolyn J. Battelene
Notary Public, State of New York
No. 01BA4978310
Appointed in Oneida County
My Commission Expires 2/25/01

WARRANTY DEED WITH LIEN COVENANT

CAUTION: THIS AGREEMENT SHOULD BE PREPARED BY AN ATTORNEY AND REVIEWED BY ATTORNEYS FOR SELLER AND PURCHASER BEFORE SIGNING.

THIS INDENTURE, made the 14th day of March, 2012, **between**

Martin Zarnock, aka Martin Zarnock Sr., residing at 249 Woods Road, Whitesboro, New York

Party of the First Part,

and

Thomas J. Sunderlin, Jr., residing at 2350 Douglas Avenue, Yorkville, New York 13495

Party of the Second Part,

WITNESSETH, that the party of the first part, in consideration of $1.00 dollars, lawful money of the United States, paid by the party of the second part, and other good and valuable consideration, does hereby grant and release unto the party of the second part, the heirs or successors and assigns of the party of the second part forever,

See Schedule "A" attached hereto and made a part hereof.

SUBJECT to covenants, conditions, restrictions and easements of record, and utility easements, whether or not of record.

BEING the same premises conveyed to Nicholas Gentile, Thomas J. Sunderlin, Jr. and Martin Zarnock by Quitclaim Deed from Nicholas J. Gentile dated September 30, 1993 and recorded in the Oneida County Clerk's Office on September 30, 1993 in Book 2664 of Deeds at page 360; and BEING the same premises as conveyed to Sheriff's Deed dated September 20, 2005, by Daniel G. Middaugh, Sheriff of Oneida County, as grantor, to Martin Zarnock Sr., as grantee, conveying the interest of Nicholas Gentile, said deed recorded in the Oneida County Clerk's Office on September 28, 2005, as Instrument 2005-020580.

TOGETHER with all right, title and interest, if any, of the party of the first part in and to any streets and roads abutting the above described premises to the center lines thereof,

TOGETHER with the appurtenances and all the estate and rights of the party of the first part in and to said premises.

TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, the heirs or successors and assigns of the party of the second part forever.

AND the party of the first part, in compliance with Section 13 of the Lien Law, covenants that the party of the first part will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the

costs of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

AND the party of the first part covenants as follows:

FIRST. That said party of the first part is seized of the said premises in fee simple, and has good right to convey the same;

SECOND. That the party of the second part shall quietly enjoy the said premises;

THIRD. That the said premises are free from encumbrances, except as aforesaid;

FOURTH. That the party of the first part will execute or procure any further necessary assurance of the title to said premises;

FIFTH. That said party of the first part will forever warrant the title to said premises.

The word "party" shall be construed as if it read "parties" whenever the sense of this indenture so requires.

IN WITNESS WHEREOF, the party of the first part has duly executed this deed the day and year first above written.

Martin Zarnock

Martin Zarnock

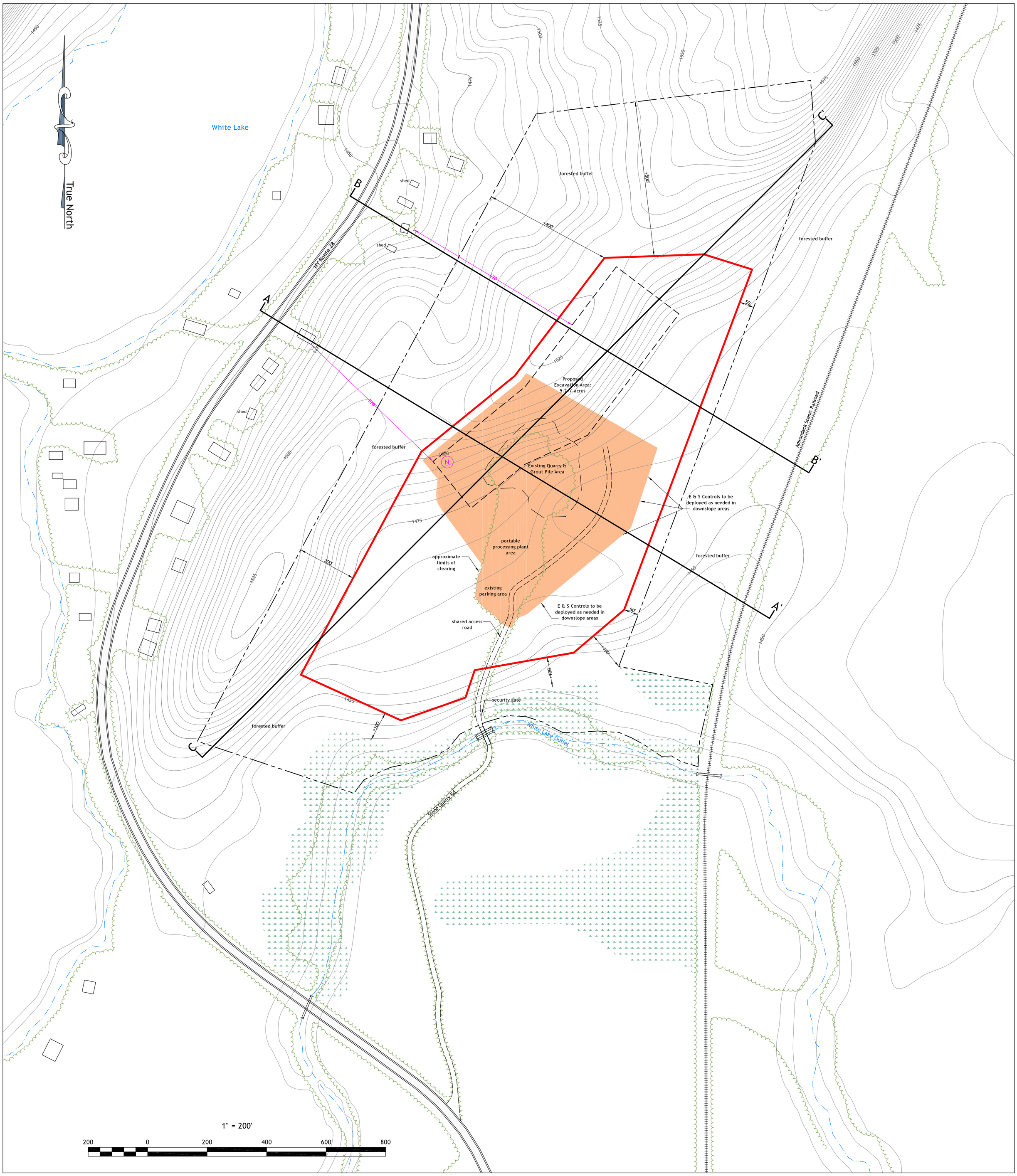
STATE OF NEW YORK)
) ss.:
COUNTY OF ONEIDA)

On the 14th day of March, 2012, before me, the undersigned, a Notary Public in and for said State, personally appeared Martin Zarnock personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument

Notary Public - State of NY/County of
My co. ex.:

RETURN RECORDED INSTRUMENT TO:
Andrew S. Kowalczyk, III, Esq.
Kowalczyk, Deery, Hilton & Broadbent, LLP
185 Genesee Street
Utica, New York 13501

All that certain plot, piece or parcel of land, situate in the Town of Forestport, County of Oneida, and State of New York, beginning at a spruce tree being the northeast corner of Lot No. 8, Adgate's Eastern Purchase, Miller & Swanton Tract; running thence, north 87 degrees W., along the northerly line of said Lot Eight 1000 ft. (more or less) to a spruce tree cornered and marked; thence southwesterly to a stake standing S. 80 degrees E., 500 ft., from S.W. corner of F. Gaus' camp site (now or formerly) on White Lake; thence, south 60 ½ degrees E., to the center of the outlet of White Lake; thence down the stream as it winds and turns 462 ft. to the center of the highway bridge (said highway being known in 1989 as Stone Quarry Road); thence down the center of said stream to the westerly bounds of the Mohawk and Malone Railway Company's property (now or formerly); thence northerly along the westerly bounds of said railway company's property to the place of beginning, containing 60 acres of land more or less.



MINE PLAN MAP

White Lake Granite Quarry

NYSDEC Mine ID: pending

Town of Forestport/Oneida County, NY

Mapping & Consulting Services by:

strategic mining solutions

prospecting • planning • permitting • problem solving

MAP DETAILS

- Date: February 15, 2021
- Scale: 1 inch = 200 feet
- Datum: Mean Sea Level
- USGS Quad: Woodgate, NY
- Contour Interval: 5 feet
- Drafted by: DAS

REVISIONS

Date	Description	By
4/2021	Revisions requested by APA & DEC.	DAS

LEGEND

- Property Line (Red Rock Quarry Assc.)
- Life of Mine Boundary (Proposed)
- Excavation Area (Proposed)
- 1450 Contour Line: 25'
- Contour Line: 5'
- Stream/Edge of Water
- Wetland Area
- Building/Structure
- Adirondack Scenic Railroad
- Road: Unpaved
- Road: Paved
- Treeline/Hedge
- Culvert
- Minimum Distance for Noise Calculations

ACREAGE SUMMARY

- Red Rock Quarry Assc. LLC : 60.0+/-acres
- Life of Mine Area: 26.6+/-acres
- Affected Area (Permit term 2021-2026: 8.8+/-acres

NOTES

- Base topography from 10-meter DEM of Woodgate 7.5 min. USGS quadrangle.
- Surface features digitized from 2017 high-resolution (1-foot) natural color orthophoto.
- Wetlands: from USFWS National Wetlands Inventory application & delineation of northern wetland boundary.

True North

White Lake

NY Route 28

shed

shed

shed

forested buffer

forested buffer

forested buffer

forested buffer

forested buffer

partially to fully back-filled & revegetated floor

Deepest el. 1465 +/-
floor el. 1445 +/-

shared access road

security gate

White Lake Outlet

Stone Quarry Rd

Adirondack Scenic Railroad

A

A'

B

B'

C

C'

400'

200'

100'

50'

50'

130'

180'

1450

1475

1500

1525

1550

1575

1600

1625

1650

1675

1" = 200'

200 0 200 400 600 800

RECLAMATION PLAN MAP

White Lake Granite Quarry

NYSDEC Mine ID: pending

Town of Forestport/Oneida County, NY

Mapping & Consulting Services by:

strategic mining solutions
prospecting • planning • permitting • problem solving

MAP DETAILS

- Date: February 15, 2021
- Scale: 1 inch = 200 feet
- Datum: Mean Sea Level
- USGS Quad: Woodgate, NY
- Contour Interval: 5 feet
- Drafted by: DAS

REVISIONS

Date	Description	By
4/2021	Revisions requested by APA & DEC.	DAS

LEGEND

- Property Line (Red Rock Quarry Assc.)
- Life of Mine Boundary
- Crest of Highwall
- Contour Line: 25'
- Contour Line: 5'
- Stream/Edge of Water
- Wetland Area
- Building/Structure
- Adirondack Scenic Railroad
- Road: Unpaved
- Road: Paved
- Treeline/Hedge
- Culvert

ACREAGE SUMMARY

Red Rock Quarry Assc. LLC : 60.0+/-acres

Area to be reclaimed over the life of the mine: 26.6+/-acres

NOTES

- Base topography from 10-meter DEM of Woodgate 7.5 min. USGS quadrangle.
- Surface features digitized from 2017 high-resolution (1-foot) natural color orthophoto.
- Wetlands: from USFWS National Wetlands Inventory application & delineation of northern wetland boundary.

SMS strategic mining solutions
www.miningstrategy.com
Geologists & Mining Consultants

July 17, 2021

NYSDEC- Region 6 Utica Sub-Office-Permits
207 Genesee St. State Office Building
Utica, NY 13501

Re: Application ID: 6-3038-00081/00003; Tom Sunderlin/White Lake Granite Quarry

Dear Mr. Goodale,

Thank you for inquiry regarding potential cumulative impacts from noise from the proposed portable processing plant operating simultaneously with all other mobile equipment present at the project site. The issue was raised during the DEC site inspection that occurred on July 15, 2021. Please find below an assessment.

A list of the simultaneously operating noise sources at the proposed mine site is as follows.

Sound levels of operating equipment measured at 50 feet (noise sources):

1. Front-end loader = 82.8 dB(A) Caterpillar 988F
2. Portable rock drill = 98.0 dB(A) Tam Rock 120 or equivalent
3. OTR flat-bed truck in operation = 71.2 dB(A)
4. Diamond wire saw w/portable generator = 84.0 dB(A)
5. Lokotrak Portable Impact Crusher with Two Loaders = 84.7 dB(A)

Combined sound level at the source = **98.5 dB(A)**

Sound levels from multiple sources are not added arithmetically because they are reported on a logarithmic scale. Sound levels are added logarithmically to calculate the combined sound level. For approximation purposes, two sounds with the same sound level intensity (and frequency spectrum) will increase the overall sound pressure by approximately 3 dB. Combining noise sources where one sound level intensity is less than another will cause an overall increase of some value less than 3 dB. Once the difference between two sound levels is 10 dB or more the lower intensity sound adds little to nothing to the overall sound level (NYSDEC, 2001).

The potential impact from increased sound levels at the receptor is measured by comparing existing ambient sound levels with projected sound levels from the proposed operation (NYSDEC, 2000). The results are summarized as follows.

- Combined sound level at the source = 98.5 dB(A)

- Attenuation by distance = 21.1 dB(A) (Nearest receptor is located at a minimum distance 570+/-)
- Attenuation by topography and barriers = 24 dB(A)

Projected sound level at the receptor from the project site = **53.4 dB(A)***

**To keep the assessment conservative attenuation of sound due to atmospheric absorption and vegetation were not considered.*

- Existing Ambient sound level = 58.0 dB(A)*

* Recall Section 4.2.1.1 where the actual ambient sound level is ~60 dB(A) generated primarily by traffic on NY Route 28.

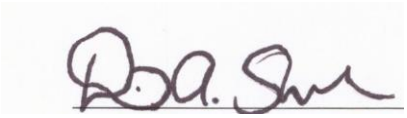
- Projected sound level at the receptor resulting from the proposed project site = **53.2 dB(A)** or ***no change***.

Projected increase in sound level at the receptor when all equipment mine is operating simultaneoulsy is 0 dB(A).

In summary, operating the portable processing plant and two additional loaders adds between 0 and 0.2 dBA to the projected noise levels emanating from the site in this highly conservative model. The portable plant would actually be operated from the lowest point in the floor due to operational considerations. That area is further from the nearest receptor than is modeled and lower in elevation where distance and barrier attenuation would be greater. Operation of a portable plant, if it occurs at all, will be occasional and intermittent due to inherent limitations regarding properties of granite, cost and end-use market. The resultant cumulative noise impact of simultaneous equipment operations, including the portable plant is zero.

Please feel free to contact me with questions. Thank you very much.

Sincerely,



David A. Shank, PG
Strategic Mining Solutions, LLC

ec. Chris Lucidi, NYSDEC Mined Land Reclamation
Terri Tyoe, NYSDEC Division of Permits
Andrew Abbott, NYSDEC Mined Land Reclamation
Adirondack Park Agency
Tom Sunderlin, Applicant/Owner

WHITE LAKE GRANITE QUARRY

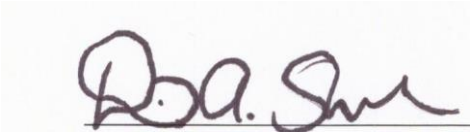
Town of Forestport, Oneida County

New York

Mined Land Use Plan

April 2021

Prepared for:	New York State Department of Environmental Conservation & The Adirondack Park Agency
Applicant:	Mr. Tom Sunderlin
Prepared by:	Strategic Mining Solutions LLC dave@miningstrategy.com



David A. Shank, P.G.

TABLE OF CONTENTS

APPENDIX

A. NYSDEC Mining Permit Application (85-19-2)
B. NYSDEC Organizational Report Form (85-15-12)
C. NYSDEC Full Environmental Assessment Form (FEAF)
D. APA General Information Request Form (GIR)
E. APA Supplemental Information Request Form (SIR)
F. NYOPRHP Findings Letter dated March 25, 2021
G. USDA/NRCS Custom Soil Survey Map
H. White Lake Quarry Application: Sound Level Attenuation Calculation Summary

IN POCKETS

- Mine Plan Map dated February 15, 2021
- Reclamation Plan Map dated February 15, 2021
- Typical Sections dated February 15, 2021

1.0 Introduction

This Mined Land Use Plan (MLUP) was prepared for the purpose of obtaining a NYSDEC Mined Land Reclamation Permit and APA Project Permit for the proposed "White Lake Granite Quarry" located on Stone Quarry Road, wholly within tax parcel 8.000-1-8 in the Town of Forestport in Oneida County, NY. The proposed action will result in a total life of mine area (LOMA) of 26.7+/-acres situated more or less centrally on a 56.5+/-acre parcel owned by the applicant, Mr. Tom Sunderlin.

Access to the project site is made by traveling north on Stone Quarry Rd from its intersection with NY Route 28, approximately nine miles north of the Forestport Town Center. Stone Quarry Rd is a seasonal-use municipal road which ends at a bridge transecting White Lake Outlet. The privately-owned access road begins at the bridge and extends north into the project site.

The proposed mine will operate above the water table using standard industry methods for the extraction of granite blocks for use as dimension stone. Dimension stone is cut and finished for a wide variety of architectural, landscaping and other applications.

2.0 Existing Condition of the Land to be Affected

2.1 Past Mining History

There is an existing quarry with numerous small excavations and waste pile located within the proposed LOMA at the base of a steep sided northeast-southwest oriented bedrock ridge. The former granite quarry was operated by Oneida Pink Granite Company of Utica, NY in the 1920's (Karboski, 2000). Granite from the WLQ was used several prominent architectural installations including, the Proctor Memorial in Utica, Five Wall Street in NYC, the Bailey Fountain in Brooklyn and buildings in Carthage and Hempstead, NY, among others.

2.2 Previous Land Use

The previous land use is described above in Section 2.1. Non-mining land uses within the project site are limited to occasional logging. The subject area is currently vacant.

2.3 Vegetation

The project site and vicinity are mostly forested except for steep sided granite bedrock outcroppings and a small clearing in the vicinity of the quarry. Trees consist of mixed hardwoods and conifers typical for the region.

2.4 Topography

The project site contains portions of an elongate northeast-southwest oriented ridge. The ridge is composed of pre-Cambrian granitic bedrock of the Greenville geologic province. The ridge extends roughly 50 ft. from its base to the top in the proposed excavation area. Elevations within the project site vary from 1430+/-ft. amsl in the south along White Lake Outlet to 1575+/-ft. as the ridge extends northeasterly off the property.

2.5 Drainage

Drainage within the project site is east and south toward White Lake Outlet. Slopes range from 5 to 30% with steeper slopes occurring on bedrock outcrops, primarily along its east face. Granite bedrock forms prominent outcrops along and atop the ridge. Soils are present off the ridge within the gently sloping portions of the project site. The surficial geology is mapped as "outwash sand and gravel" described as "coarse to fine gravel with sand, pro-glacial fluvial deposition…permeable, thickness variable" by Cadwell & Pair, 1991.

Where present, soils are mapped as Adams, Becket-Turnbridge and Turnbridge-Lyman Series (USDA/NRCS Custom Soil Report). Adams soils are present in the proposed support area and are described as developed on kames, outwash plains and deltas. They are characterized as "excessively drained" and are not mapped as prime farmland within the project site. Becket-Turnbridge and Turnbridge-Lyman soils are mapped within the proposed excavation area. Both are described as loamy till derived from gneiss and are well drained and also not considered prime farmland.

2.6 Man-made Features

Several small excavations from past mining activities are present within the proposed LOMA. A bridge crossing White Lake Outlet is located at the southern end of the subject

parcel. There are no buildings or other fabricated structures present within the project site.

3.0 Mining Plan

3.1 Type of Deposit

The target mineral resource present at the White Lake Quarry mine site is a granite bedrock. The granite is uniquely suitable for use as dimension stone due to its desirable color, crystal formation and durability. Granite is generally described as medium-grained ranging in color from pink to red, light pink to gray with a weak gneissic foliation. Outcrops are massive with widely placed structural jointing forming natural planes of weakness, which facilitates excavation. Exposed bedrock surfaces exhibit minimal alteration, decomposition or weathering (Karboski, 2000).

3.2 Mining Method

Minimal overburden is present within the proposed excavation area and stripping operations will be proportionally limited in scope. Overburden, generally consisting of thin soil overlying outwash sand and gravel, will be removed using an excavator or similar equipment. Soils and overburden will be stockpiled outside the excavation area within the LOMA for use in reclamation.

Proposed mining operations will occur above the water table in consolidated bedrock.

Granite bedrock excavation for the production of architectural and landscaping dimension stone is proposed to occur using a combination of methods designed to cause minimal damage to the material. Diamond wire saws, line drilling and micro-blasting are used to extract granite in blocks ranging is sizes depending on the conditions of the rock and end-use considerations.

Blocks will be loaded onto flat-bed trucks for transport offsite to a finish process facility or end-use destination.

3.2.1 Mining Operations

Excavation of granite bedrock is proposed to occur within a 5.2+/-acre excavation area depicted on the enclosed Mine Plan Map. All excavation will occur along the east-

southeast facing slope of the elongate ridge. Development will begin at the base of the slope within or adjacent the existing excavation cuts. Advancement of the production area will be into the bedrock slope, moving incrementally west and north along the 1485-ft. elevation. Development into the floor may occur in subsequent mine phases. Proposed terminal depth of excavation is 1445 ft., roughly 5 to 10 feet above the water table.

Excavation of granite blocks will be conducted using a combination of diamond wire sawing, line drilling, expandable grouts and micro-blasting methods. The saw and drill are typically used to first isolate a larger primary block from bedrock. Expandable grouts and micro-blasting may be necessary to fully separate the primary block from the quarry face.

When micro-blasting is necessary, charges are minimally designed in a manner that does not damage or impact the block. The charge consists of an explosive agent such as detonation cord or black powder with a maximum charge weight of less than 100 lbs. The micro-blasting method proposed under this action does not generate seismic waves or air overpressure effects due to the minimal quantities of explosive agent involved. For comparison, a typical production blast in an aggregate quarry will utilize from 15,000 to 70,000 lbs of explosive agent per event. A NY Licensed blaster is required to conduct and/or supervise all activities involving blasting. The licensed blaster is required to assess the potential for damaging effects, including scaled distance calculations, prior to conducting each shot. Records shall be kept for inspection upon request.

Once separated from the quarry face the primary block is cut to 100 to 200 ft^3 size for transport.

A total of two main production faces are proposed within the 5.2+/-excavation area, each will be a maximum of 40 feet high. Production face heights may vary depending on geologic considerations.

3.2.1.1 Setbacks

Setback areas, or undisturbed buffers, consist of lands not to be affected by mining that consist primarily of dense forest. Proposed setbacks from the project site property line range from a minimum of 50 feet along the eastern boundary with the railroad to more than 500 feet to the north.

Receptors of potential impacts from the proposed action are located west of the project site, on NY Route 28. Property line setbacks along the western boundary of the site range from a minimum of 200 feet to over 400 feet. Additional forested buffer exists between the receptors and the proposed LOMA outside the project site.

A minimum setback of 100 feet is proposed between the LOMB and wetlands located along White Lake Outlet in the southern portion of the site.

3.2.1.2 Processing and Stockpiling

On site processing of granite blocks will be limited to basic elements required to achieve size and shape characteristics of the granite blocks using methods described in previous sections. Onsite finish processing of granite blocks is not proposed.

An option to conduct limited processing of waste rock for the production of crushed granite aggregate is proposed. On occasion a portable processing plant with a capacity of less than 150 tph would be utilized to produce small amounts of crushed aggregate for use at the project site or for sale, provided there is demand. Processing, if it occurs, would be limited to occur over a period of one to three weeks during work hours.

Stockpiling will be limited to granite blocks staged for offsite transport, waste rock and overburden. All stockpiles will be placed within the proposed affected area in a manner that they be accessed safely and efficiently. Topsoil and subsoil to be utilized in reclamation will be stored outside the production area but within the LOMA. Waste materials that may be generated will be stockpiled onsite to be subsequently used in establishing final grade or processed for local use or sale.

4.0 Pollution Control and Prevention of Environmental Damage

Pollution and environmental impacts are mitigated or avoided by incorporating best management practices into day-to-day mining operations. BMP's and other mitigation measures to be utilized at the WLQ mine site are described in this Section.

4.1 Air Pollution Control

Air emissions can be generally classified as either point sources (equipment stack emissions) or non-point sources (open fugitive emissions). Point sources common to the mining industry are typically from the portable generator utilized to supply power to the sawing and cutting equipment. Such point source emissions are regulated under

6NYCRR Parts 200 (General Provisions), 201 (Permits and Certificates), 212 (General Process), and 227 (Stationary Combustion Installation).

Non-point source emissions from the proposed operation will be produced by mining activities (excavation), transporting on dry roads and stockpiling. Generally non-point sources in mining operations create large particles that settle out quickly and are not transported beyond the mine area boundary. Any large particle dust generated by mining activities settles out or is trapped by surrounding vegetation before it reaches a potential receptor.

Dust pollution or "fugitive" dust is airborne particulate matter that leaves the site. The following measures will be employed to mitigate potential adverse impacts on air quality to minimize the generation of dust, to contain the dust that is generated and shorten the distance the dust may travel.

- Operations which have the potential to generate dust will occur behind barriers such as mine faces and forested areas. Barriers will limit exposure to wind thereby reducing the potential to cause airborne pollutants.
- Ground disturbance such as stripping operations have the potential to generate dust. Such disturbances will occur incrementally in small areas, minimizing the potential for dust generation.
- Water or approved dust palliatives will be utilized on internal haulage and access roadways when necessary.
- Maintain the portable generator and mobile equipment with factory recommended exhaust systems that reduce air and noise pollution effectively.

The potential for air pollution to occur as a result of the proposed action is very limited due to the size and scope of the operation. Powered hand tools, drills and mobile equipment will operate on a very small scale in comparison to other mines in the area. The potential for offsite impacts from air pollution is *significantly* minimal in comparison.

4.2 Noise Pollution Control

Noise pollution is defined by the NYSDEC in its Program Policy: Assessing and Mitigating Noise Impacts as "any loud, discordant or disagreeable sound or sounds". More

commonly, in the environmental context, noise is defined simply as unwanted sound. There is a potential for noise pollution whenever sources of sound, such as mobile mining equipment, are newly introduced in a given area. The aforementioned policy requires an assessment of potential impacts, and when necessary, the implementation of mitigation measures to minimize impacts to the extent practicable on neighbors (receptors).

Potential impacts to offsite receptors from noise generated by a mining operation are evaluated by measuring the potential increase in noise from the existing, or ambient, condition. Evaluation of impacts is described in detail in the NYSDEC Program Policy: Assessing and Mitigating Noise Impacts. The policy document states that increases in noise levels of less than 5 dB(A) are to be considered "Unnoticed to Tolerable" for the purposes of evaluation. See table below for reference.

Increase in Sound Pressure (dB)	Human Reaction
Under 5	Unnoticed to tolerable
5 to 10	Intrusive
10 to 15	Very noticeable
15 to 20	Objectionable
Over 20	Very objectionable to intolerable

Table from Down and Stocks, 1978

4.2.1 Noise Impact Assessment

This Noise Impact Assessment (NIA) was conducted to determine the potential for the proposed quarry to result in unwanted sound (noise) at the nearest residences. The NIA models projected noise levels at given points (receptors) around the site by combining various noise sources that will be in operation at the mine and considering attenuation factors such as distance, atmospheric absorption, barriers and vegetation (mature forest). Sources of sound are modeled under "worst-case" (loudest) scenarios to be conservative in the assessment. A worst-case scenario assumes that all equipment will be operating at once from a location within the site that is nearest the receptor. In reality, operating equipment will be further from the receptor than what is modeled and likely not all operating simultaneously. The following summarizes the objectives of the NIA.

- Determine a sound level baseline (ambient conditions) at the nearest receptors.
- Estimate worst-case potential sound levels from operations occurring from within the project site at the nearest receptors.
- Compare the existing ambient conditions against those modeled under the proposed worst-case conditions to assess potential for resultant impacts; and
- Recommend mitigation measures to address potential impacts from noise.

4.2.1.1 Ambient Sound Conditions

Ambient sound is the existing sound level at a particular location under normal conditions. Ambient sound can either be measured at the location or is estimated by considering existing sources of sound such as traffic, commercial or industrial activity or other common sources of sound. An estimated ambient sound level is presented in lieu of an actual measurement based on the fact that the dominant source of sound at the nearest receptors to the project site is traffic on NY Route 28. Recent traffic level data is available through the NYSDOT from which an accurate estimate of ambient sound can be derived.

According to NYSDOT Classification Count Average Weekday Data Report (calculation year 2019) 2,510 vehicle trips per day (AADT) occur on NY Route 28 as measured by NYSDOT in the vicinity of the proposed project. It should be noted that traffic levels are highest during the day, resulting in elevated noise levels from traffic while the mine is in operation. The NYSDOT traffic count indicates over 220 vehicles per hour transit NY Route 28 during peak periods.

The DEC policy document offers two noise levels related to roadways. “Light Auto Traffic” generates a noise level in the low 50 dB(A) range at a distance of 50 feet. By comparison the sound level generated by “freeway traffic” at 50 feet is in the low to mid 70 dB(A) range. Traffic levels on NY Route 28, at 2,510 AADT, is not considered “light auto traffic” or “freeway traffic” but rather intermediate of the two. An average of the two referenced sound levels is used to approximate the sound levels at 50 feet from NY Route 28 to be in the upper 50 to low 60 dB(A) range. This sound level range represents ambient conditions at receptors along NY Route 28 in the vicinity of the project site. An existing ambient sound level at the nearest receptor of **58 dB(A)** is used for the purpose of comparison in this NIA.

This NIA will compare the estimated existing ambient sound level against the projected sound levels at the receptor locations from future mining operations occurring within the project site.

4.2.1.2 Projected Sound Levels

Sources of potential noise pollution from the proposed project site include mobile equipment such as the loader, over-the-road (OTR) flat-bed truck and portable equipment. Equipment will operate on the floor of the mine (elevation 1475'+/-) behind quarry faces at all times during day-to-day operations. Rock drills will operate at grade atop the quarry face only during initial development for a period of one to two days or less than a week. A drill operating at the surface without attenuation of a barrier represents the worst-case in terms of the potential for noise impacts on the nearest receptor.

The assessment model assumes that the rock drill would be operating at existing grade without barrier attenuation be conservative. Importantly, this will only occur for a period of less than one week while the mine is in operation. The remaining equipment will be modeled operating behind the topographic barrier. Thus, impacts will be determined using a "worst-case" model.

A list of the simultaneously operating noise sources at the proposed mine site is as follows.

Sound levels of operating equipment measured at 50 feet (noise sources):

1. Front-end loader = 82.8 dB(A) Caterpillar 988F
2. Portable rock drill = 98.0 dB(A) Tam Rock 120 or equivalent
3. OTR flat-bed truck in operation = 71.2 dB(A)
4. Diamond wire saw w/portable generator = 84.0 dB(A)

Combined sound level at the source = **98.3 dB(A)**

Sound levels from multiple sources are not added arithmetically because they are reported on a logarithmic scale. Sound levels are added logarithmically to calculate the combined sound level. For approximation purposes, two sounds with the same sound level intensity (and frequency spectrum) will increase the overall sound pressure by approximately 3 dB. Combining noise sources where one sound level

intensity is less than another will cause an overall increase of some value less than 3 dB. Once the difference between two sound levels is 10 dB or more the lower intensity sound adds little to nothing to the overall sound level (NYSDEC, 2001).

4.2.1.3 Attenuation of Sound

Sound is attenuated by several factors including distance to the receptor from the source, the nature of the surroundings and intervening topography (barriers), vegetation (forested buffers), wind direction and intensity, and humidity. Projected sound levels are modeled based on these factors and compared to the existing or ambient sound levels at the receptor to determine potential impacts.

Sound Attenuation by Distance: Attenuation of sound over distance follows the inverse-square law which applies when any force or energy is evenly radiated outward from a point source in three-dimensional space. The sound pressure from a spherical wave front radiating from a point source decreases by 50% (or 6.02 dB) for every doubling of distance.

The nearest receptor is located on NY Route 28 north of the project site. The residence is positioned less than 80 feet from the highway. The distance from the receptor to the rock drill operating at the surface is over 570 feet from the at its closest possible point. All other residences were further away which will result in lower projected sound levels because of an increased attenuation of sound by distance, barriers, vegetation (forested areas) and atmospheric absorption.

For the nearest receptor, combined sound level of multiple pieces of equipment operating simultaneously = 98.3 dB(A) measured at 50 feet. Attenuation of sound level over a distance of 570 feet = 21.1+/- dB(A). Refer to the "White Lake Quarry 2021 Application Sound Level Attenuation Calculation Summary" appended to this MLUP.

Topographic and Barrier Attenuation: Topographic features and barriers, such as earthen berms, stockpiles and mine faces, can be utilized to attenuate sound if placed between the source and receptor. Intervening topography will consist of a 30+/- ft. high mine face with some intervening forest to remain in place as an additional buffer.

Quantitative barrier attenuation models typically use multiple octave band sound levels at a range of frequencies because sound attenuation from barriers varies among

different frequencies. In this case an analysis of attenuation based on octave bands is not necessary because the receptor is within the geometrical shadow of the source of sound. The following graph (from Beranek 1992) illustrates the concept.

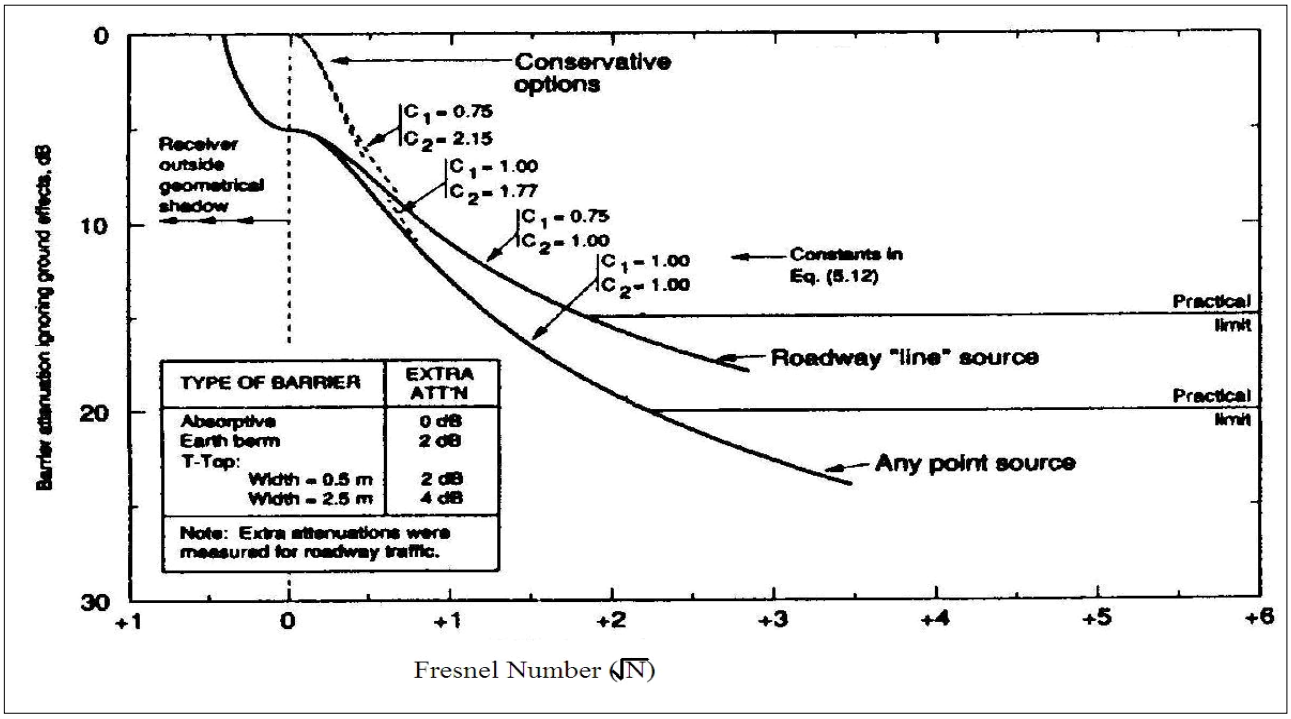


Figure 1: Graph illustrates the attenuation of sound from barriers (from Beranek, 1992).

For the nearest receptor, combined sound level of multiple pieces of equipment operating simultaneously = 98.3 dB(A) measured at 50 feet. Attenuation of sound levels operating simultaneously behind a 15 ft. earthen barrier = 24+/- dB(A). Refer to the White Lake Quarry/2021 Application Sound Level Attenuation Calculation Summary appended to this MLUP.

Attenuation of Sound by Vegetation: Dense vegetation that is at least 100 feet in depth will reduce sound levels by 3 to 7 dB(A) (from NYSDEC Noise Policy Document, 2001). Roughly 530 feet of mature forest occupies the area between the closest receptor and the proposed LOMB. Using a conservative estimate of 4 dB(A) per 100 feet of forest indicates a decrease in sound levels of over 20 dB(A).

4.2.1.4 Conclusions and Recommendations

4.2.1.4.1 Noise Impact Assessment: Day-to-Day Operations

The potential impact from increased sound levels at the receptor is measured by comparing existing ambient sound levels with projected sound levels from the proposed operation (NYSDEC, 2000). The results are summarized as follows.

- Combined sound level at the source = 98.3 dB(A)
- Attenuation by distance = 21.1 dB(A) (Nearest receptor is located at a minimum distance 570+/-)
- Attenuation by topography and barriers = 24 dB(A)

Projected sound level at the receptor from the project site = **53.2 dB(A)***

**To keep the assessment conservative attenuation of sound due to atmospheric absorption and vegetation were not considered.*

- Existing Ambient sound level = 58.0 dB(A)*

  * Recall Section 4.2.1.1 where the actual ambient sound level is ~60 dB(A) generated primarily by traffic on NY Route 28.

- Projected sound level at the receptor resulting from the proposed project site = **53.2 dB(A) or *no change***.

Projected increase in sound level at the receptor when mine is operating under normal conditions is 0 dB(A).

4.2.1.4.2 Noise Impact Assessment: Rock Drill Operating at the Surface at the Closest Possible Location to the Nearest Receptor

Evaluation of potential noise impacts from the Rock Drill operating at the surface for short durations is as follows.

- Sound level of the Rock Drill at 50 feet = 98.0 dB(A)
- Attenuation by distance = 21.1 dB(A) (Nearest receptor is located at a minimum distance 570+/-)

- Attenuation by topography and barriers = 0 dB(A)
- Attenuation by Vegetation = 20 dB(A)

Projected sound level at the receptor from the project site = **56.8 dB(A)***

**To keep the assessment conservative attenuation of sound due to atmospheric absorption was not considered.*

- Existing Ambient sound level = 58.0 dB(A)*

  * Recall Section 4.2.1.1 where the actual ambient sound level is ~60 dB(A) generated primarily by traffic on NY Route 28.

- Projected sound level at the receptor resulting from the project site = **53.2 dB(A) or *no change***.

Projected increase in sound level at the receptor when the Rock Drill is operating at the surface at the closest location to the nearest receptor is 0 dB(A).

Recommendations to establish and maintain effective noise mitigation strategies include the following;

- Utilize directional mining methods that establishes and maintains an earthen barrier and forested buffer between mining activities and receptors. Operational considerations require that mining occurs at the floor such that the production face and forested buffer are always positioned in a manner that maximizes noise attenuation.
- Maintain all operating equipment with factory recommended muffler systems that reduce air and noise pollution effectively.
- Development of the mine should occur incrementally such that periods of overburden removal are minimized so that areas of ground disturbance at the surface are small and occur in short durations. Timber removal and subsequent topsoil stripping activities should be conducted in an area large enough to accommodate one to two seasons of production to minimize periods of ground disturbance at the surface.

- Mining operations are conducted on a seasonal basis, resulting in periods of three to four months per year with no sound generating activity. During the production season mining occurs during the day when highway traffic levels are highest, resulting in elevated ambient sound when the mine is active.

4.3 Visual Pollution

The proposed project site is well-screened from views in all directions. Its location within a densely forested area blocks views from all receptors, including residences and travelers on NY Route 28. The project site is located on the east slope of an elongate bedrock ridge which will remain in place over the life of the mine. The ridge, and forested lands, effectively screens all potential views from the west, including receptors and travelers NY Route 28.

Views into the project site from travelers on the Adirondack Scenic Railroad are obstructed by a minimum of 250-ft. of forested buffer occupying the intervening lands. Refer to Typical Section AA' and BB' which indicate the obstructed views of the project site from the Railroad.

The nearest summit is 1,939-ft. Neejer Hill. It is located over five miles northeast of the project site. No known public hiking trails access Neejer Hill and views from its summit are not possible given the intervening forest and distance.

The intersection of Stone Quarry Road and NY Route 28 (existing) is visible to travelers however, the view is limited to the initial 200+/-ft. due to the dense forest cover. No aspect of the project site is visible from NY Route 28.

The potential for impacts to the viewshed from the proposed action are nil. Its location behind topographic barriers and forested buffers effectively screens the site from views in all directions. Please refer to the Typical Sections and Mine Plan Map which illustrate visual screening of the proposed activity.

4.4 Water Pollution

The potential for water pollution is present wherever ground disturbance activities remove soils and vegetation and sediment-laden storm water run-off is transmitted to surface water resources such as streams, lakes and wetlands. Surface water discharges

are regulated under the State Pollutant Discharge Elimination System (SPDES). The proposed White Lake Quarry will operate without surface water discharge because water entering the affected area from precipitation and/or run-on will be internally drained. The proposed excavation will not extend into the water table, facilitating vertical internal drainage into the ground under vadose conditions. Best management practices described in this section will be employed to establish and maintain internal drainage.

Fuel, oil, grease, coolants and other chemicals utilized in machinery and tools are also potential sources of water pollution. Best management practices described in this section will be employed to avoid spills, leaks or other means of potential contamination of water resources.

Mining is not proposed to occur below the water table. Ground water pumping or usage of water is not proposed. A minimum separation of 5 to 10 feet between the proposed mine floor and the water table will be maintained over the life of the mine.

Wells will not be affected by the proposed excavation because ground water will not be encountered and no pumping is proposed. The proposed portable screen processor does not utilize water for washing, it is a dry system. The singular net impact of the proposed activity will occur as a slightly higher rate of infiltration due to the removal of sandy material overlying the aquifer. It can be reasonably assumed that the additional recharge will not be measurable and the net effect, if any, will result in a slight increase in the recovery rate of wells after usage. A reduction in water availability or quality in neighboring wells will not occur from the proposed action.

4.4.1 Potential Impacts to Water Resources

4.4.1.1 Quality

Mining alone does not impact water quality. However, the potential for impacts exists wherever contaminants such as fuel, coolant, etc. are used. Operators are trained to use care in the handling of potential contaminants to avoid spills or improper disposal. Potential contamination sources are mainly:

- Leaky storage tanks.
- Accidental leakage during fuel delivery.
- Leakage from parked or operating equipment.

The following protocols will be observed by all personnel to ensure groundwater will not be contaminated by activities related to mining:

- No hazardous waste or toxic chemicals will be stored or disposed of at the site.
- Fuel will be stored in a secure tank held within an impermeable containment basin with a storage capacity of at least 110% of the tank.
- Fuel delivery to equipment on site will be carefully attended and personnel are instructed to use fueling practices that avoid accidental spillage.
- Fuel delivery systems will be equipped with automatic shut off mechanisms.
- Fuel delivery systems such as hoses and tanks will be regularly inspected and repairs or replacements made as necessary to avoid leaks.
- Equipment such as loaders and haul trucks, etc. will be inspected and maintained to keep in good working order and in accordance with factory recommendations.

The NYSDEC Spill Hotline phone number, 1-800-457-7362, is listed here and will be posted on site. Personnel will be instructed to contact the Hotline in the unlikely event of a spill.

4.4.1.2 Quantity

Approval of this mining permit application will not have a measurable impact on ground water resources of the area. This type of mining does not remove water from the aquifer nor will it add water thus no appreciable change to the water table will occur. Factors that have an impact to the ground water table are:

- Precipitation- precipitation that infiltrates through the unsaturated layer into the ground water is recharge.
- Unsaturated thickness- a thin overlying unsaturated zone results in more rapid infiltration into the ground water.
- Vegetative cover- trees, shrubs, grass and other types of vegetation impede infiltration into ground water in an internally drained system (highly permeable soils developed on sand and gravel are generally internally drained) by absorbing and redirecting precipitation.
- Water usage- no additional ground water pumping or water usage is proposed.

A minimum separation of ten feet will be maintained between the proposed mine floor & the ground water table. The separation is necessary from an operational perspective because the mine is operable only if the mine floor is dry. Water entering the affected area will be directed into the quarry for internal drainage.

4.5 Potential Impacts to Cultural Resources

A consultation with the State Historical Preservation Office was conducted using the Cultural Resources Information System (CRIS) online application. It is the opinion of the SHPO that no properties, including archaeological and/or historic resources, listed in or eligible for the NY State or National Registers of Historic Places will be impacted by this project. The letter of findings is appended to this MLUP.

5.0 Reclamation Plan

5.1 Land-Use Objectives

The WLQ project site is proposed to be reclaimed to a state similar to and compatible to that which currently exists. The post-mining condition of the affected area will consist of revegetated upland with exposed granite bedrock in reclaimed quarry faces and natural outcrops. Post-mining drainage will be internal.

5.2 Reclamation Method

5.2.1 Final Grades

Proposed final grades and slopes are shown on the revised Reclamation Plan Map and Typical Sections included with this application and described herein. At completion the quarry floor will be back-filled with native non-salable waste material. Back-filled material will be graded to blend with adjacent contours. Overburden soils will be distributed over the backfill and remaining affected area, seeded and mulched as necessary to achieve a perennial vegetative cover.

5.2.2 Revegetation

The affected area will be graded and subsequently treated with cover material (topsoil) stored in within the project site to create a viable substrate for vegetative growth.

Revegetation of disturbed areas will be achieved through seeding, mulching and/or other appropriate and effective means. Concurrent reclamation, including revegetation will be conducted as the mine is developed and portions of the site reach final grade and lateral extent of mining. Revegetation of the affected area will be conducted in accordance with requirements of 6 NYCRR Part 422.3.

The seed mixture described below is recommended by the Oneida County Soil and Water Conservation District to be effective for revegetation. The seed mixture is as follows.

- Creeping red fescue or taller fescue 20 lbs/acre
- Redtop 2 lbs/acre
- Birdsfoot trefoil 8 lbs/acre

Soil pH and fertility to be tested prior to seeding if necessary and seed mixture adjusted accordingly.

Mulch will be applied to seeded areas at a rate of roughly three tons per acre. Fertilizer will be applied according to specific manufacturers recommendations.

5.2.3 Waste Removal & Treatment of Haulageways

All junk, trash, personal property, equipment and vehicles will be removed from the site prior to final Department approval of reclamation.

The multi-use access road to the site will remain to facilitate access to the area by the property owners. Other roads internal to the site, if any, that will not be retained for access roads, hike/bike trails or other pathways will be de-compacted, seeded and mulched in similar fashion to other affected uplands to be reclaimed.

5.2.4 Final Drainage

Proposed final drainage within the life of mine area will be internal into the back-filled quarry. No surface drainage discharge is proposed. Proposed final grade is illustrated on the enclosed plans.

5.3 Reclamation Schedule

All of the proposed 26.7+/-acres within the life of mine area will be reclaimed as shown on the revised Reclamation Plan Map in accordance with 6NYCRR Part 422.3. Concurrent reclamation will be conducted wherever practicable over the life of the mine.

Final reclamation will begin immediately upon completion of all mining activities. The NYSDEC will be notified of the completion of mining and reclamation activities.

REFERENCES

1. Cadwell, D. H., and D. L. Pair. 1991. Adirondack Sheet. In *Surficial Geologic Map of New York; New York State Museum*. New York State Museum Map and Chart Series 40, edited by D. H. Cadwell, and others, The University of the State of New York, Albany, New York.

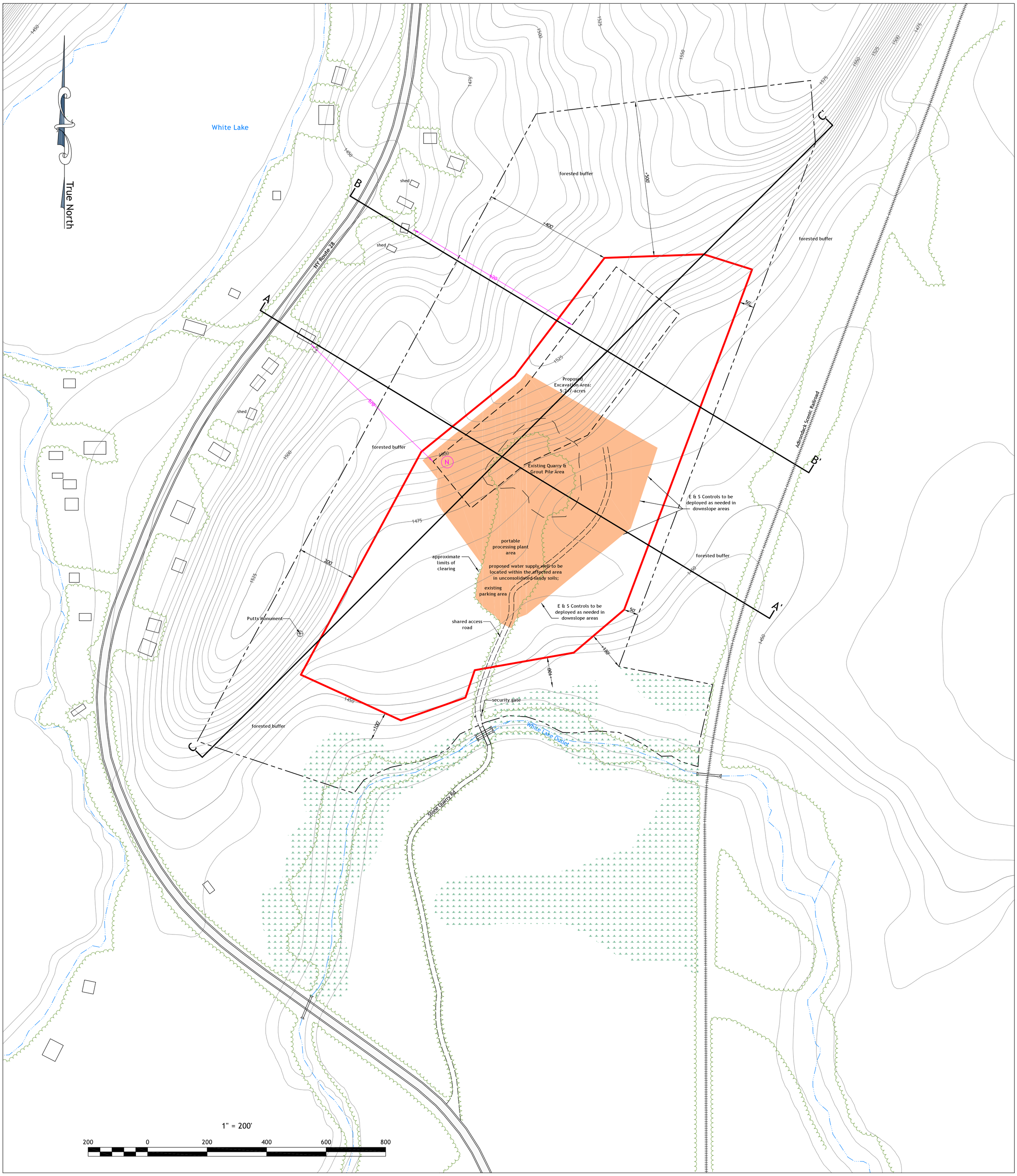
2. Down, C.G. and Stocks, J.; Environmental Impact of Mining. Applied Science Publishers Ltd., ISBN 0853347166, 1978.

3. Karboski, F. 2000 "Mining & Reclamation Plan for the White Lake Granite Quarry", unpublished.

4. NYSDEC, 2001, "Assessing and Mitigating Noise", NYSDEC Division of Environmental Permits, issued October 6, 2000, last revised February 2, 2001.

5. NYSDEC, Article 23, Title 27 - Environmental Conservation law (Mined land Reclamation Law), 6NYCRR, Chapter IV- Quality Services, Parts 420-425

6. USDA/NRCS Web Soil Survey Application, https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm



MINE PLAN MAP

White Lake Granite Quarry

APA Project: 2021-0075/NYSDEC Mine ID: 61163

Town of Forestport/Oneida County, NY

Mapping & Consulting Services by:
strategic mining solutions
prospecting • planning • permitting • problem solving

MAP DETAILS

- Date: February 15, 2021
- Scale: 1 inch = 200 feet
- Datum: Mean Sea Level
- USGS Quad: Woodgate, NY
- Contour Interval: 5 feet
- Drafted by: David A. Shank, PG

STATE OF NEW YORK · DAVID ALLEN SHANK · LICENSED PROFESSIONAL GEOLOGIST · 000619

REVISIONS

Date	Description	By
4/2021	Revisions requested by APA & DEC.	DAS
9/7/2021	Map updates requested by APA.	DAS

LEGEND

- Property Line (Red Rock Quarry Assc.)
- Life of Mine Boundary (Proposed)
- Excavation Area (Proposed)
- 1450 Contour Line: 25'
- Contour Line: 5'
- Stream/Edge of Water
- Wetland Area
- Building/Structure
- Adirondack Scenic Railroad
- Road: Unpaved
- Road: Paved
- Treeline/Hedge
- Culvert
- Minimum Distance for Noise Calculations

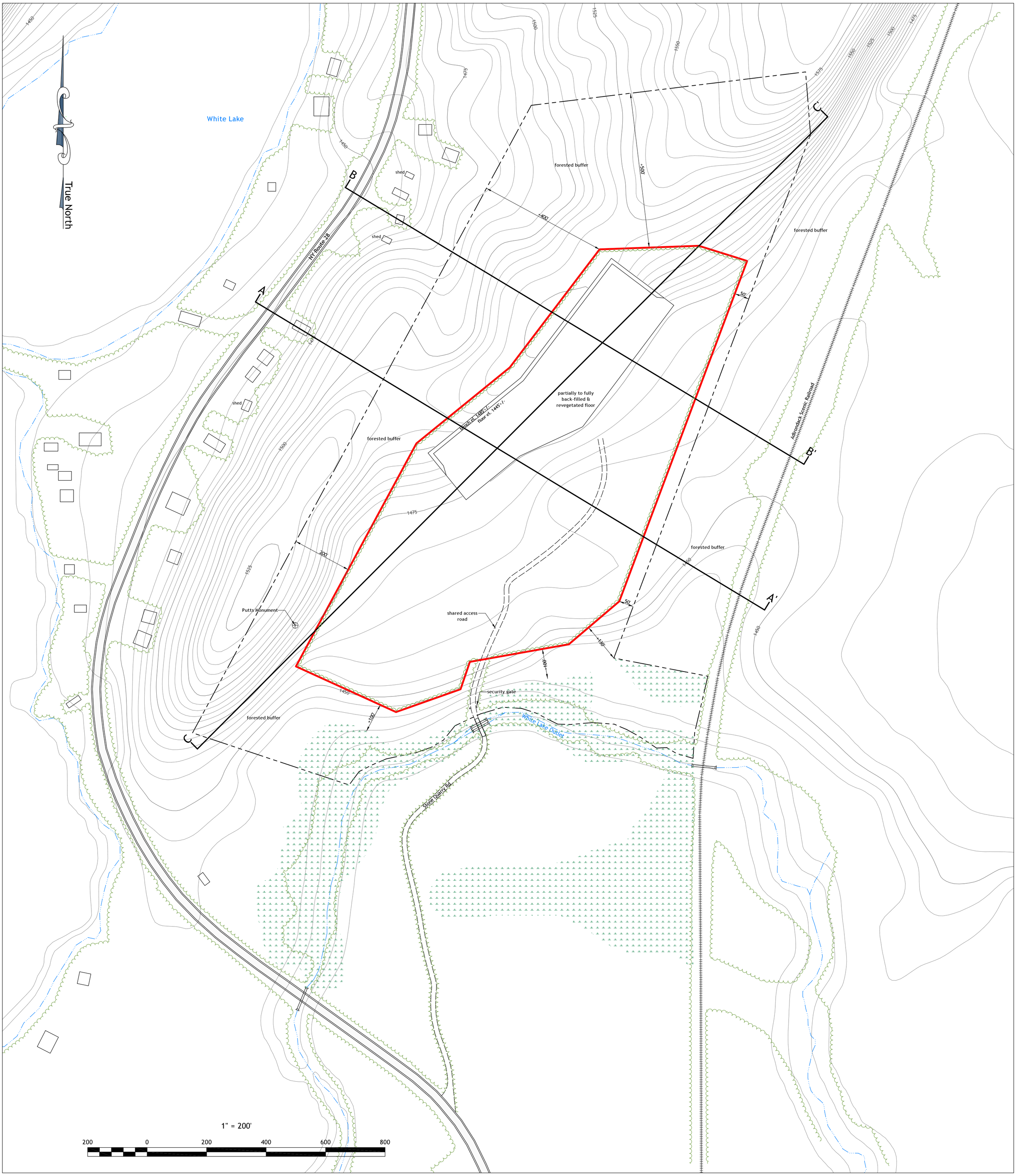
ACREAGE SUMMARY

- Red Rock Quarry Assc. LLC : 60.0+/-acres
- Life of Mine Area: 26.6+/-acres
- Affected Area & Limits of clearing (Permit term 2021-2026): 8.8+/-acres

NOTES

- Base topography from 10-meter DEM of Woodgate 7.5 min. USGS quadrangle.
- Surface features digitized from 2017 high-resolution (1-foot) natural color orthophoto.
- Wetlands: from USFWS National Wetlands Inventory application & delineation of northern wetland boundary.

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency
RECEIVED
Date: September 21, 2021



RECLAMATION PLAN MAP

White Lake Granite Quarry

APA Project: 2021-0075/NYSDEC Mine ID: 61163

Town of Forestport/Oneida County, NY

Mapping & Consulting Services by:
strategic mining solutions
prospecting • planning • permitting • problem solving

MAP DETAILS

- Date: February 15, 2021
- Scale: 1 inch = 200 feet
- Datum: Mean Sea Level
- USGS Quad: Woodgate, NY
- Contour Interval: 5 feet
- Drafted by: David A. Shank, PG

STATE OF NEW YORK · DAVID ALLEN SHANK · LICENSED PROFESSIONAL GEOLOGIST · 000619

REVISIONS

Date	Description	By
4/2021	Revisions requested by APA & DEC.	DAS
9/7/2021	Map updates requested by APA.	DAS

LEGEND

- Property Line (Red Rock Quarry Assc.)
- Life of Mine Boundary
- Crest of Highwall
- 1450 Contour Line: 25'
- Contour Line: 5'
- Stream/Edge of Water
- Wetland Area
- Building/Structure
- Adirondack Scenic Railroad
- Road: Unpaved
- Road: Paved
- Treeline/Hedge
- Culvert

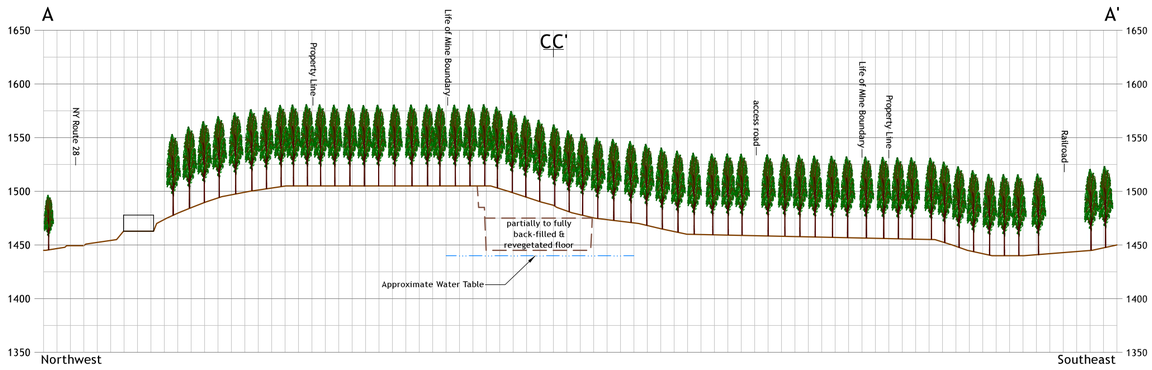
ACREAGE SUMMARY

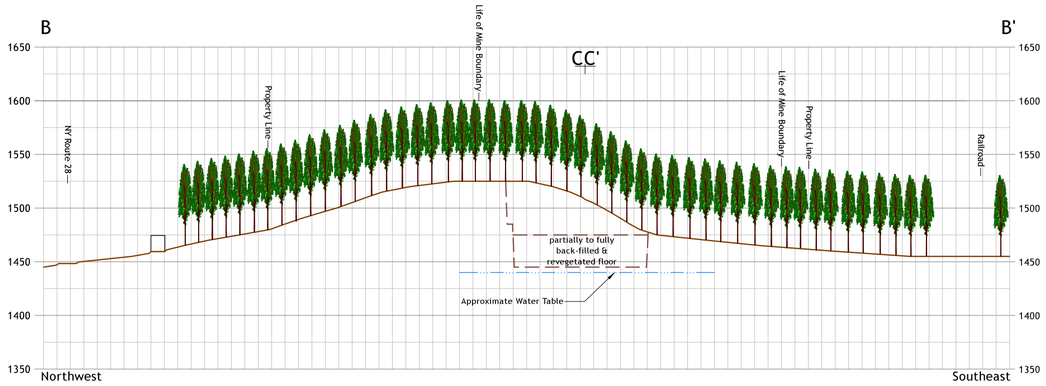
Red Rock Quarry Assc. LLC : 60.0+/-acres

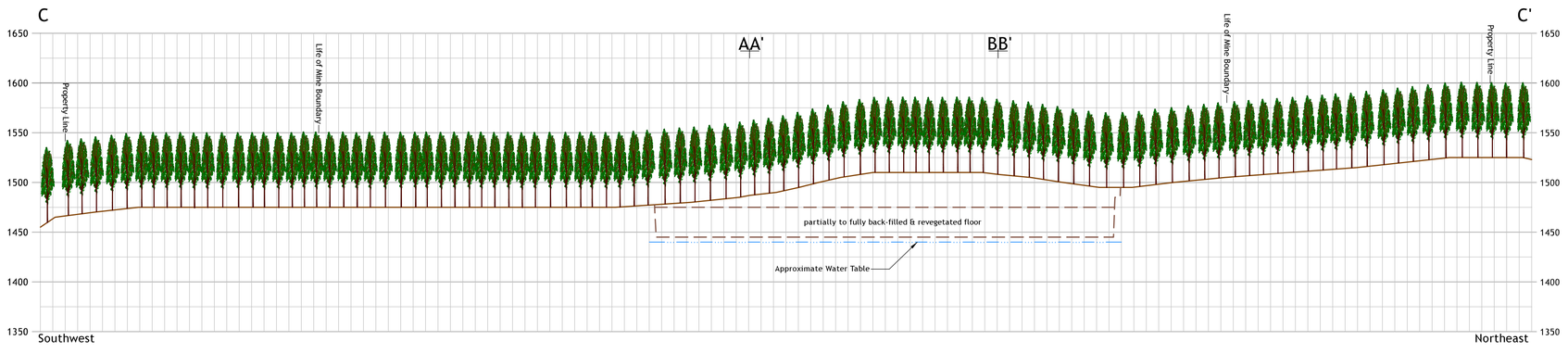
Area to be reclaimed over the life of the mine: 26.6+/-acres

NOTES

- Base topography from 10-meter DEM of Woodgate 7.5 min. USGS quadrangle.
- Surface features digitized from 2017 high-resolution (1-foot) natural color orthophoto.
- Wetlands: from USFWS National Wetlands Inventory application & delineation of northern wetland boundary.







TYPICAL SECTIONS

White Lake Granite Quarry

APA Project: 2021-0075/NYSDEC Mine ID: 61163

Town of Forestport/Oneida County, NY

MAP DETAILS

- Date: February 15, 2021
- H Scale: 1 inch = 200 feet
- V Scale: 1 inch = 100 feet
- Vertical Exaggeration: 2X
- Datum: Mean Sea Level
- USGS Quad: Woodgate, NY
- Drafted by: David A. Shank, PG

STATE OF NEW YORK · DAVID ALLEN SHANK · LICENSED PROFESSIONAL GEOLOGIST · 000619

REVISIONS

Date	Description	By
9/7/2021	Update Title Block.	DAS

LEGEND

- Profile of Existing Topography
- Profile of Proposed Final Grade
- Profile of Water Table (Approximate)
- Structure/Building
- Forest/Trees

NOTES

- Base map: None
- Site topography updated from survey conducted on July 2, 2015 by Strategic Mining Solutions, LLC.
- Base topography from 10-meter DEM of West Winfield 7.5 quadrangle.
- Surface features digitized from 2012 high-resolution (2-foot) natural color orthophoto.

Mapping & Consulting Services by:
strategic mining solutions
prospecting • planning • permitting • problem solving
www.miningstrategy.com