

Article 24 and Section 404 Permit Application

for

**Shelby Crushed Stone Expansion  
10830 Blair Road**

**Town of Shelby  
Orleans County, New York**

for

**Shelby Crushed Stone**



**EARTH DIMENSIONS, INC.**

*Soil and Hydrogeologic Investigations • Wetland Delineations*

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May 28, 2019  
EDI Project Code: W9D12b

**Article 24 and Section 404 Permit Application**

**SHELBY CRUSHED STONE EXPANSION  
10830 BLAIR ROAD**

**Prepared for Submission to**

**U.S. ARMY CORPS OF ENGINEERS  
1776 NIAGARA STREET  
BUFFALO, NEW YORK 14207**

**And**

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
REGION 8 HEADQUARTERS  
6274 EAST AVON-LIMA ROAD  
AVON, NEW YORK 14414**

**Prepared by**

**EARTH DIMENSIONS, INC.  
1091 JAMISON ROAD  
ELMA, NEW YORK 14059**

**for**

**SHELBY CRUSHED STONE  
10830 BLAIR ROAD  
SHELBY, NEW YORK 14103**

**DATE PREPARED**

**May 28, 2019**

**Project Code: W9D12b**

## EXECUTIVE SUMMARY

Shelby Crushed Stone (the "Applicant") has operated a NYSDEC-permitted (Permit ID 8-3436-00007/00001) stone quarry at 10830 Blair Road in the Town of Shelby, New York (the "Site") since the Applicant acquired it in 2005. Since that time, the quarry has produced dolomitic limestone aggregate products for an established customer base in Western Orleans and Eastern Niagara Counties, and the Applicant has made significant investments at the Site in the form of structures, machinery and processing equipment to enable long-term mining operations to meet local demand. The Applicant's quarry not only provides an important resource for the local highway department and local businesses, but also provides local jobs and contributes to the local tax base which, in turn, supports public services.

Unfortunately, the Applicant's 93.5 acre permit term area within a 105.9 acre Life of Mine is projected to deplete marketable material in 2021. In order for the Applicant to stay in business and continue to contribute to the local economy and meet local demand, additional mine area is required. Because upstate New York municipalities generally do not support more than one operational quarry due, in large part, to the cost and time-sensitivity of shipping aggregates, it is imperative that the Applicant's expansion be located in the same general vicinity as the existing operation. The purpose of this report is to demonstrate that the Applicant's application to expand its current operations at the Site and associated alternatives analysis complies with Section 404(b)(1) of the Clean Water Act and ECL Article 24 Weighing Standards.

To date, the Applicant has maximized the use of its property within the spatial restrictions posed by federal and state regulated wetland and buffer areas and, to a lesser extent, a protected Native American historic resource area. A federal wetland delineation conducted by EDI, dated April 16, 2019, revealed the presence of 81.99± acres of wetland at the Site. The report was submitted to the U.S. Army Corps of Engineers (USACE) and New York State Department of Environmental Conservation (NYSDEC) on April 17, 2019 and is pending site visits with each agency to verify the wetland boundaries.

As outlined in Section 5 of this report (which contains confidential business information for which the Applicant is seeking an exemption from FOIA / FOIL disclosure), the Applicant has diligently pursued, yet exhausted, all potential options for acquisition of adjacent or nearby industrially-zoned properties not encumbered by wetlands. Likewise, the Applicant has been unsuccessful in its efforts to acquire the closest existing quarry, operated by LaFarge, in the Town of Royalton. The Applicant's extensive search for suitable off-site alternatives within the targeted geographical region has been frustrated by several factors restricting the siting of a comparable quarry including, among other things, geology, zoning and proximity to similar quarrying operations. As such, the Applicant respectfully submits that there are no practicable alternatives to on-site development within the meaning of 6 N.Y.C.R.R. § 663.5(e)(2).

Accordingly, after exhausting all off-site options meeting the search criteria, the Applicant considered various on-site alternatives described in Appendix 6 of this application. The Applicant's preferred on-site expansion alternatives would have impacted 86 acres, 61 acres and 41 acres of regulated wetland, respectively, along with varying levels of stream impact. Although the Applicant believes that any one of these three alternatives is preferable from an efficiency standpoint and can and should be accomplished in conjunction with appropriate off-site wetland mitigation measures, the time-sensitivity of the Applicant's current operational capacity dictated the need for a further reduction in the scale of these proposals.

Specifically, as a further compromise designed to facilitate a reasonable (i.e. 7 year) extension of the Applicant's operations beyond the projected 2-4 years of reserves in the currently permitted mining area, the Applicant is proposing a 14.8 acre expansion of its existing stone quarry that will impact 8.69 acres of state and federally regulated wetland and 6.11 acres of state regulated 100-foot adjacent area, but which will involve no stream impacts. The proposed expansion area is designed to minimize impacts on wetland hydrology and the higher quality mature forested wetland on the site and instead focus on the lower quality emergent marsh which is heavily dominated by invasive species. This application represents a 90% reduction in wetland impacts associated with the Applicant's preferred (i.e. 86 acre) expansion option.

As depicted in Appendix 2, mitigation for the wetland and adjacent area impacts is proposed off-site at ratios outlined in the 2008 Final Mitigation Rule. The proposed mitigation area would be comprised of approximately 24.5 acres of mixed shallow emergent marsh and hardwood swamp wetland and 2 acres of wetland preservation in order to replace the wetland impacted in kind. In addition, the Applicant is proposing the creation of 12.4 acres of upland adjacent area tree plantings adjacent to the newly created wetland in order to mitigate the impact of  $6.11 \pm$  acres of regulated upland adjacent area at the project site. As such, the Applicant believes that the reduced footprint of its expansion proposal and associated wetland mitigation proposal will minimize adverse impacts on wetland functions and benefits within the meaning of 6 N.Y.C.R.R. § 663.5(e)(2).

The Applicant respectfully submits that this reduced expansion footprint and significant wetland mitigation proposal in order to strike a reasonable balance between the preservation of important wetland functions, values and benefits pursuant to CWA Section 404(b)(1) and ECL Article 24 and the furtherance of compelling economic and social needs within the meaning of E.C.L. § 24-0103, 6 N.Y.C.R.R. §§ 663.1(a) & 663.5(e). The New York State legislature has declared a state-wide policy "to foster and encourage the development of an economically sound and stable mining industry, and the orderly development of domestic mineral resources and reserves necessary to assure satisfaction of economic needs compatible with sound environmental management practices." E.C.L. § 23-2703(1). The Applicant's proposal will further this legislative policy by enabling the survival of an existing mining operation and continued service to the local aggregate market in a manner that is compatible with sound wetland mitigation principles.

In addition, the Applicant's proposal is consistent with New York State smart growth policy "[t]o advance projects for the use, maintenance or improvement of existing infrastructure" within the meaning of ECL 6-0107(2)(A). As noted above, the Applicant has made significant infrastructure investments at the Site, and proximity to the local market is essential to the economic stability of the Applicant's existing operations due to the cost and time-sensitivity of shipping aggregates. As NYSDEC has acknowledged, "Smart Growth is sensible, planned growth that integrates economic development and job creation with community quality-of-life by preserving the built and

natural environments. Smart Growth seeks to discourage development on open space and farmland and encourage growth in developed areas with existing infrastructure."

<https://www.dec.ny.gov/lands/45970.html>. While the nature of mining operations dictates the use of undeveloped land, the Applicant's proposed continuation of operations adjacent to a developed mining area and associated infrastructure will preserve and enhance the natural environment to the extent practicable by avoiding the need for industrial disturbance of undeveloped land elsewhere.

Further, the continuation of mining operations at the existing Site will yield other compelling environmental benefits by reducing vehicle miles traveled and associated decreases in greenhouse gas emissions associated with aggregate shipping from more distant locations. In addition, unlike most other industrial activities, DEC approval of the proposed expansion area ultimately will result in a reclamation area meeting all applicable DEC standards.

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## SECTION 1: PROJECT DESCRIPTION

Shelby Crushed Stone (the "Applicant") is a top producer of rock products from dolomitic limestone for the local construction industry. The Applicant features an extensive range of product types to meet the broad needs of development throughout Western New York. The Applicant's aggregate products range in size from riprap, where each stone may weigh several tons, to manufactured sand for use in concrete and asphalt applications.

The current operation is a NYSDEC permitted facility (Permit ID 8-3436-00007/00001) consisting of a 93.5 acre permit term area within a 105.9 acre Life of Mine. Approved operations include crushing, washing, and/or screening. The Applicant projects that the quarry will deplete marketable material in 2021. In order to stay in business and continue to mine and market product, additional mine area is required. To date, the Applicant has maximized the use of the property it owns outside of the federal and state-regulated wetland and state-regulated 100-foot adjacent area and federally protected Neuter Fort located partially on-site. As outlined in subsequent sections of this report, all other potential options have been exhausted including making unsuccessful offers well above market value on all adjacent properties within the Industrial Zone in the Town of Shelby, and a robust but unsuccessful offer to purchase the competing LaFarge quarry in the Town of Royalton.

The current expansion proposal would impact 8.69 acres of state and federal jurisdictional wetland and 6.11 acres of state regulated 100-foot adjacent area. The site plans and wetland impact map are included as Appendix 2 of this report. The project involves a 14.8 acre expansion of the existing mine. The location of the proposed expansion area was selected to minimize impacts to the higher quality mature forested wetland on the site and instead focus on the lower quality emergent marsh which is heavily dominated by invasive species. The outer limits of the proposed expanded mine area have been designed to ensure that the expanded mine will not impact the existing hydrology of the wetland to remain. The depth of the proposed mine is based on the depth of marketable material in the area based on rock cores taken in the project footprint.

## SECTION 2: PROJECT PURPOSE AND NEED

The Applicant's quarry currently produces dolomitic limestone aggregate products for an established customer base in Western Orleans and Eastern Niagara Counties. The Applicant has made significant investments at the Site in the form of structures, machinery and processing equipment to enable long-term mining operations to meet local demand. The Applicant's quarry not only provides an important resource for the local highway department and local businesses, but also but also provides local jobs and contributes to the local tax base which, in turn, supports public services.

The purpose of this project is to facilitate a reasonable expansion of the existing stone quarry in order to continue providing stone for local construction projects in the targeted market area of Western Orleans County and Eastern Niagara County. The New York State legislature has declared a state-wide policy "to foster and encourage the development of an economically sound and stable mining industry, and the orderly development of domestic mineral resources and reserves necessary to assure satisfaction of economic needs compatible with sound environmental management practices." E.C.L. § 23-2703(1). The Applicant's proposal will further this legislative policy by enabling the survival of an existing mining operation and continued service to a local aggregate market in a manner that is compatible with sound wetland mitigation principles.

In addition, the Applicant's proposal is consistent with New York State smart growth policy "[t]o advance projects for the use, maintenance or improvement of existing infrastructure" within the meaning of ECL 6-0107(2)(A). As noted above, the Applicant has made significant infrastructure investments at the Site, and proximity to the local market is essential to the economic stability of the Applicant's existing operations due to the cost and time-sensitivity of shipping aggregates. As NYSDEC has acknowledged, "Smart Growth is sensible, planned growth that integrates economic development and job creation with community quality-of-life by preserving the built and natural environments. Smart Growth seeks to discourage development on open space and farmland and encourage growth in developed areas with existing infrastructure."

<https://www.dec.ny.gov/lands/45970.html>. While the nature of mining operations dictates the use of undeveloped land, the Applicant's proposed continuation of operations adjacent to a developed mining area with associated infrastructure will preserve and enhance the natural environment to the extent practicable by avoiding the need for disturbance of undeveloped land elsewhere. Further, the continuation of mining operations at this existing location will yield other environmental benefits by reducing vehicle miles traveled and associated decreases in greenhouse gas emissions associated with aggregate shipping from more distant locations, and ultimately result in a reclamation area meeting all applicable DEC standards.

**2.1 Basic Project Purpose:** The basic project purpose is to enable continued operations of an existing stone quarry to meet local demand.

**2.2 Overall Project Purpose:** The overall project purpose is to construct a necessary expansion of an existing stone quarry in western Orleans County, New York.

## SECTION 3: SITE SELECTION CRITERIA

3.1 Market Analysis: The market area for this project is identified in the Site Search Area map included as Appendix 13 of this report. The Applicant has been in operation at the Site for approximately 15 years after purchasing the operation in 2005 from the previous owner, which had been in operation for decades there with an established customer base in Western Orleans and Eastern Niagara Counties. There are several factors that restrict the siting of a rock quarry of this type, including geology, zoning and proximity to similar operations. There are no municipalities in Western or Central New York with more than one operational quarry because the upstate market does not generally support more than one quarry in a given geographic region due to the cost and time-sensitivity of aggregate deliveries. Therefore, it is imperative that the Shelby Crushed Stone expansion be located in the same general vicinity as the existing operation.

Appendix 3 includes a general Bedrock Geology map of New York State. The map indicates the limits of the Lockport Dolomite in a narrow strip extending from the Niagara River eastward to the Mohawk Valley. Locations that would support a rock quarry capable of producing quality material which meets NYSDOT standards is restricted to the area shaded in yellow in Appendix 3.

Appendix 3 includes a copy of the proposed future land use (zoning map) for Western Orleans County adopted in 2003 as well as the current Town of Shelby zoning map. A rock quarry must be located in an area zoned as Industrial. As noted, the only areas slated for industrial use in Western Orleans County include the current location of Shelby Crushed Stone, several areas in and adjacent to the Village of Medina and an area to the west of the Village of Lyndonville. The Industrial zone west of Lyndonville is north of the escarpment and not suitable for the formation of a stone quarry. It is relevant to note that Frontier Stone spent nearly 15 years attempting to rezone an area currently zoned for Agriculture to Industrial in order to construct a competing rock quarry in the Town of Shelby. The request was denied by the Town.

In 2008, the Town of Shelby enacted a Mining and Excavation Law which prohibits mining or excavation activity of over 1,000 tons in areas other than those which are (1) zoned industrial; and (2) fall within a "Mining / Excavation Overlay," among other requirements. The effect of this law is to complicate, if not effectively prohibit, the siting of new stone quarry operations in the Town's non-Industrial zones. On the other hand, under prevailing New York State case authorities, expansion of an existing "grandfathered" quarrying operation beyond currently permitted areas may be allowed where an operator (such as the Applicant) has manifested a clear intent to utilize all of its property in a manner consistent with a mining purpose. Based on these circumstances, the Applicant submits that the Town may approve a modification to the Applicant's local Special Use Permit to allow mining on the Applicant's adjoining AR parcels without the requirements for a zoning amendment and Mining /Excavation Overlay approval. This is also consistent with The Western Orleans Comprehensive Plan, as amended in 2018, which supports mining uses in areas designated for industrial uses "as well as adjoining land that may be suitable for additional industrial use. This category also includes land devoted to mining uses (Town of Shelby)." *Id.*, p. 253.

Based on the above, the Applicant's site selection requirements included the following:

- Expansion site must be capable of producing a minimum of 1.7 million tons of DOT quality stone in order to extend the life of mine through 2028.
- Any new proposed quarry must be zoned Industrial and Mining Excavation / Overlay. On the other hand, an expansion of an existing quarry operation in an Industrial Zone to an adjoining non-Industrial zone is possible for operations which meet applicable criteria for grandfathering.
- Site must be within the appropriate geologic region to economically reach the Lockport Dolomite. The limits of this geologic area are defined by the escarpment to the north and a line in northern Genesee County to the south. Appendix 3 of this report reflects the extent of the Lockport Dolomite formation. Further south, it is not economically feasible to conduct mining operations because the dolomite layer fades out and there is too much overburden.

- Land must be available to the Applicant. As outlined in the off-site alternatives portion of this report, the Applicant has pursued every practicable alternative which would avoid and minimize wetland impacts. This includes making purchase offers to every adjacent landowner with parcels of sufficient size to conduct mining operations, and making purchase offers to competing facilities to the west and east.
- Site must be located within the targeted market area. See Appendix 13 which is a map of the geographic market area.

3.2 Market Area: The market area for the project is depicted in Appendix 13 and can generally be described as an area bounded to the south by the Town of Alabama in northern Genesee County and to the north by Lake Ontario. The eastern limits are generally defined by the Town of Barre and the west limits are in the eastern portion of the Town of Lockport in Niagara County. Competing quarries are located to the west, east and south which prevent the further expansion of this market area in any of these directions. The cost and travel time for aggregate shipments beyond the depicted limits makes it impossible to compete with the surrounding quarries on a cost basis.

### 3.3 Project Requirements

- Need capacity for 1.7 million tons of DOT quality stone (dolomite) in order to have supply until 2028.
- Need access to road infrastructure without weight restrictions

## **SECTION 4: NO ACTION ALTERNATIVE**

The no action alternative would result in no adverse environmental impacts. However, it would not fulfill the project purpose, market demand and state-wide objectives outlined in Section 2.

These objectives would not be fulfilled if the project does not take place. The no action alternative thus is not considered viable as it does not meet the project purposes.

**NOTE: THE APPLICANT RESPECTFULLY REQUESTS THAT THE FINANCIAL INFORMATION IN THE FOLLOWING SECTION 5 BE TREATED AS THE APPLICANT'S CONFIDENTIAL AND PROPRIETARY BUSINESS INFORMATION / TRADE SECRETS WITHIN THE MEANING OF NYS PUB. OFFICER'S LAW § 87(2) & 5 U.S.C. § 552(b)(4) AND BE PROTECTED FROM DISCLOSURE UNDER THE FOIL AND FOIA**

## SECTION 6: ON-SITE ALTERNATIVES

The applicant previously considered three on-site alternative plans which would have impacted 86 acres, 61 acres and 41 acres of state and federal wetland. These alternative layouts are included in Appendix 6 of this report. Due to the fact that the Applicant has exhausted the mining potential in all of the unregulated area, no on-site alternatives are available which would avoid impacts to state-regulated 100-foot adjacent area or state and federally regulated wetland. The table below indicates the wetland impacts under the three on-site alternatives considered. All far exceed the currently proposed impacts of 8.69 acres of regulated wetland. Note that the current proposal does not involve any stream impacts.

Option	Wetland Impact	Stream Impact
Concept 1	86 acres	2,200 LF
Concept 2	61 acres	2,200 LF
Concept 3	41 acres	1,120 LF

## SECTION 7: MITIGATION CONCEPT

The Applicant proposes to mitigate the proposed 8.69± acres of state and federal wetland impact and 6.11± acres of state regulated 100-foot adjacent area at a parcel owned by the applicant which is currently in active agriculture. The site is located approximately 5.5 miles to the east in the Town of Barre and is within the same watershed (Oak Orchard) as the impact site. A conceptual mitigation plan is included in this report as Appendix 7.

The conceptual plan is designed to mitigate the loss of wetland and adjacent area at ratios outlined in the 2008 Final Mitigation Rule. Based on the functions and values assessment included in the conceptual plan, the Applicant is confident that the functions lost at the impact site will be replaced through the creation and restoration at the mitigation site. The impact wetland is heavily encumbered with invasive species whereas the proposed mitigation site has been in agricultural production and is free of invasives, setting it up for success.

The proposed Pask Road mitigation will consist of a mix of wetland preservation, restoration and creation of in-kind mitigation relative to the wetland impact types. The mitigation also includes the creation of approximately 11 acres of forested upland adjacent area.

Impact Type	Restoration	Creation	Preservation	Total Mitigation Credit
Emergent Wetland 7.0 acres	6.66 acres (2:1) = 3.33 acres credit	11.01 acres (3:1) = 3.67 acres credit	NA	7 acres
Forested Wetland 1.69 acres	NA	6.8 acres (4:1) = 1.7 acres credit	2.04 acres (20:1) = 0.1 acres credit	1.8 acres
100' Upland Buffer 6.11	NA	NA	11.04 buffer creation (tree planting) and 1.22 acre upland buffer preservation= 12.26 acres	12.22 acres
<b>TOTALS</b> <b>8.69± acres wetland,</b> <b>6.11± acres upland</b>	3.33 credits	5.37 credits	12.26 acres buffer creation and 0.1 credit for wetland preservation	8.8 acres and 12.26 acres buffer creation

## SECTION 8: CONCLUSIONS

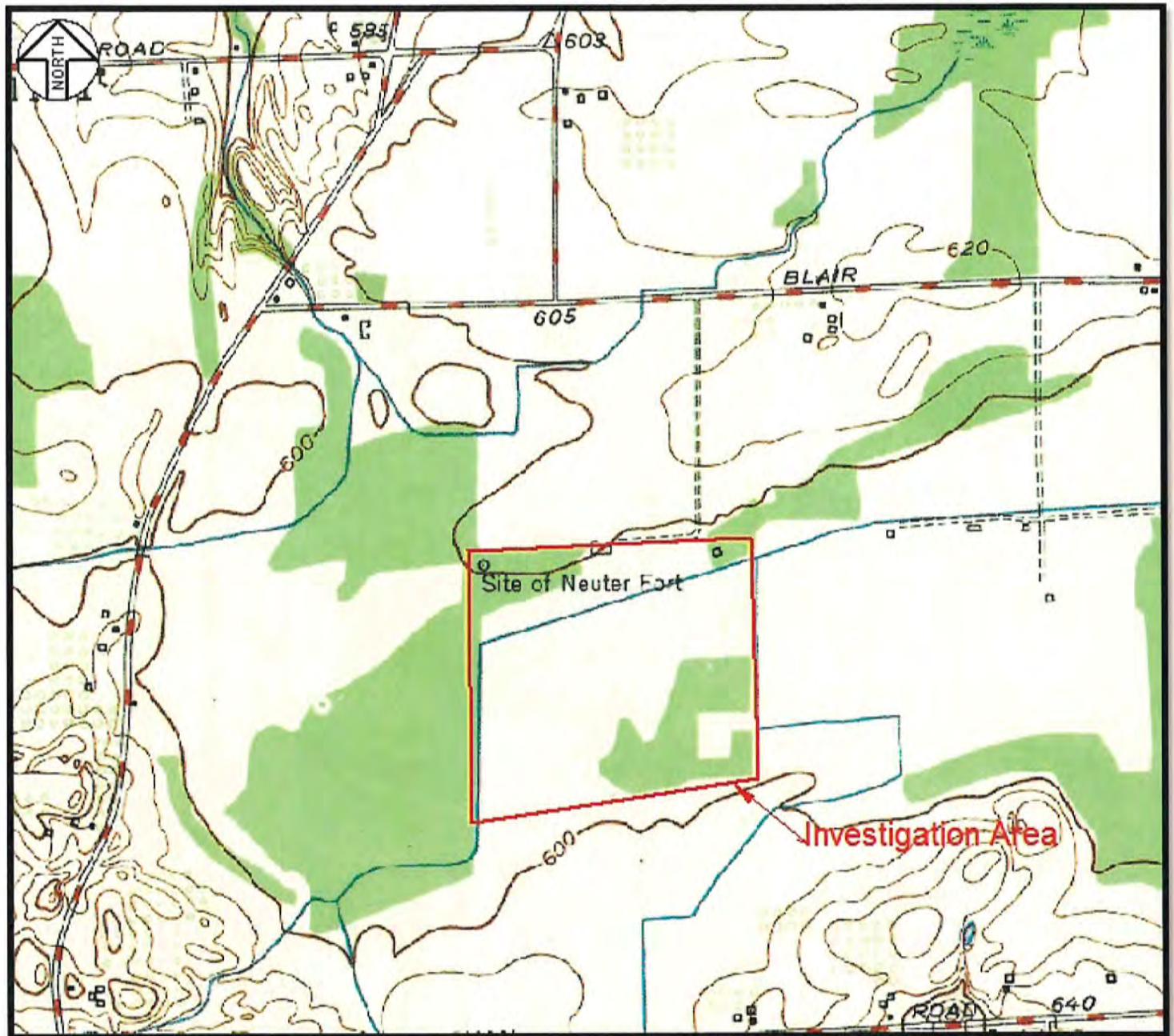
Shelby Crushed Stone has conducted an Alternatives Analysis per Section 404(b)(1) of the Clean Water Act and an evaluation of the Article 24 weighing standards. The purpose of this analysis was to identify the alternative that minimized adverse impacts to aquatic resources to the extent practicable while allowing for a reasonable continuation of mining operations at the Site in order to meet the project purposes and other compelling state-wide economic and social needs outlined in Section 2.

As outlined in Section 5 of this report, the applicant conducted an extensive search of the market area in order to identify alternative sites which would fulfill the project purpose. For the reasons listed, the subject site was identified as the only practicable alternative which fulfilled the project purposes.

As outlined in Section 6 of this report, the Applicant considered various alternative designs at the preferred Site. The Applicant's original preferred concept would have impacted 86± acres of jurisdictional wetland. The current plan will impact 8.69± acres of jurisdictional wetland. This exercise in avoidance and minimization resulted in a ninety percent reduction in wetland impacts. In addition, a conceptual mitigation plan has been prepared which would compensate for the proposed impact to 8.69± acres of state and federally jurisdictional wetland and 6.11 acres of state regulated 100-foot adjacent area.

The Applicant respectfully submits that its reduced expansion proposal and associated conceptual wetland mitigation plan minimizes degradation or loss of aquatic resources while meeting the project purposes in a manner that complies with CWA Section 404(b)(1) and ECL Article 24. The Applicant further submits that this reduced expansion footprint and significant wetland mitigation proposal strike a reasonable balance between the preservation of important wetland functions, values and benefits pursuant to CWA Section 404(b)(1) and ECL Article 24 and the furtherance of compelling economic and social needs within the meaning of E.C.L. § 24-0103, 6 N.Y.C.R.R. §§ 663.1(a) & 663.5(e) as discussed more fully in Section 2.

## APPENDIX 1 – SITE LOCATION MAP



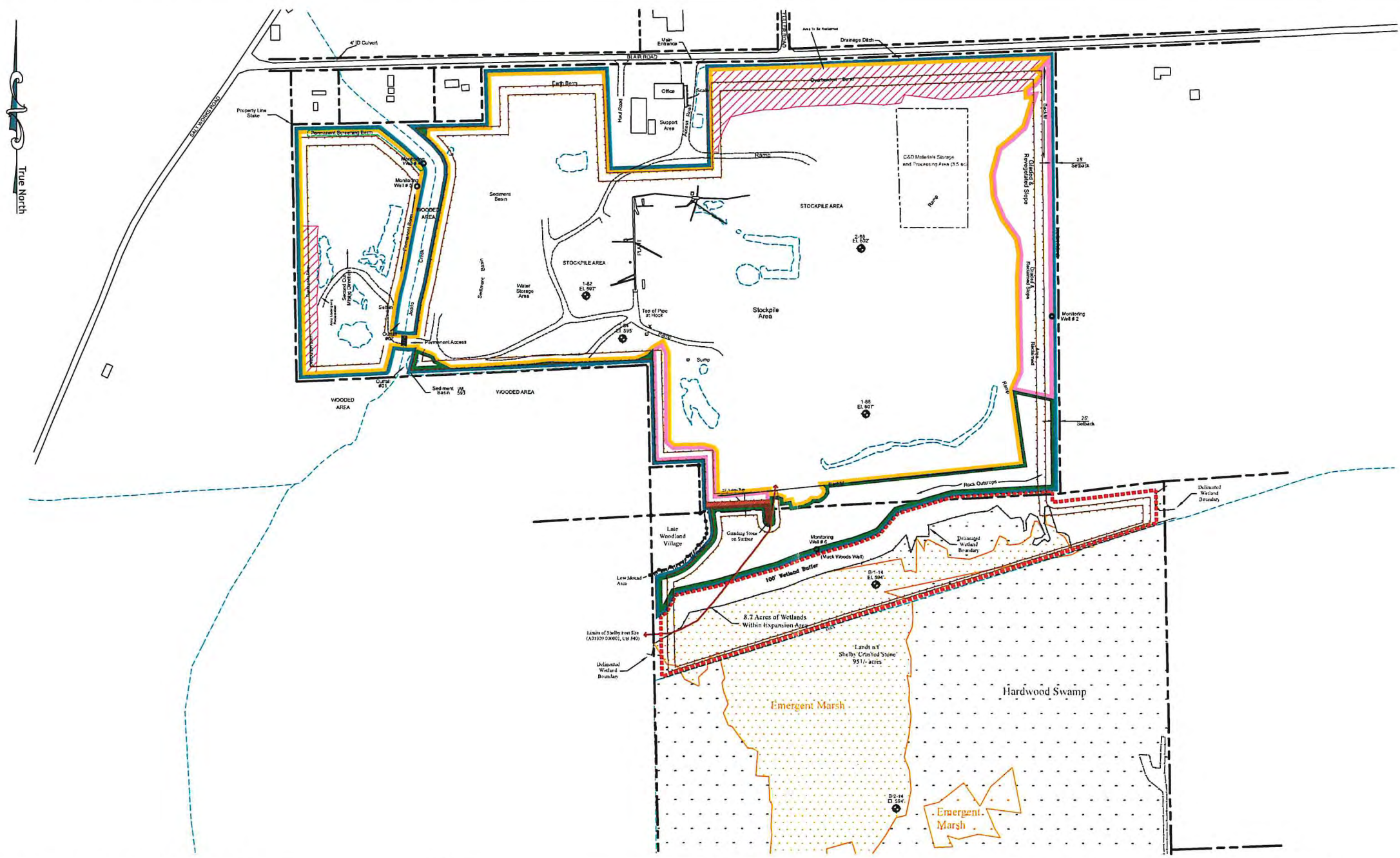
**FIGURE 1: USGS 7.5 MINUTE TOPOGRAPHICAL MAP**

Medina Quadrangle / 2002 DeLorme

Shelby Crushed Stone- Blair Road Expansion Site

Town of Shelby, Orleans County, New York

## APPENDIX 2 – SITE PLANS/IMPACT MAP



MINING PLAN MAP

Medina Mine  
NYSDEC Mine ID: 80346  
Shelby Crushed Stone, Inc.  
Town of Shelby, Orleans County, New York

Prepared by:  
**strategic mining solutions**  
Geologists & Mining Consultants  
473 Brockway Road / Frankfort, New York 13340

David Shank  
315.725.5734  
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Details:  
Date: August 17, 2016  
Horizontal Scale: 1" = 200'  
Datum: Mean Sea Level  
USGS Quad: Medina 7.5'  
Contour Interval: 0.5 feet  
Drafted by: Milliman

Brian McGinnis  
315.725.4294  
brian@strategicmining.com

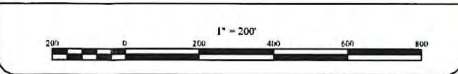
REVISIONS

Date	Description	By
11/6/18	Add Expansion Area	BTM

LEGEND

- Property Line
- Life of Mine Boundary
- 2.5' Contour Line
- 0.5' Contour Line
- Stream/Edge of Water
- Structure
- Unpaved Road
- Paved Road
- Wetland

SCALE

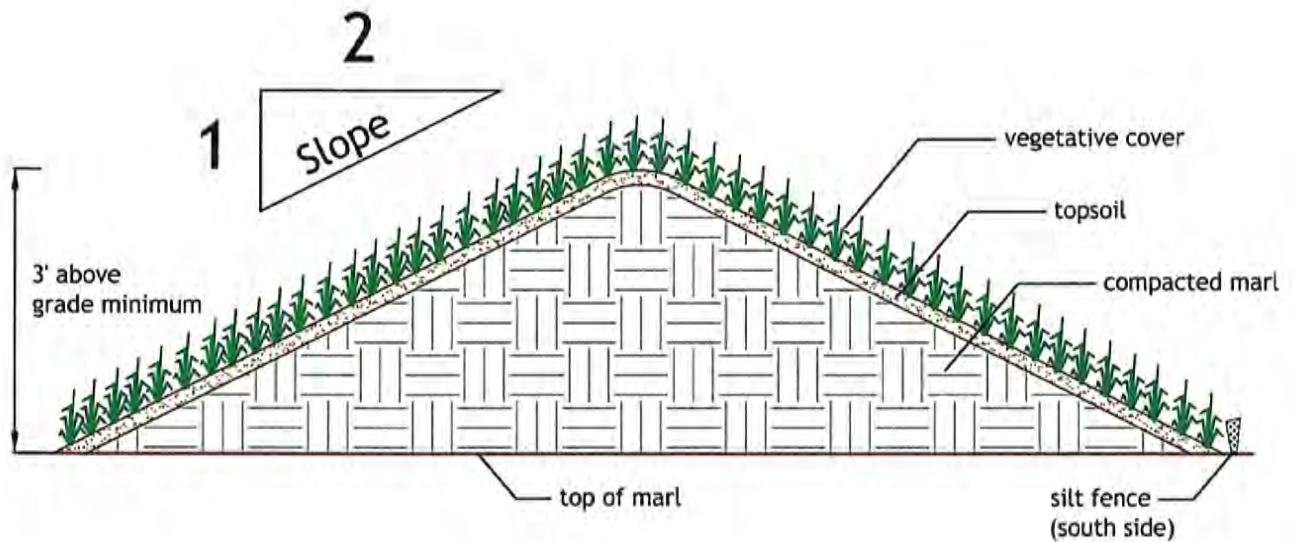


NOTES

- Base Maps & Background Information
- Mining Plan Map prepared by Griggs-Lang Consulting Geologists, last updated June 9, 2014.
  - Extended elevation contours (2 foot) derived from LIDAR dataset provided through NYSGIS Clearinghouse available at <http://www.orthos.dhser.ny.gov/>.
  - Certain map features digitized from digital high resolution aerial orthophotos provided from the National Aerial Imagery Program (NAIP) and the NYSGIS Clearinghouse.
  - Property lines and location of low mound area updated from Map of Parts of Lots 15, 16, & 29, TWP.14, R.4, Holland Purchase by McIntosh & McIntosh, PC, last revised 12/19/13.
  - Limits of Shelby Fort Site and Grinding Stone location updated from Artifact Density & Distribution in Area C dated 6/19/14.

ACREAGE SUMMARY

- Total acreage currently affected by mining activities: 91+/- acres
- Lands Currently Affected By Mining Activities To Be Reclaimed During The 2016-2021 Permit Term: 6+/- acres
- Lands Approved As Reclaimed By NYSDEC: 6+/- acres
- Lands Within Existing Life Of Mine To Be Newly Affected Or Reaffected During The 2016-2021 Permit Term: 8+/- acres
- Lands To Be Bonded During The 2016-2021 Permit Term: 99+/- acres
- Current Life of Mine Area: 105+/- acres
- Lands Proposed To Be Added To The Life of Mine Area: 15+/- acres



## CONSTRUCTION SEQUENCING AND SPECIFICATIONS

1. Stake out work zone.
2. Divert incoming stormwater runoff away from work zone and install silt fencing along southern limit of construction.
3. Topsoil and subsoil in areas on which fill is to be placed will be stripped (approximately 1-foot) to the virgin marl.
4. Berm shall be constructed of marl placed in 6 to 9 inch layers and shall be continuous over the entire length of the fill.
5. Compaction will be obtained by routing earth-moving equipment or compactor over the marl fill until compaction rate is equal or greater than 90% of the existing virgin marl.
6. The berm shall be continuous and smoothly graded.
7. The berm shall be constructed to an elevation at least 3 feet above the existing grade.
8. Establish vegetation on the berm immediately after construction, as follows:
  - a) Place a minimum of 6 inches of topsoil on the berm.
  - b) All areas to be seeded will be disked or otherwise loosened and raked to remove surface irregularities and any objectionable material.
  - c) Soil will be limed and fertilized at an appropriate rate based on the results of a soil fertility test.
  - d) Seed mixture and application rates will be similar to those previously approved for the existing mine. All affected land will be vegetated with a "conservation" seed mixture at a rate of 60 pounds per acre and tracked in with a bulldozer.
  - e) Berm will be mulched with small grain straw at a rate of 1.5 tons per acre or, alternatively, erosion control matting will be used to maintain moisture and reduce erosion.

MARL BERM

### APPENDIX 3 – BEDROCK GEOLOGY MAP

# Generalized Bedrock Geology of New York

## Bedrock Geologic Map of New York Map & Chart #15

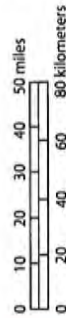
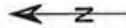
Multi-colored maps illustrating rock type, faults, contact lines, and structure with explanatory text, in a detailed, 5 sheet format @ 1:250,000 scale.

Niagara & Finger Lakes, 36°-36°;  
Adirondack & Lake Ontario, 40°-40°  
\$15.000/sheet; \$75.000/set

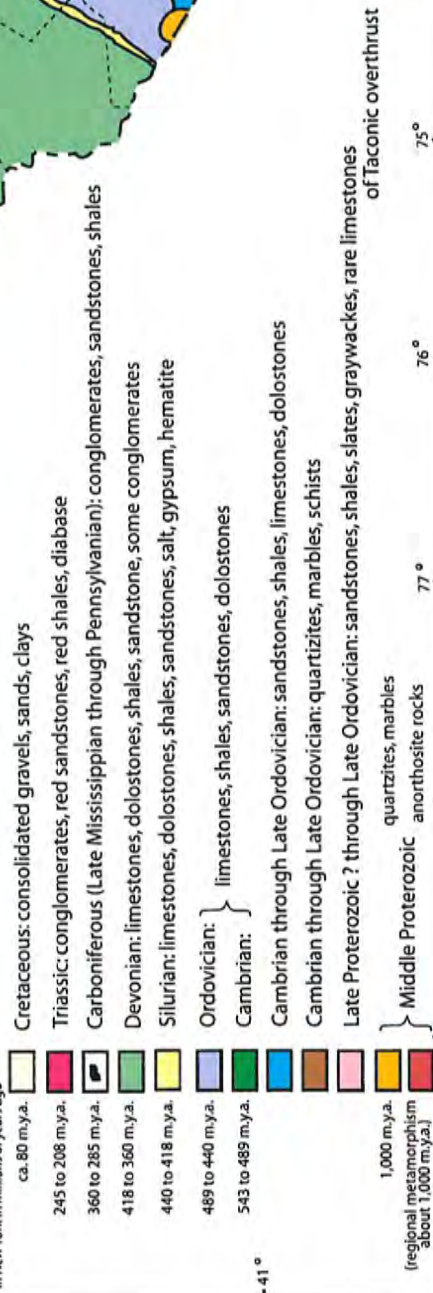


Available from:

Office of Cartography & Publications  
New York State Museum  
3126 CEC  
Albany, N.Y. 12230  
Tel. 518-486-2013  
FAX 518-486-2034  
email: nysmpub@mail.nysed.gov



Time Span of Rock Record  
in New York in millions of years ago



of Taconic overthrust

## APPENDIX 4 – ZONING MAP

# Town of Shelby

## Zoning Map

### Zoning Districts

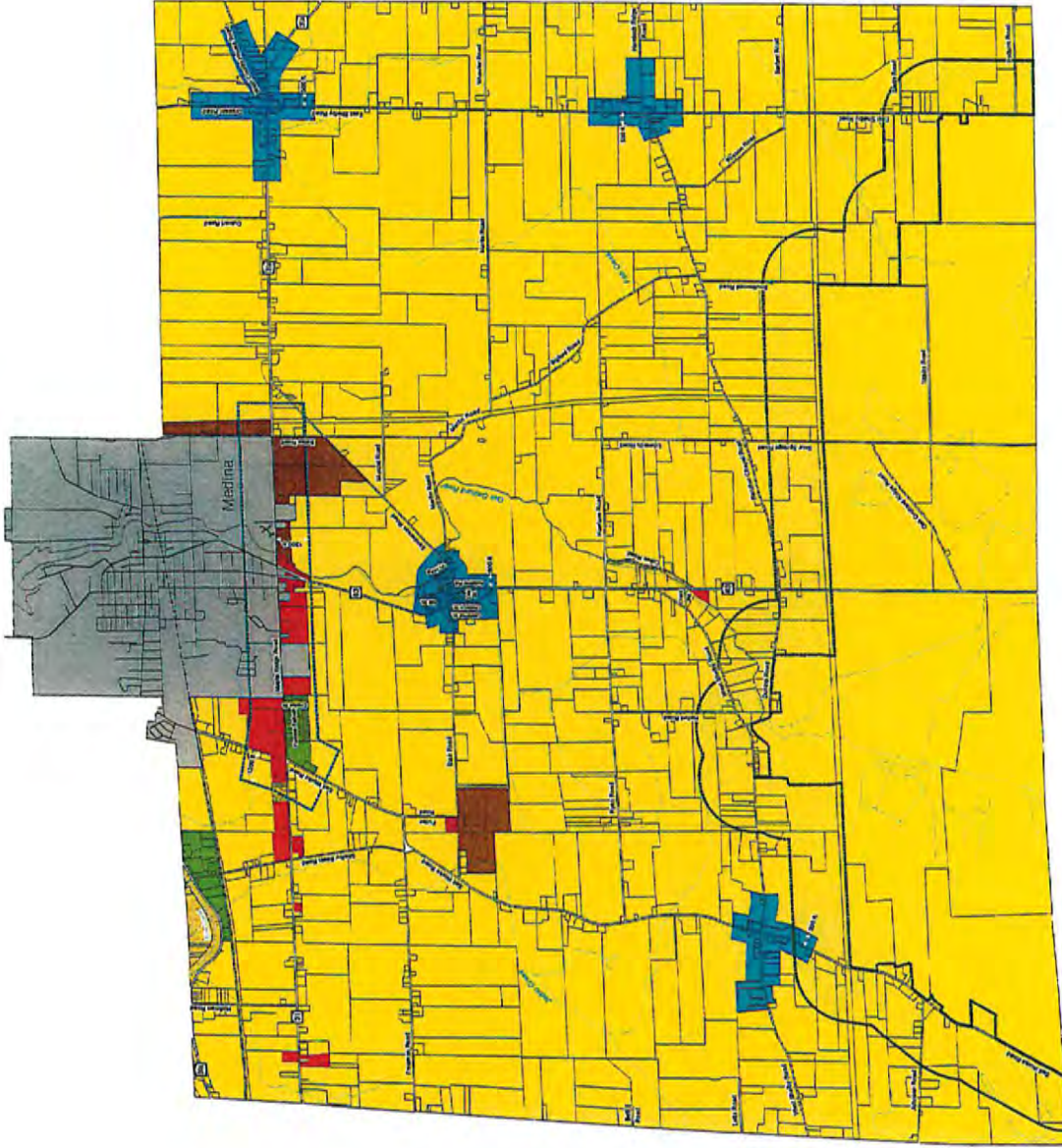
- Agricultural/Residential
- General Business
- Hamlet
- Industrial
- Light Industrial
- Rural Residential
- Maple Ridge Overlay
- Waterfront Development Overlay
- Illinois National Wildlife Refuge
- Wildlife Protection Overlay



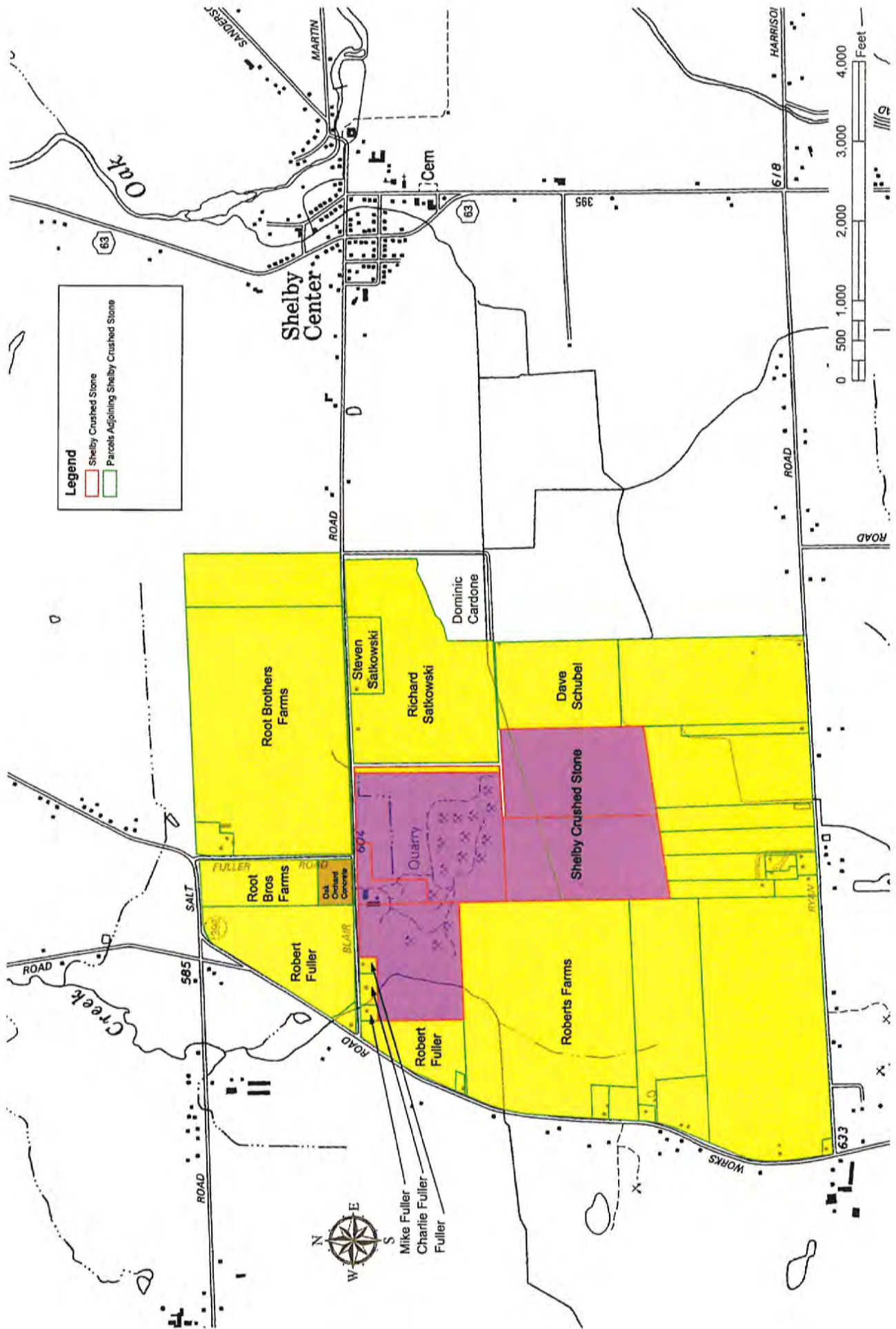
Adopted: August 18, 2003  
 Last Revised: June 19, 2017  
 Parcel Base Layer: March 2017



Prepared 7-3-2017 by  
 Orleans County Department of  
 Planning and Development



## APPENDIX 5 – OFF-SITE ALTERNATIVES





## APPENDIX 6 – ON-SITE ALTERNATIVES

86%+ AC.  
IMPACT










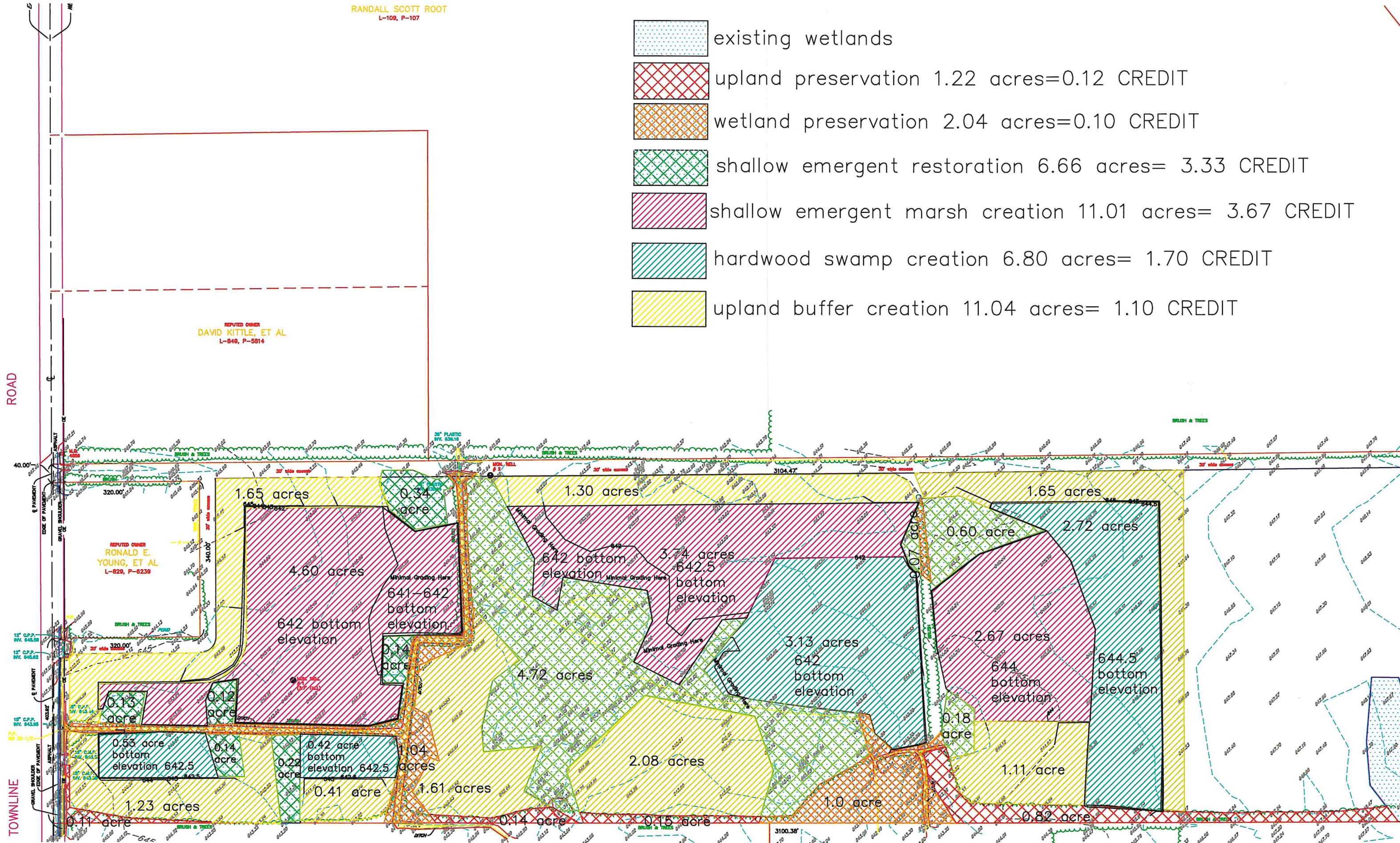
614-AC.  
IMPACT

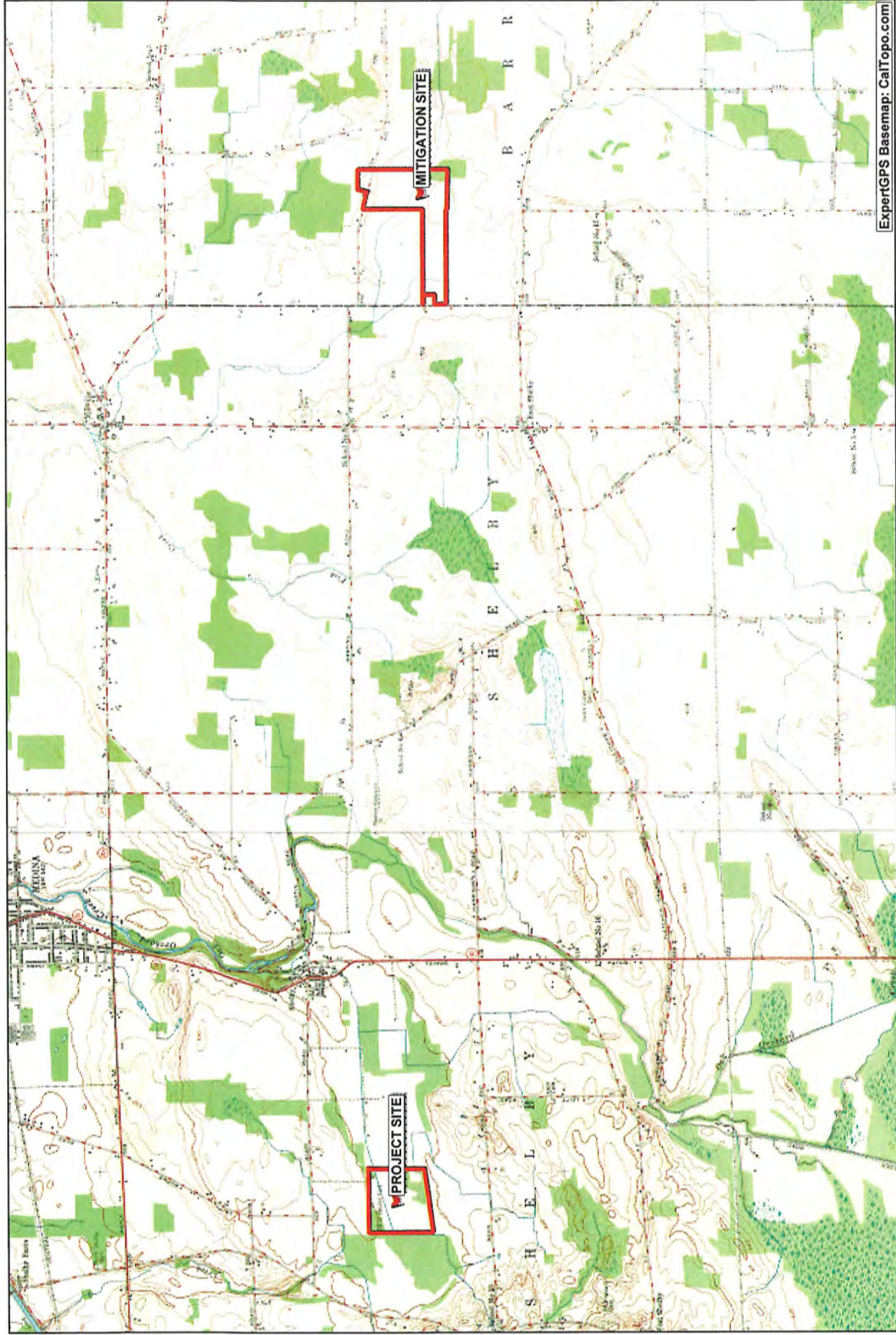




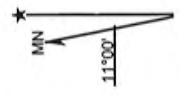
## APPENDIX 7 – CONCEPTUAL MITIGATION PLAN

	existing wetlands
	upland preservation 1.22 acres=0.12 CREDIT
	wetland preservation 2.04 acres=0.10 CREDIT
	shallow emergent restoration 6.66 acres= 3.33 CREDIT
	shallow emergent marsh creation 11.01 acres= 3.67 CREDIT
	hardwood swamp creation 6.80 acres= 1.70 CREDIT
	upland buffer creation 11.04 acres= 1.10 CREDIT





ExpertGPS Basemap: CalTopo.com



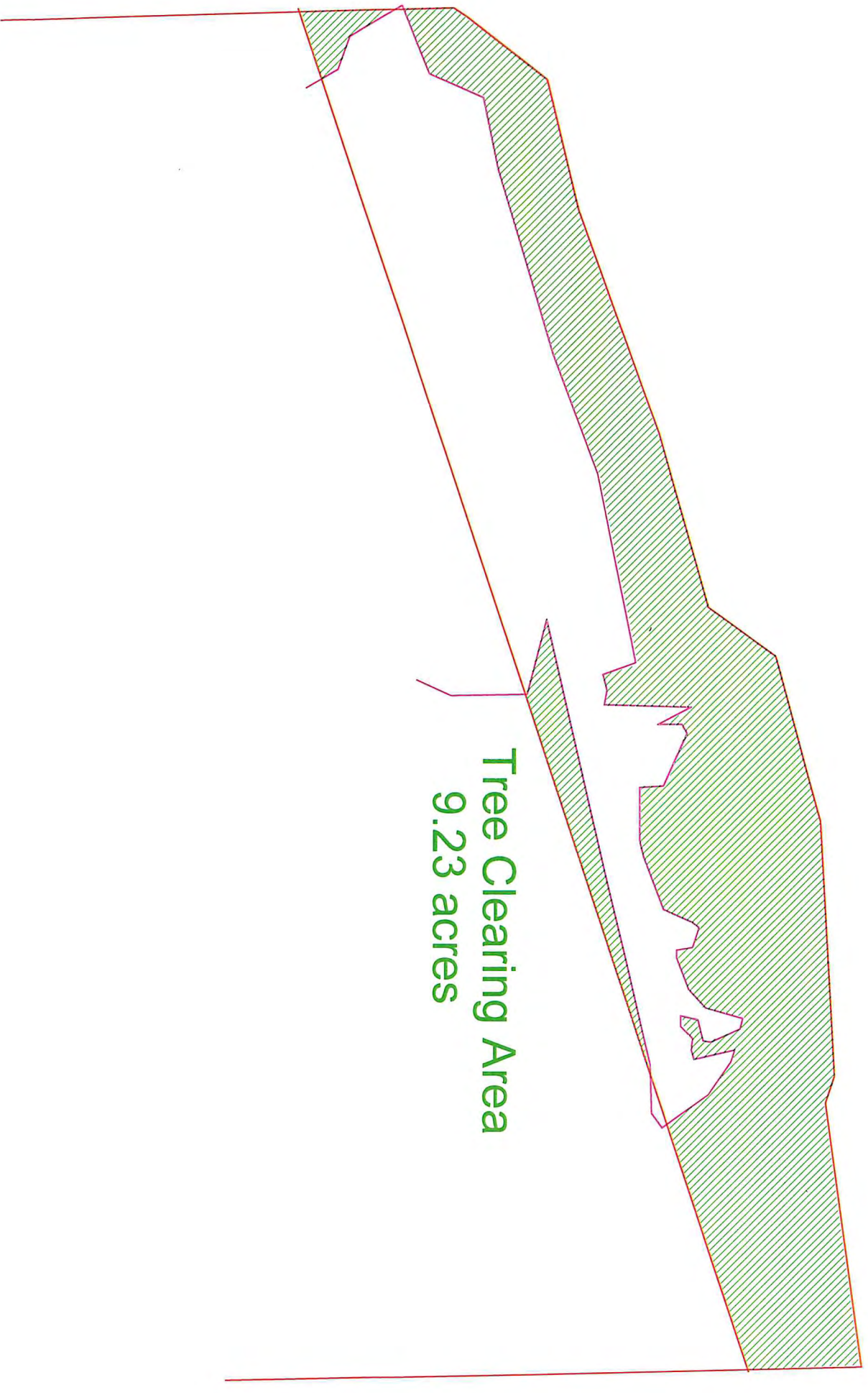
## APPENDIX 8 – LIST OF ADJACENT LANDOWNERS

**Property Owners Adjacent to Shelby Crushed Stone**

<b><u>Number</u></b>	<b><u>Name</u></b>	<b><u>Address</u></b>	<b><u>Property ID</u></b>
1	David Schubel	11021 Ryan Rd, Medina, NY 14103	101.-1-4
2	David Schubel	11021 Ryan Rd, Medina, NY 14103	101.-1-71
3	Winans Thomas J	10957 Ryan Rd, Medina, NY 14103	101.-1-69.21
4	Rizzo Patricia B	10885 Ryan Rd, Medina, NY 14103	101.-1-69.312
5	Rizzo Jon	10885 Ryan Rd, Medina, NY 14103	101.-1-69.311
6	Schrader Darren & Heather	10879 Ryan Rd, Medina, NY 14103	101.-1-81.1
7	Schrader David & Diane	10799 Ryan Rd, Medina, NY 14103	101.-1-81.2
8	Schrader Steven & Susan	10893C Ryan Rd, Medina, NY 14103	101.-1-68.114
9	Verbocy Stephen C & Beckwith Samantha	4817 Salt Works Rd, Medina, NY 14103	101.-1-66.1
10	Roberts Todd J & Deborah	4263 Salt Works Rd, Medina, NY 14103	100.-1-2.11
11	Richard Satkowski	10956 Blair Rd, Medina, NY 14103	90.-1-43.1

## APPENDIX 9 – TREE CLEARING LIMITS

Tree Clearing Area  
9.23 acres





## United States Department of the Interior



### FISH AND WILDLIFE SERVICE

New York Ecological Services Field Office

3817 Luker Road

Cortland, NY 13045-9385

Phone: (607) 753-9334 Fax: (607) 753-9699

<http://www.fws.gov/northeast/nyfo/es/section7.htm>

In Reply Refer To:

February 11, 2019

Consultation Code: 05E1NY00-2019-SLI-0947

Event Code: 05E1NY00-2019-E-02941

Project Name: Shelby Crushed Stone Expansion

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: <http://www.fws.gov/northeast/nyfo/es/section7.htm>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (<http://www.fws.gov/windenergy/>)

[eagle\\_guidance.html](#)). Additionally, wind energy projects should follow the Services wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**New York Ecological Services Field Office**  
3817 Luker Road  
Cortland, NY 13045-9385  
(607) 753-9334

## Project Summary

Consultation Code: 05E1NY00-2019-SLI-0947

Event Code: 05E1NY00-2019-E-02941

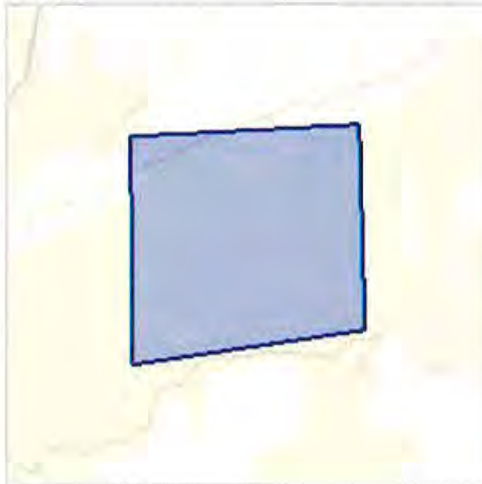
Project Name: Shelby Crushed Stone Expansion

Project Type: MINING

Project Description: 15 Acre Stone Quarry Expansion - 2020

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/43.18115480139424N78.41992120515414W>



Counties: Orleans, NY

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## Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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## APPENDIX 11 – OPRHP CORRESPONDENCE

## APPENDIX 12 – JOINT APPLICATION FOR PERMIT



### JOINT APPLICATION FORM

For Permits for activities affecting streams, waterways, waterbodies, wetlands, coastal areas, sources of water, and endangered and threatened species.

You must separately apply for and obtain Permits from each involved agency before starting work. Please read all instructions.

<b>1. Applications To:</b>	
<b>&gt;NYS Department of Environmental Conservation</b> <input checked="" type="checkbox"/> Check here to confirm you sent this form to NYSDEC.	
Check all permits that apply:	<input type="checkbox"/> Dams and Impoundment Structures
<input type="checkbox"/> Stream Disturbance	<input type="checkbox"/> Tidal Wetlands
<input type="checkbox"/> Excavation and Fill in Navigable Waters	<input type="checkbox"/> Wild, Scenic and Recreational Rivers
<input type="checkbox"/> Docks, Moorings or Platforms	<input type="checkbox"/> Coastal Erosion Management
<input checked="" type="checkbox"/> 401 Water Quality Certification	<input type="checkbox"/> Water Withdrawal
<input checked="" type="checkbox"/> Freshwater Wetlands	<input type="checkbox"/> Long Island Well
	<input type="checkbox"/> Incidental Take of Endangered / Threatened Species
<b>&gt;US Army Corps of Engineers</b> <input checked="" type="checkbox"/> Check here to confirm you sent this form to USACE.	
Check all permits that apply:	<input checked="" type="checkbox"/> Section 404 Clean Water Act
Is the project Federally funded?	<input type="checkbox"/> Section 10 Rivers and Harbors Act
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If yes, name of Federal Agency: _____	
General Permit Type(s), if known: _____	
Preconstruction Notification: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>&gt;NYS Office of General Services</b> <input type="checkbox"/> Check here to confirm you sent this form to NYSOGS.	
Check all permits that apply:	
<input type="checkbox"/> State Owned Lands Under Water	<input type="checkbox"/> Docks, Moorings or Platforms
<input type="checkbox"/> Utility Easement (pipelines, conduits, cables, etc.)	
<b>&gt;NYS Department of State</b> <input type="checkbox"/> Check here to confirm you sent this form to NYSDOS.	
Check if this applies: <input type="checkbox"/> Coastal Consistency Concurrence	

<b>2. Name of Applicant</b>		<b>Taxpayer ID (if applicant is NOT an individual)</b>	
Shelby Crushed Stone		20-2421945	
<b>Mailing Address</b>		<b>Post Office / City</b>	<b>State Zip</b>
10830 Blair Road		Shelby	NY 14103
<b>Telephone</b>	585-798-4501	<b>Email</b>	Tom@ShelbyStone.com
Applicant Must be (check all that apply): <input checked="" type="checkbox"/> Owner <input checked="" type="checkbox"/> Operator <input type="checkbox"/> Lessee			

<b>3. Name of Property Owner (if different than Applicant)</b>			
_____			
<b>Mailing Address</b>		<b>Post Office / City</b>	<b>State Zip</b>
_____		_____	_____
<b>Telephone</b>	_____	<b>Email</b>	_____

<b>For Agency Use Only</b>	Agency Application Number: _____
----------------------------	----------------------------------

<b>4. Name of Contact / Agent</b>			
Scott Livingstone (Earth Dimensions, Inc.)			
<b>Mailing Address</b>		<b>Post Office / City</b>	<b>State Zip</b>
1091 Jamison Road		Elma	NY 14059
<b>Telephone</b>	716-655-1717	<b>Email</b>	slivingstone@earthdimensions.com

<b>5. Project / Facility Name</b>		<b>Property Tax Map Section / Block / Lot Number:</b>	
Shelby Crushed Stone Expansion		101.-1-2 and 101.-1-3	
<b>Project Street Address, if applicable</b>		<b>Post Office / City</b>	<b>State Zip</b>
10830 Blair Road		Shelby	NY 14103
Provide directions and distances to roads, intersections, bridges and bodies of water			
The site is located approximately 1,300 feet south of Blair Road and 1,800 linear feet east of Salt Road.			
<input checked="" type="checkbox"/> Town	<input type="checkbox"/> Village	<input type="checkbox"/> City	<b>County</b>
Shelby			Orleans
		<b>Stream/Waterbody Name</b>	
		Tributary to Oak Orchard Ck. & FWW MD-9	
<b>Project Location Coordinates: Enter Latitude and Longitude in degrees, minutes, seconds:</b>			
Latitude:	43 °	10 ' 59.49N "	Longitude: 78 ° 25 ' 09.85W "

**6. Project Description:** Provide the following information about your project. Continue each response and provide any additional information on other pages. **Attach plans on separate pages.**

a. **Purpose of the proposed project:**

The project purpose is to expand an existing quarry into a 14.8 acre area outside of the current mining permit area.

b. **Description of current site conditions:**

The site is currently vacant and is dominated by emergent marsh, hardwood swamp and northern hardwood community.

c. **Proposed site changes:**

Proposed site changes include the development of a stone quarry expansion which will involve the removal of overburden and extraction of dolomite.

d. **Type of structures and fill materials to be installed, and quantity of materials to be used (e.g., square feet of coverage, cubic yards of fill material, structures below ordinary/mean high water, etc.):**

The proposed project encompasses a 14.8 acre area to be mined for dolomite. The project will involve the removal of approximately 1.7 million tons of stone and will require the impact of 8.7 acres of state and federally jurisdictional wetland.

e. **Area of excavation or dredging, volume of material to be removed, location of dredged material placement:**

The project will involve the removal of 755,555 cubic yards of dolomite.

f. **Is tree cutting or clearing proposed?** ☒ Yes If Yes, explain below. ☐ No

Timing of the proposed cutting or clearing (month/year): unknown - Please process under 4d rule

Number of trees to be cut: Acreage of trees to be cleared: 9.23 acres

g. Work methods and type of equipment to be used:

Typical work methods will be used to complete the construction of the project. Equipment will include the use of excavators and dozers. Mining and stone processing will involve the use of blasting, crushers and sorting equipment

h. Describe the planned sequence of activities:

Following installation of erosion control devices, overburden will be stripped within the work area and stockpiled around the perimeter. Mining of the dolomite will then proceed from the existing quarry southward.

i. Pollution control methods and other actions proposed to mitigate environmental impacts:

Silt fencing and/or silt sock will be used to control sedimentation into the regulated wetland/waterway. Since the mine will be self-contained, future activities will not require further sediment and pollution control features.

j. Erosion and silt control methods that will be used to prevent water quality impacts:

Installation of perimeter silt sock/fence.

k. Alternatives considered to avoid regulated areas. If no feasible alternatives exist, explain how the project will minimize impacts:

The project has been designed to minimize wetland impacts scaling back on the proposed expansion from 86 acres to 14.8 acres.

l. Proposed use: ☐ Private ☐ Public ☒ Commercial

m. Proposed Start Date: Spring 2012 Estimated Completion Date: 2028

n. Has work begun on project? ☐ Yes If Yes, explain below. ☒ No

o. Will project occupy Federal, State, or Municipal Land? ☐ Yes If Yes, explain below. ☒ No

p. List any previous DEC, USACE, OGS or DOS Permit / Application numbers for activities at this location:

LRB 2006-00616

q. Will this project require additional Federal, State, or Local authorizations, including zoning changes?

☒ Yes If Yes, list below. ☐ No

Town of Shelby Approval

**7. Signatures.**

Applicant and Owner (If different) must sign the application.


Append additional pages of this Signature section if there are multiple Applicants, Owners or Contact/Agents.

I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief.

Permission to Inspect - I hereby consent to Agency inspection of the project site and adjacent property areas. Agency staff may enter the property without notice between 7:00 am and 7:00 pm, Monday - Friday. Inspection may occur without the owner, applicant or agent present. If the property is posted with "keep out" signs or fenced with an unlocked gate, Agency staff may still enter the property. Agency staff may take measurements, analyze site physical characteristics, take soil and vegetation samples, sketch and photograph the site. I understand that failure to give this consent may result in denial of the permit(s) sought by this application.

False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the NYS Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than \$10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

**Signature of Applicant**



Date

5/22/19

Applicant Must be (check all that apply): ☒ Owner ☒ Operator ☐ Lessee

Printed Name

Thomas Biamonte

Title

President

**Signature of Owner (if different than Applicant)**

Date

Printed Name

Title

**Signature of Contact / Agent**



Date

5.23.2019

Printed Name

Scott Livingstone

Title

Wetlands Operations Manager

**For Agency Use Only**

**DETERMINATION OF NO PERMIT REQUIRED**

Agency Application Number

(Agency Name) has determined that No Permit is required from this Agency for the project described in this application.

Agency Representative:

Printed Name

Title

Signature

Date

## APPENDIX 13 – GEOGRAPHIC MARKET AREA

