



November 8, 2021  
Our File: 221367

Via Email: [eli@fbmcontracting.ca](mailto:eli@fbmcontracting.ca)

319 Mary Street  
Warton, ON N0H 2T0

Attention: Mr. Eli Vermilyea,

Re: Letter of Opinion  
GCOP Bedrock Resource Area Viability  
Proposed Residential Development  
Part Lot 3, Conc. 20 – Grey Road 17  
Township of Georgian Bluffs  
County of Grey

Dear Eli,

As requested, this correspondence is provided as a letter of professional opinion regarding the location of your property on an area of Paleozoic bedrock covered by soil with a thickness of 1 to 8 metres, as noted in Appendix E of the Grey County Official Plan (June 7, 2019), which identifies potential bedrock and shale resources within Grey County. Section 5.6.6(2) of the Grey County Official Plan indicates that “...*development and activities which would preclude or hinder the establishment of new operations or access to the resources shall only be permitted if the resource use would not be feasible...*”

Based on a review of geological mapping, it is our understanding that the near-surface bedrock underlying your property consists of dolostone of the Amabel formation. A review of area well records indicates that the depth to bedrock in the vicinity of your property is in the range of 3.5 to 4.0 metres below ground surface (mbgs).

Although there is the potential in some instances for the extraction of dolostone of the Amabel formation for use as either dimension stone or for crushing to produce aggregate resources, the subject property is not considered to be feasible for the extraction of these resources, as discussed below.

#### Shallow Groundwater Elevation

Upon reviewing available aerial imagery of the Site, an estimated 77% (approximately 7,700m<sup>2</sup> of 9,950m<sup>2</sup>) of the Site is at least seasonally wet or saturated, with only the southeasternmost 23% of the property adjacent to Grey Road 17 appearing to be generally dry year-round. A groundwater spring appears to be present on the far northern boundary of the Site in the seasonally saturated area, where the start of a watercourse extends northward from the Site. The elevation difference between the southeastern “dry” area of the Site and this watercourse is estimated to be in the range of 1 to 2 metres. A recent aerial image of the Site is provided in the Site Layout attachment.

Further, a soils investigation was conducted by GM BluePlan Engineering (GMBP) personnel in October 2021, which involved the excavation of shallow testholes. These testholes were excavated to a depth of less than 1 metre below the ground surface and each of the holes were observed to have evident groundwater infiltration within 1 metre of the surface.

Overall, the shallow groundwater on the Site is expected to act as a significant barrier to a viable bedrock extraction operation. The approval of extraction of below water operations is considered to be a significant undertaking and only viable with valuable resource and relatively large volumes.

### Environmental Protection (EP) Zoning and Grey Sauble Conservation Authority (GSCA) Regulated Area

A review of the Municipality of Georgian Bluffs Zoning Bylaw and GSCA designated wetlands and indicates that the area of the Site inferred to be seasonally saturated through an inspection of available aerial imagery (i.e. approximately 77% of the Site) is zoned Environmental Protection (EP) and/or Regulated under Ontario Regulation 151/06. EP zoning provisions do not typically permit development, especially if the rationale for the zoning is associated with saturated or floodplain areas. The GSCA Regulated area is associated with the local wetland feature, which includes a 30 metre area of interference from the wetland, and low-lying flood prone areas. The Municipal Zoning Map and GSCA Map attached outline the EP and Regulated areas, respectively.

Beyond the difficulty with extraction below the water table, when the setbacks from the features and property boundaries are accounted for, the resulting developable area of the property is eliminated.

### **Summary**

The property is not considered a viable for extraction of bedrock resources from an environmental protection, logistical, or economical perspective based on the following:

- the prominent wetland feature on the majority of the property,
- the shallow groundwater elevation (i.e. less than 2 m),
- the EP zoning area and the area regulated under Ontario Regulation 151/06, and setbacks that would be required from wetland areas, property boundaries, County Road 17, and neighbouring residential dwellings, which would eliminate the potential area of extraction on the Site.

Yours truly,

**GM BLUEPLAN ENGINEERING LIMITED**

Per:

A handwritten signature in blue ink, appearing to read 'C. J. Sweet'.

C. J. Sweet, P.Geo.  
CJS/md



cc: GMBP: Matt Nelson – [matt.nelson@gmblueplan.ca](mailto:matt.nelson@gmblueplan.ca);  
GMBP: Bill Dubeau – [bill.dubeau@gmblueplan.ca](mailto:bill.dubeau@gmblueplan.ca)  
File No. 221367

Encl: Site Layout  
Municipal Zoning Map  
GSCA Mapping

## Legend

### Large Scale Roads

-  Provincial Highway
-  County Road
-  Township Road
-  Seasonal Road

-  Parcels - Current
-  Grey County Boundary



Grey Road 17

49 0 25 49 Meters

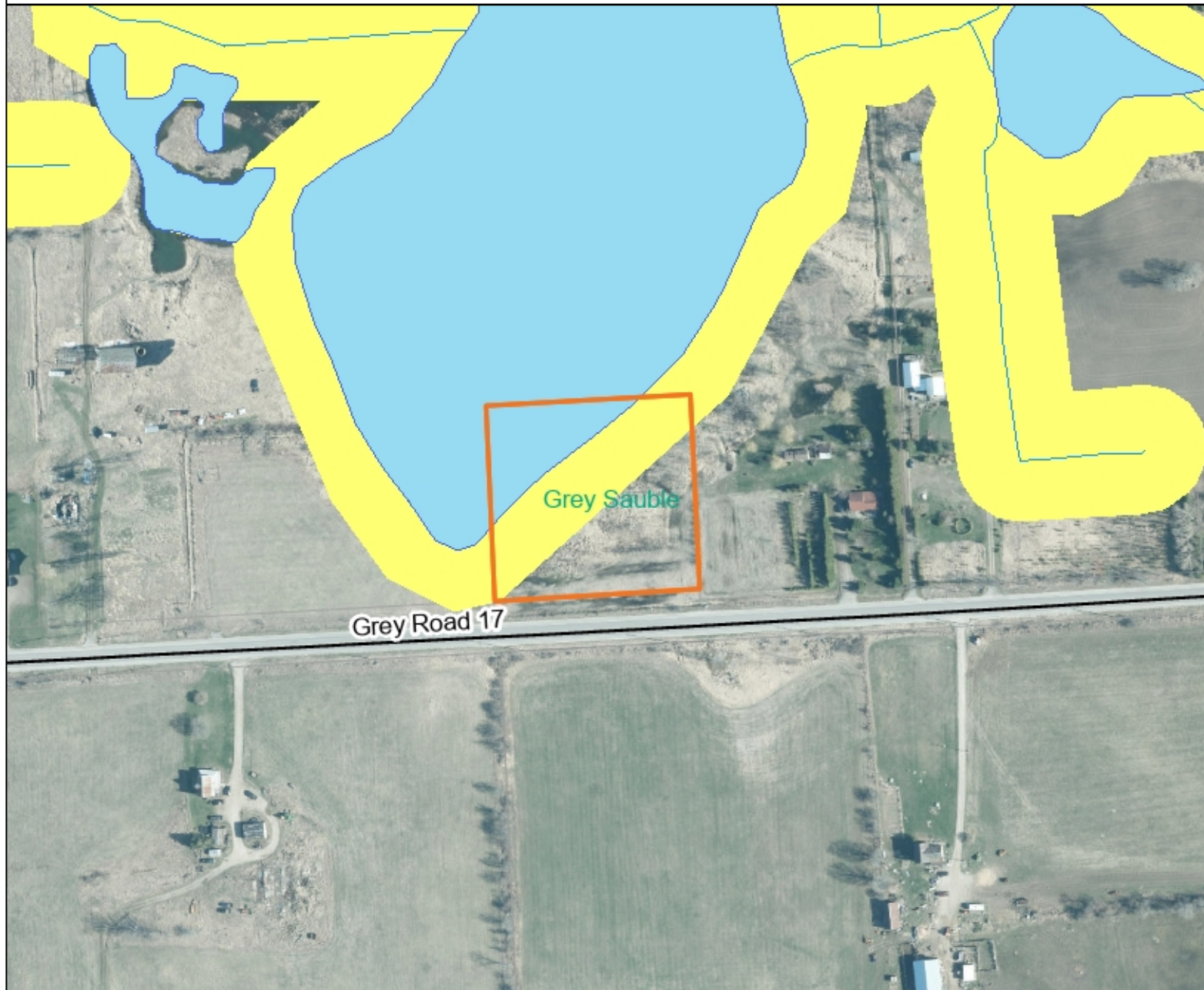


## Notes



## Legend

-  CA Boundaries
-  Wet Areas - GSCA
-  Watercourses
-  Regulations - GSCA
- Large Scale Roads**
  -  Provincial Highway
  -  County Road
  -  Township Road
  -  Seasonal Road
-  Parcels - Current
-  Grey County Boundary



Grey Road 17

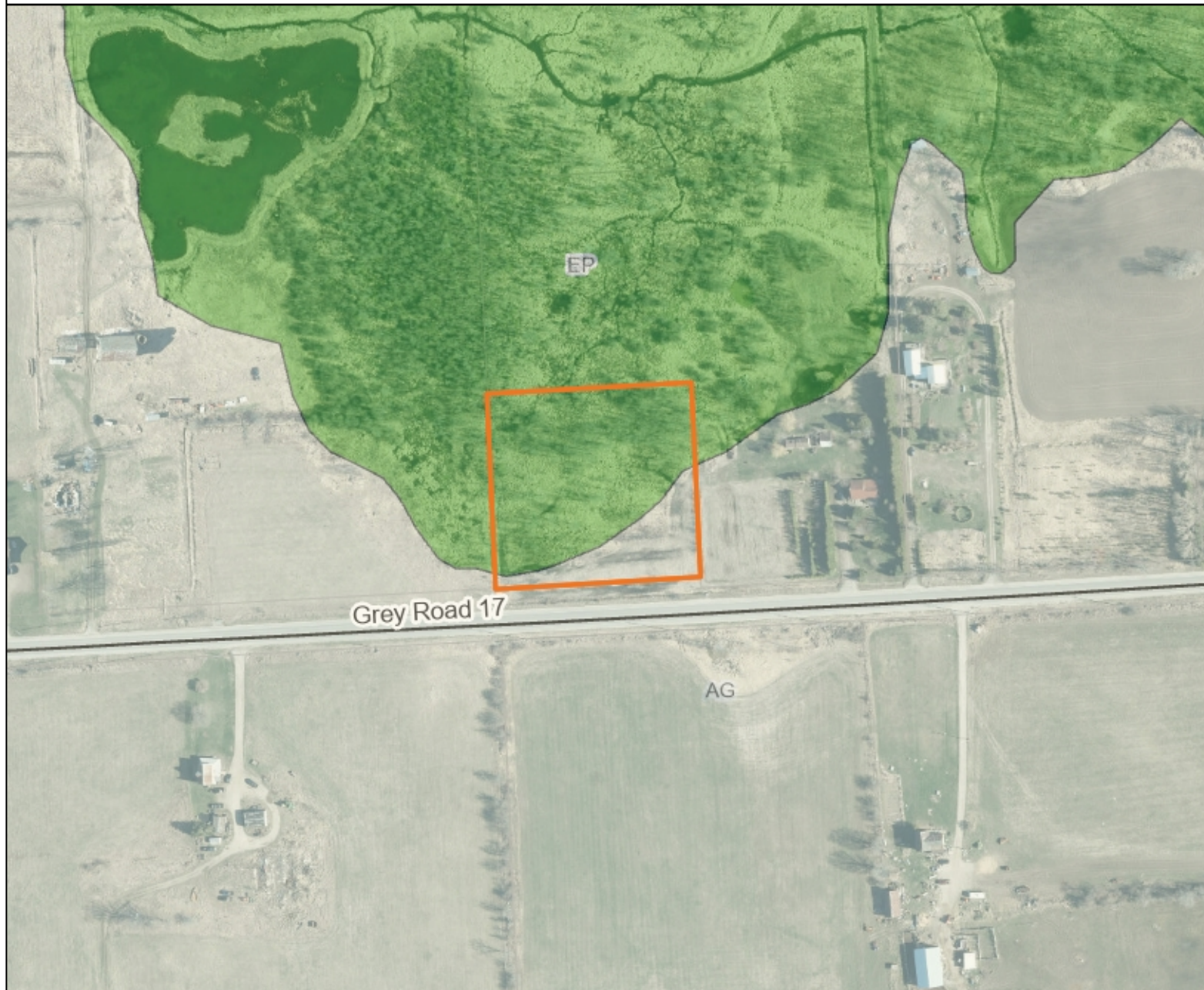
Grey Sauble

197 0 98 197 Meters
























## Notes







## Legend

### Zoning - Georgian Bluffs

-  Agricultural
-  Airport
-  General Commercial
-  Rural Commercial
-  Tourist Commercial
-  Highway Commercial
-  Marine Commercial
-  Environmental Protection
-  Institutional
-  Industrial
-  Extractive Industrial
-  NEC
-  Open Space
-  Golf Course
-  Planned Development
-  Residential One
-  Residential Multiple One
-  Residential Mobile Home
-  Rural
-  Shoreline Residential
-  Waste Disposal

### Large Scale Roads

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## Notes

197 0 98 197 Meters

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
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Printed November 6, 2021 THIS MAP IS NOT TO BE USED FOR NAVIGATION