

September 11, 2025

Project No. 2401284

GSS Engineering Consultants Ltd.  
945 3<sup>rd</sup> Avenue East, Suite 230  
Owen Sound, ON  
N4K 2K8

Attention: W. Brad Benson

**Re: Peer Review Comment Response  
Maximum Predicted Water Table and Hydrogeological Assessment Report  
Proposed Class 'A' Pit Above Water (JT Pit), JT Excavating Ltd,  
Municipality of West Grey, Grey County**

Dear Brad:

GEI Consultants Canada Inc (GEI) has been retained by JT Excavating Ltd (the Client) to provide a response to the Peer Review Comments issued to the Municipality of West Grey by GSS Consultants Ltd, dated July 23, 2025. The response below is based on our review of the comments provided, desktop review and analysis of available data as well as the meetings that were held on July 21 and August 25, 2025.

### **Surface Water Monitoring**

In response to the comments received on both June 13, 2025, and July 23, 2025, the wording of the note to be added to the site plan with respect to surface water monitoring is as follows:

A shallow piezometer will be installed in the on-site surface water feature to measure surface water and groundwater levels, coincident with groundwater levels in the existing monitoring wells. Water levels will be monitored on at least three occasions, at least 2 weeks apart during the period of seasonal high-water levels.

### **Groundwater Fed Surface Water Feature**

It is the opinion of GEI that the surface water feature at 382048 Concession 4 is groundwater fed rather than the result of surface water runoff. Monitoring well MW3 on the JT Pit property indicates that the groundwater table ranges from 287.18 masl at the driest times of the year to 288.01 masl at the wettest time of the year. Based on the water levels obtained on the JT Pit at MW3 and a review of the publicly available information such as Grey and Bruce County Groundwater Study and aerial photographs, a portion of the surface water feature at 382048 Concession 4 is groundwater fed especially during times of seasonally high groundwater elevations.

### **Direction of Surface Water Runoff Catchment Area**

Based on discussions on June 21, 2025 and August 25, 2025, it is GEI's understanding that there is a concern that the property to the south of the pit property (382048 Concession 4 NDR) will no longer receive surface water run off discharging from the pit property. Surface water run off from the pit property currently travels southwest across the site to the perimeter ditching between the roadway and the property and ultimately to the Saugeen River. Storm water drainage patterns pre and post development are illustrated in enclosed Figures 1 and 2. A 600 mm culvert at a elevation of 288.0 masl is present on the JT Pit Property to discharge surface water runoff under circumstances where pooling occurs, such as during large storm events. The current surface water runoff in the catchment area is west to southwest towards the perimeter ditching and the Saugeen River. These figures demonstrate that surface water drainage from the pit property is not currently proportionally contributing to the surface water feature on 382048 Concession 4 and therefore the development and rehabilitation of the pit property will not negatively impact this property, or the surface water run off that it receives.

### **Site Visit and Site Observation of Surface water Runoff**

A site visit was conducted on August 25, 2025, to determine predevelopment conditions, photos have been included as Appendix A. The site visit occurred following a period of rain events that took place on August 24 and August 25, 2025. It is noted that a culvert was observed on site at the time of the site visit. Photos of the site visit demonstrate that the field appeared to be damp, however, the culvert was dry, and no pooling water was observed. It is noted that the soil at the site has a high hydraulic conductivity which would result in limited surface runoff. Based on field observations, the culvert is present on site to allow drainage of surface water run off during large storm events (100-year storms).

### **Surface Water Runoff Onto 382048 Concession 4 NDR**

It is acknowledged that there are proportional contributions of surface water runoff based on limited water flow in the above noted culvert; however larger contributions originate from the properties adjacent to the east. The local topography of the properties adjacent to the east of 382048 Concession 4 NDR suggest that the surface run off in the immediate area of 382048 Concession 4 would travel west to the river. The properties immediately adjacent to 382048 Concession Road 4 are approximately 292 masl compared to the approximate elevation of 382048 Concession Road 4 in the wet area of 288 masl. 382048 Concession 4 is also mapped in a floodplain area of the Saugeen River. During times of high-water levels of the Saugeen River, the river is also a likely source of surface water on 382048 Concession 4.

### **Catchment Area Run off and Infiltration**

While the direction of surface run off will continue to be in a southwesterly direction, it is acknowledged that there will be some change to the overall runoff associated with the pit property. The post rehabilitation grading will maintain the overall direction of runoff; however, some amount of runoff will not discharge off site and will infiltrate on the property due to a "basin" effect from the final contours. There is a volume of water that will be captured in this small "basin" that will not run off the site. This

volume of water was calculated to be 376,850 m<sup>3</sup> per year based on the area of the excavation areas multiplied by annual precipitation and accounting for a portion of the water to evaporate. While this volume will no longer run off the site, it will infiltrate into the soil on the JT Pit property. The local groundwater flows towards the Saugeen River, the infiltrated water will travel as groundwater to the Saugeen River. It is our opinion that the water balance of the overall catchment area will not be impacted as the surface water in this area also ultimately travels to the Saugeen River.

If you have any questions, please feel free to contact me via email at [kpickett@geiconsultants.com](mailto:kpickett@geiconsultants.com).

Sincerely,

GEI Consultants Canada Ltd.



Kim Pickett, M. Ed, C.E.T, LET, QP<sub>ESA</sub>  
Project Geoscientist



Matthew Nelson, P. Eng., P. Geo  
Vice President, Senior Project Manager,  
Environmental Practice Lead

Enclosure:

Appendix A Site Photos

Appendix B Stormwater Drainage Figures

## **Appendix A Site Photos**

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**Photograph 1  
(GEI 2025)**

Description:  
Dry culvert  
following rain  
event





**Photograph 2  
(GEI 2025)**

Description:  
Inside of culvert –  
viewing south to  
property 382048  
Concession 4  
NDR, following a  
rain event





**Photograph 3  
(GEI 2025)**

Description:  
Entrance to the  
culvert originating  
on pit property,  
following rain  
event



**Photograph 4  
(GEI 2025)**

Description:  
Existing culvert  
originating on JT  
Pit property,  
following a rain  
event

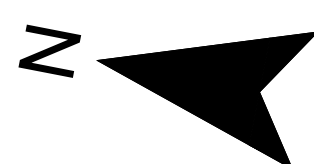
## **Appendix B   Figures**

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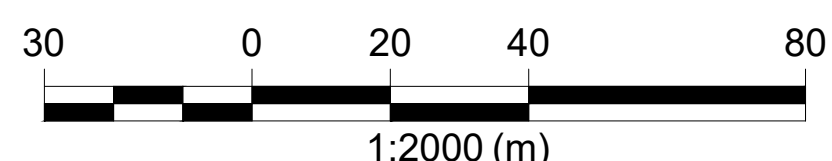
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PROPOSED AGGREGATE PIT  
MUNICIPALITY OF WEST GREY



LEGEND

- SITE BOUNDARY
- - - CATCHMENT BOUNDARY
- 100  
3.35 CATCHMENT NUMBER  
CATCHMENT AREA (ha)
- OVERLAND FLOW DIRECTION



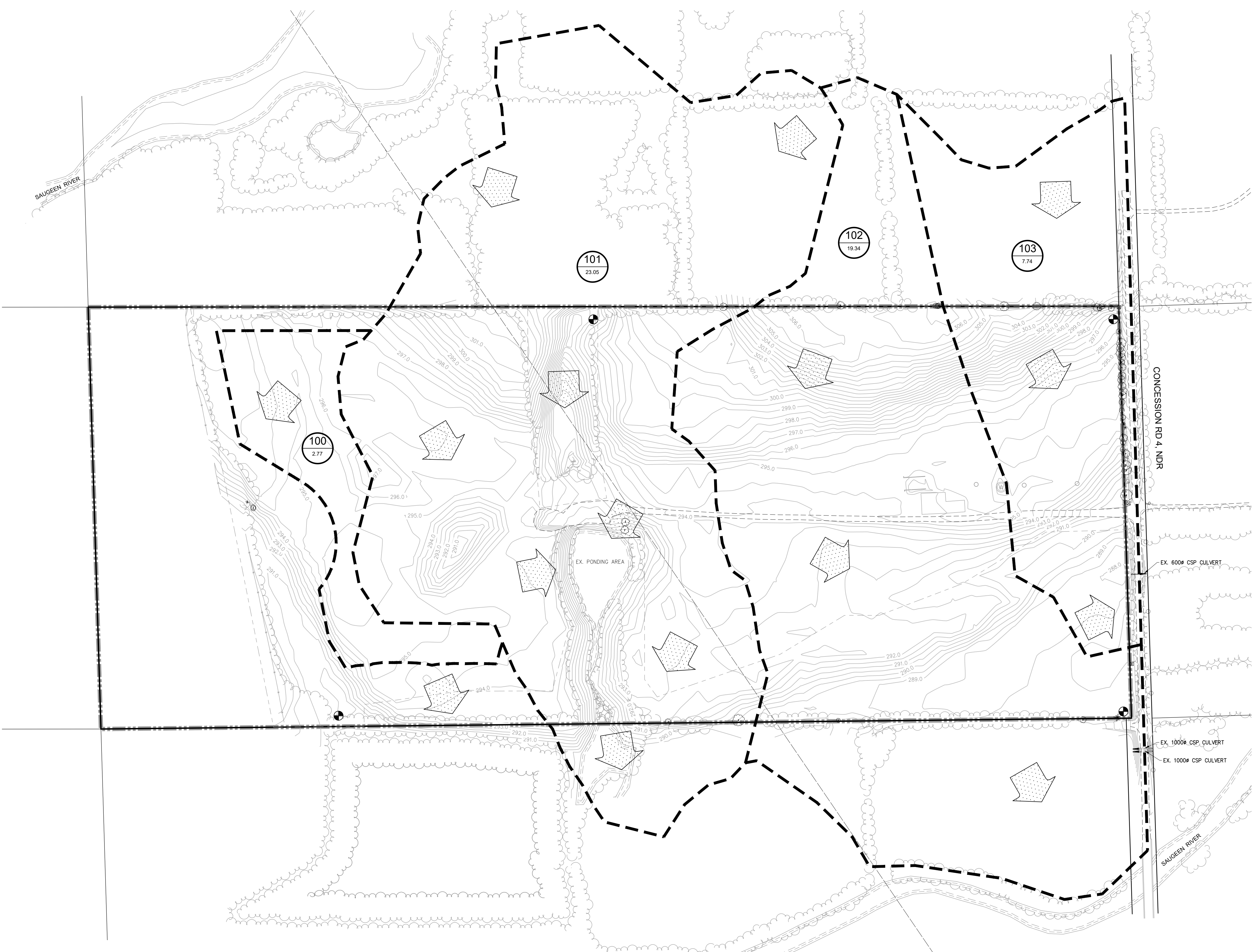
PRE - DEVELOPMENT  
DRAINAGE PLAN

Figure No. 1

GEI

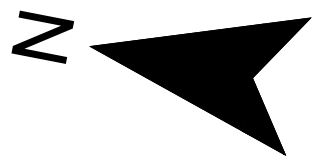
Consultants

220135  
SEPTEMBER 2025  
Scale: 1:2000



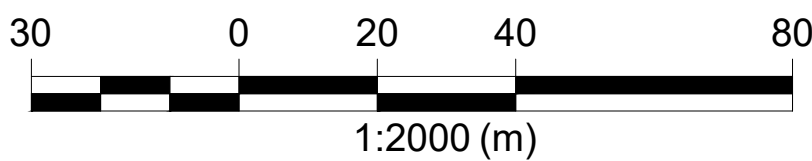
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PROPOSED AGGREGATE PIT  
MUNICIPALITY OF WEST GREY



LEGEND

- SITE BOUNDARY
- - - CATCHMENT BOUNDARY
- (100 / 3.35) CATCHMENT NUMBER  
CATCHMENT AREA (ha)
- ← OVERLAND FLOW DIRECTION



POST - DEVELOPMENT  
DRAINAGE PLAN

Figure No. 2



220135  
SEPTEMBER 2025  
Scale: 1:2000

