

File: Strada (21-407)

Date: September 18, 2024 (Updated Sept 20, 2024)

By: RL

Re: Insitu Proposed Pit / Quarry Limits Extraction Volume Calculations

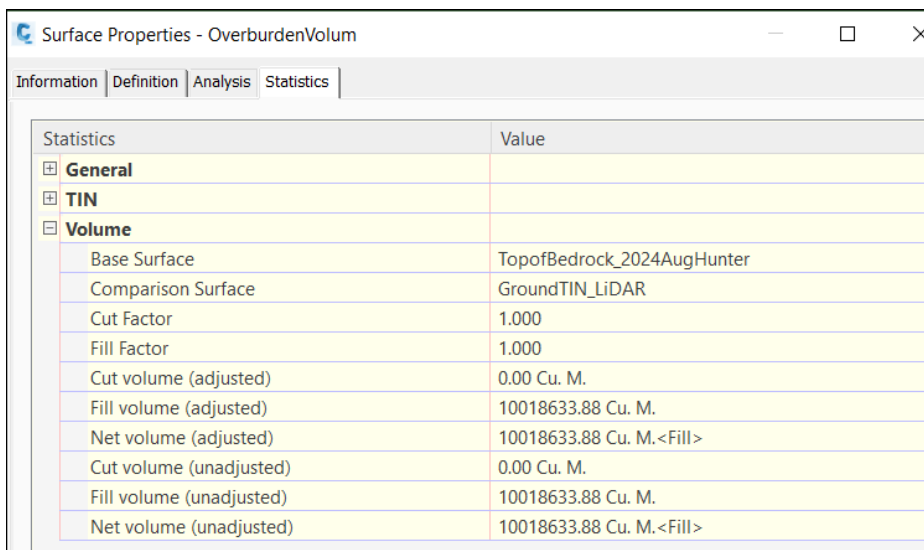
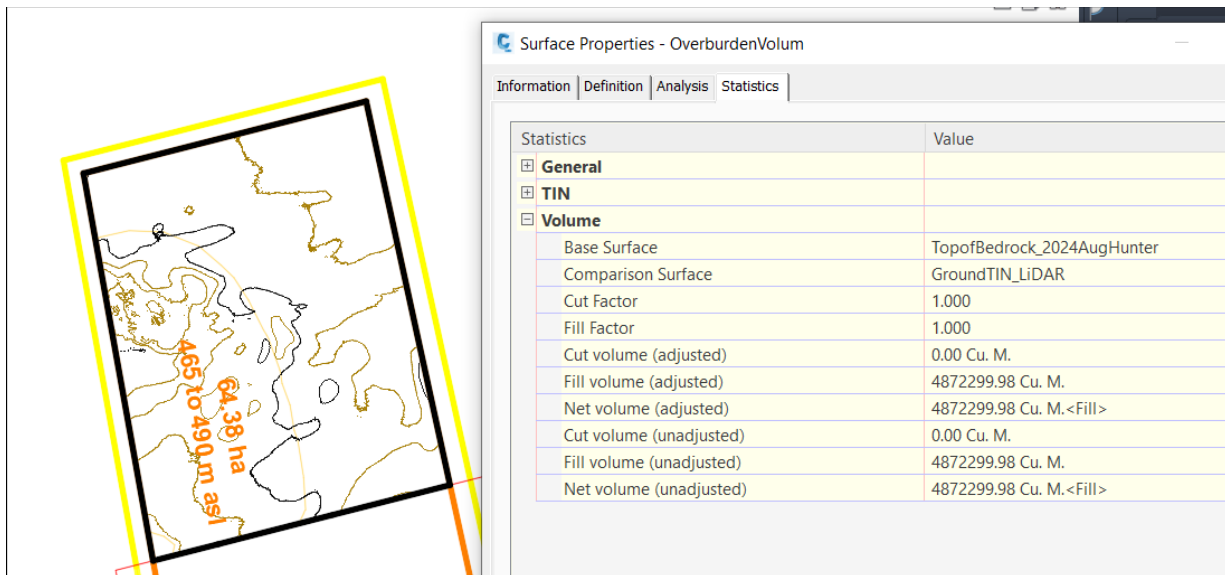
1. Overburden Volume

Prince Pit (W1/2 Lot 14) Sand/Gravel and Limited Till:	4,872,300 m ³	24.067 ha
Melancthon Pit (W1/2 Lot 13) / Bonnefield Pit (W1/2 Lot 12) Mostly Till:	5,146,334 m ³	40.318 ha
Total:	10,018,634 m ³	64.385 ha

Top Surface: LiDAR DEM (Oct 24 to Nov 10, 2022)

Bottom Surface: Hunter Top of Bedrock (Aug 30, 2024 Version, based on Table H.1)

Boundary: Hunter Modified Quarry Extraction Limit (Fig H.3)

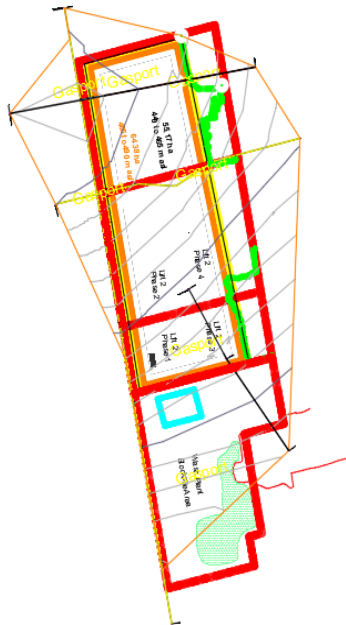
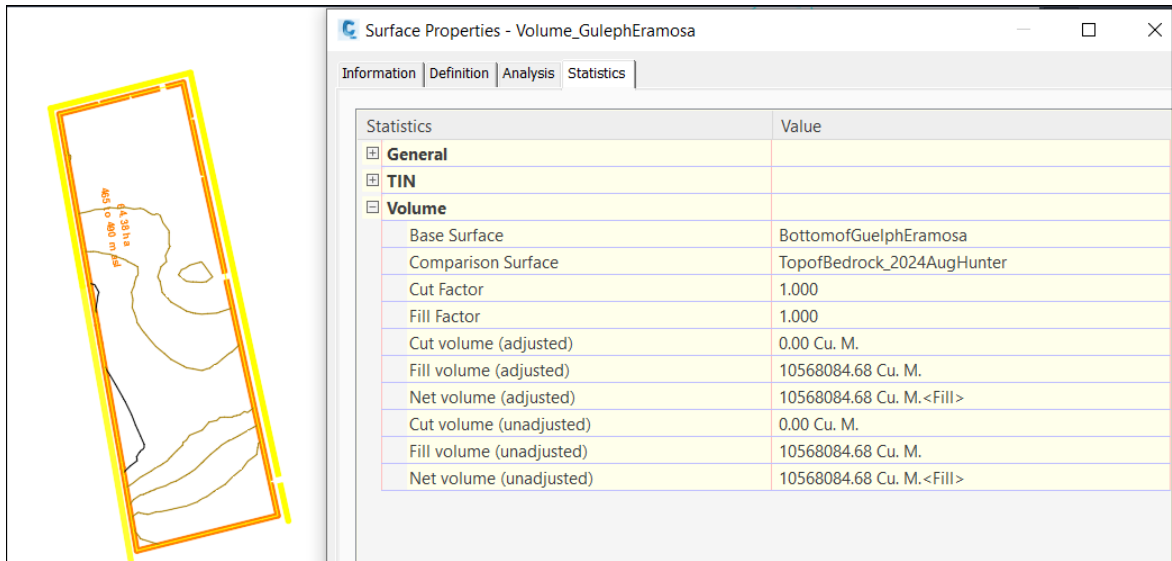


2. Geology surfaces from *Strada NDACT DRAFT Impact Assessment Report, August 2024*

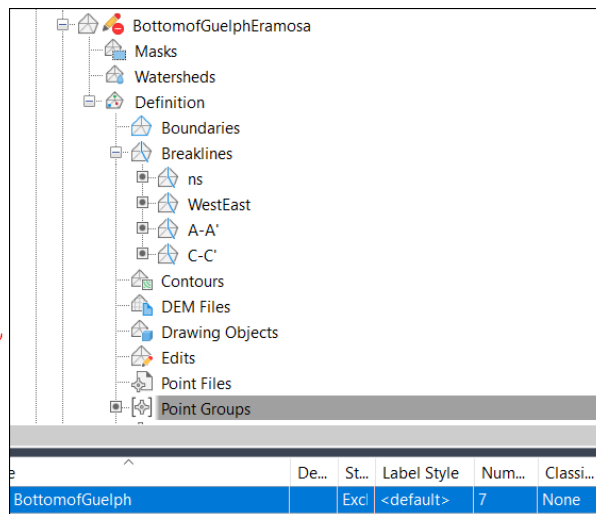
- Fig 10.2 Cross Section Locations
- Fig 10.3 West-East Cross Section C
- Fig 10.4 North-South Cross Section A
- Appendix B Proposed Cross Sections Provided by Client

1) Guelph Eramosa Volume: 10,568,085 m³ (64.385 ha)

- Top of Bedrock: 478.4 m asl to 494.5m asl
- Bottom of Guelph Eramosa: 466.2 m asl to 476.2 m asl



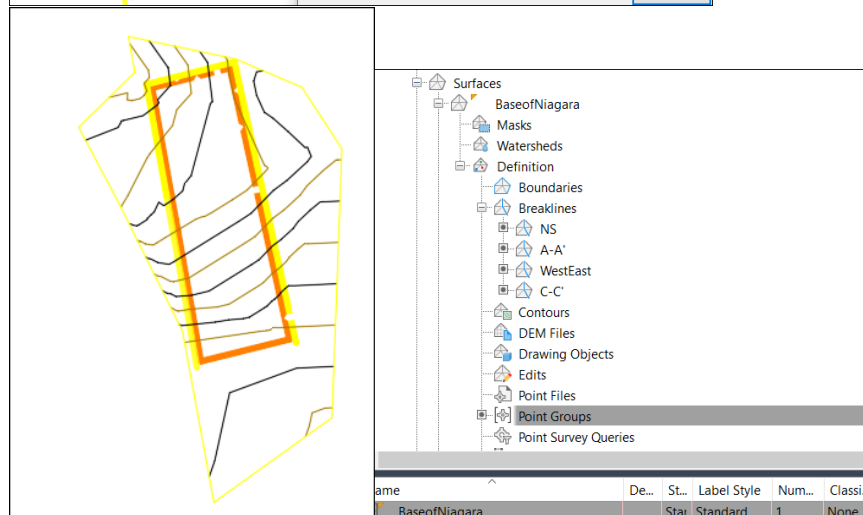
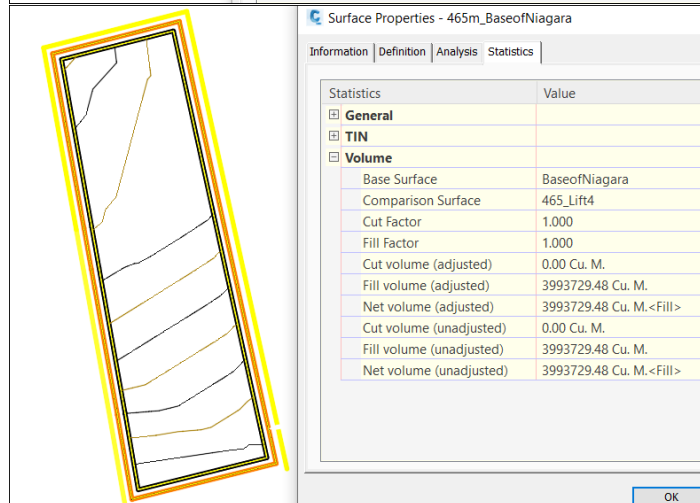
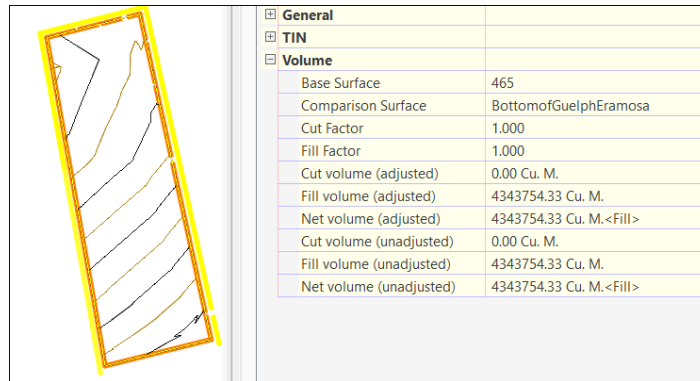
Base Surface of Guelph Eramosa



2) Ancaster Niagara Volume : 8,337,483 m³

- Bottom of Guelph Eramosa: 466.2 m asl to 476.2 m asl
- Bottom of Ancaster Niagara: 452.5 m asl to 462.6 m asl

Base of Guelph Eramosa to 465m asl: 64.385 ha 4,343,754 m³
 465m asl to the base of Ancaster Niagara: 55.165ha 3,993,729 m³
 Total: 8,337,483 m³



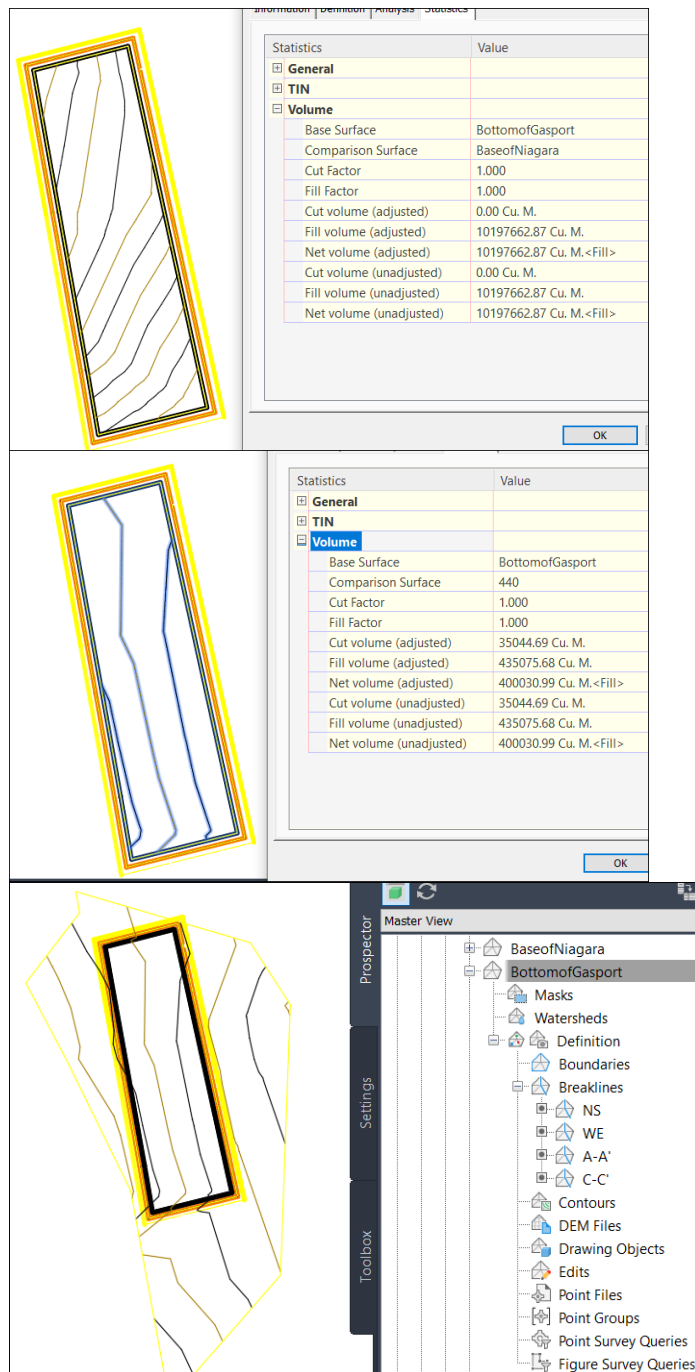
3) Gasport Volume (including IRM) : 9,762,587 m³ (55.165ha)

- Bottom of Ancaster Niagara: 452.5 m asl to 462.6 m asl
- Bottom of Gasport: 437.6 m asl to 440.6 m asl

Base of Ancaster Niagara to bottom of Gasport: 10,197,663 m³

Bottom of Gasport below 440 m asl: - 435,076 m³

Total: 9,762,587 m³



Base Surface of Gasport (including IRM)