

Thursday, April 6, 2023

Job # K223050ABD Report # MM230302

Sean Mason Homes Vet Lane Inc. 718 3100 Steeles Ave. E. Markham, ON L8R 3T1

> Re: Temporary Soil Shoring 405 Essa Rd., Barrie, ON

Dear Mr. Mason,

Kempenfelt Engineering Limited has been requested, via email, to review the conditions surrounding the proposed development at 405 Essa Road in Barrie Ontario and comment on the restricted space allowed for the shoring offset.

Kempenfelt Engineering Limited has reviewed the conditions surrounding the above captioned property and has found that the following parameters apply:

Depth of soil retained: 6.0m Allowable width for shoring: 0.85m

If the assumptions listed below are applicable to this site, KEL will be able to provide a design for temporary shoring of the excavation in a width of 0.85m. The assumptions considered are as follows:

- 1. The site has a competent soil at 3m below grade (greater than 75kPa bearing capacity).
- 2. The site has no fill material located on this site at this depth of the excavation.
- 3. The water table is 4m below grade.
- 4. The surcharge around the excavation does not exceed 12 MPa.
- 5. The soil on this site does not have boulders.
- 6. The soil is granular.
- 7. No Tie backs are available into the surrounding properties
- 8. The soil consistent and capable for a minimum of 5 meters below the bottom of excavation.

Based on soils encountered near this site, KEL is anticipating that these are reasonable assumptions to consider. The design will commence upon the issuance of the geotechnical report.

If there is any further information required or you have any questions, do not hesitate to contact our office.

Sincerely, Kempenfelt Engineering Limited



Mark Milne, P. Eng.