## **MEMORANDUM**



TO: Sathish Ponnusamy PROJECT CO947.03

Rohit NO:

**FROM:** Zen Keizars **DATE:** Friday, September 27, 2024

**RE:** Assessment of the potential requirement of a PTTW or EASR during the

development of Building B (125 Oshedinaa Street) and Building C (135

Oshedina Street) on Block 6.

Terrapex Environmental Ltd. (Terrapex) completed a comparative review of the provided plans (Arcadis, Grading Plan for Phase 4 Block 6, dated 2024-09-25), and the measured groundwater levels previously carried out by Terrapex to determine if a Permit to Take Water (PTTW), or an Environmental Activity Sector Registration (EASR) will be required during the development of Building B (125 Oshedinaa Street) and Building C (135 Oshedina Street) on Block 6.

Based on the review, provided plans for Block 6, Building B have proposed Under Side Footing (USF) elevations planned at 83.15 masl, respectively (Grading Plan; Arcadis, 2024-09-25). Groundwater measurements (collected on November 24, 2023, as part of our geotechnical investigation) show that the groundwater elevation was 82.20 masl (MW6-6).

Based on the review, provided plans for Block 6, Building C have proposed Under Side Footing (USF) elevations planned at 82.10 masl, respectively (Grading Plan; Arcadis, 2024-09-25). Groundwater measurements (collected on November 24, 2023, as part of our geotechnical investigation) show that the groundwater elevation was 78.52 masl (MW6-1).

It is noted that groundwater appeared to mirror the historical topography. As noted above, the groundwater elevation is 3.68 m lower at MW6-1 than at MW6-6. Comparatively, the depth to groundwater ranged from 4.30 m below grade(mbg) to 3.67 m bg, respectively, at those two locations at the time of the monitoring event.

A comparison of these planned USF depths, in relation to the measured groundwater elevations, shows that groundwater levels are approximately 1 m below the proposed USF for Building B and approximately 3.5 m below the proposed USF for Building C. As such, it is anticipated that groundwater will not be encountered during excavation operations, and permanent dewatering is not anticipated for Block 6, Building B or Building C. Consequently, we do not expect that a PTTW, or an EASR will be required.

## **MEMORANDUM**



Please contact me directly if you have any questions or wish to discuss the foregoing.

Regards,

Zen Keizars, P.Geo., FGC Senior Hydrogeologist