



Project Profile: Geotechnical Investigation



LOCATION

Edmonton, AB

CLIENT

Jason McNeil, 1st Call
Concrete Pumping Ltd.

STAKEHOLDERS

City of Edmonton

PROJECT RELEVANCE

Geotechnical Investigation
Groundwater Monitoring
Development and Zoning

CONTRACT VALUE

SCHEDULE

Start Date:
October 2020
End Date:
November 2020

TEAM

Shawn Samborsky
Kyla Melnyk
Zachary Person

PROJECT DESCRIPTION

CORE Environmental Consulting (CORE) was retained to provide project management and field staff for a geotechnical investigation by Espira Engineering (Espira) as part of a Top of Bank (TOB) study for the rezoning of the subject property. The investigation was used to determine setback recommendations for the existing slope TOB and other design and construction recommendations.

SCOPE

The scope of work for this assessment was outlined in the proposal submitted by Espira and received approval from the Client. The scope of work included the following:

- A desktop study of available existing surficial geology and aerial photographs.
- A geotechnical investigation program to assess subsurface soil and groundwater conditions, as well as subsequent groundwater level measurements after completion of the drilling investigation;
- Laboratory testing of selected samples for moisture content determination, grain size, hydrometer analysis, unconfined compression strength (UCS), and Atterberg's limits.
- Preparation of a geotechnical engineering report summarizing the findings of the desktop study, site reconnaissance, geotechnical investigation, laboratory testing, and engineering analysis including the comments and recommendations for slope setbacks, foundation design, seismic design parameters, drainage considerations, subgrade preparation, utility installation, temporary excavation and groundwater management and backfill material compaction and specifications.

SPECIFIC SERVICES

- Field preparation
- Geotechnical soil sampling
- Groundwater monitoring

PROJECT OUTCOME AND TECHNIQUES

The final report that CORE provided included a desktop review of the surficial geology, aerial photograph review, findings of the geotechnical investigation as well as recommendations for the minimum setback from the TOB.

Costs for project activities were tracked and reported daily with project controls including:

- Budgets submitted for approval along with deliverables and timelines.
- Timesheets: with detailed project summaries (customized for CORE's client) were submitted with invoice and breakdowns of fees and disbursements

The client was provided the reports within the timeframe and budget required and the work performed successfully addressed the required scope.