Earth Solutions NW LLC
Geotechnical Engineering, Construction
Observation/Testing and Environmental Services

May 9, 2023
ES-5559.05

Mr. Peter Chen
4709 Memory Lane West
University Place, Washington 98488

Subject: **Groundwater Monitoring Program Summary**
Sunset Pointe
2301 – 23rd Street Southeast
Puyallup, Washington

Reference: Earth Solutions NW, LLC
Geotechnical Engineering Study, ES-5559, updated April 5, 2023

Dear Mr. Chen:

As requested, Earth Solutions NW, LLC (ESNW) has prepared this letter summarizing the recently completed groundwater monitoring program for the proposed development.

Groundwater Monitoring

Seasonal groundwater monitoring was conducted at three monitoring locations across the subject development area, which ESNW installed during earlier phases of work for the site. Please refence the attached Plate 1 (Test Pit Location Plan) for the approximate monitoring areas. The monitoring period was conducted from December 16, 2022, through the end of April 2023. Groundwater depths and fluctuations were recorded via hand measurements in combination with daily recordings obtained by dataloggers. The following table depicts the approximate surface elevation of each well, the approximate peak groundwater condition (GWC), the corresponding approximate groundwater elevation, and the occurrence date. Please note that if precise peak GWC values are necessary, the surface elevations of each well location should be surveyed and recorded by a professional land surveyor.

Monitoring Well Location	Peak GWC Depth (ft bgs)	Approximate Surface Elevation (ft)	Approximate GWC Elevation (ft)	Peak Date
TP-104	10.6’	384	373.4	12/16/2022*
TP-201	N/A	376	N/A	N/A
TP-202	N/A	388	N/A	N/A

* *Peak GWC elevation occurred on multiple dates.*

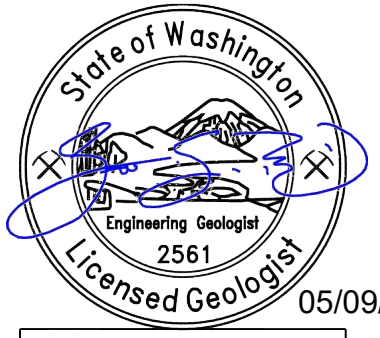
Based on our observations and the recorded conditions, the site does not have a shallow, uniform groundwater table. There were no indications or records of significant subsurface water exposures at TP-201 or TP-202. A relatively consistent water level was recorded at TP-104; however, in our opinion, represents a minor accumulation of water that could not infiltrate given the soil conditions in the area and not related to groundwater. This correlates with the subsurface conditions encountered at the test pit locations, which consist predominately of dense glacially consolidated deposits with isolated and discontinuous sandy layers.

The opinions and evaluations provided in this letter do not cover unforeseen or changed conditions. ESNW should observe the infiltration surface during construction to confirm soil conditions are as anticipated and to provide supplemental recommendations, if deemed necessary.

We trust this letter meets your current needs. Should you have any questions regarding the content herein, or require additional information, please call.

Sincerely,

EARTH SOLUTIONS NW, LLC

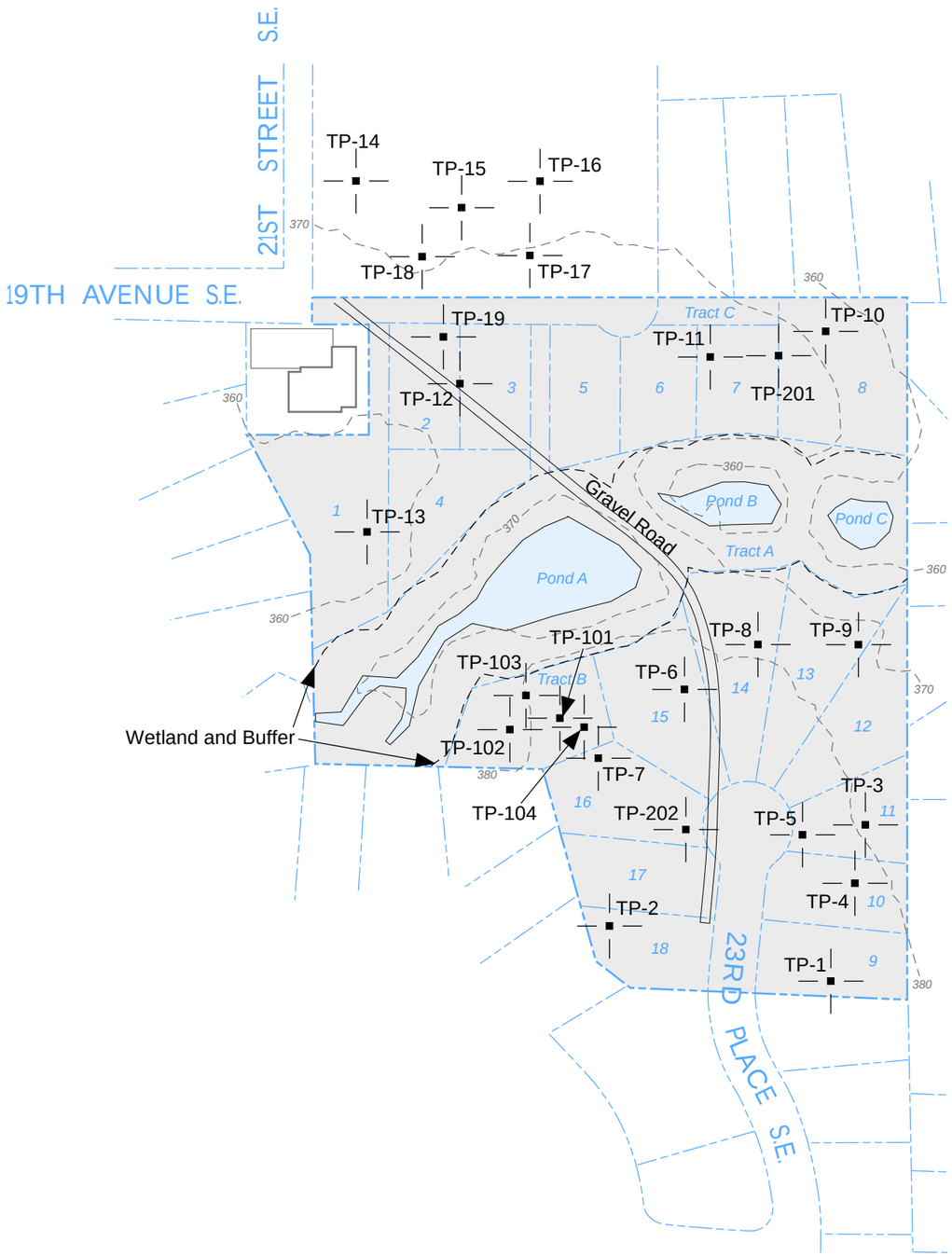


Chase G. Halsen, L.G., L.E.G.
Senior Project Geologist

Scott S. Riegel, L.G., L.E.G.
Associate Principal Geologist

Attachment: Plate 1 – Test Pit Location Plan

cc: CES NW, Inc.
Attention: Mr. Fred Brown, P.E. (Email only)
Ms. Dawn Markakis (Email only)



LEGEND

TP-201 — Approximate Location of ESNW Test Pit, Proj. No. ES-5559.03, Jan. 2020

TP-101 — Approximate Location of ESNW Test Pit, Proj. No. ES-5559, May 2019

TP-1 — Approximate Location of ESNW Test Pit, Proj No. ES-5559, Oct. 2017

Subject Site

Existing Building

10 — Proposed Lot Number

NORTH

1"=150'

0 75 150

Scale in Feet

NOTE: The graphics shown on this plate are not intended for design purposes or precise scale measurements, but only to illustrate the approximate test locations relative to the approximate locations of existing and / or proposed site features. The information illustrated is largely based on data provided by the client at the time of our study. ESNW cannot be responsible for subsequent design changes or interpretation of the data by others.

NOTE: This plate may contain areas of color. ESNW cannot be responsible for any subsequent misinterpretation of the information resulting from black & white reproductions of this plate.

Test Pit Location Plan
Sunset Pointe
Puyallup, Washington

Earth Solutions NW LLC
Geotechnical Engineering, Construction Observation/Testing and Environmental Services

Drwn. By	CAM
Checked By	CGH
Date	05/08/2023
Proj. No.	5559.05
Plate	1