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

March 15, 2024
ES-8413.01

American Pride Lending, LLC
P.O. Box 1226
Kent, Washington 98035

Attention: Sikander Sekhon

**Subject: Geotechnical Evaluation
Proposed Townhomes
212 Todd Road Northeast
Puyallup, Washington**

Dear Sikander:

As requested, Earth Solutions NW, LLC (ESNW) has prepared this geotechnical evaluation for the subject site.

Project Description

We understand the project will include construction of two new townhome buildings and related infrastructure improvements. Based on the referenced plans, the proposed residential structures will be three stories in height and constructed utilizing relatively lightly loaded wood framing supported on conventional continuous and spread footing foundations. We anticipate perimeter footing loads of about 1 to 2 kips per linear foot, column loads of up to about 20 kips, and slab-on-grade loading of roughly 150 pounds per square foot (psf).

We understand low impact development flow control best management practices (BMPs) are being evaluated to control stormwater. Infiltration of stormwater is being evaluated as part of the overall stormwater design.

If the above design assumptions are incorrect or change, ESNW should be contacted to review the recommendations provided in this report. ESNW should review final designs to confirm that our geotechnical recommendations have been incorporated into project plans.

Surface

The subject site is located at 212 Todd Road Northeast in Puyallup, Washington, as illustrated on the attached Vicinity Map (Plate 1). The site consists of one tax parcel (Pierce County parcel number 2354300575). The site is currently developed a single-family residence in the northwest corner of the property; the remainder of the property is covered with gravel. The site topography is relatively level.

Subsurface

An ESNW representative observed, logged, and sampled five test pits, excavated at accessible locations within the property boundaries, on March 7, 2022 using a mini-trackhoe and operator provided by our firm. Shallow groundwater monitoring wells were installed within test pits TP-3, TP-4, and TP-5. The approximate locations of the test pits are depicted on the attached Plate 2 (Test Pit Location Plan). Please refer to the test pit logs provided as attachments for a more detailed description of subsurface conditions. Representative soil samples collected at the test pit locations were evaluated in general accordance with Unified Soil Classification System (USCS) and USDA methods and procedures.

Fill

Existing gravel fill was encountered at all test pit locations extending to about one foot below the existing ground surface (bgs). The gravel fill was associated with the gravel-surfacing material observed throughout the majority of the site.

Native Soil

Underlying surficial existing fill, native soil was encountered primarily as loose to medium dense silty sand and sandy silt (USCS: SM and ML, respectively). Caving within the test pits was observed, beginning at depths of about three and one-half to seven and one-half feet bgs. The native soil was generally observed to be in a wet condition.

Geologic Setting

The referenced geologic map identifies alluvium deposits throughout the site and surrounding area. According to the geologic map resource, alluvium deposits are loose, stratified to massively bedded fluvial silt, sand, and gravel. Based on our field observations, native soil likely to be exposed on site will be consistent with alluvium deposits.

Groundwater

The local groundwater table was observed beginning at depths of about five to five and one-half feet bgs during the fieldwork on March 7, 2022. It is likely that the local groundwater table rises a foot or two throughout the peak of the wet season; ESNW can complete seasonal groundwater level monitoring upon request. Groundwater flow rates and elevations fluctuate depending on many factors, including precipitation duration and intensity, the time of year, and soil conditions. In general, groundwater flow rates are higher during the winter, spring, and early summer months.

Geotechnical Recommendations

Based on the relatively loose alluvial soils underlying the site and potential for liquefaction during a seismic event, we recommend supporting the proposed townhome buildings on a continuous grid foundation system bearing on at least two feet of granular, imported structural fill following successful completion of a surcharge program. The intent of the continuous grid foundation system is to reduce the potential for structural damage and catastrophic building failure should soil liquefaction occur during a seismic event; to further reduce risk of building damage from potential liquefaction, a deep foundation system or other ground improvement methods, such as aggregate piers, can be considered. The purpose of the surcharge program is to induce static settlement within the relatively loose alluvial soils, which is anticipated to occur due to the new building loads, prior to building construction.

Surcharge Program

In order to induce the majority of anticipated settlement from new building loads, we recommend completing a surcharge program for the proposed building pads. The following general guidelines can be used for a surcharge program:

- Surcharge fill height — Two feet above finish floor elevation
- Surcharge duration — Estimated three to four weeks
- Surcharge settlements — Estimated to be two to four inches

Surcharge fill should extend beyond the limits of the building footprints a minimum of five feet; a row of ecology blocks may be necessary to support the surcharge fill along the east and west sides of the property. Where surcharge fill is placed, settlement markers should be installed to monitor the fill-induced settlements. The settlement markers should be placed prior to beginning of fill placement and monitored daily during the fill placement. Following completion of the surcharge placement, readings should be acquired weekly until it is determined by ESNW that the estimated future settlement is within an acceptable range. ESNW should review the settlement data and provide supplemental recommendations for the surcharge program, if necessary.

To improve accuracy of the settlement markers, the integrity of the markers should be maintained. Damaged markers require replacement, which increases the costs of the project, and can compromise the settlement data.

Foundations

In our opinion, the proposed residential townhome structures should be constructed on a continuous grid foundation system bearing on at least two feet of granular, imported structural fill following successful completion of the surcharge program. A continuous grid foundation ties all foundation elements together to increase rigidity and minimize differential settlement experienced within the structure. No isolated footings should be included in the foundation design. Where necessary, loose or unsuitable soil conditions exposed at foundation subgrade elevations should be overexcavated and replaced with a suitable structural fill. Organic material encountered at structural subgrade elevations should be removed, and grades should be restored with structural fill as necessary. Provided the foundations will be supported as described above, the following parameters may be used for design:

- Allowable soil bearing capacity 2,500 psf
- Passive earth pressure 250 pcf (equivalent fluid)
- Coefficient of friction 0.40

A one-third increase in the allowable soil bearing capacity may be assumed for short-term wind and seismic loading conditions. The passive earth pressure and coefficient of friction values include a factor-of-safety of 1.5. With structural loading as expected, total settlement in the range of one inch and differential settlement of about one-half inch is anticipated for static loading conditions. The majority of the settlements will likely occur during construction as dead loads are applied.

Seismic Design

The 2018 International Building Code (2018 IBC) recognizes the most recent edition of the Minimum Design Loads for Buildings and Other Structures manual (ASCE 7-16) for seismic design, specifically concerning earthquake loads. Based on potentially liquefiable soils underlying the site, the seismic Site Class would be characterized as F; however, because the building is expected to have a fundamental frequency less than 0.5 s, the site class can be determined in accordance with Section 20.3 of ASCE 7-16 and the corresponding values of F_a and F_v in Tables 11.4-1 and 11.4-2. As such, the following seismic parameters and values are recommended.

Parameter	**Value**
Site Class	D*
Mapped short-period spectral response acceleration, S_S (g)	1.276
Mapped 1-second period spectral response acceleration, S_1 (g)	0.439
Short period site coefficient, F_a	1
Long period site coefficient, F_v	1.861†
Adjusted short-period spectral response acceleration, S_{MS} (g)	1.276
Adjusted 1-second period spectral response acceleration, S_{M1} (g)	0.817†
Design short-period spectral response acceleration, S_{DS} (g)	0.851
Design 1-second period spectral response acceleration, S_{D1} (g)	0.545†

* *Assumes medium dense to dense soil conditions. If soil exploration to 100 feet was completed, Site Class may classify differently.*

† *Values assume F_v may be determined using linear interpolation per Table 11.4-2 in ASCE 7-16.*

Drainage

The local groundwater table should be expected in site excavations that extend below about four feet bgs and active dewatering will likely be necessary. Finish grades must be designed to direct surface drain water away from the structures. Water must not be allowed to pond adjacent to the structures. In our opinion, foundation drains should be installed along the building; a typical footing drain detail is provided as Plate 3.

Infiltration Evaluation

Our evaluation of site infiltration capacity was completed by excavating a series of test pits throughout the site, and completing two small-scale pilot infiltration tests (PITs). As indicated in the *Subsurface* section of this report, native soils encountered during our fieldwork were characterized primarily as silty sand and sandy silt, with the groundwater table encountered beginning at about five to five and one-half feet bgs.

PITs were performed within TP-1 and TP-2 at a depth of roughly four feet bgs; the measured infiltration rates were 4.2 and 1.4 inches per hour, respectively. For preliminary design purposes, we recommend assuming a measured infiltration rate of 1.4 inches per hour. The measured rate must be reduced by the following correction factors:

- Measured infiltration rate 1.4 inches per hour
- Site variability (CF_v) 0.5
- Test method (CF_t) 0.5
- Degree of influent control (CF_m) 0.9

The correction factors, along with the measured infiltration rate, were applied to determine the design infiltration rate. Based on our in-situ test results, it is our opinion the following infiltration rate can be used for preliminary design purposes if pursued:

- Design infiltration rate 0.3 inches per hour

Based on the results of the infiltration testing and the observed soil and groundwater conditions, infiltration is not an ideal method for controlling stormwater at the subject site. However, if infiltration is pursued, the facilities will need to maintain proper separation from the local groundwater table. Depending on total impervious area proposed to be directed to infiltration facilities, additional PITs may be necessary.

ESNW can provide further evaluation and recommendations for site BMPs as plans develop.

<u>Limitations</u>

The recommendations and conclusions provided in this letter are professional opinions consistent with the level of care and skill that is typical of other members in the profession currently practicing under similar conditions in this area. A warranty is not expressed or implied. Variations in the soil and groundwater conditions observed at the test sites may exist and may not become evident until construction. ESNW should reevaluate the conclusions in this letter if variations are encountered.

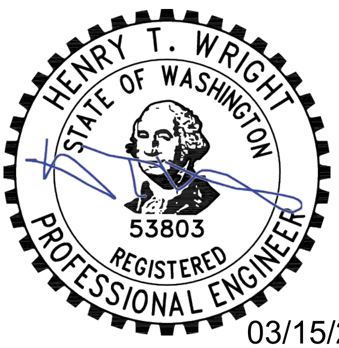
Additional Services

ESNW can complete additional PITs and seasonal groundwater level monitoring upon request. ESNW should have an opportunity to review the final design with respect to the geotechnical recommendations provided in this letter. ESNW should also be retained to provide testing and consultation services during the earthwork phase of construction.

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

Sincerely,

EARTH SOLUTIONS NW, LLC



03/15/2024

Henry T. Wright, P.E.
Associate Principal Engineer

Attachments: Plate 1 – Vicinity Map
Plate 2 – Test Pit Location Plan
Plate 3 – Footing Drain Detail
Test Pit Logs
Grain Size Distribution

cc: Veer Architecture, PLLC
Attention: Lavina Wadhwani

References:

- Site and Building Plans, prepared by Veer Architecture, PLLC, dated January 22, 2024
- 2014 Stormwater Management Manual for Western Washington
- Geologic Map of Tacoma, compiled by Schuster, et al., November 2015

Reference:
Pierce County, Washington
OpenStreetMap.org

NORTH

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.

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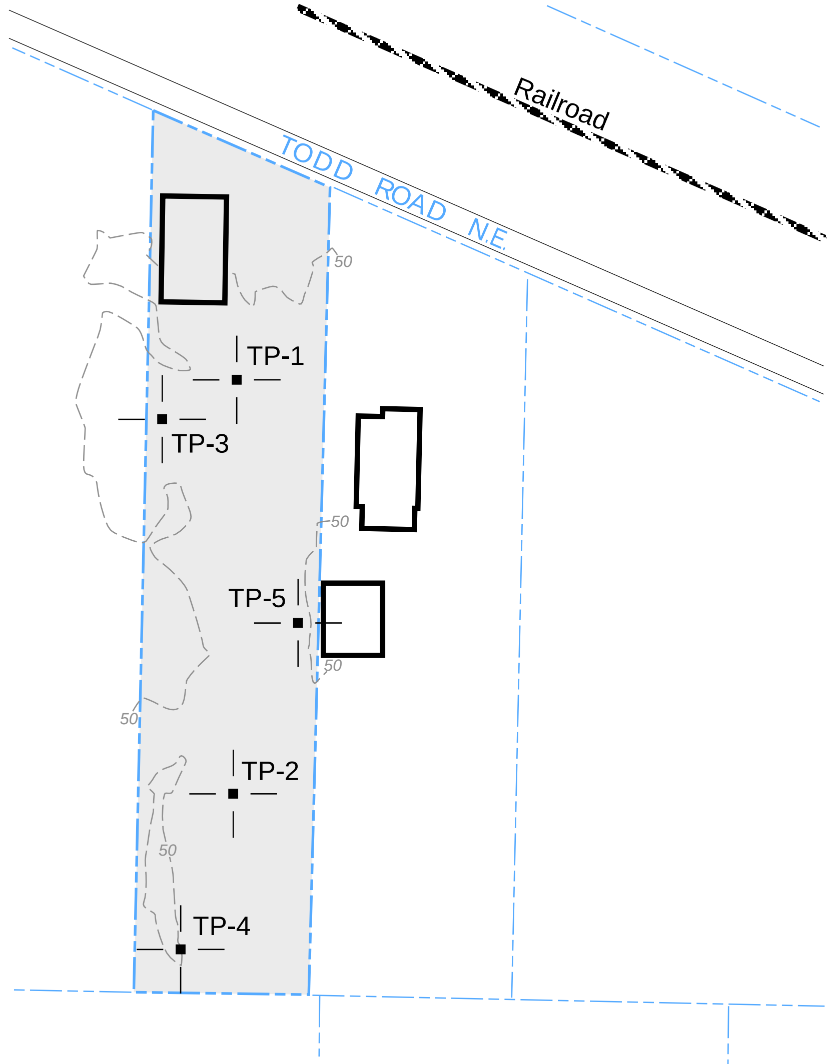
Vicinity Map
212 Todd Road N.E.
Puyallup, Washington

Drawn CAM	Date 02/28/2024	Proj. No. 8413.01
Checked HTW	Date Feb. 2024	Plate 1



LEGEND

TP-1	Approximate Location of ESNW Test Pit, Proj. No. ES-8413, March 2022
	Subject Site
	Existing Building

NORTH

0 50 100 200

1"=100'

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.

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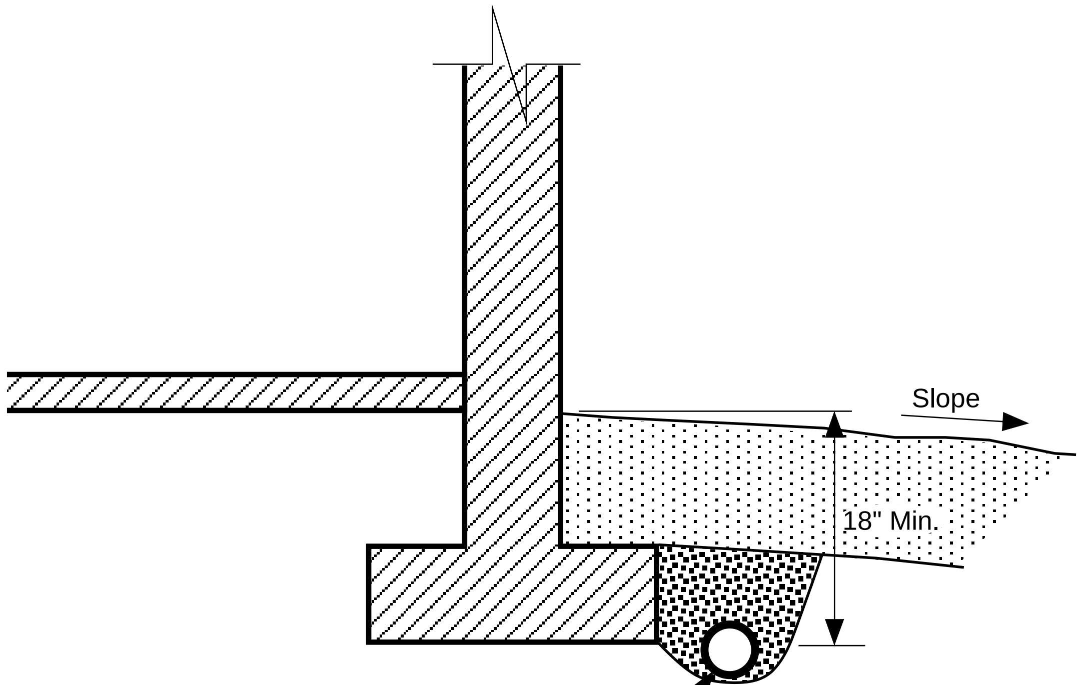
Test Pit Location Plan
212 Todd Road N.E.
Puyallup, Washington

Drawn CAM	Date 02/28/2024	Proj. No. 8413.01
Checked HTW	Date Feb. 2024	Plate 2



NOTES:

- Do NOT tie roof downspouts to Footing Drain.
- Surface Seal to consist of 12" of less permeable, suitable soil. Slope away from building.

SCHEMATIC ONLY - NOT TO SCALE
NOT A CONSTRUCTION DRAWING

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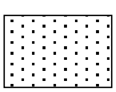
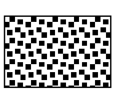


Surface Seal: native soil or other low-permeability material.



1-inch Drain Rock

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Footing Drain Detail
212 Todd Road N.E.
Puyallup, Washington

Drawn CAM	Date 02/28/2024	Proj. No. 8413.01
Checked HTW	Date Feb. 2024	Plate 3

Major Divisions			Symbol	Description
Coarse-Grained Soils - More Than 50% Retained on No. 200 Sieve	Gravels - More Than 50% of Coarse Fraction Retained on No. 4 Sieve	< 5% Fines	GW	Well-graded gravel with or without sand, little to no fines
			GP	Poorly graded gravel with or without sand, little to no fines
		> 12% Fines	GM	Silty gravel with or without sand
			GC	Clayey gravel with or without sand
	Sands - 50% or More of Coarse Fraction Passes No. 4 Sieve	< 5% Fines	SW	Well-graded sand with or without gravel, little to no fines
			SP	Poorly graded sand with or without gravel, little to no fines
		> 12% Fines	SM	Silty sand with or without gravel
			SC	Clayey sand with or without gravel
Fine-Grained Soils - 50% or More Passes No. 200 Sieve	Silts and Clays Liquid Limit Less Than 50		ML	Silt with or without sand or gravel; sandy or gravelly silt
			CL	Clay of low to medium plasticity; lean clay with or without sand or gravel; sandy or gravelly lean clay
			OL	Organic clay or silt of low plasticity
	Silts and Clays Liquid Limit 50 or More		MH	Elastic silt with or without sand or gravel; sandy or gravelly elastic silt
			CH	Clay of high plasticity; fat clay with or without sand or gravel; sandy or gravelly fat clay
			OH	Organic clay or silt of medium to high plasticity
Highly Organic Soils			PT	Peat, muck, and other highly organic soils
Fill			FILL	Made Ground

Moisture Content

Dry - Absence of moisture, dusty, dry to the touch

Damp - Perceptible moisture, likely below optimum MC

Moist - Damp but no visible water, likely at/near optimum MC

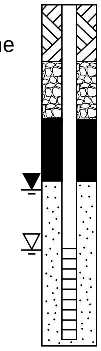
Wet - Water visible but not free draining, likely above optimum MC

Saturated/Water Bearing - Visible free water, typically below groundwater table

Symbols

ATD = At time of drilling

Static water level (date)



Terms Describing Relative Density and Consistency

Coarse-Grained Soils:

Density	SPT blows/foot
Very Loose	< 4
Loose	4 to 9
Medium Dense	10 to 29
Dense	30 to 49
Very Dense	≥ 50

Fine-Grained Soils:

Consistency	SPT blows/foot
Very Soft	< 2
Soft	2 to 3
Medium Stiff	4 to 7
Stiff	8 to 14
Very Stiff	15 to 29
Hard	≥ 30

Test Symbols & Units

Fines = Fines Content (%)

MC = Moisture Content (%)

DD = Dry Density (pcf)

Str = Shear Strength (tsf)

PID = Photoionization Detector (ppm)

OC = Organic Content (%)

CEC = Cation Exchange Capacity (meq/100 g)

LL = Liquid Limit (%)

PL = Plastic Limit (%)

PI = Plasticity Index (%)

Component Definitions

Descriptive Term	Size Range and Sieve Number
Boulders	Larger than 12"
Cobbles	3" to 12"
Gravel	3" to No. 4 (4.75 mm)
Coarse Gravel	3" to 3/4"
Fine Gravel	3/4" to No. 4 (4.75 mm)
Sand	No. 4 (4.75 mm) to No. 200 (0.075 mm)
Coarse Sand	No. 4 (4.75 mm) to No. 10 (2.00 mm)
Medium Sand	No. 10 (2.00 mm) to No. 40 (0.425 mm)
Fine Sand	No. 40 (0.425 mm) to No. 200 (0.075 mm)
Silt and Clay	Smaller than No. 200 (0.075 mm)

Modifier Definitions

Percentage by Weight (Approx.)	Modifier
< 5	Trace (sand, silt, clay, gravel)
5 to 14	Slightly (sandy, silty, clayey, gravelly)
15 to 29	Sandy, silty, clayey, gravelly
≥ 30	Very (sandy, silty, clayey, gravelly)

Classifications of soils in this geotechnical report and as shown on the exploration logs are based on visual field and/or laboratory observations, which include density/consistency, moisture condition, grain size, and plasticity estimates, and should not be construed to imply field or laboratory testing unless presented herein. Visual-manual and/or laboratory classification methods of ASTM D2487 and D2488 were used as an identification guide for the Unified Soil Classification System.

Earth Solutions NW LLC

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EXPLORATION LOG KEY

Earth Solutions NW LLC
15365 NE 90th Street, Suite 100
Redmond, WA 98052
Office (425) 449-4704 | esnw.com
Branch Office: Pasco, WA

TEST PIT NUMBER TP-1

PROJECT NUMBER ES-8413
PROJECT NAME 212 Todd Road N.E.
DATE STARTED 3/7/22 **COMPLETED** 3/7/22
GROUND ELEVATION
EXCAVATION CONTRACTOR NW Excavating
LATITUDE **LONGITUDE**
LOGGED BY SES **CHECKED BY** HTW
GROUND WATER LEVEL:
NOTES Surface Conditions: gravel pad
▽ **AT TIME OF EXCAVATION** 5.0 ft
SURFACE CONDITIONS
AFTER EXCAVATION

DEPTH (ft)	SAMPLE TYPE NUMBER	TESTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0			GP		Gray poorly graded GRAVEL, loose, damp (Fill) -fabric at contact
1.0		MC = 27.0 OC = 4.4%	SM		Dark brown silty SAND, loose to medium dense, wet
2.5		MC = 27.2 Fines = 48.6			-infiltration test at 4' [USDA Classification: slightly gravelly very fine sandy LOAM] -becomes wet
5.0					▽ -groundwater table
7.5					-slight caving to BOH
10.0		MC = 32.6 Fines = 30.5			[USDA Classification: fine sandy LOAM]

Test pit terminated at 10.0 feet below existing grade. Groundwater table encountered at 5.0 feet during excavation. Caving observed from 7.5 feet to BOH.

Earth Solutions NW LLC
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Branch Office: Pasco, WA

TEST PIT NUMBER TP-2

PROJECT NUMBER ES-8413
PROJECT NAME 212 Todd Road N.E.
DATE STARTED 3/7/22 **COMPLETED** 3/7/22
GROUND ELEVATION
EXCAVATION CONTRACTOR NW Excavating
LATITUDE **LONGITUDE**
LOGGED BY SES **CHECKED BY** HTW
GROUND WATER LEVEL:
NOTES Surface Conditions: gravel pad
▽ **AT TIME OF EXCAVATION** 5.0 ft
SURFACE CONDITIONS
AFTER EXCAVATION

DEPTH (ft)	SAMPLE TYPE NUMBER	TESTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0			GP	1.0	Gray poorly graded GRAVEL, loose, damp (Fill)
2.5, 5.0		MC = 35.6 OC = 6.2% MC = 28.4 Fines = 42.9	SM	5.5	Dark brown silty SAND, loose to medium dense, wet -infiltration test at 4', becomes wet [USDA Classification: slightly gravelly very fine sandy LOAM] ▽ -groundwater table
7.5, 10.0		MC = 44.4 Fines = 98.4	ML	10.0	Dark brown sandy SILT, loose to medium dense, wet -slight caving to BOH [USDA Classification: slightly gravelly LOAM]

Test pit terminated at 10.0 feet below existing grade. Groundwater table encountered at 5.0 feet during excavation. Caving observed from 7.0 feet to BOH.

Earth Solutions NW LLC
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Redmond, WA 98052
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Branch Office: Pasco, WA

TEST PIT NUMBER TP-3

PROJECT NUMBER ES-8413
PROJECT NAME 212 Todd Road N.E.
DATE STARTED 3/7/22 **COMPLETED** 3/7/22
GROUND ELEVATION
EXCAVATION CONTRACTOR NW Excavating
LATITUDE **LONGITUDE**
LOGGED BY SES **CHECKED BY** HTW
GROUND WATER LEVEL:
NOTES Surface Conditions: gravel pad
▽ **AT TIME OF EXCAVATION** 5.5 ft
SURFACE CONDITIONS
AFTER EXCAVATION

DEPTH (ft)	SAMPLE TYPE NUMBER	TESTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0			GP	1.0	Gray poorly graded GRAVEL, loose, damp (Fill)
2.5		MC = 18.9	SM	5.0	Dark brown silty SAND, loose to medium dense, wet
5.0 / 7.5		MC = 37.9 MC = 34.6	ML	9.5	Dark brown sandy SILT, loose to medium dense, wet ▽ -groundwater table, moderate caving to BOH -mottled texture

Test pit terminated at 9.5 feet below existing grade. Groundwater table encountered at 5.5 feet during excavation. Caving observed from 5.5 feet to BOH.

Earth Solutions NW LLC
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Redmond, WA 98052
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Branch Office: Pasco, WA

TEST PIT NUMBER TP-4

PROJECT NUMBER ES-8413
PROJECT NAME 212 Todd Road N.E.
DATE STARTED 3/7/22 **COMPLETED** 3/7/22
GROUND ELEVATION
EXCAVATION CONTRACTOR NW Excavating
LATITUDE **LONGITUDE**
LOGGED BY SES **CHECKED BY** HTW
GROUND WATER LEVEL:
NOTES Surface Conditions: gravel pad
∇ **AT TIME OF EXCAVATION** 5.0 ft
SURFACE CONDITIONS
AFTER EXCAVATION

DEPTH (ft)	SAMPLE TYPE NUMBER	TESTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0			GP	1.0	Gray poorly graded GRAVEL, loose, damp (Fill)
2.5		MC = 24.6	SM	4.0	Brown silty SAND, loose to medium dense, wet
5.0 7.5 10.0		MC = 41.1 MC = 33.6	ML	10.0	Dark brown sandy SILT, loose to medium dense, wet -mottled texture ∇ -groundwater table -slight caving to BOH

Test pit terminated at 10.0 feet below existing grade. Groundwater table encountered at 5.0 feet during excavation. Caving observed from 6.5 feet to BOH.

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Redmond, WA 98052
Office (425) 449-4704 | esnw.com
Branch Office: Pasco, WA

TEST PIT NUMBER TP-5

PROJECT NUMBER ES-8413
PROJECT NAME 212 Todd Road N.E.
DATE STARTED 3/7/22 **COMPLETED** 3/7/22
GROUND ELEVATION
EXCAVATION CONTRACTOR NW Excavating
LATITUDE **LONGITUDE**
LOGGED BY SES **CHECKED BY** HTW
GROUND WATER LEVEL:
NOTES Surface Conditions: gravel pad
▽ **AT TIME OF EXCAVATION** 5.0 ft
SURFACE CONDITIONS
AFTER EXCAVATION

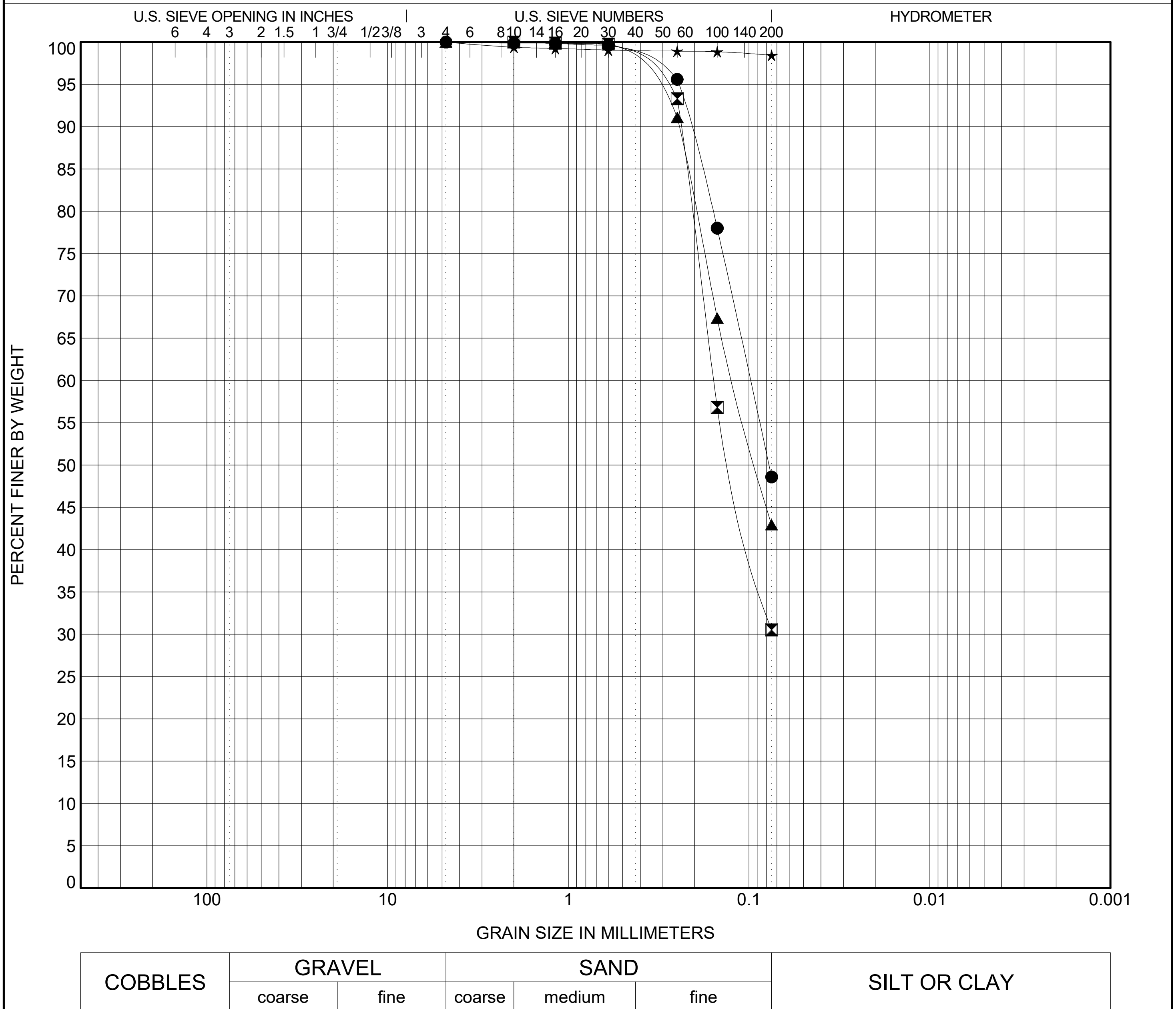
DEPTH (ft)	SAMPLE TYPE NUMBER	TESTS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
0.0			GP		Gray poorly graded GRAVEL, loose, damp (Fill)
1.0		MC = 23.8	SM		Brown silty SAND, loose to medium dense, wet
2.5					-slight caving to BOH
5.0				▽	-groundwater table
5.5		MC = 37.2	ML		Dark brown sandy SILT, loose to medium dense, wet
7.5					
10.0		MC = 34.2			

Test pit terminated at 10.0 feet below existing grade. Groundwater table encountered at 5.0 feet during excavation. Caving observed from 3.0 feet to BOH.

GRAIN SIZE DISTRIBUTION

Earth Solutions NW LLC
15365 NE 90th Street, Suite 100
Redmond, WA 98052
Office (425) 449-4704 | esnw.com
Branch Office: Pasco, WA

PROJECT NUMBER ES-8413 **PROJECT NAME** 212 Todd Road N.E



Specimen Identification		Classification	Cc	Cu
● TP-01	4.00ft.	**USDA: Dk Brown Slightly Gravelly Very Fine Sandy Loam. USCS: SM.**		
⧗ TP-01	10.00ft.	**USDA: Dk Brown Fine Sandy Loam. USCS: SM.**		
▲ TP-02	4.00ft.	**USDA: Dk Brown Slightly Gravelly Very Fine Sandy Loam. USCS: SM.**		
★ TP-02	10.00ft.	**USDA: Dk Brown Slightly Gravelly Loam. USCS: ML.**		

Specimen Identification		D100	D60	D30	D10	LL	PL	PI	%Silt	%Clay
● TP-01	4.0ft.	4.75	0.098						48.6	
⧗ TP-01	10.0ft.	2	0.157						30.5	
▲ TP-02	4.0ft.	4.75	0.122						42.9	
★ TP-02	10.0ft.	4.75							98.4	