CERTERRA GEOTEST

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Geotechnical Engineering Report

Arlington Taco Bell

77XX 204th Street NE

Arlington, Washington

Parcel No. 00847300000200

Client Name: Pacific Bells, LLC

Project Name: Granite Falls Taco Bell

Project Number: 00-252170-0

Date: September 30, 2025

September 30, 2025
Project No. 10-252170-0

Pacific Bells, LLC
111 West 39th Street
Vancouver, Washington 98660

c/o: **Albert Palacios**
Anchor Point Management Group

Regarding: **Geotechnical Engineering Report**
Arlington Taco Bell
77XX 204th Street NE
Arlington, Washington
Parcel No. 00847300000200

Dear Albert:

As requested, Certerra Northwest LLC (formerly GeoTest Services, Inc.) is pleased to submit the following report summarizing the results of our geotechnical evaluation for the proposed Taco Bell located at 77XX 204th Street NE (Parcel No. 00847300000200) in Arlington, Washington (see Vicinity Map, Figure 1). This report has been prepared in general accordance with the terms and conditions established in our services agreement dated August 27th, 2025 and authorized by yourself.

We appreciate the opportunity to provide geotechnical services on this project and look forward to assisting you during the construction phase. Should you have any further questions regarding the information contained within the report, or if we may be of service in other regards, please contact the undersigned.

Respectfully,
Certerra

Jeff Vanfossen
Geotechnical Technician

Edwardo Garcia, P.E.
Geotechnical Department Manager

Enclosure: Geotechnical Engineering Report

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Purpose and Scope of Services

The purpose of this evaluation is to establish general subsurface conditions beneath the site from which conclusions and recommendations pertaining to project design can be formulated. Our scope of services includes the following tasks:

- Exploration of soil and groundwater conditions underlying the site by advancing five Test Pit Explorations (TP-1 through TP-5) with a subcontracted tracked excavator to evaluate subsurface conditions.
- Perform a visual reconnaissance of the proposed development site and immediate vicinity to observe existing site topographic and geologic conditions.
- Laboratory testing on representative samples to classify and evaluate the engineering characteristics of the soils encountered.
- Provide a preliminary assessment of the on-site infiltration capability based on USDA textural classification and the *Stormwater Management Manual for Western Washington [Manual].*
- Provide a written report containing a description of surface and subsurface conditions and exploration logs. Included are findings and recommendations pertaining to site preparation and earthwork, including stripping depths, subgrade preparation below the planned buildings, reuse of on-site soils, wet weather earthwork, and criteria for selection, placement, and compaction of Structural Fill.
- Provide recommendations for foundation support of the planned structures including allowable bearing pressures, bearing elevations, frost penetration depth, a discussion of potential foundation settlement (total and differential), floor support, and general foundation design.
- Provide recommendations for lateral earth pressures including active and at-rest conditions, allowable passive soil resistance, groundwater considerations, drainage recommendations, temporary and permanent slope inclinations, and utilities.
- A discussion of the Seismic Site Class considerations based on the 2021 International Building Code (IBC).
- Provide an assessment of geologically hazardous areas per the City of Arlington Municipal Code (AMC), Chapter 20.93.600, *Geologically Hazardous Areas*.
- Provide recommendations for geotechnical monitoring, materials testing, and consultation during construction.

Project Description

We understand that there are plans to construct a new one-story Taco Bell restaurant with a drive-through and typical parking/drive paths. Certerra anticipates that the new construction will utilize typical wood-framed construction with slab-on-grade floors. Structural loads have not been provided to us but are expected to be relatively light and will utilize shallow conventional foundations. Certerra does not expect that significant grading will be required to achieve final site grades.

A stormwater plan was not available at the time of this report. The infiltration of stormwater is expected as a project goal and preliminary infiltration feasibility information is outlined later in this report.

Site Conditions

This section includes a description of the general surface and subsurface conditions observed at the project site during the time of our field investigation. Interpretations of site conditions are based on the results and review of available information, site reconnaissance, subsurface explorations, laboratory testing, and previous experience in the project vicinity.

Surface Conditions

The project consists of one parcel (No. 00847300000200), 0.63-acres in size, just east of 7715 204th Street NE Street in Arlington, Washington. The project area is currently vacant and consists of a grassy field with occasional invasive weeds. The subject parcel is generally flat with less than a few feet of topographic relief across the site. Similarly sized commercial developments are to the east and west of the project area, while a large residential apartment complex is present to the north and smaller single-family residences exist to the south.

Images 1 (left) and 2 (right): Surface conditions in the northern portion of the subject parcel and excavator used for Test Pit excavations (Image 1 – facing north) and surface conditions in the southern portion of the subject parcel (Image 2 – facing southeast). Photos 1 and 2 were taken during our initial site visit on September 10th, 2025.

Subsurface Soil Conditions

Subsurface conditions were explored by advancing five test pits (TP-1 through TP-5) with a subcontracted excavator and operator on September 10th, 2025. The explorations were advanced to depths of between 10 and 12 feet below ground surface (BGS). Approximate locations of these explorations have been plotted on the *Site and Exploration Plan* (Figure 2).

The on-site subsurface soils consisted of approximately 0.25 to 1 foot of Topsoil, which was comprised of loose, brown, moist, gravelly, very silty sand with numerous organics. Underlying the topsoil at all locations, Certerra observed Uncontrolled Fill to depths between approximately 3 and 5.25 feet BGS. The Uncontrolled Fill consisted of loose to medium dense, light brown to brown, dry to damp, gravelly, very silty sand with orange mottling and occasional organics. In TP-2, between 2.25 feet and 5.25 feet BGS, the Uncontrolled Fill consisted of dense, brown, moist, sandy gravels with trace cobbles. Beneath the Uncontrolled Fill in all exploration locations, the soils consisted of loose/stiff, brown to dark brown, damp, silty sands/sandy silts with orange mottling. Certerra interpreted these soils as Weathered Marysville Sand. Unweathered Marysville Sand was encountered between depths of approximately 5 feet and 7 feet BGS and extended to the termination depth of each exploration. The native Marysville Sand were comprised of medium dense/stiff, brown to blue-gray, moist, very silty sand with interbeds of silt and occasional orange mottling.

General Geologic Conditions

Geologic information for the project site was obtained from the Geologic map of the Arlington West 7.5-minute quadrangle, Snohomish County, Washington (Minard, 1985), published by the United States Geological Survey. This map indicates that the project site is underlain by Vashon Drift Recessional Outwash consisting of the Marysville Sand Member (map unit Qvrm). The Marysville Sand Member consists of mostly well-drained, outwash sand with minor amounts of gravel. The older Arlington Gravel Member (map unit Qvra) of the Vashon Drift Recessional Outwash is also mapped northeast of the project site, underlying the Marysville Sand. Deposits of the Arlington Gravel consist of mostly well-drained and stratified sand and gravel deposits. Sediments of both soil types were deposited as valley fill by meltwater flowing south from the stagnating and receding Vashon Glacier during the Pleistocene Epoch.

Image 3 (left) and Image 4 (right): Subsurface conditions observed in TP-1 (left) and TP-3 (right) illustrating the Uncontrolled Fill observed in the shallow subsurface soil conditions. Images 3 and 4 were taken on the September 10th, 2025 site visit.

Our onsite explorations indicate that the encountered subsurface soil conditions are generally in accordance with the mapped deposits. It should be noted that the published soil types are representative of regional conditions and some variation between onsite soils and mapped geologic units should generally be anticipated. The native soils encountered in our explorations are consistent with soils that we have encountered on nearby projects. For the purposes of this report, Certerra has referred to the native soils as Marysville Sand.

According to the *Geologic Information Portal* and Dragovich et al. (2003) illustrate that the Darrington-Devils Mountain Fault Zone and smaller Mt. Washington Fault Zone are mapped to the north of the project site approximately 10.5 miles and 7.5 miles, respectively. The Darrington-Devils Mountain Fault Zone is described as a broad, northwest-trending right-lateral to oblique-slip fault zone and the Mt. Washington Fault Zone is described as right-lateral strike-slip antithetic faults. According to the same resource, there are not mapped landslides or alluvial fans near the project site.

Groundwater

Groundwater associated with the regional groundwater table was not encountered during our explorations. However, perched water conditions were encountered in our exploration locations at depths of 11 and 12 feet BGS. The perched water was observed within the native Marysville Sand soils.

We expect perched groundwater conditions to develop at the project site during the wet season and/or following periods of extended precipitation. Perched water conditions occur above the regional groundwater table in the unsaturated zone and typically occur when loose, more permeable soil is underlain by denser, less permeable soil. The vertical movement of water through loose soils is restricted once a dense or less permeable soil is encountered at depth. Perched water conditions typically develop in the wet season (November through April) or after extended periods of rainfall.

The groundwater conditions reported on the exploration logs are for the specific locations and dates indicated and therefore may not be indicative of other locations and/or times. Groundwater levels are variable and groundwater conditions will fluctuate depending on local subsurface conditions, precipitation, and changes in on-site and offsite use.

Based on a review of publicly available well log data from the Washington Department Ecology Well Log Viewer, the regional water table in the vicinity of the project area appears to be at depths of generally 20 and 30 feet BGS in the vicinity of the site.

Web Soil Survey

According to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) *Web Soil Survey* website, one relevant soil unit is present on the subject property. Please refer to Table 1 below for general characteristics of the mapped site soils. Based on their erosion "K" factor assigned by the NRCS, the soils present on-site are considered to have a **moderate** susceptibility to erosion with a value of 0.28. The value of the erosion factor "K" ranges from 0.02 to 0.69; the higher the value, the more susceptible the soil is to sheet and rill erosion by water. Mapped site soils are generally consistent with the soils observed during our explorations. However, the soil's vulnerability to sheet and rill erosion are considered **low** based on the gentle slope inclination that is present within the proposed area of development. In our opinion, erosion may be managed during and following construction using conventional best management practices.

Table 1 - USDA NRCS Soil Classifications

Map Unit Symbol	39
Map Unit Name	Norma loam
Soil Description	Ashy loam to sandy loam
Landform	Drainageways, depressions
Parent Material	Alluvium
Land Capability Classification	5w
Erosion K Factor, Whole Soil	0.28

Geologic Hazards

As the subject property is located within the City of Arlington, Certerra reviewed Chapter 20.93 Part V (Geologically Hazardous Areas) of the Arlington Municipal Code (AMC). Since the subject property is relatively flat with minor elevation gradients, it is Certerra's opinion that the subject property does not contain hazards pertaining to erosion or landslides (i.e., not an Erosion Hazard or Steep Slope Hazard). However, the subject property is mapped as having a low to moderate susceptibility to liquefaction. This is addressed in the next section.

Seismic and Liquefaction Hazards

Based on a review of information obtained from the Washington State Department of Natural Resources Geologic Information Portal, the subject site is classified as having a low to moderate liquefaction susceptibility. However, this map only provides an estimate of the likelihood that the soil will liquefy as a result of an earthquake and is meant as a general guide to delineate areas prone to liquefaction.

Liquefaction is defined as a significant rise in porewater pressure within a soil mass caused by earthquake-induced cyclic shaking. The shear strength of liquefiable soils is reduced during large and/or long duration earthquakes as the soil consistency approaches that of semi-solid slurry. Liquefaction can result in significant and widespread structural damage if not properly mitigated. Deposits of loose, granular soil below the groundwater table are most susceptible to liquefaction. Damage caused by foundation rotation, lateral spreading, and other ground movements can result from soil liquefaction.

The site is underlain by native, medium-dense, very gravelly, sandy soils. Certerra did not encounter the regional groundwater table during our explorations, and a review of local well log data suggests that it is more than 20 feet BGS in the vicinity of the site. Due to these factors, it is Certerra's opinion that the potential for liquefaction underlying the subject property is low. Thus, it is our opinion that the site does not require mitigations to address liquefaction concerns.

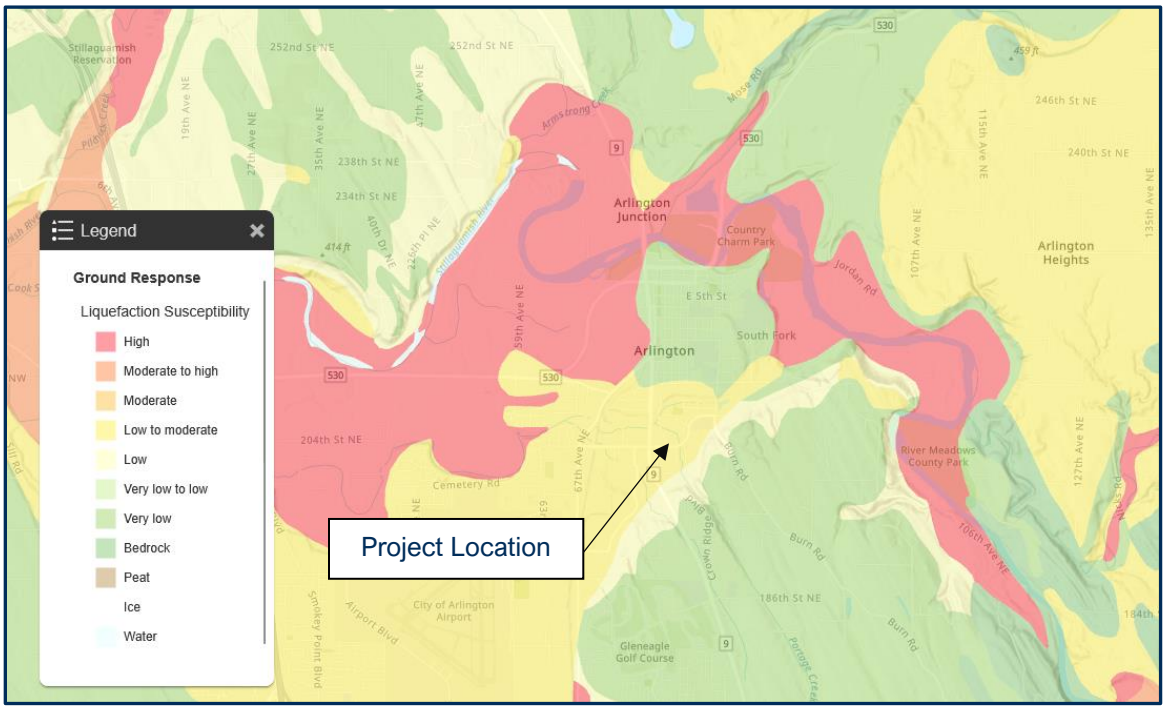

Image 5. Map showing liquefaction hazard susceptibility. Yellow depicts “low to moderate” susceptibility in the vicinity of the subject property. (Source: Washington Geologic Information Portal.)

Based on our findings, we generally agree with the mapped designation. Please keep in mind that the Pacific Northwest region is seismically active. In addition to the nearby faults discussed above, large Cascadia subduction zone earthquakes with possible magnitudes of 8 or 9 could produce ground shaking events with the potential to significantly impact the subject property regardless of the topography or subsurface conditions. Cascadia subduction zone earthquakes have occurred 6 times in the last 3,500 years with the most recent taking place in 1700, approximately 325 years ago. They have been determined to have an average recurrence interval of approximately 300 to 700 years (Atwater and Haley, 1997).

Conclusions and Recommendations

Based on the evaluation of the data collected during this investigation, it is our opinion that the subsurface conditions at the site are suitable for the proposed development, provided the recommendations contained herein are incorporated into the project design.

As previously mentioned, the site is generally flat and is underlain by loose Uncontrolled Fill soils, medium dense Marysville Sand with variable amounts of gravel and silty interbeds. The fill soils extended between 3 and 5.25 feet BGS in the explorations within the vicinity of the proposed building locations. Firm and unyielding Marysville Sand soils are, in our opinion, suitable for foundation support.

If encountered, existing fill, deleterious materials, organics, and loose/unsuitable portions of native soil (if remedial compaction is infeasible) should be removed from areas below foundations to expose suitable undisturbed Marysville Sand. Alternatively, foundations may be supported by Structural Fill over suitably prepared native soils.

Due to the depths of Uncontrolled Fill encountered at the project site, full removal of these soils underlying floor slabs and pavement areas may not be financially favorable. As such, Certerra is providing a limited overexcavation and replacement option detailed below. It should be noted that the Owner must accept that an increased risk of differential settlement, pavement distress, and other forms of settlement induced damage may occur from the soils underlying these areas.

This report provides preliminary findings to be used for conceptual design purposes by the Stormwater Designer. Based on the conditions encountered during our subsurface investigation, we expect that stormwater infiltration is feasible, but may

require subsequent investigation, monitoring, and/or additional explorations to fully develop stormwater management concepts.

Site Preparation and Earthwork

The portions of the site proposed for foundation(s), floor slabs, pavement, and/or sidewalk development should be prepared by removing existing pavements, topsoil, deleterious material, and significant accumulations of organics. Based on our explorations, Certerra anticipates between 3 and 5.25 feet of removal at most locations for foundation areas to expose native Marysville Sand soils. Finished site grades have not been established, so it is currently unknown if the project will be graded or what finished building elevations will be.

Certerra recommends that Uncontrolled Fill be removed from all foundation areas. Prior to placement of any foundation elements or Structural Fill, the exposed subgrade under all areas to be occupied by soil-supported foundations should be observed to confirm suitability. If found unsuitable, the subgrade soils should be recompacted to a firm and unyielding condition. Verification of compaction can be accomplished through proof rolling with a loaded dump truck, large self-propelled vibrating roller, or similar piece of equipment applicable to the size of the excavation. The purpose of this effort is to identify loose or soft soil deposits so that, if feasible, the soil distributed during site work can be recompacted. Then foundation areas may receive Structural Fill backfilled and compacted as outlined in the Fill and Compaction section of this report.

It is Certerra's opinion that the option with the least amount of risk for post-construction settlement is to remove existing fill from the building footprint area. Alternatively, the Owner may elect to overexcavate at least 2 feet below the planned foundation and floor slab areas, then backfill and compact Structural Fill as outlined in the Fill and Compaction section of this report. Prior to placement and compaction of Structural Fill, the Uncontrolled Fill soils exposed below the overexcavated area should be compacted to firm and unyielding conditions. If these soils are unable to be compacted to a firm and unyielding condition, then a geotextile fabric should be used to bridge the soils between the Uncontrolled Fill and new Structural Fill.

Proof rolling should be carefully observed by qualified geotechnical personnel. Areas exhibiting significant deflection, pumping, or over-saturation that cannot be readily compacted should be overexcavated to firm soil. Alternatively, Dynamic Cone Penetrometers or soil probing by a qualified Certerra representative can confirm firm and unyielding conditions if a proof roll cannot be performed. Overexcavated areas should be backfilled with compacted granular material placed in accordance with subsequent recommendations for Structural Fill. During periods of wet weather, proof rolling could damage the exposed subgrade. Under these conditions, qualified geotechnical personnel should observe subgrade conditions to determine if proof rolling is feasible.

Fill and Compaction

Structural Fill used to obtain final elevations for footings and soil-supported floor slabs must be properly placed and compacted. In most cases, suitable, non-organic, predominantly granular soil may be used for fill material provided the material is properly moisture conditioned prior to placement and compaction, and the specified degree of compaction is obtained. Material containing topsoil, wood, trash, organic material, or construction debris is not suitable for reuse as Structural Fill and should be properly disposed offsite or placed in non-structural areas.

Soils containing more than approximately 5 percent fines are considered moisture sensitive and are difficult to compact to a firm and unyielding condition when over the optimum moisture content by more than approximately 2 percent. The optimum moisture content is that which allows the greatest dry density to be achieved at a given level of compactive effort.

Reuse of On-Site Soil – Existing Fill

Existing fill soils were observed to extend between 3 and 5.25 feet BGS in our explorations. The existing fill soils contained indications of refuse and/or organic debris. Fill containing refuse, debris, or organics should be segregated and removed from the site. It should be noted that the existing fill also contained elevated fines content and are considered moisture sensitive. Silty soil should only be reused if it can be placed at or near optimum moisture contents.

Reuse of On-Site Soil – Native Soil

It is our opinion that the native Marysville Sand is suitable for reuse as Structural Fill when placed at or near optimum moisture contents and if allowed for in the project plans and specifications. It should be noted that the native soils contained restrictive layers with elevated fines contents and are considered moisture sensitive. Based on our experience, it will be difficult to achieve industry standard levels of compaction when using these soils during wet weather, wet site conditions, or when encountering shallow perched water. As such, we recommend that these soils only be utilized as Structural Fill during extended periods of dry weather and site conditions. We recommend that any native soils reused under structural elements be free of significant organic content and/or other deleterious material.

We recommend that any Uncontrolled Fill soils containing deleterious material and native soils not properly moisture conditioned, and/or any onsite soil containing significant organic content be limited to non-structural areas or be disposed of offsite.

Import Structural Fill

Certerra recommends that imported Structural Fill consist of clean, well-graded sandy gravel, gravelly sand, or other approved naturally occurring granular material (pit run) with at least 30 percent retained on the No. 4 sieve, or a well-graded crushed rock. Structural Fill for dry weather construction may contain up to 10 percent fines (that portion passing the U.S. No. 200 sieve) based on the portion passing the U.S. No. 4 sieve. The use of an imported fill having more than 10 percent fines may be feasible, but the use of these soils should generally be reviewed by the design team prior to the start of construction.

Imported Structural Fill with less than 5 percent fines should be used during wet weather conditions. Due to wet site conditions, soil moisture contents could be high enough that it may be difficult to compact even clean imported select granular fill to a firm and unyielding condition. Soils with an over-optimum moisture content should be scarified and dried back to a suitable moisture content during periods of dry weather or removed and replaced with drier Structural Fill.

Backfill and Compaction

Structural Fill should be placed in horizontal lifts. The Structural Fill must measure 8 to 10 inches in loose thickness and be thoroughly compacted. All Structural Fill placed under load bearing areas should be compacted to at least 95 percent of the maximum dry density, as determined using test method ASTM D1557. The top of the compacted Structural Fill should extend outside all foundations and other structural improvements a minimum distance equal to the thickness of the fill. We recommend that compaction be tested after placement of each lift in the fill pad.

Wet Weather Earthwork

Fine grained Uncontrolled Fill and native soils are particularly susceptible to degradation during wet weather due to the high percentage of fines. As a result, it may be difficult to control the moisture content of site soils during the wet season. If construction takes place during wet weather, Certerra recommends that Structural Fill consist of imported, clean, well-graded sand or sand and gravel as described above. If fill is to be placed or earthwork is to be performed in wet conditions, the Contractor may reduce soil disturbance by:

- Limiting the size of areas that are stripped of topsoil and left exposed
- Accomplishing earthwork in small sections
- Limiting construction traffic over unprotected soil
- Sloping excavated surfaces to promote runoff
- Limiting the size and type of construction equipment used
- Providing gravel ‘working mats’ over areas of prepared subgrade
- Removing wet surficial soil prior to commencing fill placement each day
- Sealing the exposed ground surface by rolling with a smooth drum compactor or rubber-tired roller at the end of each working day
- Providing up-gradient perimeter ditches or low earthen berms and using temporary sumps to collect runoff and prevent water from ponding and damaging exposed subgrades

Seismic Design Considerations

The Pacific Northwest is seismically active, and the site could be subject to movement from a moderate or major earthquake. Consequently, moderate levels of seismic shaking should be accounted for during the design life of the project, and the proposed structure should be designed to resist earthquake loading using appropriate design methodology.

For structures designed using the seismic design provisions of the 2021 International Building Code, the Marysville Sand underlying the site is classified as Site Class D according to ASCE 7-22. The Structural Engineer should select the appropriate design response spectrum based on Site Class D soil and the geographical location of the proposed construction.

Foundation Support

Continuous or isolated spread footings founded on proof-rolled, undisturbed, medium dense native soils or on properly compacted Structural Fill placed directly over undisturbed native soil can provide foundation support for the proposed improvements. We recommend that qualified geotechnical personnel confirm that suitable bearing conditions have been reached prior to placement of Structural Fill or foundation formwork.

To provide proper support, Certerra recommends that existing topsoil, existing fill, and/or loose/soft upper portions of the native soil be removed from beneath the building foundation area(s) or be replaced with properly compacted Structural Fill as described in the Fill and Compaction section of this report. Localized overexcavation, if necessary, can be backfilled to the design footing elevation with lean concrete, or foundations may be extended to bear on undisturbed native soil. In areas requiring overexcavation to competent native soil, the limits of the overexcavation should extend laterally beyond the edge of each side of the footing a distance equal to the depth of the excavation below the base of the footing. If lean concrete is used to backfill the overexcavation, the limits of the overexcavation need only extend a nominal distance beyond the width of the footing. In addition, Certerra recommends that foundation elements for the proposed structure(s) bear entirely on similar soil conditions to help prevent differential settlement from occurring. As previously mentioned, Uncontrolled Fill soils were encountered below the anticipated building footrprint and complete removal may be cost prohibitive.

Continuous and isolated spread footings should be founded 18 inches, minimum, below the lowest adjacent final grade for freeze/thaw protection. The footings should be sized in accordance with the Structural Engineer's prescribed design criteria and seismic considerations.

Limited Overexcavation and Replacement

Uncontrolled Fill soils exist on the property. These soils were encountered within our explorations, extending between 3 and 5.25 feet BGS. The depth of this fill, however, could vary across the site. If left in place and not mitigated, the existing fill soils will increase the risk of post-construction settlements.

In lieu of removing the entirety of the uncontrolled native fill soils below the footprint of the building, Certerra recommends removal of at least 24 inches of the existing fill below the bottom-of-foundation elevation and floor slab areas. After removal, the exposed subgrades should be compacted to a firm and unyielding condition with a vibratory Ho-Pac compactor, drum roller, or similar high-energy compaction equipment. After compacting the exposed soils to a firm and unyielding condition, improved areas should be backfilled to foundation grades with properly placed and compacted Structural Fill.

Allowable Bearing Capacity

Assuming the above foundation support criteria are satisfied, continuous or isolated spread footings founded directly on firm and unyielding native soils, on compacted Structural Fill placed directly over firm and unyielding native soils, or on a prism of Structural Fill overlying remedially densified, firm and unyielding soil may be proportioned using a net allowable soil bearing pressure of 2,500 pounds per square foot (psf).

The "net allowable bearing pressure" refers to the pressure that can be imposed on the soil at foundation level. This pressure includes all dead loads, live loads, the weight of the footing, and any backfill placed above the footing. The net allowable bearing pressure may be increased by one-third for transient wind or seismic loads.

Foundation Settlement

Settlement of shallow foundations depends on foundation size and bearing pressure, as well as the strength and compressibility characteristics of the underlying soil. If construction is accomplished as recommended and at the maximum allowable soil bearing pressure, Certerra estimates the total settlement of building foundations to be less than one inch under static conditions. Differential settlement between two adjacent load-bearing components supported on competent soil is estimated to be less than one half the total settlement.

Floor Support

Conventional slab-on-grade floor construction is feasible for the planned site improvements. Floor slabs may be supported on properly prepared native subgrade, on properly placed and compacted Structural Fill placed over prepared native soil, or on a prism of 2 feet of Structural Fill overlying suitably firm soil. Prior to placement of the Structural Fill, the underlying soil should be proof-rolled as recommended in the *Site Preparation and Earthwork* section of this report.

Certerra recommends that interior concrete slab-on-grade floors be underlain with at least 6 inches of clean, compacted, free-draining gravel. The gravel should contain less than 3 percent passing the U.S. Standard No. 200 sieve (based on a wet sieve analysis of that portion passing the U.S. Standard No. 4 sieve). The purpose of this gravel layer is to provide uniform support for the slab, provide a capillary break, and act as a drainage layer. To help reduce the potential for water vapor migration through floor slabs, a continuous 10-mil minimum thick polyethylene sheet with tape-sealed joints should be installed below the slab to serve as an impermeable vapor barrier. The vapor barrier should be installed and sealed in accordance with the manufacturer's instructions.

The American Concrete Institute (ACI) guidelines suggest that the slab may either be poured directly on the vapor barrier or on a granular curing layer placed over the vapor barrier depending on construction conditions. Certerra recommends that the Architect or Structural Engineer specify if a curing layer should be used. If moisture control within the building is critical, we recommend a representative of Certerra observe the vapor barrier to confirm that joints and penetrations have been properly sealed. A Subgrade Modulus (k) of 200 pounds per cubic inch (pci) is recommended for use in the design of concrete slab elements placed on suitably compacted near-surface soils and Structural Fill.

Exterior concrete slabs-on-grade, such as sidewalks, may be supported directly on undisturbed native soil or on properly placed and compacted Structural Fill; however, long-term performance will be enhanced if exterior slabs are placed on a layer of clean, durable, well-draining granular material.

Foundation and Site Drainage

Positive surface gradients should be provided adjacent to the proposed building to direct surface water away from the building and toward suitable drainage facilities. Roof drainage should not be introduced into the perimeter footing drains but should be separately discharged directly to the stormwater collection system or similar municipality-approved outlet. Pavement and sidewalk areas, if present, should be sloped and drainage gradients should be maintained to carry surface water away from the building towards an approved stormwater collection system. Surface water should not be allowed to pond and soak into the ground surface near buildings or paved areas during or after construction. Construction excavations should be sloped to drain to sumps where water from seepage, rainfall, and runoff can be collected and pumped to a suitable discharge facility.

To reduce the potential for groundwater and surface water to seep into interior spaces, Certerra recommends that an exterior footing drain system be constructed around the perimeter of new building foundations as shown in the *Conceptual Footing and Wall Drain Section* (Figure 3) of this report. The drain should consist of a perforated pipe measuring 4 inches in diameter at minimum, surrounded by at least 12 inches of filtering media. The pipe should be sloped to carry water to an approved collection system.

The filtering media may consist of open-graded drain rock wrapped in a nonwoven geotextile fabric such as Mirafi 140N (or equivalent) or wrapped with a graded sand and gravel filter. For foundations supporting retaining walls, drainage backfill should be carried up the back of the wall and be at least 12 inches wide. The drainage backfill should extend from the foundation drain to within approximately 1 foot of the finished grade and consist of open-graded drain rock containing less than 3 percent fines by weight passing the U.S. Standard No. 200 sieve (based on a wet sieve analysis of that portion passing

the U.S. Standard No. 4 sieve). The invert of the footing drainpipe should be placed at approximately the same elevation as the bottom of the footing or 12 inches below the adjacent floor slab grade, whichever is deeper, so that water will be contained. This process prevents water from seeping through walls or floor slabs. The drain system should include cleanouts to allow for periodic maintenance and inspection.

Please understand that the above recommendations are intended to assist the Design engineer and/or Architect in development of foundation and site drainage parameters and are based on our experience with similar projects in the area. The final foundation and site drainage plan that will be incorporated into the project plans is to be determined by the design team.

Resistance to Lateral Loads

The lateral earth pressures that develop against retaining walls will depend on the method of backfill placement, degree of compaction, slope of backfill, type of backfill material, provisions for drainage, magnitude and location of any adjacent surcharge loads, and the degree to which the wall can yield laterally during or after placement of backfill. If the wall is allowed to rotate or yield so the top of the wall moves an amount equal to or greater than about 0.001 to 0.002 times its height (a yielding wall), the soil pressure exerted comprises the active soil pressure. When a wall is restrained against lateral movement or tilting (a nonyielding wall), the soil pressure exerted comprises the at rest soil pressure. Wall restraint may develop if a rigid structural network is constructed prior to backfilling or if the wall is inherently stiff.

Certerra recommends that yielding walls under drained conditions be designed for an equivalent fluid density of 35 pounds per cubic ft (pcf), for Structural Fill and native soils in active soil conditions. Nonyielding walls under drained conditions should be designed for an equivalent fluid density of 55 pcf, for Structural Fill and native soils in at-rest conditions. The design of walls should include appropriate lateral pressures caused by surcharge loads located within a horizontal distance equal to or less than the height of the wall. For uniform surcharge pressures, a uniformly distributed lateral pressure equal to 35 percent and 50 percent of the vertical surcharge pressure should be added to the lateral soil pressures for yielding and nonyielding walls, respectively. Certerra also recommends that a seismic surcharge of 8*H psf be included where H is the wall height. The seismic surcharge should be modeled as a rectangular distribution with the resultant applied at the midpoint of the wall.

Passive earth pressures developed against the sides of building foundations, in conjunction with friction developed between the base of the footings and the supporting subgrade, will resist lateral loads transmitted from the structure to its foundation. For design purposes, the passive resistance of well-compacted fill placed against the sides of foundations is equivalent to a fluid with a density of 250 pcf. The recommended value includes a safety factor of about 1.5 and is based on the assumption that the ground surface adjacent to the structure is level in the direction of movement for a distance equal to or greater than twice the embedment depth. The recommended value also assumes drained conditions that will prevent the buildup of hydrostatic pressure in the compacted fill. Retaining walls should include a drain system constructed in general accordance with the recommendations presented in the *Foundation and Site Drainage* section of this report. In design computations, the upper 12 inches of passive resistance should be neglected if the soil is not covered by floor slabs or pavement. If future plans call for the removal of the soil providing resistance, the passive resistance should not be considered.

An allowable coefficient of base friction of 0.35, applied to vertical dead loads only, may be used between the underlying imported granular Structural Fill and the base of the footing. If passive and frictional resistance are considered together, one half the recommended passive soil resistance value should be used since larger strains are required to mobilize the passive soil resistance as compared to frictional resistance. A safety factor of about 1.5 is included in the base friction design value. Certerra does not recommend increasing the coefficient of friction to resist seismic or wind loads.

Temporary and Permanent Slopes

The Contractor is responsible for construction slope configurations and maintaining safe working conditions, including temporary excavation stability. All applicable local, state, and federal safety codes should be followed. All open cuts should be monitored during and after excavation for any evidence of instability. If instability is detected, the Contractor should flatten the side slopes or install temporary shoring.

Temporary excavations in excess of 4 feet should be shored or sloped in accordance with Safety Standards for Construction Work Part N, WAC 296-155-66403. Temporary unsupported excavations in the Uncontrolled Fill and Marysville Sand soils

encountered at the project site are classified as a Type C soil according to WAC 296-155-66401 and may be sloped as steep as 1.5:1 (Horizontal: Vertical). All soils encountered are classified as Type C soil in the presence of groundwater seepage. Flatter slopes or temporary shoring may be required in areas where groundwater flow is present and unstable conditions develop.

Temporary slopes and excavations should be protected as soon as possible using appropriate methods to prevent erosion from occurring during periods of wet weather.

Certerra recommends that permanent cut or fill slopes be designed for inclinations of 2H:1V or flatter. Permanent cuts or fills used in detention ponds, retention ponds, or earth slopes intended to hold water should be 3H:1V or flatter. All permanent slopes should be vegetated or otherwise protected to limit the potential for erosion as soon as practical after construction.

Utilities

Utility trenches must be properly backfilled and compacted to reduce cracking or localized loss of foundation, slab, or pavement support. Excavations for new shallow underground utilities are expected to be placed within Uncontrolled Fill or native soils.

Trench backfill in improved areas (beneath structures, pavements, sidewalks, etc.) should consist of Structural Fill as defined in the *Fill and Compaction* section of this report. Outside of improved areas, trench backfill may consist of reused material provided the backfill can be compacted to the project specifications. Trench backfill should be placed and compacted in general accordance with the recommendations presented in the *Fill and Compaction* section of this report.

Surcharge loads on trench support systems due to construction equipment, stockpiled material, and vehicle traffic should be included in the design of any anticipated shoring system. The Contractor should implement measures to prevent surface water runoff from entering trenches and excavations. In addition, vibration as a result of construction activity and traffic may cause caving of the trench walls.

The Contractor is responsible for trench configurations. All applicable local, state, and federal safety codes should be followed. All open cuts should be monitored by the Contractor during excavation for any evidence of instability. If instability is detected, the Contractor should flatten the side slopes or install temporary shoring. If groundwater or groundwater seepage is present, and the trench is not properly dewatered, the soil within the trench zone may be prone to caving, channelling, and running. Trench widths may be substantially wider than under dewatered conditions.

Pavement Subgrade Preparation

Selection of a pavement section is typically a choice relative to a higher initial cost and lower long-term maintenance, or a lower initial cost with more frequent maintenance. For this reason, we recommend that the Owner participates in the selection of the proposed pavement sections planned for the site. Site grading plans should include provisions for sloping of the subgrade soils in proposed pavement areas, so that passive drainage of the pavement section(s) can proceed uninterrupted during the life of the project. The proposed pavement areas should be prepared as indicated in the *Site Preparation and Earthwork* section of this report. If existing fill is exposed after initial site stripping and it cannot be remedially compacted to the requirements for Structural Fill, limited overexcavation and replacement with Structural Fill should occur. We provide further detail for removal depths of unsuitable soil and subgrade preparation recommendations in the Foundation Support and Slab on Grade support sections of this report.

Light-Duty Flexible Pavement

Certerra anticipates that asphalt pavement will be used for new passenger vehicle access drives and parking areas. We recommend that a standard, or 'light duty,' pavement section consist of 2.5 inches of ½-inch HMA asphalt above 6 inches of crushed surfacing base course (CSBC) meeting criteria set forth in the Washington State Department of Transportation (WSDOT) Standard Specification 9-03.9[3] Crushed Surfacing Base Course.

Certerra is available to further consult, review, and/or modify our pavement section recommendations based on further discussion and/or analysis with the project team/owner. The above pavement sections are initial recommendations and may be accepted and/or modified by the site Civil Engineer based on the actual finished site grading elevations and/or the owner's preferences.

Heavy-Duty Flexible Pavement

The drive-thru lane and/or areas that will be accessed by more heavily loaded vehicles, emergency access vehicles, garbage trucks, and similar vehicles will require a thicker asphalt section and should be designed using a paving section consisting of 3 inches of Class ½-inch HMA asphalt surfacing above 6 inches of CSBC meeting criteria set forth in WSDOT Standard Specification 9-03.9[3].

Concrete Pavement

Concrete pavements could be used for access and drive areas. Design of concrete pavements is a function of concrete strength, reinforcement steel, and the anticipated loading conditions for the roads. For design purposes, a vertical modulus of subgrade reaction of 200 pounds per cubic inch (pci) should be expected for concrete roadways constructed over properly placed and compacted Structural Fill. Certerra expects that concrete pavement sections, if utilized, will be at least 6 inches thick and be founded on a minimum of 6 inches of compacted CSBC. The design of concrete pavements will need to be performed by a Structural Engineer. Certerra recommends that subgrade soils supporting concrete pavement sections include minor grade changes to allow for passive drainage away from the pavement.

Certerra is available to further consult, review, and/or modify our pavement section recommendations based on further discussion and/or analysis with the project team/Owner. The above pavement sections are initial recommendations and may be accepted and/or modified by the site Civil Engineer based on the actual finished site grading elevations and/or the Owner's preferences.

Stormwater Infiltration Potential

Based on the presence of predominantly granular materials at depth, it is our opinion that the on-site infiltration of stormwater is feasible for this project site. Please note that there are thin silt interbeds that exist between 4 and 8 feet below existing site grades. These silt interbeds are expected to have negative effects on infiltration. As such, Certerra recommends that the bottom of facilities be extended through existing fill soils and silt interbeds, and be founded in the granular Marysville Sand that exists at depths of about 8 feet below existing site grades. If desired, shallower facilities may be constructed as long as excavated "slot trenches" are extended from the bottom of the facility and through the silt lenses that exist between 4 and 8 feet below existing site grades. Slot trenches, if utilized, should be backfilled with C33 Sand, or similar high-permeability, predominately granular materials that will hydraulically connect the infiltration facility to the receptor soils at depth.

Provided that infiltration facilities are extended to predominantly granular soil at approximately 8 feet below existing site grades, a preliminary, corrected infiltration rate of 0.5 inches per hour may be assumed for the design of these facilities. Please note that this rate is representative of siltier soils in the unit with a correction factor. Laboratory analysis of collected soil samples indicates some areas with clean sands and gravels are expected to have infiltration rates greater than 0.5 inches per hour. The location and depths of proposed infiltration facilities are currently unknown. As such, designing a facility to a higher infiltration rate at an unknown location and with an unknown facility depth presents moderate amounts of risk to the Owner. If desired, a field performance test (Pilot Infiltration Testing) can be performed for an additional fee and upon the completion of Civil Design services. It will be logistically challenging to perform a Pilot Infiltration Test at approximately 8 feet below existing site grades, but such a test can be performed if it becomes necessary and if a faster infiltration rate is needed for the design.

At the time of this report, a specific infiltration facility design is not available. As such, it should be expected that multiple iterations may be needed to initially size facilities and then determine the necessity of reductions to the presented infiltration rate to account for groundwater mounding.

Stormwater Treatment

The stormwater facilities on-site may require some form of pollutant pretreatment with an amended soil prior to on-site infiltration or offsite discharge. The reuse of on-site topsoil is often the most sustainable and cost-effective method for pollutant treatment purposes. Cation exchange capacities, organic contents, and pH of site subsurface soils were also tested to determine possible pollutant treatment suitability.

Cation exchange capacity, organic content, and pH tests were performed by Northwest Agricultural Consultants on three soil samples collected from the project site. A summary of the laboratory test results is presented in Table 2 below.

TABLE 2 Cation Exchange Capacity, Organic Content, and pH Laboratory Test Results					
Test Pit ID	Sample Depth (ft)	Geologic Unit	Cation Exchange Capacity (meq/100 grams)	Organic Content (%)	pH
TP-1	0.25	Topsoil	16.9	6.69	5.8
TP-2	0.25	Topsoil	28.9	12.04	5.5
TP-3	5.0	Marysville Sand	16.3	3.48	6.2

Suitability for onsite pollutant treatment is determined in accordance with SSC-6 of the Manual. Soils with an organic content of greater than or equal to 1 percent and a cation exchange capacity of greater than or equal to 5 meq/100 grams are characterized as suitable for stormwater treatment. Based on the results shown in Table 2, topsoil is suitable for stormwater treatment. However, reduced rates of infiltration should be anticipated in the Marysville Sand soils due to these soils' elevated silt contents.

On-site soils can be amended by mixing higher silt content soils or adding mulch (or other admixtures) to elevate the cation exchange capacity and organic contents. On-site amended soil requires additional testing to confirm compliance with ecological regulations. Certerra is available to perform additional laboratory testing as part of an expanded scope of services if the soil is to be amended. Alternatively, the owner may elect to import amended soils with the desired properties for planned treatment facilities.

Geotechnical Consultation and Construction Monitoring

Certerra recommends that we be involved in the project design review process. The purpose of the review is to verify that the recommendations presented in this report are understood and incorporated in the design and specifications.

We also recommend that geotechnical construction monitoring services be provided. These services should include observation by Certerra personnel during Structural Fill placement, compaction activities and subgrade preparation operations to confirm that design subgrade conditions are obtained beneath the areas of improvement.

Periodic field density testing should be performed to verify that the appropriate degree of compaction is obtained. The purpose of these services is to observe compliance with the design concepts, specifications, and recommendations of this report. In the event that subsurface conditions differ from those anticipated before the start of construction, Certerra Services would be pleased to provide revised recommendations appropriate to the conditions revealed during construction.

Certerra is available to provide a full range of materials testing and special inspection during construction as required by the local building department and the International Building Code. This may include specific construction inspections on materials such as reinforced concrete, reinforced masonry, wood framing and structural steel. These services are supported by our fully accredited materials testing laboratory.

Use of This Report

Certerra Services has prepared this report for the exclusive use of Pacific Bells, LLC and their design consultants for specific application to the design of the proposed development located on Parcel No. 00847300000200 in Arlington, Washington. Use of this report by others is at the user's sole risk. This report is not applicable to other site locations. Our services are conducted in accordance with accepted practices of the geotechnical engineering profession; no other warranty, express or implied, is made as to the professional advice included in this report.

Our site explorations indicate subsurface conditions at the dates and locations indicated. It is not warranted that these conditions are representative of conditions at other locations and times. The analyses, conclusions, and recommendations contained in this report are based on site conditions to the limited depth and time of our explorations, a geological reconnaissance of the area, and a review of previously published geological information for the site. If variations in subsurface conditions are encountered during construction that differ from those contained within this report, Certerra should be allowed to review the recommendations and, if necessary, make revisions. If there is a substantial lapse of time between

submission of this report and the start of construction, or if conditions change due to construction operations at or adjacent to the project site, we recommend that we review this report to determine the applicability of the conclusions and recommendations contained herein.

The earthwork Contractor is responsible to perform all work in conformance with all applicable WISHA/OSHA regulations. Certerra Services, Inc. is not responsible for job site safety on this project, and this responsibility is specifically disclaimed.

Attachments:	Figure 1	Vicinity Map
	Figure 2	Site and Exploration Plan
	Figure 3	Typical Footing and Wall Drain Section
	Figure 4	Soil Classification System and Key
	Figure 5 – 7	Test Pit Exploration Logs
	Figure 8 – 9	Grain Size Test Data
	Attachment	NW Agricultural Consultants Test Results
	Attachment	Report Limitations and Guidelines for its Use (4 Pages)

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CERTERRA GEOTEST	Date: 9-15-2025	By: JV	Scale: As Shown	Project 25-2170
	VICINITY MAP ARLINGTON TACO BELL PARCEL NO. 00847300000200 ARLINGTON, WASHINGTON			Figure 1

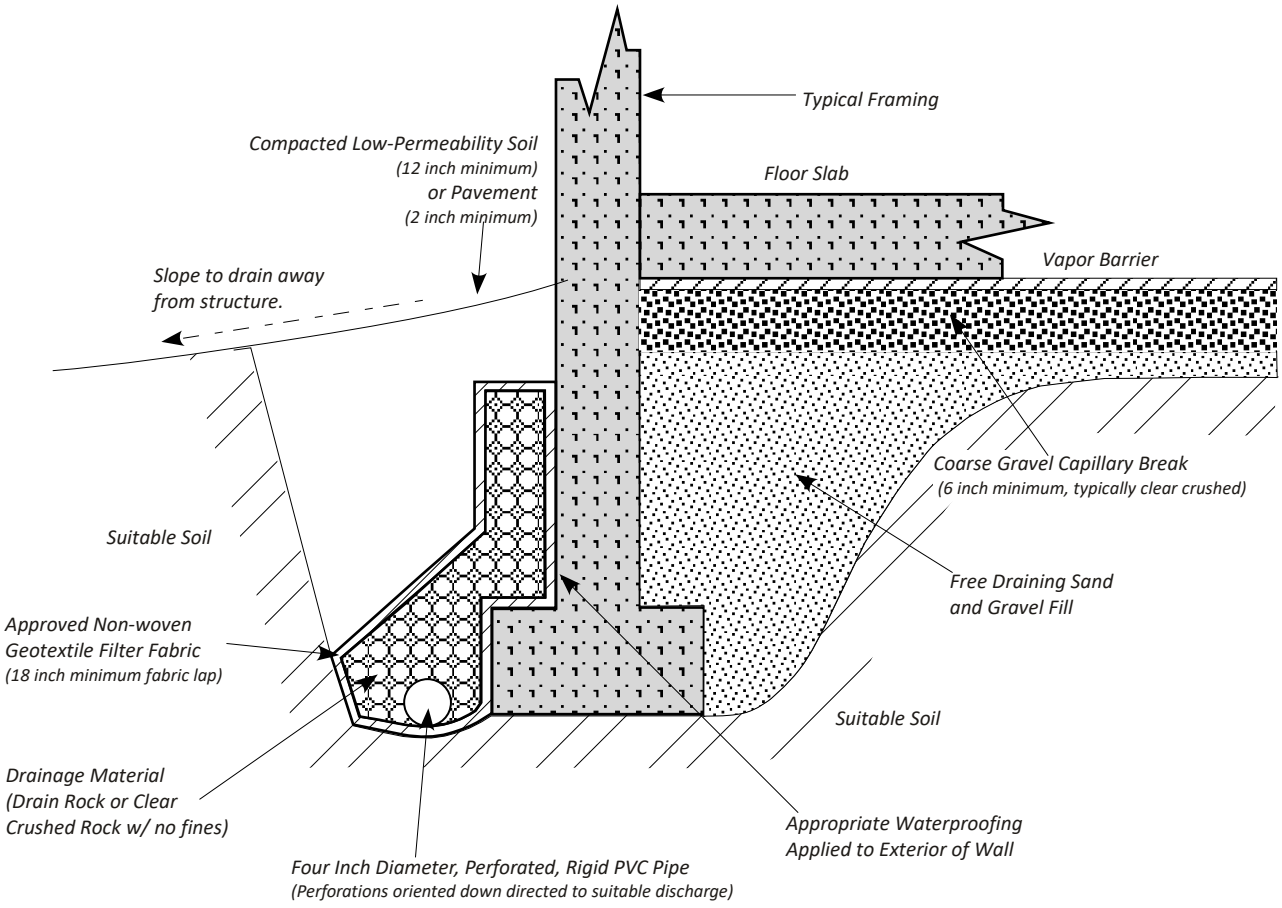
CERTERRA GEOTEST

Date: 9-15-2025	By: JV	Scale: As Shown	Project 25-2170

SITE AND EXPLORATION PLAN
ARLINGTON TACO BELL
PARCEL NO. 00847300000200
ARLINGTON, WASHINGTON

Figure 2

CONCEPTUAL FOOTINGS WITH INTERIOR SLAB-ON-GRADE



Notes:

Footings should be properly buried for frost protection in accordance with International Building Code or local building codes (Typically 18 inches below exterior finished grades).

This figure is not intended to be representative of a design. This figure is intended to present concepts that can be incorporated into a functional foundation drain designed by a Civil Engineer. In all cases, refer to the Civil plan sheet for drain details and elevations.

This footing drain detail may need to be modified from this conceptual drawing to fit the dimensions of the planned footing and slab configuration.

CERTERRA GEOTEST	Date: 9-15-2025	By: JV	Scale: None	Project 25-2170
	CONCEPTUAL FOOTING & WALL DRAIN SECTION ARLINGTON TACO BELL PARCEL NO. 00847300000200 ARLINGTON, WASHINGTON			Figure 3

Soil Classification System

MAJOR DIVISIONS			GRAPHIC SYMBOL	USCS LETTER SYMBOL	TYPICAL DESCRIPTIONS[1][2]
COARSE-GRAINED SOIL (More than 50% of material is larger than No. 200 sieve size)	GRAVEL AND GRAVELLY SOIL (More than 50% of coarse fraction retained on No. 4 sieve)	CLEAN GRAVEL (Little or no fines)		GW	Well-graded gravel; gravel/sand mixture(s); little or no fines
				GP	Poorly graded gravel; gravel/sand mixture(s); little or no fines
		GRAVEL WITH FINES (Appreciable amount of fines)		GM	Silty gravel; gravel/sand/silt mixture(s)
				GC	Clayey gravel; gravel/sand/clay mixture(s)
	SAND AND SANDY SOIL (More than 50% of coarse fraction passed through No. 4 sieve)	CLEAN SAND (Little or no fines)		SW	Well-graded sand; gravelly sand; little or no fines
				SP	Poorly graded sand; gravelly sand; little or no fines
		SAND WITH FINES (Appreciable amount of fines)		SM	Silty sand; sand/silt mixture(s)
				SC	Clayey sand; sand/clay mixture(s)
FINE-GRAINED SOIL (More than 50% of material is smaller than No. 200 sieve size)	SILT AND CLAY (Liquid limit less than 50)			ML	Inorganic silt and very fine sand; rock flour; silty or clayey fine sand or clayey silt with slight plasticity
				CL	Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay
				OL	Organic silt; organic, silty clay of low plasticity
	SILT AND CLAY (Liquid limit greater than 50)			MH	Inorganic silt; micaceous or diatomaceous fine sand
				CH	Inorganic clay of high plasticity; fat clay
				OH	Organic clay of medium to high plasticity; organic silt
	HIGHLY ORGANIC SOIL			PT	Peat; humus; swamp soil with high organic content

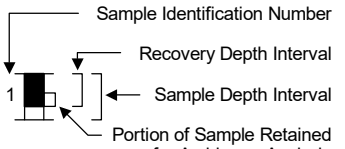
OTHER MATERIALS	GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
PAVEMENT		AC or PC	Asphalt concrete pavement or Portland cement pavement
ROCK		RK	Rock (See Rock Classification)
WOOD		WD	Wood, lumber, wood chips
DEBRIS		DB	Construction debris, garbage

Notes:
1. Soil descriptions are based on the general approach presented in the *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*, as outlined in ASTM D 2488. Where laboratory index testing has been conducted, soil classifications are based on the *Standard Test Method for Classification of Soils for Engineering Purposes*, as outlined in ASTM D 2487.
2. Soil description terminology is based on visual estimates (in the absence of laboratory test data) of the percentages of each soil type and is defined as follows:

Primary Constituent:	> 50% - "GRAVEL," "SAND," "SILT," "CLAY," etc.
Secondary Constituents:	> 30% and ≤ 50% - "very gravelly," "very sandy," "very silty," etc.
	> 12% and ≤ 30% - "gravelly," "sandy," "silty," etc.
Additional Constituents:	> 5% and ≤ 12% - "slightly gravelly," "slightly sandy," "slightly silty," etc.
	≤ 5% - "trace gravel," "trace sand," "trace silt," etc., or not noted.

Drilling and Sampling Key

SAMPLE NUMBER & INTERVAL



SAMPLER TYPE

Code	Description
a	3.25-inch O.D., 2.42-inch I.D. Split Spoon
b	2.00-inch O.D., 1.50-inch I.D. Split Spoon
c	Shelby Tube
d	Grab Sample
e	Other - See text if applicable
1	300-lb Hammer, 30-inch Drop
2	140-lb Hammer, 30-inch Drop
3	Pushed
4	Other - See text if applicable

Groundwater

▽ ATD — Approximate water elevation at time of drilling (ATD) or on date noted. Groundwater levels can fluctuate due to precipitation, seasonal conditions, and other factors.

Field and Lab Test Data

Code	Description
PP = 1.0	Pocket Penetrometer, tsf
TV = 0.5	Torvane, tsf
PID = 100	Photoionization Detector VOC screening, ppm
W = 10	Moisture Content, %
D = 120	Dry Density, pcf
-200 = 60	Material smaller than No. 200 sieve, %
GS	Grain Size - See separate figure for data
AL	Atterberg Limits - See separate figure for data
GT	Other Geotechnical Testing
CA	Chemical Analysis

CERTERRA GEOTEST

Arlington Taco Bell
Parcel No. 00847300000200
Arlington, Washington

Soil Classification System and Key

Figure 4

TP-1

SAMPLE DATA			SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Test Data	Graphic Symbol	USCS Symbol	Excavation Method: Tracked Excavator Ground Elevation (ft): ~134 Excavated By: E&D Excavating, Inc. / JV	
0		d			SM	Loose, brown, dry, gravelly, very silty SAND with numerous organics (Topsoil)	Groundwater not encountered.
					SM	Medium dense, brown, dry, silty SAND with occasional organics, orange mottling (Uncontrolled Fill)	
2		d			SM	Certerra observed an increase in silt content below 2.5 feet.	
4		d				Medium dense, dark brown, damp, very silty SAND (Weathered Marysville Sand)	
6		d			SM	Medium dense to dense, brown, damp, silty, very gravelly SAND with orange mottling, trace cobbles (Weathered Marysville Sand)	
8		d			SW	Medium dense to dense, orange brown, moist, very gravelly SAND with orange mottling (Marysville Sand)	
10		d	W = 5 GS			Excavation terminated at planned depth.	
12							

Test Pit Completed 09/10/25
Total Depth of Test Pit = 10.0 ft.

TP-2

SAMPLE DATA			SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Test Data	Graphic Symbol	USCS Symbol	Excavation Method: Tracked Excavator Ground Elevation (ft): ~135 Excavated By: E&D Excavating, Inc. / JV	
0		d			SM	Loose, brown, dry, gravelly, very silty SAND with numerous organics (Topsoil)	Groundwater not encountered.
					SM	Medium dense, brown, dry, slightly gravelly, very silty SAND with numerous organics (Uncontrolled Fill)	
2		d			GP	Dense, brown, moist, sandy GRAVEL with trace cobbles (Uncontrolled Fill)	
4							
6		d	W = 28 GS		SM	Loose to medium dense, dark brown to black, slightly gravelly, silty SAND (Weathered Marysville Sand)	
		d	W = 7 GS		SW		
8		d			ML	Dense, brown, moist, very gravelly SAND with trace cobbles (Marysville Sand)	
					SM	Loose to stiff, blue-gray, moist, sandy SILT (Silty Interbed within Marysville Sand)	
10		d				Medium dense, blue-gray-brown, damp, gravelly, very silty SAND (Marysville Sand)	
12						Excavation terminated at planned depth.	

Test Pit Completed 09/10/25
Total Depth of Test Pit = 10.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. Approximate elevations obtained from CalTopo interactive web portal.

CERTERRA GEOTEST

Arlington Taco Bell
Parcel No. 00847300000200
Arlington, Washington

Log of Test Pits

Figure 5

TP-3

SAMPLE DATA | **SOIL PROFILE** | **GROUNDWATER**

Depth (ft) | Sample Number & Interval | Sampler Type | Test Data | Graphic Symbol | USCS Symbol

Excavation Method: Tracked Excavator
Ground Elevation (ft): ~135
Excavated By: E&D Excavating, Inc. / JV

Depth (ft)	Sampler Type	Test Data	USCS Symbol	Soil Profile
0	d		SM	Loose, brown, dry, gravelly, very silty SAND with numerous organics (Topsoil)
0	d		SM	
2	d			Medium dense, dark brown, dry to damp, slightly gravelly, very silty SAND with occasional organics (Uncontrolled Fill)
4	d		ML	Stiff, dark brown, damp, very sandy SILT with orange mottling (Weathered Marysville Sand)
6	d		SM	
6	d	W = 22 GS		Stiff, brown to gray-brown, damp, very silty SAND with orange mottling (Marysville Sand)
8	d		GP	Medium dense to dense, brown, very sandy GRAVEL with orange mottling, minor silt seams (Marysville Sand)
10	d	W = 11 GS		Certerra observed an increase in moisture content, increase in silt content, and the color transition to blue-gray below 11 feet.
12				Excavation terminated at planned depth.
14				

GROUNDWATER: ▽ Slight groundwater seepage encountered at 11.0 ft.

Test Pit Completed 09/10/25
Total Depth of Test Pit = 12.0 ft.

TP-4

SAMPLE DATA | **SOIL PROFILE** | **GROUNDWATER**

Depth (ft) | Sample Number & Interval | Sampler Type | Test Data | Graphic Symbol | USCS Symbol

Excavation Method: Tracked Excavator
Ground Elevation (ft): ~134
Excavated By: E&D Excavating, Inc. / JV

Depth (ft)	Sampler Type	Test Data	USCS Symbol	Soil Profile
0	d		SM	Loose, brown, dry, gravelly, very silty SAND with numerous organics (Topsoil)
0	d		SM	
2	d		SM	Loose, light brown, dry, silty, very gravelly SAND with occasional organics (Uncontrolled Fill)
4	d			Medium dense, dark brown, dry to damp, slighty gravelly, very silty SAND with occasional organics (Uncontrolled Fill)
6	d		ML	Stiff, brown to dark brown, damp, slightly sandy SILT with orange mottling (Weathered Marysville Sand)
6	d		ML	
8	d	W = 30 GS		PP= 1.5 tsf
8	d		GP	Medium stiff to stiff, blue-gray, damp, sandy SILT (Silty Interbed within Marysville Sand)
10	d			Medium dense, orange-brown, damp to moist, slightly silty, sandy GRAVEL with orange mottling (Marysville Sand)
12				Excavation terminated at planned depth.
14				

GROUNDWATER: ▽ Slight groundwater seepage encountered at 11.5 ft.

Test Pit Completed 09/10/25
Total Depth of Test Pit = 12.0 ft.

Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. Approximate elevations obtained from CalTopo interactive web portal.

CERTERRA GEOTEST

Arlington Taco Bell
Parcel No. 00847300000200
Arlington, Washington

Log of Test Pits

Figure 6

TP-5

SAMPLE DATA			SOIL PROFILE			GROUNDWATER
Depth (ft)	Sample Number & Interval	Sampler Type	Test Data	Graphic Symbol	USCS Symbol	Excavation Method: Tracked Excavator Ground Elevation (ft): ~133 Excavated By: E&D Excavating, Inc. / JV	
0		d			SM	Loose, brown, dry, gravelly, very silty SAND with numerous organics (Topsoil)	
		d			SM		
2		d				Loose, light brown, dry, silty, gravelly SAND with occasional organics (Uncontrolled Fill)	
		d				Certerra observed an increase in silt content below 2 feet.	
4							
		d	W = 22 GS		ML	Certerra observed orange mottling below 3 feet.	
6						Medium stiff to stiff, dark brown, damp, sandy SILT with orange mottling (Weathered Marysville Sand)	
		d	W = 6 GS		GP		
8						Medium dense, dark brown, damp, very sandy GRAVEL with orange mottling (Marysville Sand)	
		d					
10							▽ Slight groundwater seepage encountered at 11.8 ft.
12		d				Excavation terminated at planned depth.	
14							

Test Pit Completed 09/10/25
Total Depth of Test Pit = 12.0 ft.

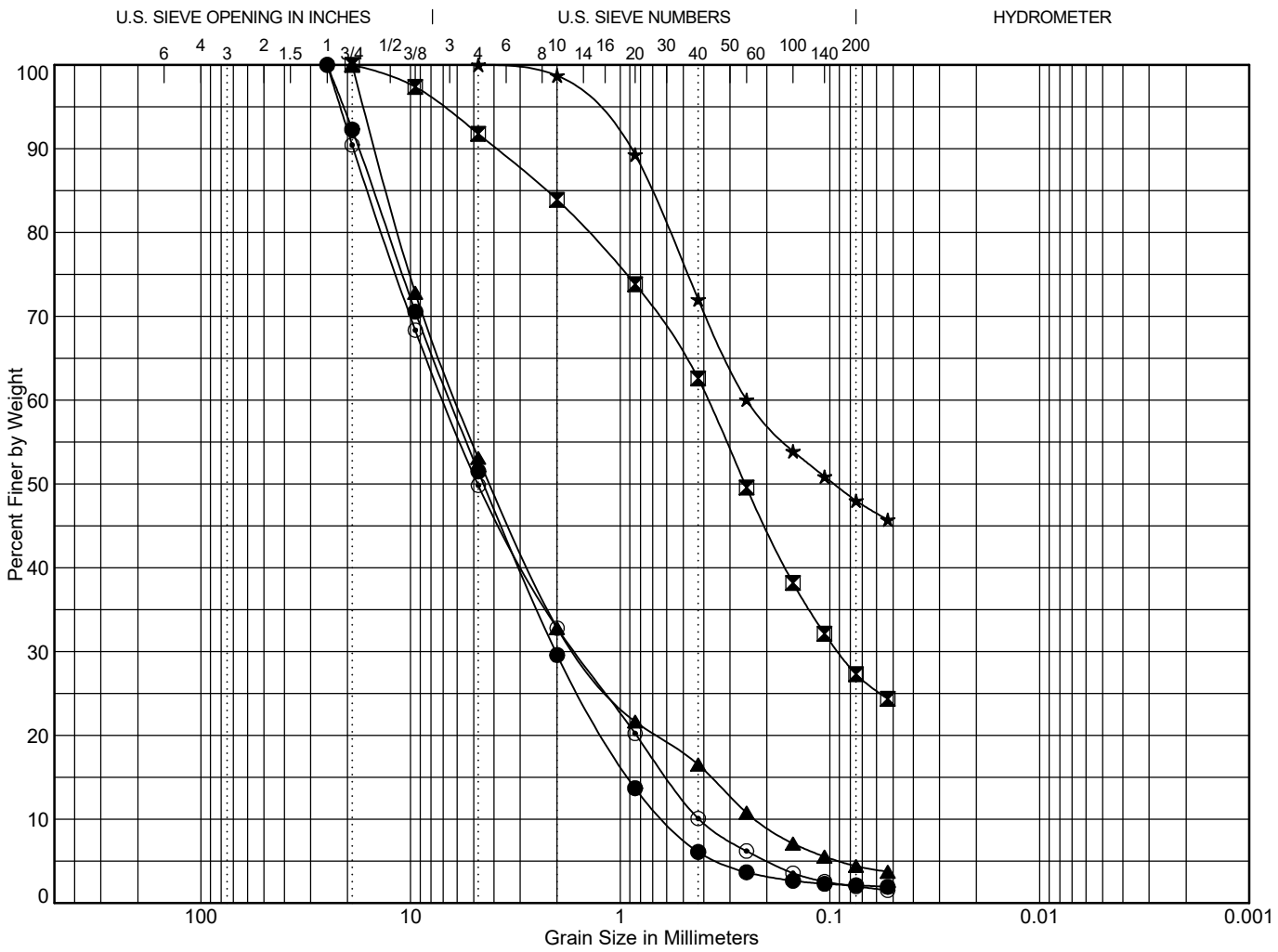
Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.
4. Approximate elevations obtained from CalTopo interactive web portal.

CERTERRA GEOTEST

Arlington Taco Bell
Parcel No. 00847300000200
Arlington, Washington

Log of Test Pits

Figure 7



Cobbles	Gravel		Sand			Silt or Clay
	coarse	fine	coarse	medium	fine	

Point		Depth	Classification	LL	PL	PI	C_c	C_u
●	TP-1	10.0	Very gravelly SAND (SW)				1.05	10.67
⊠	TP-2	5.3	Slightly gravelly, silty SAND (SM)					
▲	TP-2	6.0	Very gravelly SAND (SW)				1.91	27.00
★	TP-3	6.5	Very silty SAND (SM)					
⊙	TP-3	12.0	Very sandy GRAVEL (GP)				0.94	16.55

Point		Depth	D_{90}	D_{60}	D_{50}	D_{30}	D_{10}	%Coarse Gravel	% Fine Gravel	% Coarse Sand	% Medium Sand	% Fine Sand	% Fines
●	TP-1	10.0	17.66	6.472	4.478	2.033	0.607	7.7	40.8	21.9	23.5	4.0	2.1
⊠	TP-2	5.3	3.909	0.383	0.254	0.091		0.0	8.2	7.9	21.3	35.3	27.3
▲	TP-2	6.0	14.724	6.055	4.162	1.612	0.224	0.0	46.9	20.3	16.3	12.1	4.4
★	TP-3	6.5	0.906	0.249	0.095			0.0	0.0	1.3	26.7	24.0	48.0
⊙	TP-3	12.0	18.736	6.951	4.781	1.653	0.42	9.6	40.6	17.0	22.7	8.1	2.0

$C_c = D_{30}^2/(D_{60} * D_{10})$
$C_u = D_{60}/D_{10}$

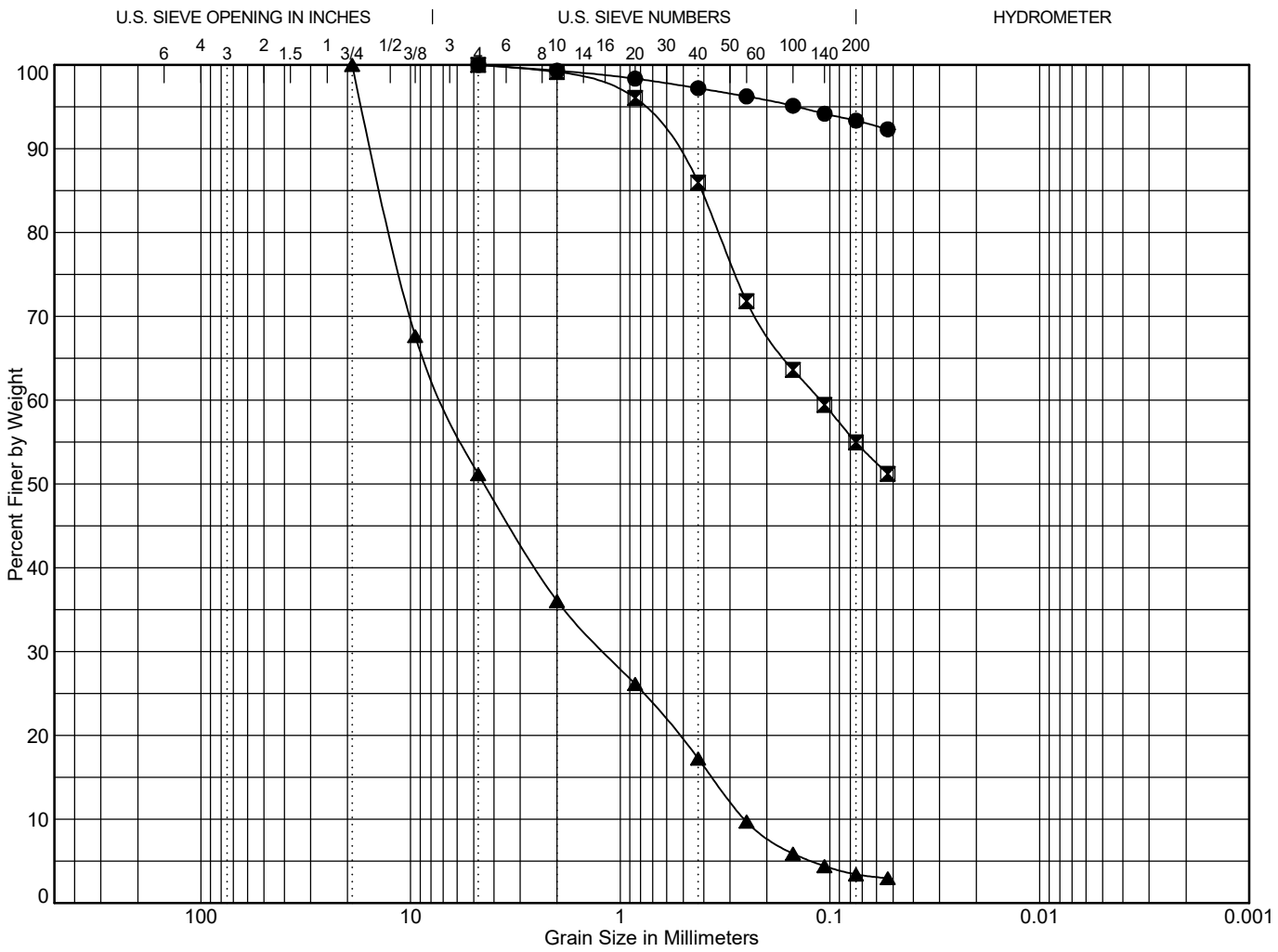
To be well graded: $1 < C_c < 3$ and $C_u > 4$ for GW or $C_u > 6$ for SW

CERTERRA GEOTEST

Arlington Taco Bell
Parcel No. 00847300000200
Arlington, Washington

Grain Size Test Data

Figure 8



Cobbles	Gravel		Sand			Silt or Clay
	coarse	fine	coarse	medium	fine	

Point		Depth	Classification	LL	PL	PI	C_c	C_u
●	TP-4	7.5	Sandy SILT (ML)					
⊠	TP-5	5.0	Very sandy SILT (ML)					
▲	TP-5	7.5	Very sandy GRAVEL (GP)				0.80	27.00

Point		Depth	D_{90}	D_{60}	D_{50}	D_{30}	D_{10}	%Coarse Gravel	% Fine Gravel	% Coarse Sand	% Medium Sand	% Fine Sand	% Fines
●	TP-4	7.5						0.0	0.0	0.7	2.1	3.9	93.3
⊠	TP-5	5.0	0.561	0.111				0.0	0.0	0.8	13.2	31.0	55.0
▲	TP-5	7.5	15.336	6.889	4.447	1.188	0.255	0.0	48.8	15.1	18.8	13.8	3.4

$C_c = D_{30}^2/(D_{60} * D_{10})$
$C_u = D_{60}/D_{10}$

To be well graded: $1 < C_c < 3$ and $C_u > 4$ for GW or $C_u > 6$ for SW

CERTERRA GEOTEST

Arlington Taco Bell
Parcel No. 00847300000200
Arlington, Washington

Grain Size Test Data

Figure 9

Northwest Agricultural Consultants
2545 West Falls Ave Kennewick, WA 99336
509.783.7450 www.nwag.com lab@nwag.com

Report: 74327-1
Date: 2025-09-11
Project Name: Arlington Taco Bell
Project Number: 10-252170-0

GEOTEST SERVICES INC
741 MARINE DR
BELLINGHAM, WA 98225

Sample ID	Sulfate mg/kg	pH s.u.	Resistivity ohm-m	OM %	CEC meq/100g	Chloride mg/kg	Moisture %	Sand %	Silt %	Clay %	Class
TP-1 @ 0.25'		5.8		6.69	16.9						
TP-3 @ 0.25'		5.5		12.04	28.9						
TP-3 @ 5.0'		6.2		3.48	16.3						

Analyte Method	Sulfate SM-4500 SO4 E	pH SM 4500-H+ B	Resistivity SM 2510 B	OM ASTM D2974	CEC EPA 9081	Chloride ASTM D512	Moisture Gravimetric	Sand Hydrometer	Silt Hydrometer	Clay Hydrometer	Class Hydrometer

CERTERRA
GEOTEST

REPORT LIMITATIONS AND GUIDELINES FOR ITS USE [1]

Subsurface issues may cause construction delays, cost overruns, claims, and disputes. While you cannot eliminate all such risks, you can manage them. The following information is provided to help:

Geotechnical Services are Performed for Specific Purposes, Persons, and Projects

At Certerra our geotechnical engineers and geologists structure their services to meet specific needs of our clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of an owner, a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared solely for the client. No one except you should rely on your geotechnical engineer who prepared it. And no one – not even you – should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report is Based on a Unique Set of Project-Specific Factors

Certerra's geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the clients goals, objectives, and risk management preferences; the general nature of the structure involved its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless Certerra, who conducted the study specifically states otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed, for example, from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed construction,
- alterations in drainage designs; or
- composition of the design team; the passage of time; man-made alterations and construction whether on or adjacent to the site; or by natural alterations and events, such as floods, earthquakes or groundwater fluctuations; or project ownership.

Always inform Certerra's geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.

Subsurface Conditions Can Change

This geotechnical or geologic report is based on conditions that existed at the time the study was performed. Do not rely on the findings and conclusions of this report, whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or

[1] Information in this document is based upon material developed by ASFE, Professional Firms Practicing in the Geosciences (asfe.org)

groundwater fluctuations. Always contact Certerra before applying the report to determine if it is still relevant. A minor amount of additional testing or analysis will help determine if the report remains applicable.

Most Geotechnical and Geologic Findings are Professional Opinions

Our site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Certerra's engineers and geologists review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ – sometimes significantly – from those indicated in your report. Retaining Certerra who developed this report to provide construction observation is the most effective method of managing the risks associated with anticipated or unanticipated conditions.

A Report's Recommendations are Not Final

Do not over-rely on the construction recommendations included in this report. Those recommendations are not final, because geotechnical engineers or geologists develop them principally from judgment and opinion. Certerra's geotechnical engineers or geologists can finalize their recommendations only by observing actual subsurface conditions revealed during construction. Certerra cannot assume responsibility or liability for the report's recommendations if our firm does not perform the construction observation.

A Geotechnical Engineering or Geologic Report may be Subject to Misinterpretation

Misinterpretation of this report by other design team members can result in costly problems. Lower that risk by having Certerra confer with appropriate members of the design team after submitting the report. Also, we suggest retaining Certerra to review pertinent elements of the design teams plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having Certerra participate in pre-bid and preconstruction conferences, and by providing construction observation.

Do not Redraw the Exploration Logs

Our geotechnical engineers and geologists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors of omissions, the logs included in this report should never be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable; but recognizes that separating logs from the report can elevate risk.

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, but preface it with a clearly written letter of transmittal. In that letter, consider advising the contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with Certerra and/or to conduct additional study to obtain the specific types of information they need or prefer. A pre-bid conference can also be valuable. Be sure contractors have sufficient time to perform additional study. Only then might you be in a position to give contractors the best information available, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. In addition, it is recommended that a contingency for unanticipated conditions be included in your project budget and schedule.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering or geology is far less exact than other engineering disciplines. This lack of understanding can create unrealistic expectations that can lead to disappointments, claims, and disputes. To help reduce risk, Certerra includes an explanatory limitations section in our

reports. Read these provisions closely. Ask questions and we encourage our clients or their representative to contact our office if you are unclear as to how these provisions apply to your project.

Environmental Concerns Are Not Covered in this Geotechnical or Geologic Report

The equipment, techniques, and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated containments, etc. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk management guidance. Do not rely on environmental report prepared for some one else.

Obtain Professional Assistance to Deal with Biological Pollutants

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts biological pollutants from growing on indoor surfaces. Biological pollutants includes but is not limited to molds, fungi, spores, bacteria and viruses. To be effective, all such strategies should be devised for the express purpose of prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional biological pollutant prevention consultant. Because just a small amount of water or moisture can lead to the development of severe biological infestations, a number of prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of this study, the geotechnical engineer or geologist in charge of this project is not a biological pollutant prevention consultant; none of the services preformed in connection with this geotechnical engineering or geological study were designed or conducted for the purpose of preventing biological infestations.