DRAFT Geotechnical Engineering Report

Eagle Bluff Subdivision

Prepared For:
Harley C. Douglass, Inc.

Prepared By:
Inland Empire Geotech, LLC

June 3, 2025

Harley C. Douglass, Inc.
5520 N. Florida St.
Spokane, WA 99217-5018

Attention: Mr. Harley C. Douglass

Subject: **DRAFT Geotechnical Engineering Report**
Eagle Bluff Subdivision
S. Meadow Lane Rd.
Spokane, Washington
IEG Project No. 25-024

Mr. Harley C. Douglass,

At your request, Inland Empire Geotech (IEG) has completed the subsurface exploration and geotechnical engineering evaluation for the new single-family and multi-family residential development located at S. Meadow Lane Rd. in Spokane, Washington. The purpose of this evaluation was to characterize the soil and geologic conditions on the property and prepare the attached report with the results of the field evaluation and our geotechnical recommendations to assist with design and construction of the proposed project.

Our services were completed in general accordance with our Proposal for Geotechnical Engineering Services (Proposal No. 25-024) dated March 21, 2025. Written authorization to proceed on our proposed scope of services was also provided by Harley C. Douglass, Inc. on April 3, 2025.

We appreciate the opportunity to support your project. If you have any questions or need additional information, please call us at 206.930.9205.

Sincerely,
Inland Empire Geotech

Samuel P. Sommers, P.E. (WA, ID, MT, OR)
Principal Geotechnical Engineer

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Spokane, Washington
IEG Project No. 25-024
June 3, 2025

Executive Summary

The purpose of this evaluation was to assess the subsurface conditions on the project site with respect to the planned construction. Our services were provided in accordance with our proposal no. 25-024 dated March 21, 2025.

We expect the proposed construction to be feasible on the project site provided the recommendations in this report are followed and the associated risks are acceptable to the owner. The recommendations presented in this report are based on the soil conditions observed in our explorations. It is required by the International Building Code for the Geotechnical Engineer of Record to review and approve the project subgrade. If we are not retained to provide the required construction observations, we cannot be responsible for soil engineering related construction errors or omissions.

The following geotechnical considerations were identified:

- The natural soil is suitable for re-use as structural fill. The topsoil is unsuitable for re-use as structural fill.
- A minimal allowable bearing pressure of 2,279 pounds per square foot (psf) can be used for the design of spread foundations bearing on structural fill overlying a properly prepared subgrade.
- Parking Lot: A pavement section of 2½-inches of asphaltic concrete over a minimum of 10-inches crushed aggregate base is recommended.
- Local Roads: A pavement section of 3-inches of asphaltic concrete over a minimum of 4-inches of crushed aggregate base is recommended.
- Arterial Streets: A pavement section of 5-inches of asphaltic concrete over a minimum of 7-inches of crushed aggregate base is recommended.
- We recommend a permanent foundation drainage system be designed and constructed around the perimeter of the structures. The drainage system should consist of a four-inch diameter, Schedule 40 or ADS, perforated pipe surrounded with a free draining aggregate. The pipe should be located at the lowest elevation of the foundation excavation such that gravity drainage may be achieved. Water collected in the drains should be discharged down-gradient of the structure.

This summary should be used in conjunction with the entire report for design purposes. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein. The *EVALUATION LIMITATIONS* section of this report should be read for an understanding of the report's limitations.

Project Documents

The following documents were provided to and reviewed by IEG to help develop our understanding of the planned construction:

- [1] Preliminary Plat Cover Sheet, prepared by J.R. Bonnett Engineering, dated March 2025.
- [2] Preliminary Plat Overall Site Plan, prepared by J.R. Bonnett Engineering, dated March 2025.

Project Understanding

We understand the planned development will consist of 374 single-family lots and 9 multi-family lots are planned on the site. The project site consists of 11 acres totaling approximately 106.59-acres of undeveloped land. Associated roads, stormwater disposal facilities, and utility infrastructure will also be constructed as part of the development.

Site Conditions

Based on the provided topographic information, the majority of the site slopes from west to east with a total relief of approximately 120 feet across the site. On the north end of the project site, there are steep slopes that generally range from 1H:1V to 1.5H:1V. We anticipate site cut and fill will be on the order of 30 feet or more to achieve the desired grades. The site is moderately vegetated with abundant bushes and a variety of evergreen trees ranging up to 12 inches in diameter. The property is currently in the process of being developed. Roads and utilities are being constructed throughout the site. The general location of the project site is shown on Figure A-1 – Vicinity Map in Appendix A.

Subsurface Conditions

Anticipated Subsurface Conditions
The geologic conditions in the vicinity of the subject property are mapped on the "Geologic Map of the Spokane Southwest 7.5-minute Quadrangle, Spokane County, Washington" prepared by Michael H. Hamilton, Robert E. Derkey, and Dale F. Stradling, 2004.

The mapping indicates the site may be underlain by the following geologic units:

- Glacial flood deposits, predominantly sand (Qfs) – This unit of the Pleistocene epoch is described as medium-fine to coarse-grained sand and granules with sparse pebbles, cobbles, and boulders.

- Glacial flood deposits, predominantly gravel (Qfg) – This unit of the Pleistocene epoch is described as thick-bedded to massive mixture of boulders cobbles, pebbles, granules, and sand.

- Glacial lake and glacial flood deposits, undifferentiated (Qglf) – This unit of the Pleistocene epoch is described as fine-grained, massive, and thin-bedded lake deposits of sand and silt interbedded with irregularly distributed glacial-flood sand and gravel.

Subsurface Exploration Program
We observed the excavation of 55 test pits at the site on April 16 and 17, 2025, utilizing a CAT 315C track-mounted excavator with a 36-inch toothed excavation bucket. The approximate locations of the test pits are shown on Figure A-2, Site and Exploration Plan in Appendix A. The soil conditions observed in the test pits were visually described and classified in general accordance with ASTM D 2487 and we logged the subsurface profiles. Grab or bulk samples were collected from the base or sidewall of test pits or excavation spoil piles.

Subsurface Characterization
Detailed descriptions of the soil observed within the explorations are presented on individual exploration logs in Appendix B. The descriptive soil terms used on the exploration logs, and in this report, can be referenced from the Soil Classification Chart based on the Unified Soil Classification System (USCS). The subsurface conditions may vary between exploration locations; such changes in subsurface conditions may not be apparent until construction.

The near surface geologic profile appears to consist of topsoil overlying natural sand and decomposed bedrock. General descriptions of the observed soil units follow:

Topsoil – Topsoil was observed in all the test pits. The topsoil consists of silt with sand, roots, and organics. The topsoil layer varied from 3 to 36 inches in thickness with an average thickness of about 10 inches.

Natural Sand – Glacial flood deposits were encountered on the site that consisted of sand with variable silt contents. The largest deposits of this material were encountered in the westernmost edge of the project site.

Decomposed Bedrock – Decomposed bedrock encountered on the site consisted of interbedded layers of sandstone and basalt deposits.

Groundwater Conditions

In some of the lower lying areas on the south half of the site we encountered perched groundwater 3 to 9 feet below existing grades. We did not observe surface water on the property during our evaluation. If staining is observed or a hydraulically restrictive layer is observed, note that perched water should be anticipated seasonally at those elevations. Changes in precipitation, irrigation, construction, or other factors may impact depth to groundwater and the surface water flow on the property and therefore, conditions may be different during construction.

Laboratory Testing

We performed laboratory testing to supplement field classifications and to assess some of the soil engineering properties and parameters. The laboratory testing included are presented in the following table. The laboratory test results, included in Appendix C. Some results are also summarized on the exploration logs attached to this report in Appendix B.

Table 1 - Laboratory tests performed.

Test Performed	Information Acquired
Natural Water Content (ASTM D 2216)	Water content representative of soil conditions at the time and location samples were collected.
Particle-Size Distribution (ASTM D 6913)	Size and distribution of soil particles (i.e., gravel, sand, and silt/clay) of a particular sample.

Conclusions and Recommendations

We expect the proposed construction to be feasible on the project site provided the recommendations in this report are followed and the associated risks are acceptable to the owner. If the proposed construction changes or if unforeseen conditions are encountered, we must be given the opportunity to review the new information and, if necessary, update our recommendations. Additionally, we should be given the opportunity to review the plans and specifications to determine whether the recommendations presented in this report were properly incorporated.

Seismic Considerations

Seismic Hazard Areas (SHAs): SHAs include areas that due to a combination of soil and ground water conditions, are subject to risk of ground shaking, subsidence, or liquefaction of soil during earthquakes. These areas are typically underlain by soft or loose saturated soil (such as alluvium), have a shallow ground water table, and are typically located on the floors of river valleys. The tectonic setting of the Inland Northwest is dominated by the Lewis and Clark Zone which is a megashear of the earth's crust up to 30 miles wide and cuts about 240 miles from Coeur d'Alene, Idaho to Helena, Montana. This setting leads to intraplate and crustal earthquake sources. Seismic hazards relate to risks of injury to people and damage to property resulting from these principle earthquake sources.

The seismic performance of the development was evaluated relative to seismic hazards resulting from ground shaking associated with a design seismic event with a 2,475 year return period determined in accordance with the 2018 International Building Code (IBC). Conformance to the above criteria for seismic excitation does not

constitute any kind of guarantee or assurance that significant structural damage or ground failure will not occur if a maximum level earthquake occurs. The primary goal of the IBC seismic design procedure is to protect life and not to avoid all damage, since such design may be economically prohibitive. Following a major earthquake, a building may be damaged beyond repair yet not collapse.

Ground Surface Rupture: Based on our review of the USGS Quaternary age fault database, the nearest mapped fault is more than 5 miles away from the project site. As the fault does not appear to cross the site, it is our opinion that the risk of ground surface rupture at the site is low.

Soil Liquefaction: Liquefaction is a phenomenon wherein cohesionless soil below the groundwater table build up excess pore water pressures during earthquake loading. Liquefaction typically occurs in loose, cohesionless soil, but may occur in denser soil if the ground shaking is sufficiently strong. The potential hazardous impacts of liquefaction include liquefaction-induced settlement and lateral spreading. Soil conditions observed in our explorations consisted of medium dense to dense sand and gravel. Based on the subsurface conditions we encountered on the site; it is our opinion that the risk of liquefaction for a design level earthquake event is low for this site.

IBC Seismic Design Parameters: Based on site location and soil conditions, the values provided below are recommended for seismic design. The values provided below are based on the 2021 IBC as the building code reference document.

Table 2 - Seismic design parameters.

Parameter	Value	Description
Latitude	47.587652	Project site geographic position
Longitude	-117.411288	Project site geographic position
Seismic Site Class	C	Seismic design site classification
Risk Category	II	Seismic design risk category
S_S	0.320	Mapped MCE, 5 percent damped, spectral response acceleration parameter at short periods
S_1	0.093	Mapped MCE, 5 percent damped, spectral response acceleration parameter at a period of 1 s
S_{MS}	0.350	The MCE, 5 percent damped, spectral response acceleration at short periods adjusted for site class effects
S_{M1}	0.130	The MCE, 5 percent damped, spectral response acceleration at a period of 1 s adjusted for site class effects
S_{DS}	0.240	Design, 5 percent damped, spectral response acceleration parameter at short periods
S_{D1}	0.090	Design, 5 percent damped, spectral response acceleration parameter at a period of 1 s
T_L	16	Long-period transition period
PGA_M	0.150	Site modified peak ground acceleration
V_{S30}	530	Average shear wave velocity at small shear strains in top 100 ft (30 m)

Site Preparation

Erosion Control Measures

Stripped surfaces and soil stockpiles are typically a source of runoff sediments. We recommend that silt fences, berms, and/or swales be installed around the downslope side of stripped areas and stockpiles in order to capture runoff water and sediment. If earthwork occurs during wet weather, we recommend that appropriate Best Management Practices (BMPs) be implemented to mitigate erosion and sediment transfer.

Temporary Drainage

Stripping, excavation, grading, and subgrade preparation should be performed in a manner and sequence that will provide drainage at all times and provide proper control of erosion. The site should be graded to prevent water from ponding in construction areas and/or flowing into and/or over excavations. Exposed grades should be crowned, sloped, and smooth-drum rolled at the end of each day to facilitate drainage if inclement weather is forecasted. Accumulated water must be removed from subgrades and work areas immediately and prior to performing further work in the area. Equipment access may be limited and the amount of soil rendered unfit for use as structural fill may be greatly increased if drainage efforts are not accomplished in a timely manner.

Clearing and Stripping

Once TESC measures are installed, we expect site preparation to continue with clearing and grubbing brush and trees, and stripping of organic rich topsoil. We recommend all tree stumps and roots larger than ½ inch in diameter be cleared and grubbed from the areas planned for improvement. Based on our explorations, stripping depths to remove topsoil is estimated to be about 10 inches on average. Stripping depths may be greater near trees and brush to fully remove root systems. All clearing and stripping debris should be wasted off site or, if approved, used for topsoil in landscape areas.

Subgrade Preparation

IEG defines the subgrade as the natural soil exposed at the base of excavation prior to placement of fill or concrete. The subgrade requires an evaluation by the geotechnical engineer of record or staff under their supervision to confirm the site conditions are consistent with those observed during our geotechnical evaluation. The subgrade should be moisture conditioned to within two percentage points of the optimum moisture content for compaction. The subgrade should then be compacted to a firm and unyielding condition.

Once site preparation is complete, all areas that are at design subgrade elevation or areas that will receive new structural fill should be moisture conditioned to a moisture content within plus or minus two percent of optimum moisture content for compaction. In the event the exposed subgrade becomes unstable, yielding, or unable to be compacted due to high moisture conditions or construction traffic, we recommend that IEG be consulted to provide cost-effective recommendations to achieve a stable subgrade.

Freezing Conditions

If earthwork takes place during freezing conditions, exposed subgrades should be allowed to thaw and then be compacted prior to placing subsequent lifts of structural fill. Alternatively, the frozen material could be stripped from the subgrade to expose unfrozen soil prior to placing subsequent lifts of fill or foundation components. The frozen soil should not be reused as structural fill until allowed to thaw and adjusted to the proper moisture content, which may not be possible during winter months.

Structural Fill Materials and Preparation

Structural fill includes any material placed below or adjacent to foundations, below concrete slabs, within utility trenches, or other areas to support settlement-sensitive site improvements. Prior to the placement of structural fill, all surfaces to receive fill should be prepared as previously recommended in the Site Preparation section of this report.

Laboratory Testing

Representative samples of on-site and imported soil to be used as structural fill should be submitted to a qualified laboratory for grain size distribution and modified proctor testing at least 5 days in advance of its intended use in order to complete the necessary Proctor tests. The test results should be provided to IEG for review and approval for use as structural fill.

Reuse of Site Soil as Structural Fill

The suitability for reuse of site soil as structural fill depends on the composition and moisture content of the soil. Soil encountered in excavations at the site is expected to consist of sand with variable silt contents. As the amount of fines increases, the soil becomes increasingly sensitive to small changes in moisture content. Soil containing more than about 5 percent fines cannot be consistently compacted to the appropriate levels when the moisture content is more than approximately 2 percent above or below the optimum moisture

content (per ASTM D1557). Optimum moisture content is that moisture content which results in the greatest compacted dry density with a specified compactive effort.

The on-site soil is suitable for re-use as structural fill. Some of the soil will be moisture sensitive and require significant moisture conditioning.

Imported Structural Fill

The appropriate type of imported structural fill will depend on weather conditions.

Dry-Weather Construction: During dry-weather conditions, we recommend imported fill, at a minimum, meets the requirements of Common Borrow as specified in Section 9-03.14(3) of the 2025 Washington State Department of Transportation (WSDOT), Standard Specifications for Road, Bridge, and Municipal Construction (WSDOT Standard Specs).

Wet-Weather Construction: During wet weather and/or wet site conditions, higher-quality structural fill might be required, as Common Borrow may contain sufficient fines to be moisture-sensitive. During wet conditions, we recommend that imported structural fill consist of a "clean," free-draining pit-run sand and gravel. Such material should generally contain less than 7 percent fines, based on that soil fraction passing the U.S. No. 4 sieve, and not contain discrete particles greater than 3 inches in maximum dimension. Alternatively, Gravel Borrow conforming to Section 9-03.14(1), of the WSDOT Standard Specs could be used during wet weather. It should be noted that the placement of structural fill is, in many cases, weather-dependent. Delays due to inclement weather are common, even when using select granular fill. We recommend that site grading and earthwork be scheduled for the drier months, if possible.

Fill Placement and Compaction

Structural fill should be placed in horizontal lifts not exceeding 10 inches in loose thickness. Thinner lifts may be necessary, depending on the size and weight of the compaction equipment. Each lift of fill should be compacted to the minimum levels recommended in the table below based on the maximum laboratory dry density as determined by the ASTM D 1557 Modified Proctor Compaction Test. Structural fill placed in municipal rights-of-way should be placed and compacted in accordance with the jurisdiction codes and standards. We recommend that IEG be hired to review compaction test reports prepared by a qualified materials testing firm.

Temporary Excavations

Temporary excavation slope stability is a function of many factors, including:

- The presence and abundance of groundwater;
- The type and density of the various soil strata;
- The depth of cut;
- Surcharge loadings adjacent to the excavation; and
- The length of time the excavation remains open.

It is exceedingly difficult under the variable circumstances to pre-establish a safe and "maintenance-free" temporary cut slope angle. Therefore, it should be the responsibility of the contractor to maintain safe temporary slope configurations since the contractor is continuously at the job site, able to observe the nature and condition of the cut slopes, and able to monitor the subsurface materials and groundwater conditions encountered. Unsupported vertical slopes or cuts deeper than 4 feet are not recommended if worker access is necessary. The cuts should be adequately sloped, shored, or supported to prevent injury to personnel from local sloughing and spalling. The excavation should conform to applicable Federal, State, and Local regulations.

Permanent Slopes

We recommend permanent fill placed on slopes steeper than about 5H:1V (Horizontal:Vertical) be keyed and benched into soil comprising the underlying slope. We recommend that the base downslope key be cut into

undisturbed natural soil and be at least 5 feet wide and 2 feet deep. The hillside benches cut into the natural soil should be at least 3 feet in width. The intent of the benches is to provide a level surface onto which new fill can be placed and compacted. The face of the embankment should be compacted to the same relative compaction as the body of the fill. This may be accomplished by over-building the embankment and cutting back to the compacted core.

We recommend that all permanent cut or fill slopes constructed in natural soil be designed at a 2H:1V (Horizontal:Vertical) inclination or flatter. All permanent cut and fill slopes should be adequately protected from erosion both temporarily and permanently.

Shallow Foundation Recommendations

Based on our understanding of the proposed development and the soil conditions described in this report, it is our professional opinion that the structures may be supported on conventional spread foundations. In order to incorporate the parameters presented in this section, it is crucial that the recommendations presented in the *Site Preparation* section of this report are implemented to achieve a properly prepared subgrade free of debris and loose soil. The project design and construction should incorporate the following recommendations:

Bearing Capacity

Bearing capacity is determined based on multiple factors including soil type, density, and confinement pressure. Confinement of the soil is increased based on the size of the foundation and the depth of embedment. Foundations may be designed based on the allowable bearing pressures presented in the following table.

Table 3 – Allowable Bearing Capacities Based on Foundation Width and Embedment in Pounds Per Square Foot (psf).

		Minimum Foundation Width (feet)				
		1.5	3	4	5	6
Embedment Depth (feet)	2 to 3	2,279	2,762	3,084	3,406	3,728
	3 to 5	3,177	3,660	3,982	4,304	4,626
	5 to 8	4,974	5,457	5,779	6,100	6,422
	8 to 12	7,669	8,151	8,473	8,795	9,117
	12+	11,262	11,744	12,066	12,388	12,710

The allowable bearing pressure values may be increased by one-third to account for transient loads such as wind and seismic. Continuous foundations should be a minimum of 18 inches in width and column foundations should be a minimum of 24 inches in width to rely on the provided allowable bearing capacity values. Foundations should be embedded at least 24 inches below finished exterior ground surface to help protect against frost action.

Settlement

If the previous recommendations are implemented, it is our opinion the total settlement will be less than one inch and differential settlement will be less than ½-inch in a 30-foot horizontal span.

Lateral Resistance

For sliding resistance, an ultimate value for coefficient of friction between cast-in-place concrete and natural soil or structural fill of 0.36 may be used for design.

Lateral Earth Pressures: The following lateral earth pressures are based on the observed soil conditions described in this report. These pressures should be implemented in the lateral design of the proposed structures. These pressures are only applicable for cases where the ground surface around the structure is relatively flat or sloping away and do not account for hydrostatic forces. For recommendations for site retaining wall design, refer to the *Retaining Walls* section of this report.

Table 4 - Lateral Earth Pressures for Lateral Design.

Condition	Lateral Earth Pressure Coefficient	Equivalent Fluid Pressure (pcf)
Active	0.333	40
At-Rest	0.500	60
Passive	3.000	271

There are three conditions for lateral earth pressures:

- Active Condition: To mobilize active earth pressure instead of at-rest pressure, a wall must be unrestrained and allowed to move. Typically, depending on soil type, the wall needs to deflect between 0.001H and 0.01H. More granular soil requires less deflection while cohesive soil requires more deflection to fully mobilize active earth pressure.
- At-Rest Condition: At-Rest pressure should be used as the driving force where there is no lateral movement.
- Passive Condition: This pressure is the resisting force in lateral design. This pressure which is significantly higher is the pressure of the soil resisting the movement of the wall or structure.

Surcharge pressures should be applied in the lateral design when heavy loads will be present within a 1H:1V wedge from the bottom of footing elevation up to the ground surface. The weight of the load should be multiplied by the appropriate lateral earth pressure coefficient and the result should be applied as a uniform pressure on the adjacent foundation wall.

We recommend backfill placed adjacent to foundation walls be placed uniformly on both sides of the foundation walls to reduce displacement of the foundation walls.

Foundation Drainage

We recommend a permanent foundation drainage system be designed and constructed around the perimeter of the structure. The drainage system should consist of a four-inch diameter, Schedule 40 or ADS, perforated pipe surrounded with a free draining aggregate. The pipe should be located at the lowest elevation of the foundation excavation such that gravity drainage may be achieved. Water collected in the drains should be discharged down-gradient of the structure.

Concrete Slabs-on-Grade

Concrete slabs-on-grade should be underlain by at least 6 inches of crushed base course. The crushed base course below the slabs should be compacted to at least 95 percent of the maximum dry density determined by modified Proctor (ASTM D 1557). The slab subgrade should be prepared as previously recommended.

From a geotechnical perspective, a vapor barrier is not considered necessary beneath the slab-on-grade floor unless moisture sensitive floor coverings and/or adhesives are used. If a vapor barrier is used, we recommend using a 15-mil, puncture-resistant proprietary product such as Stego Wrap, or an approved equivalent that is classified as a Class A vapor barrier in accordance with ASTM E 1745. Overlap lengths and the appropriate tape used to seal the laps should be in accordance with the vapor retarder manufacturer's recommendations. To avoid puncturing of the vapor barrier, we recommend a thin sand layer be placed over the crushed gravel. When conditions warrant the use of a vapor retarder, the slab designer and slab contractor should refer to ACI 302 and ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder/barrier.

Retaining Walls

At the time this report was prepared we had no knowledge of planned retaining walls for this project. If retaining walls are to be implemented as part of this project IEG should be provided the opportunity to review the plans to determine if further geotechnical evaluation is required. We may need to develop wall specific lateral earth pressures depending on location and elevation of proposed retaining wall(s). Our scope of services did not

include segmental block design, boulder faced slope design, or global stability analyses; we can provide these services for an additional fee, if requested.

Flexible and Rigid Pavement Design

We understand new asphalt pavement will be constructed on the site for access roads and local streets. Prior to placing site grading fill or base course, the subgrade should be prepared as recommended in *Site Preparation* section. IEG should be given the opportunity to observe a proof-roll of the subgrade.

The following table presents values incorporated in the flexible pavement design in accordance with AASHTO 1993 Flexible Pavement Design methodology. These values were either measured, estimated, or assumed. It is necessary that the owner and civil engineer review these values to confirm they are appropriate based on their understanding.

Table 5 - Pavement Design Parameters.

Design Parameter	Value
Estimated: Subgrade California Bearing Ratio (CBR)	10%
Estimated: Equivalent Single-Axle Loads (ESALs) Parking Lots / Local Streets / Arterial Roads	300,000 / 897,000 / 1,400,000
Assumed: Pavement Reliability	85%
Assumed: Pavement Design Life	20-year
Assumed: Initial Serviceability	4.2
Assumed: Terminal Serviceability	2.0

The following table presents the results of our flexible and rigid pavement design:

Table 6 - Flexible and Rigid Pavement Design Results.

	Flexible Pavement		Rigid Pavement	
Pavement Area	Asphalt (in.)	Base Course (in.)	Asphalt (in.)	Base Course (in.)
Parking Lots	2 ½	10	-	-
Local Streets	3	4	-	-
Arterial Roads	5	7	-	-
Rigid Section	-	-	6	6

We also recommend a concrete apron in areas where you expect frequent truck loading, unloading, turning, starting, and stopping such as around loading docks and dumpster pads. Steel reinforcement for rigid pavement should be designed by the structural engineer using a modulus of subgrade reaction of 150 pounds per cubic inch (pci).

We recommend specifying crushed aggregate top or base course meeting the requirements of the Washington Department of Transportation (WSDOT) Standard Specification 9-03.9(3). We recommend the asphalt concrete pavement meet the requirements of WSDOT Standard Specifications for Hot Mix Asphalt (HMA) Class ½ inch asphalt concrete pavements. Portland cement concrete should have a minimum 28-day compressive

strength of 4,000 psi. We recommend the crushed aggregate base be compacted to a minimum of 95 percent of the modified Proctor maximum dry density (ASTM D1557). We recommend the asphaltic concrete surface be compacted to minimum of 92 percent of the Rice density.

Pavements should be sloped to provide rapid drainage of surface water. Water allowed to pond on or adjacent to the pavements could saturate the subgrade and contribute to premature pavement deterioration. In addition, the pavement subgrade should be graded to provide positive drainage within the crushed aggregate base section.

The pavement sections provided in this report represent minimum recommended thicknesses. Therefore, preventive maintenance should be planned and provided for through an on-going pavement management program. Preventive maintenance activities are intended to slow the rate of pavement deterioration, and to preserve the pavement investment. Preventive maintenance consists of both localized maintenance (e.g., crack, and joint sealing and patching) and global maintenance (e.g., surface sealing). Preventive maintenance should be the first priority when implementing a planned pavement maintenance program and provides the highest return on investment for pavements.

Stormwater Disposal and Final Site Grading

Final stormwater management plans were not available at the time this report was prepared. We anticipate stormwater runoff will be directed to one or more grassed swale(s) with drywells around the proposed building development.

We recommend the grading plan include slopes such that stormwater run-off is directed away from buildings and pavement areas to a stormwater management system. We recommend the ground surface adjacent to foundations be sloped a minimum of five percent within ten feet of the building. If the adjoining ground surface consists of hardscapes, it may be sloped a minimum of two percent in the first ten feet. Water should not be allowed to infiltrate or pond adjacent to the foundations.

Many of the swales are located in areas of the site where structural fill will be placed. Further testing should be performed to determine the anticipated infiltration rate. The lower swales on the north end of the site were located within soil with 25 to 50 percent fines which according to the Spokane 200 Method is not suitable for drywell disposal. In-situ infiltration testing will need to be performed to determine design infiltration rates.

ADDITIONAL SERVICES

The 2021 International Building Code (IBC) requires in section 1705.6 that the following geotechnical special inspections be performed:

- Verify materials below shallow foundations are adequate to achieve the design bearing capacity.
- Verify excavations are extended to proper depths and have reached proper material.
- Perform classification and testing of compacted fill materials.
- During fill placement, verify use of proper materials and procedures in accordance with the provisions of the approved geotechnical report. Verify densities and lift thicknesses during placement and compaction of compacted fill.
- Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.

EVALUATION LIMITATIONS

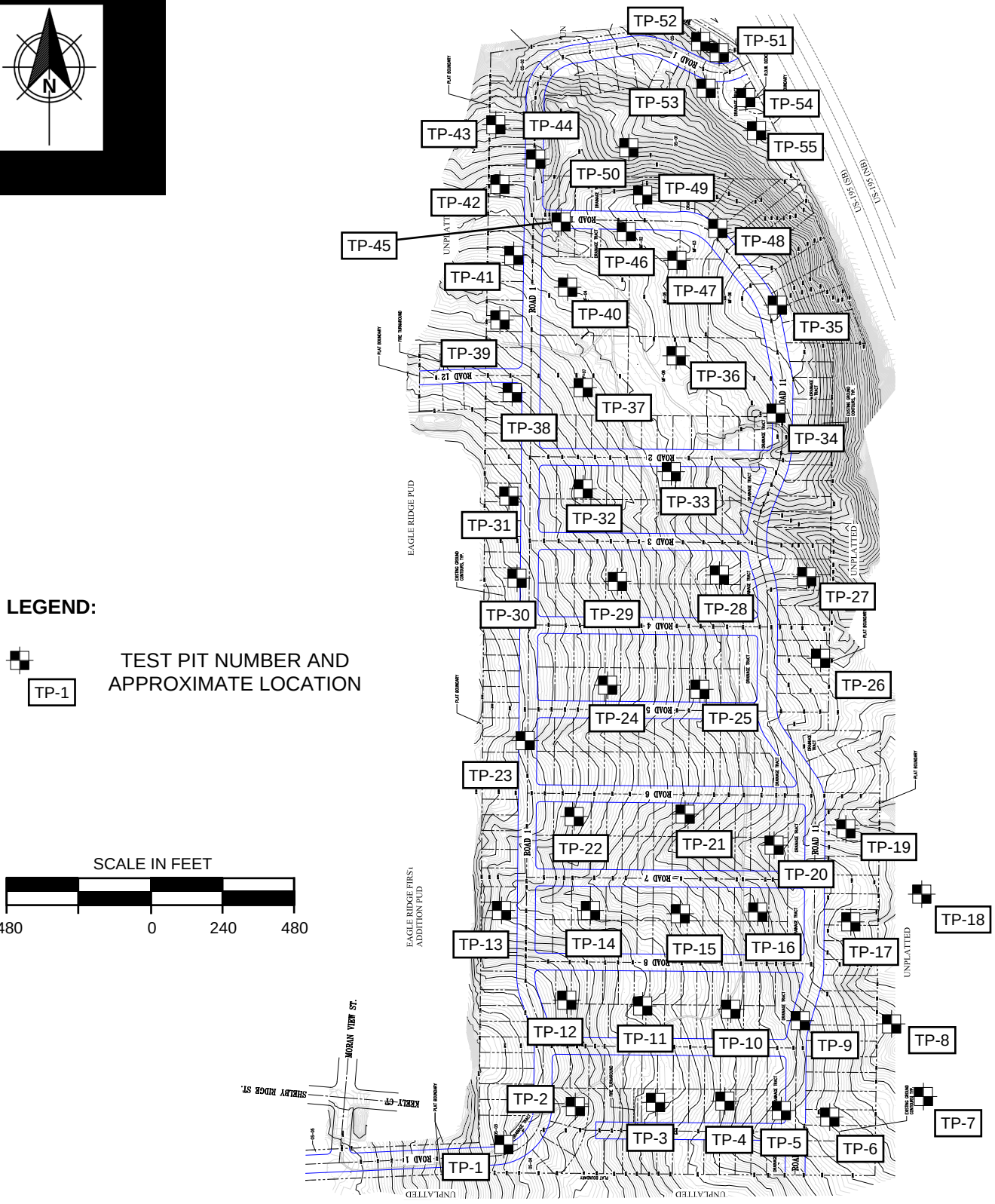
This report has been prepared to assist the planning and design for the Eagle Bluff Subdivision project located at S. Meadow Lane Rd. in Spokane, Washington. Reliance by any other party is prohibited without the written authorization of IEG. Our services consist of professional opinions and conclusions made in accordance with generally accepted geotechnical engineering principles and practices in the local area at the time this report was prepared. It is important to understand that geotechnical recommendations are not warranties or guarantees of perfection. Certain architectural or cosmetic imperfections may occur and are often unavoidable due to the inherent variability of subsurface conditions and construction processes. By authorizing us to serve as the geotechnical engineer of record for your project, you acknowledge and accept that perfection is neither realistic nor expected. This acknowledgement is in lieu of all warranties, express or implied.

Appendix A

Vicinity Map
Site and Exploration Plan
General Notes

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

FIGURE A-1 - VICINITY MAP	
PROJECT NAME: ***EAGLE BLUFF SUBDIVISION***	
SITE LOCATION: ***S. MEADOW LANE RD., SPOKANE, WA***	
DRAFTER: ***S. SOMMERS***	PROJECT #: ***25-024***
SCALE: ***NOT TO SCALE***	DATE: ***04/24/2025***



LEGEND:

TP-1 — TEST PIT NUMBER AND APPROXIMATE LOCATION

SCALE IN FEET

480 0 240 480

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

FIGURE A-2 - SITE AND EXPLORATION PLAN

PROJECT NAME: ***EAGLE BLUFF SUBDIVISION***	
SITE LOCATION: ***S. MEADOW LANE RD., SPOKANE, WA***	
DRAFTER: ***S. SOMMERS***	**PROJECT #:** ***25-024***
SCALE: ***AS SHOWN***	**DATE:** ***04/24/2025***

GENERAL NOTES

SAMPLING SYMBOLS:

Split Spoon: 1 3/8" inner-diameter - 2" outer-diameter

Shelby Tube (thin-walled tube): 3" outer-diameter

Over-Sized Sampler (California Spoon): 3" outer-diameter

G — Grab Sample

WATER LEVEL SYMBOL AND MOISTURE DESCRIPTIONS:

Approximate elevation of observed or measured groundwater table

Approximate elevation of observed perched groundwater level

"Damp": Soil is estimated to be more than 2% below the optimum moisture content based on visual observation.

"Moist": Soil is estimated to be within 2% of the optimum moisture content based on visual observation.

"Wet": Soil is estimated to be more than 2% above the optimum moisture content based on visual observation.

DESCRIPTIVE SOIL CLASSIFICATION NAMES & SYMBOLS:

Soil classifications are based on the Unified Soil Classification System (USCS). Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Soil that contains a significant proportion of a second material type are additionally described with a modifier (such as "silty").

Silty Sand (SM)

Silt (ML)

Sandy Silt (ML)

Gravel (GW or GP)

RELATIVE DENSITY OF COARSE-GRAINED SOILS	
Standard Penetration or N-Value, Blows/Ft.	**Relative Density Description**
0 - 3	Very Loose
4 - 9	Loose
10 - 29	Medium Dense
30 - 49	Dense
50+	Very Dense

CONSISTENCY OF FINE-GRAINED SOILS		
Unconfined Compressive Strength, Qu, psf	**Standard Penetration or N-value, Blows/Ft.**	**Consistency Description**
< 500	0 - 1	Very Soft
500 - 1,000	2 -3	Soft
1,001 - 2,000	4 - 6	Medium Stiff
2,001 - 4,000	7 - 12	Stiff
4,001 - 8,000	13 - 26	Very Stiff
8,000+	26+	Hard

RELATIVE PROPORTION DESCRIPTIONS		
Descriptive Term of Secondary Materials	**Percent of Dry Weight**	
	Fine-Grained	**Coarse-Grained**
Trace	< 5	< 15
With	5 - 12	15 - 30
Modifier	> 12	> 30

PLASTICITY DESCRIPTION	
Term	**Plasticity Index**
Non-plastic	0
Low Plasticity	1 - 10
Medium Plasticity	11 - 30
High Plasticity	30+

GRAIN SIZE TERMINOLOGY	
Major Component of Sample	**Particle Size**
Boulders	Over 12 in.
Cobbles	12 in. to 3 in.
Gravel	3 in. to #4 sieve (4.75 mm)
Sand	#4 to #200 sieve (0.075mm)
Silt or Clay	Passing #200 Sieve

Appendix B

Exploration Logs

TEST PIT LOG NO. TP-1

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.587652°*, **LONGITUDE:** *-117.411288°*

Surface Elevation: *2106'*

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
6" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist			S-1	G			11.4	24
	5							
7' - grades to light brown to gray, damp								
	10							
Test Pit terminated at 11 feet. No caving observed.								
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-1

TEST PIT LOG NO. TP-2

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.587989°*, **LONGITUDE:** *-117.410469°*

Surface Elevation: 2091′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
4" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, damp 1.5' - grades to gray			S-1	G			11.4	18
	5							
Test Pit terminated at 8 1/2 feet. Major caving observed throughout.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-2

TEST PIT LOG NO. TP-3

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.587974°*, **LONGITUDE:** *-117.409465°*

Surface Elevation: 2057′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
3" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist	5							
8.5' - grades to gray	10							
Test Pit terminated at 10 feet. Moderate caving observed throughout.	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-3

TEST PIT LOG NO. TP-4

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.587957°*, **LONGITUDE:** *-117.408619°*

Surface Elevation: 2041′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
6" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist	5							
WELL-GRADED SAND (SW-SM), with silt, trace gravel, medium-grained, medium dense to dense, gray, moist to wet (decomposed sedimentary rock)		▽						
9' - major seepage observed from all directions								
Test Pit terminated at 9 1/2 feet. Moderate caving observed throughout.	10 15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *9' Perched Groundwater*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-4

TEST PIT LOG NO. TP-5

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.587863°*, **LONGITUDE:** *-117.407831°*

Surface Elevation: 2020′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
7.5" of Topsoil								
sandy SILTY CLAY (CL-ML), with cobbles, very stiff, brown, moist to wet (decomposed basalt)								
5' - 12" interbed of decomposed rock predominately sand and gravel with cobbles	5							
7.5' - moderate seepage observed from all sides		▽						
LOW PLASTICITY CLAY (CL),with boulders, subangular to subrounded, very stiff to hard, brown, moist (decomposed basalt)								
Test Pit terminated at 9 1/2 feet. Moderate caving observed throughout.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *7.5' Perched Groundwater*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-5

TEST PIT LOG NO. TP-6

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.587912°*, **LONGITUDE:** *-117.406990°*

Surface Elevation: 2008′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
3" of Topsoil								
SILTY CLAY (CL-ML), stiff, brown, damp (decomposed basalt)								
3' grades to with boulders (up to 3') very stiff, light brown, moist	5							
Test Pit terminated at 9 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-6

TEST PIT LOG NO. TP-7

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.588039°*, **LONGITUDE:** *-117.405748°*

Surface Elevation: 1990′

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	14" of Topsoil									
	SILTY CLAY (CL-ML), stiff, brown, moist									
	SILTY SAND (SM), trace gravel, medium dense to dense, light brown, damp (decomposed sedimentary rock)	5								
	Test Pit terminated at 9 1/2 feet. No caving observed.	10 15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Groundwater Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-7

TEST PIT LOG NO. TP-8

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.588677°*, **LONGITUDE:** *-117.406171°*

Surface Elevation: 1989′

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
	12" of Topsoil								
	ORGANIC SILT (OL), very soft, gray, saturated (free flowing mud) 3' - major seepage observed from all directions		▽						
	SILTY CLAY (CL-ML), with cobbles, very stiff, brown, damp to moist (decomposed basalt)	5							
	Test Pit terminated at 9 1/2 feet. Major caving of saturated overburden.	10 15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *3' - Perched Groundwater*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-8

TEST PIT LOG NO. TP-9

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.588749°*, **LONGITUDE:** *-117.407360°*

Surface Elevation: 2018′

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	6" of Topsoil									
	SILTY CLAY (CL-ML), very stiff, brown, damp to moist (decomposed sedimentary rock)									
		5								
	Test Pit terminated at 7 feet. No caving observed.	10								
		15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Groundwater Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-9

TEST PIT LOG NO. TP-10

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.588880°*, **LONGITUDE:** *-117.408344°*

Surface Elevation: 2038′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
30" of Topsoil (localized mound of wood waste)								
CLAYEY SILT (CL-ML), very stiff, brown, damp (decomposed sedimentary rock)								
5' - grades to moist	5							
Test Pit terminated at 7 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Groundwater Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-10

TEST PIT LOG NO. TP-11

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.588916°*, **LONGITUDE:** *-117.409525°*

Surface Elevation: 2057′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
8" of Topsoil								
SILTY CLAY (CL-ML), very stiff, brown, damp (decomposed sedimentary rock)								
5' - grades to moist	5							
Test Pit terminated at 6 1/2 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Groundwater Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-11

TEST PIT LOG NO. TP-12

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.588930°*, **LONGITUDE:** *-117.410514°*

Surface Elevation: 2085′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
13" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, light brown, moist								
5' - grades to gray	5							
Test Pit terminated at 7 1/2 feet due to major caving.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-12

TEST PIT LOG NO. TP-13

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.589732°*, **LONGITUDE:** *-117.411378°*

Surface Elevation: 2073′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
16" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, light brown, moist	5							
7' - grades to gray								
Test Pit terminated at 7 1/2 feet. Minor caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-13

TEST PIT LOG NO. TP-14

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.589746°*, **LONGITUDE:** *-117.410196°*

Surface Elevation: 2056′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
12" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, light brown, moist	5							
SANDY CLAY (CL), with cobbles, trace gravel, medium stiff to stiff, gray, moist to wet (decomposed basalt rock) 7' - moderate seepage observed from all directions		▽						
Test Pit terminated at 8 1/2 feet. No caving observed.	10 15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-14

TEST PIT LOG NO. TP-15

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.589732°*, **LONGITUDE:** *-117.409010°*

Surface Elevation: 2042′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
6" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose, brown, moist								
CLAYEY SILT (CL-ML), trace gravel, very stiff, light brown, damp to moist (decomposed sedimentary rock) 7' - moderate seepage observed from all directions	5	▽						
Test Pit terminated at 8 feet. No caving observed.	10 15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-15

TEST PIT LOG NO. TP-16

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.589754°*, **LONGITUDE:** *-117.407955°*

Surface Elevation: 2020′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
6" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose, brown, moist to wet								
CLAYEY SILT (CL-ML), trace gravel, very stiff, light brown, damp (decomposed sedimentary rock)	5							
7' - moderate seepage observed from all directions		▽						
Test Pit terminated at 7 1/2 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-16

TEST PIT LOG NO. TP-17

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.589681°*, **LONGITUDE:** *-117.406641°*

Surface Elevation: 1990′

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	4" of Topsoil									
	SILTY SAND (SM), fine- to medium-grained, loose, brown, moist									
	POORLY GRADED SAND (SP), with silt, fine- to medium-grained, medium dense, gray, moist	5								
	SANDY CLAY (CL), trace gravel, very stiff, brown, moist									
	Test Pit terminated at 8 1/2 feet. Major caving observed.	10								
		15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-17

TEST PIT LOG NO. TP-18

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.589942°*, **LONGITUDE:** *-117.405723°*

Surface Elevation: *Unknown*

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	18" of Topsoil									
	SILTY CLAY (CL-ML), medium stiff, brown, moist									
	SILTY SAND (SM), fine- to medium-grained, dense to very dense, light brown, moist (decomposed sedimentary rock)	5								
	Test Pit terminated at 8 1/2 feet. No caving observed.	10								
		15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-18

TEST PIT LOG NO. TP-19

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.590545°*, **LONGITUDE:** *-117.405723°*

Surface Elevation: *1980'*

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
12" of Topsoil								
SILTY CLAY (CL-ML), stiff, light brown, moist (decomposed sedimentary rock)								
5' - grades to very stiff, damp	5							
Test Pit terminated at 8 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-19

TEST PIT LOG NO. TP-20

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.590366°*, **LONGITUDE:** *-117.407739°*

Surface Elevation: 1997′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
18" of Topsoil								
ORGANIC SILT (OL), very soft, gray, saturated (free flowing mud)								
CLAY (CL), stiff, orange-brown, moist 3.5' - major seepage observed all directions	5	▽						
Test Pit terminated at 7 1/2 feet. Major caving observed.	10 15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *3.5' - Perched Groundwater*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-20

TEST PIT LOG NO. TP-21

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.590696°*, **LONGITUDE:** *-117.408898°*

Surface Elevation: 2035′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
3" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist 3' - 18" pocket of cleaner sand observed in sidewall	5							
CLAY (CL), stiff, orange-brown, moist 3.5' - major seepage observed all directions								
Test Pit terminated at 8 1/2 feet. No caving observed.	10 15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-21

TEST PIT LOG NO. TP-22

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.590664°*, **LONGITUDE:** *-117.410401°*

Surface Elevation: 2070′

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	8" of Topsoil									
	SILTY CLAY (CL-ML), medium stiff, brown, moist									
	CLAY (CL), very stiff, tan, damp to moist	5								
	Test Pit terminated at 8 1/2 feet. No caving observed.	10 15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-22

TEST PIT LOG NO. TP-23

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

GRAPHIC LOG	LOCATION: *SEE EXHIBIT A-2* LATITUDE: *47.591337°*, LONGITUDE: *-117.411040°* **Surface Elevation:** 2087′	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	24" of Topsoil									
	SILTY CLAY (CL-ML), medium stiff, brown, moist	5								
	Test Pit terminated at 6 1/2 feet. No caving observed.	10 15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-23

TEST PIT LOG NO. TP-24

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.591842°*, **LONGITUDE:** *-117.409945°*

Surface Elevation: 2061′

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	10" of Topsoil									
	SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist									
	SILTY CLAY (CL-ML), very stiff, brown, moist (decomposed sedimentary rock)	5								
	Test Pit terminated at 8 feet. No caving observed.	10								
		15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-24

TEST PIT LOG NO. TP-25

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.591787°*, **LONGITUDE:** *-117.408716°*

Surface Elevation: 2022′

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	14" of Topsoil									
	SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist	5								
	COBBLES AND BOULDERS, subangular to subrounded in **SILTY SAND (SM)** matrix. Boulders up to 2.5' diameter (decomposed basalt rock)									
	Test Pit terminated at 8 1/2 feet. No caving observed.	10 15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-25

TEST PIT LOG NO. TP-26

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.592046°*, **LONGITUDE:** *-117.407111°*

Surface Elevation: 1985′

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	12" of Topsoil									
	SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist	5								
	COBBLES AND BOULDERS, subangular to subrounded in **SILTY SAND (SM)** matrix. Boulders up to 2.5' diameter (decomposed basalt rock)									
	Test Pit terminated at 9 1/2 feet. Minor caving observed.	10 15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-26

TEST PIT LOG NO. TP-27

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.592823°*, **LONGITUDE:** *-117.407296°*

Surface Elevation: 1997′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
6" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, medium dense to dense, brown, moist (decomposed sandstone)	5							
Test Pit terminated at 10 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-27

TEST PIT LOG NO. TP-28

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.592862°*, **LONGITUDE:** *-117.408455°*

Surface Elevation: 2015′

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	3.5" of Topsoil									
	SILTY SAND (SM), with abundant cobbles, fine- to medium-grained, subangular to subrounded, medium dense to dense, brown, moist (decomposed sandstone)	5								
	Test Pit terminated at 8 1/2 feet. Moderate caving observed.	10 15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-28

TEST PIT LOG NO. TP-29

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.592798°*, **LONGITUDE:** *-117.409788°*

Surface Elevation: 2051′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
7.5" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist								
	5							
SILTY SAND (SM), with abundant cobbles, fine- to medium-grained, subangular to subrounded, medium dense to dense, brown, moist (decomposed basalt rock)								
Test Pit terminated at 8 feet. Minor caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-29

TEST PIT LOG NO. TP-30

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.592777°*, **LONGITUDE:** *-117.411163°*

Surface Elevation: 2084′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
4" of Topsoil								
POORLY GRADED GRAVEL (GM), with silt, loose, gray, moist								
SILTY SAND (SM), with abundant cobbles, fine- to medium-grained, subangular, dense, red-brown, damp (excavatable basalt)	5							
Test Pit terminated at 8 feet. Minor caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-30

TEST PIT LOG NO. TP-31

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.593583°*, **LONGITUDE:** *-117.411263°*

Surface Elevation: 2077′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
4" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist								
	5							
5.5' - grades to gray, damp								
Test Pit terminated at 8 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-31

TEST PIT LOG NO. TP-32

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.593672°*, **LONGITUDE:** *-117.410186°*

Surface Elevation: 2051′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
4" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist								
5' - grades to loose, gray	5							
Test Pit terminated at 8 1/2 feet. Major caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-32

TEST PIT LOG NO. TP-33

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.593827°*, **LONGITUDE:** *-117.409061°*

Surface Elevation: 2026′

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	12" of Topsoil									
	SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist									
	4.5' - grades to loose, gray	5								
	Test Pit terminated at 7 1/2 feet. Moderate caving observed.	10								
		15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-33

TEST PIT LOG NO. TP-34

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.594383°*, **LONGITUDE:** *-117.407654°*

Surface Elevation: 2034′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
6" of Topsoil									
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist									
5' - grades to with cobbles, medium dense	5								
Test Pit terminated at 7 1/2 feet. Minor caving observed.	10								
	15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-34

TEST PIT LOG NO. TP-35

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.595254°*, **LONGITUDE:** *-117.407705°*

Surface Elevation: 2050′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
4" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist	5							
8' - grades to medium dense								
Test Pit terminated at 9 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-35

TEST PIT LOG NO. TP-36

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.594810°*, **LONGITUDE:** *-117.409057°*

Surface Elevation: 2024′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
8" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist								
	5							
5.5' grades to medium grained, gray								
Test Pit terminated at 8 1/2 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-36

TEST PIT LOG NO. TP-37

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.594574°*, **LONGITUDE:** *-117.410291°*

Surface Elevation: 2035′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
4" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist								
3' grades to medium grained, gray	5							
Test Pit terminated at 8 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-37

TEST PIT LOG NO. TP-38

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.594493°*, **LONGITUDE:** *-117.411254°*

Surface Elevation: 2055′

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	12" of Topsoil									
	CLAYEY SILT (CL-ML), stiff, brown, moist									
	SILTY SAND (SM), medium grained, loose, gray, moist	5								
	Test Pit terminated at 8 feet. Moderate caving observed.	10								
		15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-38

TEST PIT LOG NO. TP-39

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.595168°*, **LONGITUDE:** *-117.411370°*

Surface Elevation: 2039′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
6" of Topsoil								
CLAYEY SILT (CL-ML), stiff, brown, moist								
SILTY SAND (SM), medium grained, loose, gray, moist								
grades to with silt, gray-brown	5							
Test Pit terminated at 7 1/2 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-39

TEST PIT LOG NO. TP-40

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

GRAPHIC LOG	LOCATION: *SEE EXHIBIT A-2* LATITUDE: *47.595495°*, LONGITUDE: *-117.410460°* **Surface Elevation:** 2020′	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	7" of Topsoil									
	SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist									
		5								
	5.5' - 1.5' lens of poorly graded sand, gray									
	Test Pit terminated at 9 feet. No caving observed.	10								
		15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/16/2025*

Exhibit: B-40

TEST PIT LOG NO. TP-41

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.595746°*, **LONGITUDE:** *-117.411197°*

Surface Elevation: 2021′

GRAPHIC LOG		DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	16" of Topsoil									
	SILTY CLAY (CL-ML), medium stiff, brown, moist									
	POORLY GRADED SAND (SP), with silt, medium grained, gray, moist, white precipitate lining bottom of sand layer	5								
	SILTY CLAY (CL-ML), very stiff, light brown, damp (decomposed sedimentary rock)									
	Test Pit terminated at 9 feet. Minor caving observed.	10 15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-41

TEST PIT LOG NO. TP-42

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.596386°*, **LONGITUDE:** *-117.411356°*

Surface Elevation: 2000′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
18" of Topsoil								
SILTY CLAY (CL-ML), with cobbles, very stiff, brown, moist (decomposed sedimentary rock)								
4.5' - grades to hard	5							
Test Pit terminated at 7 1/2 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-42

TEST PIT LOG NO. TP-43

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

GRAPHIC LOG	LOCATION: *SEE EXHIBIT A-2* LATITUDE: *47.597002°*, LONGITUDE: *-117.411429°* **Surface Elevation:** 2067′	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)	
	13" of Topsoil									
	SILTY CLAY (CL-ML), with cobbles, very stiff, brown, moist (decomposed sedimentary rock) 2.5' - grades to hard									
	Test Pit terminated at 4 1/2 feet. No caving observed.	5 10 15								

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-43

TEST PIT LOG NO. TP-44

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.596717°*, **LONGITUDE:** *-117.410913°*

Surface Elevation: 1985′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
13" of Topsoil								
SILTY SAND (SM), with cobbles, very stiff, brown, moist (decomposed basalt rock)								
WELL-GRADED GRAVEL (GW), with cobbles and boulders, very dense, black, moist (excavatable basalt rock)	5							
Test Pit terminated at 9 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-44

TEST PIT LOG NO. TP-45

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.596044°*, **LONGITUDE:** *-117.410577°*

Surface Elevation: 2011′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
10" of Topsoil								
SILTY SAND (SM), with cobbles, very stiff, brown, moist (decomposed basalt rock)								
WELL-GRADED GRAVEL (GW), with cobbles and boulders, very dense, black, moist (excavatable basalt rock)	5							
Test Pit terminated at 9 feet. Minor caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-45

TEST PIT LOG NO. TP-46

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.595970°*, **LONGITUDE:** *-117.409726°*

Surface Elevation: 2024′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
8" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist								
3' grades to medium grained, gray	5							
Test Pit terminated at 8 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-46

TEST PIT LOG NO. TP-47

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.595740°*, **LONGITUDE:** *-117.409011°*

Surface Elevation: 2023′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
18" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, loose to medium dense, brown, moist 3.5' grades to medium grained, gray	5							
Test Pit terminated at 7 feet. Minor caving observed.	10 15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-47

TEST PIT LOG NO. TP-48

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.595998°*, **LONGITUDE:** *-117.408508°*

Surface Elevation: 2034′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
3" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, dense, brown, moist (decomposed sedimentary rock)	5							
8' grades to medium grained, gray								
Test Pit terminated at 9 feet. Minor caving observed of gray sand.	10 15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-48

TEST PIT LOG NO. TP-49

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.596268°*, **LONGITUDE:** *-117.409510°*

Surface Elevation: 2026′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
12" of Topsoil								
SILTY SAND (SM), fine- to medium-grained, dense, brown, moist (decomposed sedimentary rock)								
2' grades to medium grained, gray	5							
Test Pit terminated at 9 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-49

TEST PIT LOG NO. TP-50

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.596762°*, **LONGITUDE:** *-117.409686°*

Surface Elevation: 1970′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
16" of Topsoil								
SILTY SAND (SM), with cobbles and boulders, fine- to medium-grained, dense, brown, moist (decomposed basalt rock)	5							
Test Pit terminated at 8 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-50

TEST PIT LOG NO. TP-51

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.597658°*, **LONGITUDE:** *-117.408498°*

Surface Elevation: 1903′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
18" of Topsoil								
SANDY SILT (ML), very stiff, brown, moist (decomposed sedimentary rock)	5		S-3	G				50
Test Pit terminated at 6 1/2 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-51

TEST PIT LOG NO. TP-52

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.597652°*, **LONGITUDE:** *-117.408718°*

Surface Elevation: 1902′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
30" of Topsoil								
SANDY SILT (ML), very stiff, brown, moist (decomposed sedimentary rock)	5							
Test Pit terminated at 6 feet. No caving observed.	10 15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-52

TEST PIT LOG NO. TP-53

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.597417°*, **LONGITUDE:** *-117.408731°*

Surface Elevation: 1910′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
16" of Topsoil								
SANDY SILT (ML), very stiff, brown, moist (decomposed sedimentary rock)	5							
Test Pit terminated at 8 feet. No caving observed.	10 15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-53

TEST PIT LOG NO. TP-54

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.597276°*, **LONGITUDE:** *-117.408319°*

Surface Elevation: 1904′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
12" of Topsoil								
SILTY SAND (SM), very stiff, brown, moist (decomposed sedimentary rock)			S-3	G				25
3' - 12" of lightly cemented soil	5							
Test Pit terminated at 9 feet. No caving observed.	10							
	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-54

TEST PIT LOG NO. TP-55

PROJECT NAME: *25-024 EAGLE BLUFF SUBDIVISION*

SITE ADDRESS: *5520 N. FLORIDA ST., SPOKANE, WA 992117-5018*

CLIENT: *HARLEY C. DOUGLASS, INC.*

LOCATION: *SEE EXHIBIT A-2*

LATITUDE: *47.597077°*, **LONGITUDE:** *-117.408276°*

Surface Elevation: 1909′

GRAPHIC LOG	DEPTH (FT.)	WATER LEVEL OBSERVATIONS	SAMPLE NUMBER	SAMPLE TYPE	RECOVERY (IN.)	FIELD TEST RESULTS	WATER CONTENT (%)	FINES CONTENT (%)
15" of Topsoil								
SILTY SAND (SM), very stiff, brown, moist (decomposed sedimentary rock)	5		S-4	G				25
	10							
Test Pit terminated at 10 1/2 feet. No caving observed.	15							

Advancement Method:
CAT 315C

Abandonment Method:
Loose Backfill

See Exhibit A-3 General Notes for explanation of symbols and abbreviations.

Notes:
Exploration locations were determined based on iPhone 16 Pro GPS.

WATER LEVEL OBSERVATIONS

▽ *No Seepage Observed*

INLAND EMPIRE GEOTECH
BUILD WITH CONFIDENCE

Excavation Company: *PECK & PECK*

Logger: *S. SOMMERS*

Date: *04/17/2025*

Exhibit: B-55

Appendix C

Laboratory Test Results

AGGREGATE
LABORATORY SUMMARY

LABORATORY NUMBER				25-0245	25-0246	25-0247	25-0248
SAMPLED BY				Client	Client	Client	Client
SAMPLE TYPE				Bulk	Bulk	Bulk	Bulk
DATE RECEIVED				4/17/25	4/17/25	4/17/25	4/17/25
SAMPLE #				TP-1 S-1	TP-3 S-2	S-3	S-4
SAMPLE SOURCE				25-024 Eagle Bluff Sub Division	25-024 Eagle Bluff Sub Division	25-024 Eagle Bluff Sub Division	25-024 Eagle Bluff Sub Division
		UNITS	TEST METHOD				
MOISTURE CONTENT		%	ASTM D2216	11.4	11.4		
AGGREGATE ANGULARITY			Visual	SR - SA*	SR - SA*	SR - SA*	SR - SA*
SIEVE ANALYSIS			ASTM C136/C117				
S	1 1/2"	%					
I	1"					100	100
E	3/4"	P				100-	100-
V	1/2"	A				100-	100-
E	3/8"	S		100	100	100-	100-
	#4	S		100-	100-	99	99
S	#10	I		97	99	99	95
I	#16	N		84	97	99	84
Z	#30	G		52	88	93	56
E	#40			42	81	89	44
	#100			29	30	65	29
	#200			24	18	50	25

*Sub-rounded - Sub-angular