October 2, 2018
Project No. 170017H001

Lakeside Industries, Inc.
6505 226th Place SE, Suite 200
Issaquah, Washington 98027

Attention: Ms. Karen Deal

Subject: Revised Critical Area Assessment (CAA)
Maple Valley Asphalt Plant
18825 SE Renton-Maple Valley Road
King County, Washington

Dear Ms. Deal:

As requested, Associated Earth Sciences, Inc. (AESI) is pleased to provide this letter-report containing our revised assessment of the critical areas (geologic hazard areas and aquifer recharge areas) for the subject site. The original critical area assessment (CAA) was performed as a requirement by King County Department of Permitting and Environmental Review (KCDER) for the proposed environmental remediation efforts and future development of the site. This revision includes additional information to address King County comments, dated April 23, 2018, regarding geologic hazard areas and aquifer recharge areas for the project grading permit and SEPA review submittal. Our study is based on information provided by Lakeside Industries, Inc. (Lakeside), David Evans and Associates, Inc. (DEA) and Triad (Triad is now part of DEA) including advance issue construction plan sets (including stormwater plans) titled "Maple Valley Asphalt Facility Site Engineering Plan," Sheet 1 through Sheet 13, dated October 2, 2018, and "Road Improvements Plan," Sheet 051 through 055, dated September 26, 2018.

Written authorization to proceed with the CAA and this revision was granted by Ms. Karen Deal and our study was accomplished in general accordance with our proposals dated January 13, 2017 and May 17, 2018. Our scope of work included a review of readily available information including in-house resources, municipal records, geologic maps, and historical aerial photography and site reconnaissance. AESI also performed subsurface exploration onsite for a

proposed stormwater infiltration facility under a separate proposal, dated January 16, 2018. Results of our subsurface exploration is presented in a separate report, dated October 2, 2018 (AESI, 2018).

This letter-report has been prepared for the exclusive use of Lakeside and their agents, for specific application to this project. Within the limitations of scope, schedule, and budget, our services have been performed in accordance with generally accepted engineering geology practices in effect in this area at the time our letter-report was prepared. No other warranty, express or implied, is made. It must be understood that no recommendations or engineering design can yield a guarantee of stable slopes. Our observations, findings, and opinions are a means to identify and reduce the inherent risks to the owner.

The location of the site is shown on Figure 1, and the various key features discussed below in this letter-report are shown on the attached "Site Plan" (Figure 2).

SITE DESCRIPTION

The subject property consists of approximately 25 acres and is located at 18825 SE Renton-Maple Valley Road along the south side of the Renton-Maple Valley Highway, opposite the Cedar River, east of Renton, Washington. The parcel is irregularly shaped with a smaller "panhandle" on the east side. The parcel is bordered to the west, south, and east by undeveloped lots. Steep, undeveloped north to northwest-facing slopes up to approximately 320 feet tall with gradients of between 20 and 75 percent are located within the southern and eastern panhandle portion of the property and extend up beyond the property line to the south and southeast. The topography within the remainder of the property, is relatively level, graded, and contains a large fill pad.

The site is currently vacant, and all previous business-related structures have been removed. A well house for Group B Water System No. AB892 exists on the southwest portion of the property south of the fill pad. A large soil stockpile, partially vegetated, of on-site origin, is located on the east side of the property and a small soil stockpile is located on the southeast corner of the fill pad. Wetlands and streams are identified (by others) along the perimeter of the fill pad and the base of slopes. Stream A travels down the slope from the south and flows into Stream B at the base of the slope. Wetland A is the headwaters for Stream B, which flows west along the base of the slope to the confluence with Stream A, then flows north along the western edge of the fill pad (Figure 2). Portions of the existing fill pad are within the buffers of the identified streams and wetlands.

PROJECT DESCRIPTION

The previous activities on the site have led to contamination of the soil and groundwater. The first proposed activity on the property includes remediation of the site by removing the contaminated soil from the site. AESI has prepared this report with the understanding that

environmental cleanup activities will be performed in accordance with Washington State Department of Ecology (Ecology) standards prior to the proposed development. After remediation, our understanding is the lower portion of the site will be developed into an asphalt plant. The asphalt plant will consist of drive lanes, aggregate stockpiles, aboveground storage tanks, mixing and crushing machinery, and a small office building. Based on conversations with Lakeside, the proposed development for the site includes asphaltic concrete surfacing of the entire lower region of the site. They plan to utilize secondary containment for all their aboveground tanks.

Stormwater management for the project is designed in accordance with the 2016 *King County Surface Water Design Manual* (KCSWDM). Current stormwater plans indicate that stormwater from the proposed developed portion of the site including pavement will be conveyed to lined biofilter swales on the western and northern edges of the pavement and the southern edge of Highway 169. From the biofilter swales, stormwater will be conveyed via closed piping systems in the following sequence: 1) two oil/water coalescent plate separators, 2) a water quality pre-settling vault, 3) a large sand filter, and 4) an infiltration Stormtech chamber system located near the northeast corner under pavement (Figure 2). Roof runoff from the office will be conveyed to the infiltration facility and roof runoff from the covered portion of the proposed pavement will be conveyed to a lined biofilter swale.

The remaining portions of the property south, west, and east of the proposed pavement include undeveloped slopes and existing fill pad areas within the stream and wetland buffers. Current plans indicate stormwater generated from these areas will be collected in swales, French drains, or existing drainages and ultimately discharge to the Cedar River via Stream B (stormwater from the south and west) and via a culvert under Highway 169 (stormwater from the east). Figure 2 shows elements of the proposed development and stormwater plan, and identifies streams, wetlands, and their buffers established by others.

LITERATURE REVIEW

Aerial Image Review

AESI reviewed topographic and other pertinent information contained at the King County iMAP website[1]. AESI reviewed aerial photographs of the site and surrounding area available at the iMAP website dating from 1936 to 2017 and a 1990 aerial photograph on Google Earth. Of the images reviewed, no definitive indications of recent large-scale landslides were noted on the property. Grading and soil stockpiling has occurred on the eastern panhandle at the base of the steep slopes as observed in 1936 through 2017 aerial photography.

[1] King County iMAP (www.kingcounty.gov/services/gis/Maps/imap.aspx)

LiDAR (Light Distance and Ranging)

As part of our critical areas assessment, we reviewed LiDAR (Light Distance and Ranging) imagery of the site and vicinity. LiDAR provides high resolution topographic aerial images of the ground surface. The LiDAR imagery can detect large-scale geomorphic features, such as landslides, even in heavily vegetated areas like the subject site. We observed bowl-shaped, or arcuate features within the sloping area of the southern portion of the property. These features can be indicative of groundwater discharge and/or evidence of small-scale landslides since the last glaciation period. There was likely deposition of a fan at the toe of slope from the erosion and sediment transport of material derived from the bowl-shaped geomorphic features. However, evidence of a fan has likely been obscured by site grading activities. The courses of Streams A and B appear to have been modified by berming to direct flow to the western margin of the site.

Geologic Maps

Based on review of the published geologic map titled *Surficial Geologic Map of the Maple Valley Quadrangle, King County, Washington* by D.B. Booth, dated 1995 (Booth, 1995), the steep slopes located within the southern portions of the site are underlain by glacially consolidated Vashon-age glacial till, Vashon advance outwash, and pre-Vashon, undivided glacial and non-glacial deposits. Per the referenced geologic map, the older pre-Vashon sediments generally consist of dense to very dense till, sand and gravel with minor silt, clay, and peat. Vashon advance outwash consisting primarily of sand and gravel with variable amounts of silt are shown on the map in the upper to mid-slope region immediately south of the property boundary. A small area of Vashon advance outwash is mapped onsite near the southeastern project boundary. The younger higher elevation Vashon-age glacial till sediments mantle the upland areas upslope of the site, and generally consist of an unsorted mixture of clay, silt, sand, and gravel, deposited directly by the advancing Vashon-age glacier. The low-lying areas of the site and vicinity extending from the base of the steep slopes north to and beyond the site boundary are mapped as Quaternary alluvium. These deposits are described as loose, stratified to massively bedded fluvial silt, sand, and gravel. Holocene mass wasting deposits are mapped on the slope in the southern portion of the site. The mass wasting deposits are most likely deposited on the site by small landslides or sediment transfer from the southern drainage channels. Figure 3 shows geology of the site and surrounding area, adapted from Booth (1995).

Environmental Site Assessment

AESI was provided a Phase I Environmental Site Assessment Report (ESA) from Farallon Consulting (Farallon) dated April 19, 2016. The report discusses the historical use of the site and the recognized environmental conditions (RECs) identified onsite through review of historical documents and a site reconnaissance. We were also provided a letter from Farallon dated September 1, 2016 which depicts the discovery of an environmental release onsite and the planned independent cleanup of petroleum hydrocarbon constituents. Associated with this

work we were provided copies of seven monitoring well logs attached as Appendix A. Upon receiving a grading permit from King County, Lakeside plans to excavate and remove the contaminated soil from the site. We understand that Farallon will provide environmental services for the project. AESI has prepared this study with the understanding that environmental cleanup activities will be performed in accordance with Ecology standards prior to the proposed development.

GEOLOGIC RECONNAISSANCE

A geologic reconnaissance of the property was done by AESI on January 23, 2017 and June 28, 2018. The predominant geomorphic features of the site consist of an imported fill pad overlying alluvial soils on which the existing development and proposed new development are situated. The site is bordered by steep slopes to the south and southeast. AESI observed an old road located on the east side of the site. The road climbs up from the main pad at an approximate elevation of 180 feet to a relatively level bench at an elevation of 220 feet. The bench is located on the southern portion of the site near the base of steep slopes.

On the west edge of the bench, we observed Stream A as labeled on Figure 2. The drainage channel of Stream A is oriented generally north-south onsite. Stream A enters the site from the south, flows north past the bench then curves to the west. Stream A combines with Stream B at the base of the slope and continues north along the western edge of the site.

A well house for the on-site Group B well (Water System No. AB892) was observed on the southwestern portion of the site near the base of the slope. According to Washington State Department of Health (DOH) records, an irrigation well, formerly Group B Water System 38640, exists on the northeastern portion of the site (see "Groundwater Wells and Use" section below). No indication of the wellhead for the irrigation well was observed in the northeastern portion of the site.

The steep slopes located on the southern portion of the property, except for the bench, were observed to contain a moderately dense vegetative growth consisting of young to mature, mostly straight-trunked evergreen trees, deciduous trees, and a moderately well-developed undergrowth of native shrubs and blackberry brambles. We did not observe seepage on the slope where traversed with the exception of Streams A and B.

The slope that extends up to the southeast does not appear to be forming the same arcuate features as are observed to the south and were observed to be fully vegetated with trees and underbrush. Few evergreen trees were observed mainly near the top of slope. Predominantly deciduous trees were observed on the slope face. No bare, unvegetated areas were observed. No back-rotated trees were observed. A few curved tree trunks were observed on the slope that may indicate slow creep. No obvious signs of significant slope failure were observed on the slopes immediately southeast of the site.

During our geologic reconnaissance of the site and vicinity, we did not observe tension cracks or other indications of recent slope instability.

ENVIRONMENTALLY CRITICAL AREAS

AESI assessed erosion, landslide, steep slope, coal mine, and seismic hazard areas, and critical aquifer recharge areas. Erosion, landslide, and steep slope hazard areas are presented on Figure 4. Figure 5 presents critical aquifer recharge area data.

Erosion Hazard

Soils and Designated Erosion Hazard Areas

King County Code (KCC) 21A.06.415 defines an erosion hazard area *as an area underlain by soils that is subject to severe erosion when disturbed. These soils include, but are not limited to, those classified as having a severe to very severe erosion hazard according to the United States Department of Agriculture Soil Conservation Service, the 1990 Snoqualmie Pass Area Soil Survey, the 1973 King County Soils Survey or any subsequent revisions or addition by or to these sources such as any occurrence of River Wash ("Rh") or Coastal Beaches ("Cb") and any of the following when they occur on slopes inclined at fifteen percent or more:*

A. The Alderwood gravely sandy loam ("AgD");
B. The Alderwood and Kitsap soils ("AkF");
C. The Beausite gravely sandy loam ("BeD" and "BeF");
D. The Kitsap silt loam ("KpD");
E. The Ovall gravely loam ("OvD" and "OvF");
F. The Ragnar fine sandy loam ("RaD"); and
G. The Ragnar-Indianola Association ("RdE").

The sloping portions of the property, identified on Figure 4, have a high risk of erosion and classify as erosion hazard areas. These areas are underlain by Alderwood and Kitsap soils (AkF) on 25 to 70 percent slopes derived from glacial till and glacial lake deposits. A small portion of the property, in the southeast corner, is underlain by Alderwood gravelly sandy loam on 8 to 15 percent slopes.

The existing and proposed development area is identified as Urban Land by the United States Department of Agriculture's Natural Resource Conservation Service (USDA-NRCS) Web Soil Survey. Pre-development or historical soils of this area are not identified by available USDA-NRCS soils maps. Based on the surrounding soil units and AESI's subsurface exploration (AESI, 2018), the pre-development soils of the site labeled Urban Land are likely Pilchuck loamy fine sand (Pc) and/or Puyallup fine sandy loam (Py). The parent material is gravelly and sandy alluvium for Pc and alluvium for Py and both soils formed on nearly flat terraces and flood plains. According to the soil survey, soil units Pc and Py have the following properties: 1) a

"slight" erosion hazard indicating little or no erosion is likely, and 2) Group A hydrologic soil group having a high infiltration rate, are well drained to excessively drained with a high to very high capacity to transmit water (USDA-NRCS, 2017). This is consistent with AESI's on-site explorations (AESI, 2018). In our opinion, this portion of the site has a low risk of erosion.

Proposed Stormwater Facilities

Portions of the existing fill pad are within wetland and stream buffers, south and west of the proposed development. Plans indicate enhancement of wetland/stream buffers is proposed. The areas to the south and west where enhancement is proposed are not considered erosion, landslide, or steep slope hazard areas, however they are located within buffers to those hazards (Figures 2 and 4). In addition, swales and French drains are proposed immediately east/southeast of the proposed pavement within the buffer of erosion, landslide, and steep slope hazard areas, to intercept stormwater generated east of the proposed pavement from non-pollution generating surfaces (NPGS). In our opinion, installation of drainage facilities/conveyances to enhance drainage within the buffer is appropriate and significant adverse impacts to the erosion, landslide, or steep slope hazard areas are not anticipated.

The proposed stormwater infiltration system facilities and biofilter swales are not located within erosion, landslide, or steep slope hazard areas or their buffers (Figures 2 and 4) and impacts to those hazard areas are not anticipated by the proposed infiltration system.

General

At the time of our site visit, flows in Stream A and B were fully contained within the drainage channels. However, it should be noted that future changes in the condition of stream drainages such as landslides in the steep slope areas adjacent to the stream or increased erosion of the banks of the stream and increased sediment deposition within the channel may cause drainage courses to change. Mitigation to protect structures may be necessary to account for changes to the drainage course over time.

In AESI's opinion, the proposed environmental remediation efforts and proposed development, within the northern portion of the site, has a low risk of erosion and should not increase the erosion of the nearby slopes.

Landslide Hazard

Per KCC 21A.06.680, a landslide hazard area is *an area subject to severe risk of landslide, such as:*

A. An area with a combination of:
   1. Slopes steeper than fifteen percent of inclination;
   2. Impermeable soils, such as silt and clay, frequently interbedded with granular soils, such as sand and gravel; and
   3. Springs or ground water seepage;

B. An area that has shown movement during the Holocene epoch, which is from ten thousand years ago to the present, or that is underlain by mass wastage debris from that epoch;

C. Any area potentially unstable as a result of rapid stream incision, stream bank erosion or undercutting by wave action;

D. An area that shows evidence of or is at risk from snow avalanches;

E. An area located on an alluvial fan, presently or potentially subject to inundation by debris flows or deposition of stream-transported sediments.

The sloping portions of the property to the south, southeast, and east are considered landslide hazard areas, as identified on Figure 4, due to a combination of steepness, height, continued erosion, shallow slides evidenced by the geomorphology (southern portion), mapped landslides (eastern portion, Figure 4), seepage/wetlands at the base of slopes, and presence of low-permeable units on the slope as indicated by the referenced geology map (Booth, 1995).

A deep-seated historical landslide is mapped by King County on the slope above the eastern panhandle and the mapped landslide mass covers a portion of the panhandle (Figure 4). This area is also identified by King County as a potential landslide hazard area. Portions of the eastern panhandle are identified as a wetland. Development is not proposed on the panhandle portion of the site or within a 100-foot buffer of the mapped landslide toe.

Based on review of the existing literature, and observations of site conditions during our recent geologic reconnaissance of the property, the risk of damage to the existing and proposed new structures by deep-seated landslide activity is low, in AESI's opinion.

The slopes to the southeast of the site are greater than 40 percent with a total height of approximately 200 feet. King County has identified this slope as having a severe potential for shallow debris slides. Shallow debris slides are typically shallow in depth and small in lateral extent. AESI observed this slope to be well vegetated and did not observe obvious signs of slope instability. Currently, the proposed office, control house, and other major processing elements are located more than 100 feet from the landslide hazard area along the southeastern portion

of the property. In our opinion, the proposed locations of these structures in relation to the landslide hazard area is adequate.

A reduced buffer of approximately 35 feet is currently proposed between the steep slopes/landslide hazard area and the edge of pavement, the Reclaimed Asphalt Pavement (RAP) stockpiles, and crusher. We recommend a minimum setback and buffer of 30 feet from these development features and the southeastern steep slope/landslide hazard area identified on Figure 4.

The steep slopes located south of the site are underlain by Holocene-age mass wasting deposits (Figure 3). It appears the mass wasting deposits were derived from underlying dense to very dense glacially consolidated, generally coarse-grained sediment based on published geologic mapping. It should be noted that the upper several feet of these dense sediments can be loosened by precipitation, freeze/thaw, animal burrowing, and foot traffic. The loosened soils are subject to mass wasting events including relatively shallow landslides. Loosened soils may also migrate down the steep slope via gravity forming an accumulation of colluvium at the slope toe. Shallow slides usually occur during seasonally wetter periods of the year. Based on the distance of the proposed development from the southern slopes, the presence of the deep drainages at the base of these slopes creating catchments for any potential small-scale slide debris, and previous grading that has occurred to create the "bench"; the risk of damage to the proposed development by shallow slides originating on the southern slope is low, in AESI's opinion. Figure 2 shows a 50-foot wetland buffer zone extending onto the site from the base of the slopes. In our opinion, an additional 15-foot building setback for a combined buffer/building setback distance of 65 feet is appropriate to account for runout from the identified landslide hazard or debris flow hazards related to Stream A.

Steep Slope Hazard

According to KCC 21A.06.1230, a steep slope hazard area is defined as *an area on a slope of forty percent inclination or more within a vertical elevation change of at least ten feet.*

Portions of the site to the south, southeast, and on the eastern "panhandle" classifies as steep slope hazard areas since slope gradients exceed 40 percent and the slope heights range from about 200 feet to over 300 feet (Figure 4).

The proposed control house and other major processing elements are located more than 100 feet from the toe of the steep slopes along the southern portion of the property. The proposed RAP stockpiles and crusher are located approximately 35 feet from the toe of the steep slope hazard area to the southeast. Based on our observations in the field, the southeast slope is not eroding at the same rate as the slopes to the south and has denser vegetation. We recommend a minimum setback and buffer of 30 feet from the toe of the southeastern slope to allow for catchment of the weathered zone deposits that may release over time. Alternatively, the setback and buffer may be reduced to 15 feet in combination with a low wall constructed at

the toe of slope to provide debris catchment. The wall should be no taller than 4 feet in height and can be constructed as a cast-in-place concrete wall or a large segmental concrete block wall (Ultra Blocks or Redi-Rock for example). The wall is intended to provide catchment for loose surface soils. The area behind the wall should be periodically cleared of accumulated soils.

Coal Mine Hazard

According to KCC 21A.06.200 a coal mine hazard area is defined as *an area underlain or directly affected by operative or abandoned subsurface coal mine workings*.

As part of our study, we conducted a review of historic coal mining maps on file with the Washington State Department of Natural Resources (DNR). Review of the readily available maps and the data indicates that the entrance of the New Black Diamond Mine also known as the Indian Mine owned and operated by the Pacific Coast Coal Company was located on this property. The maps indicate two openings located near the base of the southern slope at the west and east ends of the "bench." The maps show the mine entrances extending into the hillside to the southwest and southeast, respectively, and extending offsite.

Based on the review of the readily available information the workings appear to extend offsite to the southwest. Therefore, it is AESI's opinion that the proposed remediation and eventual development will not be underlain by the abandoned subsurface coal mine workings. The mine shaft maps that we reviewed only showed workings beneath the slope of the property, therefore development of the lower regions of the site should be unaffected.

Seismic Hazard

Seismic hazards are defined by KCC 21A.06.1045 as *an area subject to severe risk of earthquake damage from seismically induced settlement or lateral spreading as a result of soil liquefaction in an area underlain by cohesionless soils of low density and usually in association with a shallow ground water table.*

Liquefaction is a process through which unconsolidated, saturated, granular soil loses strength as a result of vibrations, such as those which occur during a seismic event. Liquefaction can result in deformation of the sediment and settlement of overlying structures. Areas most susceptible to liquefaction include those areas underlain by non-cohesive silt and sand with low relative densities, accompanied by a shallow water table. The site is mapped by King County as a moderate to high liquefaction hazard potential. The geologic map of the area indicates alluvial soils which support the County's designation.

AESI has reviewed the available subsurface information from the environmental investigations onsite which described the soil encountered as being cohesionless. However, there was limited information regarding the density except from 12.2 to 19 feet on the MW-1 log, and 15.5 to 20 feet on the MW-5 log. In both instances, they noted a loose consistency. Among all the

monitoring wells installed onsite groundwater elevations were recorded ranging from 2 to 10½ feet below the ground surface. Based on the reviewed information it is AESI's opinion that the site classifies as a seismic hazard area, and further study should be done to evaluate the probability and magnitude of seismically induced settlement during a design-level earthquake event.

The project site is located within a zone of shallow bedrock referred to as the Seattle Uplift. The Seattle Uplift is bounded on the south by the Tacoma Fault Zone (TFZ) located approximately 12 miles southwest of the site, and on the north by the main strand of the Seattle Fault Zone (SFZ) located approximately 8 miles north of the site. Recent studies of the SFZ and the TFZ have concluded that certain fault splays within these fault zones are active (evidence of seismic activity in the last 11,000 years). Based on the distance of the TFZ from the site, it is AESI's opinion that the risk of damage from surface fault rupture along any of the known fault splays associated with this fault is low.

The Seattle Fault is understood to consist of a fault zone typically approximately 1 to 2 miles wide, with displacement distributed across multiple fault "strands" within the fault zone. The SFZ extends west to east from approximately Bremerton to Fall City. Displacements within the SFZ occur along discreet strands within the relatively large fault zone. Current research indicates that the Seattle Fault has locally offset Quaternary sediments, which indicates that within the geologic time frame the fault zone is active or potentially active; an active fault is one that has ruptured in the last 11,000 years and a potentially active fault is one that has ruptured in the Quaternary (last 2.1 million years). Recent studies have focused on fault splays within the northern portion of the SFZ, referred to as the "deformation front," where evidence of recent faulting is more prevalent. The southernmost known fault splay within the SFZ is mapped approximately 2 miles northeast of the site. This fault splay is inferred based on geophysical studies. Other specific data pertaining to this fault are limited. Based on AESI's review of published data pertaining to the SFZ, and the distance of the SFZ from the site, we conclude that the risk of surface fault rupture related to known fault splays within the SFZ is low.

Review of the *Geologic Map of the Tacoma 1:100,000-scale Quadrangle, Washington* dated November 2015 and compiled by Eric J. Schuster and others, indicates an east-west-trending, north-dipping normal fault is mapped to the east of the site. The fault reportedly displaces early Eocene to early Oligocene (~33 million years old) Renton Formation bedrock. The fault is shown as concealed beneath Vashon-age lodgement till east and west of its mapped location. Data pertaining to this fault are limited. We have not identified any other specific information regarding this fault during our research of published geologic references. Given the fault is not shown to have displaced Vashon lodgement till dating around 15,000 years old, it is AESI's opinion that the fault is not considered active and presents a low risk of damage to the site due to fault rupture.

CRITICAL AQUIFER RECHARGE AREAS (21A.24.316)

Critical Aquifer Recharge Areas (CARAs) are defined by KCC 21A.06.253C as "*an area designated on the critical aquifer recharge area map adopted by KCC 21A.24.311 that has a high susceptibility to ground water contamination or an area of medium susceptibility to ground water contamination that is located within a sole source aquifer or within an area approved in accordance with Chapter 246-290 WAC as a wellhead protection area for a municipal or district drinking water system, or an area over a sole source aquifer and located on an island surrounded by saltwater. Susceptibility to ground water contamination occurs where there is a combination of permeable soils, permeable subsurface geology and ground water close to the ground surface.*"

Portions of the site have a Sole Source Aquifer (SSA) designation by the U.S. Environmental Protection Agency (EPA) to protect the City of Renton well fields. In addition, portions of the site are within the wellhead protection area of the King County Water District #90 (KCWD#90) well field. King County has designated portions of the site as CARA Category 1 and 2 based on King County's susceptibility rating of the soils and because they are located within SSA and wellhead protection areas. According to King County, portions of the site have a high susceptibility rating for contamination.

This letter-report provides information to address the following topics, which satisfy the reporting needs and critical aquifer recharge area development standards for this site, in our opinion.

- Available information regarding geologic and hydrogeologic characteristics of the site, including the surface location of all critical aquifer recharge areas located onsite or immediately adjacent to the site, and permeability of the unsaturated zone.

- Groundwater depth, flow direction, and gradient based on available information.

- Currently available data on wells and springs within ¼ mile of the project area.

- Locations of other critical areas, including surface waters, within ¼ mile of the project site.

- Available historic water quality data for the area to be affected by the proposed activity.

- Groundwater quantity and quality impacts and proposed mitigations (best management practices [BMPs]).

Physical Setting and Topography

Physical Setting

The surface location of the CARAs, SSA, and wellhead protection areas for KCWD#90 and Renton well fields in relation to the project site are shown on Figures 1 and 5. The site lies within King County designated CARA Category 1 and 2, EPA designated SSA, and wellhead protection areas for KCWD#90 wells. In addition, the Cedar River lies approximately 150 feet to the north of the northern property boundary, across SE Renton-Maple Valley Road. Delineated wetlands and streams, and their associated buffers are present to the west, south, and east of the development area.

Topography/Geology

As described in the "Literature Review" section of this letter-report, the steep slopes located within the southern portions of the site are underlain by mass wasting deposits, glacially consolidated Vashon-age glacial till, Vashon advance outwash, and pre-Vashon, undivided glacial and non-glacial deposits. The low-lying areas of the site and vicinity extending from the base of the steep slopes north to and beyond the site boundary is mapped as Quaternary alluvium which is described as loose, stratified to massively bedded fluvial silt, sand, and gravel. The lithologic descriptions contained in the exploration logs completed by AESI (AESI, 2018) and boring logs completed by Farallon (Appendix A) are in general agreement with geologic mapping (Booth, 1995).

Groundwater Depth, Flow Direction, and Gradient

Farallon's monitoring well logs and Groundwater Contours Map (Appendix A) depict a generally northeast-trending groundwater flow direction, with a gradient of approximately 0.06 to 0.08 feet vertical, per foot horizontal (ft/ft). Groundwater was encountered during drilling at depths of approximately 9 to 10 feet below ground surface (bgs) in monitoring wells MW-1 through MW-6, and at 2 feet bgs in MW-7. The sand and gravel deposits described in Farallon's logs are interpreted to represent Holocene younger alluvium (Qyal) described in Booth, 1995. The Qyal sediments are described as moderately sorted deposits of cobble gravel, pebbly sand, and sandy silt. In bulk, these deposits would have moderate to high permeabilities, depending in part on the degree of sorting and silt content. AESI's explorations and infiltration rate testing are in general agreement with the lithologic descriptions above and indicate the alluvium in the area of the infiltration rate test had high to very high permeability (AESI, 2018).

Groundwater Wells and Use

Available well and water system data was obtained from online databases at DOH, Ecology, and from wellhead protection plans for the Group A water systems. The site is within the 5-year and 10-year wellhead protection areas for the Group A KCWD#90 wells. The site is not located

within the wellhead protection area for the City of Renton Group A systems, but it is within the SSA associated with those wells. Four Group B water systems or their assigned time of travel are located within a 1,320-foot (¼ mile) radius of the site, including the on-site Group B system. Records for one domestic well within the ¼-mile radius were obtained from the Ecology water well database. Each water system or well is discussed below. Water system records and well logs are included in Appendix B.

Sole Source Aquifer (SSA) and City of Renton Wellhead Protection Areas

The primary source of the Renton municipal water supply is the Cedar Valley Aquifer. Portions of the Cedar Valley Aquifer have been designated a SSA by the EPA for the City of Renton wells in 1986. This includes the alluvial sediments of the site which encompasses the entire developed area and proposed development area of the site. The City of Renton petitioned and was granted SSA status and protection by the EPA. According to the City of Renton Wellhead Protection Plan (Renton, 2012), the designation helps to protect the aquifer.

The City of Renton delineated groundwater capture zones (1-year, 5-year, and 10-year time-of-travel (TOT) zones) to their Group A wells to comply with DOH requirements of *Washington Administrative Code* (WAC) 246-293-135(3). The 10-year TOT in relation to the site is depicted on Figure 1. The capture zones were delineated using a combination of groundwater flow (MODFLOW) and particle tracking modeling and were presented in the Wellhead Protection Plan (Renton, 2012). The project site is over 9,000 feet outside and upgradient of the 10-year TOT (Figure 1). Based on the distance between the project site and the modeled 10-year TOT as well as the proposed stormwater management plan, it is our opinion that the project will not have a significant adverse impact on the City of Renton Cedar Valley Aquifer water source.

King County Water District # 90 (KCWD#90) - Group A Water System

The wellhead protection plan for KCWD#90 Water System No. 41150 delineated groundwater capture zones (1-year, 5-year, and 10-year TOT zones) to their Group A wells to comply with DOH requirements of WAC 246-293-135(3). The capture zones were delineated using a combination of groundwater flow and particle tracking modeling. The TOT zones are shown on Figure 5, as presented in the wellhead protection plan (Pacific Groundwater Group [PGG], 2014). The majority of the subject property lies within the jurisdictional 10-year TOT Group A water system 41150. The northwest corner of the site is within the 5-year TOT. The water system, owned by KCWD#90, is served by a well field which includes three wells: Wojewodski Well 1, Well 2 APP301, and Well 3 BCS873. Well logs for Wells 2 and 3 are included in Appendix B. The well log for Well 1 was not available from Ecology's well log database. The well field is located approximately ½ mile northwest, on the other side of the Cedar River from the subject property within the Cedar River Valley.

The DOH and King County online databases have assigned TOT for KCWD#90 Water System 41150 that are based on assumed capture zones that have not been modeled. These capture zones have not been updated to the modeled TOTs presented in the wellhead protection plan (PGG, 2014) and indicate the site is located within the 1-year and 5-year TOT.

Group B Water Systems

Water System No. AB892 - This water system is on the subject property, identified as Goodnight Properties Water System. The well is identified with Ecology well tag no. AFJ613. The well is 50 feet deep, and at time of drilling, had a static water level of 2 feet bgs. The well is completed with a 4-inch liner, and is screened from 30 to 50 feet deep. The system is listed as having a capacity of 20 gallons per minute (gpm), with one approved connection.

Water System No. 52451 - This water system is located west of the subject property with the system name identified as Muralt, Ted, owned by Richardo Ramacho. The water system is located at 17823 Renton-Maple Valley Highway. A small portion of the water system's assigned TOT radius intersects the ¼-mile radius from the subject site. This water system has two approved connections. The well log indicates the well was installed in 1980 to a total depth of 22 feet bgs, with an open bottom completion. The static water level shown on the well log is 3 feet bgs. The well location shown on Figure 5 is at the parcel level.

Water System No. 38128 - There is no well address, well tag, or parcel number listed for this water system. The well depth is listed as 11 feet, and it is located in the SE ¼, SE ¼, Township 23N, Range 6E, which is east of the subject property. The system owner name is Kenny's Service Station, listed at 18015 Maple Valley Highway, which is located to the west of the subject property. The system is listed as having eight active connections and no approved connections.

Water System No. 46980 - This water system is located west of the subject property with the system name identified as Cedar Rapids Grocery, owned by George McCall. The water system is located at 18015 SE Renton-Maple Valley Highway. A small portion of the water system's assigned TOT radius intersects the ¼-mile radius from the subject site. This water system has nine approved connections. The well log indicates the well was installed in 1987 to a total depth of 18 feet bgs, with an open bottom completion. The static water level shown on the well log is 7 feet bgs. The well location shown on Figure 5 is at the parcel level.

Domestic Well

Well No. 1556680 - The well log indicates the well is owned by Chuck Vowell on Parcel No. 1923069016, immediately adjacent to the subject property to the east at 15905 190th Avenue SE. The well is completed with an open bottom, at a depth of 75 feet bgs. Static water level was 55 feet bgs. The well log shows hardpan extending to a depth of 47 feet, under which is sand and gravel to a depth of 70 feet. The sand and gravel unit is underlain by sandstone at this

depth. The well location on Figure 5 is shown to the parcel level but the exact location on the parcel is unknown.

Irrigation Well

Water System No. 38640 - DOH records indicate that Group B Water System 38640 is owned by King County Shop #2. As described in the paragraphs below, the well associated with this water system has been reclassified as an irrigation well. No well address is provided, and no well log or Ecology well ID is provided in the DOH online database. The well depth is listed as 35 feet. The DOH describes five active connections and undetermined approved connections. The DOH location information for this well is limited to the quarter-quarter section.

The title report for the subject property included a covenant document entitled Declaration of Covenant to Acknowledge Use of a Well for Irrigation Purposes Only, and Not to be Connected to Potable Water Source or Used for Potable Water Source, dated June 18, 2009, with reference number 20090624001358. This document is included in Appendix B. The covenant declares that the well is to be utilized solely for irrigation purposes and is not to be connected to any potable water supplies. The well covenant document references the original King County Group B Water Use Agreement as document number 20051229000800. **The above-referenced covenant converts the Group B designation to an irrigation well.**

In our review of the Ecology and DOH well log databases, we did not find documentation of decommissioning of this well. The well is not in use currently and future use is not proposed. Lakeside is unable to locate the wellhead onsite. While the exact location of this well is not known, the location shown on Figure 5 is approximated from multiple years of aerial photographs, the ALTA survey provided by Lakeside and the location description contained in the above-referenced covenant document. We recommend that the well be properly decommissioned per KCC 21A.24.316 Critical aquifer recharge areas — development standards, section E: In any critical aquifer recharge area, the property owner shall properly decommission an abandoned well. Chapter 173-160 WAC: Minimum Standards for Construction and Maintenance of Wells reinforces the decommissioning standard and describes acceptable decommissioning methods.

Groundwater Quantity and Quality Impacts and Proposed Mitigations (BMPs)

Proposal Elements

The project proposes to continue operation of the existing Group B water system to serve the proposed administrative office. The office will be served by an underground sewage holding tank; no on-site septic system is proposed. In addition, the project proposes to pave the entire operational site with asphalt and use primary and secondary containment for aboveground storage tanks.

Stormwater management for the project is designed in accordance with the KCSWDM. Proposed stormwater plans indicate that stormwater will be managed via infiltration into on-site permeable alluvial sediments. Plans indicate stormwater from pollution-generating surfaces (PGS) will be pre-treated to a minimum treatment level of enhanced basic. Stormwater from PGS will be conveyed to lined biofilter swales. From lined biofilter swales, stormwater will be conveyed via closed piping systems in the following sequence: 1) two oil/water coalescent plate separators, 2) a water quality pre-settling vault, 3) a large sand filter, and 4) an infiltration Stormtech chamber system located near the northeast corner under pavement (Figure 2). Roof runoff from the office will be conveyed to the infiltration facility and roof runoff from the covered portions of the proposed pavement will be conveyed to lined biofilter swales. Wetlands and stream drainages currently exist around the perimeter of the fill pad (Figure 2). Portions of the existing fill pad are within wetland and stream buffers, south and west of the proposed development. Plans indicate enhancement of wetland/stream buffers is proposed. The remaining portions of the property south, west, and east of the proposed pavement include undeveloped slopes and are considered NPGS. Stormwater from NPGS will be collected in swales, French drains or existing drainages and ultimately discharge to the Cedar River via Stream B (stormwater from the south and west) and via a culvert under Highway 169 (stormwater from the east).

The following sections provide information regarding potential impacts that might result from the proposed development with respect to groundwater quantity and groundwater quality. Planned mitigation measures (BMPs) for minimizing impacts to groundwater recharge, wetland recharge, and water quality are also summarized in the following sections.

Groundwater Quantity

The project proposes infiltration of treated stormwater and roof runoff into on-site permeable alluvial sediments. Wetland and stream buffers will be enhanced and maintained under the current proposal. Stormwater from NPGS will be directed to unlined conveyances, through existing wetlands and streams, and ultimately discharge to the Cedar River. Flow control is designed in accordance with the KCSWDM. AESI performed infiltration testing and groundwater mounding analysis of the proposed infiltration design in accordance with the KCSWDM (AESI, 2018).

The project proposes to continue use of the existing on-site Group B water supply well to service the office. This well is located on the southwestern portion of the site (Figure 5) and located upgradient of the proposed stormwater facilities (Figure 2). Sewage from the office will be stored in an underground holding tank; no on-site septic system is proposed.

Infiltration of all pre-treated stormwater from impervious surfaces under the design storm event will maintain groundwater recharge to the site and downgradient water resources. Enhancement of wetland/stream buffers and routing NPGS stormwater through existing wetlands and streams will maintain and attenuate surface water flows. The minor loss of

recharge due to the groundwater well use and absence of an on-site septic system is offset by the stormwater conveyance and infiltration proposal. It is AESI's opinion that the current development proposal will not result in significant adverse impacts to groundwater quantity or surface water flows to on-site groundwater and surface water features as well as downgradient groundwater and surface water features including the Cedar River Alluvial Aquifer, deeper aquifers, water supply wells, or the Cedar River.

Groundwater Quality

Our groundwater quality assessment includes an evaluation of potential pollutants, fate and transport considerations, and mitigating measures included in the proposed improvement project.

Pollutants generated during construction include suspended solids and trace petroleum hydrocarbons. The foundation for the administrative building has not been determined at this time but will be at grade. Construction materials will not adversely impact the groundwater, in AESI's opinion.

Following construction, the primary source of pollutants include runoff from roadway/paved areas of the site. Pavement runoff includes trace petroleum hydrocarbons and trace metals.

General fate and transport for each of the pollutants identified above includes the following:

- Suspended solids generated during construction (including heavy metals in a particulate form) are generally removed by settling in a temporary detention facility consistent with the KCSWDM and best management erosion control practices. After construction, stormwater runoff will be treated to enhanced basic level as described above in accordance with the KCSWDM and includes a treatment train of biofiltration, pre-settling vault and sand filtration. Therefore, suspended solids generated during construction or in on-site stormwater will not be transported offsite or infiltrated into the subsurface.

- Heavy metals in the dissolved form will be treated to enhanced basic level by the proposed treatment train (or temporary detention pond during construction) in accordance with the KCSWDM. Therefore, heavy metals generated in on-site stormwater will not be transported offsite.

- Dilute concentrations of petroleum hydrocarbons (typical of roadway runoff) are readily degradable in the natural environment. The potential for petroleum hydrocarbons will be highest on the pavement surfaces of the parking areas and driveways. Water runoff from the pavements will be directed to the proposed treatment train for enhanced basic treatment in accordance with the KCSWDM.

In addition to the Group B water system located onsite, there is one domestic well within ¼ mile of the site boundary that is used to supply drinking water (Figure 5). This well is located upgradient of the proposed stormwater infiltration system. The water supply well information from DOH for this well is presented in Appendix B. This well should have been constructed according to Ecology well construction standards and as such include a well seal to prevent local surface contamination of the sources.

Deleterious substances and hazardous materials must be identified as required by the General Permit. The project proposes to use aboveground storage tanks to store liquid and gaseous fuel, liquid asphalts, and asphalt cement at the site. Two 30,000-gallon heated asphalt cement storage tanks, one 10,000-gallon diesel tank, and one 10,000-gallon emulsified asphalt tank will be located on a concrete slab within a concrete wall enclosure for secondary containment. One 30,000-gallon propane tank will supply fuel to the proposed drum mix aggregate dryer burner.

Aboveground storage tanks in critical aquifer recharge areas are addressed in KCC Chapter 21A.24.316: "*Critical aquifer recharge areas - development standards. The following development standards apply to development proposals and alterations on sites containing critical aquifer recharge areas: A. Except as otherwise provided in subsection H. of this section, the following new development proposals and alterations are not allowed on a site located in a category I critical aquifer recharge area…8. Above-ground storage tanks for hazardous substances, as defined in chapter 70.105 RCW, unless protected with primary and secondary containment areas and a spill protection plan.*"

The proposed aboveground storage tanks will be protected with primary and secondary containment areas in the form of concrete slab within a concrete wall enclosure. A spill prevention and response plan will be developed in accordance with the General Permit.

In AESI's opinion, if the improvement project follows the recommended BMPs provided in the KCSWDM and the General Permit including development of a SWPPP and a Spill Plan; provide primary and secondary containment areas and a spill protection plan for hazardous materials and aboveground storage tanks; then groundwater quality will not be adversely impacted by the improvement project.

<u>General Hazardous Material Storage and Spill Prevention</u>

- Ensure all hazardous substances are properly labeled.
- Store, dispense, and/or use hazardous substances in a way that prevents releases.
- Provide secondary containment when storing hazardous substances in bulk quantities (approximately 55 gallons).
- Maintain good housekeeping practices for all chemical materials at the facility.
- Routine/Daily checks in the hazardous substance storage area to be performed by a future person onsite to be named at the commencement of work.

- Monthly inspections of the hazardous substance storage area, secondary containment, and annular space (interior cavity of double wall tank) on any aboveground storage tanks need to be logged in this plan.
- In general, most substances stored onsite will be minimal in size, such as 5-gallon gasoline cans. Large volume spills are not anticipated involving the work on this site.

Spill Containment

A Spill Plan will be prepared for the site in accordance with the General Permit. The Spill Plan will include emergency response procedures to reduce the potential for operational or accidental release of pollutants to the surface water or shallow groundwater. Requirements and guidance for development of the Spill Plan are provided by Ecology.

- The general spill response procedure at this facility is to stop the source of the spill, contain any spilled material and clean up the spill in a timely manner to prevent accidental injury or other damage.
- Small spills will be contained by site personnel if they are able to do so without risking injury. Spill kits will be located onsite.

Emergency Procedures

- Immediately call **911** in the event of injury, fire or potential fire, or spill of a hazardous substance that gives rise to an emergency situation.
- Spill cleanup for large spills should be handled by the Spill Cleanup Contractor as specified in the Spill Plan.

Construction Erosion Hazard Best Management Practices

A properly developed, constructed, and maintained erosion control plan consistent with the KCSWDM standards and best management erosion control practices will be required for the project. Care must be taken during construction not to contaminate the stormwater facilities with untreated construction stormwater and silt.

It is in our opinion that with the proper implementation of the temporary erosion and sediment control (TESC) plans and by field-adjusting appropriate mitigation elements (BMPs) throughout construction, as recommended by the erosion control inspector, the potential adverse impacts from erosion hazards on the project may be mitigated.

Description and Management of Deleterious Substances and Hazardous Materials

Any deleterious substances and hazardous materials that will be stored, handled, treated, used, produced, recycled, or disposed of onsite should be identified. And, if necessary, the

assessment shall specify methods of storing and handling these substances and provide a Spill Plan. The identification of deleterious substances and hazardous materials, storage and handling and a Spill Plan is required as part of the Sand and Gravel General Permit.

ADDITIONAL COMMENT RESPONSE AND PAVEMENT DESIGN

Special Requirement #3: Flood Protection Facilities

Based upon review of Federal Emergency Management Agency (FEMA) flood maps dated May 16, 1995, provided by DEA, it appears that due north of the site the Cedar River Flood elevation ranges from 154 feet at the west end of the site to 164 feet on the east end. The low point of the site located near the northwest corner is approximately elevation 164 feet which roughly matches the road grade of Renton-Maple Valley SE. Based upon the elevations of the flood plain and the site, it appears that the natural grade of the site is above the flood plain and the site does not rely on the embankment on the south side of the Cedar River for flood protection.

Deceleration Lane Pavement Design

Based on information provided by DEA, AESI prepared a pavement design. The design is attached to this letter-report as Appendix C.

Stormtech SC-740 Chamber System

Specifications for the minimum thickness of stone foundations below the chambers and minimum cover depth and paving section over top of the chambers was requested. Truck and trailer traffic over the chambers is assumed in our recommendations.

AESI recommends a minimum thickness of 10 inches of stone foundation below the chambers, which is above the manufacturer recommendations of 9 inches. For cover depth over the top of the chambers, AESI recommends using the manufacturer's minimum. The upper cover over the crown of the chamber has a minimum depth of 24 inches with a minimum of 12 inches being pavement subgrade. For the structural pavement section, assuming truck and trailer traffic over the chambers, we recommend a minimum of 5 inches of Hot Mix Asphalt (HMA) over 6 inches of crushed surfacing base course (CSBC) and 2 inches of crushed surfacing top course (CSTC). A comparable with similar structural integrity would be suitable.

CLOSURE

AESI has prepared this letter-report for the exclusive use of our client and their agents, for specific application to this project. Within the limitations of scope and schedule, our services have been performed in accordance with generally accepted local geotechnical and

hydrogeological engineering practices in effect at the time our letter-report was prepared. No other warranty, express or implied, is made.

We appreciate the opportunity to be of service to you on this project. Should you have any questions regarding this letter-report or other geotechnical aspects of the site, please call at your earliest convenience.

Sincerely,
ASSOCIATED EARTH SCIENCES, INC.
Kirkland, Washington

Suzanne S. Cook, L.G.
Senior Project Geologist

MATTHEW A. MILLER
STATE OF WASHINGTON
REGISTERED
PROFESSIONAL ENGINEER
10-1-18

Matthew A. Miller, P.E.
Principal Engineer

State of Washington
Hydrogeologist
496
Licensed Geologist
10/1/18
Curtis J. Koger

Curtis J. Koger, L.G., L.E.G., L.Hg.
Senior Principal Geologist/Hydrogeologist

Attachments:

	Figure 1.	Vicinity Map and City of Renton Wellhead Protection Area
	Figure 2.	Site Plan
	Figure 3.	Geology Map
	Figure 4.	Steep Slope, Landslide and Erosion Hazard Areas
	Figure 5.	Wellhead Protection Area and Well Location Map
	Appendix A.	AESI Exploration logs, Farallon Environmental Monitoring Well Logs and Groundwater Contour Map
	Appendix B.	Water System Records and Ecology Well Logs
	Appendix C.	Deceleration Lane Pavement Design Memo

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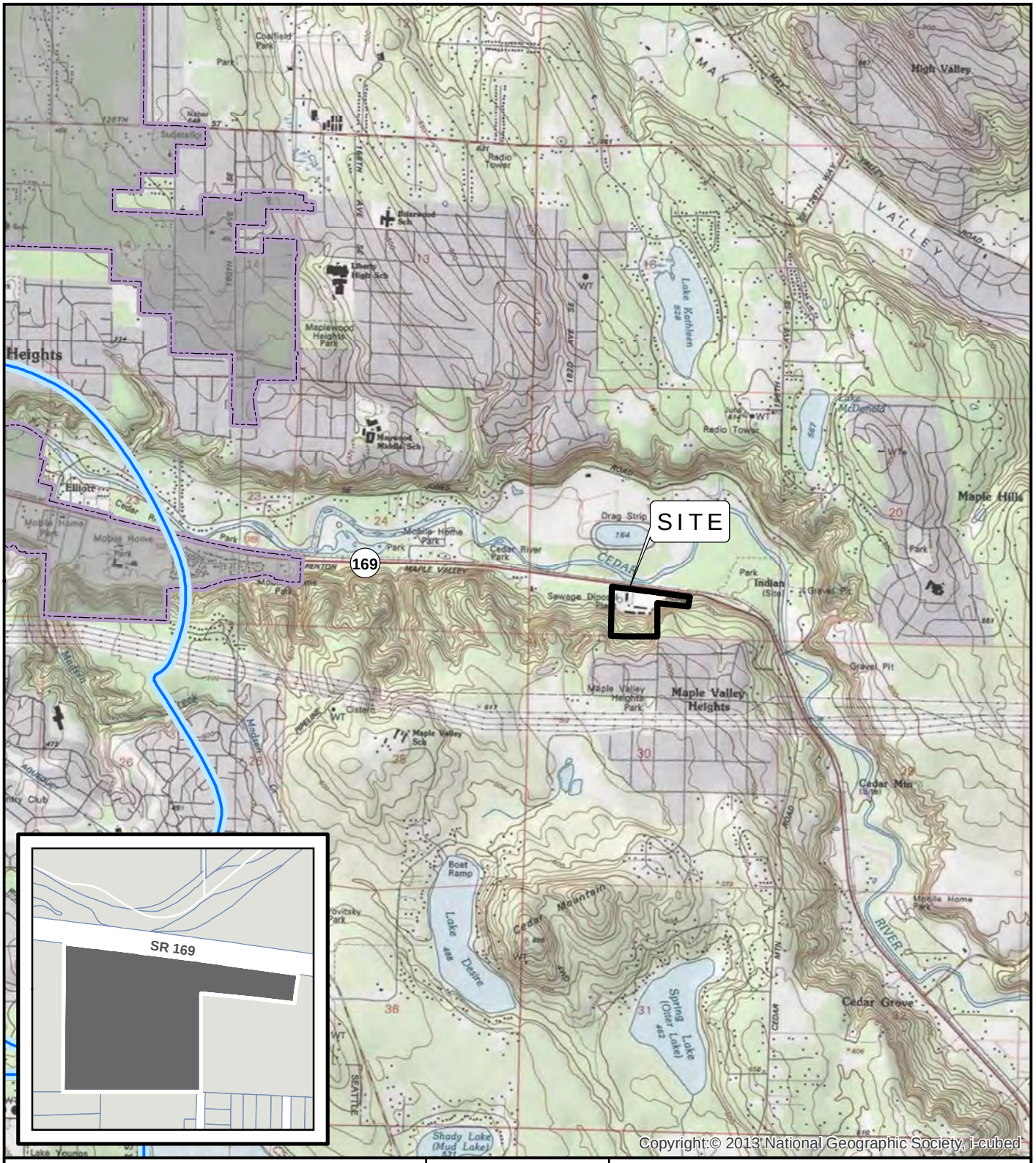

SITE

10 YR TIME OF TRAVEL

CITY BOUNDARY

N

0 1000 2000

FEET

DATA SOURCES / REFERENCES:
USGS: 24K SERIES TOPOGRAPHIC MAPS
KING CO: PARCELS 02/17, WA DEPT HEATH TOT 2018

LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE

NOTE: BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION

associated earth sciences incorporated

VICINITY MAP

MAPLE VALLEY ASPHALT PLANT
KING COUNTY, WASHINGTON

PROJ NO.	DATE:	FIGURE:
170017H001	9/18	1

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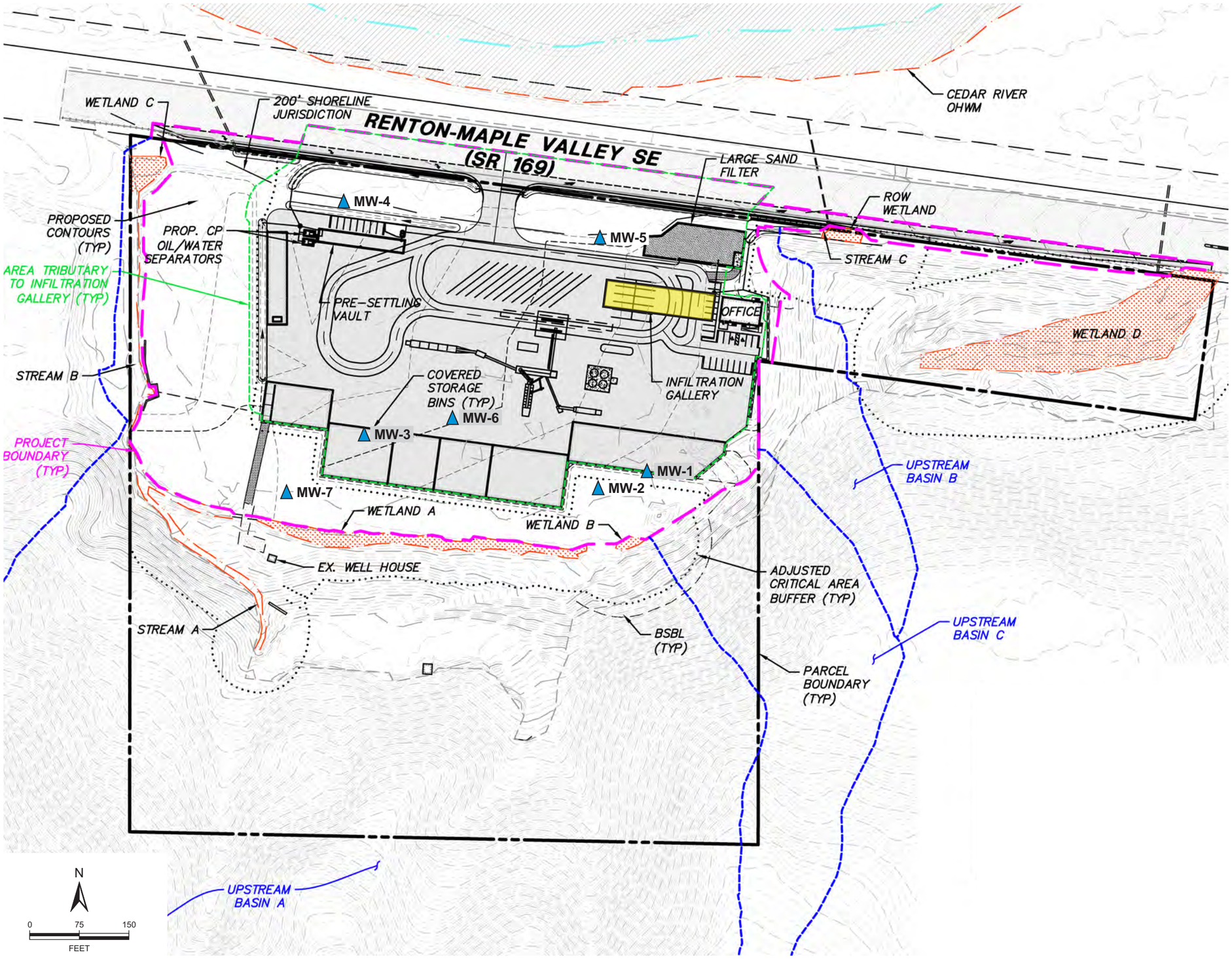

LEGEND:

MONITORING WELL - BY OTHERS FARALLON

PROPOSED INFILTRATION SYSTEM

CONTOUR INTERVAL = UNKNOWN

NOTE: LOCATION AND DISTANCES SHOWN ARE APPROXIMATE.

NOTES:
1. BASE MAP REFERENCE: TRIAD, LAKESIDE INDUSTRIES, INC., MAPLE VALLEY ASPHALT PLANT, DEVELOPED CONDITIONS EXHIBIT, SHEET 1, UNSTAMPED, UNDATED.

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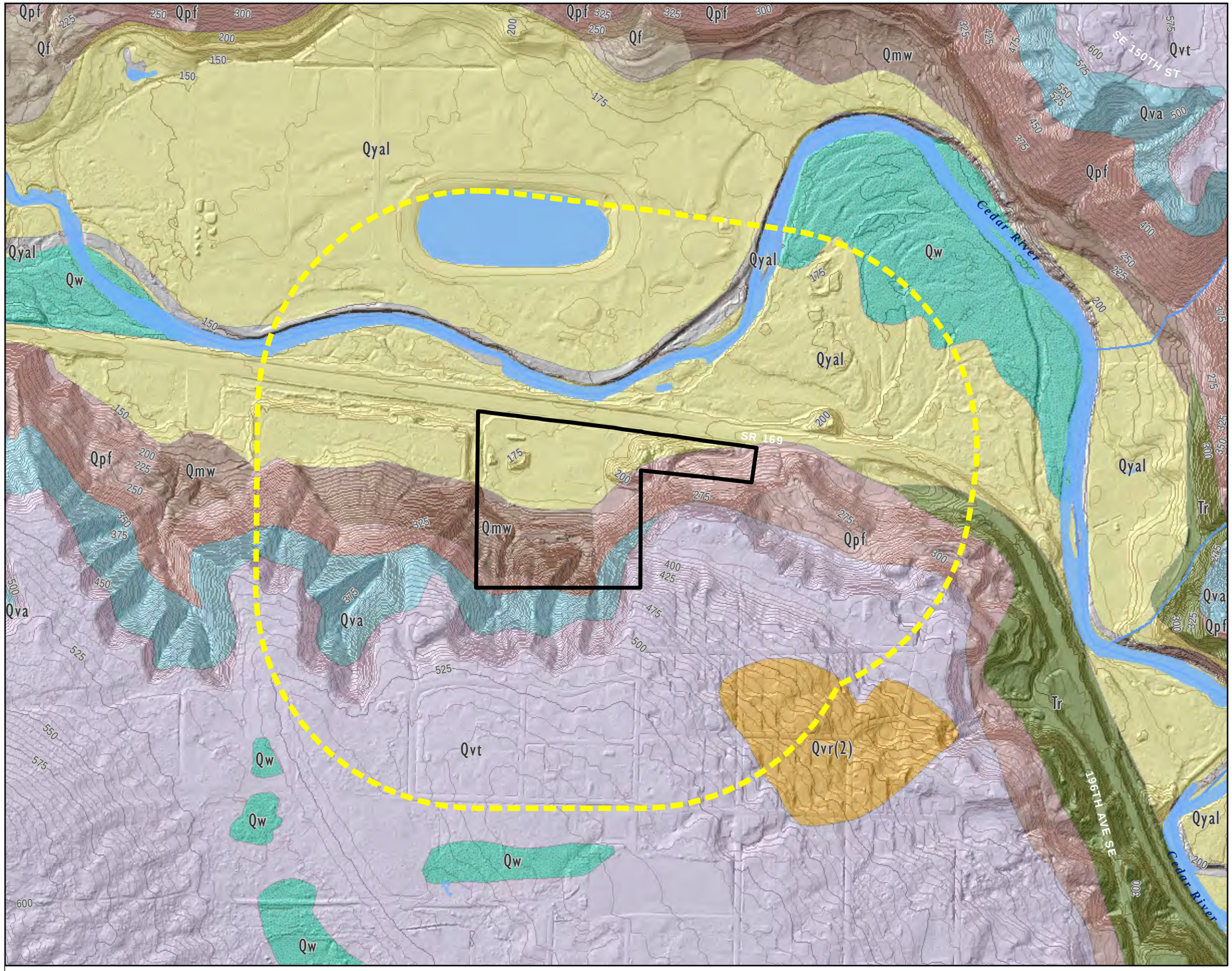
SITE PLAN

MAPLE VALLEY ASPHALT PLANT
KING COUNTY, WASHINGTON

PROJ NO.	DATE:	FIGURE:
170017H001	9/18	2

170017 Maple Valley Asphalt \ 170017h001 F2 Site-MW 9-18.cdr



LEGEND:

- SITE
- 1/4 MILE SITE BUFFER
- m - MODIFIED LAND
- Qw - WETLAND DEPOSITS
- Qmw - MASS-WASTAGE
- Qf - ALLUVIAL FAN
- Qyal - YOUNGER ALLUVIUM
- Qvr(2) - VASHON RECESSIONAL OUTWASH
- Qvt - VASHON TILL
- Qva - VASHON ADVANCE OUTWASH
- Qpf - PRE-FRASER SEDIMENTARY
- Tr - RENTON FORMATION
- CONTOUR 25 FT
- CONTOUR 5 FT

DATA SOURCES / REFERENCES:
PSLC 2016 KING CO. DELIVERY 3 FLOWN 3/2/16 - 3/29/16
GRID CELL SIZE IS 3'.
WA STATE PLANE NORTH (FIPS 4601), NAD83(HARN)
NAVD88 GEOID03 (GEOID03), US SURVEY FEET.
KING CO: PARCELS, STREETS, HYDRO 1/17
WADNR: GEOLOGY 24K 11/16 (USGS_MF-2297 BY D. BOOTH, 1995)

LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE

N

0 300 600
FEET

BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION

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GEOLOGY MAP

MAPLE VALLEY ASPHALT PLANT
KING COUNTY, WASHINGTON

PROJ NO.	DATE:	FIGURE:
170017H001	5/17	3

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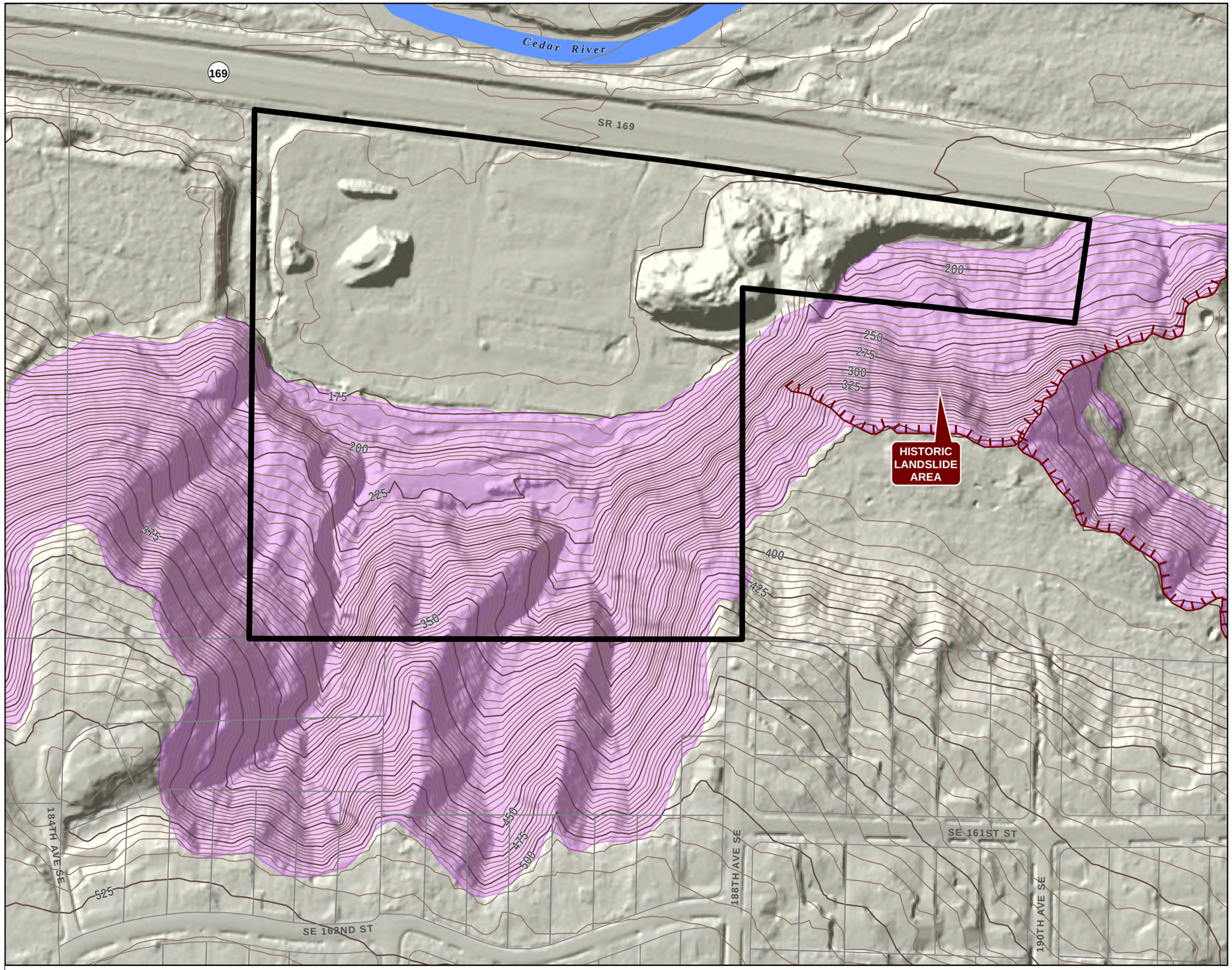

LEGEND:

- SITE
- LANDSLIDE SCARP (KING CO)
- STEEP SLOPE, LANDSLIDE, AND EROSION HAZARD AREAS
- CONTOUR 25 FT
- CONTOUR 5 FT

DATA SOURCES / REFERENCES:
PSLC: KING COUNTY 2016, GRID CELL SIZE IS 3'.
DELIVERY 3 FLOWN 3/2/16 - 3/29/16, CONTOURS FROM LIDAR
WA STATE PLANE NORTH (FIPS 4601), NAD83(HARN)
NAVD88 GEOID03 (GEOID03), US SURVEY FEET.
KING CO: STREETS, PARCELS 1/18, LANDSLIDE HAZARDS 9/17

LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE

N

0 100 200
FEET

BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION

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STEEP SLOPE, LANDSLIDE AND EROSION HAZARD AREAS

MAPLE VALLEY ASPHALT PLANT
KING COUNTY, WASHINGTON

PROJ NO.	DATE:	FIGURE:
170017H001	9/18	4

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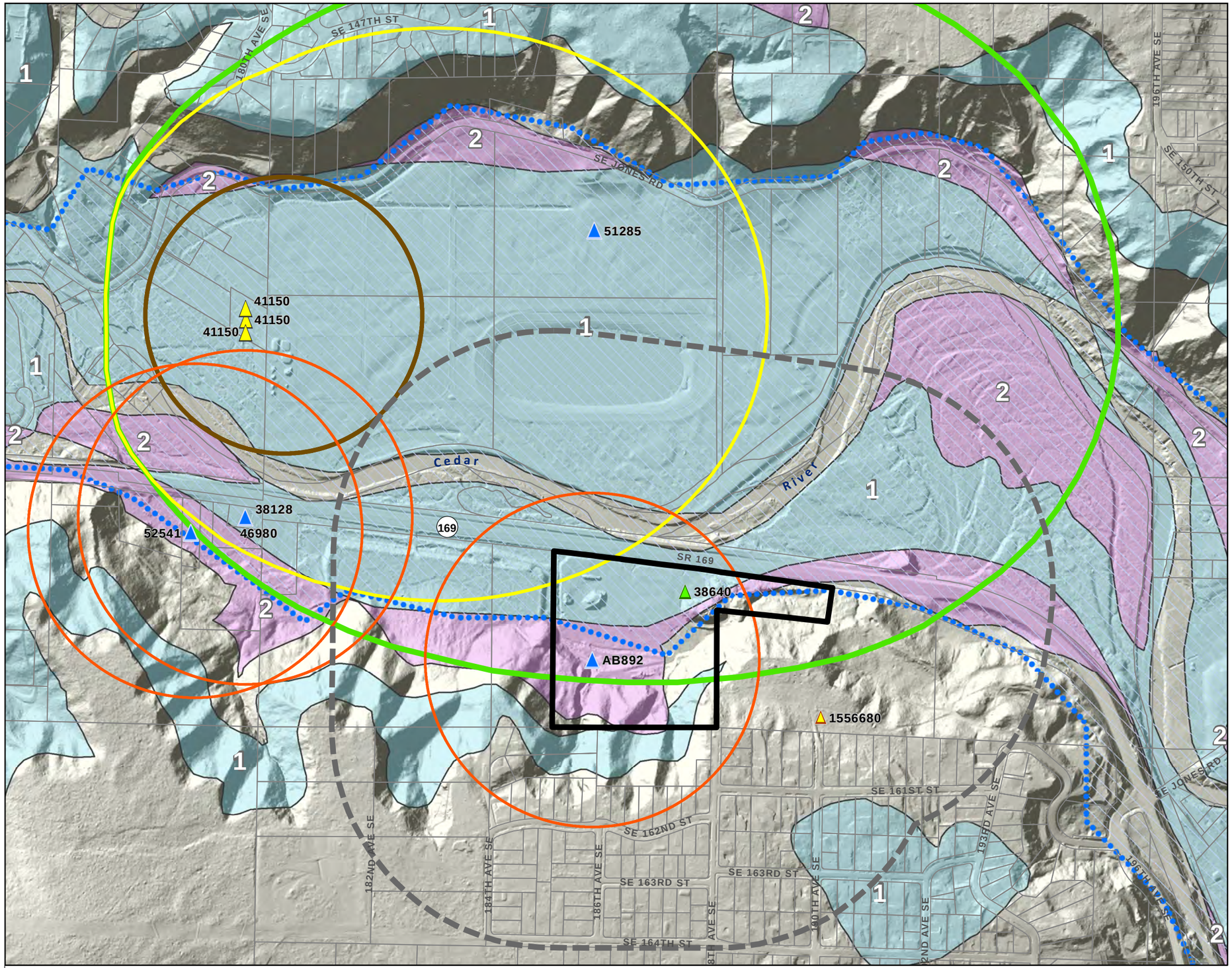

LEGEND:

- SITE
- PROPERTY BUFFER 1/ 4 MI
- GROUP A
- GROUP B
- DOMESTIC (SINGLE FAMILY)
- IRRIGATION
- ASSIGNED TIME OF TRAVEL (DOH)
- 1 YEAR (PGG, 2014)
- 5 YEAR (PGG, 2014)
- 10 YEAR (PGG, 2014)
- CEDAR VALLEY SOLE SOURCE AQUIFER (EPA)
- CARA CATEGORY 1 (KING CO)
- CARA CATEGORY 2 (KING CO)

NOTE: WELLS LABELED WITH PWSID FROM DEPT OF HEALTH OR WELL LOG ID FROM DEPT OF ECOLOGY

DATA SOURCES / REFERENCES:
PSLC: KING COUNTY 2016, GRID CELL SIZE IS 3'.
DELIVERY 3 FLOWN 3/2/16 - 3/29/16
WA STATE PLANE NORTH (FIPS 4601), NAD83(HARN)
NAVD88 GEOID03 (GEOID03), US SURVEY FEET.
KING CO: STREETS, PARCELS 1/18, GWSOURCE 1/17
CARA_AREA 9/17, AERIAL: KINGCO, PICTOMETRY INT. 2015
DOH: WELLS 2/18, DOE: WELLS 7/18
EPA: SOLE SOURCE AQUIFER 2014, RXSSA
KC#90 TIME OF TRAVEL FROM PGG REPORT: KING CO WATER DISTRICT #90, WELLHEAD PROTECTION PLAN, APPENDIX M, 8/14
LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE

N

0 300 600
FEET

BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION

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WELL LOCATIONS
WELLHEAD PROTECTION AREAS

MAPLE VALLEY ASPHALT PLANT
KING COUNTY, WASHINGTON

PROJ NO.	DATE:	FIGURE:
170017H001	9/18	5

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APPENDIX A

AESI Exploration Logs,
Farallon Environmental Monitoring Well Logs
and Groundwater Contour Map

Coarse-Grained Soils - More than 50% (1) Retained on No. 200 Sieve	Gravels - More than 50% (1) of Coarse Fraction Retained on No. 4 Sieve	≤5% Fines (5)	GW	Well-graded gravel and gravel with sand, little to no fines
			GP	Poorly-graded gravel and gravel with sand, little to no fines
		≥12% Fines (5)	GM	Silty gravel and silty gravel with sand
			GC	Clayey gravel and clayey gravel with sand
	Sands - 50% (1) or More of Coarse Fraction Passes No. 4 Sieve	≤5% Fines (5)	SW	Well-graded sand and sand with gravel, little to no fines
			SP	Poorly-graded sand and sand with gravel, little to no fines
		≥12% Fines (5)	SM	Silty sand and silty sand with gravel
			SC	Clayey sand and clayey sand with gravel
Fine-Grained Soils - 50% (1) or More Passes No. 200 Sieve	Silts and Clays Liquid Limit Less than 50		ML	Silt, sandy silt, gravelly silt, silt with sand or gravel
			CL	Clay of low to medium plasticity; silty, sandy, or gravelly clay, lean clay
			OL	Organic clay or silt of low plasticity
	Silts and Clays Liquid Limit 50 or More		MH	Elastic silt, clayey silt, silt with micaceous or diatomaceous fine sand or silt
			CH	Clay of high plasticity, sandy or gravelly clay, fat clay with sand or gravel
			OH	Organic clay or silt of medium to high plasticity
Highly Organic Soils			PT	Peat, muck and other highly organic soils

Terms Describing Relative Density and Consistency

Coarse-Grained Soils

Density	SPT(2) blows/foot
Very Loose	0 to 4
Loose	4 to 10
Medium Dense	10 to 30
Dense	30 to 50
Very Dense	>50

Fine-Grained Soils

Consistency	SPT(2) blows/foot
Very Soft	0 to 2
Soft	2 to 4
Medium Stiff	4 to 8
Stiff	8 to 15
Very Stiff	15 to 30
Hard	>30

Test Symbols

G = Grain Size
M = Moisture Content
A = Atterberg Limits
C = Chemical
DD = Dry Density
K = Permeability

Component Definitions

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

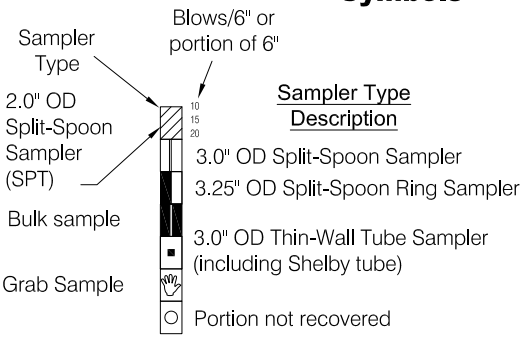
(3) Estimated Percentage

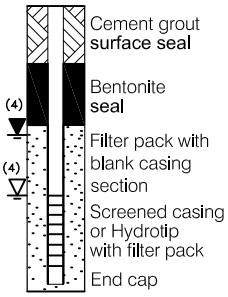
Component	Percentage by Weight
Trace	<5
Some	5 to <12
Modifier (silty, sandy, gravelly)	12 to <30
Very *modifier* (silty, sandy, gravelly)	30 to <50

Moisture Content

Dry - Absence of moisture, dusty, dry to the touch
Slightly Moist - Perceptible moisture
Moist - Damp but no visible water
Very Moist - Water visible but not free draining
Wet - Visible free water, usually from below water table

Symbols





(1) Percentage by dry weight
(2) (SPT) Standard Penetration Test (ASTM D-1586)
(3) In General Accordance with Standard Practice for Description and Identification of Soils (ASTM D-2488)
(4) Depth of ground water
▼ ATD = At time of drilling
▽ Static water level (date)
(5) Combined USCS symbols used for fines between 5% and 12%

Classifications of soils in this report are based on visual field and/or laboratory observations, which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field or laboratory testing unless presented herein. Visual-manual and/or laboratory classification methods of ASTM D-2487 and D-2488 were used as an identification guide for the Unified Soil Classification System.

LOG OF EXPLORATION PIT NO. EP-1

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Medium dense, moist to wet, dark brown, silty, fine to medium SAND; abundant organic material (SM).
2	
3	
4	
5	
6	
7	
8	
9	**Younger Alluvium**
10	Medium dense, moist, gray with trace iron oxidation, silty, gravelly, fine to medium SAND, trace coarse sand; stratified (SM).
11	Medium dense, wet, gray, fine to coarse GRAVEL, some fine to coarse sand, trace cobbles, trace silt; stratified (GW).
12	
13	Bottom of exploration pit at depth 12 feet Minor to moderate seepage 2 to 10 feet. Minor caving 0 to 9 feet, moderate to severe caving 9 to 12 feet. Water table at 10 feet.
14	
15	
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Maple Valley Asphalt
Renton, WA

Logged by: KB

Approved by: CJK

associated earth sciences incorporated

Project No. 170017H001

1/18/18

LOG OF EXPLORATION PIT NO. EP-2

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Medium dense, moist, brown, silty, fine to medium SAND, trace coarse sand, trace fine to coarse gravel, trace rootlets (SM).
2	
3	Charcoal brown fill material and concrete fragments.
4	
5	**Younger Alluvium**
6	Medium dense, moist to wet, gray, fine to coarse gravelly, medium to coarse SAND, trace fine sand, trace silt; stratified (SW).
7	
8	
9	
10	
11	
12	
13	
14	Bottom of exploration pit at depth 13 feet No seepage. Severe caving 4 to 13 feet. Water table at 12 feet.
15	
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17	
18	
19	
20	

Maple Valley Asphalt
Renton, WA

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Project No. 170017H001

1/18/18

LOG OF EXPLORATION PIT NO. EP-3

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Medium dense, moist, brownish gray to dark brown, silty, gravelly, fine to coarse SAND, trace wood chips; concrete fragments, rail fragment, fabric, small wire springs, and rebar (SM).
2	
3	
4	
5	Medium dense, moist to wet, gray, silty fine SAND to fine to medium SAND, trace coarse sand (SP-SM).
6	
7	Excavation appears to have encountered a weathered concrete box or culvert at the southwest corner of the pit at 6.5 feet. A vertical concrete wall crossed from the north to the south side of the pit, and water flowed freely in and out of an opening.
8	
9	Bottom of exploration pit at depth 8 feet No seepage. Minor caving 0 to 8 feet. Water table at 6.5 feet.
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Maple Valley Asphalt
Renton, WA

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Project No. 170017H001

1/18/18

LOG OF EXPLORATION PIT NO. EP-4

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Medium dense, moist, grayish brown, silty, gravelly fine to medium SAND, trace coarse sand, trace rootlets and wood chips (SM).
2	
3	Medium dense, moist, gray, silty, fine SAND to fine to medium SAND, trace coarse sand, trace fine to coarse gravel, trace cobbles, trace concrete fragments (SP-SM).
4	
5	Layer (6 inches thick) of charcoal brown fill material.
6	**Younger Alluvium**
7	Medium dense, moist to wet, gray, fine to coarse very gravelly, medium to coarse SAND, trace fine sand; stratified (SW).
8	
9	
10	
11	
12	Bottom of exploration pit at depth 11 feet Minor seepage 3 to 4 feet. Severe caving 6 to 11 feet. Water table at 9 feet.
13	
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16	
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Renton, WA

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Project No. 170017H001
1/18/18

LOG OF EXPLORATION PIT NO. EP-5

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Medium dense, moist, brownish gray to dark brown, silty, gravelly, fine to coarse SAND, trace cobbles, trace wood chips; plastic, rubber fragments (SM).
2	
3	
4	**Younger Alluvium**
5	Medium dense, moist, gray, medium to coarse sandy, fine to coarse GRAVEL, trace fine sand, trace cobbles; stratified (GW).
6	
7	
8	Bottom of exploration pit at depth 7.5 feet Minor to moderate seepage 1 to 7 feet. Severe caving 1 to 7.5 feet. Water table at 7 feet.
9	
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Maple Valley Asphalt
Renton, WA

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Project No. 170017H001

1/18/18

LOG OF EXPLORATION PIT NO. EP-6

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Medium dense, moist, brownish gray, silty, gravelly, fine to coarse SAND; charcoal brown fill material at the east end of the pit (SM).
2	
	Younger Alluvium
3	
4	Medium dense, moist, gray, fine to medium SAND, trace coarse sand; stratified (SP).
5	
6	Medium dense, moist to wet, medium to coarse sandy, fine to coarse GRAVEL, trace fine sand, trace cobbles; stratified (GW).
7	
8	
9	
10	Bottom of exploration pit at depth 9 feet No seepage. Moderate to severe caving 3 to 9 feet. Water table at 8 feet.
11	
12	
13	
14	
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19	
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Renton, WA

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Project No. 170017H001

1/18/18

LOG OF EXPLORATION PIT NO. EP-7

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Medium dense, moist, brownish gray, silty, gravelly, fine to coarse SAND (SM).
2	Medium dense, moist, light brown, silty, fine SAND, trace medium to coarse sand, trace fine to coarse gravel (SM).
3	
4	
	Younger Alluvium
5	Medium dense, moist, brownish gray, fine to medium SAND, trace coarse sand; stratified (SP).
6	
7	Medium dense, moist to wet, gray to reddish brown with iron oxidation, medium to coarse sandy, fine to coarse GRAVEL, trace cobbles; stratified (GW).
8	
9	
10	
11	Bottom of exploration pit at depth 10 feet No seepage. Moderate to severe caving 4.5 to 10 feet. Water table at 9 feet.
12	
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Maple Valley Asphalt
Renton, WA

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Project No. 170017H001

1/18/18

LOG OF EXPLORATION PIT NO. EP-8

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Medium dense, moist, dark brown to brownish gray, silty, gravelly, fine to coarse SAND (SM).
2	Charcoal brown fill material with wood fragments and gravel.
3	
4	
5	
6	
7	
8	**Younger Alluvium**
9	Medium dense, wet, brownish gray, medium to coarse sandy, fine to coarse GRAVEL, trace fine sand; stratified (GW).
10	
11	Bottom of exploration pit at depth 10 feet Moderate seepage 7 to 9. Moderate to severe caving 2 to 10 feet. Water table at 9 feet.
12	
13	
14	
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17	
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20	

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Project No. 170017H001

1/18/18

LOG OF EXPLORATION PIT NO. EP-9

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Medium dense, moist, light brown to brownish gray, silty, gravelly, fine to coarse SAND (SM).
2	
3	**Younger Alluvium**
4	Medium dense, moist to wet, brownish gray, fine to coarse sandy, fine to coarse GRAVEL, trace cobbles; stratified (GW).
5	
6	
7	
8	
9	
10	Bottom of exploration pit at depth 9 feet No seepage. Severe caving 0 to 9 feet. Water table at 8 feet.
11	
12	
13	
14	
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19	
20	

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Project No. 170017H001

1/18/18

LOG OF EXPLORATION PIT NO. EP-10

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Fill material consisting of gravel, cobbles, sticks and wood fragments, fabric, and other debris.
2	
3	Fill material consisting of light tan coarse sand, light brown silty sand, charcoal brown material with abundant root fragments, and organic odor - possible hydrocarbon.
4	
5	**Younger Alluvium**
6	Medium dense, moist, gray, fine to medium SAND; stratified interbeds of silty fine sand, organic odor - possible hydrocarbon (SP).
7	
8	Medium dense, moist to wet, gray, fine to medium sandy, fine to coarse GRAVEL, trace cobbles; stratified, organic odor - possible hydrocarbon (GW).
9	
10	
11	
12	
13	
14	Bottom of exploration pit at depth 13 feet Heavy seepage at 1 foot, moderate seepage 5 to 6 feet. Moderate caving 0 to 5 feet, severe caving 5 to 13 feet. Water table at 11 feet.
15	
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19	
20	

Maple Valley Asphalt
Renton, WA

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Project No. 170017H001

1/18/18

LOG OF EXPLORATION PIT NO. EP-11

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Medium dense, moist, dark brown, silty, gravelly, fine to coarse SAND; abundant roots and wood debris, trace plastic fragments, organic odor - possible hydrocarbon (SM).
2	
3	
4	
5	
6	
7	**Younger Alluvium**
8	Medium dense, moist, gray, fine to medium SAND, trace coarse sand, trace fine gravel; stratified, organic odor - possible hydrocarbon (SP).
9	
10	Medium dense, moist to wet, gray, fine to medium sandy, fine to coarse GRAVEL, trace cobbles; stratified, organic odor - possible hydrocarbon (GW).
11	
12	
13	
14	Bottom of exploration pit at depth 13.5 feet Heavy seepage at southeast corner of pit at 1 foot. No caving. Water table at 13.5 feet.
15	
16	
17	
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19	
20	

Maple Valley Asphalt
Renton, WA

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Project No. 170017H001

1/18/18

LOG OF EXPLORATION PIT NO. EP-12

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Loose, very moist to wet, dark brown, gravelly, silty, fine to coarse SAND; abundant wood and organics (SM).
	Younger Alluvium
2	Medium dense, moist to very moist, dark brownish gray, fine to coarse sandy to very sandy, fine to coarse GRAVEL, trace silt; scattered cobbles; stratified (GW).
3	
4	
5	
6	
7	
8	Medium dense, wet, dark brownish gray, medium to coarse sandy, GRAVEL, trace fine sand, trace silt; abundant cobbles; stratified; organic odor; fines content may be understated due to washing (GW).
9	
10	Medium dense, wet, dark gray, gravelly, fine to coarse SAND, trace silt; stratified; fines content may be understated due to washing (SW).
11	Bottom of exploration pit at depth 10 feet No seepage. Heavy caving 1 to 10 feet. Groundwater encountered at 8 feet.
12	
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Maple Valley Asphalt
Maple Valley, WA

Logged by: MJP

Approved by: CJK

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Project No. 170017H001

4/24/18

LOG OF EXPLORATION PIT NO. IT-1

Depth (ft)	This log is part of the report prepared by Associated Earth Sciences, Inc. (AESI) for the named project and should be read together with that report for complete interpretation. This summary applies only to the location of this trench at the time of excavation. Subsurface conditions may change at this location with the passage of time. The data presented are a simplfication of actual conditions encountered. **DESCRIPTION**
	Fill
1	Loose, very moist to wet, dark brown, gravelly, silty, fine to coarse, SAND; abundant wood and organics (SM).
	Younger Alluvium
2	Medium dense, moist to very moist, dark brownish gray, fine to coarse sandy, fine to coarse GRAVEL and gravelly, fine to medium SAND, some coarse sand, trace silt; scattered cobbles; stratified (GW).
3	
4	Medium dense, very moist, dark brownish gray, medium to coarse very sandy, fine to coarse GRAVEL, trace fine sand, trace silt; scattered cobbles; stratified (GW).
5	
6	
7	
8	Medium dense, wet, dark brownish gray, medium to coarse sandy, GRAVEL, trace fine sand, trace silt; abundant cobbles; organic odor; fines content may be understated due to washing (GW).
9	
10	
11	
12	Bottom of exploration pit at depth 11 feet No seepage. Heavy caving 1 to 11 feet. Groundwater encountered at 8 feet.
13	
14	
15	
16	
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Maple Valley Asphalt
Maple Valley, WA

Logged by: MJP
Approved by: CJK

associated earth sciences incorporated

Project No. 170017H001

4/24/18

Log of Boring: MW-1

Client: Lakeside Industries
Project: Goodnight Property
Location: Renton, Washington
Farallon PN: 525-022
Logged By: Ken Scott

Date/Time Started:	4/25/16 @ 0930	**Sampler Type:**	2.5' Poly-sacs
Date/Time Completed:	4/25/16 @ 1030	**Drive Hammer (lbs.):**	Autohammer
Equipment:	Terra Sonic	**Depth of Water ATD (ft bgs):**	~10.0'
Drilling Company:	Holt Drilling	**Total Boring Depth (ft bgs):**	20.0'
Drilling Foreman:	Pete Rosenberg	**Total Well Depth (ft bgs):**	20.0'
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-1.0': Silty SAND with gravel Fill (60% sand, 20% silt, 20% gravel), fine to medium sand, fine to coarse gravel, brown, moist, no odor, no sheen.	SM							Monument
			SM							Concrete
		1.0-7.5': Silty SAND Fill (70% sand, 25% silt, 5% gravel), fine to medium sand, fine to coarse gravel, brown, moist, no odor, no sheen.								Bentonite Seal
										Sand
5					100	NA	0.0	MW1-5.0 @ 940	X	
		7.5-12.2': Well-graded GRAVEL with sand (60% gravel, 35% sand, 5% silt), fine to coarse gravel, fine to coarse sand, brown, moist to wet @ ~10-feet bgs, no odor, no sheen. Subrounded gray gravel, some 3-inch subrounded gray cobbles.	GW							Stabilized water level
10					100	NA	0.0	MW1-10.0 @ 955	X	Water level
		12.2-19.0': Silty SAND (80% sand, 20% silt), fine to medium sand, brown, wet, no odor, no sheen. Loose consistency, orange colored ferric-banding.	SM							Casing
15					100	NA	0.1	MW1-15.0 @ 1005	X	Screen
		19.0-19.8': SILT with sand (80% silt, 15% sand, 5% gravel), fine to medium sand, fine to coarse gravel, tan, wet, no odor, no sheen. Rounded black gravel.	ML							
20			SP		100	NA	0.0	MW1-20.0 @ 1015		End cap
		19.8-20.0': Poorly graded SAND (90% sand, 5% silt, 5% gravel), fine to medium sand, fine to coarse gravel, tan, wet, no odor, no sheen. Rounded black gravel.								

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	10/20 sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1329373.32 E
Screened Interval (ft bgs):	5 to 20'	**Boring Abandonment:**	NA		**Y:** 170563.21 N

Log of Boring: MW-2

Client: Lakeside Industries
Project: Goodnight Property
Location: Renton, Washington
Farallon PN: 525-022
Logged By: Ken Scott

Date/Time Started:	4/25/16 @ 1135	**Sampler Type:**	2.5' Poly-sacs
Date/Time Completed:	4/25/16 @ 1245	**Drive Hammer (lbs.):**	Autohammer
Equipment:	Terra Sonic	**Depth of Water ATD (ft bgs):**	~9.5'
Drilling Company:	Holt Drilling	**Total Boring Depth (ft bgs):**	20.0'
Drilling Foreman:	Pete Rosenberg	**Total Well Depth (ft bgs):**	20.0'
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-1.5': Sandy SILT with gravel Fill (55% silt, 30% sand, 15% gravel), fine sand, fine to coarse gravel, brown, moist, no odor, no sheen.	ML							Monument; Concrete
		1.5-2.5': Silty SAND Fill (70% sand, 25% silt, 5% gravel), fine to medium sand, fine to coarse gravel, brown, moist, no odor, no sheen.	SM							Bentonite Seal
		2.5-13.0': Well-graded GRAVEL with sand (55% gravel, 40% sand, 5% silt), fine to coarse gravel, fine to coarse sand, brown, moist to wet @ ~9.5-feet bgs, no odor, no sheen. Subrounded gray gravel, some 3 to 4-inch subrounded gray cobbles.	GW							Sand
5					100	NA	0.1	MW2-5.0 @ 1145	X	Stabilized water level
10					100	NA	0.1	MW2-10.0 @ 1200	X	Water level
		13.0-14.2': Silty SAND (80% sand, 15% silt, 5% gravel), fine to medium sand, fine to coarse gravel, tan, wet, no odor, no sheen.	SM							Casing
15		14.2-17.5': Silty SAND (80% sand, 20% silt), fine sand, dark gray, wet, no odor, no sheen.	SM		100	NA	0.0	MW2-15.0 @ 1215	X	Screen
		17.5-20.0': Silty SAND (85% sand, 15% silt), fine sand, dark gray, wet, no odor, no sheen.	SM							
20					100	NA	0.1	MW2-20.0 @ 1230		End cap

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	10/20 sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1329301.96 E
Screened Interval (ft bgs):	5 to 20'	**Boring Abandonment:**	NA		**Y:** 170535.83 N

Log of Boring: MW-3

Client: Lakeside Industries
Project: Goodnight Property
Location: Renton, Washington
Farallon PN: 525-022
Logged By: Ken Scott

Date/Time Started:	4/25/16 @ 1340	**Sampler Type:**	2.5' Poly-sacs
Date/Time Completed:	4/25/16 @ 1445	**Drive Hammer (lbs.):**	Autohammer
Equipment:	Terra Sonic	**Depth of Water ATD (ft bgs):**	~10.5'
Drilling Company:	Holt Drilling	**Total Boring Depth (ft bgs):**	20.0'
Drilling Foreman:	Pete Rosenberg	**Total Well Depth (ft bgs):**	20.0'
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-2.5': Silty SAND with gravel Fill (60% sand, 20% silt, 20% gravel), fine to medium sand, fine to coarse gravel, brown, moist, no odor, no sheen.	SM							Monument; Concrete; Bentonite Seal
		2.5-10.5': Well-graded GRAVEL with sand (60% gravel, 35% sand, 5% silt), fine to coarse gravel, fine to coarse sand, brown, moist, slight petroleum-like odor, no sheen. Subrounded green, gray, and black gravel, rounded 3 to 5-inch green, and gray cobbles.	GW							Sand
5					100	NA	0.1	MW3-5.0 @ 1350	X	Stabilized water level
10					100	NA	0.1	MW3-10.0 @ 1400	X	Water level
		10.5-20.0': Silty SAND (80% sand, 15% silt, 5% gravel), fine to medium sand, fine to coarse gravel, dark gray, wet, no odor, no sheen. Mostly fine sand (~90%), subrounded 3 to 5-inch gray cobbles between 18 to 20-feet bgs.	SM							Casing
15					100	NA	0.0	MW3-15.0 @ 1415	X	Screen
20					100	NA	0.1	MW3-20.0 @ 1430		End cap

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	10/20 sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1328945.56 E
Screened Interval (ft bgs):	5 to 20'	**Boring Abandonment:**	NA		**Y:** 170614.99 N

Log of Boring: MW-4

Client: Lakeside Industries
Project: Goodnight Property
Location: Renton, Washington
Farallon PN: 525-022
Logged By: Ken Scott

Date/Time Started:	4/25/16 @ 1515	**Sampler Type:**	2.5' Poly-sacs
Date/Time Completed:	4/25/16 @ 1615	**Drive Hammer (lbs.):**	Autohammer
Equipment:	Terra Sonic	**Depth of Water ATD (ft bgs):**	~9.5'
Drilling Company:	Holt Drilling	**Total Boring Depth (ft bgs):**	20.0'
Drilling Foreman:	Pete Rosenberg	**Total Well Depth (ft bgs):**	20.0'
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-2.5': Silty SAND with gravel Fill (60% sand, 25% silt, 15% gravel), fine to medium sand, fine to coarse gravel, brown, moist, no odor, no sheen.	SM							Monument; Concrete; Bentonite Seal
		2.5-4.1': Sandy SILT with gravel (50% silt, 35% sand, 15% gravel), fine to medium sand, fine to coarse gravel, dark brown, moist, no odor, no sheen.	ML							Sand
		4.1-4.6': SILT (100% silt), dark gray, moist, no odor, no sheen.	ML							
5		4.6-9.5': Well-graded GRAVEL with sand (55% gravel, 40% sand, 5% silt), fine to coarse gravel, fine to coarse sand, brown, moist, no odor, no sheen. Subrounded gray gravel, and 3 to 4-inch subrounded gray cobbles.	GW		100	NA	0.0	MW4-5.0 @ 1525	X	Stabilized water level
10		9.5-13.5': Silty SAND with gravel (50% sand, 20% silt, 30% gravel), fine to coarse sand, fine to coarse gravel, brown, wet, no odor, no sheen.	SM		100	NA	0.0	MW4-10.0 @ 1535	X	Water level; Casing
15		13.5-17.5': Well-graded GRAVEL with sand (60% gravel, 35% sand, 5% silt), coarse gravel, fine to coarse sand, brown, wet, no odor, no sheen. Subrounded gray gravel, and 3 to 4-inch subrounded gray cobbles between 15 and 17-feet bgs.	GW		100	NA	0.1	MW4-15.0 @ 1545		Screen
		17.5-20.0': Silty SAND (80% sand, 20% silt), fine sand, dark gray, wet, no odor, no sheen.	SM							
20					100	NA	0.0	MW4-20.0 @ 1600		End cap

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	10/20 sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1328916.58 E
Screened Interval (ft bgs):	5 to 20'	**Boring Abandonment:**	NA		**Y:** 170968.26 N

Log of Boring: MW-5

Client: Lakeside Industries
Project: Goodnight Property
Location: Renton, Washington
Farallon PN: 525-022
Logged By: Ken Scott

Date/Time Started:	4/26/16 @ 830	**Sampler Type:**	2.5' Poly-sacs
Date/Time Completed:	4/26/16 @ 930	**Drive Hammer (lbs.):**	Autohammer
Equipment:	Terra Sonic	**Depth of Water ATD (ft bgs):**	~9.0'
Drilling Company:	Holt Drilling	**Total Boring Depth (ft bgs):**	20.0'
Drilling Foreman:	Pete Rosenberg	**Total Well Depth (ft bgs):**	20.0'
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-3.6': Silty SAND with gravel Fill (60% sand, 25% silt, 15% gravel), fine to medium sand, fine to coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	SM							Monument; Concrete; Bentonite Seal
		3.6-11.5': Well-graded GRAVEL with sand (55% gravel, 40% sand, 5% silt), fine to coarse gravel, fine to coarse sand, brown, moist to wet @ ~9.0-feet bgs, no odor, no sheen. Subrounded gray gravel.	GW							Sand
5					100	NA	0.2	MW5-5.0 @ 840	X	Stabilized water level; Water level
10					100	NA	0.2	MW5-10.0 @ 850	X	
		11.5-14.5': Well-graded GRAVEL (90% gravel, 5% sand, 5% silt), fine to coarse gravel, fine to coarse sand, tan, wet, no odor, no sheen. Subrounded gray gravel, and 3 to 5-inch subrounded gray cobbles.	GW							Casing
15		14.5-15.5': Well-graded GRAVEL with sand (60% gravel, 35% sand, 5% silt), fine to coarse gravel, fine to coarse sand, brown, wet, no odor, no sheen. Subrounded gray gravel, and subrounded 3 to 4-inch gray cobbles.	GW		100	NA	0.2	MW5-15.0 @ 905		Screen
		15.5-20.0': Silty SAND (75% sand, 25% silt), fine to medium sand, brown, wet, no odor, no sheen. Loose consistency.	SM							
20					100	NA	0.1	MW5-20.0 @ 920		End cap

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	10/20 sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1329303.03 E
Screened Interval (ft bgs):	5 to 20'	**Boring Abandonment:**	NA		**Y:** 170916.06 N

Log of Boring: MW-6

Client: Lakeside Industries
Project: Goodnight Property
Location: Renton, Washington
Farallon PN: 525-022
Logged By: Ken Scott

Date/Time Started:	4/26/16 @ 950	**Sampler Type:**	2.5' Poly-sacs
Date/Time Completed:	4/26/16 @ 1050	**Drive Hammer (lbs.):**	Autohammer
Equipment:	Terra Sonic	**Depth of Water ATD (ft bgs):**	~10.0'
Drilling Company:	Holt Drilling	**Total Boring Depth (ft bgs):**	20.0'
Drilling Foreman:	Pete Rosenberg	**Total Well Depth (ft bgs):**	20.0'
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-1.6': Silty SAND with gravel Fill (60% sand, 20% silt, 20% gravel), fine to medium sand, fine to coarse gravel, brown, moist, no odor, no sheen. Subrounded gray gravel.	SM							Monument; Concrete
		1.6-2.4': Sandy SILT (60% silt, 35% sand, 5% gravel), fine to medium sand, fine gravel, brown, moist, no odor, no sheen.	ML							Bentonite Seal
		2.4-8.5': Silty SAND (70% sand, 25% silt, 5% gravel), fine to medium sand, fine to coarse gravel, reddish brown, moist, no odor, no sheen.	SM							Sand
5					100	NA	0.1	MW6-5.0 @ 1000	X	
		8.5-10.5': Well-graded SAND (90% sand, 5% silt, 5% gravel), fine to coarse sand, fine to coarse gravel, reddish brown, moist to wet @ ~10-feet bgs, no odor, no sheen. Subrounded gray gravel.	SW							
10					100	NA	0.1	MW6-10.0 @ 1015	X	Water level
		10.5-20.0': Well-graded GRAVEL with sand (80% gravel, 15% sand, 5% silt), fine to coarse gravel, fine to coarse sand, greenish gray, wet, no odor, no sheen. Subrounded green, gray gravel, and subrounded 3 to 4-inch green, and gray cobbles.	GW							Casing
15					100	NA	0.0	MW6-15.0 @ 1025		Screen
20					100	NA	0.1	MW6-20.0 @ 1035		End cap

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	10/20 sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1329078.79 E
Screened Interval (ft bgs):	5 to 20'	**Boring Abandonment:**	NA		**Y:** 170643.93 N

Log of Boring: MW-7

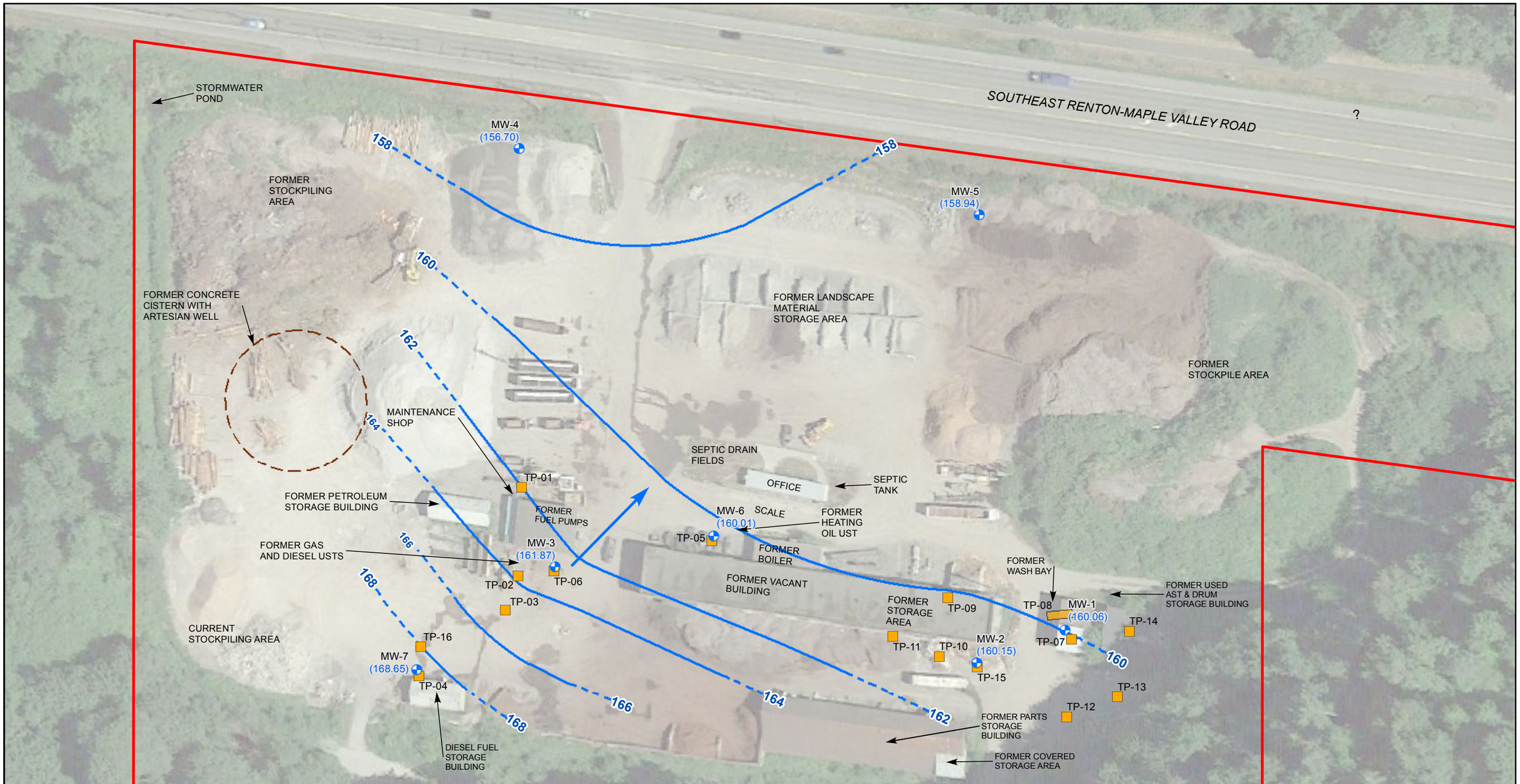
Client: Lakeside Industries
Project: Goodnight Property
Location: Renton, Washington
Farallon PN: 525-022
Logged By: Ken Scott

Date/Time Started:	4/26/16 @ 1135	**Sampler Type:**	2.5' Poly-sacs
Date/Time Completed:	4/26/16 @ 1315	**Drive Hammer (lbs.):**	Autohammer
Equipment:	Terra Sonic	**Depth of Water ATD (ft bgs):**	~2.0'
Drilling Company:	Holt Drilling	**Total Boring Depth (ft bgs):**	20.0'
Drilling Foreman:	Pete Rosenberg	**Total Well Depth (ft bgs):**	18.5'
Drilling Method:	Sonic		

Depth (feet bgs.)	Sample Interval	Lithologic Description	USCS	USGS Graphic	% Recovery	Blow Counts 8/8/8	PID (ppm)	Sample ID	Sample Analyzed	Boring/Well Construction Details
0		0.0-1.5': Silty SAND with gravel Fill (60% sand, 20% silt, 20% gravel), fine to medium sand, fine to coarse gravel, brown, moist, no odor, no sheen. Subrounded to subangular gray gravel.	SM							Monument
		1.5-6.5': Well-graded SAND Fill (85% sand, 10% silt, 5% gravel), fine to coarse sand, fine to coarse gravel, brown, moist to wet @ ~2-feet bgs, no odor, no sheen.	SW							Concrete Bentonite Water Level Sand
5					100	NA	0.0	MW7-5.0 @ 1145	X	
		6.5-12.5': Well-graded GRAVEL with sand (80% gravel, 15% sand, 5% silt), fine to coarse gravel, fine to coarse sand, reddish brown, wet, no odor, no sheen. Subrounded tan, green, gray gravel, and subrounded 3 to 4-inch tan, green, and gray cobbles. Observed red brick debris~7-feet bgs.	GW							
10					100	NA	0.0	MW7-10.0 @ 1155	X	
		12.5-14.6': Well-graded GRAVEL with sand (65% gravel, 30% sand, 5% silt), fine to coarse gravel, fine to coarse sand, reddish brown, wet, no odor, no sheen. Subrounded black, green, gray gravel, and subrounded 3 to 5-inch black, green, and gray cobbles.	GW							Casing
15		14.6-20.0': Silty SAND (80% sand, 15% silt, 5% gravel), fine to medium sand, fine gravel, dark gray, wet, no odor, no sheen.	SM		100	NA	0.0	MW7-15.0 @ 1205		Screen
20					100	NA	0.1	MW7-20.0 @ 1215		End cap

Well Construction Information

Monument Type:	Flush Mount	**Filter Pack:**	10/20 sand	**Ground Surface Elevation (ft):**	NA
Casing Diameter (inches):	2	**Surface Seal:**	Cement	**Top of Casing Elevation (ft):**	NA
Screen Slot Size (inches):	0.010	**Annular Seal:**	Bentonite	**Surveyed Location:**	**X:** 1328829.46 E
Screened Interval (ft bgs):	2.5 to 18.5'	**Boring Abandonment:**	NA		**Y:** 170532.13 N



LEGEND

MW-7	MONITORING WELL
TP-01	TEST PIT LOCATION
	SITE BOUNDARY
168	GROUNDWATER SURFACE ELEVATION CONTOUR (DASHED WHERE INFERRED)
	APPROXIMATE DIRECTION OF GROUNDWATER FLOW
(160.01)	GROUNDWATER LEVEL ELEVATION

NOTES:
ALL GROUNDWATER ANALYTICAL RESULTS IN MICROGRAMS PER LITER

AST = ABOVEGROUND STORAGE TANK
UST = UNDERGROUND STORAGE TANK
BOLD = ANALYTICAL RESULT REPORTED ABOVE THE CLEANUP LEVEL
< = DENOTES RESULT IS LESS THAN LABORATORY PRACTICAL QUANTITATION OR ANALYTE NOT DETECTED AT OR ABOVE THE REPORTING LIMIT

THE SITE SLOPES NORTH
ALL LOCATIONS ARE APPROXIMATE

N

0 80
SCALE IN FEET

KING COUNTY PARCEL: 1923069026
SOURCE AERIAL: GOOGLE EARTH IMAGERY (JULY 2014)

FARALLON CONSULTING
Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle
Oregon
Portland | Bend | Baker City
California
Oakland | Sacramento | Irvine

FIGURE 3

GROUNDWATER CONTOURS
LAKESIDE INDUSTRIES
18825 SOUTHEAST RENTON-MAPLE VALLEY ROAD
RENTON, WASHINGTON

FARALLON PN: 525-022

Drawn By: tperrin | Checked By: HC | Date: 6/22/2016 | Disc Reference:
Document Path: G:\Projects\525 Lakeside Ind\525022 18825 Southeast Renton-Maple Valley Road\GIS\Figure 3_GW_CNT_NoUtil.mxd

APPENDIX B

Water System Records and Ecology Well Logs

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

Individual System View - king county water district no 90 - Water System Id - 41150

Compliance Actions | Operating Permits | Operators | Reports | Water Use Efficiency

General Information | Source Information | Samples | Exceedances | Water Quality Monitoring Schedule

Group	A	Status	Active	Ownership Type	Special District
Type	Community	Residential Population	19,100	Jurisdiction	WA DOH ODW
County	KING	NonResidential Population	500	System Effective Date	1/1/1970
Owner Name	KING COUNTY WATER DISTRICT NO 90	Total Calculated Connections	7,814	System Inactive Date	
Primary Contact	Darcey Peterson	Total Approved Connections	Unspecified	SMA Name	
Primary Contact Phone	(425) 255-9600	Distribution Capacity (gallons)	7,446,000	SMA Number	
Water System Mailing Address					

Links to external resources are provided as a public service and do not imply endorsement by the Washington State Department of Health

Department of Health, Office of Drinking Water

Street Address:
243 Israel Road S.E. 2nd floor
Tumwater, WA 98501

Mail:
PO BOX 47822
Olympia, WA 98504-7822

Phone: (360) 236-4357
Toll Free: (800) 521-0323

Send inquiries about DOH and its programs to the Health Consumer Assistance Office
Comments or questions regarding this Web site? Send email to Environmental Health Application Support or call 888-457-2467.

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

Individual System View - king county water district no 90 - Water System Id - 41150

Compliance Actions | Operating Permits | Operators | Reports | Water Use Efficiency

General Information | Source Information | Samples | Exceedances | Water Quality Monitoring Schedule

Source 01 - 77050Y/Seattle

Source Status	Active	Usage	Permanent	WRIA	Cedar-Sammamish	Intertie Supplying System	SEATTLE PUBLIC UTILITIES
Type	Intertie	Capacity (gpm)	2,800	Township	00	Intertie Supplying Number	77050
Effective Date	1/1/1970	Treated	No	Range	00E		
Inactive Date		Metered	Undefined	Section			
DOE Well Tag Number		Well Depth (ft)		Qtr/Qtr Section			

Source 03 - Well 2 APP301

Source Status	Active	Usage	Permanent	WRIA	Cedar-Sammamish	Intertie Supplying System	NA
Type	Groundwater Well	Capacity (gpm)	250	Township	23	Intertie Supplying Number	NA
Effective Date	4/30/2008	Treated	Yes	Range	05E		
Inactive Date		Metered	Yes	Section	24		
DOE Well Tag Number	APP301	Well Depth (ft)	220	Qtr/Qtr Section	NESE		

Source 02 - Wojewodski Well 1

Source Status	Active	Usage	Permanent	WRIA	Cedar-Sammamish	Intertie Supplying System	NA
Type	Groundwater Well	Capacity (gpm)	250	Township	23	Intertie Supplying Number	NA
Effective Date	1/7/2003	Treated	Yes	Range	05E		
Inactive Date		Metered	Yes	Section	24		
DOE Well Tag Number		Well Depth (ft)	199	Qtr/Qtr Section	NESE		

Records 1 - 3 of 5

Display as table with source treatment information

Home Page | Find Water Systems | Find Water Quality | Downloads/Reports

DOH Home | Community and Environment| Drinking Water Home | Drinking Water Contacts
Access Local Health | Privacy Notice | Disclaimer/Copyright Information

Links to external resources are provided as a public service and do not imply endorsement by the Washington State Department of Health

Department of Health, Office of Drinking Water

Street Address:
243 Israel Road S.E. 2nd floor
Tumwater, WA 98501

Mail:
PO BOX 47822
Olympia, WA 98504-7822

Phone: (360) 236-4357
Toll Free: (800) 521-0323

Send inquiries about DOH and its programs to the Health Consumer Assistance Office
Comments or questions regarding this Web site? Send email to Environmental Health Application Support or call 888-457-2467.

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 1
Updated: 12/13/2016
Printed: 5/8/2017
WFI Printed For: On-Demand
Submission Reason: Contact Update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
41150 L	KING COUNTY WATER DISTRICT NO 90	KING	A	Comm

6. PRIMARY CONTACT NAME & MAILING ADDRESS	7. OWNER NAME & MAILING ADDRESS	8. OWNER NUMBER: 003012
DARCEY J. PETERSON [GENERAL MANAGER] 15606 SE 128TH ST RENTON, WA 98059	KING COUNTY WATER DIST. NO 90 JOSHUA A. DERAITUS OPERATIONS MGR 15606 SE 128TH ST RENTON, WA 98059	
STREET ADDRESS IF DIFFERENT FROM ABOVE	**STREET ADDRESS IF DIFFERENT FROM ABOVE**	
ATTN ADDRESS CITY STATE ZIP	ATTN ADDRESS CITY STATE ZIP	

9. 24 HOUR PRIMARY CONTACT INFORMATION		10. OWNER CONTACT INFORMATION	
Primary Contact Daytime Phone:	(425) 255-9600	Owner Daytime Phone:	(425) 255-9600
Primary Contact Mobile/Cell Phone:	(425) 444-7731	Owner Mobile/Cell Phone:	(425) 766-7918
Primary Contact Evening Phone:	(xxx)-xxx-xxxx	Owner Evening Phone:	(xxx)-xxx-xxxx
Fax: (425) 277-4128	E-mail: xxxxxxxxxxxxxxxxxxxx	Fax: (425) 277-4128	E-mail: xxxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [x] Commercial / Business
- [x] Day Care
- [x] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [x] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [x] Residential
- [x] School
- [ ] Temporary Farm Worker
- [x] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [ ] Investor
- [ ] Private
- [x] Special District
- [ ] State

14. STORAGE CAPACITY (gallons): 7,446,000

15	16	17	18										19			20	21						22	23	24			
	SOURCE NAME	INTERTIE	SOURCE CATEGORY										USE				TREATMENT						DEPTH		SOURCE LOCATION			
Source Number	LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	77050Y/Seattle	77050 Y											X				X							2800			00N	00E
S02	Wojewodski Well 1				X								X			Y		X	X	X			124	250	NE SE	24	23N	05E
S03	Well 2 APP301				X								X			Y		X	X	X			50	250	NE SE	24	23N	05E
S04	Well 1,2,3 Wellfield			X									X			Y		X	X	X			42	450	NE SE	24	23N	05E
S05	Well 3 BCS873				X								X			Y		X	X	X			42	250	SE NE	24	23N	05E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
41150 L	KING COUNTY WATER DISTRICT NO 90	KING	A	Comm

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		7641	Unspecified
A. Full Time Single Family Residences (Occupied 180 days or more per year)	7641		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	173	173	
28. TOTAL SERVICE CONNECTIONS		7814	

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 19100

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?	500	500	500	500	500	500	500	500	500	500	500	500
B. How many days per month are they present?	20	20	20	20	20	20	20	20	20	20	20	20

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290	20	20	20	20	20	20	20	20	20	20	20	20

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

WS ID	WS Name
41150	KING COUNTY WATER DISTRICT NO 90

Total WFI Printed: 1

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

23-SE-24J

WATER WELL REPORT

Original & 1st copy - Ecology, 2nd copy - owner, 3rd copy - driller

Construction/Decommission ("x" in circle) 298782

☒ Construction

☐ Decommission *ORIGINAL INSTALLATION*

Notice of Intent Number

PROPOSED USE: ☐ Domestic ☐ Industrial ☒ Municipal ☐ DeWater ☐ Irrigation ☐ Test Well ☐ Other ____

TYPE OF WORK: Owner's number of well (if more than one) ____

☒ New well ☐ Reconditioned *Method:* ☐ Dug ☐ Bored ☐ Driven ☐ Deepened ☒ Cable ☐ Rotary ☐ Jetted

DIMENSIONS: Diameter of well 16 inches, drilled 220 ft. Depth of completed well 190 ft

CONSTRUCTION DETAILS

Casing installed: ☒ Welded 16" Diam. from +1 ft. to 50 ft. ☐ Liner installed 12" Diam. from +5 ft. to 190 ft. ☐ Threaded ____" Diam. From ____ ft. to ____ ft.

Perforations: ☐ Yes ☒ No

Type of perforator used ____

SIZE of perfs ____ in. by ____ in. and no. of perfs ____ from ____ ft. to ____ ft.

Screens: ☒ Yes ☐ No ☐ K-Pac Location ____

Manufacturer's Name Alloy Machine Works, Inc.

Type SSI Model No. ____

Diam. 12 Slot size .040 from 42.7 ft. to 115 ft.

Diam. 12 Slot size .040 from 165 ft. to 190 ft.

Gravel/Filter packed: ☒ Yes ☐ No Size of gravel/sand 8X12

Materials placed from 0 ft. to 190 ft.

Surface Seal: ☒ Yes ☐ No To what depth? 32.8 ft.

Material used in seal cement grout

Did any strata contain unusable water? ☐ Yes ☒ No

Type of water? ____ Depth of strata ____

Method of sealing strata off ____

PUMP: Manufacturer's Name ____

Type: ____ H.P. ____

WATER LEVELS: Land-surface elevation above mean sea level 147 ft.

Static level ____ ft. below top of well Date ____

Artesian pressure 5 lbs. per square inch Date 3/18/08

Artesian water is controlled by valve (cap, valve, etc.)

WELL TESTS: Drawdown is amount water level is lowered below static level

Was a pump test made? ☒ Yes ☐ No If yes, by whom? R N & S

Yield: 465 gal./min. with 31.7 ft. drawdown after 1 hrs.

Yield: 465 gal./min. with 42.1 ft. drawdown after 14 hrs.

Yield: 465 gal./min. with 43.6 ft. drawdown after 24 hrs.

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level
0 min	43.5	30 min	14.4	4 hr	7.3
5 min	18.7	1 hr	12.41	8 hr	4.3
10 min	17	2 hr	10	24 hr	0.8

Date of test Bailer test ____ gal./min. with ____ ft. drawdown after ____ hrs

Airtest ____ gal./min. with stem set at ____ ft. for ____ hrs.

Artesian flow ____ g.p.m. Date ____

Temperature of water 51 Was a chemical analysis made? ☒ Yes ☐ No

CURRENT

Notice of Intent No. W210113

Unique Ecology Well ID Tag No. APP301

Water Right Permit No. G1-25195P

Property Owner Name King County Water District No. 90

Well 2

Well Street Address 17711 SE Jones Rd

City Renton County King County

Location NE 1/4-1/4 SE 1/4 Sec 24 Twn 23 R 05

EWM ☒ Or WWM ☐

Lat/Long (s, t, r Still REQUIRED) Lat Deg ____ Min ____ Sec ____ Long Deg ____ Min ____ Sec ____

CONSTRUCTION OR DECOMMISSION PROCEDURE

Formation: Describe by color, character, size of material and structure, and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of information. (USE ADDITIONAL SHEETS IF NECESSARY.)

MATERIAL	FROM	TO
Brown Sand and Gravel	1	18
with Cobbles below 10'		
Gray Clay with occasional	18	40
Sand and Gravel, Thin Layers		
of Green Clay below 35'		
Gray Gravel and Sand Water	40	64
Bearing		
Gray fine to coarse Sand	64	106
with occasional gravel		
and Silt Water Bearing		
Gray fine to medium Sand	106	132
with occasional Gravel		
and Silt, Coal and Wood		
below 125'		
Gray Silty Fine Sand	132	207
with occasional gravel		
to coobles and Gray Clay		
Layers, Coal, and Wood		
Increase below 187'		
Gray Clay/Silt with	207	220
Sand and Gravel		

RECEIVED
APR 28 2008
DEPT. OF ECOLOGY

Start Date 01/02/08 Completed Date 04/03/08

Tax Parcel No. 2423059114

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee Driller or trainee License No. 1476

Name (Print Last, First) Mickelsen, Todd

Driller/Engineer/Trainee Signature Todd Mickelsen

IF TRAINEE: Driller's License No. ____

Driller's Signature ____

Drilling Company Charon Drilling, Inc.

Address 12719 - 224 St East

City, State, Zip Orcham, WA 98338

Contractor's Registration No. CHARODI133NF Date 4-23-08

ECY 050-1-20 (Rev 7/06)

Ecology is an Equal Opportunity Employer

WATER WELL REPORT

Original & 1st copy – Ecology, 2nd copy – owner, 3rd copy – driller

DEPARTMENT OF ECOLOGY State of Washington

Construction/Decommission *("x" in circle)*

☒ Construction

☐ Decommission *ORIGINAL INSTALLATION*

Notice of Intent Number _____

PROPOSED USE: ☐ Domestic ☐ Industrial ☒ Municipal ☐ DeWater ☐ Irrigation ☐ Test Well ☐ Other _____

TYPE OF WORK: Owner's number of well (if more than one) 3

☒ New well ☐ Reconditioned *Method:* ☐ Dug ☐ Bored ☐ Driven ☐ Deepened ☒ Cable ☐ Rotary ☐ Jetted

DIMENSIONS: Diameter of well 16 inches, drilled 150 ft. Depth of completed well 89 ft.

CONSTRUCTION DETAILS

Casing Installed: ☒ Welded 16" Diam. from +4 ft. to 42 ft.
☒ Liner installed 20" Diam. from +2.5 ft. to 45 ft.
☐ Threaded _____" Diam. From _____ ft. to _____ ft.

Perforations: ☐ Yes ☒ No

Type of perforator used _____

SIZE of perfs _____ in. by _____ in. and no. of perfs _____ from _____ ft. to _____ ft.

Screens: ☒ Yes ☐ No ☐ K-Pac Location _____

Manufacturer's Name JOHNSON

Type STAINLESS STEEL Model No. V-WIRE

Diam. 16" Slot size 80 from 42 ft. to 87 ft.

Diam. _____ Slot size _____ from _____ ft. to _____ ft.

Gravel/Filter packed: ☒ Yes ☐ No Size of gravel/sand 4X8

Materials placed from +2 ft. to 89 ft.

Surface Seal: ☒ Yes ☐ No To what depth? 30 ft.

Material used in seal NEAT PORTLAND CEMENT

Did any strata contain unusable water? ☐ Yes ☒ No

Type of water? _____ Depth of strata _____

Method of sealing strata off _____

PUMP: Manufacturer's Name _____

Type: _____ H.P. _____

WATER LEVELS: Land-surface elevation above mean sea level _____ ft.

Static level +12.9 ft. below top of well Date 2/20/2014

Artesian pressure _____ lbs. per square inch Date _____

Artesian water is controlled by VALVE (cap, valve, etc.)

WELL TESTS: Drawdown is amount water level is lowered below static level

Was a pump test made? ☒ Yes ☐ No If yes, by whom? HOKKAIDO

Yield: 245 gal./min. with 24.9 ft. drawdown after 1 hrs.

Yield: 245 gal./min. with 29.1 ft. drawdown after 8 hrs.

Yield: 245 gal./min. with 30.8 ft. drawdown after 24 hrs.

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level
1 HR	+5.96	23.5	+12.7		
8 HR	+10.88				
12 HR	+11.72				

Date of test 2/19/2014

Bailer test _____ gal./min. with _____ ft. drawdown after _____ hrs.

Airtest _____ gal./min. with stem set at _____ ft. for _____ hrs.

Artesian flow _____ g.p.m. Date _____

Temperature of water 50.9F Was a chemical analysis made? ☒ Yes ☐ No

CURRENT

Notice of Intent No. WE17500

Unique Ecology Well ID Tag No. BCS 873

Water Right Permit No. G1-2519P

Property Owner Name KING COUNTY WATER DISTRICT #90

Well Street Address 17711 SE JONES ROAD

City RENTON County KING

Location SE 1/4-1/4 NE 1/4 Sec 24 Twn 23N R 5 EWM ☒ Or WWM ☐

(s, t, r Still REQUIRED)

Lat/Long Lat Deg _____ Lat Min/Sec _____
Long Deg _____ Long Min/Sec _____

Tax Parcel No. (Required) 242305-9066

CONSTRUCTION OR DECOMMISSION PROCEDURE

Formation: Describe by color, character, size of material and structure, and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of information. (USE ADDITIONAL SHEETS IF NECESSARY.)

MATERIAL	FROM	TO
BROWN GRAVELLY FINE TO MEDIUM	0'	12'
SAND		
GRAY SILT AND F-M SAND, WITH	12'	27'
TRACE OF GRAVEL		
GRAY STICKY CLAY	27'	45'
GRAY VERY GRAVELLY COARSE	45'	49'
SAND		
GRAY SLIGHTLY GRAVELLY F-M	49'	52'
SAND		
GRAY VERY SANDY GRAVEL	52'	58'
GRAY SLIGHTLY SILTY F-M SAND;	58'	71'
INCREASING GRAVEL		
GRAY F-C SANDY GRAVEL	71'	87'
GRAY SILTY F-M SAND	87'	99'
GRAY SILTY, SLIGHTLY GRAVELLY	99'	108'
FINE SAND		
GRAY SILTY FINE SAND WITH	108'	126'
WITH WOOD/ORGANICS		
GRAY VERY SILTY FINE SAND	126'	133'
GRADING TO SANDY SILT		
GRAY SILTY FINE SAND WITH	133'	144'
ORGANICS		
GRAY SILTY FINE SAND WITH	144'	150'
TRACE OF GRAVEL AND COBBLES		
BOTTOM HOLE	150'	
BACKFILLED FROM 150' TO 89'		
WITH ALTERNATING LAYERS OF		
BENTONITE CHIPS AND PEA GRAVE		

RECEIVED MAR 31 2014 DEPT OF ECOLOGY NW/RO WR

Start Date 11/21/2014 Completed Date 2/26/2014

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

☒ Driller ☐ Engineer ☐ Trainee Name (Print) BILLY A. DODGE

Driller/Engineer/Trainee Signature _____

Driller or trainee License No. 1146

IF TRAINEE: Driller's License No:

Driller's Signature:

Drilling Company HOKKAIDO DRILLING, INC.

Address P.O. BOX 100

City, State, Zip GRAHAM, WA 98338

Contractor's Registration No. HOKKADI017M8 Date 3/28/2014

ECY 050-1-20 (Rev 02/10) *If you need this document in an alternate format, please call the Water Resources Program at 360-407-6872. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.*

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

Individual System View - Goodnight Properties Water System - Water System Id - AB892

Compliance Actions | Operating Permits | Operators | Reports | Water Use Efficiency

General Information | Source Information | Samples | Exceedances | Water Quality Monitoring Schedule

Group	B	Status	Active	Ownership Type	Investor
Type		Residential Population	0	Jurisdiction	
County	KING	NonResidential Population	2	System Effective Date	10/25/2007
Owner Name	Goodnight Properties Water System	Total Calculated Connections	1	System Inactive Date	
Primary Contact	Debbie Silva	Total Approved Connections	1	SMA Name	
Primary Contact Phone	(360) 794-6220	Distribution Capacity (gallons)	0	SMA Number	
Water System Mailing Address	PO Box 1347 Monroe, WA 98058				

Home Page | Find Water Systems | Find Water Quality | Downloads/Reports

DOH Home | Community and Environment | Drinking Water Home | Drinking Water Contacts
Access Local Health | Privacy Notice | Disclaimer/Copyright Information

Links to external resources are provided as a public service and do not imply endorsement by the Washington State Department of Health

Department of Health, Office of Drinking Water

Street Address:
243 Israel Road S.E. 2nd floor
Tumwater, WA 98501

Mail:
PO BOX 47822
Olympia, WA 98504-7822

Phone: (360) 236-4357
Toll Free: (800) 521-0323

Send inquiries about DOH and its programs to the Health Consumer Assistance Office
Comments or questions regarding this Web site? Send email to Environmental Health Application Support or call 888-457-2467.

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

Individual System View - Goodnight Properties Water System - Water System Id - AB892

Compliance Actions | Operating Permits | Operators | Reports | Water Use Efficiency

General Information | Source Information | Samples | Exceedances | Water Quality Monitoring Schedule

Source 01 - Well AFJ613

Source Status	Active	Usage	Permanent	WRIA	Cedar-Sammamish	Intertie Supplying System	NA
Type	Groundwater Well	Capacity (gpm)	20	Township	23	Intertie Supplying Number	NA
Effective Date	10/18/2007	Treated	No	Range	06E		
Inactive Date		Metered	Yes	Section	19		
DOE Well Tag Number	AFJ613	Well Depth (ft)	50	Qtr/Qtr Section	SESE		

Records 1 - 1 of 1

Display as table with source treatment information

Home Page | Find Water Systems | Find Water Quality | Downloads/Reports

DOH Home | Community and Environment | Drinking Water Home | Drinking Water Contacts
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Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 0
Updated: 10/25/2007
Printed: 5/7/2017
WFI Printed For: On-Demand
Submission Reason: New System

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
AB892 A	GOODNIGHT PROPERTIES WATER SYSTEM	KING	B	

6. PRIMARY CONTACT NAME & MAILING ADDRESS

DEBBIE SILVA [PROJECT MANAGER]
GOODNIGHT PROPERTIES INC
PO BOX 1347
MONROE, WA 98058

7. OWNER NAME & MAILING ADDRESS | **8. OWNER NUMBER: 032884**

GOODNIGHT PROPERTIES INC
GARY D. GOODNIGHT PRESIDENT
PO BOX 1347
MONROE, WA 98058

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS 18825 RENTON-MAPLE VALLEY RD SE
CITY RENTON STATE WA ZIP 98058

STREET ADDRESS IF DIFFERENT FROM ABOVE

ATTN
ADDRESS
CITY STATE ZIP

9. 24 HOUR PRIMARY CONTACT INFORMATION		10. OWNER CONTACT INFORMATION	
Primary Contact Daytime Phone: (360) 794-6220		Owner Daytime Phone: (360) 794-6220	
Primary Contact Mobile/Cell Phone:		Owner Mobile/Cell Phone:	
Primary Contact Evening Phone:		Owner Evening Phone:	
Fax:	E-mail: xxxxxxxxxxxxxxxxxxxx	Fax:	E-mail: xxxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [x] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [ ] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [x] Investor
- [ ] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

15	16 SOURCE NAME	17 INTERTIE	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22 DEPTH	23	24 SOURCE LOCATION			
Source Number	LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	Well AFJ613		X										X			Y	X						30	20	SE SE	19	23N	06E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
AB892 A	GOODNIGHT PROPERTIES WATER SYSTEM	KING	B	

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		0	0
A. Full Time Single Family Residences (Occupied 180 days or more per year)	0		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	1	1	1
28. TOTAL SERVICE CONNECTIONS		1	1

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 0

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?	2	2	2	2	2	2	2	2	2	2	2	2
B. How many days per month are they present?	20	20	20	20	20	20	20	20	20	20	20	20

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290												

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ **Update - Change** ☐ **Update - No Change** ☐ **Inactivate** ☐ **Re-Activate** ☐ **Name Change** ☐ **New System** ☐ **Other** _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

WS ID	WS Name
AB892	GOODNIGHT PROPERTIES WATER SYSTEM

Total WFI Printed: 1

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

Individual System View - Goodnight Properties Water System - Water System Id - AB892

Compliance Actions | Operating Permits | Operators | Reports | Water Use Efficiency

General Information | Source Information | Samples | Exceedances | Water Quality Monitoring Schedule

Source	DOE Source	Collect Date	Test Panel	Analyte Group	Sample Number	Lab Number	Exceedances
Dist		3/27/2009	COLI_AP	MICRO	99148	089	No

Records 1 - 1 of 1

Export CSV

Links to external resources are provided as a public service and do not imply endorsement by the Washington State Department of Health

Department of Health, Office of Drinking Water

Street Address:
243 Israel Road S.E. 2nd floor
Tumwater, WA 98501

Mail:
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Toll Free: (800) 521-0323

Send inquiries about DOH and its programs to the Health Consumer Assistance Office
Comments or questions regarding this Web site? Send email to Environmental Health Application Support or call 888-457-2467.

File Original with
Department of Ecology
Second Copy - Owner's Copy
Third Copy - Driller's Copy

108281

WATER WELL REPORT

STATE OF WASHINGTON

Notice of Intent W118743
UNIQUE WELL I.D. # AFJ613
Water Right Permit No

(1) OWNER: Name Goodnight Properties Address P.O. Box 1347 Monroe wa 98272

(2) LOCATION OF WELL: County King SE 1/4 SE 1/4 Sec 19 T 23 N R 5E WM

(2a) STREET ADDRESS OF WELL: (or nearest address) 18825 Hwy 169 Renton WA

TAX PARCEL NO. 23-5E-19R

(3) PROPOSED USE: ☑ Domestic ☐ Industrial ☐ Municipal ☐ Irrigation ☐ Test Well ☐ Other ☐ DeWater

(4) TYPE OF WORK: Owner's number of well (if more than one)
☑ New Well ☐ Deepened ☐ Reconditioned ☐ Decommission
Method: ☐ Dug ☐ Bored ☐ Cable ☐ Driven ☑ Rotary ☐ Jetted

(5) DIMENSIONS: Diameter of well 6 inches
Drilled 50 feet Depth of completed well 50 ft

(6) CONSTRUCTION DETAILS
Casing Installed:
☐ Welded 6" Diam from +2 ft to 18 ft
☑ Liner installed 4" Diam from -6" ft to 30 ft
☐ Threaded " Diam from ft to ft

Perforations: ☐ Yes ☑ No
Type of perforator used
SIZE of perforations in by in
perforations from ft to ft

Screens: ☑ Yes ☐ No ☐ K-Pac Location
Manufacturer's Name Western
Type PVC Model No
Diam 4 Slot Size 15 from 30 ft to 50 ft
Diam Slot Size from ft to ft

Gravel/Filter packed: ☑ Yes ☐ No ☐ Size of gravel/sand 8-12 Silica
Material placed from 1 ft to 50 ft

Surface seal: ☑ Yes ☐ No To what depth? 18 ft
Material used in seal Bentonite
Did any strata contain unusable water? ☐ Yes ☑ No
Type of water? Depth of strata
Method of sealing strata off

(7) PUMP: Manufacturer's Name Goulds
Type Submersible HP 1

(8) WATER LEVELS: Land-surface elevation above mean sea level ft
Static level 2 ft below top of well Date Nov 1/00
Artesian pressure lbs per square inch Date
Artesian water is controlled by
(Cap, valve, etc)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☑ No If yes, by whom?
Yield gal/min with ft drawdown after hrs
Yield gal/min with ft drawdown after hrs
Yield gal/min with ft drawdown after hrs
Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test
Bailer test 24 gal/min with 3 ft drawdown after 2 hrs
Airtest gal/min with ft drawdown after hrs
Artesian flow g p m Date
Temperature of water Was a chemical analysis made? ☐ Yes ☑ No

(10) WELL LOG or DECOMMISSIONING PROCEDURE DESCRIPTION
Formation Describe by color, character, size of material and structure, and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of information Indicate all water encountered

MATERIAL	FROM	TO
Sandy Brown clay rocks	0	4
Brown Till	4	12
Blue Till	12	32
Sand & gravel (water)	32	50

RECEIVED
NOV 07 2000
DEPT OF ECOLOGY

Work Started Nov 1/00 Completed Nov 2/00

WELL CONSTRUCTION CERTIFICATION:

I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards Materials used and the information reported above are true to my best knowledge and belief

Type or Print Name L. GOSLING License No 1539
(Licensed Driller/Engineer)

Trainee Name License No
Drilling Company CASCADE DRILLING
(Signed) License No 1539
(Licensed Driller/Engineer)
Address 7411 30 ST NE MARYSVILLE WA.
Contractor's Registration No CASCADO91P8 Date Nov 4/00

(USE ADDITIONAL SHEETS IF NECESSARY)

Ecology is an Equal Opportunity and Affirmative Action employer For special accommodation needs, contact the Water Resources Program at (360) 407-6600 The TDD number is (360) 407-6006

ECY 050-1-20 (11/98)

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

Individual System View - MURALT, TED - Water System Id - 52541

Compliance Actions | Operating Permits | Operators | Reports | Water Use Efficiency

General Information | Source Information | Samples | Exceedances | Water Quality Monitoring Schedule

Group	B	Status	Active	Ownership Type	Investor
Type		Residential Population	5	Jurisdiction	WA DOH ODW
County	KING	NonResidential Population	0	System Effective Date	9/1/1988
Owner Name	MURALT, TED	Total Calculated Connections	2	System Inactive Date	
Primary Contact	Richardo Ramacho	Total Approved Connections	2	SMA Name	
Primary Contact Phone	(000)000-0000	Distribution Capacity (gallons)	250,000	SMA Number	
Water System Mailing Address	17823 MAPLE VALLEY HIGHWAY MAPLE VALLEY, WA 98058				

Links to external resources are provided as a public service and do not imply endorsement by the Washington State Department of Health

Department of Health, Office of Drinking Water

Street Address:
243 Israel Road S.E. 2nd floor
Tumwater, WA 98501

Mail:
PO BOX 47822
Olympia, WA 98504-7822

Phone: (360) 236-4357
Toll Free: (800) 521-0323

Send inquiries about DOH and its programs to the Health Consumer Assistance Office
Comments or questions regarding this Web site? Send email to Environmental Health Application Support or call 888-457-2467.

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

Individual System View - MURALT, TED - Water System Id - 52541

Compliance Actions | Operating Permits | Operators | Reports | Water Use Efficiency

General Information | Source Information | Samples | Exceedances | Water Quality Monitoring Schedule

Source 01 - WELL #1

Source Status	Active	Usage	Permanent	WRIA	Duwamish-Green	Intertie Supplying System	NA
Type	Groundwater Well	Capacity (gpm)	22	Township	24	Intertie Supplying Number	NA
Effective Date	1/1/1970	Treated	No	Range	05E		
Inactive Date		Metered	Undefined	Section	24		
DOE Well Tag Number		Well Depth (ft)	22	Qtr/Qtr Section	NWSE		

Records 1 - 1 of 1

Display as table with source treatment information

Links to external resources are provided as a public service and do not imply endorsement by the Washington State Department of Health

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Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 0
Updated: 08/21/2006
Printed: 5/7/2017
WFI Printed For: On-Demand
Submission Reason: Non-Periodic update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
52541 F	MURALT, TED	KING	B	

6. PRIMARY CONTACT NAME & MAILING ADDRESS	7. OWNER NAME & MAILING ADDRESS	8. OWNER NUMBER: 013414
RICHARDO RAMACHO [WS - PRIMARY CONTACT] 17823 MAPLE VALLEY HIGHWAY MAPLE VALLEY, WA 98058	RICHARDO RAMACHO 17823 MAPLE VALLEY HIWAY MAPLE VALLEY, WA 98058	

STREET ADDRESS IF DIFFERENT FROM ABOVE	STREET ADDRESS IF DIFFERENT FROM ABOVE
ATTN	ATTN
ADDRESS	ADDRESS
CITY STATE ZIP	CITY STATE ZIP

9. 24 HOUR PRIMARY CONTACT INFORMATION		10. OWNER CONTACT INFORMATION	
Primary Contact Daytime Phone: (000)000-0000		Owner Daytime Phone: (000)000-0000	
Primary Contact Mobile/Cell Phone:		Owner Mobile/Cell Phone:	
Primary Contact Evening Phone:		Owner Evening Phone:	
Fax:	E-mail: xxxxxxxxxxxxxxxxxxxx	Fax:	E-mail: xxxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [x] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [x] Investor
- [ ] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons)

250,000

15	16 SOURCE NAME	17 INTERTIE	18 SOURCE CATEGORY										19 USE			20	21 TREATMENT						22 DEPTH	23	24 SOURCE LOCATION			
Source Number	LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	WELL #1		X										X				X						22	22	NW SE	24	24N	05E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
52541 F	MURALT, TED	KING	B	

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		2	2
A. Full Time Single Family Residences (Occupied 180 days or more per year)	2		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	0	0	0
28. TOTAL SERVICE CONNECTIONS		2	2

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 5

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290												

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ **Update - Change** ☐ **Update - No Change** ☐ **Inactivate** ☐ **Re-Activate** ☐ **Name Change** ☐ **New System** ☐ **Other** _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

WS ID	WS Name
52541	MURALT, TED

Total WFI Printed: 1

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

23/05-24 R

Application No. .....

Permit No. .....

File Original and First Copy with Department of Ecology
Second Copy — Owner's Copy
Third Copy — Driller's Copy

Muralt

WATER WELL REPORT

STATE OF WASHINGTON

(1) OWNER: Name Ted Murell Address 17855 Renton-Maple Valley Highway SE

(2) LOCATION OF WELL: County King — SE ¼ SE ¼ Sec. 24 T. 23 N., R. 5 E W.M.

Bearing and distance from section or subdivision corner See attached

(3) PROPOSED USE: Domestic ☐ Industrial ☐ Municipal ☒ Irrigation ☐ Test Well ☐ Other ☐

(4) TYPE OF WORK: Owner's number of well (if more than one) .....
New well ☒ Deepened ☐ Reconditioned ☐
Method: Dug ☐ Bored ☐ Cable ☐ Driven ☐ Rotary ☒ Jetted ☐

(5) DIMENSIONS: Diameter of well 6 inches.
Drilled 22 ft. Depth of completed well 22 ft.

(6) CONSTRUCTION DETAILS:

Casing installed: 6" Diam. from 0 ft. to 22 ft.
Threaded ☐ ..." Diam. from ... ft. to ... ft.
Welded ☒ ..." Diam. from ... ft. to ... ft.

Perforations: Yes ☐ No ☒
Type of perforator used .....
SIZE of perforations ... in. by ... in.
... perforations from ... ft. to ... ft.
... perforations from ... ft. to ... ft.
... perforations from ... ft. to ... ft.

Screens: Yes ☐ No ☒
Manufacturer's Name .....
Type ..... Model No. .....
Diam. ... Slot size ... from ... ft. to ... ft.
Diam. ... Slot size ... from ... ft. to ... ft.

Gravel packed: Yes ☐ No ☒ Size of gravel: .....
Gravel placed from ... ft. to ... ft.

Surface seal: Yes ☒ No ☐ To what depth? 18 ft.
Material used in seal puddling clay
Did any strata contain unusable water? Yes ☐ No ☒
Type of water? ..... Depth of strata .....
Method of sealing strata off .....

(7) PUMP: Manufacturer's Name .....
Type: ..... H.P. .....

(8) WATER LEVELS: Land-surface elevation above mean sea level .... ft.
Static level 3 ft. below top of well Date 7/25/80
Artesian pressure ... lbs. per square inch Date .....
Artesian water is controlled by ..... (Cap, valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes ☐ No ☒ If yes, by whom? .....
Yield: gal./min. with ft. drawdown after hrs.
" " " "
" " " "

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test .....
Bailer test 50 gal./min. with 10 ft. drawdown after 4 hrs.
Artesian flow ... g.p.m. Date .....
Temperature of water ..... Was a chemical analysis made? Yes ☐ No ☒

(10) WELL LOG:

Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

MATERIAL	FROM	TO
Surface	0	2
Brown sand & gravel Clay	2	16
Gray water sand & gravel	16	22
Gray heaving sand	22	—

Work started 7/25, 19 80 Completed 7/25, 19 80

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Johnson Drilling Co., Inc (Person, firm, or corporation) (Type or print)

Address 19415 108th Ave SE Renton 98055

[Signed] Brad Johnson (Well Driller)

License No. 0233 Date 7/25, 19 80

(USE ADDITIONAL SHEETS IF NECESSARY)

ECY 050-1-20

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

Individual System View - KENNYS SERVICE STATION - Water System Id - 38128

Compliance Actions | Operating Permits | Operators | Reports | Water Use Efficiency

General Information | Source Information | Samples | Exceedances | Water Quality Monitoring Schedule

Group	B	Status	Active	Ownership Type	Investor
Type		Residential Population	20	Jurisdiction	WA DOH ODW
County	KING	NonResidential Population	0	System Effective Date	1/1/1970
Owner Name	KENNYS SERVICE STATION	Total Calculated Connections	8	System Inactive Date	
Primary Contact	PRIMARY CONTACT WS# 38128 KENNYS SERVICE STATION	Total Approved Connections	Undetermined	SMA Name	
Primary Contact Phone		Distribution Capacity (gallons)	80	SMA Number	
Water System Mailing Address					

Home Page | Find Water Systems | Find Water Quality | Downloads/Reports

DOH Home | Community and Environment | Drinking Water Home | Drinking Water Contacts
Access Local Health | Privacy Notice | Disclaimer/Copyright Information

Links to external resources are provided as a public service and do not imply endorsement by the Washington State Department of Health

Department of Health, Office of Drinking Water

Street Address:
243 Israel Road S.E. 2nd floor
Tumwater, WA 98501

Mail:
PO BOX 47822
Olympia, WA 98504-7822

Phone: (360) 236-4357
Toll Free: (800) 521-0323

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Comments or questions regarding this Web site? Send email to Environmental Health Application Support or call 888-457-2467.

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

Individual System View - KENNYS SERVICE STATION - Water System Id - 38128

Compliance Actions | Operating Permits | Operators | Reports | Water Use Efficiency

General Information | Source Information | Samples | Exceedances | Water Quality Monitoring Schedule

Source 01 - Well 01

Source Status	Active	Usage	Permanent	WRIA	Cedar-Sammamish	Intertie Supplying System	NA
Type	Groundwater Well	Capacity (gpm)		Township	23	Intertie Supplying Number	NA
Effective Date	1/1/1970	Treated	Yes	Range	06E		
Inactive Date		Metered	Undefined	Section	19		
DOE Well Tag Number		Well Depth (ft)	11	Qtr/Qtr Section	SESE		

Records 1 - 1 of 1

Display as table with source treatment information

Home Page | Find Water Systems | Find Water Quality | Downloads/Reports

DOH Home | Community and Environment | Drinking Water Home | Drinking Water Contacts
Access Local Health | Privacy Notice | Disclaimer/Copyright Information

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Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 0
Updated: 05/14/2002
Printed: 5/7/2017
WFI Printed For: On-Demand
Submission Reason: Non-Periodic update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
38128 C	KENNYS SERVICE STATION	KING	B	

6. PRIMARY CONTACT NAME & MAILING ADDRESS	7. OWNER NAME & MAILING ADDRESS	8. OWNER NUMBER: 002946
PRIMARY CONTACT WS# 38128 KENNYS SERVICE STATION [WS - PRIMARY CONTACT] 18015 MAPLE VLLY HWY RENTON, WA 98055	KENNYS SERVICE STATION NEED PRIMARY CONTACT OWNER ORG 18015 MAPLE VLLY HWY RENTON, WA 98055	OWNER ORG - PRIMARY CO

STREET ADDRESS IF DIFFERENT FROM ABOVE	STREET ADDRESS IF DIFFERENT FROM ABOVE
ATTN	ATTN
ADDRESS	ADDRESS
CITY STATE ZIP	CITY STATE ZIP

9. 24 HOUR PRIMARY CONTACT INFORMATION		10. OWNER CONTACT INFORMATION	
Primary Contact Daytime Phone:		Owner Daytime Phone:	
Primary Contact Mobile/Cell Phone:		Owner Mobile/Cell Phone:	
Primary Contact Evening Phone:		Owner Evening Phone:	
Fax:	E-mail: xxxxxxxxxxxxxxxxxxxx	Fax:	E-mail: xxxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [ ] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [x] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [x] Investor
- [ ] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons): 80

15	16	17	18										19			20	21						22	23	24			
	SOURCE NAME	INTERTIE	SOURCE CATEGORY										USE				TREATMENT						DEPTH		SOURCE LOCATION			
Source Number	LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	Well 01		X										X					X					11		SE SE	19	23N	06E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
38128 C	KENNYS SERVICE STATION	KING	B	

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		8	Undetermined
A. Full Time Single Family Residences (Occupied 180 days or more per year)	8		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	0	0	
28. TOTAL SERVICE CONNECTIONS		8	

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 20

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?												
B. How many days per month is water accessible to the public?												

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290												

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ **Update - Change** ☐ **Update - No Change** ☐ **Inactivate** ☐ **Re-Activate** ☐ **Name Change** ☐ **New System** ☐ **Other** _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

WS ID	WS Name
38128	KENNYS SERVICE STATION

Total WFI Printed: 1

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

Individual System View - cedar rapids grocery - Water System Id - 46980

Compliance Actions | Operating Permits | Operators | Reports | Water Use Efficiency

General Information | Source Information | Samples | Exceedances | Water Quality Monitoring Schedule

Group	B	**Status**	Active	**Ownership Type**	Investor
Type		**Residential Population**	0	**Jurisdiction**	WA DOH ODW
County	KING	**NonResidential Population**	5	**System Effective Date**	5/1/1988
Owner Name	CEDAR RAPIDS GROCERY	**Total Calculated Connections**	9	**System Inactive Date**	
Primary Contact	GEORGE MCCALL	**Total Approved Connections**	9	**SMA Name**	
Primary Contact Phone	(425) 204-0838	**Distribution Capacity (gallons)**	840	**SMA Number**	
Water System Mailing Address	18015 SE RENTON MAPLE VALLEY HWY RENTON, WA 98058				

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Department of Health, Office of Drinking Water

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Mail:
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For technical issues with this website send email to DOH IT Service Desk or call 360-236-4357.

Individual System View - cedar rapids grocery - Water System Id - 46980

Source 01 - WELL #1

Source Status	Active	**Usage**	Permanent	**WRIA**	Duwamish-Green	**Intertie Supplying System**	NA
Type	Groundwater Well	**Capacity (gpm)**	14	**Township**	22	**Intertie Supplying Number**	NA
Effective Date	1/1/1970	**Treated**	Yes	**Range**	05E		
Inactive Date		**Metered**	Undefined	**Section**	25		
DOE Well Tag Number		**Well Depth (ft)**	18	**Qtr/Qtr Section**	NENW		

Records 1 - 1 of 1

Display as table with source treatment information

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Mail:
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Olympia, WA 98504-7822

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WATER FACILITIES INVENTORY (WFI) FORM

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

ONE FORM PER SYSTEM

Quarter: 0
Updated: 10/21/1999
Printed: 9/19/2018
WFI Printed For: On-Demand
Submission Reason: Non-Periodic update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
46980 Q	CEDAR RAPIDS GROCERY	KING	B	

6. PRIMARY CONTACT NAME & MAILING ADDRESS	7. OWNER NAME & MAILING ADDRESS	8. OWNER NUMBER: 012957
GEORGE MCCALL [CONTACT] 18015 SE RENTON MAPLE VALLEY HWY RENTON, WA 98058	MCCALL, GEORGE 18015 SE RENTON MAPLE VALLEY HWY RENTON, WA 98058	
STREET ADDRESS IF DIFFERENT FROM ABOVE	**STREET ADDRESS IF DIFFERENT FROM ABOVE**	
ATTN	ATTN	
ADDRESS	ADDRESS	
CITY STATE ZIP	CITY STATE ZIP	

9. 24 HOUR PRIMARY CONTACT INFORMATION		10. OWNER CONTACT INFORMATION	
Primary Contact Daytime Phone: (425) 204-0838		Owner Daytime Phone:	
Primary Contact Mobile/Cell Phone:		Owner Mobile/Cell Phone:	
Primary Contact Evening Phone:		Owner Evening Phone:	
Fax:	E-mail: xxxxxxxxxxxxxxxxxxxx	Fax:	E-mail: xxxxxxxxxxxxxxxxxxxx

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [x] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [ ] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [x] Investor
- [ ] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons): 840

15	16	17	18									19			20	21						22	23	24			
	SOURCE NAME	INTERTIE	SOURCE CATEGORY									USE				TREATMENT						DEPTH		SOURCE LOCATION			
Source Number	LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN TERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	WELL #1		X										X						X				18	14	NE NW	25	22N	05E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
46980 Q	CEDAR RAPIDS GROCERY	KING	B	

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		0	9
A. Full Time Single Family Residences (Occupied 180 days or more per year)	0		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	0
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	9	9	0
28. TOTAL SERVICE CONNECTIONS		9	9

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 0

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?	5	5	5	5	5	5	5	5	5	5	5	5
B. How many days per month is water accessible to the public?	1	1	1	1	1	1	1	1	1	1	1	1

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290												

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ Update - Change ☐ Update - No Change ☐ Inactivate ☐ Re-Activate ☐ Name Change ☐ New System ☐ Other _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

Error: Subreport could not be shown.

Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

Water Facilities Inventory (WFI)

Report Create Date:	9/19/2018		
Water System Id(s):	46980		
Print Data on Distribution Page:	ALL		
Print Copies For:	DOH Copy		
Water System Name:	ALL		
County:	-- Any --		
Region:	ALL		
Group:	ALL		
Type:	ALL		
Permit Renewal Quarter:	ALL		
Water System Is New:	ALL		
Water System Status:	ALL		
Water Status Date From:	ALL	**To:**	ALL
Water System Update Date From:	ALL	**To:**	ALL
Owner Number:	ALL		
SMA Number:	ALL		
SMA Name:	ALL		
Active Connection Count From:	ALL	**To:**	ALL
Approved Connection Count From:	ALL	**To:**	ALL
Full-Time Population From:	ALL	**To:**	ALL
Water System Expanding Services:	ALL		
Source Type:	ALL		
Source Use:	ALL		
WFI Printed For:	On-Demand		

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

File Original and First Copy with Department of Ecology
Second Copy — Owner's Copy
Third Copy — Driller's Copy

WATER WELL REPORT

STATE OF WASHINGTON

23/05-24R
Application No

Permit No.

(1) OWNER: Name George McCall Address 18015 SE Maple Valley Hwy, Renton

(2) LOCATION OF WELL: County King SE ¼ SE ¼ Sec. 24 T. 23 N., R. 5 W.M.

Bearing and distance from section or subdivision corner

(3) PROPOSED USE: Domestic ☐ Industrial ☐ Municipal ☒ Irrigation ☐ Test Well ☐ Other ☐

(4) TYPE OF WORK: Owner's number of well (if more than one)
New well ☒ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☐
Reconditioned ☐ Rotary ☒ Jetted ☐

(5) DIMENSIONS: Diameter of well 6 inches.
Drilled 18 ft. Depth of completed well 18 ft.

(6) CONSTRUCTION DETAILS:

Casing installed: 6" Diam. from 0 ft. to 18 ft.
Threaded ☐ " Diam. from ft. to ft.
Welded ☒ " Diam. from ft. to ft.

Perforations: Yes ☐ No ☒
Type of perforator used
SIZE of perforations in. by in.
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.

Screens: Yes ☐ No ☒
Manufacturer's Name
Type Model No.
Diam. Slot size from ft. to ft.
Diam. Slot size from ft. to ft.

Gravel packed: Yes ☐ No ☒ Size of gravel:
Gravel placed from ft. to ft.

Surface seal: Yes ☒ No ☐ To what depth? 18 ft.
Material used in seal puddling clay
Did any strata contain unusable water? Yes ☐ No ☒
Type of water? Depth of strata
Method of sealing strata off

(7) PUMP: Manufacturer's Name
Type: H.P.

(8) WATER LEVELS: Land-surface elevation above mean sea level ft.
Static level 7 ft. below top of well Date 12-1-87
Artesian pressure lbs. per square inch Date
Artesian water is controlled by (Cap, valve, etc.)

(9) WELL TESTS: Drawdown is amount water level is lowered below static level
Was a pump test made? Yes ☐ No ☐ If yes, by whom?
Yield: gal./min. with ft. drawdown after hrs.
" 18 " 5 " 2 1/2 "
" " " AIR JET "

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m. Date
Temperature of water Was a chemical analysis made? Yes ☐ No ☐

(10) WELL LOG:

Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

MATERIAL	FROM	TO
Brown sand & gravel	0	5
Tan silty sand	5	7
Tan hardpan	7	14
Gray water sand & gravel	14	18
Gray silty sand	18	

RECEIVED
DEPT. OF ECOLOGY

Work started 12-1, 19 87 Completed 12-1, 19 87

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Johnson Drilling Co, Inc. (Person, firm, or corporation) (Type or print)

Address 19415 108th Ave SE Renton 98055

[Signed] Brad Johnson (Well Driller)

License No. 0233 Date 12-1, 19 87

(USE ADDITIONAL SHEETS IF NECESSARY)

ECY 050-1 20

1556680

Water Well Report

DEPARTMENT OF ECOLOGY State of Washington

Asterisks (*) Indicates Required Field.

*Notice of Intent Number W357042

*Unique Ecology Well ID Tag Number AFJ-551

Water Right Permit Number —

*Property Owner Name Chuck Vowell

*Well Street Address 19002 SE 161st ST

*City Renton *County King

*Location SE 1/4-1/4 SE 1/4 Twn 23 R 6 Sec 19 EWM ■ or WWM ☐

Latitude Lat Deg ____ Lat Min/Sec ____

Longitude Long Deg ____ Long Min/Sec ____

*Tax Parcel No. 192306-9016

***Construction/Decommission**

■ Construction

☐ Decommission *Original Installation*

Notice of Intent Number ____

***Proposed Use:** ■ Domestic ☐ Industrial ☐ Municipal ☐ DeWater ☐ Irrigation ☐ Test Well ☐ Other ____

***Type of work:** Owner's number of well (if more than one) ____

■ New well ☐ Reconditioned *Method:* ☐ Dug ☐ Bored ☐ Driven ☐ Cable ■ Rotary ☐ Jetted ☐ Deepened

***Dimensions:** Diameter of well 6 inches, drilled 75 ft.

Depth of completed well 70 ft.

***Construction Details**

Casing ■ *Welded* 6" *Diameter from* +1 ft. to 69 ft.

Installed: ☐ Liner installed ____" Diameter from ____ ft. to ____ ft.

☐ Threaded ____" Diameter from ____ ft. to ____ ft.

***Perforations:** ☐ Yes ■ No

Type of perforator used ____

Size of perforators ____ in. by ____ in. and

Number of perforators ____ from ____ ft. to ____ ft.

***Screens:** ☐ Yes ■ No ☐ K-Pac Location ____

Manufacturer's Name ____

Type ____ Model No. ____

Diameter ____ Slot size ____ from ____ ft. to ____ ft.

Diameter ____ Slot size ____ from ____ ft. to ____ ft.

***Gravel/Filter packed:** ☐ Yes ■ No Size of gravel/sand ____

Materials placed from ____ ft. to ____ ft.

***Surface Seal:** ■ Yes ☐ No To what depth? 18 ft.

Material used in seal bentonite

Did any strata contain unusable water? ☐ Yes ■ No

Type of water? ____ Depth of strata ____

Method of sealing strata off ____

***Pump:** Manufacturer's Name ____

Type: ____ H.P. ____

***Water Levels:** Land-surface elevation above mean sea level ____ ft.

Static level 55 ft. below top of well Date 2-14-2016

Artesian pressure ____ lbs. per square inch Date ____

Artesian water is controlled by ____ (cap, valve, etc.)

***Well Tests:** Drawdown is amount water level is lowered below static level

**Was a pump test made?* ■ No ☐ Yes If yes, by whom? ____

Yield: ____ gallon/minute with ____ ft. drawdown after ____ hrs.

Yield: ____ gallon/minute with ____ ft. drawdown after ____ hrs.

Yield: ____ gallon/minute with ____ ft. drawdown after ____ hrs.

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

*Time	Water Level	Time	Water Level	Time	Water Level

*Date of test ____

*Bailer test ____ gallon/minute with ____ ft. drawdown after ____ hrs.

*Airtest 5 gallon/minute with stem set at 68 ft. for 2 hrs.

*Artesian flow ____ gpm *Date ____

*Temperature of water ____ *Was a chemical analysis made?* ☐ Yes ■ No

***Construction Or Decommission Procedure**

Formation: Describe by color, character, size of material and structure, and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of information. Use additional sheets if necessary.

Material	From	To
Surface	0	3
Sand - brown	3	11
Hardpan - brown	11	47
Sand - gravel brown	47	61
Sand-gravel-water brown	61	70
Sandstone - gray	70	75

RECEIVED MAR 28 2016 DEPT OF ECOLOGY NWRO WR

*Start Date 2-10-2016 *Completed Date 2-14-2016

WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

*■ Driller ☐ Engineer ☐ Trainee Name (Print) Brad Johnson

*Driller/Engineer/Trainee Signature [signature]

*Driller or trainee License Number 0233

*If Trainee: Driller's License Number ____

*Driller's Signature ____

*Drilling Company Johnson Drilling Co. Inc

*Address 19415 108th Ave SE

*City, State, Zip Renton, WA 98055

Contractor's Registration Number JOHNSDC202OM Date 2-14-2016

ECY-050-1-20 (Rev 02/10) *If you need this document in an alternate format, please call the Water Resources Program at 360-407-6872. TTY Washington Relay Service. Persons with a speech disability can call 877-833-6341.*

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

Individual System View - KING COUNTY SHOP #2 - Water System Id - 38640

Compliance Actions | Operating Permits | Operators | Reports | Water Use Efficiency

General Information | Source Information | Samples | Exceedances | Water Quality Monitoring Schedule

Group	B	Status	Active	Ownership Type	Investor
Type		Residential Population	0	Jurisdiction	WA DOH ODW
County	KING	NonResidential Population	24	System Effective Date	1/1/1970
Owner Name	KING COUNTY SHOP #2	Total Calculated Connections	5	System Inactive Date	
Primary Contact		Total Approved Connections	Undetermined	SMA Name	
Primary Contact Phone	(425) 392-3355	Distribution Capacity (gallons)	1,000	SMA Number	
Water System Mailing Address					
	ISSAQUAH, WA 98027				

Home Page | Find Water Systems | Find Water Quality | Downloads/Reports

DOH Home | Community and Environment | Drinking Water Home | Drinking Water Contacts
Access Local Health | Privacy Notice | Disclaimer/Copyright Information

Links to external resources are provided as a public service and do not imply endorsement by the Washington State Department of Health

Department of Health, Office of Drinking Water

Street Address:
243 Israel Road S.E. 2nd floor
Tumwater, WA 98501

Mail:
PO BOX 47822
Olympia, WA 98504-7822

Phone: (360) 236-4357
Toll Free: (800) 521-0323

Send inquiries about DOH and its programs to the Health Consumer Assistance Office
Comments or questions regarding this Web site? Send email to Environmental Health Application Support or call 888-457-2467.

Washington State Department of Health

Division of Environmental Health
Office of Drinking Water

Help

Individual System View - KING COUNTY SHOP #2 - Water System Id - 38640

Compliance Actions | Operating Permits | Operators | Reports | Water Use Efficiency

General Information | Source Information | Samples | Exceedances | Water Quality Monitoring Schedule

Source 01 - WELL #1

Source Status	Active	Usage	Permanent	WRIA	Cedar-Sammamish	Intertie Supplying System	NA
Type	Groundwater Well	Capacity (gpm)		Township	23	Intertie Supplying Number	NA
Effective Date	1/1/1970	Treated	No	Range	06E		
Inactive Date		Metered	Undefined	Section	19		
DOE Well Tag Number		Well Depth (ft)	35	Qtr/Qtr Section	SWSE		

Records 1 - 1 of 1

Display as table with source treatment information

Home Page | Find Water Systems | Find Water Quality | Downloads/Reports

DOH Home | Community and Environment | Drinking Water Home | Drinking Water Contacts
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Washington State Department of Health
Division of Environmental Health
Office of Drinking Water

WATER FACILITIES INVENTORY (WFI) FORM

ONE FORM PER SYSTEM

Quarter: 0
Updated: 12/13/1991
Printed: 5/7/2017
WFI Printed For: On-Demand
Submission Reason: Non-Periodic update

RETURN TO: Central Services - WFI, PO Box 47822, Olympia, WA, 98504-7822

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
38640 D	KING COUNTY SHOP #2	KING	B	

6. PRIMARY CONTACT NAME & MAILING ADDRESS	7. OWNER NAME & MAILING ADDRESS	8. OWNER NUMBER: 002979
RICHARD SCHRODER [OWNER] P O BOX 1324 ISSAQUAH, WA 98027	RICHARD SCHROEDER P.O. BOX 1324 ISSAQUAH, WA 98027	

STREET ADDRESS IF DIFFERENT FROM ABOVE	STREET ADDRESS IF DIFFERENT FROM ABOVE
ATTN	ATTN
ADDRESS	ADDRESS
CITY STATE ZIP	CITY STATE ZIP

9. 24 HOUR PRIMARY CONTACT INFORMATION		10. OWNER CONTACT INFORMATION	
Primary Contact Daytime Phone: (425) 392-3355		Owner Daytime Phone:	
Primary Contact Mobile/Cell Phone:		Owner Mobile/Cell Phone:	
Primary Contact Evening Phone: (xxx)-xxx-xxxx		Owner Evening Phone:	
Fax:	E-mail: xxxxxxxxxxxxxxxxxxxx	Fax:	E-mail: xxxxxxxxxxxxxxxxxxxx

WAC 246-290-420(9) requires that water systems provide 24-hour contact information for emergencies.

11. SATELLITE MANAGEMENT AGENCY - SMA (check only one)

- [x] Not applicable (Skip to #12)
- [ ] Owned and Managed
- [ ] Managed Only
- [ ] Owned Only

SMA NAME: _____ SMA Number:

12. WATER SYSTEM CHARACTERISTICS (mark all that apply)

- [ ] Agricultural
- [ ] Commercial / Business
- [ ] Day Care
- [ ] Food Service/Food Permit
- [ ] 1,000 or more person event for 2 or more days per year
- [x] Hospital/Clinic
- [ ] Industrial
- [ ] Licensed Residential Facility
- [ ] Lodging
- [ ] Recreational / RV Park
- [ ] Residential
- [ ] School
- [ ] Temporary Farm Worker
- [ ] Other (church, fire station, etc.): _____

13. WATER SYSTEM OWNERSHIP (mark only one)

- [ ] Association
- [ ] City / Town
- [ ] County
- [ ] Federal
- [x] Investor
- [ ] Private
- [ ] Special District
- [ ] State

14. STORAGE CAPACITY (gallons): 1,000

15	16	17	18										19			20	21						22	23	24			
	SOURCE NAME	INTERTIE	SOURCE CATEGORY										USE				TREATMENT						DEPTH		SOURCE LOCATION			
Source Number	LIST UTILITY'S NAME FOR SOURCE AND WELL TAG ID NUMBER. Example: WELL #1 XYZ456 IF SOURCE IS PURCHASED OR INTERTIED, LIST SELLER'S NAME Example: SEATTLE	INTERTIE SYSTEM ID NUMBER	WELL	WELL FIELD	WELL IN A WELL FIELD	SPRING	SPRING FIELD	SPRING IN SPRINGFIELD	SEA WATER	SURFACE WATER	RANNEY / INF. GALLERY	OTHER	PERMANENT	SEASONAL	EMERGENCY	SOURCE METERED	NONE	CHLORINATION	FILTRATION	FLUORIDATION	IRRADIATION (UV)	OTHER	DEPTH TO FIRST OPEN INTERVAL IN FEET	CAPACITY (GALLONS PER MINUTE)	1/4, 1/4 SECTION	SECTION NUMBER	TOWNSHIP	RANGE
S01	WELL #1		X										X				X						35		SW SE	19	23N	06E

WATER FACILITIES INVENTORY (WFI) FORM - Continued

1. SYSTEM ID NO.	2. SYSTEM NAME	3. COUNTY	4. GROUP	5. TYPE
38640 D	KING COUNTY SHOP #2	KING	B	

	ACTIVE SERVICE CONNECTIONS	DOH USE ONLY! CALCULATED ACTIVE CONNECTIONS	DOH USE ONLY! APPROVED CONNECTIONS
25. SINGLE FAMILY RESIDENCES (How many of the following do you have?)		0	Undetermined
A. Full Time Single Family Residences (Occupied 180 days or more per year)	0		
B. Part Time Single Family Residences (Occupied less than 180 days per year)	0		
26. MULTI-FAMILY RESIDENTIAL BUILDINGS (How many of the following do you have?)			
A. Apartment Buildings, condos, duplexes, barracks, dorms	0		
B. Full Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied more than 180 days/year	0		
C. Part Time Residential Units in the Apartments, Condos, Duplexes, Dorms that are occupied less than 180 days/year	0		
27. NON-RESIDENTIAL CONNECTIONS (How many of the following do you have?)			
A. Recreational Services and/or Transient Accommodations (Campsites, RV sites, hotel/motel/overnight units)	0	0	
B. Institutional, Commercial/Business, School, Day Care, Industrial Services, etc.	5	5	
28. TOTAL SERVICE CONNECTIONS		5	

29. FULL-TIME RESIDENTIAL POPULATION

A. How many residents are served by this system 180 or more days per year? 0

30. PART-TIME RESIDENTIAL POPULATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many part-time residents are present each month?												
B. How many days per month are they present?												

31. TEMPORARY & TRANSIENT USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. How many total visitors, attendees, travelers, campers, patients or customers have access to the water system each month?	24	24	24	24	24	24	24	24	24	24	24	24
B. How many days per month is water accessible to the public?	1	1	1	1	1	1	1	1	1	1	1	1

32. REGULAR NON-RESIDENTIAL USERS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
A. If you have schools, daycares, or businesses connected to your water system, how many students daycare children and/or employees are present each month?												
B. How many days per month are they present?												

33. ROUTINE COLIFORM SCHEDULE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
* Requirement is exception from WAC 246-290												

34. NITRATE SCHEDULE	QUARTERLY	ANNUALLY	ONCE EVERY 3 YEARS
(One Sample per source by time period)			

35. Reason for Submitting WFI:

☐ **Update - Change** ☐ **Update - No Change** ☐ **Inactivate** ☐ **Re-Activate** ☐ **Name Change** ☐ **New System** ☐ **Other** _____

36. I certify that the information stated on this WFI form is correct to the best of my knowledge.

SIGNATURE: _____ **DATE:** _____

PRINT NAME: _____ **TITLE:** _____

WS ID	WS Name
38640	KING COUNTY SHOP #2

Total WFI Printed: 1

RETURN ADDRESS

Goodnight Properties, Inc.
P.O. Box 1347
Monroe, WA 98272

20090624001358
GOODNIGHT PROP COV 45.00
PAGE001 OF 004
06/24/2009 13:36
KING COUNTY, WA

Please print neatly or type information

Document Title(s)

DECLARATION OF COVENANT TO ACKNOWLEDGE USE OF A WELL FOR IRRIGATION PURPOSES ONLY, AND NOT TO BE CONNECTED TO POTABLE WATER SOURCE OR USED FOR POTABLE WATER SOURCE

Reference Number(s) of related documents

20051229000800

Additional Reference #'s on page 4

Grantor(s) (Last, First, and Middle Initial)

Goodnight, Gary D.
Goodnight, Shelley M.

Additional grantors on page #'s

Legal Description (abbreviated form: i.e. lot, block, plat or section, township, range, quarter/quarter)

Legal Description is attached on page 4
192306/ SW-19-23-6

Assessor's Property Tax Parcel/Account Number

192306902607

Additional parcel #'s on page

FILING: Phone: (206) 296-1570
Department of Records and Elections
Room 311, County Administration Building
4th & James, Seattle, WA 98104

DISCLAIMER REGARDING USE OF THIS FORM

This blank form is provided for informational purposes only and is not intended as a complete or legally sufficient form. Neither King County, Public Health – Seattle & King County, nor any of their officials and employees make any warranty of any kind, express or implied, in relation to any information on this form or any use made of this form by any person. No information on this form, nor any use made of this form shall create any liability on the part of King County, Public Health – Seattle & King County, or any of their officials or employees. As with any document affecting the rights and responsibilities of real property ownership, we recommend that you consult with your private legal counsel before filling out, signing, or making any other use of this form.

DECLARATION OF COVENANT TO ACKNOWLEDGE USE OF A WELL FOR IRRIGATION PURPOSES ONLY, AND NOT TO BE CONNECTED TO POTABLE WATER SOURCE OR USED FOR POTABLE WATER SOURCE

Know all men by these presents that I(we) the undersigned, owner(s)_____in fee simple of the land described herein, hereby declare this covenant and place same on record. I(we), am(are) the owner(s) in fee simple of (an interest in) the following described real estate situated in KING County, State of Washington, to wit: (INCLUDE LEGAL, PARCEL NUMBER & ADDRESS)

(See Pg 4 for legal description) Parcel # 1923069026

18825 Renton Maple Valley Rd, Renton, WA 98058

I (we) use water for non potable use only from an irrigation well located on said real estate, to-wit: (PINPOINT THE ACCURATE LOCATION OF THE IRRIGATION WELL SITE, FOR EXAMPLE, 125 FEET OF THE SOUTH PROPERTY LINE AND 100 FEET EAST OF THE WEST PROPERTY LINE ALONG WITH THE PROPERTY LEGAL DESCRIPTION FOR THE PROPERTY ON WHICH THE IRREGATION WELL IS LOCATED).

100 FEET SOUTH OF THE NORTH PROPERTY LINE AND 450 FEET WEST OF THE EAST PROPERTY LINE AND 760 FEET EAST OF THE WEST PROPERTY LINE. (Legal Description is on page 4)

1. I(We) covenant for myself (selves), and for any future purchasers, successors or assignees that this well is to be utilizes solely for irrigation purposes and is not to be connected to any potable water supplies.
2. All original minimum set-back distances will apply to this well, including 100 feet from septic drainfields and other potential sources of contamination per WAC 173.160.171 or its successor.
3. This well will be utilized to irrigate not more than one-half acre in area of lawn or non-commercial garden as per RCW 90.44.050.

This covenant shall run with the land and shall be binding on all parties having or acquiring any right, title, or interest in the land described herein or any part thereof, as long as said well or waterworks is used for the purpose of furnishing irrigation water to the above real property decribed earlier in this document.

WITNESS [signature] hand ___ this 18th day of June, ~~19~~ 2009

Gary Goodnight (Seal)

Shelley Goodnight (Seal)

Grantor

State of Washington
County of Snohomish)

I, the undersigned, a Notary Public in and for the above named County and State, do hereby certify that on this 18th day of June, ~~19~~ 2009, personally appeared before me Shelley M Goodnight and Gary D Goodnight to me known to be the individual ___ described in and who executed the within instrument, and acknowledge that he (they) signed and sealed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

GIVEN under my hand and official seal the day and year last above written.

[signature]
(Notary Public in and for the State of Washington,
residing at Monroe

CORAL D. BUSH
COMMISSION EXPIRES
NOTARY
PUBLIC
JULY 9, 2011
STATE OF WASHINGTON

Reference Number: 20051229000800: recorded into King County on 12/29/2005

This is the **King County Group B Water Use Agreement** for the *new* on site well system for the property in question.

Legal Description:

192306 26BEG 731 FT N SW COR GL 8 TH S83-38-00 E 665 FT TH N 06-28-00 E210 FT TO SLY MGN RENTON-MAPLE VALLEY RD TH W ALG SD RD TO W LNLOT 8 TH S TO BEG LESS C/M/ RGTSALSO E 950 FT OF GL 9 LY S OF RENTON- MAPLE VALLEY RD LESS C/M RG

Quarter Section Township Range

SW–19-23-6

Parcel Address:

18825 SE Renton Maple Valley Rd, Renton, WA 98058

APPENDIX C

Deceleration Lane Pavement Design Memo

associated earth sciences incorporated

Technical Memorandum

Date:	8-10-18	**Project Manager:**	Curtis Koger/ Matt Miller
To:	Lakeside Industries	**Principal in Charge:**	Curtis Koger
Attn:	Karen Deal	**Project Name:**	Lakeside Industries Maple Valley
Address:		**Project No:**	170017 E001
Subject:	Deceleration Lane Pavement Design		

Based upon information from the Traffic Impact Analysis (TIA) provided by TENW we have assumed the following for the analysis:

The Average Daily Traffic (ADT) in the Eastbound direction of 14,000 was used for the design. Since this is not the travel lane we dropped the ADT to one-half of the east bound traffic and increased the truck traffic to 40%.

The Washington State Department of Transportation Pavement Policy Manual Table 5.1, was referenced for pavement thickness. In the category of an Equivalent Single Axle Load (ESAL) in the range of 10,000,000 to 25,000,000 over the 20 year life of the pavement, the following pavement section is recommended:

- Hot Mix Asphalt = 0.83 feet (10 inches)
- Crushed Surfacing Base Course = 0.5 feet (6 inches)