

DIRECTOR'S DECISION

- APPLICANT:** Russell Patton for Public Utility District No. 1 of Klickitat County
- LANDOWNER:** J and A Lands, LLC
- FILE NO.:** C17-0006
- REQUEST:** To develop a well site for the community of Lyle, Washington. The development will include a wellhead, electrical transformation and control equipment, a pipeline to the existing reservoir, and landscaping. Chain-link security fencing will surround the facility and barbed-wire cattle fencing will be installed to protect a 100-foot sanitary control radius around the well. Construction require a 43' by 89' drilling pad and a 14' wide access road to be surfaced with imported fill. Post-construction the pad will be regraded to 30' by 50'.
- LOCATION:** The subject parcels are located in Section 34, Township 3 North, Range 12 East, Lyle, Washington (Klickitat County Parcel Numbers 03123455000700, 03123455000400, and 03123444000100).
- LAND USE DESIGNATION:** The subject parcels are located in the General Management Area and designated Forest - Small Woodland. Parcel 03123455000700 is 16.9 acres, 03123455000400 is 14 acres, and 03123444000100 is 0.8 acres.

DECISION:

Based upon the following findings of fact, the land use application by PUD No. 1 of Klickitat County to develop a new well site and upgrade associated utilities as described above is consistent with the standards of Section 6 and the purposes of the Columbia River Gorge National Scenic Area Act P.L. 99-663, and the Management Plan for the Columbia River Gorge National Scenic Area, and approvable under Commission Rule 350-81 and is hereby **approved**.

CONDITIONS OF APPROVAL:

The following conditions of approval are given to ensure that the subject request is consistent with the standards of Section 6 and the purposes of the Columbia River Gorge National Scenic Area Act, and the Management Plan and approvable under Commission Rule 350-81.

- 1. To ensure notice of the conditions to successors in interest, this Director's Decision, Staff Report for C17-0006, and approved site plan shall be recorded in county deeds and records at the Klickitat County Assessor's Office. Once recorded, the applicant shall submit a copy of the recorded document to the Executive Director at the Commission.**
2. The development shall be constructed as described and shown on the approved project description, site plan and elevation drawings. Any changes shall be reviewed and approved by the Executive Director before the changes are implemented. The drilling pad shall be reduced to a final footprint no greater than 1500 square feet. The applicant shall notify the Gorge Commission within 5 days of beginning construction to arrange for a staking inspection; the applicant shall mark all trees to be removed with flagging or reflective tape and indicate the location of structures.

3. Security fencing shall be a matte black finish and crushed rock material shall be dark in color unless completely screened by vegetation. All structures shall be painted the approved Padmount Green (sample reviewed) or alternative color approved by the Executive Director.
4. Replacement trees shall be planted at a 2:1 ratio and will include Oregon white oak and ponderosa pine trees. Replacement trees shall be 6' tall upon planting; plantings to the west and south of the development shall be maintained by the applicant as permanent visual screening trees. Planted pine trees should be spaced greater than 15 feet between the crowns and pruned to remove dead and low (less than 8 feet) branches. Accumulated leaves, needles, and other dead vegetation shall be removed from beneath trees. Any screening trees planted at the existing water storage tank site, as described in condition 5, are subject to these standards.
5. The applicant shall paint or treat the surface of the existing water storage tank located on taxlot 0312344000100 to achieve a dark earth tone color. The applicant shall maintain the painted or treated surface so that it retains a dark earth-tone color for the life of the existing water storage tank. Any replacement tank shall also be dark earth tone in color. If this proves to be impractical, the applicant shall plant ponderosa pine or other native coniferous screening trees and be responsible for their survival and upkeep. Low branches shall be limbed to minimize fire risk. The applicant shall implement these visual improvements prior to project completion and for review during the final site inspection.
6. The amount of new fencing shall be the minimum necessary. All new or replacement cattle fencing shall be installed to wildlife-friendly specifications outlined in the attached staff report, namely:
 - (a) *To make it easier for deer to jump over the fence, the top wire shall not be more than 42 inches high.*
 - (b) *A gap of at least 10 inches shall be maintained between the top two wires.*
 - (c) *The bottom wire shall be at least 16 inches above the ground and shall consist of smooth wire.*
7. Construction shall not take place during the blooming season for *Meconella oregana* (February-May). All access to the well site shall use only the existing road and new access drive. The applicant shall inform its contractors that they shall not pull off the existing gravel road until they reach the project site. The applicant shall limit road work to the approved utility line trench and otherwise shall use the road "as-is". Ground disturbance shall be minimized throughout construction and maintenance and all soil erosion control measures described on the approved site plan shall be followed.
8. No outdoor lighting is approved in this Director's Decision. Any future proposed outdoor lighting shall be submitted for review and approval by the Executive Director prior to installation.
9. A qualified cultural resources monitor shall be present for ground-disturbing construction activities including tree removal, well drilling, and grading.
10. If cultural resources are discovered during construction activities, all activities within 100 feet of the cultural resources shall cease and the applicants shall notify the Gorge Commission within 24 hours. The cultural resources shall remain as found; further disturbance is prohibited until permission is granted by the Executive Director of the Gorge Commission.
11. If human remains are discovered during construction activities, all activities shall cease upon their discovery. Local law enforcement, the Executive Director, Indian Tribal governments and the Washington State Department of Archaeology and Historic Preservation and the Washington State Anthropologist shall be contacted immediately. Further disturbance is prohibited until permission is granted by the Executive Director of the Gorge Commission.

12. The applicant shall notify the Gorge Commission within 30 days of project completion to arrange for an inspection to confirm compliance with conditions of approval. Project completion means completion of all work on exteriors of structures (including painting).

DATED AND SIGNED THIS 12 day of June 2017 at White Salmon, Washington.

Krystyna U. Wolniakowski
Krystyna U. Wolniakowski
Executive Director

EXPIRATION OF APPROVAL:

Commission Rule 350-81-044 governs the expiration of this Director's Decision.

This decision of the Executive Director becomes void on the 12 day of June 2019 unless construction has commenced in accordance with Commission Rule 350-81-044(3).

Commission Rule 350-81-044(4) specifies that commencement of construction means construction of support structures for an approved above-ground utility or development or actual excavation of trenches for an approved underground utility or development. For roads, commencement of construction shall mean actual grading of the roadway.

Construction must be completed within two years of the date that the applicant commenced construction. The date of the Executive Director's preconstruction staking inspection to confirm the location of the proposed development as required by this decision shall be considered the date the applicant commenced construction, unless the applicant demonstrates otherwise.

Once the applicant has commenced construction of one element in this decision, the applicant will need to complete all elements in this decision in accordance with Commission Rule 350-81-044. The Commission does not use different "commencement of construction" dates for different elements in this decision.

The applicant may request one 12-month extension of the time period to commence construction and one 12-month extension to complete construction in accordance with Commission Rule 350-81-044(6). The applicant must submit the request in writing prior to the expiration of the approval. If the applicant requests an extension of time to complete construction after commencing construction, the applicants shall specify the date construction commenced. The Executive Director may grant an extension upon determining that conditions, for which the applicants were not responsible, would prevent the applicants from commencing or completing the proposed development within the applicable time limitation. The Executive Director shall not grant an extension if the site characteristics and/or new information indicate that the proposed use may adversely affect the scenic, cultural, natural or recreation resources in the National Scenic Area.

APPEAL PROCESS:

The appeal period ends on the 14 day of July, 2017.

The decision of the Executive Director is final unless the applicant or any other person who submitted comment files a Notice of Intent to Appeal and Petition with the Commission within thirty (30) days of the date of this decision. Information on the appeal process is available at the Commission office.

NOTES:

Any new land uses or structural development such as driveways, parking areas, garages, workshops, fences or other accessory structures; or additions or alterations not included in the approved application or site

plan will require a new application and review. New cultivation also requires a new application and review.

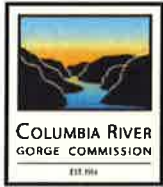
This decision does not address local, state, or federal requirements that may be applicable to the proposed development. The landowner is responsible for obtaining all applicable county, state, or federal permits required for the development.

COPIES OF THIS DECISION SENT TO:

Confederated Tribes and Bands of the Yakama Nation
Confederated Tribes of the Umatilla Indian Reservation
Confederated Tribes of Warm Springs Reservation of Oregon
Friends of the Columbia Gorge
Klickitat County Planning Department
Klickitat County Building Department
Klickitat County Health Department
Klickitat County Assessor
Nez Perce Tribe
Skamania County Planning Department
U.S. Forest Service National Scenic Area Office
Washington Department of Fish and Wildlife
Washington State Historic Preservation Office
White Salmon Library

Attachments:

Staff Report C17-0006
Approved Site Plan



FACTS AND FINDINGS

COLUMBIA RIVER GORGE COMMISSION STAFF REPORT

- APPLICANT:** Russell Patton, PUD No. 1 of Klickitat County
- LANDOWNER:** J and A Lands, LLC
- FILE NO.:** C17-0006
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COMMENTS FROM OTHER INDIVIDUALS/AGENCIES/GOVERNMENTS:

Notice of the subject request was mailed to property owners within 500 feet of the subject parcel and the following individuals/agencies/governments:

Confederated Tribes and Bands of the Yakama Nation
Confederated Tribes of the Umatilla Indian Reservation
Confederated Tribes of Warm Springs Reservation of Oregon
Friends of the Columbia Gorge
Klickitat County Planning Department
Klickitat County Building Department
Klickitat County Health Department
Klickitat County Assessor
Nez Perce Tribe
Skamania County Planning Department
U.S. Forest Service National Scenic Area Office
Washington Department of Fish and Wildlife
Washington State Historic Preservation Office
White Salmon Library

Comments were received from the following parties:

Amber Johnson, Washington Department of Fish and Wildlife
Jasa Holt, Washington State Department of Natural Resources Natural Heritage Program
Marge Dryden, US Forest Service National Scenic Area
David Berger
Pam Essley
Steve McCoy, Friends of the Columbia River Gorge
William Weiler

The comments received are addressed in the following findings of fact. In addition, the public comments and associated information received by the Commission were forwarded to the applicant and relevant comments were discussed in a meeting between staff and the applicant.

BACKGROUND:

The applicant submitted initial application materials to the Gorge Commission in February 2016. Commission staff requested the applicant submit a feasibility study report, to demonstrate the need for the proposed development and that no alternative site was practicable. In May and June of 2016 Commission staff made site visits to discuss adjustments to the proposed design and site plan. A final application, incorporating these recommendations, was submitted in March 2017.

FINDINGS OF FACT:

A. LAND USE

Commission Rule 350-81-280 lists uses allowed with review and additional approval criteria for lands designated small woodland.

(1) The following uses may be allowed on lands designated Commercial Forest Land or Large or Small Woodland, subject to compliance with the guidelines for the protection of scenic, cultural, natural, and

recreation resources (350-81-520 and 620) and the "Approval Criteria for Specified Review Uses" (350-81-290).

(a) Utility facilities and railroads necessary for public service upon a showing that (1) there is no practicable alternative location with less adverse effect on agricultural and forest lands and on scenic, cultural, natural and recreation resources and (2) the size is the minimum necessary to provide the service.

The applicant's project engineer, Russell D. Patton, PE, submitted a Resource Feasibility Report (March 3, 2017) explaining that the two existing groundwater wells that make up the Lyle Water System serve 292 active customers. In each of the past two summers, shortages from the lower well required rationing or redistribution of water from the upper well. The source capacity of existing wells is declining, while water demand for Lyle is projected to increase. The PUD has made attempts to repair the existing infrastructure without success. Capacity continues to diminish. The agency is working to upgrade piping and other infrastructure within the greater water system.

The applicant proposes a new well to provide water to the entire service area, retaining the existing two wells as backup sources.

Klickitat PUD manages the Lyle Water System, which is in part regulated by the Washington Department of Ecology and Department of Health standards. The applicant provided the following rationale for the selected siting and size of development:

Co-locating the new well near the existing upper well site could lead to hydrological interference, according to PUD hydrologists. The existing well site is outside the Urban Area. Adding a well site here might cluster development within a single footprint, but would still require new development in the Urban Area.

The existing water right, and applicable standards set by the Washington Department of Ecology, prohibits placing a new well site within 750 feet of one existing non-PUD well. The owner(s) of other properties meeting this distance requirement are not willing to allow the well to be located there.

An evaluation of unoccupied sites within the Urban Area and within the water right area indicates no practicable alternative within the Urban Area.

The proposed well will provide flexibility and capacity to address future needs. In 2016 the total capacity of the existing water system was insufficient to meet the theoretical maximum daily demand.

The feasibility report references the 2011 Lyle Water System Plan, a document required by the Washington State Department of Health. The 2011 plan states that Lyle provided water for 370 equivalent residential units (ERUs), a standard metric for estimating water use equivalent to the needs of a single-family dwelling. The plan also estimates that 438 ERUs are needed to support the 20-year growth potential of Lyle, a potential increase of approximately 68 households. The predictions assume no non-residential increase in water demand and a modest improvement in water efficiency. Growth was predicted using Klickitat County average projections, which may not be applicable to communities within the National Scenic Area.

Staff reviewed the existing parcels within the community of Lyle, including the Urban Area and Lyle Point, and adjacent taxlots designated (GMA) Residential. Using recent aerial imagery, we identified at least 60 taxlots that are currently undeveloped. This is a coarse evaluation, but we find the applicant's estimate of potential future water needs to be reasonable for the Lyle service area, assuming no changes to the existing National Scenic Area Land Use Designations or Urban Area boundaries. The Commission has no authority regarding local government land use decisions within the Urban Area, and does not speculate on likely growth scenarios for the community.

The scope of development under review at this time is limited to the new well site and associated infrastructure. Any request for future development of the parcel or surrounding parcels in the National Scenic Area will require a new application and be subject to applicable review under the Management Plan.

In consultation with Commission staff, the applicant reduced the proposed grading from 600 cubic yards to 116 cubic yards. The road and well construction pad are proposed to be the minimum size necessary to accommodate the drilling equipment. Earth cut from up-slope will be used to fill the lower elevation to the greatest extent practicable. The layout of the access roads also minimizes the number of trees that will need to be cut. The applicant redesigned the original well pump to eliminate the need for a small building.

350-81-290(1) states:

The uses identified under 350-81-280, may be allowed only if they meet all of the following criteria:

(a) The owners of land that is designated Commercial Forest Land, Large or Small Woodland, or Large-Scale or Small-Scale Agriculture and that lies within 500 feet of the perimeter of the subject parcel have been notified of the land use application and have been given at least 10 days to comment prior to a final decision.

A notice of development review and site plan for the proposed utility were mailed to the landowners of all properties within 500 feet of the project area. Staff discussed the comments we received with the applicant and incorporated that feedback where appropriate in this staff report. Klickitat PUD conducted additional outreach related to the project, presenting to the Lyle Community Council in April.

Conclusion: The requirements for notice and comment have been met.

(b) The use will not seriously interfere with accepted forest or agricultural practices on nearby lands devoted to resource use.

(c) The use will be sited in a way that minimizes the loss of forest or agricultural land and minimizes the chance of interference with accepted forest or agricultural practices on nearby lands.

The parcel is currently used for cattle grazing. Approximately one acre of the project area will be fenced from cattle, to achieve a required 100-foot sanitary radius for water quality purposes. The landowner is aware of this requirement. A total of 51 Oregon white oak trees, ranging in diameter from six to ten inches, and one 24 inch-diameter oak will be removed from the property, as described in the attached site plan. The new development occurs entirely within a grove of Oregon white oak. Replacement trees will be oak or ponderosa pine. The project site is adjacent to a steep slope and paved road.

Conclusion: This project has been sited to minimize the impact on forest and agricultural practices and is not expected to seriously interfere with the on-going agricultural use of this or nearby lands.

(d) The use will not significantly increase fire hazard, fire suppression costs, or risks to fire suppression personnel and will comply with the "Approval Criteria for Fire Protection" (350-81-300).

The proposed project does not include any new buildings or overhead power lines and it meets the Commission's approval criteria, described below. However, as public comments brought to our attention, the site is steep and treed and there have been fires in the area in past years. Staff recommended the applicant consult with their local fire district and called the Lyle Fire Department for input. Suggested best management practices are incorporated in the conditions of approval; long term maintenance of planted ponderosa pines includes trimming low limbs to reduce fuels. The Lyle Fire Department does not believe that the project would increase fire risk or suppression costs.

350-81-300. Approval Criteria for Fire Protection in GMA Forest Designations states:

(1) All uses, as specified, shall comply with the following fire safety guidelines:

(a) All buildings shall be surrounded by a maintained fuel break of 50 feet. Hazardous fuels shall be removed within the fuel break area. Irrigated or fire resistant vegetation may be planted within the fuel break. This could include green lawns and low shrubs (less than 24 inches in height). Trees should be spaced greater than 15 feet between the crowns and pruned to remove dead and low (less than 8 feet) branches. Accumulated leaves, needles, and other dead vegetation shall be removed from beneath trees.

(b) Buildings with plumbed water systems shall install at least one standpipe a minimum of 50 feet from the structure(s).

(c) A pond, stream, tank or sump with storage of not less than 1,000 gallons, or a well or water system capable of delivering 20 gallons per minute shall be provided. If a well pump is located on-site, the electrical service shall be separate from the dwelling.

(d) Access drives shall be constructed to a minimum of 12 feet in width and not exceed a grade of 12 percent. Turnouts shall be provided at a minimum of every 500 feet. Access drives shall be maintained to a level that is passable to fire equipment. Variances to road guidelines may be made only after consultation with the local rural fire district and the Washington Department of Natural Resources in Washington or the Oregon Department of Forestry in Oregon.

(e) Within 1 year of the occupancy of a dwelling, the local government shall conduct a review of the development to assure compliance with these guidelines.

(f) Telephone and power supply systems shall be underground whenever possible.

(g) Roofs of structures should be constructed of fire-resistant materials such as metal, fiberglass shingle or tile. Roof materials such as cedar shake and shingle should not be used.

(h) Any chimney or stovepipe on any structure for use with a woodstove or fireplace should be screened with no coarser than 1/4 inch mesh metal screen that is noncombustible and corrosion resistant and should be equipped with a spark arrestor.

(i) All structural projections such as balconies, decks and roof gables should be built with fire resistant materials equivalent to that specified in the Uniform Building Code. 131

(j) Attic openings, soffit vents, foundation louvers or other ventilation openings on dwellings and accessory structures should be screened with no coarser than 1/4- inch mesh metal screen that is noncombustible and corrosion resistant.

Criteria (a-c), (e) and (g)-(j) do not apply, as no dwellings or buildings are proposed. The well and water tank provide on-site water sources. The project narrative and site plan show that Gene Drive is 12 feet in width. Staff discussed the road with the applicant and confirmed that the proposed new access drive and segment of Gene Drive required for access will be maintained to 12 feet in width and passable to equipment, including “brush trucks” that local fire fighters would likely use. The applicant proposes buried utility lines.

Conclusion: The approval criteria for specified review uses in the GMA Forest Small Woodland designation have been met.

B. SCENIC RESOURCES

Commission Rule 350-81-520 lists scenic resource protection guidelines for review uses in the GMA. Commission Rule 350-81-520(1) lists guidelines for all review uses in the GMA that apply to all proposed development. Of these, the following guidelines for roads and planting screening vegetation apply. Additional guidelines for new buildings and new quarries are not applicable.

(a) New buildings and roads shall be sited and designed to retain the existing topography and to minimize grading activities to the maximum extent practicable.

...

(c) Project applicants shall be responsible for the proper maintenance and survival of any planted vegetation required by the guidelines in this chapter.

...

(e) For all proposed development, the determination of compatibility with the landscape setting shall be based on information submitted in the site plan.

Compliance with (a): The applicant’s site plan and staff field visits demonstrate that the access drive and well siting requires 116 cubic yards of grading. The average slope at the well site is 14%; it becomes steeper north and west of the site. The selected siting also achieves partial topographical screening and minimizes the number of existing screening trees to be removed.

Compliance with (c): Replacement trees are required as a condition of approval to mitigate the loss of Oregon white oak habitat and also to provide vegetative screening. The conditions of approval state the applicant shall be responsible for the proper maintenance and survival of trees and shrubs planted to provide screening.

Compliance with (e): Discussion of compatibility with the landscape setting is below where this report addresses Commission Rule 350-81-520(3).

Conclusion: The applicable guidelines of Commission Rule 350-81-520(1) have been met by the project siting, design, and mitigation planting. **A condition of approval requires the applicant to plant and maintain replacement trees and shrubs for visual screening. The applicant is required to request a**

staking inspection at least 5 days prior to beginning construction to demonstrate compliance with applicable guidelines.

Commission Rule 350-81-520(2) lists guidelines for all review uses that are topographically visible from key viewing areas.

Commission staff observed that the subject parcels are topographically visible from key viewing areas (KVAs): State Route 14, Rowena Crest, Interstate 84, State Route 142, Historic Columbia River Highway, and the Columbia River. Thus, the guidelines of Commission Rule 350-81-520(2) are applicable.

Commission Rule 350-81-520(2)(b) states:

Each development shall be visually subordinate to its setting as seen from key viewing areas.

Commission Rule 350-81-020(170) defines visually subordinate as follows:

Visually subordinate: A description of the relative visibility of a structure where the structure does not noticeably contrast with the surrounding landscape, as viewed from a specified vantage point (generally a Key Viewing Area, for the Management Plan). As opposed to structures that are fully screened, structures that are visually subordinate may be partially visible. They are not visually dominant in relation to their surroundings.

Commission Rule 350-81-520(2)(d) states that conditions of approval to achieve visual subordination shall be proportionate to its potential visual impacts as seen from KVAs and lists the factors.

The proposed development includes a construction pad and road, utility trench within existing roadway, construction of a transformer 4' by 6' by 4'9" tall and a pump control structure to be 2'1" by 6' by 7'2" tall, cattle fencing, and security fencing. Gorge Commission staff used mapping software, aerial photography, and field observations to determine the distance to and distance along linear key viewing areas as follows:

The site is visible for a stretch of approximately 1.8 miles along I-84 at a distance of 1 to 3 miles from the development. The site is within 0.1 miles of SR 142 but is directly upslope and not visible from the road. For an approximately .25 mile segment of SR 14 the site is visible at a distance of 0.5 miles. The development is potentially visible from Rowena Crest at approximately 1.5 miles away. It is partially topography screened.

Project siting largely minimizes the visibility of development from these KVAs. The site is located at mid-slope on a northwest facing slope in oak woodland and does not break the skyline as seen from KVAs. The applicant has adjusted the design to eliminate the need for a building over the well head. By retaining as many existing trees as possible and planting replacement trees on site, vegetative screening will contribute to visual subordination. The dark earth tone paint used for the transformer and pump control will reduce the visibility of the two new structures. Linear utilities will be buried in the existing roadway and will not create additional visual impacts.

The proposed cattle fencing is consistent with the description of oak woodland landscape setting elements of "scattered rural development". Structures are six and seven feet tall, well below the canopy of the existing vegetation on site. The number of trees removed is the minimum necessary to accommodate construction and access. **Replacement trees shall be planted at a 2:1 ratio, will be at least 6' tall unless otherwise advised by a professional (arborist, ecologist, landscaper) and, will include**

native Oregon white oak and ponderosa pine, and shall be maintained by the applicant to achieve visual screening as a condition of approval.

The security fence and gravel pad structures are not likely to appear compatible with the rural development associated with the oak woodland landscape setting. Vegetative screening and revegetation using native grass and forb mix is necessary to achieve visual subordination. Upon inspection, if the rock material making up the drilling pad is not dark enough to be visually subordinate from KVAs, the applicant shall be required to treat the material with a darkening agent or to install additional plantings.

Conclusion: The topographic visibility of above ground development from key viewing areas is limited and the use of colors that blend with the landscape and vegetative screening help ensure the development will be visually subordinate as viewed from key viewing areas.

Commission Rule 350-81-520(2)(c) states:

Determination of potential visual effects and compliance with visual subordination policies shall include consideration of the cumulative effects of proposed developments.

Commission Rule 350-81-020(40) defines “cumulative effects” as:

The combined effects of two or more activities. The effects may be related to the number of individual activities, or to the number of repeated activities on the same piece of ground. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

The proposed development is an addition to the existing Lyle water system and existing development on the three subject parcels. This system includes a water storage tower that is a light-colored concrete and currently is highly visible from KVAs including SR 14 and Rowena Crest. In order to address cumulative impacts of the well system, **a condition of approval for this new well development requires the PUD to paint or treat the surface of the existing water storage tank located on taxlot 0312344000100 to achieve a dark earth tone color. If this proves to be impractical, the applicant shall plant screening trees and be responsible for their monitoring and survival.** The applicant shall implement these mitigations prior to project completion and for review during the final site inspection.

Commission Rule 350-81-520(2) also states:

(f) New development shall be sited using existing topography and/or existing vegetation as needed to achieve visual subordination from key viewing areas.

(g) Existing tree cover screening proposed development from key viewing areas shall be retained as specified in the Landscape Settings Design Guidelines in 350-81-520(3).

...

(j) The following guidelines shall apply to new landscaping used to screen development from key viewing areas:

(A) New landscaping (including new earth berms) shall be required only when application of all other available guidelines in 350-81-520 is not sufficient to make the development visually subordinate from key viewing areas. Alternate sites shall be considered prior to

using new landscaping to achieve visual subordination. Development shall be sited to avoid the need for new landscaping wherever possible.

(B) If new landscaping is required to make a proposed development visually subordinate from key viewing areas, existing on-site vegetative screening and other visibility factors shall be analyzed to determine the extent of new landscaping, and the size of new trees needed to achieve the standard. Any vegetation planted pursuant to this guideline shall be sized to provide sufficient screening to make the development visually subordinate within five years or less from the commencement of construction.

(C) Unless as specified otherwise by provisions in 350-81-520, landscaping shall be installed as soon as practicable, and prior to project completion. Applicants and successors in interest for the subject parcel are responsible for the proper maintenance and survival of planted vegetation, and replacement of such vegetation that does not survive.

(D) The Scenic Resources Implementation Handbook shall include recommended species for each landscape setting consistent with the Landscape Settings Design Guidelines in 350-81-520(3), and minimum recommended sizes of new trees planted (based on average growth rates expected for recommended species).

(k) Conditions regarding new landscaping or retention of existing vegetation for new developments on lands designated GMA Forest shall meet both scenic guidelines and fuel break requirements in 350-81-300(1)(a).

(l) Unless expressly exempted by other provisions in 350-81-520, colors of structures on sites visible from key viewing areas shall be dark earth-tones found at the specific site or in the surrounding landscape. The specific colors or list of acceptable colors shall be included as a condition of approval. The Scenic Resources Implementation Handbook will include a recommended palette of colors.

Compliance with these guidelines is partially addressed in the findings above. The applicant indicates on the approved site plan the location of 51 oak trees to be removed for the construction of access roads and the building pad. The project narrative demonstrates this is the minimum necessary to meet the needs of the utility project. The majority of replacement trees will be Oregon white oak. Ponderosa pine are also located in the project area. Some of the replacement trees will be ponderosa pine to provide year-round screening and wildlife habitat. Planted shrubs will be native species that grow in association with oak woodlands, described on the approved site plan.

The applicant has proposed a gravel drilling pad of dark-colored crushed rock. A condition of approval to be verified upon inspection is that the rock color shall be consistent with the dark earth tones found in this landscape setting or completely screened by vegetation. Structures are to be painted a very dark, matte green polyester powder coating that was provided to and approved by Commission staff, called Padmount Green (P70090GPC). A field visit verified that the proposed siting maximizes topographic screening, and a staking inspection is included as a condition of approval. All utility lines are to be buried.

Commission Rule 350-81-520(3) contains siting and design requirements for specific landscape settings.

The parcel is located primarily within a wooded portion of the Oak-Pine Woodlands Landscape Setting (350-81-520(3)(c), and partially in the Grasslands Landscape Setting (350-81-520(3)(d) outside the

project area. The setting is characterized by transitional vegetation types, dry forested areas and small pastures, occasional cultivated areas, and scattered rural development, including roads and fences.

Applicable guidelines for Oak-Pine Woodland Setting include:

A. Structure height shall remain below the tree canopy level in wooded portions of this setting.

B. In portions of this setting visible from key viewing areas, the following guidelines shall be employed to achieve visual subordination for new development and expansion of existing development:

i. At least half of any tree species planted for screening purposes shall be species native to the setting. Such species include Oregon white oak, ponderosa pine, and Douglas-fir.

ii. At least half of any trees planted for screening purposes shall be coniferous to provide winter screening. For substantially wooded portions:

iii. Except as is necessary for construction of access roads, building pads, leach fields, etc., the existing tree cover screening the development from key viewing areas shall be retained.

Commission Rule 350-81-520(4) contains guidelines for new uses within ¼ mile of scenic travel corridors. Portions of the project are within ¼ mile of Washington SR-142, a scenic travel corridor. Scenic travel corridor guidelines apply to new and existing buildings, parking lots, vegetation management in public rights-of-way to provide or improve views, signal wires and power lines, and mineral resources and quarries. None of the guidelines in Commission Rule 350-81-520(4) apply to the type of development proposed.

Conclusion: With conditions, the proposed development can be visually subordinate from all key viewing areas as discussed in the preceding findings. The proposed development will not cause adverse scenic impacts, and will not cause adverse cumulative scenic impacts. By mitigating the visual impact of the existing water storage tank, the outcome of this project will likely have an overall neutral or positive effect on scenic resources. This development review application is consistent with Commission Rule 350-81-520(2) through (4).

C. CULTURAL RESOURCES

Commission Rule 350-81-540 directs the Executive Director to follow procedures and guidelines for cultural resources review; Commission Rules 350-81-540(1)(c)(A) and (B) include guidelines to determine when a cultural resources reconnaissance survey and a historic survey are required for proposed developments.

On September 23, 2016, Marge Dryden, Heritage Program Manager, U.S. Forest Service (USFS), Columbia River Gorge National Scenic Area Office, advised that a previous survey conducted for a Lyle Urban Area boundary expansion application in 2005 would not satisfy NSA requirements for a survey associated with large-scale uses.

The applicant provided a cultural resources survey report as part of the complete application, which Ms. Dryden reviewed. A reconnaissance survey and shovel testing were done and no prehistoric resources were located. Gene Drive is recorded as a historic, non-significant resource, but is not expected to be adversely affected by the proposed development. Ms. Dryden provided Commission staff a letter on April

19, 2017 stating concurrence with the survey determination of no effect on historic or prehistoric properties for the project (DAHP Project Number 2017-02-01215). The report and the letter recommend a cultural resources monitor be present for ground-disturbing activities including tree removal, well drilling, and grading.

Notice of the determination and copies of the survey report were provided to the treaty tribes and the Washington State Department of Archaeology and Historic Preservation for a 30-day comment period. No comments were received.

Conclusion: The proposed development is consistent with the applicable cultural resource guidelines in Commission Rule 350-81-540. A condition of approval will include provisions for the inadvertent discovery of cultural resources and discovery of human remains, including notification of the State Physical Anthropologist Dr. Guy Tasa at (360) 586-3534 or guy.tasa@dahp.wa.gov. In addition to the conditions for inadvertent discovery, **a condition of this approval requires a qualified cultural resources monitor to be present during ground-disturbing construction activities including tree removal, well drilling, and grading.**

D. NATURAL RESOURCES

Commission Rules 350-81-560 through 590 contain provisions for the protection of natural resources. Commission Rule 350-81 protects wetlands (350-81-560); streams, ponds, lakes and riparian areas (350-81-570); sensitive wildlife areas and sites (350-81-580); and rare plants (350-81-590).

Wetlands; Streams, ponds, lakes, and riparian areas: The proposed development is within 1000 feet of the Klickitat River wetland and riparian area. The development site is approximately 900 feet measured along the ground surface at its closest point and separated from the river by both Centerville Highway and State Route 142. The access road for all construction activity, Gene Drive, is further upslope from the river. This site is positioned approximately 400 vertical feet upslope from the river. The project will not result in any disturbance of the wetland or wetland buffer. Impacts of development are expected to be isolated to the immediate construction site which extends upslope and away from the river.

Sensitive wildlife resources: Commission Rule 350-81-580 contains provisions for the protection of sensitive wildlife areas and sites within 1,000 feet of the proposed development. Resource inventories indicate Oregon white oak, deer and elk winter range, and bald eagle habitat occur in the project area. The applicant provided a wildlife survey report as part of the application. Commission staff provided the site plan and wildlife report to the Washington Department of Fish and Wildlife for review.

Consultation with the Washington Department of Fish and Wildlife included several reviews of the site plan, phone calls to discuss fencing, public notice, Staff discussed appropriate mitigation for the loss of Oregon white oak habitat on this particular site. During an additional site visit in April of 2017, staff recommended changes to the project siting to reduce the number of trees that would be cut and to maximize topographical and vegetative screening from KVAs. The applicant incorporated staff feedback in the design and will be required to stake the location of the pad and structures prior to construction.

The subject parcels are partially within identified winter range for black-tailed deer. Commission Rule 350-81-580(6) specifies that new fencing in Deer and Elk Winter Range is subject to the following approval criteria:

(a). New fences in deer and elk winter range shall be allowed only when necessary to control livestock or exclude wildlife from specified areas, such as gardens or sensitive wildlife sites. The areas fenced shall be the minimum necessary to meet the immediate needs of the project applicant.

(b). New and replacement fences that are allowed in winter range shall comply with the guidelines in Specifications for Structural Range Improvements (Sanderson et al. 1990), as summarized below, unless the project applicant demonstrates the need for an alternative design:

(A). To make it easier for deer to jump over the fence, the top wire shall not be more than 42 inches high.

(B). The distance between the top two wires is critical for adult deer because their hind legs often become entangled between these wires. A gap of at least 10 inches shall be maintained between the top two wires to make it easier for deer to free themselves if they become entangled.

(C). The bottom wire shall be at least 16 inches above the ground to allow fawns to crawl under the fence. It shall consist of smooth wire because barbs often injure animals as they crawl under fences.

(D). Stays, or braces placed between strands of wire, shall be positioned between fence posts where deer are most likely to cross. Stays create a more rigid fence, which allows deer a better chance to wiggle free if their hind legs become caught between the top two wires.

The proposed security fencing, as described, is intended to prevent people from vandalizing the well facility. The applicant told staff that security fencing would only be installed if trespass was observed. The cattle-exclusion fencing is required by Washington Department of Health standards to maintain a sanitation buffer around the well site.

Conclusion: The applicant has demonstrated that an alternative design is necessary to meet the purpose of security fencing. **A condition of approval shall be that the design specifications for exterior cattle fencing meet the above described criteria for deer-friendly fencing.**

The Washington Department of Fish and Wildlife determined that the project and associated mitigation measures will not adversely affect wildlife resources.

Sensitive Plants: Commission Rule 350-81-590 contains provisions for the protection of sensitive plants within 1,000 feet of the proposed development.

Gorge Commission inventories indicate observations of rare plant species within 1,000 feet of the project area. The applicant provided a rare plant survey report. The survey was conducted by a professional biologist and included a visit during the blooming season for *Meconella oregana* in April 2017. Notice of the survey report was provided to the Washington Department of Natural Resources Natural Heritage Program for a 20-day comment period. Jasa Holt responded with a letter noting that *Meconella oregana* is very difficult to locate by survey alone, and likely does occur on the site. Based on input from the Heritage Program staff, conditions of approval shall require the applicant to limit vehicle traffic and ground disturbance to the immediate project site, staging equipment in previously disturbed sites such as the existing water tower site, and using native, weed-free seed for all plantings. Ms. Holt advised that the project, including these conditions, is not expected to have adverse impacts on the local population of *Meconella oregana*.

Conclusion: The proposed development, with conditions, is consistent with the applicable guidelines in Commission 350-81-560 through 350-81-590 that protect natural resources from adverse effects.

E. RECREATION RESOURCES

The subject parcel is not adjacent to any parks or recreation sites.

Conclusion: The proposed development is consistent with applicable recreation resource guidelines and Commission Rule 350-81-610 does not apply.

F. TRIBAL TREATY RIGHTS

Commission Rule 350-81-084(1) provides protection of tribal treaty rights from new development in the National Scenic Area. Commission Rule 350-81-084(1)(a) lists additional notice materials for projects in or providing access to the Columbia River or its fish bearing tributaries or for projects that may affect Indian treaty rights and provides 20 days for tribal governments to submit comments.

The subject property has no access to the Columbia River, but pursuant to previously described noticing requirements, notice of the proposal was mailed or emailed to the four tribal governments on April 7, 2017.

Commission Rule 350-81-084(1)(b) lists guidelines for tribal government consultation when those governments submit substantive written comments. No substantive comments were received. Given this information, the proposed development is consistent with Commission Rule 350-81-084(1)(b).

Commission Rule 350-81-084(1)(c)(B) states:

The treaty rights protection process may conclude if the Executive Director determines that the proposed uses would not affect or modify treaty or other rights of any Indian tribe. Uses that would affect or modify such rights shall be prohibited.

The subject property does not provide access to the Columbia River or its fish bearing tributaries. No known treaty rights are affected by this proposal and no substantive treaty rights concerns were raised by the tribal governments. Because the proposed use would not affect or modify treaty or other rights of any Indian tribe, the treaty rights protection process may conclude pursuant to Commission Rule 350-81-084(1)(c)(B).

Conclusion: The proposed development is consistent with the guidelines in Commission Rule 350-81-084, which provides protection for treaties and any other rights of any Indian tribe.

DATE THIS REPORT WAS PREPARED: June 7, 2017

PREPARED BY: *Jessica Gist, Natural Resources & Land Use Planner, Columbia River Gorge Commission*

cc: Confederated Tribes and Bands of the Yakama Indian Nation
Confederated Tribes of the Umatilla Indian Reservation
Confederated Tribes of Warm Springs Reservation
Dave Berger
Marge Dryden, United States Forest Service National Scenic Area
Nez Perce Tribe
Pam Essley
Klickitat County Planning
Klickitat County Building

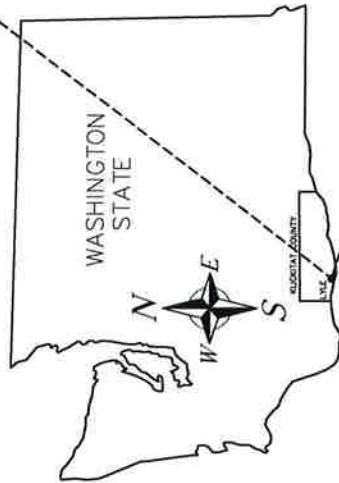
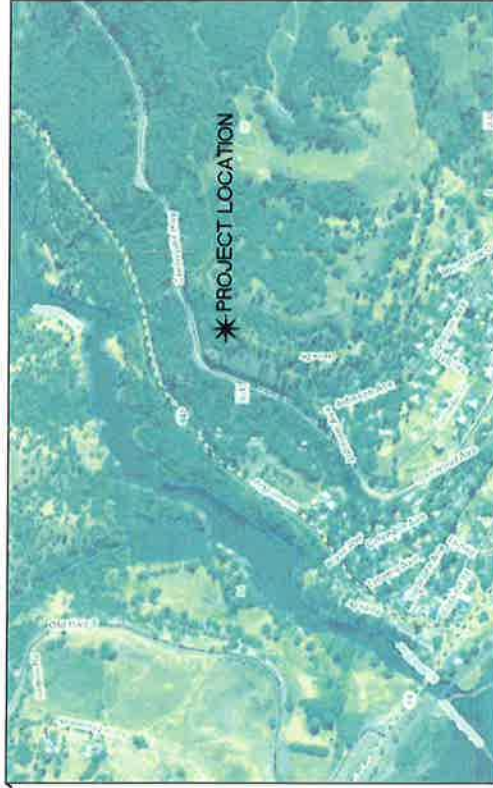
Friends of the Columbia Gorge
Amber Johnson, Washington Department of Fish and Wildlife
Washington Natural Heritage Program
William Weiler

END OF STAFF REPORT

CLICKITAT PUBLIC UTILITY DISTRICT LYLE UPPER WELL SITE LYLE, WA

APPROVED
Pages 1-8 *Just*

VICINITY MAP



- DRAWING SHEET LIST**
- CE-00 COVER SHEET AND VICINITY MAP
 - CE-10 OVERALL SITE PLAN
 - CE-20 ORIGINAL GROUND SITE PLAN
 - CE-30 CONSTRUCTION SITE PLAN
 - CE-31 FINISHED GRADE SITE PLAN
 - CE-40 PROFILE VIEWS
 - CE-50 EROSION CONTROL PLAN
 - CE-60 FENCE DETAILS

- CML LEGEND**
- FENCE LINE
 - NEW WATER LINE
 - PROPERTY LINE
 - NEW ROAD & PAD SURFACE
 - BUILDING FOOTPRINT
 - EXISTING ROAD
 - CONIFER TREE
 - DECIDUOUS TREE
 - PLANTINGS OF PONDEROSA PINE SEE CE-3.1
 - PLANTINGS OF OREGON WHITE OAK SEE CE-3.1

UTILITY STATEMENT

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED AS ACCURATELY AS POSSIBLE FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. PIONEER SURVEYING AND ENGINEERING, INC. HAS CONDUCTED A UTILITY LOCATING SERVICE TO IDENTIFY UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. IT IS THE POLICY OF PIONEER SURVEYING AND ENGINEERING, INC. THAT THE UNDERGROUND UTILITIES SHOWN ARE IN EXACT LOCATION INDICATED, ALTHOUGH WE DO CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.

GRASS SEED INFORMATION

Kind and Variety of Seed in Mixture	Percent By Weight	Minimum Pure Seed	Minimum Percent of Germination
Colonial Bent Grass:	10 percent	9.8 percent	85 percent
Cresting Red Fescue:	40 percent	39.2 percent	90 percent
Perennial Rye Grass:	30 percent	29.4 percent	90 percent
White Clover:	20 percent	19.6 percent	90 percent
Maximum Percentage of Weed Seed	1.0 percent		
Maximum Inert and Other Crops	1.0 percent		

PROJECT NARRATIVE

PURPOSE: THE PURPOSE OF THIS PROJECT IS TO PROVIDE ADDITIONAL WATER TO THE CITIZENS OF LYLE, WASHINGTON.

CUT/FILL: THE NET CUT OF THE PROJECT SITE BASED OFF ORIGINAL GROUND MINUS FINISHED GRADE IS APPROXIMATELY 191 CUBIC YARDS OF MATERIAL.

EROSION CONTROL: THE DRILL PAD AND ACCESS ROAD WILL BE FINISHED WITH COMPACTED GRAVEL TO SUFFICIENTLY SUPPORT THE WELL DRILL RIGGS. THE GRADED HILL AND DSE SLOPES WILL HAVE GRASS SEED PLANTED TO MAINTAIN STABLE SLOPES (SEE GRASS SEED TABLE FOR MORE INFORMATION). ADDITIONALLY A SEDIMENT FENCE WILL BE INSTALLED PRIOR TO CONSTRUCTION TO CATCH ANY ADDITIONAL SURFACE RUNOFF DURING CONSTRUCTION. SEE EROSION CONTROL PLAN CE-5.0 FOR MORE INFORMATION.

TREE REMOVAL: ROUGHLY (51) EASTERN WHITE OAK TREES WILL BE REMOVED. MOST OF THOSE BEING IN THE RANGE OF 4-10 INCH TRUNK DIAMETER. ONLY ONE TREE WILL HAVE A DIAMETER IN THE RANGE OF 20-24 INCHES. OWNER WILL BE PLANTING (51) NEW EASTERN WHITE OAKS AND (12) PONDEROSA PINES IN UNDISTURBED SOIL SURROUNDING THE SITE. THE LOCATION OF THE REMOVED TREES AND CORRESPONDING NUMBER CAN BE FOUND ON SHEET CE-2.0. SEE SHEET CE-3.1 FOR LOCATION OF NEW PLANTINGS.

PROJECT CONTACT INFORMATION

OWNER:
RUSSELL PATTON
CLICKITAT PUD
310 S ROOSEVELT AVE,
GOLDENDALE, WA 98620
PA: (509) 773-4022

ENGINEER:
PIONEER SURVEYING AND ENGINEERING, INC.
125 E SIMCOE DRIVE
GOLDENDALE, WA 98620
PA: (509) 773-4945

CALL
BEFORE YOU DIG
1-800-424-5555
ONE CALL NUMBER
48 HR. NOTICE REQUIRED

Pioneer Surveying & Engineering, Inc.
Civil/Structural Engineering and Land Planning
125 E Simcoe Drive
Goldendale, Washington 98620
Phone (509) 773-4945, Fax (509) 773-5888, E-Mail ps@pse-engineer.net



COVER SHEET AND VICINITY MAP
LYLE, WA
CLICKITAT PUD -
LYLE UPPER WELL SITE

Date	Revisions
12/7/2015	WORKSHEET PLOT SIZE
12/7/2015	CORRECT COMMISSION REVISION #1
12/7/2015	CORRECT COMMISSION REVISION #2
12/7/2015	CORRECT COMMISSION REVISION #3
12/7/2015	CORRECT COMMISSION REVISION #4
12/7/2015	CORRECT COMMISSION REVISION #5
12/7/2015	CORRECT COMMISSION REVISION #6
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12/7/2015	CORRECT COMMISSION REVISION #9
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12/7/2015	CORRECT COMMISSION REVISION #99
12/7/2015	CORRECT COMMISSION REVISION #100

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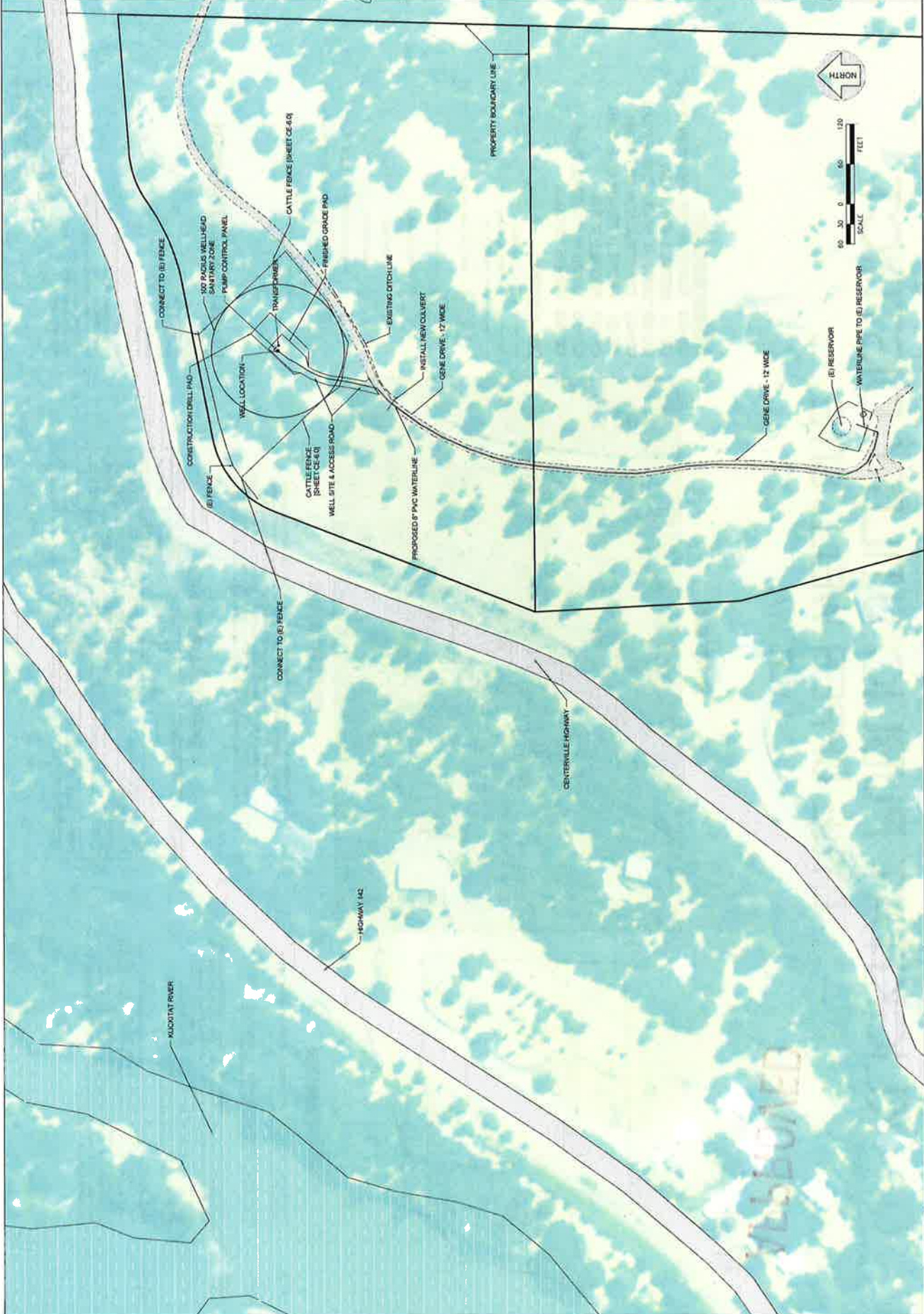
Pioneer Surveying & Engineering, Inc.
 Civil/Structural Engineering and Land Planning
 125 E. Stinson Drive
 Goldsboro, NC 27520
 Phone (509) 773-4945, Fax (509) 773-5688, E-Mail psee@psege.net



OVERALL SITE PLAN
 LYLE, WA
 KICKTAT PUD -
 LYLE UPPER WELL SITE

No.	Date	Revisions
1	1/28/2015	INCREASED DRILL PAD SIZE
2	1/22/2015	GRADE COMMISSION REVISIONS #3
3	3/20/2015	GRADE COMMISSION REVISIONS #2
4	1/23/2015	GRADE COMMISSION REVISIONS
5	1/16/2015	FINAL SUBMITTAL
6	12/16/2014	SUBMITTED FOR FINAL REVIEW

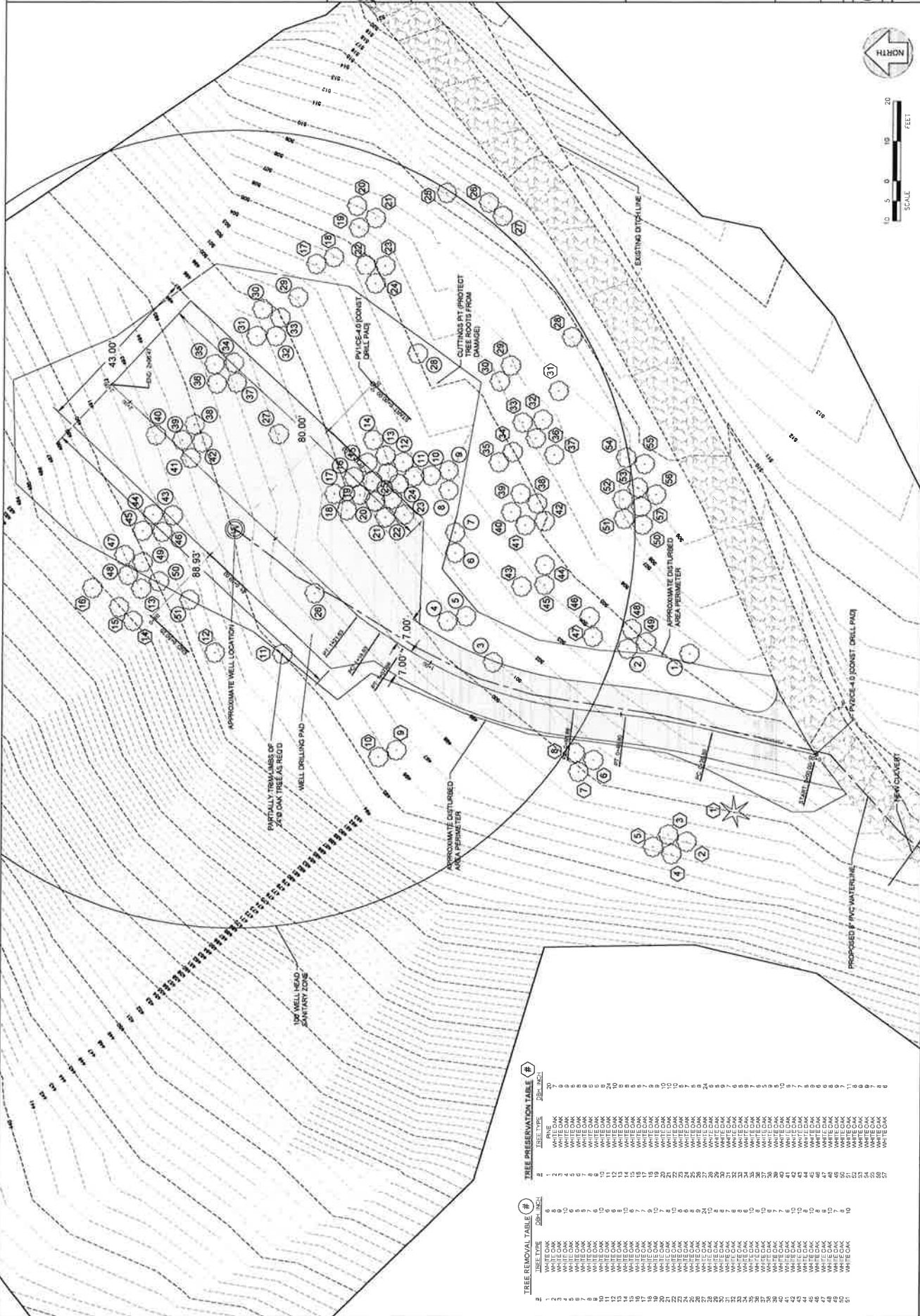
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ORIGINAL GROUND SITE PLAN

No.	Date	Revisions
1	1/17/2015	PROPOSED BELL PAD PER
2	1/20/2015	CHIEF COMMISSION REVISION #2
3	1/22/2015	CHIEF COMMISSION REVISION #3
4	1/23/2015	CHIEF COMMISSION REVISION #4
5	1/23/2015	CHIEF COMMISSION REVISION #5
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92	1/23/2015	CHIEF COMMISSION REVISION #92
93	1/23/2015	CHIEF COMMISSION REVISION #93
94	1/23/2015	CHIEF COMMISSION REVISION #94
95	1/23/2015	CHIEF COMMISSION REVISION #95
96	1/23/2015	CHIEF COMMISSION REVISION #96
97	1/23/2015	CHIEF COMMISSION REVISION #97
98	1/23/2015	CHIEF COMMISSION REVISION #98
99	1/23/2015	CHIEF COMMISSION REVISION #99
100	1/23/2015	CHIEF COMMISSION REVISION #100



TREE REMOVAL TABLE (#)

TREE #	TREE TYPE
1	WHITE OAK
2	WHITE OAK
3	WHITE OAK
4	WHITE OAK
5	WHITE OAK
6	WHITE OAK
7	WHITE OAK
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95	WHITE OAK
96	WHITE OAK
97	WHITE OAK
98	WHITE OAK
99	WHITE OAK
100	WHITE OAK

TREE PRESERVATION TABLE (#)

TREE #	TREE TYPE
1	WHITE OAK
2	WHITE OAK
3	WHITE OAK
4	WHITE OAK
5	WHITE OAK
6	WHITE OAK
7	WHITE OAK
8	WHITE OAK
9	WHITE OAK
10	WHITE OAK
11	WHITE OAK
12	WHITE OAK
13	WHITE OAK
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96	WHITE OAK
97	WHITE OAK
98	WHITE OAK
99	WHITE OAK
100	WHITE OAK

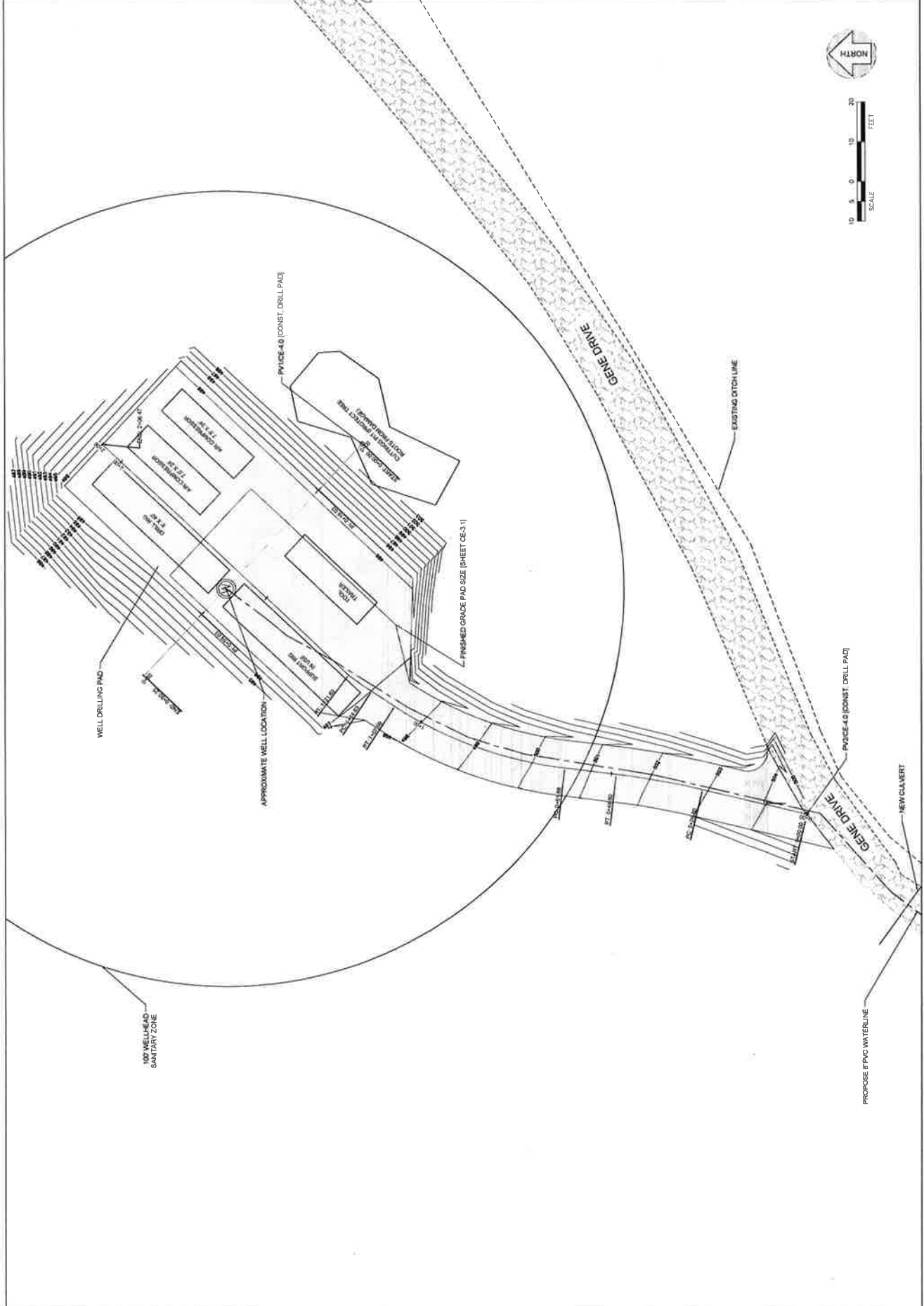
Pioneer Surveying & Engineering, Inc.
 Civil/Structural Engineering and Land Planning
 125 E. Simcoe Drive
 Edinburg, Washington 98520
 Phone (509) 773-4945, Fax (509) 773-5988, E-Mail pseg@pse.net



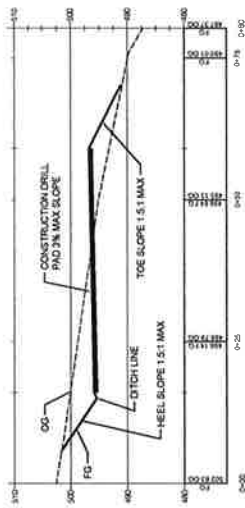
KLICKITAT PUD -
 LYE UPPER WELL SITE
 LYL, WA
 CONSTRUCTION SITE PLAN

No.	Date	Revisions
1	1/8/2017	INCREASED DRILL PAD SIZE
2	1/17/2018	LOCAL COMMISSION REVISIONS #2
3	1/22/2018	LOCAL COMMISSION REVISIONS #3
4	1/22/2018	LOCAL COMMISSION REVISIONS #4
5	1/22/2018	FINAL SUBMITTAL
6	12/8/2018	SUBMITTED FOR FINAL REVIEW

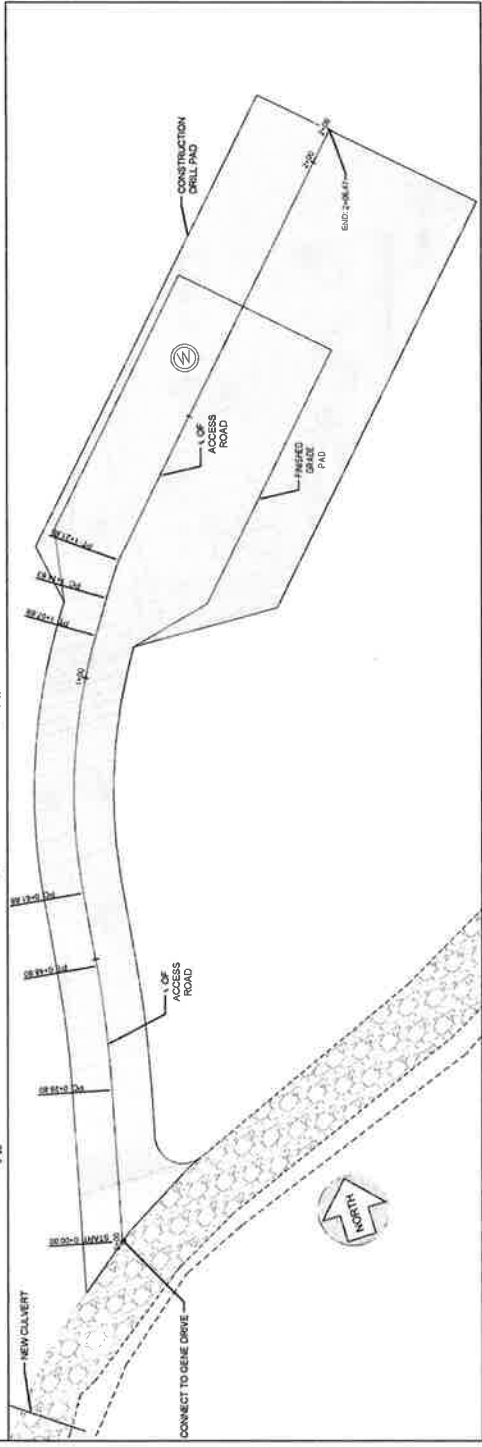
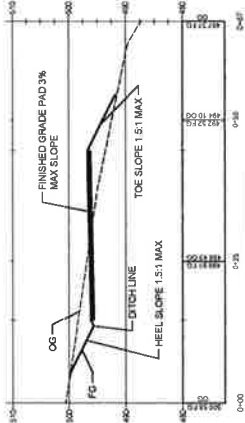
CE-30
 SCALE AS NOTED
 JOB NO. 15-146
 SHEET NO. 1



PROFILE VIEW (PV) 1 OF ORIGINAL GROUND (OG) VS FINISHED GRADE (FG)



PROFILE VIEW (PV) 1 OF ORIGINAL GROUND (OG) VS FINISHED GRADE (FG)



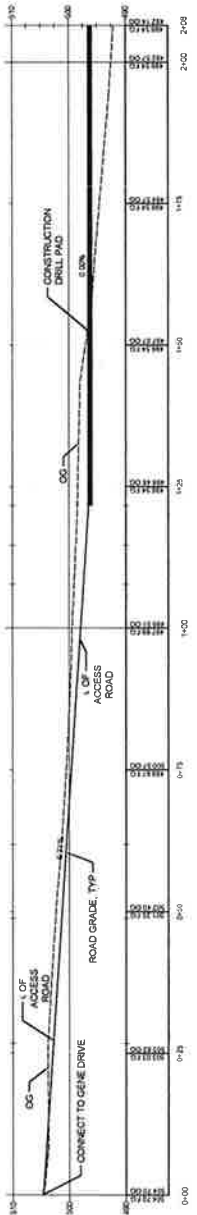
TYPICAL ACCESS ROAD SECTION



STRUCTURAL FILL OR
COMPACTED NATIVE MATERIAL

—GEO-TEXTILE FABRIC UNDER ROCK IF GROUND IS
WET DURING CONSTRUCTION. GEO-TEXTILE
FABRIC TO BE MIRAFI FILTERWEAVE 500 OR EQUAL

PROFILE VIEW (PV) 2 OF ORIGINAL GROUND (OG) VS CENTERLINE GRADE OF ACCESS ROAD



PROFILE VIEW (PV) 2 OF ORIGINAL GROUND (OG) VS CENTERLINE GRADE OF ACCESS ROAD



CRUSHED SURFACING
(PER WSDOT STANDARD SPECIFICATIONS)
SECTION 9-03.9(3)

SIEVE SIZE	TOP COURSE PERCENT PASSING
1-1/4"	99-100
1"	80-100
3/4"	—
5/8"	50-80
1/2"	—
No. 4	25-45
No. 40	3-18
No. 200	7.5 MAX.
% FRACTURE	75 MIN.
SAND EQUIVALENT	40 MIN.
COLOR	DARK GREY

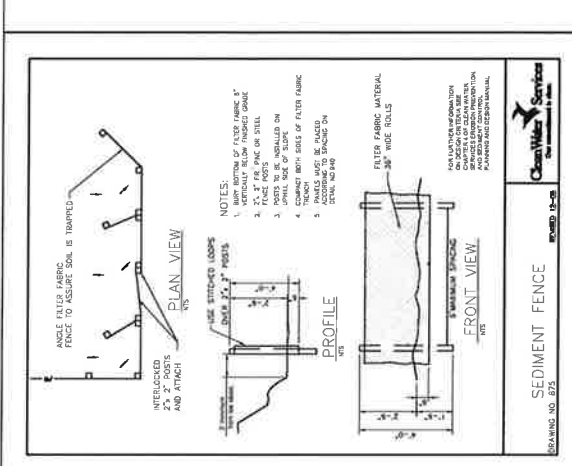
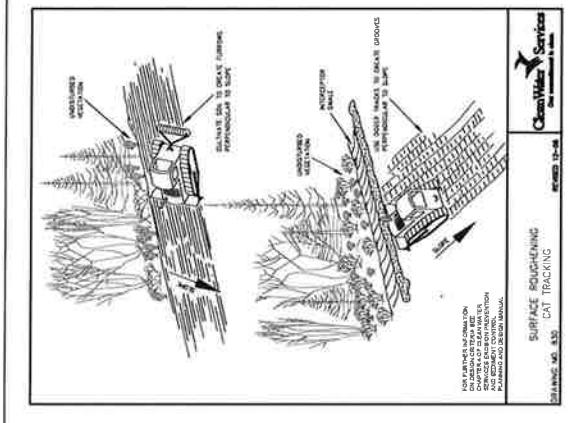


No.	Date	Revisions
1	1/8/2017	INCREASED DRILL PAD SIZE
2	1/12/2018	CODED COMMISSION REVISIONS #2
3	1/23/2018	FINAL SUBMITTAL
4	1/23/2018	CODED COMMISSION REVISIONS #3
5	1/23/2018	FINAL SUBMITTAL
6	1/23/2018	SCHEMATIC FOR FINAL REVIEW
7	1/23/2018	SCHEMATIC FOR FINAL REVIEW



No.	Date	Revisions
1	1/27/2017	PROCESSED SHEET, PWD SET
2	2/17/2018	CONCEPT DESIGN REVISIONS
3	3/29/2018	CONCEPT DESIGN REVISIONS
4	1/23/2018	CONCEPT DESIGN REVISIONS
5	1/23/2018	FINAL SUBMITTAL
6	12/18/2018	QUANTIFIED FOR FINAL REVIEW

CE-50
 SCALE AS NOTED
 JOB NO. RBV
 15-146



PRE-CONSTRUCTION, CLEANING, AND DEMOLITION NOTES:

- ALL BSC, ESR, MEASURES (PERIMETER SEDIMENT CONTROL, GRAVEL, STABILIZATION, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN WRITING PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- SEEDING BARRIERS APPROVED FOR USE INCLUDE: INTERLOCKED FENCE, BERM, STONE WALLS, OR OTHER APPROVED MATERIALS.
- EXISTING RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND AERIAL PROTECTION AREAS SHALL BE CLEARLY DEMARCATED WITH RED FLAGGING AND/OR BARRIERS. ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIERS.
- CONSTRUCTION ACTIVITIES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND WASH-OUT SHALL BE PROVIDED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- BUN-OFF AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO THE BEGINNING OF CONSTRUCTION AND MAINTAINED THROUGHOUT CONSTRUCTION AND DEMOLITION.

GRADING, STREET, AND UTILITY EROSION AND SEDIMENT CONTROL NOTES:

- SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING VARIETIES, UNLESS OTHERWISE AUTHORIZED:
 SEE SEED TABLE ON SHEET CE-10
- SLOPE TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRUCK-WALKING OR THE USE OF OTHER APPROVED MEASURES. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.
- LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE USE OF EROSION CONTROL MATS, VEGETATION COVER VIA SEEDING WITH EROSION CONTROL MATS, AND APPLICATION OF EROSION CONTROL MATS.
- TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STORM ALLOCH, VEGETATION, OR OTHER APPROVED MEASURES.
- STOCKPILES OF SOIL OR MATERIALS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION DURING WET WEATHER PERIODS. STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STORM ALLOCH. SEDIMENT FENCE IS REQUIRED TO BE INSTALLED UP-DRAINAGE OF THE STOCKPILE. STOCKPILES MUST BE LOCATED AT LEAST 50' FROM INTERSECTIONS.
- EXPOSED SOIL OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF EROSION CONTROL MATS, VEGETATION COVER VIA SEEDING WITH EROSION CONTROL MATS, OR OTHER APPROVED MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
- AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STORM ALLOCH, OR OTHER APPROVED MEASURES.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE PROVIDED, THE WASH-OUT SHALL BE LOCATED WITHIN 50 FEET OF TRUCK ACCESS AND MEASURES SUCH AS BERMING OR TEMPORARY SETBACKS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN 50 FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.
- SWEETENERS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE ALLOWED TO ENTER THE STORM WATER SYSTEM. SWEETENERS SHALL BE PICKED UP AND DISPOSED IN THE TRUCK.
- USE BMPs, SUCH AS SEDIMENT FENCE AND BIRMING DICES TO PREVENT RUN-OFF FROM ROADING DRAINAGE PAVEMENTS.

