CRITICAL AREAS RECONNAISSANCE

March 8, 2022







Rolling Hills
Sequim, Washington

Prepared for

The JWJ Group
3599 NW Carlton Street
Silverdale, WA 98383
(360) 626-1146

Prepared by
Ecological Land Services
1157 3rd Avenue, Suite 220A • Longview, WA 98632
(360) 578-1371 • Project Number 2211.13

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SIGNATURE PAGE

The information and data in this report were compiled and prepared under the supervision and direction of the undersigned.

Joanne Bartlett, PWS
Senior Biologist

INTRODUCTION

Ecological Land Services, Inc. (ELS) was contracted by The JWJ Group (JWJ) to conduct a reconnaissance on the Rolling Hills project site on South 7th Avenue, Clallam County Tax Parcel Nos. 033030-219030 and 033030-219040, in Sequim, Washington (Figure 1). These properties are in a portion of Section 30, Township 30 North, Range 3 West of the Willamette Meridian. This report provides an overview of the critical areas reconnaissance site visits conducted on June 18, 2021 and February 2, 2022 in conjunction with critical areas maps obtained of these properties. Local permit information was also reviewed for preparation of this report.

STUDY AREA DESCRIPTION

Combined, the two properties form an irregularly shaped rectangular study area with a large parcel excluded to the southwest and a smaller excluded property in the northeast corner (Figure 2). The study area also wraps around the east side of the apartment complex in the northeast corner. There are access roads entering the north end from McCurdy Road, which is a dirt road that forms a circle near the center. There is a second access from South 5th Avenue to the east that also accesses the residential development offsite to the east.

The study area is level on the north end and slopes gradually up to the south through the central area. From the central area, the study area slopes more steeply up to the south property line. The level area in the north and the sloping area on the south are both composed of unmaintained fields separated by a sparse conifer forest that occupies the central portion of the study area. The forested area is composed of conifer trees with areas of dense high and low shrub layers. The groundcover in these areas is composed of unmaintained grasses.

NATURAL RESOURCES CONSERVATION SERVICE, WEB SOIL SURVEY

As referenced on the Natural Resources Conservation Service (NRCS 2021) website, the soils in the study area includes: Carlsborg gravelly sandy loam, 0 to 5 percent slopes (6) in the northwest corner, Sequim very gravelly sandy loam (63) through the central portion, and Clallam gravelly sandy loam, 0 to 5 percent slopes (12) and Yeary gravelly loam, 0 to 15 percent slopes in the southern portion of the study area (Figure 3). These soil types are considered somewhat excessively to moderately well drained with depths to groundwater tables between 18 and 80 inches. None of these mapped soil units are classified as hydric because they are well drained and lack a shallow water table. Clallam and Yeary soil types can contain inclusions of such hydric soils as McKenna in depressions, but no hydric soil indicators were observed.

U.S. FISH AND WILDLIFE SERVICE, NATIONAL WETLAND INVENTORY

United States Fish and Wildlife Service (USFWS), National Wetlands Inventory (NWI 2021) maps a linear wetland across the northwestern portion of the study area in the general configuration of a stream (Figure 4). As mapped on this property, the wetland area is classified as palustrine shrub-shrub seasonally flooded. Offsite to the west and northeast, the wetland is classified as palustrine emergent seasonally flooded. However, the two reconnaissance visits revealed the absence of indicators for both flowing and standing surface water; no wetlands or streams were identified. See Conclusions section for more details.

CLALLAM COUNTY CRITICAL AREAS INVENTORY

The Clallam County Critical Areas map (CC 2021) maps an irrigation ditch across the southern half of the study area (Figure 5). This map differs from the other map sources because it does not indicate a stream across the north half. The other maps do not show the irrigation ditch in the location mapped by Clallam County. The two visits to this property did not reveal the presence of a stream or irrigation ditch in the area mapped. See Conclusions section for more details.

WASHINGTON DEPARTMENT OF NATURAL RESOURCES

The Washington Department of Natural Resources (WDNR), Forest Practices Application Mapping Tool (FPAMT), maps a stream classified as a Type F water across the northwestern portion of the study area (Figure 6). The mapping of this stream is in the same area indicated on the NWI map. However, the two reconnaissance visits revealed the absence of indicators for both flowing and standing surface water; no wetlands or streams were identified. See Conclusions section for more details.

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

The Washington Department of Fish and Wildlife Priority Habitat and Species (PHS) website (WDFW 2021) identifies presence of priority habitat and species areas within the stream indicated on the NWI and WDNR mapping sources (Figure 7). As listed on Table 1, the areas of priority habitats occur primarily along the stream mapped across the northwestern portion of the study area. The southeast corner of the study area is within the outer portion of the large potential habitat area for the Northern Spotted Owl and Roosevelt Elk that lies to the south and east.

Table 1: WDFW Priority Habitats and Species

Priority Habitat or Species	Priority Area	Location
Freshwater Forested/Shrub Wetland Freshwater Emergent Wetland	Aquatic Habitat	Stream corridor across northwestern portion
Coho salmon (*Oncorhynchus kisutch*)	Occurrence/Migration	Stream corridor across northwestern portion
Pink salmon (Odd Year) (*Oncorhynchus gorbuscha*)	Occurrence/Migration	Stream corridor across northwestern portion
Winter steelhead (*Oncorhynchus mykiss*)	Occurrence/Migration	Stream corridor across northwestern portion
Northern spotted owl (*Strix occidentalis*)	Occurrence	Southeast corner
Roosevelt elk (*Cervus elaphus roosevelti*)	Occurrence	Southeast corner

LOCAL PROJECT REVIEW

In addition to the field reconnaissance, a review of completed projects on nearby properties was conducted through public records requests to the City of Sequim. Two projects that were completed on adjacent and nearby properties include the Sea Breeze Apartments and the Booster

Pump Station east of the Rolling Hills project site. Below is an overview of the documents reviewed and the information obtained regarding the mapped stream.

Sea Breeze Apartments

The Environmental Checklist and the approved development plans were obtained through the public records request for the Sea Breeze Apartments, which were submitted to the City of Sequim in late 2007. The site development plans, which are dated July 18, 2007, shows the irrigation ditch crossing the property in the approximate location of the previously discussed critical area maps. It is shown on both the pre-development site conditions (Sheet C2.0) and on the development plan sheets including the water and sewer plan (Sheet C5.0), the grading and paving plan (Sheet C4.0), and the storm drainage plan (Sheet C4.1). Question 3.a.1 of the environmental checklist asks whether there is "…*any surface water body on or in the immediate vicinity of the site*…" the answer was yes, and the mapped stream was described as an "irrigation ditch." The answer to Question 3.a.4, which asks if "…*the proposal require surface water withdrawals or diversions?*" The answer was yes, and the mapped stream is further described as "…an existing Highland Irrigation District ditch that runs across the site…" and that it was "…plugged with dirt and dry...". The answer also indicates that the ditch "…will be rerouted around the perimeter of the site…". According to the storm drainage plan (Sheet C4.1), the Highland Irrigation District ditch was rerouted along the south side of the apartment complex within a 7-foot-wide easement.

City of Sequim Booster Pump Station

The public records request for this project indicates that Permit No. SITE 17-003 was issued on May 31, 2017. The site plan for the 5th and McCurdy Booster Pump Station obtained from this permit as prepared by Gray and Osbourne, Inc., shows a "Proposed Ditch Flow Line" in the location of the mapped stream. The flow line appears to be contained within a rock lined channel (the area is hatched with what appears to be rock but there is no legend on the plan sheet). An access road was constructed across the ditch with water conveyed below through "25 LF-18" ductile iron CL. 52 Twin Culverts-2 Each @ 1% min slope". The City of Sequim Booster Pump Station Permit does not indicate the presence of a stream and only the indicates the "proposed ditch flowline." No stream indicators are present in the vicinity of the Booster Pump Station.

Conclusions

The public documents reviewed for this project all indicate that the stream mapped by the NWI, WDFW PHS, and the WDFW SalmonScape maps, is a ditch that is part of the Highland Irrigation District. These maps typically show topographic low areas as well as areas containing water visible on aerial photos. It appears that the irrigation ditch was mistakenly identified as a stream for these reasons. As an irrigation ditch, it is not considered a water of the state, or a regulated stream so would therefore not require buffers or protection measures.

RECONNAISSANCE RESULTS

Critical Area Determination

The June 18, 2021 and February 2, 2022 reconnaissance site visits revealed that there were no critical areas as indicated on the collected maps. There is low topography across the northwestern portion of the study area, but a stream channel was not observed during either site visit, and the entire area was dominated by upland[1] plant species present throughout the area. The vegetation in this area included Douglas fir (*Pseudotsuga menziesii*, FACU), ocean spray (*Holodiscus discolor*, FACU), snowberry (*Symphoricarpos albus*, FACU), serviceberry (*Amelanchier alnifolia*, FACU), Oregon grape (*Mahonia nervosa*, FACU), Nootka rose (*Rosa nutkana*, FAC), Indian plum (*Oemleria cerasiformis*, FACU), Himalayan blackberry (*Rubus armeniacus*, FAC), orchard grass (*Dactylis glomerata*, FACU), oxeye daisy (*Leucanthemum vulgare*, FACU), tall fescue (*Schedonorus arundinacea*, FAC), and red top (*Agrostis* sp. FAC). The level and sloping fields in the northwest and southeastern portion of the study area respectively, are dominated by a mix of upland grass and weed species including orchard grass, tall fescue, cheat grass (*Bromus tectorum*, FACU), oxeye daisy, narrowleaf plantain (*Plantago lanceolata*, FACU), and dandelion (*Taraxacum officinale*, FACU). The dominance by FACU plant species indicate that the property is very dry, most likely because of the irrigation ditch, and does not contain wetlands. Therefore, critical areas are not present within the stream corridor as mapped by the USFWS, WDNR, and WDFW. The February 2, 2022 site visit confirmed the June 2021 findings a stream is not present in the mapped location because there was no water and no indicators of water flow in the low area despite heavier than normal precipitation occurring in December 2021 and January 2022.

A small area of the uppermost sloping field contained a mixture of potential wetland species that included sedges (*Carex* sp., FACW) and soft rush (*Juncus effusus*, FACW). A soil hole was dug in this area and revealed a dark soil matrix within the upper 16 inches but no specific hydric soil indicators such as a depleted matrix or redoximorphic concentrations. There also were no indicators of hydrology. An additional area downslope and northwest of this small area also contained sedges. Data was collected in these areas on February 2, 2022, and while there was water present on the surface of the ground, there was no evidence of wetland hydrology and hydric soil indicators were not observed. The data from these areas was compiled on data sheets and are included as Appendix C.

Irrigation Ditch

An above ground irrigation ditch was not observed within the mapped location even though the vegetation configuration and topography indicate the potential for the ditch as mapped by Clallam County. A smaller ditch was identified during the study area reconnaissance along the east

[1] The dominant vegetation found onsite is recorded on the attached wetland determination data forms (Appendix A). The indicator status, following the common and scientific names, indicates how likely a species is to be found in wetlands. Listed from most likely to least likely to be found in wetlands, the indicator status categories are:

- **OBL** (obligate wetland) – Almost always occur in wetlands.
- **FACW** (facultative wetland) – Usually occur in wetlands but may occur in non-wetlands.
- **FAC** (facultative) – Occur in wetlands and non-wetlands.
- **FACU** (facultative upland) – Usually occur in non-wetlands but may occur in wetlands.
- **UPL** (obligate upland) – Almost never occur in wetlands.
- **NI** (no indicator) – Status not yet determined.

property line in the southern half. The ditch follows the property line down the slope and into a culvert under the existing road that is used by the adjacent residential community (Figure 2). It continues north for about 50 feet and then curves to the east behind offsite buildings. The route of the ditch after crossing the road area roughly follows the route of the irrigation ditch on the Clallam County map. An abandoned irrigation ditch was identified in the location of the Clallam County map during the site reconnaissance that drains north at the property line and follows the southern boundary of an offsite development.

Priority Habitats and Species

A stream was not observed in the location mapped by the USFWS, WDNR, and WDFW and therefore does not meet the definition for a water of the state so is not a typed water. Additionally, because it does not meet the stream criteria, it does not support the fish species that appears on the WDFW PHS map. A water type modification form can be submitted to the city of Sequim and the WDNR to remove the stream from the maps following specific reconnaissance and data collection within the mapped stream area. There is also no wetland present in the area of aquatic habitat indicated on the WDFW PHS map.

The area of Northern Spotted Owl and Roosevelt Elk occurrence mapped across the southeast corner is part of a larger habitat area designated for these species. There is no suitable habitat within the study area for the Northern Spotted Owl because it lacks mature or old growth trees so there is no use by this species. The study area is currently undeveloped, which is in contrast with the remainder of the PHS mapped area (most of it is residentially developed), so there is potential use of these properties by Roosevelt Elk. The study area is surrounded by high density residential developments, roadways, and Highway 101. It is unlikely that the elk utilize the study area as part of their range because of the lack of direct access.

February 2022 Site Visit Observations

ELS conducted a follow-up site visit on February 2, 2022, to walk the route of the mapped stream and determine if stream conditions were present. The onsite mapped stream lies between a set of double culverts under S 7th Avenue at the west end and ends at the Sea Breeze Apartments at the east end. During the site visit, a shallow channel was observed but there was no standing or flowing water present (Photos 3, 4, and 5). The absence of water was confirmed at photos taken at the 7th Avenue and at the entrance of the culvert at the Sea Breeze Apartments (Photos 2, 3, and 6). The culvert extends under the apartments and exits at a rock lined swale at the McCurdy Booster Pump Station along the mapped stream location, but no stream conditions were observed (Photo 1).

Upstream of 7th Avenue, water was observed at the upper end of the twin concrete culverts but was not entering the culverts. The mapped stream continues southwesterly and crosses through a pasture west of 7th Avenue receiving water from a series of stormwater ditches that originate at the existing development south of Silberhorn Road. The main stormwater ditch comes from the south and begins at Comfort Way (Photo 12). It extends due north between existing homes and drains into a pair of small culverts under the paved sidewalk (Photo 10). Additional stormwater flows from the west through a rock lined channel and joins the main ditch before it enters the culverts (Photo 11). The culverts discharge into the grassy swale between Silberhorn Road and the sidewalk, and flows easterly to a small culvert under the road (Photos 8 and 9). This culvert

discharges into the channel across the pasture at the corner of 7th Avenue and Silberhorn Road (Photo 7). There were no other culverts or sources of surface water observed to indicate that a stream is present in this area.

CONCLUSIONS

The June 2021 site visit revealed the absence of critical areas on or within 500 feet of the study area. The stream that has been mapped was not observed and there were no indicators that a stream was located across these properties, except for a culvert under 7th Avenue. The February 2022 follow-up site visit took place after a period of heavier than normal precipitation over the preceding months and the absence of water in the mapped stream location is further proof that a stream does not exist across the study area. Search of historic aerial photos also does not indicate the presence of a stream across the properties or potential alteration of a stream historically. The February 2022 site reconnaissance confirmed that there are no stream conditions onsite because there was no water flow observed during the winter months when free flowing water would be expected within a natural stream. The source of water is the stormwater generated on the upslope development and only discharges during and following storm events.

The sloping pasture on the south half of the study area contained small areas of water that had collected from precipitation and snow melt occurring in the early winter of 2022. Data collected on February 2, 2022, indicates that these areas do not meet the wetland criteria because they lack positive indicators for one or two of the wetland parameters. The hydrophytic vegetation criterion is met in each area because there was greater than 50 percent dominance by FAC species but because the hydric soil criterion is not met, these areas are not wetland. Based on the data collected in the pasture, there are no wetlands within the study area.

The irrigation ditch is not a regulated critical area because it represents a man-made feature that contains water only during irrigation season. Additionally, the ditch along the east property line is not a regulated water because it was also created to convey water down the slope and into the downslope irrigation system. Therefore, neither the irrigation ditch nor the eastern stormwater ditch requires buffers. Note: all irrigation ditches onsite have been abandoned by the Highlands Irrigation District.

LIMITATIONS

ELS bases this report's determinations on standard scientific methodology and best professional judgment. In our opinion, local, state, and federal regulatory agencies should agree with our determinations. However, the information contained in this report should be considered preliminary and used at your own risk until it has been approved in writing by the appropriate regulatory agencies. ELS is not responsible for the impacts of any changes in environmental standards, practices, or regulations after the date of this report.

REFERENCES

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1. U.S. Army Corps of Engineer Waterways Experiment Station, Vicksburg, Mississippi.

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Washington Department of Fish and Wildlife (WDFW). 2021. *Priority Habitats and Species* (PHS) website. https://geodataservices.wdfw.wa.gov/hp/phs/. Website accessed June 2021.

Washington Department of Natural Resources (WDNR). 2021. *Forest Practices Application Mapping Tool* (FPAMT) website. https://fpamt.dnr.wa.gov/default.aspx. Website accessed June 2021.

FIGURES

PROJECT VICINITY MAP

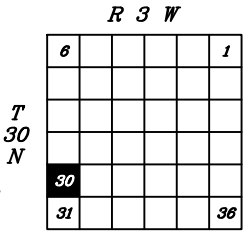
WASHINGTON



48.0700° Latitude
-123.1155° Longitude

NOTE(S):
1. Aerial from Google Earth™.
2. Stream mapped by WDNR; however, no evidence of stream was observed onsite by ELS, Inc. biologists.

LEGEND:
- Site Boundary
- Parcel Boundary
- Mapped Stream (See Note 2)
- Irrigation Ditch with Flow Direction
- Irrigation Ditch Mapped by Clallam County
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine
- Hydric Soils
- PHS Wetland



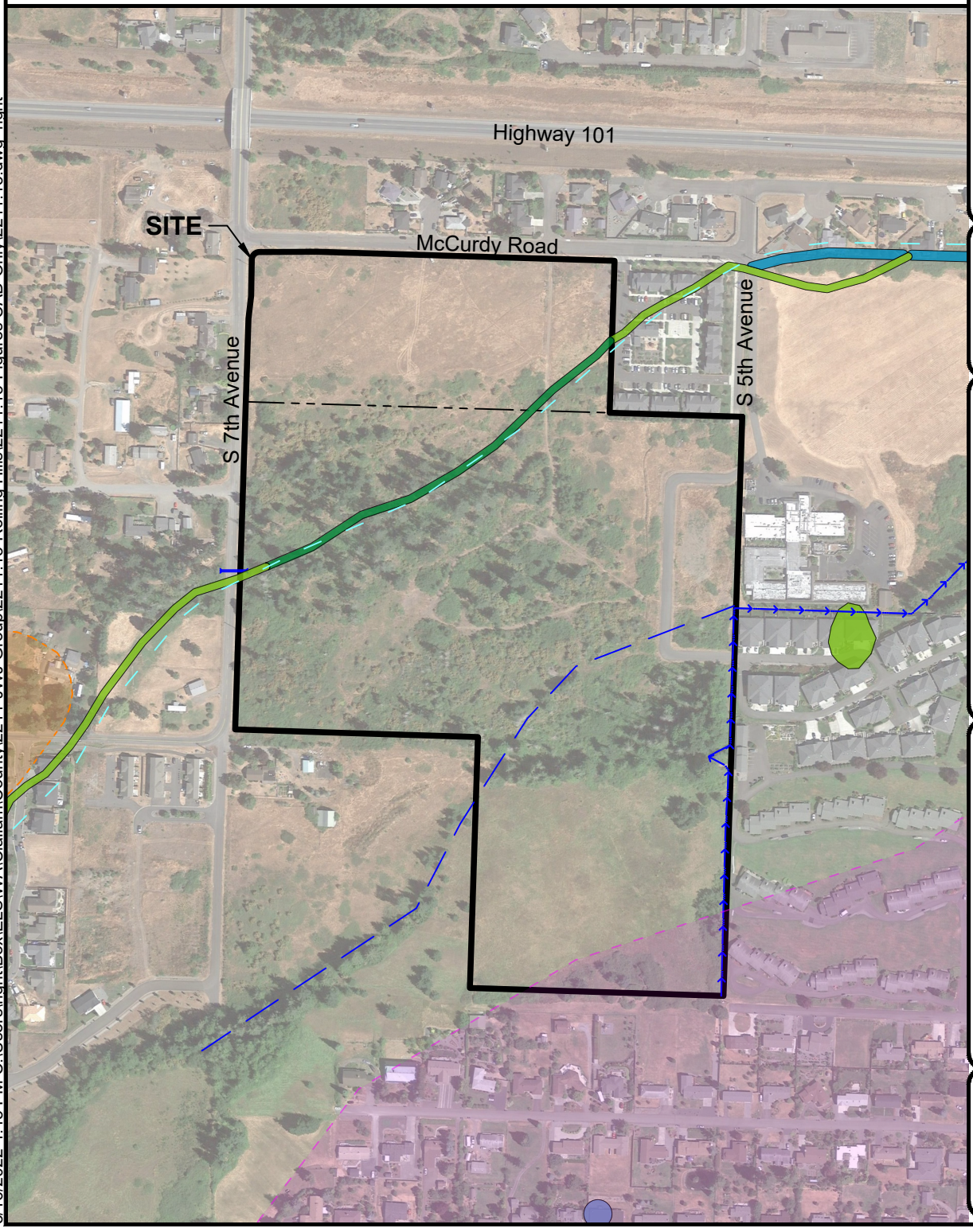


Figure 1
VICINITY MAP
Rolling Hills
JWJ Group
City of Sequim, Clallam County, Washington
Section 30, Township 30N, Range 3W, W.M.

DATE: 3/16/22
DWN: JLL
REQ. BY: JB
PRJ. MGR: JB
CHK:
PROJECT NO: 2211.13

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Longview, WA 98632
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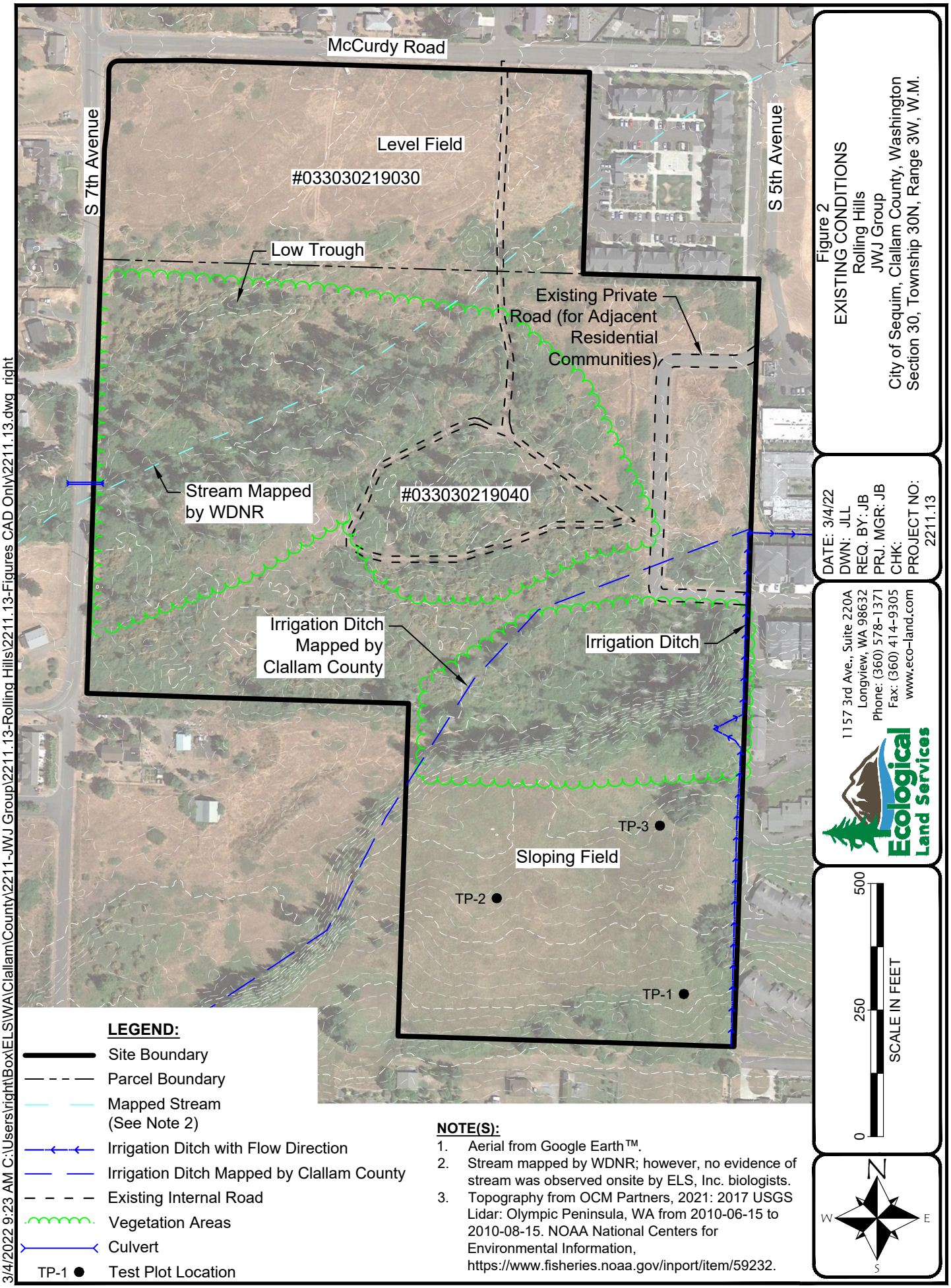


Figure 2
EXISTING CONDITIONS
Rolling Hills
JWJ Group
City of Sequim, Clallam County, Washington
Section 30, Township 30N, Range 3W, W.M.

DATE: 3/4/22
DWN: JLL
REQ. BY: JB
PRJ. MGR: JB
CHK:
PROJECT NO: 2211.13

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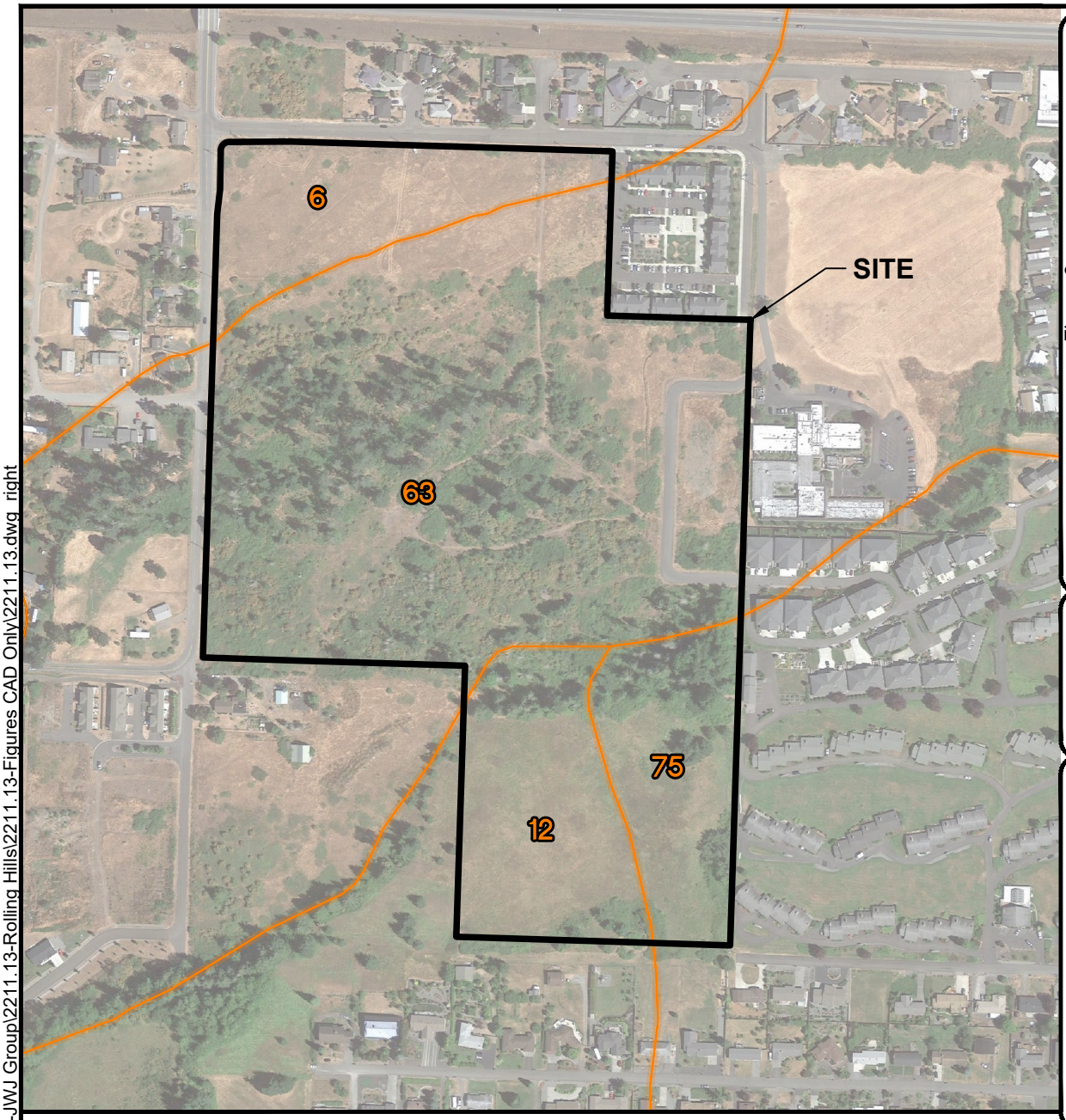


Figure 3
NRCS SOIL SURVEY
Rolling Hills
JWJ Group
City of Sequim, Clallam County, Washington
Section 30, Township 30N, Range 3W, W.M.

DATE: 3/4/22
DWN: JLL
REQ. BY: JB
PRJ. MGR: JB
CHK:
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LEGEND:

- Site Boundary
- NRCS Soil Boundary
- 6 Carlsborg gravelly sandy loam, 0 to 5 percent slopes. Not hydric.
- 12 Clallam gravelly sandy loam, 0 to 5 percent slopes. Not hydric.
- 63 Sequim very gravelly sandy loam. Not hydric.
- 75 Yeary gravelly loam, 0 to 15 percent slopes. Not hydric.

NOTE(S):

1. Map provided on-line by NRCS at web address: *http://websoilsurvey.nrcs.usda.gov/app/*

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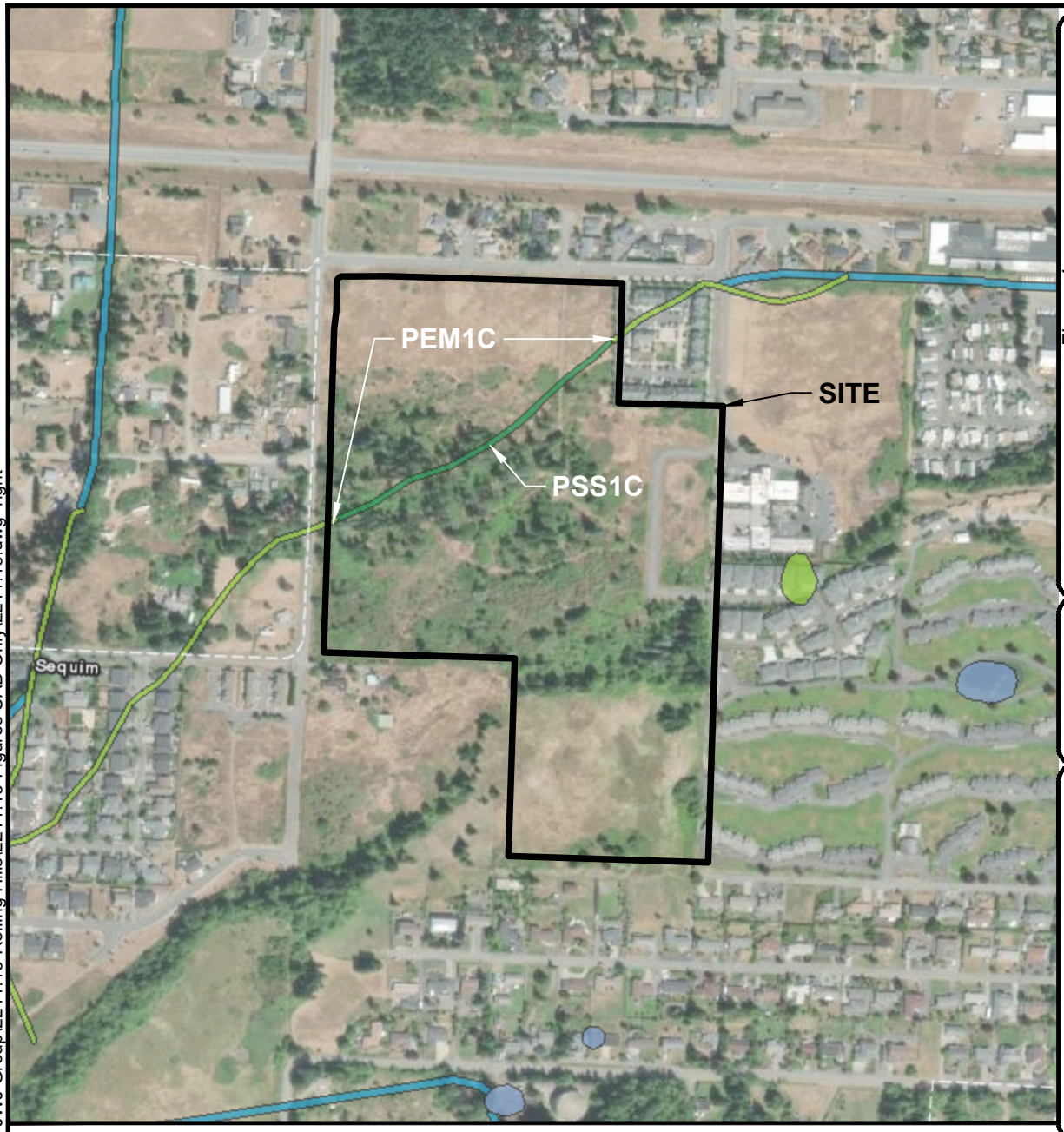


Figure 4
USFWS NATIONAL WETLANDS INVENTORY
Rolling Hills
JWJ Group
City of Sequim, Clallam County, Washington
Section 30, Township 30N, Range 3W, W.M.

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Mapped wetlands indicated onsite by US Fish & Wildlife Service.

LEGEND:

Site Boundary

Wetlands

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

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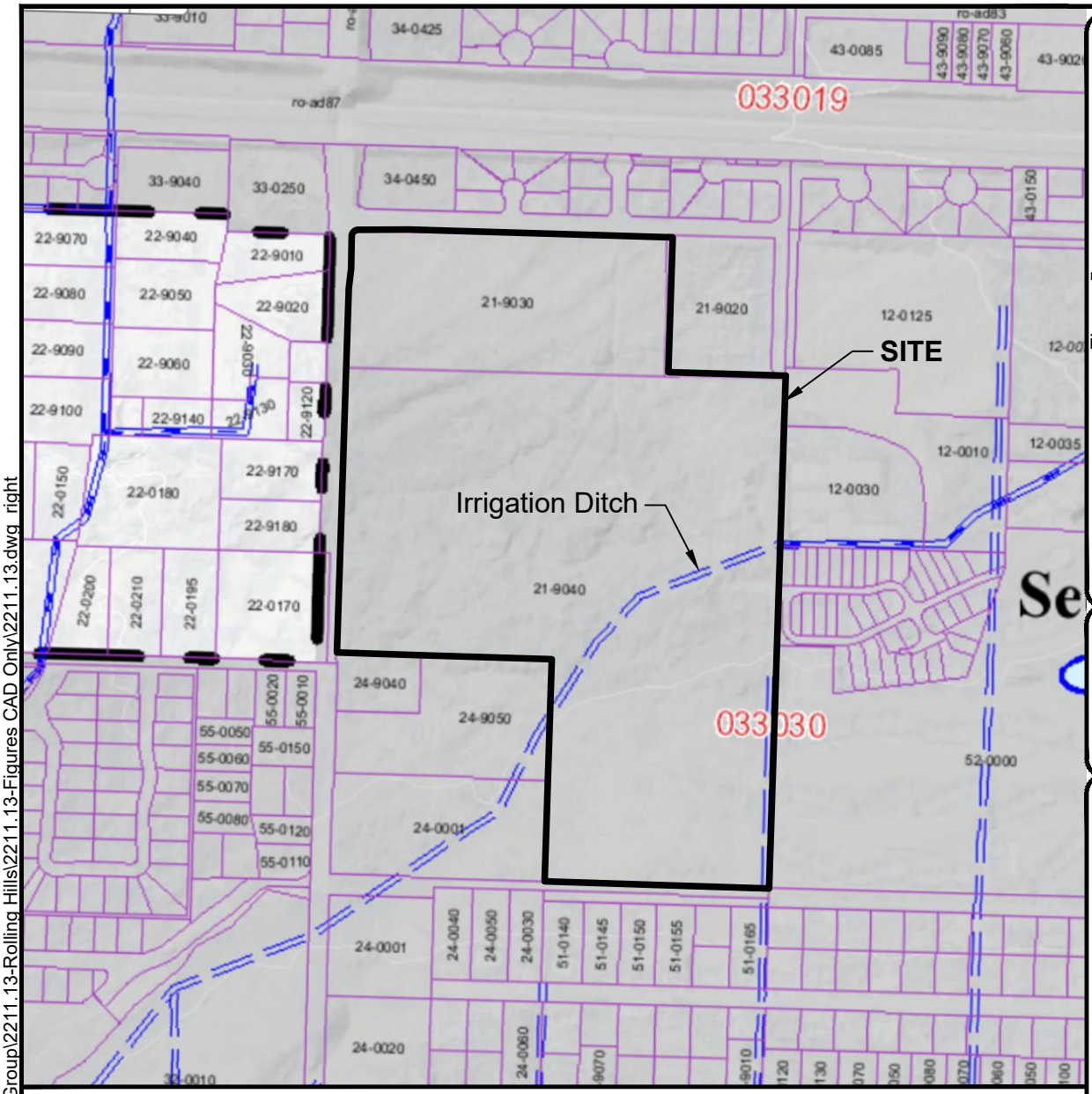
PEM1C Palustrine, emergent, persistent, seasonally flooded.

PSS1C Palustrine, scrub-shrub, broad-leaved diciduous, seasonally flooded.

NOTE(S):

1. Map provided on-line by US Fish & Wildlife Service at web address: *http://www.fws.gov/wetlands/data/index.html*

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LEGEND:

- Site Boundary
- Parcel Boundary

Streams (type)

- Type 1
- Type 2
- Type 3
- Type 4 or 5
- Untyped
- ONP Streams
- Glacier
- Ditch
- Pipeline
- Wet Areas

Irrigation Ditches

- Ditch
- Pipeline

NOTE(S):

1. Map provided on-line by Clallam County at web address: *https://websrv19.clallam.net/map/multipurpose_map/*

Figure 5
CLALLAM COUNTY CRITICAL AREAS
Rolling Hills
JWJ Group
City of Sequim, Clallam County, Washington
Section 30, Township 30N, Range 3W, W.M.

DATE: 3/4/22
DWN: JLL
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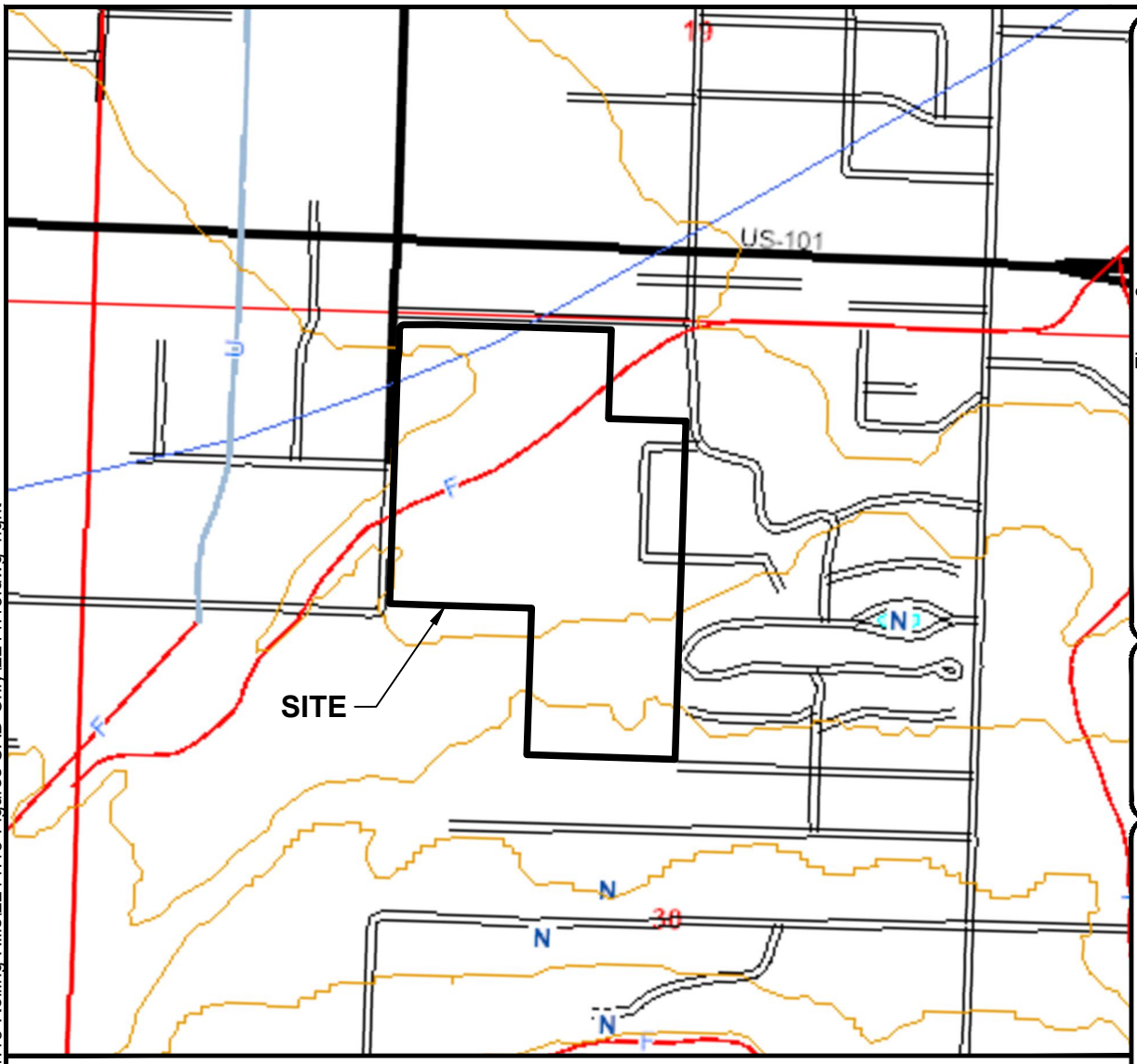


Figure 6
WDNR FPAMT
Rolling Hills
JWJ Group
City of Sequim, Clallam County, Washington
Section 30, Township 30N, Range 3W, W.M.

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Mapped streams indicated onsite by the Washington State Department of Natural Resources (DNR).

Water Bodies (FP)

Water Bodies (FP)
- Other Impoundments
- Open Freshwater
- Subject to Inundation
- Glacier / Snowfield
- Wet Area
- Open Saltwater
- Artificial Feature

Water Courses (FP)

Water Courses (FP)
- Type S
- Type F
- Type N, Np, Ns
- U, unknown
- X, non-typed per WAC 222-16

NOTE: Map provided on-line by Washington State Department of Natural Resources at web address: *http://fortress.wa.gov/dnr/app1/Fpars/viewer.htm*

3/4/2022 9:23 AM C:\Users\right\Box\ELSWA\Clallam\County\2211-JWJ Group\2211.13-Rolling Hills\2211.13-Figures CAD Only\2211.13.dwg right

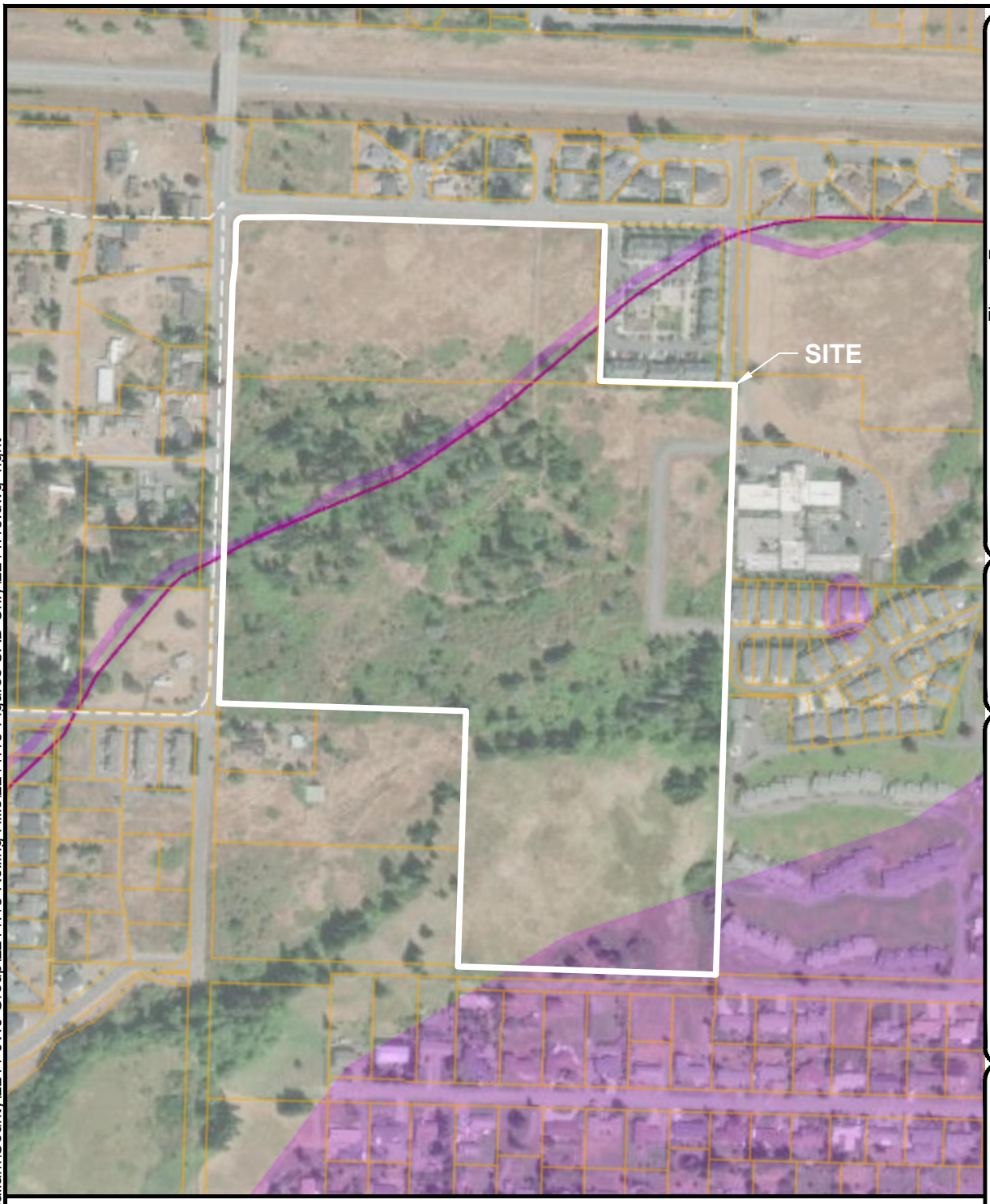


Figure 7
WDFW PRIORITY HABITAT AND SPECIES & SALMONSCAPE
Rolling Hills
JWJ Group
City of Sequim, Clallam County, Washington
Section 30, Township 30N, Range 3W, W.M.

DATE: 3/4/22
DWN: JLL
REQ. BY: JB
PRJ. MGR: JB
CHK:
PROJECT NO: 2211.13

1157 3rd Ave., Suite 220A
Longview, WA 98632
Phone: (360) 578-1371
Fax: (360) 414-9305
www.eco-land.com
Ecological Land Services

0 400 800
SCALE IN FEET

N W E S

LEGEND:

Freshwater Forested/Shrub Wetland
Freshwater Emergent Wetland

Coho Occurrence/Migration
Pink Salmon Odd Year Occurrence/Migration
Winter Steelhead Occurrence/Migration
Northern Spotted Owl Occurrence
Roosevelt Elk Occurrence

NOTE: Map provided on-line by Washington State Department of Fish & Wildlife at web address:
http://apps.wdfw.wa.gov/phsontheweb/

3/4/2022 9:23 AM C:\Users\right\Box\ELS\WA\Clallam\County\2211-JWJ Group\2211.13-Rolling Hills\2211.13-Figures CAD Only\2211.13.dwg right

APPENDIX A

Environmental Checklist identifies mapped stream as an Highland Irrigation District Ditch

0 20 40
SCALE: 1" = 20'-0"

EROSION AND SILTATION CONTROL NOTES:

1. ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF SEQUIM. PRIOR TO ANY WORK COMMENCING, THE CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE SITE TO BE ATTENDED BY ALL MAJOR CONTRACTORS, REPRESENTATIVES OF INVOLVED UTILITIES AND THE CITY OF SEQUIM. CONTACT THE PUBLIC WORKS DEPARTMENT AT THE CITY OF SEQUIM TO SCHEDULE THE MEETING (683-4908). THE CONTRACTOR IS RESPONSIBLE TO HAVE HIS SET OF APPROVED PLANS AT THE MEETING.

2. ALL LIMITS OF CLEARING AND AREAS OF VEGETATION PRESERVATION AS PRESCRIBED ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD AND OBSERVED DURING CONSTRUCTION.

3. ALL REQUIRED SEDIMENTATION AND EROSION CONTROL FACILITIES MUST BE CONSTRUCTED AND IN OPERATION PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT ENTER THE NATURAL DRAINAGE SYSTEM. ALL EROSION AND SEDIMENT FACILITIES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION AS DETERMINED BY THE CITY, UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR ON-SITE EROSION HAS PASSED. THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT, AND ADDITIONS TO THE EROSION AND SEDIMENTATION CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER.

4. THE EROSION AND SEDIMENTATION CONTROL SYSTEM DEPICTED ON THESE PLANS ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, FACILITIES WILL BE NECESSARY TO ENSURE COMPLETE SILTATION CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITTEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE THE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES AND/OR STORM DRAINAGE SYSTEMS.

5. APPROVAL OF THESE PLANS IS FOR GRADING, TEMPORARY DRAINAGE, EROSION AND SEDIMENTATION CONTROL ONLY. IT DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT STORM DRAINAGE DESIGN, SIZE NOR LOCATION OF PIPES, RESTRICTORS, CHANNELS OR RETENTION FACILITIES.

6. ANY DISTURBED AREA THAT HAS BEEN STRIPPED OF VEGETATION AND WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 30 DAYS OR MORE, MUST BE IMMEDIATELY STABILIZED WITH MULCHING, GRASS PLANTING, OR OTHER APPROVED EROSION CONTROL TREATMENT APPLICABLE TO THE TIME OF YEAR. GRASS SEEDING ALONE WILL BE ACCEPTABLE ONLY DURING THE MONTHS OF APRIL THROUGH SEPTEMBER INCLUSIVE. SEEDING MAY PROCEED OUTSIDE THE SPECIFIED TIME PERIOD WHENEVER IT IS IN THE INTEREST OF THE DEVELOPER, BUT MUST BE AUGMENTED WITH MULCHING, NETTING, SOD, PLASTIC COVERING OR OTHER TREATMENT APPROVED BY THE CITY.

7. IN CASE EROSION OR SEDIMENTATION OCCURS TO ADJACENT PROPERTIES, ALL CONSTRUCTION WORK WITHIN THE DEVELOPMENT THAT WILL FURTHER AGGRAVATE THE SITUATION, MUST CEASE AND THE OWNER/CONTRACTOR SHALL IMMEDIATELY COMMENCE RESTORATION METHODS. RESTORATION ACTIVITY SHALL CONTINUE UNTIL SUCH TIME THAT EFFECTIVE EROSION CONTROL MEASURES, AS DETERMINED BY THE CITY, ARE IN PLACE AND EFFECTIVELY OPERATING.

8. SEE SHEETS C2.1 - C2.5 FOR ADDITIONAL EROSION AND SEDIMENTATION CONTROL NOTES AND BMP'S.

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STATE OF WASHINGTON
JAMES M. TONKIN
REGISTERED PROFESSIONAL ENGINEER
4/19/07
EXPIRES 08/10/07

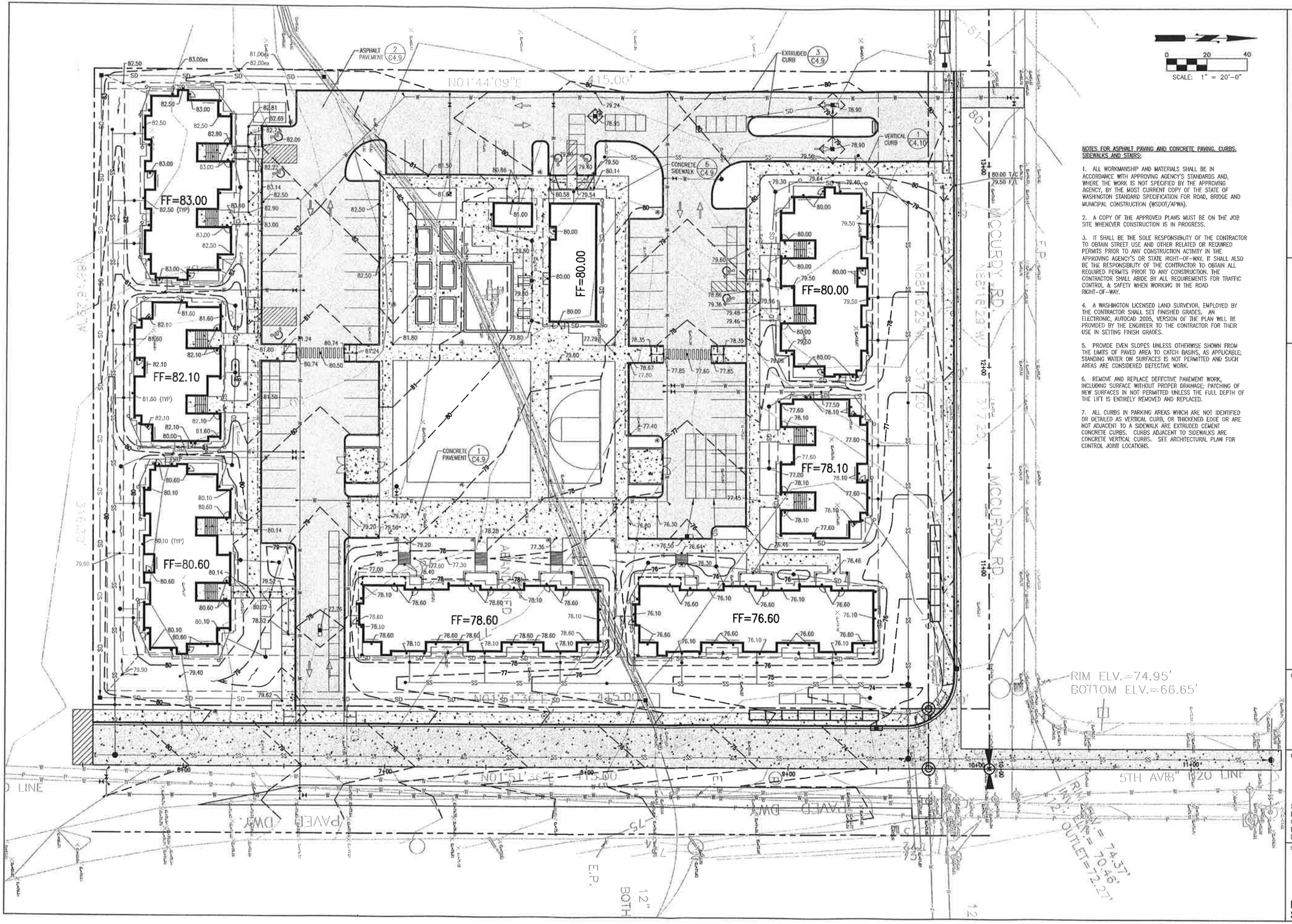
SEA BREEZE APARTMENTS
SEQUIM, WASHINGTON 98382
SEA BREEZE SEQUIM ASSOCIATES
A WASHINGTON LIMITED PARTNERSHIP

DRAWING ISSUE:
PRE APP SUBMITTAL 4 OCT 06
SITE CONST. PERMIT 07-18-07

DRAWING TITLE
EROSION & SEDIMENT CONTROL PLAN

SCALE:	1"=20'-0"
PLOT DATE:	10/30/06
CAD FILE:	siteplan.dwg
PROJ. MGR.:	T.A.W.
DRAFTER:	J.M.C.

SHEET NO
C2.0
PERMIT SET



NOTES FOR ASPHALT PAVING AND CONCRETE PAVING, CURBS, SIDEWALKS AND STAIRS:

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH APPROVING AGENCY'S STANDARDS AND, WHERE THE WORK IS NOT SPECIFIED BY THE APPROVING AGENCY, BY THE MOST CURRENT COPY OF THE STATE OF WASHINGTON STANDARD SPECIFICATION FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION (WSDOT/APWA).

2. A COPY OF THE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

3. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN STREET USE AND OTHER RELATED OR REQUIRED PERMITS PRIOR TO ANY CONSTRUCTION ACTIVITY IN THE APPROVING AGENCY'S OR STATE RIGHT-OF-WAY. IT SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL ABIDE BY ALL REQUIREMENTS FOR TRAFFIC CONTROL & SAFETY WHEN WORKING IN THE ROAD RIGHT-OF-WAY.

4. A WASHINGTON LICENSED LAND SURVEYOR, EMPLOYED BY THE CONTRACTOR SHALL SET FINISHED GRADES. AN ELECTRONIC, AUTOCAD 2005, VERSION OF THE PLAN WILL BE PROVIDED BY THE ENGINEER TO THE CONTRACTOR FOR THEIR USE IN SETTING FINISH GRADES.

5. PROVIDE EVEN SLOPES UNLESS OTHERWISE SHOWN FROM THE LIMITS OF PAVED AREA TO CATCH BASINS, AS APPLICABLE; STANDING WATER ON SURFACES IS NOT PERMITTED AND SUCH AREAS ARE CONSIDERED DEFECTIVE WORK.

6. REMOVE AND REPLACE DEFECTIVE PAVEMENT WORK, INCLUDING SURFACE WITHOUT PROPER DRAINAGE; PATCHING OF NEW SURFACES IN NOT PERMITTED UNLESS THE FULL DEPTH OF THE LIFT IS ENTIRELY REMOVED AND REPLACED.

7. ALL CURBS IN PARKING AREAS WHICH ARE NOT IDENTIFIED OR DETAILED AS VERTICAL CURB, OR THICKENED EDGE OR ARE NOT ADJACENT TO A SIDEWALK ARE EXTRUDED CEMENT CONCRETE CURBS. CURBS ADJACENT TO SIDEWALKS ARE CONCRETE VERTICAL CURBS. SEE ARCHITECTURAL PLAN FOR CONTROL JOINT LOCATIONS.

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21571
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SEA BREEZE SEQUIM ASSOCIATES
A WASHINGTON LIMITED PARTNERSHIP

DRAWING ISSUE
PRE APP SUBMITTAL 4 OCT 06
SITE CONST. PERMIT 07-18-07

DRAWING TITLE
GRADING AND PAVING PLAN

SCALE:	1"=20'-0"
PLOT DATE:	10/30/06
CAD FILE:	siteplan.dwg
PROJ. MGR.:	T.A.W.
DRAFTER:	J.M.C.

SHEET NO.
C4.0
PERMIT SET

"7.00' Wide Highland Irrigation District Easment"

7.00' WIDE HIGHLAND IRRIGATION DISTRICT EASEMENT

CB#H2, TYPE 1 W/ SOLID LOCKING LID
RIM=83.05 (MATCH GRADE)
IE=77.2

CB#H1, TYPE 1 W/ SOLID LOCKING LID
RIM=80.90 (MATCH GRADE)
IE=76.00±

CB# 3, TYPE CBSF-2
RIM=78.95
IE=75.45

CB# 2, TYPE CBSF-1
RIM=78.90
IE=75.40

CB# 1, TYPE 1
RIM=78.90
IE=75.60

INFILTRATION SYSTEM S1
INFILTRATION SYSTEM S2
INFILTRATION SYSTEM S4
INFILTRATION SYSTEM S5
INFILTRATION SYSTEM S6
INFILTRATION SYSTEM S7
INFILTRATION SYSTEM S8
INFILTRATION SYSTEM S9
INFILTRATION SYSTEM S10

CONNECT BLDG FOOTING DRAIN TO THIS AD
FF=83.00
FF=82.10
FF=80.60
FF=80.00
FF=78.10
FF=78.60
FF=76.60

AD# 1 RIM=79.30 IE=77.45
AD# 2 RIM=79.30 IE=77.00
AD# 3 RIM=77.00 IE=75.30
AD# 4 RIM=77.00 IE=75.00
AD# 5 RIM=75.50 IE=73.72
AD# 6 RIM=75.50 IE=73.34
AD# 7 RIM=75.50 IE=73.68
AD# 8 RIM=79.80 IE=
AD# 9 RIM=79.80 IE=77.80
AD# 10 RIM=79.80 IE=77.80
AD# 11 RIM=78.25 IE=76.25
AD# 12 RIM=79.50 IE=76.60
AD# 13 RIM=79.75 IE=77.00
AD# 14 RIM=79.40 IE=77.25
AD# 15 RIM=79.40 IE=77.40
AD# 16 RIM=79.50 IE=76.80
AD# 17 RIM=80.90 IE=76.35
AD# 18 RIM=80.90 IE=77.01
AD# 19 RIM=82.90 IE=79.90
AD# 73.50 IE=71.13

CB#H3, TYPE 1 W/ SOLID LOCKING LID
RIM=80.10 (MATCH GRADE)
IE=75.07

CB#H4, TYPE 1 W/ SOLID LOCKING LID
RIM=75.90 (MATCH GRADE)
IE=73.18

CB# 4, TYPE CBSF-2
RIM=77.76
IE=74.26

CB# 5, TYPE CBSF-1
RIM=75.84
IE=73.20

43LF-8"ø @ 1.0%
20LF-8"ø @ 1.0%
16LF-8"ø @ 1.0%
44LF-6"ø @ 1.0%
31LF-6"ø @ 1.0%
34LF-8"ø @ 1.0%
19LF-8"ø @ 1.0%
38LF-6"ø @ 1.0%
34LF-6"ø @ 1.0%
5LF-8"ø @ 1.0%
33LF-6"ø @ 2.0%
309LF-8"ø @ 0.70%
12LF-6"ø @ 1.0%
46LF-6"ø @ 2.0%
20LF-6"ø @ 2.0%
271LF-8"ø @ 0.70%

RIM ELV.=74.95'
BOTTOM ELV.=66.65'

RIM ELV.=74.37'
12" INV. ELEV. OUTLET=70.46'
OUTLET=72.27'

MACURDY RD.
5TH AVE
NO1°44'09"E 415.00'
N01°51'36"E 415.00'
N88°16'23"W 317.20'

0 20 40
SCALE: 1" = 20'-0"

STORM DRAINAGE AND GRADING NOTES:

1. ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF SEQUIM. PRIOR TO ANY WORK COMMENCING, THE CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE SITE TO BE ATTENDED BY ALL MAJOR CONTRACTORS, REPRESENTATIVES OF INVOLVED UTILITIES AND THE CITY OF SEQUIM. CONTACT THE PUBLIC WORKS DEPARTMENT AT THE CITY OF SEQUIM TO SCHEDULE THE MEETING (683-4908). THE CONTRACTOR IS RESPONSIBLE TO HAVE HIS SET OF APPROVED PLANS AT THE MEETING.

2. DURING CONSTRUCTION, ALL EXISTING AND NEWLY INSTALLED DRAINAGE STRUCTURES SHALL BE PROTECTED FROM SEDIMENTS.

3. CATCH BASINS SHALL CONFORM TO THE FOLLOWING WSDOT STANDARD PLANS:

A. TYPE 1 – PLAN B-1.
B. TYPE 1L, PLAN B-1a.
C. TYPE 2, 48-INCH AND 54-INCH – PLAN B-1e.
D. TYPE 2, 72-INCH AND 96-INCH – PLAN B-1f

4. CATCH BASINS TYPE II SHALL BE USED FOR DEPTHS GREATER THAN 5 FEET FROM THE TOP OF THE GRATE TO THE INVERT OF THE STORM PIPE.

5. CAST IRON FRAME AND GRATE SHALL CONFORM TO WSDOT STANDARD PLAN NO. B-2a. GRATE SHALL BE MARKED WITH "DRAINS TO STREAM". SOLID CATCH BASIN LIDS SHALL CONFORM TO WSDOT STANDARD PLAN B-2. VANED GRATES SHALL BE UTILIZED WHERE PAVEMENT GRADE EXCEEDS FOUR PERCENT AND SHALL CONFORM TO WSDOT STANDARD PLAN B-2b.

6. STORM SEWER PIPE SHALL BE ONLY PVC, CONCRETE, CPEP, OR DUCTILE IRON PIPE.

THE USE OF ANY OTHER TYPE SHALL BE REVIEWED AND APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.

PVC PIPE SHALL BE PER ASTM D-3034, SDR 35, OR ASTM F789. MINIMUM COVER ON PVC PIPE SHALL BE 2.0 FEET.

CONCRETE PIPE SHALL CONFORM TO THE WSDOT SPECIFICATIONS FOR PLAIN OR REINFORCED CONCRETE PIPE. MINIMUM COVER ON CONCRETE PIPE SHALL BE 2.0 FEET.

CPEP – CORRUGATED POLYETHYLENE PIPE WITH SMOOTH INTERIOR WALL MEETING AASHTO M-294 TYPE-S SHALL BE JOINTED BY COUPLINGS AND FITTINGS THAT MEET THE REQUIREMENTS OF ASTM F-1336, EXCEPT FOR DIFFERENCES OF THE INSIDE AND OUTSIDE COUPLING DIAMETERS. THE PVC COLLAR WITH THE RING GASKETS ARE INSTALLED ON THE PIPE AT THE MANUFACTURER'S FACILITY. MINIMUM COVER ON CPEP SHALL BE 2.0 FEET.

DUCTILE IRON PIPE SHALL BE CLASS 50, CONFORMING TO AWWA C151. MINIMUM COVER ON DUCTILE IRON PIPE SHALL BE 1.0 FOOT.

7. TRENCHING, BEDDING, AND BACKFILL FOR PIPE SHALL CONFORM TO CITY STANDARD DETAIL.

8. AFTER THE ASPHALT WORK IS COMPLETED, ALL STORM PIPE SHALL PASS A LOW PRESSURE AIR TEST IN ACCORDANCE WITH SECTION 7-04.3(4)D OF THE STANDARD SPECIFICATIONS.

9. APPLY AN EMBOSSED PAVEMENT MARKING AT ALL CATCH BASIN INLETS UTILIZING WHITE, 2-INCH HIGH LETTERS, TO READ "DUMP NO WASTE – DRAINS TO GROUNDWATER" (OR "STREAM" AS APPLICABLE).

10. SEE LANDSCAPE PLANS FOR DETAILS AT ROCK SPLASH PADS AT DOWNSPOUTS.

** SEE SHEET C4.3 FOR ADDITIONAL STORM DRAINAGE & GRADING NOTES & REQUIREMENTS. **

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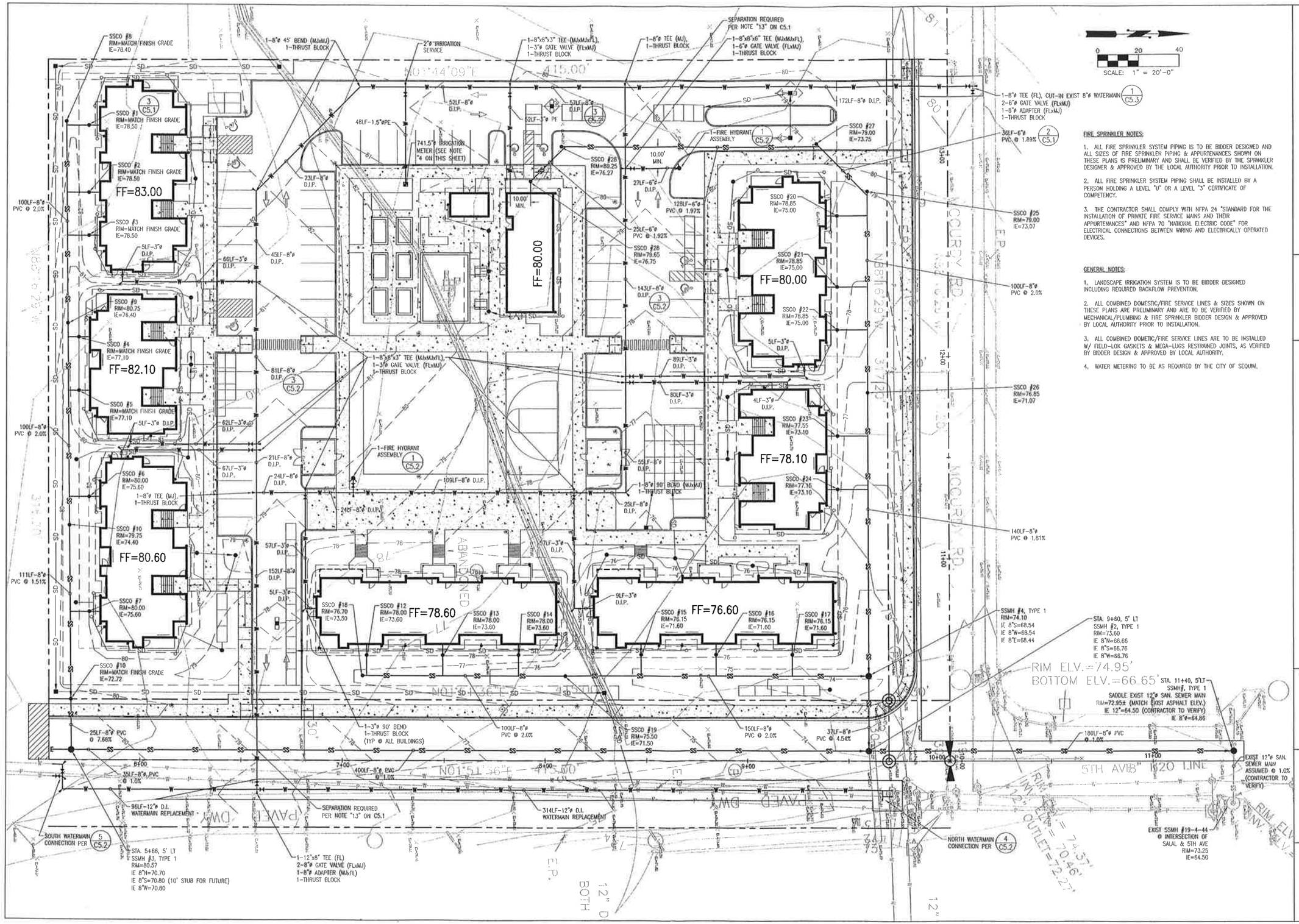
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SEQUIM, WASHINGTON 98382
SEA BREEZE SEQUIM ASSOCIATES
A WASHINGTON LIMITED PARTNERSHIP

DRAWING ISSUE
PRE APP SUBMITTAL 4 OCT 06
SITE CONST. PERMIT 07-18-07

DRAWING TITLE
STORM DRAINAGE PLAN

SCALE: 1"=20'-0"
PLOT DATE: 10/30/06
CAD FILE: siteplan.dwg
PROJ. MGR.: T.A.W.
DRAFTER: J.M.C.

SHEET NO.
C4.1
PERMIT SET



FIRE SPRINKLER NOTES:

1. ALL FIRE SPRINKLER SYSTEM PIPING IS TO BE BIDDER DESIGNED AND ALL SIZES OF FIRE SPRINKLER PIPING & APPURTENANCES SHOWN ON THESE PLANS IS PRELIMINARY AND SHALL BE VERIFIED BY THE SPRINKLER DESIGNER & APPROVED BY THE LOCAL AUTHORITY PRIOR TO INSTALLATION.
2. ALL FIRE SPRINKLER SYSTEM PIPING SHALL BE INSTALLED BY A PERSON HOLDING A LEVEL "U" OR A LEVEL "3" CERTIFICATE OF COMPETENCY.
3. THE CONTRACTOR SHALL COMPLY WITH NFPA 24 "STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES" AND NFPA 70 "NATIONAL ELECTRIC CODE" FOR ELECTRICAL CONNECTIONS BETWEEN WIRING AND ELECTRICALLY OPERATED DEVICES.

GENERAL NOTES:

1. LANDSCAPE IRRIGATION SYSTEM IS TO BE BIDDER DESIGNED INCLUDING REQUIRED BACKFLOW PREVENTION.
2. ALL COMBINED DOMESTIC/FIRE SERVICE LINES & SIZES SHOWN ON THESE PLANS ARE PRELIMINARY AND ARE TO BE VERIFIED BY MECHANICAL/PLUMBING & FIRE SPRINKLER BIDDER DESIGN & APPROVED BY LOCAL AUTHORITY PRIOR TO INSTALLATION.
3. ALL COMBINED DOMETIC/FIRE SERVICE LINES ARE TO BE INSTALLED W/ FIELD-LOK GASKETS & MEGA-LUGS RESTRAINED JOINTS, AS VERIFIED BY BIDDER DESIGN & APPROVED BY LOCAL AUTHORITY.
4. WATER METERING TO BE AS REQUIRED BY THE CITY OF SEQUIM.

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STATE OF WASHINGTON — 20211 — REGISTERED PROFESSIONAL ENGINEER — TERRENCE A. WATSON
EXPIRES 08/10/07 — 11/9/07

SEA BREEZE APARTMENTS
SEQUIM, WASHINGTON 98382

SEA BREEZE SEQUIM ASSOCIATES
A WASHINGTON LIMITED PARTNERSHIP

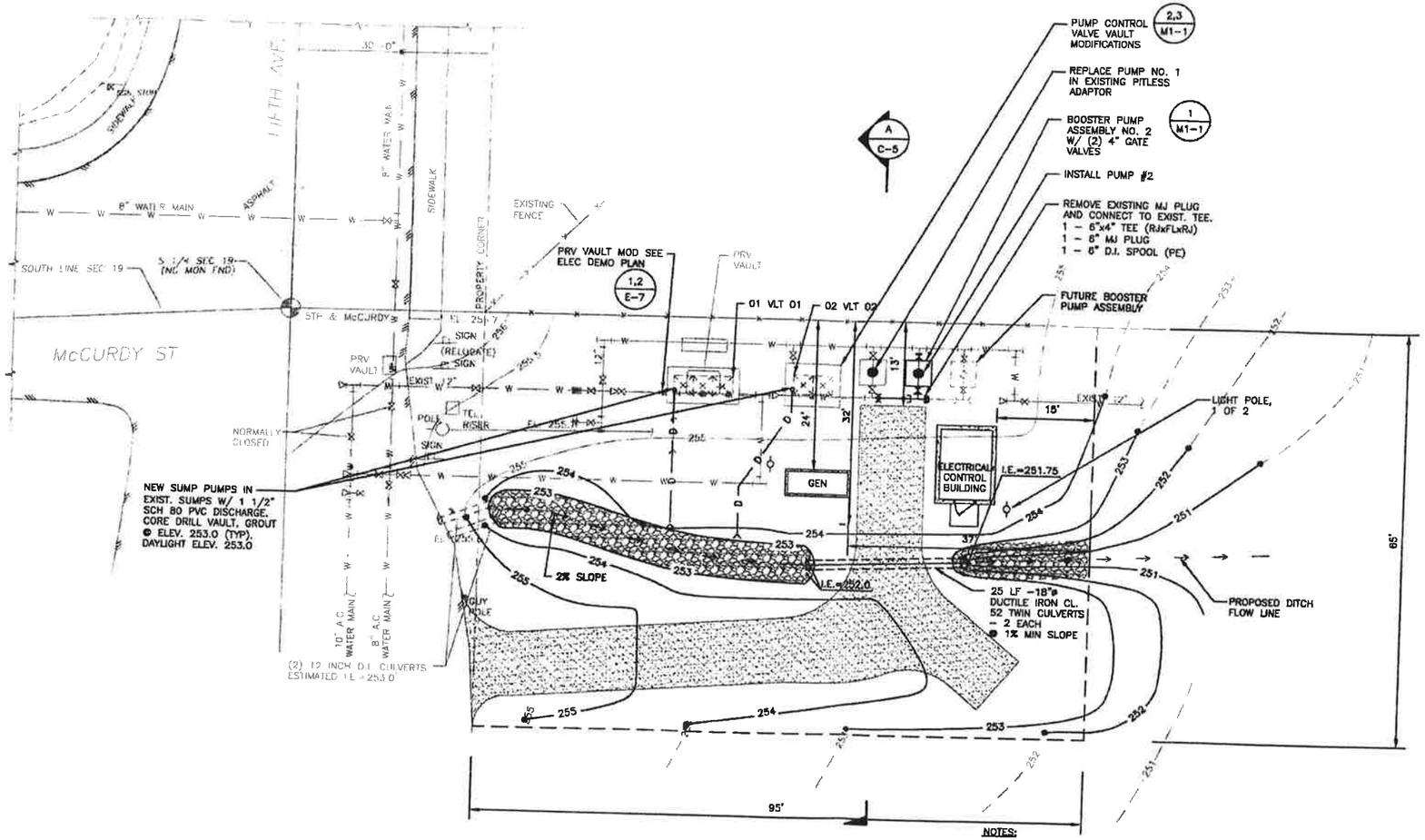
DRAWING ISSUE
PRE APP SUBMITTAL 4 OCT 06
SITE CONST. PERMIT 07-18-07

DRAWING TITLE
WATER & SEWER PLAN

SCALE:	1"=20'-0"
PLOT DATE:	10/30/06
CAD FILE:	siteplan.dwg
PROJ. MGR.:	T.A.W.
DRAFTER:	J.M.C.

SHEET NO.
C5.0

PERMIT SET



SITE PLAN

SCALE: 1"= 10'

NOTES:

1. EXISTING SITE ELEVATIONS HAVE NOT BEEN SURVEYED. ALL CONTOURS ARE APPROXIMATE.
2. ALL NEW PIPES AND FITTINGS TO BE RESTRAINED.

0 1" 2"

TWO INCHES AT FULL SCALE. IF NOT, SCALE ACCORDINGLY

Grey & Osborne, Inc.
CONSULTING ENGINEERS

DATE: FEB 2017 | SCALE: NOTED | DRAWN: PGM | CHECKED: RLP | APPROVED: NEL

PRELIMINARY NOT FOR CONSTRUCTION

No.	REVISION	DATE	APPD

RUSSELL T. PORTER 35008 STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER

NANCY B. LOCKETT 15361 STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER

CITY OF SEQUIM
WASHINGTON
CLALLAM COUNTY
5TH AND McCURDY BOOSTER STATION IMPROVEMENTS
PROPOSED SITE PLAN

SHEET: C-4
OF: 8
JOB NO.: 14595.00
DWG: SITE_PLAN

APPENDIX B

Forest Practices Activity Map - Application #_____



Map Symbols

- Harvest Boundary
- Road Construction
- Stream
- RMZ / WMZ Buffers
- Rock Pit
- Landing
- Waste Area
- Clumped WRTS/GRTS
- Existing Structure

Additional Information

- Photo Points
- Existing culverts (double lines indicates 2 culverts)
- Stormwater ditches
- Mapped Type F stream

Legal Description

, S30 T30.0N R03.0W

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

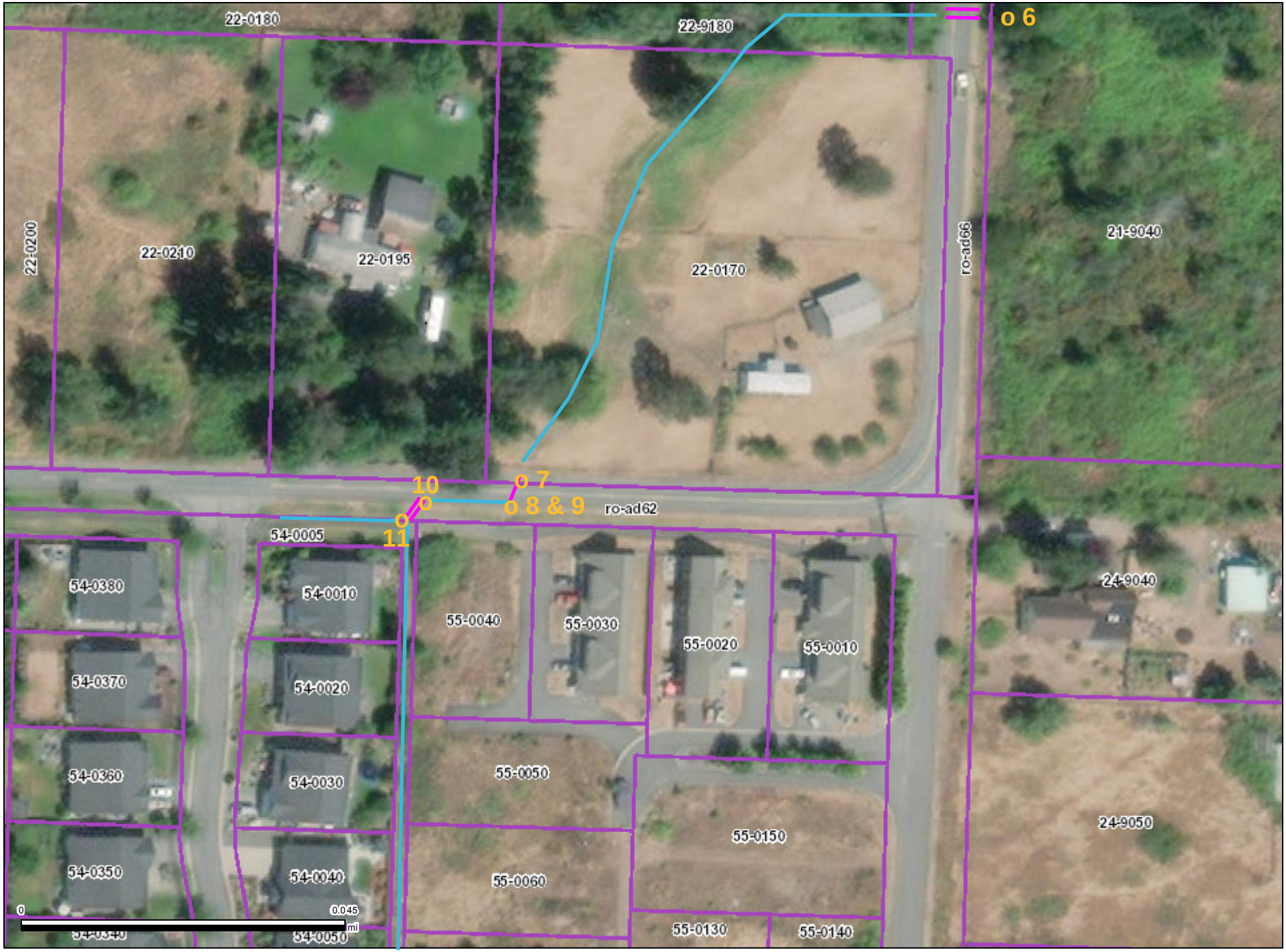
Extreme care was used during the compilation of this map to ensure its accuracy. However, due to changes in data and the need to rely on outside information, the Department of Natural Resources cannot accept responsibility for errors or omissions, and therefore, there are no warranties that accompany this material.

0 0.1 Miles

Date: 2/18/2022 Time: 8:52:52 AM

Clallam County Web Map

Clallam County GIS



Scale 1:1,128

Existing culverts (double lines indicates 2 culverts)

Stormwater ditches

o Photo Points

February 18, 2022 Clallam County GIS

Clallam County | Maxar, Microsoft |



Photo 1 was taken from near the southwest corner of the McCurdy Booster Station along S 5th Avenue. It looks easterly across the mapped stream location. There is a culvert that outlets into this area (just below the photo) but it does not appear that water flows through this area.



Photo 2 was taken at the start of the culvert under the Sea Breeze Apartments.



Photo 3 was taken from the same location as Photo 2 and looks more closely at the ground where the stream was mapped. There was no evidence of flowing or standing water in this location.

Ecological Land Services

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Fax: (360) 414-9305

DATE: 2/18/22
DWN: JB
PRJ. MGR: JB
PROJ.#: 2211.13

Photoplate 1
Project Name: Rolling Hills
Client: The JWJ Group
Clallam County, Washington



Photo 4 was taken along the mapped stream location on the east side of the study area. A channel was not observed and there was no evidence of water flow.



Photo 5 was taken looking at the ground within the mapped stream. Channelization was not observed nor was any water during the 2/2/22 site reconnaissance.



Photo 6 was taken of the pair of concrete culverts that lie beneath 7th Avenue and end on the west edge of the study area. There was no water observed in the culverts or within the onsite start of the mapped stream.

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PRJ. MGR: JB
PROJ.#: 2211.13

Photoplate 2
Project Name: Rolling Hills
Client: The JWJ Group
Clallam County, Washington



Photo 7 was taken from the westbound lane of Silberhorn Road and looks north along the route of stormwater.



Photo 8 was taken from the inlet of the culvert that conveys stormwater from the grassy swale between Silberhorn Road and the paved sidewalk into the area pictured in Photo 7.



Photo 9 was taken from the same location as Photo 8 and looks west along the grassy swale in which a small channel has developed. There are two small culverts at the upper end of the channel (Photo 10).

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DATE: 2/18/22
DWN: JB
PRJ. MGR: JB
PROJ.#: 2211.13

Photoplate 3
Project Name: Rolling Hills
Client: The JWJ Group
Clallam County, Washington



Photo 10 was taken of the two small culverts as they enter the grassy strip down the center of Silberhorn Road. These culverts begin in the area pictured in Photo 11.



Photo 11 was taken from the upslope end of the double culverts pictured in Photo 10. It also shows the rock lined swale that drains into this area and into the culverts.



Photo 12 was taken from the south end of the main north-south ditch that ends at the area pictured in Photo 11. There was no water present during the site reconnaissance and it does not appear that water occurs on a regular basis.

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DATE: 2/18/22
DWN: JB
PRJ. MGR: JB
PROJ.#: 2211.13

Photoplate 4
Project Name: Rolling Hills
Client: The JWJ Group
Clallam County, Washington

APPENDIX C

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Rolling Hills City/County: Sequim/Clallam Sampling Date: 2-2-22

Applicant/Owner: The JWJ Group State: WA Sampling Point: TP 1

Investigator(s): J. Bartlett Section, Township, Range: S 30 T 30 N R 3 WWM

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): concave Slope (%): 16%

Subregion (LRR): LRR A Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Yeary gravelly loam, 0-15% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☒	No	☐	**Is the Sampled Area within a Wetland?** **Yes** ☐ **No** ☒
Hydric Soil Present?	Yes	☐	No	☒	
Wetland Hydrology Present?	Yes	☐	No	☒	

Remarks: This study area is located south of McCurdy Road and west of 7th Avenue in the southern portion of Sequim. The northern half is level and composed of open fields and upland conifer forest. The southern half slopes steeply up to the south property line, which is composed of maintained pasture. Test Plot 1 was conducted in the uppermost southeast corner of the study area.

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
50% = _____, 20% = _____		= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)			
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
50% = _____, 20% = _____		= Total Cover	
Herb Stratum (Plot size: _____)			
1. *Schedonorus arundinaceus*	100	yes	FAC
2. *Juncus effusus*	15	no	FACW
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
50% = 57.5, 20% = 23	115	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____			
2. _____			
50% = _____, 20% = _____		= Total Cover	
% Bare Ground in Herb Stratum 0			

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x1 =	_____
FACW species	_____	x2 =	_____
FAC species	_____	x3 =	_____
FACU species	_____	x4 =	_____
UPL species	_____	x5 =	_____
Column Totals:	_____ (A)		_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks: The hydrophytic vegetation criterion is met because there is greater than 50% dominance by FAC species.

Project Site: Rolling Hills

SOIL Sampling Point: TP 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5Y 2.5/1	100					clay	
12-16	2.5Y 3/1	100					clay	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix, RC=Root Channel

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☐ **No** ☒

Remarks: The hydric soil criterion is not met because the profile does not exhibit depleted matrix conditions and there are no redoximorphic features.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☒	No	☐	Depth (inches):	14
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☐ **No** ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrology was present at the bottom of the soil hole but does not represent wetland hydrology because the water table is below 12 inches and saturation was not observed.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Rolling Hills City/County: Sequim/Clallam Sampling Date: 2-2-22

Applicant/Owner: The JWJ Group State: WA Sampling Point: TP 2

Investigator(s): J. Bartlett Section, Township, Range: S 30 T 30 N R 3 WWM

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): concave Slope (%): 16%

Subregion (LRR): LRR A Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Yeary gravelly loam, 0-15% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☒	No	☐	**Is the Sampled Area within a Wetland?** **Yes** ☐ **No** ☒
Hydric Soil Present?	Yes	☐	No	☒	
Wetland Hydrology Present?	Yes	☒	No	☐	

Remarks: This study area is located south of McCurdy Road and west of 7th Avenue in the southern portion of Sequim. The northern half is level and composed of open fields and upland conifer forest. The southern half slopes steeply up to the south property line, which is composed of maintained pasture. Test Plot 2 is located near the center of the sloping field in the south half.

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
50% = _____, 20% = _____	_____	= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)			
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
50% = _____, 20% = _____	_____	= Total Cover	
Herb Stratum (Plot size: _____)			
1. *Schedonorus arundinaceus*	100	yes	FAC
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
50% = 50, 20% = 20	100	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____	_____	_____	_____
2. _____	_____	_____	_____
50% = _____, 20% = _____	_____	= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC:	1	(A)
Total Number of Dominant Species Across All Strata:	1	(B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	_____	x1 =	_____
FACW species	_____	x2 =	_____
FAC species	_____	x3 =	_____
FACU species	_____	x4 =	_____
UPL species	_____	x5 =	_____
Column Totals:	_____ (A)		_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks: The hydrophytic vegetation criterion is met because there is greater than 50% dominance by FAC species.

Project Site: Rolling Hills

SOIL Sampling Point: TP 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/3	100					silt loam	
12-16	2.5Y 3/2	100					silt loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix, RC=Root Channel

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☐ **No** ☒

Remarks: The hydric soil criterion is not met because the profile does not exhibit depleted matrix conditions and there are no redoximorphic features.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☒ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present?	Yes	☐	No	☒	Depth (inches):	
Water Table Present?	Yes	☒	No	☐	Depth (inches):	10
Saturation Present? (includes capillary fringe)	Yes	☐	No	☒	Depth (inches):	

Wetland Hydrology Present? **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrology was present at a depth of 10 inches in the soil hole so the wetland hydrology criterion is met.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: Rolling Hills City/County: Sequim/Clallam Sampling Date: 2-2-22

Applicant/Owner: The JWJ Group State: WA Sampling Point: TP 3

Investigator(s): J. Bartlett Section, Township, Range: S 30 T 30 N R 3 WWM

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): concave Slope (%): 16%

Subregion (LRR): LRR A Lat: _____ Long: _____ Datum: _____

Soil Map Unit Name: Yeary gravelly loam, 0-15% slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☐, Soil ☐, or Hydrology ☐, significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐, naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	☒	No	☐	**Is the Sampled Area within a Wetland?** **Yes** ☐ **No** ☒
Hydric Soil Present?	Yes	☐	No	☒	
Wetland Hydrology Present?	Yes	☐	No	☒	

Remarks: This study area is located south of McCurdy Road and west of 7th Avenue in the southern portion of Sequim. The northern half is level and composed of open fields and upland conifer forest. The southern half slopes steeply up to the south property line, which is composed of maintained pasture. Test Plot 3 is located in the lower half of the sloping field.

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
50% = _____, 20% = _____		= Total Cover	
Sapling/Shrub Stratum (Plot size: _____)			
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
50% = _____, 20% = _____		= Total Cover	
Herb Stratum (Plot size: _____)			
1. *Schedonorus arundinaceus*	100	yes	FAC
2. *Cerastium arvense*	10	no	FACU
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
50% = 55, 20% = 22	110	= Total Cover	
Woody Vine Stratum (Plot size: _____)			
1. _____			
2. _____			
50% = _____, 20% = _____		= Total Cover	

% Bare Ground in Herb Stratum 0

Dominance Test Worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:
OBL species	_____	x1 = _____
FACW species	_____	x2 = _____
FAC species	_____	x3 = _____
FACU species	_____	x4 = _____
UPL species	_____	x5 = _____
Column Totals:	_____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ☐ 1 – Rapid Test for Hydrophytic Vegetation
- ☒ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ 5 - Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ☒ **No** ☐

Remarks: The hydrophytic vegetation criterion is met because there is greater than 50% dominance by FAC species.

Project Site: Rolling Hills

SOIL Sampling Point: TP 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	2.5Y 2.5/1	100					clay loam	
12-16	2.5Y 4/3	95	10YR 4/6	5	C	M	clay loam	

[1]Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix, RC=Root Channel

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soils Present? **Yes** ☐ **No** ☒

Remarks: The hydric soil criterion is not met because the profile does not exhibit depleted matrix conditions despite the presence of redoximorphic features.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Surface Soil Cracks (B6)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Stunted or Stresses Plants (D1) **(LRR A)**
- ☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) **(LRR A)**
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):

Water Table Present? Yes ☐ No ☒ Depth (inches): 14

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches):

Wetland Hydrology Present? **Yes** ☒ **No** ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Hydrology was present at a depth of 14 but the wetland hydrology criterion was not met because the water was below 12 inches and there was no soil saturation.